Oregon
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MEMORANDUM

TO: Water Resources Commission

FROM: Thomas M. Byler, Director

SUBJECT: Agenda Item D, December 7, 2017
Water Resources Commission Meeting

Water Project Grants and Loans - Funding Recommendations

I. Introduction

This report describes the Technical Review Team's (TRT) recommendations, public comments received, and the Department recommendations for the funding of projects through Water Project Grants and Loans. The Commission will be asked to award funding for the 2017 funding cycle of Water Project Grants and Loans. See Attachment 1 for the TRT project ranking, funding recommendation, and a list of all projects.

II. Background

Recommended action 10.E of the 2012 Integrated Water Resources Strategy called for the authorization and funding of a water supply development program. In 2013, the Oregon Legislature passed Senate Bill 839, establishing the Water Supply Development Account and associated funding. The Water Project Grants and Loans funding opportunity is designed to support the development of instream and out-of-stream water supply projects that have economic, environmental and community benefits. After adoption of rules in June 2015, the Commission in May 2016 awarded nine grants for a total of $8,891,118.

Solicitation of applications for the 2017 cycle of Water Project Grants and Loans closed on April 5, 2017. The Department received 34 applications by the deadline, 32 of which were determined to be complete. Grant requests totaled $31,551,815 and loan requests totaled $3,415,892 for a total request of $34,967,707 from the complete applications. All 32 applications requested grant funding and three included requests for loans. These loan requests were paired with grant requests so that the loan request would cover the 25 percent cost-match requirement for grants. Grant requests ranged from $3,000 to $5,400,000. Loan requests ranged from $142,700 to $1,800,000.

There is currently $5,108,882 of unobligated funds in the account available for the Commission to award during this cycle, with an additional $15,000,000 available after the Lottery Bonds are sold in the spring of 2019.

III. Grant Application Review Process

After reviewing the applications for eligibility and completeness, the Department solicited written comments on complete applications during a 60-day public comment period from May 1, 2017 through June 29, 2017. During this first comment period, the Department received comments from six individuals and organizations addressing 24 of the applications. See Attachment 2 for a compilation of the comments received.

An inter-agency TRT evaluated the applications and developed funding recommendations for the Commission. The TRT consisted of staff from the Department, as well as Regional Solutions, and the Departments of Environmental Quality, Fish and Wildlife, Business Development, and Agriculture. As per statute, affected tribes were also invited to serve as members of the TRT, but instead choose to submit comments for consideration as the TRT scored the applications.

The TRT met to discuss the public benefits of each project and consider comments submitted by tribes and the public. The TRT members scored each application individually and submitted an initial public benefit score to the Department. The TRT scored applications based on public benefits described in the applications and the comments received. The public benefits categories are: economic, environmental, and social/cultural. See Attachment 3 for the public benefit scoring criteria and Attachment 4 for the Department's Guidance on the Evaluation of Public Benefits. The Department calculated the median public benefit score for each project and prepared a draft ranking using that median score. The TRT then reviewed and adopted the final ranking, which ranks projects in order of greatest public benefit. See Attachment 1 for the TRT ranking, funding recommendation, and a list of all projects.

The TRT rankings and recommendations were published on the Department's website and distributed on the Water Resources Development Program's listserve for a 30-day public comment period, which took place from September 27 through October 27. During the second comment period, the Department received comments from 21 individuals and organizations addressing six applications. See Attachment 5 for the public comments received. The Department's responses to those comments are included in Attachment 6.

IV. 2017 Funding Award Recommendation

Based on the TRT ranking, public comments, and staff review, the Department recommends funding the top four of 32 projects (Table 1). This funding recommendation takes into account the availability of funds and statutory provisions to review applications annually. See Attachment 6 for summaries of the projects, TRT evaluations, public comments, and the Department's responses to those comments. If approved by the Commission, Department staff will work with recipients to develop grant agreements. Funding awards are contingent on the applicants obtaining all applicable local, state, and federal permits and regulatory approvals, as well as meeting the program's match funding requirements.

Table 1. 2017 Funding Recommendations (all grants)

Project Name	***Project Type***	***Grant Funding Request***	***Total Cost of Project***	***Funding Recommendation***
North Fork Sprague Conservation Piping and Instream Flow Restoration	Conservation, Flow Restoration and Protection, Water Infrastructure	$2,731,746	$3,875,000	$2,731,746
Powder Valley Connector	Conservation; Water Infrastructure	$1,076,000	$1,440,000	$1,076,000
Opal Springs Fish Passage and Pool Raise	Flow Restoration and Protection; Water Infrastructure	$1,550,486	$10,720,486	$1,550,486
Coe Branch Pipeline & On-Farm Irrigation Efficiency Project	Conservation; Water Infrastructure	$924,000	$1,680,105	$924,000
Total		**$6,282,232**	**$17,715,591**	**$6,282,232**

V. Summary

The funding recommendations include the applications that demonstrated the greatest public benefits. As recommended, this would result in grant awards totaling $6,282,232. Assuming the Lottery Bonds are issued in the spring of 2019, this is would leave $13,826,650 for the 2018 and 2019 funding cycles.

VI. Alternatives

The Commission may consider the following alternatives:

1. Adopt the staff funding recommendation contained in the table in section IV of this report.
2. Adopt a modified funding recommendation.
3. Direct the Department to further evaluate the applications and return with a revised recommendation.

VII. Recommendation

The Director recommends Alternative 1, to adopt the staff funding recommendations to fund four applications for a total award of $6,282,232.

Attachments:

1. TRT Ranking and Funding Recommendation
2. Public Comments on Applications
3. Excerpt from Division 93 Rules on Scoring
4. Guidance on the Evaluation of Public Benefits
5. Public Comments Received on the TRT Funding Recommendation
6. Application Evaluation Summaries, Public Comments, and Response to Comments

Lisa Snyder, Administrator
503-986-0921

Kim Ogren, Manager, Water Resources Development Program
503-986-0873

Technical Review Team Ranking

Water Project Grants and Loans – 2017 Funding Cycle

The Department solicited grant and loan applications from November 2016 through April 5, 2017. During that time the Department received 32 complete applications requesting nearly $35 million in project implementation funds. The TRT, a multi-agency technical review team, reviewed, scored, and ranked each application. The TRT scoring criteria was based upon the Guidance on the Evaluation of Public Benefits. The rank and score is based on the median reviewer score for the public benefits as described in the project application.

Below is the TRT application ranking and funding recommendation for the 2017 review cycle of Water Project Grants and Loans. The four applications in Table 1 are recommended for funding by the TRT. These represent the projects with the greatest public benefits as evaluated by the TRT. The applications in Table 2 are not recommended for funding at this time. While all of the applications demonstrated some measure of public benefit, the projects in Table 2 are not recommended for funding due to funding limitations, insufficient public benefit demonstrated in the application, and/or other reviewer concerns about project implementation. Additional information is available in the evaluation summary of each application. The TRT determined that, as submitted, applications ranked 15 through 32 did not demonstrate sufficient public benefits to justify funding at this time. While the proposed projects associated with those applications may have public benefits, as submitted, the applications did not demonstrate or support those benefits consistent with the criteria identified in the Guidance on the Evaluation of Public Benefits.

For a summary and evaluation of all the applications, please click here. To access 2017 Water Project Grants and Loans applications and attachments, please click here.

Table 1. Applications Recommended for Funding

TRT Rank	2017 Funding Cycle Application	TRT Score	Funding Request	Running Total
1	North Fork Sprague Conservation Piping and Instream Flow Restoration	60	$2,731,746	$2,731,746
2	Powder Valley Connector	58.5	$1,076,000	$3,807,746
3	Opal Springs Fish Passage and Pool Raise	52.5	$1,550,486	$5,358,232
4	Coe Branch Pipeline & On-Farm Irrigation Efficiency Project	49.5	$924,000	$6,282,232

Table 2. Applications Not Recommended for Funding At This Time

TRT Rank	2017 Funding Cycle Application	TRT Score	Funding Request	Running Total
5	Painted Hills Reservoir Expansion	48	$542,429	$6,824,661
6	Dog River Pipeline Replacement Project	47.5	$1,000,000	$7,824,661
7	Desolation Creek Natural Water Storage Project	45.5	$194,040	$8,018,701
8	Bandon Off-Channel Reservoir Project	45	$7,200,000*	$15,218,701
9	Threemile Joint Fish Screen Project	44.5	$317,495	$15,760,626
10	Flat Creek Watershed Enhancement	44.5	$224,430	$15,443,131

Technical Review Team Ranking

Water Project Grants and Loans – 2017 Funding Cycle

11	Alder Creek Reservoir	43.5	$6,334,590*	$22,095,216
12	Highland Ditch Piping	43	$650,000*	$22,745,216
13	Walla Walla Basin Alluvial Managed Aquifer Recharge	42	$212,509	$22,957,725
14	Water Storage for Irrigation at La Creole Orchards in Polk County	41.5	$59,041	$23,016,766
15	East Reservoir Water Supply & Irrigation Project	41	$651,300	$23,668,066
16	Ruby Peak Diversion	40	$25,000	$23,693,066
17	Marks Creek Meadow Restoration Project	39	$105,490	$23,798,556
18	Madras Agricultural Water Efficiency and Reuse Project	38.5	$43,568	$23,842,124
19	McMullin Creek Dam and Spillway Upgrades	37	$2,623,500	$26,465,624
20	Newport Citywide Advanced Metering Infrastructure	36.5	$1,730,000	$28,195,624
21	Restormel Family Farm Water Conservation and storage project	35.5	$273,750	$28,469,374
22	Silverton Water Treatment Plant Improvement Project	34.5	$5,250,000	$33,719,374
23	Big Springs and Lost River Infrastructure Improvements	34	$17,000	$33,736,374
24	Hwy 240 to Chehalem Drive and North to Columbia Drive Waterline Extension	32	$250,000	$33,986,374
25	Cold Springs Ranch Irrigation System Improvement Project	30	$258,600	$34,244,974
26	Fargo Frontage Road Hazelnut Drip Irrigation	28	$45,621	$34,290,595
27	Queen's Avenue Transmission Line	27	$120,562	$34,411,157
28	Wallace Pump Station, Under-Road Crossing and Piping Upgrade	26.5	$281,100	$34,692,257
29	Stanfield Irrigation District Efficiency Project	24.5	$201,000	$34,893,257
30	South Deschutes County Water Conservation & Frog Habitat	24	$65,750	$34,959,007
31	Burlington Control System Updates	10.5	$3,000	$34,962,007
32	Kubli Ditch Group Restoration	7	$5,700	$34,967,707

*Request includes grant and loan funds

Excerpt from Division 93 Rules on Scoring
Water Project Grants and Loans - 2016 Funding Cycle

OAR 690-093-0090

Scoring and Ranking; funding decisions

(1) The primary elements in the process of scoring and ranking of applications include the following:
- (a) Initial review for completeness by the Department;
- (b) Public comment;
- (c) The Technical Review Team conducts the initial scoring and ranking for the projects, considers comments from applicants and the public and makes loan and grant funding recommendations to the Commission; and
- (d) The Commission determines the final scoring and ranking of projects, provides for additional public comment, and makes the final decision regarding which projects are awarded loans or grants from the account.

(2) The Technical Review Team scoring methodology shall rank applications based upon the public benefits of the project and additional considerations set forth in ORS 541.677 subsection (1)(b), (1)(d) and (1)(e). The Technical Review Team shall use a score sheet provided by the Department. Each of the three public benefit categories shall be given equal importance in the evaluation and will have scoring sublevels including but not limited to the following:
- (a) The evaluation of economic benefits for a project based on the changes in economic conditions expected to result from the project related to:
  - (A) Job creation or retention;
  - (B) Increases in economic activity;
  - (C) Increases in efficiency or innovation;
  - (D) Enhancement of infrastructure, farmland, public resource lands, industrial lands, commercial lands or lands having other key uses;
  - (E) Enhanced economic value associated with tourism or recreational or commercial fishing, with fisheries involving native fish of cultural significance to Indian tribes or with other economic values resulting from restoring or protecting water in-stream; and
  - (F) Increases in irrigated land for agriculture.
- (b) The evaluation of environmental benefits for a project based on the changes in environmental conditions expected to result from the project related to:
  - (A) A measurable improvement in protected streamflows that:
    - (i) Supports the natural hydrograph;
    - (ii) Improves floodplain function;
    - (iii) Supports state or federally listed sensitive, threatened or endangered fish species;
    - (iv) Supports native fish species of cultural importance to Indian tribes; or
    - (v) Supports riparian habitat important for wildlife;
  - (B) A measurable improvement in groundwater levels that enhances environmental conditions in groundwater restricted areas or other areas;
  - (C) A measurable improvement in the quality of surface water or groundwater;
  - (D) Water conservation;
  - (E) Increased ecosystem resiliency to climate change impacts; and
  - (F) Improvements that address one or more limiting ecological factors in the project watershed.
- (c) The evaluation of the social or cultural benefits for a project based on the changes in social or cultural conditions expected to result from the project related to:
  - (A) The promotion of public health and safety and of local food systems;
  - (B) A measurable improvement in conditions for members of minority or low-income communities, economically distressed rural communities, tribal communities or other communities traditionally underrepresented in public processes;
  - (C) The promotion of recreation and scenic values;

(D) Contribution to the body of scientific data publicly available in this state;
(E) The promotion of state or local priorities, including but not limited to the restoration and protection of native fish species of cultural significance to Indian tribes; and
(F) The promotion of collaborative basin planning efforts, including but not limited to efforts under the state Integrated Water Resources Strategy.

(3) Scoring sublevels shall have a numeric point scale that accounts for positive and negative effects of the project. Sublevel scores shall be summed to a public benefit category level. The Department shall set a minimum score for the application to proceed.
(4) The Technical Review Team will use the total score from the score sheet provided by the Department to rank all applications and make loan and grant funding recommendations to the Commission.
(5) The Commission shall determine the final scoring and ranking of projects and make the final decision regarding which projects are awarded loans or grants from the account based on criteria in OAR 690-093-0100.
(6) The Department shall document the ranking of all applications and make the application ranking publicly available after the funding decisions by the Commission have been published.

Attachment 4

Water Project Grants and Loans

Guidance on the Evaluation of Public Benefits

November 2016

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2017 Grant Solicitation

Water Project Grants and Loans
Guidance on the Evaluation of Public Benefits

Overview of Application Review Process

After receiving an application for a Water Project Grant or Loan, the Oregon Water Resources Department reviews the application to ensure it is complete. Complete applications are posted online for a 60-day public comment period. Next, an inter-agency Technical Review Team (TRT) reviews the public comments and evaluates the applications based on demonstration of economic, environmental and social/cultural. The TRT then develops a project ranking, which is posted for a 30-day public comment period. Finally, the Department presents the TRT ranking, public comments, and funding recommendations to the Water Resources Commission for a funding decision.

Overview of Application Scoring

When evaluating an application, the TRT examines public benefits in three categories: economic, environmental, and social/cultural. A project must provide some benefit in each of the three categories in order to be eligible for funding. Each category contains six specific public benefits for a total of 18 possible public benefits. A project is not required to score points in each of the 18 public benefits, but projects that provide the greatest public benefit have the best chance of receiving funding.

When applicants describe the project's public benefits in their application, they should include a description of the conditions prior to and following project implementation, and clearly demonstrate the extent to which the project will provide public benefits, and, if applicable, how it will improve conditions. When possible, applicants should quantify the project's public benefits. The TRT will only consider public benefits derived from the tasks and project scope contained within the application. Public benefits related to future phases of the project (beyond the scope of the project) or unrelated activities will not be considered in public benefit scores and should not be included in the application. Likewise public benefits related to past activities will not be considered.

When making a funding decision, the Water Resources Commission considers: 1) the public benefits as evaluated by the TRT; 2) public comments received on the TRT ranking; and 3) funding projects of diverse sizes, types and geographic locations. As outlined in rule, the Water Resources Commission also considers three potential preferences: 1) a preference for partnerships and collaborative projects; 2) a preference for projects that provide a measurable improvement in protected streamflow, if a project proposes to divert water; and 3) a preference for projects that provide a measurable increased efficiency of water use, if a project proposes to increase efficiency.

Document Purpose

This document provides an overview of each of the public benefits, describes how the TRT will score the benefits, and provides recommendations for what information an application should include when describing a project's public benefits.

Contact

If you have any questions about the evaluation of public benefits, please contact Grant Program Coordinator, Jon Unger at (503) 986-0869 or waterprojects@wrd.state.or.us.

Seven-Point Scale Used in Evaluation of Public Benefits

Each of the public benefits will be graded on a seven-point scale (see below).

Highest	Project is likely to yield exceptional benefits, of unusually high standard or quality; results supported with data, professional opinion, narrative of qualified person(s), or other acceptable documentation
	Project is likely to yield significant benefits; results supported with data, professional opinion, narrative of qualified person(s), or other acceptable documentation
	Project is likely to yield moderate benefits; results supported with data, professional opinion, narrative of qualified person(s), or other acceptable documentation
	Project is likely to yield minor benefits; results supported with data, professional opinion, narrative of qualified person(s), or other acceptable documentation
	Project is likely to yield trace benefits; or project claims of benefits are unsupported / unquantified.
	No benefits likely.
Lowest	Project is likely to have negative effects in this category.

Category 1. Economic benefits

The evaluation of economic benefits of a project is based on the change in economic conditions expected to result from the project and demonstrated in the application.

1a. Does the project create or retain jobs?

Job creation means the project would result in new jobs. Retention means the project would prevent the loss of jobs. Job creation and retention benefits may include direct effects within the organization that owns or operates the project, or it may include indirect effects on retail customers or consumers of the project. Temporary jobs resulting from project implementation will not receive as high of a score as permanent job creation or retention.

Application tip: Quantify the number and identify the type of jobs to be created or retained as a result of the project. Describe the value of the increase or retention of jobs to the local economy.

5	*Exceptional* increases in job creation or retention
4	*Significant* increases
3	*Moderate* increases
2	*Minor* or short-term increases
1	*Trace* increases *OR* benefit claims are unsupported or unquantified
0	Job creation or retention is *unlikely*
-1	*Losses or decreases* in jobs

1b. Does the project increase economic activity?

Economic activity is associated with the production, distribution, and consumption of goods and services. Such economic activity could occur within one or more entities/businesses and includes an increase in production, gross sales, or net revenue compared to the year preceding project completion. It also includes but is not limited to the arrival of new firms, renewed contracts, and increased orders.

5	*Exceptional (five or more years)* increase in economic activity
4	*Significant (three to four years)* increase
3	*Moderate* (*one to two years)* increase
2	*Minor, short-term (less than one year)* increase
1	*Trace* increase *OR* benefit claims are *unsupported or unquantified*
0	Increased economic activity *not likely* to occur
-1	*Losses or decreases* in economic activity

1c. Does the project increase efficiency or innovation?

Increase in efficiency means the project would make improvements in performance or functionality resulting in less effort or waste. Increase in innovation means that new, creative solutions and ideas would be implemented. Examples of increases in efficiency and innovation include water system efficiencies such as system redundancy (back-up, inter-ties), innovative production techniques, energy savings (e.g., the energy required to move, treat, or heat water), and time savings.

5	*Exceptional* increase in efficiency or innovation
4	*Significant* increases
3	*Moderate* increases
2	*Minor* increases
1	*Trace* increases *OR* benefit claims are *unsupported or unquantified*
0	Increased efficiency or innovation not likely
-1	*Decreases* in efficiency or innovation

1d. Does the project enhance infrastructure, farmland, public resource lands, industrial lands, commercial lands or lands having other key uses?

Enhancement of infrastructure, farmland, public resource lands, industrial lands, commercial lands and other lands means that the value of such lands would increase as a result of project implementation. This includes an increase in the re-sale or rental value of the land or improvements, including: maintained, repaired, or upgraded infrastructure; maintained or buffered riparian areas; and maintained or improved soils.

5	*Exceptional* enhancements of infrastructure or land, increasing property value
4	*Significant* enhancements
3	*Moderate* enhancements
2	*Minor* enhancements
1	*Trace* enhancements *OR* benefit claims are *unsupported or unquantified*
0	Enhancements *not likely*
-1	Infrastructure or lands that are *degraded or removed from productive uses*

1e. Does the project enhance the economic value associated with: tourism, recreation, fishing (recreational or commercial), fisheries involving native fish of cultural significance to Indian tribes, or other economic values resulting from restoring or protecting water instream?

Examples of enhancement of these economic values include increases in: daily park fees, tour guide revenues, boat or gear rentals, fishing licenses, or hospitality and lodging.

5	*Exceptional* increased value of tourism, recreation, fishing, fisheries involving native fish of cultural significance to Indian tribes, or other economic values resulting from restoring or protecting water instream
4	*Significant* increased value
3	*Moderate* increased value
2	*Minor* increased value
1	*Trace* increased value *OR* benefit claims are *unsupported or unquantified*
0	Enhanced values *not likely*
-1	Decrease in the economic value of tourism, recreation, fishing, fisheries involving native fish of cultural significance to Indian tribes, or other economic values resulting from restoring or protecting water instream

1f. Does the project result in increases in irrigated land for agriculture?

Increases in irrigated land for agriculture mean that the numbers of acres (acreage) to be irrigated after project completion would be greater than what could previously be irrigated. Acreage can include lands that were never historically in production or lands that were historically in production but were taken out of production as a result of insufficient water supply.

Application tip: Highlight the amount of land currently in production in the area, identify the quantity of additional acreage to be irrigated, and calculate the percentage increase in irrigated acreage that would result from the project.

5	*20 percent or more increase* in irrigated acreage
4	*15-19 percent* increase
3	*10-14 percent* increase
2	*5-9 percent* increase
1	1-4 percent increase *OR* benefit claims are *unsupported or unquantified*
0	Increased irrigated land *not likely*
-1	*Decreases* irrigated land for agriculture

Category 2. Environmental benefits

The evaluation of the environmental benefits of a project is based on the change in environmental conditions expected to result from the project and demonstrated in the application.

2a. Does the project result in measurable improvements in protected streamflows?

Protected streamflow means water that remains in or is released into the natural channel *and* is legally protected by the State in order to achieve one or more of the following:

(A) Supports the natural hydrograph;
(B) Improves floodplain function;
(C) Supports state- or federally-listed sensitive, threatened or endangered fish species;
(D) Supports native fish species of cultural importance to Indian tribes; **or**
(E) Supports riparian habitat important for wildlife.

Application tip: To score in this category an application must describe the legal means by which water would be protected by the State, as well as the quality, timing, duration or other value this streamflow would contribute to the stream.

5	*75-100 percent* of new project water (or equivalent volume) is protected instream or streamflow is exceptionally improved
4	*50-74 percent* of new project water (or equivalent volume) is protected instream or streamflow is significantly improved
3	*25-49 percent* of new project water (or equivalent volume) is protected instream or streamflow is moderately improved
2	*5-24 percent* of new project water (or equivalent volume) is protected instream or streamflow is somewhat improved
1	1-4 percent of new project water (or equivalent volume) is protected instream or trace amounts of streamflow are protected instream *OR* benefit claims are *unsupported or unquantified*
0	Improvements in protected streamflow *not likely OR streamflow would not be legally protected by the State*
-1	*Decreases* protected streamflow (e.g., proposes to reverse an instream lease)

2b. Does the project result in measurable improvements in groundwater levels that enhance environmental conditions in groundwater restricted areas or other areas?

Measurable improvements in groundwater levels mean that groundwater declines would be reduced or eliminated and/or groundwater levels would increase. Stabilization or improvements in groundwater levels could come from aquifer storage and recovery, artificial recharge projects, natural recharge, or discontinued / reduced groundwater use.

Application tip: Use quantitative measurements to indicate that any improvements would be measurable. If applicable, indicate if these improvements would occur in groundwater restricted area.

5	*Exceptional* improvements in groundwater levels
4	*Significant* improvements
3	*Moderate* improvements
2	*Minor* improvements
1	*Trace* improvements *OR* benefit claims are *unsupported or unquantified*
0	Improved groundwater levels *not likely*
-1	Groundwater declines

2c. Does the project result in measurable improvements in the quality of surface water or groundwater?

Water quality parameters include but are not limited to: temperature, dissolved oxygen, contaminated sediments, toxic substances, bacteria, or nutrients. Improvements could result from a higher quality of water discharged to surface water or injected into groundwater, or from increased flow, or from treatment or filtration of water already in the environment.

Application tip: Any improvement must be measurable or quantifiable. One must be able to measure or determine the change in quality before and after project implementation.

5	*Exceptional* improvements in water quality
4	*Significant* improvements
3	*Moderate* improvements
2	*Minor* improvements
1	*Trace* improvements *OR* benefit claims are *unsupported or unquantified*
0	Improved water quality *not likely*
-1	*Decreases* in water quality

2d. Does the project result in water conservation?

Water conservation is a means of eliminating waste or otherwise improving the efficiency of water use by modifying the technology or method of diverting, transporting, applying, or recovering water.

