



Irrigation Modernization Funding Applications

Project Summaries – 2024 Funding Cycle

February 1, 2024

Updated April 4, 2024

Background

The Water Supply Development Account provides grants and loans for water projects that have economic, environmental and social/cultural benefits (ORS 541.651-696). In 2023, the Oregon Legislature passed House Bill 5030, providing \$50 million to the Water Supply Development Account to issue grants for irrigation modernization projects and \$10 million for Water Project Grants and Loans. The 2024 application deadline was January 17, 2024. The Oregon Water Resources Department (OWRD) received 10 complete applications requesting a total of \$25,900,067 in grant funding for irrigation modernization projects. OWRD received no complete applications for Water Project Grants and Loans.

Document Description

The following are project summaries for complete grant applications received by January 17, 2024 for the 2024 Irrigation Modernization Funding cycle. The project summaries are adapted from submitted project applications. The application summaries are listed in alphabetical order by project name and page numbers listed below.

OWRD solicited public comment on the Irrigation Modernization Funding applications from February 1 through April 2, 2024. Public comments were received from three applicants providing additional information about the legal conservation and protection of water in their applications. The summaries in this document have been updated to reflect the additional information and the new text is indicated by underline.

Next Steps

Public comments submitted on applications will be considered by the Technical Review Team (TRT). The TRT will evaluate applications and make a funding recommendation to the Water Resources Commission. OWRD will post the TRT funding recommendation for an additional public comment period. OWRD will present funding recommendations for Commission decision on June 13-14, 2024.

More Information

If you have questions please contact the Grant Coordinator, Adair Muth, at 971-301-0718 or OWRD.Grants@water.oregon.gov.

List of Applications Received

Project Name	Applicant	County	Grant Funds Requested	Total Project Cost
Arnold Irrigation District Deschutes Basin Flow Restoration Project - Phases 3-4	Arnold Irrigation District	Deschutes	\$2,860,000	\$11,551,000
Deschutes Basin Flow and Water Quality Restoration Project – Group 6C	Tumalo Irrigation District	Deschutes	\$3,000,000	\$6,567,000
Farmers Canal Piping and Sediment Management Project	Farmers Irrigation District & Farmers Conservation Alliance	Hood River	\$2,527,000	\$10,840,000
Joint System Canal Piping Project Phase 1	Medford Irrigation District & Rogue River Valley Irrigation District	Jackson	\$2,210,000	\$7,360,000
Kingman Lateral 1st Mile Piping	Owyhee Irrigation District	Malheur	\$2,000,000	\$5,100,000
Klamath Irrigation District Pump Plants and 2025 Main D Canal Improvements	Klamath Irrigation District & Farmers Conservation Alliance	Klamath	\$4,615,000	\$18,460,000
Lone Pine Irrigation Modernization Phase 2	Lone Pine Irrigation District	Crook and Jefferson	\$775,000	\$4,698,000
Phase 2: G and G2 Lateral Piping and Water Conservation Project	Deschutes River Conservancy	Deschutes	\$3,061,829	\$5,086,774
Piping Lateral Canals in the Vale Bench: Building on Experience	Malheur Watershed Council	Malheur	\$3,601,238	\$6,121,238
Snake River Pumping Efficiencies	Owyhee Irrigation District	Malheur	\$1,250,000	\$2,825,133
		Total	\$25,900,067	\$78,609,145

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Arnold Irrigation District Deschutes Basin Flow Restoration Project - Phases 3-4

Project Information (adapted from application)

Applicant Name: Arnold Irrigation District

County: Deschutes

Funding Requested: \$2,860,000

Total Project Cost: \$11,551,000

Project Summary: The proposed project would enclose over four miles (22,751 linear feet) of open canal into leak-free HDPE piping with the goal of restoring approximately 8.7 cubic feet per second (cfs) of streamflow to the Deschutes Basin during the non-irrigation season. AID would reduce their water right certificate(s) by 100% of the amount of water conserved through this project. Through an interdistrict agreement, the conserved live flow would be made available to the North Unit Irrigation District (NUID) for use as irrigation water during the irrigation season. NUID would release an equivalent amount during the winter season in Upper Deschutes River below Wickiup Reservoir via a secondary use right for flow augmentation. The proposed project, Phases 3-4, would improve conditions for native and Endangered Species Act (ESA)-listed species, improve public safety, and provide a resilient solution for water supply reliability in the Deschutes Basin.

