

Brad Little *Governor*

Jeff Raybould

Chairman St. Anthony At Large

Roger W. Chase

Vice-Chairman Pocatello District 4

Jo Ann Cole-Hansen

Secretary Lewiston At Large

Dale Van Stone

Hope District 1

Albert Barker Boise

District 2

Dean Stevenson Paul District 3

Peter Van Der Meulen Hailey At Large

Brian Olmstead

Twin Falls At Large

AGENDA Idaho Water Resource Board

Board Meeting No. 5-22 WORK SESSION Thursday, May 19, 2022 9:00 a.m. (PT)

> Hampton Inn Conference Room 2701 Nez Perce Dr. Lewiston

Board Members & the Public may participate via Zoom

Click here to join our Zoom Meeting

<u>Dial in Option</u>: 1(253) 215-8782 <u>Meeting ID</u>: 899 1955 0031 <u>Passcode</u>: 536238

- 1. Roll Call
- 2. Anderson Ranch Dam Raise Update
- 3. MHAFB Water Sustainability Project Update
- 4. Loan Programs
 - a. Reynolds Creek Irrigation District Loan
 - b. Delmore Canal Company Loan
 - c. Blaine County Canal Company Loan
- 5. Criteria for Aging Infrastructure & Water Sustainability Projects Update
- 6. PBAC Update
- 7. Update on Status of Northern Idaho Aquifers
- 8. Dworshak Small Hydropower Project
- 9. Non-Action Items for Discussion
- 10. Adjourn

The board will break for lunch at approximately noon.

Following lunch, the board will depart for a field trip of the Dworshak Facilities.

Transportation will be provided for board members, IDWR staff, and invited guests.

^{*} Action Item: A vote regarding this item may be made this meeting. Identifying an item as an action item on the agenda does not require a vote to be taken on the item. <u>Americans with Disabilities</u>: 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: Remington Buyer, Cynthia Bridge Clark

Date: May 6, 2022

Re: Anderson Ranch Dam Raise





The Idaho Water Resource Board (IWRB) partnered with the U.S. Bureau of Reclamation (Reclamation) to complete a feasibility study of new surface water storage options on the Boise River. Reclamation issued the Final Feasibility Study and Draft Environmental Impact Statement (DEIS) in 2020 which recommended a 6-foot raise of the Anderson Ranch Dam (project) and approximately 29,000 acre-feet of new storage space. The recommended plan was deemed feasible by the Secretary of Interior in December 2020 which met required deadline for authorization under the Water Infrastructure Improvements for the Nation Act (WIIN Act). Fiscal Year 2021 Appropriations legislation secured \$12.88 Million in WIIN Act funding as the federal cost share for completion of the Feasibility Study, environmental compliance, and construction.

The WIIN Act also required an agreement between Reclamation and a partner capable of funding the nonfederal share of the project costs through construction and initiation of construction or final design activities prior to December 16, 2021. On November 19, 2021, the IWRB passed a resolution authorizing execution of a cost-share agreement (contract) between Reclamation and the IWRB to continue development of the Anderson Ranch Dam Raise through construction. The contract was executed on November 19, 2020 and Reclamation initiated dam raise design activities. The Anderson Ranch Dam Raise project met the December 16, 2021 WIIN Act construction initiation deadline.

Current Activities

IWRB staff continues to coordinate with Reclamation and provide support where appropriate. This
includes use of the Boise River water right accounting model as it may pertain to Reclamation's
hydrologic analysis and the IWRB's water right application 63-34753. IWRB staff will provide support
for the Rim projects by coordinating with stakeholders as needed. Staff is also tracking post-feasibility
study design work in anticipation of an update to the spillway design, potential reservoir elevation
restriction and mitigation during construction, and updated project costs in fall 2022.

Reclamation will provide an update on project activities at the May 19, 2022 IWRB meeting. A briefing letter from Reclamation and copy of its preliminary project development schedule are attached.

ATTACHMENTS

• Boise River Basin Feasibility Study / Anderson Ranch Dam Raise Status Update Letter from USBOR to IWRB (dated May 5, 2022)



United States Department of the Interior

BUREAU OF RECLAMATION Snake River Area Office 230 Collins Road Boise, ID 83702-4520



VIA ELECTRONIC MAIL ONLY

Mr. Jeff Raybould Chairman Idaho Water Resource Board 322 East Front Street Boise, ID 83702

Ms. Melanie Paquin Area Manager Snake River Area Office 230 Collins Road Boise, ID 83702

Subject: Boise River Basin Feasibility Study / Anderson Ranch Dam Raise Status Update, Boise Project, Idaho

Dear Mr. Raybould and Ms. Paquin:

This status update is being sent in preparation for the Idaho Water Resource Board (IWRB) meeting on May 19, 2022.

The IWRB and the Bureau of Reclamation partnered to complete a feasibility study of new surface water storage opportunities in the Boise River Basin (Study). Authorized under Water Infrastructure Improvements for the Nation (WIIN) Act of 2016, the Study focused on a 6-feet raise of Anderson Ranch Dam in Idaho, to achieve approximately 29,000 acre-feet of new water storage.

Current Status

Recent project activities include:

- Columbia-Pacific Northwest Regional Drill Crew and Geology Group in coordination with the Technical Service Center (TSC) finalizing field exploration plan and preparing for geotechnical field investigations and on-site survey work anticipated to occur late May.
- Reclamation Regional surveyors conducted stationary LiDAR scanning of the upstream slope of the dam.
- TSC continuing preparation of spillway feasibility design, cost estimates, and construction schedule estimates.
- Reclamation's Regional resources continuing to scope and advance reservoir rim projects including coordination with external stakeholders.

INTERIOR REGION 9 • COLUMBIA-PACIFIC NORTHWEST

Ongoing project activities include:

- Reclamation's TSC continuing spillway overlay feasibility design and reservoir frequency analysis activities.
- TSC continuing proposed detour route design analysis, data collection, and stakeholder coordination
- Reclamation and IWRB staff coordinating post-feasibility study activities, including on the dam raise and reservoir rim projects.
- Standing monthly oversight team meetings between Reclamation and IWRB staff.

Completed Key Milestones

Nov. 2017 – Jan. 2019	Reclamation completed initial screening of the three potential dam raise alternatives and developed a project management plan.
July 27, 2018	IWRB passed a resolution supporting the narrowed focus of the Study to a raise at Anderson Ranch Dam.
August 28, 2018	Reclamation and IWRB hosted a Legislative Infrastructure Tour to discuss large water infrastructure projects in Idaho with representatives from Idaho's Congressional delegation.
November 8, 2018	Reclamation and IWRB hosted an informational public open house on the Study in Boise, Idaho.
December 3-7, 2018	Reclamation conducted a Value Planning Study with a final Accountability Report received in February 2019.
December 25, 2018	Reclamation awarded an Indefinite Delivery / Indefinite Quality contract for architect and engineering services to Sundance-EA Joint Venture (Consultant) to complete the Study and environmental compliance activities.
April 30, 2019	Consultant submitted land, structure, infrastructure, and real estate impact assessment (Rim Analysis) for Anderson Ranch Reservoir.
June 7, 2019	IWRB filed a water right permit application for the potential additional storage (Water Right No. 63-34753).
June 19, 2019	Reclamation's TSC completed feasibility-level design and cost estimates completed for Anderson Ranch Dam raise.
August 9, 2019	Reclamation published the Notice of Intent for an environmental impact statement (EIS) in the Federal Register.
August 27-29, 2019	Reclamation conducted Public Scoping Open Houses in Pine, Boise, and Mountain Home, Idaho.
February 3-7, 2020	Reclamation completed the Design, Estimate, and Construction review of the feasibility-level designs.
April 6-10, 2020	Reclamation completed the Peer Review of the Water Operations Technical Memorandum.

July 31, 2020	Reclamation released the Draft EIS and Draft Feasibility Report.
October 30, 2020	Reclamation initiated formal Endangered Species Act consultation with National Oceanic and Atmospheric Administration National Marine Fisheries Service and submitted its biological assessment.
December 2020	The Secretary of the Interior determined the Study's recommended plan to be feasible in accordance with the WIIN Act.
December 2020	Reclamation transmitted the Final Feasibility Report to Congress.
December 2020	Fiscal Year 2021 Appropriations legislation secured \$12.88 million in WIIN Act funding for completing the Study, environmental compliance, and construction.
May 2021	Initiated pause in environmental compliance process pending further development of final design.
July / August 2021	Reclamation's Columbia-Pacific Northwest Region requested delegation of authority and received approval from the Commissioner to negotiate, execute, and administer a cost-share agreement pursuant to section 4007 of the WIIN Act with the IWRB.
Sept. / Oct. 2021	Reclamation and IWRB completed cost-share contract negotiation sessions: Sept. 22, Oct. 5, Oct. 19, and Oct. 28.
November 2021	IWRB and Reclamation signed and executed cost-share contract. IWRB provided first interval payment of advanced funds. TSC initiated final design activities.
Key Critical Path Milest	ones

Summer 2022	Complete dam spillway overlay feasibility design
Spring 2023	Complete dam raise 30% Design and Cost Estimate
Winter 2023/2024	Complete environmental compliance
Summer 2024	Complete final design

Thank you for this opportunity to provide an update on the Boise River Basin Feasibility Study / Anderson Ranch Dam Raise Project. If you have any questions, please contact me at (208) 378-5360 or via email at ckeith@usbr.gov.