Application tip: Identify the quantity of water saved, by comparing what water would be needed to accomplish the task after project completion with what was previously used to achieve the same task.

5	*21 percent or more* reduction in water use to achieve the same outcomes
4	*11-20 percent* reduction
3	*6-10 percent* reduction
2	*1-5 percent* reduction
1	Trace (<1 percent) reduction *OR* benefit claims are *unsupported or unquantified*
0	Water conservation *not likely*
-1	*Additional water used* to achieve the same outcomes (e.g., sacrificing water efficiency for energy/pumping efficiency)

2e. Does the project increase ecosystem resiliency to climate change impacts?

Ecosystem resiliency to climate change means increasing the ecosystems ability to adapt to changes in climate or positively respond to the impacts of climate change. This includes: increasing streamflow, increasing natural storage (e.g., wetlands, upland meadows), decreasing water temperature, protecting or enhancing cold-water habitat, restoring floodplain connectivity and backwater habitats, restoring stream buffers, decreasing coastal erosion and inundation, or decreasing risk of drought, fire, plant disease, or invasive species outbreak.

5	*Exceptional* improvements in ecosystem resiliency to climate change
4	*Significant* improvements
3	*Moderate* improvements
2	*Minor* improvements
1	*Trace* improvements *OR* benefit claims are *unsupported or unquantified*
0	Improvements in ecosystem resiliency to climate change *not likely*
-1	*Decreases* in ecosystem resiliency to climate change

2f. Does the project address limiting ecological factors in the project watershed?

A limiting ecological factor is an environmental condition that limits the growth, abundance, or distribution of an organism or a population of organisms in the project watershed. Examples of limiting factors may include, but are not limited to: improvement of fish passage, habitat for sensitive, threatened and endangered species, water quality, or streamflow.

Application tip: To score in this category an application must include citation of public reports, peer reviewed scientific studies, or other substantiating documentation from a state or federal agency to verify the limiting ecological factor's presence in the watershed.

5	*Exceptional* progress towards removing limiting ecological factors
4	*Significant* progress
3	*Moderate* progress
2	*Minor* progress
1	*Trace* progress *OR* benefit claims are *unsupported or unquantified*
0	*Not likely* to address limiting ecological factors in the project watershed *OR documentation verifying limiting ecological factor not included in the application*
-1	*Exacerbates* limiting ecological factors in the project watershed

Category 3. Social or Cultural benefits

The evaluation of the social/cultural benefits of a project is based on the change in social or cultural conditions expected to result from the project and demonstrated in the application.

3a. Does the project promote public health, public safety, and local food systems?

This public benefit includes: protection of drinking water sources, repair of septic systems/field, maintenance and repair of other water infrastructure, treatment and protection of drinking water itself, improved emergency response and advisory systems (e.g., WARN network, fish consumption advisories, water contact advisories, etc.), improved or protected water quality for human consumption and human contact (e.g., removal or prevention of toxics, contaminants of concern, bacteria), and the promotion of self-reliant and resilient food networks that connect food producers and food consumers in the same geographic region.

5	*Exceptional* improvements in public health, public safety or local food systems
4	*Significant* improvements
3	*Moderate* improvements
2	*Minor* improvements
1	*Trace* improvements *OR* benefit claims are *unsupported or unquantified*
0	Improvements in public health, public safety or local food systems *not likely*
-1	*Degrades* public health, public safety or local food systems

3b. Does the project improve conditions for Oregon's environmental justice communities (e.g., minority or low-income communities, economically distressed rural communities, tribal communities, or other communities traditionally underrepresented in public processes)?

Environmental justice communities in Oregon are minority or low-income communities, economically distressed rural communities, tribal communities, or other communities traditionally underrepresented in public processes.

Application tip: Identify which of those communities would benefit from the project and quantify these benefits. Demonstrate that project-siting decisions have been examined and approved by affected landowners and affected environmental justice communities.

5	*Exceptional* benefits to environmental justice communities, and environmental justice communities were consulted in the process of developing projects
4	*Significant* benefits and environmental justice communities were consulted
3	*Moderate* benefits and environmental justice communities were consulted
2	*Minor* benefits and environmental justice communities were consulted
1	*Trace* benefits and environmental justice communities were consulted; *OR* benefit claims are *unsupported or unquantified*
0	Improved conditions *not likely*
-1	Worsen conditions for environmental justice communities

3c. Does the project promote recreation and scenic values?

Recreation and scenic values include recreational fishing, motorized boating, non-motorized boating, other forms of water-based recreation, swimming, fishing, hunting, wildlife viewing, sightseeing, hiking, photography, and aesthetic values. To promote those values means the project would improve the quality of or access to the examples identified.

Application tip: Evidence to support this benefit can be provided in the form of qualitative information, which may include interviews, professional opinion, or surveys.

5	*Exceptional* promotion of recreation or scenic values
4	*Significant* promotion
3	*Moderate* promotion
2	*Minor* promotion
1	*Trace* promotion *OR* benefit claims are *unsupported or unquantified*
0	Benefit to recreation and scenic values *not likely*
-1	Detracts from recreation and scenic values

3d. Does this project contribute to the body of scientific data publicly available in this state?

Contributing to the body of scientific data means collecting new scientific information *and* making it available to the public. For example, data could be collected from water quality or habitat monitoring; groundwater studies or other investigations; stream gages; or monitoring wells. Contributions could also come from conducting a Seasonally Varying Flow analysis. Collection of scientific data is not sufficient to achieve this public benefit---the data must be made publicly available.

Application tip: Describe the equipment and/or methods that would be used and whether the data would be made available to the public. Note how equipment would be calibrated and maintained.

5	*Exceptional* contributions of new data to the body of scientific data publicly available in the state
4	*Significant* contributions
3	*Moderate* contributions
2	*Minor* contributions
1	*Trace* contributions *OR* benefit claims are *unsupported or unquantified*
0	Contribution *not likely*
-1	N/A

3e. Does this project promote state or local priorities, including but not limited to the restoration and protection of native fish species of cultural significance to Indian tribes?

A state or local priority is one that is identified in a plan, strategy, or study such as Oregon's Integrated Water Resources Strategy, a place-based integrated water resources plan, the Oregon Plan for Salmon and Watersheds, state and local water quality plans, species and habitat conservation or recovery plans/strategies, forestry plans, regional solutions priorities, local economic development plans, state or local hazard mitigation plans, etc. The Oregon Department of Fish and Wildlife maintains a list of native fish species: http://www.dfw.state.or.us/fish/crp/freshwater.asp.

5	*Exceptional* role supporting a state or local priority
4	*Significant* role
3	*Moderate* role
2	*Minor* role
1	*Very minor* role *OR* benefit claims are *unsupported or unquantified*
0	No promotion of state or local priorities
-1	Runs counter to state or local priorities

3f. Does this project promote collaborative basin planning efforts, including but not limited to efforts under the state Integrated Water Resources Strategy?

Collaborative basin planning efforts incorporate public processes that are transparent and inclusive of diverse interests.

Application tip: Demonstration of a collaborative planning effort may include publicly noticed meetings, posting agendas and decisions so they were publicly available, the inclusion of multiple types of water users represented in the process (e.g., instream interests, agricultural, municipal, domestic and industrial users), evidence that the project is supported by the community, and evidence that the project was identified in a Place-Based Integrated Water Resources Plan or another collaboratively developed strategic plan.

5	*Exceptional:* Project was identified in a collaboratively developed plan that is supported by all basin interests and where the public had meaningful opportunities to provide input
4	*Significant:* Project was identified by a collaborative group that includes representation of multiple interests and where the public had meaningful opportunities to provide input
3	*Moderate:* The public was notified of the project and had meaningful opportunities to provide input
2	*Minor*: The public was notified of the project and had minimal opportunities to provide input
1	Claims are *unsupported or unquantified*
0	Stakeholders with differing perspectives were *not informed nor consulted* about the project
-1	Stakeholders with differing perspectives were *excluded* during project development

Water Project Grants and Loans

Public Comments Received
2017 TRT Funding Recommendation

Document Description

After the Technical Review Team ranks projects based on their public benefits, the Commission is required by statute to provide an additional public comment opportunity. The TRT ranking and recommendation were published on the Department's website and distributed on the Water Resources Development Program's listserve for a 30-day public comment period, which took place from September 27 through October 27. The Department received comments from 21 individuals and organizations on six applications. Public comments on 2017 TRT funding recommendation are in the order and page number listed below. The Department's responses to these comments are included in Attachment 6.

Contents

Coe Branch Pipeline and On-Farm Irrigation Efficiency (two comments) 2
Dog River Pipeline Replacement (one comment) 4
Opal Springs Fish Passage and Pool Raise (five comments) 7
Powder Valley Connector (thirteen comments) 25
WaterWatch of Oregon (comments on mulitiple applications, general feedback) 38

Middle Fork Irrigation District

P.O. Box 291
8235 Clear Creek Rd
Parkdale, OR 97041
Phone (541) 352-6468
Fax (541) 352-7794

October 24, 2017

Grant Program Coordinator
Oregon Water Resources Department
725 Summer St., Suite A
Salem, OR 97301

Re: Coe Branch Pipeline and On-farm Irrigation Efficiency Project

Dear Grant Program Coordinator,

Thank you for your support of the Coe Branch Pipeline and On-farm Irrigation Efficiency project. I would like to take the opportunity to address a number of the OWRD and Technical Review Team (TRT) comments. OWRD noted that "Instream benefits may result through on farm efficiency but the project as proposed would not legally protect water instream." The District is confident that *both* the on-farm efficiency and the Coe Branch Pipeline projects *will* provide higher summer time flows below Clear Branch dam. As noted in the application, Clear branch is a high priority stream for flow restoration because it is a non-glacial tributary providing high quality habitat for threatened bull trout, spring chinook, and winter steelhead. Although the District is not planning to pursue a Conserved Water Allocation as part of this project, streamflow protection will be identified and incorporated into the renewed Special Use permit (SUP) from the U.S. Forest Service for operation of the dam and diversions.

The TRT noted the application could be improved by describing more clearly how the proposed project meets fish management objectives and how the reservoir will be managed. Key fish management objectives are to increase summer streamflow in Clear branch below the reservoir and at the same time maintain or increase reservoir levels. Increased summer time flows in Clear branch will benefit spring chinook, steelhead, and bull trout. Increased reservoir levels will benefit the bull trout population that live in the reservoir and spawn in its tributaries. This project will allow more Coe branch water to be used in the summer, so that less reservoir water is needed for irrigation; thereby giving the District the ability to increase or maintain reservoir levels and release more flow to Clear branch.

In response to the review comment that the application "lacked assurances that efficient irrigation infrastructure would be installed," please find the attached letter from NRCS indicating that MFID patron contracts with the NRCS have been entered into for on farm improvements. Efficient systems are being installed and will continue to be as the ability to provide cleaner sediment free water is realized.

And lastly in regards to the comment about "lack of information on the status of the Special Use permit that has been in negotiation for many years." Planned reissuance of the SUP is scheduled for 2021. In preparation, the District has been working collaboratively with basin stake holders for the past 11 years on a suite of improvements to our operation and infrastructure that will allow the District to reduce its impacts on the environment while providing efficient and resilient water delivery on farm. MFID is in the NEPA process on these projects and expects to be in the construction phase in the next few years. It is incorrect to characterize the process we are in as a "negotiation" of the new SUP. We are working collaboratively with stakeholders to bring our system up to date for environmental benefits and continued support of the agricultural community.

Respectfully,
Craig DeHart
Middle Fork Irrigation District Manager

USDA
United States Department of Agriculture

Natural Resources
Conservation Service

Parkdale Field Office

6780 Hwy 35
Mt Hood Parkdale
OR 97041
Voice 541.352.1037
Fax 855.651.8899

October 4, 2017

Oregon Water Resources Department
Attn: Jon Unger
725 Summer St NE, Ste A
Salem, OR 97301

Dear Jon,

In an effort to coordinate with the efforts made by the Middle Fork Irrigation District to supply clean water to agriculture producers and provide critical habitat in the Middle Fork Hood River, NRCS has awarded $500,000 to the Middle Fork Irrigation District On-Farm Irrigation Improvement Project for the 2017 fiscal year.

With those funds, a total of 12 private landowners and a total of 314 acres within the district were able to obtain a contract to help improve irrigation efficiency and thus reduce water use on their crop land. The knowledge that they will be seeing cleaner irrigation water, free from damaging glacial sediment, has made the transition to these more efficient systems a more confident move.

NRCS will continue to support the Middle Fork Irrigation District On-Farm Irrigation Improvement Project for the 2018 fiscal year with the expectation of further contracts within the district.

Sincerely,

Carly Heron

Carly Heron
District Conservationist

CITY OF THE DALLES
Department of Public Works
1215 West First Street
The Dalles, Oregon 97058

October 27, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

Re: Water Project Grants and Loans TRT ranking

Dear Coordinator:

I am writing in support of the application for funding submitted by City of The Dalles for the Dog River Pipeline Replacement Project, and to reiterate clarifying information to help improve the ranking of the project for funding. The comments presented herein are intended to specifically address notes and conclusions presented in the Technical Review Team (TRT) Recommendation for the project.

Project Background
The Dog River Pipeline is a 3.5 mile long, over 100 year old wooden water transmission pipeline that carries 54% of the City of The Dalles' municipal water supply of 1.26 billion gallons per year. Due to significant deterioration, the pipeline leaks nearly 1 million gallons per day at peak flows, and is at risk of complete failure.

This project will replace the wooden pipeline with a ductile iron pipe as well as enhance flow metering systems, install fish screens and upstream/downstream fish passage structures, construct an arch culvert where vehicles are currently required to drive through a stream, and commit to providing bypass stream flows during critical periods for important fish species such as Steelhead, Coho, and Chinook. The project will eliminate the enormous daily loss of water, mitigate the risk of catastrophic pipeline failure, and provide several significant environmental and social benefits.

Economic Public Benefits
The TRT summary correctly stated the large economic burden to the community that would occur if this 100-year-old wooden pipeline, which is the primary source of municipal water for The Dalles, fails. The TRT noted that the project was a priority project on the North Central Regional Solutions project list (ranked #3), and that it was ranked very high on the Region Comprehensive Economic Development Strategy (ranked #2). However, the TRT Recommendation failed to note that the project was also:

- The highest priority project for The Dalles City Council
- The second highest priority project in Wasco County for the Wasco County Economic Development Commission

The TRT also commented that the application would be strengthened if it better quantified the project impacts to the community, provided additional details about the population and number of businesses served, and the current vulnerability of the City of The Dalles system. In response to these comments, I draw your attention to the following information from the application.

phone (541) 506-2008 danderson@ci.the-dalles.or.us fax (541) 296-4346

The City strongly relies on this element of critical water supply infrastructure, as was indicated in the application by repeatedly stating that the existing pipeline supplies over half of the City's annual water supply (answers provided to questions in Sections III, V A 5, V A 6, VII 20 a, VII 20 c, VII 21 d, and VII 21 e). The project will prevent the imminent failure of the existing wooden pipeline and loss of over half the City's annual water supply which would adversely impact every business, industry and residential water customer in the City. The adverse impacts would include water-use curtailment to all customers, loss of jobs, potential loss of vital national and worldwide internet services from affected local data farms (Google), loss of future development, and dramatically increased water utility rates to pay for emergency replacement of the failed pipeline. With such far-reaching impacts, it is impossible to accurately quantify the full impact of losing over half of the City's water supply; it is, however, easily understood that these adverse impacts should be avoided, and this project would do that.

Related to the population and businesses served, as stated in the application, The Dalles is a community of about 15,000 population (which is over half the entire county population) and has about 7,200 jobs. And, as stated in Section VII:

- Median household income in The Dalles is below the state average
- Water utility rates are already well above the state average
- The Dalles has higher than average minority and over-age-65 populations.

Environmental Public Benefits

The TRT correctly noted that the project would eliminate current water loss due to leakage and would result in the installation of fish screens at the diversion. It also noted the project's intent to provide bypass water in Dog River during the months of September and October which were the months that tribal representatives, when consulted specifically about this project, indicated were the most important months for downstream spawning activities. However, the TRT summary incorrectly states that the bypass flows would be intended to benefit tribal hatchery spawning. The spawning activities that occur downstream from the project area, and which would therefore benefit from properly-timed bypass flows, include natural runs of Coho salmon and are not part of any deliberate hatchery release program. It appears, from the statement about "hatchery spawning", that the TRT under-valued the environmental benefits of the bypass flows to be provided by the project.

The TRT report also incorrectly concluded that the bypassed water would not be protected instream. Within Dog River, downstream from the project's point of diversion, the Oregon Department of Fish and Wildlife holds an unmet instream water right that is senior to any other users and which would legally protect any bypassed water instream. Again, the environmental benefits were under-valued in the ranking.

Lastly, the TRT report states that the public benefits for the project could be improved by coordinating with the Oregon Department of Fish and Wildlife (ODFW) on timing. The City, as project owner, did specifically consult with ODFW on the project and, in fact, had a letter of support from ODFW for the project which was submitted to WRD as part of the grant application in 2016. It was our understanding that the 2017 grant process was revised in such a way that a letter of support from ODFW, as a state agency, could not be provided for the project this year. The suggested consultation with ODFW did occur, and the project ranking should reflect as much.

The TRT ranking report did not mention all of the environmental benefits of the project that were listed in the application. The project, if constructed, will also voluntarily install fish passage systems at the point of diversion in Dog River that don't currently exist, and it will construct an arch culvert on a Forest Service road over a stream where an unimproved stream crossing currently exists. This culvert will eliminate the current practice of vehicles driving through the unprotected stream and creating increased erosion and turbidity.

With a correct understanding of the information provided in the application, it is clear that the project provides greater environmental benefits than were reflected in the TRT comments, that the suggested consultations did occur, and that the project warrants higher scoring for Environmental Public Benefits.

Social/Cultural Public Benefits

The TRT commented that the application could have been improved if it provided additional details about the collaborative process that promoted the project. However, the application did provide the following information related to public processes for the project:

- It is the highest-priority project for The Dalles City Council, which is the governing body elected to represent citizens of The Dalles.
- It is the second highest priority project in Wasco County for the Wasco County Economic Development Commission
- It is the #2 ranked project for the Region Comprehensive Economic Development Strategy.
- It is the #3 ranked project identified in the North Central Regional Solutions project list.
- Broad public comment on the project has been solicited through the US Forest Service's public scoping as part of the NEPA analysis for the project.
- 13 letters of support were submitted as part of the application indicating broad local support from local public, commercial, industrial, economic development, and public health entities.

In addition, the application provided information summarizing the benefits of the project to the local citizens including minority, low-income/fixed-income, and over-age-65 populations in a community where these groups make up higher-than-average percentages of the local population with lower-than-average median incomes.

The application for this project should receive very high scoring for Social/Cultural Public Benefits.

Conclusion

In conclusion, it appears that the TRT may not have fully appreciated all of the public benefits that would be provided by completion of the Dog River Pipeline Replacement project as outlined in the application. It is also evident that the TRT drew some inaccurate conclusions or made incorrect assumptions related to some of the environmental benefits. Because of these issues, it seems likely that the project was inadvertently scored lower than was warranted. On behalf of City of The Dalles, I respectfully request that the ranking of this project be elevated to a point where funding is awarded for its implementation.

If you have any questions regarding these comments, please feel free to contact me at your convenience.

Respectfully submitted,

Dave Anderson

Dave Anderson
Public Works Director
1215 W 1st Street
The Dalles, OR 97058
(541) 506-2008

Cc: Nate Stice, North-Central Regional Solutions Coordinator

Oregon Water Resources Department
Attention: Kim Ogren, Water Resources Development Program Manager
725 Summer Street NE, Suite A
Salem, OR 97301
October 25, 2017

RE: Supplemental Responses to Comments of the Technical Review Team for Grant Application of Fish Passage at Opal Springs

Dear OWRD Review Committee:

Deschutes Valley Water District (DVWD) is the owner of the Opal Springs Hydroelectric Project in central Oregon seeking funding support for the construction of an upstream/downstream volitional fish ladder to be constructed in 2018 and 2019. In April 2017, DVWD submitted a grant application to the Oregon Water Resources Department (OWRD) for $1,550,486. In September 2017, the applicants were notified that they had been recommended to receive these funds.

This recommendation is a pivotal turn for our project. Due to funding concerns that arose during 2016 and 2017, DVWD has been working cooperatively with other funding partners, the construction contractor and resource agencies to value-engineer the project so that it could be ready for construction in 2018. The news of being short-listed for this grant is very exciting for DVWD, the state and federal agencies, and the non-governmental organizations that have been working on this project for over 10 years; who collectively have helped raise funds to help this project move forward.

This fish ladder will connect over 110 miles of habitat for anadromous fish use. The fish passage project represents a major effort that will not only provide significant environmental benefits to the basin, but will bring temporary jobs, provide new recreation opportunities and improve the local economy, much of which is based on fishing and tourism in our local streams. Protecting this habitat for fish passage means protecting water and keeping it in-stream.

Our commitment to this project is supported by our continual momentum towards awarding construction contracts and firm plans for the 2018 in-water work period. With this grant, DVWD believes that we will get this project over the finish line. We understand responses were not required for the TRT comments, however, we want to continue this discussion and answer all questions the TRT may have. We will also be available to answer questions and to thank you personally at the Public Meeting in December 2017.

Sincerely,

Edson Pugh
DVWD General Manager

Supplement Submittal
in Response to Comments by the Technical Review Committee

2015 – 2017 GRANT SOLICITATION

OPAL SPRINGS HYDROELECTRIC FISH PASSAGE AND POOL RAISE PROJECT
(FERC PROJECT NO. 5891)

Deschutes Valley Water District
Madras, Oregon

Prepared by:
Kleinschmidt

Portland, Oregon
www.KleinschmidtGroup.com

October 25, 2017

Economic Public Benefits

Technical Review Committee Comment:

Economic benefit strengths of the proposed project are that it intends to preserve water delivery for agriculture, prevent an increase in water rates, and increase hydropower generation income. Another economic benefit is increased opportunities for camping and whitewater rafting. There are also economic benefits associated with the creation of temporary jobs and a strengthened long-term viability of municipal water supply. The application could be improved by better describing the benefits to the larger communities instead of focusing on statements about customers of the project and by providing additional substantiating detail.

DVWD Response to Comment:

Deschutes Valley Water District (DVWD) provides water to over 4,000 residents of Culver, Metolius, Madras, and surrounding areas in Jefferson County, Oregon. As mentioned in the application, Jefferson County is an economically distressed community that contains within it the large Native American population of the Confederated Tribes of the Warm Springs Indian Reservation. The 2015 American Community Survey found the following information for residents of each city listed:

	City of Madras	City of Culver	City of Metolius	Jefferson County	State of Oregon
Total Population	**6,046**	**1,357**	**710**	**21,720**	**3,831,074**
Percentage of Families and People Whose Income is Below the Poverty Level (All families)	**24.4**	**13.6**	**17.1**	**14.7**	**11.2**
Unemployment Rate	**14.9**	**16.8**	**9.3**	**14.4**	**9.3**

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

As shown by the data above, the cities closest to the Opal Springs project have a very high percentage of people living below the poverty line (the data for the Warm Springs Indians is captured under Jefferson County). Additionally, the overall county unemployment rate reflects the struggling economies of eastern Oregon. The provision of a safe, secure source of potable water is a critical role served by the DVWD; the hydropower project helps keep this fundamental need economical; the intent of the proposed project is to manage risks to this water supply.

Economic Benefits to Larger Community

As mentioned in the application, the Jefferson County commercial fishing, tourism and recreational fishing industries are major contributors and employers of the local economy. Trout fishing in the canyon upstream of the Opal Springs, an area which currently has no fish passage, is considered a Blue-Ribbon quality fishery for native redband trout. With Opal Springs blocking

the Crooked River from fish passage since the 1980s, trout fishing in this area has declined significantly and trout populations became very limited. Currently, Chinook and Steelhead provide fall and winter commercial fishing, tourism and recreational fishing in the area, but the increase in redband trout would open those opportunities in the spring, as well.

According to the State of Oregon's Employment Department Economic Data for the 1st Quarter 2017 for Jefferson County, the leisure and hospitality private sector, which includes establishments that operate to enable patrons to participate in recreational activities, employ 536 people over 63 businesses, providing $2,036,340 in wages, and providing an average quarterly wage of $3,799 per employee. In all, the leisure and hospitality sector employs 6% of the county. In the "fishing, hunting and trapping industry," of which fish harvesting is the predominant economic activity of this subsector, another 300 people are employed with approximately $2.7M in wages (although a specific breakout of the fishing industry is not available).

In terms of recreation, a 2008 study[1] found that 631,000 Oregonians participated in recreational fishing, making 5,241 trips, and spending $341.5 million on recreational fishing trips. They additionally spent $441.3 million on fishing gear.

