



BOARD MEETING APRIL 16-17, 2019

SALEM



Monday, April 15, 2019

Reception – 5:00p.m.

The public is invited to join the OWEB Board and staff at a reception celebrating the 20th anniversary of OWEB.

Location of Reception:

Willamette Heritage Center Dye House 1313 Mill St. SE Salem, OR 97301 Directions: <u>https://goo.gl/maps/i9yeoactTJk</u>

Tuesday, April 16, 2019

Macleay Conference & Retreat Center Fireside Hall 2887 74th Ave. SE Salem, OR 97317 Directions: https://goo.gl/maps/K4hg6vokwkx

Business Meeting – 8:00 a.m.

For each agenda item, the time listed is approximate. The board may also elect to take an item out of order in certain circumstances. During the public comment periods (Agenda Items F, I, J, L, O, and P), anyone wishing to speak to the board on specific agenda items is asked to fill out a comment request sheet (available at the information table). This helps the board know how many individuals would like to speak and to schedule accordingly. At the discretion of the board co-chairs, public comment for agenda items on which the board is taking action may be invited during that agenda item. *The board encourages persons to limit comments to 3 to 5 minutes.* Written comments will also be accepted on any item before the board. Written comments should be sent to Eric Hartstein at Eric.Hartstein@oregon.gov. Please note that written comments received after April 9, 2019 will not be provided to the board in advance of the meeting.

A. Board Member Comments (8:05 a.m.)

Board representatives from state and federal agencies will provide an update on issues related to the natural resource agency they represent. This is also an opportunity for public and tribal board members to report on their recent activities and share information

and comments on a variety of watershed enhancement and community conservationrelated topics. *Information item*.

B. Review and Approval of Minutes (8:45 a.m.)

The minutes of the January 15-16, 2019 meeting in Cannon Beach will be presented for approval. *Action item*.

C. Board Co-Chair Election (8:50 a.m.)

The current term of Oregon Watershed Enhancement Board Co-Chair Will Neuhauser ends in April 2019. Co-Chair Randy Labbe will lead a discussion and vote by Board members to elect one Board Co-Chair position for a new two-year term. *Action item.*

D. Board Subcommittee Updates (8:55 a.m.)

Representatives from board subcommittees will provide updates on subcommittee topics to the full board. *Information item*.

E. Strategic Plan Update (9:00 a.m.)

Executive Director Meta Loftsgaarden will provide a *written* report to the board on progress made on strategic plan implementation. *Information item.*

F. Public Comment (9:00 a.m.)

This time is reserved for general public comment, as well as other matters before the board.

G. Harney Basin Groundwater Conservation Reserve Enhancement Program (CREP) (9:15 a.m.)

Partnerships Coordinator Jillian McCarthy will be joined by Harney County Commissioner Mark Owens, High Desert Partnership Executive Director Brenda Smith, and Consultant Ken Bierly to provide a presentation to the board on a proposal to develop a Harney Basin Groundwater CREP initiative to reduce groundwater use across the basin. *Information item*.

H. Director's Update (9:45 a.m.)

Executive Director Meta Loftsgaarden will update the board on agency business and latebreaking issues. *Information item.*

I. Spending Plan Presentations and Discussion (10:20 a.m.)

NOTE: Public Comment specific for this agenda item at approximately 1:00 p.m. and 3:15 p.m.

Following an introduction by Executive Director Meta Loftsgaarden, the board will hear staff presentations on items in the OWEB spending plan. Presentations will feature a brief history of each item, the demand and future need for the item, and recent highlights and accomplishments with the OWEB spending plan line item. *Information item.*

Wednesday, April 17, 2019

Business Meeting - 8:00 a.m.

For each agenda item, the time listed is approximate. The board may also elect to take an item out of order in certain circumstances. During the public comment periods (Agenda Items F, I, J, L, O, and P), anyone wishing to speak to the board on specific agenda items is asked to fill out a comment request sheet (available at the information table). This helps the board know how many individuals would like to speak and to schedule accordingly. At the discretion of the board co-chairs, public comment for agenda items on which the board is taking action may be invited during that agenda item. *The board encourages persons to limit comments to 3 to 5 minutes.* Written comments will also be accepted on any item before the board. Written comments should be sent to Eric Hartstein at Eric.Hartstein@oregon.gov. Please note that written comments received after April 9, 2019 will not be provided to the board in advance of the meeting.

J. Public Comment (8:00 a.m.)

This time is reserved for general public comment, as well as other matters before the board.

K. Land Acquisition Grant Program- Administrative Rules (8:15 a.m.)

Grant Program Manager Eric Williams, Acquisitions Coordinator Miriam Forney, and Senior Policy Coordinator Eric Hartstein will present administrative rule revisions for the land acquisition grant program for board consideration and approval. Public comment associated with this item may be heard as part of general public comment. However, because this item has already been the subject of a formal public hearing and a comment period, further public testimony may not be taken except upon changes made to the item since the original public comment period, or upon the direct request of the board members in order to obtain additional information. *Action item*.

L. Land Acquisition Grant Awards (9:00 a.m.)

NOTE: Public Comment specific for this agenda item at approximately 9:15 a.m.

Grant Program Manager Eric Williams and Acquisitions Coordinator Miriam Forney will request board action on land acquisition grant applications that were received during the Fall 2018 grant offering. *Action item.*

M. Monitoring Grants-Administrative Rules (10:00 a.m.)

Deputy Director Renee Davis and Senior Policy Coordinator Eric Hartstein will request the board authorize rulemaking for the monitoring grant program. *Action item.*

N. Programmatic Effectiveness Monitoring Funding Request (10:10 a.m.)

Deputy Director Renee Davis and Effectiveness Monitoring Coordinator Ken Fetcho will request the board provide funding for tidal wetland effectiveness monitoring. *Action item.*

O. Fall 2018 Open Solicitation Grant Offering (10:30 a.m.) *NOTE*: Public Comment specific for this agenda item at approximately 11:40 a.m. Introduction

Grant Program Manager Eric Williams and OWEB Regional Program Representatives will provide background information on the Fall 2018 Open Solicitation grant offering.

Public Comment [approximately 11:40 a.m.]

This time is reserved for public comment on pending restoration, technical assistance, and stakeholder engagement grant applications to be considered for funding by the board. Only comments pertaining to these specific grant applications will be accepted during this portion of the meeting. Any written comments pertaining to pending grant proposals must be received by agency staff by the **April 9, 2019 deadline** in order to be provided to the board in advance of the meeting. *The board encourages speakers to limit comments to 3 to 5 minutes.*

Board Consideration of Pending Open Solicitation Grant Applications

The board will consider grant applications submitted through the Fall 2018 Open Solicitation grant offering. Proposals, supporting materials, and funding recommendations will be discussed and acted on by the Board. *Action item.*

P. Water Acquisition Grant Awards (1:30 p.m.)

NOTE: Public Comment specific for this agenda item at approximately 1:40 p.m.

Grant Program Manager Eric Williams and Partnerships Coordinator Jillian McCarthy will request board action on water acquisition grant applications that were received during the December 2018 grant cycle. *Action item.*

Q. Coastal Wetlands Grants- Permission to Apply for 2020 Federal Grant (2:00 p.m.)

Partnerships Coordinator Jillian McCarthy will request permission from the board to apply to the National Coastal Wetlands Conservation Grant Program for funding in 2020. *Action item.*

R. Focused Investment Partnership (FIP) Program- Rule Waiver (2:20 p.m.)

Interim Business Operations Manager Courtney Shaff and Partnerships Coordinator Andrew Dutterer will provide a report to the board explaining a pending administrative rule waiver regarding the John Day Partnership, which was recently selected by the board as a FIP beginning in the 2019-2021 biennium. *Information item.*

S. Other Business (2:35 p.m.)

This item is reserved for other matters that may come before the board.

Meeting Rules and Procedures

Meeting Procedures

Generally, agenda items will be taken in the order shown. However, in certain circumstances, the board may elect to take an item out of order. To accommodate the scheduling needs of interested parties and the public, the board may also designate a specific time at which an item will be heard. Any such times are indicated on the agenda.

Please be aware that topics not listed on the agenda may be introduced during the Board Comment period, the Executive Director's Update, the Public Comment period, under Other Business, or at other times during the meeting.

Oregon's Public Meetings Law requires disclosure that board members may meet for meals on Monday, Tuesday, and Wednesday.

Voting Rules

The OWEB Board has 18 members. Of these, 11 are voting members and 7 are ex-officio. For purposes of conducting business, OWEB's voting requirements are divided into 2 categories – general business and action on grant awards.

General Business

A general business quorum is **6 voting members**. General business requires a majority of **all** voting members to pass a resolution (not just those present), so general business resolutions require affirmative votes of **at least 6 voting members**. Typical resolutions include adopting, amending, or appealing a rule, providing staff direction, etc. These resolutions cannot include a funding decision.

Action on Grant Awards

Per ORS 541.360(4), special requirements apply when OWEB considers action on grant awards. This includes a special **quorum of at least 8 voting members** present to take action on grant awards, and affirmative votes of at least six voting members. In addition, regardless of the number of members present, **if 3 or more voting members** object to an award of funds, the proposal will be rejected.

Public Testimony

The board encourages public comment on any agenda item.

General public comment periods will be held on *Tuesday, April 16 at 8:55 a.m., and Wednesday, April 17 at 8:00 a.m.* for any matter before the board. Comments relating to a specific agenda item may be heard by the board as each agenda item is considered. People wishing to speak to the board are asked to fill out a comment request sheet (available at the information table). The board encourages persons to limit comments to 3 to 5 minutes. Written comments will also be accepted on any item before the board. Written comments should be sent to Eric Hartstein at <u>Eric.Hartstein@oregon.gov</u>. Please note that written comments received after *April 9, 2019* will not be provided to the board in advance of the meeting.

Tour

The board may tour local watershed restoration project sites. The public is invited to attend, however transportation may be limited to board members and OWEB staff. Any person wishing to join the tour should have their own transportation.

Executive Session

The board may also convene in a confidential executive session where, by law, only press members and OWEB staff may attend. Others will be asked to leave the room during these discussions, which usually deal with current or potential litigation. Before convening such a session, the presiding board member will make a public announcement and explain necessary procedures.

More Information

If you have any questions about this agenda or the Board's procedures, please call Darika Barnes, OWEB Board Assistant, at 503-986-0181 or send an e-mail to <u>darika.barnes@oregon.gov</u>. If special physical, language, or other accommodations are needed for this meeting, please advise Darika Barnes as soon as possible, and at least 48 hours in advance of the meeting.

Oregon Watershed Enhancement Board Membership

Voting Members

Barbara Boyer, Board of Agriculture Molly Kile, Environmental Quality Commission Bruce Buckmaster, Fish and Wildlife Commission Vacant, Board of Forestry Meg Reeves, Water Resources Commission Jason Robison, Public (tribal) Gary Marshall, Public Will Neuhauser, Board Co-Chair, Public Randy Labbe, Board Co-Chair, Public Jan Lee, Public Liza Jane McAlister, Public

Non-voting Members

Vacant, National Marine Fisheries Service Stephen Brandt, Oregon State University Extension Service Debbie Hollen, U.S. Forest Service Kathy Stangl, U.S. Bureau of Land Management Ron Alvarado, U.S. Natural Resources Conservation Service Alan Henning, U.S. Environmental Protection Agency Paul Henson, U.S. Fish and Wildlife Service

Contact Information

Oregon Watershed Enhancement Board 775 Summer Street NE, Suite 360 Salem, Oregon 97301-1290 Tel: 503-986-0178 Fax: 503-986-0199 www.oregon.gov/OWEB

OWEB Executive Director – Meta Loftsgaarden <u>meta.loftsgaarden@oregon.gov</u>

OWEB Assistant to Executive Director and Board – Darika Barnes

darika.barnes@oregon.gov 503-986-0181

2019 Board Meeting Schedule

January 14-16, in Cannon Beach April 16-17, in Salem July 16-17, in Klamath Falls October 15-16, in Condon

For online access to staff reports and other OWEB publications, visit our web site: <u>www.oregon.gov/OWEB</u>.



On behalf of the board members and staff of the Oregon Watershed Enhancement Board (OWEB), we invite you to review our 2018-2028 strategic plan. This plan celebrates all we have accomplished together over the last twenty years and sets a course for the next ten.

Mission

To help protect and restore healthy watersheds and natural habitats that support thriving communities and strong economies

About OWEB

OWEB has funded more than 8,700 grants since 1999, with which Oregonians have restored more than 5,100 miles of streams and have made more than 6,100 miles of habitat accessible for fish. The grants have helped landowners improve more than 1,135,000 upland habitat acres and restore, improve, or create more than 51,000 wetland or estuarine habitat acres. The majority of the funds invested go directly to on-the-ground improvements of land and water, such as native plantings, dam removals, irrigation efficiencies, streams and rivers made accessible to fish, and land protected for future generations.

Our current investment portfolio – ranging from our flagship Open Solicitation grants to our newly established Organizational Collaboration grants – provides the foundation to improve the health of our watersheds by investing in people in our local communities.





Who We Are

We are dedicated to the idea that...

- Healthy watersheds sustain healthy communities now and in the future.
- [□] Every Oregonian plays a role in the health of our watersheds.
- [□] It takes broad partnership to support resilient watersheds.
- The work to improve our watersheds requires we take the long view.

Our work is in service to ...

- Healthy, resilient watersheds (Ecological)
- Broad care and stewardship of watersheds by Oregonians (Social)
- Adaptive capacity of communities to support their watersheds (Community)
- Strengthened economies emerging from healthy watersheds (Economic)
- Strong and diverse partnerships that promote and sustain healthy watersheds (Sectoral)

In all things, we will...

- Be bold
- Be open and transparent
- Consider future Oregonians
- Be curious

Our work is characterized by...

- Involving stakeholders broadly and in partnership
- Using best available science supported by local knowledge
- Investing with long-term outcomes in mind
- Demonstrating impact through meaningful monitoring and evaluation
- Reaching and involving underrepresented populations

Priorities & Strategies

With extensive input from our stakeholders, OWEB has designed a strategic plan to provide direction for the agency and its investments over the next 10 years.

Priority 1

Broad awareness of the relationship between people and watersheds

Strategies

- Develop and implement broad awareness campaigns and highlight personal stories to tell the economic, restoration, and community successes of watershed investments
- Increase involvement of non-traditional partners in strategic watershed approaches

Priority 2

Leaders at all levels of watershed work reflect the diversity of Oregonians

Strategies

- Listen, learn, and gather Information about diverse populations
- Create new opportunities to expand the conservation table
- Develop funding strategies with a lens toward diversity, equity, and inclusion

Priority 3

Community capacity and strategic partnerships achieve healthy watersheds

Strategies

- Evaluate and identify lessons learned from OWEB's past capacity funding
- Champion best approaches to build organizational, community, and partnership capacity
- Continue to catalyze and increase state/federal agency participation in strategic partnerships

Priority 4

Watershed organizations have access to a diverse and stable funding portfolio

Strategies

- Increase coordination of public restoration investments and develop funding vision
- Seek alignment of common investment areas with private foundations
- Explore creative funding opportunities/partnerships with the private sector
- Partner to design strategies for complex conservation issues that can only be solved by seeking new and creative funding sources

Priority 5

The value of working lands is fully integrated into watershed health

Strategies

- Implement the Oregon Agricultural Heritage Program
- Strengthen engagement with a broad base of landowners
- Enhance the work of partners to increase working lands projects on farms, ranches, and forestlands
- Support technical assistance to work with owners/managers of working lands
- Develop engagement strategies for owners/managers of working lands who may not currently work with local organizations

Priority 6

Coordinated monitoring and shared learning to advance watershed restoration effectiveness

Strategies

- Broadly communicate restoration outcomes and impacts
- Invest in monitoring over the long term
- Develop guidance and technical support for monitoring
- Increase communication between and among scientists and practitioners
- Define monitoring priorities
- Develop and promote a monitoring framework

○ Priority 7

Bold and innovative actions to achieve health in Oregon's watersheds

Strategies

- Invest in landscape restoration over the long-term
- Develop investment approaches in conservation that support healthy communities and strong economies
- Foster experimentation that aligns with OWEB's mission









OWEB Strategic Direction and Principles

WEB's Mission: To help protect and restore healthy watersheds and natural habitats that support thriving communities and strong economies.

Goals Goals from OWEB's 2010 Strategic Plan

In 2010, the OWEB Board approved a strategic plan with five goals. With the passage of Constitutional Measure 76 and permanent Lottery funding, the Board continues to operate under the strategy.

Goal 1: Adaptive Investment

Restore and sustain resilient ecosystems through program and project investments that enhance watershed and ecosystem functions and processes and support community needs.

Goal 2: Local Infrastructure Development

Support an enduring, high capacity local infrastructure for conducting watershed and habitat restoration and conservation.

Goal 3: Public Awareness and Involvement

Provide information to help Oregonians understand the need for and engage in activities that support healthy watersheds.

Goal 4: Partnership Development

Build and maintain strong partnerships with local, state, tribal, and federal agencies, nonprofit organizations, and private landowners for watershed and habitat restoration and conservation.

Goal 5: Efficient and Accountable Administration

Ensure efficient and accountable administration of all investments.

OWEB's Framework for Grant Investments

In 2013, the Board adopted a Long-Term Investment Strategy that guides its investments of Lottery, federal and salmon plate funding. All of OWEB's investments in ecological outcomes also help build communities and support the local economy. The Board also approved a direction for the investments outlined below. They will continue operating capacity and open solicitation grants and continue focused investments with a gradual increase over time.

Operating Capacity

Long-Term

Investment

Strategy

Operating Capacity Investments support the operating costs of effective watershed councils and soil and water conservation districts. Councils and districts are specifically identified in OWEB's statutes.

Open Solicitation

OWEB offers responsive grants across the state for competitive proposals based on local ecological priorities.

Focused Investments

OWEB helps landscape-scale collaborative partnerships achieve collaboratively prioritized ecological outcomes.

Effectiveness Monitoring

OWEB evaluates and reports on the progress and outcomes of watershed work it supports.



Guiding Principles

Guiding Principles

As the Board developed the Investment Strategy, they did so under established principles for how any changes in OWEB's programs would operate.

Build on accomplishments. The commitment and work of our local partners have resulted in a nationally and internationally recognized approach with unmatched environmental accomplishments. OWEB will build on this foundation.

Effective communication. OWEB is committed to active, two-way communication of ideas, priorities, and results with its staff, partners, potential partners, and the public as a means for developing and maintaining a strong investment strategy and successful cooperative conservation.

Transparency. OWEB values transparency and develops its Long-Term Investment Strategy through an open, transparent process that involves input and dialogue with stakeholders and staff.

Maximize service, minimize disruption. The Board considers how OWEB's grant portfolio impacts partner organizations and staff resources to maximize effectiveness without adversely affecting service delivery.

Responsive. The Long-Term Investment Strategy will adjust to changes in revenue and be responsive to changes in ecological priorities from the Governor, Legislature, the Board, and local partners.

Adapt based on monitoring and evaluation. OWEB's staff and Board monitor and evaluate the effectiveness and implementation of the Long-Term Investment Strategy. The Board shall adapt and modify the strategy as needed to meet its desired goals and outcomes and to improve overall investment success.

Phase-in Change. OWEB's Long-Term Investment Strategy will guide future efforts, is designed to accommodate changes and adjustments made by stakeholders and OWEB staff, and will be periodically revisited.

Operating Principles

Operating Principles to Enhance OWEB Team Work

We will do all we can, individually and as a group, to:

- Use Good communication--at all levels and in all directions;
- Operate with a Team approach;
- Follow through on conversations in order to build and maintain needed trust;
- Empower staff wherever it is appropriate to do so; and
- Have fun while doing important work!

OWEB 2017-19 Spending Plan Proposed for the April Board Meeting

	OWEB SPENDING PLAN	Spending Plan as of Jan 2019	TOTAL Board Awards To- Date	Remaining Spending Plan after To- Date Awards	Apr 2019 Proposed Awards	Remaining Spending Plan after April 2019 awards
1	Open Solicitation:					
2	Restoration (includes USFW Coastal Wetlands)	33.000	25.032	7.968	7.761	0.207
3	Technical Assistance					
4	Restoration TA	4.000	2.636	1.364	1.229	0.135
5	CREP TA (includes NRCS & ODF funds)	1.435	1.435	0.000		0.000
6	Stakeholder Engagement	0.700	0.632	0.068	0.240	(0.172)
7	Monitoring grants	3.100	1.784	1.316	1.325	(0.009)
8	Land and Water Acquisition	0.000	6 6 2 0	2 270	2 902	(0.522)
9 10	Acquisition Technical Assistance	9.900	0.030	0.450	3.002	(0.332)
10	Weed Grants	3,000	3 000	0.430		0.430
12	Small Grants	3 150	3 150	0.000		0.000
13	Programmatic Effectiveness Monitoring	1.587	0.756	0.000	0 253	0.000
14	TOTAL	60.472	45.205	15.267	14.610	0.657
15	% of assumed Total Budget	62.43%	.01200	101201		0.001
10	Focused Investments:					
10	Dooobutoo	4 000	4 000	0.000		0.000
17	Deschutes Willemette Meinstem Angher Hebitet	4.000	4.000	0.000		0.000
10	Willamette Mainstenn Anchor Habitat	2.445	2.443	0.000		0.000
19	Ramey Basin Wellands	1.970	1.970	0.000	-	0.000
20	Ashland Forest All-Lands	2.333	2.333	0.000		0.000
27	Linner Grande Ronde	2.340	2.340	0.000		0.000
23	Development FIPs	1 150	0.916	0.000		0.000
24	FL Effectiveness Monitoring	0.750	0.750	0.000	-	0.000
25		17 427	17 193	0.000	0.000	0.000
20 26	% of assumed Total Budget	17.99%	17.100	0.234	0.000	0.234
27	Operating Capacity:					
27	Capacity grants (WC/SWCD) incl NPCSU CWC	1/ 598	1/ 508	0.000		0.000
20	Statewide org partnership support	0.500	0.500	0.000		0.000
30	Organizational Collaborative Grants	0.000	0.000	0.000	-	0.000
31	TOTAL	15.498	15.498	0.000	0.000	0.000
32	% of assumed Total Budget	16.00%				
33	Other:					
34	CREP	0.750	0.750	0.000		0.000
35	Governor's Priorities	1.011	1.011	0.000		0.000
36	Strategic Implementation Areas	1.200	1.200	0.000		0.000
37	Strategic Plan Implementation Grants	0.500	0.500	0.000		0.000
38	TOTAL	3.461	3.461	0.000	0.000	0.000
39	% of assumed Total Budget	3.57%				
40	TOTAL OWEB Spending Plan	96.858	81.357	15.501	14.610	0.891
41	OTHER DISTRIBUTED FUNDS IN ADDITIC	ON TO SPEND	ING PLAN D	ISTRIBUTION		
42	Oregon Department of Fish and Wildlife - PCSRF	10.450	10.450	0.000		0.000
43	Lower Columbia Estuary Partnership	0.309	0.309	0.000		0.000
44	Forest Health Collaboratives from ODF	0.500	0.500	0.000		0.000
45	PSMFC-IMW	0.729	0.729	0.000		0.000
46	PSMFC-Coho Habitat Tools	0.166	0.166	0.000		0.000
52 47		0.250	0.250	0.000	0.000	0.000
41		12.404	12.404	0.000	0.000	0.000
	TOTAL Including OWER Sponding Plan	I]		
48	and Other Distributed Funds	109.262	93.761	15.501	14.610	0.891
			•		-	•

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE BOARD

Oregon Watershed Enhancement Board (OWEB) January 15, 2019 Board Meeting Surfsand Resort – Oceanview Ballroom 148 W Gower Ave Cannon Beach, OR 97110

MINUTES: Some agenda items are discussed out of order. (Audio time stamps reference recording at: <u>https://youtu.be/x8kFe2ea9rg</u>)

OWEB BOARD MEMBERS PRESENT

OWEB STAFF PRESENT

Boyer, Barbara Brandt, Stephen Buckmaster, Bruce Labbe, Randy Lee, Jan Marshall, Gary McAlister, Liza Jane Neuhauser, Will Reeves, Meg Robison, Jason

ABSENT

Alvarado, Ron Furfey, Rosemary Henning, Alan Henson, Paul Hollen, Debbie Kile, Molly Stangl, Kathy

VACANT

Board of Forestry

Appel, Lisa Barnes, Darika Davis, Renee Dutterer, Andrew Duzik, Katie Fetcho, Ken Greer, Sue Hartstein, Eric Loftsgaarden, Meta Shaff, Courtney Williams, Eric Arnold, Jed Ayres, Betsy Beamer, Kelley Bey, Marko Bierly, Ken Borgia, Darren Brock, Jim Burkhardt, Derek Chambers, Chris Charette, Amy Coordes, Regan Esquivel, Robert Farrell, Justin Gannon, Chris Graham, Becki Henderson, Bonnie Krass, Marci Larson, Taylor Lev, Esther Littell, Nancy Loop, Lois Luncy, Bob Jackson, Nathan Keith, John McCandless, Collin McGinnis, Cheryl Mendoza, Lydia Merscreau, John

OTHERS PRESENT

Miller, Kolleen Morford, Shawn Morinaga, Kayla Mundy, Sarah Ortiz, Lorraine Oveson, Jeff Pearson, James Polenz, Marla Propst, Carolyn Resland, Angie Runyon, John Schiffman, Ron Schmeirer, Ann Schuler, Marci Sedell, Ted Sibert-Wahimund, Jan Smith, Brenda Stanely, Brooke Steele, Jesse Stern, Mark Suter-Goold, Marty Swanson, Kaola Voelke, Katie Walz, Kristen Webster, Jim Winter, Herb Zwissler, Sarah

The meeting was called to order at 7:57 a.m. by Co-Chair Will Neuhauser.

A. Board Member Comments (Audio = 0:00:20)

Board members provided updates on issues and activities related to their respective geographic regions and/or from the state and federal natural resource agencies they represent.

B. Review and Approval of June Meeting Minutes (Audio = 0:35:00)

The minutes of the October 16-17, 2018 meeting in Gold Beach were presented to the board for approval.

Jason Robison moved the board approve the minutes from the October 16-17, 2018 meeting in Gold Beach. The motion was seconded by Will Neuhauser. The motion passed unanimously. (Audio = 0:35:20)

C. Board Subcommittee Updates (Audio = 0:35:40)

Subcommittee reports were presented to the board in written form.

D. Strategic Plan Update (Audio = 0:36:50)

Executive Director Meta Loftsgaarden provided general updates on OWEB's 2018 strategic plan progress, and more detailed updates on specific priority areas and how OWEB staff are tracking the progress of each priority and supporting strategies.

E. Executive Director's Update (Audio = 0:47:25)

E-1: Focused Investment Partnership (FIP) Monitoring

This report was provided to the board in written form.

E-2: Salmon License Plates

This report was provided to the board in written form.

E-3: Budget and Legislative (Audio = 0:48:03)

Deputy Director Renee Davis provided an overview of OWEB's budget-related activities in preparation for the 2019 Legislative Session, highlighting the differences in OWEB's Agency Request Budget and the Governor's Recommended Budget. Senior Policy Coordinator Eric Hartstein provided a broad overview of the upcoming legislative session, including relevant Natural Resources committee assignments, and briefly reviewed legislation that would provide technical corrections to OAHP statutes, if approved.

F. Public Comment (Audio = 1:18:35)

The Oregon Conservation Partnership came before the board to provide an update on their organizations' individual and collective activities. The Partnership was represented by Kelley Beamer from the Coalition of Oregon Land Trusts (COLT), Shawn Morford from the Network of Oregon Watershed Councils, and John Keith from the Oregon Association of Conservation Districts. They announced they received a grant from the Brainerd Foundation to support communication efforts. Beamer asked that the board watch a video on YouTube called "Wild Possibilities," which is one of a series of short films produced by COLT and the Land Trust Alliance with a grant from Meyer Memorial Trust.

G. Water 4 Initiative

Due to the Federal government furlough, this agenda item was cancelled.

H. Programmatic Effectiveness Monitoring Funding Requests (Audio = 1:29:20)

Deputy Director Renee Davis and Programmatic Effectiveness Monitoring Coordinator Ken Fetcho presented three funding requests to the board for 1) a pilot to track performance for

Conservation Reserve Enhancement Program (CREP) projects, 2) effectiveness monitoring support for the Middle Fork John Day River Intensively Monitored Watershed, and 3) to continue a grant offering that assists OWEB and its partners with communicating outcomes from restoration work.

Co-Chair Randy Labbe moved the board award up to \$25,000 from the Open Solicitation Programmatic Effectiveness Monitoring line item in the 2017-19 spending plan to support grants that develop and pilot a performance tracking approach for CREP, and delegate to the Executive Director the authority to distribute the funds through appropriate agreements with an award date of January 15, 2019. The motion was seconded by Gary Marshall. The motion passed unanimously. (Audio = 1:59:50)

Co-Chair Randy Labbe moved the board award up to \$75,000 from the Open Solicitation Programmatic Effectiveness Monitoring line item in the 2017-19 spending plan to support the effectiveness monitoring program associated with the Middle Fork John Day River Intensively Monitored Watershed, and delegate to the Executive Director the authority to distribute the funds through appropriate agreements with an award date of January 15, 2019. The motion was seconded by Gary Marshall. The motion passed unanimously. (Audio 2:00:35)

Co-Chair Randy Labbe moved the board award \$100,000 from the Open Solicitation Programmatic Effectiveness Monitoring line item in the 2017-19 spending plan to support grants for additional retrospective analyses to tell the restoration story, and delegate to the Executive Director the authority to distribute the funds through appropriate agreements with an award date of January 15, 2019. The motion was seconded by Gary Marshall. The motion passed unanimously. (Audio = 2:01:20)

I. Oregon Agricultural Heritage Program (OAHP) (Audio = 2:02:50)

I-2: OAHP Commission Appointments (Audio = 2:04:00)

Executive Director Meta Loftsgaarden and Grant Program Manager Eric Williams briefly reviewed the structure of OAHP appointments and recommended to the board that Mary Wahl and Ken Bailey be re-appointed to the Oregon Agricultural Heritage Commission, each for a four-year term.

Co-Chair Will Neuhauser moved the board reappoint Ken Bailey, as recommended by the Board of Agriculture, and Mary Wahl, as recommended by the Fish and Wildlife Commission, to the Oregon Agricultural Heritage Commission for four-year terms. The motion was seconded by Jason Robison. The motion passed unanimously. (Audio = 2:06:30)

I-1: OAHP Rules (Audio = 2:07:45)

Grant Program Manager Eric Williams presented the Oregon Administrative Rules being proposed for adoption, which have been revised according to public comment and recommended by the Oregon Agricultural Heritage Commission. Commissioners Lois Loop and Nathan Jackson joined Williams before the board to provide information about the Commission and the development of the draft rules. Board members were given the opportunity to ask clarifying questions on each section of the rules.

OAHP Rule Public Comment (Audio = 2:20:30):

Kelley Beamer from the Coalition of Oregon Land Trusts came before the board to discuss the progress of a proposed legislative bill that would provide funding for the OAHP. She talked about different ways the bill will be promoted and supported, including legislative breakfasts, a Capitol Day, legislator visits, and more.

Meg Reeves moved the board adopt the administrative rules as revised in response to public comment and recommended by the Oregon Agricultural Heritage Commission as specified in Attachments A through E in the Oregon Agricultural Heritage Program Rules staff report with the additional revision that rules titled OAR 698-005-0100 and related waiver rules in each division be modified to say that "any waiver must be in writing and included in the grant file to which the waiver applies and reported to the Commission by the next meeting," and the additional authority to correct any Scrivener's errors that come to light as the rules are finalized. The motion was seconded by Jason Robison. The motion passed unanimously. (Audio = 3:10:30)

J. 2019-2021 Development FIP Grant Awards (Audio = 3:13:10)

Capacity Programs Coordinator Courtney Shaff presented three applications being recommended for Development FIP grant awards to support existing high-functioning partnerships that wish to write a strategic action plan, enhance an existing plan, and/or develop a financial plan.

Public Comment (Audio = 3:18:20):

Sarah Zwissler from Trout Unlimited came to support the Salmon Super Highway project (219-302-165740) and explained how the funds will be used by their partnership. Regional Program Representative Katie Duzik was called upon to discuss OWEB's past interaction with the Salmon Super Highway Partnership.

Co-Chair Randy Labbe moved the board award Development FIP grants to the staff funding recommendations as described in Attachment B to the Development FIP Grant Awards staff report. The motion was seconded by Jason Robison. The motion passed unanimously. (Audio = 3:32:00)

K. Implementation FIP Update (Audio = 3:33:20)

Grant Program Manager Eric Williams was joined by Senior Policy Coordinator Eric Hartstein and Partnerships Coordinator Andrew Dutterer to provide a progress report on OWEB's FIP Implementation program and introduce representatives from OWEB's six FIP Implementation partnerships, each of whom provided detailed reports about their partnership progress and activities. Partnerships were represented before the board as follows:

- 1. Deschutes Partnership (\$4 million): Chris Gannon from the Crooked River Watershed Council; Kolleen Miller from the Upper Deschutes Watershed Council; Natasha Bellis from the Deschutes River Conservancy. (Audio = 3:42:00)
- Willamette Mainstem Anchor Habitat Working Group (\$2.45 million): Taylor Larson from Coast Fork Willamette Watershed Council; Marci Krass from Willamette Riverkeepers; Collin McCandless from the Calapooia Watershed Council. (Audio = 4:07:15)
- 3. Upper Grande Ronde Restoration Partners (\$2.4 million): Jesse Steele and Kayla Morinaga from the Grande Ronde Model Watershed; Jim Webster from the Union Soil

and Water Conservation District; Ted Sedell from the Oregon Department of Fish and Wildlife. (Audio = 4:36:40)

- Harney Basin Wetlands Initiative (\$1.97 million): Esther Lev from the Wetlands Conservancy; James Pearson from Oregon State University; Brenda Smith from the High Desert Partnership. (Audio = 5:00:15)
- Oregon Model to Protect Sage Grouse, All Counties Partnership (\$2.355 million): Sarah Mundy and Marty Suter-Goold from Harney Soil and Water Conservation District, Derek Burkhardt from the Malheur Soil and Water Conservation District; Justin Ferrell from Lakeview Soil and Water Conservation District. (Audio = 5:30:30)
- Ashland Forest All-lands Restoration Initiative (\$2.34 million): Marko Bey from Lomakatsi Restoration Project; Darren Borgias from The Nature Conservancy; Chris Chambers from the City of Ashland. (Audio = 5:50:25)

L. Land Acquisition Conveyance (Audio = 6:27:40)

Grant Program Manager Eric Williams explained to the board a potential conveyance to the U.S. Forest Service of the Keystone property, which was acquired by the Wild Rivers Land Trust (formerly Elk River Land Trust) with OWEB acquisition program funds. This transaction will require OWEB relinquish an easement to allow the transfer of ownership to a federal agency, and provisions for repayment of grant funds used for the initial purchase. Wild Rivers Land Trust is seeking a sense of direction from the board prior to expending significant resources on due diligence before initiating a formal request for the conveyance.

Q. ODOT Fish Passage (Audio = 7:00:00)

Grant Program Manager Eric Williams came before the board to request that the board authorize the Executive Director to amend the existing interagency agreement with the Oregon Department of Transportation (ODOT) for fish passage grants by increasing the amount received from ODOT from \$250,000 to \$500,000. The initial funding of \$250,000 has already been encumbered for eligible projects, and ODOT has several three projects that are currently eligible, and expects several more in the near term.

Co-Chair Will Neuhauser moved the board authorize the Executive Director to amend the Interagency Master Funding Contribution Agreement (#217-901) with Oregon Department of Transportation by increasing ODOT's contribution from \$250,000 to \$500,000, and delegate authority to the Executive Director to enter into appropriate agreements with grantees under the terms of the Agreement. The motion was seconded by Bruce Buckmaster. The motion passed unanimously. (Audio = 7:09:05)

The meeting was adjourned at 4:46 p.m. by Co-Chair Randy Labbe.

Oregon Watershed Enhancement Board (OWEB)

January 16, 2019 Board Meeting Surfsand Resort – Oceanview Ballroom

148 W Gower Ave Cannon Beach, OR 97110

MINUTES: Some agenda items are discussed out of order.

(Audio time stamps reference recording at: https://youtu.be/hCZnaiCPzly)

OWEB MEMBERS PRESENT

Boyer, Barbara Buckmaster, Bruce Labbe, Randy Lee, Jan Marshall, Gary McAlister, Liza Jane Neuhauser, Will Reeves, Meg Robison, Jason

ABSENT

Alvarado, Ron Brandt, Stephen Furfey, Rosemary Henning, Alan Henson, Paul Hollen, Debbie Kile, Molly Stangl, Kathy

OWEB STAFF PRESENT

Barnes, Darika Davis, Renee Dutterer, Andrew Duzik, Katie Greer, Sue Hartstein, Eric Loftsgaarden, Meta Shaff, Courtney Williams, Eric

OTHERS PRESENT

Abercrombie, Troy Beamer, Kelley Berg, Tristen Blankenship, Michael Brick. Jim Burkhardt, Derek Butler, Tim Charette, Amy Coordes, Regan Gannon, Chris Keith, John McGinnis, Cheryl Morford, Shawn Neeley, Doug Salzer, Jan Salzer, Tom Shalom, Gail Vaughan, Bruan Walls, Kristen Winters, Herb Zwissler, Sarah

VACANT

Board of Forestry

The meeting was called to order by Co-Chair Randy Labbe at 8:00 a.m.

M. Public Comment (Audio =0:01:05)

The board was addressed by Tim Butler and Tristen Berg from the Oregon Department of Agriculture and Troy Abercrombie from the Tillamook County Soil and Water Conservation District to thank the board for their support of OWEB funding for the Oregon State Weed Board grant program.

N. Implementation FIP 2017-2019 Action Items (Audio = 0:11:55)

Senior Policy Coordinator Eric Hartstein and Partnerships Coordinator Andrew Dutterer presented to the board two requests related to Implementation FIPs. Hartstein requested the board carry-forward on 2015-2017 biennium funds for current Implementation FIP initiatives,

and explained how OWEB policy is being modified to reduce future requests. Dutterer explained a request by the Deschutes Partnership to adjust the scope of their FIP initiative to include stream habitat restoration in the Crooked River basin.

Co-Chair Randy Labbe moved the board carry-forward 2015-2017 biennium funding for each of the six current Implementation FIP partnerships to make any balances of funding available to the partnerships through the 2019-2021 biennium. The motion was seconded by Jason Robison. The motion passed unanimously. (Audio = 0:19:35)

Co-Chair Randy Labbe moved the board approve the scope of initiative change for the Deschutes Partnership to pursue instream and riparian habitat improvement projects in the Crooked River basin. The motion was seconded by Bruce Buckmaster. The motion passed unanimously. (Audio = 0:25:35)

O. Implementation FIPs (Audio = 0:26:20)

Grant Program Manager Eric Williams provided an overview of the 2019-2021 FIP solicitation, covering the application and expert technical review team processes, as well as the interview of partnerships, and recommendations made by the focused investments board subcommittee.

O-1: 2019-21 Implementation FIP Selections (Audio = 0:16:15) Public Comment (Audio: 0:16:20):

Members from the Clackamas Partnership, represented by Cheryl McGinnis, Tom Salzer, Jim Brick, Doug Neeley, and Gail Shalom addressed the board to discuss the importance of the restoration work they are doing in their watershed, the match they are able to secure, and to request that, if additional funding becomes available, that the board will consider the Clackamas partnership for a 2019-21 Implementation FIP grant award.

Members from the John Day Partnership, represented by Amy Charrette, Kristin Walls, and Herb Winters thanked the board for their investment in the John Day Partnership through the FIP Development program and the recommended investment in the partnership as an Implementation FIP.

Co-Chair Randy Labbe moved the board alter the existing recommendation of the focused investment subcommittee to include the Clackamas Partnership among the list of FIPs recommended for funding in Attachment C to the 2019-2021 Implementation FIP Selections staff report. The motion was seconded by Jason Robison. The motion passed with seven favorable votes and two dissenting votes (McAlister and Marshall). (Audio = 1:47:45)

O-2: Implementation FIPs Kickoff Funding (Audio 1:59:45)

Capacity Programs Coordinator Courtney Shaff discussed with the board the activities of the five newly selected FIPs leading up to their funding in July 2019, recommending \$60,000 to cover required activities that commence prior to final approval of FIP implementation grants in July 2019.

Co-Chair Randy Labbe moved the board delegate to the Executive Director the authority to enter into agreements with an award date of January 16, 2019, with selected 2019-2021 Implementation FIPs to cover OWEB-required activities that commence prior to July 2019, in an amount not to exceed \$60,000, to be taken from the Development FIP line

item in the spending plan. The motion was seconded by Jan Lee. The motion passed unanimously. (Audio = 2:03:00)

P. Spending Plan (Audio = 2:04:15)

Executive Director Meta Loftsgaarden reviewed the process for the board to approve the spending plan each biennium and explained delegated authority. She also presented the timeline for approving the 2019-21 spending plan for the next biennium, including spending plan categories, and the percentages allocated to each major category.

The meeting was adjourned at 11:05 a.m. by Co-Chair Neuhauser. (Audio = 2:42:25)

April 16-17, 2019 OWEB Board Meeting Operating Capacity Subcommittee Update

Subcommittee Members

Chair Debbie Hollen, Jan Lee, Barbara Boyer, Molly Kile, and Liza Jane McAlister

Background

The Operating Capacity Subcommittee focuses on issues related to watershed council and soil and water conservation district operating capacity grants, monitoring of capacity investments, support for the statewide partnership organizations, and organizational collaboration grants.

Summary of Operating Capacity Subcommittee Work this Quarter

The subcommittee met on January 3 and March 12, 2019. The meeting on March 12 also included a joint meeting with the Monitoring Subcommittee. The subcommittee discussed the following topics:

- Update on the 2019-2021 Council Capacity grant cycle and the role of the subcommittee. The application deadline was extended by one week to allow applicants impacted by the late winter snow storm to be able to meet the deadline. Fifty-nine applications were received by the March 8, 2019 deadline.
- Merger Implementation grants and the amount and type of funding OWEB should provide to merged watershed councils in the future. Attachment A provides additional information. This will be discussed in more detail with the board at the July board meeting.
- Status update on Capacity monitoring.

To be presented at the April 2019 Board meeting by:

Debbie Hollen, Subcommittee Chair

Staff Contact

Courtney Shaff, Capacity Programs Coordinator <u>courtney.shaff@oregon.gov</u> or 503-986-0046

Attachments

A. Council Capacity Merger Funding Concept

Council Capacity Merger Funding Concept

Background

In 2013 the Board awarded its first Organizational Collaboration grants, one of which supported the merger of four watershed councils in the Rogue Basin. At the same time, the Board recognized the real costs associated with post-merger life and created the merger implementation grant offering. These grant funds can be used for strategic planning, board and staff development, and other real costs of merging multiple organizations. The goal of both the Organizational Collaboration and the Merger Implementation grant programs is to build capacity and support strategic collaborations in order to build resilient, sustainable, local organizations that achieve ecological outcomes and engage local communities.

This fall, OWEB staff talked with other funders, reviewed the literature, reflected on the agency's lessons learned, and talked with the Rogue River Watershed Council to begin to develop post-merger funding options. When OWEB first awarded the Merger Implementation grants, the agency had not yet defined what a successful merger would look like. Mergers in general are not common, and funders all over the county are struggling with how to define success. OWEB is in a unique situation as an agency which funds both mergers and ongoing operating costs of organizations. In addition, the agency believes that more organizations may consider merging in the future, and OWEB wants to support organizations in that process.

Research Findings

The following common themes emerged from the research:

- 1) Reaching "success" is harder and takes longer than organizations think.
- 2) Having a supportive funder as a partner is key to success.
- 3) Clear merger goals should be set at the beginning and revisited on a regular basis.
- 4) The first few years are spent focusing on the logistics of the merger, after the logistics comes growing a strong, resilient organization.
- 5) Stakeholder engagement and community recognition of the organization within the broader geography are important to address, but the organization has to be at a point of stability before it can addresses these issues.
- 6) Board member development and transition take time, especially when organizations need to develop a new board with a broader vision.

In addition, the literature repeatedly lists the following as key indicators of success.

- Increased social capital
- Improved/expanded services
- Effective/efficient operations
- Financial stability
- Culture of new board and staff

Proposed Funding Options Moving Forward

Pre-merger funding options

Continue to provide Organizational Collaboration grants. As part of any application requesting funds for a merger, the application must include direct and clear measures of success for the merger process. The final project completion report at the conclusion of the merger must report on direct measures of success and methods for evaluating the new organization's postmerger progress toward integration.

Post-Merger Funding Options

Individual councils apply for a council capacity grant each biennium. If a group of councils is interested in merging they can apply for an organizational collaboration grant to help cover the costs of the merger process. The descriptions of funding options below are what two or more merged councils can apply for after the merger process is complete. The funding amount available is different when two, three, or four or more councils merge. The funding available reduces between the first biennium after the merger and the second biennium, reducing again in the third biennium. The explanation and proposed amounts are below.

When four or more watershed councils merge

When developing the numbers below, staff took into consideration what four of more watershed councils would be eligible to receive if they had not merged. In 2017-19, this would be \$473,300 or more for a biennium.

In biennium 1 and 2 after the merger, in addition to their council capacity grant, the council could apply for merger implementation funding. Merger implementation funding in biennium 1 would be \$236,850, which is the council capacity grant award, \$118,425 x 2. In biennium 2 merger implementation funding would be \$207,243, which is the council capacity grant award, \$118,425 x 1.75. Beginning in biennium 3, and in all future biennia, the merged council would be eligible to receive additional merger funding of \$177,637, \$118,425x1.5.

Table 1 shows the distribution of funding across three biennia for a new organization where four or more watershed councils merged.

	Council Capacity	Merger Funding	Total
Biennium 0 (pre- merger, four councils)	\$473,300	\$0	\$473,300
Biennium 1	\$118,425	\$236,850 (\$118,425x2)	\$355,275
Biennium 2	\$118,425	\$207,243 (\$118,425x1.75)	\$306,425
Biennium 3 and in all future biennia	\$118,425	\$177,637 (\$118,425x1.5)	\$296,062

Table 1

When three watershed councils merge

When developing the numbers below, staff took into consideration what three watershed councils would be eligible to receive if they had not merged, up to \$355,275 (in 2017-2019) for a biennium.

In biennium 1 and 2 post merger, in addition to their council capacity grant, the council could apply for merger implementation funding. Merger implementation funding in biennium 1 would be \$207,243, which is the council capacity grant award, \$118,425x1.75. In biennium 2 merger implementation funding would be \$177,637, which is the council capacity grant award,

\$118,425x1.5. Beginning in biennium 3, and in all future biennia, the merged council would be eligible to receive additional merger funding of \$148,031, \$118,425x1.25.

Table 2 shows the distribution of funding across three biennia for a new organization where three watershed councils merged.

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	Council Capacity	Merger Funding	Total
Biennium 0 (pre- merger)	\$355,275	\$0	\$355,275
Biennium 1	\$118,425	\$207,243 (\$118,425x1.75)	\$325,668
Biennium 2	\$118,425	\$177,637 (\$118,425x1.5)	\$296,062
Biennium 3 and in all future biennia	\$118,425	\$148,031 (\$118,425x1.25)	\$266,456

When two watershed councils merge

When developing the numbers below, staff took into consideration what two watershed councils would be eligible to receive if they had not merged, up to \$236,850 (in 2017-2019) for a biennium.

In biennium 1 and 2 post merger, the council could apply for merger implementation funding in addition to their council capacity grant. Merger implementation funding in biennium 1 would be \$88,818, which is the council capacity grant award, 118,425 x .75. In biennium 2 merger implementation funding would be \$59,212, which is the council capacity grant award, \$118,425 x .5. Beginning in biennium 3, and in all future biennia, the merged council would be eligible to receive additional merger funding of .25x the base award (\$118,425x.25=\$29,606).

Table 3 shows the distribution of funding across three biennia for a new organization where two watershed councils merged.

	Council Capacity	Merger Funding	Total
Biennium 0 (per- merger)	\$236,850	\$0	236,850
Biennium 1	\$118,425	\$88,818 (118,425x .75)	\$207,243
Biennium 2	\$118,425	\$59,212 (\$118,425x .5)	\$177,637
Biennium 3 and in all future biennia	\$118,425	\$29,606 (\$118,425x .25)	\$148,031

Table 3

Subcommittee Members

Chair Meg Reeves, Kathy Stangl, Rosemary Furfey, Stephen Brandt

Background

The Open Solicitation Subcommittee focuses on issues related to open solicitation grants, including restoration, technical assistance, and stakeholder engagement, and the effectiveness of these programs.

Summary of Open Solicitation Subcommittee Work this Quarter

The subcommittee met on February 28 and discussed the following topics:

- Strategic Plan progress on Priority #6 (Working Lands), including recent actions with
 respect to the Oregon Agricultural Heritage Program and the status of bills to address
 technical fixes in statute and to fund the program. The subcommittee was briefed on
 agenda items to be addressed at the March 6 Oregon Agricultural Heritage Commission
 (OAHC) meeting. The OAHC will discuss efforts to determine valuation methodologies for
 implementing conservation management plans and purchasing termed covenants.
 Pending appropriation of funds, the OAHC will discuss a prospective solicitation timeline
 for grants in the 2019-2021 biennium.
- The subcommittee also discussed a key OWEB/Oregon Department of Agriculture working lands program Strategic Implementation Areas. The program has been revamped to provide technical assistance funding to work with landowners in designing solutions to identified water quality concerns. Implementers can then apply for restoration funding through the open solicitation program. There is potential for additional leverage by applying to the Natural Resources Conservation Service for a Resource Conservation Partnership Program grant as a statewide priority with identified SIA areas as targeted geographies.
- Strategic Plan progress on Priority #7 (Bold and Innovative Actions), as the subcommittee was briefed on the Executive Director's dialogue with all six regional review teams about the strategic plan initiatives. Priority #7 in particular resonated with review teams, who felt that it gives them the space to recommend innovative approaches where they feel such approaches are technically sound. In addition, the proposed Land Acquisition rules, on the April board agenda for adoption, include a new risk-sharing option where grantees can request reimbursement for certain eligible due diligence costs prior to closing a transaction.
- Subcommittee Topics: In the current biennium, the subcommittee has completed work addressing conversion of outreach grants to stakeholder engagement grants, an assessment of the small grants program, and assessments of funding line development and board presentations for open solicitation grants. In order to gage the preference of the board regarding topics the subcommittee should address, the subcommittee will survey board members for input.

To be presented at the April 2019 Board Meeting as a written report only.

Staff Contact

Eric Williams, Grant Program Manager eric.williams@oregon.gov or 503-986-0047

April 16-17, 2019 OWEB Board Meeting Focused Investment Subcommittee Update

Subcommittee Members

Chair Jason Robison, Alan Henning, Gary Marshall, Will Neuhauser, Ron Alvarado, Paul Henson, Bruce Buckmaster

Background

The Focused Investment Subcommittee focuses on issues related to the Focused Investment Program (FIP), including Development and Implementation FIPs, and the effectiveness of these programs.

Summary of Focused Investment Subcommittee Work this Quarter

The subcommittee met on March 8 and discussed the following items:

• A preview of a board agenda item relative to allocation of funds for development FIPs in the Operating Capacity spending plan category, calling them "Partnership Capacity" grants. Twelve partnerships have received development FIP funding in the past two biennia. Through the Partnership Learning Project, which assessed the effectiveness of partnerships, OWEB changed the name of the grants from "Capacity Building FIPs" to "Development FIPs" to better characterize their work in developing effective partnerships.

There are partnerships working outside of the FIP program doing similar work as well; some of these are high performing partnerships worthy of capacity investment. Partnership Capacity grants would continue to fund development of strategic action plans, partnership governance, and financial plans. In addition, funds would be available for the continuing management of high-performing partnerships. This new grant type would fall under the Operating Capacity spending plan category rather than the FIP category.

• Progress toward updating the board-designated ecological priorities for the FIP program, which is required by FIP program rules at least every five years. The initial priorities were established in 2015; the update is scheduled for board action in October 2019, for use in the planned 2020 FIP solicitation. Priority updates are under development for Aquatic Habitat for Native Fish Species and Dry-type Forest. ODFW is reviewing the priority maps and will provide recommendations for updates. ODFW was also consulted to better reflect habitat needs within the dry-type forest priority.

The need to incorporate climate change into the program was discussed, in particular through voluntary carbon sequestration markets. Staff will bring a proposal back for subcommittee consideration on this topic.

- FIP Kick-off Meeting Eric Williams summarized the FIP kick-off meeting held as a teleconference on February 26.
- Implementation FIP Board Reporting The subcommittee provided feedback on the written and oral reporting from the partnerships at the January board meeting. The subcommittee sees value in having in-person reports from the partnerships.

To be presented at the April 2019 Board meeting as a written report only.

Staff Contact

Eric Williams, Grant Program Manager eric.williams@oregon.gov or 503-986-0047

Subcommittee Members

Chair Alan Henning, Stephen Brandt, Debbie Hollen, Molly Kile, Jason Robison

Background

The Monitoring Subcommittee oversees work associated with both open solicitation programmatic effectiveness monitoring (EM) and Focused Investment Partnership (FIP) monitoring, and provides input about the monitoring of OWEB's capacity investments.

Summary of Monitoring Subcommittee Work this Quarter

The subcommittee met on February 15 and March 12, 2019, and discussed the following topics:

- Strategic Plan progress check-in, with a focus on Priority #6 (Coordinated Monitoring and Shared Learning) and brief discussion of Priorities #3 (Community Capacity and Strategic Partnerships) and #7 (Bold and Innovative Actions);
- Status updates about 1) 'telling the restoration story,' 2) FIP monitoring, 3) FIP progress tracking reports, 4) CREP performance tracking, and 5) tide gate monitoring next steps, including a collaborative effort with Extension Sea Grant to disseminate key findings of the Oregon State University literature review in a non-technical format geared for decision-makers and practitioners;
- An update about the retrospective evaluation framework for capacity investments to watershed councils and soil and water conservation districts (the update was completed in coordination with the Operating Capacity subcommittee), including feedback received from stakeholder and expert advisory groups;
- Recent discussions with local, agency, and academic partners about data and information needs that could be addressed with a programmatic investment in monitoring associated with the Stage 0 restoration approaches (this potential investment will be discussed in more detail with the subcommittee during its spring 2019 meeting). For an example of Stage 0 restoration see: <u>https://www.middleforkwillamette.org/restore/rivers-andstreams/staley-creek/;</u> and
- April board meeting items, including a) monitoring related investments proposed in the 2019-21 spending plan, b) a programmatic investment in tidal wetland effectiveness monitoring, which builds on recommendations from the OSU tide gate literature review, and c) a request to approve rulemaking for OWEB monitoring grants.

The group is scheduled to meet again on May 14, 2019.

To be presented at the April 2019 Board Meeting as a written report only.

Staff Contact

Renee Davis, Deputy Director, renee.davis@oregon.gov or 503-986-0203







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Agenda Item E supports all of OWEB's Strategic Plan priorities.

MEMORANDUM

TO: Oregon Watershed Enhancement Board

FROM: Meta Loftsgaarden, Executive Director

SUBJECT: Agenda Item E – Strategic Plan Update April 16-17, 2019 Board Meeting

I. Introduction

At this and upcoming meetings, the board will be provided with both general updates on plan progress, and more detailed updates as needed on specific priority areas.

II. Background

In June, 2018, the board approved a new strategic plan. For the October 2018 board meeting, staff developed a template to track quarterly progress on strategic plan priorities. This template was presented and feedback about structure and content was provided by the board.

Following the October board meeting, staff added a header to all staff reports outlining the connection between the work contained in the staff report and the board's approved strategic plan.

Attached is the quarterly update of the strategic plan. Based on time constraints at the April board meeting, the update is in written format only. Other information on the strategic plan is also contained in the subcommittee updates.

III. Recommendation

This is an information item only.

Attachments

A. OWEB Strategic Plan Progress Report, January to March 2019

OWEB Strategic Plan Progress

QUARTERLY PROGRESS UPDATE – January-March 2019

Prior	ity	1 - Broad awareness of t	he relationship between people and watersheds				
Strategies	1.	Develop and implement broad awareness campaigns and highlight personal stories to tell the economic, restoration, and community successes of watershed investments	 In The Last Quarter, We Did This: (actions) Recently launched news site of the Governor's Office, <u>https://myoregon.gov/</u>, featured Oregon Lottery videos. Process to update the Salmon License plate is underway, and design options are being evaluated. Unveiled a new logo in alignment with OWEB's 20th Birthday. 50 stakeholders from around the state gathered at the Capitol on Feb. 22 for OWEB's 20th Birthday Celebration hosted by the Oregon Conservation Partnership. OWEB Staff volunteered at Miller Woods for the Yamhill SWCD in celebration of OWEB's 20th Birthday. 	<u>So</u> - -	 That: (outputs) Local partners are trained and have access to media and tools. Local conservation organizations have meaningful connection to local media. Each region has access to public engagement strategies that reach non-traditional audiences. Oregon Lottery media campaigns have new stories every year of watershed work and progress. 	<u>-</u>	Make This Difference: Non-traditional partr involved and engaged watershed approach Successes are celebra and state level throug appropriate tools. More Oregonians: o are aware of the in investment in thei o understand why h watersheds matte
		non-traditional partners in strategic watershed approaches					 and community; understand their r their watershed h
Prior	ity	2 - Leaders at all levels of	fwatershed work reflect the diversity of Oregonians	1			
Strategies	1.	Listen, learn and gather Information about diverse populations	 In The Last Quarter, We Did This: (actions) Diversity, Equity and Inclusion (DEI) cross-sectional team met monthly and continued developing work plan. Two staff attended SAIF Corporation Workers' Compensation Insurance's "Delivering a Culturally Inclusive Experience - State Agency" workshop. Staff engagement: All-staff meeting activity on the Native American roots of many Oregon place names and how tribes are working with the State to restore historic place names. Provided staff Black History month resources. Continued development of DEI survey for grantees, including Department of Justice review. Will be released in second quarter. Engaged Oregon Employment Department DEI Officer to understand their approach to equity work and share lessons learned. 	<u>So</u> - - -	That: (outputs) OWEB board and staff have been trained in diversity, equity and inclusion (DEI). OWEB has DEI capacity. OWEB grantees and partners have access to DEI tools and resources. DEI are incorporated into OWEB grant programs, as appropriate. OWEB staff and board develop awareness of how social, economic, and cultural differences impact individuals, organizations and business practices. OWEB staff and board share a	<u>To</u> - -	Make This Difference: New and varied populengaged in watershe Grantees and partne DEI tools and resource greater diversity of si members and volunt Increased engageme represented communi grant programs and p stakeholders. OWEB, state agencie funders consider opp fund natural resource a DEI lens.
	2.	Create new opportunities to expand the conservation table Develop funding strategies with a lens toward diversity, equity, and inclusion (DEI)		-	common understanding of OWEB's unique relationship with tribes. Board and staff regularly engage with underrepresented partnerships and stakeholder groups to support DEI work.		

ce: (outcomes) artners are aged in strategic aches. ebrated at the local rough use of	 Near-term measure: Fall 2018 Oregon Lottery campaign featured 6 partners from 5 OWEB regions with 1,473 YouTube views (accessed 2/12/2019).
e impacts of their heir watershed; y healthy itter to their family y; eir role in keeping d healthy.	 Potential impact measure: Increase in public conversation about watersheds and people's role in keeping them healthy. Increase recognition of landowner connection to healthy watersheds. Broader representation/greater variation of populations represented in the Oregon watershed stories.
ce: (outcomes) opulations are shed restoration therers actively use ources to recruit a of staff, board unteers. ment of under- munities in OWEB and programs of our cies, and other opportunities to urce projects with	 Near-term measure: Staff has participated in 190 hours of cumulative training since July 2018. Potential impact measure: Increased awareness by grantees of gaps in community representation. Increased representation of Grantees and partners from diverse communities on boards, staff, and as volunteers. Increased funding provided to culturally diverse stakeholders and populations.

Prio	rity	3 - Community capacity a	and strategic partnerships achieve healthy watersheds		
	1.	Evaluate and identify	In The Last Quarter, We Did This: (actions)	<u>So That: (outputs)</u>	To Make This Differen
		lessons learned from OWEB's past capacity funding	 OWEB Capacity Evaluation Expert Group met to give feedback on the capacity evaluation approach and methodologies. Feedback has been compiled and next steps are under consideration. 	 Data exists to better understand the impacts of OWEB's capacity investments 	 Partners access be capacity and strat and approaches.
ategies	2.	Champion best approaches to build organizational, community, and partnership capacity	 Three new D-FIPs were funded to advance strategic conservation planning among high-performing partnerships: The Intertwine Alliance Oak Prairie Working Group, Salmon Super Highway, and Pure Water Partners. Coordinated FIP Cohort Orientation & Onboarding for new partnerships on agreement and theory of change development processes. 	 Help exists for local groups to define their restoration 'community' for purposes of partnership/community capacity investments. A suite of alternative options exists to invest in capacity to support conservation outcomes. New mechanisms are available for 	 OWEB can clearly the value of capace Funders are awar importance of fur Lessons learned for investments infor decisions.
Str	3.	Accelerate state/federal agency participation in partnerships	 Coordinated with Oregon Department of Agriculture (ODA) to prepare for presentation at CONNECT on capacity evaluation of SWCD & Watershed Councils. Presented OWEB Strategic Plan to Region 2 Review Team (6/6 RRTs now complete), including dialogue around Priority 3 and OWEB's interest in supporting interagency collaboration where appropriate 	 We mechanisms are available for watershed councils and soil and water conservation districts to report on outcomes of capacity funding. A set of streamlined cross-agency processes exist to more effectively implement restoration projects. 	 Restoration proje multiple agencies implemented more effectively. State-federal agen participation in st partnerships
				 Local capacity strengths and gaps are identified to address and implement large-scale conservation solutions. 	partnersnips.
Prio	rity	4 - Watershed organizati	ons have access to a diverse and stable funding portfolio		
	1.	Increase coordination of	In The Last Quarter, We Did This: (actions)	<u>So That: (outputs)</u>	To Make This Differen
		public restoration investments and develop funding vision	 Awarded just under \$1 million of Natural Resource Conservation Service (NRCS) funding to local partners to support coordinated activities between them and NRCS. Launched annual grant offering for coastal wetland conservation and restoration projects with federal funding from US Fish and Wildlife Service's National Coastal Wetland Conservation Grant Program. Water Core Team kicked off interagency effort to explore opportunities to coordinate mitigation and associated investments 	 OWEB has a clear understanding of its role in coordinating funding. OWEB and other state and federal agencies have developed a system for formal communication and coordination around grants and other investments. OWEB and partners have a 	 Agencies have a sl about how to inver- restoration. Oregon has a com- analysis of the sta built infrastructur investments. Foundations and of
	2.	Align common investment	across agencies.	coordinated outreach strategy for increasing watershed investments by	partners in waters efforts.
gies		areas with private foundations		state agencies, foundations, and corporations.	- Foundations and o increase their inve
Strate	3.	Explore creative funding opportunities and partnerships with the private sector		 Foundations and corporations are informed about the important restoration work occurring in Oregon and understand the additional 	restoration. - Natural resources implementing wat work that is also e
	4.	Partner to design strategies for complex conservation issues that can only be solved by seeking new and creative funding sources	 Presented climate change agricultural incentives concept to Oregon Board of Agriculture. Presented information about existing incentives programs that address carbon sequestration and climate adaptation (in coordination with Oregon Departments of Agriculture and Forestry) to Joint Committee on Carbon Reduction Continuing work with Water Core Team to prioritize information gaps regarding natural and built water infrastructure. Began process to work with Harney place-based planning for groundwater to determine best approaches to invest in reducing 	 community benefits of restoration projects. Foundations and corporations know OWEB, how the agency's investments work, and how they can partner. Foundations and corporations understand the importance of investing in healthy watersheds Foundations and corporations consider restoration investments in 	sustainable.

Attachment A

ece: (outcomes) pest community tegic practices y tell the story of city funds. re of the nding capacity. From past capacity rm funding ects involving s are ore efficiently and ncies increase trategic	 Near-term measure: Under development Potential impact measure: Increase in indicators of capacity for entities. Increased restoration project effectiveness from cross-agency efforts. Increase in funding for capacity by funders other than OWEB.
ice: (outcomes) shared vision est strategically in	 <u>Near-term measure:</u> Increase in the use of new and diverse funding sources by grantees.
nprehensive ate's natural and re to direct future corporations are shed funding corporations	 Potential impact measure: Increase in grantees cash match amount and diversity of cash match in projects. Increase in new and diverse funding sources. Increase in creative funding
estment in s companies are tershed health environmentally	 mechanisms and strategies. Increased high-quality conservation and restoration projects are funded without OWEB investment. Increased funding for bold and innovative, non-traditional investments.

		water use focused on key groundwater areas in the basin. Board will receive information at its April meeting.	 their investment portfolios. Oregon companies that depend on healthy watersheds are aware of the opportunity to invest in watershed health. 	
Priorit	ty 5 - The value of working	lands is fully integrated into watershed health		
Strategies	 Implement the Oregon Agricultural Heritage Program (OAHP) Strengthen engagement with a broad base of working landowners Enhance the work of partners to increase working lands projects on farm, ranch and forestlands Support technical assistance to work with owners/managers of working lands Develop engagement strategies for owners and managers of working lands who may not currently work with local organizations 	 In The Last Quarter, We Did This: (actions) HB 2086 was filed and heard to make technical fixes to the OAHP statute. The Commission met in March to tackle valuation of termed covenants and conservation management plan implementation, and to discuss potential grant solicitation timelines if program funding is secured. Continued Strategic Implementation Area technical assistance grant program to engage private landowners in streamside management for water quality; an additional six applications were submitted for the 2019 funding, bringing the total number of SIAs this biennium to 12. 	 So That: (outputs) Landowner engagement strategies and tools are developed and used by local conservation organizations Strategies and stories are being utilized to reach owners and managers of working lands who are not currently working with local organizations. Local organizations have the technical assistance to address gaps in implementing working land conservation projects. Examples of successful working lands conservation projects are available for local organizations to use. New partners are engaged with owners and operators of working lands to increase conservation. The Oregon Agricultural Heritage Commission has administrative rules and stable funding for the OAHP to protect working lands. Local capacity exists to implement the Oregon Agricultural Heritage Program. 	 <u>To Make This Difference</u> Generations of lar continue to integr on their working la maintaining econd sustainability. Fully functioning w landscapes remain the future. Across the state, I have the resource better facilitate w restoration oppor working lands. Sustained vitality of natural resources
Priorit	ty 6 - Coordinated monitor	ing and shared learning to advance watershed restoration effe	ectiveness	
1	 Broadly communicate restoration outcomes and impacts 	 In The Last Quarter, We Did This: (actions) Products are in development with seven "Telling the Restoration Story" grantees; additional story-telling opportunities are being scoped. Continued work with Conservation Effectiveness Partnership (CEP) to update the Fifteenmile Creek Fact Sheet and produce an online StoryMap. New watershed case studies are being explored. 	 <u>So That: (outputs)</u> Additional technical resources—such as guidance and tools—are developed and/or made accessible to monitoring practitioners. Priorities are proactively established and clearly articulated to plan for 	 To Make This Difference Decision-making a driven by insights data and results. Limited monitorin focused on approp quality, prioritized
3	 Invest in monitoring over the long term Develop guidance and technical support for monitoring 	 Convened a meeting with CREP technicians to review a draft monitoring checklist to pilot performance tracking in 2019. Interagency STREAM Team kicked off an initiative to improve data access among agencies for water temperature data. Completed review processes to award funding to five of the six 	 adequate monitoring resources that describe restoration investment outcomes. Monitoring practitioners focus efforts on priority monitoring needs. 	 being conducted k local groups, and s conducting monitor Local organization monitoring goals i

nce: (outcomes) ndowners rate conservation lands while nomic	 Near-term measure: Percentage of landowners identified within Strategic Implementation Areas that receive technical assistance.
working in resilient into local partners es necessary to vhy and where rtunities exist on of Oregon's s industries.	 Potential impact measure: Increased conservation awareness amongst owners and managers of working lands. A better understanding of conservation participation, barriers and incentives for working lands owners. Expanded relationships with agriculture and forestry associations. Increased engagement of owners and managers of working lands conservation projects. Increased working lands conservation projects on farm, ranch, and forest lands. Expanded working lands partnerships improve habitat and water quality. Expanded funding opportunities exist for working lands conservation.
at all levels is at all levels is s derived from ng resources are opriate, high- id monitoring	 <u>Near-term measure:</u> Number of communication tools developed through staff, grants or partnerships. <u>Potential impact measure:</u> Increased public awareness about
by state agencies, federal agencies toring. ns integrate into strategic pact, not just	 the outcomes and effects of watershed restoration and why it matters to Oregonians Increased utilization of effective and strategic monitoring practices by grantees and partners

					successful monitoring projects.		effort, is practice
	4.	increase communication between and among scientists and practitioners	 Coordinated with Oregon Sea Grant Extension to develop outreach materials on OSU's tidegate literature review report. Fostered information exchange on OWEB-funded projects by recruiting presenters for the Network of Oregon Watershed Council webinar series and a presentation by Bonneville Environmental Foundation at OR American Fisheries Society conference on applying the theory of change using the Deschutes FIP Progress Monitoring Framework as an example. 	-	wide audiences to incorporate into adaptive management and strategic planning at the local level. A dedicated process exists for continually improving how restoration outcomes are defined and described. Strategic monitoring projects receive	-	impacts on ecolo and social factors as a part of succe efforts. Partners are usin restoration 'stori conservation suc lessons learned.
	5.	Define monitoring priorities Develop and promote a monitoring framework			long-term funding.	-	Monitoring frame developed and sl Monitoring result visualized across are available at lo and regional scal Limited monitori provide return on priority needs.
Prior	ity	7 - Bold and innovative ad	tions to achieve health in Oregon's watersheds			1	
	1.	restoration over the long term	 In The Last Quarter, We Did This: (actions) Funded five new I-FIP partnerships, including John Day Basin Native Fish Habitat Initiative, Baker Comprehensive Sage-grouse Threat Reduction, Warner Basin Fish Passage and Habitat Improvement Initiative, Rogue Forest Restoration Initiative, and Clackamas Partnership Restoration for Native Fish Recovery. Presented OWEB Strategic Plan to Region 2 Review Team (6/6 RRTs now complete), including dialogue around Priority 7 and OWEB's interest in supporting experimentation where appropriate. 	-	 <u>Ihat: (outputs)</u> OWEB works with partners to share results of landscape scale restoration with broader conservation community. OWEB and partners have a better understanding of how restoration approaches can be mutually beneficial for working lands and watershed 	-	Make This Differer Multi-phased, hig and large geogra restoration proje OWEB's investme recognize the du and economic dr of watershed act appropriate.
Itegies	2.	Develop investment approaches in conservation that support healthy communities and strong economies		-	health. OWEB's landscape-scale granting involves effective partnerships around the state.	-	Diverse, non-trac and activities tha watershed health that weren't prev Conservation cor
Stre	3.	Foster experimentation that aligns with OWEB's mission	 Began agency, NGO and academia stakeholder engagement to scope monitoring and information needs and ideas to fill information gaps related to Stage 0 Restoration. Incorporated a shared risk approach in the draft land acquisition rules, which will allow reimbursement for certain due diligence costs prior to closing a transaction. Presented OWEB Strategic Plan to Region 2 Review Team (6/6 RRTs now complete), including dialogue around Priority 7 and OWEB's interest in supporting experimentation where appropriate. 			-	an experimental learning and inno Conservation cor become comfort properties and p potential, even if demonstrated ba demonstrated pa OWEB becomes evaluate risk OWEB encourage innovation.

4

Attachment A

d broadly. gical, economic a are considered assful monitoring g results-based es' to share cesses and eworks are hared. ts that can be time and space ocal, watershed es. Ing resources in investment for	 Improved restoration and monitoring actions on the ground to meet local and state needs. Increase in local organizations that integrate monitoring goals into strategic planning. Increased engagement and support of restoration and conservation activities. Increased decision-making at all levels is driven by insights derived from data and results. Increased ability to evaluate social change that leads to ecological outcomes.
sh-complexity, phic footprint cts are underway. ent approaches al conservation ivers and benefits ions, where litional projects t contribute to n are now funded viously. nmunities value approach to ovation. nmunities able with rojects that show the work is not used on est performance. oetter able to	 Near-term measure: 16.98% of Oregon is covered by a Strategic Action Plan associated with a FIP or Coho Business Plan. Potential impact measure: Increased strategic watershed restoration footprint statewide. Increased money for innovative watershed work from diverse funding sources. Increased learning from bold and innovative actions so future decisions result in healthy watersheds in Oregon New players or sectors—such as healthcare providers—engaged to invest in watershed restoration, enhancement and protection.
s a culture of	







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Agenda Item G supports OWEB's Strategic Plan priority # 7: bold and innovative actions to achieve health in Oregon's watersheds.

MEMORANDUM

 TO: Oregon Watershed Enhancement Board
 FROM: Jillian McCarthy, Partnerships Coordinator
 SUBJECT: Agenda Item G – Harney Basin Conservation Reserve Enhancement Program April 16-17, 2019 Board Meeting

I. Introduction

This report provides an overview of the proposed Conservation Reserve Enhancement Program (CREP) for groundwater in the Harney Basin.

II. Background

The Harney Basin is a semi-arid, internally draining system in southeastern Oregon. While also used for domestic, municipal, and livestock watering, groundwater in the basin is predominantly used for agricultural irrigation for the production of alfalfa. The water resources of the Harney Basin have been significantly over-allocated. Surface water was fully appropriated by the 1960's, and permitted groundwater development began increasing in the 1970's. In 2016, due to the decline in groundwater, the Oregon Water Resources Commission adopted rules designating the Greater Harney Valley Groundwater Area of Concern (GHVGAC) that included a moratorium on new groundwater permit applications within the GHVGAC (see map in Attachment A).

Also in 2016, the Harney County Watershed Council and the Harney County Court (County Government) were awarded a planning grant to conduct place-based water resource planning for the Harney Basin. The partners developed a collaborative planning program and have been convening work groups for Vegetation Management, Domestic and Municipal Water Use, Agricultural Irrigation, and Ecological Conditions. The Harney Basin Groundwater CREP Program is one part of a larger effort to reach sustainable levels of groundwater use in the Harney Basin.

In the summer of 2018, the Community-Based Water Planning Collaborative requested assistance from OWEB to develop a Harney Basin Groundwater Conservation Reserve Enhancement Program (CREP) proposal in partnership with the U.S. Department of Agriculture. The Harney Basin Groundwater CREP Program proposes to develop incentives

for farmers in the Harney Basin to reduce the use of groundwater through voluntary enrollment in the program.

III. Harney Basin Groundwater CREP Proposal

The primary goal for the Harney Basin Groundwater CREP is to reduce groundwater use to sustainable levels when coupled with other strategies of groundwater use reduction. There are approximately 100,000 acres of permitted groundwater irrigated acres in the Harney Basin. While it is very early in the development process, groundwater-based CREP programs in other states have provided ideas for how the Harney Basin Groundwater CREP could be structured. A proposal for Harney Basin Groundwater CREP program would be developed with significant discussion by a technical committee and staff with other agencies and interests.

Considering groundwater-based CREP programs in other states, the Harney Basin Groundwater CREP could involve enrollment of up to 30,000 acres of actively irrigated land within the GHVGAC and up to 4,500 acres of associated dryland (pivot corners) for 15 year contracts. Conservation rental payments for irrigated land could occur at an irrigated land rental rate with pivot corners at a dryland rental rate. Cost-share of up to 50% could be available for conservation practices implemented. Other considerations for the technical team would include incentive options to retire water rights and provide lump sum payments and well closure costs, and targeted incentives for areas of significant groundwater level declines.

Full implementation of the program could result in the conservation of 90,000 acre-feet of groundwater annually. In addition, the program could provide additional habitat for sage-grouse. The direct results of full enrollment are expected to result in a decrease in the rate of decline of the groundwater table, reduced threat to domestic water users, and long-term sustainability of agricultural production in the basin.

Total program costs and state cost-share would be estimated when the program is fully defined. It will be important to consider the current obligations of OWEB and other state agencies when developing program incentives.

The first step to explore the potential for the program is to appoint and charge a technical committee to follow Farm Service Agency (FSA) guidelines (Attachment B) for a program proposal development. When a final draft is prepared, it will be brought back to the board for consideration and deliberation.

IV. Sage Grouse and Harney Basin CREP

The sage-steppe habitats of Harney County are crucial for the recovery of sage grouse. The Harney Basin CREP would provide additional habitat for sage grouse adjacent to mesic vegetation, which is important for grouse brood rearing. It would also provide an opportunity to connect agricultural practices with sage grouse conservation, such as the potential to convert irrigated lands to permanent cover with a preference for sage steppe vegetation.

V. Recommendation

This is an information item only.

Attachments

A. Harney Basin and the Greater Harney Valley Groundwater Area of Concern Map

B. FSA Process for CREP Proposal Development


772 CREP Proposal Overview

A New CREP Project Development Stages

--The implementation of a new CREP program typically has the following 7 general stages.--

Stage	Development				
1	State CREP partners identify natural resource concerns, identify a solid State				
	funding commitment, and draft a written CREP proposal for submission to the				
	Program Manager.				
	* * *				
2	Program Manager and National CREP Review Team will review the proposal and				
	provide written comments to State CREP partners. Subsequent negotiation with				
	State CREP partners may also be conducted to resolve outstanding issues.				
3	State CREP partners will develop a Draft CREP Agreement outlining the legal				
	provisions of the proposed State CREP Program and submit to the Program				
	Manager. The Program Manager, National CREP Review Team, and USDA-OGC				
	will review the draft agreement and provide all necessary agreement wording				
	changes back to the State CREP partners.				
	Note: In most cases, CREP agreement drafts are undated through cycles of review				
	and refinement between State CREP nartners and National CREP Review				
	Team/OGC negotiations				
4	After full agreement and consensus is achieved among State CREP partners and				
	between State CREP partners and the Program Manager, a Final CREP Agreement				
	is prepared by State CREP partners and submitted to the Program Manager for				
	USDA-OGC approval.				
*5	The FSA State Office, in consultation with State CREP partners, must:				
	• submit a CREP project area shapefile for the new CREP project area				
	Note: A separate shapefile must be submitted to CEPD for each project area.				
	• consult CEPD to ensure that the shapefile format is consistent with all CREP				
	shapefiles*				
6	After the final agreement is signed by the Secretary of Agriculture and the				
	Governor, the FSA State Office drafts and submits a State supplement to 2-CRP to				
	the Program Manager for approval.				
7	The State and County FSA Offices, PAS, and State CREP partners conduct				
	outreach/promotional activities, issue local press releases and fact sheets, conduct				
	training, and announce CREP program signup.				

April 16-17, 2019 OWEB Board Meeting Executive Director Update H-1: Budget and Legislative

This report provides the board an update about the legislative budgeting process and the 2019 Legislative Session.

Background

The 2019 Legislative Session began on January 22 and is expected to adjourn by late June, 2019.

The Oregon Legislature approves budgets for state agencies on a biennial basis. Budgets are structured so that each agency's current (or "base") budget is recalibrated and submitted without need for specific policy description or justification. Any resources requested to be added to the base budget by agencies must be identified separately with policy narratives and justification. The requested additions to an agency's base budget are called "policy option packages," or POPs. The board approved OWEB's POPs in June of 2018 and these were included in OWEB's Agency Request Budget (ARB) that was submitted in August 2018. The Governor's Budget was released in late November 2018.

The Legislative Budgeting Process

The Governor's Recommended Budget, or GRB, is the starting point for agency budget discussions at legislative hearings. During the legislative session, agencies may advocate for their individual POPs only to the extent that they are included in the GRB. The GRB retains all of the following requests from OWEB's ARB:

- Program Continuity package (Conservation Outcomes Coordinator and Conservation Outcomes Specialist positions);
- Program Enhancement package (Partnerships Coordinator and Online Systems Project Manager positions and contracted services);
- Conservation Policy and Strategy Coordination package (contracted services); and
- Grant funds for: carryforward of federal grant funds and other funds; forest collaborative grant funds; federal funds from Natural Resources Conservation Service; loan funds from the Clean Water State Revolving Loan Fund; and funds for Upper Klamath Basin grants associated with salmon reintroduction.

Along with 12 other agencies, the Governor's Office added funding for an internal auditor position to OWEB's budget, as part of her 'Smart Government' emphasis area. Policy packages requested by OWEB, but <u>not</u> included in the GRB, are both operations and grant funding related to the Oregon Agricultural Heritage Program (OAHP). OWEB's current service level did not take any reductions in the GRB. However, prior to the start of legislative session, the agency was required to submit to Legislative Fiscal Office a report that lists 10 percent reduction options from current service level by priority for all fund sources.

OWEB's budget was heard by the Natural Resources Subcommittee of the Joint Committee on Ways and Means on March 18-19. Day 1 was a presentation of the agency's budget by OWEB leadership, and Day 2 was reserved for public comment. Work sessions with the Natural Resources Subcommittee of the Ways and Means Committee may occur any time after agency budget hearings are completed.

The only substantive change to OWEB's requested budget for the 2019-21 biennium since release of the GRB involves the Policy Option Package 240, Septic System Loan Funds. The package proposed an increase in limitation to enable OWEB to enter into a partnership to

receive loan funds from the Clean Water State Revolving Fund (SRF) from the Oregon Department of Environmental Quality (DEQ). Based on discussions during the legislative session, the decision was made to withdraw this POP, and instead change DEQ's statutes directly.

The February 2019 economic forecast projects that the economy will continue to grow at a modest, but slower pace than in recent years. Lottery revenues to OWEB in 2019-21 are expected to be higher than budgeted in 2017-19, and the 2017-19 biennium will have an ending balance for use in 2019-21. Depending on future revenue outlooks and the level of remaining ending balances from the 2017-19 biennium, the upcoming legislative budget cycle may or may not require the implementation of some degree of reductions. Staff will continue to update the board about key milestones in the legislative budgeting process.

Legislative

I. Oregon Agriculture Heritage Program (OAHP) Bills

HB 2086 is an OWEB-supported bill that, if approved, will provide technical corrections to OAHP statutes. Attachment A describes the proposed revisions to OAHP statutes. At the time of writing this staff report, HB 2086 has passed the House, and has been moved out of the Senate Environment and Natural Resources committee with a "Do-Pass" recommendation to the full Senate. HB 2729 is a bill that would provide \$10 million to OWEB for OAHP grants. The bill received a public hearing in February.

II. House Bill 2020

HB 2020 would establish the Oregon Climate Action Program. A cap-and-trade program would be created that sets a cap on allowable emissions, then auctions these allowances to regulated entities (e.g., fuel sector, natural gas sector). Proceeds from the sale of allowances will be deposited into accounts with the state treasury, including a Transportation Decarbonization Account, a Just Transition Fund, and a Climate Investments Fund (CIF). The CIF will support programs and projects that achieve emissions mitigation, climate adaptation, carbon sequestration, and/or clean energy transition. Under a separate bill (SB 928), a new agency—the Oregon Climate Authority—is established.

The Oregon Climate Authority will biennially outline the best opportunities for climate mitigation, adaptation, and carbon sequestration. This report, along with input from other entities, will inform budget funding recommends by the Joint Legislative Committee on Climate Action. The CIF could fund a range of activities such as energy efficiency and conservation; renewable energy; fuel efficiency; resilience planning; and adaptation or resiliency through natural and working lands investments, such as agricultural or forestry practices that reduce emissions or sequester carbon, restoration of tidal marsh or intertidal areas of estuaries, irrigation efficiency projects, and riparian restoration. Funding also would be available to "strengthen the resilience of fish, wildlife, and ecosystems in the face of climate change through investments in projects, including but not limited to projects involving instream flow acquisition and protection, fish barrier removal, habitat restoration and enhancement and protection of wildlife corridors, coldwater refugia areas and species strongholds."

Currently, the Oregon Climate Authority can consult with OWEB and the Oregon Departments of Agriculture and Forestry to develop offset programs. Amendments to

HB2020 are expected. At the April board meeting, staff will update the board about any changes that have the potential to affect OWEB.

Staff Contact

Budget topics or HB 2020: Renee Davis, Deputy Director, at <u>renee.davis@oregon.gov</u> or 503-986-0203. Legislative topics: Eric Hartstein, Senior Policy Coordinator, at <u>eric.hartstein@oregon.gov</u> or 503-986-0029.

Attachments

A. OWEB 2019-2021 Agency Legislation and Budget



HB 2086 Oregon Agricultural Heritage Program Technical Corrections

In addition to general clean-up, HB 2086 includes the following revisions to OAHP statutes:

- Requiring that the use of the land be preserved and protected for agricultural production as a requirement of a conservation easement.
- Clarifying that the succession planning program is intended to benefit "agricultural owners or operators" with succession planning for "working lands," using terms defined by statute.
- Clarifying that conservation management plans are "developed," whereas working land covenants and easements are "purchased."
- Revising technical assistance grant use to more accurately reflect the purpose of the grant funds, and to expand the eligible applicants to all organizations that are eligible to enter into conservation easements or covenants.
- Changing language to be consistent throughout the statute regarding the relationship between the Oregon Agricultural Heritage Commission and the OWEB Board.
- Revising language to align with OWEB's process by which technical committees can either advise staff who make recommendations to the OWEB Board/Oregon Agricultural Heritage Commission or advise the board/commission directly.

Category	2017-2019 Legislatively	2019-2021
	Approved Budget	Governor's Budget
General Fund	\$190,000	\$0
Lottery Funds	\$79,589,460	\$84,173,659
Other Funds	\$3,009,486	\$5,570,646
Federal Funds	\$41,759,143	\$58,710,763
Total Funds	\$124,548,089	\$148,455,068
Full-Time Equivalent (FTE)	33.00	35.88

Budget

Policy Packages - Recommended

100-NRS-4 - Conservation Outcomes Coordinator

Request position be made permanent. Measures and reports on ecological, economic, and social outcomes resulting from OWEB grant investments at the landscape level. Coordinates with various agencies and stakeholders to implement the Conservation Effectiveness Partnership and similar initiatives (including those with a connection to salmon habitat and recovery), and develop metrics and evaluation methods. \$266,080 (FF: PCSRF)

100-NRS-3 - Conservation Outcomes Specialist

Limited duration; Assists in building structure for monitoring and reporting results of agency and partner investments in watershed restoration. Helps to implement coordinated monitoring, adaptive management and shared learning aspects of OWEB's updated strategic plan. \$195,313 (LF: Ops)

200-Carry Forward

Proposes to extend expenditure limitation for non-lottery fund grants that have been awarded and continue to be active. This will allow funds for these grants to be expended in the 2019-21 biennium. \$16,400,000 (FF/OF)

210-Forest Collaborative Grants

Funding to OWEB from Oregon Department of Forestry for implementation of the competitive grants under the Oregon Federal Forest Health Program. \$500,000 (OF)

110-Personal Services Contracting Funds

Contract funds are critical for the agency to implement its programs in the most efficient and effective manner possible. \$375,000 (LF: Ops)

110-NRS-4 - Partnerships Coordinator

Limited duration; Manages work associated with Focused Investment Partnership program, which intends to scale up conservation to ensure progress toward quantifiable ecological outcomes. \$230,375 (LF: Ops)

110-PM-2 - Online Systems Project Manager

Limited duration; Manages work associated with OWEB's online grant management systems. \$218,375 (LF: Ops)

130-Conservation Policy and Strategy Coordination

Provides contracting resources to assist with conservation policy and strategy coordination on complex, landscape-scale natural resource issues. Examples include tide gates, sage-grouse habitat conservation and Governor Brown's initiative to create a secure, safe and resilient water future for all Oregonians. Using a model that has been successfully implemented for other programs, this package requests contracted services for effective program delivery. \$325,000 (LF: Ops)

230-Additional Grant Funds

Allows OWEB to receive and expend as grants funding from Natural Resources Conservation Service, should this service be requested, and if federal funds are available for this purpose. \$2,000,000 (FF)

250-Upper Klamath Basin Grants

Provides funds to support the reintroduction of salmon and steelhead into the Upper Klamath Basin and enable associated habitat restoration work through on-the ground grants, if federal funds are available for this purpose. \$13,400,000 (FF)

Policy Packages – Analyst Adjustment

090-Analyst Adjustments

Adds an Internal Auditor 2 position. \$183,351 (LF: Ops)

Policy Packages – Not Recommended

120-Oregon Agricultural Heritage Program-Operations

This package would provide staff and funds for contracting to support the Oregon Agricultural Heritage Program. \$738,652 (GF/LF: Ops)

220-Oregon Agricultural Heritage Program (OAHP) Grants

This package proposes funding for grant for implementation of the OAHP to help farmers and ranchers voluntarily keep their land in agriculture and maintain or improve fish and wildlife habitat. \$9,250,000 (GF)

April 16-17, 2019 OWEB Board Meeting Executive Director Update H-2: Oregon Agricultural Heritage Program

This report provides the board an update about the Oregon Agricultural Heritage Program (OAHP).

Background

The Oregon Agricultural Heritage Commission (OAHC) was established by law in 2017 to provide voluntary tools to protect and enhance working lands while maintaining or enhancing valuable fish and wildlife habitat and other natural resource values. The OAHC is authorized to make grant recommendations supporting conservation values on working lands, including grants for succession planning, developing and implementing conservation management plans, technical assistance, and conservation covenants and easements. The OAHC makes recommendations to the OWEB Board for approval.

OAHC Meeting

The OAHC met on March 6, 2019 to discuss the following items: valuation of conservation management plan (CMP) implementation; valuation of termed conservation covenants; OAHP legislation; and a potential timeline for solicitation of OAHP grants.

I. Valuing CMP Implementation

The commission's CMP subcommittee presented a report on valuation of CMP implementation. The subcommittee noted that some programs pay for the capital cost of installing practices, but not maintenance and monitoring. Since the OAHP could potentially pay for CMP implementation for 20-50 years, more work is needed to develop a payment system that recognizes the public benefit provided by CMP implementation. The OAHC decided to solicit contracting services to determine valuation of public benefits received from implementation of CMPs. Staff have released an RFP for this process.

II. Valuing Termed Conservation Covenants

The OAHC found that there is no standardized appraisal process for termed covenants. Available information found that valuation generally corresponded to the length of the term. Until standardized methods of appraisal are available, the OAHC decided that termed covenants should be valued at a percentage of market value that aligns with the number of years of the covenant, or 20% for a 20-year covenant and up to 50% for a 50-year covenant.

III. OAHP Legislation

Bills related to OAHP are described in Director's Update H-1.

IV. Potential Timeline for Solicitation of OAHP Grants

Should OAHP funding be appropriated for the 2019-2021 biennium, the OAHC expressed a desire to make funding available as soon as possible after the beginning of the biennium. Staff have drafted application templates for use in OWEB's online grant application system. If funding becomes available, a solicitation would be announced in July 2019 with applications due in October 2019. Following expert review and evaluation, the OAHC would recommend applications for funding at a March 2020 meeting. The board would act on the funding requests at its April 2020 meeting.

Staff Contact

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Agenda Item I supports all of OWEB's Strategic Plan priorities.

MEMORANDUM

TO:	Oregon Watershed Enhancement Board
FROM:	Meta Loftsgaarden, Executive Director
SUBJECT:	Agenda Item I – Spending Plan
	April 16-17, 2019 Board Meeting

I. Introduction

This report updates the board on OWEB's 2019-2021 Spending Plan. This item is for discussion only; no board action will be taken at this time. However, the board will be asked to provide direction to staff for moving forward with final options for the July 2019 meeting.

II. Background

After the Oregon Legislature approves OWEB's budget at the beginning of each biennium, the board considers and approves a spending plan for the distribution of grant funding. The OWEB Spending Plan guides the agency's grant investments for the biennium. Available funding for the board to distribute includes Measure 76 Lottery, federal, and salmon license plates. The bulk of OWEB's funding comes from two major sources: Measure 76 Lottery and the Pacific Coastal Salmon Recovery Fund (PCSRF).

At its July 2017 meeting, the board adopted a 2017-2019 Spending Plan totaling \$84.352 million. In June 2018, the board updated the spending plan to include additional Lottery and PCSRF monies, as well as funding transfers to other agencies. These funds, combined with additional revenues from Lottery, resulted in a final 2017-19 spending plan of \$96.858 million. Attachment A shows the 2017-2019 Spending Plan, total board awards to date, and funds remaining in each line item as of April 2019.

III. 2019-2021 Spending Plan Development

Based on the February 2019 revenue forecast, it is estimated that a total combined \$96 million will be available for grant distribution through Measure 76 Lottery Funds and PCSRF funding over the course of the biennium. For Lottery funding, this amount is dependent on revenues received. For PCSRF funding, this amount will be dependent on OWEB's successful receipt of PCSRF funding through their competitive grant process. If Congressional funding is available, PCSRF provides an opportunity for eligible applicants—including OWEB on behalf of the State of

Oregon—to submit grants each year. It should be noted that there are limitations on eligible uses of the available PCSRF funds, such that these funds cannot be used for all aspects of OWEB's grant program.

In October 2018, the board was updated on the process and timeline for approving the 2019-2021 Spending Plan. In January 2019, the board discussed spending plan categories and provided feedback on the proposed percentages allotted to each category. Between January and April, staff discussed funding options for specific grant types within each category. Based on board feedback and staff discussions, a draft 2019-21 spending is provided as Attachments B (percentages) and C (spending plan detail).

IV. Spending Plan Line Items

The spending plan contains a range of items. Some are frequently discussed (restoration, technical assistance, and monitoring grants; focused investments and council capacity), while others (weed grants, small grants, district capacity, CREP) are less frequently on the board's agenda. At the April 2019 board meeting, staff will present on each line item to give the board a better sense of what is funded in each area. These presentations are in advance of the July 2019 board meeting where decisions will be made on spending plan amounts for the 2019-21 biennium. Attachments I-1 through I-18 to the staff report provide summaries of the spending plan line items. Staff will present information to the board at the April meeting to provide additional details about the programs and answer any questions the board may have about those programs.

V. Recommendation

This is an information item only. Staff will be seeking feedback on overall spending plan direction for development of a final proposal for board consideration in July 2019. No final decisions will occur at the April meeting.

Attachments

- A. 2017-2019 Spending Plan
- B. Draft 2019-2021 Spending Plan Percentages
- C. Draft 2019-21 Spending Plan
- D. Spending Plan Line Item Summaries 1-18

OWEB 2017-19 Spending Plan Proposed for the April Board Meeting

	OWEB SPENDING PLAN	Spending Plan as of Jan 2019	TOTAL Board Awards To- Date	Remaining Spending Plan after To- Date Awards	Apr 2019 Proposed Awards	Remaining Spending Plan after April 2019 awards
1	Open Solicitation:		2010	20007000.00		
2	Restoration (includes USFW Coastal Wetlands)	33.000	25.032	7.968	7.761	0.207
3	Technical Assistance					
4	Restoration TA	4.000	2.636	1.364	1.229	0.135
5	CREP TA (includes NRCS & ODF funds)	1.435	1.435	0.000		0.000
6	Stakeholder Engagement	0.700	0.632	0.068	0.240	(0.172)
7	Monitoring grants	3.100	1.784	1.316	1.325	(0.009)
8	Land and Water Acquisition	0.000	0.000	0.070	0.000	(0.500)
9	Acquisition (includes USFW Coastal Wetlands)	9.900	6.630	3.270	3.802	(0.532)
10	Acquisition Technical Assistance	0.600	0.150	0.450		0.450
11	Small Grants	3.000	3.000	0.000	-	0.000
12	Programmatic Effectiveness Monitoring	1 587	0 756	0.000	0 253	0.000
14		60 472	45 205	15 267	14 610	0.670
15	% of assumed Total Budget	62.43%	40.200	10.201	14.010	0.007
	-		R			
16	Focused Investments:					
17	Deschutes	4.000	4.000	0.000		0.000
18	Willamette Mainstem Anchor Habitat	2.445	2.445	0.000		0.000
19	Harney Basin Wetlands	1.970	1.970	0.000		0.000
20	Sage Grouse	2.355	2.355	0.000		0.000
21	Ashland Forest All-Lands	2.340	2.340	0.000		0.000
22	Development EIPs	2.417	2.417	0.000	-	0.000
23	El Effectivenese Menitering	0.750	0.910	0.234	-	0.234
24		0.750	0.750	0.000	0.000	0.000
20 26	IOTAL % of assumed Total Budget	17.427	17.193	0.234	0.000	0.234
20	N of accurred Total Dauget	11.0070				
27	Operating Capacity:					
28	Capacity grants (WC/SWCD) incl. NRCS+LCWC	14.598	14.598	0.000		0.000
29	Statewide org partnership support	0.500	0.500	0.000		0.000
30	Organizational Collaborative Grants	0.400	0.400	0.000		0.000
31	TOTAL	15.498	15.498	0.000	0.000	0.000
32	% of assumed Total Budget	16.00%				
33	Other:					
34	CREP	0.750	0.750	0.000		0.000
35	Governor's Priorities	1.011	1.011	0.000		0.000
36	Strategic Implementation Areas	1.200	1.200	0.000		0.000
37	Strategic Plan Implementation Grants	0.500	0.500	0.000		0.000
38	TOTAL	3.461	3.461	0.000	0.000	0.000
39	% of assumed Total Budget	3.57%				
40	TOTAL OWEB Spending Plan	96.858	81.357	15.501	14.610	0.891
	· • · · · · • • • · · · · • • • • • • •		•			0.001
41	OTHER DISTRIBUTED FUNDS IN ADDITIC	ON TO SPEND	DING PLAN D	ISTRIBUTION		
42	Oregon Department of Fish and Wildlife - PCSRF	10.450	10.450	0.000		0.000
43	Lower Columbia Estuary Partnership	0.309	0.309	0.000		0.000
44	Forest Health Collaboratives from ODF	0.500	0.500	0.000		0.000
45	PSMFC-IMW	0.729	0.729	0.000		0.000
46	PSMFC-Coho Habitat Tools	0.166	0.166	0.000		0.000
52	ODOT	0.250	0.250	0.000		0.000
47	IOIAL	12.404	12.404	0.000	0.000	0.000
48	I O I AL INCluding OWEB Spending Plan					
	and Other Distributed Funds	109.262	93.761	15.501	14.610	0.891



2019-2021 Proposed Spending Plan Percentages

OWEB 2019-21 Proposed Spending Plan 2017-19 Carry Proposed Proposed Difference Spending Forward 2019 2020 from 2017-19 OWEB SPENDING PLAN Plan as of Spending Spending **Biennial Plan** Jan 2019 Plan Plan Open Solicitation: 1 30.200 31.200 2 Restoration 32.000 -0.800 Coastal Wetlands Restoration 1.000 0.332 -0.668 3 Technical Assistance 4.000 2.850 3.850 -0.150 4 Restoration TA CREP TA (includes NRCS & ODF funds 17-19; and \$250k NRCS 1.375 -0.060 5 1.435 1.375 funds in 19-21) 6 Stakeholder Engagement 0.700 0.900 0.900 0.200 3.100 3.250 3.250 0.150 7 Monitoring grants 8 Land and Water Acquisition 0.000 9 Acquisition (includes USFW Coastal Wetlands) 8.900 6.500 8.500 -0.400 **Coastal Wetlands Acquisition** 1.000 -1.000 10 Acquisition Technical Assistance 0.600 -0.600 3.000 11 Weed Grants 3.000 3.000 0.000 0.500 2.800 2.800 -0.350 12 Small Grants (carryforward up to \$500k based on 2017 board policy) 3 150 13 Quantifying Outputs and Outcomes (name change) 1.587 0.560 0.700 1.200 0.173 1.060 TOTAL 60.472 51.907 56.075 -3.505 14 53.78% 54.50% % of assumed Total Budget 63.12% 15 16 Focused Investments: Deschutes 4.000 4.000 4.000 0.000 17 Willamette Mainstem Anchor Habitat 2.445 2.180 2.180 -0.265 18 1.970 2.500 2.500 19 Harney Basin Wetlands 0.530 0.474 20 Sage Grouse 2.355 0.474 -1.881 21 Ashland Forest All-Lands 2.340 2.000 2.000 -0.340 22 Upper Grande Ronde 2.417 2.777 2.777 0.360 John Day Partnership 23 4.000 4.000 4.000 24 Baker Sage Grouse 1.715 1.715 1.715 25 Warner Aquatic Habitat 2.000 2.000 2.000 26 Rogue Forest Rest. Partnership 1.500 1.500 1.500 27 Clackamas Partnership 3.455 3.455 3.455 28 FI Effectiveness Monitoring 0 750 0.700 -0.050 0.450 TOTAL 16.277 0.000 27.051 27.301 11.024 29 30 % of assumed Total Budget 16.99% 28.03% 26.54% 31 Operating Capacity: 32 Capacity grants (WC/SWCD) (includes 3.8% COLA 19-21) 13.547 0.157 14.259 14.259 0.869 0.250 33 Statewide org partnership support 0.500 0.500 0.000 Organizational Collaborative Grants 34 0.400 0.200 0.200 -0.200 35 Partnership Technical Assistance (name change) 1.150 0.500 1.000 -0.150 TOTAL 0.157 15.597 15.209 15.959 0.519 36 % of assumed Total Budget 16.28% 15.76% 15.51% 37 38 Other: CREP 0.750 0.750 0.750 0.000 39 40 Governor's Priorities 1.011 1.000 1.000 -0.011 41 Strategic Implementation Areas 1.200 0.600 1.800 0.600 Strategic Plan Implementation Grants 0.500 0.435 -0.065 42 0.000 0.000 43 TOTAL 3.461 0.435 2.350 3.550 0.524 % of assumed Total Budget 3.45% 44 3.61% 2.43% 45 TOTAL OWEB Spending Plan 8.562 95.807 1.652 96.517 102.885 46 OTHER DISTRIBUTED FUNDS IN ADDITION TO SPENDING PLAN DISTRIBUTION 11.437 47 Oregon Department of Fish and Wildlife - PCSRF 10.450 11.437 0.987 0.309 0.321 0.321 0.012 48 Lower Columbia Estuary Partnership 49 Forest Health Collaboratives from ODF 0.500 0.500 0.500 0.000 51 NRCS technical support 1.000 0.000 0.000 -1.000 PSMFC-IMW 0.729 0.600 0.600 -0.129 52 53 PSMFC-Coho Habitat Tools 0.166 0.166 0.166 0.000 ODOT 54 0.000 0.000 0.000 0.000 55 TOTAL 13.154 0.000 13.024 13.024 -0.130 TOTAL Including OWEB Spending Plan and Other 56 **Distributed Funds** 108.961 1.652 109.541 115.909 8.432

Title: Governor's Priorities

Recommended Amount: \$1.0 million

Summary: The Governor's Priorities spending plan line item supports work within the sideboards of Ballot Measure 76 that furthers priority programs and initiatives related to restoration in Oregon. Typically these investments address landscape-scale or emerging issues related to restoration needs of importance as identified by the Governor's Office. Grant investments are targeted and catalyze broadscale, multi-organizational work. These types of investments are unique in that they address both technical assistance and restoration needs while focusing on areas of importance to the Governor.

Program History: Under Ballot Measure 76, OWEB's funding has flexibility to address a range of needs that ultimately lead to on-the-ground restoration work. This, combined with Oregon's approach to addressing broad-scale initiatives through multi-organizational partnerships, has resulted in the use of OWEB funding as a catalyst to support emerging or particularly complex natural resource challenges and opportunities.

These investments have varied over time and include:

- Support for initial work of forest-health collaboratives, including statewide coordination, technical support for local collaboratives, and planning and implementation support for these groups.
- Partnerships with the National Fish and Wildlife Foundation (NFWF) to support on-the-ground investments in Salmon Stronghold projects. This work led to a multi-organizational partnership to develop a Coastal Coho Business Plan and component action plans through a partnership with NFWF, the Wild Salmon Center, National Oceanic and Atmospheric Administration, and Oregon Department of Fish and Wildlife.
- Support for Oregon's Sage-Grouse Plan, including convening partners to develop strategies for successful restoration programs, as well as Geographic Information Systems and other data gathering and analysis.
- Support for development of a federal, state, and local agency and organization partnership focused on clean water. The partnership includes a comprehensive framework in support of monitoring and implementation focused on the state's agricultural water quality program, currently focused on Strategic Implementation Areas. This investment has also been instrumental in the current Water Vision work with multiple state agencies
- Support for the development of a working lands easement program concept focused on agricultural lands. This resulted in legislative approval of the Oregon Agricultural Heritage Program.

Demand: Investments have totaled \$1 million in each of the last two biennia. Because this program operates as a proactive grant-making item, the demand does not exceed the funding available.

Future Need: The Governor's office is still in the process of identifying future focus areas for the program and will provide updates at both the April and July board meetings. In addition, as in previous biennia, the Governor's office may come before the board during the biennium with additional program priorities. At this time, it is not expected that additional requests will increase the spending plan amount requested.