Sincerely,

Chris Keith Project Manager

INTERIOR REGION 9 • COLUMBIA-PACIFIC NORTHWEST

Memorandum

To: Idaho Water Resource Board

From: Mike Morrison

Date: May 5, 2022



Re: Mountain Home Air Force Base Water Resilience Project

REQUIRED ACTION: No action is required.

Project Update

Since the March Board meeting, Staff and the Air Force have continued to work together in order to clearly delineate each party's roles and responsibilities.

Staff has begun the process of identifying an Owner's Advisor who will assist Staff in the selection of qualified design and construction firms, and who will help Staff monitor and manage project process.

Other Activities:

- Staff has submitted a draft MOA for Air Force Review.
- Idaho Power has completed an assessment of existing transmission level facilities and determined that there currently is sufficient transmission capacity to support this project.

<u>Project Status</u>: The Air Force has provided Staff preliminary Security, SCADA, and water delivery requirements. Staff is awaiting Air Force review of the draft MOA submitted by Staff to the Air Force in early April.

Department of the Air Force

IWRB Board Meeting



Seema Aziz-Hall Office of the DAS of the Air Force (Environment, Safety, & Infrastructure) 18 May 2022



WTP Task Force (1 of 2)

- Deputy Assistant Secretary of the Air Force (Energy, Installations, and Environment, SAF/IEE)
 - Seema Aziz–Hall Installation Energy Policy & Programs
 - Ashley Sadorra Senior Principal Advisor (CTR)
 - Ivana Kajtezovic Senior Water Policy Analyst (CTR)
- General Counsel of the Department of the Air Force (SAF/GCN)
 - Mary Mulhearn Associate General Counsel
 - Jon Morris Associate General Counsel
- Office of Energy Assurance
 - Miranda Brannon Energy Program Analyst
 - William Krafcheck Project Manager (CTR)



WTP Task Force (2 of 2)

- Air Force Civil Engineer Center, Facility Engineering Directorate
 - Elizabeth Bradley Project Manager
- MHAFB Installation
 - Lt. Col. Josh Aldred Mtn Home AFB, Civil Engineer Squadron (CES) Commander
 - Andrew Mendoza Mtn Home AFB, Deputy CES Commander
 - Tracy Meeks Mtn Home AFB, Engineering Flight Chief
 - Trace Giles Mtn Home AFB, Community Partnerships
- City of Mtn Home
 - Marty Anderson City of Mtn Home, Military Liaison



Project Update & Questions



MEMO

To:Idaho Water Resource BoardFrom:Kala GoldenDate:May 9, 2022Subject:Reynolds Irrigation District- New Water Project Loan ApplicationREQUESTED ACTION: Approve loan request of \$225,000

DAHO

1.0 INTRODUCTION

Reynolds Irrigation District (District) is requesting a new loan in the amount of \$225,000 from the Idaho Water Resource Board (Board) for a recently completed project that replaced the syphon structure used to deliver water to its hydropower facility (Project).

2.0 BACKGROUND

Located in Owyhee County near Melba, Idaho, the District was formed in 1935, and provides irrigation water to 15 shareholders for a total of approximately 1,488 acres of agricultural land. A portion of the District's water rights were diverted from Snake River through open ditch and a 940-foot syphon that flows year-around, supporting a hydro generation facility that was purchased by the District in 1984. Power generated through the Districts facility is then purchased by Idaho Power Company, generating revenue for the District.

The syphon structure began to fail and conveyance losses through the structure increased to an estimated 25%, creating inefficiencies in the generation of hydropower and significantly reducing the District's annual income. The District was approved for a loan with D.L. Evans Bank (Bank) to fund a project to repair the syphon. The Bank issued a letter of guarantee for the project, and the District began construction. Upon further review, the Bank determined that it could not issue a loan to the District without first going through a bonding process and an ultimately reversed its loan approval.

Given construction was already underway, the District was forced to quickly assemble funding. The project was ultimately funded with cash reserves, in-kind services and private funding from its patrons, and voluntary pre-paid assessments. The District will need to repay its patrons for project costs related to the repair of the syphon and will face significant challenges in managing its cashflow to do so, as project costs were not budgeted for in the current year assessments.

3.0 PRIOR LOANS

The District has not previously held a loan with the Board.

4.0 PROPOSED PROJECT

The District is requesting a loan to consolidate debts from two separate projects that have already been completed. To mitigate for challenges in reorganizing the District's budget following the unexpected reversal of a loan approval, the District is requesting a loan from the IWRB to cover \$180,000 in costs related to the recent project to replace the syphon. This money will be used to repay shareholders that covered the costs of the project.

In 2020, the District also completed a project to replace aging conveyance structures and install new pipe, inlets, weirs, and boxes. This project was funded by cash reserves, grant funds, and a private loan held by a group of the District's shareholders. The District would also like to repay its shareholders for the remaining \$45,000 in private loans for costs related to the 2020 project, consolidating this debt into a new loan with the Board.

5.0 BENEFITS

Replacement of deteriorating infrastructure within the District's service area has reduced delivery system water losses and improved the District's ability to effectively deliver water to its shareholders Consolidation of its project related debts will allow the District to organize its finances and provide for more manageable cash flow moving forward.

6.0 FINANCIAL ANALYSIS

The District is requesting a Board loan in the amount of \$225,000 to cover the total estimated costs for consolidation. The District is requesting a 15-year term on the loan and has no other outstanding debts beyond the projects for which it is requesting funding.

The District's annual income includes shareholder assessments and approximately \$75,000-\$100,000 in revenue generated from its hydropower facility.

The following analysis reflects the Board's current interest rate of 2.8%. The District's assessments are charge by share, with a total of 1,488 shares.

Term (Years)	3-Year Average Annual Income	3-Year Average Cash on Hand	Estimated Annual Payment	Current Assessments Cost/Acre/Year	New Assessments Cost/Acre/Year
15	\$363,000	\$123,000	\$18,575.88	\$185	\$198

Payment Analysis

6.0 WATER RIGHTS

WATER	SOURCE	Diversion Rate	PRIORITY
RIGHT		(CFS)	DATE
63-34085	Grouch Drain, Springs, Unnamed Drains	13.56	05/18/2015
63-9909	Grouch Drain, Springs,	18.00	05/11/1982
	Unnamed Drains		

63-9368	Groundwater	11.74	04/17/1980
63-2420	Warm Springs Creek	23.56	03/08/1929
63-359	Drains and Groundwater	26.00	04/1/1950
63-306	Warm Springs Creek	8.00	04/1/1934
2-2027B	Snake River	24.64	07/2/1915

7.0 SECURITY

As collateral for the loan, the Board is authorized to hold lien against the District's shareholder assessments.

8.0 CONCLUSION AND RECOMMENDATION

This loan will be used to consolidate the District's debts. Reynold's Irrigation District is a qualified applicant, and the project for which the District has proposed is consistent with the goals of the Board as identified within the Idaho State Water Plan. Staff recommend approval of the loan request, for the total amount of \$225,000.

Attachments: RID Loan Application, RID District Map



IDAHO WATER RESOURCE BOARD 322 East Front Street, Statehouse Mail Boise, Idaho 83720 Tel: (208) 287-4800 FAX: (208) 287-6700



APPLICATION FOR FINANCIAL ASSISTANCE FOR <u>POTABLE</u> WATER SYSTEM CONSTRUCTION PROJECT

Answer the following questions and provide the requested material as directed. All pertinent information provided. Additional information may be requested by the Idaho Water Resource Board (IWRB) depending on the scope of the project and amount of funding requested. For larger funding amounts an L.I.D. may be required.

Incomplete documents will be returned and no further action taken will be taken by IWRB staff. All paperwork must be in twenty eight (28) working days prior to the next bi-monthly Board meeting.

Board meeting agendas can be found at: http://www.idwr.idaho.gov/waterboard/

I. Prepare and attach a "Loan Application Document".

The Loan Application Document requirements are outlined in the Water Project Loan Program Guidelines. The guidelines can be found at:

Homeowner's Association

Water Association

Explain: Local Government

Dean Young, Chairman

Name and title of Contact Person

amyanddean@gmail.com

27.30

e-mail address

(208)841-2974

Contact telephone number

Other

http://www.idwr.idaho.gov/waterboard/Financial%20program/financial.htm.

