



AGENDA

IDAHO WATER RESOURCE BOARD

Finance Committee Meeting No. 8-24

Monday, December 16, 2024

9:00 a.m. (MT) / 8:00 a.m. (PT)

Water Center

Conference Room 648A

322 E. Front St.

BOISE

Brad Little

Governor

Jeff Raybould

Chairman

St. Anthony

At Large

Jo Ann Cole-Hansen

Vice Chair

Lewiston

At Large

Dean Stevenson

Secretary

Paul

District 3

Dale Van Stone

Hope

District 1

Albert Barker

Boise

District 2

Brian Olmstead

Twin Falls

At Large

Marcus Gibbs

Grace

District 4

Patrick McMahon

Sun Valley

At Large

Livestream available at <https://www.youtube.com/@iwrp>

1. Introductions and Attendance
2. Groundwater to Surface Water Conversion Grants Evaluations*
3. Secondary Aquifer Fund Budget Review
4. Other Items
5. Adjourn

Committee Members: Chair Jo Ann Cole-Hansen, Jeff Raybould, Marc Gibbs, Dale Van Stone, and Dean Stevenson.

Special Board Meeting No. 13-24

Monday, December 16, 2024

Upon adjournment of Finance Committee Meeting No. 8-24

Livestream available at <https://www.youtube.com/@iwrp>

1. Roll Call
2. Groundwater to Surface Water Conversion Grants*
3. Non-Action Items for Discussion
4. Next Meeting & Adjourn

* Action Item: A vote regarding this item may be made at this meeting. Identifying an item as an action item on the agenda does not require a vote to be taken on the item. **Americans with Disabilities:** If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email jennifer.strange@idwr.idaho.gov or by phone at (208) 287-4800.

Memorandum



To: Idaho Water Resource Board
From: Neeley Miller, Planning & Projects Bureau
Date: December 12, 2024
Re: Groundwater to Surface Water Conversion Grant Criteria

Action: Consider resolution to award grant funds

Background:

On July 1, 2024 the Idaho Water Resource Board (IWRB) adopted resolution no. 32-2024 modifying the spending plan for the Water Management Account. The IWRB's modified spending plan included a budget of \$20,000,000 for a groundwater to surface water conversion projects grant program. On July 26, 2024 the IWRB passed resolution no. 38-2024 adopting criteria for the award of groundwater to surface conversion grants. The IWRB set an application deadline of October 4, 2024. The IWRB received 13 grant applications requesting approximately \$23M million in funding.

Key Elements of the Criteria

Eligible Projects: Projects located in eligible geographic areas that propose to convert from groundwater to surface water irrigation.

Eligible Entities: Groundwater Districts, Irrigation Districts, Irrigation Boards of Control, Canal Companies. Individuals must apply through one of the eligible entities.

Eligible Geographic Area: Statewide basins that have been designated Critical Groundwater Areas and Groundwater Management Areas under Idaho Code § 42, Chapters 233a and 233b

Grant Award Limit: \$5 million per application (IWRB reserves the right to fully allocate the total budget among the applicants)

- Applicants must agree to cease pumping the proposed portion of groundwater related to project and that delivered conversion water will be used only on lands with an existing groundwater right tied to this project.
- Applications are scored based upon project benefits/effectiveness and proposal clarity.

Staff Recommendation

Staff has evaluated, scored and ranked the applications according to the criteria adopted by IWRB. Staff recommends the IWRB approve grant awards as specified in Attachment A to this resolution.

Attachment(s):

Resolution w/Attachment A
Project Summaries

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF GROUNDWATER TO
SURFACE WATER CONVERSION GRANTS

RESOLUTION TO AWARD FUNDS

1 WHEREAS, the Idaho Water Resource Board (IWRB) on July 1, 2024 adopted a resolution
2 (resolution # 32-2024) modifying the spending plan for the Water Management Account; and

3
4 WHEREAS, the IWRB’s modified spending plan included a budget of \$20,000,000 for a
5 Groundwater to Surface Conversion Projects Grant Program; and

6
7 WHEREAS, on July 26, 2024 the IWRB adopted criteria for the award of Groundwater to
8 Surface Water Conversion Grant (resolution # 38-2024) and set an application deadline of
9 October 4, 2024; and

10
11 WHEREAS, the IWRB received thirteen Groundwater to Surface Water Conversion Grant
12 applications by the deadline. The applications were evaluated, scored and ranked according to
13 the criteria adopted by the IWRB; and

14
15 WHEREAS, on December 16, 2024, the Finance Committee met and discussed the
16 projects, and recommended the IWRB approve grant awards as specified in Attachment A to this
17 resolution; and

18
19 NOW, THEREFORE BE IT RESOLVED that the IWRB approves the award of Groundwater to
20 Surface Water Grants from the Water Management Account as specified in Attachment A to this
21 resolution.