Economic Benefits to Tribal Communities

There is a direct correlation between a successful stream population of fish, and the success of the Tribes in Jefferson County. In fact, fishing was one of the few privileges ensured to the Warm Springs Indians in the Treaty of 1855 in which the Tribal members were moved onto the Warm Springs Reservation. The tribes were given the rights to take fish from the streams running through and bordering the reservation, as well as to hunt, gather roots and berries, and to pasture their stock on all unclaimed lands. In fact, the purpose of the Confederated Tribes of Warm Springs Department of Fisheries is to "provide fisheries populations in harvestable levels, allowing opportunities for tribal members to exercise their treaty rights of harvest" (Warm Springs 2016). These harvests represent the preferred livelihood for many tribal members and allow them to fish and trade.

Environmental Public Benefits

Technical Review Committee Comment:

An environmental benefit strength of the proposed project is that it intends to reconnect redband trout and open historic habitat for bull trout. Another environmental benefit is that the proposed project addressed the number two fish passage priority project in the state as identified by the Oregon Department of Fish and Wildlife. There is also environmental benefit associated with increased resilience to climate change that could result from fish passage. A limiting factor for the environmental benefits of the proposed project is that there is not an opportunity for the state to legally protect flows instream. Non-consumptive hydroelectric use does not allow for the legal

[1] Fishing, Hunting, Wildlife Viewing and Shellfishing in Oregon, 2008 State and County Expenditure Estimates, May 2009 Prepared for ODFW and Travel Oregon by Dean Runyan Associates, Portland, Oregon

protection of water instream and the credit banking flows described in the application are not legally protected by the state.

DVWD Response to Comment:

The Federal Clean Water Act (CWA) allows states to approve and apply conditions to projects proposed in the waters of the United through, including wetlands. The Oregon Department of Environmental Quality (DEQ) has the mandatory authority to act on and enforce the federal requirements of the CWA through the 401 Water Quality Certification (WQC) program. Conditions of the 401 Certification become conditions of the Federal permit or license issued to the licensee. In short, the requirements of a 401 WQC are binding commitments between DVWD and the State of Oregon to legally protect the waters of the United States through the conditions stated in the 401 WQC. Although this Bypass Flow Accrual Account is not considered a "water right," through the terms of the 401 WQC and FERC license, DVWD is compelled to specifically allocate these stream flows for the purposes described in the OWRD application.

DVWD was issued a final CWA 401 Certification for the Opal Springs Project on October 26, 2016. Section 2(b) of the Opal Springs WQC is for the "credit banking flows," known as the Bypass Flow Accrual Account (BFAA). DVWD will be required to establish, manage and administer the BFAA in accordance with the methodology presented in proposed License Article 4 of the 2015 Amended and Restated Settlement Agreement (see Attachment A).

Social/Cultural Public Benefits

Technical Review Committee Comment:

A social/cultural benefit strength of the proposed project is that it represents a collaborative process that is supported by regional fisheries organizations. Other social/cultural benefits are increased recreation in a Blue-Ribbon fishery area, the public availability of scientific data, and the proposed project's location within an economically distressed Jefferson County. There is also social/cultural benefit associated with the importance of redband trout to Indian Tribes.

DVWD Response to Comment:

DVWD did not identify any comments to address.

Other Comments

Technical Review Committee Comment:

The review team noted that the project demonstrates a readiness for funding (i.e. shovel ready). Another comment was that the application could more clearly described how the project fits within a complex water distribution system.

DVWD Response to Comment:

DVWD established a Water Management and Conservation Plan in 2012 as part of an effort to provide information necessary to maintain the supply of adequate, reliable and clean water to its

present and future customers, in a manner consistent with the requirements of public water suppliers (DVWD 2012). DVWD is a public water supplier (#4100501) that supplies drinking water to nearly 4,100 consumers in residential, commercial and industrial settings. The water supply is obtained from the lower Opal Springs, and three ground water appropriation wells near DVWD's main office.

Opal Springs

Water is pumped out of the canyon to three Main Reservoir tanks located on top of the canyon rim, west of Culver, Oregon (see Figure 1). Water is pumped out of the canyon through one 12-inch and one 20-inch diameter steel pipelines. These reservoirs are approximately 825 feet above the pump facilities. Water is distributed from the reservoirs to customers within the 130-square-mile area served by the District. Water is continually pumped from the lower Opal Springs 24-hours a day. By monitoring the level of the Main Reservoirs, one or any combination of these pumps is manually operated to meet demands of the water being used. The most recently constructed new pump house provides the capacity for eight 500 horsepower pumps; however, the District presently uses only two 500 horsepower pumps. The redundancy of the two pump houses and their transformers provides more reliability to District customers. If one fails, the District has a backup system.

Wells

Three wells (Nos. 1, 2 and 3) supply the District with water in conjunction with lower Opal Springs. The wells are located on the east side of the Crooked River at distances ranging from approximately 300 to 1300 feet south of the lower Opal Springs. District water rights allow appropriation of ground water from wells between June 15 and August 31 at a maximum rate and annual volume of 16.7 cfs and 2,312 acre-feet, respectively for permit G-16548 and at a maximum rate of 10.38 cfs under T-9720 for a total of 27.08 cfs. These ground water rights are subject to mitigation under OAR Chapter 690 Division 505.

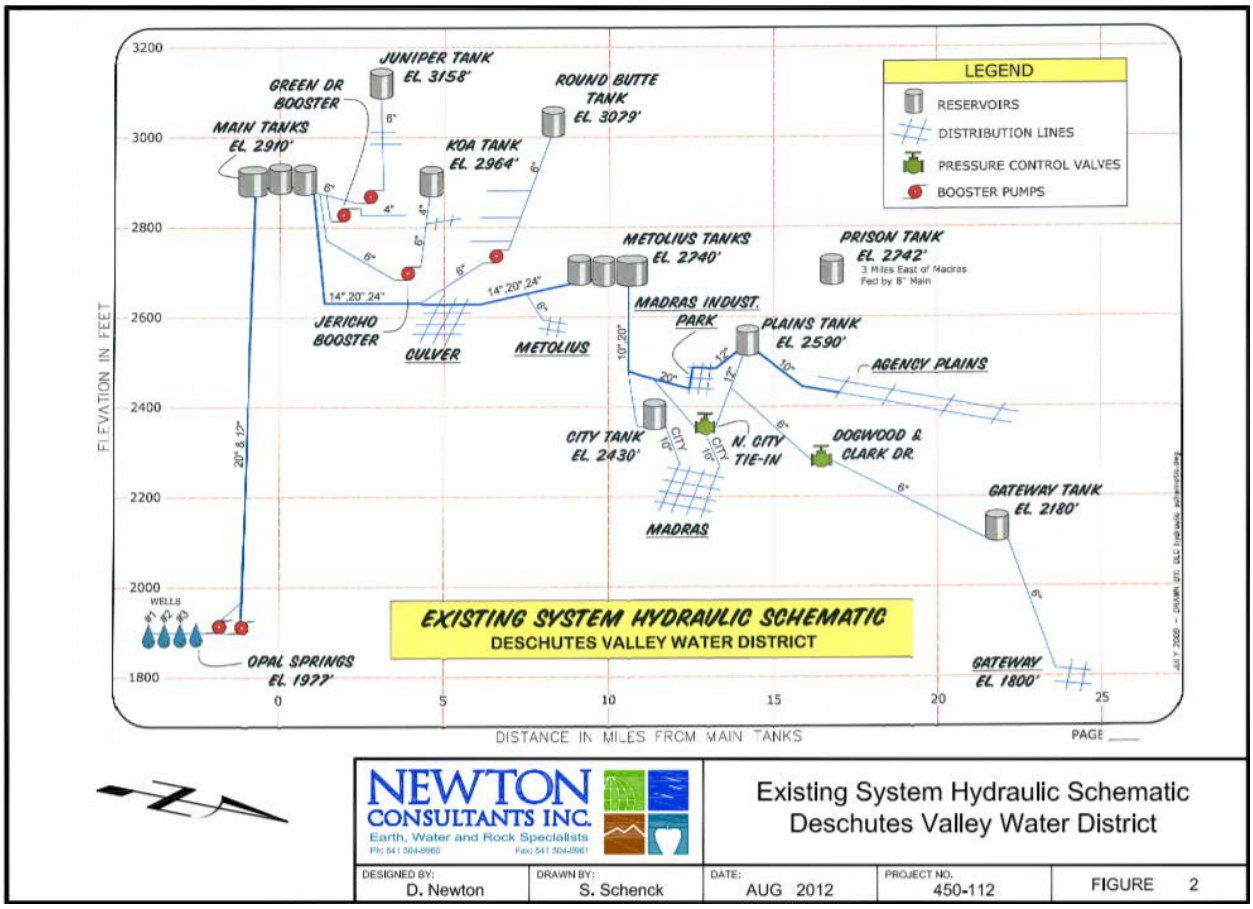

Figure 1 Existing System Hydraulic Schematic

Communities Served

The City of Culver, the City of Metolius, and the surrounding rural areas are provided water from the three Main Reservoirs. The largest population zone is served by the three Metolius Reservoirs. They supply the City of Madras, the Madras Industrial Park, and during the high use months, the Gateway area. The Plains Tank supplies the Agency Plains area north of Madras and the Gateway area in the lower demand winter month periods.

The service area boundaries extend from Juniper Butte on the south to Agency Plains and Gateway, west of Warm Springs, on the north. The communities of Culver, Madras and Metolius are within the service area and are supplied with water by the District. The District's boundaries encompass a broad area for a relatively small water community (approximately 4,000 services). The District water conveyance distance between the southwest and northeast service area boundaries is roughly 23 miles.

The District supplies water to customers in the communities of Culver, Madras and Metolius, and to customers in other unincorporated areas. The total estimated population presently served by the District is approximately 14,306 persons, most of whom reside in incorporated areas.

Interconnections with Other Municipal Supply Systems

The City of Madras is the only interconnection the District has with another municipal supply system. Water is supplied from the District to the City through three interconnections; therefore, future plans of the District include water demand for the City of Madras.

The south interconnection is located at South Adams Drive and Bard Lane. This is the primary interconnection supplying up to approximately 1,000 gpm during summer periods. The north interconnection is located at Kinkade and 'A' Street, supplying approximately 400 to 500 gpm during summer periods. The third interconnection is sited at Lincoln and 'I' Street and is used primarily for fire backup flows. All three interconnections are through 6-inch meters. The interconnection locations are shown on below in Figure 1.

The interconnections are established under a "Water Sale Agreement" (Agreement) between the District and the City of Madras. The Agreement is renewable on a three-year cycle and provides for basis of payment by the City, metering by the District, interconnection maintenance by the District and continuity of service (considering potential curtailment, interruption or reduction in deliveries).

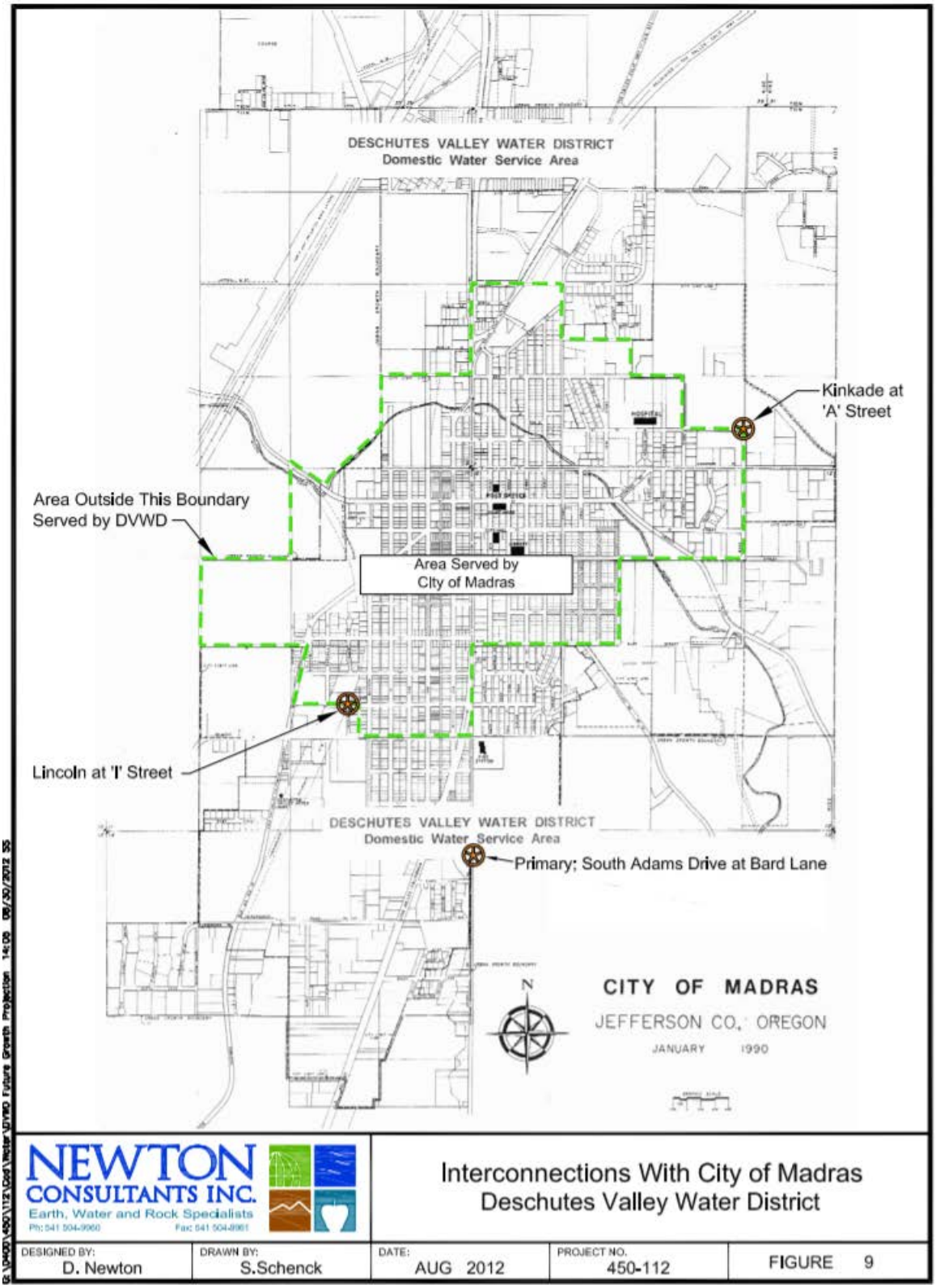

Figure 2 Interconnections with City of Madras

From:	Lickwar, Peter
To:	Finlay Anderson
Cc:	brett hodgson; Scott Carlon - NOAA Federal; Nuria Claudio; Frozena, Jennifer
Subject:	USFWS : Support for Grant Application of Fish Passage at Opal Springs, National Marine Fisheries Service
Date:	Thursday, October 19, 2017 2:53:57 PM

Greetings;

Please see the U.S. Fish and Wildlife Service's message below regarding our support of funding for the Opal Springs Fish Passage Project. If you have any questions or need more information, please contact me.

Thanks, Peter Lickwar

Oregon Water Resources Department

Attention: Grant Program Coordinator

725 Summer Street NE, Suite A

Salem, OR 97301

October 12, 2017

RE: Support for Grant Application of Fish Passage at Opal Springs

Dear OWRD Technical Review Committee:

The U.S. Fish and Wildlife Service (USFWS) strongly supports the licensee's request for funds from your agency. As you know, the Deschutes Valley Water District's Opal Springs Fish Passage project was recently recommended for funding by the Oregon Water Resources Department Water Project Grant 2017 cycle. We

are extremely pleased that the Review Committee found that DVWD demonstrated the many public benefits this project will have in Central Oregon, and in the larger Deschutes River Basin.

This project has been in the making for over 10 years, and has involved the collaborative efforts of local, state and federal agencies, members of the public and non-government groups. Together, this group has designed a fish passage program that will reconnect over 100 miles of anadromous fish habitat. The successful reintroduction of these fish species is a critical component to the long-term recovery plan for steelhead, and will benefit all those who live, work and recreate in the Deschutes River Basin. The action to build a fish ladder is a voluntary effort taken on by DVWD. Over the last several years, DVWD has worked to secure the contractors necessary for construction, has taken the regulatory steps with all state agencies and the Federal Energy Regulatory Commission, and is prepared to be in the water for construction by June 1, 2018. The need to secure these final funds is critical to the success of this project.

Receiving the news that the Opal Springs project had been short-listed brought the DVWD great optimism and enthusiasm for the future of in-stream water protection in Central Oregon. Reconnecting fish passage is important not only to the DVWD and other basin partners, but also to the state agencies, and most importantly, the residents of the state of Oregon. The USFWS sends this final support letter for DVWD in their efforts to secure the funding needed to construct a fish passage facility at Opal Springs and encourages the Water Resources Department to fund the construction of this project to the greatest extent possible. We look forward to the December news.

Sincerely,

Peter Lickwar

--
Peter Lickwar
USFWS Bend, Oregon
Phone 541-383-7146

Article 4: Bypass Flow Accrual Account

Upon completion of the fish passage facilities, the Licensee shall establish a Bypass Flow Accrual Account (BFAA). The BFAA will identify "water credits" (in acre-feet) which will be used to identify water available for aiding upstream and downstream fish passage. Water credits will be accrued in lieu of actual stored water, given that the Project has no storage capacity, and turbine discharge will be reduced when exchanging water credits for actual bypass flows. The Licensee shall administer the BFAA for the term of the amended license as follows:

1. Accumulating Credits

The Licensee shall accrue water credits in the BFAA beginning concurrently with the start of Project operations under the new diversion pool elevation and shall continue to accrue water credits in the BFAA for the License Term. Water credits will accrue as a percentage of instantaneous turbine flow (initially 2.89% and hereinafter referred to as the "Accrual Rate") under all flow conditions up to the maximum controlled hydraulic capacity of the Project. The maximum controlled hydraulic capacity of the Project is initially 1,913 cfs [the sum of hydraulic capacity at new head (estimated at 1,600 cfs), the license required bypass flow (50 cfs), and spring water and ground water accreting into the bypass reach (263 cfs)]. Water credits will not accrue at total river discharge greater than the maximum controlled hydraulic capacity of the Project.

The Licensee shall, within one year of commencing operations at the new diversion pool elevation, verify all estimates used for determining the maximum controlled hydraulic capacity of the Project. The Licensee shall provide this information to the FPWG at least 45 days prior to filing any proposed modifications with the Commission. The Licensee shall not file with the Commission any proposed modifications of the information used to calculate water credits until any disputes raised by the FPWG have been addressed under the dispute resolution provisions of the Settlement Agreement. Upon Commission approval of any modifications to the information used for calculating water credits, the Licensee shall calculate all subsequent BFAA credits pursuant to the new information.

The Licensee shall periodically reassess spring water and ground water accretion estimates throughout the license term as requested by the FPWG. Any future changes recommended by the Licensee pursuant to periodic review of these parameters, will be further approved by the FPWG prior to the Licensee submitting the new information to the Commission. Upon Commission approval, the Licensee shall calculate all subsequent BFAA credits pursuant to the new information.

The Licensee shall calculate all BFAA credits based on: 1) direct measurements of the hourly turbine discharge data and 2) the gage data from USGS Gage No. 14087400, near Culver, Oregon, below Opal Springs.

The Licensee shall accrue water credits in the BFAA at a rate of between 25% and 45% ("Allocation Percent") of the increase in power generation attributable to the head increase at the Project. Adjustments to the Allocation Percent will only occur following each successive 5-year Performance Assessment Interval, and only if necessary, pursuant to the Adaptive Management program. The potential for asynchronous monitoring periods notwithstanding, the BFAA Allocation Percent will not be increased more than one time every five years. Allocation Percent increases above 45% may only occur with the approval of the Licensee.

The Licensee shall, until the turbine performance calculation is modified, accrue water credits at a rate of 2.89% of instantaneous turbine flow [(25% Allocation Percent) X (11.54% increase in power generation) = 2.89% Accrual Rate]. The Licensee shall convert real-time accruals into acre-feet for purposes of developing a BFAA Annual Allocation Plan. The Licensee shall develop the BFAA Annual Allocation Plan in consultation with and for approval by the FPWG. The BFAA Annual Allocation Plan will include a current accounting of BFAA water credits (less any water credits advanced the prior year for emergency purposes); a flow forecast for the upcoming year; and an estimate of the water credits that will be accrued over the coming year. The Licensee shall include the BFAA Annual Allocation Plan in its Annual Reports.

The Licensee shall maintain a record of withdrawal requests and actual discharged bypass flows, and shall provide a monthly status of available BFAA water credits to the FPWG within two business days of a request by Oregon Department of Fish and Wildlife and the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWS) ("Fish Managers") (provided that the CTWS is a signatory to the Settlement Agreement). Water credits not used within a given year will be carried over from year to year until expended, but will not extend beyond the term of the Amended License. The Licensee shall include this information in its Annual Reports.

2. Bypass Flow Releases

The Licensee shall provide bypass flows from the BFAA within two business days of receiving a request from the liaison designated by the Fish Managers within the limitations of the approved BFAA Annual Water Plan. The Licensee shall make 10% of the forecasted annual accrual in the BFAA available for emergency use if insufficient water credits are available in the BFAA. Otherwise, only water credits accrued in the BFAA will be available for release. Any water credits advanced to the BFAA by the Licensee will be offset by a debit to the BFAA as soon as possible but by no later than one year from disbursement, unless otherwise agreed to by the Licensee.

The Licensee shall be exempted from providing BFAA flows that would result in a Critical Circumstance, which is potential damage or excess wear and tear to project equipment. The Licensee shall, within one year of initial operations at the new diversion pool elevation and periodically during the term of the amended license, in consultation with the FPWG and supported by engineering concerns, determine specific turbine unit loading that would result in a

Critical Circumstance. If the Licensee determines that a request for flow releases will cause a Critical Circumstance, the Fish Managers may request a lower BFAA flow release that will not cause a Critical Circumstance, or the Fish Managers may request and the Licensee shall shut down the powerhouse and direct all river flows into the bypass reach as long as sufficient water credits are available in the BFAA. The Licensee shall not be required to shut down the powerhouse in response to a BFAA flow request more than one time per week.

If the Project shuts down for other operational, safety, or maintenance reasons resulting in spill, water credits will not be removed from the BFAA.

DESCHUTES RIVER CONSERVANCY

October 27, 2017

Oregon Water Resources Department
Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

Re: 2017 Water Project Grants and Loans TRT Funding Recommendation Comments

Dear Grant Program Coordinator:

Thank you for the opportunity to provide comments on the Technical Review Team's (TRT) application ranking and funding recommendation for the 2017 Water Project Grants and Loans funding cycle.

The DRC strongly supports the TRT's recommendation for funding Deschutes Valley Water District's Opal Springs Proposal to alter structural and operation changes to the Opal Springs Hydroelectric Project to allow upstream and downstream passage at the diversion dam for federally protected fish species. This passage barrier is the 2nd highest fish passage priority project for the Oregon Department of Fish and Wildlife and its removal is critical to the success of PGE's and the Confederated Tribes of the Warm Springs' reintroduction effort.

As a member of the Deschutes Partnership, the DRC works to restore habitat conditions to support the successful reintroduction of salmon and steelhead into the Upper Deschutes subbasin and providing match funding for the Opal Springs Fish Passage project is a critical part of our strategic action plan. This broadly supported effort will restore access to over 100 miles of anadromous fish habitat through the Lower Crooked River and will specifically benefit DRC's work to restore streamflow in the Crooked River Basin for the benefit of reintroduced steelhead.

The Deschutes River Conservancy (DRC) restores streamflow and improves water quality in the Deschutes Basin using a coordinated, collaborative and voluntary approach. Founded in 1996 as a consensus-based, multi-stakeholder organization, the DRC's Board of Directors includes diverse representation such as irrigated agriculture, hydro-power, tribal and environmental interests as well as federal, state and local government interests.

Thank you for the opportunity to provide comment.

Sincerely,

/s/Natasha Bellis
Program Manager
Deschutes River Conservancy

CENTRAL OREGON LANDWATCH

50 SW Bond St., Ste. 4 | Bend, OR 97702
Phone: (541) 647-2930
www.centraloregonlandwatch.org

October 27, 2017

Grant Program Coordinator
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301
503-986-0869
waterprojects@wrd.state.or.us

RE: Water Project Grants and Loans – 2017 Funding Cycle

To Whom It Concerns:

Thank you for the opportunity to comment on the Oregon Water Resources Department Water Project Grants and Loans for the 2017 Funding Cycle. Central Oregon LandWatch submits these comments in support of the inclusion of the Opal Springs Fish Passage and Pool Raise project in the list of projects recommended for funding. Central Oregon LandWatch is a conservation organization which has advocated for preservation of natural resources in Central Oregon for over 30 years. With over 200 members in Central Oregon, LandWatch has worked on water resource issues in the Deschutes River Basin and has succeeded in gaining special protection for Whychus Creek and the Metolius River and spring systems. LandWatch has lately been focused on achieving the recovery of river and stream flows across the entire Deschutes River basin for the health and survival of native aquatic species.

