



Water Project Grants and Loans and Irrigation Modernization Funding Applications

Evaluation Summaries – 2024 Funding Cycle 2

October 25, 2024

*Revised October 29, 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 issue grants for irrigation modernization projects and \$10 million for Water Project Grants and Loans. The application deadline for the second 2024 funding cycle was July 10, 2024. The Oregon Water Resources Department (OWRD) received seven complete applications requesting a total of \$9,279,591 in grant funding for Water Project Grants and Loans projects. OWRD received one complete application for irrigation modernization funding requesting \$907,290 in grant funding.

Document Description

The following are evaluation summaries for complete grant applications received for the second 2024 Water Project Grants and Loans (WPGL) and 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 Grants Manager 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 24 additional preference points; up to 12 points for legally protecting water instream and up to 12 points for collaboration. Irrigation Modernization projects may receive an additional 10 points for legally protecting water instream commensurate with the amount required under the approach described in ORS 537.470 for a total of 34 preference points. Preference points are listed in the "Other" category. There is a maximum public benefit score of 240 points for WPGL projects and 250 points for Irrigation Modernization projects.

Based on the TRT ranking, the TRT recommends the top four WPGL projects for funding (Table 1). This funding recommendation considers the public benefits provided by these applications and available funding. Projects ranked two through four are provisionally recommended for funding, subject to available funding. OWRD has \$3.7 million available for immediate award, and an additional \$5 million potentially available for provisional award contingent on a spring 2025 lottery revenue bond sale. The WPGL projects not recommended for funding are in Table 2. Two projects are not recommended for funding as they did not achieve the minimum score

* Revised text indicated by underline

required in each public benefit category. The third is not recommended due to insufficient funds. The TRT also recommends provisionally awarding funds to the Irrigation Modernization Funding application received, subject to available funding (Table 3). OWRD does not have any funds available for immediate award but has \$20.5 million potentially available for provisional award contingent on a spring 2025 lottery revenue bond sale.

Next Steps

OWRD is soliciting public comment on the TRT ranking and funding recommendation through 5 pm on November 15, 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 December 12–13, 2024.

More Information

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

Water Project Grants and Loans Applications

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

Project Name	Applicant	County	Grant Funds Requested	Total Project Cost	Total Score
Catherine Creek Elmer Dam Fish Passage and Flow Improvement	Union Soil & Water Conservation District	Union	\$1,924,463	\$7,267,790	100
Bend Headworks Fish Screen Replacement	North Unit Irrigation District	Deschutes	\$1,971,924	\$9,782,732	96*
Winston Reservoir Replacement	Winston-Dillard Water District	Douglas	\$3,700,000	\$7,038,500	92*
Sweet Cron Irrigation Modernization Project	Illinois Valley SWCD and Trout Unlimited	Josephine	\$535,868	\$669,890	71*
Total			\$8,132,255	\$24,758,912	

* Provisionally recommended, subject to available funding. OWRD has \$3.7 million available for immediate award and an additional \$5 million potentially available for provisional award contingent on a spring 2025 lottery revenue bond sale.

Table 2. Applications Not Recommended for Funding by the Technical Review Team

Project Name	Applicant	County	Grant Funds Requested	Total Project Cost	Total Score
Harbor Water Collector Disaster Mitigation Project	Harbor Water People’s Utility District	Curry	\$171,584	\$1,715,838	59*
Twickenham Irrigation Efficiency	Gabe Williams	Wheeler	\$831,602	\$1,674,206	50^
Southside Well Water Storage	Harney Soil and Water Conservation District	Harney	\$144,150	\$188,150	5*
Total			\$1,147,336	\$3,578,194	

*Not recommended because it did not meet the minimum public benefit score in one or more categories.

^Not recommended due to insufficient funds; may be considered if funding is available by the December Commission meeting.

Irrigation Modernization Funding Application

Table 3. Application Recommended for Funding by the Technical Review Team

Project Name	Applicant	County	Grant Funds Requested	Total Project Cost	Total Score
Klamath Irrigation District A-3 Urban Canal Piping	Klamath Irrigation District	Klamath	\$907,290	\$3,629,159	51*
Total			\$907,290	\$3,629,159	

* Provisionally recommended, subject to available funding. OWRD has \$20.5 million potentially available for provisional award contingent on a spring 2025 lottery revenue bond sale.

2024 Water Project Grants and Loans Applications

Catherine Creek Elmer Dam Fish Passage and Flow Improvement 5

Bend Headworks Fish Screen Replacement 7

Winston Reservoir Replacement 9

Sweet Cron Irrigation Modernization Project 11

Harbor Water Collector Disaster Mitigation Project 13

Twickenham Irrigation Efficiency 15

Southside Well Water Storage 17

2024 Irrigation Modernization Funding Application

Klamath Irrigation District A-3 Urban Canal Piping 19

Overview of Application Scoring

The scoring criteria for applications to the Water Projects Grants and Loans and Irrigation Modernization funding opportunities are based on the public benefits a project is likely to achieve. Projects funded are those which are likely to achieve the greatest public benefits. The change in conditions anticipated to result in public benefits must be described and explained in the project application. When evaluating an application, the TRT examines public benefits in three categories: economic, environmental, and social/cultural. The TRT evaluates and scores each application based on the following questions and determines whether the project would provide exceptional, high, moderate, minor, or no public benefits, or minor or medium negative impacts. See the [Scoring Criteria document](#) for more information.