Deschutes Basin Flow and Water Quality Restoration Project – Group 6C

Project Information (adapted from application)

Applicant Name: Tumalo Irrigation District

County: Deschutes

Funding Requested: \$3,000,000

Total Project Cost: \$6,567,000

Project Summary: The proposed project would conserve 1.3 cfs by enclosing 19,005 linear feet of open canal and laterals. Approximately 0.98 cfs of the conserved water would be restored and protected instream to Tumalo Creek during the irrigation season and released in Crescent Creek in the winter. The conserved water would be legally protected instream through the Oregon Water Resource Department's Allocation of Conserved Water program and would result in improved temperature conditions and water quantity for ESA-listed species and native fish and wildlife. The proposed project would enclose a portion of the open canal referred to as the Columbia Southern Canal. The pipe follows the existing canal alignment and would be installed in a compacted trench with 3 feet of cover to protect from freezing and damage. The surface would be restored with soil and seeding where appropriate.

Farmers Canal Piping and Sediment Management Project

Project Information (adapted from application)

Applicant Name: Farmers Irrigation District & Farmers Conservation Alliance

County: Hood River

Funding Requested: \$2,527,000

Total Project Cost: \$10,840,000

Project Summary: The proposed project would install 2.65 miles of buried, dual 48-inch-diameter pipelines and deepen an existing attenuation bay to create a sediment management system to conserve water and deliver reliable, high-quality water for irrigation and renewable hydropower generation in Hood River County within the Hood River Basin. As a result of this project, the District would legally protect approximately 2 cfs in the Hood River through the Oregon Water Resource Department's Allocation of Conserved Water program to improve streamflow and enhance habitat for ESA-listed coho, steelhead, and Chinook populations, increase ecological drought and climate change resiliency, and help recover species of cultural significance for the Confederated Tribes of the Warm Springs (CTWS).

Joint System Canal Piping Project Phase 1

Project Information (adapted from application)

Applicant Name: Medford Irrigation District & Rogue River Valley Irrigation District

County: Jackson

Funding Requested: \$2,210,000

Total Project Cost: \$7,360,000

Project Summary: The goal of the proposed project is to modernize the North Fork Canal and South Fork Canal to improve water supply reliability for high-value agriculture in Oregon's Rogue Valley while improving water quality and habitat conditions for ESA-listed fish in the Little Butte Creek watershed. The proposed project would pipe the Districts' 4,700-foot North Fork Canal, 1,900-foot South Fork Canal, and the junction where the canals merge. The project would improve water supplies for agricultural production, reduce the risk of infrastructure failure, reduce operations and maintenance costs, and enhance instream flows for federally threatened Southern Oregon/Northern California Coast (SONCC) coho salmon, and sensitive species including Chinook, bull trout, steelhead trout, and Pacific lamprey. The Districts would leave 25% of the water saved by the project instream (approximately 111 acre-feet). The proposed project would be the first phase of a large-scale effort to modernize the Districts' shared Joint System Canal.

Kingman Lateral First Mile Piping

Project Information (adapted from application)

Applicant Name: Owyhee Irrigation District

County: Malheur

Funding Requested: \$2,000,000

Total Project Cost: \$5,100,000

Project Summary: The objective of the proposed project is to implement a comprehensive conservation strategy addressing various facets such as human safety, habitat protection, water and fuel savings, reduced sediment loading in 303(d) listed streams, and economic viability of the community. The proposed project would enclose approximately 5,900 linear feet of an open canal by installing a 72-inch HDPE pipe within the existing canal profile. The proposed canal section extends from the headgates downstream to the tunnel on the Kingman Lateral, chosen due to slope instability and significant water losses. The project would also include rehabilitating operation and maintenance roads, constructing automated headgate facilities, establishing a structure at the termination linking to the existing canal tunnel, and backfilling the pipe.

Klamath Irrigation District Pump Plants and 2025 Main D Canal Improvements

Project Information (adapted from application)

Applicant Name: Klamath Irrigation District & Farmers Conservation Alliance

County: Klamath

Funding Requested: \$4,615,000

Total Project Cost: \$18,460,000

Project Summary: The goal of the proposed project is to improve water management within the Klamath Irrigation District to benefit both agricultural producers and broader Klamath Basin water supplies. To move towards this goal, the proposed project would upgrade the Adams and Stukel pump stations, line approximately 0.9 miles of the D Canal, and pipe approximately 0.9 miles of the D Canal. The project would 1) improve water delivery reliability for agricultural producers within the District; 2) allow the District to more effectively manage the flow of water through its system to downstream users such as Tulelake, Shasta View, and Malin irrigation districts; 3) save 1,276 acre-feet of water through infrastructure improvements, providing the opportunity to leave water stored in Upper Klamath Lake later into the irrigation season to benefit basin water supply; and 4) reduce the energy use associated with pumping water throughout the District by 10 percent, resulting in an average savings of approximately 6,800 kilowatt hours annually.