You can also obtain a copy by contacting IWRB staff.

II. General Information:

A. Type of organization: (Check box)

- Municipality
- Water and/or Sewer District
- Non-Profit Water Company
 - For-Profit Water Company

Reynolds Irrigation District

- Organization name
- PO Box 12

PO Box/Street Address

Melba, ID 83641

City, County, State, Zip Code

Project location legal description <u>NE1/4 of the SW1/4 of Section 9</u>, Township 1 South, Range 2 West of the Boise Meridian

B. Is your organization registered with the Idaho Secretary of State's office? Yes 🗌 No 🔳

- C. Purpose and name of project for this loan application.
 - New Project Rehabilitation or replacement of existing facility DEQ requirement
 - Other:
- **D**. Briefly describe the existing water supply facilities and describe any existing operational or maintenance problems. Attach map of the service area and a separate sheet if necessary to complete the explanation.

See Attachment #1

III. WATER SYSTEM:

A. Source of water:

Stream Reservoir

Groundwater

Other Springs, Drains, and ground water.

B. Water Right Numbers:

Water Right	Stage	Priority Date	Source	Amount
See Attachment #2			7	
				×
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Note: Stage refers to how the water right was issued. (License, Decree, or Permit)

C. Hook-ups on the system:

Approximate number of residential hook-ups: Approximate number of commercial hook-ups: Approximate number of industrial hook-ups:

N/A N/A

N/A

D. On average, how much water is provided per day? 1000 to 1500 Inches In season (4-1 to 11-1)

IV. USER RATES:

A. How does you organization charge user rates

 Per Hook up
 Other

 Per Volume Used
 Explain:

B. Current user rate? <u>\$ 185.00</u> per share/year

(gallons used, monthly, yearly, etc.)

If a graduated or progressive rate structure or different rates for different classes of users are used, attach a separate sheet with explanation.

C. When was the last rate change? November/2021 for the year 2022. (month/year)

D.	Does your organization measure water use?	Yes 🔳	No	
	If yes, how?			

\mathbf{D}
Γ

Meters at User Hook-ups Master Meter

Other (explain)

E . Does you organization have a regular assessment for a reserve fund?	Yes No	0
If yes, explain how it is assessed:		

F. Does your organization have an assessment for some future special need? Yes No If yes, explain for what purpose and how it is assessed:

V. PROPOSED METHOD FOR PAYING LOAN PAYMENTS

How will you pay the annual loan payments? Check revenue sources below:

Tax Levies

Capital Improvement Reserve Account or Sinking Fund User Fees and Tap/

Hookup Fees

Other (explain) Through an increase in power production and potentially an increase in user fees.

Will an increase in assessment be required? Yes 🔳 No 🗌

When will new assessments start and how long will they last?

New assessments are set at the annual meeting in November. They start in December (ie 12/2022) and last one year.

VI. SECUREMENT OF LOAN

List all land, buildings, waterworks, reserve funds, and equipment with estimated value that will be used as collateral for the loan:

P	r	n)e	rt	v
*	* •	1			1

Estimated Value

A Hydro that produces power and sells it to Idaho Power. The contract with Idaho Power can be used as

\$82,750.00 / Year

collateral for the loan. The Hydro produces between \$75,000.00 to \$100,000.00 per year.

The Hydro is located at: Lot 4 of Section 17, Township 1 South, Range 2 West

<u>Please attach a legal description of the property being offered along with a map referencing the</u> <u>property.</u> See Attachment #3

VII. PROOF OF OWNERSHIP

Please provide proof of ownership, easements or agreements that are held or can be acquired for the construction and operation of the project. See Attachment #3 For Idaho Power contract.

VIII. FINANCIAL INFORMATION:

A. Attach a copy of each of the last 3	year's financial statement	. <u>(Copies must be atta</u>	ched)
B. Reserve fund (current) \$0.00		See Attachment #4	
C. Current cash on hand \$69,391.27	7		-
D. Outstanding indebtedness: To Whom Reynolds Creek Calf Ranc	Annual Payment h 5,934.91	Amt. Outstanding 20,565.09	Years Left 4
Young's Riverfront Ranch	4,747.93	16,452.07	4
Seven High Ranches	2,373.96	8,226.04	4
 G. Have you done business with the If yes what was the loan for? How much was the loan for? Is the loan paid off? Yes N If no what is the payment and 	Idaho Water Resource Bo	oard before? Yes No	>
I. What other sources of funding have Rural Development, Banks, Local We looked at local banks, one said	e been explored to fund th Government, etc.) d yes, then the day we we	e project? (example: N ere to sign they said "N	RCS, USDA
Is a vote of the shareholders, members If yes, a record of the vote must be att	s, etc. required for loan ac ached.	quisition? Yes 🗌 No	
Amount of funds requested:	\$225,000.00		
By signing this document you verify th out to the best of your ability.	naț all information provide	ed is correct and the do	cument is filled
Authorized signature& date:	1. Steen your	(chairman) 4	-15-22
x	-	· **	77 7

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE REYNOLD'S IRRIGATION DISTRICT LOAN REQUEST

RESOLUTION TO AUTHORIZE LOAN FUNDING FOR CONSOLIDATION OF PROJECT COSTS

1 2 3	WHEREAS, Reynolds Irrigation District (District) submitted a loan application to the Idaho Water Resource Board (IWRB) in the amount of \$225,000.00 to cover costs for 2 completed projects that replaced aging infrastructure within the District's service area (Project); and
4	
5	WHEREAS, the District delivers water for approximately 1,488 acres of irrigated lands in Owyhee
6 7	County near Melba, Idano; and
/	WHEREAS, the District's delivery system was originally constructed in the early 1000's, and had a
0	number of necessary repairs to reduce water losses and ensure the long-term viability of water delivery
10 11	to its shareholders; and
12	WHEREAS, to improve the efficiency of the system and reduce losses, the District obtained a
13	loan approval from DL Evans Bank (Bank) in the amount of \$225,000 to cover costs for a project to
14	replace a 940 syphon; and
15	
16	WHEREAS, the District initiated construction after receipt of a Letter of Guarantee for the
17	project from the Bank; and
18	
19	WHEREAS, the Bank reversed its loan approval following commencement of project
20	construction, siting statutory requirements for the District to engage in the bonding process; and
21	
22	WHEREAS, the District was responsible for expenditures in the amount of \$180,000 for the
23	syphon repair project which were paid with cash reserves, in-kind contributions, and private funding
24	from its patrons; and
25	
26 27	WHEREAS, In 2020 the District completed a separate project to replace aging water conveyance
27	structures that was partially funded by grants, cash reserves, and a private loan held by District
28 20	shareholders. The private loans associated with this project hold a remaining balance of approximately
29 20	\$45,000, allu
30 31	WHEREAS to consolidate project debts the District is requesting a loan from the IWPR in the
32	amount of \$225,000, and
33	
34	WHEREAS, the District is a qualified applicant, and the proposed Project is eligible for a loan
35	from the IWRB's Revolving Development Account: and
36	

Resolution No. _____

WHEREAS, the proposed Project is in the public interest and is in compliance with the State 37 Water Plan. 38 39 40 NOW THEREFORE BE IT RESOLVED that the IWRB approves a loan not to exceed \$225,000 from the Revolving Development Account at 2.8% interest with a 5-year repayment term. 41 42 43 NOW THEREFORE BE IT FURTHER RESOLVED that the IWRB authorizes its chairman or designee 44 to enter into contracts with the District, to effectuate the loan. 45 NOW THEREFORE BE IT FURTHER RESOLVED that this resolution and the approval of the loan are 46 47 subject to the following condition: 48 49 Prior to the disbursement of any funds, the District shall provide the IWRB with acceptable documentation demonstrating compliance with all applicable statutory requirements for the 50 51 incurrence of debt. 52

DATED this 20th day of May 2022.

JEFF RAYBOULD, Chairman Idaho Water Resource Board

ATTEST _____

JO ANN COLE-HANSEN, Secretary

Resolution No.

MEMO

To: Idaho Water Resource Board Finance Committee

From: Kala Golden

Date: May 9, 2022



Subject: Delmore Canal Company– New Water Project Loan Application

REQUESTED ACTION: Approve loan request of \$1,500,000

1.0 INTRODUCTION

Delmore Canal Company (Company) is requesting a new loan in the amount of \$1,500,000 from the Idaho Water Resource Board (Board) for the purchase of water rights (Project).

2.0 BACKGROUND

Located in Oneida County near Stone, Idaho, the Company was formed in the early 1900's and provides irrigation water to 18 shareholders for approximately 3000 acres of agricultural land. The Company stores water from the Deep Creek Spring in Stone Reservoir. A portion of the stored water is released from the reservoir during the irrigation season to supply water to the Curlew Irrigation Company (CIC). The delivery system for CIC consists of 2 irrigation canals and the original creek channel used to deliver water to its shareholders, including one shareholder located over the state line in Utah.