Highlights of Accomplishments or Program Developments in the Biennium: In the last biennium, the board invested in four initiatives through this spending plan line item:

- **Oregon's Water Vision** \$65,000 to support work to ensure a secure and resilient water future for all Oregonians. Work will continue to focus on:
 - Understanding the context for change, including what has been accomplished in other areas;
 - Helping to better define and frame Oregon's water 'story' as it relates to community resiliency, economy, and health;
 - Developing a strong framework for the program that will lead to an effective governance and funding model; and
 - Continuing to develop a statewide shared vision and path.
- Tide Gate Partnership \$300,000 to support work to support resilient coastal communities by reducing risks from coastal hazards, protecting landscapes that support local economies, and enhancing ecological function of estuarine resources for fish and wildlife. Work continues to focus around local outreach, completion of a tide gate inventory, development of an interactive decision support tool, and building out engineering and regulatory toolboxes resulting in more, high quality on-the-ground projects.
- **Post-Fire Response** \$85,000 to support post-fire recovery work from both the Chetco Bar fire in 2017 and fires in the mid-Columbia region in 2018. Work included an inventory of the stream network on private lands to locate areas within the burn region that are most likely to degrade based on variables such as slope, loss of canopy, soil burn severity, road density, and channel morphology. Funds were also used for conservation planning and project implementation in partnership with Natural Resources Conservation Service funds.
- SageCon Partnership \$550,000 to continue key coordination and collaborative governance role for statewide planning and coordination related to the health of Oregon's sage-steppe ecosystem, rural community vitality, addressing threats to habitat and wildlife, and advancing economic development within a conservation framework.

Investments by Biennium (in millions)			
for Governor's Priorities			
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium	
2013-2015	\$1.00	\$0.00	
2015-2017	\$1.00	\$0.00	
2017-2019	\$1.011	\$0.00	

Title: Strategic Implementation Areas

Recommended Amount: \$1.8 million

Summary: The Oregon Department of Agriculture's (ODA) Agricultural Water Quality Management Program is leading the "Strategic Implementation Area" (SIA) program, where select areas around the state will receive focused stakeholder engagement, technical assistance, and monitoring to address priority non-point source water quality concerns in agriculturally influenced areas. Water quality goals are achieved by voluntary cooperation among landowners and natural resource partners to address management concerns, and by ODA enforcing water quality regulations.

During the 2017-2019 biennium, 11 SIAs were identified by ODA. OWEB provided \$100,000 in technical assistance and stakeholder engagement funding to soil and water conservation districts (SWCDs) to support working with landowners and developing restoration project designs within newly identified SIAs. Any restoration projects developed from SIAs as a result of OWEB's technical assistance funding may be submitted either through OWEB's other grant programs or in partnership with other agencies for implementation.

In addition to the support for technical assistance and stakeholder engagement, OWEB has also provided \$25,000 to each SIA to support baseline and long-term monitoring with the SIA geography.

Program History: In the 2013-2015 biennium, ODA developed the SIA process in order to prioritize agricultural lands with connectivity to waters of the state using data sets of reproducible criteria. Following the prioritization process, ODA worked with the Clackamas County and Wasco County SWCDs as pilot test areas. ODA then initiated a remote Compliance Evaluation to identify and categorize agricultural areas that may be contributing to pollution, with the results shared with landowners. Additional outreach and education, personal landowner contact, and referral to SWCDs and watershed councils for assistance in conducting restoration activities followed.

In the 2015-2017 biennium, ODA identified SIAs in Deschutes, Polk, Columbia, Clatsop, Polk, Yamhill, East Multnomah, Clackamas, Jackson, Tillamook, Marion, Hood River, and Umatilla counties. To assist producers in these regions, OWEB allocated \$1 million to fund restoration projects within SIA boundaries. At the conclusion of the 2015-2017 biennium, OWEB and ODA collectively reevaluated this approach and identified that the highest need for the program was to provide technical assistance, stakeholder engagement, and monitoring funds to the SIA's. This revised approach began in 2017-2019 biennium, where ODA has identified SIAs in Lane, Curry, Wasco, Benton, Linn, Klamath, Umatilla, Baker, Gilliam, Malheur, and Harney counties.

Demand: In the 2019-2021 biennium, ODA will identify 12 additional SIAs. ODA has requested additional staff through the legislative process to support an increased number of SIAs. Following SIA identification, OWEB funds will be eligible to assist local partners in providing technical assistance to agricultural operators for water quality improvement. Restoration projects may be proposed through existing OWEB processes in the Small Grant and Open Solicitation grant programs.

ODA and OWEB believe that strategic delivery of stakeholder engagement and technical assistance will lead to greater program effectiveness and allow ODA and its partners to make better use of limited resources.

Future Need: It is anticipated that SIAs will continue to be selected using a robust prioritization approach based on data from multiple sources including state and federal agencies. Funding will

continue to be needed to assist in providing stakeholder engagement technical assistance in selected SIAs.

Highlights of Accomplishments or Program Developments in the Biennium: Several soil and water conservation districts have developed projects as a result of the SIA program and OWEB technical assistance funds and have submitted applications to OWEB's small grant program. In addition, several groups have developed monitoring plans and are beginning to plan for baseline data collection.

Investments by Biennium (in millions) for Strategic Implementation Areas			
Biennium Spending Plan (after any additional funds added) at end of biennium			
2013-2015	\$0.00	\$0.00	
2015-2017	\$1.00	\$0.00	
2017-2019	\$1.20	\$*	

Title: Open Solicitation - Restoration

Recommended Amount: \$31.2 million

Summary: Open solicitation restoration grants are OWEB's primary method of delivering support for watershed projects that restore watershed functions. Open solicitation restoration grants are offered twice per year, spring and fall, through a competitive granting program.

Program History: Open solicitation restoration grants provide assistance to landowners to restore watershed health locally and have been part of OWEB's history since its beginning in 1987 as the Governor's Watershed Enhancement Board. Initial investments were modest and focused on restoration demonstration projects. The number of projects and level of investment quickly increased as the Oregon Legislature and the public supported OWEB through Ballot Measures 66 and 76. At the same time, organizational capacity within watershed councils, soil and water conservation districts, and other groups to plan and implement projects grew, and landowners became engaged in implementing voluntary projects.

Restoration accomplishments in Oregon, including those funded by OWEB, have been reported through the Oregon Watershed Restoration Inventory (OWRI). From 1999 through 2018, OWEB invested \$337 million in 6,112 OWEB restoration projects that have reported their accomplishments to OWRI. Riparian, road, upland, fish passage, and instream restoration activities make up the largest number of projects, respectively. These projects have resulted in:

- 5,417 linear stream miles treated through instream and riparian activities
- 6.469 miles of habitat made accessible for fish
- 1,198,227 acres treated through upland activities
- 54,527 acres of wetland/estuarine habitat restored/created/enhanced

Demand: In the 2017-2019 biennium, the board awarded 62% of requested funds, or \$31.5 million out of \$51 million requested. The board awarded 85% of the funds requested in applications recommended for funding by regional review teams.

Future Need: While the five new implementation Focused Investment Partnerships will absorb some of the demand for open solicitation restoration funds, this category of the spending plan is expected to continue to require a high proportion of available funds.

Highlights of Accomplishments or Program Developments in the Biennium: In 2017, the board adopted revised restoration rules that clarify evaluation criteria that successful projects must address. Facilitation of regional review teams incorporated graphic references to the criteria, the "bubble diagrams," to help review teams address evaluation comments commensurate with criteria in rule.

Investments by Biennium (in millions)				
for Open Solicitation - Restoration				
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium		
2013-2015	\$27.720	\$0.102		
2015-2017	\$25.982	\$0.00		
2017-2019	\$33.000	\$*		

Title: Open Solicitation – Technical Assistance

Recommended Amount: \$3.85 million

Summary: Open solicitation technical assistance grants are offered twice per year, spring and fall, through a competitive granting program for watershed assessments and designs that lead to eligible restoration projects. Technical assistance grants through the open solicitation process are capped at \$75,000 per grant.

Program History: Since 1999, OWEB has been awarding technical assistance grants. These grants play a key role in developing future restoration grant proposals and increase the capacity of OWEB's local partners to engage in project development, planning, design, coordination, and permitting. There are two types of technical assistance grants offered through the open solicitation program:

- Technical Design and Engineering: Development of technical design for a restoration project; and
- Resource Assessment and Planning: Development of an implementation plan for restoration activities.

Demand: In the 2017-2019 biennium, the board awarded 60% of requested funds, or \$3.9 million out of \$6.5 million requested for eligible projects. The board awarded 77% of the funds requested in applications recommended for funding by regional review teams.

Future Need: Demand remains high, even after the spending plan line item was increased mid-biennium in 2016. Similar to restoration grants, it is anticipated that the five new implementation FIPs will reduce demand somewhat.

Highlights of Accomplishments or Program Developments in the Biennium: The cap on technical assistance grant requests was increased from \$50,000 to \$75,000, reflecting increased costs of services and increased complexity of project types. For the first time, the board adopted rules specific to technical assistance grants, including evaluation criteria that better relate to planning, assessment, and design projects. Landowner recruitment projects were moved out of the technical assistance grant type to the new stakeholder engagement grants, which are more appropriate for that project type.

Investments by Biennium (in millions)				
for Open Solicitation – Technical Assistance				
Biennium Spending Plan (after any additional funds added) Remaining Spending at end of biennium				
2013-2015	\$2.60	-\$0.024		
2015-2017	\$3.06	\$0.169		
2017-2019	\$4.00	\$*		

Title: Open Solicitation Monitoring Grants

Recommended Amount: \$3.25 million

Summary: Open solicitation monitoring grants are awarded once per year in the fall grant cycle. Funded monitoring grants may include: gathering baseline data on current conditions in a watershed, evaluating the specific efforts of management actions, or identifying causes for changes in trajectory (either up or down) in habitat, fish and wildlife populations, and water quality/quantity. All monitoring projects must be developed within the context of the entire watershed, follow OWEB approved protocols, and use the information to design, direct, or implement projects to enhance or sustain the health of watersheds.

Grantees also can request funding for effectiveness monitoring of restoration projects that are funded by OWEB to determine if an individual restoration project is effective at meeting its biological and ecological objectives. Effectiveness monitoring is not a requirement of any OWEB grant, and is above and beyond compliance monitoring/implementation reporting. Information gathered can be helpful in assisting the restoration practitioner and OWEB in determining the biotic and abiotic changes on the treatment area from the restoration action(s) and informing future restoration design. Project-level effectiveness monitoring grants reflect the diversity of the associated restoration grants.

Open solicitation monitoring grants differ from OWEB's Programmatic Effectiveness Monitoring line item in the spending plan in that the open solicitation monitoring grants are proposed by local partners to OWEB as part of the agency's responsive grant-making process. The projects are designed and led by grantees, and typically are smaller in scope and effort than programmatic effectiveness monitoring projects.

Program History: As a part of the Oregon Plan for Salmon and Watersheds, OWEB and other state natural resources agencies developed an associated monitoring strategy. This strategy described an overall framework for structuring coordinated monitoring and provided direction to help integrate Oregon Plan programs and monitoring with region-wide watershed enhancement and salmon recovery efforts. OWEB's monitoring grants assist the agency in meeting its responsibility to: 1) provide support for cooperative monitoring activities, 2) describe the results of restoration investments, and 3) report on Oregon Plan progress.

Demand: In the 2017-2019 biennium, the board awarded 57% of requested funds, or \$3.1 million out of \$5.4 million requested. The board awarded 79% of the funds requested in applications recommended for funding by regional review teams (RRTs). The total allocation to open solicitation monitoring grants this biennium was increased from previous biennia, to help address the high demand for monitoring funds.

Future Need: It is anticipated that a consistent and significant need for monitoring funds will extend into the next biennium, given that approximately 25-30 monitoring applications are received each year on average. Alternate sources of funding for monitoring are limited, and in some cases other funding sources have seen reductions in available funds in recent years. For example, Oregon Department of Environmental Quality (DEQ)'s Clean Water Act Section 319 grants can only fund a limited number of monitoring projects statewide due to recent funding cuts. Staff anticipate working with the board's monitoring subcommittee in the 2019-21 biennium to scope resource needs associated with potential future monitoring actions, such as long-term monitoring investments and paired restoration and effectiveness monitoring.

Highlights of Accomplishments or Program Developments in the Biennium: OWEB staff convened the Oregon Plan Monitoring Team (OPMT) to discuss the technical merits and potential benefits of submitted monitoring grants in two open solicitation grant cycles. The OPMT reviews were provided to RRTs to inform funding recommendations for monitoring grants.

In 2017, OWEB monitoring staff solicited input from OWEB Grant Program staff, OPMT and RRT members, and monitoring grantees to determine how to improve the monitoring application guidance to maximize the quality and success of monitoring grant investments. Based on those recommendations, in May 2018, staff revised and added guidance for the online monitoring grant application, and hosted a webinar to provide additional training to interested applicants.

In the 2017-2019 biennium, the effectiveness monitoring coordinator and regional program representatives successfully implemented an informal pre-application consultation process with potential monitoring applicants. This consultation allows the applicant to describe their monitoring interest and provides an opportunity for OWEB staff to advise them on integral components of a successful monitoring project, including data management and analyses recommendations, engagement with agencies as project partners, well defined and implemented monitoring objectives, and appropriate sampling methodologies. Staff can also alert applicants to questions in the monitoring application and the important information that is of interest to the reviewers.

This biennium, monitoring and grant staff have further increased coordination, including collaboratively administering monitoring grants over the life of the project and jointly reviewing grant reports to ensure they adequately fulfill the scope of work described in the grant application. This effort is another example of OWEB staff working across programs to ensure accountable use of funds, and to support sharing of important findings obtained through these monitoring funds.

Investments by Biennium (in millions) for Open Solicitation Monitoring Grants			
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium	
2013-2015	\$2.50	-\$0.024	
2015-2017	\$2.12	\$0.024	
2017-2019	\$3.10	*	

^{*}Full biennium data not available

Title: Quantifying Conservation Outputs and Outcomes

Recommended Amount: \$1.2 million

Summary: Quantifying Conservation Outputs and Outcomes is the new title for the previous Programmatic Effectiveness Monitoring line item in OWEB's spending plan. This item includes OWEB-led initiatives that evaluate specific types of restoration actions at a larger geographic and temporal scale, rather than at the project scale. This program-level monitoring and evaluation that is supported through targeted investments is different from open solicitation monitoring grants, which are conceptualized by local partners and considered through OWEB's responsive grant program.

Programmatic monitoring consists of evaluating the cumulative effectiveness of restoration action types that are funded through OWEB's open solicitation grants. Recent examples include the livestock exclusion effectiveness monitoring study completed in 2018, and the ongoing Upper Middle Fork John Day River Intensively Monitored Watershed (IMW). This spending plan line item also supports quantification of conservation outcomes. For example, funds have supported the 'Telling the Restoration Story' initiative, which helps local partners compile and report existing data to highlight progress towards meeting ecological outcomes and communicate lessons learned.

As a complement to these investments, OWEB staff also participate in cross-agency teams to evaluate programs and projects that share common goals and objectives. One example is the Conservation Effectiveness Partnership (CEP), which includes the Natural Resources Conservation Service, Oregon Department of Agriculture (ODA), Oregon Department of Environmental Quality (DEQ), and OWEB. OWEB also has convened an interagency team consisting of ODA, DEQ and Oregon Department of Fish and Wildlife (ODFW) to provide oversight and guidance for Strategic Implementation Area (SIA) monitoring.

Program History: In September 2004, the board authorized the initial concept of an effectiveness monitoring program. Since that time, staff have worked with the board monitoring subcommittee to build the program. This approach included the identification of specific scales at which to conduct monitoring, such as watershed-scale as with the Upper Middle Fork John Day IMW, and certain prioritized project types for evaluation, like juniper removal or livestock exclusion.

In September 2016, OWEB filled a new position, Conservation Outcomes Coordinator, which assists OWEB with quantifying outcomes associated with collective conservation actions implemented in Oregon, and works with cross-agency teams such as CEP. In July 2018, OWEB added another new position, Conservation Outcomes Specialist, adding more capacity to help OWEB track and report on ecological and programmatic outcomes.

Demand: In the 2017-2019 biennium, \$1.587 million was allocated for programmatic monitoring, with \$756,000 awarded as of January 2019. Several additional investments are in development (e.g., tidal wetland effectiveness monitoring, monitoring of Stage 0 restoration approach) that will result in funding requests spanning this and early next biennium.

Future Need: Demand for Quantifying Conservation Outputs and Outcomes EM funds increased in the 2017-2019 biennium, and this trend is anticipated to continue in the 2019-2021 biennium. For example, given strong support expressed for 'Telling the Restoration Story,' sustained demand for this program is expected in the 2019-2021 biennium. Staff anticipate expansion of this initiative to support more paired

restoration and monitoring investments, which enable monitoring over the full life of a restoration project. Ongoing investment in monitoring under the Coordinated Streamside Management approach for SIAs will be needed. As implementation of OWEB's 2018 strategic plan continues, additional monitoring needs will emerge for investments related to Strategy 7, Bold and Innovative Actions, that require paired monitoring. Staff will work with the board's monitoring subcommittee to identify these needs and opportunities. For these reasons, staff recommend carrying forward funding for this line item from 2017-19 to 2019-21.

Highlights of Accomplishments or Program Developments in the Biennium: Example highlights are described below (not an exhaustive list):

- 'Telling the Restoration Story' These grants support compilation, analysis, and/or interpretation of existing data from a watershed restoration project to tell the story of quantitative restoration effects. Seven retrospective projects are currently funded by OWEB, and each is anticipated to produce a suite of outreach and technical communications products by June 2019. More projects are in development.
- Coordinated Streamside Management/SIA monitoring The inter-agency approach include funding for monitoring provided to each SIA, which will scale up restoration work to address agricultural water-quality issues. The statewide monitoring team has developed guidance for use by local partners and is working with current SIAs to help develop local monitoring plans.
- Tide gate Literature Review In February 2018, a final report was completed by Oregon State University that summarizes existing information about the effects of tide gate restoration projects. This document reports on findings, conclusions and recommendations regarding the effectiveness of tide gate removal or upgrade in improving conditions for Oregon's native aquatic species (particularly salmonids), and will inform future programmatic monitoring investments by OWEB.

Investments by Biennium (in millions)				
Biennium Spending Plan (after any additional funds added) Remaining Spending Plan at end of biennium				
2013-2015	\$1.00	\$0.31		
2015-2017	\$0.50	\$0.287		
2017-2019	\$1.587	\$*		

Title: Open Solicitation – Stakeholder Engagement

Recommended Amount: \$0.9 million

Summary: Open solicitation stakeholder engagement projects include outreach efforts that are necessary for carrying out eligible restoration and acquisition projects, or programs that lead to eligible projects.

Program History: From 1999 to 2011, OWEB awarded outreach and education grants. Under Measure 66, these activities were funded through non-capital funds, which could be used for a variety of purposes that furthered the goals of improving water quality, recovering fish and wildlife, and enhancing watershed health.

Measure 76 changed the constitutional language regarding education and outreach grant offerings. Due to these changes, beginning with the October 2011 grant cycle, OWEB only offered outreach grants that are necessary for activities to protect or restore native fish and wildlife habitat, water quality, or stream flows. Grants for education only are not eligible under Measure 76. In 2017, the board adopted rules for the new stakeholder engagement offering that provided further guidance for the program.

Demand: In the 2017-2019 biennium, the board awarded \$0.875 million of the \$1.6 million requested – an award amount of 54% compared to the requested amount. The board awarded 87% of the funds requested in applications recommended for funding by regional review teams.

Future Need: While stakeholder engagement grants, and formerly outreach grants, were eligible for activities necessary for eligible acquisition projects, the offering had never been utilized for that purpose. With participation in rule development from the land trust community, and subsequent outreach to land trusts, there has been increased interest in accessing stakeholder engagement funds for the purpose of developing eligible acquisition projects. Increasing complexity of restoration projects is also expected to increase interest in stakeholder engagement grants for the purpose of community engagement.

Highlights of Accomplishments or Program Developments in the Biennium: Stakeholder engagement replaced outreach grants in the 2017-2019 biennium to better align the offering with constitutional and statutory requirements for Ballot Measure 76 Lottery funds. Staff worked with a rules advisory committee of stakeholders to develop new rules for the offering, including evaluation criteria that reflect the significant differences between stakeholder engagement grants and the former outreach grants. In addition to landowner recruitment, stakeholder engagement projects can include outreach necessary for community buy-in that is essential to subsequent restoration or acquisition project success.

Investments by Biennium (in millions)				
for Open Solicitation – Stakeholder Engagement				
Biennium Spending Plan (after any additional funds added) Remaining Spending Plan at end of biennium				
2013-2015	\$1.10	-\$0.028		
2015-2017	\$0.65	\$0.003		
2017-2019	\$0.70	\$*		

Title: Land and Water Acquisitions

Recommended Amount: \$8.5 million

Summary: OWEB funds projects involving the acquisition of interests in land and water from willing sellers for the purpose of maintaining or restoring watersheds and habitat for native fish or wildlife. OWEB-funded interests in land and water may be held by a variety of entities including, but not limited to, local, state and federal agencies, tribes, and not-for-profit conservation organizations and land trust trusts.

OWEB funds several types of land and water acquisitions: the purchase of property in fee simple, conservation easements, permanent water rights, and water leases.

Program History:

Land Acquisitions: The board began making land acquisition grants in 1998. Several grants were awarded during the first few years of the program. In 2000, interest in the program began growing, and grew significantly over subsequent biennia. During the 2017-2019 biennium, OWEB convened a rules advisory committee to recommend program rule changes for board consideration in April 2019. To date, the board has awarded nearly \$49 million in land acquisition grants, leveraging \$94 million in matching funds and protecting nearly 79,000 acres.

Water Acquisitions: The board awarded its first water acquisition grant in 2001. Until 2010, only five grants were awarded, with a relatively small award amount for each project (i.e., under \$40,000). Beginning in 2010, interest in water acquisition grants began to grow as a result of increased organizational capacity in select areas of the state to carry out water acquisition projects and programs and increased concern about instream flow issues. Since 2010, the board has awarded over \$4.55 million for water acquisition grants, resulting in the short-term transfer of over 98 cubic feet per second (cfs), or 17,987 acre-feet and the permanent transfer of about 30 cfs, or 6,256 acre-feet to instream use. To date, funding requests to OWEB have come from three primary locations in the state: the Deschutes, Klamath, and mid-Columbia Basins. In addition, OWEB is now seeing more applications from the Rogue Basin. These awards have supported a range of activities from permanent transfers and temporary leases of instream water rights to incentivizing voluntary curtailments by irrigators.

Demand:

Land Acquisitions: In the 2017-2019 biennium, twelve applicants requested approximately \$10.3 million in funding through the Land Acquisition open solicitation program. Land acquisitions that are part of Special and Focused Investment Partnerships total \$1, 943,850.

Water Acquisitions: In the 2017-2019 biennium, eleven applicants requested \$1,891,040 in funding through the Water Lease and Transfer grant program. Seven projects were fully funded in 2017 and three applications are recommended for funding from the 2018 grant offering. One application was determined to be incomplete.

Future Need:

Land Acquisitions: The Land Acquisition open solicitation program seeks to continue annual solicitations for land acquisition applications in the 2019-2021 biennium. OWEB's land acquisition program prioritizes the purchase of land with intact, functioning systems that benefit priority plant communities and fish and wildlife species.

Water Acquisitions: The Water Lease and Transfer grant program seeks to continue annual solicitations for applications in the 2019-2021 biennium. The purpose of the program is to increase instream flow to address the conservation needs of habitats and species and to improve water quality.

Highlights of Accomplishments or Program Developments in the Biennium:

Land Acquisitions: During the 2017-2019 biennium, land acquisition staff completed one acquisition transaction, which permanently protected 1,771 acres, completed the conveyance of two OWEB-funded properties to a new grantee, started or continued eight land acquisition transactions, moved the land acquisition application to the online platform in collaboration with the Technical Services staff, and coordinated monitoring of OWEB's portfolio of land acquisition investments.

Water Acquisitions: During the 2017-2019 biennium, staff worked with the National Fish and Wildlife Federation (NFWF) to coordinate technical and organization capacity reviews of water acquisition grant applications. OWEB staff developed a new online application for water acquisition projects to better align the program with the agency's grant process improvements. Through this, application materials were updated to streamline and coordinate with NFWF's Columbia Basin Water Transaction Program. The application review process utilized NFWF's Technical Advisory Committee to evaluate the 2018 OWEB Water Lease and Transfer grants for project soundness, ecological outcomes, and organizational capacity.

Investments by Biennium			
for Land and Water Acquisitions			
Biennium	Spending Plan (after additional funds added)	Remaining Spending Plan at end of biennium	
2013-2015	\$8.00	\$1.06	
2015-2017	\$6.675	\$2.659	
2017-2019	\$10.50**	\$*	

*Full biennium data not available

** Includes federal Coastal Wetlands funding

Title: Small Grant Program

Recommended Amount: \$3.3 million

Summary: OWEB small grant program (SGP) funds are awarded biennially to cooperative partnerships of watershed councils, soil and water conservation districts, and tribes. These small grant teams (Teams) form to prioritize and implement smaller-scale watershed restoration projects. Teams select from an OWEB rule-defined list of actions when identifying priority watershed concerns for their small grant area. Priority concerns include: fish passage; urban impact reduction; road impact reduction; water quality and quantity/irrigation efficiency; and instream, riparian, wetland, and upland process and function. Teams set application cycles, review submitted proposals, and submit recommended projects to OWEB.

Program History: In 1999 OWEB investigated ways to be more responsive to small restoration projects. During this time the Oregon Legislature encouraged the agency to initiate a county-based, local cost-share program through a budget note in OWEB's legislative adopted budget.

In January 2002, the board adopted administrative rules establishing the SGP with the goal of supporting implementation of the Oregon Plan for Salmon and Watersheds by funding small, straightforward restoration projects designed to improve water quality, water quantity, and fish and wildlife habitat. Such projects are to include, but are not limited to, those developed to address Total Maximum Daily Loads (TMDL's), Agriculture Water Quality Management Plans, urban non-point source pollution management plans, and the Board of Forestry's Forestry Program for Oregon.

The board set boundaries for 28 geographic areas throughout the state. Within each area a team may form comprised of representatives from local watershed councils, soil and water conservation districts, and tribes. Teams are guided by self-defined operating procedures, along with a list of watershed priorities and eligible project types revisited biennially. Historically the board has awarded \$2.8 million (\$100,000 per team) per biennium to the program.

During the 2015-2017 biennium, the board open solicitation subcommittee completed a review of the SGP. This process resulted in two recommended changes, the first being an increase in the project award cap from \$10,000 to \$15,000. The second recommendation was to allow the reallocation of up to \$500,000 in unspent SGP funds carried over from one biennium to the next. Following board approval, these changes were implemented in the 2017-2019 biennium. SGP rules were updated April 2018, to reflect the increased project cap along with minor clarifying language updates.

Demand: In the 2017-2019 biennium, all 28 Teams successfully reorganized and were awarded \$100,000 each. As of March 8, 2019, 214 projects have been awarded utilizing nearly \$2.4 million in SGP funding.

Future Need: The biennium spending plan need is expected to remain stable at \$2.8 million. The continuation of unspent program funds carryover is requested to allow high-performing teams access to additional funding when their original funding award has been exhausted.

Highlights of Accomplishments or Program Developments in the Biennium: As noted above, two changes to the SGP were implemented during the 2017-2019 biennium – the increased cap and board allowance for additional carryover. To date, more than half of projects awarded this biennium have utilized the increased award amount. Regarding carryover funds, these were added to the award of those teams allocating at least 95% of their original award by the mid-point of the biennium. Thirteen teams met the threshold and received an additional \$26, 923 each to allocate to projects this biennium.

Both program changes were well-received and will allow for increased utilization of program funding by redistributing funds to those teams and areas where demand is greatest.

Investments by Biennium (in millions)				
for Small Grant Program				
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium		
2013-2015	\$2.80	\$0.404		
2015-2017	\$2.80	\$0.350		
2017-2019	\$3.30	\$*		

Title: Oregon Department of Agriculture, Oregon State Weed Board Grant Program

Recommended Amount: \$3.0 million

Summary: The Oregon Department of Agriculture (ODA) noxious weed control grants are awarded annually through the Oregon State Weed Board (OSWB) using Measure 76 Lottery funds approved through OWEB's biennial spending plan. Grant projects protect watershed health, native fish and wildlife habitat from the negative impacts of State Listed noxious weeds. Under the OSWB Grant program, the OSWB works to fund as many high priority projects as possible with the available funds. Grants are restricted to projects that restore, enhance or protect fish and wildlife habitat, watershed functions, native salmonid populations, or water quality. Grants are for noxious weed control work. They must address State Listed noxious weeds and can include assessment, survey, outreach, and project design activities that are necessary to enable the weed control portion of the project.

The prevention and control of State Listed noxious weed species are critical elements of watershed protection and enhancement. To address this issue, ODA and OWEB partner to support implementation of high-priority noxious weed control statewide. Noxious weed control is a first step in restoring watershed health and key to protecting the investment in Oregon's restoration work.

Program History: The OSWB Grant Program was established in the 1999-2001 biennium, after the passage of Measure 66. Until 2010 and the passage of Measure 76, the fiscal responsibilities for Oregon State Weed Board (OSWB) grants were administered through ODA. The passage of Measure 76 in 2010 started the partnership between OWEB and ODA for OSWB grants. The ballot measure changed the language within the constitution, designating OWEB as the single granting agency for State Lottery funds designated for watershed restoration. This change resulted in a move of OSWB grant funding under OWEB's budget, rather than being transferred directly to and administered by ODA.

The 2011-2013 biennium was a transition period for the OSWB grant partnership. A Lean-Kaizen process was completed to identify strengths, challenges, and redundancies in the process, and refinements to the process were made based on the lessons learned. ODA and OWEB staff have worked together to ensure grantees meet the requirements and standards of both agencies under the new OSWB grants process, and have improved communication between the agencies and local partners such as watershed councils, county weed programs, Cooperative Weed Management Areas, and soil and water conservation districts.

Under the new system, OSWB grant program applications are reviewed and evaluated by ODA staff and the OSWB approves the grants for funding. ODA maintains technical oversight over the grants and works with grantees on project implementation (e.g., prepares the applications, agreements, approves reports, reviews invoices, monitors projects, and approves payments). OWEB approves budgets, approves the grants that are recommended for funding, enters into grant agreements, completes the final review of all reports and receipts, and issues payments.

Demand: In the 2017-2019 biennium, applicants to the OSWB grant program had a success rate of 79%; 103 projects secured full funding, seven obtained partial funding, and 29 projects did not receive funding. Historic demand for grants has only had a success rate of 68% of the projects which secured funding.

Future Need: The OSWB Grant Program is seeking to continue an increase of \$500,000 in the 2019-2021 biennium that was first proposed in 2017-19. In the 2017-2019 biennium, the OSWB Grant Program was awarded an increase of \$500,000 for the pilot County Weed Development Grants. Previous to that

increase, the program remained at \$2.5 million since the 2011-2013 biennium. A continuation of this increase would provide the opportunity to expand existing projects and address new opportunities for weed grant investments that meet the requirements of M76.

Highlights of Accomplishments or Program Developments in the Biennium *(include programmatic highlights from the biennium)*: In 2017 grantees had a 179% match on the OSWB/OWEB funding that was received for project work, treating over 16,161 net acres and surveyed 730,556 gross acres.

Investments by Biennium (in millions)					
for Oregon State Weed Board Grant Program					
Biennium	Spending Plan (after any additional funds added) at end of biennium				
2013-2015	\$2.50	\$0.00			
2015-2017	\$2.50	\$0.00			
2017-2019	\$3.00	\$0.00			

Title: Focused Investment Partnership – Implementation

Recommended Amount: \$26.601

Summary: Focused Investment Partnership (FIP) – Implementation investments address a boardidentified priority of significance to the state; achieve clear and measurable ecological outcomes; use integrated, results-oriented approaches as identified through a strategic action plan; and are implemented by high-performing partnerships.

Program History: OWEB began its current partnership investments in 2006 with the Whole Watersheds Restoration Initiative, a multi-agency, cooperative funding grant program to restore salmon habitat in priority watersheds throughout the state. This investment was followed by several Special Investment Partnerships.

In June 2013, the board approved its Long-Term Investment Strategy Framework with four major areas of investment: Operating Capacity, Open Solicitation, Focused Investments, and Effectiveness Monitoring. At that time, no formal definition, process, or solicitation approach for the FIP program existed. In October 2013, OWEB initiated a nine-month process to develop the definition, criteria, and program design (including solicitation approach and process) for the FIP category in the Long-Term Investment Strategy. This was followed by initiation of an 18-month process to set board priorities and solicit for investments within the program.

Following an extensive public process, the board selected the following priority areas for focused investments at its April 2015 meeting:

- 1) Sagebrush/Sage-Steppe Habitat
- 2) Oregon Closed Lake Basin Wetland Habitat
- 3) Dry-type Forest Habitat
- 4) Oak Woodland and Prairie Habitat
- 5) Coho Habitat and Populations along the Oregon Coast
- 6) Aquatic Habitat for Native Fish Species
- 7) Coastal Estuaries

The first solicitation for Implementation FIP proposals occurred in 2015. Applications discussed the strength of the partnership; the partnership's strategic action plan; and the restoration strategy, work plan, and budget for the six-year FIP initiative. Proposals were evaluated by expert review teams formed around the designated board priorities, and partnerships were interviewed by the board Focused Investment subcommittee in January 2016 in a public meeting setting.

For the 2015-2017 biennium, the board awarded \$14.058 million to the six partnerships listed below. In July 2017, these partnerships were awarded \$15.512 million for the 2017-2019 biennium.

- 1) Ashland Forest All-Lands Restoration
- 2) Habitat Restoration for Anadromous Fish Reintroduction in the Deschutes
- 3) Harney Basin Wetlands Initiative
- 4) Oregon Model to Protect Sage-Grouse, All Counties
- 5) Upper and Middle Willamette Mainstem Anchor Habitats
- 6) Upper Grande Ronde Initiative

The second solicitation for Implementation FIP proposals occurred in 2018. The application and review process were similar to the initial 2015 solicitation, and included refinements based on lessons learned

from the first solicitation and the FIP program administrative rules that were adopted in January 2018. At the January 2019 meeting, the board selected five initiatives to be funded in 2019-2021 totaling \$12.670 million, including:

- 1) John Day Basin Native Fish Habitat Initiative
- 2) Baker Comprehensive Sage-grouse Threat Reduction
- 3) Warner Basin Fish Passage and Habitat Improvement Initiative
- 4) Rogue Forest Restoration Initiative
- 5) Clackamas Partnership Restoration for Native Fish Recovery

Demand: OWEB conducted required pre-application consultations with 15 partnerships for the 2018 solicitation. Of those, 10 partnerships submitted Implementation FIP applications and two submitted Development FIP applications. At the January 2019 board meeting, five partnerships were selected for Implementation FIP funding and both of the partnerships that submitted Development FIP applications were awarded funding through that grant offering.

Future Need: At the time of application, the original six FIP implementation initiatives requested funding and provided budgets for three biennia. The sum of FIP Implementation budgets for the 2019-2021 biennium is \$13.931 million, an approximate 10.2% decrease from the 2017-2019 biennium. Details on 2017-2019 and 2019-2021 budgets are found in Attachment A. Having selected the five new initiatives for funding as noted above, the program would add an additional \$12.670 million in the 2019-2021 biennium to make those awards. Thus, the total projected 2019-2021 biennium Implementation FIP investment is \$26.601 million. Budgets for each of the FIP initiatives are available if requested.

Highlights of Accomplishments or Program Developments in the Biennium: The six partnerships awarded funding in 2016 have made strong, measurable progress toward their initiative goals. A full update on progress for each initiative was provided through written and oral reports in agenda item K at the January 2019 meeting. Additionally, 2018 marked just the second time the FIP program has solicited proposals for Implementation funding. This process was built on lessons learned from the first solicitation in 2015, and it recruited highly capable partnerships with ambitious restoration initiative goals. The program will seek to continue refining its solicitation and review processes in the future.

Investments by Biennium (in millions)			
for Focused Investment Partnership – Implementation			
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium	
2013-2015	\$10.25	\$0.00	
2015-2017	\$14.058	\$0.00	
2017-2019	\$15.527	\$0.00	

Attachments:

A. FIP Implementation Initiatives 2017-2019 Budgets and 2019-2021 Estimated Budgets

Focused Investment Partnerships (FIP) 2017-2019 Implementation FIP Budget Tables

Table 1: Deschutes Partnership

OWEB Grant Category	2017-2019 Biennial OWEB Investment	2017-2019 Balance to be Obligated*	2019-2021 Biennial OWEB Request**
Partnership Capacity	\$123,900	\$0	\$125,000
Stakeholder Engagement	\$174,536	\$174,536	\$234,375
Technical Assistance	\$475,000	\$200,000	\$40,000
Restoration	\$2,002,924	\$1,802,924	\$2,491,875
Land Acquisition	\$938,750	\$938,750	\$928,750
Water Acquisition	\$0	\$0	\$0
Monitoring Data Analysis/Reporting of Results	\$284,890	\$284,890	\$180,000
TOTAL	\$4,000,000	\$3,401,100	\$4,000,000

Table 2: Willamette Anchor Habitat Working Group

OWEB Grant Category	2017-2019 Biennial OWEB Investment	2017-2019 Balance to be Obligated*	2019-2021 Biennial OWEB Request**
Partnership Capacity	\$101,661	\$0	\$100,000
Stakeholder Engagement	\$0	\$0	\$0
Technical Assistance	\$233,761	\$158,761	\$0
Restoration	\$1,989,595	\$1,121,271	\$1,960,000
Land Acquisition	\$0	\$0	\$0
Water Acquisition	\$0	\$0	\$0
Monitoring Data Analysis/Reporting of Results	\$119,983	\$0	\$120,000
TOTAL	\$2,445,000	\$1,280,032	\$2,180,000

*Obligated funds are funds that are currently in grant agreement

**Not to exceed total budget request from the FIP Phase 2 Application

Focused Investment Partnerships (FIP) 2017-2019 Implementation FIP Budget Tables

OWEB Grant Category	2017-2019 Biennial OWEB Investment	2017-2019 Balance to be Obligated*	2019-2021 Biennial OWEB Request**
Partnership Capacity	\$61,200	\$0	\$62,000
Stakeholder Engagement	\$0	\$0	\$0
Technical Assistance	\$488,350	\$0	\$0
Restoration	\$1,821,960	\$1,492,413	\$2,685,000
Land Acquisition	\$0	\$0	\$0
Water Acquisition	\$0	\$0	\$0
Monitoring Data Analysis/Reporting of Results	\$44,990	\$0	\$30,000
TOTAL	\$2,416,500	\$1,492,413	\$2,777,000

Table 3: Upper Grande Ronde Restoration Partnership

Table 4: Ashland Forest All Lands Restoration

OWEB Grant Category	2017-2019 Biennial OWEB Investment	2017-2019 Balance to be Obligated*	2019-2021 Biennial OWEB Request**
Partnership Capacity	\$1,780,680	\$0	\$0
Stakeholder Engagement	\$0	\$0	\$0
Technical Assistance	\$449,778	\$0	\$547,425
Restoration	\$0	\$0	\$1,228,603
Land Acquisition	\$0	\$0	\$0
Water Acquisition	\$0	\$0	\$0
Monitoring Data Analysis/Reporting of Results	\$109,542	\$0	\$223,972
TOTAL	\$2,340,000	\$0	\$2,000,000

*Obligated funds are funds that are currently in grant agreement

**Not to exceed total budget request from the FIP Phase 2 Application

Focused Investment Partnerships (FIP) 2017-2019 Implementation FIP Budget Tables

OWEB Grant Category	2017-2019 Biennial OWEB Investment	2017-2019 Balance to be Obligated*	2019-2021 Biennial OWEB Request**
Partnership Capacity	\$384,925	\$0	\$500,000
Stakeholder Engagement	\$0	\$0	\$110,000
Technical Assistance	\$567,067	\$394,646	\$125,000
Restoration	\$923,920	\$923 <i>,</i> 920	\$1,655,000
Land Acquisition	\$0	\$0	\$0
Water Acquisition	\$0	\$0	\$0
Monitoring Data Analysis/Reporting of Results	\$94,088	\$94,088	\$2,500,000
TOTAL	\$1,970,000	\$1,412,654	\$2,500,000

Table 5: Harney Basin Wetlands Initiative Partners

Table 6: Oregon Model to Protect Sage Grouse

OWEB Grant Category	2017-2019 Biennial OWEB Investment	2017-2019 Balance to be Obligated*	2019-2021 Biennial OWEB Request**
Partnership Capacity	\$0	\$0	\$0
Stakeholder Engagement	\$0	\$0	\$0
Technical Assistance	\$122,228	\$122,228	\$0
Restoration	\$2,190,985	\$255 <i>,</i> 082	\$473,000
Land Acquisition	\$0	\$0	\$0
Water Acquisition	\$0	\$0	\$0
Monitoring Data Analysis/Reporting of Results	\$42,037	\$0	\$0
TOTAL	\$2,355,250	\$377,310	\$473,000

*Obligated funds are funds that are currently in grant agreement

**Not to exceed total budget request from the FIP Phase 2 Application

Title: Focused Investment Effectiveness Monitoring

Recommended Amount: \$700,000

Summary: The approach employed by Focused Investment Partnerships (FIPs) provides an opportunity to learn about the progress and outcomes possible under six-year investments. Focused Investment Effectiveness Monitoring (EM) evaluates the dedicated FIP funding to help board, staff, and stakeholders to adaptively manage partnership investments in the future.

Program History: In January 2016, the board awarded its first six Implementation FIPs. Recognizing the need to understand how FIPs are achieving their intended ecological and programmatic impacts, the board awarded funds to the Bonneville Environmental Foundation (BEF) in April 2016 to help OWEB establish a structure for evaluating progress towards ecological outcomes and program-level impacts. The resulting progress monitoring framework helps OWEB and local implementers evaluate progress toward outcomes for each of the board-identified ecological priorities. Key elements include a results chain and a cross-walk matrix. The framework is based on best practices for evaluating conservation outcomes and may also be useful to other funders, as well as the board. BEF then worked with each of the six Implementation FIP partnerships to develop, refine, and complete results chains and cross-walks for their program, overlaying existing monitoring efforts of the FIPs to determine what monitoring already is occurring or planned and what remains as a gap.

In April 2018, the board awarded supplemental funding to fill the top priority monitoring gaps identified by the six FIPs. Five applications have been submitted, and OWEB staff established a technical review process for evaluating these applications. Also in April 2018, additional funding was provided to support BEF's ongoing engagement in the FIP monitoring effort, including (but not limited to): creating 'generic' results chains for each board-approved FIP ecological priority to communicate with less-technical audiences; developing adaptive management guidance for each FIP; and working with newly selected Implementation FIPs to complete results chains and cross-walks.

Demand: In April 2016, the board awarded \$200,000 to BEF to coordinate with OWEB on developing the FIP monitoring framework, in collaboration with each partnership. In April 2018, the board delegated \$623,750 to be awarded to FIP partnerships to address their top priority monitoring need(s) identified through the results chain process. Additionally, \$126,250 was awarded for continued work by BEF. During the 2019-21 biennium, funding is needed to help the five newly selected Implementation FIPs bridge from results chains to monitoring plans by continuing to fill gaps that may be identified. The new FIPs did not yet have the benefit of using a FIP strategic action plan template that incorporate results chain (or theory of change) concepts. Implementation FIPs awarded beyond the 2019-21 biennium will use theory of change approaches and reflect this in their monitoring funding requests to OWEB. In addition, a modest amount of funding is requested to continue BEF's involvement during this transition biennium.

Future Need: As supplemental funding is now being provided to each FIP to address top priority monitoring needs, there will be a continued need to evaluate interim results and adaptively manage their restoration and monitoring efforts where needed. As new FIPs are selected, demand to connect the results and outcomes of these investments to the ecological outcomes in a consistent way will continue. Staff will work with the board monitoring and focused investment subcommittees to track FIP monitoring needs, and ultimately may propose refinements to this spending plan line item in the future (e.g., supporting out-year tracking and reporting activities beyond the life of a six-year FIP). Over the
long term, the FIP monitoring results will help the board understand the outcomes and impacts of this investment approach and lessons learned from these partnerships.

Highlights of Accomplishments or Program Developments in the Biennium:

- Each existing partnership has worked with BEF and OWEB staff to identify top priorities for supplemental monitoring funding. Working within the context of the progress monitoring framework, each of the six FIPs identified a top priority for supplemental funding to enhance FIP monitoring efforts and/or their ability to track and report progress. Currently funded projects include: 1) a monitoring database for the Oregon All Counties Sage Grouse FIP; and 2) enhanced monitoring and analysis to support an updated results chain that connects social support and ecosystem services to restoration for the Ashland Forest All-Lands Restoration Initiative. Monitoring applications are under review to support the Upper Grande Ronde Initiative, Deschutes Partnership, and Harney Basin Wetlands Initiative. The application for the Upper and Middle Willamette Mainstem Anchor Habitats partnership is pending.
- Generic results chains for the board's FIP ecological priorities are in development to fill a
 communication need for less technical audiences to understand how restoration results in nearterm and longer-term ecological outcomes. These communication products demonstrate how
 strategies and actions yield near-term and longer-term ecological outcomes specific to each
 ecological priority in an attractive one-page graphic.
- OWEB staff are developing progress tracking reports for each of the six FIPs to provide a
 consistent approach to tracking outputs, outcomes and lessons learned over time. These reports
 will align strategies presented in the partnerships' results chains with work done towards
 implementing strategic action plans. They will show progress each partnership is making
 towards measuring and achieving ecological outcomes and share insights learned from
 implementing restoration.

Investments by Biennium (in millions)		
for Focused Investment Effectiveness Monitoring		
Biennium	Spending Plan (after any	Remaining Spending Plan
	additional funds added)	at end of biennium
2013-2015	\$0.00	\$0.00
2015-2017	\$0.50	\$0.30
2017-2019	\$0.75	\$0.00

Title: Partnership Technical Assistance (formerly Development Focused Investment Partnership)

Recommended Amount: \$1 million

Summary: Development Focused Investment Partnership (FIP) grants have supported existing partnerships working within an OWEB focused investment priority. The current Development FIP grant offering is intended for partnerships seeking to 1) build their capacity to partner at a high-performing level, 2) generate a new strategic action plan, 3) enhance an existing strategic action plan, and/or 4) develop a financial plan.

Program History: OWEB awarded the first grants under this program (known as 'Capacity-Building' FIPs at the time) in January 2016, with eight grants to partnerships totaling \$937,369. In January 2017, staff solicited for 2017-2019 Capacity Building applications. At that time staff also expanded the eligible activities and recommended a name change for the program (from 'Capacity Building' to 'Development'). Developing a financial plan was included in the eligible activities and stakeholder engagement was made required activity. These changes were based on lessons learned from grantees and from the Partnership Learning Project associated with the FIP program.

Demand: During the 2017-2019 biennium, OWEB offered two Development FIP grant cycles and funded seven applications totaling \$676,671.

Future Need: Oregon is a leader in collaborative approaches to restoration. After offering two biennia of grants to support partnership development and development of a strategic action plan, there is now a diversity of partnerships operating in Oregon working collaboratively on ecological outcomes. Some of those partnerships are a direct result of receiving a Capacity Building or Development FIP and are now high-performing partnerships with strategic action plans. Some are just forming and might be future applicants to the program.

As we enter into the third biennium of this program area OWEB staff recommend several changes to the program, as outlined below.

- 1. Change the name from 'Development FIP' to 'Partnership Technical Assistance'.
- 2. Add a new eligible action under this grant offering to allow existing, high-performing partnerships with a strategic action plan to apply for funding to support and maintain the high-performing partnership. We know from experience in working with our grantees and from the Partnership Learning Project that maintaining a high functioning partnership takes time, energy, and financial resources. This change also directly supports the outcomes listed under Strategic Plan Priority 3: Community capacity and strategic partnerships achieve healthy watersheds.
- 3. Move the program out of the Focused Investment spending plan category into the Operating Capacity category, and no longer require partnerships to be directly addressing one of OWEB's identified ecological priorities.

These proposed changes would continue to make the program responsive to the evolving partnership needs on the landscape and open up the offering to additional eligible applicants. The bar would continue to be high for which types of applications are eventually funded, but staff believe a greater diversity of applicants to the program will have wide-ranging benefits.

Highlights of Accomplishments or Program Developments in the Biennium: The Development FIP program has encouraged communication and learning across partnerships. Staff host quarterly calls with all of the current grantees to discuss lessons learned, challenges, and questions. These calls continue to

be great opportunities for grantees to share information across partnerships and learn from each other. We will continue this approach in the future as we move forward with the program.

Investments by Biennium (in millions)		
for Partnership Tech	nnical Assistance	
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium
2013-2015	\$0.00	\$0.00
2015-2017	\$1.039	\$0.00
2017-2019	\$1.15	\$*

*Full biennium data not available

Title: Council Capacity

Recommended Amount: \$7.129 million

Summary: Council Capacity grants are awarded biennially and help support the operations of effective watershed councils that engage people in their communities to participate in collaborative, voluntary restoration of watersheds.

Program History: OWEB has provided operating grants to watershed councils for more than 15 years. Watershed councils are locally based, voluntary, and under ORS 541.890(15), "designated by a local government group convened by a county governing body, to address the goal of sustaining natural resource and watershed protection, restoration and enhancement within a watershed."

OWEB does not create or oversee watershed councils. OWEB has statutory discretion to provide capacity grants to councils that represent a balance of interests in their watersheds and demonstrate the potential to protect and enhance the quality of their watersheds. Councils also are expected to assure a high level of citizen involvement in the development and implementation of watershed action programs (ORS 541.910).

In the 2015-2017 biennium, 59 councils submitted council capacity applications and 58 councils were funded. Staff used the merit criteria and evaluation process adopted by the board in July 2014 to determine funding levels, including full funding, reduced funding, and do not fund. All 58 councils that received funding submitted the required work plan update in June 2016.

In the 2017-2019 biennium, 60 councils submitted requests for eligibility determination by the November 2016, deadline. After the eligibility review, and when necessary an appeal process, all 60 were determined eligible to apply for a council capacity grant. All 60 councils applied by the March 2017, deadline. The board awarded 58 councils two year council capacity grants and one council a one year grant with the ability to reapply for the second year of funding. In June 2018 that watershed was able to demonstrate it met all five merit criteria and the board awarded the council a second year of council capacity grant funding.

Demand: In the 2017-2019 biennium, of the 59 councils mentioned above, 53 received full funding, five received reduced funding, and one received one-year funding with an extension as referenced. One council did not receive funding.

Future Need: The council capacity grant program is seeking to include a 3.8% cost-of-living increase for councils in the 2019-2021 biennium. These funds will be distributed, based on the results of the merit evaluation, among 59 grant applications that were submitted by the application deadline.

Highlights of Accomplishments or Program Developments in the Biennium: During the 2017-2019 biennium OWEB staff moved the council capacity grant application to OWEB's online grant application system. This transition allows watershed councils to manage most of their OWEB grant applications through one system. In addition, staff made several updates to the council capacity grant application guidance, including merging two merit criteria, effective governance and effective management into one criterion, effective governance and management.

The final development has been related to support for watershed councils that choose to merge into one watershed councils. After multiple discussions with the board's operating capacity subcommittee, staff recommend the board adopt the approach outlined in Attachment A of the Operating Capacity Subcommittee staff report, providing additional, ongoing support, to watershed councils that have

successfully merged. In the 2019-2021 biennium this additional merged funding will only be applicable to the successfully merged Rogue River Watershed Council.

Investments by Biennium (in millions)		
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium
2013-2015	\$6.10	\$0.00
2015-2017	\$6.250	\$0.00
2017-2019	\$6.848	\$0.00

Title: District Capacity

Recommended Amount: \$7.129 million

Summary: Soil and Water Conservation District (SWCD) capacity grants provide funding for 45 SWCDs to work with landowners to conserve natural resources and lend support to the Oregon Department of Agriculture (ODA) Agricultural Water Quality Management Program. The funding is divided into two funds for each SWCD:

- 1) Scope of Work funds support working with landowners and partners to protect and conserve natural resources; specifically, providing technical assistance and community engagement for the restoration and protection of native fish and wildlife, watersheds, and water quality through implementation of Agricultural Water Quality Management Area Plans.
- 2) *District Operations Fund* supports the capacity of the SWCDs to comply with Oregon Revised Statute (ORS) requirements, conduct business, and provide assistance to landowners and partners.

Program History: SWCDs have an over 75-year history in Oregon. Established in 1939, South Tillamook became the first official Soil Conservation District. In 1963 the Oregon Legislature added the "and Water" to the name of Soil Conservation Districts. In 1997, the legislature added a budget note for SWCD funding as follows: "The Subcommittee expects the grant funds to be available in the following amounts through the Governor's Watershed Enhancement Board: \$2,400,000 - Soil and Water Conservation Districts: Funding for positions in each of the eight existing areas and for watershed assessments and management plans; half of the funding would be distributed through an application process."

SWCDs are political subdivisions of state government, but are not state agencies. SWCDs are considered municipal corporations. They are governed by specific enabling legislation under ORS 568. The members of SWCD Boards of Directors are elected officials, to serve on either a five or seven member board.

Since the inception of the Agricultural Water Quality Management Program, legislative direction and budget notes have resulted in the following list of fundamental principles from which the annual work plan, commonly known as the Scope of Work (SOW), is built:

- 1) ODA is responsible to develop, periodically modify, and implement Agricultural Water Quality Area Plans that are sufficient to meet water quality standards as described in statute.
- 2) SWCDs are the Local Management Agencies that assist ODA in implementing the Area Plans. SWCDs are to be involved in timely, effective implementation of Area Plans to the fullest extent practical.
- 3) Legislative budget notes (1997, 2007) provide direction to ODA on the use and purpose of funds allocated to SWCDs, as further refined in the Intergovernmental Agreement.
- 4) Legislative direction is to use these funds to implement the agricultural portion of the Oregon Plan for Salmon and Watersheds as administered by ODA.
- 5) In June 2012, ODA began working with Oregon Association of Conservation Districts leadership, SWCD managers, and the Soil and Water Conservation Commission to develop a new annual work plan or (SOW) process. The new SOW process provides SWCDs more flexibility and responsibility. 75% of the SOW funds are used for district-wide tasks, while requiring 25% of the funds to be used for a specific geographic area (Focus Area). Focus Areas allow SWCDs to assess and measure change in land conditions over time. The SOW Focus Area process is a consistent approach to geographically

assess riparian conditions, target on the ground projects to improve water quality, and demonstrate effectiveness of the conservation work SWCDs achieve on a statewide basis.

Demand: In the 2017-2019 biennium, 40 SWCDs received full capacity grant funding. Four Baker County SWCDs split two full shares of capacity grant funds. One SWCD did not receive any capacity grant funding. Those unspent funds have been rolled over into the 2019-2021 spending plan to be redistributed to SWCDs during the 2019-2021 biennium.

Future Need: The district capacity grant program is seeking to include a 3.8% cost-of-living increase in the 2019-2021 biennium.

Highlights of Accomplishments or Program Developments in the Biennium: SWCDs continue to work directly with ODA, watershed councils, Natural Resources Conservation Service, and other partners in implementing Oregon's 38 Agricultural Water Quality Area Plans, and assist landowners in conducting conservation work on agricultural lands. SWCDs are also vital to assisting ODA in implementing the Strategic Implementation Area program, and capacity funding provides the means to allow SWCDs to engage in the program at the current levels.

Investments by Biennium (in millions) for District Capacity		
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium
2013-2015	\$6.10	\$0.00
2015-2017	\$6.250	\$0.00
2017-2019	\$6.75	\$0.00

Title: Statewide Organizational Partnership Technical Assistance

Recommended Amount: \$.500 million

Summary: The Oregon Conservation Partnership (Partnership) includes The Network of Oregon Watershed Councils (NOWC), Oregon Association of Conservation Districts (OACD), Coalition of Oregon Land Trusts (COLT), and Oregon Conservation Education & Assistance Network (OCEAN). These separate groups collaborate and coordinate to deliver technical support, member services, program development, training, and outreach to their stakeholders. For the 2019-2021 biennium, the partnership plans to continue to current level of increased services and offerings to their stakeholders.

Program History Since 2007, the board has approved grants to support the efforts of these organizations, recognizing that they provide a vital link between OWEB's programs and successful on-the-ground work. OWEB's funding has supported various deliverables, including conferences, trainings, webinars, regional and local media assistance, and one-on-one work with local organizations.

In 2012, OWEB, NOWC and OACD began meeting to discuss ways to advance collaboration between the organizations. This resulted in NOWC and OACD taking steps to formalize a partnership that included shared office space and staff resources, allowing them to reduce overhead and expand capacity. In recent years, the organizations' work has expanded to include COLT and OCEAN. This expanded effort resulted in a Partnership request to the board for the 2015-2017 biennium that included funding for partnership focused deliverables in each of the four organizations. In July 2015 and again in July 2017, the board approved grants for joint programming that serves the collective and complementary missions of the councils, districts, and land trusts.

Demand: The demand for the services provided by the Partnership has continued to grow. For example, the Partnership has also seen greatly increased attendance at the CONNECT conference, which provides training for restoration practitioners, increased participation in bi-monthly webinars, as well as good turnout at both the NOWC and OACD annual meetings last year. In addition, communications staff shared amongst the partners have resulted in increased press coverage of local conservation projects.

Future Need: The increase in funding from \$0.334 million in 2015-2017 to \$0.500 million in the 2017-2019 biennium made a significant impact in the partnership's ability to deliver programs and provide support to their collective stakeholders. Receiving the same level of funding for the 2019-2021 biennium will enable the new level of service and delivery to be sustained among all four partners.

Highlights of Accomplishments or Program Developments in the Biennium: The Partnership continued to meet monthly to increase coordination and communication, and the boards of the four organizations are meeting annually. The Partnership has delivered 16 webinars to date reaching more than 400 stakeholders. The 2018 CONNECT conference in Seaside reached over 332 individuals representing councils, districts, and land trusts from around the state. The Partnership is currently working on the 2019 CONNECT conference, which is scheduled for April 9-11 in Sunriver.

Investments by Biennium (in millions)		
for Statewide Organizational Partnership Technical Assistance		
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium
2013-2015	\$0.415	\$0.00
2015-2017	\$0.334	\$0.00
2017-2019	\$0.500	\$0.00

Title: Organizational Collaboration

Recommended Amount: \$0.200 million

Summary: Organizational Collaboration grants support new or expanded strategic collaborations in order to build resilient, sustainable, local partners that achieve ecological outcomes and engage local communities. Activities may include 1) changing the operational structure of the organization(s), which may result in sharing of staff and services with other councils, districts, or organizations, or 2) merger/consolidations of councils, districts, or councils and districts. The applicants must demonstrate that the organizational restructuring options being considered will strengthen organizational impact and build resiliency and sustainability of the organization(s). Currently, this category also provides short-term funding post-merger to successfully consolidated organizations to facilitate the successful transition of the newly combined organizations.

Program History: OWEB announced this new grant offering in July 2013. Since its inception, seven grants have been awarded. This is the first biennium demand has exceeded the funds available, which demonstrates more stakeholders are beginning to think about how to operate differently to build resilient, sustainable, local partners that achieve ecological outcomes and engage local communities.

- In 2013, \$83,824 was awarded for the merger of four watershed councils in the Rogue basin. In both 2015 and 2017, a \$200,000 merger transition grant was awarded to the successfully merged Rogue River Watershed Council.
- In 2013, \$40,461 was awarded to Cascade Pacific RC&D for the expansion of fiscal sponsorship and employer of record services for local partners.
- In 2016, \$42,964 was awarded to Marys River Watershed Council, Greenbelt Land Trust, Benton County SWCD, and Institute for Applied Ecology to explore co-locating and sharing of services.
- In 2017, \$72,848 was awarded to Greenbelt Land Trust for phase II of the shared space concept.
- In 2017, \$53,772 was awarded to Forest Park Conservancy to work with Verde Northwest and West Multhomah SWCD to work together to develop a partnership that will improve our restoration work and strengthen meaningful engagement of communities of color.
- In 2018, \$72,848 was awarded to Rickreall and Glenn Gibson Watershed Councils to explore a new organizational structure.

Demand: As expected, staff have seen the interest in this grant offering grow over time. In the first two biennia of this offering there was limited interest and not all of the grant funds were awarded. In the 2017-2019 biennium OWEB awarded all of the available funds and received many additional inquiries from organizations that were interested in applying.

Future Need: While the interest is increasing, staff propose to reduce this category from \$400,000 to \$200,000 for two reasons. First, staff proposed that funding for the Rogue River Watershed Council merger transition grant out of this spending plan category will cease in its current form. See Attachment A of the council capacity spending plan staff report for additional details about this funding. In addition, staff believe the requested \$200,000 will likely fill the need of those partnerships that have expressed interest and are ready to proceed with exploring new organizational structures.

Highlights of Accomplishments or Program Developments in the Biennium: OWEB staff participated in the ground-breaking ceremony of the shared services center, called Confluence, in Corvallis in late 2018.

The vision for this center, project scoping, and MOU between the partners (Greenbelt Land Trust, Benton SWCD, Institute for Applied Ecology, Cascade Pacific RC&D, and Corvallis Environmental Center) has been supported through two Organizational Collaboration grants.

Investments by Biennium (in millions) for Organizational Collaboration		
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium
2013-2015	\$0.200	\$0.00
2015-2017	\$0.400	\$0.00
2017-2019	\$0.400	\$0.00

Title: Conservation Reserve Enhancement Program Cost-Share Payments and Technical Assistance

Recommended Amount: \$1.375 million (CREP Technical Assistance) & \$0.750 million (CREP Cost-Shares)

Summary: The Oregon Conservation Reserve Enhancement Program (CREP) is a cooperative venture between the State of Oregon and Farm Services Agency (FSA), with technical support from the Natural Resources Conservation Service (NRCS), state agencies, and local partners including soil and water conservation districts, watershed councils, and resource conservation and development councils. The purpose of this long-standing program is to restore, maintain, and enhance streamside areas along agricultural lands to benefit fish, wildlife, and water quality. Landowners enrolled in CREP receive annual rental payments and state and federal cost-share incentives to install approved conservation measures such as planting trees and shrubs, and installing fencing and livestock watering facilities. OWEB also provides competitive, statewide CREP Technical Assistance (TA) grants every two years. These grants support costs associated with local CREP implementation including staffing, travel, training, outreach, and planning.

Program History: In 1998, Oregon CREP was established to support implementation of approved conservation practices aimed at improving riparian function on private lands throughout Oregon. The State of Oregon contributes 25% of the eligible cost-share for establishing approved conservation practices, 75% of eligible cost-share (minus available federal cost-share) for certain water developments, and 100% of costs for heavy-duty tree protectors. FSA contributes federal cost-share, rental payments, incentive bonuses, and administrative oversight. NRCS and the Oregon Department of Forestry provide the majority of the necessary technical assistance, with Oregon Water Resources Department, Oregon Department of Agriculture, and others providing in-kind technical assistance. Since 1998, Oregon CREP has grown from a relatively small, experimental program into a robust statewide program that provides important, unique financial incentives and continues to be a leader in enrollments nationwide.

The board has supported CREP technical assistance with funding since 2001, beginning with SWCDs. In 2011, in consultation with CREP agency partners, funding eligibility expanded to include multi-county, multi-organization proposals. In that same year, OWEB and NRCS joined together to invest over \$1 million in CREP TA grants independent from the funding for SWCD capacity and OWEB's regular technical assistance grant program. These two-year grants aimed to address critical technical assistance needs for Oregon CREP.

OWEB contributed approximately \$2.125 million to the CREP program for the 2017-2019 biennium. This includes \$750,000 in cost-share payments to farmers and \$1.375 for OWEB's CREP TA grants (of which \$250,000 was from NRCS).

Demand: In the 2017-2019 biennium, 62% of CREP cost-share funds have been spent to date. For the TA portion of the program, 12 organizations secured funding through CREP TA grants, utilizing the full funding available.

Future Need: The CREP cost-share program is seeking to make available \$750,000 in the 2019-2021 biennium. Staff estimate 13 organizations will apply for CREP TA funding in the 2019-2021 biennium.

Highlights of Accomplishments or Program Developments in the Biennium: The CREP TA funding supported 12 programs in the 2017-2019. These programs provide critical technical assistance for Oregon CREP, covering 21 counties statewide.

In 2017, OWEB and NRCS entered into a new agreement between the State of Oregon and NRCS that awarded \$250,000 of NRCS funds to OWEB for CREP TA.

In April 2018, OWEB hosted a training for CREP technicians and other riparian practitioners in Seaside. The training was open to all local, state, and federal partners in the program and was heavily attended. The training focused on program enhancement, capacity building, and technical topics to effectively deliver Oregon CREP.

OWEB and FSA continued the process of revising the CREP Agreement between the State of Oregon and FSA in the 2017-2019 biennium. The revision is intended to clarify incentives and payments for reenrolled contracts and to clarify agency roles. It is expected that the agreement will be finalized in 2019.

Investments by Biennium (in millions)			
for CREP Cost Share	for CREP Cost Share		
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium	
2013-2015	\$0.500	\$0.248	
2015-2017	\$0.500	\$0.0	
2017-2019	\$0.750	\$*	
Investments by Biennium (in millions)			
for CREP TA			
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium	
2013-2015	\$0.750	\$0.00	
2015-2017	\$1.05	\$0.00	
2017-2019	\$1.375	\$0.0	

*Full biennium data not available

Title: Strategic Plan Priorities

Recommended Amount: \$0 (carryforward \$465,500)

Summary: A number of priorities and strategies within OWEB's strategic plan will benefit from a broad partnership approach to their implementation. In June 2018, the board added a new line item to its spending plan to work with various partners to implement components of the newly adopted strategic plan, delegating authority to the director to enter into appropriate agreements.

As OWEB staff reviewed the strategic plan, a number of areas are ripe for partnership, either to gather more information, to develop and complete monitoring, or to begin to implement key plan elements. Oregon has many highly equipped organizations that are poised to assist in this effort. However, funding may be needed in some instances to support organizational work. Examples include:

- **Priority 3: Community capacity and strategic partnerships achieve healthy watersheds.** Partnerships with the university system and experts in community capacity to design and implement monitoring for OWEB's capacity investments and analysis of current community capacity baseline, needs and gaps. This also supports the board's monitoring priority (6).
- **Priority 5: The value of working lands is fully integrated into watershed health.** Partnerships with Oregon agricultural and forestry organizations to implement strategies within this priority focused on community engagement and increasing access to technical assistance for landowners.

Program History: While staff hoped to move forward multiple grants in the first year of funding, only one grant has been finalized so far – funding to support Priority 3 as outlined above. In addition to grants, some areas of strategic plan implementation are better suited to direct contracts with vendors who provide training or other services. OWEB has a request to the legislature for increased contract funding to support this work, which would be provided in the 2019-2021 biennium if approved.

In addition, a grant was provided through the Governor's Priorities line item in the spending plan that also supports Strategic Plan Priority 4: Watershed organizations have access to a diverse and stable funding portfolio. Work is focused on:

- Understanding the context for change, including what has been accomplished in other areas;
- Helping to better define and frame Oregon's water 'story' as it relates to community resiliency, economy, and health;
- Better understanding of who is working where, and why; and
- Developing a shared vision and path.

Demand: Only one grant has been funded through the line item to date.

Future Need: Because project funding has been slower to move forward than anticipated, there is no need for additional funding. Currently, \$465,500 remains in the holding account.

Highlights of Accomplishments or Program Developments in the Biennium: For the first funded grant in this spending plan line item, Willamette Partnership will complete an assessment of Oregon's current collaborative systems (e.g., watershed councils, forest collaboratives, coordinated care organizations, early learning hubs, and others) to understand the current state of collaborative capacities, lessons learned about what does or does not work around collaboration, and strategies for increasing the

collaborative capacity for communities across Oregon. From that assessment, the project will develop strategies to more strongly support collaboration in ways that A) increase sustainable water management, B) create healthy communities, and C) advance conservation. The grant is in process and expected to be complete later in 2019. One early product that has begun to take form is an Oregon Atlas of Collaboration. This document will include information on 250+ collaborative cases across 14 collaborative platforms addressing issues in health, natural resources, education, economic development, and public safety across Oregon.

Investments by Biennium (in millions)		
for Strategic Plan Pr	iorities	
Biennium	Spending Plan (after any additional funds added)	Remaining Spending Plan at end of biennium
2013-2015	\$0.00	\$0.00
2015-2017	\$0.00	\$0.00
2017-2019	\$0.500	\$0.4655







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Agenda Item K supports OWEB's Strategic Plan priority # 7: Bold and innovative actions to achieve health in Oregon's watersheds.

MEMORANDUM

TO: Oregon Watershed Enhancement Board

FROM: Eric Hartstein, Senior Policy Coordinator Eric Williams, Grant Program Manager

SUBJECT: Agenda Item K– Land Acquisition Grants Administrative Rules April 16-17, 2019 Board Meeting

I. Introduction

This report requests board approval of proposed administrative rules for OWEB's Land Acquisition grant program (Division 45).

II. Background

At the June 2018 meeting, the board authorized staff to initiate rulemaking for Land Acquisition grants. The rules were last updated in 2013. A rules advisory committee (RAC) was established to assist OWEB staff in developing Land Acquisition administrative rules. A list of RAC members is found in Attachment A.

The RAC met on four occasions between August and November 2018, reviewing each section of the current rule and recommending changes where there was consensus to do so.

III. Public Comment on Proposed Land Acquisition Grants Administrative Rules

OWEB released draft rule amendments for public comment on February 1, 2019. The public comment period was open from February 1 – March 1, 2019 with a public hearing in Salem on February 20. Two written comments were received during the public comment period. A summary of the comments, and OWEB staff response, are provided in Attachment B. There were no attendees at the public hearing. At its April meeting, the board may only receive public comment on the revisions to the proposed rules that have occurred since the close of the public comment period.

IV. Summary of Proposed Changes

In addition to technical changes and new definitions, the following changes are included in the proposed rules:

- Match will be calculated in the same manner as other OWEB grants (i.e., 25% of the OWEB request).
- Habitat restoration completed on a project parcel can be used as match.
- Site stabilization costs can be reimbursed after closing.
- Certain due diligence costs can be reimbursed prior to closing.
- Subsequent conveyances will be evaluated based on the applicable evaluation criteria in the rules.

V. Recommendation

Staff recommend the board approve Land Acquisition grants administrative rules found in Attachment C.

Attachments

- A. RAC members
- B. Public Comments and Staff Response
- C. Proposed Land Acquisition Rules

Land Acquisition RAC Members

Brad Nye	Deschutes Land Trust
Clair Fiegener	Greenbelt Land Trust
Daniel Dietz	McKenzie River Trust
Amanda Martino	Blue Mountain Land Trust
Dan Roix	Columbia Land Trust
Kelley Beamer	Coalition of Oregon Land Trusts
Brad Paymar	Land Trust Alliance
Paul Belson	Southern Oregon Land Trust
Kathleen Ackley	Wallowa Land Trust
Larry Ojua	Yamhill SWCD
Jon Wickersham	North Coast Land Conservancy

Rules: 695-045-0206, A	ccess		
Commenter(s)	Comments	Response	Rule
			Change
Mary Anne Cooper, Oregon Farm Bureau	Requests to ensure that for a conservation easement or other agreement where the landowner is still in control of the land, adequate notice must be provided of the inspection, the agency should have liability for any property damage or injury that occurs during the inspection, and the entry and inspection can only be used to enforce easement rights, not looking for or reporting any other conditions found on the property unrelated to the easement.	Terms dictating access to private property with a conservation easement are negotiated between the landowner and the conservation easement holder for each property. These terms include access for OWEB, its contractors, and cooperating agencies. Similarly, issues related to liability, and associated indemnification provisions, are negotiated between the landowner and conservation easement holder, so are not generalized in rule. As a state agency, OWEB liability is addressed in DOJ-approved boilerplate language in conservation easements, and is subject to applicable laws. As noted in OAR 695-045-0206, and in ORS 541.906(2)(c)(A), the purpose of accessing the property is for monitoring and enforcing the conservation easement.	No

Rule: General Comment	S		
Commenter(s)	Comments	Response	Rule
			Change
Douglas Powell	Appreciates land acquisition grant program as designed. Would like to see revenue from marijuana taxes be utilized to support the purchase of property interests for conservation.	OWEB appreciates the support for the land acquisition grant program and the proposed rule revisions. Funding sources for the purchase of property interests for conservation purposes are determined by the legislative process, which is beyond the control of OWEB	No

DIVISION 45 LAND ACQUISITION GRANTS

695-045-0010 Definitions

- "Management Plan" is a description of the planned future management of a property proposed for acquisitionProperty Interest that addresses is consistent with guidance established by OWEB and includes, but is not limited to, actions such as species and habitat management practices, proposed restoration projects, stewardship orStewardship and monitoring, land uses, public access, and educational orand research opportunities on the property.
- 2) "Profit" means thea positive difference between the original purchase price for the property interestProperty Interest acquired with OWEB grant funds and a subsequent purchase price for the same property interestProperty Interest, minus the owner's property improvement costs that, from an accounting or tax perspective, are capitalized and not expensed.
- 3) "Stewardship" means monitoring, maintaining, managing, and improving a Property Interest, including providing signage, controlling access, enforcing use restrictions and resolving violations.
- 4) "Stewardship Fund" means a restricted fund that is used to pay a Property Interest holder's long-term costs for Stewardship of the Property Interest and taxes and insurance associated with that interest. If the source of the Stewardship Fund allows investment of the Stewardship Fund, the funds may be used for investment management costs.
- 5) "Conservation Easement" means a nonpossessory interest of a holder in real property imposing limitations or affirmative obligations the purposes of which include protecting or restoring native fish or wildlife habitats.
- 6) "Land Acquisition Grants" mean funds awarded by OWEB to purchase Property Interests.
- 7) "Property Interest" means fee simple ownership or Conservation Easement.
- 8) "Project" means the aggregate of eligible activities included in OAR 695-045-0170 and 0175 that comprise an application and are specific to parcels of land, all of which are essential to the protection of a specific priority habitat at a local scale.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2005, f. & cert. ef. 2-1-05; OWEB 1-2013, f. & cert. ef. 1-30-13

695-045-0020 Purpose

The-In accordance with Section 4(b)(2) of Article XV of the Oregon Constitution and ORS 541.956, OWEB may consider grant applications that propose to acquire Property Interests in lands from willing sellers for the purpose of this rule is to supplementmaintaining or restoring watersheds and habitats for native fish or wildlife. This Chapter 695, Division 45 supplements the OWEB Grant Program rules under OAR Chapter 695-005, Division 5 and to addprovides specific guidance regarding requirements for the OWEB land acquisition grant program. In the event of any conflict between the requirements in this Division 45 and requirements identified in OAR 695-005, the requirements in this Division will take precedence.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2005, f. & cert. ef. 2-1-05; OWEB 1-2013, f. & cert. ef. 1-30-13

695-045-0160 Nature of Application

In accordance with Section 4(b)(4) of Article XV of the Oregon Constitution, OWEB may consider grant applications that propose the acquisition of interests in lands from willing sellers for the purpose of maintaining or restoring watersheds and habitat(s) for native fish or wildlife. Applications must address the conservation needs of habitat(s) and species consistent with conservation priorities and principles identified by the Board. Interests in land include a lease, purchase of a conservation easement, or purchase of fee simple title.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0165

Application and Subsequent Grant Processing and Agreement Requirements

- Land acquisition grant applications must be submitted on the most current form that conforms with the process prescribed by the Boardprovided by OWEB and comply with all application requirements.
- The Board may consider proposals proposal for a Property Interest that are received for properties that werewas acquired by the applicant after the previous application deadline.
- 3) In the event of any conflict between these requirements and requirements identified in OAR 695-005, the land acquisition requirements in this division will take precedence.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0170 Use of Grant Funds

Land acquisition grant fundsAcquisition Grants may be applied towards costs related to the purchase of the property <u>a Property Interest</u>, including:

- The purchase price and the purchase option fees associated with the property or conservation casement<u>Property Interest</u>. The purchase price shall be based on an appraisal and review appraisal completed in accordance with applicable appraisal standards, including the Uniform Standards of Professional Appraisal Practice, and if required, the Uniform Appraisal Standards for Federal Land Acquisitions-;
- 2) The interest on loans.
- 2) The interest on bridge loans needed to secure closure on the Property Interest prior to when funding will be available for distribution through the program;
- (3) The staff costs incurred as part of the acquisition process related to the property.Property Interest;
- (4) The cost of due diligence activities, including appraisal, environmental site assessment, survey, title review, the applicant's legal fees incurred, and other customary due diligence activities-;
- 5) The cost of baseline inventory preparation-;
- 6) The cost of preparation of the initial management plan<u>Management Plan</u>, including consideration of any restoration needs-<u>;</u>

7) The legal fees incurred.

8)(7) The closing fees, including, but not limited to, recording and title insurance costs-; or

9)(8) The cost of securing and maintaining the conservation values associated with the propertyProperty Interest in accordance with the application or a Management Plan approved by the Director.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0175 Matching Contributions

- (1) All applicants shall demonstrate <u>that</u> at least 25% of the actual land acquisition project cost<u>match</u> is being sought as match, with, based on the <u>total OWEB</u> grant applicant required to provide matching funds and efforts necessary to complete the purchase. request for the Project.
- Funds provided by OWEB shall not qualify as match.
- <u>1)(3)</u> The following costs and activities will qualify as match:
- a) <u>AllA contribution to any</u> costs listed under OAR 695-045-0170, including in-kind contributions of those costs-
- b) Funding commitments made by others as a result of grant applicant efforts-;
- c) The donated portion of a bargain sale.
- d) Funds deposited in a stewardship endowment, before the time that OWEB funds are released for acquisition of the property.
- 2)-OWEB funds provided under OAR 695-045-0170 shall not qualify as matching contributions.
- d) Stewardship funds, provided that documentation demonstrates that the fund is dedicated to the <u>Project.</u>
- 4) The Director retains the discretion to determine that whether specific matching costs are unreasonable reasonable in a particular grant context and will not be recognized as qualifying matching costs.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0180 Application Evaluation Process

- (1) Land acquisition grant applications shall be evaluated in accordance with guidance adopted and periodically reviewed by the Board and made available to the public via the agency's website and Board meeting materials.
- 2) The grant application evaluation process shall include reviews for:

OWEB shall evaluate grant applications for:

- The consistency of the project Project with the Board's established priorities and principles and conservation priorities established in local, regional, or state conservation plans for land acquisitions-;
- The significance of the projected ecological outcomes-;

- (3) The capacity of the grant applicant, or intended property manager, to complete the acquisition <u>of the</u> <u>Property Interest</u> and to achieve and sustain the proposed ecological outcomes over time-<u>;</u>
- 4) The soundness of the legal and financial terms of the proposed real estate transaction-;
- 5) The community impacts or benefits resulting from the project, including those related to jobs, agricultural land use, local property taxes, public access and education Project; and
- (6) Any other factors the Board determines are relevant.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0185

Board Approval and Delegation of Authority

The Board shall approve grants in accordance with <u>guidance adopted by the Board and made available</u> to the public.<u>this OAR Chapter 695</u>, <u>Division 45</u>. The Director is delegated the responsibility of ensuring that funding conditions required by the Board are fully satisfied by the grant applicant. Conditionally <u>Except for disbursements authorized in OAR 695-045-0195(3)</u>, <u>conditionally</u> approved grant funds shall be encumbered for disbursement only after all conditions are-fulfilled. The encumbered funds may be made available for other uses by OWEB if all conditions required by the Board<u>, except for site</u> <u>stabilization and Management Plan activities</u>, are not satisfied within 18 months of the conditional Board approval.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0190 Public Involvement

The public shall be provided with meaningful opportunities to comment on grant applications being considered by the Board. In a manner consistent with this requirement, the governing bodies of cities and counties with jurisdiction in the area of the proposed acquisition, as well as affected governmental agencies, will be provided with written notice of the Board's intent to consider:

- (1) Written comments received at least 14 days before the Board meeting at which the application is to be considered by the Board_{τ_L} </sub>
- (2) Comments made at public hearings held and publicized in accordance with ORS 271.735-; and
- (3) Comments made at the Board meeting at which the grant application is considered.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0195 Director Funding Approval and Distribution

Director Funding Approval and Distribution of Funds

(1) The Director may approve the distribution of grant funds when:

- (a) The funding conditions, if any, imposed by the Board are satisfied to the full satisfaction of the Director.
- (b) The legal and financial terms of the proposed real estate transaction are approved by the Director-;
- (c) The title restrictions required under ORS 541.960 are approved by the Director.
- (d) A grant agreement is executed by the Director and the grant applicant-;
- (e) The Director has reconciled conditionally approved funding with actual projectProject costs-; and
- The grant applicant has satisfied the match requirements under OAR 695-045-0175-
- (g)-The Board is notified in writing of the Director's intent to distribute the grant funds or hold the grant funds pending Board consideration under 695-045-0200.
- (f) <u>Notwithstanding and</u> OAR 695-005-0060(1), for<u>2);</u> and
- (2) For grants established under these rules the Director is authorized to reimburse the grant applicant for allowable costs identified in <u>OAR</u> 695-045-0170 and to recognize matching contributions under <u>OAR</u> 695-045-0175 that or earlier than 18 months before the applicable grant application deadline.
- (3) Notwithstanding OAR 695-045-0195(1)(a), funds may be distributed prior to transaction closing for due diligence activities specified in OAR 695-045-0170(4) and included in the application budget.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0200

Funding Decision Reconsideration by Board

In the event that the Director determines <u>that</u> an applicant has not met conditions imposed by the Board, the Director shall forward the determination in writing to the Board for its consideration. <u>The and</u> to the applicant will be provided a copy of the written determination. The conditionally encumbered grant funds will remain encumbered until the Board either affirms the Director's determination or authorizes the continued encumbrance of all or part of the funds in accordance with a modified decision of the Board.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0205 Compliance and Enforcement

The ongoing use of the propertyProperty Interest acquired with OWEB land acquisition grantLand Acquisition Grant funds shall be consistent with the purposes specified in section 4(b) Article XV of the Oregon Constitution. If significant compliance issues cannot be resolved to the full satisfaction of the Director, the Director, after informing the Board and providing reasonable written notice to the recipient of the grant, may in his or her discretionOWEB may initiate any and all legal remedies available to OWEB to address compliance issues, including but not limited to recovery of the OWEB grant funds that were used to purchase the property, and reasonableProperty Interest, together with interest andat the highest rate allowed under Oregon law, and other penalties at the option of the Director.

Stat. Auth.: ORS 541.906

<u>Stats. Implemented: ORS 541.932(9)</u> <u>Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13</u>

695-045-0206 Access

OWEB, its contractors and cooperating agencies will be provided <u>legal and</u> sufficient <u>legal</u> access to propertyProperty Interest acquired with OWEB grant funds, for the purpose of <u>monitoring and enforcing</u> <u>OWEB's Conservation Easement rights and</u> completing inspections and evaluations required under ORS 541.906(2)(c)(A).

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0210 Subsequent Conveyances

(1) Subsequent conveyances of propertyPropertyInterests acquired with OWEB grant funds must strictly comply with the requirements of ORS 541.960, including, but not limited to, the requirement that subsequent conveyances be made subject to Board approval and that subsequent conveyances shall not result in profita Profit.

(2) Subsequent conveyances shall be evaluated based on criteria established in OAR 695-045-0180 as applicable.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13

695-045-0215 Waiver and Periodic Review of Rules

The Director may, but is not required to, in the exercise his or her sole discretion, waive the requirements of divisionthis Chapter 695, Division 45 for individual grant applications unless a requirement under this Division is also required by statute, when doing so will result in more efficient or effective implementation of the Board's land acquisition grant program. Any waiver must be in writing and included in the grant file to which the waiver applies. The administrative rules for Land Acquisition Grants shall be periodically reviewed by the Board and revised as necessary and appropriate.

Stat. Auth.: ORS 541.906 Stats. Implemented: ORS 541.932(9) Hist.: OWEB 1-2013, f. & cert. ef. 1-31-13







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Awards

Agenda Item L supports OWEB's Strategic Plan priority #7: Bold and innovative actions to achieve health in Oregon's watersheds.

MEMORANDUM

TO:	Oregon Watershed Enhancement Board
FROM:	Eric Williams, Grant Program Manager
	Miriam Forney, Acquisitions Coordinator
SUBJECT:	Agenda Item L – October 2018 Land Acquisition Grant Offering
	April 16-17, 2019 Board Meeting

I. Introduction

This staff report provides an overview of the October 2018 land acquisition grant offering and outlines staff recommendations for grant awards.

II. Land Acquisitions – October 2018 Offering Background and Summary

A. Applications Submitted

The October 2018 grant offering is the second of two annual land acquisition grant cycles for the 2017-2019 biennium. The land and water acquisition spending plan includes \$10.5 million for the biennium, including \$600,000 reserved for funding land acquisition technical assistance applications. After awarding \$150,000 for a land acquisition technical assistance project in April 2018, no further applications have been received for this pilot funding program. The remaining spending plan balance for land and water acquisition is \$3,720,000. Four land acquisition applications were received in October 2018, requesting \$5,061,009. The applications are summarized in Attachment A. Application evaluations are included as Attachment B.

Following technical reviews, land acquisition applications 219-9900 and 219-9901 are recommended for funding with conditions. Land acquisition applications 219-9902 and 219-9903 are not recommended for funding.

B. Review Process

The land acquisition applications were reviewed in accordance with the process adopted by the board at its January 2013 meeting and refined by the board in 2015. The process utilizes technical experts to evaluate ecological outcomes, project soundness, organizational

capacity, and community benefits and impacts. It also includes a public hearing and submission of public comment by interested parties.

Site visits were conducted by staff and teams of ecological reviewers consisting of subject matter experts selected by the applicant and chosen by staff from Regional Review Teams. Each ecological reviewer completed a project evaluation form, and the input of all ecological reviewers was summarized by staff.

Project soundness reviews were conducted by a team consisting of staff, the land acquisition program's due-diligence technical assistance contractor, and the Oregon Department of Justice. The reviews included identifying project soundness concerns, and whether reviewers think concerns are resolvable in the 18-month timeframe allowed for closing transactions after the board awards funding.

Staff reviewed organizational capacity and community benefits and impacts. Public comment was solicited through notices and a public hearing held by staff for each of the applications received this cycle.

Staff summarized the review outcomes for each project. After evaluations were completed, they were provided to the applicants.

Using the revised review process approved by the board in 2015, the board land acquisition subcommittee met with staff during the evaluation process for the October 2018 applications. The purpose of the meeting was for subcommittee members to understand the content of the applications and the information used for evaluation that was gathered up to the time of the meeting, and to ask clarifying questions about the applications.

III. Staff Funding Recommendation

Staff recommend the board award funding for land acquisition grants as specified in Attachment A, with the project-specific conditions detailed in Attachment C. The land acquisition grant funding recommendations total \$3,179,542.

Attachments

A. Summary of Land Acquisition Applications and Recommended Awards, October 2018 Grant Offering

B. Land Acquisition Project Evaluations

C. Project-specific Funding Conditions (to be provided at the April board meeting)

ATTACHMENT A

Application #	Application Name	Applicant	\$ Requested	\$ Recommended
219-9901	Mt Hood Oaks	Columbia Land Trust	\$2,638,377	\$2,638,377
		North Coast Land		
219-9900	Tillamook Head	Conservancy	\$541,165	\$541,165
	GSG Ranch Conservation			
219-9902	Easement	Blue Mountain Land Trust	\$613,776	\$0
	Hood River Forest and Fish			
219-9903	Conservation Project	Western Rivers Conservancy	1,267,691	\$0

October 2018 Offering - Land Acquisition Applications and Staff Recommendations

Total	
Recommended:	\$3,179,542

FALL 2018 OWEB GRANT OFFERING

LAND ACQUISITION APPLICATION

Application No.:	218-9900		
Project Name:	Tillamook Head		
Applicant:	North Coast Land Conservancy	Region:	North Coast
Basin:	Necanicum River	County:	Clatsop
OWEB Request:	\$541,165	Total Cost:	\$720,965

APPLICATION DESCRIPTION [PROVIDED BY THE APPLICANT]

Located on the north face of the iconic headland, the Tillamook Head property presents a unique opportunity to link large existing conservation areas and steward a temperate rainforest habitat to maturity. The acquisition would link two Conservation Opportunity Areas, Tillamook Head and the Necanicum watershed, and build upon previous conservation investments made by OWEB and Oregon State Parks. Chances to protect 95 acres of forest, wetland, salmon-bearing stream and riparian corridor are infrequent, particularly in the Necanicum watershed, more than 90% of which is owned by industrial timber companies. NCLC is proposing to purchase the land in fee title with no rights reserved to the landowner.

REVIEW

PROJECT SOUNDNESS

The proposed transaction appears to be relatively straightforward. Several matters should be promptly addressed to ensure the purchase is completed in a sound manner:

- Lot line adjustment (LLA): The LLA must occur before NCLC can purchase the property. Information about the LLA process, approving party, and likelihood of approval should be obtained to ensure the transaction can proceed as proposed.
- NCLC estimate of the property's value: NCLC does not have such an estimate and instead is relying on valuation information derived from a timber cruise obtained by the sellers. NCLC should obtain an independent preliminary opinion of value soon after a grant is awarded. This approach could help avoid a significant investment of NCLC and OWEB resources if circumstances regarding the LLA and property value are different than currently assumed and cause the sellers to abandon the transaction.
- Stewardship needs: NCLC should clarify its intentions regarding the amount of stewardship funds that will be dedicated to the property, and an evaluation of anticipated stewardship needs specific to the property. To ensure the long-term soundness of the project, the management plan for the property should include specific plans for addressing stewardship issues related to the property's close proximity to urban development, with actions including but not limited to minimizing trespass uses of the property and protecting the property against the spread of urban weeds.

ECOLOGICAL OUTCOMES

The acquisition will improve connectivity and support existing ecological networks between large intact conservation areas by linking Tillamook Head to the Necanicum River estuary. The project adopts a whole watershed protection approach in an area of coastal Clatsop County where such opportunities are uncommon, contributing to a 3,600 acre corridor of conserved land on Tillamook Head. Protection of the forest and wetland habitats found on the property would benefit numerous species including salmon, amphibians, and birds that thrive within forest and wetland mosaics.

The coastal habitats found within the property are relatively intact, diverse, and devoid of invasive species, ensuring a high likelihood of success for the project's approach of simple acquisition and protection. The Sitka spruce forest is in good condition, multi-aged, structurally diverse, and on a trajectory to develop into a late-successional plant community without active management. The 14-acre lowland wetland found on the property is dominated by native shrubs and forbs without the presence of invasive species. Pocket wetlands also in good condition can be found throughout the interior of the property, including a sphagnum wetland considered to be part of a regionally rare plant community. The lowland riparian woodlands along Little Muddy Creek are also well shaded by a diversity of conifer and hardwood species. Together, this complex of habitats creates a diverse ecological system that links headwater streams to lowland wetlands in close proximity to the Pacific Ocean.

Acquisition of this property would further the conservation goals stated in documents that guide conservation and restoration work on the North Coast, including the Oregon Conservation Strategy and the Oregon Coast Coho Conservation Plan. As a priority conservation area, the Necanicum Watershed and Tillamook Head are also documented by the Nature Conservancy as an important anchor habitat for ecological resiliency and diversity. The project's approach would achieve three main ecological goals: 1) complementing existing ecological networks; 2) protecting large intact areas; and 3) improving connectivity.

Based on the excellent condition of the upland and wetland habitats on the property, the limited need for active management of the forest stands, and the opportunity to improve connectivity of existing conservation lands, this project is viewed as having the potential to achieve valuable ecological outcomes.

COMMUNITY BENEFITS AND IMPACTS

The application states that the project will ensure that the property's streams will continue to provide healthy fish habitat working in partnership with Necanicum Watershed Council, Oregon State Parks, and adjoining residential landowners. Ecosystem service benefits will be enhanced by the connection of this 95-acre parcel to an adjoining network of 3,600 acres of conservation lands. Given the proximity of the property to the Cove neighborhood in the City of Seaside, the project provides an opportunity for increased understanding of habitat conservation issues in the north coast.

ORGANIZATIONAL CAPACITY

The NCLC has successfully completed previous OWEB acquisition transactions and reporting requirements and is currently managing other properties in the North Coast. The organization received its Land Trust accreditation in 2016. This property is adjacent to another property owned by the NCLC, aligns with the mission of the organization, and is consistent with its conservation strategy.

The acquisition project team has the necessary skills and experience to complete this uncomplicated transaction. To address prior concerns about NCLC submitting documents to OWEB that do not contain necessary information for a complete review, if this project is funded OWEB staff will work with NCLC staff to develop clear expectations around document review and submittal.

The applicant has sufficient staff and volunteers to develop the management plan and complete long-term management of the site; however, the application lacked details about how the applicant will apply its current principles and practices of conservation to this site or how it will take into account site specific considerations, including public access, invasive species, and proximity to an urban environment.

PUBLIC REVIEW

A public hearing was held at Seaside City Hall on December 19, 2019 with 9 people in attendance. The hearing focused on the public's view of the project's benefits, and questions and concerns about the project, summarized as follows:

Benefits

- No development adjacent to neighborhood.
- Connects to other conservation properties, benefits the whole watershed.
- Will help clarify land use in this area.
- NCLC is a proven, competent land steward.
- Quiet, spiritual place close to town.
- NCLC understands forest ecology and management with respect to fire.
- No additional residential development.

Concerns

- Managing the impacts of transient populations, such as structures and debris.
- Large trees and brush in the urban interface could be a fire hazard for nearby structures.
- The area is zoned residential, not conservation.
- May preclude the possibility of connecting Rippott Road to the Cove.
- Need a vehicle for timely communication with NCLC.
- Precluding development on land outside the tsunami zone.

SUMMARY

The project will result in a key parcel of intact forest and wetland habitat within a complex of 3,600 acres of conservation land, benefitting key salmon and wetland species as well as Sitka spruce forest. The transaction is uncomplicated and the applicant has the appropriate skills and experience to complete the transaction and provide good stewardship in perpetuity. Concerns identified in the evaluation can easily be addressed through funding conditions.

STAFF RECOMMENDATION

Staff recommend the Board award \$541,165 in accordance with OWEB's standard grant agreement for land acquisition, including project-specific conditions specified in the grant agreement. Staff will consult with NCLC to finalize project-specific conditions, which will be provided to the Board at its April 2019 meeting.

FALL 2018 OWEB GRANT OFFERING

LAND ACQUISITION APPLICATION

Application No.:	218-9901		
Project Name:	Mt. Hood Oaks		
Applicant:	Columbia Land Trust	Region:	Central Oregon
Basin:	Hood/Lower Deschutes Rivers	County:	Wasco
OWEB Request:	\$2,638,377	Total Cost:	\$3,488,377

APPLICATION DESCRIPTION [PROVIDED BY THE APPLICANT]

The 1,950-acre Mt. Hood Oaks conservation project lies on the border between OWEB's Hood and Deschutes Basins immediately east of the Mt. Hood National Forest and north of the State's White River Wildlife Area near the historic community of Friend, Wasco County. Located at the hub of intersecting ecological gradients and at a gap in an existing network of public lands, the property is positioned to host extraordinary biological diversity, function beyond its borders by connecting habitat between Mt. Hood and the Deschutes River, and provide resilience to a changing climate. The project will conserve through fee acquisition one of the largest remaining unprotected transitional pine-oak habitat properties in the East Cascades eco-region and ensure its intact habitat remains functional for OWEB priority species by enabling coordinated cross-boundary land management. Partners consider this property the highest conservation priority in the Wasco Oaks Conservation Opportunity Area due to its combination of intact habitat, adjacency to other conservation ownerships, and high threat of conversion due to low timber value and adjacency to rural-residential development. Habitat types to be conserved vary from dry mixed conifer forest to Oregon white oak woodlands to coniferous riparian forest and lowland riparian woodlands. The property hosts at least eight of the 18 priority plant communities for OWEB's Hood Basin and is likely to host all of the terrestrial OWEB priority wildlife species. The project meets Columbia Land Trust's Conservation Agenda objectives to conserve the most intact and functional habitats at a scale that allows natural processes to function and will meet objectives in many other agencies' and organizations' conservation plans. It will protect opportunities for local communities and visitors to engage with nature. Partners include ODFW, USFS, American Bird Conservancy, and the East Cascades Oak Partnership.

REVIEW

PROJECT SOUNDNESS

It is likely that the transaction and long-term management of the property can be completed in a sound manner provided that matters associated with a Rocky Mountain Elk Foundation (RMEF) conservation easement that encumbers the majority of the property can be adequately addressed, and ODFW's desired public access for the property (in exchange for its contribution of \$200,000 for the property purchase) can be aligned with CLT's property management objectives and OWEB's conservation easement.

CLT should agree to work with RMEF to reach an agreement to either extinguish the RMEF easement, or, alternatively, amend the RMEF conservation easement so that it does not conflict with the conservation easement that will be granted to OWEB. This will ensure that CLT can manage the property for the protection of its conservation values, including temporarily or permanently closing certain portions of the property to public access if needed to restore or conserve vegetative communities and wildlife.

There is a higher than average likelihood of unauthorized uses of the property due to historical uses of the property, plans for future open public uses, and adjacent land uses including livestock grazing and a public road. The management plan for the property should include actions for minimizing unauthorized uses. The management plan should also include closures of the property when necessary to restore and protect the conservation values, and coordination with other parties that have an interest in the property or its use.

ECOLOGICAL OUTCOMES

The 1,950 acre property is strategically located for conservation protection; it is directly adjacent to both state and federal protected lands and serves as a transitional habitat zone from coniferous forests to mixed oak, grasslands, and shrub steppe. The property is primarily mixed oak/pine/conifer woodlands with relatively good understory condition and some intact stream and riparian corridors, offering a wide variety of productive habitat types for numerous wildlife species. The property is a key area for ungulate winter range and an East Cascades migratory corridor for many species including neo-tropical birds.

Given the property's limited timber and grazing value, residential development, which is occurring adjacent to the property, is a potential threat to habitat values. Long-term protection of the ecological values of the property is identified in local and state plans. The application accurately identified and addressed OWEB's basin-specific priority species that could benefit from protecting this property, specifically ashthroated flycatcher, Lewis's woodpecker, western gray squirrel, and Townsend's big-eared bat.

The prospect for a non-profit organization to protect a large acreage of mosaic habitats benefiting wildlife and connectivity directly adjacent to public lands opens up partnership opportunities to realize landscape scale protection and restoration of these habitats. ODF, ODFW, and USFS have already been working on this model with success in different parts of the state. While the majority of the acreage is in good ecological condition, future management (prescribed fire, thinning, revegetation) will be needed. Columbia Land Trust ownership of the parcel and the desire to partner with land management agencies offers a high likelihood of success in planning and implementing large scale restoration projects across the Oak and Dry Mixed Conifer Ecotype.

COMMUNITY BENEFITS AND IMPACTS

In addition to the habitat benefits provided by connectivity with adjacent public lands, connectivity provides human benefits for recreational opportunities, fire management, and water availability. Three large fires in 2018 consumed over 133,000 acres and resulted in loss of life. Habitat management envisioned by this project will reduce tree density in favor of older, larger trees, which will reduce the severity of wildfire.

The project has potential to provide benefits for tribal use within ceded lands of the Confederated Tribes of Warm Springs. Mule deer is an important First Foods species for tribal members. CLT plans to work with tribal representatives to facilitate positive project outcomes for this priority.

CLT plan to provide non-motorized public access from April 1 – November 30 each year, and will dedicate staff to engage with neighbors and the public.

Payment of property taxes is an important issue in Wasco County. CLT currently has a mix of properties in its portfolio where some pay property taxes and some do not. At the public hearing, CLT expressed its intent to raise funds sufficient to endow property tax payments annually, but cannot commit to that at this time.

ORGANIZATIONAL CAPACITY

CLT is the applicant and will be the long-term holder of the property. CLT is accredited by the National Land Trust Alliance, has successfully completed previous OWEB acquisition transaction and reporting requirements, and is well suited to complete this transaction. This property complements other property owned by CLT, aligns with the mission of the organization and is consistent with its conservation strategy and the East Cascades Oak Development FIP the organization is currently working on with other partners.

The acquisition project team has the necessary skills and experience to complete the transaction. The stewardship and long-term management team also has the necessary skills, experience, and financial resources to develop the management plan and complete long-term management of the site. CLT has the necessary funds in place for long-term management and is committed to fundraising to support any additional needs.

PUBLIC REVIEW

A public hearing was held January 10, 2019 at the Dufur School with 18 people in attendance. The hearing focused on the public's view of the project's benefits, and questions and concerns about the project, summarized as follows:

Project Benefits

- Protect large intact property that has been identified as a conservation priority.
- Provides connectivity to adjacent protected lands (ODFW White River wildlife area, USFS).
- Managed to reduce fire hazard.
- Columbia Land Trust has demonstrated good invasive species management.
- The intent of continuing to pay property taxes (at a conservation rate).
- Provide public access.
- Property provides big game (ungulates) winter rage habitat.
- Columbia Land Trust is a good neighbor (Mill Creek ridge property, Wasco County) particularly with respect to managing access and marking boundaries and managing fire risk.

Project Concerns

- Maintenance of fences.
- The need for boundary markers for public access to prevent access onto adjacent private property.
- Trespass patrol.
- Parking for public visitors.
- Road maintenance needs in particular Shell Rock Rd.
- Property tax payment is not guaranteed at this time.
- If appraisal comes in at the suggested \$1,750 per acre, there is concern that:
 - o It may be higher than current value; and
 - o It may result in increased property assessments.

- Regarding the current Larch Creek cow hunt (which is open year round), if this closes, it may impact neighboring landowners from hunting pressure.
- Application mentions current fencing on northern boundaries are in disrepair, but no detail on how this will be addressed or managed.
- Public ownership in Wasco County is already high.

SUMMARY

The proposed project will result in permanent protection of high value habitat that has connectivity with significant conservation parcels with pine-oak transitional habitat in the East Cascades eco-region. The applicant has substantial expertise in closing similar properties and an excellent track record of long-term stewardship. CLT also has staff expertise in neighborhood and community engagement, which will be important for long-term management given the relatively high public use expected on the property. A critical component of the transaction will be to ensure that the RMEF easement does not conflict with the required OWEB easement of the property.

STAFF RECOMMENDATION

Staff recommend the Board award \$2,638,377 in accordance with OWEB's standard grant agreement for land acquisition, including project-specific conditions specified in the grant agreement. Staff will consult with CLT to finalize project-specific conditions. The conditions will be provided to the Board at its April 2019 meeting.
FALL 2018 OWEB GRANT OFFERING

LAND ACQUISITION APPLICATION

Application No.:	218-9902				
Project Name:	GSG Ranch Conservation Easement				
Applicant:	Blue Mountain Land Trust	Region: Mid-Columbia			
Basin:	John Day	County:	Grant		
OWEB Request:	\$613,776	Total Cost:	\$1,113,776		

APPLICATION DESCRIPTION [PROVIDED BY THE APPLICANT]

Blue Mountain Land Trust proposes to acquire and monitor a Conservation Easement on GSG Ranch, a privately owned 1,642-acre cattle ranch in Grant County, Oregon. The GSG Ranch Conservation Easement is located in the Upper John Day Basin, approximately 5 miles southeast of Prairie City in the Reynolds Creek Watershed, adjacent to Malheur National Forest and in close proximity to the Strawberry Wilderness. This working land conservation easement will protect 1,642 acres of upland, wetland, and riparian lands. The ranch provides large landscape connectivity for upland species, as well as priority steelhead and salmon spawning habitat of 1.2 miles of the John Day River and 0.5 miles of Reynolds Creek, an important cold water tributary. Continued restoration of Reynolds Creek and the John Day River on the ranch, in partnership with the Confederated Tribes of Warm Springs, will begin in 2020-2021.

With support from conservation partners, the landowners have worked to improve and restore agricultural lands and fish and wildlife habitat on the ranch. As a working lands easement, farming and ranching will continue under management plans designed to balance agricultural uses and protection of critical fish and wildlife habitat. The landowners are partnering with Blue Mountain Land Trust to preserve the improvements and investments they've made on the property in perpetuity.

REVIEW

PROJECT SOUNDNESS

The application and review process identified soundness challenges that make it unlikely that the transaction can be completed in an efficient, sound manner in the near term, and create uncertainty with regard to the long-term outcomes of the proposed investment. These efforts identified project soundness challenges that make it unlikely that the transaction can be completed in an efficient, sound manner in the near term, and create uncertainty with regard to the long-term outcomes of the proposed to the long-term outcomes of the proposed.

