BOARD OF WATER RESOURCES

BOARD MEETING

PLAN

CONSERVE

DEVELOP

PROTECT

DECEMBER 5, 2023

DIVISION OF WATER RESOURCES

1594 WEST NORTH TEMPLE, #310, SLC, UTAH

84114

2024 BOARD MEETING SCHEDULE

January

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February

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25	26	27	28	29		

March

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31						

April

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May

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30						

July

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28	29	30	31			

August

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25	26	27	28	29	30	31

September

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29	30					

October

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November

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December

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29	30	31				

January 25 Thursday SLC
Aug 15 Thursday TBA

March 20 Wednesday (St. George)
October 10 Thursday

May 9 Thursday SLC
December 11 Wednesday

June 20 Thursday SLC

Agenda
Utah Board of Water Resources
Board Briefing Meeting

December 5, 2023
8:00 am

I. WELCOME/CHAIR'S REPORT
*Chair Juliette Tennert

II. DISCUSSION OF BOARD AGENDA ITEMS
(See Board Meeting Agenda)

III. INFORMATION TO THE BOARD

IV. OTHER ITEMS TO DISCUSS

Agenda
Utah Board of Water Resources
Board Meeting
December 5, 2023
8:00 AM Briefing
10:00 AM Board Meeting
Department of Natural Resources Auditorium
1594 W. North Temple, Salt Lake City
Link to presentations and public comment form:
https://water.utah.gov/comments/
Livestream Links
Briefing Meeting: https://youtube.com/live/bkvNKrTGifE
Board Meeting: https://youtube.com/live/KljBWUhVGVg

OATH OF OFFICE - NEW BOARD MEMBER
DNR Director - Joel Ferry

APPROVAL OF MINUTES

Project No.	Applicant	County	Project Manager
FEASIBILITY REPORTS:			
RE472	Davis & Weber Counties Canal Company	Davis	Tom Cox
RE474	Davis & Weber Counties Canal Company	Davis	Tom Cox
RM074	Lehi City	Utah	Tom Cox
RM116	Bountiful Irrigation District	Davis	Tom Cox
RL590	Metropolitan Water District of SL & Sandy	Salt Lake	Bradley Caldwell
RL591	Hurricane City	Washington	Ethan Stayner
COMMITTAL OF FUNDS:			
RM086	Morgan Secondary Water Association	Morgan	Russell Hadley
SPECIAL ITEMS:			
RE470	Eden Water Works (Additional Funds)	Weber	Tom Cox
RE468	Liberty Pipeline Company (Reauthorization)	Weber	Ann Baynard
RM103	Grantsville Irr. Co. (Reauthorization & COF)	Tooele	Ann Baynard

GREAT SALT LAKE PUBLIC TRUST LAWSUIT:
Attorney General's Office

FINAL WATER MARKETING STRATEGIES REPORT:
Update - Emily Lewis, Clyde Snow & Sessions (Consultant)

DIRECTOR'S REPORT:
Candice Hasenyager

ADJOURNMENT

BOARD OF WATER RESOURCES
Feasibility Report

Applicant: **Davis & Weber Counties Canal Company**

Project Number: RE472
Fund: Revolving Construction Fund
Cost Estimate: $1,175,000

Application Received: 9/7/2023
Board Meeting Date: 12/5/2023

Board Member: Kyle Stephens
Project Manager: Tom Cox

Project Summary: The purpose of the project is to install approximately 580 feet of HDPE pipe to provide an emergency discharge point from the Davis & Weber Canal. Approximately 1,700 feet of unlined discharge channel will also be improved.

Recommendation: Staff recommends the Board authorize 85% of the project cost, up to $999,000, and that the project be purchased at 0% interest over 20 years with annual payments of approximately $50,000.

Project Contacts:

President:
Scott Paxman
138 W. 1300 N.
Sunset, UT 84015
801-771-1677

Manager:
Rick Smith
138 W. 1300 N.
Sunset, UT 84015
801-774-6373

Engineer:
Jon Frazier
J-U-B Engineers
466 Kays Drive
Kaysville, UT 84037
801-547-0393

Location
The proposed project is located in Riverdale in Davis County.

Introduction & Background
Davis & Weber Counties Canal Company (DWCCC) was organized in 1884 and is registered in "good standing" with the Utah Department of Commerce. DWCCC delivers approximately 60,000 acre-feet of water annually to its 40,000-acre service area. This includes wholesale water to Weber Basin Water Conservancy District, Roy Water Conservancy District, Syracuse City, approximately 17,250 secondary irrigation connections and about 9,000 acres of farm ground. Approximately 5,800 secondary connections are metered, and all new residential development is required to have meters installed. Water is diverted from the Weber River and delivered primarily through the 17.2-mile-long Davis & Weber Canal.

Since 1980, the Board has committed approximately $31.1 million to the Applicant for canal improvements, and more than $32.2 million for residential secondary irrigation systems in Clinton, Kaysville, Layton, and West Point. With the aid of Board funding, the Applicant is beginning a pipe replacement project on its secondary system, enclosing another section of canal, and installing secondary water meters.

Existing Conditions & Problems
Construction on the Davis & Weber Canal began in 1884, with sections being lined with concrete starting in the 1910's. DWCCC has created a Master Plan detailing the condition of each section of canal and prioritizing needed improvements and has been active in upgrading the canal.

The Applicant utilizes the penstock of a decommissioned hydro-electric plant to flush its canal in the spring. This configuration also allows the company to drain the canal in case of emergency. The steel penstock pipe and its concrete supports are deteriorating. Downstream of the penstock, the water is discharged into approximately 800 feet of concrete-lined channel and then into an unlined channel about 1,700 feet long before it flows under I-84 and into the Weber River. The property the channel traverses is owned by PacifiCorp and access is restricted.

Proposed Project
The purpose of the project is to install approximately 580 feet of 48-inch HDPE pipeline from the Davis & Weber Canal to the existing concrete-lined channel. The unlined part of the discharge channel will be cleared and reestablished. Negotiations are underway with PacifiCorp about purchasing the property the channel traverses, which would allow the Applicant better access to maintain the channel. It is anticipated that work will begin in the fall of 2024. Technical assistance is being provided by J-U-B Engineers in Kaysville.

Benefits
The proposed project will provide a way for the Applicant to continue to flush its canal in the spring and provide an emergency discharge point.

Cost Estimate

The following cost estimate is based on the engineer's preliminary design and has been reviewed by staff:

Item	Description	Quantity	Unit	Unit Price	Total
1	48-inch HDPE Pipe	580	LF	$985	$571,300
2	Lower Channel Restoration	1	LS	225,000	225,000
				Construction Cost	**$796,300**
				Contingency	94,700
				Design & Construction Engineering	80,000
				Legal and Administrative	20,000
				Property Purchase	184,000
				TOTAL	**$1,175,000**

Cost Sharing & Repayment

The recommended cost sharing and repayment are:

Agency	Cost Sharing	% of Total
Board of Water Resources	$999,000	85%
Applicant	176,000	15
TOTAL	**$1,175,000**	**100%**

Staff recommends the Board authorize 85% of the project cost, up to $999,000, and that the project be purchased at 0% interest over 20 years with annual payments of approximately $50,000.

Financial Feasibility

Monetary benefits of the project include reduced operation and maintenance costs of about a few thousand dollars.

Water Rights & Supply

The Applicant holds dozens of water rights for Weber River diversions to irrigate more than 40,000 acres. It also has storage rights of 28,000 acre-feet in East Canyon Reservoir and 29,000 acre-feet in Echo Reservoir. The Board holds title to 21 of the Applicant's major water rights from previous projects.

Easements

The Applicant owns the property of the proposed pipeline alignment. PacifiCorp owns the property which the discharge channel crosses. DWCCC has an agreement with PacifiCorp to discharge up to 150 cfs into the channel. The Applicant is working with PacifiCorp on the possibility of purchasing the unlined channel alignment, and that purchase price is included in the project cost estimate.

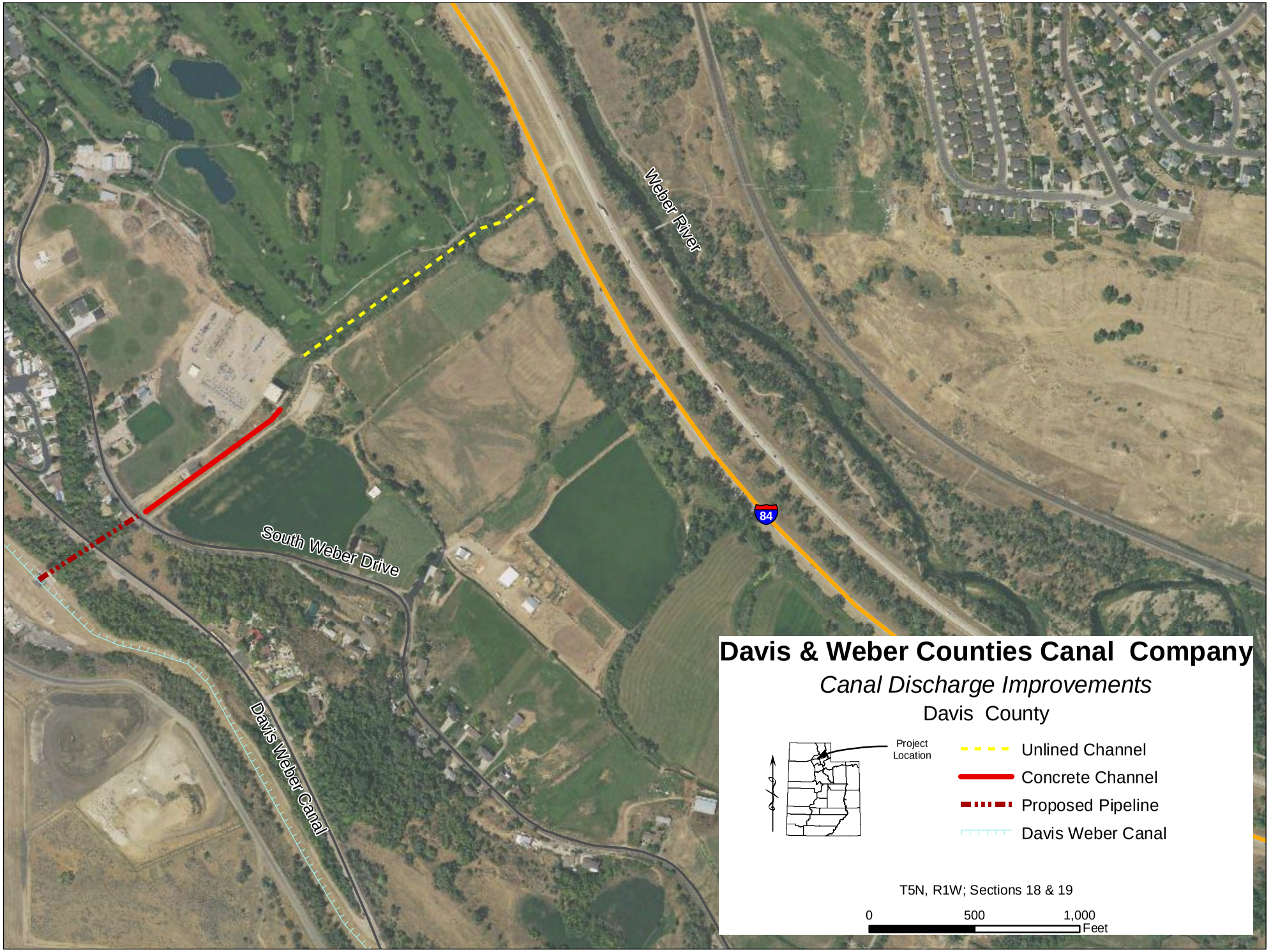
Environmental

No long-term environmental impacts are expected due to the project.

Applicant's Responsibilities

If the Board authorizes the proposed project, the Applicant must do the following before a purchase agreement can be executed:

1. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.
2. Pass a resolution by the appropriate majority (as defined in the company's Articles of Incorporation and Bylaws) authorizing its officers to do the following:
    a. Assign properties, easements, and water rights required for the project to the Board of Water Resources.
    b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the Board.
3. Have an attorney give the Board of Water Resources a written legal opinion that:
    a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.
    b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.
    c. The company has obtained all permits required for the project.
    d. The company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.
    e. The company's water rights applicable to the project are unencumbered and legally transferable to the Board of Water Resources, and that they cover the land to be irrigated by the project.
    f. The company is in compliance with sections 73-10-33, 10-9a-211, and 17-27a-211 of the Utah Code governing management plans for water conveyance facilities.
4. Update its water conservation plan for its service area and obtain approval of it from the Division of Water Resources.
5. Obtain approval of final plans and specifications from the Division of Water Resources.


Weber River
84
South Weber Drive
Davis Weber Canal
Davis & Weber Counties Canal Company
Canal Discharge Improvements
Davis County
Project Location
Unlined Channel
Concrete Channel
Proposed Pipeline
Davis Weber Canal
T5N, R1W; Sections 18 & 19
0
500
1,000
Feet

BOARD OF WATER RESOURCES
Feasibility Report

Davis & Weber Counties Canal Company

Applicant:

Project Number: RE474
Fund: Conservation and Development Fund
Cost Estimate: $4,500,000

Application Received: 8/30/2023
Board Meeting Date: 12/5/2023

Board Member: Kyle Stephens
Project Manager: Tom Cox

Project Summary:

The purpose of the project is to enclose approximately 980 feet of the Davis & Weber Canal with a precast concrete box culvert and replace about 1,420 feet of old, aluminized-steel pipe with reinforced concrete pipe.

Recommendation:

Staff recommends the Board authorize 52.9% of the project cost, up to $2,380,000, and that the project be purchased at 2.1% interest over 30 years with annual payments of approximately $107,800.

Project Contacts:

President:
Scott Paxman
138 W. 1300 N.
Sunset, UT 84015
801-771-1677

Manager:
Rick Smith
138 W. 1300 N.
Sunset, UT 84015
801-774-6373

Engineer:
Jon Frazier
J-U-B Engineers
466 Kays Drive
Kaysville, UT 84037
801-547-0393

Location
The proposed project is located in Riverdale and Layton in Davis County.

Introduction & Background
Davis & Weber Counties Canal Company (DWCCC) was organized in 1884 and is registered in "good standing" with the Utah Department of Commerce. DWCCC delivers approximately 60,000 acre-feet of water annually to its 40,000-acre service area. This includes wholesale water to Weber Basin Water Conservancy District, Roy Water Conservancy District, Syracuse City, approximately 17,250 secondary irrigation connections and about 9,000 acres of farm ground. Approximately 5,800 secondary connections are metered, and all new residential development is required to have meters installed.

Water is diverted from the Weber River and delivered primarily through the 17.2-mile-long Davis & Weber Canal. Since 1980, the Board has committed approximately $31.1 million to the Applicant for canal improvements, and more than $32.2 million for residential secondary irrigation systems in Clinton, Kaysville, Layton, and West Point. With the aid of Board funding, the Applicant is beginning a pipe replacement project on its secondary system, enclosing another section of canal, and installing secondary water meters.

Existing Conditions & Problems
Construction on the Davis & Weber Canal began in 1884, with sections being lined with concrete starting in the 1910's. DWCCC has created a Master Plan detailing the condition of each section of canal and prioritizing needed improvements and has been active in upgrading the canal.

Sections of the canal remain unlined or have a deteriorating liner. The open canal tends to collect trash and debris and is also a potential safety hazard as it winds through developed areas. In some places, the canal is higher than the adjacent ground. Additionally, some of the previously installed pipeline in Layton is deteriorating and needs to be replaced.

Proposed Project
The purpose of the project is to enclose approximately 980 feet of canal with a precast concrete box culvert and replace about 1,420 feet of old, aluminized-steel pipe with reinforced concrete pipe. It is anticipated that construction will begin in fall 2024. Work can only be completed during the non-irrigation season. Technical assistance is being provided by J-U-B Engineers in Kaysville.

Benefits
The proposed project is estimated to conserve approximately 1,100 acre-feet of water annually. Operation and maintenance costs are expected to be reduced by a few thousand dollars. Most importantly, it will increase safety by eliminating open canal and enable the Applicant to continue to provide water to its users.

Cost Estimate

The following cost estimate is based on the engineer's preliminary design and has been reviewed by staff:

Item	Description	Quantity	Unit	Unit Price	Total
1	Mobilization	1	LS	$325,000	$325,000
2	Traffic Control	1	LS	30,000	30,000
3	Site Preparation	1	LS	125,000	125,000
4	Pipe/Liner Removal	1	LS	90,000	90,000
5	Precast Box Culvert	980	LF	1,500	1,470,000
6	Reinforced Concrete Pipe	1,420	LF	700	994,000
7	Turnouts	1	LS	100,000	100,000
8	Structures	1	LS	120,000	120,000
9	Restoration	1	LS	300,000	300,000
				Construction Cost	**$3,554,000**
				Contingency	356,000
				Design & Construction Engineering	555,000
				Legal and Administrative	35,000
				TOTAL	**$4,500,000**

Cost Sharing & Repayment

The recommended cost sharing and repayment are:

Agency	Cost Sharing	% of Total
Board of Water Resources	$2,380,000	52.9%
BOR - WaterSMART Grant	1,700,000	37.8
Applicant	420,000	9.3
TOTAL	**$4,500,000**	**100%**

The WaterSMART grant has been awarded for the work to begin in 2024.