Lone Pine Irrigation Modernization Phase 2

Project Information (adapted from application)

Applicant Name: Lone Pine Irrigation District

County: Crook and Jefferson

Funding Requested: \$775,000

Total Project Cost: \$4,698,000

Project Summary: The proposed Phase 2 project would complete the irrigation modernization of the Lone Pine Irrigation District. The District is pursuing water conservation strategies to construct a more efficient system and permanently restore flows in the Deschutes River. The proposed layout reduces the need for multiple pump stations and maintenance of multiple distribution lines. The proposed Phase 2 project would conserve approximately 1.5 cfs by installing 4.2 miles of pipe for the main canal and laterals. The District would reduce their water right certificate(s) by 100% of the amount of water conserved through this project. Through an interdistrict agreement, the conserved live flow would be made available to the North Unit Irrigation District (NUID) for use as irrigation water during the irrigation season. NUID would release an equivalent amount during the winter season in Upper Deschutes River below Wickiup Reservoir via a secondary use right for flow augmentation.

Phase 2: G and G2 Lateral Piping and Water Conservation Project

Project Information (adapted from application)

Applicant Name: Deschutes River Conservancy

County: Deschutes

Funding Requested: \$3,061,829

Total Project Cost: \$5,086,774

Project Summary: The proposed project would pipe 12,522 linear feet of the G Lateral and 15,350 linear feet of the G2 Lateral in Central Oregon Irrigation District (COID). Collectively, the project proposes to convert 27,872 linear feet of open canal to HDPE pipe. The G and G2 laterals serve 35 tax lots, encompassing 922.5 acres, in the Smith Rock-King Way area of COID in Deschutes County, and connect to COID's Pilot Butte Canal, one of COID's two main canals. The proposed project would expedite the benefits of providing on-demand pressurized water to COID patrons and enable water savings to be moved to other uses within the Deschutes Basin to help meet critical basin water supply needs for agriculture and for streamflow in the Upper Deschutes River. The proposed project would save approximately 6.74 acre-feet/day (3.4 cfs) or 1348 acre-feet/year. COID would reduce their water right certificate(s) by 100% of the amount of water conserved through this project. Through an interdistrict agreement, the conserved live flow would be made available to the North Unit Irrigation District (NUID) for use as irrigation water during the irrigation season. NUID would release an equivalent amount during the winter

season in Upper Deschutes River below Wickiup Reservoir via a secondary use right for flow augmentation to benefit the Oregon spotted frog and redband trout.

Piping Lateral Canals in the Vale Bench: Building on Experience

Project Information (adapted from application)

Applicant Name: Malheur Watershed Council

County: Malheur

Funding Requested: \$3,601,238

Total Project Cost: \$6,121,238

Project Summary: The proposed project would pipe 10.4 miles of earthen lateral canals. The project would result in savings of approximately 4,896 acre-feet per year. These savings would help achieve a carryover pool in Beulah Reservoir to benefit the habitat of the federally-listed bull trout. Side benefits of piping would be improved water quality by enabling landowners to convert from furrow to sprinklers, which would eliminate irrigation-induced erosion. The future of the area's food supply would be protected by ensuring irrigation water supply and maintaining soil quality.

Snake River Pumping Efficiencies

Project Information (adapted from application)

Applicant Name: Owyhee Irrigation District

County: Malheur

Funding Requested: \$1,250,000

Total Project Cost: \$2,825,133

Project Summary: The District's pumping plants (Dead Ox and Dunaway), dating back to the 1930s, continue to operate with relatively high efficiency (approximately 70%). However, there is currently no mechanism installed on the pumps to reduce water flow output under the pumps' maximum output. This results in excessive water being pumped into the canal, leading to operational spills. This excess water undergoes various transformations, including heating up, evaporation, and potential contamination, primarily sediment. The proposed project would leave approximately 3,500 acre-feet of water instream and conserve approximately 560,000 kWh by installing Variable Frequency Drives (VFDs) and pump controls. The project would expand the existing pumping plant buildings to accommodate the VFDs and other controls. The Dunaway plant would be fitted with a weed removal mechanism to clear debris from the pump intake grates and the Dead Ox plant would be fitted with a new hoist and gantry for safer pump and motor removal during maintenance and repairs.