	Question
Economic Public Benefits	a. Does the project create or retain jobs?
	b. Does the project increase economic activity?
	c. Does the project result in increases in efficiency or innovation?
	d. Does the project result in enhancement of infrastructure, farmland, public resource lands, industrial lands, commercial lands or lands having other key uses?
	e. Does the project enhance economic value associated with tourism or recreational or commercial fishing, with fisheries involving native fish of cultural significance to Indian tribes, or with other economic values resulting from restoring or protecting water instream?
	f. Does the project result in increases in irrigated land for agriculture? (which may include increasing irrigated acres, agricultural economic value, or productivity of irrigated land)
Environmental Public Benefits	a. Does the project result in measurable improvement in protected streamflows?
	b. Does the project result in water conservation?
	c. Does the project result in measurable improvement in groundwater levels that enhances environmental conditions in groundwater restricted areas or other areas?
	d. Does the project result in a measurable improvement in the quality of surface water or groundwater?
	e. Does the project increase ecosystem resiliency to climate change impacts?
	f. Does the project result in improvements that address one or more limiting ecological factors in the project watershed?
Social/Cultural Public Benefits	a. Does the project promote public health and safety and of local food systems?
	b. Does the project result in measurable improvements in conditions for members of minority or low-income communities, economically distressed rural communities, tribal communities or other communities traditionally underrepresented in public processes?
	c. Does the project promote recreation and scenic values?
	d. Does this project contribute to the body of scientific data publicly available in this state?
	e. Does this project promote state or local priorities, including but not limited to the restoration and protection of native fish species of cultural significance to Indian tribes?
	f. Does this project promote collaborative basin planning efforts, including but not limited to efforts under Oregon's Integrated Water Resources Strategy?

2024 Water Project Grants and Loans Applications:

Catherine Creek Elmer Dam Fish Passage and Flow Improvement

Applicant Name: Union Soil & Water Conservation District

County: Union

Funding Requested: \$1,924,463

Total Project Cost: \$7,267,790

Project Summary (adapted from application): The proposed project is within the Catherine Creek River Basin, near the confluence of the Grande Ronde River. The project goals are to (a) improve irrigation water use efficiency, (b) decrease the negative hydrologic effects associated with Elmer Dam in its current state, (c) improve fish passage for all native fishes at all water levels and provide unimpeded passage to approximately 40 of miles of critical spawning and/or rearing habitat for ESA-listed salmon, (d) increase aquatic habitat quality, and (e) increase climate change resiliency. The proposed project would improve the fishway and dam and make on-farm improvements to off-channel reservoirs and intakes, which would result in unimpeded fish passage and more natural hydrologic scenarios throughout this migration corridor for all native fishes.

Technical Review Team Score and Comments

TRT Recommendation: Recommended for Funding

Public Benefit Scores:

Total Score	Economic	Environmental	Social/Cultural	Other
100	27	22	39	12

Economic Public Benefits:

The review team found the proposed project would likely result in:

- a) Moderate public benefit due to the 8-10 temporary jobs that would be created as a result of this project. The review team also noted indirect benefits related to job retention within gas, restaurant, and grocery sectors.
- b) Moderate public benefit to economic activity by increasing the access to spawning habitat for and population of ESA-listed salmon, which would benefit the commercial salmon fishing industry. The review team also noted a benefit to the increase in productivity for the landowner's farming operations.
- c) High public benefit in increases in efficiency. The proposed project would replace diesel pumps with electric pumps and increase water use efficiency.
- d) High public benefit due to the infrastructure improvements, including providing better access to channel storage, reducing the forebay elevation, connecting waterways, and increasing irrigation efficiency.
- e) High public benefit in the enhancement of economic value associated with commercial fishing, including Steelhead fishing in the Grande Ronde River system.

- f) Moderate public benefit to the increase in agricultural value and productivity of irrigated land.

Environmental Public Benefits:

The review team found the proposed project would likely result in:

- a) No public benefit as the project is not proposing to legally protect water instream.
- b) High public benefit in water conservation. The project anticipates reducing water use by 39.6% because of the irrigation infrastructure improvements.
- c) Minor public benefit due to the marginal improvements to groundwater levels by allowing more free-flowing water into the channel and returning the river to natural conditions.
- d) Moderate public benefit to improvement in the quality of surface water by reducing the length of the stored water by 1-2 miles, which would create more natural streamflow conditions.
- e) High public benefit to the increase in ecosystem resiliency to climate change impacts due to better stream flow and lessened tailwater, improved fish passage, and improved water quality.
- f) High public benefit due to the improvements in fish passage and habitat. The proposed project would benefit State Sensitive fish species Redband Trout, Pacific Lamprey, and ESA-listed fish species Chinook Salmon, Steelhead Trout, and Bull Trout.

