



Irrigation Modernization Funding Applications

Evaluation Summaries – 2024 Funding Cycle

May 9, 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 evaluation summaries for complete grant applications received by January 17, 2024 for the 2024 Irrigation Modernization Funding cycle. The multi-agency Technical Review Team (TRT) provided comments on each application, scored applications based on the criteria identified within the [Scoring Criteria document](#), and made a funding recommendation to the Water Resources Commission (Commission) based on that evaluation and available funds. The following evaluation summaries highlight TRT comments gathered by OWRD during the application evaluation process and are prepared for the Commission's consideration and review. Applicants are encouraged to contact the Grant Coordinator to request a review meeting and receive additional evaluation feedback. The evaluation summaries are listed in order of the TRT ranking.

The evaluation summary includes a combined public benefit score, which the TRT used to rank proposed projects. A table is also provided that shows a breakdown of the application score by category. An application could score up to 72 points in each of the economic, environmental, and social/cultural public benefit categories. A proposed project could receive up to 34 additional preference points; up to 12 points for legally protecting water instream, up to 12 points for collaboration, and 10 points for legally protecting water instream commensurate with the amount required under the approach described in ORS 537.470. Preference points are listed in the "Other" category. There is a maximum public benefit score of 250 points.

Based on the TRT ranking, the TRT recommends the top five projects for funding (Table 1). This funding recommendation considers the public benefits provided by these applications. While there were three additional projects that met the minimum public benefit category scores required to be recommended for funding, the TRT did not recommend those projects for funding at this time due to their low public benefit scores, limited funds available, and in consideration of the additional funding cycle that will be offered this year (applications due July 10, 2024). The TRT recommends applicants who were not recommended for funding in this cycle to revise and resubmit their application in the next funding cycle (Table 2).

Next Steps

OWRD is soliciting public comment on the TRT ranking and funding recommendation through 5:00 pm on May 31, 2024. Information on how to submit a public comment is available [here](#). Public comments submitted on the TRT ranking and funding recommendation will be presented to the Commission who will make a funding decision. The date for the Commission to make its funding decision is June 13, 2024.

Table 1. Applications Recommended for Funding by the Technical Review Team

Project Name	Applicant	County	Grant Funds Requested	Total Project Cost	Total Score
Farmers Canal Piping and Sediment Management Project	Farmers Irrigation District & Farmers Conservation Alliance	Hood River	\$2,527,000	\$10,840,000	121
Deschutes Basin Flow and Water Quality Restoration Project – Group 6C	Tumalo Irrigation District	Deschutes	\$3,000,000	\$6,567,000	116
Arnold Irrigation District Deschutes Basin Flow Restoration Project - Phases 3-4	Arnold Irrigation District	Deschutes	\$2,860,000	\$11,551,000	90
Phase 2: G and G2 Lateral Piping and Water Conservation Project	Deschutes River Conservancy	Deschutes	\$3,061,829	\$5,086,774	71
Kingman Lateral 1st Mile Piping	Owyhee Irrigation District	Malheur	\$2,000,000	\$5,100,000	56
		Total	\$13,448,829	\$39,144,774	

Table 2. Applications Not Recommended for Funding at This Time

Project Name	Applicant	County	Grant Funds Requested	Total Project Cost	Total Score
Klamath Irrigation District Pump Plants and 2025 Main D Canal Improvements	Klamath Irrigation District & Farmers Conservation Alliance	Klamath	\$4,615,000	\$18,460,000	48
Lone Pine Irrigation Modernization Phase 2	Lone Pine Irrigation District	Crook and Jefferson	\$775,000	\$4,698,000	46
Joint System Canal Piping Project Phase 1*	Medford Irrigation District & Rogue River Valley Irrigation District	Jackson	\$2,210,000	\$7,360,000	44
Piping Lateral Canals in the Vale Bench: Building on Experience	Malheur Watershed Council	Malheur	\$3,601,238	\$6,121,238	39
Snake River Pumping Efficiencies*	Owyhee Irrigation District	Malheur	\$1,250,000	\$2,825,133	39
		Total	\$12,451,238	\$39,464,371	

* Did not meet the minimum score of seven in each public benefit category required to be eligible for funding.