Staff recommends the Board authorize 52.9% of the project cost, up to $2,380,000, and that the project be purchased at 2.1% interest over 30 years with annual payments of approximately $107,800.

The Applicant provides both agricultural and secondary irrigation water at an estimated 50/50 split; therefore, the interest rate is an average of the Board's agricultural rate of 1% and the M&I target rate of 3.28%. Previous canal improvement projects funded through the Conservation & Development Fund have had repayment terms of 30 years or more.

Economic Feasibility

The primary purpose of the proposed project is to increase safety. Therefore, it is assumed there is no project alternative and that the benefit/cost ratio is 1.0.

Financial Feasibility

Monetary benefits of the project include reduced operation and maintenance costs of approximately a few thousand dollars, as well as the availability to use approximately 1,100 acre-feet of conserved water within its 40,000-acre service area.

Water Rights & Supply

The Applicant holds dozens of water rights for Weber River diversions to irrigate over 40,000 acres. It also has storage rights of 28,000 acre-feet in East Canyon Reservoir and 29,000 acre-feet in Echo Reservoir. The Board holds title to 21 of the Applicant's major water rights from previous projects.

Easements

The proposed project will be constructed within the existing canal alignment. No additional easements will be needed.

Environmental

Since the project will be constructed within the existing canal alignment, no long-term environmental impacts are expected due to the project.

Water Conservation

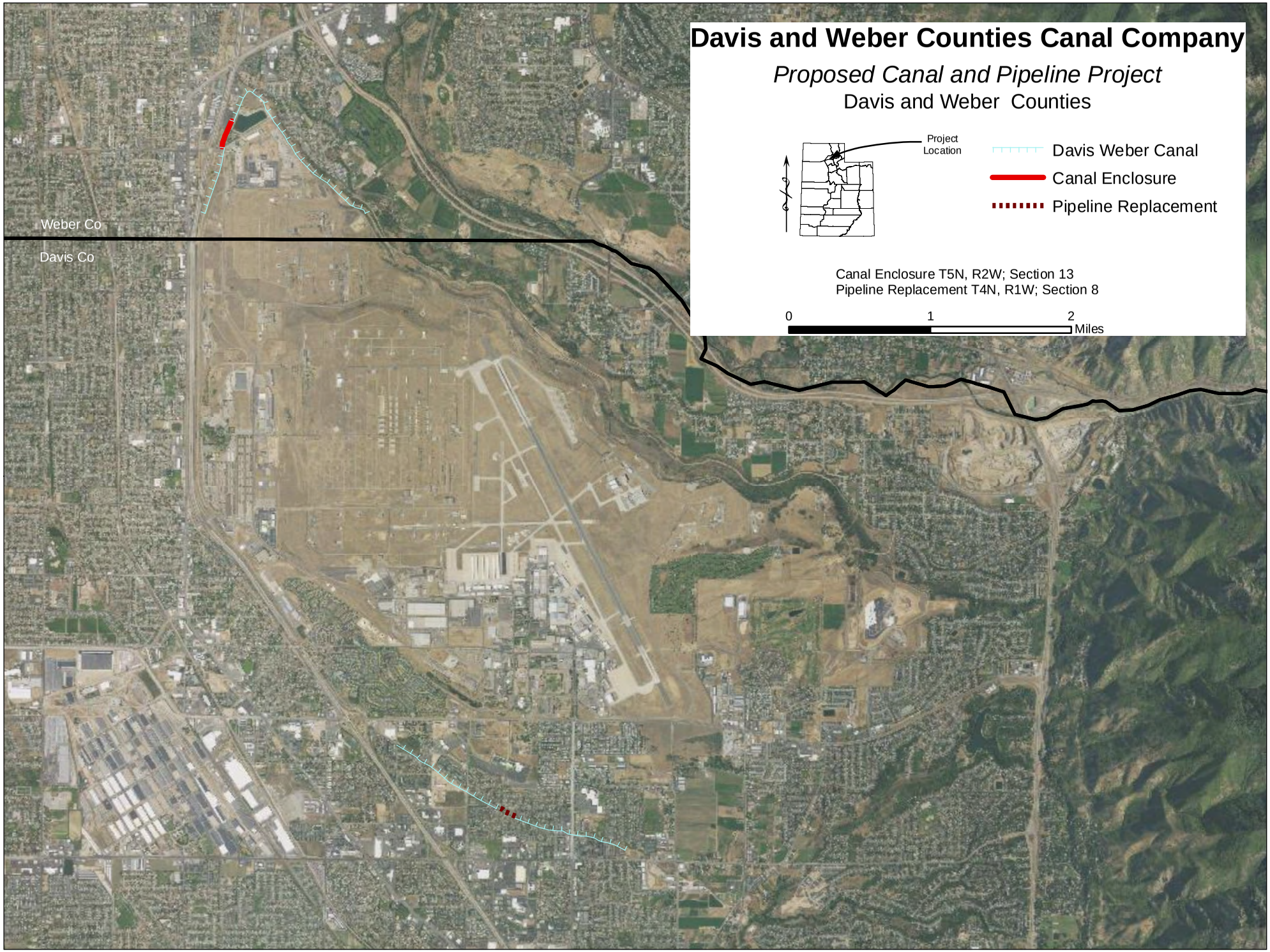
It is estimated that approximately 1,100 acre-feet of water will be conserved annually by the project, which will be held in storage and used in the Applicant's service area.

Applicant's Responsibilities

If the Board authorizes the proposed project, the Applicant must do the following before a purchase agreement can be executed:

1. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.
2. Pass a resolution by the appropriate majority (as defined in the company's Articles of Incorporation and Bylaws) authorizing its officers to do the following:
    a. Assign properties, easements, and water rights required for the project to the Board of Water Resources.
    b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the Board.
3. Have an attorney give the Board of Water Resources a written legal opinion that:
    a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.
    b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.
    c. The company has obtained all permits required for the project.

   d. The company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.
   e. The company's water rights applicable to the project are unencumbered and legally transferable to the Board of Water Resources, and that they cover the land to be irrigated by the project.
   f. The company is in compliance with sections 73-10-33, 10-9a-211, and 17-27a-211 of the Utah Code governing management plans for water conveyance facilities.
4. Update its water conservation plan for its service area and obtain approval of it from the Division of Water Resources.
5. Obtain approval of final plans and specifications from the Division of Water Resources.
6. Obtain letters from all outside financing agencies establishing their commitment of funds to the project.


Davis and Weber Counties Canal Company
Proposed Canal and Pipeline Project
Davis and Weber Counties
Project Location
Davis Weber Canal
Canal Enclosure
Pipeline Replacement
Canal Enclosure T5N, R2W; Section 13
Pipeline Replacement T4N, R1W; Section 8
0
1
2
Miles
Weber Co
Davis Co


Davis Weber Canal
Canal Enclosure
T5N, R2W; Section 13
0
500
1,000
Feet


Davis Weber Canal
Pipeline Replacement
T4N, R1W; Section 8
0
500
1,000
Feet

BOARD OF WATER RESOURCES
Secondary Meter Report

Lehi City

Applicant: Lehi City

Project Number: RM074
Fund: Conservation and Development Fund
Cost Estimate: $8,891,000

Application Received: 7/5/2022
Board Meeting Date: 12/5/2023

Board Member: Michael Davis
Project Manager: Tom Cox

Project Summary: The purpose of the project is to purchase and install approximately 3,550 secondary meters.

Recommendation: Staff recommends the Board authorize 25.5% of the project cost, up to $2,267,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $176,000 (including reserves).

Project Contacts:

Mayor:
Mark Johnson
153 North 100 East
Lehi, UT 84043
801-768-7100

Meter Supervisor:
Justin Monson
2538 North 300 West
Lehi, UT 84043
385-250-5753

Engineer:
Lehi City Staff
2538 North 300 West
Lehi, UT 84043
835-201-1700

Location
The proposed project is located in Lehi City in Utah County.

Project Summary
Lehi City serves approximately 18,100 secondary irrigation connections. About 6,700 connections have been metered. State legislation requires all secondary connections to be metered by 2030. The Board previously committed $10,000,000 in ARPA grant funds and $3,643,000 in loan funds (RM001) in 2022 and $6,223,500 in ARPA grant funds for this application (RM074) in October 2023.

The Applicant is requesting loan funding to purchase and install approximately 3,550 secondary meters. This funding will not be enough to complete all unmetered connections.

Meter installation is ongoing and is expected to be completed by December 2026. Engineering services are being provided by Lehi City staff.

Cost Estimate & Sharing
The estimated cost of the project is $8,891,000. The recommended cost sharing is as follows:

Agency	Cost Sharing	% of Total
Board of Water Resources – Loan	$2,267,000	25.5%
Board of Water Resources – Grant	6,223,500	70.0
Applicant	400,500	4.5
TOTAL	**$8,891,000**	**100%**

Staff recommends the Board authorize 25.5% of the project cost, up to $2,267,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $176,000 (including reserves).

Economic Feasibility
The Applicant is required by current state law to complete metering of their secondary system by January 1, 2030. As there is no alternative to metering, the benefit-cost ratio is assumed to be 1.0.

Water Rights & Supply
The city obtains secondary irrigation water from wells and multiple irrigation and canal companies and water districts.

Easements
Meters will be placed in existing easements held by the Applicant. No additional easements will be required for the proposed project.

Environmental
Since meters will be installed on existing connections, no long-term environmental impacts are expected.

Applicant's Responsibilities

The Applicant will be required to make all arrangements to sell the Board a non-voted revenue bond, as well as verify it has adequate water rights and rights-of-way to construct the project. If the project is authorized, a full list of requirements and procedures necessary to close the bond will be furnished to the Applicant.

BOARD OF WATER RESOURCES
Secondary Meter Report

Bountiful Irrigation District

Applicant:

Project Number: RM116
Fund: Conservation and Development Fund
Cost Estimate: $10,556,000

Application Received: 12/19/2022
Board Meeting Date: 12/5/2023

Board Member: Kyle Stephens
Project Manager: Tom Cox

Project Summary: The purpose of the project is to purchase and install approximately 3,970 secondary meters.

Recommendation: Staff recommends the Board authorize 25.5% of the project cost, up to $2,692,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $209,000 (including reserves).

Project Contacts:

President:
Kirk Gough
995 South 500 West
Bountiful, UT 84010
801-295-5573

Managing Supervisor:
Kurtis Anderson
995 South 500 West
Bountiful, UT 84010
801-390-1860

Engineer:
Greg Seegmiller
J-U-B Engineers
446 North 900 West
Kaysville, UT 84037
801-547-0393

Location

The proposed project is located in Bountiful, Centerville, West Bountiful and Woods Cross in Davis County.

Project Summary

Bountiful Irrigation District serves approximately 9,800 secondary irrigation connections. About 1,800 connections have been metered. State legislation requires all secondary connections to be metered by 2030. The Board previously committed $10,000,000 in ARPA grant funds and $3,643,000 in loan funds (RM007), as well as $7,389,000 in ARPA grant funds in October 2023 for this project (RM116).

The Applicant is requesting loan funding to purchase and install approximately 3,970 secondary meters.

Construction is ongoing and is expected to be completed by December 2026. Engineering services are being provided by J-U-B Engineers.

Cost Estimate & Sharing

The estimated cost of the project is $10,556,000. The recommended cost sharing is as follows:

Agency	Cost Sharing	% of Total
Board of Water Resources - Loan	$2,692,000	25.5%
Board of Water Resources - Grant	7,389,000	70.0
Applicant	475,000	4.5
TOTAL	**$10,556,000**	**100%**

Staff recommends the Board authorize 25.5% of the project cost, up to $2,692,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $209,000 (including reserves).

Economic Feasibility

The Applicant is required by current state law to complete metering of their secondary system by January 1, 2030. As there is no alternative to metering, the benefit-cost ratio is assumed to be 1.0.

Water Rights & Supply

The Applicant obtains its water through a purchase agreement with Weber Basin Water Conservancy District.

Easements

Meters will be placed in existing easements held by the Applicant. No additional easements will be required for the proposed project.

Environmental

Since the meters will be installed on existing connections, no long-term environmental impacts are expected.

Applicant's Responsibilities

The Applicant will be required to make all arrangements to sell the Board a non-voted revenue bond, as well as verify it has adequate water rights and rights-of-way to construct the project. If the project is authorized, a full list of requirements and procedures necessary to close the bond will be furnished to the Applicant.

Applicant: **Metropolitan Water District of Salt Lake & Sandy (MWDSLS)**

Project Number: RL590
Fund: Conservation and Development Fund
Cost Estimate: $50,000,000

Application Received: 05/31/2023
Board Meeting Date: 12/05/2023

Board Member: Juliette Tennert
Project Manager: Brad Caldwell

Project Summary: The purpose of the project is to purchase and install about 2.5 miles of welded-steel pipeline (60- to 72-inch), about 2,400 feet of 54-inch HDPE pipe, and improvements at the site of the Little Cottonwood Water Treatment Plant.

Recommendation: If the Board authorizes the project, it is suggested the Board participate in an interest rate buydown with MWDSLS to buy the market rate down to a net effective interest rate of 3%. The $22,000,000 bonded indebtedness to the Board will be returned at 1% interest, over 30 years, with annual payments of approximately $885,000 (includes reserves).

Project Contacts:

Board Chair:
Tom Godfrey
3430 E. Danish Road
SLC, UT 84106
801-942-1391

General Manager:
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3430 E. Danish Road
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Engineering Manager:
Wayne Winsor
3430 E. Danish Road
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801-696-9134

Project Engineer:
Kelly Stevens
3430 E. Danish Road
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801-696-9134

Location
The proposed project is located in Cottonwood Heights in Salt Lake County.

Introduction & Background
The Metropolitan Water District of Salt Lake & Sandy (MWDSLS) has a primary function to supply water to Salt Lake City and Sandy. MWDSLS water supply comes from Little Cottonwood, Bell Canyon, the Provo River Project, Little Dell Reservoir, and the Central Utah Project. MWDSLS has approximately 78 million gallons (MG) of drinking water storage with an additional 170,000 acre-feet (AF) of untreated water storage in Deer Creek and Little Dell reservoirs. There is also 40 MG of untreated water storage at the Point of the Mountain Water Treatment Facility.

MWDSLS had one previous project funded by the Board to construct Little Dell Dam that has been paid off. MWDSLS has an existing annual debt payment of $19.2 million that will be paid off in 2037.

Existing Conditions & Problems
The Salt Lake Aqueduct (SLA) is the aqueduct between the Big Cottonwood Water Treatment Plant (BCWTP) and Deer Creek Reservoir. While it is in use, it is aging and seismically unstable and will need to be upgraded eventually. The Little Cottonwood Conduit (LCC) connects the Little Cottonwood WTP to the Big Cottonwood Conduit (BCC). It is currently in "active failure" and cannot provide the capacity for which it was designed. It will be abandoned once it reaches failure.

Proposed Project
MWDSLS is in collaboration with Salt Lake City Department of Public Utilities (SLCDPU) to convey water from Big Cottonwood WTP to Little Cottonwood WTP and replace and/or upgrade a portion of the existing Salt Lake Aqueduct (SLA). This project is one part of a larger overall project to replace and/or upgrade the entire SLA. The Applicant is requesting that the Board fund the MWDSLS portion of this project. The following are descriptions for this project:

Salt Lake Aqueduct Resiliency (SLAR): This includes the installation of about 2.5 miles of welded-steel pipeline from the mouth of Big Cottonwood Canyon to the north end of the Little Cottonwood WTP. Once the SLAR pipeline is in place, the corresponding portion of the SLA pipeline can eventually go off-line and potentially be slip-lined. This will allow it to be placed back in service and provide redundancy as part of a two-pipe conveyance system in the future. The SLAR will also provide additional capacity as the LCC can no longer provide the capacity for which it was designed. The LCC will eventually be abandoned in place. The cost of the SLAR will be divided between MWDSLS and SLCDPU by the ratios of 110/145 and 35/145, respectively.

Site Improvements for Little Cottonwood WTP: Site improvements for the existing Little Cottonwood WTP are needed due to the construction of the Cottonwood Connector Reach 2 pipeline by SLCDPU.

Little Cottonwood Conduit Raw Water Replacement (LCCR): The LCCR will replace the main pipeline that feeds raw water into MWDSLS' Little Cottonwood WTP from Little Cottonwood Creek.

Benefits
The project will increase the seismic resiliency and stability of the aqueduct. The SLAR pipeline will also add additional capacity to the system and provide redundancy for MWDSLS and the SLCDPU.