The Oregon Department of Fish and Wildlife ("ODFW") began reintroduction of salmon and steelhead species into the Upper Deschutes Basin in 2007. On the lower Crooked River, the Opal Springs Hydroelectric Project is a massive impediment to the ability of these anadromous fish species to reclaim their natural habitat in the Crooked River watershed. The Opal Springs Fish Passage and Pool Raise project would significantly increase the ability of these species to travel upstream beyond the hydroelectric facility. Indeed, the project was ODFW's second highest priority project on its 2013 Statewide Fish Passage Priority List. The need for this project is acute and widely recognized.

LandWatch particularly supports the Opal Springs Fish Passage and Pool Raise project for its potential benefits to efforts to restore stream flows basin-wide. The U.S. Fish and Wildlife Service is currently drafting a Habitat Conservation Plan ("HCP") after an initial public scoping comment period that closed on September 21, 2017. The HCP will impose new conservation measures that irrigation districts throughout the basin must follow in order to receive an Incidental Take Permit, which would allow them to continue operations notwithstanding the incidental take of species listed under the federal Endangered Species Act. The applicant points out in their application for Water Project

Grants and Loans for the 2017 Funding Cycle that constructing a fish passage at the Project "will provide significant impetus to upstream water-users in the basin to conserve and return water instream, as envisioned by proposed Habitat Conservation Plans for the basin." A current argument against flow restoration on the Crooked River is that the improved flows resulting from the Habitat Conservation Plan would not aid aquatic species because they cannot access habitat above the Opal Springs Hydroelectric Project. Funding and constructing the Opal Springs Fish Passage and Pool Raise would negate this concern by reconnecting the former native habitat of the Deschutes River Basin's aquatic species. If the project is built, all future conserved water that remains instream will directly aid the anadromous species of the Crooked River.

The Deschutes Valley Water District has completed the regulatory steps required to construct the Opal Springs Fish Passage and Pool Raise by obtaining the necessary permit amendments from the Federal Energy Regulatory Commission. As the TRT evaluation summary for this project mentions, the project is "shovel ready," and will provide immediate benefits to the entire Deschutes River Basin.

We appreciate OWRD providing the public with opportunity to participate in the recipient selection process for the Water Project Grants and Loans for the 2017 Funding Cycle. The Opal Springs Fish Passage and Pool Raise will provide enormous benefits to the ecology and environment of the Crooked River and the entire Deschutes River Basin, and we fully support your selection of the project for funding.

Sincerely,

Rory Isbell
Staff Attorney
Central Oregon LandWatch

50 SW Bond St., Ste. 4 | Bend, OR 97702
Phone: (541) 647-2930
www.centraloregonlandwatch.org

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Columbia Basin Branch
304 South Water Street, Suite 201
Ellensburg, Washington 98926

October 18, 2017

Oregon Water Resources Department
Attention: Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, OR 97301

Re: Support for Grant Application of Fish Passage at Opal Springs, National Marine Fisheries Service

Dear Technical Review Committee:

The National Marine Fisheries Service (NMFS) is writing in support of the Deschutes Valley Water District's (DVWD) Opal Springs Fish Passage project. It is our understanding that this project was recently recommended for funding by the Oregon Water Resources Department (OWRD) Water Project Grant 2017 cycle. As you are likely aware, this project has been in the making for nearly 15 years and has involved the collaborative efforts of local, state, and federal agencies and non-government groups. Together, this group has designed a fish passage program that will reconnect over 100 miles of anadromous fish habitat and promote recovery of steelhead.

The DVWD's effort to establish fish passage at the Opal Springs Project is voluntary, and in recent years they have worked to find funding, secure contractors, and satisfy regulatory requirements in order to move forward with a volitional fish passage program. Should a grant be awarded, DVWD is prepared to begin construction in June of 2018. We greatly appreciate OWRD's consideration of this project and urge funding to the greatest extent possible.

If you have questions or wish to discuss the merits of this project and its value to anadromous reintroduction in the Deschutes Basin, please call Scott Carlon of my staff at (503) 231-2379 or email: scott.carlon@noaa.gov.

Sincerely,

Dale Bambrick, Chief
Columbia Basin Branch
NOAA Fisheries, West Coast Region

cc: Peter Lickwar, USFWS–Bend, OR
Brett Hodgson, ODFW–Bend, OR
Finlay Anderson, Kleinschmidt–Portland, OR

Bill Harvey
Commission Chair
bharvey@bakercounty.org

Mark Bennett
Commissioner
mbennett@bakercounty.org

Bruce A. Nichols
Commissioner
bnichols@bakercounty.org

October 25, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

I am writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential for increased water use efficiency and to support the livelihood of our region.

Baker County supports the Powder Valley Water Control District's (PVWCD) Powder Valley Connector project. This project involves upgrading a 1.5 mile stretch of the MaHarry-Blevins Ditch from a manually operated open-ditch system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1pipeline, W-3 pipeline and the MaHarry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance of the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the project design, and the PVWCD hopes to construct the project in 2018.

In closing, Baker County supports this project and will continue to support the project as it moves forward.

Sincerely,

Mark Bennett, Commissioner
Baker County

RESOURCE SOLUTIONS FOR RURAL COMMUNITIES

office 11 third street, suite 101 . hood river . oregon . 97031 *telephone* 541.716.6085 *website* www.fcasolutions.org

October 17, 2017

Oregon Water Resources Department
725 Summer St. NW, Ste A
Salem, OR 97301

Subject: Public Comment Letter of Support for Powder Valley Water Control District
OWRD Water Project grant application for the Powder Valley Connector Piping Project

Dear OWRD Grant Selection Committee:

Thank you very much for the opportunity to provide public comments on the staff recommendations for funding for the OWRD Water Project Grant funds. We very much appreciate the staff recommendation to fund the Powder Valley Water Control District's (PVWCD) grant application requesting OWRD Water Project Grant funds for the proposed Powder Valley Connector Piping Project. The project is located in Baker and Union Counties, and it will pipe 6,980 feet of PVWCD's MaHarry-Blevins Ditch. This section of the PVWCD system was built in 1975 and loses 1,350 acre feet of water to infiltration and evapotranspiration. The benefits of the project will be numerable and include improving water quality and quantity for endangered fish, enhancing fish habitat while also providing efficient delivery of pressurized irrigation water to patrons within the project area, ensuring a stable agricultural community, and enhancing recreational opportunities at the Wolf Creek Reservoir.

This piping project will allow for 1,350 acre feet of water to be left in the Wolf Creek Reservoir, ameliorating water temperature issues and increasing habitat for Bull and Red Band trout. The conserved water will also help to improve water quality and improve aquatic habitat by diluting pollutants. Piping this section of canal will supply pressurized water, which optimizes agricultural practices by decreasing operation and maintenance costs while at the same time improving a farmer's ability to provide the exactly correct amount of water to crops precisely when needed upon demand.

FCA, a non-profit organization focused on irrigation modernization, is working to help irrigation companies and districts conserve water, become more efficient by modernizing conveyance system, and protect fish and the environment. The Powder Valley Connector Piping Project will provide many benefits that will be realized by PVWCD employees and farmers including the community at-large and the associated environment -- all of these benefits being perfectly aligned with FCA's goals. Therefore, FCA has chosen to partner with PVWCD in the development of a full modernization strategy for the entire district. Due to the numerous benefits of this project, not only in the immediately impacted area but also basin-and state-wide, FCA is in full support of funding this project.

Sincerely,

Julie O'Shea
Chief Executive Officer
Farmers Conservation Alliance

POWDER VALLEY WATER CONTROL DISTRICT
P.O. Box 189 - 690 E Street, North Powder, OR 97867 Tele: (541) 898-2366
FAX (541) 898-2548 Email: pvwater@eoni.com
Hearing Impaired – Call 711

October 20, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

First of all I would like to thank you very much for recommending this project for funding. I am writing today to provide public comment in support of the Powder Valley Connector project. Also included in the envelope are several letters of support from those landowners that the land will cross and also those who are users of the existing system. This project is absolutely essential for increased water use efficiency in the Powder Valley Water Control District (PVWCD).

The PVWCD will provide matching resources for this project in the form of Bedding Material, Ditch Fill, Project Management, and Construction Administration. This funding is secured and valued at $230,000.

The PVWCD recognizes the high importance of water use efficiency. Under the new fully pressurized system, flow meters will be an integral part of the system and the water used from at each outlet will be monitored and recorded by the District. This information will be instrumental in showing the benefits of the completely enclosed pipeline system compared to the existing open ditch system where water is only measured through the flow meter at the reservoir outlet.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the Powder Valley Connector project design.

The PVWCD hopes to construct the project in 2018.

Sincerely,

Lyle Umpleby

Lyle Umpleby, PVWCD Manager

October 20, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

We are writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential for increased water use efficiency and to support the livelihood of our region.

We, James E. and Elsie D. Newman , support the Powder Valley Water Control District's (PVWCD) application for funding to construct the Powder Valley Connector. This project involves upgrading a 1.5 mile stretch of the Maharry-Blevins Ditch from an open-ditch, manually operated system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

This ditch crosses our property, and we fully support the construction of this project to take place on our land. Replacing the open ditch with a pipeline will greatly enhance the efficiency of our operation as well as remove the hazard to both domestic and wild animals that an open ditch creates.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1 pipeline, W-3 pipeline and the Maharry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance of the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the Powder Valley Connector project design. The PVWCD hopes to construct the project in 2018.

We support this project and will continue to participate in the support of this project as it moves forward through the construction process.

Sincerely,

James E Newman

October 20, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

I am writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential for increased water use efficiency and to support the livelihood of our region.

I, DOUG LEWIS, support the Powder Valley Water Control District's (PVWCD) application for funding to construct the Powder Valley Connector. This project involves upgrading a 1.5 mile stretch of the Maharry-Blevins Ditch from an open-ditch, manually operated system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

I am currently a user of the MaHarry-Blevins Ditch and P-2 Pipeline. I am looking forward to the benefits the construction of the Powder Valley Connector will provide including improved water management and water use efficiency. The PVWCD and the landowners will be able to manage the irrigation water in a much more efficient manner and leave water in Wolf Creek Reservoir for a longer period each year.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1 pipeline, W-3 pipeline and the Maharry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance in the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the Powder Valley Connector project design. The PVWCD hopes to construct the project in 2018.

I fully support this project and will continue to participate in the support of this project as it moves forward through the construction process.

Sincerely,

Douglas M Lewis

October 20, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

I am writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential for increased water use efficiency and to support the livelihood of our region.

I, JASON WILLIAMS, support the Powder Valley Water Control District's (PVWCD) application for funding to construct the Powder Valley Connector. This project involves upgrading a 1.5 mile stretch of the Maharry-Blevins Ditch from an open-ditch, manually operated system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

I am currently a user of the MaHarry-Blevins Ditch and P-2 Pipeline. I am looking forward to the benefits the construction of the Powder Valley Connector will provide including improved water management and water use efficiency. The PVWCD and the landowners will be able to manage the irrigation water in a much more efficient manner and leave water in Wolf Creek Reservoir for a longer period each year.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1 pipeline, W-3 pipeline and the Maharry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance in the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the Powder Valley Connector project design. The PVWCD hopes to construct the project in 2018.

I fully support this project and will continue to participate in the support of this project as it moves forward through the construction process.

Sincerely,

October 20, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

I am writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential for increased water use efficiency and to support the livelihood of our region.

I, BRUCE HENDERSON, support the Powder Valley Water Control District's (PVWCD) application for funding to construct the Powder Valley Connector. This project involves upgrading a 1.5 mile stretch of the Maharry-Blevins Ditch from an open-ditch, manually operated system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

I am currently a user of the MaHarry-Blevins Ditch and P-2 Pipeline. I am looking forward to the benefits the construction of the Powder Valley Connector will provide including improved water management and water use efficiency. The PVWCD and the landowners will be able to manage the irrigation water in a much more efficient manner and leave water in Wolf Creek Reservoir for a longer period each year.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1 pipeline, W-3 pipeline and the Maharry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance in the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the Powder Valley Connector project design. The PVWCD hopes to construct the project in 2018.

I fully support this project and will continue to participate in the support of this project as it moves forward through the construction process.

Sincerely,

Bruce Henderson

October 20, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

I am writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential for increased water use efficiency and to support the livelihood of our region.

I, JERRY GRAY, support the Powder Valley Water Control District's (PVWCD) application for funding to construct the Powder Valley Connector. This project involves upgrading a 1.5 mile stretch of the Maharry-Blevins Ditch from an open-ditch, manually operated system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

I am currently a user of the MaHarry-Blevins Ditch and P-2 Pipeline. I am looking forward to the benefits the construction of the Powder Valley Connector will provide including improved water management and water use efficiency. The PVWCD and the landowners will be able to manage the irrigation water in a much more efficient manner and leave water in Wolf Creek Reservoir for a longer period each year.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1 pipeline, W-3 pipeline and the Maharry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance in the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the Powder Valley Connector project design. The PVWCD hopes to construct the project in 2018.

I fully support this project and will continue to participate in the support of this project as it moves forward through the construction process.

Sincerely,

Jerry K Gray

October 20, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

I am writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential for increased water use efficiency and to support the livelihood of our region.

I, CHRIS COLTON, support the Powder Valley Water Control District's (PVWCD) application for funding to construct the Powder Valley Connector. This project involves upgrading a 1.5 mile stretch of the Maharry-Blevins Ditch from an open-ditch, manually operated system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

I am currently a user of the MaHarry-Blevins Ditch and P-2 Pipeline. I am looking forward to the benefits the construction of the Powder Valley Connector will provide including improved water management and water use efficiency. The PVWCD and the landowners will be able to manage the irrigation water in a much more efficient manner and leave water in Wolf Creek Reservoir for a longer period each year.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1 pipeline, W-3 pipeline and the Maharry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance in the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the Powder Valley Connector project design. The PVWCD hopes to construct the project in 2018.

I fully support this project and will continue to participate in the support of this project as it moves forward through the construction process.

Sincerely,

F. C. Ranches V. P.

Chris Colton

October 20, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

I am writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential for increased water use efficiency and to support the livelihood of our region.

I, LUKAS GRAY, support the Powder Valley Water Control District's (PVWCD) application for funding to construct the Powder Valley Connector. This project involves upgrading a 1.5 mile stretch of the Maharry-Blevins Ditch from an open-ditch, manually operated system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

I am currently a user of the MaHarry-Blevins Ditch and P-2 Pipeline. I am looking forward to the benefits the construction of the Powder Valley Connector will provide including improved water management and water use efficiency. The PVWCD and the landowners will be able to manage the irrigation water in a much more efficient manner and leave water in Wolf Creek Reservoir for a longer period each year.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1 pipeline, W-3 pipeline and the Maharry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance in the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the Powder Valley Connector project design. The PVWCD hopes to construct the project in 2018.

I fully support this project and will continue to participate in the support of this project as it moves forward through the construction process.

Sincerely,

October 20, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

We are writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential to the livelihood of our region.

We, Myron and Dorothy Miles, support the Powder Valley Water Control District's (PVWCD) application for funding to construct the Powder Valley Connector. This project involves upgrading a 1.5 mile stretch of the Maharry-Blevins Ditch from an open-ditch, manually operated system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

This ditch crosses our property, and we fully support the construction of this project to take place on our land. Replacing the open ditch with a pipeline will greatly enhance the efficiency of our operation as well as remove the hazard to both domestic and wild animals that an open ditch creates.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1 pipeline, W-3 pipeline and the Maharry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance of the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the Powder Valley Connector project design. The PVWCD hopes to construct the project in 2018.

We support this project and will continue to participate in the support of this project as it moves forward through the construction process.

Sincerely,

Myron Miles
Dorothy L Miles

UNION COUNTY
BOARD OF COMMISSIONERS

Steve McClure, Commissioner
Jack Howard, Commissioner
Donna Beverage, Commissioner

1106 K Avenue La Grande, OR 97850 PHONE (541)963-1001 FAX (541)963-1079 TTY 1-800-735-1232

October 17, 2017

Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, Oregon 97301

RE: Powder Valley Connector

Dear Grant Program Coordinator:

I am writing today to provide public comment in support of the Powder Valley Connector project. Thank you very much for recommending this project for funding. It is absolutely essential for increased water use efficiency and to support the livelihood of our region.

Union County supports the Powder Valley Water Control District's (PVWCD) Powder Valley Connector project. This project involves upgrading a 1.5 mile stretch of the Maharry-Blevins Ditch from a manually operated open-ditch system to a fully enclosed pipeline with automated water control features. By upgrading this system there will be a decrease in water lost through evaporation, irrigation inefficiency, power failures and human error. This project will allow more water to remain in the Wolf Creek Reservoir for native fish use.

The PVWCD is located in Union County, Oregon within the community of North Powder. The District consists of two reservoirs, three ditches and five pipelines. Wolf Creek Reservoir sits approximately seven miles from North Powder and provides water for 36 landowners through the W-1 pipeline, W-3 pipeline and the Maharry-Blevins Ditch. The 1.5 mile stretch of the MaHarry-Blevins Ditch from Wolf Creek Reservoir to the P-2 pipeline inlet is the portion that has been designed for a pipeline. The PVWCD identified the need to reduce water loss from the existing open ditch water conveyance of the MaHarry-Blevins Ditch by replacing it with a totally enclosed pipeline from Wolf Creek Dam to the existing P-2 Pipeline.

An Oregon Watershed Enhancement Board (OWEB) grant for this project has also been recommended for funding. OWEB also provided funding for a water optimization study and the project design, and the PVWCD hopes to construct the project in 2018.

Union County supports this project and will continue to support the project as it moves forward.

Sincerely,

Donna Beverage

Donna Beverage
Union County Commissioner

WATERWATCH

PROTECTING NATURAL FLOWS IN OREGON RIVERS

October 26, 2017

Water Resources Department
725 Summer St N.E., Suite "A"
Salem, OR 97301-1271

Re: Comments, Water Development Loan and Grant Program Recommendations

Dear Grants and Loans Program,

WaterWatch appreciates the opportunity to comment on the SB 839 grant and loan program grant recommendations. We offer the following comments.

Opal Springs Fish Passage and Pool Raise: WaterWatch strongly supports the funding of this project. This project is critical to anadromous fish reintroduction efforts in the Crooked River Basin. This project squarely meets all three public benefit requirements and is supported by a wide spectrum of stakeholders.

North Fork Sprague Conservation Piping and Instream Flow Restoration: WaterWatch supports the funding of this project. As we understand it from the application, 90% of the conserved water will be legally protected instream under the Conserved Water Statute. As such, it serves as a good example of what type of conservation projects should be funded by the 839 grant and loan program.

Coe Branch Pipeline and On-Farm Efficiency Project: While we appreciate that this project enjoys the support of the USFWS and the Confederated Tribes of the Warm Springs Reservation, among others, this application could be greatly improved if Middle Fork Irrigation District would commit to using the Conserved Water Act to legally protect saved water instream. MFID states that the project will ultimately result in approximately 1.7 cfs being left in Clear Branch and/or Laurance Lake Reservoir, and that this water will be protected. However, the applicant does not commit to using the Conserved Water Act (CWA) to protect this water nor does it give details on the upcoming 2021 Special Use Permit (beyond noting the EA is being worked on). Absent legal protection, this water does not meet the statutory standard of "measurable improvement in protected streamflows". ORS 541.673(3). Given that MFID states repeatedly in its application that this water will be protected, we would urge the WRD to work with the applicant to make the CWA workable for this project[1].

[1] While we appreciate that MFID notes that applying the Conserved Water Act is complicated and, in their opinion, unworkable because of the number of lands/patrons they served, we would note that in places like the Deschutes Basin where there are similar challenges Districts have been able to use the Conserved Water Act successfully.

Absent that, if approved, we would urge the Commission to require a condition of the grant that MFID is to release 1.7 cfs into Clear Branch (in addition to any existing bypass flows) and/or protect the water in Laurance Lake, consistent with what MFID states will happen in the SUP. While we appreciate that the SUP is anticipated to protect this water, the Commission should not rely on this for gauging environmental benefit because (1) absent delay, it will not come into play until 2021 and (2) the EA has not been finalized so it is unclear what final requirements will be included. By conditioning the water right to either hold the water back in Laurance Lake and/or release to Clear Branch, as MFID represents it will do, the Commission will simply be ensuring that the claimed benefit will accrue as represented. This project has the makings of being a win-win, it simply needs protection of the saved water instream.

Powder Valley Connector: Unlike the Coe Branch project, this application did not include endorsement from any fisheries agencies or the tribes. Absent letters of support from fisheries agencies/tribes, the Water Resources Department should require documentation of claimed benefits to bull trout. We could find no data substantiating those specific claims in the application file, and in fact the application indicated that ODFW had raised questions as to the claimed benefits to bull trout. Additionally, the Powder Valley Water Control District fails to commit to protecting saved water under the Conserved Water Act. Absent legal protection of water either in the creek or in the reservoir, this project does not meet the statutory standard of "measurable improvement to protected streamflows" and should be ranked accordingly on this point (zero). Our concerns in this regard are exacerbated by the fact that PVWCD's application notes that the saved water will be used to extend the irrigation season. In a nutshell, this is a conservation project that will greatly benefit agriculture, but will provide little to no actual benefit to the environment.

Moreover, the Commission should be aware that PVWCD has protested four instream water right applications in the Powder River Basin (App 72163 on Wolf Creek, 72187 and 72188 on the N. Powder River and 72194 on Rock Creek). As we understand it there is great resistance (on the part of Districts in the Basin) to resolving these 20+ year old protests in a manner that would result in the issuance of protectable instream water rights, and instead there have been discussions about a "collaborative" approach to protecting streamflows absent the issuance of actual instream water rights. The project recommended for funding will undermine any sort of collaborative, as it grants greater certainty to users while giving nothing to streams. Until and unless the instream water right protests are resolved, we do not believe the state should be providing monies to projects that will undermine current efforts in the basin to ensure that flows for fish are protected and that water development projects provide some streamflow benefits. We would urge the Commission to reject the WRD's recommendation to fund this project.

Projects Ranked 5 through 32: WaterWatch supports the recommendation not to fund projects ranked 5 through 32. That said, we disagree with the WRD assessment that only projects 15-32 did not demonstrate sufficient benefits to justify funding. For instance, we would note that #6 (Dog River) and #8 (Bandon Reservoir) have the potential to make existing streamflow problems worse and thus we would argue do not show sufficient environmental benefit to justify public funding on the projects. For further comment, please see WaterWatch's comments to the technical committee regarding a number of the applications ranked 5-32, which are attached to these comments.

Conclusion: We appreciate the work of the technical committee and WRD to narrow funding recommendations. However, as noted in previous comments specific to efficiency projects, we would urge the WRD to work with applicants to put their efficiency projects through the Conserved Water Act. Absent dedication of some portion of the saved water instream, some conservation projects actually have the potential to harm environmental values. In order for this program to truly provide a win-win solution to our state's water development challenges, the "environmental benefits" should provide a quantifiable benefit to Oregon's rivers, streams and/or lakes. Under SB 839, all three public benefits (economic, social and environmental) must be considered equally. A conservation project that does not do anything to improve streamflows should not be considered robust enough to meet the environmental benefit mandate on its own[2].

Thank you for the opportunity to comment.

Sincerely,

Kimberley Priestley
Senior Policy Analyst

Enclosure

[2] We appreciate that the statute allows "conservation" to count as an environmental benefit, but a conservation project that provides no actual quantifiable benefit to the environment, standing alone, should not be able to elevate a project to the level that it could be approved as an equally balanced project (social, economic, environment). On that note, it would be very helpful to the public to be able to see the individual ranking sheets of the Technical Committee before Commission final decision so that the public can provide more meaningful comment on this subject. Providing a cumulative score does not allow the public to understand the points granted to each public benefit, nor provide meaningful data on any subpoints scored.

WATERWATCH

PROTECTING NATURAL FLOWS IN OREGON RIVERS

June 27, 2017

Water Resources Department
725 Summer St N.E., Suite "A"
Salem, OR 97301-1271

Re: Comments, Water Development Loan and Grant Program Recommendations

Dear Mr. Unger,

WaterWatch appreciates the opportunity to comment on the SB 839 grant and loan program grant applications prior to review by the Technical Team. As the Department is aware, WaterWatch was integrally involved in the drafting of SB 839 and the associated rules, thus we are intimately familiar with the program's requirements.

As was the case with the first round of applications in 2016, we were again struck by the number of applications that claim to be providing environmental benefits that result in a "measurable improvement in protected streamflows" that do not do actually accomplish this. SB 839 is very deliberate in its use of the words "measurable" and "protected". See ORS 541.673(3). This language was heavily negotiated. Measurable means there must be an identifiable amount of streamflow dedicated instream and protected means the water must be legally protected instream.