The project's soundness challenges include: (i) valid mineral claims held by existent third parties who may choose to explore for, and develop, mineral resources on the property; (ii) uncertainty about whether the restoration described in the application and proposed for protection under the easement will be completed, given that concurrence needed from another landowner has not been obtained and title encumbrances are not well understood; (iii) uncertainty about whether the conservation easement

template being developed by OWEB, NRCS, and BMLT will be acceptable to the property owner, including language that requires that agricultural activities contribute to intended ecological outcomes and that protection of the property's conservation values be prioritized over agricultural activities in the event of a conflict between the two; and (iv) uncertainty about whether the property's uplands, proposed for inclusion in the easement, will be protected under the easement in a manner that clearly advances the priorities of OWEB's land acquisition program.

Any revised application should consider: (i) a request for additional funds needed to purchase the reserved mineral estate; (ii) assurances that the proposed restoration will be completed; and (iii) the property owner's concurrence with the easement template currently under development, including ecological goals appropriate for a Measure 76 Lottery-funded working lands easement.

ECOLOGICAL OUTCOMES

There are high ecological values associated with the riverine, floodplain and wetland habitat, particularly if planned restoration is implemented along the main stem John Day River and Reynolds Creek. ESA-listed steelhead and bull trout, as well as Chinook would all benefit from the cold-water habitats those systems provide. Permanent protection that enhances the ability to address stream temperature impacts provides climate change resiliency. The application would have been stronger if it had provided more specific details on how the easement would protect the ecological values in the riparian and floodplain zones, specifically how or if grazing would be allowed. There were also concerns about the property boundary following the centerline of the river and how that could be impacted by re-meandering or any channel reconfiguration. Plans to complete the intended restoration have the potential to impact the cross-river landowner, so will require, at minimum, agreement with the landowner. The ecological values would be higher if the property on the opposite side of the river channel was included in restoration plans. Depending on how those issues are resolved and/or agreements reached with adjoining landowners, the outcomes of this easement could be muted or greatly improved.

The upland ecological benefits were not as well described in the application and the site visit revealed the annual grass infestation to be of extreme magnitude. Restoring the uplands will require significant and continued efforts; however, the extensive shrub component observed on the site visit would serve as an important winter food source for deer and elk. There are ecological benefits to maintaining connectivity between this large timber and grassland property with the other private and public holdings on either side.

The landowners have been active in restoration since the 1980s, and appear to be interested in protecting restoration investments and improving fish and wildlife habitat on the ranch into the future. The views from this property are magnificent and appealing for residential development; however, the application did not address the likelihood of subdivision with respect to development pressure and zoning requirements.

COMMUNITY BENEFITS AND IMPACTS

The GSG is a working ranch that contributes to the local agricultural economy, provides open and scenic areas, and supports fish and wildlife populations. The ranch is committed to remaining economically and environmentally viable through continued sustainable agricultural use of the land. The slope and aspect of the property make it an integral component of the viewshed in proximity to the Strawberry Wilderness.

The landowners have actively engaged with the Confederated Tribes of Warm Springs on irrigation efficiency and stream restoration projects. The tribe is working on protecting important strongholds for wild Chinook salmon in the basin, and is currently developing a riparian management plan for the streams on the property.

ORGANIZATIONAL CAPACITY

BMLT is a relatively new applicant to OWEB's Acquisition grant program. It is a growing organization that has recently expanded into Grant County to fulfill a local need. The proposed conservation easement aligns well with the mission and geographic scope of the organization.

BMLT project team includes a diversity of staff with most of the legal backgrounds necessary to successfully complete the transactional aspects of the propose project. However, it is likely that BMLT will need additional assistance and expertise to handle the complicated mineral estate issues associated with the property. The stewardship and long-term management team also has the necessary skills and experience. The organization has some financial resources dedicated to the long-term stewardship of the site, but it is unclear is the resources will be sufficient in consideration of the organization's growing portfolio, all of which have monitoring components.

PUBLIC REVIEW

A public hearing was held January 9, 2019 at the Prairie City City Hall with 17 people in attendance. The hearing focused on the public's view of the project's benefits, and questions and concerns about the project, summarized as follows:

Benefits

- Keep elk off the haystacks and clover.
- Reynolds Creek is a significant cold water habitat stream for steelhead rearing, bullhead habitat, and one of the only Chinook spawning tributaries.
- Provides west slope cutthroat trout habitat.
- Protects highly functioning ecological processes.
- Protects agriculture.
- Remeandering/reconnecting the floodplain generally helps irrigators.
- Potential to slow down flow during high flow events.

Concerns

- There are too many elk now and not enough elk management.
- How will stream restoration impact downstream irrigators?
- Unknown impacts of restoration on stream temperature; there is potential to blame agricultural operators.
- Unknown impacts on stream flow; there is potential for increased high water events.
- Potential for restoration to change "property boundaries" that are tied to the streambank.
- Potential damage to diversion structures.

SUMMARY

The application proposes permanent protection of significant habitat through a conservation easement on a working ranch. The concerns regarding title, particularly 3rd party ownership of significant mineral rights, likelihood of achieving restoration, both in the riparian areas and the uplands, and primacy of conservation in an OWEB-funded conservation easement, limit the likelihood of success at this time. Given the potential benefits of the project, the applicant is encouraged to address the concerns if a future application is submitted.

STAFF RECOMMENDATION

Based on the evaluation above, staff do not recommend the Board award funding for the GSG Ranch conservation easement.

FALL 2018 OWEB GRANT OFFERING

LAND ACQUISITION APPLICATION

Application No.:	218-9903				
Project Name:	Hood River Forest and Fish Conservation Project				
Applicant:	Western Rivers Conservancy	Region: Central Oregon			
Basin:	Hood River	County:	Hood River		
OWEB Request:	\$1,267,691	Total Cost:	\$5,210,356		

APPLICATION DESCRIPTION [PROVIDED BY THE APPLICANT]

Western Rivers Conservancy seeks funding to acquire a conservation easement over 5,041 acres of the 19,983 acre Mid-Columbia Tree Farm (MCTF) located in Hood River County, OR. This acquisition is the first of four phases to encumber the entire property with a conservation easement using Forest Legacy Program (FLP) funding and non-federal match dollars. The MCTF, now owned by Weyerhaeuser Company, has historically provided raw logs, recreation, jobs, and other resources to region. It is surrounded on three sides by National Forest lands and makes up roughly a third of the middle segment of the West and Middle Forks of the Hood River, a significant tributary of the lower Columbia River. Because of the Hood River's tremendous resource values, it was designated as a priority basin by the Whole Watershed Initiative. The primary goal of this phased project is to aid in the recovery of at-risk fish and wildlife by preventing home-site development and increasing stream buffers.

The Hood River supports the most diverse salmonid community in the lower Columbia River, with five of the basin's six anadromous fish populations, as well as one resident species, listed under the Endangered Species Act (ESA). The West Fork alone is the only stronghold for lower Columbia summer steelhead. Middle Fork winter steelhead are a considered a "genetic legacy" as they retain the most intact genetic composition of all Columbia steelhead. In total, there are 30 miles of fish-bearing streams on the MCTF (including 8 on Phase I) amounting to approximately 1090 acres of riparian habitat. Maintaining the property as an intact, forested landscape will secure a vital ecological linkage for fish and wildlife in the Hood River basin and advance these OWEB conservation principles:

- protect environmentally sensitive lands
- complement existing ecological networks
- improve connectivity
- protect a large intact area
- protect sites with exceptional biodiversity values; and
- secure transition

REVIEW

PROJECT SOUNDNESS

The review process identified soundness challenges that make it unlikely that the transaction can be completed in an efficient, sound manner in the near term, and create uncertainty with regard to the long-term outcomes of the proposed investment.

The project's soundness challenges include: (i) significant transaction framework and easement document revisions required in order to use OWEB and Forest Legacy Program (U.S. Forest Service) funding in a manner that meets the requirements of both funders; (ii) uncertainty about whether the property owner, USFS, and ODF are willing to agree to conservation easement terms and conditions that incorporate OWEB's easement requirements; (iii) uncertainty about partner roles; (iv) a project budget that appears to lack funds necessary for WRC to lead due diligence as OWEB's grantee; (v) an unclear basis for estimating the easement purchase price; (vi) uncertainty about WRC's ability to secure bridge funding to purchase the easement; (vii) lack of clarity about funding available to steward the property since the easement will ultimately be held by a state agency rather than by a land trust with a dedicated stewardship fund; and (viii) uncertain title circumstances, with numerous title encumbrances likely affecting the property.

The draft conservation easement submitted with the application would require significant revisions to meet OWEB's requirements, including but not limited to: (i) WRC must be granted the conservation easement in exchange for using OWEB's funds for the purchase of the easement; (ii) the conservation values of the property must be specifically described; (iii) the easement must contain specific protections for the riparian buffers such as widths and use restrictions that are sufficient to achieve fish and wildlife habitat benefits; (iv) provisions that are incompatible with the purpose of OWEB's land acquisition program, such as subdivision, clearcutting timber, oil and gas development, and mining must be revised; (v) the easement holder must have the ability to close portions of the property to public access, if needed, to protect sensitive resources; and (vi) the easement holder's right to complete certain riparian and instream restoration work should be clearly established in the easement in order to ensure that such work can be completed free of incompatibilities with ongoing industrial timber operations. The revisions are likely to change the property owner's rights, which in turn could change the easement's value and the willingness of the parties to proceed.

ECOLOGICAL OUTCOMES

This easement could provide riparian protections over a large swath of industrial timber land that encompasses portions of the West Fork of the Hood River, which supports high quality aquatic habitat for several ESA listed salmonid species. It appears that the project partners intend for the easement's riparian management zones to be more restrictive than the current Oregon Forest Practices Act, although the project's riparian provisions are in flux. Effective long-term protection of the riparian corridors would allow for more large wood recruitment, shade, and set the stage for long term diverse riparian forest characteristics to mature. These benefits would have a direct impact in improving instream habitat and complexity in this cold water refugia stream corridor, as well as increasing wildlife connectivity corridors with adjacent public land. The protection of these riparian habitats is identified in many local planning and ESA species recovery documents; an increase in riparian buffer widths would greatly contribute to the goals of these plans.

Much of the property has been aggressively managed for timber production in recent years, which suggests that conservation protection within the project area will not have immediate benefits, but benefits will increase over time if the easement is adequately written, monitored, and enforced. The application noted future development within the area as a key threat to the ecological integrity. While there is some evidence of the owner divesting other lands in the basin, the application failed to articulate the potential threat of home site development, The lack of clarity about riparian management zone specifications raised

concerns about whether the buffer zones for each stream classification would provide long-term wood recruitment.

COMMUNITY BENEFITS AND IMPACTS

In addition to potential habitat benefits, the project would ensure that the property remains in working forest management, providing raw materials, jobs, and public recreational access for Hood River County. Common recreational uses of the property include hunting, hiking, wildlife-viewing, gathering/foraging, mountain biking, water sports, and fishing. The applicant plans to continue public access for these uses.

The Confederated Tribes of Warm Springs operates a fish hatchery on 10 acres of the property, which will be excluded from the conservation easement to allow them to continue to pursue salmonid recovery on the West Fork Hood River.

ORGANIZATIONAL CAPACITY

WRC is a large organization and this acquisition aligns well with its focus on river conservation. WRC was awarded one OWEB land acquisition grant in 2007 for a project where ownership was transferred to a land trust. Based on the application materials it appears that the organization has not fully considered OWEB's acquisition program requirements when developing the application, specifically that OWEB cannot grant funds to other state agencies and OWEB's easement requirements.

The acquisition project team as proposed in the application seems small for this complicated transaction and may not have all the necessary skills and experience to complete the transaction. In addition, there does not seem to be enough resources allocated to contracted services to fill the WRC staffing shortfall. As an agency, ODF has sufficient expertise to develop the management plan and complete long-term management of the site. However, the application does not include information on the qualifications of the specific ODF staff that will be responsible for the development of the long-term management plan and ongoing stewardship. In addition, state budget fluctuations could make stewardship of the easement challenging.

PUBLIC REVIEW

A public hearing was held January 10, 2019 at the Parkdale Fire Station with 15 people in attendance. The hearing focused on the public's view of the project's benefits, and questions and concerns about the project, summarized as follows:

Project Benefits

- The project's riparian protections have the ability to recruit future large wood for fish habitat (currently, partners purchase wood to install).
- Maintaining public access for hunting, fishing, and other recreation uses.
- Proposed riparian buffers would improve water quality conditions for downstream users (primarily irrigation withdraws). The buffers could reduce the river's ability to be flashy and flush sediment downstream.
- Prevent subdivision.
- Reduces fire risk.
- Improve public access without user fees.
- Timing is important because harvest in buffer zones is ongoing.
- There is potential of replicating something of this nature on other Weyerhaeuser owned lands.
- Land is within the public water supply for Hood River residents.
- Protect and promote wildlife connectivity

Project Concerns

• The perception that tax dollars funding Weyerhaeuser for something they should be doing anyway.

SUMMARY

The application is premature given that the structural problems inherent in the transaction regarding the transaction mechanics and lack of incorporation of OWEB conservation easement requirements will require significant negotiations and agreements among the applicant, the landowner, and the long-term holder. The current application has a low likelihood that these issues could be resolved within the required 18-month timeframe in a manner that would secure conservation values in perpetuity.

STAFF RECOMMENDATION

Based on the evaluation above, staff do not recommend the Board award funding for the Hood River Forest application.







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Agenda Item M supports OWEB's Strategic Plan priority #6: Coordinated monitoring and shared learning to advance watershed restoration effectiveness.

MEMORANDUM

TO: Oregon Watershed Enhancement Board

 FROM: Renee Davis, Deputy Director Ken Fetcho, Effectiveness Monitoring Coordinator
 SUBJECT: Agenda Item M – OWEB Monitoring Grant Rulemaking April 16- 17, 2019 Board Meeting

I. Introduction

This report seeks board authorization to initiate rulemaking for OWEB monitoring grants (Division 25).

II. Background

Monitoring grants are an integral OWEB grant offering, providing important resources that assist grantees in gathering baseline data on current conditions in a watershed, evaluating the specific efforts of management actions, or comparing similar watershed components before and after a restoration project. Administrative rules for the program were adopted in 2005, so were not subject to later statutory requirements that rules adopted after 2006 be reviewed every five years.

While the rules are not required to be reviewed, given the board's direction regarding monitoring in its new strategic plan, staff propose to work with a rules advisory committee (RAC) to review the long-standing monitoring grant administrative rules and determine how these rules should be updated to reflect the current intent of, and need for, supporting watershed monitoring activities in Oregon.

III. Proposed Rulemaking Process

Staff will convene a RAC for the monitoring grant rulemaking process. The RAC will be composed of a diversity of stakeholders, ranging from monitoring grantees and review team members to agency partners and OWEB staff. Staff propose to develop the Monitoring grant rules according to the draft schedule below.

Rulemaking Action	OS Monitoring Dates/Deadlines
Board Authorization for Rulemaking	April 2019
RAC Meetings to Review Current Rules, Vet Draft Rules and Provide Feedback	August-December 2019
Draft Rules Revisions Based on RAC Feedback	January 1, 2020
Public Comment Materials posted online	February 1, 2020
Notice to Agency Mailing List and Legislators	February 1, 2020
Noticed Published in Secretary of State's Bulletin	February 1, 2020
Public Comment Period	February 1-29, 2020
Public Hearing(s)	February 2020
Revisions to Draft Rules Based on Public Comment	Early March 2020
Board Adoption of Rules	April 2020

IV. Recommendation

Staff recommend that the board authorize rulemaking for OWEB monitoring grants.







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Agenda Item N supports OWEB's Strategic Plan priority #6: Coordinated monitoring and shared learning to advance watershed restoration effectiveness.

MEMORANDUM

TO:	Oregon Watershed Enhancement Board
FROM:	Renee Davis, Deputy Director Ken Fetcho, Effectiveness Monitoring Coordinator
SUBJECT:	Agenda Item N – Programmatic Effectiveness Monitoring Funding Request April 16-17, 2019 Board Meeting

I. Introduction

OWEB's programmatic effectiveness monitoring evaluates specific types of restoration actions at broad geographic and/or temporal scales through targeted investments. This staff report requests funding from the board's Open Solicitation Programmatic Effectiveness Monitoring line item in the spending plan for a tidal wetland effectiveness monitoring project. The project was initially submitted through OWEB's Open Solicitation program and addresses programmatic information gaps identified in a recently commissioned literature review of tide gate and estuarine restoration effects.

II. Background

Periodically, grant applications submitted through Open Solicitation grant offerings are, in reality, a more appropriate fit for other OWEB programs. This situation last occurred in April 2014, with the Assessing Salmon Use of Off-Channel Wetlands along the Multnomah Channel project (OWEB grant #214-3040). The board reviewed a request from staff to fund this grant through the then-titled Effectiveness Monitoring spending plan line item.

Another example of this situation was the *Bandon Marsh NWR, Ni-les'tun Unit* -*Effectiveness Monitoring* project (OWEB grant #210-2032), awarded in March 2012. Monitoring associated with the project gathered data to document the effects of the largest tidal wetland restoration project in Oregon at that time, which included tide gate and dike removal, restored channel meandering and connectivity, and re-established historical tidal flows. This monitoring project in the Coquille River estuary had excellent potential to quantify the effects of tidal wetland restoration and inform future projects. As such, it was funded as programmatic effectiveness monitoring.

III. Proposed Shift of Monitoring Project from Open Solicitation to Programmatic Effectiveness Monitoring

OWEB Application Number 219-2048, *Ni-les'tun Tidal Wetland Restoration Effectiveness Monitoring*, has been identified as meeting programmatic effectiveness monitoring goals. The project is similar in nature to the previous Ni-les'tun monitoring project. It has broad implications for restoration practitioners well beyond the specific project location. The Niles'tun restoration project remains one of the largest tidal restoration projects completed in Oregon. The applicant and project partners note their dual intent of providing "accountability for OWEB's prior investments in this project, and through outreach, will help advance restoration practices and guide similar restoration projects in Oregon."

The application as submitted under the Open Solicitation offering proposes that the project will conduct extensive monitoring of: hydrology; plant communities; soil conditions; aquatic habitat availability, quality, and utilization by fish; and climate-change adaptation potential (e.g., carbon sequestration). The applicants and partners plan to disseminate monitoring results through several media, including a synthesis report, publicly understandable data summaries, and outreach via presentations to restoration practitioners and monitoring experts. Outreach efforts will articulate key findings and lessons learned that are relevant to future estuarine restoration efforts.

Work proposed under the application helps address priority next steps that emerged following completion of an OWEB funded literature review by Oregon State University (OSU) that focused on tide gate and estuarine restoration. At the October 2018 board meeting, staff outlined several next steps, including: 1) Developing lessons learned/considerations documents, based on findings from past investments and informed by the OSU literature review, for restoration practitioners and review teams; and 2) In coordination with agency and local partners, continue to explore opportunities to invest in the monitoring of tide gate and estuarine restoration projects.

For these reasons, staff propose removing this application from the November 2018 Open Solicitation grant awards to the board's Programmatic Effectiveness Monitoring line item in the spending plan. This application had favorable reviews from both the Oregon Plan Monitoring Team and the Region 2 Review Team. Staff will work with the applicant to review and, as needed, refine the scope of the proposed monitoring project to be funded from the Programmatic Effectiveness Monitoring line item.

IV. Recommendation

Staff recommend the board award up to \$253,000 for this grant application with funds from the Open Solicitation Programmatic Effectiveness Monitoring line item of the OWEB spending plan, and delegate to the Executive Director the authority to distribute the funds through appropriate agreements with an award date of April 17, 2019.







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

MEMORANDUM

 TO: Oregon Watershed Enhancement Board
 FROM: Eric Williams, Grant Program Manager
 SUBJECT: Agenda Item O – Fall 2018 Open Solicitation Grant Offering April 16-17, 2019 Board Meeting

I. Introduction

This staff report describes the Fall 2018 Open Solicitation Grant Offering and funding recommendations. Staff request the board approve the funding recommendations outlined in Attachment C to the staff report, including funding for 46 restoration grants, 21 technical assistance grants, 13 monitoring grants, and 6 stakeholder engagement grants.

II. Fall 2018 Grant Offering Background and Summary

A. Applications Submitted

A total of 146 applications were received requesting \$19 million. Attachment A shows applications submitted by region, project type, and funding request.

B. Applications Withdrawn

Following the application deadline, three applications (219-1013, 219-2048, and 219-4027) were withdrawn by the applicant.

C. Review Process

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

OWEB then facilitated RRT meetings in each region for all grant types offered. Reviewers considered the likelihood of success of the proposed project based on evaluation criteria in rule, including the board's new TA rules adopted in 2018. Monitoring applications were also reviewed by the Oregon Plan Monitoring Team to assess benefit to the Oregon Plan and likelihood of success prior to the RRT meeting. After classifying applications as "Fund" or "Do Not Fund," the RRTs then prioritized the projects recommended for funding by application type.

The RRTs' evaluations and recommendations in summary form are distributed to all applicants whose proposals were reviewed by that team. Prior to the board meeting, staff will forward to the board any written comments received from applicants regarding the RRT and staff recommendations.

III. Sage-grouse Projects

At its April 2015 meeting, the board adopted a policy to make available at least \$10 million through its granting programs over the next ten years in support of projects located in Oregon's sage steppe ecosystem directed to improve greater sage-grouse habitat. For the Fall 2018 Open Solicitation Grant Offering, there are four projects (219-5029, 219-5034, 219-5039, and 219-5040) recommended for funding that meet these criteria, requesting \$240,057. Total funding awarded to sage-grouse projects in all categories since April 2015 is \$6,995,302. If the recommended projects are awarded funding from the board, the new four-year total will be \$7,235,359, including investments through the Focused Investment Partnership Program.

IV. Funding Recommendations

The funding recommendations for the Fall 2018 Open Solicitation Grant Offering are shown in Table 1.

Grant Type	Spending Plan Total	Previously Awarded	Grant Funds Available	Staff Recommendations	Recommended Grant Funds Remaining
Restoration	\$32,000,000	\$24,031,715	\$7,968,285	\$7,760,592	\$207,693
Technical Assistance	\$4,000,000	\$2,635,064	\$1,364,936	\$1,229,307	\$135,629
Monitoring	\$3,100,000	\$1,783,942	\$1,316,058	\$1,324,817	(\$8,759)
Stakeholder Engagement	\$700,000	\$632 <i>,</i> 336	\$67,664	\$240,015	(\$172,351)
TOTAL	\$39,800,000	\$29,083,057	\$10,716,943	\$10,554,731	\$162,212

Table 1: 2017-19 Spending Plan and Spring 2018 Grant Offering Staff Funding Recommendations

OWEB staff considered the RRT recommendations and the funding availability in the 2017-2019 spending plan in developing the staff funding recommendation to the board. Attachment B includes the number of applications recommended for funding by RRTs and staff by region and type, and the funding requests recommended by staff by region and type.

In order to fund staff recommended applications, staff recommend the board make the adjustments to the 2017-19 Spending Plan shown in Table 2. If the spending adjustments are approved, staff recommend the board fund the applications listed in Attachment C.

Spending Plan Line Item	Adopted Amount (\$ millions)	Recommended Change	New Spending Plan Amount (\$ millions)
Open Solicitation: Restoration	33.000	-0.175	32.825
Open Solicitation: Technical Assistance	4.000	-0.130	3.870
Open Solicitation: Monitoring	3.100	+0.010	3.110
Open Solicitation: Stakeholder Engagement	0.700	+0.175	0.875
Land and Water Acquisition	9.900	+0.580	10.580
Land and Water Acquisition TA	0.600	-0.450	0.150

Table 1: Recommended 2017-19 Spending Plan Adjustments

Attachments

A. Grant Applications Submitted

B. RRT and Staff Funding Recommendations

C. Regions 1-6 Funding Recommendations

Oregon Watershed Enhancement Board October 29, 2018 Open Solicitation Offering

		Stakeholder	Technical		
	Monitoring	Engagement	Assistance	Restoration	Totals
Region 1	7	1	8	12	28
Region 2	7	1	9	15	32
Region 3	2	4	2	13	21
Region 4	4	1	6	7	18
Region 5	4	1	6	13	24
Region 6	3	2	3	15	23
Totals	27	10	34	75	146

Applications Received by Type

			/ 11		
		Stakeholder	Technical		
	Monitoring	Engagement	Assistance	Restoration	Totals
Region 1	287,770	24,690	459,800	2,562,796	\$3,335,056
Region 2	830,147	55,087	580,001	3,524,983	\$4,990,218
Region 3	96,530	251,218	149,929	2,548,336	\$3,046,013
Region 4	541,408	55,167	338,891	2,201,573	\$3,137,039
Region 5	359,787	42,609	274,793	1,302,139	\$1,979,328
Region 6	413,856	64,496	138,610	1,893,555	\$2,510,517
Totals	\$2,529,498	\$493,267	\$1,942,024	\$14,033,382	\$18,998,171

Dollar Amounts by Application Type

RRT and Staff Funding Recommendations for the Fall 2018 Open Solicitation Grant Offering

Region	Restoration		Technical Assistance		Monitoring			Stakeholder Engagement				
	RRT	Staff	%	RRT	Staff	%	RRT	Staff	%	RRT	Staff	%
Region 1	6	6	100%	5	5	100%	4	4	100%	1	1	100%
Region 2	11	6	55%	8	5	63%	4	2	50%	0	0	-
Region 3	9	6	67%	2	2	100%	1	1	100%	2	2	100%
Region 4	5	5	100%	5	4	80%	2	1	50%	1	1	100%
Region 5	11	11	100%	5	4	80%	3	3	100%	1	1	100%
Region 6	12	12	100%	2	1	50%	2	2	100%	1	1	100%
Total	53	46	87%	27	21	78%	16	13	81%	6	6	100%

Region	Restoration	Technical Assistance	Monitoring	Stakeholder Engagement
Region 1	\$890,991	\$333,217	\$100,828	\$24,690
Region 2	\$1,571,123	\$311,698	\$308,626	\$0
Region 3	\$1,376,667	\$149,929	\$48,152	\$90,027
Region 4	\$1,573,089	\$218,045	\$195,483	\$55,167
Region 5	\$1,100,410	\$171,308	\$339,552	\$42,609
Region 6	\$1,248,312	\$45,110	\$332,176	\$27,522
Total	\$7,760,592	\$1,229,307	\$1,324,817	\$240,015

North Coast - Region 1 Fall 2018 Funding Recommendations



Document Path: Z:\oweb\Technical_Services\Information_Services\GIS\Maps\Review Team Meetings\2018FallCycle\Projects\Region1_AppFundingStatus_11x17_2018Fall.mxd ESRI ArcMap 10.6 NAD 1983 Oregon Statewide, Lambert Feet Intl OWEB- PK Wills 20190314

Funding Recommendations

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

Previous Grants - 1998-Spring 2018

- Restoration
- Acquisitions
- Streams



Region Boundary

Oregon Watershed Enhancement Board

775 Summer St, NE Suite 360 Salem, OR 97301-1290 (503) 986-0178 http://oregon.gov/OWEB/

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Regior	Region 1 - North Coast							
Restoration Projects Recommended for Funding in Priority Order								
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County			
219-1024	Siuslaw WC	Upper Indian Creek Helicopter Large Wood Placement, Phase 1	Large wood will be added to 10 miles of stream in the Upper Indian Creek area of the Siuslaw watershed with the goal of improving habitat complexity for aquatic species, including Oregon coast coho salmon.	236,455	Lane			
219-1019	Siuslaw WC	Cleveland Creek Highway 36 Culvert Replacement	A barrier culvert under Highway 36 will be replaced and fish passage will restored to 1.5 miles of high quality spawning and rearing habitat in Cleveland Creek, a tributary of the Siuslaw River.	295,483	Lane			
219-1022	North Coast Land Conservancy	Boneyard Ridge Forest Restoration	Forest health thinning on a conservation property on Tillamook Head will increase spatial diversity, improve biodiversity, and work to restore late-seral forest conditions with adaptive long term management.	108,829	Clatsop			
219-1023	Lower Nehalem WC	Punchbowl Creek Large Wood Enhancement Project	Large wood will be placed within a one mile reach of Punchbowl Creek in the Lower Nehalem watershed, improving habitat complexity for aquatic species.	73,319	Clatsop			
219-1018	Columbia SWCD	Clatskanie Headwater Stream Fish Passage Restoration	This project will replace the last barrier in the headwater streams of the Clatskanie River, restoring access for migration of native fish species to 1.7 miles of spawning and rearing habitat.	152,047	Columbia			
219-1017	Lower Nehalem WC	Grassy Lake Creek Tributary Culvert Replacements and Habitat Enhancement	Critical habitat and passage needs will be addressed to benefit an isolated population of indigenous Coastal Cutthroat trout. Two undersized culverts will be replaced and large wood installed over a one mile reach.	24,858	Clatsop			
Total Rest	toration Projects Reco	ommended for Funding by I	RRT and OWEB Staff	890,991				
1								

Restoratio	Restoration Projects Recommended but Not Funded in Priority Order						
				Amount			
Project #	Grantee	Project Title	Brief Description	Recommended	County		
None							
Total Rest	oration Projects Recor	nmended for Funding by F	RT	890,991			
Restoratio	on Applications Not Re	commended for Funding b	by RRT				
				Amount			
Project #	Grantee	Project Title		Requested	County		
219-1014	Siuslaw SWCD	Bessey's North Fork Siuslaw	& McLeod Creek Floodplain Restoration	527,393	Lane		
210 1015	The Nature	Kilchic Dortor Tidal Watland	Postaration Draiget	206.025			
219-1015	Conservancy				ППатноок		
219-1016	MidCoast WC	Bummer Creek Tributary Fish	Passage and Wetland Restoration	46,410	Benton		
219-1021	North Coast WS Assn	Upper Big Creek Road Decon	nmissioning	188,073	Clatsop		

Technical Assistance (TA) Projects Recommended for Funding in Priority Order						
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
219-1027	CREST	Upper Lewis and Clark Tidal	Final designs will be completed for a 29-acre estuary restoration project on the Lewis and Clark River in Clatsop County.	74 028	Clatsop	
		Restoration Project		74,020		
219-1026	Institute for Applied Ecology	Coastal Native Seed Partnership	This project will bring partners involved in coastal restoration together with native			
			plant materials producers to increase the availability and affordability of native seed	74,602	Lincoln	
			to restore Oregon coastal habitats.			
	Ducks Unlimited, Inc.	Nestucca NWR-Bay Unit	A technical design will be developed that upgrades a tidegate to meet fish passage criteria, enhances interior aquatic habitat, and develops agricultural setbacks and	75,000		
210 1021		Restoration and			Tillamook	
215-1051		Infrastructure- Design			mamook	
		Project	inparian restoration plans on the westucca bay National Wildlife Kerdge.			
	Nestucca-Neskowin Watersheds Council	North Coast Watershed	A coalition of North Coast watershed councils will share the resources of a highly			
219-1025		Councils Restoration	qualified consultant for pre-project field work, project design solicitation, proposal	70,990	Tillamook	
		Assistance	drafting, and contract preparation.			
		South Scannoose Creek	Surveys, hydrologic modeling, and permit level designs will be produced for a			
219-1028	Scappoose Bay WC	Reach E Design	floodplain reconnection and riparian project on South Scappoose Creek, a tributary	38,597	Columbia	
		Redent Design	to Scappoose Bay.			
Total TA P	rojects Recommended	d for Funding by RRT and C	DWEB Staff	333,217		
Technical	Assistance Projects Re	commended but Not Fund	led in Priority Order			
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
None						
Total TA P	Fotal TA Projects Recommended for Funding by RRT		333,217			
Technical Assistance Applications Not Recommended for Funding by RRT						
				Amount		
Project #	Grantee	Project Title		Requested	County	
219-1029	Lower Nehalem	Alder Creek Restoration Enh	ancement Project	54 208	Tillamook	
215 1025	Community Trust			54,200	Патоок	
219-1030	Sustainable Northwest	Arch Cape Community Forest: Water and Sediment Assessment and Action Plan30,575Clatsop			Clatsop	
219-1032	Columbia SWCD	Page Creek, Final Fish Passage		41,800	Columbia	

Stakeholder Engagement Projects Recommended for Funding in Priority Order					
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
219-1040	Siuslaw WC	Siuslaw Coho Partnership Story Map for Stakeholder Engagement	An interactive story map will be created to engage stakeholders in the restoration projects identified in the Siuslaw River Coho Recovery Strategic Action Plan.	24,690	Lane
Total Stak	Fotal Stakeholder Engagement Projects Recommended for funding by OWEB Staff 24,690 24,690				
Stakeholder Engagement Projects Recommended but Not Funded in Priority Order					
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
None					
Total Stak	eholder Engagement	Projects Recommended fo	r funding by RRT	24,690	
Stakeholder Engagement Projects Not Recommended for Funding by RRT					
				Amount	
Project #	Grantee	Project Title		Requested	County
None					
	•	•			

Monitorin	g Projects Recommen	ded for Funding in Priority	Order		
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
219-1037	Tillamook Estuaries Partnership	TEP Bacteria Volunteer Water Quality Monitoring Program	This ongoing monitoring effort evaluates the status and trends for bacteria levels in the streams, sloughs, and bays throughout Tillamook County.	34,919	Tillamook
219-1038	North Coast WA Assn	NCWA Monitoring Network 2019	Temperature monitoring will be conducted in 4 watersheds in Clatsop county: Youngs Bay, Skipanon, Nicolai-Wickiup, and Ecola Creek.	5,665	Clatsop
219-1033	Columbia SWCD	Columbia SWCD Water Quality Monitoring Program	The project will build on existing data and collect new data in locations throughout the Lower Columbia watershed to measure bacteria, temperature, turbidity, conductivity, and water depth.	25,012	Columbia
219-1039	Salmon Drift Cr WC	Agnes, Baldy, & Logan Creeks and Ocean Outfalls Baseline Data Acquisition ~ 2019 -2020	Baseline water quality data will be collected in smaller, understudied ocean tributaries in Lincoln City. Flow, dissolved oxygen, pH, conductivity, temperature, and turbidity data will be collected in urbanized streams and ocean outfalls.	35,232	Lincoln
Total Monitoring Projects Recommended for funding by OWEB Staff					
Monitorin	g Projects Recommen	ded but Not Funded in Prie	ority Order		
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
None					
Total Monitoring Projects Recommended for funding by RRT			100,828		
Monitorin	g Applications Not Re	commended for Funding b	by RRT		
				Amount	
Project #	Grantee	Project Title		Requested	County
219-1034	Lincoln SWCD	Mid Coast Monitoring Project	rt Oct 2018	69,574	Lincoln
219-1035	Columbia SWCD	Lower Columbia Watershed Rapid BioAssessments		66,550	Columbia
219-1036	Salmon Drift Cr WC	Siletz & Salmon River Estuaries, Ocean Acidification and Hypoxia Baseline Data Acquisition 2019/21		50,818	Lincoln
Region	1 Total OWEB St	aff Recommended B	Board Award	1,349,726	13%
Regions 1-6 Grand Total OWEB Staff Recommended Board Award				10,554,731	

Open Solicitation-2018 Fall Offering

North Coast (Region 1)

Application Number: 219-1013-16610 Project Name: Brush Creek Large Wood Enhancement Applicant: Scappoose Bay WC Region: North Coast **OWEB Request:** \$153,204

Project Type: Restoration

County: Columbia Total Cost: \$196.614

Application Description (from application abstract)

This project is located in Brush Creek, a tributary to North Scappoose Creek in the southern third of Columbia County. North Scappoose flows into Scappoose Bay, the Multhomah Channel and the lower Columbia River. The project addresses key salmon-production limiting factors identified in the Lower Columbia River Conservation and Recovery Plan (ODFW, 2011) and the Scappoose Creek Limiting Factor Analysis (SBWC, 2012): 1) lack of physical habitat quality and complexity, including low quantity of instream large wood and loss of pools and refuge habitat, and loss of floodplain connectivity; 2) low numbers of riparian conifers for future wood recruitment and poor riparian vegetation; and 3) temperature limitations in mainstem North Scappoose. This project also stems directly from the Scappoose Bay Watershed Strategic Action Plan (SBWC, 2018), which identified restoration actions that address areas with high potential for ecological benefits. The project will install 180 log pieces along 1.5 miles of creek in summer 2019, and plant 5000 native confers, small trees and shrubs during winter 2019-2020. Project is supported by ODFW, Weyerhaeuser, and Scappoose Bay Native Plant Nursery.

Review Team Evaluation Strengths

N/A

Concerns

N/A

Concluding Analysis

Application was withdrawn by applicant prior to review.

Review Team Recommendation to Staff

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
Withdrawn

Staff Recommended Amount \$0

Staff Conditions

N/A

Open Solicitation-2018 Fall Offering

North Coast (Region 1)

Application Number: 219-1014-16613

Project Name: Bessey's North Fork Siuslaw & McLeod Creek Floodplain Restoration

Applicant: Siuslaw SWCD

Region: North Coast

OWEB Request: \$527,393

Project Type: Restoration

County: Lane Total Cost: \$842,248

Application Description (from application abstract)

The project area is located at the confluence of the North Fork (NF) Siuslaw River and McLeod Creek, extending into each of the Upper and Lower NF Siuslaw 6th Field HUC's, both of which are identified as priority watersheds for restoration in the Siuslaw Strategic Action Plan (SAP). The Siuslaw SAP (Siuslaw Coho Partnership (SCP), 2018) identifies the major stresses limiting Coho production in the Lower NF Siuslaw 6th Field HUC as decreased lateral connectivity, altered riparian function, and increased water temperatures. The Siuslaw SAP also identifies the major stresses in the Upper NF Siuslaw 6th Field HUC as decreased lateral connectivity and lack of in-stream complexity. The Federal Recovery Plan For Oregon Coast Coho (NOAA, 2016) recognized the primary habitat related limiting factors as lost habitat (especially floodplain habitat), reduced complexity, and degraded water quality. Stream complexity and water quality were also determined to be the primary and secondary limiting factors in Oregon's Coastal Coho Assessment (ODFW, 2005). The NF Siuslaw River is listed under section 303(d) of the Clean Water Act as being water quality limited by temperature and sedimentation. This effort will address each of the major stresses and limiting factors for Oregon Coastal (OC) Coho identified in each of the fore mentioned local, state, and federal plans; which is why it was ranked #3 overall out of the hundreds of proposed projects identified within the Siuslaw SAP. Measurable objectives: Hydrologically reconnecting ~15 acres of floodplain.• Establishing ~15 acres of native riparian vegetation.• Developing ~ .5 mile of anastomosing off-channel habitat.• Increasing in-stream complexity to .5 stream mile.Partners: • Siuslaw National Forest and their Regional Assistance Team (RAT's) NOAA• Wild Salmon Center (WSC)• Siuslaw Collaborative Watershed Restoration Program (SCWRP) McKenzie River Trust (MRT) Siuslaw Watershed Council (SWC)

Review Team Evaluation Strengths

- The project is a top-ranked project in the Siuslaw Strategic Action Plan and addresses key limiting factors for Oregon coast coho salmon.
- The project will build upon other nearby work in the basin.
- This restoration application is the result of a previously funded OWEB Technical Assistance grant, and the applicant followed earlier recommendations by the review team to consider watershed processes more broadly when developing a design.

- The application has the appropriate level of detail describing the importance of this reach for anchor habitat for all life stages of coho.
- The project approach is innovative and focused on restoring system processes rather than solely addressing symptoms.
- In the long term, the project could reduce sediment in the system with its design encouraging deposition within the reach. The stage 8 design methodology could increase the pace of elevational evolution.
- The partners involved have an excellent track record for implementing restoration projects in the Siuslaw basin.

Concerns

- The design approach is new and limited monitoring data is available to determine the potential ecological benefits. The lack of monitoring occurring with similar projects has resulted in a lack of clarity on effectiveness of this technique.
- Projects of this nature have typically been implemented on larger parcels with landscape-level benefits, and there is potential for reduced ecological benefit on a smaller site such as the proposed project location. The application would benefit from more information addressing the spatial scale of this type of work and resulting expected benefits.
- The design work only included 3 cross sections, which seemed minimal considering the amount of heavy earthwork proposed on site along with the adjacent infrastructure of the county road.
- The cost estimates for some of the budget items are questionable; the application would benefit from more detail as to how costs were arrived at within the budget.
- The Siuslaw River is 303d limited for sediment, and the proposed method and implementation timing
 results in a large area of the site being bare going into the winter. Rebuilding a fluvial plain could take
 many years, and it is unclear what the risks of increased sedimentation are to the system in the
 interim.
- The application would benefit from some additional clarity; parts of the narrative were repetitive and lacked clear information about the stage 8 approach.

Concluding Analysis

The design approach constructs an inset floodplain within a heavily incised reach of the river and was partially funded by a previous OWEB Technical Assistance grant. The innovative design looks beyond traditional bank stabilization techniques and effectively addresses the dynamic nature of this site, where McLeod Creek enters the North Fork Siuslaw River. This project could be a great opportunity to employ the stream evolution-based stage 8 restoration technique on private landownership, but there may be risks to this method that are unknown due to lack of monitoring for similar projects. The application proposes limited effectiveness monitoring and would be strengthened by a detailed and thorough monitoring plan which could benefit not only this project but provide valuable lessons for other similar projects.

The project design team is highly qualified and respected and has implemented other successful projects; however, the submitted designs were lacking in engineering detail for the level of earthwork and project scale involved. The applicant is encouraged to consider resubmitting the project with an

effectiveness monitoring plan, more detail on design calculations, and more information addressing the potential for temporary impacts with regards to water quality.

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-2018 Fall Offering

North Coast (Region 1)

Application Number: 219-1015-16616ProjectProject Name: Kilchis Porter Tidal Wetland
Restoration ProjectProjectApplicant: The Nature ConservancyCountyRegion: North CoastCountyOWEB Request: \$396,935Total County

Project Type: Restoration

County: Tillamook Total Cost: \$1,288,584

Application Description (from application abstract)

The Kilchis Porter project is located in the lower Kilchis River estuary on the east side of Tillamook Bay in Tillamook County near Bay City. The 60.26 acre project area lies between Stasek Slough to the south and Hathaway Slough to the north and borders the Kilchis Estuary Preserve to the south, a TNC preserve that is undergoing active restoration. The Porter project will restore former tidal wetlands that were converted to pastures, thereby providing critical off-channel rearing habitat for salmon and other species dependent upon tidal wetlands. The restoration will remove dikes, recreate tidal channels, fill agricultural ditches and restore tidal wetland vegetation through planting of wetland species. Weedy species will be reduced across the site to encourage native wetland habitats. In addition the restoration will provide for a more active connection between Stasek Slough and Hathaway Slough by removing a constricting culvert and re-designing a connecting ditch to better function as a natural tidal channel. This new channel will foster better drainage of farmlands that are along Stasek Slough upstream and east of Highway 101; the new channel will also provide enhanced tidal flow onto the existing Kilchis Estuary Preserve to the south of the Porter project. Project partners include Tillamook Estuaries Partnership, ODFW and USFWS. Access will be maintained across the new channel via a constructed bridge for the purposes of maintaining restoration plantings and an easement to private property. A second bridge will be constructed to allow for management access to the northern portion of the site along Hathaway Slough.

Review Team Evaluation Strengths

- The project will restore and enhance 60 acres of estuarine habitat, a high priority in the north coast basin.
- The applicant has a good track record of success having implemented a similar restoration project on the adjacent property.
- The project builds on adjacent restoration work in the Kilchis, expanding the habitat connectivity and ecological benefits in the basin.

Concerns

- The planting densities are high and increase the cost of the project. Dense planting on a similar project required thinning to ensure success.
- The site preparation and plant establishment techniques rely on a heavy application of herbicide for success. On the site visit, it was confirmed that native wetland plant communities are also treated with herbicide in order to establish shrub species.
- The planting plan is heavy on shrub species while the Tidal Wetland Prioritization for the Tillamook Bay Estuary (2012) identifies marsh habitat as a target for this area.
- The need to establish an artificial connection between the two sloughs was not clear.
- At the time of grant submittal, only a draft design report was available for review. Review of the final analysis would have been preferable.
- The project includes a timber bridge to be constructed for site access, and large wood is proposed immediately near the bridge. There is the potential for the wood to rot and undermine the abutments.

Concluding Analysis

The project represents a good opportunity to create and enhance 60 acres of both existing and new estuarine habitat, a high priority for the north coast basin. The adjacent Kilchis project designed and implemented by the same applicant appears to be functioning well, and this project would increase the landscape-level benefits provided to the watershed. The proposed planting plan for this project however, raised some concerns as it seemed not to have considered the lessons learned on the adjacent property. It is recommended that the next submission of this application include the final analysis from the technical assistance grant, some cost-mitigating measures, as well as a better focus that includes lessons learned from the previously completed 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

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Staff Recommendation
Do Not Fund
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Staff Recommended Amount \$0

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Staff Conditions

N/A

Open Solicitation-2018 Fall Offering

North Coast (Region 1)

Application Number: 219-1016-16626

Project Name: Bummer Creek Tributary Fish Passage and Wetland Restoration

Applicant: MidCoast WC

Region: North Coast

OWEB Request: \$46,410

Project Type: Restoration

County: Benton Total Cost: \$93,610

Application Description (from application abstract)

This project is located approximately 1.5 miles south of the town of Alsea on Bummer Creek, the largest 4th order tributary of the South Fork Alsea River. Bummer Creek is designated a high priority "Anchor Habitat" for the recovery of listed Oregon Coast coho (OCC) within the Alsea basin. However, a BLM assessment ranked Bummer Creek as the most at-risk 6th field in the South Fork Alsea watershed. In response to the ranking, a 2005 OWEB funded Limiting Factors Analysis (LFA) was conducted at the location. The LFA identified two major co-limiting factors for coho production: 1) limited availability of high-quality spawning gravel, and 2) excessive summer temperatures. The 2016 coho recovery plan notes that for the Alsea independent population, the primary limiting factor for the population is listed as stream complexity, with water quality (excessive summer temperatures) identified as a secondary limiting factor. This project addresses these temperature factors by restoring fish passage by installing a box culvert and placement of large wood and stream bed material to arrest headcutting and to improve access to 0.85 tributary miles with cold water refugia and extensive rearing habitat in a perennial wetland complex. Additionally, the 4.4-acre seasonal wetland restoration (to be funded with matching grants) will allow storage of seasonal runoff and provide for cooler water temperatures through hyporheic flow, and restore habitat for native amphibians and migratory birds. This work compliments past and on-going work in the sub-basin. Project partners are the landowners, US Fish and Wildlife Service (North American Wetlands Conservation Act grant) and the Oregon Wildlife Foundation.

Review Team Evaluation Strengths

- The project supports a unique life history of resident cutthroat trout and if implemented could enhance the resiliency of this population in the lower Nehalem. Brook lamprey are also present in the system above the falls.
- The project appeared straightforward and well-planned.
- Timing of the project is opportune with the landowner planning forest operations that can be timed with the restoration work to maximize cost efficiency.
- The project presents a good opportunity to work with a major landowner.
- The project partners have a successful track record implementing similar types of projects.

• The stream can benefit from some additional habitat complexity. The proposed large wood placements are well-described and appropriate for accomplishing this goal.

Concerns

- The application lacks detail about the proposed aquatic organism passage design features appropriate for resident cutthroat trout. Limited information was provided on the stream simulation and weirs.
- Objectives are unclear and some are not measurable.
- The discussion on alternatives within the application is limited and it was unclear whether there might be a more cost-effective approach available.
- The designs appeared unchanged from the previous submittal with little additional information provided regarding justification for sizing.

Concluding Analysis

This application is a resubmittal. Previous concerns included the lack of design features related to Aquatic Organism Passage. Grassy Lake Creek is a resident cutthroat stream. While design features necessary for other anadromous fish may not be appropriate, it is still important to design projects considering the specifications of the target species. The previous review expressed concern regarding the design standard and the sizing proposed for the structures, and this application had only limited additions with regards to the culvert replacement components of the project.

The large wood project components, however, are valuable and necessary for the health of the fish population in the creek. The large wood components of the application provide the appropriate amount of detail and articulate the expected ecological benefits and geomorphological goals of the proposed work. The addition of instream habitat complexity will address limiting factors for this population of resident cutthroat trout, and the review team recommended funding the habitat component of 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-2018 Fall Offering

North Coast (Region 1)

Application Number: 219-1017-16632

Project Type: Restoration

Project Name: Grassy Lake Creek Tributary Culvert Replacements and Habitat Enhancement

Applicant: Lower Nehalem WC

Region: North Coast

OWEB Request: \$52,776

County: Clatsop Total Cost: \$125,704

Application Description (from application abstract)

LOCATION: Grassy Lake Creek encompasses 5.53 square miles with 39 stream miles, located in the North Fork Nehalem watershed north of the city of Nehalem off of North Fork Road. The crossings being addressed in this proposal are on an unnamed fish bearing tributary to Grassy Lake Creek. There are two undersized culverts both located on Weyerhaeuser property. During the Lower Nehalem Watershed Council's 2015 culvert inventory, these two pipes were identified as "medium" priority candidates for replacement. PROJECT NEEDThis project addresses critical habitat and passage needs essential for the long-term maintenance and survival of an isolated population of indigenous Coastal Cutthroat trout. This summer (2017) Lower Nehalem Watershed Council reached out to Weyerhaeuser to determine whether any culverts that were identified as candidates for replacement in the culvert inventory lined up with any near-term harvest actions. Weyerhaeuser has a harvest scheduled for Grassy Lake Creek in 2018. Both of these culverts proposed for replacement are on Soapstone Mainline which will be used during harvest actions. PROPOSED WORKThis project proposes to remove the existing undersized pipes with fish passage issues and replace them with appropriately sized culverts. The project also proposes to install large wood in the stream to enhance habitat conditions for these same fish. PROJECT PARTNERS/ROLES1. Lower Nehalem Watershed Council providing project management, photo documentation, project permitting and grant reporting2. Weyerhaeuser providing engineering survey and designs, permitting assistance, construction contracting and construction management 3. Oregon Department of Fish and Wildlife providing large wood layout and project construction oversight

Review Team Evaluation Strengths

- The project supports a unique life history of resident cutthroat trout and if implemented could enhance the resiliency of this population in the lower Nehalem. Brook lamprey are also present in the system above the falls.
- The project appeared straightforward and well-planned.
- Timing of the project is opportune with the landowner planning forest operations that can be timed with the restoration work to maximize cost efficiency.
- The project presents a good opportunity to work with a major landowner.
- The project partners have a successful track record implementing similar types of projects.
- The stream can benefit from some additional habitat complexity. The proposed large wood placements are well-described and appropriate for accomplishing this goal.

- The application lacks detail about the proposed aquatic organism passage design features appropriate for resident cutthroat trout. Limited information was provided on the stream simulation and weirs.
- Objectives are unclear and some are not measurable.
- The discussion on alternatives within the application is limited and it was unclear whether there might be a more cost-effective approach available.
- The designs appeared unchanged from the previous submittal with little additional information provided regarding justification for sizing.

Concluding Analysis

This application is a resubmittal. Previous concerns included the lack of design features related to Aquatic Organism Passage. Grassy Lake Creek is a resident cutthroat stream. While design features necessary for other anadromous fish may not be appropriate, it is still important to design projects considering the specifications of the target species. The previous review expressed concern regarding the design standard and the sizing proposed for the structures, and this application had only limited additions with regards to the culvert replacement components of the project.

The large wood project components, however, are valuable and necessary for the health of the fish population in the creek. The large wood components of the application provide the appropriate amount of detail and articulate the expected ecological benefits and geomorphological goals of the proposed work. The addition of instream habitat complexity will address limiting factors for this population of resident cutthroat trout, and the review team recommended funding the habitat component of the project.

Review Team Recommendation to Staff

Fund Reduced with Conditions

Review Team Priority 6 of 6

Review Team Recommended Amount \$24,858

Review Team Conditions

Remove culvert replacement from budget and scope of services.

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund Reduced with Conditions

Staff Recommended Amount \$24,858

Staff Conditions

Remove culvert replacement from budget and scope of services.

North Coast (Region 1)

Application Number: 219-1018-16638ProjectProject Name: Clatskanie Headwater Stream Fish
Passage RestorationProjectApplicant: Columbia SWCDCountyRegion: North CoastCountyOWEB Request: \$152,047Total County

Project Type: Restoration

County: Columbia Total Cost: \$192,117

Application Description (from application abstract)

The project is located on an unnamed tributary of the Clatskanie River, in Columbia county, OR. It is one of two headwater streams that join near Pittsburg Road to form the mainstream Clatskanie River. The culvert was identified by Oregon Department of Fish and Wildlife (ODFW, Dave Stewart) as a fish passage barrier several years ago but as there were culverts downstream that prevented passage, this culvert replacement was delayed. Now, those culverts have been replaced and provide year- round fish passage and the focus can be moved to this tributary. The current culvert is undersized and perched, and acts as a fish passage barrier at low and high flow discharges throughout the year. It blocks access to spawning habitat to Endangered Species Act listed Coho salmon as well as steelhead. It is also a barrier to migration for resident Coastal Cutthroat and Western Brook Lamprey. The culvert is on Hancock Forest Management, Inc. (HFM) property. HFM is systematically replacing all problem culverts on their land holdings in Oregon. HFM began partnering with the Columbia SWCD and ODFW to tackle problem culverts in 2016. This culvert replacement will be the second project undertaken. The proposed work would replace the old culvert, (a 60-inch corrugated metal pipe), with a bridge, spanning 55 feet. A bridge of this size would allow for the creek, which has an average bankfull width of 15.5ft, to pass unencumbered through the road crossing and allow for up and downstream migration of native fish species. It would also restore hydraulic connectivity providing natural downstream movement of water and sediment. The project is a collaboration between HFM, ODFW, and the Columbia SWCD. Engineers at HFM will be designing the bridge crossing and the implementation of the project will be supported by the Columbia SWCD and ODFW.

- The Clatskanie watershed is a priority location for restoration supporting ESA-listed salmon and steelhead.
- There is a strong partnership between the landowner and the Columbia SWCD. The site visit clearly demonstrated that the project team had given significant consideration to the site's challenges and designed the project accordingly.
- The design carefully considers the value of the adjacent wetland and endeavors to retain this function.

- Fish passage is a limiting factor for the Clatskanie River and this project will remove the final barrier.
- The project's team has successfully implemented similar projects, including the Dribble Creek project which the team toured after the site visit.

The new crossing was not designed to meet federal fish passage standards. There was limited detail
provided on the aquatic organism passage design specifications that would be incorporated in the
project.

Concluding Analysis

Implementation of this project will restore fish access through the last barrier on the Upper Clatskanie, addressing a key limiting factor for salmonids in this basin. The project's partners have developed a thoroughly planned and well-designed fish passage project that addresses site-specific challenges.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 5 of 6

Review Team Recommended Amount \$152,047

Review Team Conditions

Bridge design to achieve 1.5:1 ACW (active channel width) and conduct pebble counts to inform stream simulation design.

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund with Conditions

Staff Recommended Amount \$152,047

Staff Conditions

Bridge design to achieve 1.5:1 ACW (active channel width) and conduct pebble counts to inform stream simulation design.

North Coast (Region 1)

Application Number: 219-1019-16652

Project Type: Restoration

Project Name: Cleveland Creek Highway 36 Culvert Replacement

Applicant: Siuslaw WC

Region: North Coast

OWEB Request: \$295,483

County: Lane Total Cost: \$1,327,354

Application Description (from application abstract)

Cleveland Creek is a salmon bearing tributary of the Siuslaw River in the Lower Siuslaw 5th Field Watershed. The creek passes through a culvert under Highway 36 in the community of Tide between Swisshome and Mapleton in Lane County, Oregon. Project partners include Siuslaw Watershed Council (SWC), Oregon Department of Transportation (ODOT), and OBEC Consulting Engineers, Inc. (OBEC). The Highway 36 culvert on Cleveland Creek is undersized and a complete barrier to juvenile aquatic species passage, including ESA threatened Oregon Coast ESU Coho Salmon, Oregon Coast DPS steelhead, cutthroat trout, and Pacific lamprey. The culvert restricts natural stream processes, limiting stream complexity and potentially affecting fish habitat and water quality. The Siuslaw Watershed Council (SWC), working with the landowner (ODOT), will replace the existing, undersized barrier culvert with a bridge that will allow fish passage, reduce water velocity during high-flow events, and allow for natural simulation of the stream bed. A 70 foot span bridge meeting ODOT design requirements will be constructed in place of the current culvert. The new bridge will restore access for anadromous species to about 1.5 miles of high quality spawning and rearing habitat and provide cool water refugia from the mainstem Siuslaw River. The proposed project will address the identified limiting factors of temperature, dissolved oxygen, stream complexity, and water quality within the Siuslaw watershed.

- The project replaces the last barrier on Cleveland Creek restoring access for all life stages of aquatic species to 1.5 miles of habitat.
- The project complements previous work implemented in Cleveland Creek with the design funded by an OWEB-funded technical assistance grant.
- Replacing the culvert provides access to critical cold water refugia habitat in the temperature-limited Siuslaw River.
- The upper Cleveland Creek watershed is in USFS-managed Late-Successional Reserve.
- Project partners have successfully implemented similar projects in the watershed.
- This is a cost-effective fish passage project considering its location on a state highway.

- The budget lacks essential detail for some line items and as a result it is unclear what OWEB's contribution will be.
- The plan for addressing Aquatic Organism Passage (AOP) standards was not well-defined.
- The downstream boulder weirs were not analyzed as part of the design.

Concluding Analysis

Cleveland Creek provides important cold water refugia habitat in this priority reach of the Siuslaw River. Access to the stream is currently limited by a perched culvert under Highway 126. Addressing this issue has been a priority of the applicant who previously implemented an OWEB-funded project upstream to repair a crossing under a railroad. This project is the result of a technical assistance grant that has produced a comprehensive and straightforward application. More detail in the designs regarding the plan for AOP would have strengthened the application, but it is understood from conversations on the site visit that the final designs will address this omission and develop appropriate specifications.

Review Team Recommendation to Staff Fund

Review Team Priority 2 of 6

Review Team Recommended Amount \$295,483

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund

Staff Recommended Amount \$295,483

Staff Conditions

Application Evaluation for Cleveland Creek Highway 36 Culvert Replacement, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

North Coast (Region 1)

Application Number: 219-1020-16653

Project Type: Restoration

Project Name: Cathlamet Bay Watershed Connectivity and Tidal Restoration Project

Applicant: North Coast WS Assn

Region: North Coast

OWEB Request: \$331,872

County: Clatsop Total Cost: \$919,815

Application Description (from application abstract)

The Cathlamet Bay Watershed Connectivity and Tidal Restoration Project encompasses two sites located between River Mile 18 and 19 of the Columbia River Estuary (CRE) in Clatsop County, just east of Astoria. At The Mill Creek site, a historic logging road is slated for removal to improve access to foraging, rearing, and spawning habitat for ESA listed salmonids, while improving tidal inundation at the mouth for species utilizing the CRE. The second site, along John Day River Road, is designed to replace a pair of undersized culverts acting as a hydrologic and fish passage barrier to the upstream wetland complex. The culverts will be replaced with a bridge, improving access to foraging and rearing habitat for CRE salmonids, while benefiting the community by reducing severe seasonal flooding, an existing safety issue for residents near the project area. At Mill Creek, 1.9 miles of road will be decommissioned in both the fluvial and tidal reaches of the subbasin. 23 road crossings will be restored to natural hydrology, 12 of which are on identified ESA listed salmonid streams. Fish passage barriers to upstream spawning habitat will be removed, floodplains will be reconnected, and wetlands will be restored. At John Day, this project removes barriers to 22 acres of tidal wetlands for ESA listed salmonids utilizing the Lower Columbia River Estuary. Post-project, salmonids will have unrestricted access to high quality tidal wetlands and local residents will have year-round safe passage to their homes. When implemented, these projects will increase watershed resiliency to existing and predicted increases in storm events and build on the cumulative effort in and around Cathlamet Bay to restore natural watershed, wetland, and tidal processes that benefit ESA listed salmonids. This project is a partnership between NCWA, CREST, Clatsop County, and the Oregon Department of Forestry (ODF) applying for the National Coastal Wetland Conservation Grant.

- The project has the potential to improve both fish passage and water quality in the Cathlamet Bay watershed.
- Decommissioning the road along Mill Creek will result in an improved forest management approach.
- The project will improve habitat connectivity in both Mill Creek and the lower John Day.
- The fish passage project is designed with climate resiliency in mind.

- The partnership team has essential capacity to implement the projects including an appropriate mix of local partners.
- The Mill Creek basin contains opportunities for educational outreach.

- Road-decommissioning alternatives do not consider re-routing the road around the wetland entirely.
- The linkage between the two projects is unclear. Additional detail regarding the strategic approach to restoration in Cathlamet Bay would strengthen the application.
- The fish passage component has increased in cost since the previous OWEB restoration grant was awarded, thus reducing the overall cost-benefit of the project.

Concluding Analysis

Both projects that comprise this application, the John Day Crossing and the Mill Creek Road decommissioning, were awarded funding by OWEB in April 2018. Since that time, both projects experienced unexpected cost increases and partners decided to pursue a Coastal Wetlands grant to compensate for the funding shortfall.

The projects continue to have a high potential for ecological benefit. They are technically sound with the partners having the capacity to successfully implement this project. It is recommended that OWEB pursue a Coastal Wetlands grant on behalf of the applicants to achieve the necessary funding levels to complete implementation.

Review Team Recommendation to Staff

Review Team Priority N/A

Review Team Recommended Amount \$0

Review Team Conditions

Proceed with Coastal Wetlands Grant application.

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation

Staff Recommended Amount

\$0

Staff Conditions

Proceed with Coastal Wetlands Grant application.

North Coast (Region 1)

Application Number: 219-1021-16655 Project Name: Upper Big Creek Road Decommissioning Applicant: North Coast WS Assn Region: North Coast OWEB Request: \$188,073 Project Type: Restoration

County: Clatsop Total Cost: \$272,682

Application Description (from application abstract)

Camp 7 Spur is a 1.2 mile stretch of legacy logging road adjacent to Big Creek that encroaches on the floodplain and needs to be abandoned. The project is located on Hampton Lumber forest land upstream of the Big Creek Fish Hatchery and the town of Knappa, 15 miles east of Astoria. This legacy haul-route roadbed constricts Big Creek's width, confining it to a much narrower floodplain and the basin's logging history has left the channel largely devoid of complexity and structure. Big Creek upstream from the ODFW fish hatchery is a priority stream for ESA listed species in the Nicolai-Wikiup Watershed because it is the only location in the watershed inaccessible to competition from hatchery fish. This project proposes to implement restoration actions to improve fish habitat and channel processes including: 1) obliterate sections of road that are in the stream floodplain including removing road fill, 2) remove existing cross drains and restore natural drainage, 3) remove tributary culverts and associated road fill, 4) plant conifer along road bed, 5) remove two bridges and abutments, saving one for re-use 6) install large wood placements to improve spawning and rearing habitat, promote floodplain connectivity, and increase off-channel refugia. This project has been identified by local residents and the Nicolai-Wikiup Watershed Council as the number one priority for implementation. This project is top priority for NCWA because there is strong community support to see it through, we need to take advantage of the landowner's willingness to move forward on the project, bringing in OWEB funds will allow us to install large wood structures along this vital stretch of spawning habitat that will no longer be accessible by road after abandonment, and this project will have downstream effects and multi-species benefit. Project partners include the private landowner, Hampton Resources and the North Coast Watershed Association (NCWA).

- The project is a result of a previously funded OWEB Technical Assistance grant. The design effort
 capitalized on existing expertise from the landowner and supplemented it with a consultant to design
 habitat features.
- This is a high priority area to improve habitat for ESA-listed species in the Nikolai-Wikiup watershed.
- The project will remove and alter sections of a road from a riparian area, decreasing its impact on fish and wildlife and reducing the amount of sediment that enters the stream.

• A planned timber harvest in the basin will provide the necessary material for the large wood placements.

Concerns

- The fish in the affected reach do not have natural access to the project site and are trucked upstream
 of the fish hatchery facilities. ODFW's ability to safely transport fish in a timely manner could be a
 greater limiting factor than habitat complexity.
- Project designs provide limited detail, even though a technical assistance grant was previously awarded. There are no calculations or drawings provided for either the road fill removal or the large wood project components.
- The project's cost is high relative to the amount of proposed work.
- It is necessary to rebuild the road to bring wood in to the site. At the site visit the plan to rebuild the road and at what location was unclear.
- Portions of the project location are within a significant landslide area. It is unclear if the design
 process thoroughly addressed the potential of the project to destabilize the slope. Additional technical
 expertise might be needed when working within the landslide area.
- Detail regarding the plan for road decommissioning was lacking in the application. Maps or designs related to the road sections slated for removal would improve the application's clarity.

Concluding Analysis

The project site on Upper Big Creek is an appropriate area to improve habitat for wild fish populations in the Lower Columbia since hatchery fish do not have access to the project reach. ODFW is aware and engaged in the issue of passage for wild fish at the hatchery location with discussions regarding potential alternatives for trucking the wild fish. The forest road proposed for decommissioning restricts floodplain access and likely contributes sediment to the stream. It was not possible to adequately review this application without seeing the design details that were funded by a previous OWEB grant. The necessity of rebuilding the road prior to dismantling it to facilitate the wood structures increases the already high cost to benefit ratio.

Review Team Recommendation to Staff Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount \$0

Review Team Conditions

Staff Recommendation

Staff Follow-Up to Review Team N/A

Staff Recommendation Do Not Fund

Staff Recommended Amount \$0

Staff Conditions

North Coast (Region 1)

Application Number: 219-1022-16682Project Type: RestorationProject Name: Boneyard Ridge Forest RestorationApplicant: North Coast Land ConservancyRegion: North CoastCounty: ClatsopOWEB Request: \$108,829Total Cost: \$137,334

Application Description (from application abstract)

1. Project Location: Boneyard Ridge Habitat Reserve, Seaside, Oregon. In 2016 NCLC acquired 340 acres of young forestland on Tillamook Head with a plan to restore the property to late seral forest habitat through long-term adaptive management. 2. Project Need: There is a 70-acre management unit on the property that is young, densely planted, even-aged, and ready for thinning. The stand contains a mix of 20-year-old spruce and hemlock, with 630 trees per acre. 3. Proposed Restoration Action: Local forest ecologists recommend we use hand crews to thin the stand to 280-350 trees per acre, favoring the healthiest trees and creating variable spacing. This prescription will allow dominant trees to grow larger quickly, increase spatial diversity, and improve forest health. Some of the resulting slash will be used to construct habitat piles that will create an immediate benefit to amphibians and songbirds. Cut trees will be installed into stretches of stream that fall within the unit to benefit fish habitat. Following the thinning treatment, western red cedar and bigleaf maple will be planted into some of the created gaps to restore species diversity that would have historically been at this site. 4. Project Partners: NCLC is working with other neighboring forest managers on Tillamook Head to share resources including Oregon State Parks and Recreation District (Ecola State Park and Elmer Feldenheimer State Natural Area) and Tareen Filgas Foundation (Ecola Ridge). NCLC will also work with the Necanicum Watershed Council to do community outreach through volunteer events and public tours. Numerous foresters and wildlife biologists have been consulted for project design and provide ongoing support to NCLC, including Northwest Natural Resource Group, Springboard Forestry, Lewis and Clark Natural Historical Park, OSU Extension Services, Celata Reseach Associates, Willapa National Wildlife Refuge, Oregon State Parks, and Integrated Resource Management.

- The proposed approach provides relevant detail and is well-considered. The applicant sought guidance from other foresters implementing similar types of work.
- Due to the current overstocked nature of the stand, the site cannot reach late-successional seral stage without reducing current stand density.
- The project has a sense of urgency -- conducting this type of work is possible and practicable at the current stage of forest development but will become increasingly more challenging as the forest ages.

- Manual hand-thinning as proposed will result in a minimal impact.
- The Boneyard property is contiguous with other conservation properties on Tillamook Head. The potential ecological benefit is high for wildlife corridors that can be expanded with the availability of more late-successional forest habitat.
- The project represents a good opportunity to demonstrate conservation forestry techniques on a
 publicly accessible site.
- The landscape will benefit from the restoration of a more diverse plant community proposed in the application.

- Thinning will result in heavy accumulations of slash.
- The size of the habitat piles will be substantial, and the benefits not well described in the application.
- The project would benefit from leveraging available fish and wildlife agencies for technical support.
- The applicant does not have experience conducting this type of restoration work.

Concluding Analysis

Boneyard Ridge, an OWEB-funded acquisition, is located in a key location connecting conservation lands on Tillamook Head. The property itself suffers from poor forest conditions with many young stands at over 600 trees per acre. This project proposes to conduct ecological forestry in the young stands with the most dire stand conditions with the intent of getting the forests on a trajectory toward late successional habitat. The proposed habitat piles and associated monitoring will broaden the expected ecological benefits.

Review Team Recommendation to Staff Fund

Review Team Priority 3 of 6

Review Team Recommended Amount \$108,829

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation

Fund

Staff Recommended Amount \$108,829

Staff Conditions

North Coast (Region 1)

Application Number: 219-1023-16683Project Type: RestorationProject Name: Punchbowl Creek Large Wood
Enhancement ProjectProject Type: RestorationApplicant: Lower Nehalem WCCounty: ClatsopRegion: North CoastCounty: ClatsopOWEB Request: \$73,319Total Cost: \$139,669

Application Description (from application abstract)

Punchbowl Creek, tributary to the North Fork Nehalem River, is located southeast of the rural community of Hamlet off Hwy 53 in Clatsop County. The stream is home to ESA listed coho salmon and also supports winter steelhead, coastal cutthroat trout, cottid species and lamprey. The project proposes to leverage a planned industrial timber harvest on Weyerhaeuser land to place large wood in the stream. The road is too far from the channel and the terrain too steep to allow access for ground based equipment. The large wood will be placed using a grapple and cable logging operation to build the structures. The project proposes to place 15 complex large wood structures along a one-mile channel reach. Each structure will be comprised of 7-9 logs with a minimum of four of the logs having rootwads attached. A total of 105-135 logs are anticipated for the overall project. Weyerhaeuser will provide construction contracting and some of the wood (30 whole trees). Oregon Department of Forestry (ODF) will supply the majority of the wood (up to 45 whole trees). Oregon Department of Fish and Wildlife (ODFW) will implement the project on the ground. Lower Nehalem Watershed Council will provide project management. OWEB funds will be used toward: project management, contracted services to tip and haul the wood and towards purchasing wood from ODF.

Review Team Evaluation

Strengths

- The project is a strong partnership between Weyerhaeuser, ODFW, and the applicant. Partners have the necessary expertise and successfully implemented similar projects.
- The project is cost-effective, leveraging an adjacent timber harvest to provide the material and contracting efficiency.
- Punchbowl Creek has beneficial coho and winter steelhead habitat with the proposed work
 addressing limiting factors. The stream is identified as a priority in the draft Nehalem Strategic Action
 Plan initiated by the Coho Business Planning process.
- This reach is an optimal location for habitat structures since there is no downstream infrastructure that can be potentially impacted by large wood movement.

Concerns

- The proposed method of placing logs by cable does not allow for a lot of flexibility with regards to placement locations.
- The benefit of the accompanying alder conversion work from an ecological standpoint is debatable. Many streams in the coast range are naturally hardwood-dominated.

Concluding Analysis

This project will increase habitat complexity in a priority stream, addressing limiting factors for Oregon coast coho salmon and winter steelhead. While the chosen method of log delivery has its limitations when it comes to site selection, the project team is experienced and capable and there is confidence a successful project will be implemented. The project is recommended for funding with the removal of the alder conversion components from the scope of services.

Review Team Recommendation to Staff Fund with Conditions

Review Team Priority 4 of 6

Review Team Recommended Amount \$73,319

Review Team Conditions

Remove alder conversion from scope of services

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund with Conditions

Staff Recommended Amount \$73,319

Staff Conditions

Remove alder conversion from scope of services

North Coast (Region 1)

Application Number: 219-1024-16710

Project Name: Upper Indian Creek Helicopter Large Wood Placement, Phase 1

Applicant: Siuslaw WC Region: North Coast

OWEB Request: \$236,455

Project Type: Restoration

County: Lane Total Cost: \$986,655

Application Description (from application abstract)

The Upper Indian Creek Helicopter Large Wood Placement Project, Phase 1 (Project) plans to utilize a helicopter to add large wood to federally owned stream reaches (up to 10 total miles) of the following streams in the Upper Indian Creek 6th-field HUC: West Fork Indian Creek, Rogers Creek, Maria Creek, Herman Creek, Pyle Creek, Long Creek, and Upper Indian Creek. The project area is located 14 air miles northeast of Florence, Oregon (Map 1).Land use practices over the last 150 years have disrupted natural habitat-forming processes that support healthy populations of salmonids, including the delivery and retention of large wood in streams. Sufficient large wood in streams has been identified as a key component of high quality spawning and rearing habitat for Oregon Coast coho. The Upper Indian Creek 6th-field sub-watershed has been identified as a high priority for restoration to support recovery of Oregon Coast Coho Salmon (Oncorhynchus kisutch) by local, state and federal entities, based on high habitat intrinsic potential and existing anchor habitat characteristics. Streams proposed in this project have been prioritized for restoration actions by the USFS (Draft Indian Creek LMP, 2017) and the Siuslaw Coho Partnership (Siuslaw Coho SAP, 2018). Stream surveys in project reaches identified a lack of sufficient wood needed to create and maintain pools, retain and sort sediments, and generate connectivity with the floodplain, key components of high quality winter rearing habitat. Proposed work to address the lack of large wood includes tipping and cutting of 540 trees, from source locations and transporting them by helicopter and placing them into up to 10 miles of streams in Upper Indian Creek stream reaches, in structures that are placed and configured to mimic log jams resulting from natural processes.Project partners include the USFS - Siuslaw National Forest and the Siuslaw Watershed Council.

- The project addresses limiting factors for Oregon coast coho salmon by improving habitat complexity within 10 miles of the Indian Creek basin, a sub-watershed identified as a high priority within the Siuslaw Coho Strategic Action Plan.
- Project implementation will achieve NOAA's benchmarks for large wood within the treatment reaches.
- The project is located on USFS lands managed as Late-Successional Reserves, ensuring future large wood recruitment to the streams.

- The application provides appropriate detail regarding expected habitat benefits as well as the location and selection process for the trees proposed for utilization in the project.
- The Siuslaw Watershed Council and the USFS have a strong partnership. The project team has a successful track record implementing similar projects in the watershed.
- The scope of the project is landscape-level and potential ecological benefits are high.
- The budget has good detail. The project is cost-effective for both the type of work proposed and the geographic scope of the treatment reaches.

• There are no significant concerns.

Concluding Analysis

The treated reaches are within forests managed for late-seral characteristics. It is expected that this effort will be the last augmentation of large wood needed in the system. The surrounding riparian areas are expected to be able to deliver large wood to the stream by the time the project matures. The project team is highly capable and experienced with the implementation of similar projects, having recently implemented a successful companion effort within the North Fork Siuslaw watershed in 2018.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 6

Review Team Recommended Amount \$236,455

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund

Staff Recommended Amount \$236,455

Application Evaluation for Upper Indian Creek Helicopter Large Wood Placement, Phase 1 , Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

North Coast (Region 1)

Application Number: 219-1025-16588Project Type: Technical AssistanceProject Name: North Coast Watershed Councils
Restoration AssistanceProject Type: Technical AssistanceApplicant: Nestucca-Neskowin Watersheds
CouncilCounty: TillamookRegion: North CoastCounty: TillamookOWEB Request: \$70,990Total Cost: \$86,740

Application Description (from application abstract)

Since 2012, a coalition of North Coast watershed councils has collaborated to increase the collective number of grant applications submitted for restoration projects. This coalition encompasses watersheds from Nicolai-Wickiup on the lower Columbia River all the way south to Neskowin Creek, all of which are within Clatsop and Tillamook Counties. This proposal is intended to continue this very successful collaboration. With the assistance of OWEB funding, these councils share the resources of a highly gualified consultant for pre-project field work, project design solicitation, proposal drafting, and contract preparation. Each Council's needs are similar, so sharing the services of a highly qualified contractor effectively leverages each organization's ability to secure funding and move high-priority projects forward. This has resulted in a proven model that takes advantage of economies of scale with only one contract. Partners US Fish & Wildlife Service (USFWS), Oregon Department of Fish and Wildlife (ODFW), and Tillamook Estuaries Partnership (TEP) support this program, seeing the value in hiring a "third arm" for the participating Councils. The partners increase that value by providing additional match. This cooperative effort has demonstrated the efficiencies that can be created by sharing resources among Councils, and it is more important than ever considering the ongoing reductions in ODFW and Oregon Department of Forestry (ODF) staffing and budgets. The best way to maintain or increase restoration is to find efficiencies through contracting. Participating councils include: North Coast Watershed Council (NCWC), Necanicum Watershed Council (NWC), Lower Nehalem Watershed Council (LNWC), Tillamook Bay Watershed Council and Nestucca, Neskowin & Sand Lake Watersheds Council (NNSL). Deliverables include 8 submitted grant applications.

- The project effectively leverages the capacity of watershed councils on the North Coast.
- The ability to hire a consultant to assist with project development is instrumental in submitting improved applications and getting projects on the ground.
- The project provides for consistency through periods of organizational transition.
- With the continued reduction in ODFW's staffing budget, there is increased demand for needed expertise among these watershed councils.

• The project has fostered collaboration and prioritization among the councils in the region.

Concerns

 The project's continuation over the years has possibly led to a reliance on the consultant by watershed councils.

Concluding Analysis

This ongoing project provided needed expertise and fostered collaboration among watershed councils in the north coast basin. The ability to help councils through transition times is an ancillary benefit with application quality remaining high and projects moving forward as scheduled. There is a concern that the unique skills of coordinators are not being utilized to their full potential. It would be beneficial to see council coordinators growing into a role of grant writing and project development to leverage the technical assistance provided by this project to a greater degree. A mentoring and coaching role that allows coordinators to foster new skills would add to the project's existing benefits and help build capacity among the organizations.

Review Team Recommendation to Staff Fund

Review Team Priority 4 of 5

Review Team Recommended Amount \$70,990

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund

Staff Recommended Amount \$70,990

Staff Conditions

Application Evaluation for North Coast Watershed Councils Restoration Assistance, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

North Coast (Region 1)

Application Number: 219-1026-16597 Project Name: Coastal Native Seed Partnership Applicant: Institute for Applied Ecology Region: North Coast OWEB Request: \$74,602 Project Type: Technical Assistance

County: Lincoln Total Cost: \$233,453

Application Description (from application abstract)

Coastal ecosystems are among the most rare and impacted ecosystems in the Pacific Northwest. As a result, threatened species like the Oregon silverspot butterfly, coho salmon, western snowy plover, streaked horned lark, and other plant and animal species that make their home in these habitats are greatly imperiled. A diverse group of partners, including land managers, restoration practitioners, tribes, conservationists and private landowners, are working together to restore coastal grasslands, estuaries, and other habitats, and to recover the listed species that depend upon them. One barrier to successful restoration in this ecoregion is a lack of diverse, genetically appropriate, native plant materials available in sufficient quantities to implement large-scale restoration projects. This project will bring partners involved in coastal restoration together with native plant materials producers to increase the availability and affordability of native seed to restore Pacific Northwest coastal habitat. The group will develop a seed strategy that will establish a dependable and sustainable supply of native seed that is genetically and ecologically appropriate in sufficient quantities needed to accomplish restoration goals on a landscape scale and to provide a stable marketplace for both growers and land managers. As a starting point, the group will assess the wild seed already collected by partners, and if sufficient seed is available, move forward with establishing several high-priority species seed production fields.

Review Team Evaluation

- Strengths
- The insufficient availability of genetically appropriate seed sources for the Oregon coastal area is a known limiting factor for restoration, particularly with the coastal prairie habitat.
- There is a sense of urgency to the effort, with Oregon Silverspot Butterfly populations on a steady decline.
- A similar ongoing effort in the Willamette Valley is now on track to becoming self-sustaining after a five-year time period.
- The previous concerns regarding the partnership's interaction with the existing native plant
 partnership (NORP) in the region have been addressed in this proposal. A letter of support from
 NORP is provided with this application.
- The project partners have an appropriate level of regional expertise and applicable experience with this type of effort.

- The project plans to bring growers into the partnership and establish production fields within the near future.
- The application is well-written, clear, and addresses previous review team comments.

- Much of the seed may be produced in the Willamette Valley, and there is no discussion in the
 proposal about the potential impacts of growing seed in a different climate from which it will be
 planted.
- Coastal growers are not identified in the proposal and doing so would have strengthened the application.
- The application lacks a long-term funding plan and details regarding how the partnership will become self-sustaining.
- The budget includes match funding pre-dating the project and may not be valid.

Concluding Analysis

This resubmitted application successfully addressed previous concerns raised by the review team, particularly regarding the interactions of the new seed partnership with the existing regional native plant partnership. The need for genetically appropriate seed for the coastal region is well described in the application. Restoring coastal prairie due to the current trajectory of the Oregon Silverspot Butterfly and other species dependent on that habitat type is crucial. Availability of native seed could provide important contributions to biodiversity and the ecological health of the coastal landscape. The partnership should strongly consider utilizing coastal growers, when feasible, to ensure optimal biological benefits of growing seed in the climate where planted and to benefit local restoration economies.

Review Team Recommendation to Staff

Fund

Review Team Priority 2 of 5

Review Team Recommended Amount \$74,602

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation

Fund

Staff Recommended Amount

\$74,602

Staff Conditions

North Coast (Region 1)

Application Number: 219-1027-16598

Project Type: Technical Assistance

Project Name: Upper Lewis and Clark Tidal Restoration Project Applicant: CREST Region: North Coast

OWEB Request: \$74,028

County: Clatsop Total Cost: \$241,346

Application Description (from application abstract)

The Columbia River Estuary Taskforce (CREST) and the National Park Service are requesting technical assistance funding to complete the design phase of Upper Lewis and Clark Tidal Restoration Project. To complete design, a geotechnical investigation must first be completed in order to inform specifications for setback levee design. 30% designs and hydraulic modeling have already been completed for the proposed project. Project partners are proposing to restore salmonid habitat and tidal processes on a 29 acre floodplain known as East Bank Netul Landing, The proposed project is part of a cumulative effort on the Lewis and Clark River to restore a matrix of quality tidal marshplain habitat for juvenile salmonids. The proposed project is part of the Lewis and Clark National Historic Park. The site is located in Clatsop County Oregon on the Lewis and Clark River at River Mile 2.5. The site is currently hydrologically disconnected from the Lewis and Clark River and as a result, the habitat is degraded. The primary purpose of this project is to restore degraded estuary habitat critical to the recovery of threatened/endangered Columbia River and tributary salmon. The project will improve hydrologic connectivity, tidal processes and habitat quality in tidal scrub-shrub/forested marsh floodplain habitat by 1) Building a setback levee on an adjacent property to protect an adjacent landowner 2) Installing a fishfriendly tidegate at the setback levee location 3) Strategic marshplain lowering, channel creation (3 tidal channels) and levee breaches (three channel breaches) will improve onsite hydraulics 4) A flow-through channel would be constructed to provide both instream habitat benefits and recreational opportunities for the National Park Service through a portion of the site 5) LWD placement and native planting in riparian and wetland areas and invasive species management will improve habitat quality and complexity on the property.

- The project is located in a priority area and will restore 29 acres of critical estuarine habitat to the Lewis and Clark River, a habitat type that is imperiled with an estimated 95% lost over the last century.
- There are limited opportunities to restore tidally influenced habitat within the Lewis and Clark watershed.

- A future restoration project has the potential to improve water quality, especially dissolved oxygen, with the reconnection of tidal slough habitat.
- The project works cooperatively with an adjacent agricultural landowner and could be a showcase project in the north coast region, particularly with regards to the proposed tidegate replacement.
- Project partners have capacity to implement this type of work and prior experience with similar types of restoration. The application demonstrates effective leveraging of available resources within the partnership.

• The site history of dredging and spoil placement and its relationship to the current restoration design is unclear.

Concluding Analysis

This application was previously submitted and recommended for funding, but fell below the staffrecommended funding line. This iteration demonstrated the strong project partnership and improved clarity describing the project's technical design specifications, particularly regarding tidegate replacement. This project, once implemented, could serve as a regional pilot project with regards to the interface of estuarine restoration and agricultural landscapes. Achieving 29 acres of new tidally influenced habitat along this stretch of the Lewis and Clark River is a significant opportunity with high ecological benefits.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 5

Review Team Recommended Amount \$74,028

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund

Staff Recommended Amount

\$74,028

Staff Conditions

North Coast (Region 1)

Application Number: 219-1028-16599Project Type: Technical AssistanceProject Name: South Scappoose Creek, Reach F
DesignApplicant: Scappoose Bay WCRegion: North CoastCounty: ColumbiaOWEB Request: \$38,597Total Cost: \$48,964

Application Description (from application abstract)

This project is located in South Scappoose Creek, a tributary to Scappoose Bay, the Multnomah Channel and Lower Columbia River. The site is approximately one mile above the confluence of the North and South Scappoose Creeks; less than three miles above tidal influence in Scappoose Bay. Project addresses key salmon-production limiting factors identified in the Lower Columbia River Conservation and Recovery Plan (LCRCP; ODFW, 2011), the Upper Willamette River Conservation and Recovery Plan (UWRCP; ODFW, 2011), and the Scappoose Creek Limiting Factor Analysis (SBWC, 2012): 1) lack of physical habitat quality and complexity, including loss of floodplain connectivity and cool-water pools and access to off-channel habitat; and 2) the loss of complex riparian vegetative function and stream shading. Project will complete surveys, hydraulic modeling, and a permit-level design with cost estimates to restore natural habitats on 0.2 miles of South Scappoose. This project supports restoration actions on 0.7 miles directly upstream, where 2018 construction completed stream layback, floodplain benches and additional side-channel reconnections. Partners include City of Scappoose, a private landowner, CSWCD, ODFW and BPA.

Review Team Evaluation Strengths

- The proposed technical assistance will lead to restoration addressing key production limiting factors for ESA-listed fish species.
- The project complements recently completed adjacent stream channel restoration work.
- The highly visible location offers outreach opportunities to raise public awareness regarding stream restoration. The site provides a unique opportunity to showcase restoration in the urban-natural interface.
- The applicant has capacity to implement future restoration and recently completed the successful adjacent project.
- The proposed work on the private ownership has wide buffers, adding to the overall ecological benefits of the work.

Concerns

• Given the constraints of an urbanized setting, resulting restoration work could have a high cost to benefit ratio.

Concluding Analysis

This project was previously submitted and recommended but fell below the staff-recommended funding line. This technical assistance will lead to a unique opportunity to continue restoration addressing limiting factors in a highly visible urban location in Scappoose. On the site visit, the review team viewed the recently completed adjacent project which was functioning well. The project team has the capacity and experience to implement a successful project, and the community is engaged and committed to the effort.

Review Team Recommendation to Staff Fund

Review Team Priority 5 of 5

Review Team Recommended Amount \$38,597

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund

Staff Recommended Amount \$38,597

Staff Conditions

North Coast (Region 1)

Application Number: 219-1029-16618Project Type: Technical AssistanceProject Name: Alder Creek Restoration and
Enhancement ProjectProject Type: Technical AssistanceApplicant: Lower Nehalem Community TrustCounty: TillamookRegion: North CoastCounty: TillamookOWEB Request: \$54,208Total Cost: \$74,408

Application Description (from application abstract)

1) Project location: The project is located on Alder Creek - a direct tributary to Nehalem Bay in the town of Nehalem, Oregon. The majority of the project area is located on Lower Nehalem Community Trust owned lands. The project area is defined as Alder Creek and the associated floodplain from the culvert at Highway 101 - south to the mouth of Alder Creek at Nehalem Bay.2) Project needThe project is needed to enhance and expand rearing habitat for Oregon Coast coho salmon within the Nehalem estuary and watershed. This habitat type is a limiting factor for recovery of the species and is in short supply within the basin. 3) Proposed Work: The proposed work is to develop a project design that will restore and enhance Alder Creek, the riparian corridor within the project area, and habitats within the adjoining floodplain.4. Proposed Partners: Tillamook Estuaries PartnershipLower Nehalem Watershed Council

Review Team Evaluation Strengths

- The site location provides excellent potential for fish and wildlife habitat enhancement in the lower Nehalem. Engaging the right technical expertise will help develop a sound project.
- Alder Creek Farm was purchased in part with an OWEB acquisition grant. This project will build on prior conservation investments.
- The application demonstrates a more active initiative to managing the natural areas of the site for ecological benefits. The passive restoration techniques that have been utilized on the site to date have had limited effectiveness.
- The project's location is highly visible and a restoration effort could provide outreach benefits.
- The property will benefit from increased stewardship guidance and partnerships that a restoration project may provide.

Concerns

The application would have been strengthened by more communication with state and federal wildlife
agencies regarding site potential and opportunities.

- NRCS holds a conservation easement and any proposed work needs to adhere to the terms of their easement; however, NRCS has not been apprised of this effort at the time of application.
- The farm has a significant amount of existing infrastructure directly adjacent to the stream which was not addressed in the application.
- The goals and objectives of the resulting technical designs are unclear. The proposed requirement
 that the designs "create" new habitat raises concerns about the project's viability.
- The applicant and landowner may not currently have the capacity to implement or manage a restoration project since the project manager is a volunteer with the organization.

Concluding Analysis

Alder Creek Farm in the Lower Nehalem watershed is an excellent place to implement restoration for fish and wildlife habitat. The site's location is directly on the Nehalem Bay. The application lacked clarity on the goals, objectives, and outcomes of the project, including what type and scale of restoration will be achieved and where it would be located. The infrastructure constraints around the farm area and upstream along neighboring properties are not adequately addressed. More clarity defining desired future conditions in the natural areas will result in a stronger application. Additional feedback from local partners to provide technical expertise about the site's potential and expanding the partnership will enhance a future application.

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

Application Evaluation for Alder Creek Restoration and Enhancement Project, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions
North Coast (Region 1)

Application Number: 219-1030-16690

Project Type: Technical Assistance

Project Name: Arch Cape Community Forest: Water and Sediment Assessment and Action Plan

Applicant: Sustainable Northwest

Region: North Coast

OWEB Request: \$30,575

County: Clatsop Total Cost: \$38,251

Application Description (from application abstract)

1) The Arch Cape Domestic Water Supply District ('the District') manages a drinking water treatment plant and storage facility for the benefit of 200 permanent and more than 1,000 seasonal residents of this rural beachfront community in Clatsop County. The District's drinking water source area lies within the Necanicum sub-basin and its 1,250 acres feeds two creeks - Asbury and Shark. 2) In the past, the District faced water quality problems as a result of upstream forest management and is now exploring land acquisition for watershed protection. The watershed is now owned by a conservation bridge buyer, Ecotrust Forest Management (EFM), and half of the property is under option to the North Coast Land Conservancy for permanent protection in its Rainforest Reserve. The lower half of the EFM property encompasses the entirety of the Arch Cape drinking water source area and the District is engaging the public in a dialogue around the creation of a Community Forest. However, there is still uncertainty about the link between forest cover loss and watershed functioning - specifically with regards to water and sediment yield following clearcut logging. 3) Sustainable Northwest is requesting support from OWEB to fund the Arch Cape Community Forest: Water and Sediment Yield Assessment and Action Plan. This technical assistance will include performing a detailed watershed analysis, collecting data about current watershed conditions and identifying erosion and sedimentation hot-spots. The resulting plan will inform stakeholder planning efforts and set an ecological baseline for future forest management. 4) Project partners include the Arch Cape Domestic Water Supply District, the landowner Ecotrust Forest Management, the campaign project partner North Coast Land Conservancy, the neighboring Ecola Creek Watershed Council, and other technical assistance providers such as Ecotrust's Knowledge Systems team, the Pinchot Institute and Springboard Forestry.

- The partnership implementing the project has good capacity to accomplish the work and has been effective with other similar projects.
- The proposed modeling work is a standard, technically sound tool. The model will identify potential sources of sediment as well as predict the sediment load.
- The resulting data could be an effective tool for building stakeholder engagement with the Community Forest concept.

Concerns

- The data collected may be duplicative of other similar efforts. There may not be a need to build a new model with new techniques, given the wide availability of other similar types of tools.
- The goals of the resulting forest landscape and whether or not harvest will be a component of
 management are currently unclear. As a result, it is unknown if this data collection and modeling effort
 is appropriate for OWEB's technical assistance program.
- It is unclear what will be done with the data/models after collection. The application would benefit from more detail about the resulting restoration or land management changes, if any.

Concluding Analysis

The data collection and analysis proposed could benefit future land management of the Arch Cape Community Forest; however, questions exist about the need for this type of work and what type of restoration work will occur as a result. The plans for forest management on the property are unclear at this time. The application would have benefitted from more information about the need and the proposed uses for the data.

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

Application Evaluation for Arch Cape Community Forest: Water and Sediment Assessment and Action Plan, Open Solicitation-2018 Fall Offering Due: Oct 29, 20

North Coast (Region 1)

Application Number: 219-1031-16696

Project Type: Technical Assistance

Project Name: Nestucca NWR-Bay Unit Restoration and Infrastructure- Design Project

Applicant: Ducks Unlimited Inc

Region: North Coast

OWEB Request: \$75,000

County: Tillamook Total Cost: \$132,574

Application Description (from application abstract)

1. This project area is approximately 104 acres, located in the Bay Unit of Nestucca Bay National Wildlife Refuge, 2.75 miles southeast of Pacific City. This site is bounded by the Little Nestucca River to the west, Nestucca Bay to the north, and Highway 101 to the east. 2. The project need is to improve habitat conditions and water quality for wintering geese and other migratory birds; aquatic species, including anadromous fish including the federally and state threatened Oregon Coast Coho salmon; and other wildlife utilizing the Bay Unit. Technical assistance funds would be used to design and evaluate alternatives for: (1) Replacement of the current water management system (i.e. tidegate) with a modern muted tidal regulator (MTR) to improve fish access and prevent entrapment, (2) interior enhancements to drainage ditches, swales, and depressional wetlands to improve off-channel / juvenile rearing habitat to salmonids, particularly Coho, and 3) develop agricultural setbacks and riparian restoration plans. The technical design would address features that improve natural hydrology and water quality, and restore historic channels.3. A.Collect data on fish and amphibian use, habitat availability, water quality, and fish habitat conditions on site. B.Develop aquatic species habitat improvement alternatives for project area. C.Collect and disseminate hydrologic and topographic data and develop a hydrologic model for project design to include culvert sizing, tide gate configuration, tidal channel construction, LWD structures, and riparian planting.D.Work with ODFW to develop fish passage plan.E.Develop conceptual project design alternatives for review by Technical Committee. F. Initiate Joint (COE/DSL) permitting requirements/application, and consultation with NOAA fisheries Biological Opinion.G.Prepare final engineering drawings and construction level contracting documents for project implementation. 4. USFWS, NNWC, DU, CTSI, ODFW, NOAA, OWEB

- The technical assistance work will result in a restoration project that improves tidal exchange, fish access, and water quality at the Nestucca Bay National Wildlife Refuge.
- The resulting restoration work will address limiting factors for anadromous fish species while upholding the Refuge's management goals for geese.
- Project planning shows foresight for considering future conditions as a result of climate change.

- Implementation of a tide gate replacement at this location and with this landowner may lead to a potential monitoring project that could yield much needed information regarding the effectiveness of tide gate restoration.
- The applicant and project team have good capacity and experience to successfully implement a project resulting from the proposed technical assistance work.

Concerns

- Given that this is a federally managed wildlife refuge, fully restored conditions that maximize the ecological benefit and potential of the site would be preferable.
- The application suffers from poor clarity. The attached maps are limited in detail and there are typographical errors throughout.
- The cost-effectiveness of the resulting restoration project may be low given the expected ecological benefit. In particular, water quality benefits of the proposed tide gate replacement work may be overstated.

Concluding Analysis

The restoration project resulting from this technical assistance work could provide new habitat opportunities at the Refuge for aquatic species, particularly Oregon coast coho salmon. While fully restored tidal hydrology at the site would be optimal, the management constraints surrounding the property are understood. The proposed work is a good compromise that meets the needs of geese populations and local producers while improving conditions for fish. The resulting project should include a sound monitoring program, including collection of baseline data.

Review Team Recommendation to Staff

Fund

Review Team Priority 3 of 5

Review Team Recommended Amount \$75,000

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation

Application Evaluation for Nestucca NWR-Bay Unit Restoration and Infrastructure- Design Project, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Fund

Staff Recommended Amount

\$75,000

Staff Conditions

North Coast (Region 1)

Application Number: 219-1032-16656 Project Name: Page Creek, Final Fish Passage Applicant: Columbia SWCD Region: North Coast OWEB Request: \$41,800 Project Type: Technical Assistance

County: Columbia Total Cost: \$57,200

Application Description (from application abstract)

The Page Creek watershed has undergone a number of restoration treatments to expand amount of available habitat for needs local salmon populations. Proposal provides resources to expound upon success of previous restoration efforts to maximize the ecological potential of the Page Creek subwatershed in the Clatskanie Basin (RM 8.8). Currently deteriorating culvert and road crossings impede access to over 9 miles of upstream habitat and contributing to excessive velocities for migrating juveniles. Funds will be used for technical services related to replacing perched, degraded culvert structure with a bridge that will span entirety of channel corridor and allow for 100% access for spawning and rearing needs of salmonid species. This includes pre-design support in the form of topographic and geotechnical services necessary for understanding existing condition as well as informing design needs. Funds will also be used to solicit proposals from established engineering firms, and overall project management to ensure regulatory and local community needs are met. Scope of engineering services include but not limited to 30% design sets, hydrologic and hydraulic analysis relevant to fish passage, flood hazard management, and climate change resiliency experience. Selected firm will work collaboratively with watershed council and partners to incorporate baseline information and local knowledge into design process. Firm will also be responsible for assisting watershed council in vetting design concepts with regulatory community and provide input to necessary permitting applications. Project also represents a unique project management structure that partnering with ODFW expertise as well as timber companies local knowledge, equipment, and materials to maximize restoration effort and project cost-effectiveness.

- The Clatskanie basin is a high priority for ODFW in which to work to restore habitat for Lower Columbia fish.
- The technical assistance work will lead to the replacement of the last remaining barrier on Page Creek and complement previous investments downstream.
- The landowner is willing and engaged in the project.

Concerns

- This is a challenging site with a steep gradient and a headcut associated with the existing structure on the downstream side.
- The design work will require a geotechnical investigation, which is noted in the application but not differentiated in the budget. The proposed budget may be low for the necessary work involved.
- The budget included only one lump sum amount and it was not clear what deliverables would be accomplished or how the applicant arrived at the estimate.
- The proposed deliverables are conceptual designs, and it is unclear how the applicant will proceed to final designs and restoration funding.
- The application is lacking in proposal clarity and was not written in complete sentences.
- It is unclear whether this site is eligible for support and technical design under the NRCS RCPP program, which covers this area.

Concluding Analysis

The Clatskanie watershed is a high priority for Lower Columbia anadromous fish species in addition to cutthroat trout and lamprey. There are key partners that could leverage additional technical expertise who may not be engaged. More communication with other local partners is encouraged in a resubmittal, along with an explanation of how the project fits in with a larger regional prioritization of fish passage 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

North Coast (Region 1)

Application Number: 219-1040-16631

Project Type: Stakeholder Engagement

Project Name: Siuslaw Coho Partnership Story Map for Stakeholder Engagement

Applicant: Siuslaw WC

Region: North Coast

OWEB Request: \$24,690

County: Lane Total Cost: \$37,923

Application Description (from application abstract)

Through this project, SWC and its partners in the Siuslaw Coho Partnership will create a Story Map that: (1) illustrates past examples of restoration projects; (2) explains how restoration efforts benefit the health of ecosystems, local communities, and local economies; and (3) creates opportunities for SWC to work with local landowners and other stakeholders on future restoration. This project will harness the knowledge, skills, and expertise of our partners at Ecotrust, the Confederated Tribes of the Coos, Lower Umpgua and Siuslaw Indians, the U.S. Bureau of Land Management (BLM), the U.S. Forest Service (USFS), and the Siuslaw Soil and Water Conservation District. Together, we will create an interactive story map to both elevate awareness about our work and engage our stakeholders in restoration projects identified in the Siuslaw River Coho Recovery Strategic Action Plan (Siuslaw SAP) 15 priority 6-field HUC watersheds within the Siuslaw River and Coastal Lakes watersheds. This project is needed so that SWC and its partners can more effectively communicate with others about the Siuslaw SAP's priority restoration projects. If we are to advance our work and complete future restoration projects, we must better communicate exactly why these projects are necessary, including sharing information about the positive economic, ecological, and social potential that these projects bring. This project is linked to the Siuslaw SAP, funded in part by OWEB. The products created by this project will strengthen the SAP and supports the goals of creating a Strategic Action Plan in order to more effectively and efficiently carry out restoration projects in targeted sub-basins. With the additional investment in this project by OWEB we believe we can better complete the goals within the SAP and more effectively involve restoration project stakeholders and recruit additional landowner and community support of Coho Salmon restoration.

- The proposed project is the result of a recently completed Outreach Plan for the Siuslaw Coho Partnership and addresses an identified knowledge gap. The approach is basin-wide and broad in scope.
- The StoryMap format can be a good communication tool, and combine the information that developed the prioritization in the Strategic Action Planning process in an understandable format for landowners and other stakeholders.
- Specific outcomes and identified numbers of engaged landowners will make this effort successful.

- The applicant has skill with social media and using digital formats as tools, ensuring that the StoryMaps will be effectively utilized.
- There is a strong partnership and the outside expertise of EcoTrust provides a high benefit.

Concerns

- The application did not clarify the approach to maintaining and managing the StoryMap long-term.
- Relying on this digital format may not be an effective engagement tool for all landowners.

Concluding Analysis

The application is a resubmittal from a previous round where the proposal was not recommended for funding. This iteration presents a more focused and improved project, with a focus solely on compiling existing data and developing StoryMaps as an engagement tool. The effort is a part of a larger engagement strategy designed by the Siuslaw Coho Partnership. There is some concern about relying on web-based methods given the importance of face-to-face contact with landowners; however, StoryMap is only one of a suite of methods that will be employed in the engagement strategy. There is high confidence that the project team will implement a successful project.

Review Team Recommendation to Staff

Review Team Priority 1 of 1

Review Team Recommended Amount \$24,690

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund

Staff Recommended Amount

\$24,690

Application Evaluation for Siuslaw Coho Partnership Story Map for Stakeholder Engagement, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

North Coast (Region 1)

Application Number: 219-1033-16645Project Type: MonitoringProject Name: Columbia SWCD Water Quality
Monitoring ProgramProject Type: MonitoringApplicant: Columbia SWCDCounty: ColumbiaRegion: North CoastCounty: ColumbiaOWEB Request: \$25,012Total Cost: \$50,162

Application Description (from application abstract)

The Columbia SWCD and partners seek funding to continue and expand the level of water quality monitoring in four key subbasins in Columbia County. These include: Clatskanie River and Beaver Creek which drain to the lower Columbia River (LCR) and Scappoose and Milton Creeks which drain into the Multhomah Channel and then to the LCR. These important watersheds provide spawning, rearing and refugia habitat for state and federally listed threatened species of salmon and steelhead. The LCR Conservation and Recovery Plan lists degraded water quality- elevated temperatures and excessive fine sediments- as limiting factors to Coho, Chinook, steelhead and Chum species using these watersheds. This project will collect and analyze comprehensive and scientifically sound water quality data that will complement the limited existing data, fill data gaps and improve watershed conditions by addressing these limiting factors. This project will build on existing data from 2008-2011 (Scappoose/Milton) and 2017-2018 (all subbasins) and collect continuous data and/or monthly grab samples in discrete upper, middle and lower watershed locations to measure bacteria, temperature, turbidity, conductivity, and water depth. The project will also collect and analyze macroinvertebrate samples and evaluate riparian land cover. Results will be used to analyze watershed status and trends, detect changes, identify water quality issues and potential sources, and determine priority stream reaches for restoration. A water quality report will be produced, and information will be included in the CSWCD's Annual Report, distributed to the community to educate and engage in conservation, restoration and best management practices. Local partners and municipality stakeholders will be engaged in a presentation highlighting water quality results and issues. Project partners include: Lower Columbia River Watershed Council, Scappoose Bay Watershed Council, Lower Columbia Estuary Partnership and Oregon DEQ. The Columbia SWCD and partners seek funding to continue and expand the level of water quality monitoring in four key subbasins in Columbia County. These include: Clatskanie River and Beaver Creek which drain to the lower Columbia River (LCR) and Scappoose and Milton Creeks which drain into the Multhomah Channel and then to the LCR. These important watersheds provide spawning, rearing and refugia habitat for state and federally listed threatened species of salmon and steelhead. The LCR Conservation and Recovery Plan lists degraded water quality- elevated temperatures and excessive fine sediments- as limiting factors to Coho, Chinook, steelhead and Chum species using these watersheds. This project will collect and analyze comprehensive and scientifically sound water quality data that will complement the limited existing data, fill data gaps and improve watershed conditions by addressing these limiting factors. This project will build on existing data from 2008-2011 (Scappoose/Milton) and 2017-2018 (all subbasins) and

collect continuous data and/or monthly grab samples in discrete upper, middle and lower watershed locations to measure bacteria, temperature, turbidity, conductivity, and water depth. The project will also collect and analyze macroinvertebrate samples and evaluate riparian land cover. Results will be used to analyze watershed status and trends, detect changes, identify water quality issues and potential sources, and determine priority stream reaches for restoration. A water quality report will be produced, and information will be included in the CSWCD's Annual Report, distributed to the community to educate and engage in conservation, restoration and best management practices. Local partners and municipality stakeholders will be engaged in a presentation highlighting water quality results and issues. Project partners include: Lower Columbia River Watershed Council, Scappoose Bay Watershed Council, Lower Columbia Estuary Partnership and Oregon DEQ.