Over the last several decades, the original stream channel used to deliver water to CIC has become overgrown and filled with sediment, causing the stream to spill over, and contributing to significant losses that make delivery of water to its shareholder in Utah nearly impossible. Making improvements to the stream channel will require the navigation of stringent permitting processes, as the stream channel is an interstate water way. The owner of the property for which CIC delivers water to in Utah, is currently selling the property, and has agreed to sell the Company half of its water rights. The Company will use this surface water from Deep Creek to support water delivery, reducing the need for storage water from the reservoir, and extending their irrigation season.

3.0 PRIOR LOANS

The Company has not previously held a loan with the Board.

4.0 PROPOSED PROJECT

The District is requesting funding from the IWRB to purchase water rights.

5.0 BENEFITS

Purchase of this water right will help to ensure the long-term viability of water delivery for users within the Company's service area, reduce the need for storage water, and will ensure that more water remains in Idaho.

6.0 FINANCIAL ANALYSIS

The District is requesting a Board loan in the amount of \$1,500,000 to cover costs for the purchase of water rights. The District is requesting a 30-year term on the loan and has no other outstanding debts.

The following analysis reflects the Board's current interest rate of 3.5%. The District's assessments are charge by share, with a total of 3318.5 shares.

Payment Analysis

Term (Years)	3-Year Average Annual Income	3-Year Average Cash on Hand	Estimated Annual Payment	Current Assessments Cost/Acre/Year	New Assessments Cost/Acre/Year
30	\$97,369	\$94,024	\$81,557	\$30.37	\$54.94

6.0 WATER RIGHTS

WATER RIGHT	SOURCE	Diversion Rate (CFS)	PRIORITY DATE
17-2000	Deep Creek	34.40	11/13/1907
17-2068	Groundwater	15.45	05/04/1967

7.0 SECURITY

As collateral for the loan, the Board is authorized to hold lien against the company's shareholder assessments and water rights.

8.0 CONCLUSION AND RECOMMENDATION

This loan will be used to purchase water rights for the Company. Delmore Canal Company is a qualified applicant, and the project for which the Company has proposed is consistent with the goals of the Board as identified within the Idaho State Water Plan. Staff recommend approval of the loan request, for the total amount of \$1,500,000.

Attachments: DCC Loan Application



IDAHO WATER RESOURCE BOARD

322 East Front Street, Statehouse Mail Boise, Idaho 83720 Tel: (208) 287-4800 FAX: (208) 287-6700



APPLICATION FOR FINANCIAL ASSISTANCE FOR <u>POTABLE</u> WATER SYSTEM CONSTRUCTION PROJECT

Answer the following questions and provide the requested material as directed. All pertinent information provided. Additional information may be requested by the Idaho Water Resource Board (IWRB) depending on the scope of the project and amount of funding requested. For larger funding amounts an L.I.D. may be required.

Incomplete documents will be returned and no further action taken will be taken by IWRB staff. All paperwork must be in twenty eight (28) working days prior to the next bi-monthly Board meeting.

Board meeting agendas can be found at: http://www.idwr.idaho.gov/waterboard/

I. Prepare and attach a "Loan Application Document".

The Loan Application Document requirements are outlined in the Water Project Loan Program Guidelines. The guidelines can be found at:

http://www.idwr.idaho.gov/waterboard/Financial%20program/financial.htm.

You can also obtain a copy by contacting IWRB staff.

II. General Information:

- A. Type of organization: (Check box)
 - Municipality
 - Water and/or Sewer District
 - Non-Profit Water Company
 - For-Profit Water Company

Homeowner's Association Water Association

Other

Explain:

more Cana

Organization name

PO Box/Street Address

Vice President

Name and title of Contact Person

Contact telephone number

City, County, State, Zip Code

Project location legal description SENW

3252 <u>basquecross@hot</u>mail.com e-mail address <u>Sec. 13 Twp 155 Rge32E Opeida County</u>

B. Is your organization registered with the Idaho Secretary of State's office? Yes X No \Box

- C. Purpose and name of project for this loan application.
 - New Project Rehabilitation or replacement of existing facility DEQ requirement Dother: Water Right Purchase
- D. Briefly describe the existing water supply facilities and describe any existing operational or maintenance problems. Attach map of the service area and a separate sheet if necessary to complete the explanation.

The Stone Reservoir Stores water from Deep Creek. A canal delivers water to various irrigated fields The original Deep Creek channel cannot be cleaned supply all of Utah's water rights

III. WATER SYSTEM:

A. Source of water:



Groundwater Other

B. Water Right Numbers:

Water Right	Stage	Priority Date	Source	Amount
772000	4	5467	Der	te and a
17-2000		11-13-1907	Deeple	ek 34.44+
17-2068		5-4-67	ground water	15.45 ¢1
			J	

+ 15, 45 cts = 49, 85 cfs

Note: Stage refers to how the water right was issued. (License, Decree, or Permit)

C. Hook-ups on the system:

Approximate number of residential hook-ups:

Approximate number of commercial hook-ups: .

Approximate number of industrial hook-ups:

D. On average, how much water is provided per day?

IV. USER RATES:

A. How does you organization charge user rates

Other Per Hook up Per Volume Used Explain: A 65men **B**. Current user rate? <u>\$</u>3 per (gallons used, monthly, yearly, etc.)

If a graduated or progressive rate structure or different rates for different classes of users are used, attach a separate sheet with explanation.

C. When was the last rate change? <u>December</u> ZO21 (month/year)

	instign mansure water use? Yes No X
D.	Does your organization measure water user and
	If yes, how?
	Meters at User Hook-ups
	Master Meter
	Other (explain)
E	Does you organization have a regular assessment for a reserve fund? Yes X No
	If yes, explain how it is assessed:
	estimated amount annuary to anticipation No No
F	Does your organization have an assessment for some future special need? Tes NO [A]
r.	If yes, explain for what purpose and how it is assessed:

V. PROPOSED METHOD FOR PAYING LOAN PAYMENTS

How will you pay the annual loan payments? Check revenue sources below:

Tax Levies Capital Improvement Reserve Account or Sinking Fund User Fees and Tap/Hookup Fees

(X)Other (explain) __________

Will an increase in assessment be required? Yes No D When will new assessments start and how long will they last?

December 2022 for a period of 30 years

VI. SECUREMENT OF LOAN

List all land, buildings, waterworks, reserve funds, and equipment with estimated value that will be used as collateral for the loan:

Property

Estimated Value

Bank Balance stocle Delmose Conal Co.

<u>Please attach a legal description of the property being offered along with a map referencing the property.</u>

VII. PROOF OF OWNERSHIP

Please provide proof of ownership, easements or agreements that are held or can be acquired for the construction and operation of the project.

infrastructure neen npin

VIII. FINANCIAL INFORMATION:

A. Attach a copy of each of the last 3 year's financial s	tatement. (Copies 1	must be attach	ed) in packet
B. Reserve fund (current)			,
C. Current cash on hand $\frac{496,000}{100}$			
D. Outstanding indebtedness: To Whom Annual Pag	yment Amt. O	lutstanding	Years Left
Noue			
 G. Have you done business with the Idaho Water Resource Board before? Yes No S If yes what was the loan for?			
VIII. ORGANIZATION APPROVAL: Is a vote of the shareholders, members, etc. required for If yes, a record of the vote must be attached.	or loan acquisition?	Yes 🕅 No 🗌]

Minutes are included

Amount of funds requested: <u># 1,500,000</u>

By signing this document you verify that all information provided is correct and the document is filled out to the best of your ability.

as a da

01

Authorized signature& date:

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE DELMORE CANAL COMPANY LOAN

RESOLUTION TO AUTHORIZE LOAN FUNDING FOR COSTS RELATED TO WATER RIGHT PURCHASE

1	WHEREAS, Delmore Canal Company (Company) submitted a loan application to the Idaho Water
2	Resource Board (IWRB) in the amount of \$1,500,000.00 to cover costs for the purchase of water rights
3	(Project); and
4	
5	WHEREAS, the Company delivers water for approximately 3,000 acres of irrigated lands in
6	Oneida County near Stone, Idaho; and
7	
8	WHEREAS, the Company stores water in Stone Reservoir and during the irrigation season must
9	release a portion of its water for delivery to the Curlew Irrigation Company; and
10	
11	WHEREAS, the Curlew Irrigation Company utilizes 2 irrigations canals and the original stream
12	Deep Creek stream channel to supply water to its shareholders, including on over the state line in Utah;
13	and
14	
15	WHEREAS, over the past several decades the stream channel has become overgrown and filled
16	with silt, contributing to significant conveyance losses in delivering water over the state line; and
17	
18	WHEREAS, obtaining proper permitting to clean the channel faces significant challenges as it's
19	an interstate waterway; and
20	
21	WHEREAS, to ensure the viability of adequate water supply, the Company would like to
22	purchase surface water rights from the Curlew Irrigation Company shareholder whose property resides
23	over the state line; and
24	
25	WHEREAS, the Company is requesting a loan from the IWRB in the amount of \$1,500,000 to
26	purchase water rights; and
27	
28	WHEREAS, the Company is a qualified applicant, and the proposed Project is eligible for a loan
29	from the IWRB's Revolving Development Account; and
30	
31	WHEREAS, the proposed Project is in the public interest and is in compliance with the State
32	Water Plan.
33	
34	NOW THEREFORE BE IT RESOLVED that the IWRB approves a loan not to exceed \$1,500,000
35	from the Revolving Development Account at 3.5 % interest with a 30-year repayment term.
36	

