#### 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 3, 2021

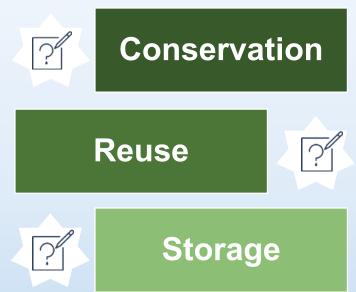


# **Funding Purpose**

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

**Deadline:** Fall each year (October 15, 2021)

Funding Decision: Spring each year (June 2021)





### Purpose of Feasibility Studies

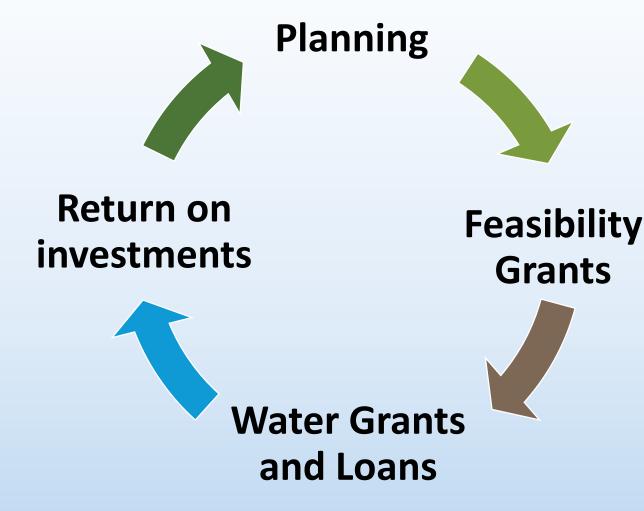
Investigate to reach the feasibility study goal

Determine if a project is worth pursuing

**Prepare for implementation** 

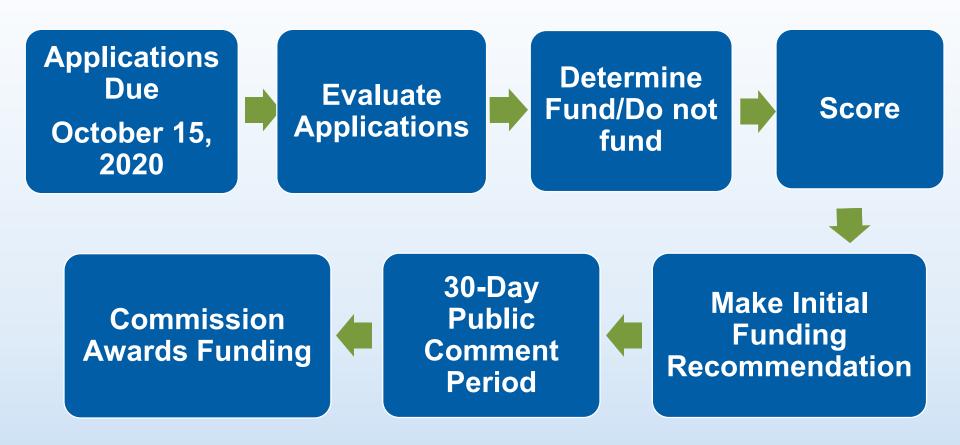


#### Water Resources Development Program





# **Application Review Process**





# **Application Evaluation**

Application Review Team makes a fund/do not fund vote, considering:

- Is the proposal a feasibility study?
- Is the proposal ready 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



# 2020-21 Funding Cycle

- •Approximately \$1.2 million available in funding
- Nine applications received
- •Requesting \$988,127 in funding
- 4 conservation studies
- 3 below-ground storage studies
- •2 above-ground storage studies



### **Applications Received**

Study Name	Project Type	Funding Requested
Dry River Canyon Water Conservation Study	Conservation	\$27,760
Fifteenmile Watershed Managed Underground	Below-Ground	\$185,000
Storage Facilities Feasibility Study Phase II	Storage	\$183,000
Klamath Irrigation District C-G Drop Hydropower Feasibility Study	Conservation	\$80,000
Silverton / Mt. Angel ASR Feasibility Study	Below-ground Storage	\$15,000
Smith Rock-King Way Water Conservation Feasibility Study	Conservation	\$171,072



### Applications Received (continued)

Study Name	Project Type	Funding Requested
Upper Grande Ronde River	Above-ground	¢114 000
Watershed Storage Feasibility Study	Storage	\$114,000
Upper John Day ASR Feasibility Study	Below-ground	
	Storage	\$293,895
Linnar Klamath Laka Watar Storago	Above-Ground	\$26,400
Upper Klamath Lake Water Storage	Storage	Ş20,400
Walla Walla River Irrigation District	Conservation	\$75,000
Water Conservation Study	CONSELVATION	\$75,000
	Total	\$988,127



# **Recommended for Funding**

Study Name	Funding Recommendation
Dry River Canyon Water Conservation Study	\$27,760
Fifteenmile Watershed Managed Underground Storage Facilities Feasibility Study Phase II	\$185,000
Silverton / Mt. Angel ASR Feasibility Study	\$15,000
Smith Rock-King Way Water Conservation Feasibility Study	\$171,072
Upper Grande Ronde River Watershed Storage Feasibility Study	\$114,000
Upper John Day ASR Feasibility Study	\$293,895
Upper Klamath Lake Water Storage	\$26,400
Walla Walla River Irrigation District Water Conservation Study	\$75,000
TOTAL	\$908 <b>,127</b>