On that note, a large number of applications claim that they will improve stream levels for fish and aquatic life, yet most of these same applicants do not commit to using available legal tools necessary to protect this water as contemplated by the governing statute. Projects that fall under this general category include, but are not limited to:

- S. Deschutes County Water Conservation and Frog Habitat
- City of Dalles, Dog River Replacement
- Powder Valley Connector
- Wallace Pump Station
- Stanfield Irrigation District Efficiency Project
- Ruby Peak Diversion
- Flat Creek Watershed Enhancement
- McMullin Creek Dam and Spillway Upgrades
- Newport Citywide Advance Metering Infrastructure
- Painted Hills Reservoir (for the irrigation portion)
- Silverton Water Treatment Plant[1]
- Alder Creek Reservoir (for the irrigation portion)
- Marks Creek Restoration Project

[1] The applicant states it will use the Act to protect approximately 12% of the water permanently instream; however, in the preceding question it states that the construction of the project will reduce intake by approximately 12%: allowing the unused water to be transmitted to neighboring communities and agricultural lands thus it is unclear what the applicants actual intent is. Simply leaving water instream for the next user is inconsistent with the CWA, which would grant legal protection for flows against junior downstream users.

Given the over appropriated state of the majority of Oregon's streams, providing a measurable improvement in protected streamflows can only be achieved through use of the Conserved Water Act (CWA) and/or instream transfers/leases that will legally protect water instream against other users. Only a handful of the applications under review commit to this critical step.

If public funds are to be used to finance public projects, the state should ensure that the "environmental benefits" claimed are legally protected into the future for the life of the project. This was the intent of the statute, which is captured in the statutory language. We urge the technical team to score projects accordingly (i.e. without legal protection of saved water instream, scoring should be zero for this particular public environmental benefit metric).

A separate, but related, issue is that for those projects that do commit to using the CWA, the Act requires a minimum of 25% of the saved water to be dedicated instream. If public funding exceeds 25%, then the percentage of water protected instream must be commensurate to the public funding provided. A number of the projects that commit to putting water instream under the CWA do not follow the percentage requirements of the Act, including but not limited to:

- Highland Ditch Piping
- Restormel Family Farm Water Conservation and Storage Project
- Silverton Water Treatment Plan Improvement Project

The WRD should ensure that any grants that are awarded are consistent with the CWA and that the percentage dedicated instream matches the percentage of public funding.

Project Specific Comments: In addition to the overarching points noted above, we have the following initial comments on specific applications.

Opal Springs Fish Passage and Pool Raise: This project is critical to anadromous fish introduction efforts in the Crooked River Basin. This project squarely meets all three public benefit requirements and is supported by a wide spectrum of stakeholders. WaterWatch supports full funding of this project; it should be a priority.

North Fork Sprague Conservation Piping and Instream Flow Restoration: 90% of the conserved water will be protected instream under the CWA. This project is precisely the type of project that should be prioritized for funding under the SB 839 Grant and Loan fund.

Bandon Off Channel Reservoir Project: This project raises a number of concerns, including the fact that there is no water available for further appropriation in the Ferry Creek Watershed twelve months of the year. See attached water availability determination for Ferry Creek. The applicant's feasibility study is misleading on this point in that it does not state this fact up front, and in fact states that the applicant will be applying for new rights. The feasibility study also notes options such as transferring existing storage (i.e. moving it) and/or characterizing the use as a "bulge in the system"; however it also notes these would likely not be approved by the OWRD. WaterWatch agrees. All in all, the lack of available water, combined with endangered species concerns, makes the viability of this project questionable. As a policy and practical matter, the state should provide public funds for storage projects that do not meet basic public interest thresholds.

City of the Dalles Dog River Pipeline Replacement Project: According to the project description, this project will double the City's capacity from 8 million gallons to 17 million gallons to supply future municipal use. While we appreciate that the City has committed to bypass flow in September and October to provide "additional flow as a result of this project"; it is unclear what metric this will be compared against as ultimately it appears this project will result in a two-fold increase in diversions into

the future. As to the amount of water saved, the statement that the bypass flow far exceeds 25% of the currently lost water, however, this fact is only true as to the two months of bypass where flow is provided, not the remaining 10 months for which there is no noted streamflow benefit. The applicant does not commit to using the Conserved Water Act. Without a commitment to go through the Conserved Water Act, this project appears to do more harm than good in the long run by virtue of the fact they will double their diversion of water from Dog River. Dog River is an important stream for imperiled fish, including chinook, coho, cutthroat and steelhead. Numerous private, non-governmental, state, federal and tribal interests are working to restore streamflows in the Hood River Basin; to fund a project that would allow double the diversion runs contrary to these many efforts. Under the rules, when evaluating the environmental benefits for a project, the Technical Team must look at the "changes in environmental conditions" expected to result from the project, which includes both positive and negative impacts. OAR 690-93-0090(2)(b). We encourage the Technical Team to take a hard look at the potential negative effects of this project.

East Reservoir Water Supply and Irrigation Project (Crooked River Basin, $651,300): This application seeks public funds to fund the majority of the cost to build a new storage project in the Crooked River basin above Prineville Dam. As the WRD is aware, in late 2014 the Crooked River Collaborative Jobs and Security Act of 2104 passed Congress and was signed into law by President Obama. This new federal law authorizes the storage and release of nearly half the water stored behind Prineville Reservoir for downstream fish and wildlife. Earlier this year, the BOR transferred the existing irrigation storage right to a right that allows for storage for downstream fish. Filling of the reservoir on an annual basis is paramount for fulfilling the intent of the Act. The Act directs releases for downstream fish, which means that the reservoir will likely be drawn down to levels not previously experienced on a regular basis. Access to all water provided under the Bureau's storage right is paramount to the annual refilling of the reservoir and the fulfillment of the Act. While the BOR right is senior to this project, the WRD has stated that it will not regulate against junior upstream reservoirs because of a required 10 cfs bypass at Bowman Dam. This means that any new storage project above Prineveille Reservoir will injure the downstream BOR storage water right by storing flows that would otherwise be going to downstream fish. To that end, the WRD should not only not be issuing any new rights[2] that would jeopardize filling into the future, it most certainly should not be spending public funds to support a project that will so clearly harm downstream fish and wildlife. We urge the state to reject this application.

S. Deschutes Co. Water Conservation and Frog Habitat: The applicant claims that this project will benefit frog habitat. However, the application fails to quantify how much water will be left instream to provide increased flows for the frog and it fails to commit to a legal avenue for protecting that water instream (i.e. the Conserved Water Act). While we agree conservation is one of the tools that the BSWG is discussing as a means to increase flows in the basin; no basin plan and/or HCP has yet been solidified. Moreover, numerous instream interests have repeatedly stated in existing collaborative forums that if public funds are going to be used for conservation projects, the saved water needs to be protected instream. Absent a commitment to protecting saved water instream via the Conserved Water Act, WaterWatch would urge the state to reject this application.

Fargo Frontage Road Hazelnut Drip Irrigation: This project claims an environmental benefit of "conservation". As we understand it, the groundwater permit has not yet been developed. As such, the applicant is really seeking funding of a simply a new consumptive use; this is not "conservation" project that would improve efficiency of and existing project. Similarly, the project claims an environmental

[2] Moreover, there appears to be a water right issue with this project. The WRD PFO proposed denial of the project in 2009. The final order notes that the applicant protested the denial and the WRD then reached settlement with the applicant. The WRD has issued a final order but not a permit. The WRD erred in issuing the final order as the applicant missed the protest deadline by three days. Thus, the WRD did not have the statutory authority to enter into settlement negotiations which resulted in their "denial" changing to an 'approval". This makes the viability of this project questionable.

benefit of decreasing the amount of nitrogen and phosphorus in the Pudding River improving water quality for trout, bluegill and steelhead. Given this would fund new irrigation; it is unclear how the applicant can claim an improvement when there is zero impact currently.

Kubli Ditch Group Restoration: From the application materials, it appears that this project has no public environmental benefit. The purpose of the SB 839 fund is to fund projects that provide measurable public benefits. Absent a strong public benefit, public funds should not be used to fund private projects.

Alder Creek Reservoir: SB 839 requires that 25% of the stored water be dedicated to fish and wildlife and legally protected instream against other users for the life of the storage project. The applicants submitted their water right application for the reservoir and secondary use of the reservoir water prior to the passage of SB 839. The WRD has issued a FO for the reservoir and the secondary use, but will not issue the permit until the final dam design and specifications are submitted to the WRD. The rules governing this program require that a storage right be conditioned to achieve this. OAR 690-093-0110(4). However, the rules also allow that for storage permits already issued, that this be satisfied by a condition on the grant. *Id.* at (5). This applicant has not yet received his/her actual permit. Thus, if this grant is approved, the WRD should issue a superseding FO for the reservoir that conditions the permit to ensure that 25% of the stored water will be dedicated instream. And, while not required by the rules, we would also ask the WRD to consider doing the same for the secondary right. Absent that, the applicant should be required to transfer 25% of the irrigation secondary right to instream as a condition of the grant agreement. The statute and rules unequivocally require 25% of the water to be (1) dedicated instream and (2) legally protected instream. The application makes clear that the applicant understands this to be a condition of funding, thus there is no question as to the intent to achieve this. Issuing superceeding FOs for R-86984 and S-86985 that clearly dedicate the 25% instream will simply ensure that these instream protections will live on into the future. As to other issues: The original FO includes bypass flows. These bypass flows are separate and distinct from any SVF flow requirements and also the requirement that 25% of the stored water be later released for downstream uses. If this project is funded, all of these should be a condition of the funding. The applicant is not proposing to go through the CWA for the irrigation efficiency portion of the application; scoring should reflect this.

Big Springs and Lost River Infrastructure Improvements: This project claims it will improve habitat for Lost River Suckers; however, there were no letters of support from either ODFW or USFWS. We would urge the Technical Team to reach out to these two agencies to get their input on this project.

Marks Creek Restoration Project: This project does not commit to using the CWA; it should be scored accordingly. Regardless of the presence of a downstream senior water right holder, we encourage the applicant to use the CWA, which would boost flows above what is required to be passed to the downstream senior water right holder. While this project offers a number of claimed benefits, we are very concerned about the applicant's proposal on measurement. Measurement and reporting of water use is required by the statute that established this program. Measurement and reporting must continue for the life of project (i.e. in perpetuity). Applicant states that they are proposing to measure water usage for two years after the implementation and after that date simply wants to "monitor usage". This does not comply with the statute. An underlying premise of the SB 839 water development program is to promote smart water management into the future; requiring measurement and reporting was a big part of the bill negotiations. Measurement and reporting is required, and it is the WRD that makes the final determination on method, timing, frequency and location, not the applicant. Given the over-appropriated nature of this stream system, it is critical that the WRD ensure that this applicant measure and report in accordance with the statute.

Conclusion: In our assessment, only a handful of the thirty seven applications before the WRD actually meet the standards and intent of this particular grant and loan program with regards to measurable improvement to protected streamflows. That said, there are in fact a large number of additional projects that, were they to protect the claimed restoration water instream through existing legal tools, would appear to be positive projects that meet the statutory intent/guidelines. We would urge the WRD to work with those applicants to commit to using legal tools available to protect water instream so that their projects meet the statutory guidelines for the claimed benefit and thus they can be more favorably scored. We would also encourage the WRD to reject applications for which there are significant environmental concerns, including but not limited to lack of water availability, endangered species concerns and injury to downstream users/values.

Thank you for the opportunity to comment.

Sincerely,

Kimberley Priestley
Senior Policy Analyst

Water Project Grants and Loans Applications

Project, Evaluation, & Comment Summaries 2017 Funding Cycle

Document Description

The following are evaluation summaries for complete grant applications received by April 5, 2017 for the 2017 Water Project Grants and Loans funding cycle. The multi-agency Technical Review Team (TRT) provided comments on each application, scored applications based on the criteria identified in the Department's rules (see attachment 3 and attachment 4), and made a funding recommendation to the Water Resources Commission (Commission) based on that evaluation and available funds. The TRT comments found within this document are adapted from comments gathered by the Department during the application evaluation process. The document also includes summaries of the public comments received on the TRT ranking as well as the Department's response to those comments. You will also find page numbers listed for where to find the full comment in Attachment 5. The evaluation summaries are listed in the order of the TRT ranking.

Table of Contents

North Fork Sprague Conservation Piping and Instream Flow Restoration 4
Powder Valley Connector 6
Opal Springs Fish Passage and Pool Raise 9
Coe Branch Pipeline & On-farm Irrigation Efficiency Project 12
Painted Hills Reservoir Expansion 16
Dog River Pipeline Replacement Project 18
Desolation Creek Natural Water Storage Project 21
Bandon Off-Channel Reservoir Project 23
Threemile Joint Fish Screen Project 25
Flat Creek Watershed Enhancement 27
Alder Creek Reservoir 29
Highland Ditch Piping 31
Walla Walla Basin Alluvial Managed Aquifer Recharge 33
Water Storage for Irrigation at La Creole Orchards in Polk County 35
East Reservoir Water Supply & Irrigation Project 37
Ruby Peak Diversion 39
Marks Creek Meadow Restoration Project 41
Madras Agricultural Water Efficiency and Reuse Project 43

McMullin Creek Dam and Spillway Upgrades....45
Newport Citywide Advanced Metering Infrastructure....47
Restormel Family Farm Water Conservation and Storage Project....49
Silverton Water Treatment Plant Improvement Project....51
Big Springs and Lost River Infrastructure Improvements....53
Hwy 240 to Chehalem Drive and North to Columbia Drive Waterline Extension....55
Cold Springs Ranch Irrigation System Improvement Project....57
Fargo Frontage Road Hazelnut Drip Irrigation....59
Queen's Avenue Transmission Line....61
Wallace Pump Station, Under-Road Crossing and Piping Upgrade....63
Stanfield Irrigation District Efficiency Project....65
South Deschutes County Water Conservation & Frog Habitat....67
Burlington Control System Updates....69
Kubli Ditch Group Restoration....71

General Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 40)

Summary of Comment: WaterWatch encouraged the Department to work with funding applicants to use the Conserved Water Act. They also expressed that water conservation, without legally protecting water instream, may harm environmental values and that the environmental benefits of projects should provide quantifiable benefits to Oregon's rivers, streams, and/or lakes. WaterWatch believes that a conservation project that does not do anything to improve streamflows should not be considered robust enough to meet the environmental benefit mandate on its own. Finally, WaterWatch noted that it would be helpful for the public to have the TRT score sheets prior to making a recommendation to the Commission so that the public can provide more meaningful comments. Providing a cumulative score does not allow the public to understand the points granted to each public benefit, nor provide meaningful data on any sub-points scored.

Department Response: In all pre-application conferences, the Department points out to potential applicants that they can only score points for the "measurable improvement to protected streamflows" benefit if they legally protect water instream. The Department also highlights that the Allocation of Conserved Water Program is one means to legally protect water instream and earn those points.

The statute states that "The evaluation of environmental benefits for a project shall be based on the changes in environmental conditions expected to result from the project, including but not limited to conditions related to…water conservation…" (ORS 541.673(3)(d)). Given the scores received by the projects funded in 2016 and recommended for funding in 2017, the Department has observed that simply scoring in one benefit in any public benefits category (e.g., water conservation in the environmental category) is unlikely to be competitive for funding. In addition, all three categories of public benefits (economic, environmental and social/cultural) are scored and considered equally.

The Department appreciates the suggestion on how to improve the public's opportunity to comment on funding recommendations as well as its comments on scoring and will consider these suggestions as we evaluate the program in the future.

North Fork Sprague Conservation Piping and Instream Flow Restoration

TRT Recommendation: Recommended for Funding ($2,731,746)

Project Information (adapted from application)

Applicant Name: Trout Unlimited

Funding Requested: $2,731,746

Total Project Cost: $3,875,000

Public Benefit Score: 60

Project Summary: The proposed project would install dual 36-inch high-density polyethylene (HDPE) pipe in the unlined North Fork Sprague River Irrigation Ditch located in the Upper Klamath Basin in Klamath County. The diversion rate is up to 76.8 cubic feet per second (cfs), and ditch loss surveys documented a 35% loss of water in the ditch, demonstrating that water conservation can be achieved through this project. More than 90% of the conserved water (as much as 29 cfs) would be legally protected for instream use in the North Fork Sprague River.

Technical Review Team Comments

Economic Public Benefits Comments

An economic strength of the proposed project is that it intends to support agriculture in the Upper Klamath Basin by providing a more reliable water supply for both instream needs and agriculture. Another economic benefit is that the project intends to result in pressurized pipe allowing irrigators to convert to sprinklers and stretch water further into the season. There are also economic benefits associated with time savings associated with reduced ditch maintenance, conserved water being allocated to new lands, and the potential for a reduction in tribal calls for water. The application could be improved by describing the impact of updated irrigation technology on jobs and whether or not future conversions to sprinklers would result in a net increase in jobs. The application could further be improved by quantifying the increased profitability for ranches expected to result from the project.

Environmental Public Benefits Comments

An environmental strength of the proposed project is that it intends to legally protect up to 29 cfs of water instream, with various portions of that total protected in the spring, summer, and fall. Another environmental benefit is that since the project takes place on a headwater stream the water quality benefit would be strong with increased flows having the potential to improve stream temperatures. There are also environmental benefits associated with a strong, collaborative monitoring plan for water temperature, and the proposed project providing benefit to spring chinook in a high priority area.

Social/Cultural Public Benefits Comments

A social/cultural strength of the proposed project is the public data that would be available due to the monitoring proposed. Other social/cultural strengths of the application are a demonstration of a strong collaborative effort and the inclusion of a letter of support from the Klamath Tribes. The application could be improved by providing specific data collection parameters and methods for the proposed project. The application could also be improved by providing additional detail of the collaborative process that identified this project as worth pursuing and describing how the basin residents were involved.

Other Comments

The review team commented that the proposed project supports and is in-line with Klamath Basin planning efforts and may be helpful in addressing conflicts between tribes and agriculture. The reviewers also noted that while the application provided evidence that landowners are in agreement with the proposed water right changes, an application for the Allocation of Conserved Water Program will require a high level of coordination due in part to that fact that individual landowners are not part of an organized legal entity. It is also possible that the project may not be able to dedicate one of the water rights listed instream if evidence cannot be provided to demonstrate that the supplemental right has been used in the last five years. The reviewers recommend that the applicant works with OWRD to clarify which water rights can go through the Allocation of Conserved Water Program. Another comment was that there is no match contribution from the landowners.

Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 38)

Summary of Comment: Letters of support for project.

Department Response: Comment supports funding of the project.

Powder Valley Connector

TRT Recommendation: Recommended for Funding ($1,076,000)

Project Information (adapted from application)

Applicant Name: Powder Valley Water Control District

Funding Requested: $1,076,000

Total Project Cost: $1,440,000

Public Benefit Score: 58.5

Project Summary: The Powder Valley Water Control District is a group of irrigators located in Baker and Union counties seeking to reduce water loss from the MaHarry-Blevins Ditch, an 8,090-foot manually controlled and open irrigation ditch. The proposal is to construct a 6,980-foot long, 36-inch diameter pipeline with automated control valves to replace the ditch from Wolf Creek Reservoir to the P-2 pipeline inlet. When completed, the pipeline would result in the conservation of up to 1,350 acre-feet of water each irrigation season, which would result in less water being released from Wolf Creek Reservoir to meet demand and a corresponding increase in late season reservoir volume.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to result in long-term preservation of jobs in ranching. Another economic benefit is that it would improve infrastructure and provide for improved on-farm efficiency. There is also economic benefit associated with tourism and recreation since the project would allow Wolf Creek Reservoir to remain full for a month longer. The public benefit descriptions in the application could have been improved by additional quantification of the job impacts.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it seeks to maintain cooler water temperatures and increased oxygen in the reservoir for a longer period of time. Other environmental benefits are that the project may prevent E. coli from ending up in the Powder River as well as decreased runoff of sediment and pesticides. While the project could result in water conservation, a weakness in the environmental benefit category is that streamflow would not be increased or legally protected instream. The environmental benefits could be improved by including monitoring of water quality parameters in the project scope. Another weakness of the application is that it notes an intention to improve bull trout habitat but it is unclear if the project would result in water that is cool enough to meet bull trout needs.

Social/Cultural Public Benefits Comments

Social/cultural benefit strengths of the proposed project are that it intends to increase recreation and tourism resulting from enhanced reservoir levels and provide benefit to an economically

distressed rural community. Another social/cultural benefit is that the proposed project seeks to promote public health and safety by protecting crops from animal waste and reducing the potential for E. coli contamination. There are also social/cultural benefits associated with making the project data publically available and collaborative efforts with the Oregon Department of Fish and Wildlife. The social/cultural public benefits could be further improved by increasing collaboration with the US Forest Service, state agencies, tribes, and county parks.

Other Comments

The review team noted that the application demonstrates that the proposed project is likely feasible and demonstrates a readiness for funding (i.e. shovel ready). Other positive reviewer comments were that landowners demonstrated a stake in the project through in-kind match funding and that the project provides a model for other similar projects.

Public Comments

Commenters (comment page number): Baker County (p. 25-26), Farmers Conservation Alliance (p. 27), Powder Valley Water Control District (applicant) (p. 28), James and Elsie Newman (p. 29), Doug Lewis (p. 30), Jason Williams (p. 31), Bruce Henderson (p. 32), Jerry Gray (p. 33), Chris Colton (p. 34), Lukas Gray (p. 35), Myron and Dorothy Miles (p. 36), and Union County (p. 37)

Summary of Comment: Letters of support for project.

Department Response: Comment supports funding of the project consistent with the Department's funding recommendation.

Commenter (comment page number): WaterWatch of Oregon (p. 39)

Summary of Comment: WaterWatch urges the Commission to not accept the Department's recommendation and to not fund this project for several reasons. First, WaterWatch notes that without support letters from fisheries agencies or tribes the Department should require documentation to support the claimed project benefits to bull trout, which it could not find in the application. Second, the project does not propose to use the Conserved Water Allocation Act to legally protect conserved water instream. Since water will not be legally protected the project should not score points on that public benefit. WaterWatch is further concerned that conserved water will be used to extend the irrigation and not benefit the environment. Third, WaterWatch notes that the district has protested four instream water right applications in the Powder River Basin (Application 72163 on Wolf Creek, 72187 and 72188 on the N. Powder River and 72194 on Rock Creek). Instead of resolving the protests in a way that results in the issuance of protectable instream water rights, the Districts have had discussions about a collaborative approach to protecting streamflows without the issuance of actual instream water rights. WaterWatch believes that funding this project would undermine any sort of collaborative effort since it provides water to users without protecting water instream. WaterWatch does not believe that public funds should be invested in projects that "undermine current efforts in the basin to ensure that flows for fish are protected" or unless the instream water right protests are resolved. WaterWatch also believes that funding should be awarded to projects that provide some streamflow benefits.

Department Response: Thank you for the comments. On the issue of bull trout, the TRT also raised concerns about the extent of public benefits to the bull trout in its feedback to the applicant (see above). However, it also noted other environmental benefits of the project. This links into WaterWatch's broader concern about the lack of environmental benefits of the project. As per statute, and further described in the Department's Guidance on the Evaluation of Public Benefits, a project can score in six different environmental public benefits. One environmental public benefit, a measurable improvement in protected streamflows, is listed in ORS 541.673(3)(a). A project must legally protect water instream to score in this environmental public benefit. The Department communicates this to applicants and the Technical Review Team. In addition to this public benefit, there are five other environmental public benefits that a project can score on, including water conservation and improvements to water quality. Legally protecting water instream is not a required environmental benefit. While the project does not have letters of support from fish agencies or tribes, it does include a letter of support from Oregon Department of Environmental Quality, which indicates that the project will have environmental benefits related to water quality.

On the issue of the protested instream water rights, it is unclear to the Department how providing greater water certainty to water users would undermine the collaborative efforts underway or impact the protested instream water rights.

This project is recommended for funding based on the merits of the project and the public benefits it would provide. After consideration of these comments, the Department still recommends funding the project as proposed.

Opal Springs Fish Passage and Pool Raise

TRT Recommendation: Recommended for Funding ($1,550,486)

Project Information (adapted from application)

Applicant Name: Deschutes Valley Water District (DVWD)

Funding Requested: $1,550,486

Total Project Cost: $10,720,486

Public Benefit Score: 52.5

Project Summary: The Opal Springs Hydroelectric Project (OSHP) is a 4.3 megawatt (MW) hydropower project on the Crooked River in Deschutes County. In 2007, fish agencies reintroduced listed salmon and steelhead into the Upper Deschutes Basin. The purpose of the project is to allow upstream and downstream fish passage through the development of fish passage facilities. The proposed project would restore effective migratory fish access to over 100 miles of habitat through the lower Crooked River. If implemented, the proposed project would enable Deschutes Valley Water District to qualify for Low Impact Hydro Institute certification to provide renewable energy credits.