Resolution No. _____

NOW THEREFORE BE IT FURTHER RESOLVED that the IWRB provides authority to the Chairman 37 38 of the Idaho Water Resource Board, or his designee, to enter into contracts, to effectuate the loan, on behalf of the IWRB. 39 40 NOW THEREFORE BE IT FURTHER RESOLVED that this resolution and the approval of the loan are 41 42 subject to the following conditions: 43 44 45 1) Prior to the disbursement of funds, the Company shall demonstrate to the IWRB that all steps have been considered and initiated to legally transfer the water rights. 46 47 2) The Company shall comply with all applicable rules and regulations that apply to the 48 proposed Project. 3) Prior to the disbursement of any funds, the Company will provide acceptable security for the 49 loan to the IWRB, including but not limited to its water rights and membership assessment 50 51 income. 52 4) The Company shall maintain a reserve fund equal to one annual loan payment until the loan 53 has been satisfied. 54

DATED this 20th day of May 2022.

JEFF RAYBOULD, Chairman Idaho Water Resource Board

ATTEST ____

JO ANN COLE-HANSEN, Secretary

MEMO

REQUESTED ACTION: Increase existing loan from \$250,000 to \$1,150,000				
Subject:	Blaine County Canal Company- New Water Projec	t Loan Application		
Date:	November 5, 2021			
From:	Kala Golden	RESOURCE \$		
То:	Idaho Water Resource Board	WATT		

1.0 INTRODUCTION

On November 19, 2021, the Idaho Water Resource Board (Board) approved a loan to Blaine County Canal Company (Company) in the amount of \$250,000 for a project to replace its diversion structure and convert a section of its open canals to closed pipe (Project).

The total project costs are estimated to be approximately \$1,500,000. The Company has been awarded grant funding in the amount of \$900,000 from NRCS, and \$100,000 from Trout Unlimited, and will additionally receive a savings incentive from Rocky Mountain Power Company for approximately \$240,000. The Board approved a loan to the Company in the amount of \$250,000 to cover the remaining portion of the Project costs, at 2.6% for a 15-year term. The Company currently holds a reserve fund and has no other outstanding debt.

Due to market conditions, it was necessary for the Company to purchase materials well in advance to secure project costs and ensure timely delivery. Grant funds awarded for the project cannot be released until the pipe and associated project materials have been installed. The Company will need to pay for the materials before the project construction has been completed. As such, the Company is requesting an increase of \$900,000 to temporarily cover the cost of materials and intends to pay this amount back to the loan as soon as grant awards have been disbursed.

2.0 BACKGROUND

Located in Butte County near Howe, Idaho, the Company was first established in 1910, and currently provides irrigation water to 18 shareholders for a total of approximately 4,880 acres of agricultural land. The Company's delivery system is comprised of a series of open canal channels and concrete flumes, with little improvements done since it was originally constructed. Water is diverted from the Little Lost River, and then conveyed across land owned by the Bureau of Land Management (BLM) and other public and private entities, before being delivered to users in the valley.

Current seepage rates in the canals are near 100% towards the end points of the Company's conveyance system. When surface water is not available, ground water pumping is used to supplement supplies. The proposed Project will pipe a section of the delivery system where

losses are currently estimated to be approximately 13%. The Company intends to undertake a multi-phased approach over the next several years to convert most of its open channel canals to closed pipe and install a pressurized system.

3.0 PRIOR LOANS

The Company has not previously held a loan with the Board.

4.0 PROPOSED PROJECT

Presently, the Company's point of diversion is located on the east side of the Little Lost River (river), where water is then conveyed through open canals down to an old concrete flume where it crosses the river connecting to canals on the opposite side. The Project proposes to move the point of diversion to the west side of the river, install a new diversion structure designed to prevent fish entrapment, remove the old concrete flume, and install closed pipe. The Project will eliminate approximately 1,700 feet of conveyance by moving the point of diversion and relocating the conveyance line to the opposite side of the river. Engineering and technical support for the project are being provided by the United States Department of Agriculture's Natural Resource Conservation Service (NRCS).

5.0 BENEFITS

The Project will provide for a number of efficiencies that will reduce energy consumption by an estimated 1.5 million kWh upon completion of all phases, reduce fish entrainment, and eliminate water losses due to seepage. Water savings by piping the canals will provide more surface water, benefitting the surrounding aquifer by reducing the need to pump supplemental groundwater.

6.0 FINANCIAL CONSIDERATIONS

As the loan increase is intended to be temporary until secured grant funds can be released, the Company does not plan to pursue further increases to its membership assessment.

WATER	SOURCE	Diversion Rate	PRIORITY
RIGHT		(CFS)	DATE
33-3	Dry Creek	61.000	07/01/1912
33-4	Little Lost River	12.000	01/23/1905
33-5	Little Lost River	145.000	01/14/1908
33-68	Little Lost River	4.280	06/1/1891
33-75	Little Lost River	3.430	07/15/1884
33-77	Sawmill Creek	1.430	05/25/1891
33-98	Dry Creek	5.150	04/15/1891
33-10086	Sawmill Creek	5.300	03/05/1908

7.0 WATER RIGHTS

8.0 SECURITY

As collateral for the loan, the Board is authorized to hold lien against the Company's membership assessments, water rights, and all Project infrastructure.

In accordance with the IWRB Loan Program conditions adopted in November of 2021, the resolution approving the Company's loan required that the Company maintain a reserve fund equal to one annual payment. Given that grant funds have been secured in an amount equal to the requested increase, and an increase of loan funding is intended to be temporary until grant funds can be disbursed and applied back to the loan, the Company would like to request that the condition to maintain a reserve fund remain equal to one annual payment based on the original amount of the loan.

9.0 CONCLUSION AND RECOMMENDATION

This loan will be used to replace the Company's deteriorated diversion structure and pipe a section of its canals. Staff recommends approval of the Company's request to increase the total approved loan amount to \$1,150,000.

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE BLAINE COUNTY CANAL LOAN REQUEST

RESOLUTION TO AUTHORIZE INCREASED FUNDING FOR COSTS RELATED TO INSTALLTION OF A DIVERSION STRUCTURE AND PIPING OF CANALS

1	WHEREAS, Blaine County Canal Company (Company) submitted a loan application to the Idaho
2	Water Resource Board (IWRB) in the amount of \$250,000.00 to cover costs associated with a project to
3	move its point of diversion, install a new diversion structure, and pipe open canals (Project); and
4	
5	WHEREAS, the Company delivers water for approximately 4,880 acres of irrigated lands in Butte
6	County near Howe, Idaho; and
7	
8	WHEREAS, the Company's delivery system was originally constructed in the early 1900s, with
9	few improvements made since the system was developed; and
10	
11	WHEREAS, considerable systemwide improvements are required to ensure long-term reliable
12	water delivery and reduce water loss due to seepage; and
13	
14	WHEREAS, the total estimated cost for the Project is approximately \$1,500,000; and
15	
16	WHEREAS, the Company has secured grant funding in the amount of \$900,000 from the Natural
17	Resource Conservation Service, \$100,000 from Trout Unlimited, and an energy savings incentive of
18	\$240,000 from Rocky Mountain Power Company; and
19	
20	WHEREAS, to protect against cost increases and ensure timely delivery of materials it was
21	necessary for the Company to purchase materials well in advance of construction; and
22	
23	WHEREAS, awarded grant funds cannot be disbursed until the associated materials have been
24	installed; therefore, the Company is obligated to cover costs of the materials until that time; and
25	
26	WHEREAS, the Company has requested an increase to its existing IWRB loan in the amount of
27	\$900,000 to cover the cost of materials until construction is complete and grant funds can be disbursed,
28	at which time the Company intends to apply equivalent funds back towards the loan; and
29	
30	WHEREAS, the Company is a qualified applicant and the proposed project qualifies for a loan
31	from the IWRB's Revolving Development Account; and
32	
33	WHEREAS, the proposed project is in the public interest and is in compliance with the State
34	Water Plan.
35	

Resolution No. _____

NOW THEREFORE BE IT RESOLVED that the IWRB approves an increase in the existing loan of 36 37 \$250,000 to an amount not to exceed \$1,150,000 from the Revolving Development Account at 2.6 % interest with a 15-year repayment term. 38 39 40 NOW THEREFORE BE IT FURTHER RESOLVED that the IWRB authorizes its chairman or designee 41 to modify existing contracts with the Company. 42 43 NOW THEREFORE BE IT FURTHER RESOLVED that this resolution and the approval of the loan 44 remain subject to the following conditions: 45 46 1) The Company shall comply with all applicable rules and regulations that apply to the 47 proposed Project. 2) Prior to the disbursement of any funds, the Company will provide acceptable security for the 48 loan to the IWRB, including but not limited to its water rights, membership assessment 49 income, and the Project infrastructure. 50 51 3) The Company shall maintain a reserve fund equal to one annual loan payment until the loan 52 has been satisfied. 53

DATED this 20th day of May 2022.