Cost Estimate

The following cost estimate is based on the engineer's preliminary design and has been reviewed by staff:

Item	Description	Quantity	Unit	Cost/Unit	Total
1	Mobilization/Traffic Control	1	LS	$657,000	$657,000
2	54-inch HDPE Pipeline (LCCR)	2,375	LF	$760	$1,805,000
3*	60-inch Welded Steel Pipe (SLAR)*	1,485	LF	$950	$1,070,000
4*	66-inch Welded Steel Pipe (SLAR)*	1,600	LF	$1,300	$1,578,000
5*	72-inch Welded Steel Pipe (SLAR)*	9,625	LF	$1,450	$10,588,000
6	Relocate portion of LCC for SLAR install	1	LS	$476,000	$476,000
7	Relocate portion of SLA for SLAR install	1	LS	$1,171,000	$1,171,000
8	Access Manway Vault	1	LS	$2,546,000	$2,546,000
9	Cathodic Protection System	1	LS	$148,000	$148,000
10	Curb, Gutter, Sidewalk & Landscaping	1	LS	$1,236,000	$1,236,000
11	Fiber Optic System/BCWTP Pump Station	1	LS	$1,623,000	$1,623,000
12	Road Restoration	1	LS	$317,000	$317,000
13	Shoring and Bracing	1	LS	$698,000	$698,000
14	Large Valve Vaults (30'x30'x20')	1	LS	$3,218,000	$3,218,000
15	Trench Stabilization Material	1	LS	$921,000	$921,000
16	Turnouts	1	LS	$1,017,000	$1,017,000
17	Utility Relocations	1	LS	$1,103,000	$1,103,000
18	30-inch Bypass w/ Fixed Cone Valve	1	LS	$2,585,000	$2,585,000
19	ASR Turnout	1	LS	$36,000	$36,000
20	Correction of 42-inch Flow Restriction	1	LS	$372,000	$372,000
21	Install Weir Gates/Farmer's Gate	1	LS	$770,000	$770,000
22	LCCR Connection to CC2	1	LS	$179,000	$179,000
23	LCCR Meter Vault	1	LS	$1,694,000	$1,694,000
24	Sewer Realignment	1	LS	$330,000	$330,000
25	Slope Stabilization	1	LS	$1,180,000	$1,180,000
26	LCWTP Site Improvements	1	LS	$1,400,000	$1,400,000
				Construction Cost	**$38,718,000**
				Contingency	$3,040,000
				Public Involvement	$465,000
				Design/Construction Engineering	$4,092,000
				Legal and Administrative	$200,000
				Easement Procurement	$3,485,000
				TOTAL	**$50,000,000**

These line items costs are multiplied by 110/145ths to represent MWDSLS' portion of costs.

Cost Sharing & Repayment

The recommended cost sharing and repayment are as follows:

Agency	Cost Sharing	% of Total
Board of Water Resources	$22,000,000	44.0%
Applicant/Market Bond	28,000,000	56.0
TOTAL	**$50,000,000**	**100%**

If the Board authorizes the project, it is suggested the Board participate in an interest rate buydown with MWDSLS to buy the market rate down to a net effective interest rate of 3%. The $22,000,000 bonded indebtedness to the Board will be returned at 1% interest, over 30 years, with annual payments of approximately $885,000 (includes reserves).

The Market Bond will be repaid in 20 years, with an interest rate of about 4.88%, with annual payments of approximately $2,265,000.

Economic Feasibility

There is no alternative to this project as it is necessary to install a pipeline to provide redundancy to the existing Salt Lake Aqueduct (SLA) due to the age and the below-standard seismic design. It is also necessary to provide additional capacity as the LCC is in "active failure" mode and cannot provide its full design capacity. Due to these reasons, the benefit/cost ratio is assumed to be 1.0.

Financial Feasibility

The repayment is based on information from the Applicant's financial advisor using current market rates and terms to allow for a net effective interest rate of 3% by participating in an interest rate buydown.

Water Rights & Supply

MWDSLS has the necessary water rights for this project.

Easements

Many easements will be needed for the installation of the SLAR pipeline and are included in the project cost estimate.

Environmental

No lasting environmental impact will be created by this project. Existing paved roads and other developed areas will be used to access the different locations for the project. No new access roads will be needed to complete the project.

Water Conservation

No measurable water conservation is expected from completion of the project.

Applicant's Responsibilities

The Applicant will be required to make all arrangements to sell the Board a non-voted revenue bond, as well as verify it has adequate water rights and rights-of-way to construct the project. If the project is authorized, a full list of requirements and procedures necessary to close the bond will be furnished to the Applicant.

BOARD OF WATER RESOURCES
Feasibility Report

Hurricane City

Applicant:

Project Number: RL591
Fund: Cities Water Loan Fund
Cost Estimate: $31,300,000

Application Received: 9/27/2023
Board Meeting Date: 12/5/2023

Board Member: Spencer Jones
Project Manager: Ethan Stayner

Project Summary: The purpose of the project is to purchase and install more than 17 miles of pressurized pipeline and construct two settling ponds to expand the existing secondary system. The project also includes the installation of two wells and a 2-million-gallon (MG) tank for the existing culinary system.

Recommendation: Staff recommends the Board authorize 40.5% of the project cost, up to $12,665,000, and that the bonded indebtedness be returned at 0% interest over 25 years with annual payments of approximately $528,000 (including reserves).

Project Contacts:

Mayor:
Nanette Billings
147 North 870 West
Hurricane, UT 84737
435-635-2811

Water Superintendent:
Ken Richins
147 North 870 West
Hurricane, UT 84737
435-635-9442

Engineer:
Glen Carnahan
Alpha Engineering
43 South 100 East, Suite 100
St. George UT 84770
435-628-6500

Location
The proposed project is located south of Gould's Wash, in the northeast portion of Hurricane City in Washington County.

Introduction & Background
Hurricane City was first incorporated in 1896. The Board has funded several projects for the Applicant including two culinary projects and two secondary water projects. These were funded between 1978 and 1992 and have all been repaid. Currently, the Board has committed funds for both a loan and an ARPA grant for secondary metering, and a Dam Safety upgrade grant for Frog Hollow Debris Basin.

Existing Conditions & Problems
The Applicant has an irrigation system, south of Gould's Wash, that is a flood irrigation system that was originally used for agricultural irrigation. This part of the city is converting quickly from agricultural land to municipal. This system is inefficient and loses water to seepage and evaporation, and it has also caused flooding on adjacent properties.

As Hurricane City continues to develop, there is a greater demand on the culinary system and there is a need for more source water and storage in that part of the city.

Proposed Project
The purpose of the project is to purchase and install more than 17 miles of pressurized pipeline and construct two settling ponds to expand the existing secondary system. The project also includes the installation of two wells and a 2 MG tank for the existing culinary system.

The irrigation system upgrades will replace the existing flood irrigation system with pressurized pipelines necessary to reach current and future residential property, and connect to the secondary system that exists North of Gould's Wash. The two concrete-lined settling ponds will reduce solids from the secondary water before delivery to customers.

The project for the culinary system includes two wells, both to be drilled to 600 feet deep, with necessary grading and pump stations. One will be constructed on city property in the southeast region of the city (Sky Ranch) with a pump booster station and a de-sanding structure. The other will be constructed on city property near Gould's Wash. There will also be a 2 MG tank constructed near the Sky Ranch well, with necessary piping, valves, and appurtenances.

Benefits
The new pressurized irrigation system will reduce demand on the culinary system from a growing population. Additionally, irrigation for lawns and gardens will be more efficient with a pressurized system and reduce losses. The new wells and storage tank provide additional sources and storage capacity for the culinary system.

Cost Estimate

The following cost estimates are based on the engineer's preliminary design and have been reviewed by staff. Together these projects total $31,300,000.

Secondary Irrigation System Upgrades

Item	Description	Quantity	Unit	Unit Price	Total
1	4" C-900 PVC Pipe	54	LF	$60	$3,240
2	6" C-900 PVC Pipe	46,767	LF	$66	$3,086,622
3	8" C-900 PVC Pipe	30, 019	LF	$72	$2,161,368
4	10" C-900 PVC Pipe	1,086	LF	$79	$85,794
5	12" C-900 PVC Pipe	4,264	LF	$88	$375,232
6	14" C-900 PVC Pipe	1,384	LF	$100	$138,400
7	16" C-900 PVC Pipe	1,349	LF	$110	$148,390
8	18" C-900 PVC Pipe	3,829	LF	$120	$459,480
9	20" C-900 PVC Pipe	1,348	LF	$130	$175,240
10	30" C-900 PVC/DIP Pipe	5,010	LF	$210	$1,052,100
11	4" Gate Valve	1	EA	$2,500	$2,500
12	6" Gate Valve	74	EA	$3,000	$222,000
13	8" Gate Valve	42	EA	$3,300	$138,600
14	10" Gate Valve	2	EA	$4,800	$9,600
15	12" Gate Valve	6	EA	$6,500	$39,000
16	14" Gate Valve	1	EA	$21,000	$21,000
17	16" Gate Valve	1	EA	$24,000	$24,000
18	18" Gate Valve	2	EA	$27,000	$54,000
19	20" Gate Valve	2	EA	$32,000	$64,000
20	30" Gate Valve	1	EA	$48,000	$48,000
21	Mobilization & Traffic Control	1	LS	$1,087,533	$1,087,533
22	3 MG Settling Pond	2	LS	$734,776	$1,469,552
23	1.3 MG Sludge Pond	1	LS	$350,000	$350,000
24	Pump Station	1	LS	$1,250,000	$1,250,000
25	Control Valve Vault, Connections, Pigging & Pond Piping	1	LS	$2,913,750	$2,913,750
26	Asphalt Replacement	668,706	SF	$4.40	$2,942,306
27	Earthwork, Material & Backfill	1	LS	$776,352	$776,352
			Secondary System Construction Cost		**$19,098,059**
				Contingency	$2,784,941
				Administration/Legal	$100,000
				Pond Site Purchase	$1,750,000
				Secondary System Subtotal	**$23,733,000**

Culinary System Upgrades

Item	Description	Quantity	Unit	Unit Price	Total
1	Sky Ranch Tank	1	LS	$2,766,838	$2,766,838
2	Sky Ranch Well	1	LS	$2,068,500	$2,068,500
3	Gould's Wash Well	1	LS	$1,218,000	$1,218,000
				Culinary System Construction Cost	**$6,053,338**
				Contingency	$613,662
				Engineering	825,000
				Administration/Legal	75,000
				Culinary System Subtotal	**7,567,000**

Cost Sharing & Repayment

The recommended cost sharing and repayment are:

Agency	Cost Sharing	% of Total
Board of Water Resources	$12,665,000	40.5%
NRCS PL-566 Grant	$16,400,000	52.4
Applicant	$2,235,000	7.1
TOTAL	**$31,300,000**	**100%**

Funding from the Natural Resources Conservation Service (NRCS) has been awarded to the Applicant for the secondary irrigation system expansion. The NRCS will pay for 100% of engineering costs and up to 75% of construction costs for this portion of the project.

Staff recommends the Board authorize 40.5% of the project cost, up to $12,665,000, and that the bonded indebtedness be returned at 0% interest over 25 years with annual payments of approximately $528,000 (including reserves).

Economic Feasibility

There is no viable alternative for this project; therefore, a benefit/cost ratio of 1.0 has been assigned.

Financial Feasibility

Based on the Board's water service affordability guidelines, residents in Hurricane could pay up to $56.12 monthly for water. The average secondary water bill was estimated, based on about 25% of the culinary connections also being on the secondary system. The cost of all water, based on 9,077 culinary connections, is shown in the following table.

Water Cost	Annual Cost	Cost/Conn/Mo
Avg. Water Bill	$4,285,070	$39.34
Avg. Secondary Water Bill	$326,772	$3.00
Property Tax for Water	$1,105,579	$10.15
Proposed Board of Water Resources Loan	$528,000	$4.85
TOTAL	$6,245,421	$57.34

Based on the table, it is noted that the Board repayment will push the Applicant above the affordability guideline by just more than one dollar.

Water Rights & Supply

Hurricane City has the necessary water rights for this project and plans to purchase additional shares from Hurricane Canal Company as they become available.

Easements

The City is in the process of obtaining two small easements. The rest of the construction will take place on city property or existing right-of-way.

Environmental

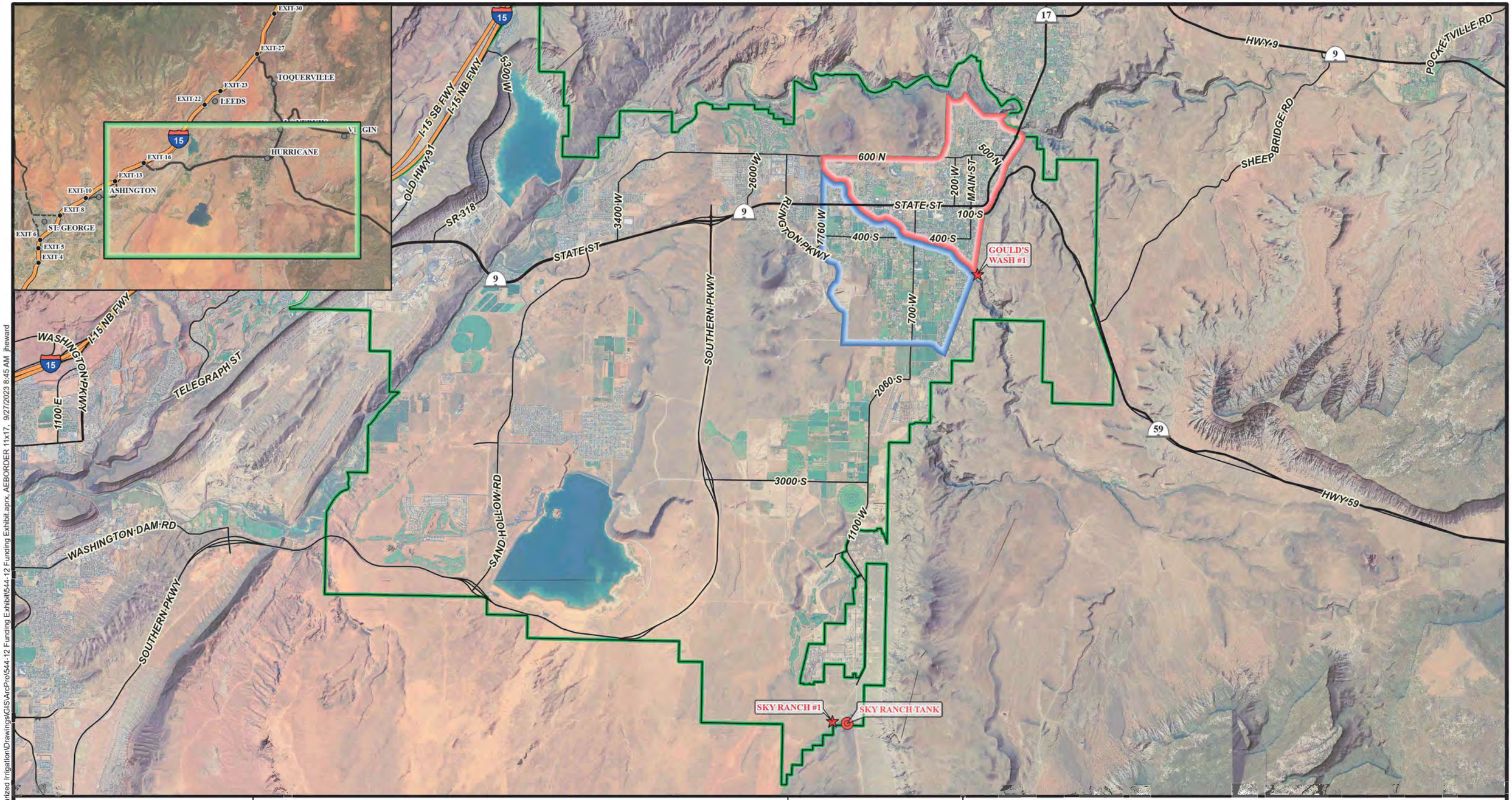
As part of the requirements for the funding from the NRCS, Environmental Assessment (EA) was completed. In addition to water conservation, this project is expected to positively impact the environment by reducing flood damage to private land, protected watershed, and public recreation areas.

Water Conservation

The expansion of the pressurized irrigation system is expected to save between 800 to 1,200 acre-feet annually.

Applicant's Responsibilities

The Applicant will be required to make all arrangements to sell the Board a non-voted revenue bond, as well as verify it has adequate water rights and rights-of-way to construct the project. If the project is authorized, a full list of requirements and procedures necessary to close the bond will be furnished to the Applicant.



P:\544-12 Bowen Collins Hurricane Pressurized Irrigation\Drawings\GIS\ArcPro\544-12 Funding Exhibit\544-12 Funding Exhibit.aprx, AEBORDER 11x17, 9/27/2023 8:45 AM jheward

0 2,500 5,000 10,000
Feet

Legend

- Municipal Boundary
- Existing Irrigation Service Area
- Proposed Irrigation Service Area
- Future Well Site
- Proposed Tank

N
W E
S

Hurricane City Water Project Exhibits

Hurricane, Utah

Spatial Reference:	Utah State Plane NAD 83, feet
Drawn By:	JRH
Scale:	1" = 6,000 feet
Date:	September 27, 2023

1 of 1

ALPHA ENGINEERING
43 South 100 East, Suite 100 • St George, Utah 84770
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BOARD OF WATER RESOURCES
Committal of Funds

Morgan Secondary Water Association

Applicant:

Project Number: RM086
Fund: Conservation and Development Fund
Total Cost: $2,510,000

Application Received: 12/28/2022
Authorized: 3/22/2023
Board Meeting Date: 12/5/2023

Board Member: Kyle Stephens
Project Manager: Russell Hadley

Project Summary: The purpose of the project is to purchase and install 840 secondary meters on the pressurized secondary water system.

