



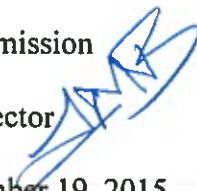
Oregon

Kate Brown, Governor

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MEMORANDUM

TO: Water Resources Commission

FROM: Thomas M. Byler, Director 

SUBJECT: Agenda Item F, November 19, 2015
Water Resources Commission Meeting

Water Conservation, Reuse and Storage Grant Program – Award and Grant Funding

I. Issue Statement

The Commission will be asked to approve grant funding for the first 2015-17 grant cycle of the Water Conservation, Reuse and Storage Feasibility Study Grants Program. This report describes the Application Review Team's recommendations, public comments, and staff recommendations for funding.

II. Background

The Feasibility Study Grants Program was established by Senate Bill 1069 in 2008. The program is designed to fund the qualifying costs of planning studies that evaluate the feasibility of developing water conservation, reuse or storage projects.

The first 2015-17 grant solicitation was May 4, 2015 through July 31, 2015. The Department received eight applications. All applications were deemed complete and met the requirements of Senate Bill 1069. A total of \$706,405 in grant funds was requested out of a total of \$2.8 million available for grant funding. Grant requests ranged from \$20,000 to \$239,520.

III. Grant Application Review Process

An Application Review Team (ART) was convened in September to evaluate the applications and provide funding recommendations to the Department. The ART consisted of a multiagency team including the Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Parks and Recreation Department, Oregon Department of Agriculture, Business Oregon, as well as technical experts from the Department.

The Application Review Team's recommendations were posted on the agency website for a 30-day public comment period that closed on November 2, 2015. The Department received eight comments on two grant applications.

Five comments were submitted regarding the Drift Creek Water Supply Development Project application. All comments urged acceptance of the multi-agency review team’s recommendation to not fund this application.

Two public comments and a petition with 25 signatures were submitted regarding the Alder Creek Reservoir Feasibility Study application. The public comments urged the Department to reconsider the initial funding recommendation and award funding to the proposed project. The signed petition demonstrated public support for the project.

See Attachment 1 for a summary of the comments received.

IV. 2015-17 Grant Award Recommendations

Based on the ART scoring, public comments, and staff review, staff recommend five of the eight applications for grant funding. The table below sets out the applications and funding levels that are recommended for awards. If approved by the Commission, staff will work with recipients to develop a grant agreement. See Attachment 2 for evaluations of each application.

<i>Study Name</i>	<i>Project Type</i>	<i>Funding Request (\$)</i>	<i>Funding Recommendation (\$)</i>
Laurance Lake Reservoir Expansion and Management Study	Storage	81,500	81,500
Upper Klamath Basin Irrigation Conservation Assessment	Conservation	58,000	58,000
Bandon Off-Channel Raw Water Storage Reservoir	Storage	39,418	39,418
City of Echo Land Feasibility Study for Water Storage and Reuse	Reuse	20,000	20,000
Thief Valley Restoration Feasibility Study	Storage	239,520	239,520
Drift Creek Water Supply Development Project	Storage	76,320	*
Mosier Valley Commingling Well Evaluations	Conservation	132,900	*
Alder Creek Reservoir Feasibility Study	Storage	58,747	*
Total		706,405	438,438

* Not recommended for funding at this time:

- *Drift Creek Water Supply Development Project:* Application as submitted does not significantly increase the body of knowledge necessary to advance the project.
- *Mosier Valley Commingling Well Evaluations:* The proposal as written is a technical study to prioritize project implementation and does not fit within the scope of a feasibility study.
- *Alder Creek Reservoir Feasibility Study:* Those cost match items that qualify as eligible fall short of the grant fund totals requested in the application.

V. Summary

The funding level recommendations are based on the applicant meeting eligible tasks and meeting match funding requirements of the program. If approved, this would result in grant awards totaling \$438,438.

VI. Alternatives

The Commission may consider the following alternatives:

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

VII. Recommendation

The Director recommends Alternative 1, to adopt the staff funding recommendations, to fund five applications for a total award of \$438,438.