Technical Review Team Comments

Economic Public Benefits Comments

Economic benefit strengths of the proposed project are that it intends to preserve water delivery for agriculture, prevent an increase in water rates, and increase hydropower generation income. Another economic benefit is increased opportunities for camping and whitewater rafting. There are also economic benefits associated with the creation of temporary jobs and a strengthened long-term viability of municipal water supply. The application could be improved by better describing the benefits to the larger communities instead of focusing on statements about customers of the project and by providing additional substantiating detail.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to reconnect redband trout and open historic habitat for bull trout. Another environmental benefit is that the proposed project addressed the number two fish passage priority project in the state as identified by the Oregon Department of Fish and Wildlife. There is also environmental benefit associated with increased resilience to climate change that could result from fish passage. A limiting factor for the environmental benefits of the proposed project is that there is not an opportunity for the state to legally protect flows instream. Non-consumptive hydroelectric use does not allow for legal protection of water instream and the credit banking flows described in the application are not legally protected by the state.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it represents a collaborative process that is supported by regional fisheries organizations. Other social/cultural benefits are increased recreation in a blue ribbon fishery area, the public availability of scientific data, and the proposed project's location within an economically distressed Jefferson County. There is also social/cultural benefit associated with the importance of redband trout to Indian tribes.

Other Comments

The review team noted that the project demonstrates a readiness for funding (i.e. shovel ready). Another comment was that the application could have more clearly described how the project fits within a complex water distribution system.

Public Comments

Commenters (page number comment): DVWD (applicant) (p. 7-15 and 18-20)

Summary of Comment: The letter from the applicant expressed appreciation for being recommended for funding. The letter also addressed three comments from the Technical Review Team (TRT) as outlined in the table below.

TRT Comment	Applicant Response
"The application could be improved by better describing the benefits to the larger communities instead of focusing on statements about customers of the project and by providing additional substantiating detail."	The applicant provided information on 1) the percent of the local population living below the poverty line, 2) the potential economic benefits to the larger community due to an improved fishery and resulting tourism/hospitality, and 3) how an improved fishery would economically benefit tribal communities.
"A limiting factor for the environmental benefits of the proposed project is that there is not an opportunity for the state to legally protect flows instream. Non-consumptive hydroelectric use does not allow for legal protection of water instream and the credit banking flows described in the application are not legally protected by the state."	The applicant explained how its Clean Water Act (CWA) 401 Certification requires them to allocate water instream and establish a Bypass Flow Accrual Account. While this water would not be legally protected by the State of Oregon through the Oregon Water Resources Department, DVWD is bound by its certification to release certain bypass flows.
"Another comment was that the application could have more clearly described how the project fits within a complex water distribution system."	The applicant provided a description of the water systems in the region and communities served.

Department Response: Thank you for the comments and the additional information addressing the TRT's comments. The Department appreciates the applicant's efforts to respond to TRT comments. On the issue of streamflow protected instream, the Department understands that the DVWD is bound by its Clean Water Act (CWA) 401 Certification to release certain bypass flows for instream use. However, the Department maintains that because it is not legally protected instream by the Department, it may be available for another user to withdraw from the river, thus potentially limiting the environmental benefit of the project. Regardless, the Department still recommends funding the project as proposed.

Commenters (page number comment): US Fish and Wildlife Service (p. 16-17), Deschutes River Conservancy (p. 21), Central Oregon LandWatch (p. 22-23), National Marine Fisheries Service (p. 24), and WaterWatch of Oregon (p. 38)

Summary of Comment: Letters of support for project.

Department Response: Comment supports the Department's funding recommendation.

Coe Branch Pipeline & On-farm Irrigation Efficiency Project

TRT Recommendation: Recommended for Funding ($924,000)

Project Information (adapted from application)

Applicant Name: Middle Fork Irrigation District

Funding Requested: $924,000

Total Project Cost: $1,680,105

Public Benefit Score: 49.5

Project Summary: The purpose of the project is to increase on-farm water conservation in the Middle Fork Irrigation District (MFID) in Hood River County, which would allow more water to be left instream for the benefit of threatened populations of winter steelhead, spring Chinook, and bull trout. Instream benefits may occur due to an estimated 60% reduction in water diversion while achieving the same irrigation benefits. Increased on-farm water conservation would be accomplished in two ways. First, MFID proposes to construct a new pipeline segment from their Coe Branch diversion to an existing settling pond, which would allow them to remove significant amounts of sediment from the water before it is delivered to irrigators. Second, MFID patrons would upgrade irrigation equipment on 304 acres, which would save approximately 407 acre-feet/year (1.7 cubic feet per second during the irrigation season). Removing sediment from Coe Branch water, via the existing settling pond, is key to enabling MFID irrigators to use more efficient irrigation equipment such as micro-sprinklers and drip lines. *Note: Instream benefits may result through improvements in efficiency but the project as proposed would not legally protect water instream.*

Technical Review Team Comments

Economic Public Benefits Comments

As described in the application, the proposed project would provide economic benefit to a key industry in the basin by increasing sustainability long-term through increased efficiency. The project also supports value-added agriculture, a top economic priority in that region. An economic benefit strength of the proposed project is that it intends to increase efficiency and remove sediment from water, allowing the use of more innovate technology like drip irrigation. Currently glacial flour in the source water is an issue preventing the installation of drip irrigation. This project would eliminate that barrier and increase water supply reliability in an area where supply will decrease over time as glaciers melt. Irrigation with drip or micro-sprinklers is identified as an important strategy to meet future orchard irrigation needs. The application could be improved by providing additional detail regarding crop outputs related to the properties served by the proposed project.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to improve flows and instream conditions in Clear Branch which is important salmonid habitat. Other environmental

benefits are the potential for water temperature improvements, reduced demand for stored water, conservation of water through a reduced need for backflushing, and reduced use of groundwater. The application could be improved by describing more clearly how the proposed project meets fish management objectives and how the reservoir will be managed. A weakness of the application is that it did not include assurances that efficient irrigation infrastructure will be installed. Rather the application simply included letters of support indicating the Natural Resources Conservation Service was involved in on-farm irrigation upgrades in the district.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it demonstrates a strong link to local food systems and tribal fisheries. Other social/cultural benefits are strong collaboration, significant monitoring capacity and publically available data, and the potential for improved recreation and scenic values. While the application describes the proposed project's potential to benefit low income and minority communities, it is unclear if there are benefits to these communities beyond a general increase in industry sustainability though water supply reliability.

Other Comments

The review team had a number of other comments about this application. One comment was that there are significant match contributions, many strong letters of support, and 50% designs have been completed, demonstrating that the project is shovel ready. A concern was identified that the application lacked detail regarding reservoir management plans. The application also did not address the status of a required special-use permit that has been under negotiation for many years.

Public Comments

Commenter (comment page number): Middle Fork Irrigation District (applicant) (p. 2)

Summary of Comment: The letter from the applicant expressed appreciation for being recommended for funding. The letter also addressed three comments from the Technical Review Team (TRT) as outlined in the table below.

TRT Comment	Applicant Response
Instream benefits may result through improvements in efficiency but the project as proposed would not legally protect water instream.	The applicant noted that, "although the district is not planning to pursue a Conserved Water Allocation as part of the project, streamflow protection will be identified and incorporated into the renewed special use permit from the US Forest Service for operation of the dam and diversions."
The application could be improved by describing more clearly how the proposed project meets fish management objectives and how the reservoir will be managed.	The applicant identified the key fish management objectives in the area and how the project would benefit those objectives. The applicant also shared the intent to maintain increased reservoir levels through reduced irrigation demand and to release more flow from the reservoir into Clear Branch.
A weakness of the application is that it did not include assurances that efficient irrigation infrastructure will be installed. Rather the application simply included letters of support indicating the Natural Resources Conservation Service was involved	The applicant and the NRCS provided a letter of support documenting the NRCS's financial commitment to on-farm efficiency projects in the district and that the NRCS has already entered into agreements with local landowners (see next comment below).

in district on-farm irrigation upgrades.	
The application also did not address the status of a required special-use permit (SUP) that has been under negotiation for many years.	The applicant shared that planned reissuance of the SUP is scheduled for 2021 and that they are working with collaboratively with basin stakeholders on a suite of improvements to reduce the district's impact on the environment. The applicant also noted that it is incorrect to characterize that collaborative process as a "negotiation" of the new SUP.

Department Response: Thank you for the comments and the additional information addressing the TRT's comments. On the issue of streamflow protected instream, the Department understands the district's intent to protect streamflow through a renewed SUP with the US Forest Service. However, the Department maintains that because it is not legally protected instream by the Department, it may be available for another user to withdraw from the river, thus potentially limiting the environmental benefit of the project. These comments support funding the project, consistent with the Department's funding recommendation.

Commenter (comment page number): Natural Resources Conservation Service (NRCS) (p. 3)

Summary of Comment: Letter of support for project noting that the NRCS has awarded $500,000 to the project and that those funds will be used to help 12 landowners improve their irrigation efficiency on 314 acres.

Department Response: Comment supports Department's funding recommendation.

Commenter (comment page number): WaterWatch of Oregon (p. 38-39)

Summary of Comment: WaterWatch noted that it felt that the application could be greatly improved if Middle Fork Irrigation District (MFID) would commit to and work with the Department to use the Conserved Water Act to legally protect saved water instream. Alternatively, WaterWatch urges the Commission to require a condition of the grant that MFID is to release 1.7 cfs into Clear Branch (in addition to any existing bypass flows) and/or protect the water in Laurance Lake, consistent with what MFID states will happen in the Special Use Permit (SUP). While WaterWatch appreciates that the SUP is anticipated to protect this water, the Commission should not rely on this for gauging environmental benefit because (1) absent delay, it will not come into play until 2021 and (2) the Environmental Assessment has not been finalized so it is unclear what final requirements will be included. By conditioning the water right to either hold the water back in Laurance Lake and/or release to Clear Branch, as MFID represents it will do, the Commission will simply be ensuring that the claimed benefit will accrue as represented.

Department Response: Thank you for the comments. The Department agrees that the SUP does not count as legal protection of water instream by the State or Oregon. The Department reached out to the applicant to see if it would be willing to use the Conserved Water Act to legally protect conserved water instream. The District Manager, Craig DeHart, provided the written response included on the following page. While any project's public benefits may be improved by different actions, such as legally protecting water instream, the TRT scored this application and found the project worthy of funding with the project public benefits described in the application. After consideration of these comments, the Department still recommends

funding the project as proposed and not requiring a condition to use the Allocation of Conserved Water Program.

Painted Hills Reservoir Expansion

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Bridge Creek Ranch LLC

Funding Requested: $542,429

Total Project Cost: $881,793

Public Benefit Score: 48

Project Summary: The purpose of the project is to enlarge the storage capacity of Painted Hills Reservoir, an existing off-channel reservoir located along Bridge Creek in Wheeler County in the John Day Basin. This project would raise the existing pool elevation by 6.2 feet and increase the reservoir's capacity by 500 acre-feet. Twenty five percent (25%) of the increased stored water (up to 125 acre-feet) would be released instream during low flow periods to augment stream flows in Bridge Creek. The project would also result in the installation of power and a 900 foot center-pivot in a field adjacent to Bear Creek to increase irrigation efficiency.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to result in direct and indirect job opportunities in Wheeler County. Another economic benefit is the potential for improved irrigation efficiency to lead to increased crop yield. The proposed project could be improved by providing economic benefits to an increased number of landowners. As described, the majority of economic benefit is seen by the landowner as opposed to the broader public.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to release stored water into Bridge Creek and enhance instream flows. Another environmental benefit is that the proposed project could result in reduced flashiness of flows which could beneficially impact beaver dams below the proposed project site. The project's environmental benefit could be improved by using the Allocation of Conserved Water program to dedicate water conserved through irrigation upgrades to instream use. Another weakness of the proposed project's environmental benefit is that while the reservoir diverts water from both Bridge and Bear Creeks, water would only be released into Bridge Creek and not Bear Creek, which has water quality concerns. An additional concern is that the temperature of water released into Bridge Creek may not be cool since the reservoir often isn't deep enough to stratify.

Social/Cultural Public Benefits Comments

Social/cultural benefits of the proposed project include that it intends to increase water available for fire suppression and provide benefits to an economically distressed community. Another social/cultural benefit is that five years of post-project monitoring data would be made publically

available. While the project could improve recreational opportunities, a weakness of the proposed project is that water quality issues such as temperature and algae may negatively impact the recreational benefits of the lake. The application could be improved by increased description of collaborative and cooperative efforts.

Other Comments

Other review team comments included a concern that there has been a lack of cooperation in maintaining fish passage and screening associated with the existing storage project. Other comments highlighted the following concerns: 1) repair of a flow meter required to adhere to existing permit conditions has not occurred in a timely manner, and 2) the required fish passage condition was not mentioned in the application materials.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Dog River Pipeline Replacement Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: City of the Dalles

Funding Requested: $1,000,000

Total Project Cost: $8,097,700

Public Benefit Score: 47.5

Project Summary: The Dog River pipeline is a 3.5 mile long, over 100 year old wooden water transmission pipeline that carries 54% of the City of The Dalles' municipal water supply of 1.26 billion gallons per year. Due to significant deterioration, the pipeline leaks nearly 1 million gallons per day at peak level, and is at risk of complete failure. This project would replace the wooden pipeline with a ductile iron pipe as well as enhance flow metering systems, install fish screens and upstream fish passage structures, construct an arch culvert where vehicles are currently required to drive through a stream, and commit to providing a 0.5 cubic feet per second (cfs) bypass flow in Dog River during the months of September and October. *Note: Bypass flow commitment would be operational and as proposed would not legally protect water instream.*

Technical Review Team Comments

Economic Public Benefits Comments

An economic strength of the proposed project is that it intends to address an infrastructure need of a large diverse community and, if left unaddressed, failure of the system would result in a large economic burden. Other economic benefits are that a reliable water source may attract new and retain existing businesses, and that the infrastructure is linked to industrial and housing developments which are key priorities for The Dalles. The Dog River Pipeline is also a priority project on the North Central Regional Solutions Project list, and it is ranked very high on the region Comprehensive Economic Development Strategy. However, the application could be improved by better quantification of project impacts to the community. The application would be strengthened by including additional details about the population and number of businesses that would be served and benefit from the project as well as further description of the current vulnerability of the City of the Dalles system.

Environmental Public Benefits Comments

Environmental strengths of the proposed project include that it intends to eliminate current water loss due to leakage and it would result in the installation of a fish screen at the diversion. The proposed project intends to provide 0.5 cfs of bypass flows in Dog River in September and October which are months when tribes have hatchery spawning; however the bypassed water would not be legally protected instream. The review team also noted that the city has the right to all flows in Dog River, so while the bypass flows may not be legally protected instream no

additional users currently have rights to divert the bypass flows. Public benefits could be improved by increasing the number of months in which bypass flows would occur, and coordinating with the Oregon Department of Fish and Wildlife on timing.

Social/Cultural Public Benefits Comments

A social/cultural strength of the proposed project is that it intends to support public health and safety through increased water security and improved water quality. Another social/cultural benefit is the potential to slow the pace of already high water rates. The application could be improved by providing additional detail of the collaborative process that promoted this project and describing how the basin residents and other stakeholders were involved.

Other Comments

Other application comments include that the proposed project would need fish passage and screening approval from ODFW and that the project would benefit from additional metering and measurement. Another was that the application is a resubmission from last year with the addition of bypass flows and associated public benefits.

Public Comments

Commenter (comment page number): The City of the Dalles (applicant) (p. 4-6)

Summary of Comment: The letter centered on a concern that the public benefits of the project were undervalued by the TRT. The letter also addressed multiple comments from the Technical Review Team (TRT) as outlined in the table below.

TRT Comment	Applicant Response
"The Dog River Pipeline is also a priority project on the North Central Regional Solutions Project list, and it is ranked very high on the region Comprehensive Economic Development Strategy."	The applicant added that the project is also the highest priority for The Dalles City Council and the second highest priority project in Wasco County for the Wasco County Economic Development Commission.
"However, the application could be improved by better quantification of project impacts to the community. The application would be strengthened by including additional details about the population and number of businesses that would be served and benefit from the project as well as further description of the current vulnerability of the City of the Dalles system."	The applicant reiterated the importance of the pipeline to supply over half of the City's annual water supply and listed adverse impacts if the current pipeline were to fail. The applicant stated that these impacts are difficult to quantify. The applicant also listed population and job statistics while describing relative to State averages, the income levels, water utility rates, and minority and over-age-65 populations in The Dalles.
"The proposed project intends to provide 0.5 cfs of bypass flows in Dog River in September and October which are months when tribes have hatchery spawning…"	The applicant acknowledged that the TRT noted the project would eliminate water loss and intended to provide bypass flow. The applicant clarified that the bypass flows are intended for natural runs of Coho salmon, not a deliberate hatchery release program.
"…however the bypassed water would not be legally protected instream."	The applicant disagreed with this statement and referenced an unmet junior instream water right downstream of the pipeline diversion that would benefit from bypass flows.

"Public benefits could be improved by … coordinating with the Oregon Department of Fish and Wildlife on timing."	The applicant clarified that consultation with ODFW did occur as well as reiterated that the project proposes to voluntarily install fish passage at the diversion and an arch culvert to replace an unimproved stream crossing.
"The application could be improved by providing additional detail of the collaborative process that promoted this project…"	The applicant cited the project's priority ranking with several stakeholders, public comment solicited through the National Environmental Policy Act process, and the 13 letters of support submitted with the application. The letter also mentioned that the application summarized benefits of the project to the diverse community.

Department Response: Thank you for the comments and the additional information addressing the TRT's comments. The Department appreciates the applicant's efforts to respond to TRT comments and will provide the comments to the Commission for its consideration. Regarding the legal protection of bypass flows, the Department understands that the applicant intends to leave 0.5 cfs instream but the application did not indicate that the flow would be legally protected instream. Legally protecting water instream is necessary to score points for the environmental public benefit "measurable improvement in protected streamflows." While there is a junior instream water right that may benefit from the bypass flow, it is not guaranteed to be protected, particularly if the city grows into its water right in the future. **After consideration of this comment, the Department does not recommend adjusting the score and rank of the project. Therefore the project still does not score or rank high enough to be recommended for funding, given the funding available.**

Commenter (comment page number): WaterWatch of Oregon (p. 39-40)

Summary of Comment: WaterWatch noted that the project proposes to install new piping that would double the applicant's diversion capability and expressed concern over the increase and its effective change on environmental conditions in Dog River. WaterWatch questioned the effectiveness of the committed bypass flow of 0.5 cfs for the duration of 2 months a year. WaterWatch was also concerned that the applicant did not propose to apply to the Allocation of Conserved Water Program. WaterWatch cited streamflow restoration efforts in the Hood River Basin by several stakeholders to benefit fisheries and questioned the environmental benefits of increasing the diversion from Dog River.

Department Response: The Department agrees with WaterWatch and the TRT's point that while water may be conserved by the project, it would not be legally protected instream, and therefore, does not qualify for the points possible under that public benefit.

Desolation Creek Natural Water Storage Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: North Fork John Day Watershed Council

Funding Requested: $194,040

Total Project Cost: $258,839

Public Benefit Score: 45.5

Project Summary: The proposed activities would increase groundwater storage retention and capacity across approximately 818 acre-feet of adjacent wet lands on the Desolation Creek, LLC property in Grant County. The project would employ local youth crews to install 275 small woody debris dams on four streams, install four beaver dam analogs (BDA's) on one stream and plant and cage 200 aspen for a future beaver food source, and plant and cage 25 cottonwoods at a separate riparian location. These activities would increase contributions to the hydrologic system in Desolation Creek, a tributary of the North Fork John Day River.

Technical Review Team Comments

Economic Public Benefits Comments

An economic strength of the proposed project is that it intends to result in fish industry improvements and other tourism benefits related to public access to the creek. Other economic benefits are that the proposed project would use an innovative approach to improve groundwater that could in turn benefit agriculture and cattle grazing in the area. While the project would create one full-time position and youth labor crews, the application could have been improved by providing more detail about the anticipated employment of the youth crews that would be performing work.

Environmental Public Benefits Comments

Environmental strengths of the proposed project are that it intends to improve floodplain function, reduce stream flashiness, benefit wetlands, and benefit bull trout and Chinook Salmon habitat. Other environmental benefits are the application included a good plan for water quality monitoring and the applicant has been working with Oregon Department of Fish and Wildlife on fish passage. The application could be improved by better describing how groundwater levels will be monitored to demonstrate improvement. Limitations of the proposed project are that it does not legally protect water instream, claimed project benefits to the Columbia River are unclear because of distance, and the environmental benefits are uncertain because it is unclear how effectively the project will benefit streamflow. The application would be improved by providing additional evidence to demonstrate that environmental benefits would be achieved if the project were implemented.

Social/Cultural Public Benefits Comments

A social/cultural strength of the proposed project is that it intends to result in fishery benefits for two Indian tribes and provide economic benefits to two distressed communities in Grant County. Other social/cultural benefits are employment of local youth, community involvement in climate resiliency efforts, and public availability of information. While the proposed project includes increased public access, the application could be improved by including additional information on how private landowners intend to provide public access.

Other Comments

The review team had a number of other comments about this application. One comment was that the project is of an experimental nature and could benefit from additional evidence supporting the application benefit claims.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Bandon Off-Channel Reservoir Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: City of Bandon

Funding Requested: $7,200,000 ($5,400,000 and $1,800,000 loan)

Total Project Cost: $7,200,000

Public Benefit Score: 45

Project Summary: The purpose of this project is to improve and expand water storage for the City of Bandon in Coos County. The City has two existing on-stream reservoirs on Geiger and Ferry Creeks, but neither is capable of storing very much water, nor can storage in either be expanded. The City has adequate amounts of surface water rights, but there are times when the supply may not be available. The proposed off-channel reservoir project would store approximately 100 acre-feet of water for municipal use that would provide the city approximately 74 days of water storage.

Technical Review Team Comments

Economic Public Benefits Comments

An economic public benefit of the proposed project is that it would improve water supply reliability for Bandon, a city with good growth potential on the south coast. There is also economic benefit associated with the potential for more water available for agricultural water users. The application could be improved by further describing the connection between municipal and agriculture users of the surface water and the economic benefits of that water use. The application could also be improved by clarifying and substantiating the percentages of increased efficiency noted in the application. A weakness of the application is that the claim that the project will result in a reliable source of water for 150 years was not well substantiated.

Environmental Public Benefits Comments

An environmental benefit of the proposed project is that it could provide water quality benefits including supporting Coquille Total Maximum Daily Load implementation. Another environmental benefit is that the proposed project would move a water right point of diversion downstream of the Oregon Fish and Wildlife (ODFW) fish hatchery, which would be beneficial for the hatchery. A third potential environmental benefit is that if stored water is used to meet municipal demand, streamflow may become more stabilized during peak demand period. There is also environmental benefit associated with planned aeration mixing that could result in improved water quality. While the project would release of 25% of stored water instream per grant program requirements, a shortcoming is that the releases would be so low in the watershed (1.5 miles from the ocean) that the benefit of those releases would be limited.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is increased fire flow availability which would benefit public safety. Another social/cultural benefit is that the additional water supply would support tourism since the community has almost run out of the current water supply several times at the height of tourism season. There is also social/cultural benefit associated with reduced vulnerability to public health that is provided by a secure water source.

Other Comments

The review team had a number of other comments about the application. A comment was made that if the project is constructed, the Coquille Indian Tribe should be contacted immediately if any known or suspected cultural resources are encountered during the work. Additionally, extreme caution is recommended during project related groundbreaking activities and if archaeological materials are discovered, uncovered, or disturbed, on the property, the Coquille Indian Tribe would discuss the appropriate actions with all necessary parties. One comment was that if the project were to be implemented, diversion of water and construction of the reservoir should be coordinated with ODFW hatchery staff. There was an additional concern that the feasibility study submitted with the application did not demonstrate an understanding of dam safety requirements and the geotechnical work lacked strength, the cost estimates for the project were not sufficiently supported by the geotechnical information, and it was unclear how much fill would be needed to construct the embankment. There was also a concern that the storage capacity numbers and days of municipal water needs met each year were inconsistent within the application and attached feasibility study. The reviewers recommend the applicant work with OWRD to address dam safety concerns.

Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 39)

Summary of Comment: WaterWatch expressed several concerns including lack of water availability on Ferry Creek; inconsistencies in the applicant's feasibility study regarding water availability and transfer of storage rights; and effect on endangered species.

Department Response: The Department does not recommend funding the project at this time.

Threemile Joint Fish Screen Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Wasco County Soil and Water Conservation District & Rock Creek District Improvement Company

Funding Requested: $317,495

Total Project Cost: $1,694,203

Public Benefit Score: 44.5

Project Summary: The Threemile Joint Fish Screen Project in Wasco County would eliminate 16,000 feet of open ditch in two neighboring irrigation districts and convert it to pipe, saving an estimated 2 cubic feet per second (cfs). Half of the conserved water (an estimated 1 cfs) would be legally protected instream permanently. The project would eliminate two unscreened fish passage barriers and install a new fish-friendly diversion and Farmers Conservation Alliance fish screen. The instream water right would improve flow in up to 14 miles of natural stream that has been seasonally dewatered for the last century.