Social/Cultural Public Benefits:

The review team found the proposed project would likely result in:

- a) Moderate public benefit to public safety and of local food systems. The proposed project would improve safety for the Elmer Dam operator due to updates to the fish ladder. The proposed project also would promote local food systems with improvement to the 100-150 acres that produce teff grain that is milled locally. The review team also noted the significance of salmon to the Tribes First Foods.
- b) High public benefit for the conditions of affected Tribes. The review team noted the Confederated Tribes of the Umatilla Indian Reservation have been a partner on this project since it began.
- c) High public benefit for recreational value due to the potential increased fishing and scenic value from improved flow conditions.
- d) High public benefit to the contribution of scientific data through the installation of a PIT-tag array. The data collected from the project site would be used by state and federal agencies and Tribes to track migrating fish species, which would help manage fish recovery.
- e) High public benefit because the proposed project promotes both state and local priorities related to fish passage for all native fish species, including the Pacific Lamprey, which is culturally significant to the Confederated Tribes of the Umatilla Indian Reservation.
- f) Exceptional public benefit because the proposed project promotes collaborative basin planning effort, engaging a diverse range of stakeholders and partners. This project has a history of collaboration over the past 20 years and supports efforts under Oregon's Integrated Water Resources Strategy.

Bend Headworks Fish Screen Replacement

Applicant Name: North Unit Irrigation District

County: Deschutes

Funding Requested: \$1,971,924

Total Project Cost: \$9,782,732

Project Summary (adapted from application): This project would remove the existing screens and other related components located at the North Unit Irrigation District (NUID) main canal intake on the mainstem of the Deschutes River and replace them with new screens and components that are in compliance with state and federal standards. The new fish screens are intended to supply debris-free water to irrigators without harming aquatic life. The NUID diversion is responsible for maintaining minimum river flow consistent with legal instream requirements at North Canal Dam as well as ensuring the North Canal Dam Fish Ladder maintains sufficient supplies for fish migration. Through design features that would slow the approach velocity, shrink the mesh size for the screen, and provide a safe path to the fish ladder, the proposed fish screen would provide protection, survival, and restoration to native fish and other aquatic species, while securing water management operations for several irrigation districts.

Technical Review Team Score and Comments

TRT Recommendation: Provisionally Recommended, Subject to Available Funding

Public Benefit Scores:

Total Score	Economic	Environmental	Social/Cultural	Other
96	30	12	42	12

Economic Public Benefits:

The review team found the proposed project would likely result in:

- a) High public benefit due to the increased temporary job availability and job retention for current employees. The project anticipates creating 41 temporary jobs during project construction and securing ongoing operations for 28 employees.
- b) Moderate to high public benefit from the positive impacts on the economic activity along the Deschutes River. The proposed project would support the agricultural and construction sectors with expenditures of over \$9 million.
- c) High public benefit from increased efficiency resulting from the replacement of the fish screen and related components to comply with current state and federal standards.
- d) High public benefit as the project would result in the enhancement of infrastructure for the North Unit Irrigation District (NUID) and enable continued water management operations to irrigate existing farmland.
- e) High public benefit in the enhancement of economic value associated with tourism and native fish of cultural significance to the Confederated Tribes of Warm Springs (CTWS). The project would improve the protection and maintenance of fish populations, including Redband Trout, Pacific Lamprey, and other native species.

- f) Minor public benefit as the project does not increase irrigated land for agriculture but does stabilize the system and support continued irrigated agriculture by bringing infrastructure into compliance with state and federal standards.

Environmental Public Benefits:

The review team found the proposed project would likely result in:

- a) No public benefit as the project is not proposing to legally protect water instream.
- b) No public benefit as the project is not proposing to conserve water.
- c) No public benefit as the project would not result in a measurable improvement in groundwater levels.
- d) Minor public benefit to the improvement in the quality of surface water by preventing debris from entering the canal through screen replacement.
- e) Moderate public benefit to the increase in ecosystem resiliency to climate change impacts by reducing hazards for native fish species in the Deschutes River.
- f) High public benefit to the improvement in addressing the limiting ecological factor of fish entrapment. The application cites the significant numbers of fish that have been rescued by ODFW each year. Fish entrapment would be addressed by the new fish screen.