Attachments:

1. Summary of Public Comments Received
2. Individual Application Evaluations with Staff Recommendation

Tracy Loudon, Administrator
503-986-0920

Summary of Public Comments Feasibility Study Grants: 2015-17 Grant Cycle 1

Drift Creek Water Supply Development Project (5)

Five public comments were submitted to the Department regarding this application. All comments urged acceptance of the multi-agency review team recommendation to not fund the application. Comments were received from Janet Neuman, WaterWatch, Mark Henjum, Pudding River Watershed Council, and Cheri Perry-Harbour/Kathleen Jaquet. Public comments included the following:

- The proposed in-channel dam and reservoir threaten the free-flowing character of Drift creek and its fish populations.
- The proposed project would require condemnation of out-of-district land owned by farmers who do not want their land used for the project.
- East Valley Water District has already received \$362,117 from the SB 1069 Grant Program, more than any other grant recipient.
- Drift Creek is the last undammed major tributary of the Pudding River, and the creek provides habitat for anadromous fish. Dams on all of the other tributaries are already listed on the Oregon Department of Fish and Wildlife's fish passage priority list because of their damaging impact to fish habitat.
- Local landowners whose land will be inundated have spent far too much of their own money and time defending their property rights.
- The project would be detrimental to elk and their habitat.
- The Pudding River Watershed Council intends to create an opportunity for collaboration with East Valley Water District to identify other ideas that will meet the needs of East Valley Water District and the needs of the watershed.

Staff response: The application met the minimum qualification for it to be reviewed and scored. The Application Review Team recommended that the application not be funded. Past state funding included:

1. 2009-2011(WRD Funds) \$258,952
2. 2011-2013 (WRD Funds) \$71,665
3. 2013-2015 (WRD Funds) \$31,500
4. Environmental Studies (Department of Administrative Services) \$500,000

OWRD staff concluded that the application as submitted does not significantly increase the body of knowledge necessary to move the project forward.

Alder Creek Reservoir Feasibility Study (3)

Two public comments and a petition with 25 signatures were submitted to the Department. The comments urged the Department to reconsider the funding recommendation and fund the application. Comments were received from Baker County Commission Chair William “Bill” Harvey and Peggy Browne. Comments included the following:

- In Baker County, water is critical to the economic wellbeing and sustainability of the community and economy.
- Above-ground water storage needs to be a well-utilized tool in water management in this arid region as well as the State of Oregon in general.
- The applicants have the full support of the Baker County Commissioners behind them in this endeavor.
- Feedback the Application Review Team provided to the applicant regarding lack of focus on Oregon Department of Fish and Wildlife regulatory requirements did not take into account the significant resources and efforts to date. The Oregon Department of Fish and Wildlife required that a stream flow study be conducted so that they could identify the amount of water that had to pass through the dam for the benefit of aquatic life. That effort alone cost in excess of \$20,000. In addition there have been several meetings with the regional fish biologist to work toward addressing fish passage.
- Feedback regarding lack of public support did not take into consideration the region for which this application is representing; the local population of Durkee only comprises 143 people. Baker County total population comprises approximately 16,000 people. The application is for a privately held project and, therefore, will not have the expanse of public support that would be expected from a public project.
- Feedback suggesting that a preliminary evaluation be pursued that evaluates the benefit versus potential dam construction costs prior to geotechnical investigations is not consistent with the recommendations of four engineering firms that have conducted site visits and provided engineering design estimates. All were clear that subsurface geologic testing would be necessary to ascertain the type of material, depth and other dimensions of the dam. This study scope as submitted would achieve the cost-versus-benefit analysis that the review team has requested.
- A petition was submitted urging the Department to fund the Alder Creek Reservoir feasibility study. The petition was signed by 25 local citizens.