Technical Review Team Comments

Economic Public Benefits Comments

Economic benefit strengths of the proposed project are that it intends to increase land values, increase production, and provide for additional irrigation through the Allocation of Conserved Water program. Another economic benefit is that the proposed project supports the local agriculture economy of Wamic. While conserved water would be available to agriculture, a piece of information not provided in the application is whether water would be applied to new or existing lands. Another limitation of the application is that job creation or retention numbers and expected crop yields were not quantified. The economic public benefits described within the application would be strengthened by increased detail and quantification.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to legally protect 1 cfs instream that could potentially add water to a previously dry stream section. However, while the project intends to provide streamflow benefits, it is unclear if 1 cfs is enough flow to rewater the stream section or support fish.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it intends to support the local food economy and local food systems. While the project could result in additional recreational opportunities at Rock Creek Reservoir, the reservoir is not used in the late summer for recreation due to muddy conditions and it is unlikely that the project's benefits would overcome

these conditions. Another weakness of the application is that collaboration with the local community is not described.

Other Comments

The review team had a number of other comments about this application. One comment was that project feasibility could be impacted by the need to acquire an Oregon Department of Fish and Wildlife (ODFW) easement and that fish passage is triggered by the project but not identified in the application. Another comment was concern that point of diversion transfers would be needed for the project and approval could be complex because ODFW would have to consent to injury.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Flat Creek Watershed Enhancement

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Cascade Pacific Resource Conservation and Development & South Fork John Day Watershed Council

Funding Requested: $224,430

Total Project Cost: $414,859

Public Benefit Score: 44.5

Project Summary: The Flat Creek subwatershed is a listed critical steelhead habitat tributary of the Upper Mainstream John Day River, five miles east of Dayville in Grant County. The proposed project area lies within Oregon Department of Fish and Wildlife's Phillip W. Schneider Wildlife Area which is a popular area for recreation. There are three reservoirs associated with Aldrich Ponds located in the headwaters: Stewart, Roosevelt, and Pinchot. The objective of this project is to improve the Roosevelt and Pinchot Reservoirs so they are fully functional, and capable of supplying irrigation water to a 60-acre food plot field. The project would also replace wheel lines with a more efficient center pivot.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to employ 5-10 local youth to perform trail maintenance and pond cleanup. Other economic benefits are improved irrigation efficiency and increased tourism that may provide economic benefit to the communities of Dayville and Mt. Vernon. There is also economic benefit associated with increased crop yield on the wildlife area that would also prevent animal related crop damage on neighboring fields. The application could be improved through increased focus on the economic value of enhanced recreational opportunities.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to increase irrigation efficiency. Other environmental benefits are installation of new fish screens and the monitoring of water temperature benefits through data loggers. While the application described the potential for improved flow in a priority conservation area, a weakness is the application does not describe how the project would result in improved flow. The application could be improved by providing additional information about how deep the ponds will be dredged to better support temperature benefit claims and by describing the impacts of the estimated 40% water savings from pivot installation. Other public benefit shortfalls are that it does not result in legal protection of water instream and it benefits trophy fish instead of native fish.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it intends to provide recreational fishing benefits. Another social/cultural benefit is that the project could provide additional water for wildfire suppression addressing a public safety issue. There are also social/cultural benefits associated with demonstrated collaboration, publically available data and signage in a wildlife area and the location of the project in economically distressed Grant County.

Other Comments

A broader reviewer comment was that portions of the application lack clarity and would benefit from greater detail.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Alder Creek Reservoir

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Bert Siddoway

Funding Requested: $6,334,590 ($4,861,398 grant and $1,473,192 loan)

Total Project Cost: $6,481,865

Public Benefit Score: 43.5

Project Summary: The Alder Creek Reservoir project in Baker County includes final design, permitting, and construction of an 85-foot-tall earthen dam. The goal of the project is to build a dam that would result in a reservoir capable of supplying surface water for irrigation in accordance with pending water rights applications, while minimizing environmental impacts to the area and improving irrigation efficiency. Finalizing design documents, material sourcing and testing, permit requirements, wetland delineation, and operations and maintenance plans would be completed prior to start of construction. Construction activities include building an access road and constructing the dam. Post-construction activities would include restoration planting.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to result in an additional full time job for the applicant's business and additional temporary construction jobs during the construction phase of the project. Another economic benefit is increased land value. There are also economic benefits associated with increased water reliability for agriculture, as well as increased crop yield with the potential for growing new, more profitable crops. While the proposed project could result in increased economic benefit associated with recreation and bird-watching, a limitation of the application is that the recreation benefits are unclear and unsubstantiated. The application could be improved by providing evidence to support those recreation benefits, as well as by providing agriculture benefits to a greater number of landowners.

Environmental Public Benefits Comments

An environmental benefit strength of the project is that it intends to improve habitat for trout by conserving water through installation of center pivots, doing riparian planting, and improving water quality. Another environmental benefit is the dedication of 25% of newly-stored water to instream use. A weakness of the application was that it is unclear if the reservoir will fill in one year or over multiple years. The fill schedule and associated amount of water that could be released impacts the environmental benefit associated with the 25% stored water dedication. Another limitation of the proposed project's environmental benefit is that water conserved through installation of center pivots would not be legally protected instream.

Social/Cultural Public Benefits Comments

Social/cultural benefits of the project include increased economic activity within a distressed rural community, as well as potential recreational benefits such as increased birdwatching. Another social/cultural benefit is the project tie to the local "beef to school" lunch program. The application could be strengthened by providing more detail to demonstrate that the benefits proposed were likely to be achieved by the project. For example, recreational access to downstream lands is not described in the application and therefore reviewers could not evaluate the potential recreational benefit of the project. The application could also be improved by including plans that describe project site recreation access and goals for youth fishing.

Other Comments

The review team had a number of other comments about this application. One comment regarding dam safety was that the hazard rating analysis conducted for the project is not appropriate. The inundation analysis (IA), which informs the dam design and construction cost is inadequate. A more detailed and rigorous IA is needed to determine the hazard rating and inform dam design. If the new IA shows that it is a significant or high hazard dam, the cost for this project will likely increase significantly. The applicant should work with the Oregon Water Resources Department to ensure any dam proposals meet dam safety requirements. The comment was made that the project is dependent on a fish passage waiver that has not yet been obtained and the proposed timeframe for acquiring the waiver is unrealistic. The applicant is encouraged to contact the Oregon Department of Fish and Wildlife regarding the waiver. The applicant should also note that a Scientific Take Permit would be required for fish salvage when the coffer dam is installed.

Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 41)

Summary of Comment: WaterWatch noted that the applicant's water right for storage would need to be conditioned to release 25% instream if funded by the Department. WaterWatch also noted that the applicant is not applying for Allocation of Conserved Water and should not receive scoring benefits as a result.

Department Response: As per the statute and rules, and further explained in the Guidance on the Evaluation of Public Benefits, applications only receive points for the public benefit mentioned when they describe legal means by which the project will conserve water. However, since the case of Alder Creek Reservoir is a storage project, the instream flow protection of 25% and the Seasonally Varying Flow prescription would be conditions of funding and would be placed as conditions on a water right. This qualifies as legal protection of water instream and therefore, the project scored in that environmental public benefit.

Highland Ditch Piping

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Badger Improvement District

Funding Requested: $650,000 ($507,300 and $142,700 loan)

Total Project Cost: $676,400

Public Benefit Score: 43

Project Summary: The proposed project would pipe roughly 5,000 ft. of irrigation ditch with a 30-inch polyvinyl chloride (PVC) or high-density polyethylene (HDPE) pipe. The current open ditch is in steep terrain and surrounded by the Badger Creek Wilderness Area in the Mt. Hood National Forest in Wasco County. The ditch is difficult to access and repair and is subject to washout due to debris filling the ditch. Ditch failure would threaten the economic stability of agriculture in the area and negatively affect fish habitat in Badger Creek through potential large amounts of dirt and debris filling the creek. Because of leaching and seepage in the existing ditch, a pipe would also conserve water and improve the overall efficiency of Badger Improvement District's irrigation system with an estimated 0.5 cubic feet per second of conserved water being legally protected for instream use.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to mitigate a threat to a key industry by providing water security to agriculture. Another economic benefit is that the proposed project is a benefit to the tourism industry. The fact that the ditch has failed several times demonstrates a high risk of future failure if nothing is done. Therefore there is also economic benefit associated with decreased susceptibility to the economic loss associated with failure. The application could be improved by increasing information about jobs, current crops grown, and by providing greater detail in the description of the project economic benefits.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to dedicate 50% of conserved water to instream use. Another environmental benefit is the potential to improve future water quality by reducing the risk of washouts. The application could be improved by including increased water quality and fish monitoring in the proposal. The application could be improved by including additional detail to support public benefit claims. Other environmental benefit weaknesses are: Badger Creek is in a wilderness area and is not currently water limited; benefits to pine hollow reservoir may be less than stated since it has another source of water; and conservation measures may impact groundwater when ditch seepage is eliminated.

Social/Cultural Public Benefits Comments

This application is limited in the identified social/cultural public benefits; however, some strengths of the proposed project are its ties to local food production, as well as recreation. The application could be improved by demonstrating increased collaboration. Another limitation of the application is that it identifies that the proposed project is consistent with state and local priorities but it does not describe how the project promotes and supports the identified state and local priorities. Additional information and support could increase the public benefit score of the project.

Other Comments

The review team had a comment that in order to implement the project, a new US Forest Service (USFS) easement would be required and the application materials did not include a support letter from USFS.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Walla Walla Basin Alluvial Managed Aquifer Recharge

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Walla Walla Basin Watershed Foundation

Funding Requested: $212,509

Total Project Cost: $615,250

Public Benefit Score: 42

Project Summary: The proposed project in Umatilla County would result in installation of five alluvial aquifer recharge projects spread across the alluvial aquifer system in the Walla Walla Basin to help meet the goal of the Walla Walla Basin Managed Aquifer Recharge (MAR) program. Each aquifer recharge site would include a diversion from a ditch or canal, a measurement device, valves and control structure, and either an infiltration basin or infiltration gallery. The goal of the MAR program is to recover groundwater levels in the alluvial aquifer system for regional benefits.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to provide greater water reliability for agriculture through increased groundwater levels and improved spring performance. Other economic benefits are the creation and retention of local jobs and increases in efficiency and innovation. The proposed project could be improved by better describing how previous groundwater recharge efforts benefitted agriculture and how this project would impact agriculture.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to increase alluvial groundwater levels to benefit spring fed creeks and the mainstem Walla Walla River. These increased streamflows could provide benefit to aquatic life such as bull trout and spring chinook. Another environmental benefit is the potential for water temperature benefits. A limitation of the proposed project is that any streamflow benefits resulting from alluvial aquifer recharge would not be legally protected instream.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it intends to make project monitoring data available online. Other social/cultural benefits are that the proposed project intends to increase recreational opportunities and benefit an economically distressed community.

Other Comments

The review team had a number of other comments about this application. One concern was that the proposed outcomes of MAR and the instream flow improvements may not be reliable and are potentially highly speculative. The Confederated Tribes of the Umatilla Indian Reservation said that it would appreciate the opportunity to work with the applicant to reshape the proposal. This could help address concerns related to declining alluvial aquifers and ensure that MAR proposals are focused on the collection of data from existing projects and designed to determine the fate, movement, and withdrawal of alluvial ground water by alluvial wells. A concern expressed was that the application lacked detail about leasing and property access for the project and whether a change in landownership could impact the long-term viability of the project concept.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Water Storage for Irrigation at La Creole Orchards in Polk County

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: La Creole Orchards & Polk County

Funding Requested: $59,041

Total Project Cost: $78,836

Public Benefit Score: 41.5

Project Summary: La Creole Orchards, located in Polk County, is faced with very limited groundwater. The goal of the proposed project is to provide adequate irrigation through water storage. The proposed project would install an off-channel, above-ground water storage tank with a capacity of 1.5 acre-feet of water for irrigation. An existing groundwater permit allows the storage of groundwater harvested from the two wells and a sump well. Groundwater would be supplemented by rainfall over the large surface of the tank, as a floating cover would allow rainwater to seep into the tank and reduce the need to pump groundwater from the wells by an estimated 250,000 gallons.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to directly and indirectly create jobs in the high value and expanding olive oil industry. There is also economic benefit associated with the installation of innovative infrastructure, including a reservoir cover that can also harvest rainwater. In addition, the application makes strong connections to the agricultural-tourism sector. The application could be improved by quantifying the economic public benefits to Polk County beyond the private landowner.

Environmental Public Benefits Comments

Although the project results in an expansion of acreage and an associated increase in water use, water used for irrigation would be applied in an efficient manner. However, as described in the application, the project provides limited environmental public benefit, and stated benefits to Ash Creek are unclear since the groundwater and surface water connection is not documented.

Social/Cultural Public Benefits Comments

A social/cultural benefit described in the application is the engagement and education efforts the applicant intends to do to share information about this irrigation infrastructure. There are also social/cultural benefits associated with the project taking place in an economically distressed rural community, project collaboration, and the potential of the project to serve as a demonstration of technology that allows for irrigation when water supplies are scarce.

Other Comments

The review team noted that the installation of the first tank demonstrated that the innovative infrastructure approach proposed by the project (an installation of a second tank) is feasible.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

East Reservoir Water Supply & Irrigation Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Young's Farm Blue Mountain Holdings, LLC

Funding Requested: $651,300

Total Project Cost: $868,400

Public Benefit Score: 41

Project Summary: The proposed East Reservoir Project in Crook County would consist of an off-channel, engineered earthfill dam creating a water storage reservoir with maximum storage capacity of 134 acre-feet. The reservoir would be adjacent to Beaver Creek, in the upper Crooked River Basin. Water would be pumped from Beaver Creek into the reservoir from March 1 to April 14 of each year. Stored water would be used to supply irrigation water for grass hay feed during June – August, when none, or very little, water is available in Beaver Creek. Release of 25% of newly stored water to Beaver Creek would be legally protected and would augment creek flows during summer periods.

Technical Review Team Comments

Economic Public Benefits Comments

An economic strength of the proposed project is that it intends to increase beef production and revenues for the landowner. Another economic benefit is the promotion of agricultural tourism. A weakness of the application is there is uncertainty whether the project will increase or retain jobs. The application could be further improved by providing greater economic benefit to the public.

Environmental Public Benefits Comments

An environmental strength of the proposed project is that it intends to improve ecosystem resiliency by increasing summer flows. While the project proposes to increase streamflow by releasing 25% of newly developed water instream (a grant program requirement), those water releases may not be enough to improve an already degraded system (dewatering of the stream may cause any water releases to infiltrate into the subsurface). Also, while releases may provide minor water quality improvements to Beaver Creek, water quality benefits would be limited if the reservoir water becomes hot, anoxic, and/or full of algae.

Social/Cultural Public Benefits Comments

A social/cultural strength of the proposed project is that it intends to support the production of grass fed beef that is a local food source. Other social/cultural benefits of the proposed project are that it takes place in a distressed rural area and promotes recreation and scenic opportunities. While the application noted that project-related scientific data would be posted and made publicly available on the company's website, the application would be strengthened

by including the website address for reviewers in the application materials. The application could be improved by increased quantification and detail of the project public benefits.

Other Comments

The review team had a number of other comments about this application. Reviewers noted that the majority of benefits are to the landowner with broader public benefits being limited and mostly associated with the water left instream. Another comment was that the water rights listed do not match the dam specifications submitted. A concern was expressed that the application proposes to change the location of the water right storage permits which is problematic under Oregon water law. For this reason the reservoir as proposed is oversized for the authorizations in place. Finally, the application seems to lump Seasonally Varying Flows (SVF) and 25% Instream Flow Protection together. These are two separate requirements of storage projects that receive OWRD funds.

Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 40)

Summary of Comment: WaterWatch noted that the East Reservoir Water Supply project is located above Prineville Dam and any upstream storage of water would affect the downstream reservoir's ability to meet fisheries needs. WaterWatch stated that the Department should not issue water rights above Prineville Dam.

Department Response: The Department does not recommend funding the project as proposed.

Ruby Peak Diversion

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Wallowa Soil and Water Conservation District

Funding Requested: $25,000

Total Project Cost: $503,698

Public Benefit Score: 40

Project Summary: This Wallowa County project proposes to improve the irrigation efficiency on 773 irrigated acres by replacing old, leaky pipelines that were installed in the 1950s and 60s with new pipeline. On-farm irrigation improvements are also being done with funding from the landowners, Natural Resource Conservation Service and Oregon Watershed Enhancement Board. This grant would help fund a new, fish-friendly diversion structure and an inlet structure that would be installed for the pipelines, and would have flow gauges installed to help inform the Watermaster and irrigators how much water is being applied.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it has the potential to result in direct and indirect jobs through construction. Other economic benefits are upgraded infrastructure and more efficient irrigation on 773 acres. While the application describes plans to install micro hydropower, the benefits and value derived from the micro hydro were not clearly described. The application in general could be improved by providing additional detail to substantiate economic public benefit claims.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that sections of pipe were studied to determine what the impacts would be for groundwater and some allowance for recharge is considered. While the proposed project could provide some flow benefits to Hurricane Creek, the proposal does not include legal protection of water instream and, therefore, the benefits to redband trout may not be realized.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the project is the potential for improvement of safety due to the reduction in risk of infrastructure failure. Another social/cultural benefit is the demonstration of collaboration with private sector partners, the local community, and federal agencies. The application could be improved by further detailing and quantifying the project's impact on economically distressed rural communities in Wallowa County.

Other Comments

The review team had a number of other comments about this application. One was that the application demonstrates secured cost match from the Natural Resources Conservation Service and the Oregon Watershed Enhancement Board, which provide the majority of funds needed to implement the project. Other positive review team comments were that the application demonstrates a readiness for funding and that the application is written in an engaging manner. However, in general the review team commented that the application would be improved by increased quantification of public benefits.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Marks Creek Meadow Restoration Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Crooked River Watershed Council

Funding Requested: $105,490

Total Project Cost: $387,316

Public Benefit Score: 39

Project Summary: The proposed project is located on Marks Creek, a tributary to Ochoco Creek upstream of Ochoco Reservoir in Crook County. The proposed project would implement fish passage, fish screens, and irrigation system improvements at two points of diversion; restore approximately 4,000 feet of stream channel; restore 1.2 acres of wet meadow habitat; and protect habitat through enrollment of 10 acres of riparian habitat into the Farm Services Agency Conservation Reserve Enhancement Program (CREP). Oregon Water Resources Department funds would be used for the fish screening and irrigation system improvements, including installation of 2 paddle wheel rotating drum screens at the points of diversion, and construction of 4,000 feet of 8-inch diameter steel and high-density polyethylene (HDPE) irrigation pipeline to replace an open ditch.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to increase livestock production and revenue for the landowner through increased production on 30 acres. A weakness is that the funding application identifies limited economic public benefit beyond that increased production for the landowner. Another weakness of the application is that the multipliers used to quantify economic public benefit appear high or are not directly linked to the project. The application could be improved by providing more detail and quantification of how the specific project would result in public benefit instead of relying on these economic multipliers.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to remove two fish passage barriers, increasing fish resiliency to climate change. Another environmental benefit is the potential to improve wet meadow and floodplain habitat, which could raise the water table and reduce erosion. There is also environmental benefit associated with increased shading through riparian planting, which may improve water quality by reducing solar radiation warming the stream. The proposed project could be improved by including water quality monitoring in the proposal. The application provides limited instream water supply benefits because the project does not propose to protect water instream, and may lack the water savings to do so.

Further, the application indicates a senior water user downstream would limit the benefit of legally protecting water instream.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it intends to provide benefit to an economically distressed population. While the proposed project may increase fishing opportunities on US Forest Service lands, a weakness of the environmental benefit is that Marks Creek is a small creek that likely limits the size of fish, resulting in a low potential for recreational benefit. The application could be improved by demonstrating increased collaboration and additional partners to increase public benefits, and by describing how the proposed project ties in with other activities in the basin.

Other Comments

Concern was expressed that the application describes irrigation of lands that haven't been irrigated in some time and that the water right holder should ensure the lands are currently covered by a water right. A comment was also made that the project is more focused on habitat restoration instead of meeting water supply needs. More generally, reviewers felt the application could be strengthened by presenting information more clearly and in a more organized fashion.

Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 41)

Summary of Comment: WaterWatch noted that the application did not propose using the Allocation of Conserved program water to increase flows downstream. WaterWatch also had concerns with the applicant's proposed measurement and reporting plan.

Department Response: The Department works with successful grantees to implement a measurement and reporting plan that meets statute requirements. While applicants are invited to propose measurement and reporting plans, the Department makes the final determination of what measurement and reporting is required and must be conducted by a funded project.

Madras Agricultural Water Efficiency and Reuse Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Jefferson Soil and Water Conservation District

Funding Requested: $43,567.50

Total Project Cost: $59,267.50

Public Benefit Score: 38.5

Project Summary: The proposed project would take place on three different landowner's properties in Jefferson County within the middle Deschutes Watershed. The project would consist of cleaning out four existing tailwater ponds, expanding two tailwater ponds, and installing a pump to improve irrigation efficiency on 300 acres. The project would reduce the amount of tailwater runoff and sediment transport from three different drainages to the Deschutes River. The goal of the project is to promote agricultural reuse, irrigation efficiency, and improved water quality within the Middle Deschutes Watershed.

Technical Review Team Comments

Economic Public Benefits Comments

Economic benefit strengths of the proposed project are that it intends to support job retention and creation as well as increases to water use efficiency and improved infrastructure. The application could be improved by including more analysis and numbers to support public benefit claims, such as providing additional detail about crops currently grown.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to reduce sediment going into the Deschutes River. Another environmental benefit is that pre- and post-project monitoring is included in the proposal. While increased efficiency may provide some benefit to the Spotted Frog, a limitation of the application is that the benefits to the Spotted Frog are not well substantiated. The application could be improved by providing additional detail about current turbidity and other water quality parameters allowing future demonstration of measurable improvement and benefits to the Spotted Frog. Other limitations are that the proposed project does not result in legal protection of water instream and application claims about percentage of water conserved in the application were not well supported.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it intends to preserve land for agricultural production. Other social/cultural benefits are the demonstration of collaboration through public meetings on the project and a potential benefit to the Warm Springs Reservation by improving water quality at the drinking water intake. However, the application could be

improved by providing more specifics about the about relationship between turbidity levels from tributaries and water quality at the drinking water treatment plant downstream.

Other Comments

Other comments included a concern about the long term feasibility of the project since the ponds may need to be cleaned out every 5-10 years. Long-term maintenance needs and how they will be addressed are not mentioned in the funding application. Another comment was that there are many similar ponds in the area and that the proposed project only addresses a handful of them. Reviewers also noted that this application presented a modest funding request.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

McMullin Creek Dam and Spillway Upgrades

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Josephine County

Funding Requested: $2,623,500

Total Project Cost: $3,498,000

Public Benefit Score: 37

Project Summary: Josephine County proposes conducting improvements to the McMullin Creek Dam to maintain use of the existing water rights for recreation at Lake Selmac. The project would enhance the safety of downstream residents by raising the dam crest and constructing a large rock buttress to improve the dam's earthquake resilience. In addition, the dam would be retrofitted with a midlevel conduit so it can safely control large rain events. The project would maintain dry-season flows and improve habitat for federally threatened Coho salmon and other native fish downstream of the dam.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to support regional tourism and the application did a good job quantifying the tourism benefits. Other economic benefits are infrastructure improvement and short- and long-term job creation and retention.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to mitigate the negative environmental impacts that would occur if the dam failed. Another environmental benefit is that the proposed project would include some habitat restoration work including riparian and instream projects. There is also environmental benefit associated with the potential to combat invasive aquatic plants if the lake can be lowered and weeds desiccated periodically in cooperation with a variety of agencies and other entities. The application could be improved by providing detail about the flow and release regime of the reservoir. Other limitations of the application are that it does not result in legal protection of water instream, there is lack of clarity on how the proposed project will result in increased flows, the drawdown schedule and ramping may impact water quality, and the instream/riparian work identified is not in priority areas.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it intends to address a top statewide priority for dam safety. The dam is high hazard because it is located upstream of a mobile home community and structural improvements are needed to reduce risk. Another social/cultural benefit is that the proposed project intends to preserve recreation and scenic value in Josephine County.