Social/Cultural Public Benefits:

The review team found the proposed project would likely result in:

- a) High public benefit to local food systems as the lands served by the district are dedicated to high-value crops. The review team cited a benefit for Tribal use due to impact on fish populations.
- b) High public benefit to the improvement in conditions for Oregon's environmental justice communities. NUID serves Jefferson County, which has a higher proportion of low-income populations and environmental justice communities.
- c) High public benefit to recreational and scenic values. The Middle Deschutes is a scenic waterway, and retaining more fish instream would help enhance recreation in that area. The proposed addition of an interpretive sign at the project site also adds value.
- d) No public benefit as the proposed would not contribute new scientific data.
- e) High to exceptional public benefit as the proposed project promotes both state and local priorities. The site has been a high priority for improved screening for decades. The proposal cites the cultural significance of fish species to CTWS in its intention to protect and maintain these populations.
- f) Exceptional public benefit in the proposal's collaborative basin planning efforts. The main strength of this project is its engagement with multiple stakeholders, its alignment with regional conservation plans, and its support for community involvement. The review team indicated this project was a significant example of collaborative planning.

Winston Reservoir Replacement

Applicant Name: Winston-Dillard Water District

County: Douglas

Funding Requested: \$3,700,000

Total Project Cost: \$7,038,500

Project Summary (adapted from application): The proposed project would replace the two existing water storage reservoirs that have a combined capacity of 1.5 million gallons with one welded steel tank reservoir that holds 2 million gallons. The project would benefit the rural communities of Dillard and City of Winston by improving water management, conserve water, improve drought resiliency, increase wildfire protection, and support aquatic habitat.

Technical Review Team Score and Comments

TRT Recommendation: Provisionally Recommended, Subject to Available Funding

Public Benefit Scores:

Total Score	Economic	Environmental	Social/Cultural	Other
92	33	16	31	12

Economic Public Benefits:

The review team found the proposed project would likely result in:

- a) Moderate to high public benefit with the creation of 15 temporary construction jobs. The proposed project would also support job retention for two major employers, a total of approximately 63 employees.
- b) High public benefit related to an increase in economic activity due to the driving need for improvements in this drought-prone area. Douglas County’s growing population would benefit by having its water needs met.
- c) High to exceptional public benefit from the increases to efficiency given the project’s goal of modernization, including a new tank, valves, hatches, and electrical panel. Additionally, the improvements would lead to more efficient hydraulic balancing and a decrease in chlorination product needed to treat water. The innovation of the ShakeAlert warning system was noted by the review team as well.
- d) High to exceptional benefit due to the infrastructure improvement of the current leak, eliminating a loss of 150,000 gallons of water monthly. The project design also considers the future impacts of earthquakes on the infrastructure.
- e) Minor to moderate public benefit to the enhancement of economic value associated with tourism and recreational fishing. The review team noted the increased summer flow mainly benefits non-native fish for fishery and would not likely improve angling.
- f) No public benefit as the project would not result in increases in irrigated land for agriculture.

Environmental Public Benefits:

The review team found the proposed project would likely result in:

- a) High public benefit from the agreement to legally protect water instream through the above-ground storage release of up to 375 acre-feet of water to augment flows in the South Umpqua River, which would improve the natural hydrograph and improve riparian ecosystems.
- b) Moderate public benefit to water conservation by replacing the leaking water storage tank and eliminating 150,000 gallons lost per month. This would result in a 15% reduction in water use.
- c) Minor public benefit in the improvement in groundwater levels by repairing the leaking tank.
- d) Minor public benefit to the quality of surface water and groundwater. The review team noted several water quality problems in this area which would see minor improvement as a result of the project.
- e) Moderate public benefit to the increase in ecosystem resiliency to climate change impacts by increasing instream flow.
- f) Moderate public benefit to limiting ecological factors related to the increased flows and potential impact on water quality.

Social/Cultural Public Benefits:

The review team found the proposed project would likely result in:

- a) High to exceptional public benefit given the current reservoir is not to current code and could be impacted by earthquakes. The proposed improvements support public safety in case of seismic activity. Related to public health, the addition of the mixer is also important to control for the loss of the chlorine residual and thermal and chemical stratification, therefore improving water quality for human consumption.
- b) High public benefit for the project's proposal to provide water security for vulnerable communities especially based on the economics of the region. Douglas County is also at high risk of flood and extreme heat, which the project addresses in its benefits toward drought management and earthquake resilience.
- c) Minor to moderate public benefit related mainly to the promotion of recreational values. The project's proposal would notably support fish habitat in the South Umpqua River. It would also support the Wildlife Safari, which is a major tourist attraction in the area.
- d) Minor public benefit to the contribution of new scientific data. There was limited information on how the project would publicly share the data gathered on pre- and post-earthquake activity with respect to early warning systems and the effectiveness of water control systems.
- e) High public benefit in the promotion of state and local priorities to help with water quality, notably increasing flow for migrating juvenile fish species important to tribes.
- f) High public benefit for fostering effective collaboration with stakeholders and promoting efforts identified in Oregon's Integrated Water Resources Strategy, including planning and preparing for drought resiliency.