DATED this 16th day of December 2024.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

ATTACHMENT A

2024 GW to SW Conversion Grant Applications						
Entity	Project	Funds Requested	Total Project Costs	Ranking	Points	Funds Awarded
AAFGWD	Lake Channel Pipeline	\$1,337,379.00	\$2,674,759.90	4	68	\$1,337,379.00
BGWD	Morgan Enterprises	\$91,882.50	\$183,765.00	7	48	\$91,882.50
BGWD	S&L Murdock	\$123,481.10	\$246,962.20	8	47	\$0.00
BGWD	V&L Cornelison	\$32,573.12	\$65,146.23	10	38	\$0.00
BGWD	R&L Polatis	\$183,666.00	\$367,332.00	9	45	\$183,666.00
BJGWD	Osgood Pipeline	\$5,000,000.00	\$25,367,120.00	1	86	\$5,000,000.00
BJGWD	Brett Jensen Farms	\$65,640.00	\$131,280.00	11	37	\$65,640.00
City of Mt. Home	Lagoon Cell 10	\$5,000,000.00	\$10,866,600.00	*	*	*
MVGWD	Large Conversion	\$5,000,000.00	\$26,683,560.00	2	85	\$5,000,000.00
MVGWD	McManus	\$131,285.70	\$175,047.60	5	65	\$131,285.70
MVGWD	PKD Properties	\$21,617.20	\$43,234.40	3	69	\$21,617.20
Raft River	Watershed Conversion	\$5,000,000.00	\$54,595,803.00	*	*	*
SRVID	West Branch Canal Improvements	\$1,343,100.00	\$2,686,200.00	6	62	\$1,343,100.00
	Total Funds Requested	\$23,330,624.62	\$124,086,810.33			\$13,174,570.40

*Not recommended for funding

GW to SW Conversion Project Summaries

1. AAFGWD Lake Channel Pipeline

Funding is requested for construction of a pumping station on the Snake River downstream of the Massacre Rocks State Park. The pumping station will be constructed to facilitate placement of pumps and motors capable of 17 cfs. Three 150 horsepower motors, one 75 horsepower motor with variable frequency drive, and associated pumps will deliver water through a single 27" HDPE pipe. Pipe size will decrease through various sizes until the last half mile at 10" diameter. Connections will be made directly to pivots or existing mainline with a short line to the north to connect to mainline capable of feeding some corners to the north. The system will feed pivots and some small wipers and corners at 100% capacity.

2. BGWD Morgan Enterprises

Funding is requested for a conversion project which includes installation of a new pump, pipe and bringing in 3 phase power.

3. BGWD S&L Murdock

Funding is requested for a conversion project which includes installation of a new pump, pipe and bringing in 3 phase power.

4. BGWD V&L Cornelison

Funding is requested for a conversion project which includes installation of a new pump, pipe and bringing in 3 phase power.

5. BGWD R&L Polatis

Funding is requested for a conversion project which includes installation of a new pump, pipe and bringing in 3 phase power.

6. BJGWD Osgood Pipeline

Funding is requested for a conversion and recharge project in the Bonneville-Jefferson Ground Water District (BJGWD) that will deliver storage and excess natural flow water from the Snake River to the Osgood area in Bonneville County. The first phase of the pipeline is designed to deliver 50 cfs and will be capable of delivering 7,000 acre-ft annually to more than 4,000 acres with 100% conversion capability for 3,200 acres. Injection wells will be drilled at the diversion ponds capable of recharging the full capacity of the pipeline.

7. BJGWD Brett Jensen Farms

Water is currently supplied to the Brett Jensen - Burr system by a 150 hp turbine pump that pump from a groundwater sub pond, a 50 hp turbine pump that pumps from groundwater sub pond, and a 75 hp turbine pump that pumps from the Snake River. The pumps supply water to a full circle center pivot with a corner arm, three standard full circle center pivots, and some hand line sprinklers that irrigate approximately 450 acres with crop rotations of small grains, grass, and alfalfa.