More Information

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

2024 Applications

Farmers Canal Piping and Sediment Management Project	4
<i>TRT Recommendation: Recommended for Funding</i>	4
Deschutes Basin Flow and Water Quality Restoration Project – Group 6C	5
<i>TRT Recommendation: Recommended for Funding</i>	5
Arnold Irrigation District Deschutes Basin Flow Restoration Project - Phases 3-4	6
<i>TRT Recommendation: Recommended for Funding</i>	6
Phase 2: G and G2 Lateral Piping and Water Conservation Project	7
<i>TRT Recommendation: Recommended for Funding</i>	7
Kingman Lateral First Mile Piping	8
<i>TRT Recommendation: Recommended for Funding</i>	8
Klamath Irrigation District Pump Plants and 2025 Main D Canal Improvements	9
<i>TRT Recommendation: Not Recommended for Funding at this time</i>	9
Lone Pine Irrigation Modernization Phase 2	10
<i>TRT Recommendation: Not Recommended for Funding at this time</i>	10
Joint System Canal Piping Project Phase 1	11
<i>TRT Recommendation: Not Recommended for Funding at this time</i>	11
Piping Lateral Canals in the Vale Bench: Building on Experience	12
<i>TRT Recommendation: Not Recommended for Funding at this time</i>	12
Snake River Pumping Efficiencies	13
<i>TRT Recommendation: Not Recommended for Funding at this time</i>	13

Farmers Canal Piping and Sediment Management Project

TRT Recommendation: Recommended for Funding

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).

Technical Review Team Score and Comments

Combined Public Benefit Score: 121

Public Benefit Category Score Breakdown

Economic	Environmental	Social/Cultural	Other
42	26	31	22

Economic: The proposed project would improve the District's infrastructure and result in a more efficient water delivery system that would reduce seepage loss and address sediment issues. The application provided details indicating a significant amount of cost and energy savings expected by piping the remaining open section of the Farmers Canal and deepening the existing attenuation bay. The review team appreciated the applicant stating their sediment management system could serve as a model for other districts needing to learn to effectively manage high sediment loads.

Environmental: The project proposes to legally protect 100 percent of the conserved water instream, approximately 2 cfs. The application described how an increase in flow in Hood River for approximately 10 miles until the confluence with the Columbia River would support the natural hydrograph and benefit fish species, including Spring Chinook salmon and Pacific lamprey, which are culturally important to the tribes. The application explained the likely benefits to multiple limiting ecological factors including streamflow and sedimentation and indicated the project would likely improve ecosystem resiliency to climate change by increasing streamflow during the summer months.

Social/Cultural: The proposed project would support local food systems by providing high-quality water to support orchards that produce crops including pears, apples, and cherries. The application described how the proposed project would likely provide benefits to public safety by mitigating hazards associated with the open canals, including flooding and canal failure.

Summary: The application provided information to substantiate a high standard of economic, environmental, and social/cultural benefits anticipated as a result of the proposed project. The review team noted the Confederated Tribes of Siletz Indians submitted comments that the eastern section of the proposed piped has not previously been surveyed by a qualified archaeologist and noted this will need to be completed if funded.

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

TRT Recommendation: Recommended for Funding

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.

Technical Review Team Score and Comments

Combined Public Benefit Score: 116

<u>Public Benefit Category Score Breakdown</u>			
Economic	Environmental	Social/Cultural	Other
27	36	31	22

Economic: The proposed project would modernize and enhance the District’s infrastructure by piping open canals. This would allow the District to deliver pressurized water to customers, conserve energy, and reduce seepage losses. The project would create a high number of temporary construction jobs and help secure long-term agriculture jobs.

Environmental: The project proposes to legally protect 75 percent of the conserved water instream, approximately 0.98 cfs. The application described how increased summer flows in Tumalo Creek would provide important cold water to the middle Deschutes River in the summer months when temperature affects fish survival. The project would provide a significant benefit to water quality and would enhance ecosystem resiliency to climate change by providing additional cold water instream.

Social/Cultural: The application described a high level of collaborative planning in the basin and the proposed project supports state and local priorities, including the Deschutes Basin Habitat Conservation Plan and the state’s Integrated Water Resources Strategy. The application described how the Twin Bridges Scenic Bikeway crosses the District’s canals at several locations that would be piped by this project, thus promoting recreation and scenic values.

Summary: The application provided information to demonstrate high economic, environmental, and social/cultural benefits would result from this project.