JEFF RAYBOULD, Chairman Idaho Water Resource Board

ATTEST ____

JO ANN COLE-HANSEN, Secretary

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Neeley Miller

Date: May 11, 2022

Re: Criteria for Aging Infrastructure & Water Sustainability Projects

REQUIRED ACTION: no action required



At the April 20th Finance Committee staff presented the Committee with proposed criteria for aging infrastructure and water sustainability projects. The Committee chose to open a 30-day public comment period on the draft criteria for funding water projects statewide, with comments due on May 20th.

Attached to this memo is the draft criteria for the two new programs.

Staff will compile comments and present to the IWRB for consideration at a future IWRB meeting.

Attachment:

1) Proposed Criteria for Aging Infrastructure & Water Sustainability Projects

IWRB Aging Infrastructure Loan/Grant Criteria

The Idaho Water Resource Board (IWRB) has identified a need to support projects that address aging water infrastructure needs as an investment in the Idaho economy and to ensure long-term water sustainability. The IWRB provides financial assistance on a statewide competitive basis through loan and grants to entities interested in pursuing projects to rehabilitate or improve aging water infrastructure.

The IWRB defines an aging water infrastructure project as any project intended to address repair, maintenance, replacement, or improvements to existing infrastructure that supports water delivery, storage, treatment, and application of water.

Eligible Entities: Irrigation Districts, Canal Companies, Drainage Districts, Groundwater Districts, Ditch Companies, Municipalities, Counties

Eligible Geographic Area: Statewide

Loan/Grant Funding Available and Cost-Share Component:

- Projects that demonstrate a cost-share component by leveraging IWRB funding will be prioritized. The IWRB Preferred Funding Package = IWRB Low Interest Loan for 2/3rd (67%) of total project costs + IWRB Grant for a maximum of 1/3rd (33%) of total project costs.
- IWRB grant portion cannot exceed 1/3rd (33%) of total project costs after accounting for all other grant funding sources. If other non-IWRB grant funding is awarded to the project after a IWRB funding award is made, the IWRB's grant will be limited to 1/3rd (33%) of total project costs after accounting for all other grant funding sources. This requirement is intended to ensure project sponsors have a "stake" in the project and to maximize the use of available IWRB grant funds. (Example: \$1.5M project; project has obtained \$900,000 non-IWRB grant; After all other grant funding the project still requires \$600,000. Project is eligible for IWRB grant up to \$200,000)
- Funding awards may be reallocated if a project is not initiated prior to May 1, 2023.
- Funding will not be made available unless the project is fully permitted. Sponsor is responsible for providing permit documentation to IWRB staff.

Evaluation Criteria: To maximize the effective and efficient use of available funds, applications and sponsor's grant document will be evaluated, scored (*215-point scale*), and ranked according to the following criteria:

First Time Applicants (10 points)

• First time applicants will receive points

IWRB Loan/Grant Combination (30 points)

• Applicants that elect the IWRB loan/grant combination will receive points. Grants not contingent on IWRB loan combo, but applications that propose loan/grant combination will receive additional points

Public Interest of Project (Up to 50 points)

 Projects that address a public interest, including consideration of the communities, population, irrigated acres, and economic activity provided by the aging infrastructure for water storage or delivery system.

Urgency and Effectiveness of Project (40 points)

- What is the urgency of the project and how does it specifically focus on repairing, replacing, or improving aging infrastructure? (10 points)
- What are the objectives and benefits of the project? (10 points)
- How does the proposed project solution address the objectives? (10 points)
- Are project sponsors using relevant and appropriate information to develop the proposed project? (Sponsor should include references to relevant design plans and specifications, studies, assessments, reports, management plans, etc.) (10 points)

Budget and Organizational Capacity of Project (85 points)

- Lead sponsor of project is identified and there is a description of other affected stakeholders and jurisdictions. (10 points)
- Project sponsors will provide documentation that affected local stakeholders and jurisdictions have been consulted. (5 points)
- Is the proposed budget, scope of work and schedule provided? (15 points)
- Are plans and specifications included in the submission package? (15 points)
- Projects that propose grant amounts below 33% of total projects costs after accounting for all other grant sources will receive additional points (1 point for each additional 1% decrease up to 20 additional points).
- What is the sponsor's history of successful accomplishments on projects similar to this one? The sponsor shall provide several past project examples, if possible. (10 points)
- Please describe what level of sponsor and consultant staffing that will be directed toward the implementation of the proposed project? Discuss the number of sponsor and consultant staff and amount of time dedicated for each for the project. Will the project utilize volunteers? If so, how? Include brief resumes or list of qualifications for each member of the project team. (10 points)

Application Process:

- Application Deadline: August 5, 2022
- Project Funding Recommendations: Early September 2022 Finance Committee
- Funding Awarded: September 2022 IWRB meeting
Loan/Grant Implementation Process:

• Loan and grant contracts will be developed following IWRB funding awards, and funds will be distributed and/or reimbursed per those contracts.

IWRB Districts are:

District No. 1: Boundary, Bonner, Kootenai, Shoshone, Benewah, Latah, Clearwater, Nez Perce, Lewis and Idaho counties.

District No. 2: Adams, Valley, Washington, Payette, Gem, Boise, Canyon, Ada, Elmore and Owyhee counties.

District No. 3: Camas, Gooding, Jerome, Twin Falls, Cassia, Blaine, Lincoln, Minidoka, Lemhi, Custer and Butte counties.

District No. 4: Clark, Fremont, Jefferson, Madison, Teton, Bingham, Bonneville, Power, Bannock, Caribou, Oneida, Franklin and Bear Lake counties.

* No more than 50% of the total budget may be spent within a single IWRB district. This limit may be waived if there are no competing funding demands.

IWRB Regional Water Sustainability Priority List

The Idaho Water Resource Board (IWRB) will partner with eligible entities on large projects that help achieve water sustainability on a regional, basin-wide, or statewide scale. The IWRB will maintain a Water Projects Priority List (List) of those projects. These are projects the IWRB has determined have the potential to help achieve water sustainability.

Eligible Entities: Irrigation Districts, Canal Companies, Drainage Districts, Groundwater Districts, Ditch Companies, Municipalities, Counties

Eligible Geographic Area: Statewide

Water Projects Priority List: Projects that provide regional, basin-wide, or statewide benefits are eligible to be placed on the List; <u>The List will be updated annually at the regularly scheduled</u> <u>January meeting of the IWRB.</u> Projects are prioritized by the readiness of project to proceed.

Getting placed on the List is not a funding commitment, but rather a recognition that the project has the potential to help achieve water sustainability. Each project on the list is unique and will have its own implementation timeline and milestones.

Project Consideration Process

Possible metrics for qualification and tier prioritization:

- Demonstration of regional benefits
- Demonstration of broad stakeholder support
- Provides resolution of long-standing or anticipated water use conflicts
- Relative economic and public benefits, and/or improves water sustainability and resiliency.
- Project readiness (may influence tier)

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Neeley Miller

Date: May 11, 2022

Re: Palouse Basin Aquifer Committee (PBAC) Update



Representatives from the Palouse Basin Aquifer Committee (PBAC) will discuss recent efforts towards developing a long term sustainable water supply.