Recommendation: Staff recommends the Board commit 25.5% of the project cost, up to $640,000, and that the project be purchased at 1% interest over 15 years, with annual payments of approximately $46,200.

Project Contacts:

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Engineer:
Matthew Crump
J-U-B Engineers
466 North 900 West
Kaysville, UT 84037
801-347-8550

Location
The proposed project is located in Morgan City in Morgan County.

Project Summary
The purpose of the project is to purchase and install approximately 840 secondary water meters. The project was authorized in March of 2023. The Board committed the ARPA funds at the same meeting, but not the loan funds. The Applicant has since completed their requirements for the loan.

Cost Estimate & Sharing
The cost estimate and sharing remain as authorized:

Agency	Cost Sharing	% of Total
Board of Water Resources – Loan	$640,000	25.5%
Board of Water Resources – Grant	1,757,000	70.0
Applicant	113,000	4.5
TOTAL	**$2,510,000**	**100%**

Repayment
Staff recommends the Board commit 25.5% of the project cost, up to $640,000, and that the project be purchased at 1% interest over 15 years, with annual payments of approximately $46,200.

Applicant: **Eden Water Works Company**

Project Number: RE470
Fund: Conservation and Development Fund
Total Cost: $2,500,000

Application Received: 4/21/2023
Authorized: 6/29/2023
Committed: 6/29/2023
Board Meeting Date: 12/5/2023

Board Member: Kyle Stephens
Project Manager: Tom Cox

Project Summary: The purpose of the project is to install about 6,800 linear feet of PVC transmission pipeline.

Recommendation: Staff recommends the Board commit an additional $425,000 and amend the purchase agreement to state the Board will provide 85% of the project cost, up to $2,125,000, and that the project be purchased at 1% interest over 30 years with annual payments of approximately $82,400.

Project Contacts:

President:
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801-391-2223

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Engineer:
Nathan Smith
J-U-B Engineers
466 N. 900 W.
Kaysville, Ut 84414
801-547-0393

Location
The proposed project is located in Eden in Weber County.

Project Summary
In June 2023, the Board committed funds to install about 6,800 linear feet of PVC transmission pipeline. Construction is underway; however, bids came in significantly higher than expected.

Cost Estimate & Sharing
The project cost estimate has increased by $500,000, from $2 million to $2.5 million. The committed and proposed cost sharing are:

Agency	Committed Cost Sharing	% of Total	Proposed Cost Sharing	% of Total
Board of Water Resources	$1,700,000	85%	$2,125,000	85%
Applicant	300,000	15	375,000	15
TOTAL	**$2,000,000**	**100%**	**$2,500,000**	**100%**

Purchase Agreement
Funds were originally committed to the project under the following terms, that the project be purchased at 1% interest over 30 years with annual payments of approximately $65,900.

The Applicant is requesting an additional $425,000.

Staff recommends the Board commit an additional $425,000 and amend the purchase agreement to state the Board will provide 85% of the project cost, up to $2,125,000, and that the project be purchased at 1% interest over 30 years with annual payments of approximately $82,400.

BOARD OF WATER RESOURCES
Reauthorization & Committal of Funds

UTAH DNR WATER RESOURCES

Applicant: **Grantsville Irrigation Company**

Project Number: RM103
Fund: ARPA Grant
Cost Estimate: $2,300,000

Application Received: 2/20/2023
Authorized: 6/29/2023
Board Meeting Date: 12/5/2023

Board Member: Juliette Tennert
Project Manager: Ann Baynard

Project Summary: The purpose of the project is to install, repair and replace residential meters, repair the North Willow Creek diversion structure, and replace the North Willow Creek inlet channel.

Recommendation: Staff recommends the Board reauthorize and commit $2,000,000 as a Water Conservation ARPA grant to include the scope changes.

Project Contacts:

President:
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384 S. Quirk Street
Grantsville, UT 84029
435-830-3175

Secretary:
Elise Mondragon
411 S. West Street
Grantsville, UT 84029
435-884-3451

Engineer:
Judd Lawrence
Bingham Engineering
262 Wright Brothers Drive
Suite 120
Salt Lake City, UT 84116
801-580-1687

Location

The proposed project is located in Grantsville in Tooele County.

Project Summary

Utah is one of the driest states in the nation, one of the fastest-growing, and drinking water sources are limited. In addition, potential climate change impacts and the current multi-year drought in Utah threaten water supplies and put public drinking water supplies at risk. Municipalities and water companies need to reduce their water use to stretch their existing drinking water supplies. Many Utah communities also have "secondary" water, typically used to irrigate lawns and gardens. Secondary water is not treated to culinary standards and is utilized throughout the state to protect the drinking water supplies. However, many users waste this precious resource because they do not realize how much they are using. The State of Utah believes that it is critical to invest in water conservation, water metering, and dual water pipe and secondary water distribution systems to protect potable drinking water supplies. This will also help lower the cost of treating drinking water and make it more cost-effective by decreasing the amount of water that needs to be treated to potable standards.

Technology has improved over the last decade and allows for the metering of untreated secondary water. Individual water use cannot be measured without metering, so water suppliers have begun installing meters on their secondary water connections. By educating their customers on their measured use compared to the amount they should be using, suppliers have seen as much as a 20-30% reduction in use. Secondary metering, combined with conservation and education, protects the drinking water supplies and allows drinking water providers to plan for their future growth.

In 2022, the Utah Legislature allocated ARPA funds for secondary water suppliers to purchase and install meters on existing pressurized systems. In 2023, additional funds were allocated by the Legislature for those systems that installed meters prior to May 4, 2022. As indicated in Utah Code 73-10-34.5(7), those systems that have "not otherwise received a grant" to install secondary meters can receive a grant from the Board "for the purpose of conservation; and in an amount not to exceed $2,000,000."

In the June 2023 board meeting, the Board authorized $2,000,000 as a Water Conservation grant. Since the June board meeting, the Applicant has requested that the scope change to include the repair the North Willow Creek inlet channel and remove the repair of the South Willow diversion structure from the scope. The meter installation will remain the same.

The inlet channel transmits water from North Willow Creek to the Grantsville Reservoir. It seems that the channel was poorly designed, and the company has had many problems over the years with leaking. The company has tried to repair it many times; however, it continues to fail and loses a large quantity of water. Additionally, there is concern, because of the alignment of the channel, that continued leakage could cause erosion near the cover material and clay seal of the dam.

It is expected that more water will be conserved by replacing the inlet channel rather than the diversion structures. Construction is expected to begin winter 2023 and be completed by winter 2026. Engineering services are being provided by Bingham Engineering.

Cost Estimate & Sharing

The estimated cost of the project is $2,300,000. The recommended cost sharing is as follows:

Agency	Cost Sharing
Board of Water Resources - Water Conservation Grant	$2,000,000
Applicant	300,000
TOTAL	**$2,300,000**

Staff recommends the Board reauthorize and commit $2,000,000 as a Water Conservation grant to include the scope changes.

BOARD OF WATER RESOURCES
Reauthorization – Change in Scope

Applicant: **Liberty Pipeline Company**

Project Number: RE468
Fund: Revolving Construction Fund
Cost Estimate: $3,670,000

Application Received: 2/10/2023
Authorization: 8/10/2023
Board Meeting Date: 12/5/2023

Board Member: Kyle Stephens
Project Manager: Ann Baynard

Project Summary: The purpose of the project is to install a booster pump station and 11,800 feet of 8-inch PVC transmission line.

Recommendation: Staff recommends the Board reauthorize 27.2% of the project cost, up to $1,000,000, from the Revolving Construction Fund, and that the project be purchased at 0% interest, over 20 years, with annual payments of approximately $50,000.

Project Contacts:

President:
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3799 East 4100 North
Liberty, UT 84310
801-941-6302

Secretary:
Jodi Davis
PO Box 1200
Eden, UT 84310
801-745-2088

Engineer:
Nathan Smith
J-U-B Engineers
466 North 900 West
Kaysville, UT 84037
801-547-0393

Location

The proposed project is located in Liberty, about 10 miles northwest of Huntsville, in Weber County.

Introduction & Background

Liberty Pipeline Company provides culinary water to approximately 679 connections. Water is obtained from two springs and two wells, stored in four tanks with a combined capacity of 1,100,000 gallons, and delivered through approximately 25 miles of pipeline ranging from four to 14 inches in diameter. About 130 of the customers also receive secondary water from Liberty Irrigation Company.

The Applicant received funding from the Board in 1977 to replace the town culinary system; in 1993 to build a storage tank, develop a spring, build a pump station and a pipeline; and in 2000 to connect a culinary well to the system. The projects have all been repaid.

Existing Conditions & Problems

The Applicant has two main pressure zones: the South Zone and the North Zone. The North Zone is currently fed by a spring that is susceptible to drought conditions. In 2018, the spring nearly went dry, and the Applicant was faced with considering an emergency connection to a neighboring system or trucking in water.

In the August 2023 board meeting, the Board authorized $3,293,000 from the Conservation and Development Fund for the Applicant's project. The original cost estimate was $5,422,000. The Applicant has since decided to reduce the size of the project to be more affordable.

Proposed Project

The Applicant is requesting the Board reauthorize the project with a reduced project scope. The PRV station (Montgomery) and the pump station PRV will not be part of the project. Additionally, the replacement of the existing 6-inch distribution will be removed from the scope. This will reduce the length of the pipeline to be installed by about half of what was originally proposed. This also reduces the amount of bedding, backfill, and asphalt repair by about half.

The updated proposed project will include constructing a building with a booster pump station and a meeting room, and the installation of about 2 miles of an 8-inch transmission pipeline. The transmission pipeline will connect the North and South zones for the overall system to be drought resilient.

Due to the reduced cost estimate, the Applicant is requesting that their funding be provided from the Revolving Construction Fund.

Liberty Pipeline Company (LPC) has received a WaterSMART Drought Resiliency Grant from the Bureau of Reclamation. Technical assistance is being provided by J-U-B Engineers.

Benefits

The project will improve the drought resiliency of the entire system.

Cost Estimate

The following cost estimate has been updated and is based on the engineer's preliminary design and has been reviewed by staff:

Item	Description	Quantity	Unit	Unit Price	Total
1	Mobilization/SWPPP/Traffic Control	1	LS	$246,000	$246,000
2	Pump Station and Meeting Room	1	EA	500,000	500,000
3	8" C900 PVC Pipe	11,800	LF	95	1,121,000
4	Connections/Fittings	46	EA	5,500	253,000
5	Bedding/Backfill	17,500	TONS	30	525,000
6	Asphalt Repair	600	TONS	150	90,000
7	Solar Panel	1	LS	65,000	65,000
8	Fire Hydrants	10	EA	10,000	100,000
				Construction Cost	**$2,900,000**
				Contingency	290,000
				Design & Construction Engineering	420,000
				NEPA	30,000
				Legal and Administrative	30,000
				TOTAL	**$3,670,000**

Cost Sharing & Repayment

The authorized and proposed cost sharing and repayment are as follows:

Agency	Authorized Cost Sharing	% of Total	Proposed Cost Sharing	% of Total
Board of Water Resources	$3,293,000	60.8%	$1,000,000	27.2%
BOR WaterSMART Grant	1,547,700	28.5	1,547,700	42.2
Applicant	581,300	10.7	1,122,300	30.6
TOTAL	**$5,422,000**	**100%**	**$3,670,000**	**100%**

Staff recommends the Board reauthorize the funding to provide 27.2% of the project cost, up to $1,000,000 from the Revolving Construction Fund, and that the project be purchased at 0% interest, over 20 years, with annual payments of approximately $50,000.

Financial Feasibility

Based on the Board's water service affordability guidelines, residents in the Applicant's service area could pay up to $104.30 monthly for water. The following table estimates the current monthly cost of water per connection for 679 connections:

Water Cost	Annual Cost	Cost/Conn/ Month
Average Water Bill	$407,400	$50.00
Average Secondary Water Bill	49,140	6.03
Property Tax for Water	125,000	15.34
Proposed Board of Water Resources Loan	50,000	6.14
TOTAL	**$631,540**	**$77.51**

The average secondary water bill was estimated based on 130 connections with shares costing $9.00/share and residents having 3.5 shares, through Liberty Irrigation Company.

All the Applicant's customers who built their home after 2004, were required to purchase a contract (one acre-foot) from Weber Basin Water Conservancy District (WBWCD), which is paid through property taxes. The cost for one acre-foot of water from WBWCD is approximately $500. There have been approximately 15 new connections per year since 2004, totaling about 250 new connections since 2004. The number of new connections was estimated using the information provided to the Utah Division of Water Rights on the Applicant's annual water use forms.

According to the Board's affordability guideline, the Applicant can afford the recommended annual repayment.

Water Rights & Supply

The Applicant's customers have many exchanges with Weber Basin Water Conservancy District under water right #35-827 for an unknown quantity of water.

Other water rights related to this project are as follows:

Water Right Number	Flow / Volume (cfs / ac-ft)
35-7219	1.68 cfs
35-5824	1.114 cfs
35-11737	29.01 ac-ft

Easements

The project will be built on property owned by the Applicant and the pipeline will follow the existing road right-of-way. No additional easements will be required.

Environmental

Since the construction is on existing facilities, no long-term environmental impacts are anticipated with the project.

Water Conservation

The project is not expected to conserve water. However, the overall system will be more drought resilient, reducing the need to bring water from another system.

Applicant's Responsibilities

If the Board authorizes the proposed project, the Applicant must do the following before a purchase agreement can be executed:

1. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.
2. Pass a resolution by the appropriate majority (as defined in the company's Articles of Incorporation and Bylaws) authorizing its officers to do the following:
    a. Assign properties, easements, and water rights required for the project to the Board of Water Resources.
    b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the Board.
3. Have an attorney give the Board of Water Resources a written legal opinion that:
    a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.
    b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.
    c. The company has obtained all permits required for the project.
    d. The company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.
    e. The company's water rights applicable to the project are unencumbered and legally transferable to the Board of Water Resources, and that they cover the land to be irrigated by the project.
    f. The company is in compliance with sections 73-10-33, 10-9a-211, and 17-27a-211 of the Utah Code governing management plans for water conveyance facilities.
4. Submit or update a water conservation plan for its service area, and obtain approval of it from the Division of Water Resources.
5. Obtain approval of final plans and specifications from the Division of Water Resources and Division of Drinking Water.
6. Adopt a rule prohibiting its users from irrigating landscapes between the hours of 10:00 a.m. and 6:00 p.m.
7. Adopt a progressive water rate schedule.
8. Obtain and submit letters from all outside financing agencies establishing their commitment of funds to the project.

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THIRD JUDICIAL DISTRICT COURT
SALT LAKE COUNTY, STATE OF UTAH

UTAH PHYSICIANS FOR A HEALTHY ENVIRONMENT, AMERICAN BIRD CONSERVANCY, CENTER FOR BIOLOGICAL DIVERSITY, SIERRA CLUB, and UTAH RIVERS COUNCIL, Plaintiffs, v. UTAH DEPARTMENT OF NATURAL RESOURCES; UTAH DIVISION OF WATER RIGHTS; and UTAH DIVISION OF FORESTRY, FIRE AND STATE LANDS, Defendants.	**COMPLAINT** (Tier 2) Case No. _____ Honorable _____

INTRODUCTION

1. This suit seeks to protect the Great Salt Lake, the bed, banks, and waters of which are held in trust for the public by the State of Utah. The Great Salt Lake is the largest saline lake in North America. A variety of industries, including brine shrimp fishing, tourism, recreation, mineral extraction, and skiing, depend on the Lake's waters and the conditions they create, collectively contributing billions of dollars each year to Utah's economy and providing thousands of jobs. The Lake is also among the most important shorebird and waterfowl sites in North America, annually providing food and habitat for more than 10 million migratory birds. Furthermore, by its continued presence, the Lake prevents a major public health threat.

2. But the Great Salt Lake is facing a mortal threat. The Lake's viability depends primarily on inflows of water from upstream runoff, which refill its basin and offset loss of the Lake's water that occurs through usage and evaporation. Water diversions, however, have driven the Great Salt Lake into structural decline and threaten its ecological collapse. Since 2020, the Lake has suffered a water deficit of more than a million acre-feet of water per year, and the Lake's elevation recently dropped to a level near 4,188 feet above sea level, ten feet below the minimum healthy elevation identified by experts.

3. Compared to its historic natural baseline level over the period from 1850 to 2016, the Lake had lost approximately 73 percent of its water and 60 percent of its surface area as of the fall of 2022. The resulting contraction of the Great Salt Lake is visible from space.

4. This already dire situation threatens to get worse. Earlier this year, scientists predicted that the ecological integrity of the Lake could collapse entirely within five years. If that happens, Utahns will lose billions of dollars each year, as well as thousands of jobs.

5. Further depletion of the Lake's water supplies will imperil myriad species, each of which plays a critical and interrelated role in the ecological health of the Lake. These species include brine flies, brine shrimp, and many shorebirds and waterfowl that depend on the flies and shrimp as a critical food source, especially during migration when the Lake is an essential feeding and stopover site on the birds' lengthy migratory paths between the northern and southern hemispheres.