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

TRT Recommendation: Recommended for Funding

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.

Technical Review Team Score and Comments

Combined Public Benefit Score: 90

<u>Public Benefit Category Score Breakdown</u>			
Economic	Environmental	Social/Cultural	Other
30	21	17	22

Economic: The proposed piping project would enhance the District’s infrastructure, resulting in considerable reductions in water seepage loss, reduced pumping costs, and increased water system efficiencies overall. The project would generate a high number of temporary construction jobs and help secure long-term agriculture jobs. The proposed project would also benefit agriculture viability in the region by providing conserved water to the junior water right holder, North Unit Irrigation District.

Environmental: The proposed project would protect approximately 8.7 cfs of water instream during the non-irrigation season which would improve habitat conditions for fish and the ESA-listed Oregon spotted frog. The increased streamflow during the winter would provide for a more natural hydrograph and potentially improve water quality, which would result in increased ecosystem resiliency to climate change impacts. During the irrigation season, the project would result in increased stream flows within a ten-mile reach of the Deschutes River, which may provide minor environmental benefits.

Social/Cultural: The application described how the proposed project aligns with various statewide initiatives and basin priorities, including the goals of the Deschutes Basin Habitat Conservation Plan and specific recommendations from the state’s Integrated Water Resources Strategy. The review team noted the project is not located within the Wild and Scenic area of the Deschutes River, and claims that the project will promote recreation and scenic values are minor.

Summary: The proposed project outcomes were evaluated as likely to achieve high economic and environmental benefits and moderate social/cultural benefits.

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

TRT Recommendation: Recommended for Funding

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.

Technical Review Team Score and Comments

Combined Public Benefit Score: 71

Public Benefit Category Score Breakdown

Economic	Environmental	Social/Cultural	Other
29	8	15	19

Economic: The proposed piping project would result in considerable reductions in water seepage loss, reduced pumping costs, and allow the District to deliver pressurized water to customers. The proposed project would benefit agriculture viability in the region by providing the conserved water to the junior water right holder, North Unit Irrigation District. The application would have been strengthened by quantifying the number of temporary construction jobs and long-term agricultural jobs expected from the project.

Environmental: The proposed project would protect 100% of the conserved water instream, approximately 3.4 cfs or 1348 acre-feet/year, during the non-irrigation season which would improve habitat conditions for fish and the ESA-listed Oregon spotted frog. The increased streamflow would provide for a more natural hydrograph during the winter but provides minimal benefits during the irrigation season.

Social/Cultural: The application described how the proposed project would improve public safety by eliminating risks associated with open canals and reducing flooding risk. The proposed project aligns with various statewide initiatives and basin priorities, including the goals of the Deschutes Basin Habitat Conservation Plan. The application demonstrated a high level of collaborative basin planning efforts.

Summary: The application provided sufficient information to demonstrate the likelihood of the proposed project achieving high economic benefits and moderate environmental and social/cultural benefits.

Kingman Lateral First Mile Piping

TRT Recommendation: Recommended for Funding

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.

Technical Review Team Score and Comments

Combined Public Benefit Score: 56

Public Benefit Category Score Breakdown

Economic	Environmental	Social/Cultural	Other
30	11	14	1

Economic: The proposed project would improve the District's infrastructure and protect against catastrophic canal failure. The proposed project would also result in a more efficient water delivery system that would reduce seepage loss. The application described how the project would create or retain jobs and is anticipated to increase efficiency in labor, maintenance, and fuel use. The proposed project would potentially benefit the economic value of the trout fishery in the Owyhee River.

Environmental: The application described how the proposed project would conserve approximately 475 acre-feet by reducing seepage and evaporative losses through piping. The proposed project would potentially improve water quality by decreasing erosion and sedimentation. The proposed project would also provide a moderate increase for ecosystem resiliency to climate change impacts by providing additional water for late season reservoir releases.

Social/Cultural: The proposed project would promote safety of local food systems by protecting the water source for agricultural in a community that is identified as overburdened and underserved. The proposed project aligns with state priorities for maintaining the cold-water fishery downstream of the Owyhee Dam and aligns with state priorities in Oregon's Integrated Water Resources Strategy. The application would have benefited from more details regarding the project's public outreach activities and how the proposed project aligns with collaborative basin planning efforts.