Palouse Basin Update

PALOUSE BASIN AQUIFER committee

Tyler Palmer, PBAC/City of Moscow Robin Nimmer, Alta Science & Engineering Cara Haley, PBAC/City of Pullman Paul Kimmell, PBAC/Latah County

Idaho Water Resource Board May 19, 2022

PALOUSE BASIN AQUIFER COMMITTEE (PBAC)

"To ensure a long-term, quality water supply for the Palouse Basin region"



OUTLINE

- Water levels and pumping
- Water supply alternatives project update
- Next steps





Lower Aquifer Water Levels





Lower Aquifer Water Levels





Lower Aquifer Water Levels





Total Pumped in 2021 = 2.43 Billion Gallons

Idaho 38%

Washington 62%





Aggregate Pumping Targets 1992 - 2021





Pullman, Moscow – Per Capita Pumping - Change from 1992



WATER SUPPLY ALTERNATIVES

- Outreach
- Alternatives
- Alternatives Evaluation
- Agency Discussions
- Next Steps





OUTREACH





DECECEMBER 2021

PBAC AWARENESS POLL FINDINGS

PALOUSE BASIN AQUIFER COMMITTEE COMMUNITY OUTREACH AND ENGAGEMENT EFFORTS

0

- ALT COMMON

"THANK YOU FOR DOING THIS WORK, I THINK WE AL **CLEAN WATER FOR GRANTED!"**





ALTERNATIVES REFINEMENT



- One diversion project
 - Divert water from Snake River: 10 mo
 - Water treatment plant
 - Pipelines to Pullman and Moscow
 - Direct use
- 85% of target (2,000 MGY; or more with larger pipeline)
- Potential to partner with a local utility on a pumped storage project to offset costs





- Two diversion projects:
 - A: Divert water from Paradise Creek or South Fork Palouse River; treatment plant; for Moscow aquifer recharge: 4 mo
 - B: Divert water from North Fork Palouse River for Pullman and Moscow; treatment plant; for direct use: 8 mo
- 82% of target (1,908 MGY)
- May not consistently produce water to sufficiently meet demand





- Two projects:
 - A. Divert water from South Fork of the Palouse River; treatment plant; for Pullman; for direct use: 8 mo
 - B. Flannigan Creek storage and conveyance to water treatment plant for Moscow; for direct use: 12 mo
- 100% of target (2,324 MGY)





- Five projects/components:
 - A. Pullman SF Palouse ASR; 4 mo.
 - B. Moscow Paradise AR; 4 mo.
 - C. Pullman WW Reuse; 6 mo.
 - D. Moscow WW Passive Recharge; 12 mo.
 - Additional Conservation
- 81% of target (1,900 MGY)
- May not consistently produce enough water to meet demand



SCHEDULE AND COST

Alternative #	Alternative Description	Years to Implement	Estimated Capital Cost (millions)	Estimated Capital Cost by Alternative (millions)		
1	Snake River Pullman & Moscow	12	\$109.9	\$109.9		
2a	Paradise Creek/SF Palouse River Aquifer Recharge Moscow	12	\$19.2	\$77.0		
2b	NF Palouse River Pullman & Moscow	11	\$57.8			
3a	SF Palouse Pullman	11	\$28.8	¢105.0		
3b	Moscow Flannigan Creek	11	\$76.2	φ105.0		
4a	SF Palouse ASR Pullman	11	\$19.2			
4b	Paradise Creek Aquifer Recharge Moscow	12	\$19.2	Ф101 Q		
4c	Water Reuse Pullman	9	\$53.0	φιζι.3		
4d	Water Reuse Moscow	9	\$4.1			
4e	Additional conservation	6	\$25.8			
6 years for "pre-co	nstruction" activities					
For schedule, assu	me all interim steps are conducted simultaneously					

SCHEDULE AND COST

Alternative #	Alternative Description	Years to Implement	Estimated Capital Cost (millions)	Estimated Capital Cost by Alternative (millions)	
1	Snake River Pullman & Moscow	12	\$109.9	\$109.9	
2a	Paradise Creek/SF Palouse River Aquifer Recharge Moscow	12	\$19.2	\$77.0	
2b	NF Palouse River Pullman & Moscow	11	\$57.8		
3a	SF Palouse Pullman	11	\$28.8	¢105.0	
3b	Moscow Flannigan Creek	11	\$76.2	φ105.0	
4a	SF Palouse ASR Pullman	11	\$ 19.2	\$28.8	
4b	Paradise Creek Aquifer Recharge Direct Moscow	Use 12	\$19.2	¢101 0	
4c	Water Reuse Pullman	9	\$ 53.0	⊅ 1 21. 0 \$73.8	
4d	Water Reuse Moscow	9	\$4.1	φ7 3.0	
4e	Additional conservation	6	\$25.8		
6 years for "pre-construction" activities				Modified Alternative 4	

For schedule, assume all interim steps are conducted simultaneously

ALTERNATIVE MODIFIED 4

- Three projects/components:
 - A. Divert water from South Fork of the Palouse River; treatment plant; for Pullman; for direct use: 8 mo
 - B. Divert water from Paradise Creek; treatment plant; for Moscow; for direct use: 4 mo.
 - Additional Conservation
- 80% of target (1,861 MGY)
- May not consistently produce enough water to meet demand





EVALUATION CRITERIA







||| ×

Technical certainty of success

M

Property acquisition

Permitting complexity – water rights



Permitting complexity – environmental



Extent of regional agreements required

Public acceptability



WATER SUPPLY ALTERNATIVES RANKING

Alternative #	Alternative	Pullman Moscow	DU /ASR / AR/ Reuse	Score	Ranking
1	Snake River Diversion	P/M	DU	105	3
2	S.F. Palouse River or Paradise Creek	М	AR	108	2
	N.F. Palouse River	P/M	DU		
3	S.F. Palouse River	Р	DU	116	1
	Flannigan Creek Reservoir	Μ	DU		
4	S.F. Palouse River	Р	ASR	89	4
	Paradise Creek	Μ	AR		
	Pullman Wastewater Reuse	Р	Reuse		
	Moscow Wastewater Infiltration	М	Reuse		
	Additional Conservation	P/M			

DU = direct use AR = aquifer recharge ASR = aquifer storage and recovery



WATER SUPPLY ALTERNATIVES RANKING – MODIFIED ALT 4

Alternative #	Alternative	Pullman Moscow	DU /ASR / AR/ Reuse	Score	Ranking
1	Snake River Diversion	P/M	DU	91	4
2	S.F. Palouse River or Paradise Creek	М	AR	101	3
	N.F. Palouse River	P/M	DU		
3	S.F. Palouse River	Р	DU	107	2
	Flannigan Creek Reservoir	М	DU		
Mod 4	S.F. Palouse River	Р	DU	131	1
	Paradise Creek	Μ	DU		
	Additional Conservation	P/M			





ENTITY ENGAGEMENT

- Washington
 - Washington Department of Ecology
- Idaho
 - Idaho Water Resource Board
 - Idaho Department of Water Resources (IDWR)















RECOMMENDATIONS







NEAR TERM NEXT STEPS

- Draft report submitted
- Continue outreach and agency engagement
- PBAC workshop in July to plan near-term next steps
- Final report expected July/August
- Agency review of report
- Discuss critical decision points





NEAR TERM NEXT STEPS

- Alternative(s) consensus: PBAC, member agencies, state agencies
- Governance structure
- Funding strategy and allocation of project costs
- Implementation plan
- Formalizing agreement with PBAC entities
- Continual communications with IDWR and Ecology





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Update on Groundwater Conditions in the Northern Region

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Topics for Today

- General Hydrogeology of the Region
- IDWR's Groundwater Monitoring Network for the Region
- Update on the Rathdrum Prairie Aquifer
- Update on the Lewiston Plateau

General Aquifers of the Northern Region



- 75% Fractured Bedrock
- 18% Columbia River Basalts
- 7% Unconsolidated Sediment

General Aquifer Type

- Unconsolidated Sediments
- **Columbia River Basalts**
- Bedrock
- Water

Groundwater Management and Monitoring Network



Spokane Valley-Rathdrum Prairie Aquifer



- Rathdrum Prairie GWMA established in 2002
- Management plan adopted in 2005
- CAMP adopted in 2011
- Bi-State aquifer
- Water source for over 500,000 people
- Groundwater model developed in 2007



Rathdrum Prairie GW Monitoring Network



- IDWR monitors 38 wells in the area
- USGS monitors one well
- All monitoring wells in the Rathdrum Prairie area are equipped with transducers

Monitoring Well Type

- Unconsolidated Sediment
- Fractured Bedrock
Water Level Trends for the Rathdrum Prairie Aquifer





- Aquifer responds to climate fluctuations, peaks every 5 to 8 years
- Water levels in the Rathdrum Prairie are generally higher since the mid-1990s

Rathdrum Prairie Monitoring Network



Future Tasks:

- Improve estimates of aquifer properties
- Increase monitoring near surface water
- Improve recharge estimates
- Update projected groundwater production

Monitoring Well Type

- Unconsolidated Sediment
- Fractured Bedrock

Groundwater Management and Monitoring Network



Lewiston Plateau GWMA



- GWMA established in 2013
- Plan adopted in 2015
- Plan addresses water level declines in the upper aquifers
- Subareas have different management policies
- IDWR has been monitoring water levels since 2015
- IDWR continues to expand the network
- IDWR continues to develop the the conceptual hydrogeological model

Geology of the Lewiston Plateau



Photo: D. Garwood



Sentinel Bluffs Member 10,150 Winter Water Member 7,800 290 Fields Spring Member Indian Ridge Member 1,200 Member of Armstrong Canyon 800 Member of Ortley 13,800 Member of Buttermilk Canyon 990 Slack Canyon Member 310 Meyer Ridge Member 580 Member of Grouse Creek 7,050 Wapshilla Ridge Member 40,250 Member of Mt. Horrible 8,150 Cold Springs Ridge Member 5,275 Hoskin Gulch Member 4,700 China Creek Member 6,100 Member of Frye Point 4,800 Member of Downey Gulch 7,500 Member of Brady Gulch Note 1 Member of Kendrick Grade Note 1 Member of Center Creek 5,250 4,000 Member of Skelton Creek Member of Rogersburg 6,400 Teepee Butte Member 7,600 Member of Birch Creek 1,900 5,304 **Buckhorn Springs Member** Note 1 - included in Downey Gulch

Volume (km³)

Geology of the Lewiston Plateau



Kaufman and others 2009

Photo: D. Garwood

Geology of the Lewiston Plateau



Major Production Wells in the Lewiston Area



- APUD produces about 4800 AFY
- LOID produces about 1800 AFY
- Lewiston produces about 500 AFY

*Note Lewiston production does not include Lewiston Wells 2,4, or 3. LOID does not include LOID 5 or 6.