6. Depletion of the Lake has already exposed, and will continue to expose, lakebed sediments that consist of fine-scale dust containing arsenic, mercury, nickel, lead, and other pollutants toxic to humans. Breathing these exposed lakebed sediments is harmful to human health in multiple ways. In areas of the lakebed uncovered by water loss, these sediments have already been carried away by wind and inhaled by millions of Utahns; this process would be amplified by the further disappearance of the Lake, endangering many lives and likely costing the State millions of dollars per year in healthcare and mitigation.

7. These ongoing and anticipated harms to the Great Salt Lake represent not only an economic and environmental catastrophe, but also a violation of the public trust.

8. The public trust doctrine is well-established in Utah law, confirmed by statutes, Supreme Court decisions, and the Utah constitution. Under this doctrine, the public owns many natural resources, and the State holds and manages them in trust for the public, which is the beneficiary of the trust. Such resources include the Great Salt Lake—a historically navigable waterway—and the sovereign lands underlying the Lake. As trustee, the State of Utah has an ongoing obligation to protect the Great Salt Lake's waters and underlying lands, so that Utahns

can continue to use them for navigation, commerce, brine shrimp fishing, recreation, and other uses recognized under the public trust doctrine.

9. Upstream water diversions are subject to the public trust doctrine and to the State's continuing obligation to manage them so that they do not impair public trust uses. Appropriators may use water only in a manner that does not impair public trust resources, including the Lake and its bed. The State, through its administrative agencies, authorizes and oversees all water appropriations in Utah. The State's public trust obligations include a responsibility to ensure that such water use by appropriators is consistent with maintaining public trust resources. Accordingly, the State of Utah has the authority and duty to review and, where necessary, modify those diversions to protect and preserve the public trust.

10. The State of Utah, however, has failed to review and modify upstream diversions, notwithstanding the harm they are causing to the Great Salt Lake, a public trust resource, and notwithstanding the numerous feasible ways of increasing flows to the Lake, including by modifying diversions.

11. By far the most significant cause of the Lake's precipitous decline is the unsustainable quantity of water diverted away from the Lake upstream. Of the roughly 3.1 million acre-feet of water that would naturally flow into the Lake each year, 2.1 million acre-feet are diverted by upstream water users pursuant to State authorizations and thus never reach the Lake.

12. Scientists and State officials themselves have repeatedly determined that addressing upstream diversions must be the linchpin of any Lake recovery program.

13. More specifically, the State of Utah has determined that the range of lake-water elevations consistent with a healthy Great Salt Lake is between 4,198 feet and 4,205 feet. The State's experts determined that lake elevations below 4,198 feet—the minimum healthy lake level—impair trust uses and threaten the Lake's ecological integrity. Reaching this minimum level requires reducing the quantities of upstream water diverted from the Lake.

14. In spite of these determinations, the State has failed to review, much less to modify, upstream diversions to ensure that adequate water reaches the Lake to sustain an elevation of at least 4,198 feet. As a result, the Lake has declined to approximately 4,192 feet and will continue to decline this year, notwithstanding the runoff from last winter's record snowpack. The State's failure to protect the Great Salt Lake violates its fiduciary duties under the public trust doctrine.

15. Plaintiffs Utah Physicians for a Healthy Environment ("UPHE"), American Bird Conservancy ("ABC"), Center for Biological Diversity ("CBD"), Sierra Club, and Utah Rivers Council ("URC") turn to this Court to ensure the State of Utah complies with its public trust obligations. As beneficiaries of the public trust, Plaintiffs rely on the State to manage the Lake consistent with the principles of loyalty, impartiality, and prudent administration.

16. Specifically, Plaintiffs pray that this Court declare that the State of Utah has breached its trust duty to ensure water flows into the Great Salt Lake sufficient to maintain the Lake at an elevation consistent with protected trust uses—that is, at least 4,198 feet, which corresponds to a grand total surface area of 924,415 acres. To redress this breach, Plaintiffs request that the Court direct the State to halt any further decline in the Lake's average annual elevation within two years of this Court's judgment and restore a Lake elevation of 4,198 feet

(and corresponding surface area) within ten years, including, as necessary, by modifying upstream diversions to ensure sufficient water reaches the Great Salt Lake to maintain this range and thereby protect and sustain public trust uses.

JURISDICTION AND VENUE

17. This Court has jurisdiction over this action pursuant to UTAH CONST., art. VIII, § 5, and Utah Code § 78A-5-102(1), which provides district courts with original jurisdiction over all civil and criminal matters except as set forth in the constitution or statute.

18. This Court has the power to grant declaratory and equitable relief pursuant to the Utah Declaratory Judgment Act, Utah Code Ann. § 78B-6-401 *et seq*., as well as *id*. § 75-7-1001 and the general equitable powers of this Court.

19. The Lake and its tributaries are situated in Salt Lake County, among other counties, and the impacts from Defendants' failures to the protect the Lake are felt in Salt Lake County as well. Accordingly, venue is proper in this court pursuant to Utah Code § 78B-3-301 *et seq*., including but not limited to Utah Code § 78B-3-307(1).

20. This Court has personal jurisdiction over the Defendants. *See* Utah R. Civ. P. 17. Defendants are state government entities and officials, sued in their official capacities, who reside and conduct their official business in the State of Utah.

PARTIES

21. Plaintiff Utah Physicians for a Healthy Environment ("UPHE") is a 501(c)(3) non-profit organization dedicated to reducing the public health consequences of environmental degradation, particularly air pollution. It is the largest civic organization of healthcare professionals in Utah, and one of the largest in the Western United States. Since its inception in

2007, UPHE has pursued improved environmental and climate public policy to protect the health and well-being of the residents of Utah, the Intermountain West, and the country at large.

22. Plaintiff American Bird Conservancy ("ABC") is a 501(c)(3) non-profit organization dedicated to conserving wild birds and their habitats throughout the Americas. ABC has been working for nearly thirty years to protect threatened birds from population decline. ABC members in Utah derive recreational, conservation, aesthetic, and other benefits from the bird life breeding, migrating through, and wintering in the Great Salt Lake.

23. Plaintiff Center for Biological Diversity ("CBD") is a 501(c)(3) non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, creative media, and environmental law. CBD has over 1.7 million members and supporters throughout Utah and the United States, including supporters who live in the Wasatch Front and derive benefit from a healthy Great Salt Lake. CBD's Great Basin program focuses on the protection of wildlife and endangered species, the preservation of public lands, and the sustainability of precious water resources.

24. Plaintiff Sierra Club is a 501(c)(4) non-profit organization and the nation's oldest grassroots environmental organization. Sierra Club's members and supporters are dedicated to the purpose of exploring, enjoying, and protecting the wild places of the Earth; practicing and promoting the responsible use of the Earth's ecosystems and resources; educating and enlisting humanity to protect and restore the quality of the natural and human environment; and using all lawful means to carry out these objectives. The Sierra Club has more than 715,000 members nationwide, and Sierra Club's Utah Chapter has more than 5,000 members.

25. Plaintiff Utah Rivers Council ("URC") is a 501(c)(3) non-profit organization that advocates for the protection of Utah's watersheds and the communities they support. Founded in 1994, URC works to protect Utah's rivers and clean water sources for today's citizens, future generations, and healthy, sustainable natural ecosystems. URC implements its mission through grassroots organizing, direct advocacy, research, education, community leadership, and litigation. URC has been working on water management issues in the Great Salt Lake Basin since 1994, and, as a result of its policy expertise and organizing efforts, has succeeded in implementing statewide water conservation measures and protecting lands directly adjacent to Great Salt Lake tributaries.

26. Members of the Plaintiff groups use the Great Salt Lake for navigation, brine shrimp fishing, commerce, recreation, and to ensure the cleanliness of the air they breathe. For instance, Jim Hopkins, a member of URC, long relied on the Lake as a brine shrimper and employee at an area ski resort. Mike Olsen, another member of URC, likewise relied on the Lake as a place to frequently sail in his 25-foot Catalina sloop. Craig Provost, a member of the Sierra Club, has been regularly using the Lake for birding for more than twenty years. Robert Weir, a member of UPHE and a neurologist and psychiatrist who can see the Lake from his home, uses the Lake for recreation with his wife and three small children. Matthew Berry, an employee at and member of URC, is a U.S. Army veteran and survivor of cancer who depends on the Lake to cover the potentially carcinogenic particulates on its bed and prevent these from becoming airborne.

27. Yet the decline in the Lake's elevation, due to the State's failure to fulfill its trust obligations and maintain the Lake at an elevation consistent with protected trust uses, has

harmed each of these members' interests in the Lake. In 2022, Jim Hopkins stopped brine shrimping in part due to the inconvenience and uncertainty created by the Lake's historically low elevation; he fears for his future in the ski industry, as dust from the increasingly exposed lakebed falls on the snowpack and threatens to harm the area's famous skiing. So too, Mike Olsen was forced to take his boat out of the Lake last year due to the low water levels; he has not put his boat back into the Lake given the reality that Lake levels will continue to decline due to the State's failure to fulfill its trust obligations. In recent years, Craig Provost has had more difficulty accessing and seeing birds, since the Lake's falling elevation has increased salinity levels and risks of predation, harming the many birds (and birders) that rely on the Lake. As the Lake's elevation has reached historic lows, Robert Weir worries that the exposed lakebed will result in worsening air quality, harming his three young children who are (due to their age) disproportionately at risk of cognitive and psychiatric issues. Matthew Berry fears the increase in particulate matter in the air will cause his cancer to return, something to which he (as a cancer survivor) is disproportionately vulnerable.

28. The Utah Department of Natural Resources ("DNR") is the governmental body responsible for protecting the state's natural resources. DNR houses the Division of Water Rights and Division of Forestry, Fire & State Lands, which are, respectively, responsible for managing the upstream diversions that are imperiling the Lake and ensuring the maintenance of the Lake's bed. DNR is thus responsible for supervising the agencies of the Utah state government that have the power and obligation to fulfill the state's trust duties with respect to the Great Salt Lake and its bed.

29. Defendant Division of Water Rights ("DWR") is the water rights authority of the State of Utah. DWR is endowed with the power and obligation to oversee water appropriations across the state—including those that are unsustainably diverting water away from the Great Salt Lake in a manner that is imperiling its utility for navigation, commerce, brine shrimp fishing, recreation, and other trust uses. DWR is responsible for administering and supervising the appropriation of the waters of the State, and is thus responsible for overseeing the upstream diversions that unsustainably interrupt the natural flow of water into the Great Salt Lake and its bed, which are vital trust resources.

30. Defendant Division of Forestry, Fire & State Lands ("DFFSL") is the executive authority for the management of sovereign lands, with sovereign lands defined as those lands lying below the ordinary high-water mark of navigable bodies of water at the date of statehood and owned by the State by virtue of its sovereignty. DFFSL is thus responsible for managing the bed of the Great Salt Lake, which is protected under the public trust doctrine.

FACTUAL BACKGROUND

I. The Great Salt Lake

31. The Great Salt Lake is an iconic water body for not only Utah but the entire American West. As the Utah Supreme Court has described it:

> The Great Salt Lake constitutes an irregularly shaped body of water which on January 4, 1896, was approximately 77 miles long and 32.5 miles wide, and lies in its entirety within the boundaries of this State. Several streams flow into the lake but it has no outlet. The depth of the lake varies from less than five feet to approximately 30 feet. The waters of the lake have a high salt content and substantial areas of saline lands surround the water.

Utah State Road Comm'n v. Hardy Salt Co., 486 P.2d 391, 392 (Utah 1971).

32. The Great Salt Lake also looms large in Utah's history and culture. Indigenous people from the Shoshone, Ute, and Paiute Tribes have lived near and relied on the Lake for thousands of years. More recently, the Great Salt Lake offered a haven to members of the Mormon Church, who first arrived at its shore in July 1847.

33. Today, the Great Salt Lake is of enormous economic importance to the State of Utah. The Lake provides approximately $2.5 billion in economic productivity each year and supports roughly 9,000 jobs, primarily in the realms of mineral extraction, recreation, and brine shrimp fishing.

34. In addition, evaporation from the Lake increases annual snowfall in nearby mountains by 5 to 10 percent, fueling Utah's skiing commerce and supporting another 20,000 jobs and an additional $1.8 billion in economic activity each year.

35. The largest saline lake in North America, the Great Salt Lake is also a key link in the Pacific flyway, providing essential habitat and food for more than 10 million migratory birds.

36. The Lake hosts the world's largest concentration of Wilson's Phalaropes, representing over a third of the world population.

37. The Lake hosts as many as 5 million Eared Grebes, at times 50 to 90 percent of the North American population.

38. The Lake hosts as many as 20 percent of the continent's population of Snowy Plovers.

39. The Lake is the only staging area in the U.S. interior for Marbled Godwits.

40. The Lake is one of the most important breeding grounds for American White Pelicans and American Avocets.

41. The Lake is one of the most significant wintering sites for Bald Eagles.

42. In total, over three hundred bird species depend on the Lake's biologically diverse environs. One expert has characterized the Lake as "the most important shorebird site in North America."[1]

II. Range of Healthy Elevations

43. The ability of the Great Salt Lake to provide these economic and environmental benefits depends on water, and specifically on sufficient inflow to maintain the Lake at a level that will sustain such benefits.

44. The Lake's elevation in the fall of 2022 was between 4,188 and 4,189 feet.[2] As of September 1, 2023, the Lake's elevation is approximately 4,192 feet.

45. Experts have determined the range of elevations consistent with a healthy Lake to be 4,198 feet to 4,205 feet. This represents the range of elevations between which the Lake's ecosystem can function at a level that sustains its economic and environmental benefits. A lake elevation of 4,198 feet corresponds with a grand total surface area of approximately 924,415 acres.[3]

46. DNR (acting through DFFSL) determined this elevation range in a 2013 Comprehensive Management Plan prepared by the agency pursuant to Utah Code § 65A-10-203(2) (formerly § 65A-10-8(1)). DNR developed this range by examining existing elevation-

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[1] Bonnie K. Baxter, *Great Salt Lake Microbiology: A Historical Perspective*, 21 INT'L MICROBIOLOGY 79, 81 (2018).

[2] Lake elevation is typically measured at the U.S. Geological Survey gauge at the Saltair Boat Harbor.

[3] *See* David Tarboton, *Great Salt Lake Bathymetry*, HYDROSHARE (Oct. 28, 2017), https://www.hydroshare.org/resource/582060f00f6b443bb26e896426d9f62a/.

specific data, including scientific data, technical reports, white papers from government agencies and research specialists, and stakeholder communications. Such data revealed a number of reasons why a healthy Lake requires an elevation of at least 4,198 feet above sea level.

47. At a Lake elevation below 4,198 feet, many of the Lake's islands become connected to the mainland, allowing predators and other species to reach the islands and disturb nesting sites for birds, resulting in significant bird mortality.

48. At a Lake elevation below 4,198 feet, salinity levels increase, making the Lake less habitable for brine shrimp, which threatens both commercial brine shrimp fishing and wildlife that depend on the shrimp for food.

49. At a Lake elevation below 4,198 feet, wildlife-rich wetlands dry up or become dominated by invasive plant species, such as exotic phragmites.

50. At a Lake elevation below 4,198 feet, boat launches become increasingly unusable and a whole host of other deleterious impacts ensue.

51. For all of these reasons and others, a lake elevation low point of 4,198 feet marks the minimum elevation necessary for supporting public trust resources.

52. Below this elevation, the Lake is too low for ordinary navigation; it is too low for optimal brine shrimp fishing, as salinity rises too high for many brine shrimp to survive; and it is too low for ordinary commerce, as the brine flies and shrimp die off due to excessive salinity levels, and as recreation becomes impossible or at least unduly burdensome.

53. Below this elevation, the Lake's ecological integrity suffers harm, as food sources and refuges for millions of migratory birds disappear, formerly protected nesting sites become

accessible to predators, and the birds themselves are forced to alter migration or breeding routes—or simply die off.

54. Furthermore, Lake elevations below 4,198 square feet expose the lakebed, turning these sovereign lands into a source of air pollution that threatens public health.

III. The Current Threat to the Lake

55. The Great Salt Lake's level is now well below the minimum elevation consistent with a healthy Lake. Accordingly, the Lake faces a mortal threat.

56. In recent years, the Great Salt Lake has entered a period of "structural decline." Since 2020, the Lake has lost more than 1 million acre-feet of water per year, putting the integrity of the Lake's natural environment on track to collapse "in the next five years," experts warned in January 2023.[4]

57. Specifically, in the fall of 2022, the Lake was 10 feet and 6.9 million acre-feet of water below its minimum healthy level of 4,198 feet. The Lake was 19 feet below its average natural level since 1850 and, measured against that level, it lost 73 percent of its water and 60 percent of its surface area. This put the Lake "in uncharted territory," according to the same experts.

58. Already this has resulted in a reduction of the Lake's surface area from a historic high of 2.1 million acres to barely 600,000 acres in the fall of 2022.

59. The Lake's iconic islands—including Antelope Island, Gunnison Island, and many others—ceased to exist as islands. Instead, diminishing Lake waters exposed land bridges

[4] Benjamin W. Abbott, *et al.*, Emergency Measures Needed to Recue Great Salt Lake from Ongoing Collapse 5 (2023), https://pws.byu.edu/GSL%20report%202023 [hereinafter *Emergency Measures*].

at the end of 2022, connecting the islands to the mainland. The Lake's eastern lobes (Bear River and Farmington Bays) and their associated wetlands, which had provided abundant wildlife habitat, largely disappeared.