Staff response: The application met the minimum qualification for it to be reviewed and scored. The Application Review Team recommended that the application not be funded. OWRD staff recommended that prior to geotechnical investigation, a preliminary evaluation be pursued that evaluates the benefit versus potential dam construction costs. In addition, in the feasibility study

budget, the applicant identifies cash match that includes irrigation infrastructure expenditures. Since these infrastructure improvements have a lifespan that exceeds the project scope, they cannot be applied toward the 50% cost-match requirement. The cost-match items that qualify as eligible, fall short of the cost-match requirement related to the grant fund totals requested in the application. For this reason Department staff confirm the recommendation of the Application Review team to not fund the application.

The Department acknowledges the importance of identifying ways to meet water needs in Baker County. The public comments submitted, including the petition, demonstrate public support for the project. Public comment identified permitting efforts and resources expended to date. The application refers to consultation with ODFW and the Department of State Lands and identifies permit identification and agency consultation as a key study task.

In the feasibility study application, the applicant is asked to identify local, state and/or federal permitting requirements and issues posed by the implementation of the project associated with the feasibility study. The purpose of this question is to identify any regulatory elements that will be required to move the project forward. This question was not adequately addressed in the application. Department staff can help with developing a matrix to identify applicable regulatory elements. The applicant is encouraged to resubmit a revised feasibility study application that identifies local, state and/or federal permitting requirements that would be required to move the project forward and that identifies cost-match that does not include any irrigation infrastructure having a useful life that exceeds the feasibility study duration.

Oregon Water Resources Department
Feasibility Study Grant Program
Evaluation of Applications for 2015-17: 1st Grant Cycle

Study Name: Laurance Lake Reservoir Expansion and Management Study
Study Type: Storage
Applicant: Hood River Soil & Water Conservation District / Middle Fork Irrigation District
Requested: \$81,500 **Total Project Cost:** \$164,022

Description Provided by Applicant:

The Middle Fork Irrigation District will assess the feasibility of increasing storage capacity in Laurance Lake Reservoir and changes to reservoir management in order to meet several goals. These include: 1) Maintaining the ability to consistently provide irrigation water and generate hydropower into the future; 2) Improving downstream flows and stream temperatures for anadromous fish; and 3) Maintaining rearing habitat for bull trout within Laurance Lake Reservoir. The technical aspects of this study include: 1) an evaluation of instream flow and salmonid spawning and rearing habitat under proposed storage management changes; 2) determination of water conservation opportunities; 3) an evaluation of water supply, demand, and rights; 4) a temperature model predicting water temperatures in reservoir and downstream under different storage and management scenarios; and 5) an assessment of the safety and technical and economic feasibility of seasonally raising the spillway crest height.

Application Review Team Evaluation: The Application Review Team recommended funding this application.

Comments: No comments were received.

Staff Recommendation: Do Fund at \$81,500.

Commission Action:

On November __2015, the Water Resources Commission took action to:

The feasibility study received an award amount of \$_____.

Study Name: **Upper Klamath Basin Irrigation Conservation Assessment**

Study Type: Conservation

Applicant: Trout Unlimited

Requested: \$58,000 **Total Project Cost:** \$116,000

Description Provided by Applicant:

This study will evaluate the potential water savings and technical feasibility of piping two large, unlined irrigation ditches in the Upper Klamath Basin in order to conserve water. The conserved water will be used to improve instream flows in this ecologically critical area to support the recovery of multiple ESA listed species, and to improve irrigation efficiency and effectiveness on the ranches served by these irrigation systems. The project will result in a feasibility determination, preferred option for the piping design, and estimated cost for project implementation. Preliminary surveys suggest that 12 cfs of water could be conserved through completion of the proposed projects.

Application Review Team Evaluation: The Application Review Team recommended funding this application.

Comments: No comments were received.

Staff Recommendation: Do Fund at \$58,000.

Commission Action:

On November __2015, the Water Resources Commission took action to:

The feasibility study received an award amount of \$_____.