### Not Recommended for Funding

Study Name	Funding Requested
Klamath Irrigation District C-G Drop Hydropower	¢00 000
Feasibility Study	\$80,000



Klamath Irrigation District C-G Drop Hydropower Feasibility Study

- Study goal Produce a hydropower structure design for the C-G Drop in Klamath Irrigation District
- Proposal Identify and evaluate opportunities to modernize the District's infrastructure, including:
  - High-level engineering designs,
  - Cost estimates,
  - Projected water savings,
  - Projected hydroelectric power generation and energy conservation potential



Klamath Irrigation District C-G Drop Hydropower Feasibility Study

#### **Review Team comments**

- The application, as submitted, appears to focus primarily on an assessment of hydropower.
- The proposed tasks were not sufficient to demonstrate that the study would investigate water conservation.
- Recommendation that the applicant
  - Seek funding from a source focused on energy savings OR
  - Revise the study to include more water conservation work and reapply



### **Public Comments**

- Department hosted 30-day public comment period March 16 – April 15, 2021
- •No public comments were received



# **Tribal Comments Received**

- Comments were received from the Confederated Tribes of the Umatilla Indian Reservation on:
  - Upper Grand Ronde River Watershed Storage Feasibility Study,
  - Upper John Day Aquifer Storage and Recovery Feasibility Study, and
  - Walla Walla Irrigation District Water Conservation Study.
- Comments were provided to the Application Review Team



### 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.
- 3. Direct the Department to further evaluate the applications and return with a revised funding proposal.



# Thank you. Questions?



# Extra Slides - to use if needed



Dry River Canyon Water Conservation Study

Study Type	Conservation
Applicant	Deschutes River Conservancy and the Central Oregon Irrigation District
Funding request	\$27,760
Total cost	\$55,520
County	Deschutes and Crook
Highlights	

Assess primary irrigation water runoff points and explore reducing water waste by these actions:

- Review and evaluate existing data to predict primary points of discharge
- Collect data on these assumptions via a field investigation
- Evaluate discharge reduction strategies



Fifteenmile Watershed Managed Underground Storage Study – PH II

Study Type	Below ground storage
Applicant	Wasco County Soil Water Conservation District
Funding request	\$185,000
Total cost	\$370,000
County	Wasco
Highlights	

- Assess the feasibility of treating target volumes of source water for subsurface storage
- Examine models for governing and operating a subsurface storage system that would ensure long-term sustainability



### Klamath Irrigation District C-G Drop Hydropower Feasibility Study

Study Type	Conservation
Applicant	Klamath Irrigation District
Funding request	\$80,000
Total cost	\$160,000
County	Klamath
Highlights	

- Identify and evaluate opportunities to modernize the District's infrastructure
- Examine and develop high-level engineering designs, cost estimates, projected water savings, and projected hydroelectric power generation and energy conservation



Silverton / Mt. Angel Aquifer Storage and Recovery

Study Type	Below ground storage
Applicant	City of Silverton
Funding request	\$15,000
Total cost	\$30,000
County	Marion
Highlights	

- Identify possible location(s) of a viable aquifer for Aquifer Storage and Recovery (ASR)
- Determine compatibility of ASR with the Cities' respective water systems



### Smith Rock-King Way Water Conservation Feasibility Study

Study Type	Conservation
Applicant	Deschutes River Conservancy and the Central Oregon Irrigation District
Funding request	\$171,072
Total cost	\$375,712
County	Deschutes
Highlights	

- Create a toolbox to assist with prioritization and implementation of on-farm water conservation projects
- Determine which actions, or combinations, result in the greatest water conservation benefit



### Upper Grande Ronde River Watershed Storage Feasibility Study

Study Type	Above-ground storage
Applicant	Union County
Funding request	\$114,000
Total cost	\$228,000
County	Union
Highlights	

Assess above ground storage options:

- Review the watershed and site suitability to determine potential locations
- Evaluate instream flow needs in the reaches most likely to be impacted by a storage project



Upper John Day Aquifer Storage and Recovery Feasibility Study

Study Type	Below ground storage
Applicant	Grant Soil and Water Conservation District
Funding request	\$293,895
Total cost	\$589,645
County	Grant
Highlights	

Assess, prioritize, and locate groundwater aquifer storage and recovery projects:

- Conduct an Airborne Electromagnetic Method survey
- Engage landowners and assess interest
- Develop conceptual design
- Develop ranking system of potential projects



Upper Klamath Lake Water Storage Study

Study Type	Below ground storage
Applicant	Modoc Irrigation District
Funding request	\$26,400
Total cost	\$58,600
County	Klamath
Highlights	

Evaluate the feasibility of building one or more above-ground water storage reservoirs

- Identify potential sites and sizes for reservoirs
- Estimate cost and regulatory requirements
- Assess environmental impacts



### Walla Walla River Irrigation District Water Conservation Study

Study Type	Conservation
Applicant	Farmers Conservation Alliance
Funding request	\$75 <i>,</i> 000
Total cost	\$170,000
County	Umatilla
Highlights	

- Identify and evaluate opportunities to modernize the District's infrastructure
- Produce a comprehensive System Improvement Plan with associated high-level engineering designs, cost estimates, projected water savings, and projected hydroelectric power generation and energy conservation potentials