Monitoring Team Evaluation Monitoring Team Strengths

- This is a straight-forward, well-written proposal to collect basic water quality data.
- The applicant has a successful track record and a DEQ-approved Sampling and Analysis Plan (SAP).
- This application builds off of previous water quality monitoring efforts and an example of the data summary was provided as an upload.
- The application has a good description of the selected monitoring sites, sampling methods, and data analyses.
- The applicant is working closely with the Lower Columbia Estuary Partnership to review results and create final report.

Monitoring Team Concerns

- Macroinvertebrate sampling locations in low gradient channels may not match well with the PREDATOR model given those were developed from samples collected in riffle habitats.
- The macroinvertebrate data may not be the best fit to identify watershed issues, pollution sources, and potential restoration actions.
- It is unclear who will be performing the lab bacteria analysis; in addition, the budget line item for this appears high.

Monitoring Team Comments

None

Review Team Evaluation Strengths

 The application is well-written with detailed descriptions of monitoring locations and protocols to be used.

- There is a high likelihood of success and the applicant has a successful track record of implementing monitoring work in the region.
- This work complements previous water quality monitoring efforts. All of the chosen monitoring locations were previously monitored.
- Data collection for five years is a reasonable target indicating an appropriate level of planning for the monitoring proposal.
- The riparian cover analysis proposed will prove useful in evaluating priority restoration areas.

Concerns

- The plan to collect macroinvertebrate data is not cost-effective and does not propose sampling in riffles. The resulting data may be of minimal use in meeting the project's goals and objectives.
- The monitoring plan would benefit from sampling bacteria year-round.
- Objective #4, which refers to using the results to identify watershed issues, sources, and prioritize restoration actions, needs clarification. The sampling network may not be of a fine enough scale to get to the project prioritization level.

Concluding Analysis

This project will build on past monitoring efforts in the lower Columbia by collecting status and trend data with the goal of a five-year data collection period. The project will help fill data gaps in the region. As an alternative to collecting macroinvertebrate data, there is value in collecting bacteria data in the subject watersheds at a larger scale than is currently in the application. The application is recommended for funding at the requested budget amount without the macroinvertebrate survey work, shifting those resources to increasing the level of bacteria monitoring.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 3 of 4

Review Team Recommended Amount \$25,012

Review Team Conditions

Remove macroinvertebrate sampling from scope of services and shift resources to collection of additional bacteria data.

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation

Fund with Conditions

Staff Recommended Amount \$25,012

Staff Conditions

Remove macroinvertebrate sampling from scope of services and shift resources to collection of additional bacteria data.

North Coast (Region 1)

Application Number: 219-1034-16651ProProject Name: Mid Coast Monitoring Project Oct
2018Project Name: Oct
2018Applicant: Lincoln SWCDCoRegion: North CoastCoOWEB Request: \$69,574To

Project Type: Monitoring

County: Lincoln Total Cost: \$90,149

Application Description (from application abstract)

The Mid Coast region is an important area for salmonid production, but the future status of these populations is uncertain as climate change and changing land use patterns continue to alter conditions for salmonid life history. Consequently, many ongoing and proposed Watershed Enhancement and Restoration Projects within the Mid Coast focus on improving the status of coho and other salmonids. These projects seek to improve environmental conditions in freshwater spawning and rearing habitats, and they depend on monitoring data to identify restoration sites and evaluate effectiveness of restoration goals after projects are completed. The Mid Coast Monitoring Project (MCMP) is a long-term data collection program in the Salmon, Siletz, Yaquina, Alsea, and Yachats River Basins of Lincoln County, along with many ocean outfall creeks. Partners of the program include ODFW, the Confederate Tribe of Siletz Indians, Mid Coast Watersheds Council, USDA-NRCS, Salmon-Drift Watershed Council, Siletz Watershed Council, Lincoln SWCD, and private landowners. MCMP activities focus on 1) supplementing ODFW efforts to track salmonid population dynamics, and 2) monitoring habitat conditions, such as preand post-project Aquatic Habitat Inventory (AQI). Spawning data collected by MCMP is used to set recommended harvest levels and deadlines for local streams. Also, roughly 20 of 28 spawning survey segments surveyed routinely by MCMP have been enhanced (e.g. LWD, culvert replacement, riparian plantings), and these data can be used to monitor effectiveness of restoration work. The 20-year compilation of data provides a unique and valuable dataset that can be used evaluate population trends on a local and regional level. Habitat data collected by the MCMP crew is used as an effectiveness monitoring tool and determine utility of sites and identify priority areas. MCMP will continue to work closely with partners in filling information gaps and explore collaborative efforts in the region. The Mid Coast region is an important area for salmonid production, but the future status of these populations is uncertain as climate change and changing land use patterns continue to alter conditions for salmonid life history. Consequently, many ongoing and proposed Watershed Enhancement and Restoration Projects within the Mid Coast focus on improving the status of coho and other salmonids. These projects seek to improve environmental conditions in freshwater spawning and rearing habitats, and they depend on monitoring data to identify restoration sites and evaluate effectiveness of restoration goals after projects are completed. The Mid Coast Monitoring Project (MCMP) is a long-term data collection program in the Salmon, Siletz, Yaguina, Alsea, and Yachats River Basins of Lincoln County, along with many ocean outfall creeks. Partners of the program include ODFW, the Confederate Tribe of Siletz Indians, Mid Coast Watersheds Council, USDA-NRCS, Salmon-Drift Watershed Council, Siletz Watershed Council, Lincoln

SWCD, and private landowners. MCMP activities focus on 1) supplementing ODFW efforts to track salmonid population dynamics, and 2) monitoring habitat conditions, such as pre- and post-project Aquatic Habitat Inventory (AQI). Spawning data collected by MCMP is used to set recommended harvest levels and deadlines for local streams. Also, roughly 20 of 28 spawning survey segments surveyed routinely by MCMP have been enhanced (e.g. LWD, culvert replacement, riparian plantings), and these data can be used to monitor effectiveness of restoration work. The 20-year compilation of data provides a unique and valuable dataset that can be used evaluate population trends on a local and regional level. Habitat data collected by the MCMP crew is used as an effectiveness monitoring tool and determine utility of sites and identify priority areas. MCMP will continue to work closely with partners in filling information gaps and explore collaborative efforts in the region.

Monitoring Team Evaluation

Monitoring Team Strengths

- The project supplements some of ODFW's key fish datasets and in some cases (e.g., early-run Chinook) has provided for continuation of long-term datasets that have been used to guide management in plans like the Coastal Multi-Species Conservation and Management Plan.
- Since the end of effectiveness monitoring associated with the Western Oregon Stream Restoration Program, this is some of the only programmatic project-scale habitat restoration effectiveness monitoring left on the coast.
- The project has been a good and long-term local/state agency partnership.

Monitoring Team Concerns

- The proposal contains some discussion about how ODFW makes use of the data, but it is less clear about how the applicant uses the data to inform restoration strategies or methods.
- The application notes tribal participation, but was not clear what exactly the information was being collected for meeting tribal goals and objectives.
- The project may overstate the utility of using the individual spawning ground surveys as a means to evaluate restoration effectiveness.
- The application didn't list all of the previously funded monitoring grants that are related to this monitoring effort.
- The application schedule does not account for data analysis or data management, and does not describe how the data will be analyzed or utilized in consultation with ODFW.

Monitoring Team Comments

Recommendation:

• Describe how the data will be analyzed to evaluate effectiveness of restoration in near- and long-term, and include this analysis and information in a final report.

Review Team Evaluation Strengths

- The project has a successful track record with many years of continuous status and trend monitoring.
- Collected data is beneficial for fishery management.
- The Aquatic Habitat Inventory data collected is an important indicator of watershed health and effectiveness of restoration projects.
- The project is the product of a strong partnership between the applicant, ODFW, and the watershed councils.

Concerns

- After 20 years of monitoring, it is unclear how the cooperating organizations utilize the data beyond anecdotal reports of site conditions leading to opportunistic restoration projects.
- Effectiveness monitoring results from previously implemented restoration projects have not been distributed or made available to practitioners.
- The program seems to be without a driving strategy or a long-term plan.
- Project coordination and communication with partners could be improved.
- The project has increased its staffing level and associated cost, but the amount of work completed has not increased.
- The work is prioritized for the Mid-Coast watersheds only, and the type of data collected would be valuable on a broader regional scale.

Concluding Analysis

Notwithstanding many years of successful monitoring, the project appears to lack a long-term vision. It is unclear how the effectiveness monitoring data is being used by partners prioritizing and implementing restoration projects. Currently, project partners are summarizing data collected over the 20 years as a funding condition in a previous grant agreement; however, that report is not complete and is unavailable for review. An OWEB grant awarded in April 2018 for the same project has not yet been utilized.

While the current request is less than previous awards, the application covers a shorter time period than previous grants and overall project costs have gone up with the increase in staffing. The project should be reassessed to ascertain how the program can best fulfill regional monitoring needs. The review team recommends the formation of a workgroup to guide the project into the future and improve communication between partners involved, and to consider expanding the effectiveness monitoring to other parts of the North Coast region.

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

North Coast (Region 1)

Application Number: 219-1035-16654 Project Name: Lower Columbia Watershed Rapid BioAssessments Applicant: Columbia SWCD **Region:** North Coast **OWEB Request:** \$66,550

Project Type: Monitoring

County: Columbia Total Cost: \$92,170

Application Description (from application abstract)

Recently the Lower Columbia River Watershed Council is pivoting toward a more strategic approach to developing restoration projects. Draft technical goals have been drafted to provide more direction to project opportunities and partnerships with local community groups. This proposal along with emerging water quality data will bolster spatial resolution of selecting project types and their location in the context of the broader watershed scale. Funding will provide resources to identify existing gaps in stream survey information and target areas for additional field investigations. The Council will form and facilitate technical group that will develop a solicitation package to established consulting firms to assess their gualifications to develop an approach to prioritize areas to address uncertainties about fish distribution patterns in selected reaches of the Lower Columbia watersheds. Technical group will meet regularly with consultant team to review data summaries and how it gets translated into information for needs of emerging Strategic Action Plan (SAP). Spatially-explicit products from this effort will overlaid with existing basemaps and emerging monitoring information to refine existing Limiting factors as well as identify salmonid habitat previously not documented. These include anchor habitats, side channel-confluences, and groundwater seeps. Scope of field investigations will also include inventorying additional constraintsOutreach priorities have also been identified in an outreach plan and new partnerships have emerged from that effort. Elements of the Rapid-BioAssessment will also be sput off into experiential learning opportunities with local schools. Lesson plans will be developed that work toward exposing students to watershed health topics in their community. Recently the Lower Columbia River Watershed Council is pivoting toward a more strategic approach to developing restoration projects. Draft technical goals have been drafted to provide more direction to project opportunities and partnerships with local community groups. This proposal along with emerging water quality data will bolster spatial resolution of selecting project types and their location in the context of the broader watershed scale. Funding will provide resources to identify existing gaps in stream survey information and target areas for additional field investigations. The Council will form and facilitate technical group that will develop a solicitation package to established consulting firms to assess their qualifications to develop an approach to prioritize areas to address uncertainties about fish distribution patterns in selected reaches of the Lower Columbia watersheds. Technical group will meet regularly with consultant team to review data summaries and how it gets translated into information for needs of emerging Strategic Action Plan (SAP). Spatially-explicit products from this effort will overlaid with existing basemaps and emerging monitoring information to refine existing Limiting factors as well as identify salmonid habitat previously not documented. These

include anchor habitats, side channel-confluences, and groundwater seeps. Scope of field investigations will also include inventorying additional constraintsOutreach priorities have also been identified in an outreach plan and new partnerships have emerged from that effort. Elements of the Rapid-BioAssessment will also be sput off into experiential learning opportunities with local schools. Lesson plans will be developed that work toward exposing students to watershed health topics in their community.

Monitoring Team Evaluation Monitoring Team Strengths

- The application proposes to collect data to inform the development of a strategic action plan.
- The applicant is transitioning from opportunistic to strategic restoration prioritization.
- RBA data can be used to identify where juvenile fish are distributed and can be used for informing restoration prioritization and future monitoring efforts.

Monitoring Team Concerns

- The applicant's information need is not clear, and it is not clear that RBAs are the solution. The application proposes to use funds to develop a solicitation package for a consulting firm that would develop the approach to prioritizing areas for addressing uncertainties about fish distribution.
- The applicant seems to be unclear what information RBA surveys can provide. It was unclear how "productivity" will be determined from juvenile densities without collecting additional information.
- It is difficult to assess the budget without more information about the specific questions the consultant will be required to address, the geographic scope of the monitoring, and details of the RBAs.
- This application may be premature based on information contained in the application. The applicant should perform more planning work to complete an initial assessment of existing data. This can inform a monitoring approach that may or may not include a RBA. This work should be done prior to releasing a RFP.
- The timing of the final product for this monitoring grant may not be soon enough to inform the development of the strategic action plan.

Monitoring Team Comments

None

- Rapid BioAssessment (RBA) surveys can have utility in planning future restoration activities.
- The Clatskanie High School teachers are engaged in the project and provide a unique applied learning opportunity to the community.

Concerns

- Proposed survey locations are not identified as part of the proposed work and it is unclear how the consultant would be tasked with identifying locations. There is no clear justification why the monitoring reaches were not previously identified nor how the applicant determined the suggestion that 4-6 areas will be selected by the consultant.
- School lesson plan development is not eligible for a monitoring grant.
- The application is challenging to read and poorly written.
- Given the early stage of work on a strategic action plan, the project may be premature. It is unclear whether RBA surveys are the best tool to provide the council with the information needed.

Concluding Analysis

RBA surveys can be a useful tool for strategic action planning, but it is unclear whether that survey method is the most appropriate to meet the applicant's needs. More targeted location information and a greater level of detail is needed to evaluate whether RBA surveys are an appropriate methodology for achieving the council's goals and objectives.

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

Application Evaluation for Lower Columbia Watershed Rapid BioAssessments, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

North Coast (Region 1)

Application Number: 219-1036-16664

Project Type: Monitoring

Project Name: Siletz & Salmon River Estuaries, Ocean Acidification and Hypoxia Baseline Data Acquisition 2019/21

Applicant: Salmon Drift Cr WC

Region: North Coast

OWEB Request: \$50,818

County: Lincoln Total Cost: \$96,593

Application Description (from application abstract)

Ocean Acidification and Hypoxia (OAH) are growing global concerns, which due to ocean circulation patterns are expected to have particular impact on the waters along the Oregon Coast. These waters include estuaries which are the nursing grounds for many fish species. Estuaries are also home to many invertebrates, mollusks, and a myriad of other flora and fauna. Ocean acidification and the exacerbating impacts of hypoxia put much of these species at risk. Given that a paucity of data exists on the estuaries of the Siletz and Salmon Rivers that can be used to assess potential changes in these systems as they relate to OAH, the Salmon Drift Creek Watershed Council (SDCWC) proposes a study establishing a baseline dataset.Specifically, SDCWC proposes collecting continuous Dissolved Oxygen, Temperature, pH, and Conductivity (as a surrogate for Salinity) at three spots in the Salmon River Estuary and a fourth in the Siletz River Estuary over the initial course of two years. Additionally, we propose collecting and analyzing grab samples for Alkalinity, which collectively with our other parameters will enable us to confine the carbonate system, exposing any changes to the carbon chemistry over time. These estuaries are of particular interest due to their proximity to one of Oregon's premier Marine Reserves and Marine Protected Areas ~ Cascade Head. Project partners include the Confederated Tribes of Siletz Indians, the City of Lincoln City, Oregon DEQ, and Robertson Environmental. Ocean Acidification and Hypoxia (OAH) are growing global concerns, which due to ocean circulation patterns are expected to have particular impact on the waters along the Oregon Coast. These waters include estuaries which are the nursing grounds for many fish species. Estuaries are also home to many invertebrates, mollusks, and a myriad of other flora and fauna. Ocean acidification and the exacerbating impacts of hypoxia put much of these species at risk. Given that a paucity of data exists on the estuaries of the Siletz and Salmon Rivers that can be used to assess potential changes in these systems as they relate to OAH, the Salmon Drift Creek Watershed Council (SDCWC) proposes a study establishing a baseline dataset. Specifically, SDCWC proposes collecting continuous Dissolved Oxygen, Temperature, pH, and Conductivity (as a surrogate for Salinity) at three spots in the Salmon River Estuary and a fourth in the Siletz River Estuary over the initial course of two years. Additionally, we propose collecting and analyzing grab samples for Alkalinity, which collectively with our other parameters will enable us to confine the carbonate system, exposing any changes to the carbon chemistry over time. These estuaries are of particular interest due to their proximity to one of Oregon's premier Marine Reserves and Marine Protected Areas ~ Cascade Head. Project partners include the Confederated Tribes of Siletz Indians, the City of Lincoln City, Oregon

DEQ, and Robertson Environmental.

Monitoring Team Evaluation

Monitoring Team Strengths

- The applicant has an effective working relationship with DEQ, tribes, the local municipality, and landowners.
- Monitoring close to Cascade Head Preserve could provide valuable information for management, and could inform the dissolved oxygen TMDL over time.
- The applicant has a successful track record with similar data collection efforts to manage and report the data in a meaningful manner.
- The applicant is working with a reputable lab to collect the parameters of interest for ocean acidification.

Monitoring Team Concerns

- It was difficult to understand if this was an ocean acidification and hypoxia monitoring project or just a continuation of the dissolved oxygen work they performed to inform the development of the TMDL.
- It is unclear why the Salmon and Siletz rivers were chosen; there was not a compelling reason articulated for choosing this area for continued monitoring.
- It is unclear how the site selection lined up with the applicant's monitoring objectives.
- It is unclear why only one sampling site was chosen in the Siletz River. It appears that the majority of the sites are located in areas that do not characterize the broader estuaries.
- It is unclear that continuous year-round data collection of pH and dissolved oxygen was necessary. It will be challenging to operate continuous loggers during the winter period.
- The applicant proposes to sample continuous pH using equipment that does not prevent bio-fouling. The OPMT had concerns about the plan to service this equipment once a month. This could impact the quality of the data.
- The alkalinity preservative method described in the application is not preferred. This is a very toxic chemical and should not be used in the field.

Monitoring Team Comments

None

- The applicant has a successful track record with monitoring projects.
- The project employs creative thinking around an emerging topic of concern to our estuaries. The applicant has researched and is prepared to implement the project.
- The importance of this type of monitoring is understood and is well-described in the application.

• Cascade Head is the only marine reserve with an associated major river. Having data on ocean acidification and hypoxia could be helpful for management.

Concerns

- This type of monitoring is extremely new and just beginning to occur in pilot form in several estuaries along the coast. The application may be premature.
- The project lacks coordination with the Ocean Acidification and Hypoxia Working Group (OAHWG), who oversees the monitoring effort for coastal estuaries. Their expertise would be essential to a successful project.
- OAHWG has not selected the Salmon and Siletz Rivers as priority locations to conduct monitoring. There are other priority areas that would be more important to establish this type of monitoring, in particular the Yaquina.
- Since the type of pH equipment chosen can have an effect on carbonate chemistry, marine-based pH meters are needed since mixing fresh and salt-water is challenging to monitor.

Concluding Analysis

The application is well-researched and detailed and there may be benefit to establishing baseline monitoring for ocean acidification and hypoxia (OAH) in conjunction with the Cascade Head Marine Reserve. This type of monitoring in Oregon is only just beginning in a pilot form and coordinated by the team of scientists on the Ocean Acidification and Hypoxia Working Group, who are not a part of this project. The OAHWG was formed to prioritize monitoring locations, manage data collection methodologies, and coordinate resources statewide. The OAHWG's pilot efforts in Tillamook and Coos Bay are in preliminary stages and lessons are being learned as the projects are implemented. The timing may be premature to launch similar 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

North Coast (Region 1)

Application Number: 219-1037-16674Project Type: MonitoringProject Name: TEP Bacteria Volunteer Water
Quality Monitoring ProgramProject Type: MonitoringApplicant: Tillamook Estuaries PartnershipCounty: TillamookRegion: North CoastCounty: TillamookOWEB Request: \$34,919Total Cost: \$44,919

Application Description (from application abstract)

Bacteria concentrations in many streams, bays, and beaches in Tillamook County are at levels that exceed the State standards for recreational contact and shellfish harvest. These waterbodies usually occur lower in the watersheds and are associated with urban and agricultural landscapes. DEQ developed three Total Maximum Daily Loads (TMDLs) in the north coast of Oregon: the North Coast Subbasins, Tillamook Bay Watershed, and Nestucca Bay Watershed to address this problem. Tillamook Estuaries Partnership (TEP) monitors E. coli and enterococcus bacteria concentrations in Tillamook County as a part of its Volunteer Water Quality Monitoring Program (VWQMP). The goal of the VWQMP is to evaluate the status and trends for bacteria levels in the streams, sloughs and bays throughout Tillamook County. The ongoing monitoring effort includes 73 sites throughout Tillamook County. TEP uses citizen scientist volunteers to collect water sample at established monitoring locations throughout Tillamook County. Approximately eight volunteers collect water samples for TEP twice a month on a year-round basis. VQWMP water samples are brought to the TEP office where they are processed and analyzed for bacteria using IDEXX equipment and methods. Sample results are recorded by TEP staff and entered into an online database. Recent results are available to the public through an interactive map on TEP's website. Every two years, TEP compiles, formats, and rates all data per DEQ protocols for accuracy. Bacteria data are forwarded to DEQ, which compares the most recent two years' of data to the appropriate State water quality standards to determine the status of the streams, sloughs, and bays. DEQ also performs regression analysis for each site to determine if statistically significant changes (trends) in bacteria concentrations are present. TEP and DEQ use this information to inform partners and the general public about water quality improvements. Bacteria concentrations in many streams, bays, and beaches in Tillamook County are at levels that exceed the State standards for recreational contact and shellfish harvest. These waterbodies usually occur lower in the watersheds and are associated with urban and agricultural landscapes. DEQ developed three Total Maximum Daily Loads (TMDLs) in the north coast of Oregon: the North Coast Subbasins, Tillamook Bay Watershed, and Nestucca Bay Watershed to address this problem. Tillamook Estuaries Partnership (TEP) monitors E. coli and enterococcus bacteria concentrations in Tillamook County as a part of its Volunteer Water Quality Monitoring Program (VWQMP). The goal of the VWQMP is to evaluate the status and trends for bacteria levels in the streams, sloughs and bays throughout Tillamook County. The ongoing monitoring effort includes 73 sites throughout Tillamook County.TEP uses citizen scientist volunteers to collect water sample at established monitoring locations throughout Tillamook County. Approximately eight volunteers collect water samples for TEP twice a month on a year-round basis. VQWMP water samples are brought to the TEP office where they are processed and analyzed for bacteria using IDEXX equipment and methods. Sample results are recorded by TEP staff and entered into an online database. Recent results are available to the public through an interactive map on TEP's website. Every two years, TEP compiles, formats, and rates all data per DEQ protocols for accuracy. Bacteria data are forwarded to DEQ, which compares the most recent two years' of data to the appropriate State water quality standards to determine the status of the streams, sloughs, and bays. DEQ also performs regression analysis for each site to determine if statistically significant changes (trends) in bacteria concentrations are present. TEP and DEQ use this information to inform partners and the general public about water quality improvements.

Monitoring Team Evaluation

Monitoring Team Strengths

- The applicant has a successful track record collecting the same data and managing and reporting it in a meaningful manner.
- This monitoring project makes good use of volunteer efforts to collect the data over a broad area to help keep the costs to a minimum.
- The applicant responded to past review comments, including providing a description of volunteer activities and QA/QC measures to ensure the data they are collecting is done correctly.

Monitoring Team Concerns

- It is unclear how each site's data set has been reviewed to ensure long-term data collection is needed at every site. This information should be provided in subsequent applications.
- The application lacked letters of support and was unclear about the reasoning behind that.

Monitoring Team Comments

None

- The collected data effectively informs status and trends in the Tillamook basin. The applicant has been proactive sharing the results of the data and has engaged stakeholders in the watershed as a result.
- The website hosting the data is user-friendly and informative.
- The project is able to track the effectiveness of restoration projects over time.
- Incorporating volunteers in data collection engages the community in local water quality issues.

- Local partners including the Tillamook SWCD utilize the data to monitor the effectiveness of nutrient management systems.
- The application is extremely well-written and the methods proposed technically sound.

Concerns

• No significant concerns are identified.

Concluding Analysis

This is a highly successful monitoring program in the Tillamook basin that collects bacteria data in highpriority locations where the land use is a good fit for an ongoing project. The project is highly regarded and continuously delivers products used in the Tillamook Bay region for planning new restoration projects and tracking the effectiveness of restoration in each monitored watershed.

Review Team Recommendation to Staff

Review Team Priority 1 of 4

Review Team Recommended Amount \$34,919

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund

Staff Recommended Amount \$34,919

Staff Conditions

North Coast (Region 1)

Application Number: 219-1038-16679 Project Name: NCWA Monitoring Network 2019 Applicant: North Coast WS Assn Region: North Coast OWEB Request: \$5,665 Project Type: Monitoring

County: Clatsop Total Cost: \$10,765

Application Description (from application abstract)

This project continues temperature monitoring in 4 watersheds in Clatsop County, namely: Youngs Bay, Skipanon, Nicolai-Wikiup, and Ecola Creek watersheds. This is the third year of monitoring in Youngs Bay and Skipanon and the second year in Ecola and Nicolai-Wikiup. Oregon DEQ has major data gaps in these watersheds and our continuous temperature monitoring assists DEQ in establishing TMDL data. NCWA uses the data to help inform restoration and support outreach where temperature limitation is a threat to salmon. Temperature is a limiting factor for salmonid survival and it doubles as an indicator of dissolved oxygen, another important parameter. This Project will:1. Collect time-series temperature data from 4 identified watersheds during the summertime months2. Deploy loggers at 22+ established sites (additional sites if access becomes available) in late spring (May/June)3. Follow DEQ approved Sample & Analysis Plan4. Audit data loggers in the office pre- and post- deployment 5. Conduct field audits with a NIST-certified thermometer approved by DEQ at least 2x/season (at deployment and retrieval)6. Retrieve loggers between Sept 15-Oct 157. Upload data and maintain organized file system on NCWA computer, backed up to iCloud8. Submit data to DEQ for processing and uploading to AWQMS9. Make data publicly available on NCWA website once processed/vetted by DEQ and promote its availability to partners and community members10. Incorporate data results into restoration planning (e.g. provide temp data to the Chum SAP, use in Chum Landowner Outreach conversations) This project is a collaboration between NCWA, Oregon DEQ, ODFW, and council volunteers. This project continues temperature monitoring in 4 watersheds in Clatsop County, namely: Youngs Bay, Skipanon, Nicolai-Wikiup, and Ecola Creek watersheds. This is the third year of monitoring in Youngs Bay and Skipanon and the second year in Ecola and Nicolai-Wikiup. Oregon DEQ has major data gaps in these watersheds and our continuous temperature monitoring assists DEQ in establishing TMDL data. NCWA uses the data to help inform restoration and support outreach where temperature limitation is a threat to salmon. Temperature is a limiting factor for salmonid survival and it doubles as an indicator of dissolved oxygen, another important parameter. This Project will:1. Collect time-series temperature data from 4 identified watersheds during the summertime months2. Deploy loggers at 22+ established sites (additional sites if access becomes available) in late spring (May/June)3. Follow DEQ approved Sample & Analysis Plan4. Audit data loggers in the office pre- and post- deployment 5. Conduct field audits with a NIST-certified thermometer approved by DEQ at least 2x/season (at deployment and retrieval)6. Retrieve loggers between Sept 15-Oct 157. Upload data and maintain organized file system on NCWA computer, backed up to iCloud8. Submit data to DEQ for processing and uploading to AWQMS9. Make data publicly available on NCWA website once processed/vetted by DEQ and promote its availability to

partners and community members10. Incorporate data results into restoration planning (e.g. provide temp data to the Chum SAP, use in Chum Landowner Outreach conversations)This project is a collaboration between NCWA, Oregon DEQ, ODFW, and council volunteers.

Monitoring Team Evaluation Monitoring Team Strengths

- The applicant has a successful track record and a DEQ approved Sampling and Analysis Plan (SAP).
- The application is well-written and addressed past reviewer comments.
- This project will continue to collect continuous water temperature data and contribute to generating a 10-year data set. These data will allow DEQ to perform adequate trend analyses to determine TMDL implementation and evaluate for delisting temperature impaired water bodies.

Monitoring Team Concerns

• It is unclear if there were adequate resources for the applicant to use the data for outreach to plan and implement restoration actions in the future.

Monitoring Team Comments

- The OPMT encourages the applicant to consider monitoring water temperature year-round (at least at a subset of sites) to adequately document thermal dynamics.
- In future applications consider requesting funds to collect data for more than one year.

Review Team Evaluation

Strengths

- This is a continuation of previous monitoring work that has been successful. The project has a positive track record of collecting high quality data and engaging volunteers.
- The project is the result of a successful partnership with oversight and participation from DEQ.
- The volunteers working on the project are knowledgeable about monitoring and have the necessary technical skillsets.
- The project recently expanded and now monitors all priority watersheds.

Concerns

- The project only focuses on temperature.
- The objectives stated in the proposal are challenging to interpret.

Concluding Analysis

The ongoing success of this relatively young volunteer monitoring program on the North Coast is acknowledged. This cost-effective project continually delivers high quality data collected by adept volunteers, working closely with DEQ to guide the project's sampling density and ensure a Sample Analysis Plan is followed. Given the cost-effectiveness and the continual low budget amounts, the review team recommends that the applicant will consider the efficiencies of scale and submit a request that covers more than one year of funding in the future.

Review Team Recommendation to Staff Fund

Review Team Priority 2 of 4

Review Team Recommended Amount \$5,665

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund

Staff Recommended Amount \$5,665

Staff Conditions

North Coast (Region 1)

Application Number: 219-1039-16635

Project Type: Monitoring

Project Name: Agnes, Baldy, & Logan Creeks and Ocean Outfalls Baseline Data Acquisition ~ 2019 - 2020

Applicant: Salmon Drift Cr WC

Region: North Coast

OWEB Request: \$35,232

County: Lincoln Total Cost: \$77,694

Application Description (from application abstract)

Salmon Drift Creek Watershed Council (SDCWC) proposes collecting baseline data of the smaller, understudied ocean tributaries and outfalls in our boundary. Project will focus on urbanized watersheds in Lincoln City. Project addresses the need to better understand current water quality of these systems as it relates to federal and state water quality standards, including those directly related to salmonid life cycles. Watersheds previously not studied include Baldy Creek, Agnes Creek, and Logan Creek plus outfalls at numerous sites along the seven miles of beaches of Lincoln City. Given the proximity, of particular interest are the systems which discharge directly into the Cascade Head Marine Reserve and/or Protected Areas which are coincidentally also within the recently redesignated United Nations Cascade Head Bioreserve. Water quality data to be collected will include physical parameters of flow, dissolved oxygen, pH, conductivity, temperature, and turbidity along with biological parameters of bacteria as indicators of fecal contamination. Sampling will be primarily in the freshwater, however, marine samples will be taken from the nearshore for a comparative bacteria study. Data acquisition will include both routine and storm sampling to best characterize these lesser understood and potentially ecologically under-valued watersheds. Data will be used to determine impairments, prioritize future restorations for anadromous fish migration, and be of value to recreational users of area beaches and harvesters of shellfish (clams and mussels). Project partners include Oregon DEQ, Siletz Tribal Charitable Contribution Fund, Neighbors for Kids, Surfrider Foundation, and the City of Lincoln City. Salmon Drift Creek Watershed Council (SDCWC) proposes collecting baseline data of the smaller, understudied ocean tributaries and outfalls in our boundary. Project will focus on urbanized watersheds in Lincoln City. Project addresses the need to better understand current water quality of these systems as it relates to federal and state water quality standards, including those directly related to salmonid life cycles. Watersheds previously not studied include Baldy Creek, Agnes Creek, and Logan Creek plus outfalls at numerous sites along the seven miles of beaches of Lincoln City. Given the proximity, of particular interest are the systems which discharge directly into the Cascade Head Marine Reserve and/or Protected Areas which are coincidentally also within the recently redesignated United Nations Cascade Head Bioreserve. Water quality data to be collected will include physical parameters of flow, dissolved oxygen, pH, conductivity, temperature, and turbidity along with biological parameters of bacteria as indicators of fecal contamination. Sampling will be primarily in the freshwater, however, marine samples will be taken from the nearshore for a comparative bacteria study. Data acquisition will

include both routine and storm sampling to best characterize these lesser understood and potentially ecologically under-valued watersheds. Data will be used to determine impairments, prioritize future restorations for anadromous fish migration, and be of value to recreational users of area beaches and harvesters of shellfish (clams and mussels). Project partners include Oregon DEQ, Siletz Tribal Charitable Contribution Fund, Neighbors for Kids, Surfrider Foundation, and the City of Lincoln City.

Monitoring Team Evaluation Monitoring Team Strengths

- The applicant addressed most previous application review comments.
- The applicant has a good track record with similar data collection efforts to manage and report the data in a meaningful manner.
- This project can provide important information to the Mid-Coast TMDL in urban areas.

Monitoring Team Concerns

- Despite the improvements to the application, it remains unclear how important these streams are to anadromous fish. It was unclear if the data are not available or if it was just not provided. Is there suitable habitat for spawning? Is there presence of juvenile salmonids?
- The application cites an incorrect internet link for the flow measurement method that should be followed.
- The application lacks a clear description of monitoring methods.
- The current SAP cited does not include flow monitoring and should be revised to include the correct methodology.
- The application includes volunteers as match, but the narrative doesn't describe what the volunteers will be doing to contribute to this project.

Monitoring Team Comments None

- This application demonstrates a stronger link to salmon habitat then the previous submittal.
- The proposed data collection will fill a gap in previous state monitoring and the data will have other benefits in addition to fisheries.
- This type of monitoring is recommended by the Ocean Acidification and Hypoxia Working Group (OAHWG).
- The proposed streams to monitor have a direct impact to human and marine health.
• The project benefits recreational users of the ocean shore.

Concerns

- The project emphasizes fish use, but is more likely to inform urban water quality issues. The project has greater human health benefits than it does ecological benefits.
- The streams proposed for monitoring have fish passage issues limiting habitat availability. It may not be cost-effective to provide fish passage given the size of the streams involved and extent of upstream habitat.
- Focusing on turbidity may not be useful in these streams. Examining metals or nutrients affecting
 aquatic organisms may be more valuable.
- The application lacks a clear description of monitoring methods. The grab samples proposed may have limited value.

Concluding Analysis

Monitoring work in ocean outfalls is lacking along the Oregon coast, and this proposed work will fill data gaps in state monitoring efforts. There is value in monitoring overlooked streams in the urban environment and the project may provide benefits to human and marine health. The applicants are encouraged to coordinate with the Lincoln SWCD to be more cost-effective and efficient in getting the samples to the lab in a timely manner.

Review Team Recommendation to Staff

Fund

Review Team Priority 4 of 4

Review Team Recommended Amount \$35,232

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team N/A

Staff Recommendation Fund

Staff Recommended Amount

Application Evaluation for Agnes, Baldy, & Logan Creeks and Ocean Outfalls Baseline Data Acquisition ~ 2019 - 2020, Open Solicitation-2018 Fall Offering Due:

\$35,232

Staff Conditions

Southwest - Region 2 Fall 2018 Funding Recommendations



Document Path: Z:loweb\Technical_Services\Information_Services\GIS\Maps\Review Team Meetings\2018FallCycle\Projects\Region2_AppFundingStatus_11x17_2018Fall.mxd ESRI ArcMap 10.6 NAD 1983 Oregon Statewide, Lambert Feet Intl OWEB- PK Wills 20190320

Funding Recommendations

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

Previous Grants - 1998-2017

- Restoration
- Acquisitions

Streams Region Boundary

Oregon Watershed Enhancement Board

775 Summer St, NE Suite 360 Salem, OR 97301-1290 (503) 986-0178 http://oregon.gov/OWEB/

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Region 2 - Southwest Oregon					
Restoration Projects Recommended for Funding in Priority Order					
Project # Grantee Project Title	Brief Description	Amount Recommended	County		
219-2033 Curry SWCD Cedar Creek Enhancemen	Natural functioning stream condition will be restored on Cedar Creek, a tributary of Elk River near Port Orford, by establishing a meandering stream channel with a connected floodplain, adjacent wetland areas, and restored native plant community.	89,787	Curry		
219-2027 Partnership for the Cattle Creek Instream Umpqua Rivers Restoration	Instream habitat will be improved for salmonids by placing instream large wood habitat structures on Cattle Creek, a tributary to Cow Creek near Riddle.	74,561	Douglas		
219-2021 Rogue River WC Elk Creek RM 5.6 Floodpla Enhancements	Stream habitat conditions for rearing juvenile salmon will be improved on Elk Creek, a tributary to the Rogue River near Shady Cove. Breaching berms and placing instream large wood habitat structures will reconnect historic side-channels and the floodplain with the stream to restore natural river processes.	173,400	Jackson		
219-2020 Rogue River WC Ashland Creek Fish Passag Improvement	Fish passage will be improved for Coho Salmon on Ashland Creek, a tributary to Bear creek in Ashland. A concrete irrigation diversion dam will be removed and replaced with a new irrigation withdrawal system designed to allow fish access to an additional two miles of stream habitat.	117,527	Jackson		
219-2029 Elk Creek WC Jack and Hardscrabble Creeks Restoration	Streamside and instream conditions will be improved on over four miles of Jack and Hardscrabble Creeks, tributaries of Elk Creek in the Umpqua Basin, near Drain. Replacing culverts blocking fish passage to stream habitat, restoring the streamside native plant community, and placing instream large wood habitat structures will support populations of coho salmon.	342,703	Douglas		
219-2032 Applegate Partnership, West Fork Evans Creek Inc. Large Woody Debris Proje	Instream habitat will be improved on the West Fork Evans Creek, a tributary of the Rogue River near Wimer. Placing instream large wood habitat structures and constructing blockades to exclude off road vehicle use from the creek and adjacent riparian area will increase the quality and quantity of native fish habitat over 11 stream miles.	773,145	Jackson		
Total Restoration Projects Recommended for Funding b	r RRT and OWEB Staff	1,571,123			

Restoration Projects Recommended but Not Funded in Priority Order						
Droject #	Grantas	Draiact Titla	Priof Description	Amount	County	
219-2028	Applegate Partnership, Inc.	Upper Phillips Dam Fish Passage and Irrigation Efficiency Project	Native salmonid fish will be provided access to 49 miles of stream habitat in the Litte Applegate River by constructing a by-pass channel and improving the water withdrawal system for irrigators at the Upper Phillips Dam located near Ruch.	270,234	Jackson	
219-2022	Coos Watershed Association	Marlow Creek Habitat Restoration	Instream habitat will be improved on 4 miles of Marlowe Creek, a tributary to the Millicoma River located near Coos Bay. Placing instream large wood habitat structures, replacing failing culverts, and improving a road surface located adjacent to the stream will reduce chronic sediment input into the stream, which will improve stream habitat conditions for native fish.	421,967	Coos	
219-2019	Smith River WC	Railroad Creek Fish Passage Improvement and Instream Restoration	Fish passage and instream habitat will be improved on Railroad Creek, a tributary of the Lower Smith River located near Reedsport. Replacing an undersized culvert with a bridge will enable fish to access an additional 3 miles of stream habitat, and placing large wood instream will improve habitat conditions for native fish.	120,711	Douglas	
219-2026	Smith River WC	Lower Wasson Creek Riparian Restoration	Streamside habitat will be restored on a 17.7 acre section of Wasson Creek, a tributary to the Smith River near Reedsport. Invasive blackberries will be controlled and replaced with native trees to restore functions and services provided by streamside vegetation communties, including bank stability, erosion control, and shade to the stream.	76,505	Douglas	
219-2025	Coos Watershed Association	Williams River Quarry Falls Fish Passage Improvement	Natural stream channel conditions will be restored at the Williams River quarry, located in the Coos basin. A major fish passage barrier listed on the ODFW Statewide Fish Passage Priority List will be addressed, which will result in improved fish access to 21 miles of stream habitat. In-stream habitat complexity and streamside riparian vegetation will also be restored to support native fish and aquatic species.	394,340	Douglas	
Total Rest	oration Projects Recor	mmended for Funding by F	RT	2,854,880		
Restoration Applications Not Recommended for Funding by RRT				Amount		
Proiect #	Grantee	Project Title		Requested	County	
219-2023	Smith River WC	Spencer Creek Instream Restoration		130,975	Douglas	
219-2024	Jackson SWCD	Quarter Creek Water Quality Improvement Project		36,019	Jackson	
219-2030	The Freshwater Trust	Little Butte Creek River Mile	13 Instream and Riparian Habitat Restoration Project	357,866	Jackson	
219-2031	Illinois Valley WC	Page Creek Aquatic Restorat	ion Activities Phase 1	145,243	Josephine	

Technical Assistance (TA) Projects Recommended for Funding in Priority Order							
				Amount			
Project #	Grantee	Project Title	Brief Description	Recommended	County		
	Coquille Watershed	Coaledo Drainage District	Alternatives will be developed for the replacement of a failing tide gate to restore				
219-2035		Tidegate Replacement and	fish passage, as well as providing improved pasture conditions and water	74,816	Coos		
	Association	Fish Passage	management for the Coaledo Drainage District located near Coquille.				
		White Ditch Sucker Creek	The White Ditch irrigation conveyance system will be examined to determine the				
210 2024	Illinois Valley SMCD	Claw Destaration & Fish	quantity of water that could be conserved, and design alternatives for infrastructure	CQ 14F	Josephine		
219-2034	minors valley SWCD	Plow Restoration & Fish Passage Study	improvements will be developed to address low stream flow and fish passage	68,145			
			concerns on Sucker Creek, located near Cave Junction.				
	Applegate Partnership, Inc.	Sykes Creek Fish Passage Project	Designs will be developed to remove 7 fish passage barriers and provide fish access	67,580	Jackson		
219-2039			to over 1.7 miles of habitat on Sykes Creek, a tributary of Evans Creek near Rogue				
			River.				
	Coos Watershed Association		A restoration plan will be developed for an approximately 80-acre wetland habitat	74,749 (Coos		
		Watershed Goose Point, Haynes Inlet iation Project Development	area located on working lands at Goose Point in Haynes Inlet, north of Coos Bay.				
219-2041			Site plans will lead to restoration projects that increase and enhance salmonid				
			habitat, improve water quality, and create a resilient and diverse tidal marsh system.				
		Olalla Creek and Tributaries	Engineered designs will be created to replace two deteriorating culverts and	26,408	Douglas		
219-2038	Partnership for the	Fish Passage and	improve instream habitat conditions on Olalla Creek and associated tributaries in				
	Umpqua Rivers	Enhancement Design	Douglas County, which will enhance habitat conditions for native salmon.				
Total TA Projects Recommended for Funding by RRT and OWEB Staff				311,698			
· · · · · · · · · · · · · · · · · · ·					-		

Technical Assistance Projects Recommended but Not Funded in Priority Order					
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
219-2037	Coos SWCD	Winter Lake Phase 3: Hydrologic Enhancement Design	Engineered designs will be created to replace multiple undersized culverts and install swale-type grass channels in two agricultural sections of the Beaver Slough Drainage District within the newly completed China Camp Tidegate replacement project, which will build on recently completed habitat restoration benefiting Oregon coastal coho.	74,659	Coos
219-2040	Coos Watershed Association	South Fork Coos River Road Assessment and Project Development	Approximately 240 miles of roads that can negatively affect the South Fork Coos River and its tributary network will be inventoried and evauated to identify road conditions that contribute sediments to the stream or disconnect stream corridors. The inventory will result in an action plan that identifies the top 10 sediment reduction actions and all of the fish passage issues in the project area.	68,942	Coos
219-2036	Rogue Basin Partnership	Rogue Basin Partners Collaboration for Engineering & Technical Services	Technical assistance work will result in engineering designs, alternatives, water rights investigation, and irrigation system designs for up to six priority dam removal projects in three priority Rogue Basin geographies.	74,800	Jackson
Total TA Projects Recommended for Funding by RRT			530,099		
Technical Assistance Applications Not Recommended for Funding by RRT					
				Amount	
Project #	Grantee	Project Title		Requested County	
219-2042	Elk Creek WC	Elk Creek Watershed Limitin	g Factors Assessment and Restoration Action Plan	49,902	Douglas

Stakeholder Engagement Projects Recommended for Funding in Priority Order						
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
None			None			
Total Stak	Total Stakeholder Engagement Projects Recommended for funding by OWEB Staff					
Stakehold	er Engagement Projec	ts Recommended but Not	Funded in Priority Order			
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
None			None			
Total Stakeholder Engagement Projects Recommended for funding by RRT						
Stakehold	er Engagement Projec	ts Not Recommended for	Funding by RRT			
				Amount		
Project #	Grantee	Project Title		Requested	County	
210 2050	Southern Oregon Land	SOLC Linner Bear Creek Ashl	and Watershed Engagement	55 097	lackson	
219-2030	Conservancy	Sole opper bear creek Asing		55,087	Jackson	

Monitoring Projects Recommended for Funding in Priority Order							
				Amount			
Project #	Grantee	Project Title	Brief Description	Recommended	County		
219-2047	Partnership for the Umpqua Rivers	Umpqua Basin	Monthly water quality data will continue to be collected in the Umpqua Basin to				
		Collaborative Monitoring	identify stream-specific limiting factors for planning restoration in areas with the	220,356	Douglas		
		2019-2021	greatest need for preservation.				
	Coos Watershad	Coos Watershed Deal time	Five long-running stream gaging and weather stations in the Coos River watershed				
		Hydrological and	will be upgraded to improve and expand data collection efforts providing real-time				
219-2049		Hydrological and	hydrological and meteorological information. This will provide a dataset large	88,270	Coos		
	ASSOCIATION		enough to perform meaningful statistical analysis for monitoring, assessment,				
		2019-2021	research, and project effectiveness needs.				
Total Mor	nitoring Projects Recon	nmended for funding by O	WEB Staff	308,626			
Monitorin	Monitoring Projects Recommended but Not Funded in Priority Order						
Project #	Grantee	Project Title	Brief Description	Amount	County		
			Pacific lamprey use of a passage ramp will be monitored to evaluate the				
	Cascade Pacific RC&D	Eel Creek Pacific Lamprey	functionality and usability of the ramp. Lamprey movement, holding habitats,	69,492			
219-2043		Ramp Effectiveness	barrier issues, and habitat use within the Eel Lake Basin near Reedsport will also be		Coos		
		Monitoring 2019	monitored to provide stakeholders with valuable information about Oregon Coast				
			Pacific Lamprey.				
	Partnership for the Umpqua Rivers	Umpqua Basin Stream Flow	Continued monitoring of summer stream flow and stream temperature at sites	31,958	Douglas		
219-2045		and Temperature	across the Umpqua Basin will inform regulation of instream water rights, model				
		Monitoring Project 2019	water supply and demand, and provide water quantity and quality data.				
Total Monitoring Projects Recommended for funding by RRT				410,076			
Monitorin	g Applications Not Re	commended for Funding b	by RRT				
Project #	Grantee	Project Title		Amount	County		
219-2044	Smith River WC	Smith River ARIS/DIDSON An	adromous Salmonid Monitoring	62,511	Douglas		
	Klamath Bird	Pird Monitoring to Evaluate	Effectiveness of Diparian Posteration in the Posue Pasin	22.607	lackson		
219-2046	Observatory	Bird Monitoring to Evaluate	Effectiveness of Riparian Restoration in the Rogue Basin	55,007	Jackson		
Region 2 Total OWEB Staff Recommended Board Award				2,191,447	21%		
Regions	Regions 1-6 Grand Total OWEB Staff Recommended Board Award						

Southwest Oregon (Region 2)

Application Number: 219-2019-16601

Project Type: Restoration

Project Name: Railroad Creek Fish Passage Improvement and Instream Restoration

Applicant: Smith River WC

Region: Southwest Oregon

OWEB Request: \$120,711

County: Douglas Total Cost: \$265,285

Application Description (from application abstract)

Railroad Creek is a tributary of the Lower Smith River located 25 miles east of Reedsport, Oregon. Currently, fish passage on Railroad Creek is restricted by an undersized culvert at a riparian road crossing. The current culvert is 7' in diameter, constraining the 18' active channel width, and perched at its downstream end. The constriction of the channel has altered hydrological processes, posing a migration barrier to fish and impeding substrate transport. Substrates above the culvert are directing summer flows subsurface under the riparian road bed, leaving the channel dry and impeding upstream access to juveniles in the summer. This project will replace the culvert with a bridge allowing a 27' stream channel at the crossing, designed in accordance with ARBO II and exceeding the required state and federally average active channel width requirements. The bridge will free the channel from constriction, allowing for fish to access to an additional 3 miles of spawning and rearing habitat, wildlife passage, and the restoration of hydrological processes. 15 instream log and boulder placements will be implemented below the current crossing in order to trap the large amount of material that has accumulated above the culvert, as these are expected to move after the culverts replacement. Photo point monitoring will take place for three years post-project. Smith River Watershed Council will work with the US Forest Service Siuslaw Nation Forest Biologist and Hydrologist, ODFW biologists, Roseburg Resources Engineers, and Rayonier Timber Company. Roseburg Resources have agreed to check the bridge after high flows and remove debris if needed, though no regular maintenance is expected for this project.

Review Team Evaluation Strengths

- ESA-listed coho, Chinook and steelhead would benefit from the proposed habitat restoration conditions.
- Project partners have substantial experience with instream habitat restoration and coordinate well on projects.
- The project objectives are clearly articulated. The large wood structure placement design and material size is appropriate for the stream.
- The budget is detailed and reasonable for the project location and the activities proposed.
- The replacement of the culvert with a bridge would allow for adult Chinook passage as well as juvenile salmonids.

Concerns

- The application did not identify or describe if there would be a low flow channel designed under the bridge. Without such a consideration, there could be a barrier during those flow conditions.
- As designed, the inside wall along the stream channel could have a short lifespan.
- Coordination with NOAA on Fish Passage has not yet occurred. It is likely that designs could change during NOAA review which could increase the costs of the structure. The rationale for boulder and log placements was unclear.

Concluding Analysis

The project components would benefit a diverse number of salmonid species including ESA-listed coho. The large wood component is sound and designed appropriately for the site. There were several concerns identified related to the proposed bridge which could impact the design approach, as well as the cost. The applicant needs to work closely with NOAA to make sure the approach meets fish passage criteria.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 9 of 11

Review Team Recommended Amount \$120,711

Review Team Conditions

The Applicant must coordinate with NOAA on bridge designs.

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount \$0

Staff Conditions

Application Evaluation for Railroad Creek Fish Passage Improvement and Instream Restoration, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Southwest Oregon (Region 2)

Application Number: 219-2020-16602Project Type: RestorationProject Name: Ashland Creek Fish Passage
ImprovementProject Type: RestorationApplicant: Rogue River WCCounty: JacksonRegion: Southwest OregonCounty: JacksonOWEB Request: \$117,527Total Cost: \$200,248

Application Description (from application abstract)

The proposed fish passage project is on Ashland Creek, a tributary to Bear Creek in the upper Rogue Basin in Jackson County, OR. Ashland Creek's perennial flow and relatively cold water is both unique and considerably important to the Bear Creek watershed. The creek provides habitat for Coho Salmon, steelhead trout, and other native aquatic organisms. Near rivermile 1.2 on Ashland Creek is an actively used irrigation structure called the Smith-Myer-Roper Diversion. This channel spanning, concrete dam is approximately 2.5 feet in height and impairs access to approximately 2 miles of valuable Coho Salmon and steelhead spawning and rearing habitat. The dam is also considered a near complete barrier to upstream migrating juveniles that seek cold water refuge in summer and high flow refuge in winter. This proposal requests funding to remove the dam, reprofile the channel, install an irrigation water collection box, remove 0.25 acre of blackberry and replace with native riparian plant species, and install interpretive signs. Project partners include the City of Ashland, Oregon Department of Fish & Wildlife, Rogue River Watershed Council (RRWC), Cascade Stream Solutions, and private landowners and water users.

Review Team Evaluation Strengths

- The project is straightforward with sound design information presented in the application. The project engineer is experienced working on passage issues at diversion structures with similar approaches.
- The barrier is the top fish passage priority in the Bear Creek system.
- The project is in a highly visible public location providing a good outreach opportunity.
- The project would build on other passage and habitat restoration in this watershed.
- Invasive species removal and planting is a value-added component to the project and will help benefit water quality.
- The applicant has consulted with NOAA on fish passage design.
- The City of Ashland is supportive of the project.
- Ashland Creek is a primary cold water refugia and provides critical habitat for salmonids, including ESA-listed coho.

Concerns

- The long term maintenance of blackberry removal will be undertaken by volunteers. This will require
 diligence on the part of the applicant to ensure the work is completed correctly and according to
 schedule.
- The project reach is constrained on all sides by housing, a sewer line, and a park. Due to the constraints of the surrounding infrastructure, the approach will not address the altered hydrologic function of the stream.

Concluding Analysis

There is a limited amount of cold water refugia in this system and this stream provides a primary cold water source to Bear Creek. Restoring passage to these valuable habitats is important for recovery of ESA-listed species and other native aquatic organisms. While the design will not restore the stream to a more naturally functioning state, the engineered roughened channel will improve the channel function from the current state, as well as improve passage to upstream habitat. The addition of a bio-swale, the removal of invasive vegetation, and the replanting of riparian areas with native species will help benefit water quality in the project area as well as downstream.

Review Team Recommendation to Staff

Fund

Review Team Priority 4 of 11

Review Team Recommended Amount \$117,527

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$117,527

Application Evaluation for Ashland Creek Fish Passage Improvement, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

None

Southwest Oregon (Region 2)

Application Number: 219-2021-16608 Project Name: Elk Creek RM 5.6 Floodplain and Side Channel Enhancements Applicant: Rogue River WC

Region: Southwest Oregon

OWEB Request: \$173,400

Project Type: Restoration

County: Jackson Total Cost: \$616,300

Application Description (from application abstract)

The proposed project seeks to address degraded aguatic habitat conditions in Elk Creek, a large tributary to the upper Rogue River in Jackson County, Oregon. Elk Creek provides habitat for Coho Salmon, Chinook Salmon, steelhead, Cutthroat Trout, Pacific Lamprey, Klamath Smallscale Suckers, Speckled Dace, Western Pond Turtle, and other native aquatic species. The proposed project reach is managed by the US Army Corps of Engineers (ACOE). A long history of restoration exists in the Elk Creek watershed. Most restoration projects completed in the Elk Creek watershed have been successful because of collaboration and teamwork among land management agencies, NGO's and private interests. The proposed project is yet another example of this collaborative approach. The degraded habitat conditions this project seeks to address are the result of historic land management actions. In summary, these conditions include simplified channel and floodplain habitat and lack of habitat connectivity within the river mile 5.0 - 5.7 reach. More specifically, project managers aim to reconnect Elk Creek and its floodplain, create complex habitat in side channels and on floodplains, and increase inundation frequency of off channel habitats - all with the primary goal of improving rearing conditions for juvenile salmonids. This project proposal originates from a technical assistance grant awarded in 2014 by OWEB (214-2006) to the former Upper Rogue Watershed Association (URWA), now Rogue River Watershed Council (RRWC), in 2014. It represents the culmination of input from OWEB's Regional Review Team (via two prior applications) and a technical team of hydrologists, biologists, fluvial geomorphologists, and resource managers. Partners include: ODFW, BLM, ACOE, and RRWC.

Review Team Evaluation Strengths

- The project was selected by a multi-interdisciplinary team through a prioritization process.
- The proposal addresses concerns from the previous review including riparian restoration and the incorporation of levee materials into instream structure work.
- This stream provides important spawning and rearing habitat for ESA-listed coho.
- The project will restore more natural stream function and floodplain connectivity along the project reach.
- The project is a high priority for BLM and will build on previous restoration efforts in the watershed.

Concerns

• No concerns were identified.

Concluding Analysis

The proposal is a resubmission and was designed through an OWEB Technical Assistance grant. The stream is important to ESA-listed coho and is identified in NOAA's SONC Coho Salmon Recovery Plan and the draft Upper Rogue Coho Salmon Strategic Action Plan as a high priority area for restoration. Historically, the project area was a highly dynamic floodplain and project activities will help to restore this function to the project reach, representing a timely and important restoration opportunity.

Review Team Recommendation to Staff Fund

Review Team Priority 3 of 11

Review Team Recommended Amount \$173,400

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$173,400

Staff Conditions

None

Southwest Oregon (Region 2)

Application Number: 219-2022-16611 Project Name: Marlow Creek Habitat Restoration Applicant: Coos Watershed Association Region: Southwest Oregon OWEB Request: \$421,967 Project Type: Restoration

County: Coos Total Cost: \$560,375

Application Description (from application abstract)

In Coos County, Marlow Creek is the furthest downstream of the three main tributaries to the East Fork Millicoma River and has been heavily impacted by past land management practices, which has degraded in-stream habitat throughout the basin. Marlow Creek provides important habitat to fall chinook, chum and coho salmon and steelhead trout, along with other important aquatic species (e.g. Pacific lamprey). For over the last two decades, the Marlow Creek subbasin has been a focal area of previous habitat restoration in the Coos basin near Coos Bay, Oregon, with its high spawning and rearing activity, but there is still room for habitat improvements. The Marlow Creek Habitat Restoration project is a multifaceted project that seeks to address a lack of stream complexity and fish passage by proposing to 1) place nearly 90 pieces of wood over 4 miles, 2) replace an undersized, perched culvert with a bridge to open 0.2 miles of tributary habitat and release a large amount of coarse sediment into the newly added wood on Marlow Creek, 3) improve passage through the boulder falls near the 5 Mile Marker on the 1000 Rd to open 2 miles of habitat, and 4) improve and maintain the 1000 Road surface and current drainage to reduce chronic sediment input into Marlow Creek. OWEB funds will be used for project management, travel, contracted services, materials & supplies, and indirect costs. The Coos Watershed Association (CoosWA), Oregon Department of Forestry (ODF), Weyerhaeuser Timber Company, Department of State Lands (DSL), and Oregon Department of Fish & Wildlife (ODFW) will be providing match that includes engineered designs, contracted services, materials & supplies, and technical assistance.

Review Team Evaluation Strengths

- The project is a resubmittal and the applicant addressed concerns from the previous review by providing design information on the instream structures and the fish passage work.
- Marlow Creek is a highly productive stream that supports important ESA-listed coho spawning and rearing habitat. The project addresses critical limiting factors impacting coho related to simplified instream habitat conditions and passage issues.
- The proposal demonstrates a strong working relationship among partners through involvement in design, implementation, and funding.
- The project continues the restoration momentum on this stream, building on completed instream and passage restoration work downstream.
- The existing riparian area has the potential for recruitment of large wood.

• Marlow Creek is the only consistent stronghold for chum salmon in this system.

Concerns

 The high cost of the bridge does not have a favorable cost to benefit ratio. The project will result in an additional 900 feet of accessible habitat and will improve sediment transport; however, the cost seemed to outweigh the benefits.

Concluding Analysis

The project partners have established a great track record of implementing this type of restoration. The project builds on restoration activities implemented downstream of the project reach and has the potential to increase the productivity in this stream for ESA-listed coho and other aquatic species, although at a high cost for the habitat benefit.

Review Team Recommendation to Staff

Review Team Priority 8 of 11

Review Team Recommended Amount \$421,967

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount \$0

Staff Conditions

Southwest Oregon (Region 2)

Application Number: 219-2023-16617 Project Name: Spencer Creek_Instream Restoration Applicant: Smith River WC Region: Southwest Oregon OWEB Request: \$130,975 Project Type: Restoration

County: Douglas Total Cost: \$322,892

Application Description (from application abstract)

Spencer Creek is a tributary of the Lower Smith River located 25 miles east of Reedsport, Oregon. Historical and current timber practices have greatly impacted the natural function of streams throughout the Smith River Watershed. These impacts have led to bedrock dominant systems lacking substrates, decreased subsurface flow leading to high peak summer temperatures, a lack of large wood recruitment, and ultimately a limited production of anadromous trout, salmon, lamprey, and other aquatic species. This project seeks to maximize ecological uplift by providing a trajectory for rehabilitating stream processes formally present. Funding will be used to mitigate environmental impacts, increasing anadromous species production and improve overall habitat and stream function through instream restoration structures. Instream log/boulder placements have been designed by SRWC and an ODFW Western Oregon Habitat Restoration Biologist.47 structures containing 507 logs and 1640 boulders will be placed over 4.5 miles of stream. Spencer Creek falls will be modified to improve fish access to 8.5 miles of stream habitat. This was a low flow barrier to anadromy that was modified by the BLM and the Oregon Fish and Game Commission. We will remove a boulder, concrete sill, exposed rebar and concrete/rebar pieces from a failed fish ladder.Project partners are the Coos Bay District BLM, Roseburg Resources Company, Oregon Department of Fish and Wildlife and Trout Unlimited.

Review Team Evaluation Strengths

- Spencer Creek is important habitat for ESA-listed coho and the project will help address primary limiting factors for coho.
- Project partners have a good deal of experience with large wood placement in the basin.

Concerns

- The designs for fish passage have not yet been provided to ODFW or NOAA.
- There is no back up plan for addressing the fish passage issues if the proposed approach at the falls is unsuccessful or if modification is necessary.

- The applicant should consider whether the falls area needs to undergo an archaeological assessment.
- Placement of large wood and boulder structures above the bedrock falls might be better timed after the passage issue is addressed.

Concluding Analysis

The bedrock falls pose a challenging fish passage problem with multiple factors to consider. The current design approach appears to be based on several assumptions and not from a sound technical foundation. The project would be a good candidate for a Technical Assistance project to provide the information needed to develop alternatives for consideration in addressing passage at the 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

Southwest Oregon (Region 2)

Application Number: 219-2024-16620Project Type: RestorationProject Name: Quarter Creek Water Quality
Improvement ProjectProject Type: RestorationApplicant: Jackson SWCDCounty: JacksonRegion: Southwest OregonCounty: JacksonOWEB Request: \$36,019Total Cost: \$110,052

Application Description (from application abstract)

Quarter Creek is a tributary to 303(d) listed, TMDL-developed Antelope Creek and Little Butte Creek, just outside of Eagle Point, Oregon. Little Butte Creek joins with the Rogue River just beyond the city of Eagle Point and has been the focus of several projects in recent years. Like many previous projects, this project focuses on converting from flood irrigation to sprinkler irrigation in order to prevent contaminated tailwater from reaching important aquatic habitat for endangered species. In this project, an irrigation bulge pond will be dug and approximately 17 acres of pasture/hayground will be converted from flood to sprinkler irrigation. Jackson SWCD is the primary organization on this project. Although this particular project is just outside the current JSWCD/NRCS CIS it will provide cumulative and similar results.

Review Team Evaluation Strengths

- The project involves the right partners needed to develop a solution to the water quality issues resulting from flood irrigation.
- The work is fairly low cost for the watershed benefit and has direct support and involvement by the landowners.
- An irrigation and pasture management plan will be developed.
- While Quarter Creek is seasonal and does not support coho, the stream it flows into does contain habitat for steelhead and ESA-listed coho. Reducing fine sediment runoff is important to improving water quality.
- The applicant has the capacity to guide implementation and is experienced in developing solutions for irrigators.

Concerns

- There is shallow bedrock in the area and there have been no geological investigations to determine if there is adequate depth for pond construction.
- The use of a "big gun" sprinkler may still result in erosion issues considering the slope of the pasture. Alternative irrigation delivery methods should be considered.
- Although the budget for pond construction was based on bids, it appears high and without better detail in the budget description it is hard to determine whether this cost is reasonable.

Concluding Analysis

Irrigation water delivery to the property is provided on a 14-day schedule. By building a pond or "bulge" in the system, the irrigator will be able to utilize more efficient irrigation methods rather then the current flood approach. Severe erosion resulting from flooding on the heavy clay soils prompted the landowner to seek assistance for conversion to a more efficient high pressure system. The pond component is key to that conversion; however, there needs to be more assurance that the pond approach will work with the potential shallow bedrock issue. The project has the potential to improve irrigation efficiencies for the landowner, as well as help reduce run-off into the stream and improve water quality. The application would have been stronger if it had examined the potential for conserving water instream.

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

Southwest Oregon (Region 2)

Application Number: 219-2025-16627Project Type: RestorationProject Name: Williams River Quarry Falls Fish
Passage ImprovementProject Type: RestorationApplicant: Coos Watershed AssociationCounty: DouglasRegion: Southwest OregonCounty: DouglasOWEB Request: \$394,340Total Cost: \$496,890

Application Description (from application abstract)

In the Coos basin near Coos Bay, Oregon, the Williams River is a major tributary to the South Fork Coos River and provides important habitat for chinook and coho salmon, steelhead, cutthroat, and Pacific lamprey, among other aquatic species. In the 1960's, road building and quarry operations constrained the Williams River at the Five Mile Creek Quarry in Douglas County against a massive bedrock hillslope, drastically increasing the stream gradient and establishing the Quarry Falls. These falls are a major topic of concern and are the last barrier on the ODFW Statewide Fish Passage Priority List on the Millicoma Tree Farm within the Coos watershed. Coos Watershed Association (CoosWA) and Weyerhaeuser have collaborated to tackle the other major barriers on the Tree Farm (OWEB #212-2047 & #216-2012), and we are now focusing on tackling the last major barrier, the Quarry Falls. To address this, we propose to shift the 5000 Road nearly 50 feet to the northeast, widen the channel by up to 45 feet, and plant 400 trees and shrubs along 700 feet of stream. These activities will improve stream complexity, provide a future source of shade and wood, and improve adult and juvenile access to nearly 21 miles of the furthest extent of anadromous fish habitat in the Coos basin and habitat recently restored (OWEB # 214-2035). OWEB funds will fund project management, travel, supplies, contracted services, and indirect costs. Weyerhaeuser, CoosWA, and OR Department of Fish & Wildlife (ODFW) will be providing match to cover project designs, permitting, road relocation activities, technical assistance, and some indirect costs.

Review Team Evaluation Strengths

- The project is a resubmittal and the applicant addressed concerns from the previous evaluation related to the design approach and engineering. Additionally, a planting component was added to the project.
- A letter of support was provided by ODFW describing the importance of addressing the barrier, which may cause delays in the timing of spawning under certain flow conditions.
- This is the final barrier in the system and builds on other fish passage and extensive instream habitat restoration work both upstream and downstream of the site.
- The project will facilitate passage for multiple species including ESA-listed coho, with juveniles benefiting the most from the project.

Project partners have experience in successfully addressing challenging fish passage projects. The
application demonstrates strong working partnerships and commitment necessary to design, fund and
undertake a project of this magnitude.

Concerns

- Fish passage is not a priority limiting factor for coho in this watershed.
- There is a high cost relative to the expected fish benefit.
- The application described that the technical team involved in project development was split on what design alternatives to pursue. Additional information on those issues and how they were resolved would help in better understanding the selected alternative.
- It was not clear if the project was "shovel ready" or if it might take additional time to get to that stage.
- The attached landowner letter of support was for a different project.

Concluding Analysis

This project is a resubmittal. The approach to improve fish passage at the site should lessen gradient and flow velocity and assist in both adult and juvenile passage for multiple species. While passage is not a critical limiting factor in this system, the project will complete fish passage restoration efforts and connectivity between upstream and downstream habitats.

Review Team Recommendation to Staff

Fund

Review Team Priority 11 of 11

Review Team Recommended Amount \$394,340

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount

Application Evaluation for Williams River Quarry Falls Fish Passage Improvement, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

\$0

Staff Conditions

Southwest Oregon (Region 2)

Application Number: 219-2026-16636ProjProject Name: Lower Wasson Creek Riparian
RestorationProjApplicant: Smith River WCCouRegion: Southwest OregonCouOWEB Request: \$76,505Tota

Project Type: Restoration

County: Douglas Total Cost: \$163,007

Application Description (from application abstract)

The Wasson Creek drainage is located 15 miles NE of Reedsport OR and is majority federally owned and managed. The project area is located 19 miles up Smith River Rd, and occurs on private property bordered by the Siuslaw NF to the West, East and the South. The primary issue here is Riparian Process and Function. Multiple watershed and terrestrial functions will be benefited by addressing noxious weeds and restoring the riparian areas to native plant dominated forested lands. This project will remove and suppress Himalayan Blackberry (HBB) over 17.7 acres, by manual, mechanical and chemical means. Pretreatment will remove the bulk of the HBB biomass over a two year period. Larger tree stock will be planted, 2-3 foot stock. Post-planting treatments will be combined manual removal and herbicide treatments and will occur twice during year 3 and once for years 4-6. The need for subsequent treatments will be evaluated during years 5 and 6 to ensure escapement for plantings to the free to grow stage.SRWC and partners will continue to monitor plantings and treat HBB for a minimum for 4 years following tree planting. Project partners include: ODFW, USFS and Ecotrust Forest Management. Postplanting treatment is aimed at ensuring trees escape HBB influence and form a canopy capable of shading out future HBB growth. OWEB funds will be used for contracted services for the treatment of HBB, replanting of native species and in-house personnel.

Review Team Evaluation

Strengths

- The project is a resubmittal and the applicant addressed the previous review concerns regarding inconsistencies in the application metrics.
- The application includes a concise description of the watershed's limiting factors and the discussion of restoration alternatives was helpful in understanding how the proposed solution will address the limiting factors.
- The site preparation approach and the planting plan are reasonable and tailored to the site conditions.
- The resulting restoration of the riparian area will help improve riparian function, benefit water quality, and support future large wood recruitment to the stream.

Concerns

The concern remains about the plant establishment timeline. With the magnitude of the berry
infestation, six years of plant stewardship proposed in the application may not be enough time to get
the plantings to the free-to-grow state. The application would have been stronger is it had included a
contingency plan in case additional time is needed after six years of plant stewardship efforts.

Concluding Analysis

The project provides an opportunity to help restore native riparian function in this project reach and provide connectivity to healthy habitats upstream. The proposed restoration actions will benefit riparian function, as well as help improve water quality and restore future large wood recruitment to the area to benefit ESA-listed coho and other native salmonids. The challenging nature of the existing conditions may require additional post-restoration plan stewardship.

Review Team Recommendation to Staff

Fund

Review Team Priority 10 of 11

Review Team Recommended Amount \$76,505

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount \$0

Staff Conditions

Southwest Oregon (Region 2)

Application Number: 219-2027-16642Project TProject Name: Cattle Creek Instream RestorationApplicant: Partnership for the Umpqua RiversRegion: Southwest OregonCounty: IOWEB Request: \$74,561Total Cos

Project Type: Restoration

County: Douglas Total Cost: \$189,261

Application Description (from application abstract)

Instream fish habitat restoration work is proposed for Cattle Creek, a tributary to Cow Creek in the Lower Cow Creek 5th field watershed. Cattle Creek is located in South Umpqua Basin southwest of Riddle, in southern Douglas County. Cattle Creek is an important tributary of Cow Creek, providing low gradient habitat used by Oregon Coast coho, winter steelhead and other native fish. Cattle Creek has a medium to high intrinsic potential to support coho and a high relative spawner abundance, but lacks instream wood and has a bedrock and cobble dominated streambed. Rearing habitat is limited during both summer and winter. Cattle Creek is identified in the Lower Cow Creek Watershed Assessment (2003) and PUR Action Plan (2007) as needing instream work to help recover coho. Partners prioritized wood placement in Cattle Creek after the Horse Prairie fire burned through it in 2017. Across 1.2 miles of BLM and private timberland, instream restoration is proposed in Cattle Creek to improve the fish habitat quality by placing 113 logs and 22 trees at 31 sites. Moving quickly to improve stream habitat is allowing us to capitalize on the opportunity to use fire-killed and road hazard trees, felled during and after the fire in 2017, before they rot. This project is proposed to span across BLM and Roseburg Forest Products ownership and include the entire extent of coho habitat in Cattle Creek.

Review Team Evaluation Strengths

- The stream contains critical habitat for ESA-listed coho and the proposed actions have been identified in an action plan for the watershed.
- The project will address habitat complexity, a secondary limiting factor for coho.
- The project is ready for implementation with completed designs, making the project highly likely to succeed. The applicant has become proficient in implementing similar projects.
- There is gravel moving through the project reach. The proposed log jams are needed to capture spawning gravels.
- The project is time sensitive. Fire damaged logs will deteriorate if not placed in the upcoming field season.

Concerns

- The project does not address the primary limiting factor of water quantity for this stream.
- Any wood placed directly above road crossings needs to have special attention to make sure it is well-placed and anchored.

Concluding Analysis

The application laid out a project designed and ready for implementation. While the project does not address the primary limiting factor for the stream - water quantity, it does address an important secondary limiting factor and will help preserve stream integrity while the system recovers from recent wildfires.

Review Team Recommendation to Staff Fund

Review Team Priority 2 of 11

Review Team Recommended Amount \$74,561

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$74,561

Staff Conditions

None

Southwest Oregon (Region 2)

Application Number: 219-2028-16670Project Type: RestorationProject Name: Upper Phillips Dam Fish Passage
and Irrigation Efficiency ProjectProject Type: RestorationApplicant: Applegate Partnership, Inc.County: JacksonRegion: Southwest OregonCounty: JacksonOWEB Request: \$270,234Total Cost: \$376,657

Application Description (from application abstract)

The Upper Phillips Fish Passage and Irrigation Efficiency Project will restore fish passage at Upper Phillips Dam; install a new headgate and fish screen; and conserve water through piping 0.2 miles of irrigation ditch that serves 10 properties in Jackson County in the Rogue River Basin. The Upper Phillips Ditch diversion has 2 dams: a 5- foot concrete structure with a 4-foot pushup dam upstream. Improvements to the diversion will eliminate the pushup dam and a bypass channel will be created around the concrete structure. These dams are located on the Little Applegate River, a high priority, major tributary of the Applegate River. This project will provide fish passage to 49 miles of essential rearing and cold water habitat, improve water quality, and increase instream flows for Endangered Species Act-listed and State-listed species Coho salmon, steelhead, Pacific lamprey, and cutthroat trout. Irrigation structure efficiencies will reduce the amount of water diverted and conserved water will be left instream for the benefit of aquatic species in a DEQ-listed flow-limited stream. Two fish passage barriers below the dams have been removed and this project continues the momentum for restoring passage upstream. Designs for this project were developed under a 2015 OWEB Technical Assistance Grant and the project is a result of a decade-long partnership between the Upper Phillips Ditch Association and the Applegate Partnership and Watershed Council (APWC) and other partners, including Steve and Priscilla Weaver (landowners), Jackson County SWCD, OWRD, BLM, ODFW, Middle Rogue Steelheaders, Trout Unlimited, and the Rogue Basin Partnership.

Review Team Evaluation Strengths

- The project has the potential to gain an instream water right through use of the allocation of conserved water statute. Instream water will be protected downstream to the confluence with the Applegate River, a distance of approximately seven miles. Water quantity is a critical limiting factor in this watershed for ESA-listed coho.
- The project is a resubmittal. The amount of piping was reduced in this proposal. Project partners plan to leverage OWEB funding as match to help secure funding from other sources for piping the ditch.
- Besides benefiting the stream, the project will increase the efficiency of the water users.
- Fish passage barriers below this project have already been addressed. The next diversion point is 1,000 feet upstream and is a partial passage barrier and on the list for the applicant to address.

- The current plan is to combine the Upper and Lower Phillips Ditch Points of Diversion. This will create
 efficiencies as well as maximize the potential for conserved water instream.
- The applicant and Ditch associations are coordinating closely with OWRD.

Concerns

- The designs provided were the same ones provided with the previous submission. The applicant plans on working with NOAA to make sure designs meet fish passage criteria.
- It was still unclear how much water is currently diverted and how much would be diverted after implementation. Determining conserved water will be part of a second phase after the fish passage and ditch piping work is completed.
- It is unclear if the fish passage designs would be complete in time for implementation in the upcoming season. It may make sense to phase the project and do the headgate and fish screen work first.
- It is unclear if landowners support the plan to merge the two ditches.

Concluding Analysis

The project has potential to build on the instream flow improvements that have already been realized from previous projects downstream. Potential savings from this project have not been determined and would likely not be established until after the project was implemented, making it difficult to determine the cost/benefit. Fish passage designs need to meet both ODFW and NOAA fish passage criteria and advance coordination with these two agencies is critical. The applicant should consider if a Technical Assistance application to support fish passage design, work with land owners on ditch merger, and quantify water savings would be helpful in moving the project forward.

Review Team Recommendation to Staff

Fund

Review Team Priority 7 of 11

Review Team Recommended Amount \$270,234

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None Application Evaluation for Upper Phillips Dam Fish Passage and Irrigation Efficiency Project, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Recommendation

Do Not Fund; falls below staff-recommended funding line

Staff Recommended Amount

\$0

Staff Conditions

Southwest Oregon (Region 2)

Application Number: 219-2029-16681 Project Name: Jack and Hardscrabble Creeks Restoration Applicant: Elk Creek WC Region: Southwest Oregon OWEB Request: \$342,703 Project Type: Restoration

County: Douglas Total Cost: \$592,919

Application Description (from application abstract)

This project addresses key watershed problems in Jack and Hardscrabble Creeks, the two major tributaries of the Middle Elk Creek sub-watershed in the Elk Creek 5th-field watershed of the Umpgua Basin, west of Drain in North Douglas County, Oregon. Past and current land management practices have contributed to degraded instream coho habitat, riparian habitat and water quality, as well as fish passage barriers. The project is based on the recommendations of the Fish and Stream Habitat Inventory Findings and Restoration Action Plans for Jack Creek (2015) and Hardscrabble Creek (2016). Restoration components include:• Culvert replacement on Johney Creek (Jack Creek tributary) to improve access to 1.75 miles of high intrinsic potential coho habitat• Culvert replacement on Hardscrabble Creek before its failure impacts water quality. Low-water bridge replacement on Hardscrabble Creek to improve access to 2.5 miles of high intrinsic potential coho habitate 67 instream fish habitat structures along 3 miles of Jack and Hardscrabble Creeks (313 logs, 700 boulders, 20 whole trees, 200 Christmas trees) to increase instream habitat complexity• Brush removal, 1200 native trees, 504 native shrubs, and a 3-year herbicide regime to restore 12 riparian acres along 1.3 miles of Jack and Johney Creeks• 2.6 miles of wildlife-friendly riparian fencing, a railcar bridge and an off-channel livestock water system to completely exclude livestock from 1.3 miles of Jack and Johney Creeks. • 5000 willow cuttings to provide shade, capture bedload and enhance beaver habitatThe Woolley family (Hardscrabble Ranch, LLC) owns the land and is a key contributor to this project. Other partners include OWEB, BLM, ODFW, Douglas Soil and Water Conservation District and the Umpqua Fish Enhancement Derby.

Review Team Evaluation Strengths

- The landowner and property manager are committed to making the project successful. The application demonstrates that effective partnerships are in place to develop, implement, and maintain the work for restoration benefits. The project will also help increase the landowner's effectiveness in managing the property for both agricultural and forestry purposes.
- The landowner has rapport with other landowners in the watershed and is open to using the project as an outreach tool.
- The project will benefit ESA-listed coho and other native salmonid habitat as well as help to improve water quality.

- The buffer setbacks are wider than is typical and all fencing is wildlife friendly.
- The applicant recognizes the need to get ODFW & NOAA involved early for approval on fish passage projects.
- The designs for instream structures on areas of bedrock are site-appropriate.
- ODFW & Douglas SWCD are supportive of the project.

Concerns

- The geotechnical work has not been done for the crossing replacements.
- The size of some of the logs seem small for the site. The applicant will need to work closely with ODFW to make sure key pieces meet sizing criteria.

Concluding Analysis

The project has a high likelihood of achieving project objectives and improving both instream habitat for ESA-listed coho, as well as helping to improve water quality. The project will serve as a great opportunity for outreach to the local agricultural community demonstrating a wide variety of approaches to stream restoration and how restoration can support the management of the property. Working closely with partner agencies and the landowners is key to bringing this project to fruition.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 5 of 11

Review Team Recommended Amount \$342,703

Review Team Conditions

Coordinate with ODFW on instream log sizing.

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund with Conditions

Staff Recommended Amount

\$342,703

Staff Conditions

Coordinate with ODFW on instream log sizing.
Southwest Oregon (Region 2)

Application Number: 219-2030-16687 **Project Name:** Little Butte Creek River Mile 13 Instream and Riparian Habitat Restoration Project

Applicant: The Freshwater Trust

Region: Southwest Oregon

OWEB Request: \$357,866

Project Type: Restoration

County: Jackson Total Cost: \$489,899

Application Description (from application abstract)

The proposed project is located on private lands at river mile 13 of Little Butte Creek in Jackson County near Eagle Point. Little Butte is a tributary of the Rogue River and is considered a priority stream at the state and federal level for endangered coho salmon recovery. The Creek also has a 303(d) listing for temperature, bacteria, and sedimentation. Other limiting factors include: reduced large wood supply; lack of channel complexity and aquatic habitat; sediment impacted spawning surfaces due to erosion; degradation of riparian forests; and high water temperatures due to irrigation withdrawals and lack of shade. The proposed work will include placement of 11 large wood structures to increase fish and wildlife habitat and reduce erosion by stabilizing a portion of exposed bank. Riparian revegetation will occur on 2.3 acres with seven years of plant establishment and noxious weed suppression. Native plants with provide shade, reduce bank erosion, filter nutrients, and become large wood recruitment in the future. The project is part of a larger effort along with the voluntary landowners and City of Medford, and builds on an adjacent project previously funded with an OWEB Restoration Grant.

Review Team Evaluation Strengths

- This project will build on similar restoration work in the area undertaken by the applicant and other partners.
- The project area is water quality limited and suffers from high summer stream temperatures. The riparian restoration work will help improve water quality.
- The watershed provides critical habitat for ESA-listed coho.

Concerns

- The application presented no clear proposed action and lacked design information for large wood and bank stabilization activities.
- Without design information it was unclear whether the cost to benefit ratio was reasonable.
- The application would have been stronger if it had included assurances the project would be protected and maintained for the long term.

Concluding Analysis

The project has potential to build on other restoration efforts in the area. Actions to improve water quality, such as restoring the riparian area, are important in this water quality limited system which contains critical habitat for ESA-listed coho. However, without design information it was difficult to assess the project and its likelihood of success. Including design information will strengthen the application if resubmitted.

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

Southwest Oregon (Region 2)

Application Number: 219-2031-16688Project Name: Page Creek Aquatic Restoration
Activities Phase 1Project Name: Page Creek Aquatic Restoration
Activities Phase 1Applicant: Illinois Valley WCRegion: Southwest OregonCOWEB Request: \$145,243Te

Project Type: Restoration

County: Josephine Total Cost: \$219,096

Application Description (from application abstract)

A tributary of the East Fork Illinois River, Page Creek is approximately 12 miles south of Cave Junction near the town of Takilma. The East Fork is a primary contributor to the Illinois River basin salmonid population. At least 50% of the Rogue River basin coho production comes from the Illinois River (FS/BLM, 2000). The Illinois River has a core, functionally independent population of SONCC coho salmon at high risk of extinction. Altered hydrologic function and degraded riparian forest conditions are the documented key limiting stresses for that species in the subbasin (NOAA, 2014). Negative effects of historic land use practices in Page Creek include channel modification, alteration of the riparian vegetative community (including introduction of invasive species), decreased off-channel habitat features, and reduced large wood recruitment. The straightened and simplified channel is mostly disconnected from it's floodplain. Two barriers to aquatic organism passage are located in the Phase 1 project reach, limiting access to one mile of Page Creek that is designated high Intrinsic Potential (high IP) for SONCC coho salmon. Funding is sought to collaboratively implement the recommended restoration strategy recently developed for the project (OWEB funded) reach that directly addresses key limiting stresses for stream and habitat restoration for a one-half mile reach of Page Creek. Specifically, 11 large wood structures will be constructed, a culvert removed, invasive plants treated, native riparian plants established, and a roughened channel constructed to replace a fish passage barrier. These recommended activities directly address stresses and recovery strategies of the Final Recovery Plan for the SONCC ESU of Coho Salmon (NOAA, 2014) and priority restoration actions of the Forest's Watershed Restoration Action Plan for the East Fork Illinois River watershed (USFS, 2014). Phase 1 project partners include the applicant, the USFS, and a private landowner.

- The landowner is engaged and highly supportive of the project.
- The contractor selected for the instream work has a proven track record.
- The project is the result of an OWEB Technical Assistance grant.

- Fish passage restoration is a high priority for the Rogue River. Improving passage at the diversion point will provide access to fish habitat above the site. Two culverts approximately one half mile upstream, which currently impede fish passage, are scheduled for removal or replacement.
- The Illinois River system is a stronghold for ESA-listed coho. This cold water stream provides critical habitat for this species and other native fish.
- The site has an intact riparian plant community with diverse species and age classes.

- The application is incohesive and unclear.
- The design approach will improve passage; however, the approach does not address altered hydrologic function. More information on the design and why it was selected would be helpful to the review.
- The application identified another agricultural user of the ditch, but there was no evidence that producer was supportive of the project.
- Some of the large wood pieces appear to be too small for this stream. The applicant is encouraged to
 work with ODFW to assure key pieces are sized appropriately.
- The wrap-up section of the application is incomplete and there is no discussion of design alternatives. Additional design detail would have been helpful in the evaluation process.
- The need and description for the riparian work was unclear and lacked detail.

Concluding Analysis

The project builds off other restoration efforts in the sub-watershed. There is an expectation that projects resulting from a Technical Assistance grant will have a higher caliber of detail and explanatory information as a result of the investment. Future submissions would be strengthened by including more information on design and design alternatives; support letters from the USFS and the other irrigators using this ditch; more clarity on the current situation and the ecological uplift expected from restoration work; and reviewing the budget for inconsistencies.

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

Southwest Oregon (Region 2)

Application Number: 219-2032-16692Project Type: RestorationProject Name: West Fork Evans Creek Large
Woody Debris ProjectProject Type: RestorationApplicant: Applegate Partnership, Inc.County: JacksonRegion: Southwest OregonCounty: JacksonOWEB Request: \$773,145Total Cost: \$1,134,290

Application Description (from application abstract)

The West Fork Evans Creek Large Woody Debris (LWD) Project will improve spawning and rearing habitat along approximately 11 miles of the West Fork Evans and Sand Creeks in Jackson County through a partnership between Olympic Resource Management, Silver Butte Timber Company, Lone Rock Resources, BLM, Seven Basins Watershed Council, and the Applegate Partnership & Watershed Council. West Fork Evans Creek is designated as a "core area" and the highest priority for restoration under the Final Recovery Plan for SONCC Coho salmon. In addition to ESA-listed Coho salmon, the project will benefit fall Chinook salmon, summer and winter steelhead, and cutthroat trout. Current BLM and ODFW surveys have indicated a decline in the coho population of West Fork Evans Creek. Past management practices in the watershed have reduced the amount of LWD instream, habitat complexity, and pool habitat; modified instream habitat; and increased sedimentation. This project will install 152 instream LWD structures and 18 blockades to exclude OHV use from the creek and adjacent riparian area. These actions will increase the quality and quantity of over-summer and over-winter rearing habitat for juveniles, improve migration and spawning habitat for adults, increase macroinvertebrate populations, improve habitat and stream channel complexity, increase the accrual and retention of spawning gravels, improve riparian health, and reduce sedimentation. These factors will increase spawning success and juvenile survival rates thereby supporting fish populations. This proposal will support fish population recovery for ESA-listed and state-listed species and address DEQ-listed limiting factors. Partners include Olympic Resource Management, Silver Butte Timber Company, Lone Rock Resources, BLM, Seven Basins WC, ODFW, Rogue Basin Partnership, and Middle Rogue Steelheaders.

- Engaging private timber companies has been difficult in the Rogue Basin. This project involves three
 industrial timber companies in a meaningful way which will help open up future opportunities for
 restoration collaboration.
- West Fork Evans Creek is a cold water stream which provides important habitat to ESA-listed coho.
- OHV use is high in this watershed and the decomposed granitics common in this system are subject to severe erosion in the unmanaged high-use areas. Activities to address this problem on a large scale are needed.

- There is a good cost to benefit ratio for the instream restoration work and the amount of habitat to be treated.
- The project match from BLM is time-sensitive and will be lost if not used in this upcoming field season.

- It is not clear that the access restriction by installing the ditch and large rock "tank traps" will be effective in reducing usage long-term. Off-road use will need to be closely monitored into the future.
- Due to the high cost of the request, the applicant offered a phased project alternative to reduce costs. However, this approach may come with loss of efficiencies through additional mobilization.
- The scope of the project may be larger than necessary. Some upper reaches have started to naturally recruit wood and trees will continue to come down on their own accord.

Concluding Analysis

The stream is important for ESA-listed coho and is identified in NOAA's SONC Coho Salmon Recovery Plan and the draft Upper Rogue Coho Salmon Strategic Action Plan as a high priority area for restoration. Project activities will help benefit habitat as well as help improve water quality. OHV use has impacted this watershed for a long time. While the application includes appropriate measures to reduce impacts, along-term comprehensive management plan with a strong outreach approach is needed to address OHV use and help mitigate for the impacts. The project is a great opportunity to approach restoration across a large number of stream miles and spanning four land ownerships in a meaningful way.

Review Team Recommendation to Staff

Fund

Review Team Priority 6 of 11

Review Team Recommended Amount \$773,145

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Application Evaluation for West Fork Evans Creek Large Woody Debris Project, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Fund

Staff Recommended Amount

\$773,145

Staff Conditions

None

Southwest Oregon (Region 2)

Application Number: 219-2033-16716 Project Name: Cedar Creek Enhancement Applicant: Curry SWCD Region: Southwest Oregon OWEB Request: \$89,787 Project Type: Restoration

County: Curry Total Cost: \$225,090

Application Description (from application abstract)

The project is located in the Cedar Creek subwatershed of Elk River, on the southern Oregon Coast. Cedar Creek is a tributary to the Elk River estuary that originates on the uplifted coastal terrace that separates the Elk River and Sixes River. The stream quickly descends from the coastal terrace and forms a short stream valley that then opens onto the Elk River floodplain. This project is needed to restore floodway capacity along 3700 feet of the Cedar Creek stream corridor so that the channel can develop hydrologic floodplain connectivity and complex instream habitat without diverting onto adjacent pastureland. Project components include the construction of a contiguous floodway and new segments of stream channel, the installation of log structures, the construction of grade control on the new channel to preserve existing wetland and off-channel habitat features, the replacement of a road crossing with a bridge, and the fencing and planting of a riparian reserve. Project partners include: ODFW, the Wild Salmon Center, the NOAA Restoration Center, the Wahl Family (landowner), the Wild Rivers Coast Alliance, the Pacific Marine and Estuarine Partnership, and the Elk River Coho Business Plan Partnership.

- The landowner is highly engaged and supportive of the project. There is a conservation easement in place to protect riparian areas on the property and the project builds on previous restoration work. The landowner is conservation minded and this is clearly reflected in the approach to management of the property, which provides high ecological benefit on working lands.
- Strong partnerships and commitment to project success are clearly demonstrated in the application.
- The proposed design aligns with the project objectives. The project designer has completed a
 topographic survey and incorporated wetland connectivity into the approach. The design also allows
 beaver activity to continue.
- The NOAA engineer reviewed the designs and has no fish passage concerns with the approach.
- This stream provides critical habitat for ESA-listed coho and the project will address key limiting factors in the stream – lack of complexity and water quality.
- A comprehensive monitoring strategy is proposed, including four years of post-project pre-smolt trapping and aquatic habitat inventory work.
- The design will break up gully-forming flows.

- The project focused on the hydrology and drainage. The application would have been further strengthened by including more discussion on the current fish use and other increased benefits from project implementation.
- The site has constraints caused by human use; the project maintains an artificial channel.

Concluding Analysis

The landowner's commitment and support for the project and demonstrated conservation approach to land management will ensure the project's long-term success. The project can serve as a demonstration opportunity to showcase how agricultural producers can maintain a livelihood while also providing ecological benefits. The project is consistent with actions identified in the Elk River Coho Salmon Strategic Action Plan.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 11

Review Team Recommended Amount \$89,787

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Staff Recommended Amount \$89,787

Staff Conditions

None

Application Evaluation for Cedar Creek Enhancement, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Southwest Oregon (Region 2)

Application Number: 219-2034-16585PrProject Name: White Ditch Sucker Creek Flow
Restoration & Fish Passage StudyPrApplicant: Illinois Valley SWCDCoRegion: Southwest OregonCo

OWEB Request: \$68,145

Project Type: Technical Assistance

County: Josephine Total Cost: \$146,045

Application Description (from application abstract)

This project will address low flow conditions and fish passage on Sucker Creek of the Illinois River basin, near Cave Junction in Josephine County. The project area is the White Ditch irrigation conveyance system, which diverts an approximated allowable 7.9cfs of water from Sucker Creek. Sucker Creek is DEQ 303(d) listed as water quality impaired for not meeting the temperature standard, and is also limited by summer low-flow conditions. The large pushup dam at the point of diversion, known as the White-Brown pushup dam, is a passage barrier for 26 miles of upstream habitat and summer temperature refugia for juvenile salmonids. The White Ditch is an inefficient water delivery system, with users citing difficulty accessing their water rights, and an open and unlined design that allows for water losses. This proposed project will research and map the water rights served by the ditch, examine and analyze existing infrastructure (including topographic and ditch loss surveys), develop alternatives (for conveyance, on-farm irrigation, and pushup dam), select the preferred alternative, and develop preliminary designs and cost estimates for the preferred alternative. The preferred alternative will meet irrigator needs, allow conserved water to remain instream, and improve fish passage. Project partners include landowners, Trout Unlimited, Natural Resources Conservation Service, Oregon Department of Agriculture, Rogue Basin Partnership, Bureau of Land Management, and Southern Oregon Fly Fishers.

Review Team Evaluation Strengths

Landowner interest is high for developing alternatives to

- Landowner interest is high for developing alternatives to the current water delivery system. The
 project provides a great opportunity to work with irrigators on allocation of conserved water. The
 oldest water right is 1858.
- There are multiple users associated with the diversion. The application clearly lays out the issues and need for a Technical Assistance project to develop alternative solutions. The approach to the problem is clear and likely to achieve project objectives.
- The structure is a seasonal push-up dam which is in place during the summer irrigation season and blocks upstream juvenile migration to 26 miles of habitat. This barrier is ranked number two in the Illinois River watershed for remediation by ODFW and is the lowest barrier on Sucker Creek.
- The resulting restoration project will address ESA-listed coho population limiting factors of altered hydrological function and water quality concerns related to temperature and sediment.

- Using infiltration galleries as alternatives to push-up dams has proven successful in the Illinois River watershed.
- NRCS is seeking support to develop a focus area to improve irrigation systems in the area.

- Before design options can be determined, the associated water rights need to be clarified. Assurance is needed that the allocation of conserved water statute will be included in the final product.
- Alternatives for improving the current system could be expensive due to the characteristics of the geography and the conveyance systems that will need to be built.

Concluding Analysis

White Ditch is an open and unlined 4.5 mile irrigation conveyance. The point of diversion is a large seasonal push-up dam that restricts upstream fish passage for juveniles. Multiple water users on White Ditch have issues with reliably receiving water due to inefficient infrastructure, lack of clarity on individual water rights, and changes in agricultural crops. Most users flood irrigate with a few that utilize more efficient systems. Before solutions to the current irrigation system can be determined, clarification of water rights associated with the ditch, their rates and priority dates, and which lands they serve is needed. Once this is completed, an alternate diversion approach and conveyance system can be designed and irrigation systems can be upgraded. The application clearly described the issues associated with the current scenario and posed a reasonable approach to developing implementable restoration projects on working lands.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 2 of 8

Review Team Recommended Amount \$68,145

Review Team Conditions

Grantee must investigate and attempt to quantify the potential for allocation of conserved water.

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Fund with Conditions

Staff Recommended Amount

\$68,145

Staff Conditions

Grantee shall investigate and quantify the potential for allocation of conserved water and include findings and recommendations in the project completion report.

Southwest Oregon (Region 2)

Application Description (from application abstract)

Lack of slow-water refugia and off-channel habitat has been identified as one of the most critical limiting factors affecting Oregon Coast ESU coho salmon recovery. In the Coquille Basin, these habitats, including tidal wetland habitats, have been converted to pasture using tidegate infrastructure to the extent that less than 5% of the historic acreage of wetlands currently exists. Restoration of tidal wetlands is a top priority for coho recovery in federal, state and local action plans. The Coaledo Drainage District Tidegate Replacement and Fish Passage Project (Coquille, OR, Coos County) will address this limiting factor by creating technical designs to restore fish passage to a 9,100 acre sub-watershed containing 11.4 miles of coho habitat and 490 acres of tidal wetland habitat, of which 289 acres are a natural wetland owned and protected by ODFW. Prioritized as a high potential restoration project by a tidegate survey and optimization model, this project is the first step in implementing habitat restoration for coho while also providing improved pasture infrastructure and water management for the Coaledo Drainage District. To achieve this, the CoqWA is partnering with ODFW, Coos SWCD, USFWS and the Coaledo Drainage District. OWEB funds are needed to 1) create and finalize structural and geotechnical engineering designs for tidegate replacement to meet fish passage requirements; 2) create and approve a water management plan with the drainage district and project partners; 3) write and submit permits for tidegate replacement; 4) coordinate meetings between project partners and stakeholders to ensure adequate input at all stages of the design process. Together these actions will result in a fish passage restoration project and working landscapes initiative that is ready for implementation. Additionally, this project will serve as a catalyst for the development of additional restoration and working lands projects within the Coaledo Drainage District.

- The project builds on the momentum of China Camp Creek and Winter Lake restoration projects and improves access to additional tidal wetland habitats.
- The resulting restoration project will address the number one limiting factor for ESA-listed coho: lack of slow-water refugia and off-channel habitat.

- The applicant has a track record of successfully working with partners and regulatory agencies to find solutions to tide gate issues. Additionally, the applicant has demonstrated ability and capacity to understand landowners needs and concerns, as well as those of the natural resources they are working to restore.
- A tide gate inventory undertaken by project partners ranked this tide gate as the number #3 priority in the Coquille River watershed.

- The application did not include information about the habitat quality of the acreage behind the tide gate structure.
- The data needed to inform the engineering design was not clearly defined.
- The resulting restoration project will be expensive due to the characteristics of the site and the systems that will need to be built.
- It is critical that a water management plan be developed as a deliverable of this proposal.

Concluding Analysis

Addressing failing tide gate infrastructure in a way that benefits fish access and restores tidal wetland habitats is a high priority. This proposal builds on recent momentum within the Coquille River drainage and on the Oregon coast to address tide gates and tidal restoration. The project clearly laid out the link to The Coquille Subbasin Plan (CIT, 2007) and the NOAA Recovery Plan for ESA-listed coho and was identified as a priority through a habitat modeling and tide gate prioritization process. The habitats behind these tide gates provide important refuge for ESA-listed coho during winter months, improving their chances for survival. The products from this technical assistance work have a high likelihood of resulting in a restoration proposal.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 1 of 8

Review Team Recommended Amount \$74,816

Review Team Conditions

A Water Management Plan must be developed as a final product of the project.

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Fund with Conditions

Staff Recommended Amount \$74,816

Staff Conditions

The project completion report shall include a water management plan.

Southwest Oregon (Region 2)

Application Number: 219-2036-16622 Pr Project Name: Rogue Basin Partners Collaboration

Project Type: Technical Assistance

Project Name: Rogue Basin Partners Collaboratio for Engineering & Technical Services

Applicant: Rogue Basin Partnership

Region: Southwest Oregon

OWEB Request: \$74,800

County: Jackson Total Cost: \$151,466

Application Description (from application abstract)

This project will take place in three priority Rogue Basin watershed council geographies: Applegate, Seven Basins and Rogue River. The Rogue River Basin has over a thousand human built barriers that inhibit native fish passage and sediment transport, which in turn impacts the long-term viability of the fisheries of the Rogue Basin including: native spring and fall Chinook salmon, ESA listed "threatened" coho salmon, winter and summer steelhead, cutthroat trout, rainbow trout and Pacific lamprey, among other native fishes. The project proposes to contract with qualified engineering contractors to to obtain engineering design and technical assistance to develop alternatives, 30% engineering designs, water rights investigation and irrigation system designs for up to 6 priority dam removals (2 in each geography: Applegate, Seven Basins, Rogue River) and enable partners to reduce the time it takes to move projects from idea to implementation. The Rogue Basin Partnership (RBP) Fish Passage Working Group is coordinating efforts with support and participation from working group members: Applegate Partnership & Watershed Council and Rogue River Watershed Council. Each organization works to address priority fish passage projects, including dam removal and culvert replacements. These barriers are primarily located on privately owned land and require significant landowner communication to reach agreement on how to improve fish passage.

Review Team Evaluation

Strengths

- Restoring fish passage in the Rogue River watershed is a significant need and priority. There has been a great deal of work and success on this effort.
- Engineering can be a bottleneck for getting projects developed and implemented, especially in a
 manner responsive to the interest and needs of landowners. This project will provide the opportunity
 to react quickly to restore fish passage opportunities in three different basins.
- The resulting restoration will help address a key limiting stress of altered hydrological function for ESA-listed coho.
- Four of the six barriers identified are considered high priority barriers in the Rogue River system.

- It was unclear how the project locations were prioritized, and whether identified priority fish barriers factored into the prioritization.
- Without site-specific details for prospective project sites, it is unclear how the applicant will determine in advance whether there is sufficient time and budget for each proposed barrier.
- With such a widespread effort, there were no letters of support provided.
- More detail on the outreach portion of the proposal would have been beneficial to the review. It was unclear whether the landowners associated with the identified barriers had already been contacted.
- Two of the barriers identified are not a high priority for ODFW.
- 30% designs may be insufficient for developing sound restoration project budgets.
- The application did not include a contingency plan for addressing all six locations in the event of cost overruns.

Concluding Analysis

This project builds on the momentum of successful fish passage projects in the Rogue basin and presents a proactive option of providing engineering services for passage projects in a timely manner. The proposal was more difficult to evaluate than traditional technical assistance projects which generally focus on one location and provide site specific details. Being responsive to potential fish passage projects in priority streams allows project partners to capitalize on landowner interest to develop successful restoration projects.

Review Team Recommendation to Staff Fund

Review Team Priority 8 of 8

Review Team Recommended Amount \$74,800

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Staff Recommended Amount

\$0

Staff Conditions

N/A

Southwest Oregon (Region 2)

Application Number: 219-2037-16623

Project Type: Technical Assistance

Project Name: Winter Lake Phase 3: Hydrologic Enhancement Design
Applicant: Coos SWCD
Region: Southwest Oregon
OWEB Request: \$74,659

County: Coos Total Cost: \$112,458

Application Description (from application abstract)

The Coos Soil and Water Conservation District (Coos SWCD) & team are developing the Winter Lake Phase III tidal floodplain hydrologic connectivity project. The project is within the Beaver Slough Drainage District (BSDD) floodplain (River Mile 20.5) of the Coquille River, 2.5 miles west of Coquille, Coos County, OR. Historical water management through installation of tidegates, berms, and channel excavation in the early 1900's has disconnected fish access to over 14,000 acres of tidal floodplain habitat in the Coquille River basin has severely truncating production potential for coho. Early tidegate infrastructure has changed little since tidegates were installed in the early 1900's. Oregon Coast (OC) coho have declined from ~150,000 average /412,000 peak adult fish prior to Euro-settlement to ~18,000 annually today. Tidegate infrastructure was installed to drain wetland habitats, and does reduce water levels sufficiently for modest pasture grass production, however, there has been limited ability to deliver water inflow to pastures for irrigation. In 2017 the largest tidegate infrastructure within the Pacific Coast was installed with the C3P tidegate project on the BSDD (Winter Lake Phase I). In 2018 installation of ~8.0 miles of tidal channel was completed in Unit 2 of Winter Lake (Phase II). Coos SWCD in coordination with Oregon Department of Fish and Wildlife, BSDD, The Nature Conservancy (TNC), and landowners are proposing to develop engineering and design for replacement of undersized culverts and installation of swale channels/grassed waterways that will critically enhance the capacity of BSDD Units 1 and 3 to produce OC coho juveniles and pasture grass due to enhanced hydrologic connectivity. This project will provide the infrastructure necessary to fully utilize the investment developed through Phase I and II. The project team includes: SWCD, ODFW, TNC, and BSDD; with additional partnership from the Coquille Watershed Council and Coquille Tribe.