60. The Lake's salinity level increased so rapidly that state officials were forced to raise a man-made berm separating the northern and southern arms of the Lake to preserve a salinity level in the southern arm that is consistent with brine shrimp and fly existence. While optimal salinity for brine shrimp and flies is 12 to 16 percent, the southern arm's salinity increased to 18–19 percent in the fall of 2022, and the northern arm's salinity was 27 percent.

61. These dire conditions were somewhat mitigated on a temporary basis by unusually high precipitation in the winter of 2022–23, which resulted in record snowmelt in the spring of 2023 that raised the Lake's elevation by a few feet. Experts evaluating the impact of this snowmelt concluded that it may have extended the timeframe for destruction of the Lake's integrity by two to two-and-a-half years but did not alter the Lake's grim long-term outlook. In sum, the Lake is still on a path to ecological collapse within the next decade.

62. Further, even at its peak in June 2023, the Lake's elevation was barely above 4,193 feet. Currently, the Lake's elevation is approximately 4,192 feet, below this recent peak. As the State itself has acknowledged:

> GSL resources begin to be adversely impacted at a range of low lake levels, but by the time GSL reaches 4,193 feet, nearly all of the resources have begun to be impaired. For example, all islands would be accessible by land (leaving nesting birds more vulnerable to predation and increasing the risk of trespassing); fringe and impounded wetlands would be drying up and vulnerable to *Phragmites* intrusion; and habitat for open water, shoreline, and island colonial nesters would decrease. Further, recreation access and

opportunities would be minimized, search-and-rescue efforts would become more challenging, and several existing mineral extraction operations would be compromised.[5]

63. This rapid deterioration of the Lake and its environment is the result of human uses, authorized by the State. In January 2023, experts noted that over the last three years, the Lake received less than a third of its natural inflow "because of excessive water diversions."[6]

64. Upstream water diversion accounts for 2.1 million acre-feet per year. Roughly 74 percent of this diverted water is used in agriculture—primarily for the irrigation of alfalfa, hay, and other crops. An additional 5 to 10 percent is used indirectly through storage and transport losses; mineral extraction from the Lake accounts for another 9 percent of water use; and cities and industry represent the final 9 percent of consumptive use, some 90 percent of which is for outdoor use, such as irrigation of lawns and decorative plants.

65. Indoor water use has little direct effect on Lake level because approximately 95 percent is returned to the Lake. Thus, the problem of excessive upstream diversions has little to do with the way that most Utah residents use water. It is due primarily to three uses: agriculture, extractive industry, and unsustainable outdoor use, which collectively account for 67 to 73 percent of the Lake's diminution.

IV. Available Pathways to Restore the Lake

66. Experts have determined multiple pathways to returning the Lake to the elevation necessary to support the Lake's ecological integrity and utility for navigation, commerce, brine

[5] Utah Dep't of Nat. Res., Final Great Salt Lake Comprehensive Management Plan and Record of Decision 3-5 (2013), https://ffsl.utah.gov/wp-content/uploads/OnlineGSL-CMPandROD-March2013.pdf ("2013 CMP").

[6] *Emergency Measures, supra*, at 5.

shrimp fishing, recreation, and other trust uses, all of which depend on increasing inflow to the Lake.

67. The Great Salt Lake Strike Team, a group of experts that includes officials from DNR, DWR, and DFFSL, recently identified conservation targets needed to maintain and restore the Lake to a target elevation of 4,198. The Team estimated that a 17.5 percent reduction in water use would be needed just to "prevent further losses to the lake." To "begin to refill the lake to the target level" of 4,198 feet (i.e., approximately 6 feet higher than the elevation as of September 1, 2023) within 20 years "would require between 500,000 and 1,100,000 acre-feet per year of additional water delivered to the lake."[7]

68. The Strike Team's analysis identified three viable scenarios to refill the Lake to 4,198 feet within 20 years: (1) 35 percent reduction in water used by the agriculture, mineral extraction, and municipal/industrial sectors; (2) 20 percent reduction in water use in agriculture and 69 percent reduction in mineral extraction and municipal/industrial use; and (3) 42 percent reduction in water use in agriculture and 20 percent reduction in mineral extraction and municipal/industrial use.

69. Defendants have the authority to implement each of these strategies.

70. Yet the State has failed to adopt or implement any of these strategies, or any other strategy to limit upstream diversions sufficiently to prevent further losses to the Lake, much less to refill the Lake to an elevation of 4,198 feet. Instead, and in spite of considerable attention and

[7] Great Salt Lake Strike Team, Great Salt Lake Policy Assessment 16–17 (2023), https://gardner.utah.edu/wp-content/uploads/GSL-Assessment-Feb2023.pdf?x71849.

resources, the State has continued to allow existing diversions that are depleting the Lake and impairing the public trust.

71. Further, although various water conservancy districts undertook voluntary efforts to increase streamflow to the Lake in 2022, those efforts, while laudable, did not make a "measurable difference in the level of the lake," according to FFSL.[8]

72. To date, the State's efforts have largely focused on trying to persuade individual water users to undertake voluntary measures to reduce their consumption or increase their efficiency. Like the voluntary efforts undertaken in 2022 by water conservancy districts, these efforts, while laudable, remain inadequate to address the fundamental problem: that 2.1 million acre-feet of water (of the 3.1 million acre-feet that would naturally flow into the Lake) are diverted away each year.

73. In particular, the State has sidestepped the problem of unsustainable diversions pursuant to appropriations overseen by the State itself. In fact, the State has explicitly exempted any effort to address such unsustainable appropriation diversions from the menu of options available to the State official who is specifically charged with Lake protection. In early 2023, the Utah legislature passed legislation creating a Great Salt Lake Commissioner, who is empowered to prepare a "strategic plan" to protect the Lake, Utah Code § 73-32-204(1), but this legislation specified that the statute did not "override, substitute, or modify a water right within the state or the role and authority of the state engineer." *Id*. § 73-32-203(3).

[8] Leia Larsen, *Water Districts Vowed to Send Billions of Gallons to the Great Salt Lake This Year. Here's How It's Going*, SALT LAKE TRIB. (Dec. 8, 2022), https://www.sltrib.com/news/environment/2022/12/08/water-districts-vowed-send/.

74. Similarly, in late 2022 the Governor suspended new water appropriations within the Great Salt Lake Basin, yet this proclamation, too, specified that it would have no effect on existing appropriations.

75. Further, the State has failed to establish a clear objective for Lake restoration to protect public trust uses—and indeed has specifically declined to do so. In early 2023, the Utah legislature rejected a resolution that would establish 4,198 feet as a nonbinding elevation goal for the Great Salt Lake, notwithstanding the conclusion of the State's own experts that this level represented the low end of the range of healthy Lake elevations.

76. The legislative and executive branches of the Utah government have thus refused to address the overwhelming cause of the Lake's decline—or of setting a science-based elevation goal crucial to its restoration and protection. Plaintiffs therefore turn to this Court for relief to protect the public trust in the Great Salt Lake.

LEGAL BACKGROUND

I. The Public Trust Doctrine

77. As a navigable water body at the time Utah entered the union, the Great Salt Lake is protected under the public trust doctrine, meaning it is held in trust by the State for the benefit of the people of Utah. *See Utah v. United States*, 403 U.S. 9, 10–12 (1971); *Hardy Salt Co.*, 486 P.2d at 392–93; *see also Morton Int'l, Inc. v. S. Pac. Transp. Co.*, 495 P.2d 31, 32–34 (Utah 1972). The bed of the Great Salt Lake also falls within the public trust doctrine's ambit, as do the "lands surrounding the Great Salt Lake." *Hardy Salt Co.*, 486 P.2d at 392–93; *see also Colman v. Utah State Land Bd.*, 795 P.2d 622, 635–36 (Utah 1990).

78. Under the public trust doctrine, states hold myriad natural resources in trust for the public. The doctrine is "founded upon the necessity" of "preserving" these resources for public use and enjoyment. *Illinois Cent. R. Co. v. Illinois*, 146 U.S. 387, 436 (1892).

79. In the United States, the public trust doctrine's scope includes navigable coastal waters and lands, as well as navigable inland rivers and lakes and their beds. *PPL Montana, LLC v. Montana*, 565 U.S. 576, 590 (2012); *Illinois Cent.*, 146 U.S. at 435–37.

80. Utah courts have long recognized that, under the common law public trust doctrine, the State holds navigable waters and the lands underlying navigable waters in trust for the public. *Utah Stream Access Coal. v. VR Acquisitions, LLC*, 439 P.3d 593, 601, 610 (Utah 2019); *Colman*, 795 P.2d at 635.

81. Historically, the doctrine guaranteed the public's right to use navigable waters for navigation, commerce, and fishing. *See, e.g.*, *Idaho v. Coeur d'Alene Tribe of Idaho*, 521 U.S. 261, 284 (1997); *Illinois Cent.*, 146 U.S. at 452. In Utah, the public right to trust resources includes this traditional triad as well as "the right to float leisure craft" and hunt. *J.J.N.P. Co. v. Utah*, 655 P.2d 1133, 1137 (Utah 1982). The doctrine likewise protects the "ecological integrity" of trust resources. *Nat'l Parks & Conservation Ass'n v. Bd. of State Lands*, 869 P.2d 909, 919 (Utah 1993). The State's obligation to maintain the "ecological integrity" of trust resources is foundational to the public's ability to use these resources for navigation, commerce, fishing, leisure, and other trust purposes. *Id.*

82. The public trust doctrine also covers public lands, including the bed of the Great Salt Lake. The state's obligation to protect these lands dates from Utah's entrance into the union,

when the state took title to all lands underlying navigable waters. *Utah Div. of State Lands v. United States*, 482 U.S. 193, 195–96 (1987).

83. Title to these sovereign lands was vested in the state "for the benefit of the whole people." *Utah Div. of State Lands*, 482 U.S. at 196. That is, the state's title is "held in trust for the people of the state." *Illinois Cent.*, 146 U.S. at 452.

84. The Utah Constitution further establishes this public trust, stating that all sovereign lands "are declared to be the public lands of the State; and shall be held in trust for the people." UTAH CONST. art. XX, § 1. These public lands include the bed of the Great Salt Lake. *Hardy Salt Co.*, 486 P.2d at 392–93. The Legislature has delegated the management of such lands to Defendants, specifically to DFFSL, Utah Code §§ 65A-1-1(6), 65A-1-4(1)(b), which acts under the supervision of DNR, *id.* § 65A-1-4(1)(a).

85. At the heart of the Constitution's trust provision is the "necessity" of "preserving" trust land. *Illinois Cent.*, 146 U.S. at 436–37; *see also VR Acquisitions, LLC*, 439 P.3d at 608 n.5.

86. The State has confirmed its role as trustee of the Great Salt Lake within the 2013 Comprehensive Management Plan for the Lake, which was mandated by the Utah Legislature. That Plan affirms that "[DFFSL] will manage [the Great Salt Lake] and its resources under multiple-use, sustained yield principles by implementing legislative policies and accommodating public and private uses to the extent that those policies and uses do not substantially impair Public Trust resources and or the lake's sustainability."[9]

[9] 2013 CMP, *supra*, at 7 (citations omitted).

II. The Duties of Utah as Trustee

87. Utah courts have long "applied common-law trust principles" in interpreting the public trust doctrine. *VR Acquisitions, LLC*, 439 P.3d at 610. Such principles include the fiduciary duties that "[a]ll trustees owe" to the beneficiaries of a trust. *Nat'l Parks & Conservation Ass'n*, 869 P.2d at 918.

88. The State as trustee is required by law to manage public trust resources, such as the Great Salt Lake and its bed, consistent with the terms of the trust, the interests of its beneficiaries, and the principles of loyalty, impartiality, and prudent administration. Restatement (Third) of Trusts §§ 76–79 (Am. L. Inst. 2007) (updated 2023); *see also* Utah Code §§ 75-7-801 to -804.

89. The State has the duty to "administer the trust as a prudent person would," exercising "reasonable care, skill, and caution." Utah Code § 75-7-804; Restatement (Third) of Trusts § 77. Prudence is an objective—not subjective—metric, assessed "in light of the purpose of the trust and the circumstances of each case." *Kramer v. City of Lake Oswego*, 446 P.3d 1, 17–18 (Or. 2019) (internal quotation marks omitted). "Although a trustee is empowered to exercise discretion with respect to the proper treatment of the corpus of the trust, that discretion is limited by the purpose of the trust and the trustee's fiduciary duties, and does not equate to mere subjective judgment." *Pa. Env't Def. Found. v. Commonwealth*, 161 A.3d 911, 933 (Pa. 2017) (internal quotation marks omitted).

90. Integral to prudent stewardship of the public trust is the duty of continuing supervision—the state's ongoing obligation to act to ensure the protection of trust resources. This "duty of continuing supervision" extends to "the taking and use of the appropriated water" that

impacts public trust resources and endows the state with the power and responsibility to reconsider previous water allocation decisions if and when new information makes clear that such allocations are imperiling the trust. *Nat'l Audubon Soc'y v. Superior Court*, 658 P.2d 709, 728 (Cal. 1983). The State may not simply abrogate the public trust by authorizing or allowing a use inconsistent with the trust. Rather, it must protect public trust uses and must determine and undertake all feasible means of doing so.

91. This duty of continuing supervision is inherent in Utah public resources law. Utah's water code makes clear that the State Engineer's approval of an application to appropriate water gives an individual only a usufructuary interest—the individual's authorization to use the water always depends on the individual's usage not imperiling the public trust in water. The State Engineer's obligation to ensure that private appropriators are using water reasonably is an "ongoing" requirement, *Delta Canal Co. v. Frank Vincent Family Ranch, LC*, 420 P.3d 1052, 1059 (Utah 2013), and the Engineer is empowered to modify water appropriations if the use of water pursuant to such an appropriation operates in a manner that impairs trust resources, *Adams v. Portage Irrigation, Reservoir & Power Co.*, 72 P.2d 648, 654 (Utah 1937).

DEFENDANTS' FAILURE TO FULFILL THEIR TRUST DUTIES

92. The State's failure to ensure adequate flows to the Lake to sustain a minimum elevation of at least 4,198 feet is already damaging public trust resources. Moreover, the consequences of further inadequate State action are projected to be catastrophic for the public trust.

93. Further depletion of the Lake will make navigation, commerce, and brine shrimp fishing impossible, precluding the canonical uses assured under the public trust doctrine. It is

impossible to navigate, fish within, or use for commerce a Lake that is so diminished that vast areas of its lakebed are exposed and its remaining waters are too saline to support life.

94. Depletion of the Lake also will harm its ecological integrity. As the Lake evaporates, its salinity increases, which negatively impacts the microbialites (i.e., organic sedimentary deposits) that cover approximately 20 percent of the lakebed. Harm to the microbialites, in turn, negatively impacts the development of the brine fly and brine shrimp, which are a vital food source for millions of shorebirds, as well as a subject of commerce in the case of the brine shrimp.

95. Already, the decline in Lake elevation and microbialite cover has had marked impacts on migratory birds that have long relied on the Lake as a refuge, migratory stopover, or breeding ground. Historically, the Lake hosted one of the largest breeding colonies of American White Pelicans, with up to 20,000 nesting at Gunnison Island; yet the decline in water elevation has led to the emergence of a land bridge connecting Gunnison Island to the shore, which has allowed predators to threaten the pelicans, and, as a result, only half of the pelicans' peak number have been stopping at the Lake in recent years.

96. Likewise, the disappearance of Farmington Bay has led to a decline in the American Avocet population at the Lake, which, at its peak, had been as high as 250,000.

97. The numbers of many duck species that nest or migrate at the Lake—including the Redhead and Common Goldeneye—have also fallen as their food sources have died off.

98. Further, the disappearance of Bear River Bay has harmed a range of bird species, as the populations of pelicans, avocets, ducks, American Wigeons, and Northern Pintails at the Bay are correlated with water levels.

99. Depletion of the Lake will further damage the lakebed, another resource protected under the public trust doctrine. In particular, contraction of the Lake will expose Utahns to greater concentrations of lakebed sediments, especially coarse, fine, and ultrafine particulate matter that can reach the deepest parts of the lungs.

100. In areas exposed by the Lake's retreat, these particulates are being transported as dust and inhaled downwind by millions of Utahns; this process will worsen as the Lake shrinks. The particulate matter from dried lakebeds can increase rates of acute and chronic disease (including many of the same diseases known to be caused by smoking cigarettes), such as cancer, lung and cardiovascular diseases, reproductive dysfunction, poor pregnancy outcomes, developmental defects, endocrine disorders, neurologic diseases, and cognitive impairment. Such outcomes have already been observed in the populations downwind of dried-up lakebeds in other parts of the world (including communities surrounding Owens Lake in California and the Aral Sea in Uzbekistan).

101. Poorer Utahns and racial/ethnic minorities have been disproportionately impacted by exposure to this particulate matter.

102. Reduction in the Lake's area will also expose Utahns to greater quantities of lakebed sediments that are toxic to humans. For years, sediments likely containing heavy metals (e.g., arsenic, mercury, nickel, lead, etc.) and other pollutants have accumulated in the lakebed, due to coal burning, smelting, mining, agriculture, and urban runoff. As a result of the Lake's shrinkage, these materials are already being transported downwind, a process that will increase as the Lake's area continues to diminish.