Brett Jensen is requesting funds to complete a groundwater conversion which involves converting groundwater to surface water development where there is an existing water right and infrastructure for both systems (surface and groundwater). Existing ground water sub pond pump use will be discontinued and a new 150 hp pump with a variable frequency drive (VFD) will be installed to pump surface water from the Snake River to the system. A new main line will be installed to connect the new pump to the system.

8. City of Mountain Home Lagoon Cell 10

This project consists of raising these three previously constructed berms an additional 3-feet, to increase the storage capacity of Cell 10, and constructing the south berm to enclose the lagoon. The new lagoon cell will be lined with an HDPE liner to reduce seepage, and rip rap will be placed on the interior berm slopes to mitigate erosion and wear and tear of the liner. The riprap rock will be harvested from a portion of the City's reuse site that is not currently farmed. Two new flow control structures will be constructed along with new bypass piping as well as a new 36-inch contact chamber to replace the aged 21-inch transite portion of the contact chamber and to increase disinfection contact time.

The City stores treated effluent in the lagoons during the non-irrigation season. The City's wastewater system operates under a Department of Environmental Quality reuse permit that allows treated effluent disposal via land application (i.e., irrigation) at the reuse site from April 1st – October 31st. There is no other means for disposal (i.e., no surface water nor rapid infiltration disposal allowed). In recent wetter years, the winter storage lagoons are approaching capacity

9. MVGWD Large Conversion

In an effort to reduce the strain on the aquifer, many water users in the MVGWD have developed a plan to install infrastructure to access surface water and reduce their annual ground water diversions. The project will use a phased approach, phase 1 being considered in this application, consisting of the construction of the pump station, east leg of the pipeline, and shortened west leg.

Pump Station:

The pump station is approximately 3.35 miles south of the Minidoka Dam on the banks of Minidoka Irrigation District's Northside Main Canal. The pump station's total capacity will be 54.5 CFS, set according to historic usage and flow rate requirements of targeted lands. The new pump station will be equipped with pumps for the east line (total dynamic head of 225 feet), but with space to add additional pumps for future phases. These specifications were determined using a hydraulic model that simulated full-capacity flow, factoring in high friction losses.

Various pump layouts were considered, taking into account factors such as the number of pumps, variable frequency drives (VFDs), and pump motor speeds (1800 RPM vs. 1200 RPM). Each option has advantages and disadvantages. The final recommendation for Phase 1 includes five 400 hp motors with associated pumps and VFDs.

Transmission Pipeline(s):

Several pipeline layouts were evaluated by engineers using a simplified cost analysis that considered pipeline and energy costs. The analysis concluded that using two dedicated transmission lines would result in enough energy savings to offset the added pipeline costs. The transmission pipelines were evaluated using a hydraulic model of the proposed pumping system.

Many different layouts were explored, estimated and reviewed, and ultimately MVGWD feels that the installation of dual transmission lines will allow for the greatest benefit to the project and water users.

A brief surge analysis was performed to evaluate the need for additional hydraulic transient control measures. Soft starts will be implemented for all pumps, and control valves will be operated using standard best practices to avoid sudden changes in flow.

Pond Diversions:

Water will be distributed to ponds across varying elevations. The highest point in the east leg is approximately 4,306 feet. Individual users will be responsible for infrastructure necessary to pump from the pond into their existing irrigation systems.

10. MVGWD McManus

Funding is requested to pipe water from the MID south side canal through a headgate down a 15" gravity line for approx. 0.5 mile to the road crossing. North of the road crossing there will be a 75-horsepower motor and associated pump to deliver water through a single 12" HDPE pipe to the main line tie in. The total distance from the canal to the well is approximately 0.84 miles.

11. MVGWD PKD Properties

Funding is requested for this project that will pump water from the Snake River to the existing irrigation mainline. In the river there will be an auto floating screen with a 40-horsepower turbine pump to deliver water through a single 8" HDPE pipe to the mainline tie in. The total distance from the river to the well is approximately 0.14 miles.

12. Raft River Watershed Conversion

Funding is requested for a proposed project that will replace a portion of existing wells with a centralized pipeline to address issues related to irrigation water supply. The project will also install suction lines or an open channel from the Snake River, construct a pump station located near the Snake River, and construct a 13-mile (68,872 feet) buried pipeline to deliver up to 100 cubic feet per second (cfs) of water. The pipeline will enable a significant portion of the acres in the northern portion of the basin to be converted to surface water supply. The project will offset 11,500 acres of the 26,000 acres within the Raft River Recharge Group.