- The project is within the footprint of the China Camp Creek Tidegate Replacement Project. The land behind the completed project includes three units with extensive channel and riparian restoration completed in Unit 2. Units 1 and 3 were reserved primarily for agricultural purposes. This project will result in designs for channel restoration compatible with agricultural practices in Units 1 and 3.
- The applicant and regulatory agencies are engaging early with the landowners.

- The project will result in additional habitat for over wintering ESA-listed coho, as well as help landowners manage and irrigate their agricultural properties during the summer months.
- The project addresses critical habitat for a number of fish species. About 5% of historic tidal wetlands remain in the Coquille valley, making landowner interest in restoring these valuable habitats notable.
- A Water Management Plan is already in place and allows water exchange with the tide cycle. During
 winter months coho can access units 1 & 3. The design work proposed would enhance access to
 habitat in these two units by replacing existing gated culverts with slide gates and providing additional
 channel systems for fish access as well as improving their ability to move back to the mainstem as
 winter flows recede.
- NRCS has done preliminary work to explore water quality projects with landowners through the EQIP program.
- The fencing plan will help protect improvements to the channel system.

- The current Water Management Plan will need to be updated.
- The existing infrastructure and proposed channel work will be designed to maximize landowner benefits. The resulting channel network design will be more simplified than in Unit 2 and may not provide high benefits for fish and tidal wetlands.
- The archeological cost appeared to be under budgeted because of project size and potential sites of cultural significance.
- The resulting restoration application will be expensive based on the costs of creating the new channel network for the Unit 2 restoration.

Concluding Analysis

Units 1 and 3 were designated as primarily agricultural units under the China Camp Creek project and the Water Management Plan was designed accordingly taking into account that coho would have access to these units during the winter months. The resulting restoration work will be costly based on costs from the Unit 2 channel restoration work and project partners will have to develop a strategy to raise those funds early on. A clear articulation of the watershed benefits of the proposed restoration will help determine the cost effectiveness.

Review Team Recommendation to Staff Fund

Review Team Priority 6 of 8

Review Team Recommended Amount \$74,659

Review Team Conditions

Application Evaluation for Winter Lake Phase 3: Hydrologic Enhancement Design, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

None

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount

\$0

Staff Conditions

N/A

Southwest Oregon (Region 2)

Application Number: 219-2038-16643Project Type: Technical AssistanceProject Name: Olalla Creek and Tributaries Fish
Passage and Enhancement DesignProject Type: Technical AssistanceApplicant: Partnership for the Umpqua RiversCounty: DouglasRegion: Southwest OregonCounty: DouglasOWEB Request: \$26,408Total Cost: \$33,808

Application Description (from application abstract)

Olalla Creek and three tributaries, located in the southern part of the 103,000 acre Olalla-Lookingglass Creek Watershed, are identified as needing improved fish passage and fish habitat enhancement. According to Oregon Department of Fish and Wildlife (ODFW) High Intrinsic Potential (HIP) maps, Olalla Creek, Byron Creek, and Bushnell Creek have high potential to provide guality spawning and rearing habitat for coho salmon and steelhead. Old Lane Creek was not surveyed for HIP, but it does have spawning surveys that ODFW conducts and the ODFW Habitat Restoration Biologist confirmed that the creek is suitable for coho salmon. Gordon Hanek, Byron Creek Estates Road Master, identified two deteriorating culverts maintained by his rural home owners association. After discussing this with other residents, he recruited two more landowners interested in participating in stream restoration work. Working with ODFW and PUR staff, the group formulated a plan to not only replace the culverts, but also restore fish habitat. To address limiting factors to fish production in Olalla Creek, Byron Creek, Bushnell Creek, and Old Lane Creek we are seeking OWEB TA funds to 1) complete site surveys at the two culverts, 2) produce culvert designs, 3) work with PUR Monitoring Coordinator to develop a monitoring plan, 4) work with the landowners on selecting materials for instream placement, 5) design instream fish habitat structures on Olalla and Byron Creek to enhance habitat, 6) work with Byron Creek Estates on outreach for future restoration projects and 7) prepare the OWEB restoration grant application for submission. Partners for this Technical Assistance Grant includes ODFW, Byron Creek Estates, Gordon Hanek, Melissa Garcia Perry and Heather Robbins-Hinton.

- Above the barrier there are two miles of medium to high intrinsic value habitat for ESA-listed coho, indicating high potential for restoration given the current poor habitat quality.
- The project will add instream habitat structures to 0.5 miles of stream to help address instream complexity which is a secondary limiting factor for ESA-listed coho.
- NRCS selected this sub-watershed as one of 16 in the nation for implementing drinking water source protection plans through the National Water Quality Initiative Project.
- The project partners have a sound track record of turning Technical Assistance projects into successful on-the-ground restoration.

- Project support by the landowners is clearly high based on the impressive letters of support provided in the application.
- A Professional Engineer has been identified to undertake the bridge designs.

• The primary limiting factor for this sub-basin is water quality yet the project does not describe any activities to address that concern.

Concluding Analysis

The project partners have a track record of designing and implementing successful fish passage and fish habitat enhancement projects. The project will address a stream reach with high intrinsic potential habitats but in need of actions to improve instream complexity to increase productivity. The project will result in implementable designs to improve stream conditions and restore fish access to two miles of spawning and rearing habitat.

Review Team Recommendation to Staff Fund

Review Team Priority 5 of 8

Review Team Recommended Amount \$26,408

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$26,408

Staff Conditions

Application Evaluation for Olalla Creek and Tributaries Fish Passage and Enhancement Design , Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

None

Southwest Oregon (Region 2)

Application Number: 219-2039-16660Project Name: Sykes Creek Fish Passage ProjectApplicant: Applegate Partnership, Inc.Region: Southwest OregonOWEB Request: \$67,580

Project Type: Technical Assistance

County: Jackson Total Cost: \$85,278

Application Description (from application abstract)

The project is located on Sykes Creek, a tributary of Evans Creek. Sykes Creek provides habitat for summer and winter steelhead and cutthroat trout. Currently fish passage is limited by man-made barriers. Removal of the barriers will provide passage for adult and juvenile steelhead for 1.7 miles of habitat and 2.7 miles of cutthroat trout habitat. Over-summering fish will have passage to critical cold water habitat during low summer flows which will increase survival. Additionally, passage will be provided for adult fish to spawning habitat. This project will develop designs for removal of 7 concrete barriers consisting of 4 small dams, 2 concrete fords, and a box culvert along 0.5 miles of on Sykes Creek, a tributary of Evans Creek in Jackson County, Oregon. One dam is located at River mile 2.5, the 6 other barriers are located on contiguous properties between river mile 3 and 3.4. The barriers will be removed and the box culvert will be replaced with a bridge. Additionally, irrigation designs (pump systems) will be provided for two of the dams that currently irrigate, and we will work with landowners to develop designs that will improve fish habitat and riparian areas along the project reach. The APWC and SWCD will provide outreach to landowners and assist in developing on site irrigation efficiency projects and the water rights from 1 dam will be donated as an instream lease.Project partners include landowners, Jackson County Soil & Water Conservation District, Seven Basins Watershed Council, United States Forest Service, Bureau of Land Management, Oregon Department of Fish & Wildlife, Oregon Water Resources Department, Rogue Basin Partnership, and Middle Rogue Steelheaders.

- The project will address the last set of barriers on Sykes Creek, restoring both fish passage and sediment transport to downstream reaches. Additionally, the effort incorporates an instream flow restoration component with the land owners in support.
- The application is well written, organized and clearly described the project need and design approach.
- This stream is a source of cool water refugia for both summer and winter runs of steelhead and cutthroat trout.
- The applicant has demonstrated the capacity and ability to successfully implement fish passage projects from the design phase through implementation.

• The water rights associated with the diversions are junior rights (1974) thus any conserved water may not have instream flow benefits because they are subject to withdrawal by senior users.

Concluding Analysis

Restoring fish passage and flow restoration address primary limiting factors for ESA-listed coho as well as steelhead and cutthroat trout in the Rogue River basin. The project will design fish passage alternatives and incorporate instream flow restoration for the seven remaining barriers on 1½ miles of Sykes Creek. The project, once implemented, will improve fish passage to 1.7 miles of stream to anadromy and benefit in-stream habitat and water quantity for all life stages of fish species.

Review Team Recommendation to Staff Fund

Review Team Priority 3 of 8

Review Team Recommended Amount \$67,580

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$67,580

Staff Conditions

None

Southwest Oregon (Region 2)

Application Number: 219-2040-16669Project Type: Technical AssistanceProject Name: South Fork Coos River Road
Assessment and Project DevelopmentProject Type: Technical AssistanceApplicant: Coos Watershed AssociationCounty: CoosRegion: Southwest OregonCounty: CoosOWEB Request: \$68,942Total Cost: \$90,130

Application Description (from application abstract)

The South Fork Coos River and its tributaries support numerous species of anadromous salmonids and resident fish. These tributaries are very important for refuge from high stream flows and unfavorable summer water temperatures. Surrounding these streams are a network of both private and federal forest roads. Fine sediment from these roads can have significant effects on aquatic habitat and water quality. Fish passage barriers and impediments can fragment stream reaches limiting access to valuable habitat. This grant will fund a road inventory to evaluate approximately 240 miles of roads that drain directly to the South Fork Coos River and its highly valuable tributary systems. We will use a protocol designed by the US Forest Service, the Geomorphic Road Analysis and Inventory Package (GRAIP). This protocol will help us to identify road conditions and identify problems. This project will provide two tools for reducing the effects of roads on streams: (1) a road features GIS database (2) a Fish Passage and Sediment Reduction Action Plan. These tools will help us to estimate road sediment yield and hydrological connectivity; identify needs, prioritization, and layouts for road improvements or decommissions; and be used for tracking sediment reduction actions and long term asset management. The Action Plan will identify the Top 10 sediment reduction actions and all of the fish passage issues in the project area. We anticipate seeking funding for at least three of the top projects in this area, and potentially other road improvements will completed by our partners. Project partners are the US Forest Service, Bureau of Land Management (BLM), Weyerhaeuser and the Oregon Department of Fish and Wildlife (ODFW). Weyerhaeuser, BLM, and ODFW will help to develop future restoration projects. US Forest Service will provide training and support. OWEB funds will be used to conduct surveys, data analysis, project management, training, travel, equipment and supplies.

- The project is a resubmittal. The applicant addressed the concerns raised in the previous review related to project prioritization, habitat capacity, and fish distribution.
- The project will survey 234 miles of road for the investment, showing a favorable cost benefit ratio.
- The project takes a watershed approach using an established methodology (GRAIP) to identify sediment sources. The applicant has successfully utilized GRAIP in other watersheds.

- The project will identify and prioritize project opportunities that address sediment from road crossings and fishing access, building on previous road improvements, instream habitat restoration, and fish passage improvements upstream from the project area.
- There is a strong partnership evidenced by extensive survey work previously undertaken in the Coos River watershed. Project partners have a history of collaborating to develop and implement projects once assessments are done.

No significant concerns identified.

Concluding Analysis

The project area focuses on the lower section of the Coos system encompassing main stem reaches that are primarily migration corridors connecting to tributary habitats. This work builds on road assessments upstream and the resulting restoration activities accomplished in other areas of the watershed. Restoration work resulting from this project can improve water quality through the reduction of sediment and benefit habitat important to ESA-listed coho and other salmon and trout species utilizing the system; however, many areas are constrained by the configuration of the forest road network within the riparian area.

Review Team Recommendation to Staff Fund

Review Team Priority 7 of 8

Review Team Recommended Amount \$68,942

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount

\$0

Application Evaluation for South Fork Coos River Road Assessment and Project Development, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

N/A

Southwest Oregon (Region 2)

Application Number: 219-2041-16707Project Type: Technical AssistanceProject Name: Goose Point, Haynes Inlet Project
DevelopmentProject Type: Technical AssistanceApplicant: Coos Watershed AssociationCounty: CoosRegion: Southwest OregonCounty: CoosOWEB Request: \$74,749Total Cost: \$113,499

Application Description (from application abstract)

The project area totals 79.7 acres of wetland habitat, freshwater systems, and working lands on Goose Point in Haynes Inlet, north of Coos Bay in Coos County. The project site is directly below the confluence of Larson and Palouse creeks—both documented as two of the most historically productive salmon streams per stream mile on the Oregon coast. Winter rearing habitat has been identified as a limiting factor for both Larson and Palouse due to limited off-channel and tidal marsh habitat available during high winter flows. This project seeks to address the lack of nursery grounds by enhancing and creating a wetland complex that is compatible with the agricultural land use. This property will provide juvenile salmonids a variety of conditions to best suit their needs depending on environmental, spatial, and temporal variation, which will allow them to gain higher fitness before migrating to the ocean. The property is a small scale ranch, and the landowners maintains their EFU through light timber harvest, blueberry production, and grazing. This project represents an opportunity to demonstrate the potential to preserve agricultural values while maximizing habitat restoration and protection. The project has three major components: enhancement and connection of 68.6 acres of wetland habitat; water quality improvements and riparian restoration on 11.1 acres of pastureland; and the facilitation of easements to protect those critical ecological, cultural, and agricultural resources for the future. The deliverables of this phase are topographic surveys to assess current conditions, water level monitoring, a hydrologic model, conceptual designs and alternatives, a selected design approved by a Technical Advisory Team, archaeology surveys, rough cost estimates, and an evaluation of necessary permits. Partners include (see Appendix 1: Abbreviations) SSNERR, DU, DEQ, ODFW, USFWS, Coos Curry CREP, WRLT, CTCLUSI, SOU, and the landowner/retired wildlife biologist, Larry Mangan.

- The landowner is highly supportive and engaged in the project development and is considering a conservation easement.
- The technical assistance requested will help design strategies maximizing the habitat potential of the property.
- The project presents an opportunity to implement several types of restoration resulting in multiple species and habitat benefits.

- The project location creates a great opportunity to showcase tidal wetland restoration on private lands.
- The resulting restoration project will benefit a critical habitat type important to ESA-listed coho.
- The application described strong partnerships and a technical advisory team to help guide the design of the project components. The ODFW shellfish team is involved in the project design.

• The application presented a great deal of information, much of it through attachments, making it somewhat cumbersome and difficult to easily discern actions.

Concluding Analysis

This project represents a good opportunity to demonstrate the potential of preserving agricultural values while maximizing salt marsh habitat restoration and protection. Current habitats of this type are only a small fraction of what they were historically and opportunities to restore these valuable habitats are very rare. The resulting restoration will address a primary limiting factor for ESA-listed coho by creating critical rearing habitat in an area drained by two highly productive creeks with high quality spawning.

Review Team Recommendation to Staff Fund

Review Team Priority 4 of 8

Review Team Recommended Amount \$74,749

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Staff Recommended Amount \$74,749

Application Evaluation for Goose Point, Haynes Inlet Project Development, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

None

Southwest Oregon (Region 2)

Application Number: 219-2042-16718

Project Type: Technical Assistance

Project Name: Elk Creek Watershed Limiting Factors Assessment and Restoration Action Plan

Applicant: Elk Creek WC Region: Southwest Oregon OWEB Request: \$49,902

County: Douglas Total Cost: \$76,845

Application Description (from application abstract)

The Elk Creek Watershed Limiting Factors Analysis and Action Plan proposal consists of several parts. There is a substantial amount of historical, reach-scale data on stream habitat conditions in the watershed, though most is outdated (ODFW, 1993-1996). There is also a limited amount of more recent data: ODFW Aquatic Habitat Inventories, and Elk Creek Watershed Council bioassessment and habitat surveys (2015-16). None of this data has been systematically analyzed to guide prioritization of restoration actions in the watershed. All this data is currently being entered into a GIS database that can be gueried to identify reach-scale limiting factors for habitat parameters affecting juvenile coho survival. (Cascade Environmental, August 2018).ODFW has developed a model (HabRate), based on ODFW benchmarks, that assesses the quality of stream habitat for each life stage contributing to coho survival at the reach scale. Using this model, individual reaches within the subwatersheds of the Elk Creek Watershed will be analyzed to identify specific factors limiting coho production. From this, Cascade will develop a strategic restoration plan that will guide and support the Council's restoration actions for the next 6 years. The final piece of this project will be the collection of survey data on the Big Tom Folley subwatershed in the summer of 2019. This survey, funded by the SW Oregon BLM RAC, will use the Watershed Council's "modified bioassessment protocols" to survey and enter a complete, current dataset for the entire 6th-field. This data will be used to develop a detailed, comprehensive restoration action plan for the subwatershed. The data analysis and plan for Big Tom Folley will be presented to Seneca-Jones Timber, who, along with BLM, owns nearly the entire watershed. Seneca has expressed an interest in understanding previous restoration work on their lands, and is willing to support projects that are compatible with their land management goals.

- The project scope includes areas containing ESA-listed coho critical habitat.
- The project brings in new partnerships and the potential for new information on habitat and ESA-listed coho distribution.
- The applicant has the capacity to undertake the project and this work builds on previous rapid bioassessment efforts in the watershed and will add information on ownerships not currently covered.

- While much of the habitat has already undergone the bioassessment survey, the application did not identify how many miles of stream will be analyzed.
- The application did not provide any description of the "modified bioassessment protocols" which would be used in the survey work.
- The project does not focus on priority critical limiting factors related to water quality for ESA-listed coho. Instead, the bioassessment approach focuses on collecting stream habitat data and fish distribution and abundance, resulting in a habitat rating.
- The budget is expressed in lump sums, making it difficult to analyze the cost effectiveness.

Concluding Analysis

The project will provide important habitat and fish distribution data that could help inform actions to protect and restore habitats important to ESA-listed coho. However, without incorporating water quality related issues the resulting project deliverables are not as strong as they could be.

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
Application Evaluation for Elk Creek Watershed Limiting Factors Assessment and Restoration Action Plan, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

N/A

Southwest Oregon (Region 2)

Application Number: 219-2050-16706Project Type: Stakeholder EngagementProject Name: SOLC Upper Bear Creek Ashland
Watershed EngagementProject Type: Stakeholder EngagementApplicant: Southern Oregon Land ConservancyCounty: JacksonRegion: Southwest OregonCounty: JacksonOWEB Request: \$55,087Total Cost: \$73,435

Application Description (from application abstract)

The geographic location comprises a portion of the upper Bear Creek Watershed, inclusive of the Ashland Watershed. This is a strategic focus area of the Southern Oregon Land Conservancy. The area includes both the forested mixed-conifer slopes of the western portion, and the oak-woodlands and grasslands of the eastern portion of the watershed, which also contains mixed conifer forests in the upper elevations. Specifically, the project will focus on privately-owned lands which contain high conservation values and at which conservation will contribute to watershed health. This area also captures a portion of the municipal watershed for the City of Ashland. The lands on the eastern side provide the scenic backdrop of the southern Rogue Valley and contain high wildlife connectivity values, and a mosaic of oak-pine and conifer forests, grasslands, and streams and springs. The Bear Creek watershed is susceptible to fragmentation and land conversion which degrades the integrity of the watershed. The stakeholder engagement objectives aim to ultimately result in acquisition projects on high-quality lands. Successful acquisition projects will conserve high-quality properties to abate the threats of subdivision and development; land conversion (e.g., land clearing); unsustainable and ecologically unsound forest and grazing practices; and protect open space and scenic view sheds. These threats are known to fragment the landscape and negatively impact the integrity of the watershed to support wildlife, fish habitat, and ecosystem functions. Activities to engage stakeholders will comprise open-house style events, direct mailings, social media, and other methods. Follow-up with interested landowners will consist of one-on-one meetings to discuss more specific aspects of conservation opportunities.Partners include Ashland Forest Resiliency (AFR), City of Ashland, USFS, and Lomakatsi. Potential partners include Selberg Institute, the Cascade Siskiyou National Monument.

Review Team Evaluation Strengths

- The proposal's focal area is in the Upper Bear Creek watershed. This area is highly impacted by urbanization and a likelihood that it will continue.
- Acquisition is a sound strategy to help preserve and protect existing habitats in the watershed.
- The applicant has a proven track record with acquisition work, including monitoring of their current portfolio of properties. They are well known and respected in the community.

- There is the potential to develop projects that could protect a wide variety of habitats ranging from upslope to riparian.
- The methods proposed to approach potential landowners seem reasonable for the area and audience.

Concerns

- It is unclear how the applicant will prioritize lands or what a high-value conservation property will look like. This information is available but was not included in the application.
- It is unclear how limiting factors for ESA-listed salmonid species will be considered in prioritizing lands for acquisition.
- Missing from the application was how the concept of restoring watershed connectivity plays into the outreach focus.
- It is unclear whether the project will result in a strategic rather than an opportunistic approach to identifying candidate parcels for permanent protection.

Concluding Analysis

This proposal fits into the applicant's strategy for identifying and acquiring properties for conservation. Acquisition is a sound strategy to protect valuable habitats and will be effective in this urbanizing area; however, the pathway from Stakeholder Engagement to an eligible acquisition is unclear. The application would be strengthened by including an explanation of what is expected beyond the Stakeholder Engagement activities and how the project will result in developing acquisition projects, and subsequent restoration where needed.

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

Southwest Oregon (Region 2)

Application Number: 219-2043-16577Project Type: MonitoringProject Name: Eel Creek Pacific Lamprey Ramp
Effectiveness Monitoring 2019Project Type: MonitoringApplicant: Cascade Pacific RC&DCounty: CoosRegion: Southwest OregonCounty: CoosOWEB Request: \$69,492Total Cost: \$104,454

Application Description (from application abstract)

Pacific Lamprey are listed as a state sensitive species and are considered a "first-food" to the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians (CTCLUSI), and an important to link to their native culture. The historical lamprey harvest within the Eel Lake Basin has been eliminated for generations due to the decline in the lamprey population. Eel Lake and Eel Creek are located in Coos and Douglas Counties just south of Reedsport. Eel Lake is a natural lake formed by dunal sand encroachment. Historically this basin and streams supported robust runs of native fishes including Coho Salmon and Pacific Lamprey. In 1989, ODFW constructed a fish trap and weir on Eel Creek at the outflow of Eel Lake. While the design works well for Salmon, it is not conducive to Pacific Lamprey passage. As a result, Pacific Lamprey have not been able to access Eel Lake and the upper tributaries since 1988.CTCLUSI, ODFW, and TLBP (Tenmile Lamprey Group (TLG)) cooperated on the funding, design, and fabrication of a new lamprey ramp, which was installed at the Eel Lake Trap in August, 2018. This creates a unique opportunity to conduct effectiveness monitoring for Pacific Lamprey passage, while increasing knowledge of this species. TLG will evaluate the functionality and usability of the lamprey ramp for allowing passage and safely trapping lamprey for enumeration. Using radio telemetry and visual observations, TLG will also monitor the movements, holding habitats, barrier issues, and habitat use of Pacific Lamprey within the Eel Lake Basin, both above and below the ramp. Implementation of this monitoring project will also provide stakeholders with valuable information for Oregon Coast Pacific Lamprey. Funding this priority monitoring effort will complete several actions recommended in the Tenmile Lakes Basin 30 Year Pacific Lamprey Management Plan and supplement the creation of ODFW's forthcoming Conservation Plan for Lampreys (CPL) with information on coastal lamprey. Pacific Lamprey are listed as a state sensitive species and are considered a "first-food" to the Confederated Tribes of the Coos, Lower Umpgua and Siuslaw Indians (CTCLUSI), and an important to link to their native culture. The historical lamprey harvest within the Eel Lake Basin has been eliminated for generations due to the decline in the lamprey population. Eel Lake and Eel Creek are located in Coos and Douglas Counties just south of Reedsport. Eel Lake is a natural lake formed by dunal sand encroachment. Historically this basin and streams supported robust runs of native fishes including Coho Salmon and Pacific Lamprey. In 1989, ODFW constructed a fish trap and weir on Eel Creek at the outflow of Eel Lake. While the design works well for Salmon, it is not conducive to Pacific Lamprey passage. As a result, Pacific Lamprey have not been able to access Eel Lake and the upper tributaries since 1988.CTCLUSI, ODFW, and TLBP (Tenmile Lamprey Group (TLG)) cooperated on the funding, design,

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Monitoring Team Evaluation

Monitoring Team Strengths

- The applicant's continued focus on lamprey given the increased conservation interest and cultural importance of lamprey across the state.
- The information that will be collected will be useful in design of future fish ladders outside the Columbia Basin.
- The cooperative group working on this ongoing monitoring project has good representation and is building on momentum from past monitoring efforts in the area.
- The application has a good description of monitoring methods and leveraged existing resources to train monitoring partners to properly tag lamprey.
- The OPMT remarked that the information could be transferrable to other areas and the exportability of findings raises the value of this monitoring.

Monitoring Team Concerns

- The application described using the monitoring data for adaptive management but it's not clear how this will be done. There was no explanation to understand if it is possible to modify the ladder.
- The applicant described an interest in using the information for outreach, but there was no description of products to be produced and what audience they were targeting.
- The application lacked information on how they plan to use the larval distribution data.

Monitoring Team Comments

None

Review Team Evaluation Strengths

• The proposed scope of work will continue efforts to monitor Pacific lamprey usage of the Eel Lake

watershed.

- The effort has strong partner support and involvement as evidenced by the letters of support, wide variety of agencies and stakeholders involved, and secured match commitments to the project.
- The application was presented in a clear and complete manner.
- The project has a high benefit for the cost.
- The proposal is timely with respect to efforts by OWFW and ODOT to remove barriers and improve access to upstream habitats for Pacific lamprey.
- Pacific lamprey are of cultural significance to Tribes and their decline is of great concern.
- ODFW's Lamprey Specialist is involved in the project and the work will be implemented in coordination with ODFW statewide conservation plan.
- Project partners have a successful track record on monitoring and addressing fish passage barriers.
- The approach and methodology is sound and the project has a high likelihood of success.

Concerns

 Differing numbers on trap effectiveness were presented in the application making the "findings to date" confusing.

Concluding Analysis

The project has high levels of commitment from the right mix of partnerships needed to make an effort like this successful. Understanding Pacific lamprey use of fresh water habitats and evaluating the effectiveness of projects designed to improve passage for them is important work and will help fill the gaps in the understanding of this species.

Review Team Recommendation to Staff

Fund

Review Team Priority 3 of 4

Review Team Recommended Amount \$69,942

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None Application Evaluation for Eel Creek Pacific Lamprey Ramp Effectiveness Monitoring 2019, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Recommendation

Do Not Fund; falls below staff-recommended funding line

Staff Recommended Amount

\$0

Staff Conditions

None

Southwest Oregon (Region 2)

Application Number: 219-2044-16603 Project Name: Smith River ARIS/DIDSON Anadromous Salmonid Monitoring Applicant: Smith River WC

Region: Southwest Oregon

OWEB Request: \$62,511

Project Type: Monitoring

County: Douglas Total Cost: \$178,806

Application Description (from application abstract)

The project location is in Douglas County on the main-stem Lower Smith River, 20 miles east of Reedsport, Oregon. The total monitoring area of the project includes the West Fork Smith River, Vincent Creek (6th field HUC), Upper Smith River (5th field HUC), and 40% of Spencer-Johnson Creek (6th field HUC). We have implemented the use of an Adaptive Resolution Imaging Sonar (ARIS) to estimate ESA listed Oregon Coast Coho, fall chinook, and winter steelhead run abundances. Escapement estimates will fill population data gaps, provide insight to population-level responses to restoration projects throughout the basin, and provide fishery managers with an improved base of information for managing these populations. Smith River and the streams throughout its basin have been heavily impacted by past land-use practices. Past timber harvest, large-scale fires, and subsequent timber salvage operations have simplified streams and dramatically reduced high quality spawning and rearing habitat for anadromous salmonids. In order to mitigate these issues, SRWC and others have carried out a multitude of restoration projects, enhancing 66.9 stream miles throughout the basin. Utilizing ARIS as a means to monitor salmonid populations is ideal for estimating the impacts restoration projects have on these populations. Though discontinued in 1996/97, the steelhead and chinook hatcheries in the basin once saturated streams with hatchery stock. Monitoring native steelhead and chinook runs will greatly contribute to our understanding of the population's trajectory since the hatcheries' termination. Project partners include Trout Unlimited (provided ARIS unit and all necessary equipment for project operation), the Oregon Department of Fish and Wildlife, and the Bureau of Land Management. OWEB funding will be used to employ a technician to collect and interpret data and remove ARIS during high flow events. Hired technician will also assist TU in maintaining and repairing equipment. The project location is in Douglas County on the main-stem Lower Smith River, 20 miles east of Reedsport, Oregon. The total monitoring area of the project includes the West Fork Smith River, Vincent Creek (6th field HUC), Upper Smith River (5th field HUC), and 40% of Spencer-Johnson Creek (6th field HUC). We have implemented the use of an Adaptive Resolution Imaging Sonar (ARIS) to estimate ESA listed Oregon Coast Coho, fall chinook, and winter steelhead run abundances. Escapement estimates will fill population data gaps, provide insight to population-level responses to restoration projects throughout the basin, and provide fishery managers with an improved base of information for managing these populations. Smith River and the streams throughout its basin have been heavily impacted by past land-use practices. Past timber harvest, large-scale fires, and subsequent timber salvage operations have simplified streams and dramatically reduced high quality spawning and rearing habitat for anadromous salmonids. In order to

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Monitoring Team Evaluation

Monitoring Team Strengths

- This technology is useful to help understand timing and abundance and will be especially useful for steelhead monitoring.
- This application can produce improved abundance estimates for this part of the Smith River.
- The information produced from this effort will provide some ancillary information about lamprey and striped bass.
- The applicant has already acquired the equipment and spent a year training staff to operate the equipment, reading the imagery, and developing protocols to determine species.
- The picket weir is likely to get better images of the fish and the applicant consulted with ODFW fish passage staff to install it according to legal requirements.

Monitoring Team Concerns

- Absent basin-wide estimates of smolt production, it would be difficult to focus a restoration
 effectiveness evaluation on the freshwater component of productivity of the Smith River solely with
 this information.
- Sonar technology has real possibilities and applications, but there are some unknowns. This proposal doesn't acknowledge the potential limitations of the technology.
- It will be challenging to estimate the Chinook and coho numbers, given the difficulty in separating them when they are present at the same time; also, there is no way to determine wild vs. hatchery origin.
- Some of the graphs provided in the application were confusing relative to describing how this information can leverage the life-cycle monitoring site on the WF Smith River.
- Setting the minimum size limit for steelhead to 60cm will reduce chances of misclassifying suckers as steelhead, but it also means that some smaller steelhead in the system will not be included in the count (see Figure2 in the report to BLM).
- The application says that it will allow ODFW to manage for harvest at Maximum Sustainable Yield.
- Retention of wild steelhead and coho is currently not allowed in the Smith River Management Area.
- Harvest limits for Chinook were established in the Coastal Multi-Species Plan, and the applicant did not discuss a direct path how this monitoring can be applied for any future revision of harvest limits.

Monitoring Team Comments

None

Review Team Evaluation Strengths

- Monitoring fish numbers is important information for restoration practitioners and fishery managers.
- This monitoring will complement other adult and juvenile salmonid sampling efforts.
- The data collected is stored, backed-, and made available to agencies and researchers.
- The equipment is in place and project staff are trained to use the equipment and analyze the information collected.
- The approach utilizes modern technology and employs sound methodology.
- The project costs appear reasonable for the proposed work.

Concerns

- By only looking at adult fish counts at only one location, it may be difficult for this data to evaluate productivity and associate it with the effectiveness of restoration efforts.
- The applicant should consider adding a juvenile estimates component.
- The cost to benefit ratio is hard to determine prior to seeing the data collected and analyzed.
- It will be difficult to differentiate between Chinook and coho during overlaps in the timing of their runs.
- The value of the project will be enhanced if field verification is included. Without it, applicability to restoration is almost impossible to determine.
- It is unclear if there is a back-up plan in case of possible equipment malfunction.

Concluding Analysis

The approach proposed to monitor returning adults has merit and employs technology that can track adults at times and flow conditions traditional survey methods cannot. This could prove cost-effective and useful in helping to understand the timing of returns, as well as numbers of returning adults. With overlaps in the timing of fish runs there will be challenges in determining the difference between the three main species targeted. The addition of field verification will enhance the accuracy, as well as help inform the analysis of the impacts of restoration work, as would adding a juvenile monitoring component.

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

Southwest Oregon (Region 2)

Application Number: 219-2045-16625Project Type: MonitoringProject Name: Umpqua Basin Stream Flow and
Temperature Monitoring Project 2019Herein Project Type: MonitoringApplicant: Partnership for the Umpqua RiversCounty: DouglasRegion: Southwest OregonCounty: DouglasOWEB Request: \$31,958Total Cost: \$56,389

Application Description (from application abstract)

This is a continuation of a long-term project which began in 1998 that monitors summer stream flow and stream temperature at sites across the Umpqua Basin (see map for locations). Flow measurements, taken at high priority sites, are used to regulate instream water rights to protect aquatic resources, model water supply and demand, and provide data of interest for PUR, agencies, and municipalities. Summer stream temperature measurements at five representative sites provide a long-term data set that is used by aquatic specialists in the basin to normalize for annual variability in stream temperature data for land management projects, burned area evaluations, and shorter-term baseline monitoring with smaller data sets. In addition, a trend analysis of the temperature dataset will provide analyses integral in understanding the effects of climate change on streams in the basin. The proposed addition of two North Umpgua temperature comparison sites (from historic sites) would expand the use of the Reference Temperature data into that subbasin. The data and analyses from the previous work on this project has been distributed and presented to natural resource professionals working in the basin. It has been widely used by both PUR and partners (OWRD, Douglas County, BLM, USFS, and DEQ) as well as by other groups (ODFW, City of Oakland, and The North Umpgua Hydroelectric Project (PacifiCorp)), and is of current interest to NOAA Fisheries. In addition to the aforementioned uses, it would continue to be used for corroboration of regional timing and trends of maximum stream temperatures; development of fishing regulations during low-flow periods; support of effectiveness monitoring; investigation of climate change impacts; evaluation of water allocation applications; implementation of TMDLs; and development of strategic plans. By maintaining a continuous period of record, this pivotal data is critical for the continued success of many programs in the Umpgua Basin. This is a continuation of a long-term project which began in 1998 that monitors summer stream flow and stream temperature at sites across the Umpgua Basin (see map for locations). Flow measurements, taken at high priority sites, are used to regulate instream water rights to protect aquatic resources, model water supply and demand, and provide data of interest for PUR, agencies, and municipalities. Summer stream temperature measurements at five representative sites provide a long-term data set that is used by aquatic specialists in the basin to normalize for annual variability in stream temperature data for land management projects, burned area evaluations, and shorter-term baseline monitoring with smaller data sets. In addition, a trend analysis of the temperature dataset will provide analyses integral in understanding the effects of climate change on streams in the basin. The proposed addition of two North Umpqua temperature comparison sites (from historic sites) would expand the use of the Reference Temperature data into that subbasin. The data

and analyses from the previous work on this project has been distributed and presented to natural resource professionals working in the basin. It has been widely used by both PUR and partners (OWRD, Douglas County, BLM, USFS, and DEQ) as well as by other groups (ODFW, City of Oakland, and The North Umpqua Hydroelectric Project (PacifiCorp)), and is of current interest to NOAA Fisheries. In addition to the aforementioned uses, it would continue to be used for corroboration of regional timing and trends of maximum stream temperatures; development of fishing regulations during low-flow periods; support of effectiveness monitoring; investigation of climate change impacts; evaluation of water allocation applications; implementation of TMDLs; and development of strategic plans. By maintaining a continuous period of record, this pivotal data is critical for the continued success of many programs in the Umpqua Basin.

Monitoring Team Evaluation Monitoring Team Strengths

- The project focuses on priority water availability basins in the Umpqua Basin.
- This ongoing project is the result of an effective partnership with OWRD and the county.
- The applicant addressed concerns identified in a previous evaluation.
- The application proposes to work with DEQ to perform trend analysis of water temperature and share the long-term dataset with them.
- The applicant has a successful track record and has a quality assurance plan in place.
- The flow information generated from this project is applied directly in water management decisions, and the water temperature information is helpful for other partners in the basin

Monitoring Team Concerns

- The applicant cited some outdated flow measurement methodologies this is confusing and should be corrected.
- Some statements about how OWRD is using its data to develop water forecasting at the basin scale are incorrect.
- Some of the application objectives were redundant and could be refined to focus on what key work they are doing.
- It was unclear why the applicant only requested funding for one year and if the water temperature monitoring period was adequate.

Monitoring Team Comments

• The applicant should work with OWRD to evaluate pros/cons of installing select gaging stations in the future at some sites to meet objectives described in the application.

• The OPMT encourages applicants to consider monitoring water temperature data year-round to adequately document thermal dynamics.

Review Team Evaluation

Strengths

- The project is the continuation of a successful ongoing monitoring effort and the project demonstrates strong partnership between the applicant, OWRD, and Douglas County.
- The monitoring work focuses on identified priority water availability basins.
- Comprehensive QA/QC assurances are described in the application.
- The efforts provide valuable flow information, especially critical in drought years.
- There is a plan to work with DEQ to perform trend analysis and share the long-term dataset.
- The data can be used by forestry and agricultural partners to understand impacts and improvements from restoration.
- The project is very straight forward with a high benefit to cost ratio.

Concerns

- The application referenced outdated flow measurement methodologies. These will need to be updated.
- Partners need to work with relevant agencies and look at long-term strategies for ensuring commitment to maintain stream gauging sites as an important piece in monitoring long-term flow conditions in the Umpqua.

Concluding Analysis

The proposed project is a continuation of a successful program originated in 1998 to collect baseline flow data and temperatures in high priority water availability basins. The information collected is useful to project partners and helps support a variety of activities, including regulation of instream water rights to protect aquatic resources, model water supply and demand, and provide flow and temperature data for project partners and the community at large.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 4 of 4

Review Team Recommended Amount \$31,958

Review Team Conditions

Application Evaluation for Umpqua Basin Stream Flow and Temperature Monitoring Project 2019, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Applicant verify and provide documentation that Flow measurement methodology is current.

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount

\$0

Staff Conditions

N/A

Southwest Oregon (Region 2)

Application Number: 219-2046-16657

Project Type: Monitoring

Project Name: Bird Monitoring to Evaluate Effectiveness of Riparian Restoration in the Rogue Basin

Applicant: Klamath Bird Observatory

Region: Southwest Oregon

OWEB Request: \$33,607

County: Jackson Total Cost: \$49,807

Application Description (from application abstract)

Healthy riparian vegetation provides important ecological services, including critical habitat for birds and other terrestrial wildlife, yet many riparian habitats in the Rogue Basin have been lost or degraded. Riparian restoration implemented by The Freshwater Trust (TFT) in the City of Medford's Water Quality Trading Program in southwestern Oregon meets rigorous vegetation performance standards, but it is unknown whether other important ecological goals are being met: improving riparian areas for wildlife habitat as well as increasing shade. Birds are widely recognized as excellent ecological and management indicators, and are relatively easy and cost-effective to monitor. Klamath Bird Observatory (KBO) proposes a project partnering with TFT using avian monitoring data and a focal species approach to evaluate effectiveness of riparian restoration in the Rogue Basin. KBO will adapt existing standardized bird monitoring techniques (e.g. territory mapping, reproductive index, activity budgets), adapt their use for smaller-scale sites restored by TFT, and confirm the feasibility of achieving ecologically meaningful results that can be applied to adaptive management. This exciting collaboration will link a science-based conservation organization with an on-the-ground restoration practitioner, create a model of better communication between scientists and land managers that will benefit the Rogue watershed, and advance efforts to quantify benefits of restoration and inform future project design. This project provides a timely opportunity to demonstrate the efficacy of avian monitoring as a metric of habitat quality, ecosystem function, and restoration success that will be exportable to other sites, and can be included in the Rogue Basin Partnership's comprehensive basin-wide monitoring strategy. Healthy riparian vegetation provides important ecological services, including critical habitat for birds and other terrestrial wildlife, yet many riparian habitats in the Rogue Basin have been lost or degraded. Riparian restoration implemented by The Freshwater Trust (TFT) in the City of Medford's Water Quality Trading Program in southwestern Oregon meets rigorous vegetation performance standards, but it is unknown whether other important ecological goals are being met: improving riparian areas for wildlife habitat as well as increasing shade. Birds are widely recognized as excellent ecological and management indicators, and are relatively easy and cost-effective to monitor. Klamath Bird Observatory (KBO) proposes a project partnering with TFT using avian monitoring data and a focal species approach to evaluate effectiveness of riparian restoration in the Rogue Basin. KBO will adapt existing standardized bird monitoring techniques (e.g. territory mapping, reproductive index, activity budgets), adapt their use for smaller-scale sites restored by TFT, and confirm the feasibility of achieving ecologically meaningful results that can be

applied to adaptive management. This exciting collaboration will link a science-based conservation organization with an on-the-ground restoration practitioner, create a model of better communication between scientists and land managers that will benefit the Rogue watershed, and advance efforts to quantify benefits of restoration and inform future project design. This project provides a timely opportunity to demonstrate the efficacy of avian monitoring as a metric of habitat quality, ecosystem function, and restoration success that will be exportable to other sites, and can be included in the Rogue Basin Partnership's comprehensive basin-wide monitoring strategy.

Monitoring Team Evaluation

Monitoring Team Strengths

- The application is based around monitoring of focal bird species that serve as indicators of habitat conditions. Species are selected for their association with particular habitat elements or features, or because of a special conservation need, and ease of monitoring.
- Information could potentially lead to a clearer connection between bird habitat and water quality benefits of riparian restoration actions.
- The application describes appropriate protocols and includes citations.
- The applicant is committed to applying the data in a meaningful manner and had a good description of how they plan to share the information with appropriate agencies and local partners
- The applicant provided information on previous success working on similar projects to describe their track record, and has the necessary skills to complete this project as proposed.
- The data will be archived through the Avian Knowledge Network. This is a data repository that helps to ensure that bird-related data are available to scientists, resource managers, and other conservation practitioners in the future.
- The application addressed concerns raised previously. One of the concerns identified by the review team last year was that monitoring for the presence of birds or their nests alone could be misleading as indicators of habitat quality. The applicant better addresses the issue by describing methods for territory mapping, indices of reproductive success, and activity budgets for focal species to understand how these species are using an area.

Monitoring Team Concerns

- The application does not specify criteria or thresholds for the metrics that would be considered success. It is unclear whether success is defined as trajectories toward values observed in reference sites or if reference values themselves are the desired outcome.
- The short-term data and the relatively young age of the restoration actions (1-6 yrs old) may not be appropriate to answer all of their questions.
- There is a lack of baseline, pre-treatment data to which to compare results.
- It is unclear how the varying aged sites distributed across a broad area will impact the results.

Monitoring Team Comments

None

Review Team Evaluation

Strengths

- The project is a resubmittal and the proposal addressed the concern related to project objectives by providing an expanded discussion on them.
- The applicant has experience with bird monitoring and this project is based on work undertaken in the Klamath, adapting monitoring protocols from those efforts. The process for implementing this project is clear and uncomplicated because the applicant is working with an organization that already has established long-term agreements with landowners.
- The use of bird presence and abundance monitoring is identified on the list of recommended parameters for effectiveness monitoring of riparian restoration in the Rogue Basin Restoration Plan.
- The project builds on monitoring The Freshwater Trust is implementing in areas that have already been planted, incorporating species diversity, survival and invasive species in the data collected.

Concerns

- The purpose of the project is confusing. It is not clear whether it evaluates riparian restoration effectiveness or refines bird monitoring methodology.
- The project statement about benefitting salmon and steelhead is questionable.
- It is unclear if this monitoring is necessary or if avian monitoring done in the Trinity River system for a ten- year period could be used to help identify tree species and bird responses, helping to further evaluate the effectiveness of plantings in providing avian habitats.
- The project focuses on evaluating smaller sized sites in mainstem settings. The work may be more effective on the smaller tributaries.

Concluding Analysis

There is value in understanding if plantings also benefit birds. The riparian projects to be evaluated are already established, making the collection of baseline data on these existing sites no longer feasible. That said, the sites have only been established in the last one to six years and the habitats may not yet be suitable to attract avian species. Additionally, the plant establishment efforts could, in the short-term, disrupt avian usage. The addition of this monitoring effort to projects already in place did not seem like a good fit.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount \$0

Application Evaluation for Bird Monitoring to Evaluate Effectiveness of Riparian Restoration in the Rogue Basin, Open Solicitation-2018 Fall Offering Due: Oct 29,

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

Southwest Oregon (Region 2)

Application Number: 219-2047-16662Project Type: MonitoringProject Name: Umpqua Basin Collaborative
Monitoring 2019-2021Project Type: MonitoringApplicant: Partnership for the Umpqua RiversCounty: DouglasRegion: Southwest OregonCounty: DouglasOWEB Request: \$220,356Total Cost: \$374,301

Application Description (from application abstract)

1) Our project location is the Umpgua Basin, which encompasses 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. The Umpqua River system originates just north of Crater Lake in the Cascade Mountains, cuts through the Coastal Range, and enters the Pacific Ocean near the town of Reedsport.2) In our basin, there is a lack of water quality data on many steams. This information is essential to know for human, fish and wildlife survival. Identifying stream-specific limiting factors will permit planning to address issues in areas most in need of restoration. This also identifies areas most in need of preservation. 3) Activities under this grant consist of staff and volunteers performing standard monthly water quality monitoring runs in 5th field watersheds for three years in the Umpgua Basin plus monitoring reference sites from watersheds where three years of monitoring has been completed. All runs will be monitored once per month, collecting water quality data on temperature, turbidity, conductivity, dissolved oxygen (DO), pH, total coliform, E. coli bacteria, blue-green algae, total chlorophyll, and photo points at 15 to 20 sites per 5th field watershed. In addition, summer instream continuous temperature loggers (about 30 recording every 30') and DO loggers (four recording every 15') will be located throughout the watersheds. Also, we will deploy a multi-parameter Sonde that will be recording temperature, DO, conductivity, and pH every 15 minutes. 4) Bureau of Land Management (BLM), Department of Environmental Quality (DEQ), US Forest Service (USFS), Natural Resources Conservation Service (NRCS), Oregon Department of Fish and Wildlife (ODFW), Tribes, Soil and Water Conservation Districts (SWCD), Oregon Water Rescores Department (OWRD), cities, county, water treatment plants and area residents.1) Our project location is the Umpgua Basin, which encompasses 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. The Umpgua River system originates just north of Crater Lake in the Cascade Mountains, cuts through the Coastal Range, and enters the Pacific Ocean near the town of Reedsport.2) In our basin, there is a lack of water quality data on many steams. This information is essential to know for human, fish and wildlife survival. Identifying stream-specific limiting factors will permit planning to address issues in areas most in need of restoration. This also identifies areas most in need of preservation. 3) Activities under this grant consist of staff and volunteers performing standard monthly water quality monitoring runs in 5th field watersheds for three years in the Umpgua Basin plus monitoring reference sites from watersheds where three years of monitoring has been completed. All runs will be monitored once per month, collecting water guality data on temperature, turbidity,

conductivity, dissolved oxygen (DO), pH, total coliform, E. coli bacteria, blue-green algae, total chlorophyll, and photo points at 15 to 20 sites per 5th field watershed. In addition, summer instream continuous temperature loggers (about 30 recording every 30') and DO loggers (four recording every 15') will be located throughout the watersheds. Also, we will deploy a multi-parameter Sonde that will be recording temperature, DO, conductivity, and pH every 15 minutes. 4) Bureau of Land Management (BLM), Department of Environmental Quality (DEQ), US Forest Service (USFS), Natural Resources Conservation Service (NRCS), Oregon Department of Fish and Wildlife (ODFW), Tribes, Soil and Water Conservation Districts (SWCD), Oregon Water Rescores Department (OWRD), cities, county, water treatment plants and area residents.

Monitoring Team Evaluation

Monitoring Team Strengths

- The applicant has developed a well-established monitoring program in coordination with DEQ.
- The previously collected data has been adequately reported to various partners in the past.
- The application included several letters of support describing the different supporting agencies and organizations and reflects the effective partnership they have developed in collaboration with other agencies.
- There is good detail in the application and justification for their monitoring methods and study design to balance continuous and grab sampling efforts is provided.
- There was good detailed information to describe the expenses in the budget.
- Their method of monitoring fits well with DEQ's TMDL data needs and use of this data to target implementation actions. Future agricultural water quality status and trend reports will benefit from the data set proposed in this application.

Monitoring Team Concerns

 The application describes that they would like to identify water quality improvement projects, but there were no examples of projects being implemented from the water quality data that has been collected to date.

Monitoring Team Comments

• The OPMT encourages applicants to consider monitoring water temperature data year-round to adequately document thermal dynamics.

• Contact DEQ to talk about continuous pH data loggers.

Review Team Evaluation Strengths

• The project will continue a successful monitoring effort and build on the existing long-term data sets.

- The applicant has the capacity and experience to make the project successful. The application presented a comprehensive explanation and justification for their approach to the data collection.
- Project partners work closely with DEQ. This work is necessary to help identify water quality impaired subwatersheds and includes an approved DEQ QA/QC plan.
- There is a great deal of support for the project demonstrated by the letters of support and match commitments.
- Past data collected is valuable and has been used to focus restoration work. For instance, data from the Lookingglass watershed helped NRCS develop a national-level water quality pilot project.

Concerns

• It would be useful to increase involvement from the agricultural and forestry sectors to help elevate awareness of the work and data collected. This in turn could help get more private land owners engaged in restoration.

Concluding Analysis

The proposal will continue long-term monitoring efforts and builds on an existing water quality data set compiled by project partners. The project is an example of how watershed councils and their professional staff can successfully organize and effectively engage volunteers in aspects of an important monitoring effort. The work is important to better understand and engage in restoring the aquatic health of watersheds in the Umpqua basin.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 4

Review Team Recommended Amount \$220,356

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount

\$220,356

Staff Conditions

None

Southwest Oregon (Region 2)

Application Number: 219-2048-16672Project Type: MonitoringProject Name: Ni-les'tun tidal wetland restoration
effectiveness monitoringProject Type: MonitoringApplicant: Institute for Applied EcologyCounty: CoosRegion: Southwest OregonCounty: CoosOWEB Request: \$323,953Total Cost: \$413,244

Application Description (from application abstract)

With 418 acres of emergent tidal marsh and 12 acres of forested tidal swamp, the Ni-les'tun restoration project in the Coquille River watershed several miles northeast of Bandon (Coos County) is one of the largest tidal wetland restoration projects completed in Oregon to date. Periodic effectiveness monitoring is essential for evaluating project results and the rate of ecosystem change, but most essential monitoring parameters have been monitored only once since restoration (in 2013). This proposal builds on previous OWEB-funded monitoring to characterize: (1) the status of site hydrology; (2) plant community development; (3) soil conditions (plus links between soils, groundwater hydrology, and plant communities); (4) aquatic habitat availability, quality, and utilization by fish (plus fish prey); and (5) climate change adaptation potential of the restored site. Project partners include the Institute for Applied Ecology, Oregon State University, the Confederated Tribes of Siletz Indians, and the US Fish and Wildlife Service. Results of our monitoring will provide accountability for OWEB's prior investments in this project, and through outreach, will help advance restoration practices and guide similar restoration projects in Oregon. We will widely distribute project results to the public via a synthesis report, outreach activities, and user-friendly datasets. Project outcomes will include valuable data on wetland restoration effectiveness in the Coquille River Estuary a decade following restoration, data on how physical drivers relate to biotic communities, and restoration lessons learned for application to other restoration projects throughout Oregon. With 418 acres of emergent tidal marsh and 12 acres of forested tidal swamp, the Niles'tun restoration project in the Coquille River watershed several miles northeast of Bandon (Coos County) is one of the largest tidal wetland restoration projects completed in Oregon to date. Periodic effectiveness monitoring is essential for evaluating project results and the rate of ecosystem change, but most essential monitoring parameters have been monitored only once since restoration (in 2013). This proposal builds on previous OWEB-funded monitoring to characterize: (1) the status of site hydrology; (2) plant community development; (3) soil conditions (plus links between soils, groundwater hydrology, and plant communities); (4) aquatic habitat availability, quality, and utilization by fish (plus fish prey); and (5) climate change adaptation potential of the restored site. Project partners include the Institute for Applied Ecology, Oregon State University, the Confederated Tribes of Siletz Indians, and the US Fish and Wildlife Service. Results of our monitoring will provide accountability for OWEB's prior investments in this project, and through outreach, will help advance restoration practices and guide similar restoration projects in Oregon. We will widely distribute project results to the public via a synthesis report, outreach activities, and user-friendly datasets. Project outcomes will include valuable data on wetland restoration

effectiveness in the Coquille River Estuary a decade following restoration, data on how physical drivers relate to biotic communities, and restoration lessons learned for application to other restoration projects throughout Oregon.

Monitoring Team Evaluation Monitoring Team Strengths

- The OPMT acknowledged that there is a need for information about the effects of tidal wetland restoration, and this can inform future coastal restoration actions.
- The application has a good description of methods and protocols. These methods follow past monitoring efforts at this restoration site.
- The OPMT liked the description of how the data will be managed, analyzed and reported.
- The monitoring described in this application is a result of good partnerships and includes tribal and university participation.
- The applicant has a good track record of completing past monitoring, including reporting and sharing findings.

Monitoring Team Concerns

- The application lacked detail on what the OSU faculty member was implementing/completing to justify the lump-sum budget and why travel from UC Davis was relevant to the monitoring in Oregon.
- The application lacked detail on the methods for obtaining the aerial imagery using a drone and how that will be linked with on-the-ground data.
- It would have been helpful to have the entire budget broken out by objective like a portion of the budget was.

Monitoring Team Comments

The OPMT recommends surveying ground water levels when doing other RTK surveys on site to verify water levels and link to the datum.

Review Team Evaluation Strengths

- This is a unique opportunity to look at large scale salt marsh restoration efforts, nearly nine years after the work began. The timing is good and the need is there for this effectiveness monitoring to help inform other tideland restoration efforts.
- The data collection methods are sound and highly likely to achieve project objectives.
- The project partnerships are long running and strong, as evidenced by the letters of support and project contributions.
- The proposal addresses concerns from the previous review, including discussion on timing of the work waiting longer to collect and documenting project support.

- Project managers and partners are experienced and have the capacity to do this monitoring.
- The macroinvertebrate sampling will be useful in determining water quality benefits.

Concerns

• The overall project cost is high related to the benefit. Perhaps interns or work study could be incorporated to help reduce the overall cost.

Concluding Analysis

Application was withdrawn by the applicant after review.

Review Team Recommendation to Staff Withdrawn

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 Withdrawn

Staff Recommended Amount \$0

Staff Conditions

N/A

Southwest Oregon (Region 2)

Application Number: 219-2049-16704

Project Type: Monitoring

Project Name: Coos Watershed Real-time Hydrological and Meteorological Monitoring 2019-2021

Applicant: Coos Watershed Association

Region: Southwest Oregon

OWEB Request: \$88,270

County: Coos Total Cost: \$133,006

Application Description (from application abstract)

The Coos Watershed, located on the Southern Oregon Coast, is the home of an important population of the ESA listed coastal coho salmon. The ESA Recovery plan for the Oregon Coast coho salmon (NOAA 2016) cites the need for increased quantity and quality of freshwater and estuarine rearing habitat. Historically, the need for hydrological and meteorological data was identified in the IMST's Recovery of Wild Salmonids in Western Oregon Lowlands (2002), and in OWEB's Monitoring Strategy for the Oregon Plan for Salmon and Watersheds (2003). NOAA's A Strategic Plan for Enhanced Coastal Observational System and Predictive Hydrodynamic Model for Improved Management of the Coos Bay Estuary. Oregon (2005) ranked continuing gaging station operations as the highest priority. The lack of long term hydrological data has driven the Coos Watershed Association (CoosWA) to try and meet this need. Most recently, Oregon's 2017 Integrated Water Resources Strategy (OWRD 2017) recommends that the state continue and maintain the stream gage network, collaborate with other groups, and promote continuous monitoring of changing climates. OWEB funds will be used for staff to upgrade, operate, and maintain five real-time stream gaging/weather stations. Hydrologcial data will be analyzed and summarized by water year, and reported quarterly and annually on the CoosWA website. Discharge data will be further complied into the long-term data set, flow duration estimates will recalculated with the updated data. Meteorological data will be posted to our website in time-series format and summarized by water year. Instantaneous data will be available in real-time. Since 1999, CoosWA has partnered with OWEB, OWRD, ODEQ, U of O, Coos Bay/North Bend Water Board, and BLM to develop a Water Resources Program to develop a Hydrological and Meteorological data set large enough to perform meaningful statistical analysis for monitoring, assessment, research, and project effectiveness needs. The Coos Watershed, located on the Southern Oregon Coast, is the home of an important population of the ESA listed coastal coho salmon. The ESA Recovery plan for the Oregon Coast coho salmon (NOAA 2016) cites the need for increased quantity and quality of freshwater and estuarine rearing habitat. Historically, the need for hydrological and meteorological data was identified in the IMST's Recovery of Wild Salmonids in Western Oregon Lowlands (2002), and in OWEB's Monitoring Strategy for the Oregon Plan for Salmon and Watersheds (2003). NOAA's A Strategic Plan for Enhanced Coastal Observational System and Predictive Hydrodynamic Model for Improved Management of the Coos Bay Estuary, Oregon (2005) ranked continuing gaging station operations as the highest priority. The lack of long term hydrological data has driven the Coos Watershed Association (CoosWA) to try and meet this need. Most recently, Oregon's 2017 Integrated Water Resources Strategy (OWRD 2017) recommends that the state continue and maintain the stream gage network, collaborate with other groups, and promote continuous monitoring of changing climates. OWEB funds will be used for staff to upgrade, operate, and maintain five real-time stream gaging/weather stations. Hydrologcial data will be analyzed and summarized by water year, and reported quarterly and annually on the CoosWA website. Discharge data will be further complied into the long-term data set, flow duration estimates will recalculated with the updated data. Meteorological data will be posted to our website in time-series format and summarized by water year. Instantaneous data will be available in real-time.Since 1999, CoosWA has partnered with OWEB, OWRD, ODEQ, U of O, Coos Bay/North Bend Water Board, and BLM to develop a Water Resources Program to develop a Hydrological and Meteorological data set large enough to perform meaningful statistical analysis for monitoring, assessment, research, and project effectiveness needs.

Monitoring Team Evaluation

Monitoring Team Strengths

- This program has done a good job leveraging funding from various sources.
- This is an ongoing long-term monitoring project with dedicated, consistent staff.
- The monitoring network provides long-term data set that is used by many agencies, researchers and other local groups.
- The application did a good job explaining how this monitoring informs the design of future restoration projects.
- The application addresses comments on previous application by explaining the streamflow monitoring methods and cites the USGS protocols.
- The data management, analysis and reporting is aided by the use of an appropriate time series management software (WISKI).

Monitoring Team Concerns

- The OPMT was questioning the use and value of the weather stations and the ability to use these to understand orographic effects due to these sites most likely suitable for documenting micro climates.
- It was unclear why are they moving the MET stations. More information and clarity about this is needed.
- The description of the gaging station history was difficult to follow and understand why some gages were being re-established.
- Past project completion reporting was limited and weather station data was of poor quality.
- The monitoring methods did not describe operation of weather station and parameters they want to collect.
- The application describes collecting continuous turbidity data at the streamflow gages for load duration calculations, but there was no description of the necessary suspended sediment monitoring to correlate the turbidity measurements to generate load estimates.

Monitoring Team Comments

- If funded, provide a final technical report summarizing data to generate products that align with their objectives and answering the monitoring questions posed in the application.
- Update QAPP to include operation of weather station and maintenance procedures.

Review Team Evaluation

Strengths

- The proposal supports continuation of a long running data set.
- The project scope has been expanded to add additional collection sites and incorporates new partners bringing in new match contributions and additional technical support.
- The data collected is important. It is actively used and is vital for natural resource agencies, as well
 as the applicant, in work such as project development, effectiveness monitoring, outreach and
 modeling efforts.
- The project is technically sound and has a high likelihood of continued success. The work is coordinated with OWRD and utilizes standard OWRD and USGS protocols.

Concerns

• No concerns were identified.

Concluding Analysis

The project will continue a long running successful data collection effort that results in information readily available and used to support restoration planning and design, assessment, effectiveness monitoring and modeling efforts. The information also sees a great community use of the real-time stream gauging information to support recreational activities. The applicant does a superb job of sharing the information and using the data collected in outreach, as well as restoration efforts. Establishing regular check in meetings with OWRD and USGS will help with making sure collection efforts are always using the latest protocols and creating a forum for sharing lessons learned.

Review Team Recommendation to Staff

Fund

Review Team Priority 2 of 4

Review Team Recommended Amount

\$88,270

Application Evaluation for Coos Watershed Real-time Hydrological and Meteorological Monitoring 2019-2021, Open Solicitation-2018 Fall Offering Due: Oct 29, 2

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$88,270

Staff Conditions

None

Southwest Oregon (Region 2)

Application Number: 219-2050-16706Project Type: Stakeholder EngagementProject Name: SOLC Upper Bear Creek Ashland
Watershed EngagementProject Type: Stakeholder EngagementApplicant: Southern Oregon Land ConservancyCounty: JacksonRegion: Southwest OregonCounty: JacksonOWEB Request: \$55,087Total Cost: \$73,435

Application Description (from application abstract)

The geographic location comprises a portion of the upper Bear Creek Watershed, inclusive of the Ashland Watershed. This is a strategic focus area of the Southern Oregon Land Conservancy. The area includes both the forested mixed-conifer slopes of the western portion, and the oak-woodlands and grasslands of the eastern portion of the watershed, which also contains mixed conifer forests in the upper elevations. Specifically, the project will focus on privately-owned lands which contain high conservation values and at which conservation will contribute to watershed health. This area also captures a portion of the municipal watershed for the City of Ashland. The lands on the eastern side provide the scenic backdrop of the southern Rogue Valley and contain high wildlife connectivity values, and a mosaic of oak-pine and conifer forests, grasslands, and streams and springs. The Bear Creek watershed is susceptible to fragmentation and land conversion which degrades the integrity of the watershed. The stakeholder engagement objectives aim to ultimately result in acquisition projects on high-quality lands. Successful acquisition projects will conserve high-quality properties to abate the threats of subdivision and development; land conversion (e.g., land clearing); unsustainable and ecologically unsound forest and grazing practices; and protect open space and scenic view sheds. These threats are known to fragment the landscape and negatively impact the integrity of the watershed to support wildlife, fish habitat, and ecosystem functions. Activities to engage stakeholders will comprise open-house style events, direct mailings, social media, and other methods. Follow-up with interested landowners will consist of one-on-one meetings to discuss more specific aspects of conservation opportunities.Partners include Ashland Forest Resiliency (AFR), City of Ashland, USFS, and Lomakatsi. Potential partners include Selberg Institute, the Cascade Siskiyou National Monument.

Review Team Evaluation Strengths

- The proposal's focal area is in the Upper Bear Creek watershed. This area is highly impacted by urbanization and a likelihood that it will continue.
- Acquisition is a sound strategy to help preserve and protect existing habitats in the watershed.
- The applicant has a proven track record with acquisition work, including monitoring of their current portfolio of properties. They are well known and respected in the community.

- There is the potential to develop projects that could protect a wide variety of habitats ranging from upslope to riparian.
- The methods proposed to approach potential landowners seem reasonable for the area and audience.

Concerns

- It is unclear how the applicant will prioritize lands or what a high-value conservation property will look like. This information is available but was not included in the application.
- It is unclear how limiting factors for ESA-listed salmonid species will be considered in prioritizing lands for acquisition.
- Missing from the application was how the concept of restoring watershed connectivity plays into the outreach focus.
- It is unclear whether the project will result in a strategic rather than an opportunistic approach to identifying candidate parcels for permanent protection.

Concluding Analysis

This proposal fits into the applicant's strategy for identifying and acquiring properties for conservation. Acquisition is a sound strategy to protect valuable habitats and will be effective in this urbanizing area; however, the pathway from Stakeholder Engagement to an eligible acquisition is unclear. The application would be strengthened by including an explanation of what is expected beyond the Stakeholder Engagement activities and how the project will result in developing acquisition projects, and subsequent restoration where needed.

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

Willamette Basin - Region 3 Fall 2018 Funding Recommendations



Document Path: Z:loweb\Technical_Services\Information_Services\GIS\Maps\Review Team Meetings\2018FallCycle\Projects\Region3_AppFundingStatus_11x17_2018Fall.mxd ESRI ArcMap 10.6 NAD 1983 Oregon Statewide, Lambert Feet Intl OWEB- PK Wills 20190314

Funding Recommendations

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

Previous Grants - 1998-Spring 2017

- Restoration
- Acquisitions

Streams Region Boundary

Oregon Watershed Enhancement Board

775 Summer St, NE Suite 360 Salem, OR 97301-1290 (503) 986-0178 http://oregon.gov/OWEB/

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Region 3 - Willamette Basin					
Restoration Projects Recommended for Funding in Priority Order					
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
219-3023	Long Tom WC	Greenhill Oak and Prairie Restoration	Oak savanna, woodland, and prairie habitat currently impacted by fire suppression, woody encroachment, dense canopy conditions, and pressure from nonnative and invasive plant species will be restored on four contigious private properties covering 315-acres in the Coyote Creek subbasin of the Long Tom Watershed, located a mile southwest of Eugene.	299,936	Lane
219-3019	The Freshwater Trust	Upper Sandy River Basin Habitat Restoration Project: Salmon River and Clear Fork	Native fish habitat will be restored in the Upper Sandy River near Welches, Oregon in Clackamas County. Increasing off-channel stream habitat, floodplain connectivity with the river, and large wood abundance instream will provide diverse, high quality habitat that supports salmon and steelhead populations.	317,507	Clackamas
219-3024	Luckiamute WC	South Fork Pedee Creek Enhancement	Impacts from historic land use practices, including logging to the water's edge, removing logs from the stream, and log drives in a upper Luckiamute tributary will be addressed to restore natural stream functions. This will include replacing road crossings, adding large wood in the stream, and replanting native streamside trees.	121,684	Polk
219-3022	McKenzie Watershed Alliance	Lower South Fork River Floodplain Enhancement Project Phase II	McKenzie River stream habitat will be restored to a healthy, diverse, and resilient ecosystem for native fish species, including spring Chinook salmon and bull trout. This multi-phased project on 600 acres over 4.2 stream miles addresses impacts caused by the installation of a Army Corps dam, placement of berms and levees, removal of instream wood, and timber harvest from floodplain forests.	464,079	Lane
219-3018	Clackamas River Basin Council	Clackamas River Community Cooperative Revegetation Project	A streamside plant community along the Clackamas River will be restored by eradicating invasive species and re-establishing native plants.	66,249	Clackamas
219-3021	Metro	Heritage Pine oak and prairie restoration and enhancment	Oak and prairie habitats will be restored on 60 acres of the Heritage Pine Natural Area, which is a 202-acre property located near Sherwood, Oregon, just east of the Tualatin River National Wildlife Refuge. Controlling invasive plant species, increasing the diversity in native plant communities, and removing plants crowding oaks trees will improve habitat for native plants and wildlife.	107,212	Washington
Total Restoration Projects Recommended for Funding by RRT and OWEB Staff				1,376,667	

Region 3 ~ Oregon Watershed Enhancement Board: Restoration, Technical Assistance, Stakeholder Engagement, and Monitoring Grant Offering
Restoration Projects Recommended but Not Funded in Priority Order					
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
219-3017	Cascade Pacific RC&D	Upper North Santiam Side Channel Reconnection	Stream habitat will be restored in the Upper North Santiam River near Idanha, Oregon. Reconnecting a side-channel to the mainsteam river and placing large wood structures instream will provide diverse habitat for native fish, including Chinook salmon and cutthroat trout.	159,894	Linn
219-3014	Lower Columbia Estuary Partnership	Horsetail Creek Floodplain Restoration Project Phase II	The diversity, quality, and quantity of instream and floodplain habitats will be improved on Horsetail Creek in the Lower Columbia River Gorge in Multnomah County. This 180-acre floodplain natural area contains two fish bearing streams and associated sloughs, ponds, drainages and wetlands. Habitat restoration will improve cold-water refuge for native salmon migrating along the Columbita River by placing large wood instream, installing beaver dam analogs, and establishing native plant communities.	162,240	Multnomah
219-3016	Coast Fork Willamette WC	Fribley Oak Woodland Restoration	Willamette Valley oak woodland will be restored on a 20 acre property located south of the City of Eugene within Lane County. Controlling invasive plant species, increasing the diversity in native plant communities, and removing fir trees that are crowding oaks trees will improve habitat for native plants and wildlife.	106,794	Lane
Total Restoration Projects Recommended for Funding by RRT				1,805,595	
Restoration Applications Not Recommended for Funding by RRT					
Project #	Grantee	Project Title		Amount Requested	County
219-3015	Cascade Pacific RC&D	Little North Fork Santiam Bank Restoration		224,608	Marion
219-3020	Sandy River Basin WC	Sandy River Delta Habitat Continuity		165,544	Multnomah
219-3025	Calapooia WC	Truax Island Floodplain Restoration - Phase 1 - Planting and Plant Establishment		212,671	Linn
219-3026	Marys River WC	Oak Creek Fish Passage Phas	se 1	139,918	Benton

Technical Assistance (TA) Projects Recommended for Funding in Priority Order						
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
219-3028	The Xerces Society	Conserving Mussels in Aquatic Restoration Technical Assistance	Technical assistance will be provided to restoration practitioners statewide to identify and protect freshwater mussels during stream restoration projects. Freshwater mussels are an important, yet overlooked, animal in Oregon's freshwater systems that provide valuable services to salmon and other stream organisms. Stream habitat restoration work poses a significant emerging threat to mussel beds, which can take decades to recover after they are lost in a stream project.	74,952	Lane	
219-3027	Lower Columbia Estuary Partnership	Feasibility Assessment of Pilot Cold Water Refuge Enhancement Technique	A feasibility assessment will be completed to develop engineering designs for a pilot technique that will enhance cold water refuges at the mouths of lower Columbia Gorge tributaries to protect salmon and steelhead in the face of warming climate conditions.	74,977	Multnomah	
Total TA Projects Recommended for Funding by RRT and OWEB Staff						
Technical Assistance Projects Recommended but Not Funded in Priority Order						
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
None						
Total TA Projects Recommended for Funding by RRT 149,929						
Technical Assistance Applications Not Recommended for Funding by RRT						
				Amount		
Project #	Grantee	Project Title		Requested	County	
None						

Stakeholder Engagement Projects Recommended for Funding in Priority Order						
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
219-3033	North Clackamas Urban Watershed Council	North Clackamas Urban Watersheds Council Kellogg Dam Fish Passage	Stakeholders in a lower Willamette tributary area will be convened into a Fish Passage Steering Committee that will provide planning, coordinated action, and fundraising essential to create fish passage at Kellogg Dam. The resulting restoration project will open passage to 9 miles of stream habitat for salmon, steelhead and lamprey, and provide off-channel refuge for Clackamas and Willamette river fish populations.	62,312	Clackamas	
219-3031	Coast Fork Willamette WC	Engaging Stakeholders in Restoration to Enhance Drinking Water Quality	Stakeholders in Row River, Mosby Creek, and Upper Coast Fork Willamette watersheds in Lane County will be engaged to conduct on-the-ground restoration actions that provide long-term drinking water protection and improve overall watershed health.	27,715	Lane	
Total Stak	Total Stakeholder Engagement Projects Recommended for funding by OWEB Staff 90,027 90,027					
Stakeholder Engagement Projects Recommended but Not Funded in Priority Order						
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County	
None						
Total Stak	Total Stakeholder Engagement Projects Recommended for funding by RRT 90,027					
Stakeholder Engagement Projects Not Recommended for Funding by RRT						
				Amount		
Project #	Grantee	Project Title		Requested	County	
219-3032	Middle Fork Willamette WC	Engaging Diverse Stakeholde	ers in Floodplain Restoration at Elijah Bristow Park	124,594	Lane	
219-3034	Sandy River Basin WC	Beaver Creek Fish Passage C	ommunity	36,597	Multnomah	

Monitoring Projects Recommended for Funding in Priority Order					
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
219-3029	Luckiamute WC	Luckiamute Temperature	Stream temperature data will be collected in the Luckiamute River Watershed to fill	49.150	.52 Polk
		Monitoring Phase 2	a data gap, and inform restoration project prioritization and planning.	48,152	
Total Monitoring Projects Recommended for funding by OWEB Staff				48,152	
Monitorin	ng Projects <i>Recomme</i>	nded but Not Funded in Pri	iority Order		
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
None					
Total Monitoring Projects Recommended for funding by RRT				48,152	
Monitorin	ng Applications Not R	ecommended for Funding	by RRT		
				Amount	
Project #	Grantee	Project Title		Requested	County
219-3030	Calapooia WC	Calapooia Environmental DI	NA Monitoring	48,378	Linn
Region 3 Total OWEB Staff Recommended Board Award				1.664.775	16%
Regions 1-6 Grand Total OWEB Staff Recommended Board Award				10,554,731	

Willamette Basin (Region 3)

Application Number: 219-3014-16583Project Type: RestorationProject Name: Horsetail Creek Floodplain
Restoration Project Phase IIProject Type: RestorationApplicant: Lower Columbia Estuary PartnershipCounty: MultnomahRegion: Willamette BasinCounty: MultnomahOWEB Request: \$162,240Total Cost: \$222,359

Application Description (from application abstract)

The Lower Columbia Estuary Partnership (LCEP) requests \$162,236 to improve the diversity, quality, and quantity of instream and floodplain habitats on the Horsetail Creek floodplain in the Lower Columbia River Gorge, Multnomah County. The site is 180-acre Columbia River floodplain natural area containing two fish bearing streams and associated sloughs, ponds, drainages and wetlands, located on US Forest Service (USFS) property. It is situated between 1-84 and the Union Pacific Railroad and was significantly impacted by construction of the railroad and highway and historic land use. The proposed Horsetail Creek Floodplain Restoration Phase II project (Phase II) expands upon the previous project. Phase I, constructed in 2013 on the west portion of the site, improved site thermal conditions, removed fish passage barriers, restored freshwater tidal hydrology, added 600 pieces of large wood to the stream and revegetated 0.9 miles of stream habitat over the lower 35 acres of the site. Phase II, focused to the East Slough, will treat an additional 0.5 stream miles by placing 25 pieces of in-stream large wood, installing beaver dam analog structures (BDAs), and revegetating an additional 30 acres of floodplain habitat by removing an invasive understory of reed canary grass and planting 65,000 native forested wetland species. This project has the unique opportunity to leverage burned wood from the 2017 Eagle Creek Fire by felling and placing large on-site burned trees in-stream and on the floodplain. Large wood placements and the BDAs will increase habitat complexity, enhance off-channel rearing and high flow refugia habitat and encourage additional beaver activity. Restoring floodplain vegetation and closing the riparian overstory will restore process and function to floodplain forests, improve the site's cold-water refuge for anadromous salmonids, and increase macroinvertebrate prey production for juvenile salmonids.

- The project builds on a previous phase 1 restoration investment.
- Since the project site is located on one of the last cold water refugia areas before the Columbia River dams, restoration actions will significantly benefit spawning and rearing ESA-listed fish.
- Technically sound designs will be implemented for large wood placement and floodplain vegetation restoration; and design alternatives and likely impacts of restoration at the site and adjacent areas were considered.

- Watershed benefits are quantified well in the application.
- The site provides a well-suited opportunity to test Beaver Dam Analog (BDA) structures, which will help beavers by providing dam building materials.
- The project will take advantage of burned trees from the 2017 Eagle Creek fire by utilizing these trees as instream and floodplain habitat features.

Concerns

- The budget has some lump sums, which makes it difficult to determine how costs break down by tasks. For example, it is unclear how costs break out for various plant establishment activities, such as mowing and herbicide application.
- Inclusion of BDA design information in the application, including a placement plan, would help provide better understanding of how BDAs will function.
- It is challenging to address causes of watershed impacts with the constraints created by the project location adjacent to I-84.

Concluding Analysis

The project addresses human altered watershed conditions in a priority location for ESA-listed fish. Proposed restoration activities take advantage of opportunities provided by available large wood, partners engaged in a restoration vision and plan for the site, and a location to restore floodplain process and function. The ecological uplift that will result is cost-effective for the watershed benefit.

Review Team Recommendation to Staff

Fund

Review Team Priority 8 of 9

Review Team Recommended Amount \$162,240

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Do Not Fund; falls below staff-recommended funding line

Staff Recommended Amount

\$0

Staff Conditions

None

Page 3 of 3

Willamette Basin (Region 3)

Application Number: 219-3015-16619Project Type: RestorationProject Name: Little North Fork Santiam Bank
RestorationProject Type: RestorationApplicant: Cascade Pacific RC&DCounty: MarionRegion: Willamette BasinCounty: MarionOWEB Request: \$224,608Total Cost: \$318,808

Application Description (from application abstract)

The Little North Fork Santiam Bank Restoration project is located just passed Salmon Falls County Park approximately 14 miles up Little North Fork Rd on private property owned by the 25 member not-for-profit group known as the Elk Horn Corporation. Over the last 30 years the members have been observing steady soil erosion along approximately 300 feet of riverbank adjacent to the county road. The riparian area in this reach which was once full of native vegetation is now consisting of exposed soils and is inundated with non-native blackberries. The bank erosion and riparian degradation in this reach has the potential overtime to undermine and impact the Little North Fork county road. The NSWC is proposing to contract River Design Group to design and oversee the construction of a large wood bank restoration project. The project area will then be planted with native riparian trees and shrubs to help further stabilize the soils and to restore the riparian habitat. The project will benefit ESA listed Spring Chinook salmon and winter steelhead by reducing further erosion, improving water quality and by providing instream large wood habitat. Grant funds will cover contracted services and supplies and materials. Project partners include: Marion Soil & Water Conservation District, Marion County, ODFW and the Elk Horn Corporation.

Review Team Evaluation Strengths

- The project is clearly described in the application.
- The project site is located in a priority watershed for ESA-listed fish.
- Proposed actions will provide benefits to a diversity of fish species during high stream flows.
- Landowner support is demonstrated by a letter of support and significant match.

Concerns

- Since the large wood placement is not designed to extend into the stream, habitat benefits to fish will be minimal.
- Project designs focus on treating symptoms of disturbance instead of causes of watershed impacts.

- The project cost is high for a limited watershed benefit.
- The county is not involved in the project even though the adjacent county road significantly influences the river in this area.

Concluding Analysis

Since the Little North Santiam River is deficient in instream large wood, adding large wood structures will address a limiting factor for this watershed. However, the primary purpose of the proposed project design appears to be bank stabilization rather than fish habitat restoration, which results in an uncertain ecological benefit for the investment. Investigating design alternatives that incorporate a longer reach of the river could lead to a restoration approach that addresses watershed processes and functions causing erosion at the project site while incorporating restoration elements that provide cost-effective fish habitat benefits.

Review Team Recommendation to Staff Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount \$0

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Do Not Fund

Staff Recommended Amount \$0

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3016-16621Project Type: RestorationProject Name: Fribley Oak Woodland RestorationApplicant: Coast Fork Willamette WCRegion: Willamette BasinCounty: LaneOWEB Request: \$106,794Total Cost: \$139,794

Application Description (from application abstract)

The 20.03 acre property is located south of the City of Eugene within Lane County and the lower Camas Swale sub-watershed. This property contains rare but degraded Willamette Valley oak woodland habitat and a seasonal stream. Oregon white oaks within the project area are threatened by conifer encroachment and overtopping, while the understory has been heavily invaded by exotic woody vegetation. This loss of native habitat reduces biodiversity and negatively impacts important species that rely on these habitats including acorn woodpecker, slender billed nuthatch, and western gray squirrel. The proposed project will implement oak woodland habitat restoration that includes: (1) thinning small and large-diameter firs and oaks around legacy trees to restore 20.03 acres of oak habitat; (2) enhancing the seasonal stream; (3) controlling invasive plant species; (4) enhancing the plant diversity by planting native trees, shrubs, forbs, and grasses. The Coast Fork Willamette Watershed Council (CFWWC) will implement this project in partnership with CFWWC Technical Advisory Team who will provide planning & technical support. OWEB funds will be used for CFWWC staff, contracted services (tree thinning, weed removal/planting crews), travel, permits, and materials (plants).

Review Team Evaluation Strengths

- The application is well-written.
- The project site is located in historic oak habitat and provides a potential future opportunity to connect with other oak habitat restoration projects in the area.
- Proposed plans for restoring oak habitat are technically sound.
- A letter of support is provided to demonstrate landowner support for the project.

Concerns

- Since there are no old legacy oak trees on the site, this site may not be the highest priority for oak habitat restoration.
- The project area has a small footprint, which limits the cost-benefit for the watershed investment.
- While there are oak restoration sites in the general area, existing projects are located too far away to provide immediate habitat connectivity.

Concluding Analysis

The current scale of this project limits the quantified watershed benefits, which also limits the cost-benefit of the restoration. While the proposed actions will improve oak habitat at this site, strategically recruiting neighbors to build connectivity with other oak habitat restoration projects in the region would significantly increase impacts from this investment.

Review Team Recommendation to Staff Fund

Review Team Priority 9 of 9

Review Team Recommended Amount \$106,794

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount \$0

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3017-16624Project Type: RestorationProject Name: Upper North Santiam Side Channel
ReconnectionHeroject Type: RestorationApplicant: Cascade Pacific RC&DCounty: LinnRegion: Willamette BasinCounty: LinnOWEB Request: \$159,894Total Cost: \$311,809

Application Description (from application abstract)

The Upper North Santiam side channel reconnection project is located 10 miles upstream of the Detroit Dam near the town of Idanha. This site has an old 750 foot long historical side-channel that used to connect with the Upper North Santiam River at River Mile 59. Past stream cleaning and logging activities have removed riparian conifers and key pieces of large wood in the channel and floodplains. Sidechannel development has been limited by the lack of in-stream large wood to re- direct flows off the mainstem and channel hardening and straightening activities from revetment installation. Reconnecting the side channel will primarily benefit ESA listed juvenile Spring Chinook salmon and resident cutthroat trout by increasing the availability and complexity of off-channel rearing habitat. The NSWC/CPRCD received an OWEB TA grant in 2017 to contract River Design Group to develop a list of restoration alternatives that helped the NSWC and its local technical team in identifying alternatives and the feasibility of restoring side channel habitat in this reach. Based off the alternatives analysis the NSWC is now seeking funds to implement the technical teams preferred design alternative of opening up the 750 ft historic side channel and creating an additional 150 ft side channel. Large wood structures will be placed at the inlet, outlets and throughout the reconnected and newly created side channel habitat. Grant funds will cover contracted services and supplies and materials. Project partners include: ODOT, ODFW, USFS and adjacent private landowners.

- The project builds on a previous technical assistance investment.
- The proposed actions will address limiting factors identified for this watershed in a strategic location for habitat restoration to benefit ESA-listed fish.
- Designs consider potential impacts to adjacent properties.
- Surrounding landowners are actively involved in the project planning process.
- The project leverages a separate mitigation investment by expanding restoration benefits through an increased project scope and footprint.

Concerns

- A constructed side-channel reconnection may not sustain over the long term since the upstream inlet connection will likely fill in over time. Furthermore, this project may not be re-establishing a historic side-channel because the site appears to be the result of avulsion instead of a historic side-channel that filled in and disconnected from the mainstem North Santiam. This, combined with the proximity of homes and other nearby infrastructure, has resulted in a highly engineered project with a whole project cost that is high for the anticipated watershed benefit.
- Land ownership for the project area is uncertain.

Concluding Analysis

The proposed restoration will provide habitat to ESA-listed fish in a priority watershed for their recovery. While the highly engineered approach limits the cost-benefits of this project, the resulting habitat elements address priority limiting factors in the Upper North Santiam watershed.

Review Team Recommendation to Staff

Fund

Review Team Priority 7 of 9

Review Team Recommended Amount \$159,894

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount

\$0

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3018-16634	Project Type: Restoration
Project Name: Clackamas River Community Cooperative Revegetation Project	
Applicant: Clackamas River Basin Council	
Region: Willamette Basin	County: Clackamas
OWEB Request: \$66,249	Total Cost: \$98,124

Application Description (from application abstract)

The proposed restoration project is located in Clackamas, Oregon on the property of the Clackamas River Community Cooperative, a nonprofit, resident owned manufactured home community (45°40'40.46N 122°52'19.53W). The property includes the confluence of Sieben Creek and the mainstem Clackamas River and can be accessed from SE Jennifer Street. This project is designed to return this property to its baseline conditions by eradicating invasive species and re-establishing native plant communities, mixed riparian forest. Bohmian knotweed, garlic mustard, Himalayan blackberry, reed canarygrass, English ivy, clematis, and false brome dominate the area and negatively impact riparian functioning. Proposed work would consist of site prep, including hand cutting weeds and then treating resprouts with aquatically labeled herbicide. The project would be maintained following OWEB funding with matching funds from the CRISP partnership (pending).

Review Team Evaluation Strengths

- The project site is located on a priority stream for ESA-listed fish, and is in close proximity to past and future restoration planned in adjacent areas.
- Restoring the riparian forest will provide significant ecological benefits to this site.
- The restoration approach is technically sound.
- It is likely that successful implementation of the proposed actions will lead to adjacent landowners committing to restoration on their properties, which will further expand the benefits of this project.
- The applicant has a proven track record restoring riparian plant communities, therefore, this project is likely to succeed.
- Project costs are reasonable for the watershed benefit.
- Landowners are actively involved and supportive of the project.

Concerns

• No significant concerns were identified.

Concluding Analysis

The proposed project provides an opportunity for a landowner with limited resources to restore a riparian forest that has ecological benefits on the decline. If an investment is not made soon to restore this riparian forest habitat, the area will further decline and require substantial investment to restore watershed function. This riparian area is at a tipping point at which a timely restoration investment will provide significant watershed benefit for the cost because there are habitat elements in place to leverage and move it towards a healthy native plant community.

Review Team Recommendation to Staff Fund

Review Team Priority 5 of 9

Review Team Recommended Amount \$66,249

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$66,249

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3019-16640

Project Type: Restoration

Project Name: Upper Sandy River Basin Habitat Restoration Project: Salmon River and Clear Fork

Applicant: The Freshwater Trust

Region: Willamette Basin

OWEB Request: \$317,507

County: Clackamas Total Cost: \$1,138,223

Application Description (from application abstract)

Sandy River salmon and steelhead populations have declined over the last century due to degradation of habitat and other factors. The Sandy River Basin Partners (the Partners) have identified the Salmon River and Upper Sandy 6th Field watersheds among the top four areas providing high quality habitat for the basin's native fish. The Partners are aligned on a near term goal of restoring these priority watersheds to advance Sandy basin-scale restoration. On behalf of the Partners, The Freshwater Trust (TFT), US Forest Service (USFS) and Bureau of Land Management (BLM) are taking the lead on the Upper Sandy River Basin Habitat Restoration Project, which will address primary limiting factors by increasing off channel habitat/floodplain connectivity and large wood abundance in the Salmon River and Clear Fork (located within the Upper Sandy 6th Field watershed). Restoration actions include: reactivation of flow to historic side channels and floodplain habitat, construction of large wood habitat structures, and placement of additional large wood in side channels and on stream margins. Proposed work is on public land managed by the USFS and BLM located near Welches, Oregon in Clackamas County. This project is part of a larger, multi-year watershed scale restoration effort, and builds on similar successful projects completed in the basin by TFT and the Partners since 2008. OWEB funding will support TFT staff time for project design/permitting, project management, construction, travel, administration and reporting.

- The application is clear and addresses previous project evaluation comments.
- The proposed restoration is similar to previous work completed in the watershed that has proven success demonstrated by evidence from fish return data.
- The project addresses key limiting factors in a priority watershed with known use by ESA-listed Chinook, coho, and steelhead. The proposed work also implements actions in multiple planning documents.
- Lessons learned from previous restoration implementation are incorporated into this phase of the project.
- The project design approach demonstrates an understanding of geomorphic processes in the Sandy River Basin.

- The project team has a proven track record as a successful partnership on similar projects.
- Partner support is demonstrated by multiple letters of support and match.

Concerns

- It is unclear whether the design-build contractor has capacity for the restoration work scheduled to occur during Summer 2019.
- Due to the scale and complexity of this project, there are greater risks of negative impacts if the project were to fail.

Concluding Analysis

This project is part of a phased strategic approach in 6th field subwatersheds of the upper Sandy River Basin. This watershed has numerous ESA-listed fish species, making it a priority area for instream habitat restoration. Furthermore, post-project data from previous work demonstrates this stream system typically has an outstanding response to restoration that improves fish run numbers. The project has a high ecological benefit-cost ratio and high likelihood of success.

Review Team Recommendation to Staff Fund

Review Team Priority 2 of 9

Review Team Recommended Amount \$317,507

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Staff Recommended Amount \$317,507

Application Evaluation for Upper Sandy River Basin Habitat Restoration Project: Salmon River and Clear Fork, Open Solicitation-2018 Fall Offering Due: Oct 29, 2

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3020-16668Project TProject Name: Sandy River Delta Habitat
ContinuityProject TApplicant: Sandy River Basin WCCounty:Region: Willamette BasinCounty:OWEB Request: \$165,544Total Co

Project Type: Restoration

County: Multnomah Total Cost: \$243,596

Application Description (from application abstract)

Located at the confluence of the Columbia and Sandy Rivers, the Sandy River Delta supports the rich biological diversity of the Columbia River Gorge region and critical habitat for fish and wildlife, including five species of salmonids listed under the Endangered Species Act (ESA). This proposal supports landscape scale restoration underway and as planned for the Sandy River Delta Park, as described in the NEPA approved USDA Forest Service Sandy River Delta Plan. Historic land conversion, multiple uncoordinated restoration projects, and noxious weed invasion have degraded riparian forest structure and function at the Delta. Without intervention, noxious weeds are inhibiting the natural forest canopy and native habitat continuity throughout the 100-acre project area. This proposal restores functional floodplain forest by connecting previously restored habitat areas through the elimination of unintentional hedge rows of invasive species such as blackberry and Scotch broom. Contract crews will remove noxious weeds, which will be replaced with native trees, shrubs and broadleaf pollinator species. Project partners include the USDA Forest Service, Friends of Trees, National Forest Foundation, and East Multnomah Soil and Water Conservation District.

Review Team Evaluation Strengths

- The project is located in an Oregon Conservation Opportunity Area and is a site that provides habitat to a diversity of native species.
- Proposed restoration will build on previous investments that resulted in successfully establishing native plant communities at this location.
- The applicant has a proven track record with similar type projects.
- Restoration actions are identified in a USFS management plan for the property.
- Project costs are reasonable for the proposed work.
- The project offers an opportunity for raising public awareness about watershed restoration.

Concerns

• The application lacks details to determine technical soundness of the project design approach for this

phase of restoring native plant communities.

- The restoration approach does not provide adequate plant protection to address the level of impact that is likely to occur at this site located in a heavily used recreational area. This will limit the likelihood of success for this investment.
- The budget does not include plant stewardship activities. Activities to ensure plants reach a "free-togrow" state depends on match funding sources that are not yet secured. As a result, it is uncertain that plants will effectively be maintained to ensure a likelihood of success for establishing restored native plant communities.
- It is unclear how funds requested for effectiveness monitoring will provide information beyond the reporting elements required for Post Implementation Status Reports, which has a separate line item in the budget.
- Since there are several partners working on restoring native plant communities on the Sandy River Delta, a description on how these partners are collaborating to leverage their efforts in implementing the USFS plan for the site would be helpful. For example, inclusion of an abridged version of the USFS management plan with progress made by each partner would provide useful context for understanding whether work on this site is coordinated or occurring as independent projects.

Concluding Analysis

While the proposed restoration will improve habitat for fish and wildlife, there are significant risks caused by recreational impacts at the site that could limit the ecological uplift from this investment. Without a site-specific plan for protecting and stewarding plants, the proposed restoration is not likely to succeed in establishing restored native plant communities under the unique conditions resulting from the heavy recreation use. Also, considering additional levee removal as part of a project in the Sandy River delta area to allow increased water inundation would significantly increase ecological benefits at this location.

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

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Staff Recommendation
Do Not Fund
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Staff Recommended Amount \$0

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3021-16675

Project Type: Restoration

Project Name: Heritage Pine oak and prairie restoration and enhancment

Applicant: Metro Region: Willamette Basin OWEB Request: \$107,212

County: Washington Total Cost: \$214,426

Application Description (from application abstract)

Heritage Pine Natural Area (Heritage Pine NA) is a 202-acre property located near Sherwood, Oregon, just east of the Tualatin River National Wildlife Refuge (TRNWR) Atfalati unit and bordered by the Tualatin River to the North. Heritage Pine NA is within the TRNWR acquisition boundary and the Tualatin River ODFW Conservation Opportunity Area. The site is co-managed by Metro and the United States Fish and Wildlife Service under an Inter-Governmental Agreement. The proposed 60 acre project will implement oak and prairie habitat restoration based on a restoration plan developed by RTF Consulting in collaboration with Metro and TRNWR staff. Actions will address fundamental limiting factors identified in the state conservation strategy, especially woody plant encroachment, invasive weeds and low forb diversity. Several restoration actions are included. 1) Release of open grown legacy Oregon white oak on 14.2 acres on the edges of the prairie and on an escarpment above the emergent wetland. This will involve thinning competing conifer, Oregon ash and bigleaf maple, removal of non-native trees and seeding of native forbs and grasses. 2) Restoration and enhancement of 33.4 acres of wet and upland prairie, including removal of woody vegetation and invasive species, and seeding of native prairie species. A small drainage ditch will be filled and agricultural drain tiles will be removed to restore wet prairie hydrology. At Heritage Pine, encroaching woody vegetation includes a planted ponderosa pine plantation surrounding the iconic pine.3) Restoring a small section of riparian forest (2.3 acres) and emergent wetland (8.9 acres) adjacent to the prairie through site preparation, native bare root plantings and seeding of native wetland species. These areas will buffer the focal oak and prairie restoration area from re-invasion by invasive weeds and provide habitat for associated species. The cost per acre over five years is approximately \$3600.

- The application is well-written and provides details on restoration activities, why these actions are needed, timing of project elements, and costs.
- Restoration methods are clearly defined, technically sound, and focus on treating causes impacting habitats rather than symptoms of disturbance.
- Priority oak and wet meadow habitats will be restored to provide benefits to a diversity of native wildlife species, and will build anchor habitats in an area that has rapid urbanization.

- There is connectivity between this project site and other restoration efforts along the Tualatin River.
- The project site provides opportunities to raise public awareness about watershed restoration.
- Multiple partners are involved in the project.

Concerns

- Project management costs seem high compared to similar type projects.
- While partner participation in the project was described well at the review team site visit, the application provides limited information on partner roles.

Concluding Analysis

A diversity of priority habitats will be restored on a large conservation holding that is part of a portfolio of properties in the region owned by the applicant. Previous restoration activities on these properties, along with future restoration envisioned for these sites, will provide a network of connected fish and wildlife habitats and build watershed resilience as urbanization expands in this region. This provides a significant watershed cost-benefit for the investment.

Review Team Recommendation to Staff Fund

Review Team Priority 6 of 9

Review Team Recommended Amount \$107,212

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$107,212

Application Evaluation for Heritage Pine oak and prairie restoration and enhancment, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3022-16680Project Type: RestorationProject Name: Lower South Fork River Floodplain
Enhancement Project Phase IIHerein Project Phase IIApplicant: McKenzie Watershed AllianceCounty: LaneRegion: Willamette BasinCounty: LaneOWEB Request: \$464,079Total Cost: \$962,134

Application Description (from application abstract)

The Lower South Fork McKenzie River Floodplain Enhancement Project is a multi-phased effort designed to restore the physical, chemical, and biological processes that maintain a healthy, diverse, and resilient ecosystem within the lower 4.2 miles and 600 acres of the South Fork McKenzie River (South Fork) downstream of U.S. Army Corps of Engineers (USACE)-operated Cougar Dam. Phase I was completed in 2018 over the lower 0.7 miles and 150 acres of the South Fork. The proposed Phase II will continue that work on 0.5 miles and 50 acres of floodplain directly upstream of Phase I on public lands owned and managed by the U.S. Forest Service (USFS) in Lane County near the unincorporated community of Blue River. The installation of USACE operated Cougar Dam, placement of berms and levees, removal of instream wood, and timber harvest from floodplain forests degraded habitat within the lower South Fork valley. These activities alter physical, chemical and biological processes and degraded habitat for native species including ESA-Threatened spring Chinook salmon and bull trout. Limiting factors include lack of spawning gravel, off-channel habitat, high flow refuge, pools, cover, fine sediment deposition on the floodplain, and shallow wetland habitat. Phase II will address limiting factors through the removal of artificial berms and other floodplain surfaces, manual aggradation of incised channels, and placement of large wood throughout the valley bottom. Partners include the USFS Willamette National Forest, McKenzie Watershed Alliance, Oregon Department of Fish and Wildlife and USACE.

- The application is well-written.
- This phase 2 project builds on previous restoration to reconnect the stream with its flooplain in a large-scale, whole valley approach that treats causes impacting watershed health rather than symptoms of disturbance.
- Lessons learned from previous restoration work are incorporated into this phase of the project.
- Effectiveness monitoring is incorporated into the project and provides an opportunity to understand the efficacy of the stage zero restoration approach.
- The overall project cost for the scale of resulting watershed benefits is reasonable.
- The project team has a proven track record as a successful partnership on similar projects.

• Partner support is demonstrated by letters of support and match.

Concerns

- Since impacts from Cougar Dam continue to affect this watershed, there could be a limit to how effective this restoration can be in restoring watershed processes and functions.
- Some ODFW staff have concerns regarding the technical soundness of the stage zero approach, however, the local ODFW staff provided a letter of support for this project that highlights the success of the phase 1 work.
- There is limited data on the effectiveness of the stage zero restoration approach.

Concluding Analysis

In addition to Cougar Dam, the lower South Fork valley in the McKenzie Watershed has been impacted by placement of berms and levees, removal of instream wood, and timber harvest from floodplain forests. While the dam will continue to be a limiting factor in this watershed, the proposed restoration will make significant progress towards restoring watershed processes and functions degraded by the collective impact of these historic actions that led to current conditions. This large-scale, high impact project will build watershed resilience and provide significant benefits to ESA-listed fish in a watershed prioritized for their recovery. Based on phase 1 results, it is expected that phase 2 will result in a significant amount of high quality stream habitat that will likely be utilized by fish instantly.

Review Team Recommendation to Staff

Fund

Review Team Priority 4 of 9

Review Team Recommended Amount \$464,079

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount

\$464,079

Staff Conditions

None

Page 3 of 3

Willamette Basin (Region 3)

Application Number: 219-3023-16702 Project Name: Greenhill Oak and Prairie Restoration Applicant: Long Tom WC Region: Willamette Basin OWEB Request: \$299,936 Project Type: Restoration

County: Lane Total Cost: \$556,756

Application Description (from application abstract)

The project area encompasses 315 acres on four contiguous private properties in the Coyote Creek subbasin of the Long Tom Watershed located about a mile southwest of Eugene in an area identified as high priority for oak and prairie conservation by the Rivers to Ridges Partnership, the Oregon Conservation Strategy, and The Nature Conservancy. The project proposes to restore 315 acres oak savanna, woodland, and prairie habitat that currently suffers from fire suppression, woody encroachment, dense canopy conditions, and pressure from nonnative and invasive plant species. Native prairie and oak understory plant communities continue to support a number of rare and high-fidelity plant species and in some places moderate and high species diversity. Grassland birds, including Oregon Vesper Sparrow, nest in the project area. The Long Tom Watershed Council proposes to work with the four highly engaged and motivated landowners, NRCS, and USFWS to develop land management plans to guide habitat restoration activities, including transitioning 78 acres of planted Doug fir woodland to oak savanna, implement habitat restoration actions, including prescribed fire, and share experiences with other landowners. The site would leverage OWEB's significant prior investment in restoration on several adjacent and nearby properties. Project activities include thinning, brush treatments, mowing, invasives control, good fire, and seeding. On one site rotational grazing planning and monitoring will continue to inform the use of grazing as a tool in prairie and oak habitat stewardship. Project partners include the U.S. Fish and Wildlife Service, the Rivers to Ridge Partnership and burn implementation group, the Natural Resources Conservation Service, and private landowners.

- The proposed project leverages previous OWEB restoration investments by extending connectivity of
 restored habitats on properties adjacent to the project area.
- Priority oak savannah, woodland, and prairie habitats identified in the Oregon Conservation Strategy will be restored.
- The project has a large footprint with four large contiguous properties, which creates a significant cost-benefit for the watershed investment.
- Landowners are actively involved in building partnerships to utilize restoration resources, and they have already completed voluntary restoration work on their properties.

- Multiple partners are involved in the project, which is demonstrated by letters of support and match.
- Existing habitat in the project area has a high diversity of native plants, including 74 prairie plant species on just one landowner site alone.

Concerns

• No significant concerns were identified.

Concluding Analysis

Landowners involved in this project share a unified vision for a ridgetop to ridgetop restoration approach across their properties. This project also provides an opportunity to demonstrate how voluntary conservation and working lands can effectively be integrated together. There is a high likelihood for this project to succeed because of the scope and scale of the restoration, diversity of partners involved, and integration of land management actions with habitat restoration.

Review Team Recommendation to Staff Fund

Review Team Priority 1 of 9

Review Team Recommended Amount \$299,936

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$299,936

Staff Conditions

Application Evaluation for Greenhill Oak and Prairie Restoration , Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Willamette Basin (Region 3)

Application Number: 219-3024-16711
Project Name: South Fork Pedee Creek Enhancement
Applicant: Luckiamute WC
Region: Willamette Basin
OWEB Request: \$121,684

Project Type: Restoration

County: Polk Total Cost: \$466,534

Application Description (from application abstract)

The South Fork Pedee Creek Enhancement project area lies within the timberlands of the upper Luckiamute watershed in the Pedee 6th field hydrologic unit. The North and South Forks join to form Pedee Creek, which then drains into the Luckiamute River near the community of Pedee in Polk County. Historical practices such as logging to the water's edge, log removal, and log drives impacted upper Luckiamute sub-basins, including Pedee. A severely undersized culvert at the upper end of the project reach is blocking the transport of bedload. The streambed is scoured to bedrock in many areas, a lack of instream wood and debris jams has led to poor sediment sorting and gravel retention, riparian conifers are absent in large sections, and there is little channel-floodplain interaction. The lower culvert, near the center of the project reach, is undersized and failed during high flows in 2012; a small, ephemeral alder log jam has raised the streambed, otherwise the pipe's size and slope create a juvenile barrier. The riparian corridor along a 0.74-mile section of the project reach is dominated by invasive weeds and is not providing adequate shade. The Luckiamute Watershed Council used NetMap, a fine-scale watershed based modeling tool, in combination with field verification to prioritize restoration reaches for steelhead recovery in the Luckiamute basin. The proposed project area was the highest ranking reach. Resolving current and future instream large wood deficiencies through log placement, conifer enrichment, understory enhancement, and riparian revegetation will result in both immediate and long-term habitat benefits and restore key ecological processes throughout the 2.8-mile reach. Project partners will replace both culverts during the project period. Partners are Starker Forests, Inc., Hancock Forest Management (on behalf of the property owners), Forests Forever, Inc., Western Oregon University, and the Bureau of Land Management.

- The project site is located in a stream reach with high potential for improved biological value, and restoration actions will address limiting factors and benefit steelhead.
- The proposed actions will treat causes impacting watershed health instead of symptoms of disturbances by addressing undersized culverts trapping sediment bedload. When the culverts are replaced, this bedload will move downstream, sort, and be captured by the large wood structures that will be placed instream. This will provide a restored streambed with fish habitat benefits.

- The proposed restoration is based on a rigorous analysis of the watershed that was used to determine the best locations for stream restoration. As a result, the proposed project has a high likelihood for success in achieving expected watershed benefits.
- Alternatives were evaluated as part of the project design.
- The project includes a public awareness component, including Western Oregon University student involvement.
- The ecological benefits from this project significantly outweigh the cost.
- Applicant has a proven track record in implementing similar projects.

Concerns

 A portion of the project planting component will occur within a 100-foot riparian buffer on private timber lands that could potentially be havested in the future.