Summary: The application provided sufficient information to demonstrate the likelihood of the proposed project achieving a high standard of economic public benefits. The review team anticipates moderate environmental and social/cultural benefits resulting from the proposed project.

Klamath Irrigation District Pump Plants and 2025 Main D Canal Improvements

TRT Recommendation: Not Recommended for Funding at this time

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.

Technical Review Team Score and Comments

Combined Public Benefit Score: 48

Public Benefit Category Score Breakdown

Economic	Environmental	Social/Cultural	Other
30	8	7	3

Economic: The application described how the proposed project would create efficiencies in water delivery and reduce seepage loss by piping or lining open canals and reduce energy consumption by upgrading two pumps. The proposed project would enhance the District's infrastructure and is expected to provide more reliable irrigation water for the District's patrons, which would slow the trend of needing to leave fallow agricultural land due to limited water supply and increase agricultural productivity.

Environmental: The application described how the proposed project would conserve approximately 1,276 acre-feet by reducing seepage and evaporative losses through piping. The conserved water would potentially improve water quality by increasing summer flows, though the review team noted this is likely a minor benefit since the water would not be legally protected instream. The review team questioned the claim that trash racks to be installed at the pump stations as part of the proposed project would act as a fish screen and reduce the number of entrained suckers in the irrigation system.

Social/Cultural: The application described the potential benefits to public safety by eliminating risks associated with open canals located on a steep hillside near a highway and school. The review team noted the application would have been strengthened by including information on strategies used to engage Oregon's environmental justice communities, including tribal communities, which have significant water interests in the project area.

Summary: The application provided sufficient information to demonstrate the likelihood of the proposed project achieving a high standard of economic public benefits. The review team's evaluation assessed moderate environmental and social/cultural public benefits resulting from the proposed project.

Lone Pine Irrigation Modernization Phase 2

TRT Recommendation: Not Recommended for Funding at this time

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.

Technical Review Team Score and Comments

Combined Public Benefit Score: 46

Public Benefit Category Score Breakdown			
Economic	Environmental	Social/Cultural	Other
12	7	11	16

Economic: The proposed project would generate temporary construction jobs, help secure long-term agriculture jobs, and enhance the District's infrastructure. However, the application did not clearly differentiate the public benefits associated with this phase of the project versus the first phase or overall project. The proposed project would benefit agriculture viability in the region by providing the conserved water to the junior water right holder, North Unit Irrigation District.

Environmental: The proposed project would protect 100% of the conserved water resulting from the project instream during the non-irrigation season which would improve habitat conditions for fish and the ESA-listed Oregon spotted frog. The application would have been improved by clearly identifying the public benefits associated with this phase of the project. The reviewers noted the answers in the environmental section consistently referenced 3.7 cfs, which was the amount conserved in phase 1 of the project, rather than the amount proposed for phase 2 (1.5 cfs).

Social/Cultural: The application described how the proposed project promotes public safety by reducing the risk of injury or drowning in canals. The proposed project would promote priorities identified by local collaborative groups working on water management in the basin, and the proposed project aligns with basin priorities, including the Deschutes Basin Habitat Conservation Plan.

Summary: The application provided sufficient information to demonstrate the likelihood of the proposed project achieving a moderate standard of economic, environmental, and social/cultural public benefits. The review team observed that in general, the application lacked clarity on the claimed benefits that would be achieved as a result of the proposed project phase versus the entire piping project. Errors and inconsistencies cast doubt on the potential public benefits of the project.

Joint System Canal Piping Project Phase 1

TRT Recommendation: Not Recommended for Funding at this time

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 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 canal.

Technical Review Team Score and Comments

Combined Public Benefit Score: 44

Public Benefit Category Score Breakdown			
Economic	Environmental	Social/Cultural	Other
27	8	6	3

Economic: The application described how the proposed project would result in economic benefits by creating construction jobs and maintaining agricultural jobs. The proposed project would increase economic activity in Jackson County by increasing the long-term reliability of water for farms, orchards, and vineyards. The proposed project would enhance the Districts' infrastructure and is expected to extend water deliveries by two weeks, increasing agricultural land productivity.

Environmental: The proposed project would result in water conservation by eliminating seepage in the portion of the canal that would be piped. The project proposes to leave 25% of the conserved water instream, approximately 111 acre-feet, which may provide minor benefits to water quality and ecosystem resiliency to climate change impacts. The application would have been improved with details on the proposed management agreement to leave conserved water instream.