Sweet Cron Irrigation Modernization Project

Applicant Name: Illinois Valley Soil and Water Conservation District and Trout Unlimited

County: Josephine

Funding Requested: \$535,868

Total Project Cost: \$669,890

Project Summary (adapted from application): The proposed irrigation modernization project at Sweet Cron Farm in Kerby would convert from flood and drip irrigation to center pivot irrigation on 33.4 acres. The project goals are to restore and maintain instream flow to benefit native fish populations and to provide an efficient water supply for irrigation. This strategic upgrade is expected to enhance water distribution by 30-50%, benefiting agricultural production. The applicant would legally protect 100% of the conserved water instream (approximately 0.14 cubic feet per second) through the Oregon Water Resource Department's Allocation of Conserved Water program in a stream with Endangered Species Act listed fish species.

Technical Review Team Score and Comments

TRT Recommendation: Provisionally Recommended, Subject to Available Funding

Public Benefit Scores:

Total Score	Economic	Environmental	Social/Cultural	Other
71	30	13	19	9

Economic Public Benefits:

The review team found the proposed project would likely result in:

- a) Moderate to high public benefit from the creation of one permanent job and job retention for local irrigators within the Illinois Valley area.
- b) High public benefit on the project's impact to economic activity. The project requires long-term maintenance that will be an economic opportunity, affecting contractors, equipment retailers, and electricians. The increased efficiency and production capacity would also benefit local farms.
- c) High public benefit from the 30% to 85% increase in efficiency from converting from flood to pivot irrigation.
- d) High public benefit to the enhancement of farmland from the investment in irrigation infrastructure.
- e) Moderate public benefit to the enhancement of economic value associated with recreation given the significance of native fish species in this region. The area also attracts tourism related to fishing and rafting.
- f) Moderate to high public benefit in the increase of production value to the irrigated land for agricultural use given the area to increase the production value of farmland by 50%.

Environmental Public Benefits:

The review team found the proposed project would likely result in:

- a) Moderate to high public benefit from the project's proposal to protect 100% of conserved water to instream flows through the Departments' Allocation of Conserved Water program. The review team noted that the amount of water, approximately 0.14 cfs, is relatively small compared to overall river flows.
- b) Moderate public benefit to water conservation. The project would irrigate the same acreage with 12% less water.
- c) Minor public benefit to the improvement of groundwater levels. The review team noted the applicants claim that the project would improve groundwater connectivity was not well-supported.
- d) Minor public benefit to water quality related to temperature and flow modification in the Illinois River. Less return flows and tailwater from farmlands would also marginally reduce pollutant load.
- e) Minor to moderate public benefit for increase in the ecosystem's resiliency to climate change from the increase in instream flow.
- f) Minor to moderate public benefit in improvements that address limiting ecological factors from the project's goal to reduce water consumption and dedicate the savings instream. This will aid wildlife species and temperature issues within the river.

Social/Cultural Public Benefits:

The review team found the proposed project would likely result in:

- a) High public benefit to local food systems due to the 50% increase in hay production. Food sales also occur directly from the farm, which is especially important given this area's qualification as a food desert.
- b) Moderate to high public benefit to environmental justice communities given the low-income, impoverished nature of this area. The ESA-listed salmon populations are important for the Tribes, including the local Takelma and the Cow Creek Band of Umpqua Tribe of Indians.
- c) Minor public benefit from the increased flows to wildlife scenic area that draws tourism. The review team noted it is a small amount of water but would still enhance flow.
- d) No public benefit to the contribution of new scientific data.
- e) Moderate public benefit from the promotion of state and local priorities especially related to fish populations. The project lists several plans and strategies that the project supports.
- f) Moderate public benefit from the project's collaborative planning with local, state, federal, and tribal partners. The project also promotes efforts identified in the Oregon Integrated Water Resources Strategy (IWRS), including improving water use efficiency and water conservation.

Harbor Water Collector Disaster Mitigation Project

Applicant Name: Harbor Water People’s Utility District

County: Curry

Funding Requested: \$171,584

Total Project Cost: \$1,715,838

Project Summary (adapted from application): The goal of this project is to protect a drinking water intake supplying water to approximately 4,300 customers on the South Bank of the mouth of the Chetco River. The proposed project would place 6-foot-deep layer of armoring riprap and barriers of submerged Douglas fir logs with attached root wads around the base of the Ranney Collector to provide structural support, encourage sediment deposition, decrease water velocity and the subsequent risk of increased erosion, and trap fines to provide further stability and future aquatic habitat for Endangered Species Act listed salmon. The riprap and large wood would prevent further erosion of the riverbank near the Harbor Water People Utility District’s (PUD) sole drinking water intake.