Concluding Analysis

This comprehensive project across multiple properties leverages landowners investing in road crossings that are currently interrupting watershed processes and functions. An OWEB grant to fund instream large wood placement is timely in order to leverage the landowner investment and achieve the highest benefit-cost of this voluntary work. Instream large wood placement needs to occur before the culverts are replaced so that when the bedload trapped above the culverts moves downstream, the large wood can sort and trap gravels and rebuild a natural streambed that provides fish habitat. The project has a high likelihood of success and benefit-cost- ratio because it addresses altered watershed functions over a significantly long stream reach that will benefit priority steelhead populations.

Review Team Recommendation to Staff

Fund

Review Team Priority 3 of 9

Review Team Recommended Amount \$121,684

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Fund

Staff Recommended Amount \$121,684

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3025-16712

Project Type: Restoration

Project Name: Truax Island Floodplain Restoration - Phase 1 - Planting and Plant Establishment **Applicant:** Calapooia WC

Region: Willamette Basin

OWEB Request: \$212,671

County: Linn Total Cost: \$365,225

Application Description (from application abstract)

Truax Island Access is a 128 acre undeveloped Willamette Greenway site within the Upper Willamette River Floodplain conservation Opportunity Area (COA 61, Oregon Conservation Strategy, 2016). The project occurs on the east side of the mainstem Willamette in kilometer slices 160-161 (http://ise.uoregon.edu/slices/Main.html). Truax Island is bordered on the south side by Dead River Slough which flows into the Willamette River. The Willamette River is the northern border of Truax Island. The primary watershed issue being addressed during the current Phase 1 is restoration of 40 acres of floodplain forest in the active floodplain which was cleared for agricultural use, and addressing riparian forest degraded by invasive species, as well as enhancing a small area of oak-pine uplands and adding turtle basking structures. Site preparation is underway thanks to a grant from Meyer Memorial Trust (OWEB 216-8201-15835). Funding is sought to install 62,160 native stems to reestablish a native floodplain forest (31.3 acres) and enhance oak-pine uplands through oak release and planting of upland native plants (8.7 acres). The future Phase 2 will build on the vegetation work and will focus on increasing connectivity to Dead River Slough and a relict gravel pit for juvenile salmonids and enhancing Western pond turtle habitat. Project partners include Oregon Parks and Recreation Department, Knife River Corporation, River Design Group, Department of Geologic and Mineral Industries (DOGAMI), The Nature Conservancy, and the Calapooia Watershed Council.

- The project site is located in a priority watershed area and implements actions identified in multiple plans, including the Upper Willamette Conservation and Recovery Plan for Chinook Salmon and Steelhead, Oregon Conservation Strategy, and the Willamette Anchor Habitat Working Group Action Plan.
- A diversity of watershed habitat benefits will result from the proposed restoration activities, including
 oak and western pond turtle habitats.
- The project builds connectivity with upstream and downstream restoration efforts.
- Multiple partners are involved in the project, which is demonstrated by letters of support. The applicant has engaged a diversity of partners necessary for this project to be successful, including neighboring agricultural landowners, state agencies, and an on-site gravel industry stakeholder.

• The project site provides opportunities to raise public awareness about watershed restoration.

Concerns

- Since previous turtle habitat projects have been unsuccessful, consulting ODFW to ensure turtle
 predation concerns are addressed and their life history is considered in scheduling restoration
 activities, such as timing of mowing and herbicide use, would improve technical soundness of the
 restoration approach.
- Planting plans for some of the habitat types may not be the most effective approach for the site. For example, planting an understory of herbaceous woody vegetation in the oak habitat area is discouraged. Given the scale of the site and the diversity of vegetation communities, the project would benefit from vetting the revegetation plan with a technical team to ensure planting approaches are likely to succeed and provide significant watershed benefits for the investment.

Concluding Analysis

Since initial site preparation has begun on the site with match funding sources, there is an element of timeliness and need to implement replanting strategies in order to maintain gains from this investment. The proposed restoration has potential to provide significant ecological uplift to priority habitats in a location that leverages connectivity with restoration investments in adjacent areas. However, proposed restoration strategies for western pond turtle and oak habitats have uncertain likelihood of success, which limits the benefit of this watershed investment. If the application is resubmitted, the applicant is encouraged to consult with ODFW on pond turtle habitat, and work with technical advisors on planting techniques, especially in the oak habitat, to ensure planting designs are site-appropriate and technically sound for the habitat type.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount \$0

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Application Evaluation for Truax Island Floodplain Restoration - Phase 1 - Planting and Plant Establishment, Open Solicitation-2018 Fall Offering Due: Oct 29, 20

Do Not Fund

Staff Recommended Amount

\$0

Staff Conditions
Willamette Basin (Region 3)

Application Number: 219-3026-16717 Project Name: Oak Creek Fish Passage Phase I Applicant: Marys River WC Region: Willamette Basin OWEB Request: \$139,918 Project Type: Restoration

County: Benton Total Cost: \$320,457

Application Description (from application abstract)

This project is located in the Oak Creek watershed, a tributary which enters the Marys River in Corvallis a mile from its confluence with the Willamette. This proposal represents the first phase to address fish passage barriers identified in Marys River Watershed Council's TA grant (#219-3007). Working with project partners Benton County Public Works and OSU Research Forests, we propose to replace two culverts which prevent access to the high value cutthroat trout habitat in the upper reaches of the basin. A third previously impassable culvert was replaced by Starker Forests in summer 2018, opening access to the upper reaches of Alder Creek, Oak Creek's major tributary. Removal of these barriers also builds upon the removal of a dam previously installed near OSU's Oak Creek Center for Urban Horticulture. The Oak Creek Action Team convened by four professors in the late 1990's recommended and oversaw the removal in 2006. The Benton County culvert located on Alder/Skunk Creek just upstream of its confluence with Oak Creek will replace a culvert that is undersized and perched with the bottom ribs rotted out. presenting a hazard to migrating aquatic life. For this crossing, we are proposing an open bottom multiplate arch culvert with concrete footings and simulated stream bed. Replacement of this culvert opens up year-round passage for 4.65 miles in the Alder and Oak Cr drainages, which is presently truncated on mainstem Oak Creek at the OSU McDonald Forest research weir (a complete passage barrier to be addressed with our TA grant). The OSU Research Forests culvert is on forest road #6020 upstream of the research weir, with high quality habitat in two branches of Oak Cr for 1.43 total miles above it. The current culvert in this location is undersized, perched and rotted in the center with about a 2' drop to the stream through the center of the pipe at low flows. We propose to install a counter-sunk squash pipe with passively-seeded stream bed at this location.

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The Benton County culvert located on Alder/Skunk Creek just upstream of its confluence with Oak Creek will replace a culvert that is undersized and perched with the bottom ribs rotted out, presenting a hazard to migrating aquatic life. For this crossing, we are proposing an open bottom multi-plate arch culvert with concrete footings and simulated stream bed. Replacement of this culvert opens up year-round passage for 4.65 miles in the Alder and Oak Cr drainages, which is presently truncated on mainstem Oak Creek at the OSU McDonald Forest research weir (a complete passage barrier to be addressed with our TA grant).

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Review Team Evaluation Strengths

- The project builds on OWEB technical assistance and stakeholder engagement investments.
- Undersized culverts that are in danger of failing and negatively impacting stream conditions will be addressed, which will also open access to cold water refugia habitat for native fish.
- An OSU concrete research weir located between the two project culverts will likely be removed in the future, and OSU plans to use this opportunity to study how barrier removal affects stream sediment transport.

Concerns

- There is uncertainty about whether the dam on an OSU property downstream of the project area is likely to be addressed.
- While there are plans to address the OSU research weir located between the two project culverts, it will not occur until after the current research project is completed in 2023.
- The project design approach could provide additional ecological benefit for the investment by incorporating instream habitat components.

Concluding Analysis

The project area provides a unique opportunity for a watershed restoration strategy to connect multiple land use types including agricultural, residential, urban, and forestry. The proposed culvert replacements will have limited benefits due to the downstream dam and research weir. The current stakeholder engagement project could provide an opportunity to continue conversations with OSU and secure a stronger commitment for addressing the downstream dam. Until there is more definitive indication these other barriers will be addressed in the near-term, the proposed restoration lacks urgency and has uncertain ecological benefit for the investment. Review Team Recommendation to Staff Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount \$0

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Do Not Fund

Staff Recommended Amount \$0

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3027-16614

Project Type: Technical Assistance

Project Name: Feasibility Assessment of Pilot Cold Water Refuge Enhancement Technique **Applicant:** Lower Columbia Estuary Partnership

Region: Willamette Basin

OWEB Request: \$74,977

County: Multnomah Total Cost: \$101,658

Application Description (from application abstract)

LCEP requests \$74,976 to assess the feasibility and develop 30% engineering designs for a pilot technique to enhance cold water refuges at the mouths of lower Columbia Gorge tributaries to benefit salmon and steelhead in the face of warming climate conditions. The importance of cold water refuges to salmon and steelhead migrating through the Columbia River is well documented, with steelhead using cold water refuges for days to weeks during the summer. Summertime water temperatures in the mainstem Columbia River have increased steadily over the last several decades, and recent annual peak temperatures have regularly exceeded 21°C and been as high as 24°C. These already stressful summer temperatures are predicted to continue to warm and the duration of that warm period is expected to increase. The warmest period typically occurs in July to early September, coincident with late-migrating summer Chinook and with substantial portions of the fall Chinook salmon and summer steelhead runs. Previous research identified several characteristics that make cold water areas along the mainstem suitable for salmonid use: 1) a temperature differential of $>2^{\circ}C$ with the mainstem, 2) water depth of >0.5meters for juveniles and >2 meters for adults, and 3) size of > 1 acre. In the lower Columbia River below Bonneville Dam only the Kalama, Cowlitz, and Lewis rivers meet these criteria, leaving a distance of 57 miles between refuges in the Lewis River and Eagle Creek. To fill this spatial gap, we assessed the feasibility of expanding the cold water plumes of three lower Columbia Gorge tributaries, which meet the temperature criterion but not the size and depth criteria, through manipulating nearby topography. By mimicking topography at other documented thermal refuges, primarily Herman and Eagle creeks' confluences with the mainstem, we hope to deflect mainstem Columbia flow away from the confluences of smaller tributaries to expand plume size and depth to foster salmonid use.

Review Team Evaluation Strengths

- The application is well-written and clearly describes a need for the proposed technical assistance.
- Enhancing cold water refugia addresses a key limiting factor for ESA-listed fish in the Columbia River. This technical assistance project provides an opportunity to design watershed restoration that will create cold water refugia fish habitat, and the proposed model may have potential to inform other cold water refugia habitat projects.

Concerns

- Portability of this work may be limited in its applicability to future projects due to differences in site conditions.
- There are a limited number of partners involved in the project.

Concluding Analysis

Cold water refuge for ESA-listed fish migrating along the Columbia River corridor is a key limiting factor in a priority location for their recovery. Restoring this habitat type in a large-scale river system is challenging, therefore, progress towards designing effective restoration projects will provide significant watershed benefit for the cost.

Review Team Recommendation to Staff Fund

Review Team Priority 2 of 2

Review Team Recommended Amount \$74,977

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$74,977

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3028-16639

Project Type: Technical Assistance

Project Name: Conserving Mussels in Aquatic Restoration--Technical Assistance

Applicant: The Xerces Society

Region: Willamette Basin

OWEB Request: \$74,952

County: Lane Total Cost: \$90,140

Application Description (from application abstract)

We will partner with restoration practitioners statewide to identify and protect freshwater mussels during restoration projects. Mussels are among the most important, yet overlooked, animals in Oregon's freshwater systems, providing valuable services to salmon and other organisms. Mussels purify water by filtration, increase macroinvertebrate abundance, support lamprey, and cycle nutrients. However, many of Oregon's native species risk extinction. Aquatic habitat restoration poses a significant emerging threat to these cryptic, frequently unnoticed animals. They are often discovered by restoration practitioners after site dewatering, at which point their chance of survival is limited. When mussel beds are lost, recovery can take decades. Our solution is to provide direct technical assistance to 18 existing restoration projects, affecting at least 20 river miles, including conducting mussel surveys, reviewing restoration plans and providing feedback on protecting mussels, and being present during restoration projects to coordinate mussel salvages or otherwise assist. Identified project partners and locations include: 1) McKenzie River Trust; Finn Rock Reach Preserve; McKenzie River near Blue River, Lane Co; 2) Luckiamute WC; South Fork Pedee Creek and Upper Luckiamute River, near Falls City, Polk Co; 3) Middle Fork Willamette WC at Elijah Bristow SP; Middle Fork Willamette River near Dexter, Lane Co; 4) BLM, South Fork Alsea River near Alsea, Benton Co; 5) MidCoast Watersheds Council; Bummer, Ernest, and Crazy Creeks; near Alsea, Benton and Lincoln Co; and North Creek near Lincoln City, Lincoln Co; and 6) CTUIR at restoration sites on the Middle Fork and North Fork John Day Rivers, and the Grand Ronde River and tributaries, Grant, Umatilla, and Union Co. Projects activities range from culvert replacements to large wood placement and floodplain and in-channel restoration. We will identify other partners through our complementary Stakeholder Engagement project.

Review Team Evaluation Strengths

- The application is well-written, and provides a clear justification for the need to protect freshwater mussels in Oregon's waterways.
- Proposed technical assistance activities are based on a technically sound Best Management Practices Manual, and will provide an effective resource for restoration practitioners.
- The applicant has relevant qualifications and experience for the proposed project.

· Project support is demonstrated by multiple letters of support.

Concerns

- Some project costs in the budget are unusually high, including costs for a wetsuit and travel costs. Additional explanation on these costs would help to determine whether they are necessary and reasonable.
- Given the broad extent of the mapped freshwater mussels, it will be difficult to have a significant impact with the limited available resources. Prioritizing geographies could be useful in helping to focus efforts.
- It is unclear whether all types of restoration projects are a risk to freshwater mussels, or whether there is a threshold at which watershed restoration work impacts mussels. For example, large wood placement projects that lay wood in the channel do not impact the stream to the same extent as large wood placement projects that bury the logs into the channel and may be more disruptive to mussel beds.

Concluding Analysis

This proactive approach for introducing Best Management Practices is likely to succeed in protecting native freshwater mussels during watershed restoration projects. Similar to lamprey, freshwater mussels are widely overlooked even though they play an important role in freshwater habitats. Raising awareness and teaching techniques for incorporating lamprey into restoration project design considerations made significant progress in protecting this species; therefore, it is expected the same result is likely to occur for freshwater mussels.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 2

Review Team Recommended Amount \$74,952

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Staff Recommended Amount \$74,952

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3029-16697Project Type: MonitoringProject Name: Luckiamute Temperature Monitoring
Phase 2Phase 2Applicant: Luckiamute WCCounty: PolkRegion: Willamette BasinCounty: PolkOWEB Request: \$48,152Total Cost: \$62,552

Application Description (from application abstract)

The Luckiamute Watershed Council (LWC) proposes to continue its temperature monitoring program. The project will collect continuous temperature data from surface waters in the Luckiamute River Watershed during the summer months of 2019 and 2020. The goal is to continue to fill a data gap of stream temperatures and trends in key locations to inform prioritization and planning for restoration projects. Sites will be selected in order to characterize priority tributaries and stream reaches, detect trends, collect baseline data, and ground-truth results of the thermal loading model from the 2017 NetMap analysis. The LWC proposes 21 monitoring stations in the mid and upper Luckiamute watershed in Polk and Benton Counties. Work will include field deployment, mid-season checks, and retrieval of 21 loggers. The LWC will also implement appropriate quality assurance and quality control measures to ensure high-quality data that meets A-level standards. The LWC will share data through presentations and incorporation of web-based interpretation and visualization applications. Project partners include field and technical volunteers, Hancock Forest Management, and River Network. The Luckiamute Watershed Council (LWC) proposes to continue its temperature monitoring program. The project will collect continuous temperature data from surface waters in the Luckiamute River Watershed during the summer months of 2019 and 2020. The goal is to continue to fill a data gap of stream temperatures and trends in key locations to inform prioritization and planning for restoration projects. Sites will be selected in order to characterize priority tributaries and stream reaches, detect trends, collect baseline data, and groundtruth results of the thermal loading model from the 2017 NetMap analysis. The LWC proposes 21 monitoring stations in the mid and upper Luckiamute watershed in Polk and Benton Counties. Work will include field deployment, mid-season checks, and retrieval of 21 loggers. The LWC will also implement appropriate quality assurance and quality control measures to ensure high-quality data that meets A-level standards. The LWC will share data through presentations and incorporation of web-based interpretation and visualization applications. Project partners include field and technical volunteers, Hancock Forest Management, and River Network.

Monitoring Team Evaluation Monitoring Team Strengths

- The applicant has an existing DEQ approved Sampling and Analysis Plan (SAP), and the application has a good explanation of monitoring methods and steps to manage and interpret the data.
- There is a sound rationale for and explanation of the sites they are choosing to monitor.

- The applicant has local support from relevant partners and some local landowners.
- The interactive web interface increase access to the data.
- A two-page handout for each participating landowner will explain what the data mean.
- The data are being collected to ground truth and inform the NetMap model to prioritize restoration actions.
- The application schedule incorporates a planning element for their Temperature Subcommittee and Project Review Committee to review and interpret the data for use in planning and prioritizing future restoration projects.

Monitoring Team Concerns

- Depending on the web interface developed, more time and resources might be needed to develop an effective online visualization tool in order to meet the objectives described in the application.
- Some sections of the application were overly long particularly the issues section. Consider using bullet points to succinctly describe important content.

Monitoring Team Comments

• The applicant should consider monitoring water temperature year-round to adequately document thermal dynamics.

• The applicant should consider developing additional water temperature metrics beyond what was mentioned in the application.

Review Team Evaluation Strengths

- The proposed monitoring builds on a previously funded project that has demonstrated success.
- The application is well-written.
- Protocols described in the application are technically sound.
- Resulting monitoring data will be used to groundtruth the applicant's NetMap watershed restoration planning tool that is used to identify and prioritize watershed projects.
- Multiple partners support this monitoring work, which is demonstrated by letters of support.
- The applicant has a demonstrated track record from previous monitoring work, which included effectively reviewing and reporting data.
- Landowners and the local community will be engaged as part of this monitoring project.
- · Project costs are reasonable for the proposed work.

Concerns

The proposed work shifts the direction of the applicant's monitoring approach, which previously
included monitoring effectivessness of completed restoration projects. The current proposal focuses
monitoring to only identifying areas with water temperatures well suited for fish rearing and migration
in the forested reaches of the watershed to identify future restoration opportunities.

Concluding Analysis

The proposed monitoring is a continuation of a number of integrated efforts the applicant is implementing to build a comprehensive watershed restoration strategy. Monitoring data will characterize temperature conditions in forested fish rearing and migration habitat to identify priority tributaries and stream reaches for future restoration. The applicant has a history of adapting their restoration strategy based on lessons learned from monitoring data, which results in cost-effective prioritized restoration projects with a high likelihood for success.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 1

Review Team Recommended Amount \$48,152

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$48,152

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3030-16713ProjProject Name: Calapooia Environmental DNA
MonitoringProject Name: Calapooia Environmental DNA
MonitoringApplicant: Calapooia WCCou
CouRegion: Willamette BasinCou
Tota

Project Type: Monitoring

County: Linn Total Cost: \$62,978

Application Description (from application abstract)

1) The Calapooia Watershed Council's proposed environmental DNA (eDNA) monitoring will occur on the mainstem Calapooia River/Sodom Ditch, from its confluence with the Willamette River in Albany to the end of anadromy on National Forest Lands at RM 72.0. 2) To best manage and restore native populations of aquatic organisms in the Willamette Valley, a baseline understanding of their distribution and habitat utilization is required. However, this critical information is largely lacking in the Calapooia River due to limitations in agency capacity and the elusiveness of certain species. Thus, management decisions regarding the declining native fish species often lack critical information. Spring Chinook in the Willamette River are listed as Threatened under the Endangered Species Act. With the recovery of UWR spring Chinook still attainable, valuable spatial information gathered with eDNA monitoring will begin to guide the restoration of important habitats and provide insights into the recovery of the population. 3) In order to make the most effective use of monitoring funds and enable instream restoration targeted at the reachscale, the Calapooia Watershed Council seeks to address these information gaps regarding wild spring Chinook in the Calapooia River with eDNA monitoring. Environmental DNA (eDNA) is an innovative monitoring technique that collects and analyzes the DNA shed into the environment by an organism. By filtering stream water and analyzing the contents for the DNA of a particular species, the presence of that species can be determined with a high level of certainty. The results of the eDNA monitoring will inform the selection of instream habitat restoration sites, depict the current spatial distribution of spring Chinook in the Calapooia River, and provide insights for future monitoring.4) The CWC will be partnering with the National Genomics Center for Wildlife and Fish Conservation, Oregon Department of Fish and Wildlife, and Weyerhaeuser. 1) The Calapooia Watershed Council's proposed environmental DNA (eDNA) monitoring will occur on the mainstem Calapooia River/Sodom Ditch, from its confluence with the Willamette River in Albany to the end of anadromy on National Forest Lands at RM 72.0. 2) To best manage and restore native populations of aquatic organisms in the Willamette Valley, a baseline understanding of their distribution and habitat utilization is required. However, this critical information is largely lacking in the Calapooia River due to limitations in agency capacity and the elusiveness of certain species. Thus, management decisions regarding the declining native fish species often lack critical information. Spring Chinook in the Willamette River are listed as Threatened under the Endangered Species Act. With the recovery of UWR spring Chinook still attainable, valuable spatial information gathered with eDNA monitoring will begin to guide the restoration of important habitats and provide insights into the recovery of the population. 3) In order to make the most effective use of monitoring funds and enable instream restoration targeted at the reach-scale, the Calapooia Watershed Council seeks to address these information gaps regarding wild spring Chinook in the Calapooia River with eDNA monitoring. Environmental DNA (eDNA) is an innovative monitoring technique that collects and analyzes the DNA shed into the environment by an organism. By filtering stream water and analyzing the contents for the DNA of a particular species, the presence of that species can be determined with a high level of certainty. The results of the eDNA monitoring will inform the selection of instream habitat restoration sites, depict the current spatial distribution of spring Chinook in the Calapooia River, and provide insights for future monitoring.4) The CWC will be partnering with the National Genomics Center for Wildlife and Fish Conservation, Oregon Department of Fish and Wildlife, and Weyerhaeuser.

Monitoring Team Evaluation

Monitoring Team Strengths

- This application proposes an appropriate use of eDNA technology to detect Spring Chinook in the Calapooia River, where the species is believed to be at very low densities.
- The applicant has a realistic understanding of what the information this technology can provide.
- The applicant is leveraging an existing eDNA assay for Spring Chinook and they are going the extra step to verify it will detect Willamette river species in advance.
- The applicant is working closely with the National Genomics Center for Wildlife and Fish Conservation to ensure they are following the correct sampling collection method and samples are analyzed correctly.
- The applicant has a good track record of coordination with ODFW to help fill data gaps in the Calapooia River.
- This project provides a nice opportunity to engage a broad range of volunteers and engage underutilized groups to help collect water samples.

Monitoring Team Concerns

- With the low numbers of Spring Chinook in the Calapooia, they may not detect any DNA, but that would be important information.
- The application mentions leveraging the water temperature data they are collecting with another monitoring grant, but this was not described in the schedule and no funding is provided in the budget.
- It was not clear what the additional staff time in the budget was needed for since they describe this monitoring project as needing minimal effort to collect the data.

Monitoring Team Comments

• Collect a water sample from a known stream (outside the Calapooia) where Spring Chinook are present and submit it blindly to the lab to verify their ability to detect DNA.

• The final report should include information from the eDNA results and mapped relative abundance and incorporate existing data gathered from additional monitoring grants to inform future monitoring and restoration efforts.

Review Team Evaluation Strengths

- The proposed monitoring protocols and use of eDNA data is technically sound.
- Resulting monitoring data will fill data gaps and inform future watershed restoration projects.
- The applicant's project manager has experience with this monitoring technique.
- The project is supported by a partnership with ODFW and National Genomics for Wildlife and Fish Commission.

Concerns

- It is unclear how other data, such as the temperature data referenced in the application, will be integrated with eDNA data. The proposed eDNA data alone may not help identify potential watershed restoration sites. As a result, the certainty of success for this project is unclear without more information on how other watershed data will be incorporated with eDNA information to direct future projects with watershed health benefits.
- The application is unclear on what final products, such as a report, will result from this monitoring project.
- Costs for staff for the amount of work outlined in the application seem high. Without an explanation on the need for the number of hours for the project manager, executive director, and restoration program manager, it is unclear whether costs and hours are reasonable for achieving the scope of work described in the application.
- It is unclear what the outreach project components requiring education staff time will entail, and whether these components are necessary for the proposed monitoring project.

Concluding Analysis

The proposed eDNA monitoring project has potential for providing useful information to determine the presence of spring Chinook that could inform ODFW management of the Calipooia River. Without additional details on how this eDNA data will be integrated with other watershed data to provide information that will be used to implement and direct watershed health projects, it is unclear whether this monitoring project is likely to succeed.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount

Application Evaluation for Calapooia Environmental DNA Monitoring, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

\$0

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Do Not Fund

Staff Recommended Amount \$0

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3031-16637

Project Type: Stakeholder Engagement

Project Name: Engaging Stakeholders in Restoration to Enhance Drinking Water Quality **Applicant:** Coast Fork Willamette WC **Region:** Willamette Basin

OWEB Request: \$27,715

County: Lane Total Cost: \$52,840

Application Description (from application abstract)

The Coast Fork Willamette watershed is located in the southern most reaches of the Willamette Basin, in Lane County. As one of the two headwater rivers that create the mainstem Willamette River near Eugene, the Coast Fork Willamette Rivers' influence can be felt throughout the Willamette Basin. The Coast Fork Willamette Watershed Council (CFWWC) continues to work collaboratively with partners to recruit stakeholders and encourage new projects that benefit fish, wildlife, natural ecosystems and human health. CFWWC is in the process of finalizing a 10-year Action Plan prioritizing work throughout the watershed. The result of this work has identified key areas that will provide the most ecologically significant impact for on the ground restoration and enhancement. This project seeks to recruit stakeholders in the prioritized regions of the Row River, Mosby Creek, and Upper Coast Fork Willamette watersheds to conduct on the ground restoration. The sensitive areas identified are drinking water sources for both the City of Cottage Grove (approximately 10,000 residents) and the City of Creswell (approximately 4,500 residents). This work is essential for the long term protection of drinking water sources for the communities reliant on the Coast Fork Willamette River surface water for drinking water. Funding for this project will primarily support CFWWC staff time and travel required to conduct outreach efforts, build relationships with key landowners, and design projects for future restoration efforts. Primary project partners include the City of Cottage Grove, the City of Creswell, Oregon Department of Environmental Quality, private landowners, and the Coast Fork Willamette Watershed Council. Secondary partners that will participate if appropriate based on landowner interest, future project design, current land use, and project location include McKenzie River Trust, Natural Resources Conservation Service, Farm Services Agency, and Oregon Department of Fish and Wildlife.

Review Team Evaluation Strengths

- Previous application evaluation concerns are addressed by the applicant.
- The project outreach plan is based on drinking water source protection, and proposed landowner engagement methods have proven successful.
- The watershed council is well-suited to serve as an ambassador bridging the urban and rural divide, and has a proven track record in effectively communicating with these stakeholders.

- Support from both cities involved in the project is demonstrated by letters of support.
- Resulting restoration project development will be beneficial to the watershed.
- Stakeholder engagement integrates job opportunities for youth crews.
- The project is timely for identifying restoration opportunities that could potentially secure local funding sources.

Concerns

- The project problem statement is unclear.
- It will be difficult to track what actions landowners complete on their own in response to the stakeholder engagement activities.
- The cities' staff roles in this project are unclear.

Concluding Analysis

The proposed stakeholder engagement project will reach a significant number of landowners in a community that has not yet been contacted through watershed related work. Framing the engagement conversation around drinking water concerns provides an effective common ground starting point to raise awareness about watersheds, and builds landowner interest to participate in activities that benefit the watershed. The applicant is encouraged to work with the county on trash pick up activities that may result from this stakeholder engagement work.

Review Team Recommendation to Staff Fund

Review Team Priority 2 of 2

Review Team Recommended Amount \$27,715

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$27,715

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3032-16649

Project Type: Stakeholder Engagement

Project Name: Engaging Diverse Stakeholders in Floodplain Restoration at Elijah Bristow State Park

Applicant: Middle Fork Willamette WC

Region: Willamette Basin

OWEB Request: \$124,594

County: Lane Total Cost: \$161,131

Application Description (from application abstract)

Through an OWEB Technical Assistance grant, the Middle Fork Willamette Watershed Council (MFWWC) has been working with Wolf Water Resources (W2r), and a robust technical team (Oregon Parks and Recreation Dept., Oregon Dept. of Fish and Wildlife, U.S. Geological Survey, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and the U.S. Forest Service) to develop process-based floodplain restoration designs for Elijah Bristow State Park (EBSP) - targeting 800 acres - and the sections of the Middle Fork Willamette River (MFWR) and Lost Creek that flow through the park. Dam building on the MFWR and berm creation have resulted in the loss of dynamism and diverse habitat historically present in this floodplain environment. Restoration designs will be bold – including the consideration of "Stage 0" approaches. This type of restoration approach has been strictly implemented on Federal lands thus far. Applying this approach in a location with more logistical and social constraints is going to require significant social engagement in order to be successful. The logical and necessary next step in the effort to restore the EBSP floodplain is to engage stakeholders. EBSP is an extremely popular site with annual day-use attendance of 187,200 including frequent use by equestrian groups, trail runners, anglers, and boaters. We seek to explain the project and its rationale to neighbors, park visitors, and river users because stakeholder understanding and acceptance will be essential to restoration project success. We will utilize project tours, science pubs, open houses, social media, and other methods to do so. It will also be critical to engage with Tribes, river and land managers, permitting agencies, and other key organizations that have an interest in the site and can support the restoration activities. Engagement activities with these groups will primarily include meetings, information sharing, and project tours.

Review Team Evaluation Strengths

- The project builds on an OWEB-funded technical assistance project.
- Stakeholder engagement activities are technically sound and described well in the application.
- The proposed stakeholder engagement is timely for development of the Elijah Bristow State Park restoration project, which will provide high ecological benefit for the watershed.

Concerns

- It is unclear whether alternatives to the proposed stage zero restoration approach were considered as part of the technical assistance work. If there are no restoration design alternatives under consideration, it is unclear what restoration project options are available in the event that engagement conversations result in no stakeholder support for stage zero restoration at this site.
- The proposed stakeholder engagement is described in the application as targeted; however, the stakeholders listed seem broader than is necessary to be effective. For example, all 9 federally recognized tribes in Oregon are identified when it would not be appropriate to engage more than the local geographically appropriate tribes. Additional information on why the proposed intensity of engagement is necessary and engages only the appropriate stakeholders for the resulting Elijah Bristow Park restoration project to be successful would provide helpful context.
- The number of staff hours seems high for the described goals, objectives, and tasks. It is also unclear whether some costs are necessary; for example, perhaps boats could be provided by partners instead of purchasing kayaks.

Concluding Analysis

Using the stage zero restoration approach at Elijah Bristow State Park is bold and will provide significant ecological benefits; and it will also require significant stakeholder engagement to be successful. Since using stage zero outside of USFS lands is new and experimental, it will be challenging to manage stakeholder expectations on how it will change this landscape. If stage zero is the only restoration alternative under consideration and it is unclear whether stakeholders will be comfortable with the uncertainty with this approach, there is a level of risk that the proposed stakeholder engagement will not lead to timely development of a watershed restoration project for implementation.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount \$0

Review Team Conditions

None

Page 2 of 3

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Do Not Fund

Staff Recommended Amount \$0

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3033-16691

Project Type: Stakeholder Engagement

Project Name: North Clackamas Urban Watersheds Council Kellogg Dam Fish Passage Applicant: North Clackamas Urban Watershed Council Region: Willamette Basin OWEB Request: \$62,312

County: Clackamas Total Cost: \$112,698

Application Description (from application abstract)

NCUWC will engage stakeholders to create fish passage at Kellogg Dam, which blocks access to 9 miles of vital salmon, steelhead and lamprey habitat in the Kellogg/Mt. Scott Watersheds and off channel refugia for Clackamas and Willamette river populations. We will convene stakeholders into a Fish Passage Steering Committee that will provide the needed planning, coordinated action, and fundraising essential needed to create fish passage at Kellogg Dam and to take advantage of upcoming windows of opportunity. While public support for fish passage and/or dam removal is high, the lack of coherent stakeholder engagement and planning processes has led to missed opportunities for mitigation credits, agency funding processes, and other opportunities to advance fish passage forward. There are several upcoming opportunities to advance the project, but they are time-sensitive and steps must be taken now to prepare to seize them. NCUWC will rejuvenate stalled processes and consolidate uncoordinated. ineffective and sporadic planning, and advance the project toward the feasibility and design phases. Key results will be:-Re-engagement of stakeholders in securing fish passage-Convening these stakeholders in a Fish Passage Steering Committee that will coordinate work-Progress toward the feasibility, design and fundraising phasesWorking with a strong consultant with knowledge of both public and private opportunities for advancing restoration work and experience in mufti-agency watershed processes, we will achieve an essential step in rebuilding anadromous fish populations and watershed health in the Lower Willamette region. Committed partners include Cascade Environmental Group (CEG), City of Milwaukie, Clackamas Water Environment Services (WES), GeoEngineers, Lower Columbia Estuary Partnership, NOAA Fisheries, North Clackamas Parks & Recreation District, and other partners listed in the full application.

Review Team Evaluation Strengths

• The proposed stakeholder engagement is likely to succeed in moving a high profile restoration project forward. This will build on previous efforts that addressed upstream barriers, and improved instream and riparian habitat.

- While there is already strong support demonstrated for dam removal, there is a clear need for an organization to lead a steering committee of key stakeholders to plan, coordinate, and fundraise for the restoration project that is likely to result from this effort.
- Project support is demonstrated by multiple letters of support.
- The consultant identified has relevant experience.
- The resulting planning documents will support fundraising efforts from diverse sources.

Concerns

- It is unclear whether the applicant has the capacity for the proposed project.
- Future restoration options may have a high cost for the resulting watershed benefit.

Concluding Analysis

The long-term goal of this project is to remove Kellogg dam and provide fish passage on an important tributary located in the lower Willamette River. This will significantly benefit fish using the drainage, including Coho and steelhead, by providing cold water refugia. Proposed activities described in this application will engage over 25 stakeholders and provide necessary coordination to move towards achieving the goal to address the negative impacts Kellogg dam has on migrating fish.

Review Team Recommendation to Staff Fund

Review Team Priority 1 of 2

Review Team Recommended Amount \$62,312

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$62,312

Application Evaluation for North Clackamas Urban Watersheds Council Kellogg Dam Fish Passage, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

Willamette Basin (Region 3)

Application Number: 219-3034-16715 Project Name: Beaver Creek Fish Passage Community Applicant: Sandy River Basin WC Region: Willamette Basin OWEB Request: \$36,597 Project Type: Stakeholder Engagement

County: Multnomah Total Cost: \$84,179

Application Description (from application abstract)

1) This project will take place in the Beaver Creek watershed, the lowermost tributary to the Sandy River, in and near the Cities of Gresham and Troutdale, in Multnomah County.2) One remaining culvert either completely or partially blocks fish passage on Beaver Creek, home to endangered salmonids, following removal of two others in the past two years. Temperatures in Beaver Creek exceed salmonid rearing standards much of the summer due in part to lack of riparian canopy. Both fish passage and temperature reduction will support recovery of ESA listed salmon in the watershed. The culvert replacement previously completed on Beaver Creek at Stark St. was met with some resistance from neighbors over the road closure; due in part to poor communication and lack of awareness that endangered salmon depend on Beaver Creek. Community concerns hold the potential to jeopardize the implementation of another culvert replacement project scheduled for 2019. Habitat in many riparian areas is compromised by invasive vegetation along Beaver Creek. This project will address weed removal and native plant establishment in key riparian areas and provide critical direct stakeholder engagement opportunities in the restoration of the watershed.3) Stakeholder engagement activities include site tours of fish passage sites (4 tours with a total of 50 participants each year), work parties to restore native vegetation in riparian and sensitive areas (4+ events with 25 participants each) and tabling and other outreach events in the community (10 events reaching 1000 stakeholders) with the outcome of securing community support and active involvement in implementing fish passage and riparian vegetation restoration projects.4) Project Partners include East Multhomah Soil and Water Conservation District, Multhomah County, Metro, Mt. Hood Community College, Cities of Gresham and Troutdale, Job Corps, Gresham Chamber of Commerce, Gresham and Reynolds School Districts, and others.

Review Team Evaluation Strengths

- The application is well-written.
- The project is located in a watershed with salmon bearing and 303(d) listed streams.
- Stakeholder engagement will target a diverse urban population with a variety of activities including face-to-face interactions, project tours, and social media.

Concerns

- Since the fish passage barrier projects will be implemented regardless of the proposed stakeholder engagement work, it is unclear whether the proposed project is needed.
- Additional description on how projects costs were determined would strengthen the application since it is unclear whether the budgeted cost for proposed community engagement staff time is warranted.
- The pathway from the stakeholder engagement project to an eligible restoration project is unclear; the application would be strengthened by an explanation on what is expected beyond the stakeholder engagement outreach activities and how they connect to a future restoration implementation project.

Concluding Analysis

Fish passage restoration projects scheduled to be implemented in 2019 offers a community engagement opportunity to raise community awareness about watershed restoration, and could potentially recruit involvement in future projects. Since stakeholder engagement is not necessary for the fish passage project implementation and it is unclear whether additional restoration project types will result from this proposed project, there is a is a low benefit for the cost.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount \$0

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Do Not Fund

Staff Recommended Amount \$0

Staff Conditions

Application Evaluation for Beaver Creek Fish Passage Community, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Central Oregon - Region 4 Fall 2018 Funding Recommendations



Document Path: Z:loweb\Technical_Services\Information_Services\GIS\Maps\Review Team Meetings\2018FallCycle\Projects\Region4_AppFundingStatus_11x17_2018Fall.mxd ESRI ArcMap 10.6 NAD 1983 Oregon Statewide, Lambert Feet Intl OWEB- PK Wills 20190314

Funding Recommendations

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

Previous Grants - 1998-Spring 2017

- Restoration
- Acquisitions

Streams Region Boundary

Oregon Watershed Enhancement Board

775 Summer St, NE Suite 360 Salem, OR 97301-1290 (503) 986-0178 http://oregon.gov/OWEB/

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Region 4 - Central Oregon							
Restoration Projects Recommended for Funding in Priority Order							
				Amount			
Project #	Grantee	Project Title	Brief Description	Recommended	County		
		West Fork Hood River at	Instream fish habitat structures will be placed along a one mile segment of the West				
219-4015	Hood River SWCD	Jones Creek Instream	Fork Hood River to improve habitat for spring Chinook, coho, and summer	72,704	Hood River		
		Habitat Project	steelhead.				
219-4014	Deschutes River	Swalley Piping Project, Elder	Irrigation piping of the Elder lateral will permanently conserve water instream to the	292 008	Deschutes		
213 4014	Conservancy	Lateral	Middle Deschutes River.	292,000	Deschates		
219-4013	Klamath Watershed Partnership	Chiloquin Community Forest and Fire Project - Forest Treatments	Small tree thinning and brush treatment will occur on forested private lands east of Chiloquin to promote wildlife resiliency and wildlife habitat.	537,878	Klamath		
219-4017	DEE Irrigation District	Dee Irrigation District Water Conservation Project	The last phase in irrigation modernization for the District will permanently conserve water instream to the West Fork Hood River.	303,981	Hood River		
219-4016	DEE Irrigation District	Cogswell Creek Fish Passage & Stream Restoration	Fish passage will be fully restored to the entire Cogswell Creek, a small east side tributary to Goose Lake.	366,518	Hood River		
Total Restoration Projects Recommended for Funding by RRT and OWEB Staff							
Restoratio	on Projects Recommen	ded but Not Funded in Pri	ority Order				
				Amount			
Project #	Grantee	Project Title	Brief Description	Recommended	County		
None							
Total Restoration Projects Recommended for Funding by RRT							
Restoration Applications Not Recommended for Funding by RRT							
				Amount			
Project #	Grantee	Project Title		Requested	County		
Discover Your							
219-4018	8 Northwest DBA: Lower Deep Creek Restoration Project Phase 2 (2019)		on Project Phase 2 (2019)	211,151	Crook		
	Discover Your Forest						
219-4019	Jefferson SWCD	Trout Creek Upland Habitat I	mprovement	417,333	Jefferson		

Technical Assistance (TA) Projects Recommended for Funding in Priority Order						
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
219-4023	Lake County Umbrella Watershed Council	Thomas Creek & Tributaries Streams - Restoration and Fish Passage Reconnaissance and Design	The technical assistance will engage three landowners to develop partial engineered designs to improve fish passage at five barriers on Thomas, Cox, and Camp Creeks located just west of Lakeview.	56,934	Lake	
219-4024	Hood River SWCD	Eastside Lateral Pipeline Design	Engineered designs will be completed and construction-ready to support future piping of a six mile canal that will permanently protect water instream to the East Fork Hood River.	35,090	Hood River	
219-4022	Crook SWCD	Fish Passage and Screening in the Upper Ochoco Creek Watershed	Project partners will work with several private landowners to develop partial engineered designs to improve fish passage and fish screening on stream diversions along Ochoco Creek above Ochoco Reservoir.	74,871	Crook	
219-4021	Lake County Umbrella Watershed Council	Thomas Creek Watershed Forest Health Mapping & Inventory	An eight step model will be used to engage and inform landowners, characterize timber and other natural resources to develop landowner specific management plans to promote forest health and wildlife habitat.	51,150	Lake	
Total TA Projects Recommended for Funding by RRT and OWEB Staff						
Technical Assistance Projects Recommended but Not Funded in Priority Order						
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County	
219-4020	Lower Columbia Estuary Partnership	Middle Mainstem Columbia Restoration Action Plan	The Lower Columbia Estuary Partnership (LCEP) will lead a variety of partners to develop a restoration inventory and action plan for the mainstem Columbia River from Bonneville Dam to the John Day Dam to fill knowledge gaps and jumpstart restoration activities in this area.	74,995	Hood River	
Total TA Projects Recommended for Funding by RRT						
Technical Assistance Applications Not Recommended for Funding by RRT						
Project #	Grantee	Project Title		Amount Requested	County	
219-4025	Deschutes SWCD	Lundy Ditch Feasibility		45,851	Deschutes	

Stakehold	Stakeholder Engagement Projects Recommended for Funding in Priority Order						
				Amount			
Project #	Grantee	Project Title	Brief Description	Recommended	County		
		Conserving Mussels in	Workshops and technical assistance will be provided to restoration practitioners in				
219-4030	The Xerces Society	Aquatic Restoration	an effort to engage and facilitate the protection of freshwater mussels during	55,167	Deschutes		
		Stakeholder Engagement	stream restoration.				
Total Stak	eholder Engagement	Projects Recommended fo	r funding by OWEB Staff	55,167			
Stakeholder Engagement Projects Recommended but Not Funded in Priority Order							
				Amount			
Project #	Grantee	Project Title	Brief Description	Recommended	County		
None							
Total Stakeholder Engagement Projects Recommended for funding by RRT							
Stakeholder Engagement Projects Not Recommended for Funding by RRT							
				Amount			
Project #	Grantee	Project Title		Requested	County		
None							

Monitoring Projects Recommended for Funding in Priority Order							
				Amount			
Project #	Grantee	Project Title	Brief Description	Recommended	County		
219-4026	Trout Unlimited Inc.	Recovery of a threatened amphibian after invader removal	Oregon spotted frogs will be monitored to evaluate their response to bull frog removal.	195,483	Klamath		
Total Monitoring Projects Recommended for funding by OWEB Staff							
Monitoring Projects Recommended but Not Funded in Priority Order							
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County		
219-4029	Klamath Watershed Partnership	Continuation Data Collection and Verification of the Stream Classification Database for Klamath/Lake	Field-based surveys will continue to classify stream types and fish suitability to provide critical updates to ODF's outdated and often unreliable stream classification database.	130,876	Klamath		
Total Monitoring Projects Recommended for funding by RRT				326,359			
Monitorin	g Applications Not Re	commended for Funding b	by RRT				
Project #	Grantee	Project Title		Amount Requested	County		
219-4028	OSU Office of Sponsored Research & Award Admin	Measuring the effects of beaver dam analogs for restoration on the South Fork of the Crooked River		48,801	Crook		
Region 4 Total OWEB Staff Recommended Board Award				2,041,784	19%		
Regions 1-6 Grand Total OWEB Staff Recommended Board Award				10,554,731			

Central Oregon (Region 4)

Application Number: 219-4013-16589Project Type: RestorationProject Name: Chiloquin Community Forest and
Fire Project - Forest TreatmentsProject Type: RestorationApplicant: Klamath Watershed PartnershipCounty: KlamathRegion: Central OregonCounty: KlamathOWEB Request: \$537,878Total Cost: \$9,591,331

Application Description (from application abstract)

Fire suppression and past forest practices in and around Chiloguin, Oregon, have altered forest structure and watershed function. Increased stand density and understory growth have reduced vegetation vigor and diversity, leaving entire landscapes vulnerable to drought, catastrophic wildfire, or other disturbances such as insects or disease. Changes in precipitation infiltration, water storage, and riparian condition have altered the hydrologic regime and water quality, altering habitat conditions and availability for T&E species such as the Oregon spotted frog, shortnose sucker, Lost River sucker, bull trout, and northern spotted owl. Forest restoration to historical conditions will restore and protect conservation values. The Chiloguin Community Forest and Fire Project (CCFFP) will restore forest health and resiliency across 184.370 acres of private and federal U.S. Forest Service land by engaging the community and implementing phased treatment of overstocked dry-type forests. The area is identified as a high-risk for wildland fire in the Chiloguin Community and Klamath County Wildfire Protection Plans. Vegetation and wildfire risk mapping has been completed for all of the private land, and crosswalks have been used to identify treatments for each stand. Outreach and education to 2,841 private landowners began with mailings and workshops in 2017, and will continue throughout the project to build a stakeholder base necessary for landscape implementation and long-term maintenance. Conservation practices that will be used to restore forest health and wildlife habitat include: brush management, fuel breaks, forest slash treatment, forest stand improvement (thinning), and tree/shrub pruning.Key partners include the U.S. Forest Service, Oregon State University Extension, Oregon Department of Forestry, Natural Resources Conservation Service, and governmental and non-governmental members of the Klamath-Lake Forest Health Partnership (KLFHP).

Review Team Evaluation Strengths

- Forestry treatments (small tree thinning and brush mowing) will improve watershed function with an increase in precipitation infiltration promoting understory vegetation growth and a decrease in risk and stress to mature trees left on the landscape from pest insects (e.g. bark beetles).
- The project builds off of successes gained through a current OWEB technical assistance grant.
- Proposed forestry treatments will improve wildlife habitat and forage availability.

- Management plans developed for each landowner will incorporate wildlife habitat improvements and wildfire education.
- The Wyden Amendment will be utilized to promote cross boundary forestry treatments between private and public lands.
- The project approach taken by the applicant and partners is strategic and utilizes an eight step model that has proven to be effective in neighboring Lake County for implementing similar cross boundary forestry treatments.
- The role of prescribed fire in contributing to the long-term maintenance and resiliency of the landscape is being discussed with the community.

Concerns

- Individual management plans with landowners have not been developed, which makes it challenging to discern the watershed and wildlife benefits without seeing actual prescriptions for each landowner.
- Mule deer could be negatively impacted by intense brush management, it would have been helpful to
 understand what type of prescriptions and subsequent monitoring will be employed to ensure that
 bitterbrush remains productive and abundant as appropriate to support mule deer populations.
- The long term benefits stated in the application are hinged upon the introduction of prescribed fire on the landscape, yet there is no guarantee this action will occur. Implementing prescribed fire requires risk management and private landowner trust, neither of which is discussed in the application.
- It is challenging to understand from the application how contracts with landowners will be managed, maintained, and monitored over time. More detail about contract management with each landowner would have been helpful.
- It is unclear what the landowners' role will be in maintaining the treatments completed with grant funds, specifically what the expectation is from the applicant and its partners.
- The timing associated with implementing match fund sources is unclear, specifically the implementation timeframe and location for treatments on Fremont Winema National Forest and landowner implementation timeframes with NRCS's Conservation Implementation Strategies (CIS) for this area. This information would have allowed for a better understanding of how matching fund sources complement this grant's focus area and timeline.
- The threatened Oregon spotted frog is listed as a beneficiary of these treatments, yet no critical habitat for the species is within the treatment area.

Concluding Analysis

The overall 184,370-acre project footprint provides an opportunity to implement landscape scale forestry treatments across ownerships that promote wildfire resiliency and watershed health. This proposal is the result of a methodical and successful model to work with community members so they are aware, informed, and engaged in the process of restoring their forests. The application clearly articulates the need for forest health treatments in this geography; however, it fell short on details regarding wildlife considerations and expected benefits from small tree thinning and brush management. This project will work with willing landowners who are committed and interested in completing forest health activities on their lands.

Review Team Recommendation to Staff

Fund

Review Team Priority 3 of 5

Review Team Recommended Amount \$537,878

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$537,878

Staff Conditions

Central Oregon (Region 4)

Application Number: 219-4014-16605Project Type: RestorationProject Name: Swalley Piping Project, Elder
LateralProject Type: RestorationApplicant: Deschutes River ConservancyCounty: DeschutesRegion: Central OregonCounty: DeschutesOWEB Request: \$292,008Total Cost: \$1,021,090

Application Description (from application abstract)

1) The Swalley Elder Lateral Piping Project is located in Bend north of Cooley Road crossing under the Old Bend-Redmond Highway in Deschutes County. 2) This project addresses critical streamflow issues that are a major limiting factor for fish and wildlife habitat and water quality in the Deschutes River. 3) Swalley Irrigation district serves 4,331 acres in the Upper Deschutes Basin. This project will pipe approximately 10,057 feet of district conveyance canals and permanently protect rights 395 acre-feet (1.3 cfs) into the Deschutes River. The project will also eliminate approximately 100 individual irrigation pumps, estimated to save irrigators up to 286,566 kWh a year. Swalley will construct the project in fall-winter 2019-2020. The Deschutes River Conservancy will manage the administrative process through the Oregon Water Resources Department to permanently protect conservancy and the Oregon Water Resources Department.

Review Team Evaluation Strengths

- Both the watershed context and ecological benefits are described well in the application, making it clear the proposed restoration is the right action in the right place to achieve the desired outcomes.
- The applicant has a proven track record for completing conserved water transactions.
- Since the Swalley Irrigation District has a completed and approved watershed plan, this project is permit-ready.
- Due to the extensive planning effort to date, the applicant and District are operating in a strategic manner to upgrade the District's delivery system.
- Piping the Elder lateral will result in 1.3 cfs of senior water rights permanently conserved to the Middle Deschutes Riv

Concerns

• The power savings discussed in the application will only occur once the main canal is piped; therefore, savings will not be realized with the implementation of this project.
- There is no documentation of landowner support in the application, nor any mention of farm irrigation water management. It would have been helpful to understand how landowner irrigation operations will become more efficient with the delivery of pressurized water.
- The applicant proposes 75% of water savings to be permanently conserved. The ecological value of the project would have been stronger if 100% of the water savings were to be permanently protected.

Concluding Analysis

Piping the Elder lateral in the Swalley Irrigation District is another step towards the District's commitment to irrigation modernization. The District's watershed plan was recently federally approved, which secures their match funding source from the current PL-566 fund and making this OWEB request a timely investment. The overall watershed plan will take roughly 10 years to implement and is heavily contingent on available funding. With this investment of public funds to modernize water delivery systems, a commitment from the landowners to implement on-farm irrigation water efficiencies would have strengthened the proposed project. The applicant and District demonstrate a strong partnership and commitment to achieving the ecological goal of improving stream flow in the Deschutes River.

Review Team Recommendation to Staff

Fund

Review Team Priority 2 of 5

Review Team Recommended Amount \$292,008

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$292,008

Staff Conditions

Application Evaluation for Swalley Piping Project, Elder Lateral, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

None

Central Oregon (Region 4)

Application Number: 219-4015-16607 Project Name: West Fork Hood River at Jones Creek Instream Habitat Project

Applicant: Hood River SWCD

Region: Central Oregon

OWEB Request: \$72,704

Project Type: Restoration

County: Hood River Total Cost: \$395,775

Application Description (from application abstract)

The proposed instream habitat enhancement project is along a 0.6-mile reach of the upper West Fork Hood River between the confluences with Jones Creek and Ladd Creek. The project is located on United States Forest Service (USFS) land on the Mt. Hood National Forest. The Upper West Fork provides some of the best spawning and rearing habitat for spring Chinook, coho, and summer steelhead in the Hood River basin because of its cold water temperatures and higher stream flows. However, past timber management practices (i.e., splash damming, stream cleaning, removal of large riparian conifers) have led to insufficient amounts of large wood instream, channel incision, and loss of connectivity between the main channel and historic side channels. These factors have resulted in reduced habitat quantity and complexity, including poor spawning substrate composition, low pool frequency, and little refuge from high velocities. The goals of the project are to improve and expand salmonid spawning and rearing habitat within the treatment reach. This will be accomplished by placing 380 pieces of large wood in 10-15 structures. Large wood structures will improve spawning habitat by trapping and sorting spawning gravels. They will improve rearing habitat by maintaining or reconnecting side channels, creating new pools, partitioning flow, increasing cover, and improving stream food web dynamics. The project will be managed by USFS staff. USFS has provided the large wood and paid for its delivery to the site, and performed a modeling analysis of the design. Confederated Tribes of the Warm Springs (CTWS) developed the design for this project and will assist with implementation oversight. Hood River Watershed Group staff will assist with contract administration and monitoring. USFS and CTWS have implemented several projects in the Upper West Fork and its tributaries over the past 10 years. The proposed project complements these projects and builds off of the lessons learned.

- The location of this project is a high priority for fish habitat restoration because it is not impacted by siltation from glacial tributaries and is a designated cold water refugia.
- The actions proposed in this project are identified in recovery planning documents for ESA-listed salmonids. The applicant and their partners have a proven track record with related restoration efforts; therefore, the project is likely to succeed.
- The project builds off previous restoration efforts and incorporates key lessons learned.

 The project is cost effective by utilizing whole trees salvaged from nearby hazard tree removal on USFS lands.

Concerns

- The design plans included in the application are light on details and do not include engineered drawings or construction plans. This additional information would have been helpful to determine whether the design intent will effectively accomplish project goals.
- The long-term objectives for the landowner should include management specifically designed to grow larger trees in the riparian area for future large wood recruitment.

Concluding Analysis

The West Fork of the Hood River bolsters some of the best remaining spawning and rearing habitat in the entire Hood River basin. The area of focus for the project partners presents an opportunity to improve these conditions while promoting floodplain inundation with the addition of whole large trees. This project complements on-going efforts in the West Fork of the Hood River, and will specifically address limiting factors for several ESA-listed salmonids. The project is cost effective, has high potential for success, and demonstrates an effective working relationship with local, federal, and tribal partners.

Review Team Recommendation to Staff

Review Team Priority 1 of 5

Review Team Recommended Amount \$72,704

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$72,704

Application Evaluation for West Fork Hood River at Jones Creek Instream Habitat Project, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

None

Central Oregon (Region 4)

Application Number: 219-4016-16609Project Type: RestorationProject Name: Cogswell Creek Fish Passage &
Stream RestorationProject Type: RestorationApplicant: Lakeview SWCDCounty: LakeRegion: Central OregonCounty: LakeOWEB Request: \$366,518Total Cost: \$482,120

Application Description (from application abstract)

1) Cogswell Creek is a steep to low gradient stream south of Lakeview flowing from the west out of the Warner Mountains into Goose Lake. 2) There are multiple irrigation diversions and a road culvert that pose multiple problems including, fish passage, altered sediment transport regimes, and in stream push up dams that require constant maintenance. The only consistent stream flow is in the upper reaches of the stream to which fish access is limited. 3) The restoration components are as follows: Replace push-up diversions with stream simulation concrete wall diversion with closeable headgates; replace failing concrete diversion with new diversion which allows for fish passage; replace perched culvert barrier with pre-fabricated steel bridge; install a screen and pipeline on the primary ditch of concern for fish entrapment, and install instream fish habitat features. 4) Partners include: OWRD, ODFW, USFWS, USFS, Lake County Umbrella Watershed Council, Lake County SWCD, and the landowners.

- The proposed system-wide approach will address all diversions and barriers to fish movement on Cogswell Creek, which will allow for a complete barrier-free perennial tributary to Goose Lake.
- The project includes instream habitat and bank stability treatments to improve overall riparian and aquatic conditions for redband trout.
- Landowner support for the project is demonstrated by letters of support and match.
- Replacing and upgrading diversions will allow for easier maintenance of structures, improved water management and delivery consistency, and an opportunity to measure flow at each diversion structure.
- The applicant has a proven track record in the community for building partnerships and recruiting participation from private landowners.
- The design detail provided in this application provides insight on the proposed approach and technique.
- This project builds off a recently completed OWEB technical assistance grant that funded engineering and planning to a 60% design level.

Concerns

- Project designs in the application do not include ODFW fish passage approval; this would have been helpful to determine whether ODFW will consider the project technically sound.
- The application includes little discussion about adjacent land use and riparian health. Riparian
 enhancements were discussed but not elaborated on. It would have been helpful to understand how
 this investment will be protected from from adjacent land use impacts.
- The design includes large wood placements on the floodplain and bank log jams. Ballast rock and
 existing vegetation will be primary anchors for this material. It is unclear from the application what the
 potential is for this material to mobilize downstream and whether this could be tolerated, particularly
 given a major highway crossing is downstream of the majority of the work being proposed.
- Including detail in the application on how the stream's hydrology was calculated and analyzed would
 assist with evaluating the design features and their ability to accomplish the project goals and
 objectives.
- A completed design set would have provided more confidence that this project could attain necessary permits and meet the desired passage and habitat objectives state in the proposal.

Concluding Analysis

The applicant was awarded a technical assistance grant from OWEB to bring each of the water users together to determine how best to collaborate in seeking solutions for fish passage and improved water delivery. As a result of this technical assistance work, this restoration project proposal includes all the water users on Cogswell Creek in voluntary conservation work that will provide a meaningful cost-benefit for the watershed investment.

Review Team Recommendation to Staff

Fund

Review Team Priority 5 of 5

Review Team Recommended Amount \$366,518

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Staff Recommended Amount \$366,518

Staff Conditions

None

Central Oregon (Region 4)

Application Number: 219-4017-16663Project Type: RestorationProject Name: Dee Irrigation District Water
Conservation ProjectProject Type: RestorationApplicant: DEE Irrigation DistrictCounty: Hood RiverRegion: Central OregonCounty: Hood RiverOWEB Request: \$303,981Total Cost: \$2,823,515

Application Description (from application abstract)

This project will take place within 840 acres of Dee Irrigation District (DID), located between the West and East forks of the Hood River in the upper west side of the Hood River Valley. The purposes of this project are to conserve water instream and eliminate sources of pollution to the West and East forks of the Hood River. DID's unpressurized, partially open distribution system is prone to leaks and breaks, and the system includes seven end spills, which result in DID diverting more water than is necessary from the West Fork Hood River. (An 'end spill' occurs when water not utilized for irrigation returns to the river, several miles downstream of the diversion, at the end of each distribution line.) The end spills also cause chemical (nutrients, sediment, bacteria, and pesticides) and thermal pollution to the West Fork and East Fork Hood River. Low flows in the West Fork Hood River are a limiting factor for threatened Chinook, steelhead, and coho populations. In addition, both the West Fork and East Fork have temperature TMDLs. Upgrading DID's distribution system to a pressurized pipeline will save an estimated 2 cfs (1 cfs of which will be protected through a Conserved Water Allocation). This will increase instream flows on approximately 6 miles of the West Fork Hood River and will eliminate chemical and thermal pollution of the West and East Fork Hood River from DID's distribution system. Project partners include Dee Irrigation District, Oregon Water Resources Department, and the Hood River Watershed Group.

- The proposed canal and ditch piping will complete the modernization of the Dee Irrigation District's distribution system.
- The project will result in 1 cfs permanently protected in the West Fork Hood River.
- A flow meter will be installed on each turnout, which will allow the District to carefully monitor water use.
- The new piping infrastructure will eliminate all of the end spills, which are speculated to increase sediment and pollutant run-off, degrading water quality.
- The applicant addressed previous review team comments regarding the permanent protection of water instream.
- The OWRD match funding source, has been awarded to the District so the project is ready for implementation.

Concerns

- The project is anticipated to save 2 cfs; however, the District is only committing 1 cfs to be permanently protected instream. The full ecological potential of this project will not be realized.
- The water quality benefits may be overstated as these are not based on actual data comparisons; however, piping will fully eliminate all end spills, which will eliminate any potential pollutants that could be degrading water quality.
- The overall project costs seem expensive for the ecological value that will be gained.

Concluding Analysis

This project is the last phase for the Dee Irrigation District to become fully modernized by piping the entire distribution system. The District has a history of conservation practice, and with flow meters installed at each turnout, the District will have the capability to monitor water use that may offer potential to realize water savings on farm.

Review Team Recommendation to Staff

Review Team Priority 4 of 5

Review Team Recommended Amount \$303,981

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$303,981

Staff Conditions

Application Evaluation for Dee Irrigation District Water Conservation Project, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

None

Central Oregon (Region 4)

Application Description (from application abstract)

The Lower Deep Creek Floodplain Restoration Project (Phase 2 - 2019) will be a continuation of instream and riparian restoration activities that were implemented in the summer of 2018 (Phase 1). This application seeks additional funding to continue a more involved project restoration approach and increased community engagement through partnership with Discover Your Forest. Feedback received by the US Forest Service (USFS) and its partners in the months leading up to Phase 1 implementation, resulted in an adaptive management hybrid design that created more immediate habitat features, relative to the initial design of 2015. This has been deemed a more desirable project design for all partners involved. Phase 2 will complete a series of treatments planned and implemented to improve aquatic habitat conditions and riparian function within the Deep Creek watershed. This watershed represents the most interconnected habitat for Redband trout in the Crooked River basin. Proposed activities would occur in the lower half of Deep Creek and dovetail with recently completed work including Crazy and Jackson creeks (see map – Jackson Creek is the upper half of Deep Creek). The purpose and need for these restoration activities is to enhance and recover habitat for Redband trout, Columbia spotted frog and other riparian dependent aquatic, wildlife, and plant species. Currently, untreated floodplain habitat is deficient in the quantity and quality of large woody debris and pools, and exceeds standards for bank stability and width/depth ratios. As with Phase 1, this project phase will match OWEB funds with significant USFS and partner funding and includes placement of large woody debris complexes in 6 distinct stream segments, and plug and fill work to aggrade the channel in the lower reach, Phase 2 include planting of additional native riparian plants across impacted floodplain, and the installation of cattle guards to protect this significant restoration investment.

- Deep Creek is a high priority for fish habitat restoration. The system is a stronghold for redband trout and offers larger base flows than the neighboring North Fork Crooked River.
- The applicant and their partners have applied lessons learned from other Stage 0 restoration projects in the region.
- The approach and technique proposed had local peer review.

- Phase I implementation was delayed, which allowed for more lessons learned and local peer review to be incorporated into the implementation of phase I and the design approach for the proposed phase II construction.
- The applicant has a public awareness plan.

Concerns

- Without allowing time to observe how the stream system will respond to the new approach applied during phase I implementation (completed October 2018), the sense of urgency for moving forward with phase II is not justified.
- The project site is part of a grazing allotment. The application lacks sufficient detail to help understand how these investments will be protected. For example, no specifications or locations are identified for the enclosures discussed and cattle guards to be installed are not identified on a map. The impact of these actions on the project site are unclear without further information.
- The maps included in the application suggest there will be restoration in Middle and Upper Deep Creek, yet there is no detail or designs provided that describe what types of actions are proposed in these locations. More detail on these proposed actions and the ecological benefit these actions will provide would have been helpful.
- Dispersed camping is a known problem in this area and has occurred on the project site, yet the application fails to articulate how the Forest Service will manage this to ensure restoration investments made will be protected from dispersed camping

Concluding Analysis

This project proposes a continuation of instream and floodplain restoration actions on lower Deep Creek in the Ochoco National Forest. Phase I was partially funded by OWEB in 2015, yet implementation was delayed till fall 2018 due to fire concerns, solar eclipse activity, and USFS personnel changes. The delay turned out to be advantageous for the USFS as new information about Stage 0 restoration was emerging, which allowed for more dialogue with local restoration practitioners. Given this, USFS revamped the approach and technique during implementation of phase I. However, this new approach forced construction to move slower than initially anticipated, leaving roughly half the initially planned restoration site un-touched, hence the proposed phase II to finish the work. Understanding the landscape and biological responses along with the ecological benefit from phase I implementation will provide information to determine whether the proposed phase II approach is likely to succeed. The applicant is encouraged to reapply when benefits of phase I can be reported on, in addition to including a detailed grazing management plan demonstrating how restoration investments will be protected over time.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount

Application Evaluation for Lower Deep Creek Restoration Project - Phase 2 (2019), Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

\$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

Central Oregon (Region 4)

Application Number: 219-4019-16699PrProject Name: Trout Creek Upland Habitat
ImprovementProject Name: Trout Creek Upland Habitat
ImprovementApplicant: Jefferson SWCDRegion: Central OregonCoOWEB Request: \$417,333To

Project Type: Restoration

County: Jefferson Total Cost: \$623,166

Application Description (from application abstract)

This project lies within the Trout Creek Watershed, an east side tributary to the Deschutes River. Located in Jefferson County, the project sites are located south of Ashwood on two tributaries of Trout Creek; Calf Gulch and Thompson Creek. These two tributaries are critical to one of the very few perennial reaches of Trout Creek. Both of these creeks are intermittent on the surface, but provide much needed subterranean flow to Trout Creek, keeping a 4 mile reach with surface water year round. With water flow being listed as one of the major limiting factors in the East side tributaries of the Deschutes River, this particular stretch of creek is very important to the survival of ESA listed Mid-Columbia Summer Steelhead. The Stenersen property includes two tracts of land totaling 2250 acres. 1445 acres are located in Calf Gulch and 805 acres in Thompson Creek, both of which have an overabundance of western juniper. The understory throughout the property is in relatively good shape with diverse perennial bunchgrasses, forbs and shrubs, lending itself to high upland restoration potential. Removing the junipers, enhancing the herbaceous and shrubby vegetation will significantly improve the wildlife habitat and provide an increase in much needed water to both creeks as well as Trout Creek itself, increasing summer flows and potentially extending the perennial reach downstream, increasing usable summer habitat for steelhead juveniles. The landowner plans to cut a portion of the junipers with chainsaws and remove others with an excavator. The Ashwood-Antelope Rangeland Fire Protection Association will then perform prescribed burns to the area, while ODFW and the Jefferson SWCD will reseed the areas cleared with the excavator. The SWCD will also plant willows along the two creeks to provide habitat and food for potential beaver relocation in the future.

- The project actions are timely given the current vegetation understory is in relatively good condition and the juniper encroachment is in phase I and II.
- A reduction in tree canopy will increase precipitation infiltration, which could increase local water tables and stream flow.
- The wildlife habitat should improve with less juniper density and reinvigorated grasses, forbs, and shrubs.

• The applicant has worked in the Trout Creek watershed for many years and is well aware of the issues and opportunities impacting fish and wildlife habitat resources.

Concerns

- The landowner is listed for completing the entire juniper cutting on 2,008 acres, which is a significant undertaking. The application lacks details on how well equipped, committed, and experienced the landowner is to complete this work.
- The cost per acre for juniper cutting seems low, which may be a result of relying too heavily on the landowner and could cause fatigue before accomplishing the entire scope of acres proposed for treatment.
- The proposal does not include a burn plan for the prescribed fire. Prescribed fire has risks associated with igniting high intensity crown fires. Without a burn plan, it is challenging to evaluate this activity due to the lack of understanding on how outreach, communication, smoke management, contingency planning, and monitoring will be implemented.
- It is unclear whether any outreach to adjacent neighbors has been completed, particularly regarding the prescribed fire component and whether or not neighbors support this type of management. Documenting support from adjacent landowners would have been helpful.
- The commitment in providing long term management of juniper encroachment is not well articulated in the application. The application points to long term prescribed fire, but offers no details on how this will be carried out.
- The Trout Creek watershed is heavily plagued with juniper encroachment, and this property represents a very small percentage of the overall problem. The application failed to explain the importance of juniper removal in this location within the context of the watershed.
- The local Rangeland Fire Protection Association (RFPA) is listed as the lead for the prescribed fire component, yet there is no letter of support pledging their partnership, capabilities, and interest in this project.

Concluding Analysis

This application proposes upland habitat restoration in two small tributary drainages of Trout Creek. Restoration activities include juniper cutting, prescribed fire, invasive species control, and riparian planting. The applicant has significant experience working in Trout Creek, and has spent the last 20 years partnering with ODFW implementing fish habitat and floodplain restoration projects to benefit mid-Columbia steelhead. This project with one landowner will remove juniper from the property and restore conditions more favorable for wildlife. The scope and scale of this project may be difficult to accomplish by only landowner labor alone. Additionally, without a burn plan in place, evaluating this component of the project is challenging to determine whether the project is technically sound and likely to succeed.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount

Application Evaluation for Trout Creek Upland Habitat Improvement, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

\$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

Central Oregon (Region 4)

Application Number: 219-4020-16537Project Type: Technical AssistanceProject Name: Middle Mainstem Columbia
Restoration Action PlanProject Type: Technical AssistanceApplicant: Lower Columbia Estuary PartnershipCounty: Hood RiverRegion: Central OregonCounty: Hood RiverOWEB Request: \$74,995Total Cost: \$95,214

Application Description (from application abstract)

The Lower Columbia Estuary Partnership (LCEP) requests \$74,991 to develop a restoration inventory and action plan for the mainstem Columbia River from Bonneville Dam to the John Day Dam to fill knowledge gaps and jumpstart restoration activities in this area. The mainstem mid-Columbia River historically provided essential rearing, migration, and refuge habitat for nine ESA-listed species of Pacific salmon and steelhead. Critical historical mainstem habitats included complex riparian shorelines, nearshore and shallow water areas, side channels, tributary confluences, and areas of groundwater upwelling or other thermal refuges. Many of these habitats have been flooded by the dams, cut off from the mainstem, and hardened or greatly simplified by the transportation corridor and urban and industrial development. In 2013, a restoration project inventory for the Washington side of the mainstem, from the White Salmon River up to the Snake River confluence, was developed by the Mid-Columbia Fisheries Enhancement Group, but this process has not been replicated on the Oregon side of the mainstem, leaving a gap of information on restoration opportunities. To fill this gap, we propose to update the literature review and salmonid life stage habitat preference criteria; survey the Oregon shoreline condition of the mainstem Columbia; catalog existing habitat types; identify restoration opportunities and compile them into a geodatabase; prioritize the identified restoration projects; and develop concept designs and an implementation plan for the top ranked projects. This entire process will be overseen by a stakeholder group, including key watershed councils and tribal, local, state, and federal representatives.

Review Team Evaluation Strengths

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- This project will focus on an area of the Columbia River that has a known data gap regarding fish and habitat restoration opportunities.
- The project will build off similar work that occurred on the Washington side of the Columbia River along this reach.
- The emphasis on cold water refugia areas and the work currently being done in conjunction with the EPA will complement and support this effort.
- The restoration plan to be developed could strongly benefit fisheries, given that numerous species migrate up and down this corridor of the Columbia River.

- This area tends to get overlooked by federal and regulatory entities; the project will raise attention and identify opportunities to benefit listed salmonids.
- The applicant is well suited and experienced to complete the work proposed.

Concerns

- Given the large focus area and complex issues, the number of stakeholder meetings may not be enough to provide understanding and gain consensus moving forward.
- The applicant has project support documented in Multnomah and Hood River Counties, but no support documented in Wasco, Sherman, and Gilliam Counties.
- There is a lack of details on how project development will occur after the restoration plan is completed. More information on this would have been helpful.

Concluding Analysis

This project is a resubmittal for the third consecutive cycle. The applicant provided answers to previous review team comments. Habitat concerns in this portion of the Columbia River are not well known, notwithstanding the numerous ESA-listed salmonids that migrate up and down this corridor. The project will help bring attention to this area, engage appropriate stakeholders, characterize the resources based on constraints and opportunities, and develop a restoration plan to move forward. This portion of the Columbia River appears overlooked by many; the applicant is attempting to change that. The degraded and modified river corridor presents challenges, but without such a plan as the applicant proposes, opportunities may be getting overlooked as well.

Review Team Recommendation to Staff

Fund

Review Team Priority 5 of 5

Review Team Recommended Amount \$74,995

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Do Not Fund; falls below staff-recommended funding line

Staff Recommended Amount

\$0

Staff Conditions

N/A

Central Oregon (Region 4)

Application Description (from application abstract)

The Thomas Creek Watershed Forest Health Project (TCWFHP) encompasses 46,266 acres of private, non-industrial forestland in Lake County, west of Lakeview. This landscape scale project is tied directly to Fremont-Winema National Forest's Thomas Creek Integrated Landscape Restoration Project, totaling 116,947 acres and is adjacent to the North Warner Forest Health Project where current treatment is underway. Through a century of fire suppression, the forests of this region have increased in density, lost diversity, and altered the structure and hydrologic function of watersheds. This loss from historic conditions has increased the scale and risk of fire severity, and reduced forest resiliency to drought, insects, and disease. High priority resources and habitat such as waterways and associated sensitive species, homes, ranch land, and private/industrial timberland are currently in jeopardy. The goal of the TCWFHP is to initiate a landscape-level forest management effort aimed at improving forest health conditions that will reverse the current fire trend and increase ecosystem resiliency. Based on similar efforts in Lake County, the TCWFHP uses an 8 step model founded on personal connections with informed and engaged private landowners. A comprehensive outreach, mapping, and inventory effort will inform and facilitate cross-boundary planning and implementation of forest health practices. Technical Assistance will be used to conduct targeted outreach to private landowners, including phone calls, mailings, site visits, forest management planning sessions, and educational workshops. Landowner education efforts will include two OSU Extension workshops for forest ecology/management, fire science and prioritization planning. Project partners include the Fremont Winema National Forest, ODF, NRCS, ODFW, and members of the Klamath- Lake Forest Health Partnership.

- This project will build off similar successful efforts employed in the adjacent North Warner focus area.
- The approach is methodical and utilizes an eight-step model that has been successful in achieving desirable goals and objectives.
- The project is well supported with all appropriate entities participating.
- The timing of this project is critical, given the massive impacts the 2018 Watson Creek fire had on the neighboring watershed.

- The need and resource concerns are well described.
- The engagement with private landowners could spawn additional opportunities to benefit fish and wildlife.
- The applicant has a strong track record of working in the Thomas Creek watershed, previously implementing a variety of fish passage and instream habitat projects

Concerns

- There is no discussion or detail provided in the application on project alternatives.
- The application lacks information on the anticipated timeline of the Fremont-Winema National Forest's work proposed for this geography. They are NEPA ready, but a timeline of activities would have been helpful to understand the timeframe associated with proposed cross-boundary forestry treatments.
- Project success is dependent on landowner awareness and interest; however, not all landowners had been contacted at the time of application.

Concluding Analysis

This proposal builds off recent local efforts and synergy around dry forest restoration. The tactic taken by the applicant and partners will work sequentially through a model to engage and inform landowners, and characterize timber and other natural resources on-site to develop site specific management plans to achieve desirable results for forest health. This effort will complement a ridgetop to ridgetop approach for overall watershed health in the Thomas Creek benefiting a variety of fish and wildlife resources.

Review Team Recommendation to Staff

Fund

Review Team Priority 4 of 5

Review Team Recommended Amount \$51,150

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Staff Recommended Amount

\$51,150

Staff Conditions

None

Central Oregon (Region 4)

Application Number: 219-4022-16629

Project Type: Technical Assistance

Project Name: Fish Passage and Screening in the Upper Ochoco Creek Watershed

Applicant: Crook SWCD Region: Central Oregon

OWEB Request: \$74,871

County: Crook Total Cost: \$98,875

Application Description (from application abstract)

Our project area is anchored by the confluence of Ochoco and Marks Creeks in the Upper Ochoco Creek watershed. Ochoco Creek is a significant tributary to the Crooked River east of Prineville, OR. These streams exhibit rich ecological potential but past management and barriers to fish migration and survival have fettered their productivity. With proper fish passage and screening this lush valley has the opportunity to offer high value spawning and rearing habitat for redband trout while continuing to provide excellent big game habitat and agricultural production. This application seeks to secure funds to engage a professional engineer who will conduct necessary surveys and develop design packages needed to address 11 fish passage barriers and 9 fish screening locations to restore passage along 20.3 miles of Ochoco and Marks Creeks. The project includes two land ownerships, with both landowners excited to continue their work to improve fish habitat and overall watershed conditions. The designs produced through this project will be used to apply for available restoration funds. The combination of willing landowners, motivated agency staff, and high site potential make this an excellent opportunity to improve fish habitat while increasing the efficiency of agricultural operations. The project team, partnering with ODFW, NRCS, US Forest Service, OWRD and The Crooked River Watershed Council, has identified this application as a necessary step in a larger effort to restore this landscape and waterway to a fully functioning ecosystem.

- The application presents a methodical approach for addressing fish passage and screening on Ochoco and Marks Creeks, starting at the first known barrier above Ochoco Reservoir and moving upstream.
- The proposal will develop designs for 11 barriers and 9 associated screens to a 50% level, which should provide enough detail to build landowner and partner support for a chosen alternative.
- The watershed above Ochoco reservoir is a stronghold for Redband trout; this project presents an opportunity to restore habitat connectivity.
- The applicant has established working relationships with private landowners involved in the project.
- The proposal is cost effective, achieving 50% designs for the number of proposed barriers and screens.

• The level of detail in the application justifies the approach, methodology, and reasoning for the project.

Concerns

- The match listed from the Forest Service is based on a projection of potential restoration investments that may occur upstream of the project area. The applicability of this match to the proposed project is unclear.
- Since stream corridors in the project area have been negatively impacted by livestock use, restoring
 passage to areas with poor riparian habitat may limit the ecological benefit of the resulting restoration
 projects. It would be helpful to learn whether there is interest and future plans to protect and or
 enhance riparian areas from adjacent land use practices.
- The proposed budget may be inadequate to achieve 50% designs for all 11 diversions and 9 screens.

Concluding Analysis

The project will engage landowners and resource entities to partially design fish passage and screening solutions at 11 diversion structures upstream of Ochoco reservoir. The proposal presents a methodical approach, has garnered local support, and developed a cost effective budget from a qualified engineer. The applicant is strongly encouraged to coordinate closely with OWRD throughout the design process regarding potential impacts to their existing stream gage located at one of the diversions on Ochoco Creek.

Review Team Recommendation to Staff Fund

Review Team Priority 3 of 5

Review Team Recommended Amount \$74,871

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Application Evaluation for Fish Passage and Screening in the Upper Ochoco Creek Watershed, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Recommended Amount

\$74,871

Staff Conditions

None

Central Oregon (Region 4)

Application Number: 219-4023-16630

Project Type: Technical Assistance

Project Name: Thomas Creek & Tributaries Streams - Restoration and Fish Passage Reconnaissance and Design

Applicant: Lake County Umbrella Watershed Council

Region: Central Oregon

OWEB Request: \$56,934

County: Lake Total Cost: \$71,434

Application Description (from application abstract)

This stream reconnaissance & design project, located northwest of Lakeview seeks to improve stream channel function and fish passage on 4 priority streams in the Goose Lake Basin. In addition to Thomas Creek, the project will also develop fish passage solutions for 3 tributary streams including Bauers, Cox, and Camp Crks (collectively known as the project area). This project will involve site survey, project alternatives plan, and conceptual design for 5 diversion structures located on four adjoining private properties. The irrigation diversion structures currently affect stream corridor connectivity and fish passage. Additionally, historical channel straightening, livestock grazing, and resulting channel incision have impacted stream corridor and wetland function. One new property owner and three existing generational ranching families have come together to address these issues. The Goose Lake Fishes Conservation Strategy, 1995 and Goose Lake Tributaries Reconnaissance and Fish Passage Plan, 2017 identify these projects as high priorities with the potential to improve stream function and fish passage. Addressing the diversions, stream conditions, and land use will improve migration corridor connectivity between upper valley stream segments that provide spawning and rearing habitat, and highly productive Goose Lake. This project has opened the door to address issues associated with these important streams that affect all 9 Goose Lake fish species Modoc Sucker, Goose Lake Redband Trout, Goose Lake Tui Chub, Pit Sculpin, Pit-Klamath, Brook Lamprey, Speckled Dace, Pit Roach, Pit Sculpin, and Goose Lake Sucker. While sections of these streams are degraded, the majority of Thomas Creek and sections of Camp, Bauers, and Cox crks have all been improved through stream restoration and fish passage improvement efforts in the last 10 years. The current projects will add to past efforts and further benefit the watershed. Partners: USFWS, ODFW, DU, 4 landowners, SWCD

Review Team Evaluation Strengths

The project includes three adjoining private properties, two of which have worked on previous
restoration projects with the applicant. The other parcel of private land has a new owner, which until
now, had never been accessible for conservation work.

- The project will greatly benefit fish habitat connectivity; the project area provides habitat for up to nine species of fish, some of which are endemic to this basin.
- The outcome of the project will be 60% project designs that address each fish passage barrier on the creek.
- Access to private lands offers an opportunity for fish surveys to be completed that will provide a better understanding of fish species use and their distribution in the system.
- Adjacent land use will be addressed by developing a grazing plan for the new landowner, and plans to comprehensively address resource concerns along these stream corridors.
- The project is cost effective for the deliverables described.
- The applicant has demonstrated success in this type of work.
- The maps and photos provide clarity about the project area and its context in the watershed.

Concerns

• The application states this project will benefit nine different species of fish. However, no data or information of known presence, use, or distribution of these fish in the Thomas Creek watershed is provided, making it hard to evaluate how valuable this project will be to fish.

Concluding Analysis

The project presents an exciting opportunity to work with a private landowner that is new to voluntary conservation. The project will provide significant benefit for improving fish passage, connectivity, and riparian management along these high priority drainages. This project will complement previous fish passage projects in Thomas Creek completed by the applicant, which increases the benefit-cost ratio of this investment.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 5

Review Team Recommended Amount \$56,934

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Fund with Conditions

Staff Recommended Amount \$56,934

Staff Conditions

As part of the project completion report, the applicant will provide fish survey data that was collected as part of this effort.

Central Oregon (Region 4)

Application Number: 219-4024-16703 Project Name: Eastside Lateral Pipeline Design Applicant: Hood River SWCD Region: Central Oregon OWEB Request: \$35,090 Project Type: Technical Assistance

County: Hood River Total Cost: \$504,400

Application Description (from application abstract)

This water conservation/pipeline design project will take place within the East Fork Irrigation District (EFID) near Hood River, Oregon. EFID serves approximately 975 patrons on 9,600 acres of agricultural and rural residential land. During peak irrigation (early July through mid-September) in an average summer, EFID diverts approximately 110 cfs from the East Fork Hood River, which amounts to about 75% of the East Fork Hood River's flow. Much of EFID's distribution system is still open canal, which results in an estimated 30 cfs of water loss during summer months. This has a significant impact on spawning and rearing habitat availability for spring Chinook, coho, and winter steelhead. The proposed work will include a cultural resource assessment and pipeline design for the Eastside Lateral Canal, a 6mile unlined ditch that begins near Swyers Drive (45.6123/-121.5073) and ends near Old Dalles Drive (45.6740, -121.4859). The canal serves about one-third of the district (~40 cfs) and has 14 end spills. Combined with evaporation and potential seepage loss, the canal loses an estimated average of 10 cfs. The design would include final construction drawings and specifications for the pipeline and turn-outs to sub-lateral lines and individual patrons. The completed design will support implementation of this project, which has received funding for the first phase of construction from the Natural Resources Conservation Service (NRCS) and Confederated Tribes of the Warm Springs (CTWS). Project partners include EFID, Hood River Watershed Group (project manager), Hood River Soil & Water Conservation District (applicant/fiscal sponsor), CTWS (funder), NRCS (technical assistance), and Farmers Conservation Alliance (technical assistance).

- The applicant addressed all of the previous review team comments, particularly regarding the design costs and breakdown of match funding.
- The proposed instream benefit from piping this lateral is ~10cfs, which will provide a strong boost in summer base flows on the East Fork Hood River. The increased streamflow is estimated to provide a 12% increase in available habitat, and up to a 25% increase under climate change scenarios.
- The added instream benefit from flow restoration for fish is well described and documented.
- The justification provided for piping this lateral is articulated well.

Concerns

- The benefits to spring Chinook may be overstated in the application.
- There is no discussion regarding any on-farm efficiencies that may be taking place in the service area
 of the East Fork Irrigation District. It would be helpful to know what landowners are doing to be more
 efficient.
- The application lacks information regarding how the District will manage operations during times of drought.

Concluding Analysis

The water savings from future piping of this lateral will provide a significant uplift to stream flows in the East Fork Hood River, which is designated habitat for ESA listed salmonids. The East Fork Irrigation District has implemented previous water conservation and fish passage projects with OWEB and tribal partners. The District and its partners are well suited to be successful at achieving the desired goals and objectives of this project.

Review Team Recommendation to Staff Fund

Review Team Priority 2 of 5

Review Team Recommended Amount \$35,090

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$35,090

Staff Conditions

Application Evaluation for Eastside Lateral Pipeline Design , Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

None

Central Oregon (Region 4)

Application Number: 219-4025-16685 Project Name: Lundy Ditch Feasibility Applicant: Deschutes SWCD Region: Central Oregon OWEB Request: \$45,851 Project Type: Technical Assistance

County: Deschutes Total Cost: \$89,708

Application Description (from application abstract)

The proposed study would comprehensively examine the feasibility of converting a private open lateral (Lundy Ditch) to pipe. In addition examine potential of consolidating other private laterals into the Lundy Ditch and upgrading all on-farm irrigation systems. The study would assess the potential water and energy savings, technical feasibility, estimated costs and financial incentives with the goal of future on demand pressurized irrigation water that will reduce water usage and increase on-farm irrigation water efficiency and management. The potential water savings will contribute to the goal of maintaining and sustaining Spotted Frog habitat in the upper Deschutes River system as addressed in the Upper Deschutes Basin Study.

Review Team Evaluation Strengths

- All of the private landowners served through the Lundy Ditch are engaged and willing to participate in this project.
- The Deschutes SWCD has committed to developing on-farm plans with each landowner.

Concerns

- The application states that 42.1% of water is lost through seepage; however, no data is provided to support this.
- It is unclear what the ecological benefit of this project will be. The intent appears more to support landowners accessing their water than providing watershed value.
- There is no letter of support from the irrigation district indicating their support for this effort and whether they would be interested in conserving water instream.
- The application has inaccuracies regarding ditch capacity and potential water savings through piping; the numbers provided were incorrect.
- Project management is budgeted for 310 hours, which is unusually high given that a consultant is tasked with the majority of the project deliverables.
- The overall project costs for engineering services on 3,996 ft. of ditch seem high and unjustifiable.
- The application fails to articulate how the Lundy ditch ranks and prioritizes for modernization within the Arnold Irrigation District.

 Without a commitment to implement the Allocation of Conserved Water Statute, there is low likelihood that conserved water will be available for in-stream uses.

Concluding Analysis

The Lundy ditch is a private lateral that is fed from Arnold Irrigation District's main canal, which diverts water from the Upper Deschutes River. It is documented that the conveyance of water through this ditch does not always reach every patron who has legal access to withdraw water. The Deschutes SWCD has completed significant outreach and awareness to all the patrons on the ditch, resulting in this application to fix delivery issues. Unfortunately, the application presented a series of inaccuracies that caused confusion regarding water calculations, potential savings, and seepage loss. There is low confidence in the engineering approach and high costs estimated for such a small ditch. The application fell short on justifying the ecological value to be gained and how modernizing this ditch fits in with local priorities.

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

Central Oregon (Region 4)

Application Number: 219-4026-16677PrProject Name: Recovery of a threatened
amphibian after invader removalPrApplicant: Trout Unlimited IncRegion: Central OregonCoOWEB Request: \$195,483To

Project Type: Monitoring

County: Klamath Total Cost: \$294,672

Application Description (from application abstract)

Invasive species are important drivers of declines for many amphibians, including the threatened Oregon Spotted Frog (Rana pretiosa; OSF). This project will monitor the recovery of an OSF population during and after removal of invasive American Bullfrog (Lithobates catesbeianus; BF). We will collect pre- and post-treatment data on abundance, distribution, and habitat use by OSF and BF in wetlands near Fort Klamath, Klamath County. Bullfrog removal will begin late in year 1 and continue during the second year of the study (2020). This removal (i.e., restoration) will target vulnerable BF life stages and maximize the effect on the local BF population. Removal of BF from our study area should both reverse local decline of OSF and eliminate BF colonists that could reach upstream wetlands that BF do not currently occupy. We will work with neighbors and area agencies to confirm BF have not yet colonized those habitats in the northern Wood River valley and provide tools for BF detection and control locally. Deliverables include meetings with landowners and agencies in the Wood River/Upper Klamath lake area, annual updates to two OSF working groups, presentation of results at a regional conference of biologists and wetland managers, and publication of results in peer reviewed journal. This project addresses limiting factors, recommended conservation actions, and information needs for the study region and across the range of the OSF: it contributes information toward recovery of an ESA-listed species via improved local status and better understanding of effects and management of an important invader. The project capitalizes on an experienced team, matching resources, and a key location for limiting BF invasion in the valley. Partners include owners of the ranch where monitoring and removal are conducted. Oregon Department of Fish and Wildlife, Oregon State University, US Geological Survey, US Fish and Wildlife Service, US Forest Service, and US Bureau of Land Management. Invasive species are important drivers of declines for many amphibians, including the threatened Oregon Spotted Frog (Rana pretiosa; OSF). This project will monitor the recovery of an OSF population during and after removal of invasive American Bullfrog (Lithobates catesbeianus; BF). We will collect pre- and post-treatment data on abundance, distribution, and habitat use by OSF and BF in wetlands near Fort Klamath, Klamath County. Bullfrog removal will begin late in year 1 and continue during the second year of the study (2020). This removal (i.e., restoration) will target vulnerable BF life stages and maximize the effect on the local BF population. Removal of BF from our study area should both reverse local decline of OSF and eliminate BF colonists that could reach upstream wetlands that BF do not currently occupy. We will work with neighbors and area agencies to confirm BF have not yet colonized those habitats in the northern Wood River valley and provide tools for BF detection and control locally. Deliverables include meetings with landowners and

agencies in the Wood River/Upper Klamath lake area, annual updates to two OSF working groups, presentation of results at a regional conference of biologists and wetland managers, and publication of results in peer reviewed journal. This project addresses limiting factors, recommended conservation actions, and information needs for the study region and across the range of the OSF: it contributes information toward recovery of an ESA-listed species via improved local status and better understanding of effects and management of an important invader. The project capitalizes on an experienced team, matching resources, and a key location for limiting BF invasion in the valley. Partners include owners of the ranch where monitoring and removal are conducted, Oregon Department of Fish and Wildlife, Oregon State University, US Geological Survey, US Fish and Wildlife Service, US Forest Service, and US Bureau of Land Management.

Monitoring Team Evaluation

Monitoring Team Strengths

- The proposed project will provide an important test of hypotheses relating to the effectiveness of bullfrog removal and Oregon spotted frog recovery in the Wood River Valley.
- This application will address several Oregon spotted frog data gaps and conservation actions described in the Oregon Conservation Strategy and inform future bullfrog and Oregon spotted frog management actions.
- The application has a good description of the frog monitoring study design, sampling methodology and citation of protocols.
- The applicant provides evidence of landowner willingness, strong interagency support and collaboration, secured match and research permits.
- The applicant has a good track record and an experienced project team that proposes to collect, analyze, and report the data over a 5-year period, which helps place the overall expense of the project in context.

Monitoring Team Concerns

- The application lacked a proper explanation of methods to collect water temperature, water level, and fish data; no protocols were cited.
- The application briefly mentioned fish monitoring, but its context was not addressed in the application.
- The application could have provided more information about how and what information will be disseminated to various landowners that will enable them to perform specific management actions on their property.

Monitoring Team Comments

• Incorporate continuous loggers to monitor water levels in the ponds.

Review Team Evaluation
Strengths

- The project team includes representatives from local, state, and federal entities who are well versed with Oregon spotted frog biology and conservation in this geographic area, and are being led by a researcher who is highly regarded by peers as an expert in this field.
- The landowner has participated in other conservation efforts on the property and is willing and engaged in this project.
- The project site represents an array of habitat features and distribution for bullfrogs and Oregon spotted frogs, including areas where bullfrogs do not currently exist. This presents an opportunity to be successful at bullfrog removal as well as yield valuable data on each species, which could be beneficial for future management considerations.
- The budget proposed provides detail and justification on need and expenses necessary to deliver on project goals and objectives.

Concerns

 The application provides detail on known bullfrog distribution in the Wood River valley; however, it fails to describe how bullfrogs are managed on public and private lands outside of this project site. The project site could be recolonized with bullfrogs over time if source populations are not managed or monitored.

Concluding Analysis

The Oregon spotted frog was federally listed in 2014, the Wood River valley is thought to be a stronghold for the species, second only to the Upper Deschutes River basin. One of the threats to the species viability is the invasive bullfrog. This project represents a combination of understanding Oregon spotted population, distribution, and survivability in direct correlation to aggressive bullfrog control on private land. One of the key attributes this project will determine is how well Oregon spotted frog recovers after bullfrog removal. This project will add valuable insight and data for conservation managers.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 2

Review Team Recommended Amount \$195,483

Review Team Conditions

None

Staff Recommendation

Staff Follow-Up to Review Team

None

Staff Recommendation

Fund

Staff Recommended Amount

\$195,483

Staff Conditions

None

Central Oregon (Region 4)

Application Number: 219-4027-16686
Project Name: Klamath Anadromous Reintroduction Monitoring
Applicant: Trout Unlimited Inc
Region: Central Oregon
OWEB Request: \$170,248 Project Type: Monitoring

County: Klamath Total Cost: \$261,838

Application Description (from application abstract)

Following the removal of the four hydroelectric dams on the Klamath River in 2021, over 400 miles of habitat (Klamath County, OR, Lake County, OR, and Siskiyou County, CA) will be available for fall and spring-run Chinook Salmon, Coho Salmon, steelhead trout, and Pacific Lamprey. Currently, staff from ODFW located in Klamath Falls and The Klamath Tribes are developing the Implementation Plan for the Reintroduction of Anadromous Fishes into the Oregon Portion of the Upper Klamath Basin (Reintroduction Implementation Plan), which will be complete by summer of 2019. The purpose of the Reintroduction Implementation Plan is to guide the monitoring activities associated with volitional recolonization of fall-run Chinook Salmon, Coho Salmon, and steelhead trout and the active reintroduction of spring-run Chinook Salmon. The Reintroduction Implementation Plan identifies the types of monitoring facilities and activities that will be needed to evaluate recolonization. The Reintroduction Implementation Plan also recommends baseline studies to occur prior to the removal of the dams, including genetically characterizing resident Redband Trout (Oncorhynchus mykiss) prior to dam removal. The proposed monitoring project will fund ODFW and TU fish biologists to conduct pre-dam removal, baseline-monitoring activities, and identify locations and establish methods for monitoring facilities in preparation for the recolonization of anadromous fishes. These activities will be beneficial to establish monitoring activities that will need to occur immediately following dam removal in the year 2021, inform the active reintroduction of spring-run Chinook, and collect time-sensitive data that will only be useful if obtained before dams are removed. Project Partners include Oregon Department of Fish and Wildlife, Oregon State University, and California Depart. of Fish and Wildlife, US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and The Klamath Tribes. Following the removal of the four hydroelectric dams on the Klamath River in 2021, over 400 miles of habitat (Klamath County, OR, Lake County, OR, and Siskiyou County, CA) will be available for fall and spring-run Chinook Salmon, Coho Salmon, steelhead trout, and Pacific Lamprey. Currently, staff from ODFW located in Klamath Falls and The Klamath Tribes are developing the Implementation Plan for the Reintroduction of Anadromous Fishes into the Oregon Portion of the Upper Klamath Basin (Reintroduction Implementation Plan), which will be complete by summer of 2019. The purpose of the Reintroduction Implementation Plan is to guide the monitoring activities associated with volitional recolonization of fall-run Chinook Salmon, Coho Salmon, and steelhead trout and the active reintroduction of spring-run Chinook Salmon. The Reintroduction Implementation Plan identifies the types of monitoring facilities and activities that will be needed to evaluate recolonization. The Reintroduction Implementation Plan also recommends

baseline studies to occur prior to the removal of the dams, including genetically characterizing resident Redband Trout (Oncorhynchus mykiss) prior to dam removal. The proposed monitoring project will fund ODFW and TU fish biologists to conduct pre-dam removal, baseline-monitoring activities, and identify locations and establish methods for monitoring facilities in preparation for the recolonization of anadromous fishes. These activities will be beneficial to establish monitoring activities that will need to occur immediately following dam removal in the year 2021, inform the active reintroduction of spring-run Chinook, and collect time-sensitive data that will only be useful if obtained before dams are removed.Project Partners include Oregon Department of Fish and Wildlife, Oregon State University, and California Depart. of Fish and Wildlife, US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and The Klamath Tribes.

Monitoring Team Evaluation Monitoring Team Strengths

• N/A

Monitoring Team Concerns

• N/A

Monitoring Team Comments N/A

Review Team Evaluation Strengths

• N/A

Concerns

• N/A

Concluding Analysis

Application withdrawn by the applicant prior to review.

Review Team Recommendation to Staff

Withdrawn

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 Withdrawn

Staff Recommended Amount \$0

Staff Conditions

Withdrawn

Central Oregon (Region 4)

Application Number: 219-4028-16719Project Type: MonitoringProject Name: Measuring the effects of beaver
dam analogs for restoration on the South Fork of
the Crooked River.Project Type: MonitoringApplicant: OSU Office of Sponsored Research &
Award AdminCounty: CrookRegion: Central OregonCounty: CrookOWEB Request: \$44,801Total Cost: \$77,418

Application Description (from application abstract)

The South Fork of the Crooked River is a tributary of the Crooked River near Paulina, Oregon (Crook County). It is disconnected from portions of its floodplain and lacks woody riparian vegetation. We propose to monitor five beaver dam analogs (BDAs) that we installed on the South Fork in 2016. We will monitor geomorphology, vegetation, and stream temperatures using RTK-GPS, drone imagery, vegetation measurements, and temperature probes. Although a BDA study on nearby Bridge Creek shows promising results for BDAs as a restoration tool, rapid implementation of BDAs in Western drainages exceeds follow-up monitoring. Our site offers an opportunity to monitor BDAs in a low-gradient system with no extant woody riparian vegetation, which differs from the steeper gradient and intact riparian woody communities on Bridge Creek. The low gradient and lack of woody riparian vegetation on the South Fork raises these questions: (1) At what rate does aggradation occur behind BDAs when a low gradient may have limited capacity to transport sediment? (2) Can BDAs aid restoration practitioners to actively reestablish riparian woody species where none currently occur? (3) What is the effect of BDAs on stream temperatures without riparian shade? An understanding of aggradation is related to restoring vegetation because as streams aggrade they reconnect with their floodplains, thus raising the water table and supporting plants. Vegetation growth and stream temperature monitoring will be conducted by OSU-Cascades students with quality control administered by OSU-Cascades professors. Aggradation measurements will be done by Anabranch LLC. Deliverables include growth rates of woody riparian vegetation planted for restoration adjacent to and distant from BDAs, changes in green zone areas measured from drone imagery, temperature data above and below each structure, and measurements of sediment gains and losses in stream channels and banks near structures and in control reaches. The South Fork of the Crooked River is a tributary of the Crooked River near Paulina, Oregon (Crook County). It is disconnected from portions of its floodplain and lacks woody riparian vegetation. We propose to monitor five beaver dam analogs (BDAs) that we installed on the South Fork in 2016. We will monitor geomorphology, vegetation, and stream temperatures using RTK-GPS, drone imagery, vegetation measurements, and temperature probes. Although a BDA study on nearby Bridge Creek shows promising results for BDAs as a restoration tool, rapid implementation of BDAs in Western drainages exceeds follow-up monitoring. Our site offers an opportunity to monitor BDAs in a low-gradient system with no extant woody riparian vegetation, which differs from the steeper gradient and intact riparian woody communities on Bridge Creek. The low gradient and lack of woody riparian vegetation on

the South Fork raises these questions: (1) At what rate does aggradation occur behind BDAs when a low gradient may have limited capacity to transport sediment? (2) Can BDAs aid restoration practitioners to actively reestablish riparian woody species where none currently occur? (3) What is the effect of BDAs on stream temperatures without riparian shade? An understanding of aggradation is related to restoring vegetation because as streams aggrade they reconnect with their floodplains, thus raising the water table and supporting plants. Vegetation growth and stream temperature monitoring will be conducted by OSU-Cascades students with quality control administered by OSU-Cascades professors. Aggradation measurements will be done by Anabranch LLC. Deliverables include growth rates of woody riparian vegetation planted for restoration adjacent to and distant from BDAs, changes in green zone areas measured from drone imagery, temperature data above and below each structure, and measurements of sediment gains and losses in stream channels and banks near structures and in control reaches.

Monitoring Team Evaluation

Monitoring Team Strengths

- The applicant addressed previous review comments and refined the scope of work and budget to focus the monitoring efforts proposed in this application.
- The application has a good justification of the data they propose to collect based on what information is available in the literature.
- The project leverages existing baseline and post-project data to collect additional years of data to understand longer term effects of BDAs.
- The application contained uploads illustrating data that have been collected in the past, and demonstrates the applicant's ability to adequately collect, manage, and report the information.
- The applicant is partnering with an experienced consultant to work on this project

Monitoring Team Concerns

- The application lacked an adequate description and citation of monitoring methods.
- The application lacked a description of how the data will be managed, analyzed and interpreted.
- The application states that they will generate a sediment budget by surveying cross sections. This approach does not take into consideration suspended sediment transport and should not be considered a true sediment budget.
- The application describes the limited information available on effects of BDAs, yet the schedule and application narrative does not indicate the development of a final report to produce findings associated with the monitoring actions proposed in the application

Monitoring Team Comments

Include in the schedule and application the development of a final report to interpret and report the monitoring findings.

Review Team Evaluation

Strengths

- The applicant and landowner have a long history working together and are committed to conservation and understanding the effectiveness of beaver dam analogues (BDAs) installed on the property.
- The contractor implementing the work has significant experience implementing BDAs and conducting ecological response monitoring.
- Impacts of ongoing CREP plantings along the project site will be characterized in relation to BDA placement, allowing both the applicant and CREP planners to learn and adapt to changing conditions.
- The applicant addressed previous review team comments and submitted a refined approach and budget from the last submission.

Concerns

- The South Fork of the Crooked River has unique qualities compared to other nearby drainages, making the applicability of utilizing this project to inform other similar projects challenging.
- It is unclear how the applicant will draw conclusions and transfer this data that will result in future restoration.
- The monitoring protocols lack sufficient detail to determine technical soundness of the approach, specifically in providing information to understand whether BDAs actually raise and hold local water tables.

Concluding Analysis

The use of BDAs in stream restoration is growing, and the applicant seeks to fill key knowledge and information gaps with the proposed monitoring. The monitoring results would be difficult to apply elsewhere due to the unique hydrologic setting of the South Fork Crooked River. The lack of details about monitoring protocols and the relatively small cluster of BDAs included in the application limit the cost-benefit of this investment. The pathway leading to future restoration is unclear.