103. Another consequence of the increased dispersion of lakebed sediments is the increased presence of dark dust particles on the nearby snowpack of the Wasatch and Uinta Mountains. Scientists refer to the dust from the Lakebed as "light absorbing particles" or "LAPs," and the presence of LAPs results in more solar radiation being absorbed into the snowpack. This, in turn, results in earlier and more rapid snowmelt, which essentially translates into water loss to the entire ecosystem. This positive feedback loop decreases "lake effect" snowpack. This process will likewise increase as the Lake's area continues to diminish, enhancing the risk of flooding in the late winter and spring and of water shortages in the late spring and summer, as well as overall accelerated shrinking of the Lake.

104. Additionally, the Lake's further disappearance will cost the State billions of dollars and thousands of jobs. A recent analysis prepared for the State estimated that the declining Lake could cost between $1.7 to $2.2 billion annually and eliminate over 6,500 jobs.[10]

105. In short, under Defendants' current course of management and failure to adequately address key causal factors, the Great Salt Lake has substantially diminished and will continue to diminish, with catastrophic consequences for Utah's economy, public health, and environmental integrity—and the public trust.

[10] Assessment of Potential Costs of Declining Water Levels in Great Salt Lake, at iii (Great Salt Lake Advisory Council, 2019), https://documents.deq.utah.gov/water-quality/standards-technical-services/great-salt-lake-advisory-council/activities/DWQ-2019-012913.pdf.

CLAIM FOR RELIEF
(Breach of Trust Duty to Undertake Feasible Means of Achieving a Lake Level Consistent with Continued Trust Uses)

106. Plaintiffs hereby reallege, as if fully set forth herein, each and every allegation contained in paragraphs 1 through 105.

107. As discussed, the public trust doctrine requires Defendants to protect the Great Salt Lake's waters and underlying lands that are held by the State in public trust.

108. Defendants have failed to undertake all feasible means of maintaining the Great Salt Lake at least at the minimum elevation consistent with protecting trust uses—that is, 4,198 feet—including the modification of upstream diversions that are impairing those trust uses. Defendants have failed even to establish a clear objective for Lake restoration to protect public trust uses, despite the fact that their own scientists have identified 4,198 feet as the low point of the range of elevations necessary to sustain a healthy Lake.

109. This failure to undertake all feasible means of maintaining the Lake at a healthy elevation constitutes a breach of Defendants' duty to manage the Great Salt Lake consistent with the principles of prudent administration. Defendants cannot comply with this duty without promptly undertaking all feasible means of maintaining the Lake's physical and ecological integrity, thus protecting its continued use for public trust purposes of navigation, commerce, brine shrimp fishing, hunting, and recreation. Defendants have the authority as trustees to ensure that water is diverted in Utah consistent with public trust obligations. If water diversions impair trust values, Defendants have the power and obligation to modify those diversions to protect the trust. By failing to exercise this authority despite the growing existential threat to the Great Salt

Lake, which is caused by excessive upstream diversions, Defendants have abdicated their duties as trustees.

110. This failure constitutes a breach of Defendants' fiduciary duty of continuing supervision. This duty requires Defendants to reconsider allocation decisions based on new information, such as the impairment of the Great Salt Lake due to upstream diversions. By failing to undertake all feasible means of ensuring the health of the Great Salt Lake for continued trust uses, including by the modification of upstream diversions, Defendants have abdicated their trust duties.

111. This failure constitutes a breach of the constitutional trust duty to maintain sovereign land "held in trust for the people." UTAH CONST. art. XX, § 1. This land, which includes the bed of the Great Salt Lake, *Hardy Salt Co.*, 486 P.2d at 392–93, is imperiled by declines in the Lake level, which have exposed, and will continue to expose, the lakebed to winds, which will disturb the now-settled surface and disperse its toxic sediments far afield (and into the lungs of millions of nearby Utahns). The lakebed is thus being converted from a public trust resource into a public health threat. By failing to implement all feasible means of protecting the lakebed from displacement by maintaining a minimum lake level of 4,198 feet, Defendants have breached the trust obligation contained in the Utah Constitution.

REQUEST FOR RELIEF

Therefore, Plaintiffs respectfully request that this Court:

1. Grant declaratory relief, pursuant to Utah Code § 78B-6-401, specifying that:

    a. The public trust doctrine imposes a duty on Defendants to maintain the Great Salt Lake at least at the minimum elevation consistent with public

trust uses—that is, 4,198 feet, which corresponds to a grand total surface area of approximately 924,415 acres.[11]

b. By allowing the water level of the Great Salt Lake to decline in a manner that adversely impacts the Lake, its ecosystem, and trust uses of the Lake, Defendants have failed to protect public trust resources, and thus they have violated the public trust duty.

c. The public trust doctrine imposes a duty on Defendants to identify and implement feasible means of maintaining the Great Salt Lake at least at the aforementioned minimum elevation, including the reduction of unsustainable upstream diversions.

d. The public trust doctrine creates a duty of continuing supervision over the taking and use of appropriated water and requires Defendants to modify water allocations based on new information as necessary to protect and preserve the public trust.

2. Grant injunctive relief, pursuant to Utah Code Ann. § 75-7-1001 and this Court's equitable authority, ordering that:

a. Defendants must take action sufficient to ensure that any further decline in the Lake's average annual elevation ceases within two years of this Court's judgment. Defendants must further take action sufficient to restore the Great Salt Lake to at least the minimum elevation consistent with

[11] Plaintiffs recognize that the Lake's elevation fluctuates each year, as seasonal precipitation leads to greater inflows in the spring. Thus, 4,198 feet indicates the low-point of the range of acceptable elevations, rather than an average elevation.

continued public trust uses, i.e., 4,198 feet, which corresponds to a grand total surface area of approximately 924,415 acres, within ten years of this Court's judgment.

b. In doing so, Defendants must review all existing water diversions from the Great Salt Lake watershed and determine feasible means to ensure compliance with their mandatory public trust duties. Defendants must then modify any diversions that are inconsistent with the restoration and maintenance of the Lake as specified above.

c. Following implementation of these modifications, Defendants must continue to monitor water usage consistent with their duty of continuing supervision and manage water diversions as necessary to protect the public trust.

d. Defendants must facilitate public involvement in the identification and implementation of these modifications through the maintenance of a public record, the establishment of a process for public comment, and the publication of documents describing state activities in a medium accessible to the general public.

3. Award Plaintiffs their reasonable attorneys' fees and costs.

4. Grant such other and further relief as the Court deems just, equitable, and proper.

Respectfully submitted this 6th day of September, 2023.

ZIMMERMAN BOOHER

/s/ Troy L. Booher
Troy L. Booher
LaShel Shaw

EARTHJUSTICE

/s/ Heidi McIntosh
Heidi McIntosh
Stuart Gillespie*
Timothy Preso*
Scott W. Stern*

Attorneys for Plaintiffs

**Pro hac vice application forthcoming*

Unapproved

BOARD OF WATER RESOURCES
BRIEFING MEETING
MINUTES
October 5, 2023

Utah Department of Natural Resources

Utah Board of Water Resources

Board Briefing Meeting

October 5, 2023
8:00 AM Board Meeting
Sunrise Resort & Event Center
865 N. Harbor Village East Drive
Garden City, UT 84028

BOARD MEMBERS PRESENT
Chair Juliette Tennert
Charles Holmgren
Blaine Ipson (On-line)
Spencer Jones
Dana Van Horn
Kyle Stephens
Mike Davis
Randy Crozier

STAFF PRESENT
Director Candice Hasenyager
Deputy Director Joel Williams
Assistant Director Shalaine DeBernardi
Assistant Director Todd Stonely
Tom Cox (On-line)
Marisa Egbert
Randy Staker
Russell Hadley (On-line)
Shannon Clough
Ann Baynard
Ben Marett
Tom Moore
Carl Ege
Liz Harris, Attorney General's Office
AV Team: Carmen McDonald (online), Paul Gedge & Seth Majors(online)

CHAIR JULIETTE TENNERT called the meeting to order at 8:00 am and invited Claudia Cottle to address the Board and tell a short history of the Bear River area.

CHAIR JULIETTE TENNERT called for a roll call of Board Members present and DIRECTOR CANDICE HASENYAGER announced Division staff present.

DISCUSSION OF BOARD AGENDA ITEMS:

APPROVAL OF MINUTES:

CHARLES HOLMGREN has a couple of minor changes that need to be made. They will be fixed before the 10:00am Board meeting.

COMMITAL OF FUNDS:

MARISA EGBERT Tom Cox and Russell Hadley are online to answer questions about their projects, but Anny will be presenting Russell's projects and Ben will be presenting Tom's projects during the board meeting.

RM034 Manti City Creek Water Users Mutual Assoc. Sanpete Marisa Egbert

MARISA EGBERT we have already authorized and committed the grant. This is for the committal of funds for the loan.

The following projects are those that came in for additional funding for secondary meters. They received their maximum in the first round, and then came back for additional funding with grant money that we had left over. These are the ones that went through the prioritization process.
RM074 Lehi City (Additional Grant Funds) Utah Tom Cox
RM115 Davis & Weber CCC (Additional Funds) Davis Tom Cox
RM116 Bountiful Irr. Distr. (Additional Grant Funds) Davis Tom Cox
RM112 Roy WCD (Additional Funds) Weber Russell Hadley
RM113 South Ogden CD (Additional Funds) Weber Russell Hadley
RM114 Weber-Box Elder CD (Additional Funds) Weber Russell Hadley
RM110 Syracuse City (Additional Funds) Davis Ann Baynard
RM111 Weber Basin WCD (Additional Grant Funds) Davis Ann Baynard

SPECIAL ITEMS:
RC066 Hurricane City (Frog Hollow Dam Safety) Washington Ben Marett

SHALAINE DEBERNARDI reminded the Board about the dam safety grant funding program and how it works, about the prioritizing of dams by the Water Rights Dam Safety Office, and the Board guidelines for funding. They aren't like regular projects that come to the Board through a regular application process.

BEN MARETT while we're on the subject of high hazard dams, and the backlog needing funding, we have pursued funding from FEMA through their High Hazard Potential Dams grant program. While there was about $22M available, we were able to secure a grant for only about $250,000, which we are putting towards Salt Lake City's Lake Mary Dam. This year however, there's about

$180M available, and we're working with the State Engineer's Office to get our national inventory of dams list updated so that our dams are appropriately labeled, and we're hoping to maximize the amount we may receive from FEMA this year.

The Frog Hollow Debris Basin is located approximately four miles southeast of Hurricane City in Washington County. It catches flood flows from the watershed and prevents a lot of water and debris from entering the city. The dam was constructed in 1955 by the NRCS. It has been worked on two times since then. In the 1978 project they used faulty materials, and the 1980 project did not correct it, so they continue to experience problems today. The new project will remove all the faulty material. They will also be doing some work on their primary outlet.
The total project will include

- Removing and replacing problematic soils
- Capping the top of the embankment
- Armoring the upstream face with cobbles
- Installing a two-stage sand/gravel filter
- Lowering the crest elevation and sloping the exit channel to increase the capacity of the auxiliary spillway
- Removing and replacing the primary outlet pipe with a 30-inch HDPE pipe encased in concrete

Project construction is expected to begin in fall 2023 and they hope to be completed by spring. Total expected cost is $8.2 million dollars. Board of Water Resources Dam Safety Grant $2,296,000. Natural Resource Conservation Service Grant is $5,330,000, and the Applicant will provide $574,000 of their own, probably with in-kind goods and services.

INFORMATION TO THE BOARD:

STATUTORY WATER BANK APPLICATION REPORT:

SHALAINE DEBERNARDI staff is recommending the Board approve the application. There will be two parts to the motion. Based on all the information provided, staff recommends the board approve the First Water Bank of Utah Statutory Water Bank, and the initial members of the bank's governing body.

CHAIR JULIETTE TENNERT do we have the authority over approving the make-up of the Board or is it over the actual Board members? Moving forward I want to make sure we have some authority over that.

SHALAINE DEBERNARDI the code says, in approving an application the Board shall issue an order approving the statutory bank. And approves persons to serve as initial members of the governing body in accordance with the proposed statutory water bank structure. These are the parts of approving a statutory bank application and you are approving persons to serve as the initial members of the governing body.

MIKE DAVIS I understand that Vernal and Ashley Valley will have the local interests in mind, but I have a concern saying one other entity could control multiple banks or be on the governing board of multiple banks, and then control development within the state.

RANDY CROZIER the State Engineer and Water Rights has a big play in this, so I think it's been checked and balanced.

CANDICE HASENYAGER there are still lots of opportunities for the public to engage throughout the process.

CHAIR JULIETTE TENNERT I would like to have a better understanding on this issue. I want to make sure we have some of our concerns on record around potential monopoly behavior and to make sure we're protecting the state interests. My direction to staff would just make sure that we check on those Board members moving forward.

ACQUISITION AND DISPOSAL OF REAL PROPERTY RULE:

Marisa Egbert and Liz Harris (AG)

Requirements of Section 79-2-403 (Utah Code)

In the August 10th Briefing Meeting, the Board of Water Resources (Board) requested that the Division of Water Resources (Division) write a rule for the acquisition and disposal of real property.

LIZ HARRIS (AG) when we looked into this rule, there is nothing specifically that we could find that requires the board and the division to put property that it's disposing of out into the public for a competitive bid process or that they have to advertise it. But there is a statute, its Utah Code 79-2-403 that talks about the Department of Natural Resources and agencies that hold property. *(2)(a) The division may acquire real property or an interest in real property through all legal means, as provided by law, in order to fulfill its mission and legislative mandates.*
(b) If the division determines that any real property or interest in real property is no longer necessary for the purpose for which it was acquired, the division may lease, sell, exchange, or otherwise dispose of the real property or interest in real property.
(3) When acquiring or disposing of real property or an interest in real property, the division shall consider and weigh the various economic and social values associated with the subject property in an effort to maintain a level of congruency between the compensation for the subject property and its values So, we took the opportunity to draft the rule directed at that valuation process. Basically, this rule's general standard is fair market value. That's what you want to be, buying and selling property.

DANA VAN HORN I love the idea of having a policy instead of it in the rule. The rule seems like it has a lot of steps to get through to change it. When we have that one unique circumstance, perhaps a policy that says, we will always go out to bid unless the board votes to say no because it's in the public interest to not do that and we have a state entity that wants to purchase the property that way. If something's coming down the pike, staff can even look to us to amend the

rule, which can be done in a matter of weeks, instead of months. And we don't look like we're flip-flopping on our guiding principles to accommodate something and rule wise.

SPENCER JONES I do like what Dana is saying.

BLAINE IPSON I like the concept of a policy as opposed to the rule.

CHAIR JULIETTE TENNERT when you present this in the Board meeting, if you can show us what a policy would look like and how that would operate complementary to the rule as proposed. This rule will not be official until it goes through the process. We can work on the policy in tandem with that.

LIZ HARRIS the soonest this could be effective is 37 days after we get it filed. 7 days from publication.

CHAIR JULIETTE TENNERT I'm proposing that we approve this rule forward thru the process, but then we'd have a policy around how these transactions come back to the Board.

CLOUD SEEDING REPORT AND REQUEST FOR FUNDING:
TODD STONELY

Staff will be requesting that the Board commit $200,000 for the 2023-2024 Cloud Seeding Program.

2024 BOARD MEETING SCHEDULE:

2024 Board Meeting Dates

January 25 - Thursday

March 20 - Wednesday (St. George)

May 9 - Thursday

June 20 - Thursday

August 15 - Thursday

October 10 - Thursday

December 11 - Wednesday

Action will be taken today to approve the dates**.**

OTHER ITEMS TO DISCUSS:

STATUS OF FUNDS:

SHALAINE DEBERNARDI

Revolving Fund- we have about $32,000,000 in the Revolving Fund and about $22,000,000 of that is Dam Safety funds. $10,000,000 will be available for projects that are not Dam Safety projects. This is not the exact amount but close. Cities Water Loan Fund- we haven't funded a project from there in a while. Conservation & Development Fund- we still have funds available. We have a couple of new applications. Secondary Meter Grants-not a lot happening on the small system grant funds. ARPA Funds- with everything you will be seeing today the balance will be $0. We will be asking you to commit the last of the $250,000,000 dollars.

DIRECTOR'S REPORT:

CANDICE HASENYAGER

We always update the Board with the status of the Lake Powell Pipeline. There haven't been any significant changes at this point. Washington County Conservancy Districts are focused on water conservation and reuse as they're waiting for the Colorado River Basin States to resolve the Colorado River challenges. I don't know if they'll resolve them, but at least the policy and guidelines associated with them. This last legislative session there was $50,000,000 per year for the next four years, transferred from the Water Infrastructure Restricted account into the C&D account specifically for entities within the Colorado River Basin that have implemented aggressive conservation for the use of water reuse, reservoirs and those type of things. The Washington County Water Conservancy District is pursuing a water reuse project right now and I know they will be making an application for those funds.