Technical Review Team Score and Comments

TRT Recommendation: Not Recommended for Funding at this time, as the project did not meet the minimum public benefit score in the environmental category

Public Benefit Scores:

Total Score	Economic	Environmental	Social/Cultural	Other
59	27	5	25	3

Economic Public Benefits:

The review team found the proposed project would likely result in:

- a) High public benefit from job retention in the applicant’s service area through water delivery to the public. The application noted the Port of Brookings-Harbor as a major water customer supporting 319 total jobs, although the review team noted that it was unlikely all of those would be eliminated if this source was to fail.
- b) High public benefit from the retainment of current economic activity. The review team also noted the importance of the project’s focus on disaster mitigation.
- c) Moderate public benefit from the increased efficiency and cost savings compared to constructing a new water intake infrastructure. The review team noted the proposed project would protect the existing service that is being delivered.
- d) High to exceptional public benefit to the improvement to water infrastructure from the stabilization of riverbanks to protect the drinking water intake in case of flood, which is the sole source of potable water for the Harbor community.
- e) Moderate public benefit to the enhancement of economic value associated with tourism and fishing. The project would protect the water source that serves a busy recreational port.
- f) No public benefit related to increases in irrigated land.

Environmental Public Benefits:

The review team found the proposed project would likely result in:

- a) No public benefit as the project is not proposing to legally protect water instream.
- b) No public benefit as the project is not proposing to conserve water.
- c) No measurable improvement in groundwater levels and therefore no public benefit in this criterion.
- d) Minor public benefit to the quality of surface water. The application's claims to reduce high salinity are unsubstantiated.
- e) Minor public benefit to the ecosystem's resiliency to climate change impacts from the proposed removal of invasive species at the project site.
- f) Minor public benefit to addressing a limiting ecological factor from the addition of large wood and riprap. The review team noted it would not be a permanent enhancement would provide minimal habitat.

Social/Cultural Public Benefits:

The review team found the proposed project would likely result in:

- a) High to exceptional public benefit for public health as the project protects the drinking water source for approximately 4,300 individuals.
- b) High public benefit for Oregon's environmental justice communities as the project area served by the Ranney Collector has a high percentage of low-income and older adults. The area is determined to be a high flood and fire risk and is susceptible to extreme heat, so the access to potable water would be important to these communities.
- c) Moderate public benefit in the promotion of recreational values given that the Port of Brookings-Harbor is the busiest recreational port on the Oregon coast. The claimed benefits to improving fish habitat was determined to be minimal.
- d) No public benefit related to the contribution of new scientific data.
- e) Moderate public benefit related to the promotion of state and local priorities.
- f) Moderate public benefit related to collaborative planning efforts through the promotion of the District's Natural Hazard Mitigation plan.

Twickenham Irrigation Efficiency

Applicant Name: Gabe Williams

County: Wheeler

Funding Requested: \$831,602

Total Project Cost: \$1,674,206

Project Summary (adapted from application): The goal of the proposed project is to improve climate change resilience of agriculture and the ecosystem. Under this are three sub-goals/actions: to improve irrigation efficiency, increase agricultural production, and increase instream flow. The proposed project would consolidate pumps and upgrade two centrifugal pumps to one more efficient turbine pump, replace the mainline system, upgrade existing pivots for improved efficiency, reduce and/or replace handline and solid-set irrigation systems with pivots, consolidate corner irrigation sections under high efficiency pivots, and apply activated biochar to the fields to improve water retention, reduce fertilizer needs, and improve microbial conditions. The applicant would legally protect 50% of the conserved water instream in the John Day River (approximately 0.75 cubic feet per second) through the Oregon Water Resource Department's Allocation of Conserved Water program. The applicant would apply 50% of the conserved water to place additional acreage into production which would improve the future viability of the agricultural operation.

Technical Review Team Score and Comments

TRT Recommendation: Not Recommended for Funding at this time due to available funding; may be considered if funding becomes available by the December Commission meeting

Public Benefit Scores:

Total Score	Economic	Environmental	Social/Cultural	Other
50	23	11	12	4

Economic Public Benefits:

The review team found the proposed project would likely result in:

- Moderate public benefit from the three temporary jobs created for this project and an opportunity for more permanent positions related to the biochar production longer term. The review team noted the project would retain farming jobs as well.
- Minor public benefit from the short-term increases of economic activity locally. The potential long-term benefits were less certain regarding biochar production and trucking/shipping.
- High public benefit from increased efficiency to water use, labor and electricity. The project would be considered a pilot for the area with its focus on biochar production, which was noted positively for its innovation by the review team.
- High public benefit to the enhancement of infrastructure as the project will upgrade existing pivot and pump systems as well as replace outdated irrigation infrastructure.
- Minor public benefit related to the enhancement of recreation and scenic values. This area is a low priority for fish species recovery due to low summer flows and high

irrigation. The review team noted a minor potential benefit to recreational boating related to the small increase in instream flow.

- f) High public benefit from increases in irrigated land for agriculture. The project would increase irrigated land from 188 acres to 240 acres.