Social/Cultural: The application described how the proposed project would result in benefits to local food systems by extending the delivery of water by up to two weeks and how the proposed project aligns with the state's Integrated Water Resources Strategy. The application would have been strengthened by adding information about strategies used to engage with Oregon's environmental justice communities. The review team noted the Confederated Tribes of Siletz Indians (CTSI) submitted comments that the project is within the area of the Rogue Valley Treaty of 1853, to which CTSI is the successor, thus it was unexpected that such a wide variety of tribes were mentioned.

Summary: The application provided sufficient information to demonstrate the likelihood of the proposed project achieving a high standard of economic public benefits. The review team anticipates moderate environmental benefits and minor social/cultural benefits resulting from the proposed project. To be funded, projects must achieve a minimum score of seven in each category indicating public benefits beyond those of a minor quality would be achieved.

Piping Lateral Canals in the Vale Bench: Building on Experience

TRT Recommendation: Not Recommended for Funding at this time

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.

Technical Review Team Score and Comments

Combined Public Benefit Score: 39

<u>Public Benefit Category Score Breakdown</u>			
Economic	Environmental	Social/Cultural	Other
22	9	7	1

Economic: The application described the anticipated job creation associated with construction activities and the project's expected economic impact was described and quantified. The proposed project would enhance the Vale Oregon Irrigation District's irrigation infrastructure, improve water delivery to patrons and increase water use efficiency by reducing seepage loss.

Environmental: The proposed project would conserve approximately 4,896 acre-feet per year by reducing seepage and evaporative losses through piping. The application described how the project would benefit ESA-listed bull trout by maintaining a minimum pool of 2,000 acre-feet per year in Beulah Reservoir. The review team noted the project would not result in measurable improvement in protected streamflow as the applicant did not identify the legal means by which conserved water would be protected instream. The proposed project would likely improve water quality by decreasing erosion and sedimentation.

Social/Cultural: The proposed project would likely provide economic benefits for an economically distressed rural community and provides benefit to tribal interests by improving conditions for bull trout. The application described how the project would improve recreation and scenic values by improving water quality in the Malheur River, a tributary to the Snake River. The application included numerous letters of support.

Summary: The application provided sufficient information to demonstrate the likelihood of the proposed project achieving a high standard of economic public benefits. The review team's evaluation assessed moderate environmental and social/cultural public benefits resulting from the proposed project. The review team noted the Vale Oregon Irrigation District did not submit a letter of support. The application would have been strengthened with either the District applying as a co-applicant or submitting a letter of support since the project involves their irrigation infrastructure and water rights.

Snake River Pumping Efficiencies

TRT Recommendation: Not Recommended for Funding at this time

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.

Technical Review Team Score and Comments

Combined Public Benefit Score: 39

<u>Public Benefit Category Score Breakdown</u>			
Economic	Environmental	Social/Cultural	Other
24	6	8	1

Economic: The proposed project would create temporary construction-related jobs and help secure long-term agricultural jobs. The proposed project is expected to result in great improvements in water, energy, and operation and maintenance efficiency. The application quantified the energy and operational savings expected as a result of the improved infrastructure. The application would have been strengthened by quantifying the number of irrigated lands serviced by the project and the anticipated increase in productivity of that land as a result of the project.

Environmental: The proposed project would result in water conservation using Variable Frequency Drive pumps and would leave approximately 3,500 acre-feet of water in the Snake River. The review team assessed the additional water instream could result in moderate improvements to water quality in the Snake River. The application would have been improved with more detail and quantification to describe current conditions and how the proposed project is likely to achieve environmental benefits.

Social/Cultural: The application described how the proposed project would improve safety for District employees by eliminating arc flash risks associated with the current configuration of the pump station's electrical controls. The application described how the proposed project aligns with several statewide priorities, including specific recommendations from the state's Integrated Water Resources Strategy.

Summary: The application provided sufficient information to demonstrate the likelihood of the proposed project achieving a high standard of economic public benefits. The review team's evaluation assessed minor environmental benefits and moderate social/cultural public benefits resulting from the proposed project. To be funded, projects must achieve a minimum score of seven in each category indicating public benefits beyond those of a minor quality would be achieved.