Review Team Recommendation to Staff Do Not Fund

Review Team Priority N/A

Review Team Recommended Amount \$0

Review Team Conditions

Application Evaluation for Measuring the effects of beaver dam analogs for restoration on the South Fork of the Crooked River., Open Solicitation-2018 Fall Offer

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

Central Oregon (Region 4)

Application Number: 219-4029-16584Project Type: MonitoringProject Name: Continuation Data Collection and
Verification of the Stream Classification Database
for Klamath/LakeProject Type: MonitoringApplicant: Klamath Watershed PartnershipCounty: KlamathRegion: Central OregonCounty: KlamathOWEB Request: \$130,876Total Cost: \$163,320

Application Description (from application abstract)

Klamath Watershed Partnership (KWP) will merge the objectives and priorities of Oregon Department of Forestry (ODF) and Oregon Department of Fish and Wildlife (ODFW) in a collaborative effort to correct, update, and supplement the ODF Steam Classification Database with field-based data regarding stream and fish presence, fish passage barriers, and habitat restoration potential in Klamath and Lake Counties. This proposal is a continuation of status and trend monitoring funded through OWEB 217-4040-14296 in 2017. The Stream Classification Database is the basis on which ODF enforces Water Protection Rules of the Oregon Forest Practices Act as it regulates forestry on private and state-owned lands. The data for the ODF Klamath-Lake District is inaccurate and insufficient due to poor modelling and inadequate capacity to support a concerted ground-truthing effort. Consequently, piecemeal investigations for fish presence delay projects, frustrate partners, consume State resources, and ultimately do not provide sufficient assurance that aquatic resources are being adequately protected. The proposed project will provide a 3rd and 4th field season of data collection and ground-truthing to correct and confirm the highest priority areas based on ODF and ODFW objectives. Potential areas include the upper North Fork Sprague, upper Sycan, and upper Williamson watersheds. Surveys will include field verification of stream classification for 300 miles of streams, and physical habitat assessments for fish presence on 120 miles of streams. Project partners include ODF and ODFW. KWP is also working with ODFW and Trout Unlimited to ensure that data collection efforts regarding fish passage barriers are complementary, and not duplicative.Klamath Watershed Partnership (KWP) will merge the objectives and priorities of Oregon Department of Forestry (ODF) and Oregon Department of Fish and Wildlife (ODFW) in a collaborative effort to correct, update, and supplement the ODF Steam Classification Database with field-based data regarding stream and fish presence, fish passage barriers, and habitat restoration potential in Klamath and Lake Counties. This proposal is a continuation of status and trend monitoring funded through OWEB 217-4040-14296 in 2017. The Stream Classification Database is the basis on which ODF enforces Water Protection Rules of the Oregon Forest Practices Act as it regulates forestry on private and state-owned lands. The data for the ODF Klamath-Lake District is inaccurate and insufficient due to poor modelling and inadequate capacity to support a concerted ground-truthing effort. Consequently, piecemeal investigations for fish presence delay projects, frustrate partners, consume State resources, and ultimately do not provide sufficient assurance that aquatic resources are being adequately protected. The proposed project will provide a 3rd and 4th field season of data collection and ground-truthing to correct

and confirm the highest priority areas based on ODF and ODFW objectives. Potential areas include the upper North Fork Sprague, upper Sycan, and upper Williamson watersheds. Surveys will include field verification of stream classification for 300 miles of streams, and physical habitat assessments for fish presence on 120 miles of streams. Project partners include ODF and ODFW. KWP is also working with ODFW and Trout Unlimited to ensure that data collection efforts regarding fish passage barriers are complementary, and not duplicative.

Monitoring Team Evaluation Monitoring Team Strengths

- This application helps fills data gaps related to the current stream network, fish presence, and potential fish barriers that exist.
- The application proposes to collect information that could inform restoration actions associated with future anadromous fish reintroduction plans.
- The application was well written, contains achievable goals and objectives and letters of support demonstrating coordination among the partners, and proposes a reasonable timeline to complete the proposed activities.
- The examples of data collected that were provided as uploads to the application describe the information gathered and how it can inform forest management and future restoration actions.

Monitoring Team Concerns

- It was unclear how intensive the forest management operations are in this region to gauge the importance and need for the data.
- There was not a strong description of the data quality assurance and quality control.
- The OPMT questioned if the information is communicated to USGS to update the National Hydrography Dataset (NHD).

Monitoring Team Comments

Report the updated stream layer to the USGS to help incorporate into the NHD.

Review Team Evaluation

Strengths

- This proposal is a continuation of a currently funded OWEB grant, which thus far has been successful at achieving the desired goals and objectives.
- The project fills key data gaps in a database that is inaccurate for characterizing stream networks and associated fish use.
- Most of the project will take place on large industrial forest lands, which makes securing property
 access for the majority of the study area feasible.

 The current grant has already spawned a restoration project to be implemented in 2019 on Spencer Creek, which according to local resource biologists may be one of the first streams recolonized by anadromous fish post-dam removal on the Klamath River.

Concerns

- The survey approach taken in summer 2018 in which surveys were stopped when field crews discovered a fish barrier and anything upstream was categorized as "non-fish" may have limited opportunities. While this determination may be applicable for anadromous fish, opportunities may be missed for other native fish by disregarding drainages above known barriers. More information regarding this protocol and justification would have been helpful.
- While one opportunity for potential restoration is discussed, the application generally lacks a clear plan on how information collected will be used to inform future restoration.

Concluding Analysis

This project will support the continuation of updating the stream classification database. Currently, the applicant has an OWEB grant and has completed one field season (2018) with one more to go (2019) with this funding. The database employed by ODF and ODFW are grossly inaccurate as it was developed at a coarse scale for landscapes on the west side of Oregon. The applicant reported a successful first year in 2018, reaching more stream miles than anticipated. However, this was achieved due to the approach of discounting drainages above discovered barriers to fish. The pathway of this monitoring effort leading to restoration has resulted in one opportunistic project thus far.

Review Team Recommendation to Staff

Fund

Review Team Priority 2 of 2

Review Team Recommended Amount \$130,876

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

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

Application Evaluation for Continuation Data Collection and Verification of the Stream Classification Database for Klamath/Lake, Open Solicitation-2018 Fall Offer

Staff Recommended Amount

\$0

Staff Conditions

N/A

Central Oregon (Region 4)

Application Number: 219-4030-16647

Project Type: Stakeholder Engagement

Project Name: Conserving Mussels in Aquatic Restoration--Stakeholder Engagement

Applicant: The Xerces Society

Region: Central Oregon

OWEB Request: \$55,167

County: Deschutes Total Cost: \$66,384

Application Description (from application abstract)

Freshwater mussels provide an essential contribution to Oregon's freshwater quality and biodiversity, yet they frequently go unnoticed. They are sensitive to disturbance, and many of Oregon's native mussel species are at risk of extinction. Aquatic habitat restoration poses a significant emerging threat to mussels. These cryptic animals are often discovered by restoration practitioners only when sites are dewatered, at which point, their chance of survival is limited. When mussel beds are lost, it can take decades to restore this resource, and the ecological condition of an otherwise restored site devoid of mussels may be poorer than the site was prior to restoration. We will address this problem by engaging more than 400 restoration practitioners statewide in learning about how to protect mussels during restoration projects. We will reach people through presentations, day-long workshops, and site visits. Through each of these levels of engagement, we will provide information on surveying for mussels and implementing best management practices during restoration planning, and we will recruit stakeholders to be part of our complementary Technical Assistance project. We have identified priority regions to target for engaging stakeholders in mussel conservation, based upon the predicted location of climate refugia for these animals over the next 50 to 100 years. These priority counties include: Baker, Clackamas, Coos, Crook, Deschutes, Douglas, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Lane, Lincoln, Linn, Multnomah, Tillamook, Union, Wallowa, and Wasco.

Review Team Evaluation Strengths

- The project proposed will deliver revealing and useful information regarding the safeguarding of freshwater mussels, a suite of species that often are overlooked and unintentionally harmed during restoration projects.
- The benefits of this engagement will have impacts statewide.
- The Xerces Society is well suited and equipped to deliver on project goals and objectives.
- The emphasis on targeting engagement to restoration practitioners should raise awareness to provide guidance and technical resources in order to carefully craft salvage plans for future instream work.
- The project is well supported by a variety of appropriate partners.

Concerns

- It is unclear how this engagement will lead to actual eligible restoration projects, which is a requirement of the Stakeholder Engagement offering.
- Engagement with regulatory or permitting personnel is not mentioned in the application. The
 applicant may be missing an opportunity that could provide more substantial, long-term protection of
 freshwater mussel species.

Concluding Analysis

Freshwater mussels tend to be a lesser known part of the ecosystem, yet provide essential value in rivers and lakes. They also can be used as a key indicator species of water quality and fish habitat suitability. As instream and wetland restoration continues to thrive in Oregon, freshwater mussels can often be overlooked and inadvertently harmed or destroyed by activities striving to benefit overall aquatic health. The applicant is looking to build off their recently developed Best Management Practices for freshwater mussels by engaging restoration practitioners in informative and thoughtful workshops and providing resources to safeguard these species in future restoration projects. This project presents a great opportunity to fill information gaps and provide pathways forward to protect and promote these species.

Review Team Recommendation to Staff Fund

Review Team Priority 1 of 1

Review Team Recommended Amount \$55,167

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount

Application Evaluation for Conserving Mussels in Aquatic Restoration--Stakeholder Engagement, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

\$55,167

Staff Conditions

None

Eastern Oregon - Region 5 Fall 2018 Funding Recommendations



Document Path: Z:loweb\Technical_Services\Information_Services\GIS\Maps\Review Team Meetings\2018FallCycle\Projects\Region5_AppFundingStatus_11x17_2018Fall.mxd ESRI ArcMap 10.6 NAD 1983 Oregon Statewide, Lambert Feet Intl OWEB- PK Wills 20190314

Funding Recommendations

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

Previous Grants - 1998-Spring 2017

- Restoration
- Acquisitions



Streams Region Boundary

Oregon Watershed Enhancement Board

775 Summer St, NE Suite 360 Salem, OR 97301-1290 (503) 986-0178 http://oregon.gov/OWEB/

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Region 5 - Eastern Oregon						
Restoration Projects Recommended for Funding in Priority Order						
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County	
219-5026	Nez Perce Tribe	Tamkaliks Side Channel and Wetland Complex	A culturally signficant section of the Wallowa River will be enhanced by installing off- channel wetland nodes, alcoves and large woody debris to improve ESA-spawning and rearing habitat; and wetland and floodplain connectivity.	235,097	Wallowa	
219-5024	Grande Ronde Model WS Foundation	Wallowa Mountain Loop Road Reconstruction	A culvert in Little Sheep Creek in the Imnaha basin is a velocity barrier to ESA-listed steelhead and bull trout and will replaced with a bridge.	118,096	Wallowa	
219-5030	Malheur SWCD	Bishop Drain: Checkmate	Flood irrigation on 80 acres will be converted to sprinklers by installing 2 pivots. Field runoff into Bishop Drain will be eliminated to improve water quality in the nearby Owyhee River.	40,223	Malheur	
219-5031	Tri-County CWMA	Upper Grande Ronde Invasive Weed Control Phase IV	Spotted knapweed and leafy spurge will be treated along 192 acres of the upper Grande Ronde riparian area that provides habitat for ESA-listed spring Chinook and steelhead. Project will treat known sites and survey new infestations.	25,024	Union	
219-5029	Owyhee WC	Springing into Action on Mahogany Mountain	Core sage-grouse habitat in the Owyhee basin will be enhanced by constructing seven spring developments and troughs to pull livestock away from riparian areas.	20,797	Malheur	
219-5035	Wallowa Resources	Upper Wallowa River Restoration Project	Bull trout and kokanee spawning and rearing habitat will be improved along 1/3 miles of the Wallowa River above Wallowa Lake. Channel complexity and bank stability will also be improved.	250,726	Wallowa	
219-5027	Malheur WC	Water Quality Improvement at River Mile 56 or Making Life Better on the Canal	A 59-acre field near Harper will be converted from flood to sprinkler irrigation to improve water quality and prevent runoff flowing directly into the Malheur River. The project will install 1,200 feet of mainline, big guns, pump and a pivot.	62,330	Malheur	
219-5036	Wallowa SWCD	Wallowa Front Forest Health Improvement Partnership-Divide Extended	Overstocked mixed conifer stands with altered fire regime in the Divide Area will be mechanically or hand thinned. Prescriptions prepared by ODF will open stands for larch, ponderosa pine and Douglas-fir regeneration.	134,987	Wallowa	

Restoration Projects Recommended for Funding in Priority Order (Continued)							
				Amount			
Project #	Grantee	Project Title	Brief Description	Recommended	County		
219-5034	Malheur SWCD	Foraged in Fire	Multiple project components including permanent firebreaks, green stripping, medusahead treatment, reseeding and spring developments will be implemented to improve core and general sage-grouse habitat in a remote area of Malheur County.	149,912	Malheur		
219-5032	Eagle Valley SWCD	Whitnah Irrigation	Flood irrigation on 30 acres will be converted to sprinklers by installing two wheel lines. Field runoff into Powder River will be eliminated to improve water quality in Powder River nearby.	27,156	Baker		
219-5033	Malheur SWCD	Mr. Rogers Neighborhood	Flood irrigation on 27 acres will be converted to sprinklers eliminating tailwater from entering the Snake River. Owyhee Irrigation District will install 1,380 feet of 12-inch conveyance pipe and orifice box which will eliminate evaporation and seepage and improve irrigation water conveyance.	36,062	Malheur		
Total Restoration Projects Recommended for Funding by RRT and OWEB Staff							
Restoratio	on Projects <i>Recommer</i>	nded but Not Funded in Pr	iority Order				
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County		
None		non-ondod for Funding but		1 100 410			
Total Restoration Projects Recommended for Funding by RRT				1,100,410			
Restoration Applications Not Recommended for Funding by RRT							
				Amount			
Project #	Grantee	Project Title		Requested	County		
219-5025	Burnt River SWCD	Bootjack Irrigation		109,353	Baker		
219-5028	Malheur WC	Makin' Things Better on the Powder: Phase II Movin' the Power Lines			Baker		

Technical Assistance (TA) Projects Recommended for Funding in Priority Order						
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County	
219-5037	Grande Ronde Model Watershed Foundation	Lostine River - River Mile 5.7 Floodplain and Side Channel Enhancement Project	A future restoration project will benefit Chinook salmon and steelhead-rearing habitat and bull trout migration. Potential design elements will create side-channels incorporating pools, alcoves, and LWD to increase habitat complexity.	73,040	Wallowa	
219-5039	Malheur WC	Let's Make the Bull Run Run Again: Da Do RunRun	Bull Run, a tributary to South Fork of the Burnt River near Unity dredged in 30's or 40's, has subsurface flow and impaired aquatic and wildlife habitat. A design will reconnect Bull Run to the South Fork; improve aquatic habitat; and enhance wet meadow for brood-rearing sage-grouse addressing 30 acres of habitat and 1.0 mile of stream.	39,850	Baker	
219-5040	Malheur WC	Cusick Creek: The Restoration Continues Phase II	Located in core sage-grouse habitat, a future restoration project will improve a wet- meadow complex to enhance late-season, brood-rearing habitat by improving riparian conditions. Components include a topgraphic survey; geomorphic analysis; hydrologic and hydraulic analysis to produce a 60% design and three alternatives.	29,488	Union	
219-5038	Owyhee WC	A Difficult Survey and Design Round 2	A project within the Three Forks Conservation Opportunity area, one of the largest remaining blocks of high-quality sagebrush, will improve sage-grouse habitat. Design addresses grazing on 15,748 ares and enhancing 82 acres of wet-meadow habitat.	28,930	Malheur	
Total TA Projects Recommended for Funding by RRT and OWEB Staff				171,308		
Technical	Assistance Proiects Re	commended but Not Fund	ed in Priority Order			
Project #	Grantee	Project Title	, Brief Description	Amount Recommended	County	
219-5042	Burns Paiute Tribe	Malheur Watershed Habitat Connectivity Assessment and Enhancement Plan	Highway 20 between Juntura and Ontario experiences high wildlife mortality caused by vehicle collision. Burns-Paiute Tribe proposes to develop a landscape-scale assessment of wildlife and habitat connectivity; evaluate measures to address connectivity; and prepare a design and implementation plan.	73,875	Malheur	
Total TA Projects Recommended for Funding by RRT				245,183		
Tochnical Assistance Applications Not Percommended for Funding by PPT						
Amount						
Project #	Grantee	Project Title		Requested	County	
219-5041	Powder Basin WC	Powder Basin Groundwater I	Records Review	29,610	Baker	

Stakeholder Engagement Projects Recommended for Funding in Priority Order						
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
219-5047	Harney County WC	Stakeholder Engagement in Groundwater Conservation in the Harney Basin	Harney basin experiences significant groundwater decline. This effort engages stakeholders in compiling water-resource information to develop realsitic conservation measures. Outcomes will provide a better understanding of what domestic well-users experience with groundwater.	42,609	Harney	
Total Stak	otal Stakeholder Engagement Projects Recommended for funding by OWEB Staff 42,609 42,609					
Stakehold	ler Engagement Projec	ts Recommended but Not	Funded in Priority Order			
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County	
Total Stak	None A2 600					
42,009						
Stakeholder Engagement Projects <i>Not Recommended</i> for Funding by RRT						
				Amount		
Project #	Grantee	Project Title		Requested	County	
None						

Monitoring Projects Recommended for Funding in Priority Order						
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
219-5043	Grande Ronde Model Watershed Foundation	Grande Ronde Basin Stream Flow Gauging Stations Operation Water Years 2019 & 2020	Streamflow gauges at 12 existing stream gauges in Union and Wallowa County will continue to operate to inform irrigation water management, fisheries management, long-term flow and trend analysis, water quality mgt plans and determine cumulative effects of conservation measures.	101,002	Wallowa	
219-5044	Malheur WC	Kumbaya 2020: Monitoring in Malheur and Owyhee Basins	Water quality monitoring will continue at 12 sites inform trend analyses; determine if water quality is improving as a result of project implementation and compile a comprehensive report. Agricultural drain monitoring will continue at 11 sites to evaluate water quality.	91,880	Malheur	
219-5046	Harney County WC	Towards Sustainable Groundwater Management - Monitoring Evapotranspiration in the Harney Basin	This project will determine actual ET (evapo-transpiration) rates of irrigated crops and native phreatophytes (groundwater-dependent plants). Actual measured ET data will help ground-truth satellite ET Models and improve estimates for irrigation efficiency.	146,670	Harney	
Total Monitoring Projects Recommended for funding by OWEB Staff						
Monitorin	g Projects Recommen	ded but Not Funded in Prie	ority Order			
Project #	Grantee	Project Title	Brief Description	Amount Recommended	County	
None						
Total Monitoring Projects Recommended for funding by RRT				339,552		
Monitoring Applications Not Recommended for Funding by RRT						
				Amount		
Project #	Grantee	Project Title		Requested	County	
219-5045	Harney County WC	Harney Groundwater Monitoring Phase 3		20,235	Harney	
Region 5 Total OWEB Staff Recommended Board Award				1,653,879	16%	
Regions 1-6 Grand Total OWEB Staff Recommended Board Award				10,554,731		

Eastern Oregon (Region 5)

Application Number: 219-5024-16570Project Type: RestorationProject Name: Wallowa Mountain Loop Road
ReconstructionApplicant: Grande Ronde Model WS FoundationApplicant: Grande Ronde Model WS FoundationCounty: WallowaOWEB Request: \$118,096Total Cost: \$8,010,736

Application Description (from application abstract)

Location: The proposed project is located in Wallowa County, Oregon, east of Joseph, along Forest Highway 248 (Wallowa County Road 4602, NFSR 39) from MP 0.0 to MP 5.0. Project Need: The roadway within the project area hosts a diversity of traffic ranging from Forest Service and natural resources personnel to recreation and logging vehicles. The overall roadway width is narrow, and existing pavement is in poor condition with much of the surface exhibiting potholes and severe alligator cracking. A few areas of fill slope instability have been identified and will be corrected. Many rock cut slopes adjacent to the roadway are raveling, and the associated rock fall is a maintenance issue. Maintenance funds are dwindling and the county and Forest Service can no longer keep the roadway in a serviceable condition. A structural asphalt concrete pavement overlay is needed to increase the service life and to improve the driving surface. Fisheries are a priority in the project area, with great emphasis being placed on restoration and improving access to habitat. ESA listed bull trout and steelhead occupy Little Sheep Creek and measures to reduce road derived sediment contribution and improve passage conditions will benefit both species. Many culverts along the roadway are damaged or buried and require maintenance or replacement. A double culvert installation in Little Sheep Creek near Highway 350 and at the beginning of the project is a long standing and known passage barrier. Proposed Work: Road surface work will consist of reconstructing or rehabilitating pavement that is in poor condition and exhibits alligator cracking, longitudinal edge cracking, potholes, and minor rutting along 5-miles of Wallowa County Road 4602. The double culvert will be removed and replaced with a bridge. Project Partners: Project partners include Federal Highway Administration, Oregon Department of Transportation, US Forest Service, Wallowa County and Grande Ronde Model Watershed.

Review Team Evaluation Strengths

- The application is well-written and provides excellent detail and maps.
- The double culvert is a well-known passage barrier on Little Sheep Creek.
- Project implementation will benefit salmonids, including Chinook, steelhead, and bull trout.
- There is 11 miles of stream habitat above the barrier that will be accessible to fish once the culvert is replaced.

- The culvert removal is part of a larger infrastructure improvement project that will provide benefits to the local community. In addition to the bridge installation, five miles of road will be improved that accesses a recreational area and is part of a scenic byway.
- There will be a positive cost-benefit to the watershed with project implementation.
- Replacing this culvert is identified in the Wallowa Atlas, the local recovery plan for anadromous fisheries.

Concerns

• No significant concerns were identified.

Concluding Analysis

The project will replace a double culvert with a channel-spanning bridge. The current culvert does not meet fish passage requirements because jump height and water velocity are too high for fish to successfully move through the culvert. Replacing the culvert will improve aquatic passage for all life stages of steelhead, specifically juvenile-rearing. Steelhead will be able to move upstream as stream temperatures increase in the summer, and downstream in the winter as stream temperatures decrease. The project is a part of a multi-million dollar road improvement of the Hells Canyon Scenic Byway between Joseph and Halfway. Project partners include ODOT, Federal Highway Administration, and Wallowa County. The overall budget for the restoration project is reasonable for the resulting high ecological benefits.

Review Team Recommendation to Staff Fund

Review Team Priority 2 of 11

Review Team Recommended Amount \$118,096

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

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Staff Recommendation
Fund
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Staff Recommended Amount \$118,096

Staff Conditions

None

Eastern Oregon (Region 5)

Application Number: 219-5025-16580 Project Name: Bootjack Irrigation Applicant: Burnt River SWCD Region: Eastern Oregon OWEB Request: \$109,353 Project Type: Restoration

County: Baker Total Cost: \$185,320

Application Description (from application abstract)

The project site is located near Unity, Oregon within the Burnt River Soil and Water Conservation District (SWCD). The Thompson ditch, an open ditch delivery system, spans 1.5 miles from its point of diversion (POD) in the West Fork of the Burnt River, to where it is currently utilized through flood irrigation on 149 acres. A survey of the ditch completed with the local NRCS office found that considerable water loss is occurring throughout the entire reach of the ditch: an estimated 224 gpm was diverted into the ditch at the head gate and 10 gpm was observed at the delivery location at the end of the ditch. To address water loss in the Thompson ditch, this project proposes to convert one mile of open ditch to a pressurized piped irrigation system. In addition to an antiquated and inefficient delivery system, this project will also address increased sediment inputs into the Burnt River Watershed by converting 30 acres of flood irrigated pasture to sprinkler irrigation under pivot. The landowner has realized these watershed issues present at the project location and has contacted the Burnt River SWCD seeking assistance to improve irrigation efficiency by piping one mile of open ditch and installing one three tower pivot converting 30 acres of flood irrigated pasture to sprinkler irrigation. Project partners include the Burnt River SWCD and the landowner.

Review Team Evaluation Strengths

- The project provides an opportunity to return water to the West Fork of the Burnt River.
- Implementation of the project will benefit 1.5 to 2 miles of the Burnt River.
- The applicant has permission and support secured for project implementation from all landowners affected by the ditch easement.

Concerns

- Concerns from the previous application evaluation are not addressed.
- There is no confirmation that the landowner will leave a certain amount of water in the West Fork of the Burnt River.
- A water management plan is needed.

• The ecological uplift needs to be more clearly defined in the application.

Concluding Analysis

The landowner has water rights to divert the entire West Fork of the Burnt River into Thompson Ditch. Replacing the open ditch with the 5,420 feet of HDPE provides opportunity for unused water to remain in the West Fork of the Burnt River. Currently up to 2.6 cfs is diverted. If the conveyance pipe is installed, 1.5 cfs is needed to operate the gated-pipe and 0.5 cfs is needed for the pivot. Potentially 1.1 cfs to 2.1 cfs can remain in the West Fork if a water management plan is developed, and irrigation to the pivot and gated-pipe is non-concurrent. However, it is not clear if the landowner is willing to return a portion of the unused water to the West Fork. The applicant should consider developing a water management plan that addresses needs for the pivot and gated-pipe and has an irrigation schedule that provides for returning water to the creek. The project potentially has merit but needs additional clarification of aquatic benefits and water savings that will remain in the West Fork.

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)

Application Number: 219-5026-16587Project TProject Name: Tamkaliks Side Channel and
Wetland ComplexProject TApplicant: Nez Perce TribeCounty: YRegion: Eastern OregonCounty: YOWEB Request: \$235,097Total Cos

Project Type: Restoration

County: Wallowa Total Cost: \$461,377

Application Description (from application abstract)

The proposed project site is located adjacent to the Wallowa River, in the town of Wallowa, and is part of a 320 acre parcel belonging to the Wallowa Band Nez Perce Trail Interpretive Center, Inc. (the Homeland Project). The local non-profit organization, chartered in 1995, is supported regionally by private citizens, local government, and representatives from the Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation and Confederated Tribes of the Colville Reservation. This land provides a place for Nez Perce people ranging from Washington, Oregon and Idaho, to exercise traditional cultural practices - such as the annual Tamkaliks Celebration - in their historical homeland territory. Due to extensive channelization in the project area habitat for juvenile salmonid rearing and spawning is severely limited. This project seeks to address multiple habitat, water quality, and stream function deficiencies associated with this middle reach of the Wallowa River. Proposed work includes constructing a multiconnection side channel, installing large wood, inlet boulders, and alcoves, and enhancing and creating emergent wetland communities. Three recent habitat restoration projects (Wallowa-Baker, McDaniel, and 6-Ranch) have been completed within 15 miles both upstream and downstream of the project reach to increase fish habitat. This project will further enhance the Wallowa River by increasing habitat quantity in the form of back water pools, large wood debris, and re-connection of the river to the existing floodplain, providing year round juvenile rearing and potential spawning habitat for ESA listed fish species. These actions will also intercept various forms of ground water and irrigation returns helping regulate water temperature, sequester excess sediment, and improve/promote riparian vegetation establishment, and hyporheic exchange. Project partners: Nez Perce Tribe, Grande Ronde Model Watershed, USFS, BPA, and the Homeland Project.

Review Team Evaluation Strengths

- Designs provided in the application demonstrate the proposed project is technically sound. These
 designs were produced from a previous OWEB technical assistance grant and with oversight by local
 partners.
- The Tamkaliks site has high cultural significance for the Nez Perce Tribe, who purchased this property in the late 1990's.

- Implementation will provide habitat benefits for ESA-listed steelhead, Chinook salmon, bull trout, and lamprey, a culturally significant tribal food source.
- The project location is conducive to public outreach as it is highly visible and frequented by many visitors.
- There is potential for future fish monitoring by the Nez Perce Tribe at the project site.
- The project is ready for implementation with BPA funding already secured.
- The project will have measurable impacts to habitat according to researchers.
- Implementation will build on recommendations identified in the Wallowa Atlas, the local strategic action plan for anadromous fisheries.

Concerns

No significant concerns were identified.

Concluding Analysis

The application describes a clear need for restoration in the mid-reach of the Wallowa River, which has been channelized by the main highway, railroad, and intensive agriculture. The site is located downstream of four previously implemented side-channel stream meander projects, and approximately two miles upstream of another side-channel project. Salmonid habitat will be significantly improved since the mid-reach of the Wallowa River lacks spawning and rearing habitat for steelhead, Chinook salmon, bull trout, lamprey, and recently re-introduced Coho. Aquatic habitat will be enhanced by the installation of large woody debris, wetland nodes, alcoves, willow clumps, and plantings. Implementation of the project will also enhance wetland and floodplain connectivity. The Nez Perce Tribe and local partners are actively engaged in this effort, demonstrating an effective project partnership and the capacity to implement a high quality project.

Review Team Recommendation to Staff

Review Team Priority 1 of 11

Review Team Recommended Amount \$235,097

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team

Application Evaluation for Tamkaliks Side Channel and Wetland Complex, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

None

Staff Recommendation

Fund

Staff Recommended Amount

\$235,097

Staff Conditions

None

Eastern Oregon (Region 5)

Application Description (from application abstract)

1. The project is located in Harper, Oregon along the Malheur River. The tail water directly enters the Malheur River near river mile 56. The slopes are steep ,and cattle are present during the late fall and early winter. It is also in an area we would like to make a "focus area" in the future. This makes this project one of the highest priorities for the Council2. Water quality improvement in the Malheur Basin is one of our top restoration priorities. Water quality improvement is achieved through on-farm irrigation infrastructure improvements and management. Malheur Watershed Council in cooperation with irrigation districts and private landowners has been systematically improving water quality through irrigation system conversions over the past 18 years across the Malheur Basin. 3. This proposal will convert 59 acres from flood to sprinkler irrigation through the installation of a pivot system, big gun sprinklers for the corner, and related irrigation infrastructure.4. Project partners include Vale Irrigation District, landowner and Malheur Watershed Council.

Review Team Evaluation Strengths

- The project is technically sound.
- Project implementation will eliminate all irrigation-induced return flow to the Malheur River from the project site, which will improve water quality.
- Due to the steep project slopes accelerating erosion and runoff and the site's proximity to the Malheur River, this project is an implementation priority for the watershed council.

Concerns

• No significant concerns were identified.

Concluding Analysis

Converting flood irrigation to sprinkler eliminates nutrient and farm chemical runoff into the Malheur

River. The watershed council has a project ranking system that gives priority to projects located in steeper slopes, in direct proximity to a water body, and within an EQIP-priority area. Flood irrigation on steeper slopes creates excessive sheet-and-rill erosion, which will be eliminated once the pivot is installed. Project implementation will improve water quality and directly benefit the Malheur River. The project is complementary to several other projects implemented in the Harper area.

Review Team Recommendation to Staff

Review Team Priority 7 of 11

Review Team Recommended Amount \$62,330

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$62,330

Staff Conditions

None

Eastern Oregon (Region 5)

Application Number: 219-5028-16594Project Type: RestorationProject Name: Makin' Things Better on the Powder:
Phase II
Movin' the Power LinesProject Type: RestorationApplicant: Malheur WCCounty: BakerRegion: Eastern OregonCounty: BakerOWEB Request: \$59,539Total Cost: \$69,139

Application Description (from application abstract)

1) The project is on the Powder River, about 2.5 road miles from the town of North Powder.2) The Powder River is water quality limited for bacteria, DO, temperature, and nutrients. Keeping more water in the river will help with many of the problems. Redband use this reach of the Powder for many stages of the their life history. Having more water in the river will help them as well. 3) With the help of a previous OWEB grant we are moving the point of diversion 4.3 miles downstream, which will automatically leave 5 cfs in the river for that length. With the previous grant we will install a fish friendly diversion, and 7040 feet of pipe of various sizes to convert 116 acres of flood irrigation to pivots. The landowner will consider using the conserved water statutes to put a portion of the saved water as an instream right. However, because of the unusually high cost of removing old transmission lines and building new lines to supply power to the proposed pivots, this part of the project (irrigation efficiency) is in jeopardy. The landowner is committed to moving the diversion, installing the fence, protecting water quality, and conserving water through improved irrigation practices. But he cannot afford the cost of supplying power. We, the landowner and project managers, underestimated the costs. The landowner was not concerned based on previous recent experiences implementing a similar project. It didn't seem to a be concern because the power lines run right along the road next to the pump site. Without more assistance, he will be forced to use gated pipe to irrigate the fields. Thus not all of our goals from the original proposal will be achieved. Without the improved irrigation efficiency the landowner will use more water, and contaminated return flows from flood irrigation will still enter the Powder.4) Partners are Curt Martin, and the Malheur Watershed Council

Review Team Evaluation Strengths

• The proposed project supports a previously funded restoration project that will install a fish friendly diversion and leave 5.0 cfs in the Powder River for 4.3 miles.

Concerns

• The number of hours listed in the application as match from project management for moving the

power lines seems unreasonably high given that the OTEC (Oregon Trail Electric Co.) will be providing most of the project oversight.

- The cost to move the power lines is high for minimal watershed benefit.
- It is unclear whether the landowner will move water savings to a conserved water right.

Concluding Analysis

The previously funded project will move a point of diversion five miles downstream on the Powder River, leaving 5 cfs in the river for an additional 4.3 miles. A fish-friendly diversion and a pivot will be installed to improve water quality on 116 acres. The original application did not include the cost for moving the power lines. Based on prior experience moving power lines on another project, the applicant and landowner assumed the costs would be much lower. However, OTEC's cost estimate is higher than was anticipated. With the uncertainty in whether water savings will be moved to a conserved water right, the watershed benefit for the whole project is limited with the additional cost of this current 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

Eastern Oregon (Region 5)

Application Number: 219-5029-16595Project Type: RestorationProject Name: Springing into Action on Mahogany
MountainApplicant: Owyhee WCApplicant: Owyhee WCCounty: MalheurRegion: Eastern OregonCounty: MalheurOWEB Request: \$53,634Total Cost: \$77,989

Application Description (from application abstract)

1. Project LocationThe "Springing into Action of Mahogany Mountain" project is located approximately 36 miles south west of Adrian in the Leslie Gulch/Mahogany Mountain area in the Owyhee Uplands.2. Briefly state the project needThis project encompases approximately 1,863 rangeland acres in core Sage Grouse Habitat. The lack of live water sources throughout the project area limits a preferred grazing rest/rotation plan, and contributes to over/under vegetation utilization in certain areas.3. Describe the proposed workThe first element in project implementation is to develop 7 different spring sites in partnership with NRCS to provide livestock watering sources across the 1,863 acre rangeland parcel. The second implementation strategy is to install approximately 1.6 miles of cross fencing. Cross fencing will allow the landowner to split the project area into 4 different pastures instead of 3 and adopt a grazing rest/rotation management plan. 4. Identify project partnersProject partners include: Private landowner, NRCS, and Owyhee Watershed Council

Review Team Evaluation Strengths

- The application is well-written, and the detailed maps, grazing plan, and photos provide helpful context of the project site. The project objectives and design are clearly articulated in the application.
- Located in core sage-grouse habitat, implementation will help further improve and enhance existing vegetation for sage-grouse. Spring sites and troughs are well-sited, located more than 1 mile away from leks.
- The landowner is participating in the Three Fingers Fuel Reduction Project with Oregon State University, which includes targeted grazing at certain times of the year to reduce invasive annual grasses.
- There are very few invasive annual grasses on the property, project implementation will help further limit the expansion of medusahead and cheatgrass.
- The applicant has successfully implemented many upland projects in the Jordan Valley area and has the capacity to oversee this project.
- The project is supported by a partnership with NRCS.

Concerns

- Cost for the tire troughs seems high compared to other projects. However, the project site is in a remote location and transportation to the site increases costs for delivery and installation.
- There is a possibility that the landowner can do a phased approach starting with the water development to ascertain whether the cross fence is needed.

Concluding Analysis

Implementation of this project will help maintain high quality rangeland in critical core sage-grouse habitat. The property has no live water and lacks sufficient livestock distribution. Expanding water sources will improve wildlife habitat and balance vegetation utilization by dispersing livestock. Annual grass invasion, combined with catastrophic wildfires across the Owyhee landscape, has created a loss in native vegetation communities and contributes to declining sage-grouse habitat. The potential for wildfire to spread increases as invasive grasses, such as medusahead and cheatgrass, increases across the landscape. The project has a high likelihood of success in achieving ecological benefits for sage-grouse.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 5 of 11

Review Team Recommended Amount \$20,797

Review Team Conditions

Remove the cross fencing project component from the project scope and budget.

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund with Conditions

Staff Recommended Amount \$20,797

Staff Conditions

Remove the cross fencing project component from the project scope and budget, including indirect costs.
Application Evaluation for Springing into Action on Mahogany Mountain, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Eastern Oregon (Region 5)

Application Number: 219-5030-16633 Project Name: Bishop Drain: Checkmate Applicant: Malheur SWCD Region: Eastern Oregon OWEB Request: \$40,223 Project Type: Restoration

County: Malheur Total Cost: \$151,855

Application Description (from application abstract)

1. This project is located on the corner of Jefferson and Ivanhoe, approximately 3. 7 miles north of Owyhee Junction, 8 miles from Nyssa and 18 miles to Ontario in the Sand Hollow-Owyhee River watershed.2. Furrow irrigation from the three fields on 80 acres drain into the Bishop Drain. Current furrow irrigation practices result in increased sediment and nutrient loading to the Owyhee and Snake Rivers. The conversion to sprinkle irrigation will eliminate sediment and nutrient loading from these fields and will increase water conservation efficiency.3. Convert 80 acres from flood to pivot by installing 2 pivots, 1 rotating cleaning screen, 3 acres solid sets, 1 orifice box that will replace the junction box on the corner of Ivanhoe and Jefferson for field 1 and 2, and the neighboring farms on Ivanhoe that use the same junction box. Electrical panel, 20 hp pump, electrical wire, continue to sample Bishop Drain for analysis.4. OWEB, Oregon DEQ, landowner, and Malheur SWCD,

Review Team Evaluation Strengths

- The application is well-written and provides essential detail for understanding the project.
- The project complements several other projects previously implemented in the Bishop Drain drainshed, and will provide long-term water quality monitoring to determine the collective impacts of these efforts.
- The project is a technically sound irrigation conversion of 80 acres from flood to sprinkler irrigation.
- The landowner and Owyhee Irrigation District are highly engaged.
- The total project cost is reasonable.

Concerns

• No significant concerns were identified.

Concluding Analysis

The project addresses significant water quality concerns caused by flood irrigation in the Owyhee basin.

Three fields will be combined with the installation of two pivots, and approximately 2,180 feet of open concrete ditches will be eliminated by burying a mainline pipe to the pivots. This will reduce runoff of sediment, nutrients, and bacteria into Bishop Drain and onto the Owyhee River, which is located approximately two miles away. Producers and irrigation districts in Malheur County are making significant strides in converting cropped acreage from flood irrigation to sprinklers. Owyhee Irrigation District will install a new orifice box and headgate. Agricultural drain monitoring will continue on Bishop Drain and inform the applicant of water quality improvement for this and other projects implemented in this drainshed. The project continues on-going efforts in Malheur and Owyhee basins to improve water quality, therefore providing a significant watershed benefit for the cost.

Review Team Recommendation to Staff

Fund

Review Team Priority 3 of 11

Review Team Recommended Amount \$40,223

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$40,223

Staff Conditions

Eastern Oregon (Region 5)

Application Number: 219-5031-16641 Project Name: Upper Grande Ronde Invasive Weed Control Phase IV Applicant: Tri-County CWMA Region: Eastern Oregon **OWEB Request:** \$25,024

Project Type: Restoration

County: Union Total Cost: \$43.024

Application Description (from application abstract)

Since 2016, OWEB has continuously supported Tri-County's efforts to control leafy spurge and spotted knapweed in the Upper Grande Ronde. The project located approximately 10 miles west of La Grande towards the town of Starkey. Phase IV of the project aims to intensify treatment of leafy spurge in new sites identified in 2018, and continue treatments of historic sites. The presence of leafy spurge and spotted knapweed both along the Grande Ronde River and adjacent uplands has negatively impacted the native plant diversity, increased sedimentation, and reduced viable riparian and upland fish/wildlife habitat. Landowners have expressed concern that the abundance of these species has negatively impacted their ranching operations and continuous treatment of these species has been successful. Beginning with Phase I of the project, only 63.5 net acres were treated, in Phase II 97.6 net acres were treated, and in Phase III 164.5 net acres were treated (mostly new sites). Photo point monitoring has shown that multiple treatments on the same site is critical to success and continuously surveying for new sites is critical to landscape-wide success. Phase III of this project worked to treat known sites prior to the implementation of the Bird Track Spring Restoration Project, along with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and USFS. Phase IV of the project will help to prevent leafy spurge and spotted knapweed from spreading into the restoration area and work with the CTUIR to treat known sites during the restoration process.

Review Team Evaluation Strengths

- The project is a long-standing programmatic weed control effort and the proposed work builds upon previous phases.
- The application has clear goals.
- Prior project completion reports and post-implementation reports document successful implementation, especially when multiple weed control treatments are implemented.
- The project cost is reasonable for a significant watershed benefit.
- Many partners in the county participate in this effort including USFS, CTUIR, Tri-County CWMA (Coordinated Weed Management Area), USFS, and landowners in the upper Grande Konde.

 Noxious weed infestations are targeted along riparian areas where wildlife and aquatic habitat can be negatively impacted by weeds in the upper Grande Ronde, which is a priority area for ESA-listed anadromous fisheries.

Concerns

- The success of prior treatments is not described well in the application. Additional information would have strengthened the application.
- Additional quantifiable information about proposed treatments and outcomes would have been beneficial to include in the application.
- A landscape-level map depicting completed efforts and strategy for future weed control would have provided helpful context.

Concluding Analysis

The ecological benefit from this weed control work is in maintaining native plant communities by preventing their being overtaken by invasive annual plants. While weeds are never eradicated, it is important to keep infestations in check. The CWMA also treats properties adjacent to recent restoration projects, which helps reduce future weed establishment on disturbed sites and protect restored areas. This is an effective partnership with the Tri-County CWMA, USFS, CTUIR, and landowners in the Starkey area.

Review Team Recommendation to Staff

Fund

Review Team Priority 4 of 11

Review Team Recommended Amount \$25,024

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount

Application Evaluation for Upper Grande Ronde Invasive Weed Control Phase IV, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

\$25,024

Staff Conditions

Eastern Oregon (Region 5)

Application Number: 219-5032-16581 Project Name: Whitnah Irrigation Applicant: Eagle Valley SWCD Region: Eastern Oregon OWEB Request: \$27,156 Project Type: Restoration

County: Baker Total Cost: \$38,526

Application Description (from application abstract)

The project site is located within the Eagle Valley Soil and Water Conservation District near Richland, Oregon and is a tributary to the Powder River Watershed. Currently the project site flood irrigates 30 acres of hay and pasture ground. Water is diverted from Eagle Creek (a fish bearing stream historically containing bull trout) to the Dry Gulch ditch where it is then applied to the project site through an earthen ditch at two locations; one 20 acre field and one 10 acre field. This project addresses water quality and water quantity by converting from flood to sprinkler irrigation through the installation of two wheel lines. All tail water from the current flood irrigation system returns to the Powder River through the Waterbury ditch, a tributary to the Powder River three miles above Brownlee Reservoir; thus decreasing water quality by submitting additional sediment and debris into the watershed. The landowner is also supporting an inefficient form of irrigation. Through the installation of two wheel lines, the landowner will convert 30 acres from flood to sprinkler irrigated, leaving additional water in Eagle Creek to support aquatic species in critical bull trout habitat. The landowner has realized the watershed issues present and contacted the Eagle Valley SWCD seeking assistance to improve irrigation practices by converting to sprinkler irrigation. Project partners include the Eagle Valley SWCD and the landowner.

Review Team Evaluation Strengths

- Project implementation will provide water quality and quantity benefits to the Power River basin.
- The project cost is reasonable for the watershed benefit..
- Project implementation provides an outreach opportunity to demonstrate benefits of irrigation conversion work to other nearby landowners.
- The application is clear.
- There is an existing flow meter located near the project area that can measure reduction in future water use.

Concerns

• No significant concerns were identified.

Concluding Analysis

The project complements other work recently implemented in this area of the Powder basin. Slopes are steep at the project site, which accelerates erosion rates and makes this location a priority for irrigation conversion. Tailwater currently returns to the Waterbury ditch and onto the Powder River. Installing the wheel lines will reduce the amount of runoff entering the waterways. Project implementation will improve water quality by reducing the amount of sediment and farm chemicals conveyed to the Powder River.

Review Team Recommendation to Staff Fund

Review Team Priority 10 of 11

Review Team Recommended Amount \$27,156

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$27,156

Staff Conditions

Eastern Oregon (Region 5)

Application Number: 219-5033-16659 Project Name: Mr. Rogers Neighborhood Applicant: Malheur SWCD Region: Eastern Oregon OWEB Request: \$36,062 Project Type: Restoration

County: Malheur Total Cost: \$81,613

Application Description (from application abstract)

1. This project is located approximately 5.5 miles north of Ontario, on the edge of Bellows subdivision next to the freeway in the Buttermilk Gulch-Snake River Watershed (Please see location Map). 2. This grant application has a twofold that is combined in one grant. Malheur SWCD is requesting \$37,677 to fund 1380 feet of open lateral, and conversion from flood on 27 acres to three different types of sprinkle irrigation system. 3. The conversion from flood to sprinkle will consolidate 4.4 acres of dry ground that has water rights transferred, but is unusable due to the current delivery system with field 1 with an open lateral that divides the 20 acre field. Field 1 will have 2 wheel lines running north and south, with 13 risers for hook up. Field 2 and 3, will have a conversion from flood to solid sets (22 solid sets and 4 big guns) for a conversion of 7 acres total due to shape and size of the two fields. The second part; Owyhee Irrigation District who will dig and bury 1380 feet of 12 inch mainline to convert from an open lateral to a buried mainline that divides field 1. The irrigation district will also install an orifice box that has the capability to measure water delivered to their patrons for this project, next door neighbor and further down the lateral. Project Partners are the landowner, Owyhee Irrigation District and the Malheur SWCD.

Review Team Evaluation Strengths

- Project implementation will provide water quality benefits to the Snake River. Runoff from the site currently flows into a natural drain that crosses underneath I-84 and is conveyed directly to the river.
- The budget provides an appropriate level of descriptive detail.
- Owyhee Irrigation District (OID) and the landowner's support is demonstrated by match contributions.
- The project cost is reasonable for the watershed benefit.
- Installation of the 12-inch pipe by OID will connect to an existing pipe and eliminate evaporation and seepage along 1,380 feet of an existing ditch.

Concerns

- The 27-acre project footprint is fairly small.
- Parts of the application were unclear.

Concluding Analysis

The Snake River is listed on the DEQ 303(d) list for sediment, nutrients, toxics, dissolved oxygen, temperature, and bacteria. The fields in the project area are used as winter-feeding areas. Tailwater flows into the Snake River approximately two miles from the project site. After the first flood irrigation in the spring, tailwater deposits excess amounts of bacteria directly into the natural drain that flows directly to the Snake River. By converting from flood to sprinkler irrigation, tailwater will be eliminated. This project will improve irrigation delivery to three separate fields and is complementary to other projects nearby in this area of the Snake River. While the project will result in significant watershed benefits for the cost, the overall impact is somewhat limited by the small project footprint.

Review Team Recommendation to Staff

Fund

Review Team Priority 11 of 11

Review Team Recommended Amount \$36,062

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$36,062

Staff Conditions

Eastern Oregon (Region 5)

Application Number: 219-5034-16667 Project Name: Foraged in Fire Applicant: Malheur SWCD Region: Eastern Oregon OWEB Request: \$149,912 Project Type: Restoration

County: Malheur Total Cost: \$240,877

Application Description (from application abstract)

The Foraged in Fire Project is located within Malheur county and is approximately 36 miles from Rome, Oregon. Fire return intervals within the area are relatively short and have resulted in vegetation loss surrounding the property and threatening known active sage grouse leks within the vicinity. Permanent fire breaks have been established to protect the lek and ranch facilities located in the northern portions of the property but additional protection is required to stop fast moving fires from jumping the breaks. Additionally due to flooding during spring runoff, riparian degradation is beginning to occur resulting in erosion and water table loss. Other issues within the property include small Medusa patches along fire breaks as well as a depleted historic crested wheat field that was heavily grazed due to grazing restrictions on fire damaged allotments. Project components include:- Decrease the fire return intervals on private land with fire breaks and controlled grazing- Protect sage grouse Lek (from fire/invasive)-Herbicide treatment-Reseeding depleted uplands-Provide alternate watering locations for cattle and protect spring heads- Convert old crested wheat seeding used as sacrifice area during adverse conditions to desired upland species.- Establish check dams along riparian area to slow spring flows and raise water table- Mark existing fence near Lek to reduce the risk of strike mortality

Review Team Evaluation Strengths

- The project is located in a remote area with few opportunities for restoration.
- Seeded areas will be rested from active grazing for two years, which will allow the native bunchgrass community to become more viable.
- Preliminary baseline monitoring for treatment effectiveness is completed.
- The spring site will be protected.
- Planned restoration work will improve core sage-grouse habitat.
- The landowner project support is demonstrated by a letter of intent (LOI) to enroll in the CCAA (Candidate Conservation Agreement with Assurances) and significant project match.

Concerns

• The application lacks a landscape map that places project components into a watershed context.

However, because of confidentiality restrictions that must be followed for landowners participating in a CCAA, exact project locations are not provided on submitted maps.

- Site preparation planned for the seeded area is unclear.
- Idaho fescue is not an appropriate choice in the seed mix since this is a low elevation site with minimal precipitation. Germination rates may be low.
- Applying seed at 18 pounds per-acre is excessive and should be no more than 12 pounds per-acre.
- The viability of the proposed check dams and how the sites for these dams were selected is uncertain. This approach could transfer the problem elsewhere rather than addressing the core issue.

Concluding Analysis

The application has multiple project components to address sage-grouse habitat improvement on a large ranch in remote Malheur County. The various project elements proposed will be incorporated into a site-specific map (SSP) that is anticipated to be approved by USFWS in late winter. The project area experiences frequent landscape fire-return intervals that adversely impact sagebrush and perennial bunchgrass necessary for sage-grouse brooding and rearing habitat. Landscape-level fire threatens the active sage-grouse leks. Permanent fire breaks are proposed to keep fast-moving fires from jumping existing breaks. In addition, the spring developments and troughs will provide upland water to aid grazing management and improve upland vegetation for sage-grouse. The budget is reasonable given the remote location and the proposed project components will benefit core sage-grouse habitat.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 9 of 11

Review Team Recommended Amount \$149,912

Review Team Conditions

Reduce seed application rate to 12 pounds per acre; and modify the seed mix to include a native species alternative to Idaho fescue. Applicant must seek engineering advice from NRCS to evaluate the effectiveness of the two check dams.

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Fund with Conditions

Staff Recommended Amount

\$149,912

Staff Conditions

Reduce seed application rate to 12 pounds per acre; and modify the seed mix to include a native species alternative to Idaho fescue. Applicant must seek engineering advice from NRCS to evaluate the effectiveness of the two check dams, and provide a letter from NRCS approving the final design for check dams prior to payment on this project component.

Eastern Oregon (Region 5)

Application Number: 219-5035-16673Project Type: RestorationProject Name: Upper Wallowa River Restoration
ProjectProject Type: RestorationApplicant: Wallowa ResourcesCounty: WallowaRegion: Eastern OregonCounty: WallowaOWEB Request: \$250,726Total Cost: \$1,109,741

Application Description (from application abstract)

The Upper Wallowa River Restoration (UWRR) Project encompasses 1 1/2 miles of the Wallowa River and the West Fork Wallowa River, beginning near the confluence of BC Creek and flowing into Wallowa Lake. This section of the river is primarily managed for recreation with a mix of small property ownership, small businesses, and Wallowa Lake State Park. This area is a large attraction for tourists and important to the Wallowa County economy. This grant covers the first two reaches of the four-reach project area, from Wallowa Lake upstream to the Bailey Lane Bridge. Natural floodplain function along the reach has been degraded by encroachment and development, thereby reducing the habitat guality and guantity. The planned habitat improvements will:1) enhance and restore spawning and rearing area habitat for kokanee salmon and bull trout:2) improve habitat while protecting private and public property from the effects of flooding by maintaining or improving bank stability;3) capitalize on its location to create significant opportunities for outreach to the general public; Wallowa Lake State Park hosts over half a million people per year; and 4) serve as a model for floodplain restoration in semi-developed areas that is FEMA and NOAA compliant. The combined habitat and social benefits provide a profound opportunity to showcase a constructive win/win example for the coexistence of people and nature. Project partners include ODFW, OPRD, the Nez Perce Tribe, Wallowa Resources, and several private parties. This creates an opportunity for significant outreach to a diverse group of Oregonians.

Review Team Evaluation Strengths

- The application is clear and has a reasonable budget with clearly defined costs.
- Previous application evaluation concerns were addressed by providing detail on implementation sequencing and consistent units across the budget and narrative sections.
- The project builds on two previously funded OWEB technical assistance grants that provided designs for the proposed work.
- The project provides an opportunity to reactivate the floodplain within the project area.
- The project location at Wallowa Lake State Park will be highly visible and provide an opportunity to demonstrate environmental restoration practices to a diverse audience. The park has over 500,000 visitors annually.

- Private landowners above the project reach have the opportunity to expand restoration. The project
 design funded by two previous technical assistance grants extends approximately 900 feet south of
 the proposed project. The DSL permits encompasses the entire reach of the technical assistance
 design.
- Proposed restoration will benefit kokanee and bull trout.
- A planting plan is provided and addresses future plant maintenance.

Concerns

• No significant concerns were identified.

Concluding Analysis

The project will restore natural watershed functions impacted by stream alterations made to channelize the river and protect private properties and infrastructure. Also, a significant high flow event approximately 15 years created significant challenges to this section of the Wallowa River . The proposed actions could become an example for restoration in a semi-developed floodplain due to the project site's high visibility and accessibility to the public. The resulting habitat restoration will benefit kokanee spawning and all life stages of bull trout in a cost-effective project with a likelihood of success.

Review Team Recommendation to Staff

Review Team Priority 6 of 11

Review Team Recommended Amount \$250,726

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$250,726

Staff Conditions

Eastern Oregon (Region 5)

Application Number: 219-5036-16700 **Project Name:** Wallowa Front Forest Health Improvement Partnership-Divide Extended

Applicant: Wallowa SWCD Region: Eastern Oregon

OWEB Request: \$134,987

Project Type: Restoration

County: Wallowa Total Cost: \$191,987

Application Description (from application abstract)

The Wallowa Front Priority Area project is a multi-agency, multi-landowner effort to reduce fuel loads and improve the overall forest health of the Wallowa Front. Alder Slope, Divide, Lostine, and Bear Creek focus areas located on the north face of the Wallowa Mountains encompass the Wallowa Front. The Divide Extended Project Area is located northeast of the Divide area, between the towns of Joseph and Imnaha, and is in the headwaters of Little Sheep Creek and Big Sheep Creek in Wallowa County. In its current state, the Divide Extended is at high risk for catastrophic fires, insect and disease infestations, and continued deteriorating health due to overstocked stands and high treatment costs. The Divide Extended is an addition to the Wallowa Front which includes landowners and six partnering entities: SWCD, NRCS, US Forest Service, Oregon Department of Forestry, OWEB, and Wallowa Resources: who are concentrating funding and implementing on-the-ground projects over the next five years to improve the health of these stands. As more projects in the Wallowa Front are completed it continues to be evident that due to the steep slopes and heavy fuels, higher rates per acre are needed to complete additional contracts. While funding has been obtained for the Wallowa Front a small portion of landowners positioned across the road were not initially included in project area when lines were drawn. The Divide Extended project will expand the work being completed in the greater Wallowa Front Priority Area. Landowner incentives are needed to help pay the high costs to complete thinning and slash treatments. OWEB funds in this application will be used to provide cost share to complete forest thinning and slash treatments on 200 acres in the Divide Extended project area, with heavy ratings being the highest priority.

Review Team Evaluation Strengths

- The project extends fuel reduction efforts into an area not previously targeted in the adjacent multiple agency RCPP. OWEB funding will enable landowners not included in this RCPP to treat their overstocked stands.
- ODF and the applicant have the capacity to oversee this effort and have a proven track record with similar projects.
- The project provides an opportunity for landowners to access funding for upland thinning, which is typically challenging to secure.

· Overstocked stands will be treated, which leads to a decreased threat of wildfire.

Concerns

- Treatment cost per-acre is somewhat high compared to similar projects. However, the stands
 proposed for treatment have a high number of trees per-acre (TPA) and are located on steep slopes.
 TPA is over 1,000 stems within some stands.
- The stands may need to be retreated in the future.

Concluding Analysis

Combined with previous efforts, a significant amount of the upland portion of Divide Area in the Sheep Creek drainage will have treated stands after this project is completed. Reducing high TPA reduces the threat of catastrophic wildfire spreading to or from nearby USFS lands. While the unit costs appear high, topographic constraints due to steep slopes, excessive stand density, piling, and mastication costs are the reason for higher per-acre treatment costs. Reducing stand density to a more historic level will improve forest health and vigor, and help alleviate the threat of insect and disease outbreak. Improved spacing reduces the threat of a ground fire crowning. In addition, hydrologic conditions are improved by increasing snow accumulation to improve groundwater recharge. More snow is able to reach the ground, reducing sublimation and evaporation. If wildfire were to occur on the steep, overstocked stands, high amounts of sediment could reach Sheep Creek and the Imnaha River. The resulting impaired water quality from such an event could adversely affect habitat for ESA-listed steelhead and spring Chinook salmon. All of these factors combined ensure that the project has the potential for high ecological uplifts and a high likelihood of success.

Review Team Recommendation to Staff

Fund

Review Team Priority 8 of 11

Review Team Recommended Amount \$134,987

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Fund

Staff Recommended Amount \$134,987

Staff Conditions

Eastern Oregon (Region 5)

Application Description (from application abstract)

This project is located on the Lostine River at the town of Lostine, Oregon. The project reach is from river mile 5.7 to river mile 6.3. The Lostine River joins the Wallowa River near the town of Wallowa and the project area is in Wallowa County Oregon. The lower 10-miles of the Lostine River has been channelized, straightened and is kept in place by dikes built as a response to flood events in the 1960's and 1970's. These actions have greatly simplified aquatic habitat conditions in the river by reducing the number of pools, increasing riffles, increasing stream velocity, reducing habitat complexity, eliminating side channels, and disconnecting the river from its floodplain. Increased water velocity, specifically at high spring flow, has degraded water quality by increasing bank erosion contributing to fine sediment deposition in the river. The strategic action plan for aguatic restoration in Wallowa County, Wallowa Atlas, identifies limiting habitat factors for the lower Lostine River to be addressed by this project: 1. Floodplain condition, 2. Instream structural complexity, 3. Instream sediment quantity, 4. Stream temperature, and 5. Riparian vegetation. This proposed technical assistance application seeks funding to complete project design, environmental compliance requirements, and construction bidding documents. Deliverables include complete 100% design, ESA Consultation, removal/fill permits, cultural resources survey and report, and construction request for proposal package.Project partners include Grande Ronde Model Watershed, Nez Perce Tribe, and 10 landowners in the project reach.

Review Team Evaluation Strengths

- The project site along the Lostine River has braided channels that can readily re-activate the floodplain, and has significant existing vegetation. This technical assistance will result in a cost-effective restoration project since habitat will not be artificially created and instead will build on these existing stream conditions.
- Landowners are engaged in every aspect of the project. The application includes cooperative agreements signed by all landowners, which speaks to the level of their commitment.
- Proposed actions for a future restoration project will provide high ecological uplift.
- The application is detailed, clear, and well-written with clear objectives.
- The project location is highly visible, and future implementation provides high potential for outreach.
- Secured match was recently approved by the Grande Ronde Model Watershed board.

 Restoration project designs will be developed with regulatory agency involvement and stakeholder engagement. This will result in secured permits and implementation-ready final designs by the end of this technical assistance project.

Concerns

• No concerns were identified.

Concluding Analysis

This section of the Lostine River was channelized, straightened, and diked in the 1960's and 1970's. With the old braided channels still present, reactivating them will alleviate the need for large quantities of riprap that would further degrade habitat. A future restoration project will increase floodplain connectivity, provide side-channel habitat, and improve spawning and rearing habitat for steelhead, Chinook salmon, and recently introduced Coho.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 4

Review Team Recommended Amount \$73,040

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Staff Recommended Amount \$73,040

Staff Conditions

Application Evaluation for Lostine River - River Mile 5.7 Floodplain and Side Channel Enhancement Project, Open Solicitation-2018 Fall Offering Due: Oct 29, 201

Eastern Oregon (Region 5)

Application Number: 219-5038-16562Project Type: Technical AssistanceProject Name: A Difficult Survey and Design
Round 2Project Type: Technical AssistanceApplicant: Owyhee WCCounty: MalheurRegion: Eastern OregonCounty: MalheurOWEB Request: \$28,930Total Cost: \$42,380

Application Description (from application abstract)

This project will take place approximately 38 air miles South of Jordan Valley on Browns and Difficulty Ridges between the Owyhee and Middle Owyhee Rivers. Four years ago, the private landowner approached OWC and DSL with a rough draft plan to enhance sage grouse habitat through expansion of a wet-meadow and improving grazing management across a 15,748-acre sage steppe area in the Owyhee Uplands. Due to the remote nature and geographic complexities of implementing such a large-scale restoration project, all parties agreed a project wide topographic survey, alternatives analysis, and project design was necessary before selecting a restoration implementation plan. The proposed work will include a full topographic survey of the proposed livestock watering and wet-meadow irrigation pipelines. A topographic survey will allow the stakeholder group to analyze all alternatives and design options before selecting the most cost-effective and purposeful approach to restoring mesic wet-meadow habitat and grazing management across the 15,748-acre project area. Project partners include: Owyhee Watershed Council, Private Landowner, Oregon Department of State Lands, Trout Unlimited, NRCS, USFWS

Review Team Evaluation Strengths

- The application is well-written and provides detailed answers to the concerns raised from the previous review including clarity regarding the wet-meadow habitat expansion project component. Detailed maps, photos, and water-right information are also provided in the application.
- The future restoration project will benefit sage-grouse habitat at a location with active nearby leks. Restoration implementation will also benefit redband trout, mule deer, elk, and the Columbia spotted frog.
- The project is located in the Three Forks Conservation Opportunity area considered to contain one of the largest blocks of remaining high quality sagebrush habitat in Oregon.
- A grazing plan and an irrigation water management plan will be developed through this technical assistance project.
- Topographic surveys and development of an implementation plan will be coordinated with input from numerous partners.
- Appropriate partners and agencies are participating in this effort including, DSL, Trout Unlimited, OWRD, USFWS, NRCS, Owyhee Watershed Council, and the landowner.

• DSL will provide in-house cultural resource surveys on the trough pipeline route and trough locations.

Concerns

• The restoration phase of this project may be a high cost for the expected ecological benefit.

Concluding Analysis

There is currently significant water loss from evaporation and seepage in the ditch, resulting in limited amounts of water conveyed to the meadow site. The proposed pipeline will expand the wet meadow site to provide mesic sage-grouse brood-rearing habitat. This wet-meadow expansion combined with improved grazing management will enhance high quality sagebrush habitats and ensure this area remain viable for many wildlife species.

Review Team Recommendation to Staff Fund

Review Team Priority 4 of 5

Review Team Recommended Amount \$28,930

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$28,930

Staff Conditions

Eastern Oregon (Region 5)

Application Description (from application abstract)

1) Location: The project is a 1 mile stretch of Bull Run Creek a tributary to the SF of the Burnt River. It is 4 air miles to downtown Unity and 12 air miles to Hereford.2) In the 1930's, Bull Run was dredged and the tailings were left in place. The creek is not functioning because most of the water runs below ground. There is little to no aquatic or wildlife habitat, no connection to the flood plain, riparian vegetation is inconsistently present, and water quality is degraded. The creek needs lots of help to become a creek again.Bull Run Creek is a tributary to the South Fork Burnt River. The upper SFBR has the best flow, temperature and riparian habitat in the Burnt River subbasin (personal communication Dadoly, DEQ). Based on visual inspection, the creek immediately downstream and upstream from the project site are in excellent condition. Thus restoring the connection to the South Fork would expand suitable aquatic habitat beyond the 1 mile project reach. We estimate about 5 miles total or an increase of 2.9 miles of connected habitat after successful rehabilitation of the site. The Bull Run is potential redband habitat and is within core sage grouse habitat. The owner plans to enroll the stream in CREP once the project is complete and has an approved CCAA plan for his property.3) We are applying for funds to hire an engineer to complete a survey, hydro-logic analysis, develop alternatives, and to develop a 60% design from the selected alternative. The selected alternative must be cost effective and approach the problem in a way that maximizes the benefits to aquatic habitat. 4) Partners are the landowner, Malheur WSC, AP engineering, and design reviewers.

Review Team Evaluation Strengths

- Three design alternatives to reconnect floodplain habitat will be developed for the landowners and technical team to consider.
- Storing floodwaters and runoff will raise the water table, which will improve mesic conditions and lateseason, brood-rearing sage-grouse habitat. Reconnecting the floodplain will also improve habitat for other aquatic species.
- Once the earthwork and stream restoration work is completed, the area will be enrolled into CREP.
- The landowner has an approved CCAA plan.
- Restoring the proposed mile of Bull Run will connect three miles intact habitat on the Bull Run, and benefits sage-grouse habitat in low-density core area.

Concerns

- The restoration project will require substantial earthwork, which will need to be permitted and the application does not address this need. The earthwork will also result in a high cost restoration project for the expected watershed benefit.
- A phased approach may be needed for the restoration project due to the potential cost and with the landowner providing the sole match.
- Redband trout presence in the Bull Run is not substantiated.

Concluding Analysis

The technical team comprised of NRCS, DEQ, TU, ODFW, USFWS, Malheur Watershed Council, and landowner will determine which alternative is feasible and most cost-effective. The resulting restoration project addresses 30 acres of habitat that will benefit brood-rearing sage-grouse and aquatic species in the Bull Run will benefit from improved floodplain connectivity.

Review Team Recommendation to Staff

Fund

Review Team Priority 2 of 5

Review Team Recommended Amount \$39,850

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$39,850

Staff Conditions

Application Evaluation for Let's Make the Bull Run Run Again: Da Do RunRun, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Eastern Oregon (Region 5)

Application Number: 219-5040-16592Project Type: Technical AssistanceProject Name: Cusick Creek: The Restoration
Continues Phase IIProject Type: Technical AssistanceApplicant: Malheur WCCounty: UnionRegion: Eastern OregonCounty: UnionOWEB Request: \$29,488Total Cost: \$36,688

Application Description (from application abstract)

1) Cusick Creek is located approx 30 miles North of Baker City and approx 10 miles from North Powder. The Cusick Creek watershed drains approximately 14 square miles or 9, I 00 acres of land and flows into Thief Valley Reservoir on the Powder River.2) The upper reaches (~6,000 feet stream length) of Cusick Creek are confined to a moderately narrow canyon and due to past land management practices has become more incised with moderated to severe bank erosion. Fish habitat and the properly functioning condition of the stream have been greatly compromised in these reaches. The lower reach has been restored to a functioning stream. This proposal is the start of Phase II. The previous surveys did not extend this far upstream.3) We are applying for funds to hire an engineer to complete a survey, horologic analysis, develop alternatives, and to develop a 60% design from the selected alternatives.4) Partners are the landowner, Malheur WSC, RSI engineering, and design reviewers.

Review Team Evaluation

Strengths

- The project reach is located in core sage-grouse habitat with nearby active leks. Future restoration will enhance the wet-meadow complex to improve riparian conditions and increase late-season, brood-rearing habitat for sage-grouse.
- The proposed project builds upon successful implementation of a previously funded restoration project. This first phase withstood a high-flow event of over 1,000 cfs with minimal damage, and is now enrolled in CREP.
- Future restoration will improve wildlife and other aquatic habitat.
- The budget is clear and rates are reasonable.
- Budgets will be provided for three restoration design alternatives.

Concerns

• The technical assistance will provide a 60% design. However, achieving the full 100% design requires additional match, which can be challenging to obtain in remote rural areas.

Concluding Analysis

This technical assistance project will provide designs for the second phase of a three-phase effort. These designs will help further restoration efforts along Cusick Creek, and address stream channel instability resulting from impacts to streambanks by historic grazing, an active headcut, and a volatile hydrograph ranging from 2 cfs to 1,258 cfs. Improvements to Cusick Creek will be beneficial to sagegrouse and will enhance wet-meadow habitat by reconnecting the floodplain.

Review Team Recommendation to Staff Fund

Review Team Priority 3 of 5

Review Team Recommended Amount \$29,488

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$29,488

Staff Conditions

Eastern Oregon (Region 5)

Application Number: 219-5041-16671 Project Name: Powder Basin Groundwater Records Review Applicant: Powder Basin WC Region: Eastern Oregon OWEB Request: \$29,610 Project Type: Technical Assistance

County: Baker Total Cost: \$37,787

Application Description (from application abstract)

There is growing concern that areas within the Powder Basin may be at risk for declining groundwater levels. This has been found in neighboring basins and since groundwater is managed similarly in the Powder Basin, it is presumed that problems will arise eventually, if not already. Based on conversations with the public and Oregon Water Resources Department (OWRD) staff, it was determined that the most logical first step in assessing the current status of groundwater in the Powder Basin was to review existing data that is stored by OWRD. The goal of this project is to summarize existing data, identify trends in groundwater levels over time, extract geologic data that is relevant to groundwater storage where possible and determine where further data collection is needed. This effort will include summarizing all existing groundwater records within the entire Powder Basin and compiling all geologic information from well logs in the Baker Valley. This project is a collaboration between the Powder Basin Watershed Council, the Oregon Water Resources Department and the Oregon Department of Geology and Mineral Industries (DOGAMI).

Review Team Evaluation Strengths

- The proposed effort could be successful if the applicant works closely with OWRD and DOGAMI, and there appears to be positive initial coordination with these agencies.
- The applicant is proactively anticipating and mitigating potential groundwater issues by using and analyzing existing data.

Concerns

- The technical soundness is unclear without information in the application explaining who will provide oversight and interpretation of the data, and how the data will be used.
- Special rules regarding groundwater use will need to be adopted for the basin before a project could lead to management changes.
- The project provides no clear path to accomplishing restoration in the basin.

Concluding Analysis

Existing data will be used to determine whether groundwater decline is a threat to the Powder Basin. Data collected from well logs and geologic data will be used to determine trends and groundwaterholding capacity. By compiling and summarizing existing groundwater data, a framework for better groundwater management will be provided. Since it is difficult to ascertain how this project leads to future restoration efforts, the cost-benefit for this technical assistance investment is unclear.

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)

Application Number: 219-5042-16684

Project Type: Technical Assistance

Project Name: Malheur Watershed Habitat Connectivity Assessment and Enhancement Plan

Applicant: Burns Paiute Tribe

Region: Eastern Oregon

OWEB Request: \$73,875

County: Malheur Total Cost: \$93,414

Application Description (from application abstract)

The proposed project is located in the Malheur watershed along U.S. Highway 20 (US 20) between Juntura and Ontario, Oregon. In this region, US 20 lacks dedicated elements to facilitate wildlife and habitat connectivity and fragments important habitats in the watershed by imposing a large physical barrier to wildlife and habitat connectivity. This fragmentation impairs wildlife and habitat connectivity and limits wildlife access to important resources along the Malheur River riparian corridor which compromises watershed function and resiliency. Additionally, attempts by wildlife to cross the highway to move between habitats often results in a myriad of wildlife-vehicle collisions that pose risk to wildlife and humans alike. For these reasons, connectivity enhancement measures (i.e., counter-measures) to address the many issues related to the fragmentation of habitat by US 20, are warranted. In order to identify connectivity enhancement measures, we will implement a Habitat Connectivity Assessment and Enhancement Plan in the Malheur watershed which will include the following: 1) development of a landscape-level assessment of wildlife and habitat connectivity including identification of limiting factors, 2) evaluation of potential connectivity enhancement measures to address connectivity and vehicle collisions, 3) selection and prioritization of feasible connectivity enhancement measures, and 4) preparation of preliminary design, estimated cost, and implementation plan for selected connectivity enhancement measures. We will develop this Habitat Connectivity Assessment and Enhancement Plan through a collaborative partnership with the Oregon Department of Transportation, Oregon Department of Fish and Wildlife, Oregon Wildlife Foundation, Oregon Hunters Association, Audubon Society, and Oregon Natural Desert Association.

Review Team Evaluation Strengths

- Concerns from the previous application evaluation are addressed, including expanding the area on the Highway 20 corridor to assess conditions from Juntura to Ontario. ODFW is also added as a project partner.
- The application is detailed and provides significant data, including additional information regarding retrofit solutions, sites for guide fencing, and potential pathways.
- Multiple partners and agencies are involved in the project. Project support from these organizations is demonstrated by the number of letters of support included in the application.

• The Burns-Paiute Tribe project support is demonstrated by significant match.

Concerns

- A recommended outcome may not be supported by ODOT.
- It is possible that this project could lead to another design phase rather than restoration.

Concluding Analysis

Highway 20 is the main travel corridor between Bend and Boise and has high amounts of truck traffic. The section of Highway 20 between Juntura and Ontario experiences unusually high wildlife-vehicle collisions. Highway 20 fragments habitat and is a physical barrier to wildlife accessing riparian habitat along Malheur River. The project will develop a landscape-level assessment of wildlife and habitat connectivity, including identification of limiting factors. This analysis will evaluate measures to address connectivity, prepare a design, and provide an implementation plan.

Review Team Recommendation to Staff

Review Team Priority 5 of 5

Review Team Recommended Amount \$73,875

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount \$0

Staff Conditions

Application Evaluation for Malheur Watershed Habitat Connectivity Assessment and Enhancement Plan, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Eastern Oregon (Region 5)

Application Number: 219-5043-16511Project Type: MonitoringProject Name: Grande Ronde Basin Stream Flow
Gauging Stations Operation – Water Years 2019 &
2020Project Type: MonitoringApplicant: Grande Ronde Model WS FoundationCounty: WallowaRegion: Eastern OregonCounty: WallowaOWEB Request: \$101,002Total Cost: \$313,982

Application Description (from application abstract)

The Grande Ronde Basin (GRB) covers over 5,000 square miles and includes several thousand miles of perennial flowing streams. This project is in place to operate 12 existing stream gauges in combination with USGS (3 gauges), Idaho Power (1 gauge) and OWRD (one gauge) who, independent of this project, operate five additional gauges (Grande Ronde at Troy, Imnaha R. at Imnaha, Minam R. at Minam, Lookingglass Creek, and Upper Catherine Cr.) to characterize flow in both the Grande Ronde and Imnaha subbasins. These gauges are intended to inform and provide data for irrigation water management, fisheries management, long term flow and trend analysis, TMDL and SB1010 water quality management plan effectiveness, subbasin plan implementation, restoration project development and provide essential information regarding cumulative effects response to conservation in the Grande Ronde Basin (GRB). Stream flow characteristics including headwater contribution, land management influence, and basin outlet data are all selectively collected in this network of 17 flow gauges. Production partners include Grande Ronde Model Watershed (GRMW) and Oregon Water Resources Department (OWRD) with funding partners being BPA, OWEB and OWRD. The Grande Ronde Basin (GRB) covers over 5,000 square miles and includes several thousand miles of perennial flowing streams. This project is in place to operate 12 existing stream gauges in combination with USGS (3 gauges), Idaho Power (1 gauge) and OWRD (one gauge) who, independent of this project, operate five additional gauges (Grande Ronde at Troy, Imnaha R. at Imnaha, Minam R. at Minam, Lookingglass Creek, and Upper Catherine Cr.) to characterize flow in both the Grande Ronde and Imnaha subbasins. These gauges are intended to inform and provide data for irrigation water management, fisheries management, long term flow and trend analysis, TMDL and SB1010 water quality management plan effectiveness, subbasin plan implementation, restoration project development and provide essential information regarding cumulative effects response to conservation in the Grande Ronde Basin (GRB). Stream flow characteristics including headwater contribution, land management influence, and basin outlet data are all selectively collected in this network of 17 flow gauges. Production partners include Grande Ronde Model Watershed (GRMW) and Oregon Water Resources Department (OWRD) with funding partners being BPA, OWEB and OWRD.

Monitoring Team Evaluation Monitoring Team Strengths

- Many local, tribal, state, and federal organizations use the data collected with OWEB funds in the past.
- OWRD has a proven track record maintaining gages and sharing real-time and published data.
- The application broadly describes how the data are used to identify, plan, and prioritize restoration projects.

Monitoring Team Concerns

- The activities described in the schedule will not achieve the broader objectives stated in the application. The project funded under this application will provide the data to organizations that will actually use it for these purposes.
- The application is not clear on how proposed monitoring aligns with the place-based planning effort that is underway.
- The application does not adequately describe the need for funding and it is unclear what would happen if this project was not funded in the future.

Monitoring Team Comments

• The objectives described in the application would be better described in the Wrap-up Section questions designed to understand how the data will be reported and applied to inform future actions.

• This project would benefit from working with the DEQ Basin Coordinator to look at long-term data to understand trends in flows and relationships to water quality.

• Letters of support from Nez Perce Tribe and Oregon Department of Fish and Wildlife should be provided to describe how they currently use the data and describe specific projects that would benefit from it in the future.

Review Team Evaluation Strengths

- The project will continue long-term monitoring that has occurred on some gauges since 1997; and continues maintenance, review, and operations of the 12 streamflow gauging stations.
- Data collected from the stream gauges are used broadly and regularly. The data is informative for many entities and users.
- The operation of the gauges ensures that irrigation water management and agreements are supported and can be enforced.
- Collected data is connected to various on-line systems.

Concerns

• It is unclear from the application how the applicant will complete a cumulative-effects response
analysis.

 USGS protocols are followed and the applicant has a proven track record collecting high quality data. The quality of data collected at these sites continues to increase with new technology and continuing years of record establishes excellent history for each site.

Concluding Analysis

There is a long-term need for the collected data that is critical to designing future restoration projects. Gauges are located strategically throughout the Grande Ronde basin to document the effects of irrigation withdrawal. This is critical for irrigation water management and to enforce water right leases, especially during low-flow periods. The information provides an important data set used by OWRD, local river guides, and others as a management tool. There is substantial ecological benefit in maintaining gauges for consistent data.

This long-term project provides valuable data to multiple stakeholders working in the basin to manage fisheries, irrigation, and watershed restoration.

Review Team Recommendation to Staff Fund

Review Team Priority 1 of 3

Review Team Recommended Amount \$101,002

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$101,002

Staff Conditions

Application Evaluation for Grande Ronde Basin Stream Flow Gauging Stations Operation – Water Years 2019 & 2020, Open Solicitation-2018 Fall Offering Due:

None

Eastern Oregon (Region 5)

Project Name: Kumbaya 2020: Monitoring in Malheur and Owyhee Basins

Application Number: 219-5044-16590

Applicant: Malheur WC Region: Eastern Oregon

OWEB Request: \$91,880

Project Type: Monitoring

County: Malheur Total Cost: \$124,096

Application Description (from application abstract)

This application is being submitted jointly by the Malheur Watershed Council and the Malheur County Soil and Water Conservation District. These two entities will pool their resources to carry out the project proposed in this application. The proposed monitoring will occur in both the Malheur and Owyhee River Basins of eastern Oregon. In the past 20 plus years landowners, agencies, and irrigation districts have invested millions of dollars improve water quality in the Malheur and Owyhee Watersheds. In conjunction with these efforts, a comprehensive water quality monitoring program was begun to determine the extent and cause of water quality degradation and measure progress in correcting those problems. As the monitoring program progressed, it was refined to provide better detail on both problem areas and areas where best management practices have been applied. At this point, a substantial amount of data has been collected and analyzed to show that some areas are reducing sediment and phosphorus loads and water quality is improving. Continued monitoring is necessary, however, to verify water quality improvements and to characterize further changes in water quality related to changes in land and irrigation management over time. Most importantly, 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. The proposed monitoring program will continue to monitor 48 existing sites including 29 agricultural drains and 19 stream locations. (Please see attached Table 1.0). The collected data will be combined with historical data collected over the last 20 years and be statistically analyzed to determine trends. This application is being submitted jointly by the Malheur Watershed Council and the Malheur County Soil and Water Conservation District. These two entities will pool their resources to carry out the project proposed in this application. The proposed monitoring will occur in both the Malheur and Owyhee River Basins of eastern Oregon. In the past 20 plus years landowners, agencies, and irrigation districts have invested millions of dollars improve water quality in the Malheur and Owyhee Watersheds. In conjunction with these efforts, a comprehensive water quality monitoring program was begun to determine the extent and cause of water quality degradation and measure progress in correcting those problems. As the monitoring program progressed, it was refined to provide better detail on both problem areas and areas where best management practices have been applied. At this point, a substantial amount of data has been collected and analyzed to show that some areas are reducing sediment and phosphorus loads and water quality is improving. Continued monitoring is necessary, however, to verify water quality improvements and to characterize further changes in water quality related to changes in

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Monitoring Team Evaluation

Monitoring Team Strengths

- The applicant has established competency, and it is beneficial for the SWCD and watershed council to pool their sampling efforts. This coordination should lead to improved coordination and analysis of the data.
- The co-applicants are working under DEQ approved SAPs, and using a reputable lab to analyze water samples.
- The data is beneficial for TMDL implementation tracking.
- Sampling incorporates the continuous flow gages to develop loads.
- The project will compare current and future data to historic data from the 1980s, and could provide some insight on longer term trends associated with BMP implementation and changes in land use.

Monitoring Team Concerns

- Letters of support are not included in the application.
- The application would have benefited from describing if and how the past sampling network has been analyzed and sites were prioritized. It is unclear if all of the sampling sites are still needed given the large data set that has been produced.
- It is unclear why additional data are needed to demonstrate agricultural water quality issues based on current land management practices; this has been shown with previously collected data.
- It is unclear whether there is a need to continue collecting Upper Malheur phosphorus data and how DEQ will use this data for TMDL purposes.
- The sampling frequency (1 time per month) in the drains is inadequate to answer the applicant's questions.
- DEQ operates ambient water quality monitoring sites in this area and the application does not describe how the applicant is coordinating with DEQ's water quality lab or basin coordinator to share data and analyze trends.
- The application describes that the drain sampling will be accompanied by an analysis to track changes in land use, but no details are provided on how this land-use/management tracking will be done or the changes tracked.
- Many challenges are laid out around the drain flow monitoring sites, yet the application does not describe how these challenges will be addressed.
- The budget is inadequate to complete all the analyses described in the application.

Monitoring Team Comments

- Drop the Upper Malheur phosphorus monitoring and perform drain monitoring 2 times per month.
- Require a communication plan to increase communication with local representatives of partner state agencies, along with reporting of incremental progress via annual progress reports.

Review Team Evaluation Strengths

- The proposed monitoring is a joint effort with the Malheur Watershed Council and the Malheur SWCD.
- There is strong partnership with Bureau of Reclamation (BOR) and their mapping is readily accessible on-line.
- The project builds on prior work, and the partners have a proven track record of completing similar projects.
- The monitoring program guides future restoration efforts. The results can also substantiate past efforts to ascertain effectiveness of implemented restoration and conservation projects.

Concerns

- Coordination with additional partners, including ODEQ and ODA, is needed.
- The application needs clarification with a more refined scope of work.

Concluding Analysis

The Snake River Agricultural Drain (SRAD) project has been ongoing with over 12 years of data. Data collected is used by the Owyhee Watershed Council, Malheur Watershed Council (MWC), and Malheur SWCD to prioritize and implement restoration projects that focus on specific drainsheds with impaired water quality. The recently added flow data further enhances the monitoring and will help calculate pollutant loads. This effort also helps to successfully track the progress of restoration projects. The Malheur and lower Owyhee basins have high phosphorus levels, and collected data is essential to help inform the overall TMDL monitoring. One of the monitoring goals is to identify total phosphorus and sediment throughout the basin. Synthesis of existing data is an essential part of this project and will help make those determinations

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority

2 of 3

Review Team Recommended Amount

\$91,880

Review Team Conditions

Prepare a communication plan to increase coordination with local representatives of partner state agencies and require the technical team to meet.

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund with Conditions

Staff Recommended Amount \$91,880

Staff Conditions

Provide a communication plan prior to first payment that includes plans for increasing coordination with project partners, specifically local representatives of partner state agencies, and plans for maintaining engagement with a technical team. Progress reports will be scheduled for the project and should include an update on actions taken to implement this communication plan.

Eastern Oregon (Region 5)

Application Number: 219-5045-16628	Project Type: Monitoring
Project Name: Harney Groundwater Monitoring Phase 3	
Applicant: Harney County Watershed Council	
Region: Eastern Oregon	County: Harney
OWEB Request: \$20,235	Total Cost: \$30,955

Application Description (from application abstract)

The project area is located in the Malheur Lakes Basin, south east Oregon within Harney County known as the Harney Basin. In 2015, Oregon Water Resources Department placed a moratorium on processing groundwater irrigation permits due to possible over-allocation. With reports of declining water levels over several areas of the basin, OWRD and USGS launched a groundwater study in the project area known as the Greater Harney Valley Area of Concern. In two previous phases of this project we received funding first to have a local technician monitor 30 wells (10 within each of three areas reporting groundwater declines). The second project increased the number of wells to a total of 60 wells to be monitored. Increased response by local landowners wanting their wells monitored has enlarged the project to a total of 102 wells to be monitored quarterly. Project partners include Oregon Water Resources Department, Harney County, the Groundwater Study Advisory Committee and the Community Based Water Planning Collaborative. The project area is located in the Malheur Lakes Basin, south east Oregon within Harney County known as the Harney Basin. In 2015, Oregon Water Resources Department placed a moratorium on processing groundwater irrigation permits due to possible overallocation. With reports of declining water levels over several areas of the basin, OWRD and USGS launched a groundwater study in the project area known as the Greater Harney Valley Area of Concern. In two previous phases of this project we received funding first to have a local technician monitor 30 wells (10 within each of three areas reporting groundwater declines). The second project increased the number of wells to a total of 60 wells to be monitored. Increased response by local landowners wanting their wells monitored has enlarged the project to a total of 102 wells to be monitored quarterly. Project partners include Oregon Water Resources Department, Harney County, the Groundwater Study Advisory Committee and the Community Based Water Planning Collaborative.

Monitoring Team Evaluation

Monitoring Team Strengths

- The proposed monitoring will build on past groundwater monitoring efforts and continue to contribute to the ongoing groundwater study.
- The application has a broader purpose to engage landowners as part of the place-based planning effort.
- The project will produce consistent data because it will be collected by the same technician that has sampled the existing well network.

 Applicant addressed previous reviewer comments and described the monitoring methods well in the application.

Monitoring Team Concerns

• The OPMT debated the need to expand the monitoring network with one year remaining and how much these data would or could be incorporated into the groundwater study to improve current understanding of the heterogeneity of the aquifer.

Monitoring Team Comments

None

Review Team Evaluation Strengths

- The proposed monitoring project builds upon past efforts and includes an increase in the sample size of wells to be monitored.
- Engaging additional landowners is part of the OWRD's placed-based planning effort.
- Utilizing local staff ensures consistency in data collection, and builds trust with landowners that enable the council to monitor wells that out-of-area agency staff may not be granted access.

Concerns

- During previous phases of this monitoring project, data was not reported back to OWRD in a timely manner, and OWRD protocols may not have been followed to provide quality data.
- Some of the previously collected data may not be available to use in the groundwater study due to data quality concerns.
- The applicant has not provided data analysis from Phase 1 of the project.

Concluding Analysis

Due to results from previous phases of this monitoring project, the technical soundness of this next phase of the project is uncertain and is not likely to succeed until the concerns are addressed.

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)

Application Number: 219-5046-16676 Project Type: Monitoring **Project Name:** Towards Sustainable Groundwater Management - Monitoring Evapotranspiration in the Harney Basin Applicant: Harney County Watershed Council Region: Eastern Oregon **County:** Harney **OWEB Request:** \$146,670

Total Cost: \$268,475

Application Description (from application abstract)

Location: Harney Basin, including the Silver, Silvies, and Donner und Blitzen, Rivers and Harney-Malheur Lakes in Harney County; nearest cities are Burns and Hines. See Figure 1 for a map of the basin. Issue: Groundwater levels are declining in the Harney Basin largely due to a rapid increase in groundwater pumping for irrigation over the last 30 years. A Groundwater Study and local water planning effort are both working to develop an accurate groundwater budget. A major gap exists in the ability to quantify basin-wide groundwater use by crops and groundwater reliant plants (known as phreatophytes). The most cost effective and accurate method for monitoring historical and current basin-wide consumption of water by plants is to use remotely sensed evapotranspiration (ET) measurements (Mapping ET at high Resolution with Internalized Calibration [METRIC]). Proper calibration of the METRIC model relies on measurements of actual ET, which do not currently exist in the basin. Project: This project will collect baseline ET data and use that data to validate the METRIC model to estimate past ET and support ongoing ET monitoring efforts (Figure 2). All data and products will be maintained online and will be publicly available through a web visualization tool. A technical report will be developed that provides ET measurements developed using METRIC from 1984-2020. Outreach activities will connect local partners to the information and help them understand how they can use it in planning and management activities.Partners: This project leverages expertise and resources from several partners to inform studies, planning efforts, management decisions, and projects. Partners include the Desert Research Institute at the University of Nevada-Reno, University of Idaho, Oregon Water Resources Department, US Fish and Wildlife Service, US Geological Survey, the Groundwater Study Advisory Committee, the Community Based Water Planning Effort, County Court, and local landownersLocation: Harney Basin, including the Silver, Silvies, and Donner und Blitzen, Rivers and Harney-Malheur Lakes in Harney County: nearest cities are Burns and Hines. See Figure 1 for a map of the basin. Issue: Groundwater levels are declining in the Harney Basin largely due to a rapid increase in groundwater pumping for irrigation over the last 30 years. A Groundwater Study and local water planning effort are both working to develop an accurate groundwater budget. A major gap exists in the ability to quantify basin-wide groundwater use by crops and groundwater reliant plants (known as phreatophytes). The most cost effective and accurate method for monitoring historical and current basin-wide consumption of water by plants is to use remotely sensed evapotranspiration (ET) measurements (Mapping ET at high Resolution with Internalized Calibration [METRIC]). Proper calibration of the METRIC model relies on

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Monitoring Team Evaluation

Monitoring Team Strengths

- The proposal is well-written and describes a clear need for why the data is needed and why existing data are not sufficient.
- The meteorological data will be real time and publicly accessible.
- The project will help with the existing and proposed ground water monitoring grants, and the ongoing groundwater study.
- The project includes outreach component to work with stakeholders and references possible uses of data to aid landowners in crop irrigation.
- The budget is detailed and organized by objective, which addresses previous project review concerns.

Monitoring Team Concerns

- The application is unclear on the number of years data are needed to adequately calibrate the model.
- The OPMT questioned what the long term plan is for monitoring needs for these data in support of the model.
- Working with this equipment and data requires a high level of expertise. The application does not include a description on who has the expertise to calculate actual ET.

Monitoring Team Comments

• The application describes the other eddy covariance ET station in the basin and it would be good to incorporate and compare these results as part of the modeling effort, if the data can be acquired.

Review Team Evaluation Strengths

- The application is well-written.
- This project will complement on-going OWRD monitoring in the region.
- This application addresses previous project evaluation concerns, including describing the need for the data and providing budget details.
- Previously identified data quality issues may be mitigated with the additional partners now
 participating in the project.
- The project includes an outreach component and work with stakeholders.
- The information can be used to help inform crop irrigation scheduling.
- Data will be available through a Web visualization too

Concerns

- The number of years of data needed to adequately calibrate the model is unclear.
- Project costs are high compared to similar work, and it is unclear how the costs for travel, maintenance, calibration, and troubleshooting were determined.
- It is unclear how this project will inform management decisions and future restoration efforts.

Concluding Analysis

OWRD and USGS are participating in an ongoing groundwater study in the Harney basin that will produce a water budget to estimate recharge, discharge, and change in storage. The information collected from the eddy co-variance will help quantify basin-wide groundwater use by crops and groundwater-dependent plants (phraetophytes). The proposed project may offer a cost-effective and accurate method for monitoring historical and current basin-wide water consumption by plants using remotely sense evapotranspiration (ET) measurements. This technology will provide ways to calibrate actual ET. While the monitoring data will be useful to OWRD, the cost-benefit of this investment is uncertain without more information on how the data can be used to inform future restoration projects.

Review Team Recommendation to Staff Fund

Review Team Priority 3 of 3

Review Team Recommended Amount \$146,670

Review Team Conditions

None

Application Evaluation for Towards Sustainable Groundwater Management - Monitoring Evapotranspiration in the Harney Basin, Open Solicitation-2018 Fall Offeri

Staff Recommendation

Staff Follow-Up to Review Team None

Staff Recommendation

Fund

Staff Recommended Amount

\$146,670

Staff Conditions

None

Eastern Oregon (Region 5)

Application Number: 219-5047-16586

Project Type: Stakeholder Engagement

Project Name: Stakeholder Engagement in Groundwater Conservation in the Harney Basin
Applicant: Harney County Watershed Council
Region: Eastern Oregon
OWEB Request: \$42,609

County: Harney Total Cost: \$53,909

Application Description (from application abstract)

The Harney Basin is located in Harney County, and encompasses a significant aquifer as well as surface drainages from the Silvies, Donner und Blitzen Rivers, Silver Creek, and the direct drainages to Harney and Malheur Lakes. Burns and Hines as the area's two major towns. The basin is experiencing significant groundwater declines resulting in regulatory curtailment of new groundwater permits and stimulated the interest in a planning initiative, the Harney Community-Based Water Planning (CBWP) Collaborative. The CBWP has engaged local community members and other interested stakeholders in a collaborative group that is open to the public. Declining groundwater levels can inhibit access to water for drinking, domestic, and agricultural use, and can affect groundwater-dependent ecosystems and species. Additionally, arsenic levels above the 10 ppb drinking water standard have been measured in groundwater wells. Some of the domestic well users are experiencing difficulties in obtaining potable water. Since domestic wells are "exempt" uses under state law, there is little information about their condition or use. The proposed work in this application entails: 1) conducting a statistically-valid, mailed survey -- to be designed and conducted by OSU -- of what rural domestic well users are experiencing with their water; and 2) effectively engaging stakeholders in water-resource information compiled by and solutions developed by the CBWP. These efforts will better enable the Collaborative in developing realistic conservation strategies that are well-matched for the basin, such as voluntary approaches for significant reduction in groundwater use and ecological restoration projects. Our project partners include all the organizations associated with the place-based water resource planning project, and particularly: OSU, Harney County Court, HCWC, OWRD, USGS, Oregon DEQ, Water Watch, The Nature Conservancy and Crane High School.

Review Team Evaluation Strengths

- The project will broaden the group of stakeholders engaged in groundwater conversations and involve more than the agricultural community.
- Engaging high school students from Crane creates a high likelihood that parents will become involved with this effort.
- Public engagement in the Harney basin may ultimately provide a larger benefit than the data collected from the mailed survey.

Stakeholder engagement will aid in the development of a water budget, which will be developed as
part of the community-based planning effort that is co-convened by Harney County Court and Harney
County Watershed Council.

Concerns

• It is unclear whether the project will lead to further study and analysis.

Concluding Analysis

The project has high potential to engage different segments of stakeholders in the Harney basin. There are several on-going efforts in Harney County, including the placed-based planning effort with OWRD and groundwater studies with USGS and OWRD. The outcomes generated by this stakeholder engagement will help stakeholders more broadly understand the magnitude of the issues. It will help various groups target solutions that will resolve conflicts and help to decrease water use. Materials will be provided for stakeholders to develop short-term conservation strategies, understand the basin's water-resource issues, and determine strategies to reduce groundwater use. Conservation strategies recommended can be incorporated into future restoration projects.

Review Team Recommendation to Staff Fund

Review Team Priority 1 of 1

Review Team Recommended Amount \$42,609

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$42.609

Application Evaluation for Stakeholder Engagement in Groundwater Conservation in the Harney Basin, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

None

Mid-Columbia - Region 6 Fall 2018 Funding Recommendations





Document Path: Z:loweb\Technical_Services\Information_Services\GIS\Maps\Review Team Meetings\2018FallCycle\Projects\Region6_AppFundingStatus_11x17_2018Fall.mxd ESRI ArcMap 10.6 NAD 1983 Oregon Statewide, Lambert Feet Intl OWEB- PK Wills 20190314

Funding Recommendations

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

Previous Grants - 1998-Spring 2017

- Restoration
- Acquisitions



Streams Region Boundary

Oregon Watershed Enhancement Board

775 Summer St, NE Suite 360 Salem, OR 97301-1290 (503) 986-0178 http://oregon.gov/OWEB/

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Region 6 - Mid-Columbia Restoration Projects Recommended for Funding in Priority Order						
Project #	Grantee	Project Title	Brief Description	Recommended	County	
219-6017	North Fork John Day WC	Clear Creek Restoration	Multiple old log weirs and historic road berms that keep fish from swimming upstream on Clear Creek will be removed.	59,893	Grant	
219-6029	Walla Walla Basin Watershed Foundation	Couse Creek Confluence Fish Passage Construction	This project will remove old concrete rip rap that blocks fish from swimming up Couse Creek to cooler water and good habitat. Wood and other natural structures will be added along 3/4 mile of Couse Creek to improve fish habitat.	117,992	Umatilla	
219-6019	Umatilla Basin Watershed Foundation	Wildhorse Creek Dam Removal & Bridge Replacement	A major barrier that blocks fish from accessing 15 miles of Wildhorse Creek will be corrected by removing a four-foot high concrete diversion under a too-narrow bridge and replace it with a structure that allows fish to swim upstream to cooler and better habitat.	103,290	Umatilla	
219-6016	Monument SWCD	Rudio Headwaters Meadow Restoration	Dense forest will be thinned around Rudio Creek headwaters then set into the stream to catch and build up an eroded channel. Additionally, a wildlife friendly fence will be built around the site to keep cattle from the restored site.	99,764	Grant	
219-6024	Gilliam SWCD	Hewes Diversion Removal	This project will remove a huge abandoned concrete diversion, add habitat instream for fish, and plant riparian shrubs for future shade.	76,921	Gilliam	
219-6025	Monument SWCD	Cavender Wetland Habitat Improvements	This project will control weeds and plant important wetland shrubs and grasses to provide good habitat for birds and wildlife that call Cavender Pond home.	17,029	Grant	
219-6022	Confederated Tribes Warm Springs	Upper Fox Creek Fish Passage and Instream Habitat Enhancement Project	Two culverts will be replaced with a bridge so steelhead and other fish can swim upstream to cooler water; habitat will be improved on two miles of Fox Creek; encroaching juniper will be removed; and riparian shrubs will be planted and protected along Fox Creek.	167,801	Grant	
219-6026	Grant SWCD	McGirr Fox Creek Passage and Habitat Project	This project will remove a concrete diversion that currently blocks most fish from swimming upstream to critical habitat in Fox Creek.	176,522	Grant	
219-6023	North Fork John Day WC	Camp - Lick Restoration	This project will remove non functioning log weirs, berms and rip rap that impair both Camp and Lick Creek; large wood and other natural structures will be added to the streams to improve fish habitat; and riparian shrubs and trees will be planted and protected with fencing.	167,452	Grant	

Restoration Projects Recommended for Funding in Priority Order (Continued)						
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
219-6027	North Fork John Day WC	Eight Mile Headwaters Upland Improvement Project	Six springs will be developed for wildlife and livestock water; and thirsty juniper and crowded timber will be removed upslope of the spring sites.	86,763	Grant	
219-6028	North Fork John Day WC	Fox Creek Upland Restoration Project	Encroaching juniper will be thinned and seven declining aspen stands will be protected with buck and pole fencing.	120,570	Grant	
219-6015	North Fork John Day WC	Big Flat Pasture Enhancements	Removing juniper upslope from Flat Creek compliments water developments for both livestock and wildlife.	54,315	Grant	
Total Rest	toration Projects Reco	ommended for Funding b	y RRT and OWEB Staff	1,248,312		
					•	
Restoratio	on Projects Recomme	nded but Not Funded in	Priority Order			
				Amount		
Project #	Grantee	Project Title	Brief Description	Recommended	County	
None						
Total Rest	toration Projects Reco	ommended for Funding b	y RRT	1,248,312		
					•	
Restoratio	on Applications Not R	ecommended for Fundin	g by RRT			
		Amount				
Project #	Grantee	Project Title		Requested	County	
219-6018	Wheeler SWCD	Pine Hollow Middle and Upper Restoration			Wheeler	
219-6020	Wheeler SWCD	Badger Creek Forest and LWD Restoration			Wheeler	
219-6021	Grant SWCD	Greenwood Upland Improvements		246,093	Grant	

Technical Assistance (TA) Projects Recommended for Funding in Priority Order					
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
219-6030	Confederated Tribes Umatilla Indian Reservation	Desolation Reach 3 Design	This proposal would result in designs to restore and improve two miles of fish habitat in Desolation Creek.	45,110	Grant
Total TA P	Projects Recommended	d for Funding by RRT and C	DWEB Staff	45,110	
Technical	Assistance Projects Re	commended but Not Fund	led in Priority Order		
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
219-6031	Umatilla Basin Watershed Foundation	Reith Dam Removal Design	Construction ready designs will enable removing an abandon full channel-spanning concrete irrigation dam on the Umatilla River.	27,500	Umatilla
Total TA Projects Recommended for Funding by RRT				72,610	
Technical	Assistance Application	ns Not Recommended for	Funding by RRT		
				Amount	
Project #	Grantee	Project Title		Requested	County
219-6032	Umatilla Basin Watershed Foundation	Umatilla River Floodplain Assessment & Action Plan		55,000	Umatilla

Stakeholder Engagement Projects Recommended for Funding in Priority Order					
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
219-6037	Walla Walla Basin Watershed Foundation	Walla Walla Basin Stakeholder Engagement	Healthier streams and better habitat for fish and wildlife in the Walla Walla Basin will result from landowners and partners collaborating on restoration.	27,522	Umatilla
Total Stak	eholder Engagement I	Projects Recommended fo	r funding by OWEB Staff	27,522	
Stakehold	ler Engagement Projec	ts Recommended but Not	Funded in Priority Order		
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
None					
Total Stak	Total Stakeholder Engagement Projects Recommended for funding by RRT 27,522				
Stakeholder Engagement Projects Not Recommended for Funding by RRT					
				Amount	
Project #	Grantee	Project Title	Project Title		County
219-6036	North Fork John Day WC	John Day Basin Partnership (ohn Day Basin Partnership Outreach		Grant

Monitoring Projects Recommended for Funding in Priority Order					
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
240 6025			Over 50% of fish native to the John Day River swim past the mouth of the river,		
	Cilliam SM/CD	Adult Steelhead Migratory	reducing the numbers of steelhead that make it back to their home streams to	222.222	Cilliam
219-0035	Gilliam SWCD	Routes Investigation	reproduce. This proposal monitors water temperature and tracks steelhead as they	223,232 Gilli	Gilliam
			return from the ocean to the John Day River.		
			This monitoring proposal will collect stream temperature, flow and ground water		
210 6022	Walla Walla Basin	Hydrological Monitoring in	levels at numerous long-term monitoring locations. This information will inform	108.044	Limatilla
219-0033	Watershed Foundation	the Walla Walla Basin	both the effectiveness of existing restoration and help prioritize locations for future	108,944	omatilia
			restoration.		
Total Mon	itoring Projects Recor	nmended for funding by C	OWEB Staff	332,176	
Monitorin	g Projects Recomment	ded but Not Funded in Pri	ority Order		
				Amount	
Project #	Grantee	Project Title	Brief Description	Recommended	County
None					
Total Monitoring Projects Recommended for funding by RRT			332,176		
Monitorin	g Applications Not Re	commended for Funding b	by RRT		
				Amount	
Project #	Grantee	Project Title		Requested	County
	PSU- Portland State				
219-6034	University	Utilizing multispectral UAV-i	magery to monitor stream and riparian restoration effectiveness	81,680	Grant
Region 6 Total OWFB Staff Recommended Board Award			1 652 120	16%	
			1,055,120	10/0	
Regions 1-6 Grand Total OWEB Staff Recommended Board Award			10,554,731		

Mid Columbia (Region 6)

Application Number: 219-6015-16582 Project Name: Big Flat Pasture Enhancements Applicant: South Fork John Day WC Region: Mid Columbia OWEB Request: \$54,315 Project Type: Restoration

County: Grant Total Cost: \$135,538

Application Description (from application abstract)

The area know as Big Flat is located in the Southwestern corner of Grant County, in the Upper South Fork John Day River Watershed, on the Keerins Ranch. Big Flat is at the headwaters of many redband bearing streams, but closest to Flat Creek and Brisbois Creek. In the both watersheds, streamflows are very low or even non-existent during summer months. Flat Creek is on the 303 (d) list for temperature. This area is also considered winter range habitat for elk, and mule deer. In order to continue efforts to enhance Flat Creek, and to enhance the habitat of Big Flat, mitigate the effects of Juniper, and provide critical water for wildlife and livestock, the Keerins's had a well installed, and are seeking assistance to develop a watering system from this well, and also to remove 183 acres of Western Juniper. Prior to this well, the only water available for the pasture was located at a spring development, previously developed by the Keerins and Izee Ranch, which is dry most of the year. To accompany the well and spring development, and assist in providing improved habitat in the Big Flat pasture, we are requesting OWEB support to remove 183 acres of Western Juniper. This will continue work occurring at the headwaters of Flat Creek on the Kee Property, OWEB grant: 218-6005. This project will also compliment work on Spoon Creek, a tributary of Flat Creek, and Flat Creek itself, just downstream of Big Flat, OWEB grant: 217-6005. Other planned restoration for Flat Creek, and surrounding Big Flat includes Forest Health treatments in the Caribou pasture. All of these project surround Big Flat, and aim to improve the Flat Creek Watershed.