Environmental Public Benefits:

The review team found the proposed project would likely result in:

- a) Moderate public benefit from the project's proposal to legally protect 50% of water instream, approximately 0.75 cfs, through the Department's Allocation of Conserved Water program. The review team noted that the increase in instream flow is small compared to overall flows in the John Day River and may have limited ecological impact.
- b) Moderate public benefit to water conservation. The project would reduce water use by 18%.
- c) No measurable improvement to groundwater levels and therefore no benefit in this area.
- d) Minor public benefit related to surface water quality. The review team noted the project may result in less fertilizer and less degraded tailwater return flows but the improvement to water quality would not likely be measurable.
- e) Moderate public benefit related to increases in the ecosystem's resilience to climate change impacts, primarily from the increased instream flow and the sequestration of carbon emissions from the biochar application.
- f) Minor public benefit to the improvement of limiting ecological factors from the small amount of water that would be legally protected instream.

Social/Cultural Public Benefits:

The review team found the proposed project would likely result in:

- a) Moderate public benefit to local food systems through the expansion of hay production.
- b) Moderate public benefit to environmental justice communities through increased productivity, bettering the conditions for the sensitive population of this area.
- c) Minor to moderate public benefit related to the promotion of recreational value through the project's effort to conserve water. This will help recreational boating, although the review team noted lesser benefit to fish species in the river.
- d) Minor public benefit to the contribution of scientific data. As a pilot project, it could demonstrate the use of biochar as a soil amendment, however the review team noted a lack of clarity for the plan to measure and share the data publicly.
- e) Minor public benefit to the promotion of state and local priorities from the increase of instream flow.
- f) Minor to moderate public benefit from the collaboration with local implementors aiming to serve as a pilot project for innovative practice. The review team noted the application did not mention the Lower John Day Working group or Place-based Planning efforts in the basin.

Southside Well Water Storage

Applicant Name: Harney Soil and Water Conservation District

County: Harney

Funding Requested: \$144,150

Total Project Cost: \$188,150

Project Summary (adapted from application): The main goal of the proposed project is to get water to the hay fields to irrigate during hot months when water is limited from the Malheur River. The proposed project would install a submersible pump into a well that would pump water to the storage area. The storage reservoir would be built and lined with Bentonite and a pipeline would be installed with valves to supply water to and from the reservoir to the point of use for irrigation.

Technical Review Team Score and Comments

TRT Recommendation: Not Recommended for Funding at this time, as the project did not meet the minimum public benefit score in all three categories

Public Benefit Scores:

Total Score	Economic	Environmental	Social/Cultural	Other
5	4	-1	2	0

Overall, the review team found the application lacked clarity on the legal path for the water rights needed for the proposed project, specifically for the proposed reservoir, which cast doubt on the feasibility of the project.

Economic Public Benefits:

The review team found the proposed project would likely result in:

- a) Minor public benefit from this project's creation of one full-time job for a duration of one year.
- b) Minor public benefit from an increase in economic activity within the construction sector for the reservoir construction.
- c) Minor to no public benefit from an increase in efficiency or innovation. Although the review team found this project fits with the region's historical land management, the proposed flood irrigation and storing pumped groundwater in an open reservoir with high evaporation potential is not an efficient use of water. There is some innovation through laser-leveling the farmable land.
- d) Minor public benefit from the enhancement of infrastructure, citing an increase to resale value of the land from greater irrigation and farming.
- e) Minor negative impact associated with this criterion. The well is 0.2 miles away from Malheur River; therefore, the project could cause injury to river, and the increased acreage of irrigation and quantity of water may impact fish populations or habitats.
- f) Minor public benefit from the increase in land for agriculture. The landowner will could irrigate an additional 5 acres as a result of the project.

Environmental Public Benefits:

The review team found the proposed project would likely result in:

- a) No public benefit as the project is not proposing to legally protect water instream.
- b) No public benefit as proposed method of conserving water via laser-leveling are likely outweighed by water losses due to evaporation in the proposed reservoir and from flood irrigating. Additionally, because the water right pathway was unclear, the review team questioned if the proposed project would result in more water use.
- c) No measurable improvement in groundwater levels and therefore no public benefit in this criterion.
- d) No public benefit from the improved quality of surface water and groundwater. The Malheur River has several water quality issues, and the quantity is low at times but the mechanics of the project and therefore public benefits are uncertain. Although the team noted that laser-leveling of the field will reduce runoff, the increased likelihood of advection (surface transport) of that water on additional flooded acres making it back to river with sediment or pollutants introduces a potential negative impact.
- e) No public benefit in terms of the potential for a negative impact on ecosystem resiliency due to evaporative losses associated with the surface water storage and flood irrigation.
- f) No public benefit. While flood irrigation may help local bird populations, it is a small plot of land and there is a potential negative impact on species downstream.

