OREGON



WATER RESOURCES D E P A R T M E N T Feasibility Study Grants Funding Recommendations

Kim Fritz-Ogren, Manager, Water Resources Development Program Becky Williams, Grant Program Coordinator June 14, 2019



Presentation Overview

Purpose and History of Funding Opportunity

2018-2019 Funding Cycle Overview

Funding Recommendations



Purpose and History



Funding Purpose

Purpose: Provide funding to evaluate feasibility of a water conservation, reuse, or storage project

Deadline: Fall each year (e.g., October 17, 2018)

Funding Decision: Spring each year (June 2019)





Funding Purpose

A feasibility study seeks to answer the question: Should we (or how should we) proceed with a proposed project idea?





Value of Feasibility Study Grants

Determine if a project is worth pursuing
Identify additional info
needed before determining feasibility
Prepare for implementation



Grant Details

- Studies limited to water conservation, reuse, and storage projects
- •\$500,000 funding cap
- Storage projects that meet certain criteria are required by statute to include certain analyses (e.g., analyses of environmental harm or impacts)



History

- •SB 1069 passed in 2008
- •82 studies funded
 - 29 conservation
 - 19 reuse
 - 36 storage
- Over \$5 million in grants awarded
- Grants last awarded in May 2017

Biennium	Funds Awarded
2009-11	~\$1.3 million
2011-13	~\$1.0 million
2013-15	~\$0.7 million
2015-17	~\$2.1 million
TOTAL	~\$5.1 million



2018-19 Funding Cycle Review Process



2018-19 Funding Cycle

- Approximately \$2.5 million available to award
- Applications due October 17, 2018
- Eight complete applications received
 - 1 Below-ground storage study
 - 7 Conservation studies



Applications Received

Study Name	Funding Requested	Total Cost of Study
Enhancing the Reliability of the Alluvial Groundwater Supply in the Walla Walla Basin	\$77,715	\$155,799
Lundy Ditch Irrigation Efficiency Feasibility Study	\$43,857	\$87,714
Talent Irrigation District Water Conservation Study	\$49,000	\$153,000
Tower Ditch Sleeving Feasibility Study	\$17 <i>,</i> 180	\$35,196
Upper John Day Irrigation Water Conservation Feasibility Study	\$151,758	\$303,516
Water & Energy Conservation with Variable Speed Drives on the Rogue River	\$43,264	\$86,527
White Ditch Sucker Creek Water Conservation Study	\$64,000	\$129,400
City of Umatilla Hydraulically Connected Wells	\$364,000	\$728 <i>,</i> 387
	\$810,773	\$1,679,538



Application Review Process





Application Review Team

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WATER RESOURCES D E P A R T M E N T



Application Evaluation

- ART makes a fund/do not fund vote, considering:
 - Is the proposal a Feasibility Study?
 - Readiness for funding?
 - Missing elements
 - Insufficient details
 - Is water available? (or, will this question be evaluated in the study?)



Application Evaluation

- Projects that receive a "fund" vote are scored on:
 - Study goal
 - Water need
 - Community benefit
 - Technical planning and preparedness
- Projects are ranked by score and recommended for funding based on fund availability



Studies Recommended for Funding



Enhancing the Reliability of the Alluvial Groundwater Supply in the Walla Walla Basin

Study Type	Below-Ground Storage		
Applicant	Walla Walla Basin Watershed Council		
Recommended Funding	\$77,715	Total Cost	\$155,799
County	Umatilla		

Highlights

- Evaluate three alternatives to recharge the alluvial aquifer:
 - Irrigate acres during winter to promote infiltration
 - Increase natural seepage loss in the Little Walla Walla
 - Store water with larger scale managed aquifer recharge sites
- Examine technical, political, regulatory, and economic feasibility



Lundy Ditch Irrigation Efficiency Feasibility Study

Study Type	Conservation	า	
Applicant	Deschutes Soil and Water Conservation District and Arnold Irrigation District		
Recommended Funding	\$44,070	Total Cost	\$189,870
County	Deschutes		
Highlights			

- Examine the feasibility of converting a private open lateral to pipe, consolidating other private laterals, and improving on-farm irrigation water efficiency
- Assess potential water and energy savings, technical feasibility, and estimated costs