Study Name: Bandon Off-Channel Raw Water Storage Reservoir

Study Type: Storage

Applicant: City of Bandon

Requested: \$39,418 **Total Project Cost:** \$78,836

Description Provided by Applicant:

The City of Bandon is seeking funding to conduct a feasibility study to develop an off-channel raw water storage reservoir as a means to store 50 acre-feet of water to be used as municipal drinking water during the dry summer months. The objectives of this study will be to determine: whether the proposed site is geological and seismic stable; whether the proposed source is adequate to provide the necessary volume of water to supply the reservoir; whether diverting this water would have detrimental effects to other users. The feasibility study would include the following tasks: geotechnical exploration; hydrology investigation; land ownership and right-of-way investigations; wetlands delineation; assess environmental impacts; detailed engineering feasibility study; cost estimate; comparison to other alternatives to provide raw water storage for municipal use; water rights administration.

Application Review Team Evaluation: The Application Review Team recommended funding this application.

Comments: No comments were received.

Staff Recommendation: Do Fund at \$39,418.

Commission Action:

On November __2015, the Water Resources Commission took action to:

The feasibility study received an award amount of \$_____.

Study Name: City of Echo Land Feasibility Study for Water Storage and Reuse

Study Type: Reuse

Applicant: City of Echo

Requested: \$20,000 **Total Project Cost:** \$40,000

Description Provided by Applicant:

The City of Echo, Oregon wastewater system is permitted as a surface water discharging system. The existing wastewater system has several deficiencies that continue to cause the City to violate the conditions of the City's National Pollutant Discharge Elimination System (NPDES) Permit issued by the Oregon Department of Environmental Quality (DEQ). As such, to assist with bringing the system into compliance, the DEQ issued a Mutual Agreement and Order (MAO) to the City. The city must complete the action items required by the MAO and address the non-compliance issues. The City completed a Wastewater Facilities Plan (WWFP) Update in 2015 and identified a preferred alternative for wastewater disposal that include the storage, treatment, and reuse of wastewater. A feasibility study is needed to identify local land parcels for potential water reuse and storage sites. The City has generally identified three potential locations for evaluation. The feasibility study will consider the feasibility of each potential site.

Application Review Team Evaluation: The Application Review Team recommended funding this application.

Comments: No comments were received.

Staff Recommendation: Do Fund at \$20,000.

Commission Action:

On November __2015, the Water Resources Commission took action to:

The feasibility study received an award amount of \$_____.

Study Name: **Thief Valley Restoration Feasibility Study**

Study Type: Conservation

Applicant: Keating Soil & Water Conservation District

Requested: \$239,520 **Total Project Cost:** \$505,260

Description Provided by Applicant:

The Thief Valley Feasibility Study will be a joint effort with several partnering agencies, including Bureau of Reclamation, to fully explore the possibility of restoring the lost storage capacity of Thief Valley Reservoir by installing an inflatable rubber dam on the existing spillway. A study was completed in 2001 that suggested that the installation of a rubber dam was the most viable option for re-establishing water storage capacity. The planning study proposed in this application will complete the feasibility portion of this project and will provide an initial design to ensure the project is feasible. This study will take into consideration several factors including: stability of the structure, cultural resource issues, permitting requirements, social and economical impacts, and will provide a final cost estimate for construction. The above listed factors are an important, necessary, and required steps that will need to be fulfilled prior to installation of the rubber dam.

Application Review Team Evaluation: The Application Review Team recommended funding this application.

Comments: No comments were received.

Staff Recommendation: Do Fund at \$239,520.

Commission Action:

On November __2015, the Water Resources Commission took action to:

The feasibility study received an award amount of \$_____.

Study Name: **Drift Creek Water Supply Development Project**

Study Type: Storage

Applicant: East Valley Water District

Requested: \$76,320 **Total Project Cost:** \$152,640

Application Description Provided by Applicant:

For over twenty years, East Valley Water District (District) has worked toward a long-term stable water supply for its membership. A portion of the District's service area lies within two Groundwater Limited Areas (GLA's); Mt. Angel and Gladdidings. The District is currently served through a combination of time limited permits, and temporary transfers – both from strained surface and groundwater sources. The Drift Creek Water Supply Development Project would store 12,000 acre-feet of water in a reservoir on Drift Creek near Silverton.