Social/Cultural Public Benefits:

The review team found the proposed project would likely result in:

- a) Minor public benefit in the promotion of local food systems by allowing the ability to farm an additional 5 acres in low flow years.
- b) Minor public benefit to Oregon's environmental justice communities from improvement of conditions for crop production for local use and other agricultural support.
- c) No public benefit to the promotion of recreation and scenic values; while there is a possible benefit to birds and wildlife in the area, downstream impacts would negate this.
- d) No public benefit, although the application states the reservoir structure may capture snow and rainfall, the application does not indicate how the data would be made publicly available.
- e) No public benefit to the promotion of state or local priorities. The application claims the project would decrease surface water use, but the likelihood of that is unclear and there is no proposed legal protection of conserved water instream. Additionally, the proximity of the well to the river would impact fish species downstream due to hydraulic connectivity.
- f) No public benefit associated with the promotion of collaborative basin planning efforts as the application did not indicate any involvement in those efforts.

2024 Irrigation Modernization Funding Application:

Klamath Irrigation District A-3 Urban Canal Piping

Applicant Name: Klamath Irrigation District

County: Klamath

Funding Requested: \$907,290

Total Project Cost: \$3,629,159

Project Summary (adapted from application): The proposed project would install piping materials along three miles of the A-3 Urban Canal, install an irrigation flow measurement device and automation to integrate with the District’s Supervisory Control and Data Acquisition (SCADA) system, and address invasive weed species. The proposed project anticipates conserving 1000- acre feet of water annually and having multi-benefit effects for numerous stakeholders. The proposed A-3 Urban Canal piping project targets an area where significant seepage is identified and requires additional water deliveries to push water through the canal to meet irrigation demand.

Technical Review Team Score and Comments

TRT Recommendation: Provisionally Recommended, Subject to Available Funding

Public Benefit Scores:

Total Score	Economic	Environmental	Social/Cultural	Other
51	19	10	16	6

Economic Public Benefits:

The review team found the proposed project would likely result in:

- a) Moderate public benefit from this project through job retention. The project would retain 24 jobs within Klamath Irrigation District, including 10 farming jobs that are directly impacted. The project would also protect 3,100 jobs within the district, though it is unclear the extent to which they would be impacted if the project did not move forward.
- b) Moderate public benefit from increases in economic activity. The review team cited the potential benefit to downstream commercial irrigators, as well as local economy impacts related to pipe fabrication and possible temporary hiring.
- c) Moderate to high public benefit from increases in efficiency by reducing evaporation and seepage, modernizing the water delivery system, and making better use of water supply.
- d) Moderate to high public benefit through the enhanced infrastructure of this project. The review team cited that water will be moved through the canal more efficiently and will be better distributed.
- e) Minor to no public benefit from enhanced economic values identified in statute. Klamath Irrigation District will likely use their full allocation of water due to the high demand in this area, so it is unlikely to result in water savings that can be used by Klamath Tribes or the National Wildlife Refuges.

- f) Minor to moderate public benefit from irrigated land in securing water to continue irrigating. Due to the demand for water in this area, however, it is unlikely an expansion would be possible.

Environmental Public Benefits:

The review team found the proposed project would likely result in:

- a) No public benefit as the project is not proposing to legally protect water instream.
- b) High public benefit from the project's anticipated savings of 1,000 acre-feet of water from evaporation, seepage, and over-delivery losses, resulting in 50% increase of water conservation.
- c) Minor public benefit to groundwater levels. While the application claims the project would mitigate high groundwater levels and reduce property damages from the high water table, this benefit is applicable to the social/cultural category.
- d) Minor public benefit from the improved quality of surface water and groundwater. While the quality in the canal would be improved, eliminating debris and urban trash, it is unlikely to affect water quality of the Upper Klamath Lake.
- e) No public benefit to ecosystem resiliency to climate change impacts. This project is primarily focused on water within the irrigation district for farming.
- f) Minor to no public benefit from addressing ecological factors. Water would be utilized primarily for irrigation. There is a possible benefit to mitigating invasive insect species and invasive weed growth.

Social/Cultural Public Benefits:

The review team found the proposed project would likely result in:

- a) High to exceptional public benefit associated with the promotion of public health and safety due to the elimination of debris and urban trash through piping of the canal. The review team also cited an exceptional benefit to protecting local food systems against contaminants that enter the food chain through the water supply.
- b) Moderate public benefit related to the amount of water potentially remaining in Upper Klamath Lake, although the applicant noted this amount would be minimal if present. There is a possible benefit for the social and environmental health of communities along the canal.
- c) No public benefit to the promotion of recreational or scenic values.
- d) No public benefit to the contribution of new scientific data.
- e) Minor to moderate public benefit to the promotion of state or local priorities. The project may support Tribal priorities to promote higher lake elevation, as there is a small chance conserved water will stay in Klamath Lake for a short period of time before diverted by junior users. The project also supports the local priorities of Klamath District and the larger Klamath system.
- f) Moderate to high public benefit related to collaborative basin planning efforts on this project. There is a notable effort between collaborators and stakeholders to organize this project within the Klamath Basin.