Saddle Mountains Basalt



- Upper most basalt formation.
- About 57 wells completed in the Saddle Mtns.
- Two different aquifers North and South.
- In 2016, IDWR monitored 4 wells.
- IDWR now monitors 16 wells.
- IDWR limits well drilling in the Saddle Mtns.
- Recharge Sources:
 - Precipitation.
 - Mann Lake seepage?
 - Return flows?

Saddle Mountains North Water Level Trends



• Aquifer responds wet winters such as 2017 thru 2019.

Saddle Mountains South Water Level Trends



- Aquifer responds wet winters such as 2017 thru 2019.
- Area can receive about 20 inches of precipitation on average.

Wanapum Basalt



- About 85 wells completed in the Wanapum Basalts.
- IDWR now monitors 14 wells in the Wanapum.
- In 2016, IDWR monitored 10 wells.
- Recharge is possibly from precipitation and seepage along Tammany Creek.
- Wanapum is connected to the Snake and Clearwater Rivers.
- Possibly extends into Clarkston.
- IDWR does not allow new wells in the Wanapum.

Wanapum Water Level Trends – Lindsay Creek



Wanapum Water Level Trends – Tammany Creek



Grand Ronde Basalt Wells and Monitoring



• About 160 wells completed in the Grande Ronde

- The Grande Ronde Basalts consist of multiple flows
- IDWR requires new wells to be completed in the Grande Ronde
- IDWR monitors 45 wells in the Grande Ronde



Grande Ronde Monitoring Network

Lower Granite Dam

- Located about 30 miles downstream of Lewiston
- Began operation in 1975
- Raised the Snake River about 30 feet near Lewiston



Photo: Army Corps of Engineers



Lewiston-1A Water Level Trends



Lewiston-5 Water Level Trends



LOID 1 Water Level Trends



LOID 1 Water Level Trends



Lindsay Creek Area Water Level Trends



Tammany View Area Water Level Trends



Lewiston Plateau GWMA



Future Tasks:

- Improve estimates of aquifer properties
- Increase monitoring near surface water
- Improve recharge estimates
- Complete geologic cross-sections and model
- Groundwater flow model efforts?

Memorandum

To: Idaho Water Resource Board

From: Cynthia Bridge Clark

Date: May 12, 2022

Re: Dworshak Small Hydropower Plant



The Idaho Water Resource Board (IWRB) will tour the Dworshak Small Hydropower Plant and downstream Clearwater Fish Hatchery on May 19, 2022. Presentations and additional information about the development of the project and current operations will be provided during the tour.

Project Description

The Dworshak Small Hydropower Plant is owned and operated by the Idaho Water Resource Board (IWRB). It generates power from flow through two pipelines (18" and 36" diameter) that deliver water from Dworshak Dam to the U.S. Fish and Wildlife Service's Clearwater Fish Hatchery (operated by the Idaho Department of Fish and Game). The IWRB obtained the FERC license to construct and operate the facility in 1998 and the plant was commissioned in 2000. The power plant includes of two Pelton-type turbines and a 2.5 MW unit on the 36-inch pipeline and a 500kW unit on the 18-inch pipeline. It produces about 21 million Kilo-watt hours per year. Power is sold to Bonneville Power Administration in accordance with a 30-year energy sales agreement. Revenue is deposited into the IWRB's Revolving Development Account and used to support and finance statewide water projects.





Dworshak Small Hydropower Plant

DAHO

ESOUF

Brian Patton, P.E. IWRB Executive Officer

May 19, 2022

Water Supply And Power Generation Overview

Dworshak Dam (USACE)

Federal Dworshak Powerplant

Clearwater Fish <u>Hatchery</u>

Ahsahka

Idaho Water Resource Board (IWRB) Dworshak Small Hydropower Plant on pipelines from dam to hatchery

7

Clearwater River

Dworshak National Fish Hatchery

Development Timeline

- In 1980's planning was underway by the federal government for the Clearwater Fish Hatchery (CFH)
- Decision was made to supply CFH by pipelines from Dworshak Dam
- Hydropower potential was noted by the U.S. Corps of Engineers site was made available for non-federal development
- City of Orofino was interested, but later withdrew from project for legal and financial reasons
- IWRB was later invited to participate
- IWRB is authorized to generate and wholesale hydropower by Article XV, Section 7 of the Idaho Constitution
- In 1990 the Legislature further directed IWRB to participate in project

Project Timeline

- Pipelines completed in 1992 – 36-inch & 18-inch pipes
- IWRB applied for FERC license to construct and operate project in 1994
- FERC issued license in late 1998
- IWRB began construction in 1998
- Powerplant was placed on-line in June of 2000



Power Plant Details

- Two Pelton-type turbines
- 2.5MW unit on 36-inch pipeline
- 500kW unit on 18-inch pipeline
- Powerplant built on pre-existing energy dissipation and water delivery structure
- Pre-existing energy dissipation system remains in place for extended turbine shutdowns
- Plant produces about 21 million Kilo-watt hours per year
- 2021 Operations and maintenance contracted to Thompson Engineering Group for a 5-year term



Power Sales Agreement

- Power is sold to Bonneville Power Administration through 30-year energy sales agreement – 30-year term began in 2000
- Current energy sales rate is \$0.0743/kWh
- Escalates at 3% per year through term of contract



Project Finances

•IWRB issued \$5 Million revenue bond to finance construction in 1999

•Total project cost was about \$5.5M (completed in 2000)

•Revenue Bonds Paid off in 2016





Approximate Annual Cash Flows

ANNUAL INCOME		
Power Sales	\$1,200,000	
Interest	\$40,000	
TOTAL INCOME	\$1,240,000	

ANNUAL EXPENSES & REVENUE	
0&M *	\$130,000
Repair/Replacement Fund	\$372,000 (current balance \$5.8 M)
TOTAL REVENUE	\$738,000

*Includes operator, wheeling, FERC, minor repairs, incidentals (e.g. phone, internet, gas)

Approx. \$4M in revenue has been placed into the Revolving Development Account for loans and other projects.

Planning Priorities & Action Items

- Capital Improvement Plan
- Negotiate new Power Sales Agreement
- FERC License renewal
 (50-year license expires 2048)







Governor's Salmon Workgroup

Initiated April of 2019.

Tasked with developing collaborative policy recommendations to restore salmon populations.

Over 20 representatives from industry, conservation, sportsmen, state and local leaders participated.

Recommendations were finalized in December of 2020.

Governor's Salmon Workgroup Hatchery Policy Recommendations

Meet Hatchery Mitigation Obligations

Maintain Existing Infrastructure

Enhance & Expand Hatchery Production

An additional pipeline to the Clearwater Hatchery would dramatically enhance hatchery operations at both the Clearwater and Dworshak hatcheries and satisfy all three hatchery policy recommendations.
Anticipated Benefits at Clearwater and Dworshak Hatcheries

Clearwater Hatchery could produce an additional 1.6 million spring chinook smolts (IDFG estimates that would produce an additional 6,000 adult Chinook Salmon returning to Idaho).

Dworshak Hatchery could produce an additional 1.8 million spring chinook smolts (NPT estimates that could result in close to 10,000 adult Chinook Salmon returning to Idaho).

Converting Dworshak Hatchery from pumped water to gravity fed would reduce their annual electricity use of ~22 million kWh by 90% and make that power available to the market.

Potential Pipeline Partners

Anticipate additional power generation from a new pipeline alone does not make fiscal sense.

If some construction costs were offset by federal funding aimed at fisheries benefits and current hatchery O&M savings the fiscal outlook changes.

Idaho will work with BPA, USFWS, NOAAF and our Congressional delegation to secure federal funding.