Review Team Evaluation Strengths

- This is a well-written application that includes clear objectives, photos, and maps.
- Improving the ecological condition of this property will benefit elk and mule deer, as well as other wildlife that live in the basin.
- The project compliments previous restoration work completed in the area.
- Improving water sources in the pasture will help reduce use of pastures that now solely rely on Flat Creek.

Concerns

- Including a grazing management strategy would be helpful to the review.
- It is not clear whether the project will continue if match dollars are not secured.

Concluding Analysis

Numerous restoration projects have been completed in this high elevation private lands to improve wet meadows and forest health, protect aspen, remove encroaching juniper, and improve water quality of Flat Creek and other redband trout tributaries to the South Fork John Day River. This project builds on those efforts by utilizing a new well for livestock water development in a dry pasture. This area is critical deer and elk wintering area with abundant bitter brush and mountain mahogany communities.

Review Team Recommendation to Staff Fund

Review Team Priority 12 of 12

Review Team Recommended Amount \$54,315

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$54,315

Staff Conditions

None

Mid Columbia (Region 6)

Application Number: 219-6016-16600ProjectProject Name: Rudio Headwaters Meadow
RestorationProject NeadowApplicant: Monument SWCDCountyRegion: Mid ColumbiaCountyOWEB Request: \$99,764Total Columbia

Project Type: Restoration

County: Grant Total Cost: \$145,592

Application Description (from application abstract)

The Rudio Headwaters Meadow Restoration project is located in the upper portions of the Rudio Creek drainage (HUC 12 -170702021005), a tributary of the North Fork John Day River, near the town of Kimberly in Grant County, Oregon. Rudio Creek is listed as critical spawning and rearing habitat for both Chinook salmon and ESA listed (Threatened) Mid-Columbia River steelhead. Past management activities under previous ownership has resulted in severely overstocked forest stands that have encroached upon, and degraded the condition and function of, historic wet meadows in the headwater reaches of Rudio Creek. This project will address the following watershed management objectives:1) Forest Stand Improvements: 137-acres of mixed conifer forest will be pre-commercially thinned, primarilyeliminating lodgepole pine. This restoration action will reduce the risk of catastrophic wildfire and restore hydrologic functions within the headwater wet meadow habitat of Rudio Creek.2) Exclude Cattle from Wet Meadow and Riparian Habitats: Approximately 6,000 feet of wildlife friendly fence will be installed to create a 27-acre exclosure around 13 acres of wet meadow and riparian habitat. This restoration action will prevent trespass cattle from adjacent properties from accessing the site. Cattle exclusion will result in reduced trampling of hydric soils, decreased soil compaction, increased soil porosity, and accelerated recovery of sensitive plant communities.3) Accelerate Wet Meadow Recovery:16 beaver dam analogue (BDA) structures will be installed within Rudio Creek using onsite materials. BDAs will improve large woody debris retention, attenuate flows, improve floodplain connectivity, aggregate sediment, and increase riparian hardwood productivity. Project partners include the Confederated Tribes of Warm Springs, North Fork John Day Watershed Council, Monument SWCD, Jeff Maben (property manager/forester), Wildwood Investments (landowner), and OWEB.

Review Team Evaluation Strengths

- The project site has potential for improved stream function and floodplain reconnection.
- Protecting the riparian area from errant trespass cattle will help establish riparian vegetation.
- The project compliments the landowner's effort to improve forest health on adjacent overstocked timber stands.
- The applicant and landowner have a successful track record of restoration accomplishments.

- Catastrophic wildfire is a serious resource concern in this basin, and the proposed forest stand improvements will reduce this wildfire risk.
- Thinning will help reduce insect infestation and disease.
- Beaver dam analog (BDA) are designed to be strategically placed and incorporated into existing large wood structures located in the stream channel.
- Planting willows will improve the diversity of the existing riparian vegetation.

Concerns

• The design would be strengthened by adding additional trees to be dropped into the channel.

Concluding Analysis

The project is located in the headwater meadows of Rudio Creek, an important steelhead tributary of the North Fork John Day River. This project will improve water quality and potentially increase flows for the entire stream. The landowner has a reputation of successful restoration on their other properties and has already begun forest health treatments adjacent to the project site, maximizing the overall ecological benefits of this project.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority

4 of 12

Review Team Recommended Amount

\$99,764

Review Team Conditions

Add project component of dropping large trees in-channel along barren reaches of the stream project site.

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund with Conditions

Staff Recommended Amount

\$99,764

Staff Conditions

Add to the application scope of work a project component for dropping large trees in-channel along barren reaches of the stream project site.

Mid Columbia (Region 6)

Application Number: 219-6017-16604 Project Name: Clear Creek Restoration Applicant: North Fork John Day WC Region: Mid Columbia OWEB Request: \$59,893 Project Type: Restoration

County: Grant Total Cost: \$110,019

Application Description (from application abstract)

Clear Creek is a perennial stream which flows into the Middle Fork John Day River (MFJDR) roughly 1.5 miles north of Austin Junction, OR. Beaver removal, past timber harvest, and associated railroad grade and road construction within the floodplain of Clear Creek led to channel incision which reduced the floodplain inundation frequency and connectivity of the creek to an extensive side-channel network. In the late 1970's, log weirs were installed in Clear Creek with the goal of improving degraded fish habitat by increasing pools, sorting spawning gravels, and preventing further channel incision. Many of these structures met their original intent, but also resulted in unintended consequences, creating barriers that prevent movement of fish to cooler upstream waters, overwidening channels, and forcing step pool complexes in plane-bed channels. Clear Creek is an important cool water tributary to the MFJDR and is key rearing habitat for Mid-Columbia River spring-run Chinook salmon, as well as being designated critical habitat for Columbia River bull trout and Mid-Columbia River steelhead. Recovery plans specifically identified removal of passage barrier weirs as key actions on Clear Creek to recover bull trout and steelhead. The North Fork John Day Watershed Council (NFJDWC), partnering with the US Forest Service (USFS) and the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO), will remove log weirs, remove valley constraining berms and riprap, plant riparian hardwoods, and place appropriate in-channel and floodplain structures (large woody debris and boulders) in order to allow the stream to naturally reduce its width/depth ratio, improve water quality, increase sinuosity and pool numbers, promote spawning gravel accumulation in pool tail-outs, and restore juvenile fish passage. These actions will enhance geomorphic and ecohydraulic processes and functions to support limited over-summer rearing habitat for native fishes.

Review Team Evaluation Strengths

- The project site provides high quality spawning and rearing for spring Chinook, ESA-listed steelhead, bull trout, and other aquatic species.
- The historic log weirs to be removed are confirmed barriers to juvenile fish. Removing these weir will
 open access to over three stream miles of Chinook habitat, nine miles of designated critical steelhead
 habitat, and twelve miles of designated critical habitat for bull trout.

- Years of temperature monitoring data for Upper Clear Creek indicates this stream is one of the coldest on the Middle Fork John Day River. Continued monitoring is an important addition to the project.
- The project is identified in multiple plans, including the Bridge Creek-Middle Fork John Day River Draft Watershed Restoration Action Plan and the Aquatic Restoration Environmental Assessment (Malheur Nat'l Forest 2014.)....
- Ample match and partners with technical expertise, indicates support for the project.
- The project is shovel-ready once cultural work is completed.
- The applicant and partners have successful track records for restoration.
- The proposed work builds on other projects in the upper Middle Fork John Day River basin.
- · Utilization of a nearby large wood supply reduces the cost of the project.
- Beavers will expand and increase floodplain connectivity resulting from the proposed work.

Concerns

• Additional information on the berm, such as their role as a limiting factor, the history and actual location, would have been helpful to the review.

Concluding Analysis

This project corrects historic anthropogenic structures that have outlived their original intent and now impact juvenile fish as they attempt to move upstream to high quality habitat. There is no grazing along this stream reach and the vegetation is thick. Dropping some of the large conifers instream will add complexity and cover, as well as allow riparian hardwoods to flourish. The project has a high ecological benefit-cost ratio and high likelihood of success.

Review Team Recommendation to Staff

Fund

Review Team Priority 1 of 12

Review Team Recommended Amount \$59,893

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Fund

Staff Recommended Amount

\$59,893

Staff Conditions

None

Mid Columbia (Region 6)

Application Number: 219-6018-16612Project Type: RestorationProject Name: Pine Hollow Middle and Upper
RestorationProject Type: RestorationApplicant: Wheeler SWCDCounty: WheelerRegion: Mid ColumbiaCounty: WheelerOWEB Request: \$167,873Total Cost: \$244,077

Application Description (from application abstract)

1) The project is located along Pine Hollow Creek, a steelhead bearing tributary of Rock Creek, which flows to the John Day River. Located within Wheeler County, the nearest town being Mitchell, Oregon. 2) This project is a holistic continuation of work within the Pine Hollow Creek Watershed to address the limiting factors to watershed health and fish passage. The project will provide much needed habitat complexity on the lower reach of Pine Hollow Creek, correct a significant fish passage barrier, and address juniper encroachment within the headwaters. 3)The project will install Vertical Post Structures (VPSs) and large wood on approximately ³/₄ miles of Pine Hollow Creek which has recently been enrolled in the ODFW Riparian Fencing Program. It will also correct a major fish passage barrier of a perch culvert. Correction of this culvert will include an additional 0.25 miles of fencing through the ODFW program. Lastly, the project will begin restoration of the headwaters of Pine Hollow Creek by the treatment of prioritized juniper in a top down manner. 4)Project partners include USFW Partners Program, the Antone Ranch(Daysprings Partners LLC), the ODFW John Day, and the Wheeler County SWCD.

Review Team Evaluation Strengths

- This project was identified from an OWEB funded assessment and follows an OWEB funded technical assistance grant for the design.
- This Pine Hollow Creek project opens access to three miles of ESA-listed steelhead habitat, and compliments other restoration work done on this stream.
- Alternative designs are discussed in the application.
- The cost rates for removing juniper appeared to be reasonable.

Concerns

- This property is in the process of a pending sale, which creates uncertainty for the project to be successfully implemented.
- It is not clear if there are remaining fish passage barriers above the project reach.

- The application does not clearly explain how the pond will not become a heat-sink that negatively impacts stream temperatures.
- Strategies explaining how the project will be sustained or improved with grazing around the site are missing from the application, further diminishing the long-term likelihood of success.
- More detail on the secondary culvert and the current condition and phases of the juniper stand would have helped the review.
- Information on the actions that will be taken to prevent juniper from re-establishing in the near and distant future is not included in the application.
- The fencing component was confusing because the maps do not show where the fencing will be located in relation to the pond, the adjacent road, and the livestock winter feed area.
- The application does not include information on how management will address livestock winter feed area runoff issues along ¼ mile of Pine Creek alongside and directly below the restoration site. The close proximity of this heavy use area negated or at best lowered the stated ecological benefits.

Concluding Analysis

Pine Hollow Creek, a tributary to Rock Creek, has potential to be valuable steelhead habitat. A lot of restoration work had been completed on this ranch and this project will build on that work. However, this project is premature with the ranch sale pending, and the application lacks critical detail necessary to determine the likelihood of success for the proposed restoration.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

Review Team Recommended Amount \$0

Review Team Conditions

Staff Recommendation Staff Follow-Up to Review Team

Staff Recommendation Do Not Fund

Staff Recommended Amount \$0

Staff Conditions

Mid Columbia (Region 6)

Application Number: 219-6019-16644Project Type: RestorationProject Name: Wildhorse Creek Dam Removal &
Bridge ReplacementProject Type: RestorationApplicant: Umatilla Basin WS FoundationCounty: UmatillaRegion: Mid ColumbiaCounty: UmatillaOWEB Request: \$103,290Total Cost: \$780,098

Application Description (from application abstract)

The Umatilla Basin Watershed Council (UBWC) and partners are collaborating with the City of Athena and Umatilla County Public Works to address fish passage and habitat in Wildhorse Creek near Athena, Oregon. Wildhorse Creek (HUC 17070103), a tributary of the Umatilla River originates in temperate forest at an elevation of 3,760 feet and flows 34 miles to the Umatilla River at an elevation of 1,100 feet near Pendleton, Oregon. ODFW & CTUIR biologist have identified a passage obstruction for steelhead along with resident rainbow trout, Pacific Lamprey, Coho Salmon, and several other non-salmonid fish species at the South 3rd Street Bridge in Athena, Oregon. Replacing the bridge was chosen because it was the only alternative from the feasibility study that would allow fish due to a velocity barrier and no associated jump pool. The existing bridge structure is a concrete box with winged buttress walls and a concrete floor. A channel spanning, concrete grade control wall located 10 feet upstream of the bridge creates a 4-foot drop in water surface elevation. These structures limit flow conveyance and passage during peak flows due to increased water velocity, and also contributes to habitat degradation. This project intends to remove the passage obstruction, replace the bridge with a larger structure that meets NMFS and ODFW fish passage criteria, and stabilize channel bed gradient by creating a 160-feet roughened channel. Restoring fish passage at the South 3rd Street Bridge will provide access to an additional 15.4 miles of mountain habitat for salmonid rearing and spawning. Project partners include the Umatilla Basin Watershed Council, ODOT Fish Passage Compensation Program, R&E Program, Umatilla Economic Development Committee, the City of Athena, Umatilla County Confederated Tribes of the Umatilla Indian Reservation, Athena Chamber of Commerce & Main Street Committee, Oregon Water Resources Department, and the Oregon Department of Fish & Wildlife.

Review Team Evaluation Strengths

- The applicant responded to all of the previous evaluation concerns.
- Project designs are 100% complete and ready for construction.
- The bridge components have been purchased by partners and are awaiting installation.
- There has been and continues to be public outreach and support for the project.

• The application includes information that validates the quality of the upstream habitat which is valuable to steelhead.

Concerns

• There are no concerns.

Concluding Analysis

The project site has a significant fish passage barrier and steelhead are known to become trapped in the pool downstream of this site because they unable to navigate the four-foot high concrete wall. The project has a high likelihood of success with strong partner support, and will provide a significant ecological benefit for the project cost.

Review Team Recommendation to Staff Fund

Review Team Priority 3 of 12

Review Team Recommended Amount \$103,290

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$103,290

Staff Conditions

None

Mid Columbia (Region 6)

Application Number: 219-6020-16650Project Type: RestorationProject Name: Badger Creek Forest and LWD
RestorationProject Type: RestorationApplicant: Wheeler SWCDCounty: WheelerRegion: Mid ColumbiaCounty: WheelerOWEB Request: \$56,423Total Cost: \$96,023

Application Description (from application abstract)

1)The project is S-SE of Mitchell on Badger Creek which is a tributary of Mountain Creek. The project is located in close proximity to several successful OWEB and NRCS project. 2)A recently completed NRCS pre-commercial thinning project was successfully completed, but enough funds were not available to address all of the area prioritized. Badger Creek through this reach has very little large wood, shading, and floodplain connectivity which are key limiting factors for steelhead recovery. 3) The project conducted additional pre-commercial thinning work on a small acreage to complement a recently completed NRCS pre-commercial thinning project and complete the originally planned total extent to reduce the danger of catastrophic wildfire. Vertical Post Structures (VPSs) and large wood will be installed to improve woody debris prevalence, shading, and floodplain connectivity. 4)Partners include the NRCS, USFWS, ODFW, the landowner, and the Wheeler SWCD.

Review Team Evaluation Strengths

- The application is relatively straight-forward and includes detailed maps and photos.
- The project builds on and expands significant restoration investment in this basin.
- Badger Creek is an important ESA-listed steelhead stream for both spawning and rearing.
- Incorporating willow whips in the beaver dam analogs is a successful and proven technique.

Concerns

- Information on the thinning project component and timber management, including stocking level and vegetation composition, is lacking in the application.
- The lack of riparian fencing decreases the expected ecological benefits of the project.
- Including documentation that demonstrates past success of using large wood to protect riparian vegetation would have been helpful to the review.
- No grazing management strategy is included in the application to show how restoration investment will be protected from or enhanced by grazing.
- No designs are included in the application.
Concluding Analysis

Quite a bit of restoration has been implemented on Badger Creek, a steelhead tributary of Mountain Creek. This project site adjoins two other completed restoration sites that are showing habitats improvements. However, it is difficult to evaluate the project without more information and detailed designs to determine the likelihood of success in achieving expected watershed benefits. If resubmitted, it is important to address the concerns noted by this evaluation.

Review Team Recommendation to Staff Do Not Fund

Review Team Priority

Review Team Recommended Amount \$0

Review Team Conditions

Staff Recommendation Staff Follow-Up to Review Team

Staff Recommendation Do Not Fund

Staff Recommended Amount \$0

Staff Conditions

Mid Columbia (Region 6)

Application Number: 219-6021-16689ProProject Name: Greenwood Upland ImprovementsApplicant: Grant SWCDRegion: Mid ColumbiaCoOWEB Request: \$246,093Tot

Project Type: Restoration

County: Grant Total Cost: \$344,940

Application Description (from application abstract)

The project is located on private property with activities in both the Isham and Reynolds Creek watersheds. The property faces numerous conservation challenges such as heavily overstocked timber, invasive annual grasses, juniper infestation, impaired riparian conditions, lack of livestock management infrastructure as well as an overall lack of late season water sources for livestock and wildlife. Late season water for 1,100 acres of pasture is currently provided by a small section of Isham Creek: a summer steelhead stream that flows year round. This project requests OWEB support to improve 4 existing stockponds, install 4 new ones, construct a solar stockwater system and 12,000 feet of cross fencing. Matching efforts will include the landowner, NRCS (forest thinning activities) and ODFW (Annual grass control and reseeding).

Review Team Evaluation Strengths

- The project proposes a whole-watershed approach to improvements on the property.
- Forest thinning and invasive medusahead treatments done by the landowners demonstrate their commitment to ecologic improvements on their land.
- The upper John Day River mainstem flows along the west side of the property and any improvements to water quality will benefit ESA listed steelhead, Chinook, and bull trout.
- Developing upland water sources are beneficial to both livestock and wildlife.

Concerns

- There is no justification on why lining the ponds is necessary.
- Modeling the hydrology for potential overland flows to ponds and evaporation rates would have been helpful to the review.
- More detail on the grazing management would have strengthened the application.
- Watershed benefit is marginal for the amount of funds requested.

Concluding Analysis

The landowners have a history of implementing restoration projects to improve the landscape scale habitat function. However, the ecological benefits that will be realized from this proposal are low for the requested amount. If this proposal is resubmitted, the applicant should consider a phased approach, documenting the previous restoration results before moving forward on the remaining phases; including clear ecological benefits resulting from the project; and providing a grazing management strategy that informs how the investment in restoration will be protected and sustained into the future.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority

Review Team Recommended Amount \$0

Review Team Conditions

Staff Recommendation Staff Follow-Up to Review Team

Staff Recommendation Do Not Fund

Staff Recommended Amount \$0

Staff Conditions

Mid Columbia (Region 6)

Application Description (from application abstract)

The Upper Fox Creek Fish Passage and Instream Habitat Enhancement Project (Project) is located on private agricultural land approximately 2 miles south of the town of Fox, Oregon. The land in the project area is actively grazed by cattle and used for producing hay-feed. Historical land use impacts have degraded the riparian corridor and accelerated stream incision, which now isolates the stream from interaction with the floodplain. Additional impacts include an increase in stream sediment from four unimproved cattle/vehicle fords within the project area and potential fish stranding issues presented by three unscreened irrigation diversions. The project includes: reconnection of historical side channels through excavation; creation of 4 habitat alcoves; 11 bank laybacks to stabilize streambank erosion; installation of LWD and beaver dam analogues; construction of 2 improved livestock crossings to restore fish passage; planting and fencing of native grasses, shrubs, and trees in the riparian area; decommissioning and consolidation of 3 irrigation Point-Of-Diversions and the addition of a fish screen on the consolidated diversion point. The landowner is placing existing surface water withdrawal rights into an instream lease, which will increase instream flows. Project Partners include the following: Bonneville Power Administration - design and implementation funding; North Fork John Day Watershed Council - aspen stand protection; Monument Soil & Water Conservation District - monitoring; US Forest Service (Malheur) - monitoring; US Fish & Wildlife Service - permitting and implementation funding; Freshwater Trust - instream lease; Grant County Soil & Water Conservation District - pump station and water delivery system designs, overseeing the cultural surveys; Landowner - trees, fence maintenance, grazing plan; Oregon Department of Fish & Wildlife - fish screen.

Review Team Evaluation Strengths

- The ecological benefits are well-explained in the application.
- The project compliments other instream work completed downstream on Fox Creek.
- Correcting the fish passage issues at the culverts will benefit steelhead, redband trout, and juvenile Chinook by opening access to 6.8 miles of cold water habitat.
- ODFW has already approved the designs for the beaver dam analog structure.
- An instream lease is in process, which will protect stream flows into the future.

- The application is well-written, includes detailed maps and provides historic perspectives to aid in the review.
- Designs are comprehensive, construction-ready, and will result in improved water quality and fish habitat in Fox Creek.
- The proposed video will serve to help tell the story of restoration.
- Monitoring fish absence/presence and macro invertebrates will be continued, which will add to the existing baseline data.
- Using the removed juniper as instream large wood habitat structures increases the efficiencies and economy of the project.
- Project support is demonstrated by ample secured match funding.

Concerns

- The large wood placement and burying entire tree boles could result in excessive streambank disturbance. As an alternative, entire logs could be placed in the stream channel for added habitat complexity and cover with less disturbance.
- More detail relating to the livestock crossings, grazing strategies and long-term juniper management would provide helpful context to the review.

Concluding Analysis

The project will provide significant ecological benefits to this upper section of Fox Creek. It builds on extensive past and current restoration underway both up- and downstream. Fox Creek is an identified stream for steelhead and other aquatic species, including large colonies of freshwater mussels.

Review Team Recommendation to Staff

Fund

Review Team Priority 7 of 12

Review Team Recommended Amount \$167,801

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation

Application Evaluation for Upper Fox Creek Fish Passage and Instream Habitat Enhancement Project, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Fund

Staff Recommended Amount

\$167,801

Staff Conditions

Mid Columbia (Region 6)

Application Number: 219-6023-16694 Project Name: Camp - Lick Restoration Applicant: North Fork John Day WC Region: Mid Columbia OWEB Request: \$167,452 Project Type: Restoration

County: Grant Total Cost: \$424,016

Application Description (from application abstract)

The Camp Creek fifth field watershed has been a priority, focus area for the USFS since 2008. Camp Creek and Lick Creek, just upstream of the town of Galena, provide higher levels of steelhead spawning and juvenile rearing than most other tributaries of the Middle Fork John Day River. An intensively monitored watershed (IMW) study identified large woody debris increased channel complexity in good water years, however, water temperatures drove the magnitude of survivability in most drought years that have occurred since 2012. Watershed issues likely started with eradicating beaver by about 1823 in Camp Creek. Then, in the 1940s, railroad grades were built immediately adjacent to Camp Creek. The railroad grade levee is having the most pervasive impacts to stream processes in low gradient, unconfined valleys along Camp Creek where the valley is bisected and trapped by these levees. Historic side channels and wetlands will be connected to Camp Creek that have been blocked by old railroad grades to restore vegetative establishment and development for cottonwood, willow and dogwood plant communities that would provide for stream shading, increasing terrestrial insect production and providing for beaver over the long term. Railroad grades will be partially and/or fully removed to provide for multithreaded channel planforms and the soil will be redistributed back across the floodplain. Wetland plants will be salvaged and replanted with more cottonwood poles, willow and dogwood whips. A split of buck and pole and metal fences will be placed around suckering mature cottonwood and disturbed areas that will provide high quality shade. Trees will be tipped and placed, improving forest structure at the stand scale and reduce wild fire threats. The North Fork John Day Watershed Council is partnering with the USFS – Blue Mountain Ranger District and the Confederation of Warm Springs Tribes to accomplish this great project.

Review Team Evaluation Strengths

- The ecological benefits are well-described in the application with detailed maps that show specific project components.
- The plans to remove the railroad grade and reconnect the floodplain will significantly improve stream function on Camp and Lick Creeks.
- Adding large wood and beaver dam analogs will add stream complexity and improve habitat for both ESA-listed steelhead and Chinook.

- The project builds on and compliments past restoration efforts in the watershed.
- The partners involved have successfully implemented numerous other restoration projects, increasing the likelihood of this project's success.
- Project support is demonstrated by significant secured match.

Concerns

- The application does not explain where the material removed from the railroad bed will end up in relation to existing wetlands on site.
- Using electric fence to protect the riparian areas will require a lot of maintenance to secure the durability around the riparian area and associated plantings.

Concluding Analysis

Camp and Lick Creek provide important habitat for both steelhead and Chinook. Malheur National Forest is partnering with the North Fork John Day Watershed Council to implement and monitor this very visible project along a well-used USFS road, offering a unique outreach opportunity on public timber land.

Review Team Recommendation to Staff

Fund

Review Team Priority 9 of 12

Review Team Recommended Amount \$167,452

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$167,452

Staff Conditions

Application Evaluation for Camp - Lick Restoration, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Mid Columbia (Region 6)

Application Number: 219-6024-16695 Project Name: Hewes Diversion Removal Applicant: Gilliam SWCD Region: Mid Columbia OWEB Request: \$76,921 Project Type: Restoration

County: Gilliam Total Cost: \$200,986

Application Description (from application abstract)

The project is located in Gilliam County 16 miles north of Condon in the Lower Rock Creek Watershed. The project is on Rock Creek approximately 20 miles upstream from the confluence with the John Day River. During high flows, steelhead enter the abandoned Hewes diversion dam and become trapped as flows recede resulting in threatened species fatalities. Additionally, high flows strike the concrete structure and careen into the eastern streambank introducing large amounts of sediment into the system. Rock Creek is an important lower basin steelhead spawning and rearing stream in the Lower John Day. This project proposes to completely remove the concrete diversion structure; enhance side channel habitat by placing large wood structures, boulder clusters and regrade the disturbed channel to natural stream form. Banks will be sloped back, seeded and planted. Project partners include Gilliam County SWCD, Oregon Department of Fish and Wildlife, the Confederated Tribes of the Warms Springs, and two local Gilliam County landowners.

Review Team Evaluation Strengths

- The applicant addressed all prior evaluation concerns.
- The design is simplified and continues to meet the goals and objectives of the project.
- Secured match is provided by partners on the project, which indicates the project is ready to implement. Since impending match dollars have spending deadlines, project implementation is urgent.
- The approach for the concrete diversion disposal is innovative and economical.
- Steelhead entrapment during high flows is a known problem at this project site. Removing the abandoned concrete structure removes that hazard and improves habitat along this reach.
- The project builds on previous restoration completed on Rock Creek in the lower John Day Basin.
- Planting the riparian areas will add benefit in the long term and the contractor identified to plant trees has a successful track record on similar project sites.

Concerns

• There are no concerns.

Concluding Analysis

The grantee maintained landowner interest and engagement in the project through multiple application submissions, developed unusual partners, and simplified the design while continuing to meet the goals and objectives of reducing entrapment of steelhead, increasing habitat, and improving water quality. The resulting project after these refinements provides a significant watershed benefit at an effective cost.

Review Team Recommendation to Staff Fund

Review Team Priority 5 of 12

Review Team Recommended Amount \$76,921

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$76,921

Staff Conditions

Mid Columbia (Region 6)

Application Number: 219-6025-16701 Project Name: Cavender Wetland Habitat Improvements Applicant: Monument SWCD Region: Mid Columbia OWEB Request: \$17,029 Project Type: Restoration

County: Grant Total Cost: \$37,328

Application Description (from application abstract)

The Cavender Wetland Habitat Improvements project is located on private property in the southwest corner of Monument, Oregon in Grant County. A 9.7-acre wetland occupies a site immediately adjacent to the North Fork John Day River. A previous OWEB restoration grant saw to multiple enhancements across this locally unique and valuable habitat. However, soil compaction from 2016 construction activities and scour from 2017 ice flows resulted in poor native plant establishment and survival in several areas. Some sites have persistent noxious weed populations that threaten the long-term trajectory of desirable plant communities. Herbivory from native ungulates and obligate wetland species (i.e., muskrat and beaver) also hinder the success of native plantings across the wetland. Therefore, additional vegetation management is required to create a stable native plant community within this rare eastern Oregon wetland. The project will address the following management objectives: 1) Herbaceous Invasive Species Control: Noxious weed control with approved herbicides will be conducted across the wetland and associated upland communities to improve the competitive advantage and establishment of desirable native species.2) Establishment of Desirable Plant Communities: Areas within the wetland with poor vegetation establishment due to soil compaction will received tillage for seed bed preparation prior to aggressive application of native grass seed. Following successful weed control, 500 native shrubs and trees will be planted within the wetland.3) Protect Wetland Plantings: Seven 25-foot x 25-foot exclosures will be constructed to protect the 500 native shrub and trees plantings from native herbivory. Project partners include the Confederated Tribes of Warm Springs, North Fork John Day Watershed Council, Monument SWCD, Jack Eldon Cavender Trust (landowner), and OWEB.

Review Team Evaluation Strengths

- The application is well-written and includes detailed maps and photos.
- The project adds to previous wetland restoration work completed at the site.
- The project location, adjacent to the BLM Park, offers multiple opportunities for restoration outreach.
- Lessons learned from prior restoration work are incorporated into the project, including planting older stock and ripping old road beds prior to seeding.
- Documentation of browse and mortality data is included in the application.

- Using Oregon Youth Conservation Corp for planting provides an outreach opportunity and adds to the socioeconomic benefit from the project.
- The project cost is reasonable for the proposed work and resulting ecological benefit.

Concerns

- When placing new plant cages, there should be consideration for the impacts of future ice flows when determining cage locations.
- Waiting a year before completing additional seeding could result in reducing the treatment area because of any late emergence of the prior seeding.

Concluding Analysis

The proposed project follows an OWEB funded technical assistance and restoration grant that enhanced nine acres of rare wetland habitat along the North Fork John Day River. This proposal addresses two issues contributing to poor plant survival from this previous restoration: 1) actual impacts from previous restoration construction that compacted the seed bed, and 2) a natural ice flow event that caused scour and damaged previous plantings. The project cost is reasonable for the expected watershed benefit from this project since the investment will help to preserve the ecological outcomes of the original restoration project.

Review Team Recommendation to Staff

Review Team Priority 6 of 12

Review Team Recommended Amount \$17,029

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount

Application Evaluation for Cavender Wetland Habitat Improvements, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

\$17,029

Staff Conditions

Mid Columbia (Region 6)

Application Number: 219-6026-16705Project Type: RestorationProject Name: McGirr Fox Creek Passage and
Habitat ProjectProject Type: RestorationApplicant: Grant SWCDCounty: GrantRegion: Mid ColumbiaCounty: GrantOWEB Request: \$351,376Total Cost: \$551,952

Application Description (from application abstract)

This project is located in Fox Valley approximately 2 miles west of Fox, Oregon. A concrete and flashboard irrigation dam was installed in the early 1980's by the SCS. The bottom-most flashboards have been left in place for many years and have checked the stream bed behind the structure; fish passage for juvenile summer steelhead moving upstream is blocked year round. The proposed project will install a combination of rootwad structures, floodplain benching, hardened rock riffle and beaver dam analogues to acheive necessary diversion head levels as well as provide year round fish passage. The existing dam will be removed. Partners include the Landowner, BOR (design), CTWSRO (design, construction and materials) and ODFW (fish screen).

Review Team Evaluation Strengths

- Fox Creek is an important ESA-listed steelhead and Chinook stream.
- The beaver dam analogs will add habitat value and the sites selected for these structures are appropriate for increasing stream function.
- Improving Fox Creek habitat builds on numerous restoration projects, past and current, upstream and downstream in this watershed.
- This is an opportune time for the project because the landowner that has not previously been interested in restoration now wants to see improvements along his section of Fox Creek.
- The project addresses one of ODFW's highest priority passage and screening sites on Fox Creek.
- The applicant has a successful track record of restoration implementation and landowner relations.
- The project is technically sound and will provide significant ecological benefits.
- Protecting and enhancing wetlands in the upper section of the project reach adds additional watershed benefit.

Concerns

Given the history of reluctance by the landowner for considering restoration, there is some risk for this
project to not be successful if the landowner decides to not implement the work.

Concluding Analysis

This project addresses a major fish barrier on Fox Creek, adding to numerous large-scale projects that enhance this critical ESA-listed steelhead habitat. Design improvements by BPA's technical review provide a cost effective project that continues to align with the original goals and objectives of the application while providing significant watershed benefits. Successful implementation with this landowner is an opportunity to demonstrate the benefits of voluntary restoration.

Review Team Recommendation to Staff

Fund Reduced with Conditions

Review Team Priority 8 of 12

Review Team Recommended Amount \$176,522

Review Team Conditions

Accept BPA's technical adjustments to design and reduce the budget accordingly.

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund Reduced with Conditions

Staff Recommended Amount \$176,522

Staff Conditions

Adjust the application scope of work and budget to reflect BPA's technical adjustments to design.

Mid Columbia (Region 6)

Application Number: 219-6027-16708Project Type: RestorationProject Name: Eight Mile Headwaters Upland
Improvement ProjectProject Type: RestorationApplicant: North Fork John Day WCCounty: GrantRegion: Mid ColumbiaCounty: GrantOWEB Request: \$86,763Total Cost: \$132,589

Application Description (from application abstract)

1) This project is located on two private properties (Eight Iron Ranch and Eight Mile Basin, LLC) in Ritter, Oregon. Eight Iron Ranch and Eight Mile Basin, LLC together cover approximately 5,200 acres in the headwaters of Eight Mile Creek. The two properties together take in just over 5 miles of Eight Mile Creek. Eight Mile Creek is a tributary to the Middle Fork John Day River (HUC #1707020305). It drains 60,605 acres, and consists of 157 stream miles. It provides critical rearing habitat for ESA listed Mid-Columbia Steelhead and threatened Chinook salmon.2) Historic and current land use practices on the Eight Iron Ranch and Eight Mile Basin, LLC have left springs and their surrounding ecosystems degraded. Eight Iron Ranch has been actively working to fence off Eight Mile Creek and provide alternative upland water sources for livestock. Eight Mile Basin, LLC has been incrementally removing juniper property wide and also working to provide alternative upland water sources for livestock. These restoration efforts are to both manage grazing more effectively and preserve water quality and quantity. The limiting factors this project addresses are: altered hydrology, sediment routing, degraded vegetation, and degraded water quality.3) This project will (1) develop 6 springs within the sub-basin and install 6 watering sources for livestock, (2) cut and burn 140 acres of juniper in priority areas surrounding the developed springs, and (3) thin 20 acres of over stocked forest surrounding one of the developed springs (targeting the optimal canopy cover of 50-60%).4) Partners for this proposed project are the private landowners (Doug Leach and Shannon Rust), North Fork John Day Watershed Council (NFJDWC), and OWEB.

Review Team Evaluation Strengths

- The application is well-written, and includes photos and maps that show both previous and proposed work.
- The application clearly describes benefits to the watershed.
- Comprehensive grazing management plans are provided in the application for both ranches.
- The project will improve water quality in Eight Mile Creek, an identified steelhead stream.

Concerns

- The application does not include any long-term commitment to weed control.
- More information on the culvert replacement would have been beneficial to the review.

Concluding Analysis

This straight forward project is on two adjoining private ranches located in headwater drainages of Eight Mile Creek. The work from this proposal compliments other restoration completed on both ranches, including riparian fencing and forest thinning. On the site visit, the landowners were enthused and showed results from their prior restoration projects. To increase the ecological benefit, the applicant should consider placing juniper carcasses in gullies and ephemeral channels to help catch sediment.

Review Team Recommendation to Staff Fund

Review Team Priority 10 of 12

Review Team Recommended Amount \$86,763

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$86,763

Staff Conditions

Mid Columbia (Region 6)

Application Number: 219-6028-16714Project Type: RestorationProject Name: Fox Creek Upland Restoration
ProjectProject Type: RestorationApplicant: North Fork John Day WCCounty: GrantRegion: Mid ColumbiaCounty: GrantOWEB Request: \$120,570Total Cost: \$168,608

Application Description (from application abstract)

1) This project is located on private property (MGN, LLC) in Grant County, approximately 1 mile south of Fox, Oregon. This 2,600 acre property takes in just under 2 miles of Fox Creek (HUC #1707020209). Fox Creek becomes Cottonwood Creek and is a tributary to the North Fork John Day River (HUC #17070202). Fox/Cottonwood Creek originates on US Forest Service approximately 6 miles above the MGN, LLC property , drains 149,063 acres, and consists of 273 stream miles. It provides critical spawning, rearing, and migration habitat for ESA listed Mid-Columbia Steelhead and threatened Chinook salmon.2) Steelhead and salmon are distributed throughout Fox/Cottonwood; productive streams provide refugia from warming water temperatures in the summer. The properties juniper infestation and overstocked, unprotected aspen stands reduce the availability and capacity for upland water. A reduction in upland water storage decreases the amount and quality of late season cold water deliveries to Fox Creek. The limiting factors this project addresses are altered hydrology, sediment routing, channel stability, floodplain and riparian area degradation and water quality.3) This project will (1) install a total of 5,600 ft of buck and pole fencing to protect 8 acres of aspen, a rare and declining habitat, (2) assess and cage aspen saplings in another 4 acres of aspen, and (3) remove 150 acres of juniper in priority areas that have been identified as "areas beneficial to cut juniper for water" within the Fox Creek/Cottonwood watershed. This project is intended to compliment instream restoration work proposed on Fox Creek by the Confederated Tribes of the Warm Springs (CTWS) in 2019.4) Partners for this proposed project are the private landowner (Mark Crissman of MGN, LLC), CTWS, North Fork John Day Watershed Council (NFJDWC), and OWEB.

Review Team Evaluation Strengths

- Aspen and juniper treatment site prioritization is well-explained in the application.
- The treatment locations selected are adjacent to Fox Creek tributaries and will improve water quality.
- The property offers an opportunity to treat the watershed at a landscape scale.
- The project compliments and builds on other restoration taking place on this property.
- Including the Oregon Youth Conservation Crew in restoration activities will provide both restoration and socioeconomic benefits.

• The application is well-written and provides detailed maps for a comprehensive review.

Concerns

 There are no concerns, but dropping junipers into ephemeral gullies to catch sediment from overland flows is suggested.

Concluding Analysis

The property owner is new to the restoration community and is one of the few private holdings on the upper reaches of this watershed. The methodology in selecting the treatment sites is well-explained in the application and shows how these efforts will build on other restoration occurring on this same property, as well as on downstream reaches. Improving upland conditions near the headwaters will have positive impacts to improving the limiting factors of reduced flow and degraded water quality in Fox Creek, an important steelhead stream.

Review Team Recommendation to Staff Fund

Review Team Priority 11 of 12

Review Team Recommended Amount \$120,570

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$120,570

Staff Conditions

Application Evaluation for Fox Creek Upland Restoration Project, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Mid Columbia (Region 6)

Application Number: 219-6029-16709Project Type: RestorationProject Name: Couse Creek Confluence Fish
Passage ConstructionProject Type: RestorationApplicant: Walla Walla Basin Watershed
FoundationCounty: UmatillaRegion: Mid ColumbiaCounty: UmatillaOWEB Request: \$117,992Total Cost: \$337,066

Application Description (from application abstract)

Couse Creek is a tributary of the Walla Walla River located 1.5 miles upstream from the town of Milton-Freewater, in Umatilla County. This stream is used by ESA listed summer steelhead and redband trout, and occasionally ESA listed bull trout and reintroduced chinook salmon. There is a fish passage barrier near the confluence of Couse Creek and the Walla Walla River when steelhead are returning to 8 miles of spawning/rearing areas. Couse Creek transitions from a natural bedrock-controlled channel, past an old concrete and riprap pipe protection structure, and then onto the gravel bed of the Walla Walla River. A 3-4 foot, slanted drop exists at this transition point. Steelhead cannot navigate this drop in late winter and early spring when discharges from the Creek are high, and also at low flows in late spring and early summer. An engineering assessment, survey, and 60% designs have been completed. BPA funds have funded design work with technical support provided by fisheries co-managers. Following a site assessment and an alternatives analysis, a preferred approach was selected. Final designs will be completed this winter. BPA funds have been secured to cover much of the construction project costs; however, OWEB funds are needed to cover the total cost of the project construction. Construction is scheduled for summer of 2019. The work consists of removal of old concrete structures and riprap from Couse Creek, construction of a new 400-foot- long lower gradient Couse Creek channel that includes roughened riffles and step pools; placement of habitat boulders, and revegetation of one acre with native trees, shrubs, and grasses. Couse Creek was described in the Walla Walla Subbasin Plan, 2004, as a Priority Protection Area, and fish passage barriers are a priority limiting factor. Recent restoration investments in Couse Creek have included fish passage and habitat work. A Couse Creek watershed habitat assessment is underway. Partners include BPA, ODFW and CTUIR.

Review Team Evaluation Strengths

- The project will open access to eight stream miles of ESA-listed steelhead habitat, critical to spawning and rearing.
- Ample cost share along with involvement by appropriate partners indicate this project has a strong likelihood of success.
- The project site is an ODFW priority for passage in the Walla Walla River system.

- Reconnecting an acre of floodplain to the river on a leveed system will provide additional habitat and benefit to the Walla Walla River and Couse Creek.
- The project is located in a rural residential area and has landowner commitment.
- The design is comprehensive.
- The applicant has a proven track record for successfully completing restoration.

Concerns

- Inclusion of an overview sketch of all project components on one map would have provided helpful context.
- More detail on the berm and levee system would have benefited the review.

Concluding Analysis

ODFW noted steelhead regularly spawn in the pool below the barrier and then die when that pool dries up later in the season. Removing this barrier and re-meandering Couse Creek to increase its length and complexity as it joins the Walla Walla River downstream allows steelhead to move upstream to cooler spawning and rearing habitat. Also, connecting an acre of tree-covered floodplain to the leveed Walla Walla River is a rare opportunity and will result in added benefit to steelhead, Chinook, bull trout, and other aquatic species.

Review Team Recommendation to Staff

Review Team Priority 2 of 12

Review Team Recommended Amount \$117,992

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount

Application Evaluation for Couse Creek Confluence Fish Passage Construction, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

\$117,992

Staff Conditions

Mid Columbia (Region 6)

Application Number: 219-6030-16578
Project Name: Desolation Reach 3 Design
Applicant: Confederated Tribes Umatilla Indian Reservation
Region: Mid Columbia
OWEB Request: \$45,110

Project Type: Technical Assistance

County: Grant Total Cost: \$121,075

Application Description (from application abstract)

This application supports the Desolation Creek Reach 3 design located between RM 2.6 and 4.4 on Desolation Creek approximately 20 miles south of Ukiah, Oregon (Figures 1&2). The property is owned and managed by Desolation Creek LLC who has worked collaboratively to improve land management strategies, infrastructure, and physical/biologic process, in part, for the benefit native wildlife. The CTUIR and collaborators developed the Desolation Creek Geomorphic Assessment and Action Plan (GAAP) in 2017 to guide future restoration efforts. The GAAPs implementation addresses ecological concerns using a tiered ATLAS derived ranking system. To date, a portion of its highest priority reach was implemented with the rest pending a final road relocation design. Collaborators include the landowner, Umatilla National Forest, Grant SWCD, and Confederated Tribes of the Umatilla Indian Reservation (CTUIR). In the meantime, the CTUIR shifted to the GAAP's second highest ranked priority, Reach 3, to implement a design supporting the landowner's needs and desires and the CTUIR's First Foods Policy under the Umatilla River Vision. To date, a qualified contractor has been selected for Reach 3's design development and data collection and analysis has begun and a 30% conceptual design will be produced by 31 January 2019. Work supported by this application will produce 80% and 100% designs to be developed under BPA's HIP III programmatic biological opinion. Collaborators currently involved in the Reach 3 design include the Landowner, Confederated Tribes of the Warm Springs Reservation, and CTUIR. The design will address the influence of historic timber harvest and grazing which reduced the effectiveness of peripheral and transitional habitats, channel structure and form, water quality, and riparian condition. Reach 3's ability to support spring Chinook salmon, Threatened Mid-Columbia steelhead trout, bull trout, Pacific lamprey, and resident species was subsequently compromised.

Review Team Evaluation Strengths

- The application is well-written and provides useful maps and photos.
- Project cost estimates are reasonable for a complex design.
- The resulting restoration will provide fish habitat benefits for spring Chinook, ESA-listed steelhead, and bull trout.

- Site selection resulted from a comprehensive Geomorphic Assessment and Action Plan (GAAP) for Desolation Creek this stream section was deemed the second highest priority reach for restoration.
- This work will compliment numerous other restoration projects completed on this large private property that contains over ten miles of Desolation Creek.

Concerns

• No concerns were identified.

Concluding Analysis

Numerous upland, riparian, and instream restoration projects have been successfully implemented, including: restoring and protecting high elevation wet meadows; riparian fencing the entire ten miles of Desolation Creek; protecting aspen communities, and developing strategic upland water for both livestock and wildlife. Following a comprehensive assessment of the entire Desolation Creek, Reach 3 was identified as the second highest priority for restoration benefit. This leveraging of previous restoration investments on a priority stream results in a high cost-benefit ratio for this project.

Review Team Recommendation to Staff Fund

Review Team Priority 1 of 2

Review Team Recommended Amount \$45,110

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$45,110

Staff Conditions

Application Evaluation for Desolation Reach 3 Design, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Mid Columbia (Region 6)

Application Number: 219-6031-16646 Project Name: Reith Dam Removal Design Applicant: Umatilla Basin WS Foundation Region: Mid Columbia OWEB Request: \$38,500 Project Type: Technical Assistance

County: Umatilla Total Cost: \$71,100

Application Description (from application abstract)

The Umatilla Basin Watershed Council and partners at The Confederated Tribes of the Umatilla Indian Reservation seek technical funding for the completion of 100% construction ready dam removal and restoration designs. The designs will serve to remove the major fish passage barrier located at RM 42.3 on the Umatilla River at the town of Reith, Oregon. The barrier known as the Reith Dam/Brownes Dairy Dam is a full river spanning irrigation diversion dam that blocks passage for federally protected aquatic species. The barrier ranks high on local assessments as well as the Oregon statewide priority list for fish passage barriers. Reith dam is located on the mainstem of the Umatilla River; removal of this barrier will provide major uplift for the entire system. The project site has an existing landowner agreement in place to remove the Reith barrier as well as complete a conservation easement on the adjoining 372.2 acres for future restoration projects. Additional Technical team partners include the Umatilla Soil and Water Conservation District, the Umatilla County Department of Public Works, Bonneville Power Administration, and the Oregon Department of Fish & Wildlife.

Review Team Evaluation Strengths

- One of the landowners has agreed to lease water instream and signed a conservation agreement that includes removing the dam.
- Removing this barrier will benefit multiple fish species, including steelhead and Chinook, and will have the greatest impact on juveniles during low flow periods.
- The dam is on ODFW's statewide priority list of barriers.
- Project costs are reasonable for the work and location.
- Project support is demonstrated by match.

Concerns

- The application does not include letters of support from the Confederated Tribes of the Umatilla Indian Reservation nor the Bureau of Reclamation.
- The schedule appears to be overly ambitious with implementation planned for the 2019 instream work window. This leaves very little time for survey work, design, and permitting to be completed.

- The technical assistance request includes costs for construction oversight, which is not a necessary expense for achieving the proposed design objectives.
- Since separate landowners own the properties adjacent to the dam on each side of the river, the
 application would be strengthened by including letters of support from both landowners for the dam
 removal.
- The exact scope of the design work is vague, and it is unclear whether the resulting project will simply
 remove the concrete dam or if additional habitat or substrate work will be included in the final
 restoration project design.
- Clear photos of the dam during high and low flows would be helpful context for the application review.
- Inclusion of the referenced scoping report would provide helpful context.

Concluding Analysis

While this dam removal project has potential for providing significant ecological benefit at a reasonable cost, the lack of detail in the application results in an uncertain scope of work for the proposed technical assistance. Without additional information on project timing, costs, and the tasks to be completed, it is difficult to determine the likelihood of success for this technical assistance design project.

Review Team Recommendation to Staff

Fund with Conditions

Review Team Priority 2 of 2

Review Team Recommended Amount \$27,500

Review Team Conditions

Remove \$10,000 for construction oversite and associated indirect cost; and require agreements from the landowners from each side of the river along the project site.

Staff Recommendation Staff Follow-Up to Review Team None

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

Staff Recommended Amount \$0

Staff Conditions

Application Evaluation for Reith Dam Removal Design, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Mid Columbia (Region 6)

Application Number: 219-6032-16648Project Type: Technical AssistanceProject Name: Umatilla River Floodplain
Assessment & Action PlanProject Type: Technical AssistanceApplicant: Umatilla Basin WS FoundationCounty: UmatillaRegion: Mid ColumbiaCounty: UmatillaOWEB Request: \$55,000Total Cost: \$217,000

Application Description (from application abstract)

The Umatilla Basin and partners seek funding for an assessment and stream prioritization along the mainstem of the Umatilla River from the North and South Forks to the town of Nolin, Oregon. This assessment will provide partners with a guide towards prioritizing future restoration efforts on the mainstem of the Umatilla River. Currently, no such document exist for the Umatilla River and partners in the basin feel that it is critical for strategic project implementation in order to provide effective uplift to the system. The project partners are the Umatilla Basin Watershed Council, Confederated Tribes of the Umatilla Indian Reservation, Umatilla Soil & Water Conservation District, Bureau of Reclamation, and the Umatilla County Public Works.

Review Team Evaluation Strengths

- The assessment will incorporate climate change in the proposed modeling and analysis.
- There is a clear need for a comprehensive action plan that prioritizes restoration activities on the Umatilla River.
- Project partners have experience completing a similar assessment on Birch Creek, a tributary of the Umatilla River.
- The cost is appropriate for a two to three year study.

Concerns

- The project is poorly planned and the application has limited information on the project activities.
- There is no justification on why some tributaries were not included in this assessment.
- It is unclear whether uplands will be included and if so, what will be assessed.
- The budget has lump sums with no detail on what expenses and activities are included in these sums.
- Descriptions of the assessment components and tasks to be completed by various contractors would have strengthened the application.
- The application does not provide a clear sequence of activities and lacks a comprehensive timeline.

• There are no letters of support from the Bureau of Reclamation or USFS.

Concluding Analysis

An updated assessment of the Umatilla River would be useful to partners collaborating on restoration on the Umatilla River. However, it is difficult to determine the likelihood of success for the proposed project without more information in the application. If resubmitted, the application should include information that addresses the concerns noted above as well as provide more detail on why the identified section of the Umatilla was selected, whether the lower section will be a future phase, and work already completed in the headwater sections on public land.

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

Mid Columbia (Region 6)

Application Number: 219-6033-16615Project Type: MonitoringProject Name: Hydrological Monitoring in the Walla
Walla BasinHydrological Monitoring in the WallaApplicant: Walla Walla Basin Watershed
FoundationCounty: UmatillaRegion: Mid ColumbiaCounty: UmatillaOWEB Request: \$108,944Total Cost: \$152,844

Application Description (from application abstract)

This project is located in the Oregon portion of the Walla Walla Basin in Umatilla County near the town of Milton-Freewater. The project will focus on the Walla Walla River, its tributaries and distributaries, and the surface water connection with the underlying shallow alluvial aquifer. Stream flow monitoring is needed to ensure migratory passage has been maintained for ESA-listed steelhead and bull trout, and reintroduced spring Chinook. Monitoring will evaluate, at different spatial scales, the effectiveness of restoration projects intended to improve hydrological conditions which directly or indirectly influence fish habitat. Streamflow and water temperature monitoring will assess the effectiveness of basin-wide streamflow and rearing habitat enhancement projects that have been implemented over the last 17 years by the Walla Walla Basin Watershed Council (WWBWC). Data will be obtained for two years at varying frequencies for key parameters such as water temperature, stage, discharge, and groundwater elevations. The effectiveness of restoration projects on a landscape scale will be based on evaluating changes over time (relying on dataset of past conditions along with data gathered through this project) in groundwater elevations, Walla Walla River flow and water temperature, and hydraulic gradients between water elevations in surface waters and nearby groundwater. BPA will be the source of match for this project (see attached match document) and project partners (non match) include ODA (Pesticide Stewardship Partnership Project), ODEQ (Couse Creek Assessment Project along with the Heat Source Modeling Project), (tentatively) CTUIR Walla Walla RM&E program (Walla Walla River Stream Gauge Monitoring and Data Distribution Project), and the Bi-State Flow Enhancement Study (WDOE and USBR). Additional project partners consisting of state, local, and federal agencies can be found in the attached letters of support. This project is located in the Oregon portion of the Walla Walla Basin in Umatilla County near the town of Milton-Freewater. The project will focus on the Walla Walla River, its tributaries and distributaries, and the surface water connection with the underlying shallow alluvial aguifer. Stream flow monitoring is needed to ensure migratory passage has been maintained for ESAlisted steelhead and bull trout, and reintroduced spring Chinook. Monitoring will evaluate, at different spatial scales, the effectiveness of restoration projects intended to improve hydrological conditions which directly or indirectly influence fish habitat. Streamflow and water temperature monitoring will assess the effectiveness of basin-wide streamflow and rearing habitat enhancement projects that have been implemented over the last 17 years by the Walla Walla Basin Watershed Council (WWBWC). Data will be obtained for two years at varying frequencies for key parameters such as water temperature, stage,

discharge, and groundwater elevations. The effectiveness of restoration projects on a landscape scale will be based on evaluating changes over time (relying on dataset of past conditions along with data gathered through this project) in groundwater elevations, Walla Walla River flow and water temperature, and hydraulic gradients between water elevations in surface waters and nearby groundwater. BPA will be the source of match for this project (see attached match document) and project partners (non match) include ODA (Pesticide Stewardship Partnership Project), ODEQ (Couse Creek Assessment Project along with the Heat Source Modeling Project), (tentatively) CTUIR Walla Walla RM&E program (Walla Walla River Stream Gauge Monitoring and Data Distribution Project), and the Bi-State Flow Enhancement Study (WDOE and USBR). Additional project partners consisting of state, local, and federal agencies can be found in the attached letters of support.

Monitoring Team Evaluation

Monitoring Team Strengths

- The application addresses concerns raised in the previous project evaluation and is well-written.
- The applicant highlights how flow is a major issue in this basin and that ongoing monitoring is needed to make decisions.
- The various letters of support demonstrate there are numerous agencies and organizations that value these data.
- This application adequately documents the monitoring methods, data management, analysis, and reporting procedures.
- The applicant has a proven track record of collecting and reporting the data on past monitoring grants.

Monitoring Team Concerns

- The applicant is using unvented pressure transducers to measure groundwater levels, and these could have accuracy issues. They could look into using vented loggers to determine if there is a difference.
- There is a lack of clarity on how the specific targets were established to answer the monitoring questions, an explanation of how they arrived at the values would have been helpful.
- The applicant has a high number of monitoring sites and it is not clear how each site's data set is evaluated to ensure ongoing data collection is needed.

Monitoring Team Comments None

Review Team Evaluation Strengths

- The application includes multiple letters of support from a diverse array of partners indicating their support for the project.
- The application is well-written and provides maps that reference existing and proposed monitoring sites.
- The monitoring will cover approximately 20 miles of the Walla Walla River and the locations selected are strategic.
- The project builds on an existing 20 year dataset that will inform management decisions related to ESA-listed steelhead and bull trout, and re-introduced spring Chinook.
- The proposed methodology is an adaptive approach to determine effectiveness of past restoration in a unique hydrologic system, as well as prioritizing locations for future watershed projects.
- Monitoring is clearly needed, both spatially and temporally, to fill existing data gaps.
- The proposed activities and timeline are technically sound, and descriptions or references to monitoring quality assurance and quality control protocols are included in the application.
- The applicant has a proven track record with previous monitoring work.
- Access to monitoring data is available to the public through a user-friendly website.
- Over 100 landowners continue to allow monitoring to occur on their land.

Concerns

- The application is unclear on who will complete the data analysis.
- A listing of specific data gaps would have been beneficial to the review.
- The application lacks a clear explanation of how long-term data will provide information on project effectiveness and how future monitoring will inform specific types of restoration.

Concluding Analysis

The watershed council has provided multiple stakeholders quality data for more than 17 years to inform management decisions related to flows, fish, levees, and agriculture. This long-term data set is an unusual and valuable resource to various partners in the basin. A significant number of restoration projects have been completed and continues to occur in this basin. Analyzing the effectiveness and impact of these projects will be useful for prioritizing future projects. The data will also be used in ongoing discussions with Washington's Department of Ecology to help protect resulting savings in water flows.

Review Team Recommendation to Staff

Fund

Review Team Priority 2 of 2

Review Team Recommended Amount \$108,944

Application Evaluation for Hydrological Monitoring in the Walla Walla Basin, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$108,944

Staff Conditions
Open Solicitation-2018 Fall Offering

Mid Columbia (Region 6)

Application Description (from application abstract)

The project will focus on the Vincent to Caribou reach on the upper Middle Fork of the John Day River. The site is located in Grant county and is approximately 13 miles northeast of Prairie City. The location is scheduled for a large-scale restoration project focused on benefiting anadromous salmonids, mainly Chinook salmon (Oncorhynchus tshawytscha) and steelhead (Oncorhynchus mykiss). Restoration at the site is planned between 07/15/2019 and 09/20/2019. The restoration site encompasses .7 river miles. The site is located on Confederated Tribes of the Warm Springs (CTWSR) property and they have agreed to allow the monitoring efforts at the location as well as provide data they have from the project location. The project location has been heavily altered via human activity. The river has been channelized with large boulders and rip rap, which has locked the channel in place, disconnected from the floodplain. Grazing has impacted riparian vegetation growth throughout the project location. The proposed restoration will remove most of the placed boulders while adding wood placements. The projects primary goal is "to restore instream habitat conditions and structure for salmonid production, and set the stage for processes needed to sustain habitat features." The project description also states that there will be "an extensive vegetation plan, which promotes stream shading and appropriate channel widths on the constructed channel segments" (CTWSR 2017). The restoration project pairs perfectly with our proposed monitoring effort, which will collect pre- and post-restoration data at the restored reach as well as a similar unrestored control reach nearby. We will be utilizing an unmanned aerial vehicle (UAV) equipped with a high-resolution multispectral sensor to gather monitoring data on stream and riparian characteristics between 06/01/2019 and 07/14/2020. We will produce a technical report describing the complete procedure for future, continuous monitoring of the projectThe project will focus on the Vincent to Caribou reach on the upper Middle Fork of the John Day River. The site is located in Grant county and is approximately 13 miles northeast of Prairie City. The location is scheduled for a large-scale restoration project focused on benefiting anadromous salmonids, mainly Chinook salmon (Oncorhynchus tshawytscha) and steelhead (Oncorhynchus mykiss). Restoration at the site is planned between 07/15/2019 and 09/20/2019. The restoration site encompasses .7 river miles. The site is located on Confederated Tribes of the Warm Springs (CTWSR) property and they have agreed to allow the monitoring efforts at the location as well as provide data they have from the project location. The project location has been heavily altered via human activity. The river has been channelized with large boulders and rip rap, which has locked the channel in place, disconnected from the floodplain. Grazing has

impacted riparian vegetation growth throughout the project location. The proposed restoration will remove most of the placed boulders while adding wood placements. The projects primary goal is "to restore instream habitat conditions and structure for salmonid production, and set the stage for processes needed to sustain habitat features." The project description also states that there will be "an extensive vegetation plan, which promotes stream shading and appropriate channel widths on the constructed channel segments" (CTWSR 2017). The restoration project pairs perfectly with our proposed monitoring effort, which will collect pre- and post-restoration data at the restored reach as well as a similar unrestored control reach nearby. We will be utilizing an unmanned aerial vehicle (UAV) equipped with a high-resolution multispectral sensor to gather monitoring data on stream and riparian characteristics between 06/01/2019 and 07/14/2020. We will produce a technical report describing the complete procedure for future, continuous monitoring of the project

Monitoring Team Evaluation

Monitoring Team Strengths

- There is an increased use of UAV technology to monitor changes associated with restoration actions.
- The applicant proposes to establish a "workflow" for processing the drone imagery data that could prove useful for other organizations interested in collecting similar data.
- The applicant proposes to create a semi-automatic tool for processing drone imagery data for others to use.
- The applicant lists a variety of staff that have expertise in working with drone imagery and collecting field habitat data.

Monitoring Team Concerns

- The monitoring study design includes one treatment site and is only measuring 0.7 stream miles. In addition, it is not clear if the short monitoring time period will allow for vegetation changes associated with the restoration actions. If there are no changes, it may be difficult to compare the images to test the tool they hope to develop.
- The application does not describe the physical habitat metrics to be collected in the field and subsequent drone metrics they plan to measure and generate.
- Additional explanation on the monitoring methods and site selection for the control site would have been helpful for understanding this project. To be valuable, multiple sites could be incorporated that represent a gradient of different vegetation composition and structures to test the UAV methodology.
- The application lacks letters of support and it is unclear if the Confederated Tribes of the Warm Springs Reservation of Oregon is going to use the data to track the changes at their restoration project.
- While the proposed monitoring project will take place in the Intensively Monitored Watershed (IMW) study area, it is unclear from the application how the applicant will work with the IMW working group to incorporate these findings.
- The application timeline is tight; the last flight is scheduled the same month in which they plan to submit the final report.

Monitoring Team Comments

None

Review Team Evaluation Strengths

• Developing a drone work-flow process could result in a concept used by others in the restoration community.

Concerns

- The timing of the restoration project does not align with the proposed pre- and post-restoration flight schedule.
- One year of data is not enough time to gauge vegetation change.
- The application does not clearly describe the work flow process.
- The likelihood of success for this monitoring project dissipates if the associated restoration project is delayed.

Concluding Analysis

Many in the restoration community are utilizing drones or UAV in monitoring their projects. It is not clear if the techniques noted in this proposal are new or if this technique is already being used by others in the restoration community. Including alternative restoration sites for the monitoring project would have provided a higher likelihood of success.

Review Team Recommendation to Staff

Do Not Fund

Review Team Priority None

Review Team Recommended Amount \$0

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team

Application Evaluation for Utilizing multispectral UAV-imagery to monitor stream and riparian restoration effectiveness, Open Solicitation-2018 Fall Offering Due: (

None

Staff Recommendation

Do Not Fund

Staff Recommended Amount \$0

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Staff Conditions

Open Solicitation-2018 Fall Offering

Mid Columbia (Region 6)

Application Number: 219-6035-16666Project Type: MonitoringProject Name: Adult Steelhead Migratory Routes
InvestigationProject Type: MonitoringApplicant: Gilliam SWCDCounty: GilliamRegion: Mid ColumbiaCounty: GilliamOWEB Request: \$223,232Total Cost: \$626,866

Application Description (from application abstract)

Approximately 60% of adult steelhead returning to the John Day River "overshoot" the John Day River mouth and are detected 119 km upstream in the Columbia River at McNary Dam. After crossing McNary Dam, John Day adult steelhead must "fallback" in order to return and spawn in the John Day River. Adult overshoot past a hydroelectric dam can directly (via physical injury during fallback) and indirectly (via increased energy expenditure) reduce the survival and reproductive capacity of returning adults. The current proportion of adult steelhead overshooting the John Day River contributes to a 7-year mean Bonneville Dam to South Fork John Day conversion probability of 50%. This means that only half of the adult steelhead arriving at Bonneville Dam survive and return to their natal stream to spawn. Life-cycle models indicate substantial risk of quasi-extinction for a John Day steelhead population if this status quo conversion probability continues. The quasi-extinction risk diminishes to near zero if conversion rate increases to 70%. A first step toward increasing conversion rate is to map the migratory routes of John Day adult steelhead from the mouth of the river upstream to Tumwater Falls. To do this, we will leverage the existing infrastructure and returning Passive Integrated Transponder tagged adults (originally tagged as parr or smolts in John Day tributaries) by capturing known origin adults in the Bonneville Dam Adult Fish Facility. Recaptured adults will be tagged with acoustic transmitters. An array of acoustic receivers positioned in the Columbia and John Day rivers will detect tagged adults and allow us to map migratory routes to elucidate where and when adult steelhead are migrating. We will compare fate of each tagged individual by migratory route to identify relationships between migration route and population performance. Gilliam SWCD and ODFW will be the lead partners, and will coordinate with other agencies as appropriate. Approximately 60% of adult steelhead returning to the John Day River "overshoot" the John Day River mouth and are detected 119 km upstream in the Columbia River at McNary Dam. After crossing McNary Dam, John Day adult steelhead must "fallback" in order to return and spawn in the John Day River. Adult overshoot past a hydroelectric dam can directly (via physical injury during fallback) and indirectly (via increased energy expenditure) reduce the survival and reproductive capacity of returning adults. The current proportion of adult steelhead overshooting the John Day River contributes to a 7year mean Bonneville Dam to South Fork John Day conversion probability of 50%. This means that only half of the adult steelhead arriving at Bonneville Dam survive and return to their natal stream to spawn. Life-cycle models indicate substantial risk of guasi-extinction for a John Day steelhead population if this status quo conversion probability continues. The quasi-extinction risk diminishes to near zero if conversion rate increases to 70%. A first step toward increasing conversion rate is to map the migratory

routes of John Day adult steelhead from the mouth of the river upstream to Tumwater Falls. To do this, we will leverage the existing infrastructure and returning Passive Integrated Transponder tagged adults (originally tagged as parr or smolts in John Day tributaries) by capturing known origin adults in the Bonneville Dam Adult Fish Facility. Recaptured adults will be tagged with acoustic transmitters. An array of acoustic receivers positioned in the Columbia and John Day rivers will detect tagged adults and allow us to map migratory routes to elucidate where and when adult steelhead are migrating. We will compare fate of each tagged individual by migratory route to identify relationships between migration route and population performance. Gilliam SWCD and ODFW will be the lead partners, and will coordinate with other agencies as appropriate.

Monitoring Team Evaluation

Monitoring Team Strengths

- The application has specific objectives to manage and report the data, and an explanation of the audience with which the data will be shared.
- The applicant is working with the ODFW research station and they have a proven track record of performing fish monitoring efforts in the Mid-Columbia.
- This application addresses a key limiting factor for the viability of Mid-Columbia steelhead populations tributary overshoot and low conversion during fallback.
- Management solutions to this problem could substantially increase long-term viability projections for John Day steelhead with possible application to other populations experiencing similar issues.
- The applicant proposes a technically sound use of the dual acoustic-radio capabilities and provides some versatility for detecting adult fish moving through the system.
- The proposed project will use existing PIT tag arrays in the hydropower system and John Day River populations.

Monitoring Team Concerns

- The application lacks a description of the methods to collect water temperature data.
- There is no letter of support submitted by tribes, and it would have been helpful to understand how they value this data.
- Connecting the resulting data and how it could affect future management actions in the John Day River to address the overshoot issue would strengthen the application.
- The application could be strengthened by more comprehensively outlining the monitoring questions, explicitly stating the hypotheses, and explaining how the monitoring could inform specific management options.

Monitoring Team Comments

Review Team Evaluation Strengths

- The application provides clear goals and objectives.
- While the acoustical pit tag technologies have not been utilized as described in the application, they have proven to be successful in other venues for comprehensive tracking of fish.
- The proposal is well-written with maps to help explain the proposed work.
- Utilizing existing infrastructure at the Bonneville dam to tag fish realizes efficiencies and lowers the overall project cost.
- The Mid-Columbia Recovery plan identifies the overshoot threat as significantly impacting the John Day major population group (MPG) - the only wholly wild MPG in the Mid-Columbia steelhead distinct population segment (DPS), and therefore is limiting John Day population, John Day MPG, and Mid-Columbia Steelhead DPS.

Concerns

- There is a risk that the data may not result in clear answers.
- It is unclear how management or restoration options will result from the proposed data collection.

Concluding Analysis

Tributary overshoot by migrating fish is an emerging threat identified after the Mid-Columbia Recovery plan was finalized. Fish research in Oregon, Washington, and Columbia River mainstem indicates this is a primary threat to steelhead recovery. The John Day consistently exhibits the highest overshoot and mainstem loss rates annually due to mortality. This project is the first step to better understand fish migration patterns at the mouth of the John Day and why they are occurring. The data will inform future John Day Basin FIP efforts to address this migration concern so that native John Day fish can spawn in their natal streams.

Review Team Recommendation to Staff Fund

Review Team Priority 1 of 2

Review Team Recommended Amount \$223,232

Review Team Conditions

Staff Recommendation

Staff Follow-Up to Review Team None

Staff Recommendation

Fund

Staff Recommended Amount

\$223,232

Staff Conditions

Open Solicitation-2018 Fall Offering

Mid Columbia (Region 6)

Application Number: 219-6036-16665
Project Name: John Day Basin Partnership Outreach
Applicant: North Fork John Day WC
Region: Mid Columbia
OWEB Request: \$36,974

Project Type: Stakeholder Engagement

County: Grant Total Cost: \$65,140

Application Description (from application abstract)

1.) The John Day Basin Partnership (JDBP) is a collaborative of 28 organizations working to enhance the pace, scale, and impact of restoration that benefits aquatic and terrestrial ecosystems, agriculture, and economic opportunities for communities in the John Day River Basin. Over the course of three years, the JDBP has become a high-functioning joint venture. It has forged new and strengthened existing relationships with constituents across the basin, developed internal communication protocols, and established operating norms. The JDBP is finalizing a Strategic Action Plan (http://nfjdwc.org/nfjdwcmedia/John-Day-Basin-Partnership-SAP FIP proposal 062918.pdf) that identifies and prioritizes restoration activities "from ridge-to-ridge" throughout the basin. 2.) The JDBP recognizes that landowner and public involvement are vital to sustaining the forward movement of restoration in the basin. In order to better connect the communities, people, and projects impacted by restoration, the time has come for more deliberate efforts dedicated to increased public relations. Initiating a basin-wide outreach campaign will help the JDBP accomplish two primary basin-wide goals: -Generate increased partner cooperation, project prioritization, and joint fundraising among diverse interests in the John Day River basin.- Conduct public outreach on watershed restoration that is taking place and its value to the community. 3.) Project activities will focus on diversifying communication pathways to the public by developing outreach materials such as regular newsletters and informational handouts, hosting informative presentations about projects and partners, and organizing a series of restoration service events for assisting landowners. Through these avenues, the JDBP will receive and respond to community input as well as deliver targeted messaging to constituents about restoration and how to get involved.4.) Please see attached list of 28 partners.

Review Team Evaluation Strengths

- Outreach is a valuable tool to engage landowners new to restoration.
- As a partner, Blue Mountain Land Trust's (BLMT) successful outreach experience will be beneficial to the proposed project.
- This proposal complements the newly awarded John Day Basin Partnership FIP by targeting areas within the basin that are outside of the FIP focus areas.

Concerns

- Since this is an ambitious, large scale project, the application would have been stronger with more detailed strategies for achieving the stated goals.
- Including examples of BMLT products or other communication tools would have been helpful in the review.
- Methodologies on how actions will be developed are vague or missing from the application.
- The application would be stronger with more detail on how sensitivities dealing with private lands will be handled.
- It is unclear how the wolf conflict workshop will result in restoration.

Concluding Analysis

The John Day Basin Partnership was recently selected as a recipient of the next round of OWEB's Focus Investment Partnership. They will be working in three geographic areas in the John Day Basin. The proposed project will expand the landowner outreach work to cover the rest of the basin. If the applicant decides to resubmit, effort should be made to address the concerns noted in this evaluation.

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

Application Evaluation for John Day Basin Partnership Outreach, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018

Staff Conditions

N/A

Open Solicitation-2018 Fall Offering

Mid Columbia (Region 6)

Application Number: 219-6037-16678Project Type: Stakeholder EngagementProject Name: Walla Walla Basin Stakeholder
EngagementProject Type: Stakeholder EngagementApplicant: Walla Walla Basin Watershed
FoundationCounty: UmatillaRegion: Mid ColumbiaCounty: UmatillaOWEB Request: \$27,522Total Cost: \$42,367

Application Description (from application abstract)

The Walla Walla Basin Watershed Council (WWBWC) seeks to engage stakeholders 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 water to groundwater interaction, water quality, fish passage, riparian conditions, and in-stream habitat complexity. To address fish passage and habitat issues, the WWBWC and Confederated Tribes of the Umatilla Indian Reservation (CTUIR) will engage directly with landowners to identify potential project partners on the upper WWR and Couse Creek. WWBWC will engage with individuals throughout the basin who possess senior water rights in order to develop partners for irrigation efficiency projects directed at permanently protecting water in-stream via Oregon's Allocation of Conserved Water program. Stakeholders will be sought to develop potential projects aimed at advancing the WWBWC's aquifer recharge program. Additionally, various stakeholder engagement activities will be carried out to familiarize potential stakeholders with the WWBWC's work, the basin's hydrological and ecological issues and the potential for projects, with the aim of developing future partners and projects necessary to address the basin's degraded hydrological and ecological systems. In various capacities, the WWBWC will seek to partner with landowners, holders of water rights, CTUIR, Oregon Department of Fish and Wildlife (ODFW), Little WWR Working Group, local irrigation districts and other stakeholders.

Review Team Evaluation Strengths

- The intent of the project is clearly stated in the application and directly relates to specific restoration types and locations.
- The applicant has a proven track record of successfully implementing restoration, monitoring, and community outreach for near to 20 years, indicating a high likelihood of success for this project.
- Maintaining landowner relations is vital to continuing restoration. ODFW depends on the council's outreach to landowners for the work they do on private lands.

• The proposed stakeholder engagement compliments assessment work being completed on Couse Creek, as well as in other areas.

Concerns

- The project description focuses more on resulting watershed restoration expected from this project instead of details on the proposed stakeholder engagement activities.
- More information on how senior water rights factor into the prioritization and selection of restoration sites would have been beneficial to the review.

Concluding Analysis

The Walla Walla Basin Watershed Council has a long history of successful community outreach. Over the years, their myriad of outreach activities has paid off in many successful restoration projects and improved landowner relations. Although parts of the application were somewhat difficult to navigate, the overall intent of the proposal was clear and objectives are reasonable.

Review Team Recommendation to Staff

Review Team Priority 1 of 1

Review Team Recommended Amount \$27,522

Review Team Conditions

None

Staff Recommendation Staff Follow-Up to Review Team None

Staff Recommendation Fund

Staff Recommended Amount \$27,522

Staff Conditions

Application Evaluation for Walla Walla Basin Stakeholder Engagement, Open Solicitation-2018 Fall Offering Due: Oct 29, 2018







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Agenda Item P supports OWEB's Strategic Plan priority #7: Bold and innovative actions to achieve health in Oregon's watersheds.

MEMORANDUM

TO:	Oregon Watershed Enhancement Board
FROM:	Jillian McCarthy, Partnerships Coordinator
SUBJECT:	Agenda Item P – Water Acquisition Grant Awards
	April 16-17, 2019 Board Meeting

I. Introduction

This staff report provides an overview of the December 2018 Water Acquisition Grant Offering process and outlines staff recommendations for grant awards.

II. Water Acquisitions – December 2018 Offering Background and Summary

A. Applications Submitted

Four grant applications were received in the December 2018 Water Acquisition Grant Offering through the new online application, requesting a total of \$1,082,988. The applications, summarized in Table 1, propose short-term instream leases and permanent water right transactions.

B. Review Process

Application review was completed in coordination with the National Fish and Wildlife Foundation's (NFWF) Columbia Basin Water Transaction Program. While the applications were submitted directly to OWEB through the online application system, NFWF's technical advisory committee reviewed the applications and prepared evaluations for OWEB staff. Applications are evaluated for project soundness, ecological outcomes, and organizational capacity using the evaluation criteria developed in coordination with the Northwest Power and Conservation Council's (NPSS) Independent Scientific Review Panel (ISRP). Proposals were reviewed by OWEB and NFWF staff, reviewed by water rights experts in the legal and economic fields, and ranked by a third-party Technical Advisory Committee (TAC) comprised of fisheries and habitat experts and water transaction specialists. The TAC ultimately assesses each transaction and provides a recommendation for funding based on the ISRP criteria. Staff prepared an evaluation of each project that summarizes the NFWF review outcomes and recommendations.

C. Overview of Funding Recommendations

Staff recommend three applications for funding. One application, 219-9906, is recommended for Year 1 funding with future years contingent upon secured matching funds from the Columbia Basin Water Transaction Program. It was determined that one application, 219-9907, was incomplete. The total amount of recommended OWEB funding is up to \$621,973.

III. Staff Funding Recommendations

Staff recommend the board award funding for water acquisition grants as specified in Table 1.

Application #	Region	Project Name	Total OWEB Request	Total Amount Recommended
219-9904	2	South Umpqua Pilot Program Water Lease	\$36,579	\$36,579
219-9905	4	South Fork Little Butte Streamflow Restoration Project	\$296,288	\$283,138
219-9906	4	Fifteenmile Creek Leasing Program	\$289,056	Up to \$289,056
219-9907	4	Tumalo Irrigation District: Crescent Creek Flow Enhancement	\$461,065	\$0
Total Water Acquisition Applications Submitted			\$1,082,988	
Total OWEB Funding Recommended				Up to \$608,773

Attachments

A. Water Acquisition Project Evaluations

Water Lease and Transfer Grant - 2018 Offering

Application Number: 219-9904-16750	Project Type: Water Lease and Transfer		
Project Name: South Umpqua Pilot Program Water Lease			
Applicant: Trout Unlimited - Oregon			
Region: Southwest Oregon	County: Douglas		
OWEB Request: \$36,579	Total Cost: \$48,799		

Project Abstract (from application)

This project proposes to implement a pilot instream leasing project in the South Umpqua River, and to leverage that lease to build capacity to expand the Umpqua Basin Flow Restoration Program. Trout Unlimited (TU), in partnership with the Cow Creek Band of Umpqua Tribe of Indians (CCBUTI), has developed a new flow restoration program in the Umpqua Basin to begin addressing the extensive over-appropriation of water in the South Umpqua River and its tributaries. The initial pilot lease will restore 0.546cfs to the South Umpqua River, in a key location for both flow restoration need, and proximity to other large agricultural producer that are targeted for enrollment in the flow restoration program. The Umpqua Basin is home to Oregon Coast Evolutionary Significant Units (ESUs) of chinook and coho salmon and a Distinct Population Segment of steelhead, providing essential habitat for these species of interest across a "checkerboard" landscape of private and BLM lands. The Umpqua is also home to multiple lamprey species, native fish of particular importance to the CCBUTI. The primary limiting factor for coho salmon in the South Umpgua is listed as water guantity, with the second most important factors listed as stream complexity and water quality (both of which depend to some extent on adequate flow.) Water quality has long been identified as a factor for decline (NMFS 1997) and a limiting factor for recovery (ODFW 2005a) for OCCS. Water quality problems largely relate to nonpoint source pollution, flow and channel modification, and the 2007 Umpgua Basin TMDLs specifically calls for obtaining minimum instream flows to improve water quality conditions As part of the pilot effort, CCBUTI will monitor vegetation conditions, weeds, animal health, and economic aspects of the project lands in comparison to an adjacent irrigated parcel to gather information to assist with increasing interest in water transactions in the basin and to inform potential participants.

Technical Advisory Committee Evaluation

Strengths

- The transaction is viable and likely to achieve the flow restoration outcomes.
- It appears that sufficient due diligence measures have been conducted to establish the short-term transferability of the subject water rights to an instream use and document the value of the water rights to be leased.
- Along with TU's expertise in flow restoration, CCBUTI has staff expertise in ranching, fish biology, water quality, and vegetation monitoring.
- The value of the water transaction is based on economic valuations for nearby basins and is near the average for leases in Oregon.
- Project monitoring will inform potential future lease participants about the impacts of leasing on:
 - Power consumption, stocking rates, and animal weight gain in comparison to nearby irrigated properties.
 - o Soil types and soil response to irrigated versus dry land farming.
 - Vegetation surveys on irrigated versus dry land farming.
- Project monitoring results will be reported and shared with other irrigators through outreach events and individual meetings. This is a unique approach to water transaction outreach that could significantly reduce the cost of developing future flow restoration projects.

• While the ecological benefits of this proposed project are inconsequential, the application documents the value of flow restoration in this river and how the proposed transaction complements other watershed-scale initiatives to address limiting factors.

Concerns

- Despite the immeasurable amount of flow, a statement from the Watermaster would have been useful.
- The project is a good step at this stage in TU's flow restoration work in the basin, but the actual ecological benefits are inconsequential.

Concluding Analysis

This transaction provides a unique opportunity to educate the basin about flow restoration and its impact on agricultural lands. While this transaction is not measurable instream, there is great value in monitoring other economic indicators, soil types, and vegetation to better understand the potential impacts of leasing to landowners. This lease will gather valuable data to further restoration efforts in the Umpqua by demonstrating the benefits of water transactions to other landowners in the watershed. It could be an educational tool for places that are early in their flow restoration development.

Technical Advisory Committee Recommendation to Staff

Fund

Technical Advisory Committee Recommended Amount \$36,579.00

Technical Advisory Committee Conditions

Staff Recommendation Fund

Staff Recommended Amount \$36,579.00

Staff Conditions

Water Lease and Transfer Grant - 2018 Offering

Application Number: 219-9905-16751	Project Type: Water Lease and Transfer	
Project Name: South Fork Little Butte Streamflow Restoration Project		
Applicant: Trout Unlimited - Oregon		
Region: Southwest Oregon	County: Jackson	
OWEB Request: \$296,288	Total Cost: \$387,288	

Project Abstract (from application)

Funding will support streamflow restoration in South Fork Little Butte Creek (SFLB) in the upper Rogue Basin (near Lake Creek, Oregon). 17 miles of stream habitat will be permanently enhanced including 11 miles of high priority anadromous fish habitat. SFLB provides habitat for ESA listed Coho Salmon, Chinook Salmon, Summer and Winter Steelhead Trout, Pacific Lamprey and a variety of other native fish species. Historic and ongoing agricultural water withdrawals dewater SFLB in summer and early fall, thus reducing habitat quantity/quality for native aquatic species. Dewatering is a widely acknowledged primary limiting factor to fish production. This creates a need for permanent and protectable instream water rights. Specifically, this project seeks to permanently transfer 168 acres (2.8 cfs) of irrigation water rights to instream rights, maintaining its existing dual, priority dates of 1858 (for 1.5 cfs) and 1888 (for 1.3 cfs). The rights proposed for transfer are located at the headwaters of SFLB, on Dead Indian Plateau. It is thought that a significant portion of this right is protectable as an instream right for approximately 17 miles - to the mouth of SFLB. The proposed instream water right will be created though the Oregon Water Resource Department's water right transfer process. The majority of funding sought will be used to compensate the water right holder in exchange for transfer of their water right from irrigation to instream uses. The water right holder has already signed a contract to this effect (attached). This project is part of TU's ongoing effort to develop and implement a streamflow restoration program in the Rogue Basin - a geography hotter and drier than other coastal watersheds in Oregon making projects such as this one critical to ensuring viable fish populations in the future. Project partners include Oregon Department of Fish and Wildlife, Oregon Water Resources Department and Rogue River Watershed Council.

Technical Advisory Committee Evaluation

Strengths

- The transaction is viable and likely to achieve at least the minimum proposed flow restoration outcomes.
- TU has the organizational capacity necessary to complete the transaction.
- It appears that sufficient due diligence measures have been conducted to establish the transferability of the subject water rights to an instream use, establish accurate ownership information of the subject water rights, and document the value of the water rights to be purchased.
- Compliance monitoring is sufficient for the transaction. The Watermaster indicated his support of the project and that both priority dates for this transfer may be protected to the mouth, although the application does not indicate the priority date that is being regulated to on South Fork Little Butte Creek.
- South Fork Little Butte Creek is a highly productive spawning and rearing stream for both steelhead and Coho.
- Early season passage flows will benefit multiple species. While gauge data from the mouth shows the stream doing dry many years during the summer months, it is likely that this transaction will shorten that timeframe in a key reach.
- Restoring instream flows for juvenile rearing and smolt migration is a top priority in the basin as documented by ODFW and the Southern Oregon Northern California Coast Coho Recovery Plan.
- The proposed transaction complements other watershed-scale initiatives to address limiting factors in the watershed and specifically in South Fork Little Butte Creek.

- Based on the water valuation report submitted with the application, the value proposed is 98% of the range noted. This valuation is economic and derived from irrigated use of land and does not include the additional value of maintaining fish populations or the impact on tourism or recreation.
- While the quantity of water is low, the transaction will demonstrate the benefits of water transactions to other landowner in the watershed.

Concerns

- A signed agreement between the landowner and TU indicates that they are proposing to purchase the entire water right, but if OWRD approves less than the seasonal minimums indicated, the agreement can be terminated.
- The frequency of activities to be conducted during periodic site visits by TU to assure that there is no water use on the formerly irrigated acreage which was not clearly described.
- The location of where spawning occurs relative to the instream reach was not clearly described.
- The calculation for indirect costs included a portion of the transaction payment to the seller and would need to be adjusted in the budget to reflect eligible indirect costs.

Concluding Analysis

The flow restoration through this project may be approved at a higher rate than TU is anticipating, but the range of benefits may be smaller than the total water right, dependent on OWRD review. The lower end of the expected protected rate is approximately 3% of late summer target flows for the creek, but the gauge data indicates that the creek goes dry during some summer months. Transferring this water instream would begin to manage flows in this creek, which would provide long term benefit on the creek and anchor TU's flow program in the subbasin. Adequate monitoring of the stream gauges, site visits by TU, and enforcement of water transactions by the Watermaster will ensure that the acquired water rights continue to provide the anticipated benefits to flows, habitat, and fish.

Technical Advisory Committee Recommendation to Staff

Fund

Technical Advisory Committee Recommended Amount

\$283,138.00

Review Team Conditions

Reduce indirect cost amount in accordance with eligible costs.

Staff Recommendation Fund

Staff Recommended Amount \$283,138.00

Staff Conditions

Reduce indirect cost amount in accordance with eligible costs.

Water Lease and Transfer Grant - 2018 Offering

Application Number: 219-9906-16752	Project Type: Water Lease and Transfer
Project Name: Hood Basin Fifteenmile Leasing	2019-2023
Applicant: The Freshwater Trust	
Region: Central Oregon	County: Wasco
OWEB Request: \$289,056	Total Cost: \$376,944

Project Abstract (from application)

The Fifteenmile leasing program provides compensation for irrigators engaging in environmental water transactions in the watershed. It provides sustained and cool base flows supporting TFT's flow restoration goal of 7 cfs at the mouth of Fifteenmile Creek. TFT is seeking funding for water payments from OWEB (75%) and CBWTP (25%) for the 2019 leasing program's suite of projects. The Fifteenmile Creek watershed has undergone extensive alteration from its natural state since settlement, and is a high-priority area under both state and federal management agency restoration criteria. The watershed provides key habitat for an almost completely wild population of ESA-listed threatened steelhead (a core and genetic legacy populations) and other important aquatic populations including Pacific Lamprey, but long-standing human interference has compromised the health of its streams. This proposal provides funding for 13 transactions with 12 landowners in the Fifteenmile watershed through full-season and splitseason instream leases ranging from 1 to 5 years in length. These deals will lease a total of 5.43 cfs instream of pre-1910 water, with 3.66 cfs protected to the mouth of the creek (the highest cfs to-date). Together they will meet 52-73% of the instream target in 2019, providing sustained base flows for a wild run of threatened steelhead, Coho, and lamprey. The proposal also provides programmatic support for the TFT project manager and hydrologist responsible for implementation over the next 5 years. TFT's Leasing Program is part of a multi-faceted approach to addressing instream conditions in Fifteenmile Creek. It complements the watershed's Fifteenmile Action to Stabilize Temperatures (FAST), a contingency plan aimed at reducing lethal stream temperatures, as well as considerable other work by local restoration groups, tribes, and state and federal agencies. These leases will be administered in conjunction with the Wasco County SWCD.

Technical Advisory Committee Evaluation

Strengths

- The Fifteenmile watershed provides habitat for a nearly intact, wild genetic stock of Middle Columbia summer steelhead, listed as threatened under the ESA. The watershed has undergone extensive alteration from its natural state since settlement. It is high-priority under both state and federal agency restoration criteria.
- TFT works closely with the Watermaster in this watershed to monitor leases; their plan for monitoring compliance with the lease terms is sufficient.
- TFT's general experience implementing water transactions and their specific experience in the Fifteenmile watershed demonstrate sufficient capacity and expertise to implement this transaction.
- Though they are at the higher end of the range, the value of the leases is supported by economic calculation.

Concerns

- In 4 of the last 5 years, the Watermaster has regulated past the 1909 priority date. Therefore, while it is expected that the leases can be implemented, the transactions are likely to achieve only a portion of the proposed flow restoration outcomes.
- Opt-out clauses in the four 2018 lease agreements create uncertainty about the amount of water instream each year. It is expected that the nine proposed lease agreements to begin in 2019 will also contain opt-out clauses.
- 5 of the 9 2019 lease agreements are a 1-year term. Of these, three have been previously leased by TFT.

- The application indicates that 52% to 73% of their current flow target (5-7 CFS of senior water rights at the mouth of Fifteenmile Creek) is reached through these leases and prior transactions; however, the application does not note what flows have been measured instream at this location in the several years of doing leases there. The application would benefit from further discussion on the strategies planned to reach their goal over time in this creek.
- The proposal notes several monitoring activities in the watershed (stream temperature, fish population, pesticide monitoring), but does not describe how that information contributed to project development or how it will contribute to future decision-making. In addition, there is no commitment to share that information with funders.
- The application describes other ongoing efforts to restore aquatic habitat in the basin. Further discussion to clarify which of these efforts have been completed, are in progress, or are planned for the future would have been helpful to the reviewers.

Concluding Analysis

This project is part of a strategic effort to support flows and fish in Fifteenmile Creek. TFT and its partners have a long history of working in this basin, and farmers in several of these transactions are doing dryland farming while keeping water instream through this project. The proposed project would result in an increase in water protected in Fifteenmile and that momentum should be supported. The economic valuation is based, in part, upon reliability. Given that the Watermaster has regulated past 1909 in 4 of the last 5 years, that valuation should be revisited. Due to the lease agreements allowing for an opt-out clause, committing funding for future year payments is not recommended as the ecological outcomes will vary based on whether proposed contracts remain in place in future years.

Technical Advisory Committee Recommendation to Staff

Fund Reduced – limit scope of services to only Year 1 transactions.

Technical Advisory Committee Recommended Amount

\$116,184

Staff Follow-up

In response to concerns over the early termination clause in the Instream Lease Agreements, OWEB staff learned that water right holders insist on the clause to alleviate concerns over unsecured funding at the time that the agreements are signed. The Columbia Basin Water Transaction Program (CBWTP), the source of matching funds to the project, requires that signed agreements be submitted with the grant application. In addition, for multi-year leases with an annual payment structure, CBWTP can only commit to pay the current year. In most circumstances, water right holders prefer annual payments over a lump sum payment due to the tax implications. The early termination clause allows the water right holder to opt-out of the agreement should CBWTP funds not be awarded in future years. Currently, the early termination clause is structured so that the lease can be terminated for any reason. OWEB strives to have lease agreements structured so that early termination can only occur if funding cannot be secured.

Staff Recommendation

Fund with Conditions

Staff Recommended Amount

\$289,056

Staff Conditions

Leases will be funded through the full lease term for Instream Lease Agreements without Early Termination clauses. In cases where the Instream Lease Agreement contains an Early Termination clause, the landowner payments will be contingent upon Columbia Basin Water Transaction funding each year.







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Agenda Item Q 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: Jillian McCarthy, Partnerships Coordinator
 SUBJECT: Agenda Item Q – Coastal Wetlands Grant April 16-17, 2019 Board Meeting

I. Introduction

Staff request the board approve the submittal of a U.S. Fish and Wildlife Service (USFWS) federal fiscal year (FFY) 2020 National Coastal Wetlands Conservation Grant Program (NCWCGP) application on behalf of the North Coast Watershed Association for their Cathlamet Bay Watershed Connectivity and Tidal Restoration Project.

II. Background

The NCWCGP requires that applications for projects from local implementers be submitted by a state agency. OWEB is both eligible and established as a trusted partner with the program. OWEB has established a process for local implementers to follow for submission to NWCGP, which includes an application and letter of interest submission through OWEB's Fall Open Solicitation or Land Acquisition Grant cycle, review by the appropriate Regional Review Team, board decision in April, and submission of the full federal application to USFWS in June. During the same time frame OWEB, like other state agencies, must also receive legislative approval to submit the application. OWEB's program administration process and timeline for vetting proposed NCWCG projects is in Attachment A.

III. Proposed NCWCGP Application

Based on the application review by the Region 1 Review Team, staff and the review team recommend submitting a NCWCGP application for the Cathlamet Bay Watershed Connectivity and Tidal Restoration Project.

This project encompasses two sites located between River Mile 18 and 19 of the Columbia River Estuary (CRE) in Clatsop County, just east of Astoria. At site 1, Mill Creek, 1.9 miles of road will be decommissioned in both the fluvial and tidal reaches of the subbasin. This will result in the restoration of 23 road crossings to natural hydrology, 12 of which are on identified Endangered Species Act (ESA)-listed salmon streams. At site 2, John Day River Road, a bridge will replace a pair of undersized culverts that currently act as barriers to hydrology and fish passage to the 22

acre upstream tidal wetland complex. Upon completion, this project will provide unrestricted access to high quality tidal wetlands for foraging, rearing, and spawning habitat for ESA-listed salmonids. The project provides additional community benefits by reducing severe seasonal flooding, an existing safety issue for residents near the project area, and to provide local residents with year-round safe passage to their homes. At the time of application, the budget did not include contingency. The North Coast Watershed Association is updating the budget to apply contingency as they prepare the federal application. Thus, the NCWCGP request is up to \$429,775, with a total project cost of \$1,107,718. A full project evaluation is included as Attachment B.

IV. Recommendation

Staff recommend the board approve submission of an application for the Cathlamet Bay Watershed Connectivity and Tidal Restoration Project to the USFWS's 2020 NCWGCP.

Attachments

A. FY2020 USFWS National Coastal Wetlands Conservation Project SolicitationB. Cathlamet Bay Watershed Connectivity and Tidal Restoration Project Evaluation



OREGON WATERSHED ENHANCEMENT BOARD

FY2020 USFWS National Coastal Wetlands Conservation Project Solicitation

The Oregon Watershed Enhancement Board (OWEB) is pleased to announce the FY2020 National Coastal Wetland Conservation Grant (NCWCG) Program solicitation. NCWCGs are awarded annually with funding from the U.S. Fish and Wildlife Service to acquire, restore, and enhance wetlands in coastal states.

Grant Information

NCWCG Program funds are available to protect and restore coastal wetland habitats. Awards typically range from \$125,000 to a maximum of \$1,000,000, and require a 25% non-federal match contribution. Eligible projects must ensure long-term conservation of coastal resources and can include a combination of acquisition, restoration, and management of coastal wetland ecosystems.

NCWCG projects are collaborative grants for which state agencies are eligible to apply. OWEB serves as the official grantee of the federal award and passes the federal funds through to local partners ("applicants") through sub-awards.

How to Apply

Applicants pursuing NCWCG funding must submit an application through OWEB's Land Acquisition Program or OWEB's Restoration Open Solicitation offerings. Application deadlines are listed in the timeline below. Applicants should upload a letter of interest to their OWEB application as a "letter" or "letter of support" to indicate intent to apply for NCWCG funds. Please include "Coastal Wetland Grant Letter of Interest" in the title of the upload document.

NCWCG Program Letter of Interest

Letters of Interest for NCWCG should include the following:

- 1. Entity and point of contact for the proposed project, and direct partners, if applicable;
- 2. A concise description of the proposed project including:
 - a. The project location, including verification that it is located within a coastal wetland ecosystem (within a coastal HUC-8 boundary);
 - b. The eligible activities that the project proposes. Eligible activities include:
 - Acquisition of a real property interest (e.g., conservation easement of fee title) in coastal lands or waters (coastal wetland ecosystems) from willing sellers or partners for longterm conservation.
 - Restoration, enhancement, or management of coastal wetlands ecosystems, provided that restoration, enhancement, or management will be administered for long-term conservation; or
 - A combination of acquisition, restoration, and management.
 - c. How the project proposes to ensure long-term (at least 20 years) conservation of coastal resources.

Contact Information

Please direct questions about the grant program and project eligibility to Jillian McCarthy, Partnerships Coordinator at <u>jillian.mccarthy@oregon.gov</u> or 503-986-0033.



TIMELINE

Note that dates with asterisks (*) are submittal deadlines for local implementers.

OCTOBER 18, 2018* (for Land Acquisition Projects)

Applicant submits land acquisition application to OWEB accompanied by NCWCG Program Letter of Interest.

October 29, 2018* (for Restoration Projects)

Applicant submits restoration application to OWEB accompanied by NCWCG Program Letter of Interest.

DEC 2018 – FEB 2019

Acquisition and /or Regional Review Teams review OWEB grant applications, conduct site tours, and make funding recommendations.

DEC 2018 – FEB 2019

USFWS announces NCWCG offering.

MARCH 2019

OWEB Management determines funding lines for all OWEB grant applications with consideration of Review Teams' funding recommendations and available funding.

APRIL 2019

OWEB Board makes funding decision on OWEB grant application and decision to submit NCWCG application at Board meeting. Applicant and OWEB work together to develop the draft federal application.

MAY 10, 2019*

OWEB submits draft application on behalf of the applicant to USFWS for preliminary review and feedback.

MAY – JUN 2019

OWEB seeks legislative approval to submit NCWCG application. Applicant and OWEB work together to address USFWS feedback and develop final grant application.

JUNE 21, 2019*

Applicant submits to OWEB the final NCWCG application, which OWEB packages and submits to NCWGC on behalf of the applicant.

JUNE 30, 2019

Anticipated NCWCG application deadline.

JAN – APR 2019

USFWS NCWCG awards are announced.

Open Solicitation-2018 Fall Offering

North Coast (Region 1)

Application Number: 219-1020-16653

Project Name: Cathlamet Bay Watershed Connectivity and Tidal Restoration Project

Applicant: North Coast WS Assn

Region: North Coast

OWEB Request: \$331,872

Project Type: Restoration

County: Clatsop Total Cost: \$919,815

Project Abstract (from application)

The Cathlamet Bay Watershed Connectivity and Tidal Restoration Project encompasses two sites located between River Mile 18 and 19 of the Columbia River Estuary (CRE) in Clatsop County, just east of Astoria. At The Mill Creek site, a historic logging road is slated for removal to improve access to foraging, rearing, and spawning habitat for ESA listed salmonids, while improving tidal inundation at the mouth for species utilizing the CRE. The second site, along John Day River Road, is designed to replace a pair of undersized culverts acting as a hydrologic and fish passage barrier to the upstream wetland complex. The culverts will be replaced with a bridge, improving access to foraging and rearing habitat for CRE salmonids, while benefiting the community by reducing severe seasonal flooding, an existing safety issue for residents near the project area. At Mill Creek, 1.9 miles of road will be decommissioned in both the fluvial and tidal reaches of the subbasin. 23 road crossings will be restored to natural hydrology, 12 of which are on identified ESA listed salmonid streams. Fish passage barriers to upstream spawning habitat will be removed, floodplains will be reconnected, and wetlands will be restored. At John Day, this project removes barriers to 22 acres of tidal wetlands for ESA listed salmonids utilizing the Lower Columbia River Estuary. Post-project, salmonids will have unrestricted access to high quality tidal wetlands and local residents will have year-round safe passage to their homes. When implemented, these projects will increase watershed resiliency to existing and predicted increases in storm events and build on the cumulative effort in and around Cathlamet Bay to restore natural watershed, wetland, and tidal processes that benefit ESA listed salmonids. This project is a partnership between NCWA, CREST, Clatsop County, and the Oregon Department of Forestry (ODF) applying for the National Coastal Wetland Conservation Grant.

Review Team Evaluation

Strengths

- The project has the potential to improve both fish passage and water quality in the Cathlamet Bay watershed.
- Decommissioning the road along Mill Creek will result in an improved forest management approach.
- The project will improve habitat connectivity in both Mill Creek and the lower John Day.
- The fish passage project is designed with climate resiliency in mind.
- The partnership team has essential capacity to implement the projects including an appropriate mix of local partners.
- The Mill Creek basin contains opportunities for educational outreach.

Concerns

- Road-decommissioning alternatives do not consider re-routing the road around the wetland entirely.
- The linkage between the two projects is unclear. Additional detail regarding the strategic approach to restoration in Cathlamet Bay would strengthen the application.
- The fish passage component has increased in cost since the previous OWEB restoration grant was awarded, thus reducing the overall cost-benefit of the project.

Concluding Analysis

Both projects that comprise this application, the John Day Crossing and the Mill Creek Road decommissioning, were awarded funding by OWEB in April 2018. Since that time, both projects experienced unexpected cost increases and partners decided to pursue a Coastal Wetlands grant to compensate for the funding shortfall.

The projects continue to have a high potential for ecological benefit. They are technically sound with the partners having the capacity to successfully implement this project. It is recommended that OWEB pursue a Coastal Wetlands grant on behalf of the applicants to achieve the necessary funding levels to complete implementation.

Review Team Recommendation to Staff

Proceed with Coastal Wetlands Grant application

Review Team Priority n/a

Review Team Recommended Amount

n/a

Review Team Conditions

Staff Recommendation

Staff Follow-Up to Review Team

At the time of application, the proposed budget did not include contingency. The North Coast Watershed Association is updating the budget to apply contingency as they begin to prepare the federal application. This, the NCWCGP request is up to \$429,775, with a total project cost of \$1,107,718.

Staff Recommendation

Staff Recommended Amount \$0

Staff Conditions







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Agenda Item R supports OWEB's Strategic Plan priority # 3: Community capacity and strategic partnerships achieve healthy watersheds.

MEMORANDUM

TO:	Oregon Watershed Enhancement Board
FROM:	Courtney Shaff, Interim Business Operations Manager
	Andrew Dutterer, Partnership Coordinator
SUBJECT:	Agenda Item R– FIP Rule Waiver
	April 16-17, 2019 Board Meeting

I. Introduction

The board adopted Focused Investment Partnership Grants administrative rules in January 2018. Oregon Administrative Rule (OAR) 695-047-0140 allows for the waiver of the rules when doing so will result in more efficient or effective implementation of the Focused Investment grant program. This staff report informs the board of the first such rule waiver under the Focused Investment Partnership Grant administrative rules.

II. Background

During the 2017-2019 biennium, OWEB, in coordination with the Oregon Department of Agriculture (ODA), began a new approach to funding and supporting Strategic Implementation Area (SIA) grants. The new approach awards stakeholder engagement, technical assistance and monitoring funds to each SIA beginning in the first year of the program. Stakeholder engagement and technical assistance funds can be spent over four years and monitoring funds can be spent over 10 years. These SIA funds are intended to bring agency and local partners together to collaboratively engage landowners to provide technical assistance in developing projects that address agriculture water quality concerns and achieve ecological uplift within the SIA geography.

ODA identified the Thirtymile Creek watershed, located within the boundaries of the Gilliam Soil and Water Conservation District (SWCD), as an SIA for the 2017-2019 biennium. Gilliam SWCD has also secured a Natural Resources Conservation Service Regional Conservation Partnership Program (RCPP) grant for this geography which will support implementation of projects that meet the objectives of the SIA program. The Thirtymile Creek watershed is also located within the boundaries of the John Day Basin Partnership's recently selected FIP Initiative. There is direct overlap between the actions, outcomes, and geography of the FIP Initiative and the work to be completed within the SIA program. OAR 695-047-0100(4) does not allow applicants to apply for restoration, technical assistance, stakeholder engagement, monitoring, or land and water acquisition grants within the defined geographic area of the FIP Initiative, that are also focused on the programs and actions identified in the Initiative's proposal.

III. Justification

The intent of OAR 695-047-0100(4) is to ensure partners are working on priority actions within the geography and working with all the necessary and relevant partners to implement projects and to not be applying for grant funds within the Open Solicitation and FIP programs simultaneously for the same geography and actions. The SIA program, and the grants it offers, is unique and distinct from OWEB's Open Solicitation grant offering because eligible watersheds are selected by ODA and program implementation occurs through an inter-agency partnership approach. Within the Thirtymile Creek watershed the RCPP, FIP, and SIA funding will allow the partners to leverage resources to work with a broad diversity of landowners, achieve the objectives of all three programs, and monitor the results of this work. This programmatic leveraging of resources across multiple funding sources is the strategic approach to conservation that the FIP program seeks to encourage and facilitate for participating partnerships.

IV. Recommendation

The rule waiver action can be taken by the OWEB Executive Director. However, because this decision is connected to two board spending plan line items, staff wanted to inform the board of this decision. This is an information item only.

Attachments

A. Map of Future Project Boundary Overlay

ATTACHMENT A