The District invested significant resources to evaluate and study water supply development, including over \$850,000 of state funding support since 2009. In early 2015, the District performed investigations for hydrology, cultural resources, wetlands, fisheries and elk. In the next phase of analysis, the District will propose to: (1) evaluate off-channel storage alternatives; (2) investigate water supply distribution alternatives; (3) further investigate elk; and (4) further cultural resources investigations.

Application Review Team Evaluation: The application met the minimum qualification for it to be reviewed and scored. The Application Review Team recommended that the application not be funded. Past state funding included:

1. 2009-2011(WRD Funds) \$258,952
2. 2011-2013 (WRD Funds) \$71,665
3. 2013-2015 (WRD Funds) \$31,500
4. Environmental Studies (Department of Administrative Services) \$500,000

OWRD staff concluded that the application as submitted does not significantly increase the body of knowledge necessary to move the project forward.

Comments: Five public comments were received (see attachment 2).

Staff Recommendation: Do Not Fund

Commission Action:

On November __2015, the Water Resources Commission took action to:

The feasibility study received an award amount of \$_____.

Study Name: Mosier Valley Commingling Well Evaluations
Study Type: Conservation
Applicant: Wasco County Soil & Water Conservation District / Mosier Watershed Council
Requested: \$132,900 **Total Project Cost:** \$412,900

Application Description Provided by Applicant:

Results of two jointly funded USGS and OWRD studies show the principal cause of 40 years of declining aquifers in Mosier to be commingling wells which allow flow between aquifers through existing boreholes. This study proposes to gather site-specific data to determine the extent of commingling within the zone predicted to have the highest impact on aquifer declines. These data will then be evaluated to determine the cost of repairing priority wells and whether any other mechanisms are significant, to maximize the amount of conserved water. Evaluation will consist of reviewing well logs to determine the likelihood of commingling followed by field evaluation of wells to confirm commingling. This will produce a prioritized well remediation list to stop the declines and begin to restore the aquifer, making efficient use of the \$1 million recently established for that purpose by the Oregon legislature.

Application Review Team Evaluation: The Application Review Team recommended not funding this application. The proposal as written is a technical study to prioritize project implementation and does not fit within the scope of a feasibility study.

Comments: No comments were received.

Staff Recommendation: Do Not Fund

Commission Action:

On November __2015, the Water Resources Commission took action to:

The feasibility study received an award amount of \$_____.

Study Name: Alder Creek Reservoir Feasibility Study

Study Type: Storage

Applicant: Bert Siddoway

Requested: \$58,747 **Total Project Cost:** \$125,441

Application Description Provided by Applicant:

The goal of the feasibility study is to close data gaps pertaining to the geology of the area and hydrologic and economic feasibility of a potential reservoir project. The geologic portion will include: geologic reconnaissance and mapping, preliminary analysis and schematic layout of onsite geology and laboratory testing of on-site materials. The geology element is crucial to the determination of the type of dam and treatment for the foundation. Hydrology will be reviewed in order to determine if enough water is available to feasibly pay for the construction of the reservoir with crops and livestock as the main source of revenue. Economic analysis will include comparing the construction of a reservoir with crops and livestock as the main source of revenue. Economic analysis will include comparing logical alternatives, estimating and evaluating the volume of materials required, analysis of the costs associated with foundations, abutments, spillway (includes analysis of hydrology) and outlet area. Considerations of the dam's safety and potential environmental stipulations addressed through agency coordination would also be evaluated with regards to feasibility.

Application Review Team Evaluation: The Application Review Team recommended not funding this application. Those cost match items that qualify as eligible fall short of the grant fund totals requested in the application.

Comments: Two public comments and a petition with 25 signatures were received (see attachment 2).

Staff Recommendation: Do Not Fund

Commission Action:

On November __2015, the Water Resources Commission took action to:

The feasibility study received an award amount of \$_____.