Other Comments

The review team noted that the application could be improved by addressing sediment deposition that compromises dam efficiency.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Newport Citywide Advanced Metering Infrastructure

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: City of Newport

Funding Requested: $1,730,000

Total Project Cost: $2,653,050

Public Benefit Score: 36.5

Project Summary: The City of Newport (the City) in Lincoln County proposes to replace its outdated metering equipment with Advanced Metering Infrastructure (AMI) technology, telemetry equipment, and billing software. Project funds would be used for the third (and final) phase of installation of a state-of-the-art, digital metering equipment and updated billing software linked to the meters. This technology would enable the City to quickly identify leaks and wasteful water practices. Installation of the AMI technology is a core strategy of the City's efforts to secure new water sources to meet growing demand for clean water supply in the Mid-Coast region.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to help the community meet increased water demand associated with tourism, population growth, and commercial water needs. Other economic benefits are that the proposed project would address critical infrastructure for the community and that AMI is a proven technology that would reap the benefits outlined in the application.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that the technology would make it easier for the City to identify and fix leaks, thereby promoting water conservation. However, the conserved water will not be legally protected instream or quantified. Overall the application could be improved by including additional environmental public benefits in the proposal.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it could result in energy savings and lower water bills. Other social/cultural benefits are that the proposed project is in line with South Coast/Valley Regional Solutions priorities and may mitigate the impacts of drought, fire, and turbidity. The review team questioned whether the increased instream flows and the benefits described in the application were likely to occur. The application could be improved by describing how the proposed project promotes recreation and scenic values.

Other Comments

The review team had a comment that there is an uncertainty whether this is the appropriate funding opportunity for the proposed project given the evaluation criteria for this funding opportunity. The review team noted that an Infrastructure Finance Authority loan may be a better fit.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Restormel Family Farm Water Conservation and Storage Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Angela Lathrop

Funding Requested: $273,750

Total Project Cost: $365,000

Public Benefit Score: 35.5

Project Summary: The proposed project in Josephine County would convert flood irrigation to sprinkler application and add supplemental water storage and use. The irrigation infrastructure portion of the project proposes to install underground mainlines along each field to irrigate crop rows on contour, to upgrade the electrical system to 3-phase power, and to improve the current point of diversion pump site that would lessen riparian impact. A portion of the water conserved through the irrigation upgrades would be legally protected instream. The project would also construct a storage reservoir that would take water during the high rainy season and store until use during peak growing season. Twenty-five percent of the water stored would be released for instream flow during low flow in the summer.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to expand agricultural operations resulting in four new jobs. The application could be improved by adding additional details that would clarify the project's economic public benefits, such as describing how increased production would occur and providing additional detail about the crops that would be produced. A weakness of the application is that claims of improvement to water and energy savings lacked supporting information and clarity.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to conserve water through the Allocation of Conserved Water program, resulting in the legal protection of water instream. While the application indicates water would be conserved, a limitation is that details regarding the amount of savings and how the water would be saved are lacking. The project environmental benefits could be improved by including a proposal for post-project monitoring and further describing the benefits of switching from flood irrigation to more efficient technology.

Social/Cultural Public Benefits Comments

While the application describes an intent to contribute to publically available scientific data, detail about how this would occur is not found in the application. The application could be improved by including supporting detail to substantiate social/cultural public benefit claims.

Other Comments

The review team had a number of comments about the application. One comment was a concern that the application is under developed and lacked clarity, making the assessment of public benefits difficult. Another was that due to lack of detail there are concerns related to project feasibility including missing elements related to dam safety, dam specifications, and storage site location.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Silverton Water Treatment Plant Improvement Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: City of Silverton

Funding Requested: $5,250,000

Total Project Cost: $7,000,000

Public Benefit Score: 34.5

Project Summary: The proposed project includes reconstruction of the City of Silverton's primary water treatment plant that would replace the existing 50-year old facility. A recent, third party assessment concluded that the plant is failing and immediate replacement is necessary. The project includes demolition of the existing plant and installation of a new 4.0 million gallons per day system. The new system would include tanks, piping, treatment system and control building. The proposed project would enable less surface water diversion to occur as the technology associated with the planned system is more efficient in both raw water and energy use.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to increase water treatment capacity and, should development be approved, would allow additional commercial and industrial development on 42 acres. Another economic benefit is the proposed project intends to support increases in recreation and tourism. While the proposed project would create temporary jobs associated with construction, it does not directly create or retain long-term jobs. The public benefits in the application could be improved by making connections to local and regional economic priorities and quantifying savings resulting from the new plant (energy, money, and chemicals).

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to conserve water through a reduced need for filter backwashing. This could reduce daily waste of water from 108,914 to 18,152 gallons per day. The application could be improved by providing additional detail about what benefit the conserved water will provide. Other shortcomings of the environmental benefits described in the application include: groundwater benefits that are not supported or substantiated; the project does not result in legal protection of water instream; and the water quality improvements proposed lack clarity, are not substantiated, and will not be monitored.

Social/Cultural Public Benefits Comments

Social/cultural benefit strengths of the propose project include the potential for increased fire suppression flows and preservation of recreational values. There are also social/cultural benefits associated with the updated plant being better able to meet drinking water standards and helping other communities understand the implemented technology. The application could have been improved by demonstrating increased collaboration and clarifying Mount Angel's role in the project. If Mount Angel was identified as benefiting from the project there could have been an opportunity to describe a broadened social/cultural impact.

Other Comments

The review team had a number of other comments about this application. One comment was that the proposal could have benefitted from increased detail and quantification. Another is that the application references letters of support but they may have inadvertently not been submitted with the application. A comment questioned the extent to which the benefits described are new public benefits as opposed to benefits the current plant already provides. There was a comment that questioned whether this is the appropriate funding source for a municipal water treatment plant.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Big Springs and Lost River Infrastructure Improvements

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Big Springs Park and Recreation District

Funding Requested: $17,000

Total Project Cost: $22,700

Public Benefit Score: 34

Project Summary: The proposed project would result in pump station and infrastructure improvements at Big Springs Park in Klamath County. Work would include installation of a new pump on the Lost River, and installation of water pipe and three-phase power to the pump site. The project seeks to improve water distribution and efficiency, help meet irrigation demands, and save energy and overall costs to the park. At the current location of the park's pump, it draws from the springs and the Lost River. Relocating the pump would alleviate the strain on Big Spring, allowing the park to use Lost River water instead. In addition to increased fish habitat, the increased contribution of Big Spring flows to the Lost River could reduce instances of Lost River backflow into the Big Spring and the associated potential for contamination of community water wells.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it would benefit the Big Springs Park by providing increased water security, which supports the community strategy to increase tourism. The application could be strengthened by including additional metrics and evidence to support economic public benefit claims. The economic benefits are lessened in that the proposed project is unlikely to result in job creation or retention.

Environmental Public Benefits Comments

An environmental benefit of the proposed project is the potential for reduced comingling of contaminated water which may improve groundwater quality. Additionally, the installation of a new pump and timer has the potential to increase water conservation. Another environmental benefit is that conditions could be improved for the Lost River Sucker by eliminating reliance on Big Spring. A weakness of the proposed project's environmental benefit is that, while the project is intended to improve Sucker habitat conditions, Suckers have not been present at this location in many years. The project location is within historic Sucker habitat, but there is not a high likelihood of return with several nearby dams preventing fish passage. Other limitations of the application include a concern that Big Spring has been going dry, which may indicate that the project would have less benefit to fish than that proposed, and that the Lost River also has flow concerns that this project would not address.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it intends to address groundwater contamination, which is a public safety issue. However, as described in the application, it is not clear if the project would address this groundwater issue. The application would be improved by providing additional evidence and supporting information to demonstrate how the project would achieve improvements to groundwater quality and, therefore, improve public safety. The project would also benefit a low income rural community. Another benefit is the potential for recreation and scenic value improvements.

Other Comments

The review team had a number of other comments about the application. One comment was that a water right point of diversion transfer would be needed for the project but is not identified in the application. Other comments were that the diversion on Lost River should include a fish screen and that there is currently no metering or monitoring on the Lost River pump. The proposal could be strengthened by collaborating with the Oregon Department of Fish and Wildlife to understand the impacts to fish as well as by having a water quality monitoring plan associated with the project.

Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 41)

Summary of Comment: WaterWatch noted lack of support letters from fisheries agencies to support habitat benefits claims in the application.

Department Response: The Technical Review Team includes a representative from ODFW who offers his/her perspective for the TRT's consideration in scoring applications.

Hwy 240 to Chehalem Drive and North to Columbia Drive Waterline Extension

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: City of Newberg

Funding Requested: $250,000

Total Project Cost: $765,000

Public Benefit Score: 32

Project Summary: In Yamhill County, this proposed project would extend the City of Newberg's water distribution system along the western edge of the city limits, between the city and the urban growth boundary. This extension would allow customers inside the city urban growth boundary and water district boundary to connect directly to city water lines improving their water quality and providing more efficient fire protection services. At the same time, the project extends city water lines to the edge of the city urban growth boundary, allowing future development projects to connect to the city water supply system.

Technical Review Team Comments

Economic Public Benefits Comments

Economic benefit strengths of the proposed project include connections made to resiliency efforts and the potential for long-term economic impacts associated with more homes in Newberg. Another economic benefit is the relationship between the proposed project, housing, and agricultural tourism. While the proposed project could address a need for housing, a limitation of the application is lack of clarity on how housing needs would be met. The application would be strengthened by making the connection to the local and regional economic development priorities from Mid-Valley Regional Solutions, SEDCOR and Mid-Willamette Valley Council of Governments. Another limitation of the application is that statements about permanent job creation are estimates that lack evidentiary support.

Environmental Public Benefits Comments

While the application details how local water wells will be taken offline and septic systems will be decommissioned, the work would take place during a future phase not funded by this request. Therefore the environmental benefits of the project as described in the application are limited with much of the claimed benefits occurring in future phases that are not considered in this application evaluation. The application could be improved by incorporating additional environmental benefits, providing greater clarity around water quality benefits, and including water quality monitoring in the proposal.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it intends to improve drinking water quality and meet fire flow standards. Another social/cultural benefit is that the proposed project is consistent with the city comprehensive goals and policies growth management plan. While the application references the presence of a housing affordability committee, this does not ensure benefits related to the potential for increased housing development will be realized. Similarly the application does not provide evidence to support claims of benefits to minority housing. The application could be strengthened by making a clear connection between project implementation and affordable housing.

Other Comments

The review team noted that, as proposed, the project provides limited public benefit in the specific public benefit categories listed in statute as the scoring criteria for this funding opportunity.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Cold Springs Ranch Irrigation System Improvement Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Crooked River Watershed Council

Funding Requested: $258,600

Total Project Cost: $473,045

Public Benefit Score: 30

Project Summary: The proposed project is located in Crook County on the South Fork of the Crooked River, the primary tributary to the main-stem Crooked River. The project is focused on implementing fish passage, fish screens, and irrigation system improvements at three points of diversion. OWRD funds would be used to implement the irrigation system improvements, including installation of 6,000 feet of 8-inch diameter steel and high-density polyethylene (HDPE) irrigation pipeline to replace an open ditch. Completion of the fish passage portion of the project would provide access to approximately 10 miles of habitat upstream in the South Fork of the Crooked River and include a new fish screen installation.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that it intends to support cattle production and increase profits for the landowner. The proposed project could be improved by linking it with other economic activities in the area. A weakness of the proposed project's economic benefit is that direct job creation or retention is not described. Other weaknesses are that the economic multipliers used to quantify public benefit claims are not directly related to the project, and that the applicability of the economic study is uncertain. Therefore, the economic benefits described in the application may be greater than what the project could feasibly achieve.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to provide for fish passage at three diversions on the South Fork of the Crooked River. Other environmental benefits are that the proposed project has a high potential for increased fish habitat and would result in the installation of headgates that would prevent fish from getting stranded in ditches. The application could be improved by including water quality monitoring in the proposal. The proposed project's environmental benefit is decreased with the presence of downstream senior water right holders which may result in the continued dewatering of the stream even if the project were implemented. The proposed project does not result in legal protection of water instream or appear to address the stream dewatering issue. Current diversions in the area result in several long stretches of dry streambed of up to 1.5 miles in length.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it supports the Crooked River Habitat Conservation Plan for redband trout and would benefit a high priority fishery. A weakness of the application is that the multiplier used to quantify social/cultural benefits seems high.

Other Comments

The review team had a number of other comments about this application. Reviewers noted that the proposed project may be complementary with work Trout Unlimited is doing in the area and that the project may have the potential to be part of the habitat mitigation needed for the Bowman Dam hydroelectric project. Another comment was that there is not a match contribution from the landowner, which would have strengthened the project.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Fargo Frontage Road Hazelnut Drip Irrigation

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Paul Leavy

Funding Requested: $45,621

Total Project Cost: $74,327

Public Benefit Score: 28

Project Summary: The proposed project would provide drip irrigation to a newly planted, blight resistant, 79-acre hazelnut orchard in Marion County. The project would result in the installation of plumbing, drip lines, a filtration unit, and electronics. The goal of the project is to replace orchards dying of Eastern Filbert Blight and preserve groundwater for neighboring farmers.

Technical Review Team Comments

Economic Public Benefits Comments

An economic strength of the proposed project is that it intends to increase land value and water security for the landowner. Other economic benefits are an increase in irrigated acreage and use of an efficient means of applying water to the hazelnut orchard. While job creation and retention benefits were generally referenced, a weakness of the application is that it lacked the quantification and details to support the public benefit claims. The application could be improved by making the connection to the local and regional economic development priorities from Mid-Valley Regional Solutions, Strategic Economic Development Cooperation, and Mid-Willamette Valley Council of Governments as well as by providing more detail and quantification to identify what the project means to the economy and landowner. The application could also be strengthened by describing additional filbert tonnage and equipment needs and more clearly connect the project with regional infrastructure and economy.

Environmental Public Benefits Comments

The funding application identifies limited environmental public benefit. One environmental benefit strength of the proposed project is that it intends to use efficient means of irrigating the hazelnut orchard. The intended irrigation method is efficient; however, it represents a new use of water, not conservation of water (i.e. using less water to achieve the same outcome) as noted in the application. The application could be improved by including groundwater and water quality monitoring in the proposal. Other weaknesses of the environmental benefits described in the application are that it is unclear how benefits to the Pudding River would be achieved and, while there is a potential benefit to pesticide reduction, the benefit is not quantified and not directly tied to water.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the proposed project is that it intends to address Eastern Filbert Blight. Another social/cultural benefit is that the visibility of the proposed project on I-5 promotes the agricultural industry. The application could be improved by providing additional detail and connections to substantiate claims. The application would be improved by demonstrating collaboration.

Other Comments

The review team had a comment that this on-farm project may be a better fit as a Natural Resources Conservation Service or Marion County Soil and Water Conservation District funded project.

Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 40-41)

Summary of Comment: WaterWatch felt that the applicant's claimed environmental benefit of conservation was inaccurate given that the project's groundwater right has yet to be developed and no infrastructure exists to improve efficiency. WaterWatch also expressed uncertainty about claims of improving water quality in the Pudding River.

Department Response: The TRT also noted that the project, as proposed, has limited environmental benefit.

Queen's Avenue Transmission Line

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Lakeside Water District

Funding Requested: $120,562

Total Project Cost: $160,750

Public Benefit Score: 27

Project Summary: Lakeside Water District in Coos County proposes to install a 12-inch transmission line up Queens Avenue to connect the system to two 500,000-gallon storage tanks and one 150,000-gallon storage tank. This would replace transmission by an 8-inch line which has been in service since the 1960s. The old Asbestos-Cement 8-inch line also works as a service line to supply water to individual customers. With any failure of the 8-inch line, water storage would not be possible and the water treatment plant would have to be manned 24 hours per day to keep the town supplied with water.

Technical Review Team Comments

Economic Public Benefits Comments

Economic benefit strengths of the proposed project include job retention, increased efficiency, and increased water security for the community. The application and project public benefits could be improved by quantifying claims related to increases in irrigated agriculture and including a plan for how the community would support long-term maintenance of the new infrastructure.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it seeks to conserve water by addressing the current 16% water loss. The application could be improved by describing how potential benefits to and resulting from wildlife buffers would be measured and by including additional environmental public benefits in the proposal.

Social/Cultural Public Benefits Comments

Social/cultural benefit strengths of the proposed project are that it intends to provide for increased fire protection and it may increase recreation and scenic values. Another social/cultural benefit is that it may contribute to public safety through a reduced risk of infrastructure failure.

Other Comments

The review team had a number of other comments about this application. One comment was that the project should be part of a capital improvement plan and there is uncertainty whether this is the appropriate funding source. Other comments were that an additional permit (1200 C)

would be needed for construction, the schedule for implementation may not be realistic, and that the proposed project's public benefits could be improved by adding additional benefits or provide greater detail to further describe and support public benefit claims.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Wallace Pump Station, Under-Road Crossing and Piping Upgrade

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Palmer Creek Water District

Funding Requested: $281,100

Total Project Cost: $377,900

Public Benefit Score: 26.5

Project Summary: The existing under-road bore for Palmer Creek Water District's water line under Hwy 221/Wallace Road, a Yamhill County main arterial road, is degrading and poses a risk to supply integrity and public safety in the event of a major seismic event. The proposed project would create a new under-road bore 15 feet south of the existing aging bore. Infrastructure improvements would include installation of 48-inch steel casing and 36-inch high-density polyethylene (HDPE) piping, replacement of existing steel and/or concrete pipe from pump station head wall, and replacement of 1250 feet of concrete pipe with 36-inch polyvinyl chloride (PVC) that discharges water into an open canal.

Technical Review Team Comments

Economic Public Benefits Comments

Economic benefit strengths of the proposed project include improved infrastructure as well as the maintenance of an efficient water delivery system for agriculture. Although the application describes job benefits, additional information about types of jobs created or retained and how they relate to the local community would strengthen the application. Weaknesses of the application are a lack of detail regarding the percentage of district water delivered through the pipe and a general lack of detail and quantification of economic claims regarding water supply resiliency.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to lessen the need to pursue groundwater supplies in the future. A limitation of the application is that the link to stream health is not strong. The application could be improved by including additional detail to substantiate the environmental benefits listed in the application.

Social/Cultural Public Benefits Comments

Social/cultural benefit strengths of the proposed project are public safety and water supply resilience. A weakness of the application is that assertions that the infrastructure would improve seismic resiliency are not supported by inclusion of seismic considerations and specifications. Another weakness of the application is that it notes data would be made publically available but does not specify the type of data that would be provided.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Stanfield Irrigation District Efficiency Project

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Stanfield Irrigation District & Umatilla Soil and Water Conservation District

Funding Requested: $201,000

Total Project Cost: $269,000

Public Benefit Score: 24.5

Project Summary: The proposed project aims to conserve groundwater by using allocated surface water from the Columbia River instead of well water for irrigation purposes. This goal would be accomplished by connecting a pipeline from the Northeast Oregon Water Association (NOWA) project and running it to the Stanfield Irrigation Ditch. With this pipeline, 3100 acres of irrigated agriculture would be able to use their primary water from Stanfield Irrigation District longer and more effectively before switching to their secondary well water right. This project would also allow Stanfield Irrigation District to pull less water from the Umatilla, leaving more water in the river.

Technical Review Team Comments

Economic Public Benefits Comments

Economic benefit strengths of the proposed project is that it intends to facilitate economic growth related to increased crop production and yield as well as increased land values associated with additional water supplies. The application could be improved by better quantifying and documenting the degree to which economic public benefits would occur if the project were implemented.

Environmental Public Benefits Comments

An environmental benefit strength of the project is that it intends to reduce groundwater use in a Critical Groundwater Area. The application claims the project will result in decreased diversion from the Umatilla River; however, the extent to which diversions will be reduced is unclear since currently irrigators switch from Umatilla to Columbia River water fairly early in the irrigation season. Another environmental benefit concern was that increased irrigated agriculture and fertilizer use could worsen groundwater quality.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of the project is that it is aligned with Region Solutions priorities. The application could be improved by demonstrating increased collaboration and communication.

Other Comments

An additional review team comment was that the application proposes to tap into a pipeline that is currently planned but not yet constructed. For this reason the proposal may be premature.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

South Deschutes County Water Conservation & Frog Habitat

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Deschutes Soil and Water Conservation District

Funding Requested: $65,750

Total Project Cost: $94,595

Public Benefit Score: 24

Project Summary: This proposed project would line ponds, install a drip irrigation system for on-farm use, and conserve an estimated 117 acre-feet of water. Water would be conserved that is currently lost through seepage and run off or tail water. The water seepage rate for this area exceeds 40% water loss. The goal of the project is to ease the pressure on landowners that want to continue their agricultural practices while leaving water instream for the Oregon Spotted Frog. *Note: The project as proposed would not legally protect water instream.*

Technical Review Team Comments

Economic Public Benefits Comments

Economic benefit strengths of the project include improved water security for the landowners involved and the support of livestock production. The application could be improved by increased description and quantification of the economic public benefits. Shortcomings of the application are that the economic value of maintaining farmland is vague and not quantified, statements are general in nature and do not tie project to direct public benefits, and some responses are not relevant to the public benefit category. Additional consideration of the criteria identified in the Guidance on the Evaluation of Public Benefit document would strengthen the application.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to conserve water through the lining of ponds and installation of drip irrigation. A weakness of the application is that it identifies limited environmental public benefit. Other weaknesses of the application include a lack of a clear link to spotted frog benefits, loss of seepage may impact groundwater recharge and reduce groundwater levels, and the project does not result in legal protection of water instream.

Social/Cultural Public Benefits Comments

A weakness of the application is that it identifies limited social/cultural public benefit. The benefits described in the application are general in nature and not directly linked to the proposed project. The application could be improved by describing whether the proposal is

linked to or consistent with the larger Bureau of Reclamation WaterSMART study occurring in the basin.

Other Comments

The review team had a number of other comments about this application. One comment was that the applicant should be commended for thinking about how to address water needs in light of spotted frog concerns, but the proposed project needs further refinement in order to determine how to meet the needs of farmers, frogs and result in other public benefits. Another comment was that the proposed project could be aligned with other water management work in the Deschutes.

Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 41)

Summary of Comment: WaterWatch noted that the applicant did not state how much water was estimated to be saved or propose how to legally protect that conserved water instream.

Department Response: Thank you for your comment**, the Department still does not recommend funding the project as proposed.**

Burlington Control System Updates

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Burlington Water District

Funding Requested: $3,000

Total Project Cost: $4,000

Public Benefit Score: 10.5

Project Summary: The proposed project would update the technology used to fill the Burlington Water District's (District) reservoir in Multnomah County by making modifications to the existing booster pump control panel. The project would allow the District to more efficiently manage their water use and reduce waste. Currently the District does not have the full time crew needed to monitor the fill of the reservoir. Updating the technology would allow the District to refill the reservoir as needed, over a 3-4 day period, rather than every 24 hours. This would also serve to reduce the number of times the district exceeds their peaking factors with the City of Portland, and stabilize the water rates for low-to-moderate income customers.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that automation of the reservoir system is intended to reduce operational costs and improve financial stability. While the application did describe increased efficiency and innovation, weaknesses of the application are that it did not quantify the fiscal impact of upgrades, how much water would be saved, time savings, and provided little information on potential job creation or retention. Overall the application does not adequately quantify and document the degree to which economic public benefits would occur if the project were implemented.

Environmental Public Benefits Comments

An environmental benefit strength of the proposed project is that it intends to update technology to conserve water. However, while the proposal represents an increased stewardship of water resources, the application would be strengthened by estimating the amount of water to be saved. An additional weakness is that the applicant is currently getting water from another city and the application did not quantify the actual environmental benefit to the source of water.

Social/Cultural Public Benefits Comments

A social/cultural benefit strength of proposed project is that it intends to stabilize water rates to customers who are of low to moderate income. However, inclusion of specific income demographics would have further quantified and strengthened the benefit. Overall the funding application identified limited social/cultural public benefit.

Other Comments

Other comments from the review team were that the proposal is a modest request that could help the community and that the public benefits described in the application are limited to the patrons of the district.

Public Comments

No public comments were received on this application during the public comment period on the TRT funding recommendation.

Kubli Ditch Group Restoration

TRT Recommendation: Not Recommended for Funding at This Time

Project Information (adapted from application)

Applicant Name: Kubli Ditch Group

Funding Requested: $5,700

Total Project Cost: $7,600

Public Benefit Score: 7

Project Summary: The proposed project in Jackson County would pipe 240 feet of irrigation ditch with 24-inch high-density polyethylene (HDPE) pipe. Currently 240 feet of retaining wall constructed of 2-inch by 12-inch boards and 6-foot fence posts is failing due to tree and root damage. Upgrading the system would improve the uninterrupted flow of water.

Technical Review Team Comments

Economic Public Benefits Comments

An economic benefit strength of the proposed project is that improves infrastructure and maintains the ability to irrigate. The application could be improved by increased detail and documentation supporting economic public benefit claims. The application could also be improved by describing the agricultural activities being protected and conserved.

Environmental Public Benefits Comments

A weakness of the application is that it was lacking in environmental public benefit by only addressing one out of six possible environmental public benefits.

Social/Cultural Public Benefits Comments

While there may be some protection to a public roadway associated with the proposed project, the application identifies limited social/cultural public benefit and the detail is inadequate.

Public Comments

Commenter (comment page number): WaterWatch of Oregon (p. 41)

Summary of Comment: WaterWatch felt that the project application indicated no environmental public benefits.

Department Response: The TRT also noted that the project, as proposed, has limited environmental benefit.