13. SRVID West Branch Canal Improvements

Funding is requested to increase the surface water conveyance capacity of the SRVID's West Branch Canal. The SRVID service area is within a designated Groundwater Management Area. The canal has a total length of approximately 11.7 miles and a service area of 8,758 acres. The project will enable SRVID to provide surface water to 1467 acres of existing ground water pumpers for soft conversions, enabling the ground water pumpers to use surface water when it is available, thereby decreasing their reliance on ground water. The soft conversions enabled by this project will allow a reduction of up to 26.8 cfs in groundwater pumping. The project will entail increasing the size of hydraulic structures, road crossings, and the canal prism in select areas in order to increase the conveyance capacity of the canal.



Memorandum

To: IWRB Finance Committee Meeting

Date: December 11, 2024

Re: Secondary Aquifer Planning, Management, and Implementation Fund Update

NO REQUIRED ACTION

Background:

The Secondary Aquifer Planning, Management, and Implementation Fund (Secondary Aquifer Fund), established under Idaho Code § 42-1780, was created in the state treasury to fund technical studies, facilitation services, project management services, hydrologic monitoring, measurement and comprehensive plan development as well as personnel costs, operating expenditures, and capital outlay and water projects associated with the statewide comprehensive aquifer planning and management effort.

The Secondary Aquifer Fund has been funded through various appropriations through the years. Currently the main funding sources are from House Bill (HB) 547 (passed by the Idaho Legislature in 2014) and appropriations from Idaho Department of Water Resources (IDWR) general fund. HB547 allocated approximately \$5 million annually from the Cigarette Tax for statewide aquifer stabilization (primarily aquifer recharge) to the IWRB's Secondary Aquifer Fund. The Idaho Legislature, starting in 2016, has authorized an annual \$5 million cash transfer from IDWR's appropriated general funds. Through the current appropriations, the Secondary Aquifer Fund receives approximately \$10 million dollars per fiscal year. Funds that are budgeted but not spent may be carried over to the next fiscal year.

Since 2016, the IWRB has passed a fiscal year budget for the Secondary Aquifer Fund to guide the allocation and expenditure of funds. The funds have primarily been used to support the ESPA Managed Recharge Program, Cloud Seeding Program, specific regional projects, and statewide groundwater monitoring and modeling initiatives. In fiscal year (FY) 2025, an estimated \$14.75 million was available in the Secondary Aquifer Fund and was budgeted for ongoing and new work authorized under the legislative appropriations.

The following graph reflects expenditures from the Secondary Aquifer Fund without consideration of program expansion or new project commitments. The graph shows actual expenditures from the Secondary Aquifer Fund for FY2020 through FY2024.

Expenditures for FY2025 show a combination of actual expenditures and estimated or budgeted values for the remainder of this fiscal year. FY2026 through FY2030 represent a conservative projection of expenditures. The projections are based on the average expenditures for FY2020 through FY2024 and estimated cost increases for some categories.

Projections for the Cloud Seeding Program represent Operations and Maintenance costs for the Collaborative Program, and maintenance for computing/modeling required for operations. The increase

in FY2030 expenditures represents a projected increase due to capital costs for new or replacement equipment and computing activities.

The projections for the ESPA Recharge Program are based on average expenditures for FY2020 through FY2024 and include capitol costs for the development of additional recharge capacity. Conveyance fees can vary significantly depending on water availability. The projections shown in the graph represent average conveyance fees of \$2.2 million. Increases in recharge capacity will also increase total conveyance fees and monitoring costs. Therefore, the total operational cost for the program could be \$1 to \$2 million more per year than represented on the graph. In addition, the projections for this category do not reflect capital costs for additional recharge capacity projects as funding is projected to come from the IWRB’s Water Management Account.

“Groundwater monitoring, modeling, and other” covers IWRB funded work managed by IDWR’s Hydrology Section and the IWRB’s work to support the water sustainability projects statewide and implementation of stakeholder driven water management initiatives. The projections for this category were estimated using an average of FY2020 through FY2024 expenditures (~\$330,000/year) and anticipated projects (~\$2 million/year) for FY2026 through FY2030.