Talent Irrigation District Water Conservation Study

Study Type	Conservatio	on	
Applicant	Farmers Conservation Alliance		
Recommended Funding	\$49,000	Total Cost	\$153,000
County	Jackson		

Highlights

- Analyze the existing water delivery infrastructure
- Evaluate one or more alternatives for modernization
- Produce high-level engineering designs, cost estimates, projected water savings, projected hydroelectric power generation and energy conservation potentials, and fish screening and passage opportunities



Tower Ditch Sleeving Feasibility Study

Study Type	Conservation	า	
Applicant	Deschutes Soil and Water Conservation District and Swalley Irrigation District		
Recommended Funding	\$17,180	Total Cost	\$35,196
County	Deschutes		
Highlights			

- Determine the technical feasibility of sleeving (lining) a segment of the Tower Ditch pipeline
- Examine estimated costs for future on-demand pressurized irrigation water



Upper John Day Irrigation Water Conservation Feasibility Study

Study Type	Conservatio	n	
Applicant	The Freshwater Trust		
Recommended Funding	\$151,758	Total Cost	\$303,516
County	Grant		
Highlights			

- Identify potential water-saving infrastructure upgrades
- Prioritize potential upgrades based on cost, instream and on-farm benefit, and landowner interest
- Complete 50% design(s) of highest priority projects



Water and Energy with Variable Speed Drives on the Rogue River

Study Type	Conservatio	on	
Applicant	Grants Pass Irrigation District		
Recommended Funding	\$43,264	Total Cost	\$86,527
County	Josephine		
Highlights			

- Evaluate the replacement of current electrical systems with more efficient variable speed drive of pumps
- Assess the water conservation, technical considerations, and potential energy savings
- Develop cost estimates

OREGON WATER RESOURCES DEPARTMENT	White Di Conserva	tch Sucker (tion Study	Creek Water
StudyType	Conservatio	n	
Applicant	Illinois Valle Conservatio	y Soil and Wate n District	er
Recommended Funding	\$64,000	Total Cost	\$129,400
County	Josephine		
Highlights			

- Investigate options for ditch and on-farm improvements
- Clarify water rights, evaluate current infrastructure and system efficiency, and assess alternatives
- Produce preliminary design and construction cost estimates for the preferred alternative



Studies Not Recommended For Funding At This Time



City of Umatilla Hydraulically Connected Wells

Study Type	Conservatio	n	
Applicant	City of Umatilla		
Recommended Funding	\$364,000	Total Cost	\$728,387
County	Umatilla		
Highlights			

- Investigate potential for using well hydraulically connected to surface water
- Drill exploratory boreholes and test well, test and monitor the water to determine hydraulic connection
- Assess potential for lower water demand



Review Team Findings

Review team did not consider the application to contain all tasks needed to show technical preparedness and readiness.

- Did not identify actions to address the development limitation or the Water Management Conservation Plan
- Did not identify the need for a permit amendment to address the well location



- Study goal and potential economic opportunity of project were viewed favorably
- Study proposal represented an interesting and innovative concept
- •ART recommended the application be revised and resubmitted in a future funding cycle



- •Comments in support of:
 - Talent Irrigation District Water Conservation Study
 - White Ditch Sucker Creek Water Conservation Study
- Comments from the City of Umatilla
 - Responded to the ART's evaluation
 - Requested that the Commission reconsider the grant application and award funding to the study



- Affected Tribes were notified of the funding recommendation and also given the opportunity to provide comments
- Received comments from Confederated Tribes of the Umatilla Indian Reservation:
 - Expressed concern about the proposed study "Enhancing the Reliability of the Alluvial Groundwater Supply in the Walla Walla Basin"
 - Requested study modifications



Funding Recommendation

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City of Umatilla Hydraulically Connected Wells	\$364,000	Not recommended at this time
TOTAL	\$810,773	\$446,773



Alternatives

- Adopt the staff funding recommendations contained in Table 1, 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.



Recommendation

- 1. Adopt the staff funding recommendations contained in Table 1, Section IV of this report.
- 2. Adopt modified funding recommendations.
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Thank you. Questions?



Extra Slides



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