MARISA EGBERT the secondary metering requirements that were set, there were some exemptions when that first came out in 2022 and then some additional exemptions went in through the legislature this last year. There are several different exemptions. One is that it can be because you can't get a meter warranty or because you're in a groundwater management area. If you're a fifth or sixth class county, a small county, and then it's got some of the reasons why you could be exempt, like the cost is just too absorbent compared to what their budget is. In Subsection 13 in the code and then there's a few different exemptions there. Those are done by the Division of Water Rights. They must apply to the Division of Water Rights about that. We are already doing that. One of our staff members, Heid King, sent out emails to the applicants that already have funds committed. Those applicants were told if you're filing for an exemption (for Subsection 13) you need to go through Water Rights. We have been in contact with Water Rights and that list. We then sent a little bit different email to the applicants in the fifth and six class counties and told them they may be exempt. We have let these entities know that whichever plans to file, to do so by January 1, 2024. You will either need to give the money back or use some of the money for other water projects. There is only one of those exemptions that

allows that. They can use the ARPA funds for other water projects. Another part of it says if you're going to be exempt through Water Rights you must come up with meters placed in strategic locations in your system. By the end of 2024 all the ARPA money must be under contract so we will want to get that money back in the pot and get it rolling. Today will be the last of the ARPA funds committed.

CANDICE HASENYAGER even if we get a few entities returning the money I don't think it will be a significant amount.

The next Board meeting is on December 5th followed with our Holiday Board Luncheon.

ADJOURNMENT

CHARLES HOLMGREN made the motion to adjourn the meeting.

The meeting adjourned at 9:49 AM.

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SUMMARY OF BOARD ACTIONS

October 5, 2023

1. CHARLES HOLMGREN moved to approve the meeting minutes from August 10, 2023 & September 5, 2023. KYLE STEPHENS seconded the motion. All voted in favor and the motion passed.

2. BLAINE IPSON moved that the Board commit 25.5% of the project cost, up to $956,000, and that the project be purchased at 1% interest over 15 years, with annual payments of approximately $69,000. RANDY CROZIER seconded the motion. All voted in favor and the motion passed.

3. MIKE DAVIS moved that the Board authorize and commit 70% of the project cost, up to $6,223,500, as a secondary meter grant. SPENCER JONES seconded the motion. All voted in favor and the motion passed

4. KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $5,129,000, as a secondary meter grant. RANDY CROZIER seconded the motion. All voted in favor and the motion passed. KYLE STEPHENS motioned the Board authorize 25.5% of the project cost, up to $1,869,000, and that the project be purchased at 1% interest over 15 years with annual payments of approximately $134,800. CHARLES HOLMGREN seconded the motion. All voted in favor and the motion passed.

5. KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $7,389,000, as a secondary meter grant. RANDY CROZIER seconded the motion. All voted in favor and the motion passed.

6. KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $5,046,500, as a secondary meter grant. MIKE DAVIS seconded the motion. All voted in favor and the motion passed. KYLE STEPHENS motioned the Board authorize and commit 25.5% of the project cost, up to $1,839,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $143,000 (including reserves). MIKE DAVIS seconded the motion. All voted in favor and the motion passed.

7. KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $3,814,000, as a secondary meter grant. RANDY CROZIER seconded the motion. All voted in favor and the motion passed.
   KYLE STEPHENS motioned the Board authorize and commit 25.5% of the project cost, up to $1,389,000, as a loan, and that the bonded indebtedness be returned at 1% interest

over 15 years with annual payments of approximately $108,000 (including reserves). CHARLES HOLMGREN seconded the motion. All voted in favor and the motion passed.

8. KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $4,743,000, as a secondary meter grant. DANA VANHORN seconded the motion. All voted in favor and the motion passed.
   KYLE STEPHENS motioned the Board authorize and commit 25.5% of the project cost, up to $1,728,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $134,000 (including reserves). DANA VANHORN seconded the motion. All voted in favor and the motion passed.

9. KYLE STEPHENS moved that the Board authorize and commit 9% of the project cost, up to $1,479,000, as a secondary meter grant. MIKE DAVIS seconded the motion. All voted in favor and the motion passed.
   KYLE STEPHENS moved that the Board authorize 25.5% of the project cost, up to $4,182,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $324,000 (including reserves). CHALRES HOLMGREN seconded the motion. All voted in favor and the motion passed.

10. KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $7,277,000, as a secondary meter grant. SPENCER JONES seconded the motion. All voted in favor and the motion passed.

11. SPENCER JONES moved that the Board commit 28% of the project cost, up to $2,296,000, as a Dam Safety grant. RANDY CROZIER seconded the motion. All voted in favor and the motion passed.

12. RANDY CROZIER moved that the Board approve the First Water Bank of Utah Statutory Water Bank, and the initial members of the bank's governing body. MIKE DAVIS seconded the motion. All voted in favor and the motion passed.

13. RANDY CROZIER moved that the Board commit up to $200,000 for the 2023-2024 Operational Cloud Seeding Program, with a maximum state cost-share of 50 percent with local sponsors. SPENCER JONES seconded the motion. All voted in favor and the motion passed.

14. KYLE STEPHENS moved that the Board accept the dates for the 2024 Board meetings. CHARLES HOLMGREN seconded the motion. All voted in favor and the motion passed.

15. **ADJOURNMENT** KYLE STEPHENS moved to adjourn. The Board meeting adjourned at **12:05 pm**

THOSE PRESENT

BOARD MEMBERS PRESENT
Chair Juliette Tennert
Charles Holmgren
Blaine Ipson (on-line)
Spencer Jones
Dana Van Horn
Kyle Stephens
Mike Davis
Randy Crozier

STAFF PRESENT
Director Candice Hasenyager
Deputy Director Joel Williams
Assistant Director Shalaine DeBernardi
Assistant Director Todd Stonely
Tom Cox (On-line)
Marisa Egbert
Randy Staker
Russell Hadley (On-line)
Shannon Clough
Ann Baynard
Ben Marett
Tom Moore
Carl Ege
Liz Harris, Attorney General's Office
AV Team: Carmen McDonald, Paul Gedge, Seth Majors

OTHERS PRESENT

Ryan Goodrich, District Manager, Ashley Valley Water & Sewer Improvement District Keith Despain, Public Works Director, Vernal City
Justin Whitaker, WETx (on-line)
Emily Lewis, Attorney, Clyde Snow (on-line)
Brownie Tomlinson, Board Member, Ashley Valley Water & Sewer Improvement District
Quinn Bennion, Vernal City Tyler Dow, WETx (on-line)
Jon Parry, Assistant General Manager, Weber Basin WCD (on-line)
Dave Maughan, Mayor, Syracuse City (on-line)
Steve Marshall, Admin Services Director, Syracuse City (on-line)
Robert Whiteley, Public Works Director, Syracuse City (on-line)

Jeff Humphrey, General Manager, Weber-Box Elder CD (on-line)
Doug Jeppesen, District Engineer, Weber-Box Elder CD (on-line)
Tamara Martinson, Secretary, Weber-Box Elder CD (on-line)
Rodney Banks, General Manager, Roy Water Conservancy District (on-line)
Kirk Gough, President, Bountiful Irrigation District
Kurtis Anderson, Manager, Bountiful Irrigation District (on-line)
Rick Smith, Manager, Davis & Weber Counties Canal Company (on-line)
Rodney Banks, Board Member, Davis & Weber Counties Canal Company (on-line)
Robert Whiteley, Board Member, Davis & Weber Counties Canal Company (on-line)
Dave Norman, Public Works Director, Lehi City (on-line)
Mark Johnson, Mayor, Lehi City (on-line)
Greg Allred, Water System Manager, Lehi City (on-line)
Justin Monson, Meter Supervisor, Lehi City (on-line)
Garrick Wilden, Engineer, Jones and DeMille (representing Manti City Creek WUMA)

The Utah Board of Water Resources meetings are regularly streamed live and are recorded so citizens can watch them later. Please use the following link to access the most recent recordings: https://goo.gl.UfyPQn

Unapproved

BOARD OF WATER RESOURCES

MEETING MINUTES

October 5, 2023

Utah Department of Natural Resources

Utah Board of Water Resources
Board Meeting
October 5, 2023
10:00 AM Board Meeting
Sunrise Resort & Event Center
865 N. Harbor Village East Drive
Garden City, UT 84028

JULIETTE TENNERT called the meeting to order 10:05 AM and announced Board members present and Board Members attending online.

DIRECTOR CANDICE HASENYAGER announced staff present as well as others present.

APPROVAL OF MINUTES:

CHARLES HOLMGREN moved to approve the meeting minutes from August 10, 2023 & September 5, 2023. KYLE STEPHENS seconded the motion. All voted in favor and the motion passed.

COMMITTAL OF FUNDS:
Project No. Applicant County Project Manager

RM034 Manti City Creek Water Users Mutual Assoc. Sanpete Marisa Egbert

MARISA EGBERT The Board authorized funds for both the loan and a grant in 2022. Grant funds have already been committed. This is to commit the loan funds as the company has completed the requirements necessary. Staff recommends the Board commit 25.5% of the project cost, up to $956,000, and that the project be purchased at 1% interest over 15 years, with annual payments approximately $69,000.

GARRICK WILDEN on behalf of Manti City Creek Water Users Mutual Association this funding will go a long way to help manage their water and they greatly appreciate it.

BLAINE IPSON moved that the Board commit 25.5% of the project cost, up to $956,000, and that the project be purchased at 1% interest over 15 years, with annual payments of approximately $69,000. RANDY CROZIER seconded the motion. All voted in favor and the motion passed.

RM074 Lehi City (Additional Grant Funds) Utah Tom Cox

BEN MARETT The Applicant is requesting funding to purchase and install approximately 3,550 additional secondary meters. The funding will not be enough to complete all their unmetered connections. The Board has previously committed $10 million in grant funds and $3.643 million in loan funds, to purchase and install approximately 5,700 secondary meters. The Applicant has installed about 2,200. The Applicant has approximately 17,935 secondary connections with about 5,200 which are now metered. Staff recommends the Board authorize and commit 70% of the project cost, up to $6,223,500, as a secondary meter grant.

DAVE NORMAN some of the numbers have been updated. We are continuing to install meters daily. 2400 are installed, we are averaging 200 a month. And we're pre-purchasing the parts to get better pricing. We currently have over 16,000 connections to our PI system with 11,085 that we needed to add with this program. It's going to be over $35 million for this project to update all of our meters.

MIKE DAVIS moved that the Board authorize and commit 70% of the project cost, up to $6,223,500, as a secondary meter grant. SPENCER JONES seconded the motion. All voted in favor and the motion passed.

RM115 Davis & Weber CCC (Additional Funds) Davis Tom Cox

BEN MARETT the Applicant is seeking funding to purchase and install approximately 2,052 additional secondary meters. The Board previously committed $10 million in grant funds and $3.643 million in loan funds to purchase and install approximately 5,260 secondary meters. The Applicant has already installed 1,200 of those meters. The Applicant has about 17,000 secondary connections, which is an increase of about 100 secondary connections since the last funding request. 5,100 connections are now metered. Staff recommends the Board authorize and commit 70% of the project cost, up to $5,129,000, as a secondary meter grant. Staff also recommends the Board authorize 25.5% of the project cost, up to $1,869,000, and that the project be purchased at 1% interest over 15 years with annual payments of approximately $134,800.

KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $5,129,000, as a secondary meter grant. RANDY CROZIER seconded the motion. All voted in favor and the motion passed.

KYLE STEPHENS moved that the Board authorize 25.5% of the project cost, up to $1,869,000, and that the project be purchased at 1% interest over 15 years with annual payments of approximately $134,800. CHARLES HOLMGREN seconded the motion. All voted in favor and the motion passed.

RM116 Bountiful Irr. Distr. (Additional Grant Funds) Davis Tom Cox

BEN MARETT the Applicant is requesting funding to purchase and install approximately 3,970 secondary meters. Staff recommends the Board authorize and commit 70% of the project cost, up to $7,389,000, as a secondary meter grant.

KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $7,389,000, as a secondary meter grant. RANDY CROZIER seconded the motion. All voted in favor and the motion passed.

RM112 Roy WCD (Additional Funds) Weber Russell Hadley

ANN BAYNARD the Applicant is requesting to purchase and install approximately 2,020 additional secondary meters. The Board previously committed $10 million in grant and $3.643 million in loan funds to purchase and installed approximately 6,000 secondary meters, and the Applicant has already installed about 1,100 of those meters. Staff recommends the Board authorize and commit 70% of the project cost, up to $5,046,500, as a secondary meter grant. Staff also recommends the Board authorize and commit 25.5% of the project cost, up to $1,839,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $143,000 (including reserves)

KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $5,046,500, as a secondary meter grant. MIKE DAVIS seconded the motion. All voted in favor and the motion passed.

KYLE STEPHENS moved that the Board authorize and commit 25.5% of the project cost, up to $1,839,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $143,000 (including reserves). MIKE DAVIS seconded the motion. All voted in favor and the motion passed.

RM113 South Ogden CD (Additional Funds) Weber Russell Hadley

ANN BAYNARD The purpose of the project is to purchase and install approximately 2,170 additional secondary meters. This funding will not be enough to complete all unmetered connections. The Board previously committed $10 million in grant and $3.643 million in loan funds to purchase and install approximately 3,425 meters, and the Applicant has already installed about 1,100 of those meters. Staff recommends the Board authorize and commit 70% of the project cost, up to $3,814,000, as a secondary meter grant. Staff also recommends the Board authorize and commit 25.5% of the project cost, up to $1,389,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $108,000 (including reserves).

KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $3,814,000, as a secondary meter grant. RANDY CROZIER seconded the motion. All voted in favor and the motion passed.

KYLE STEPHENS moved that the Board authorize and commit 25.5% of the project cost, up to $1,389,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $108,000 (including reserves). CHARLES HOLMGREN seconded the motion. All voted in favor and the motion passed.

RM114 Weber-Box Elder CD (Additional Funds) Weber Russell Hadley

ANN BAYNARD The Applicant is requesting funding to purchase and install approximately 2,260 additional secondary meters. This funding will not be enough to complete all unmetered connections. The Board previously committed $10 million in grant funds and $3.643 million in loan funds to purchase and install approximately 3,320 secondary meters, and the Applicant has already installed about 220 of those meters. Staff recommends the Board authorize and commit 70% of the project cost, up to $4,743,000, as a secondary meter grant. Staff also recommends the Board authorize and commit 25.5% of the project cost, up to $1,728,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $134,000 (including reserves).

KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $4,743,000, as a secondary meter grant. DANA VAN HORN seconded the motion. All voted in favor and the motion passed.

KYLE STEPHENS moved that the Board authorize and commit 25.5% of the project cost, up to $1,728,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $134,000 (including reserves). DANA VANHORN seconded the motion. All voted in favor and the motion passed.

RM110 Syracuse City (Additional Funds) Davis Ann Baynard

ANN BAYNARD In the August 4, 2022, Board meeting, the Board of Water Resources committed 61% of the project cost as a secondary meter grant (RM029). While the maximum grant amount was $10 million, that amount did not provide 70% of the costs of the Applicant's meter project. During the third application period entities were allowed to apply for additional funding from a separate allocation of ARPA funds. The overall project includes the purchase and installation of about 8,879 secondary meters. The Applicant is requesting additional ARPA grant funds to increase the Board's overall cost share to 70%. The Applicant is also requesting loan funds to assist with project costs. The Applicant has 9,300 secondary connections of which about 658 connections are already metered. Staff recommends the Board authorize and commit 9% of the project cost, up to $1,479,000, as a secondary meter grant. Staff also recommends the Board authorize 25.5% of the project cost, up to $4,182,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $324,000 (including reserves).

KYLE STEPHENS moved that the Board authorize and commit 9% of the project cost, up to $1,479,000, as a secondary meter grant. MIKE DAVIS seconded the motion. All voted in favor and the motion passed.

KYLE STEPHENS moved that the Board authorize 25.5% of the project cost, up to $4,182,000, as a loan, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $324,000 (including reserves). CHALRES HOLMGREN seconded the motion. All voted in favor and the motion passed.

RM111 Weber Basin WCD (Additional Grant Funds) Davis Ann Baynard

ANN BAYNARD the Applicant is requesting funding to purchase and install approximately 2,324 secondary water meters. This funding will not be enough to complete all unmetered connections. The Board previously committed $10 million in grant funds to purchase and install approximately 6,900 secondary meters, and the Applicant has already installed about 1,800 of those meters. Staff recommends the Board authorize and commit 70% of the project cost, up to $7,277,000, as a secondary meter grant.

KYLE STEPHENS moved that the Board authorize and commit 70% of the project cost, up to $7,277,000, as a secondary meter grant. SPENCER JONES seconded the motion. All voted in favor and the motion passed.

SPECIAL ITEMS:
RC066 Hurricane City (Frog Hollow Dam Safety) Washington Ben Marett

BEN MARETT the Frog Hollow Debris Basin was constructed in 1955 by the Natural Resources Conservation Service (NRCS). The dam was designed to reduce flood damage to canal systems and agricultural areas downstream of the Warner Draw Watershed. It is 27 feet tall, has a length of 1,982 feet, and is capable of impounding 1,407 acre-feet of water. The dam was raised to its current elevation (4,228 feet) and length in 1978. In 1980, sinkholes and cracking started to appear in the embankment. A rehabilitation project in 1983 attempted to address these deficiencies, but it failed and the dam continues to present cracks and sinkholes.
A geotechnical report completed as part of the Environmental Assessment concluded that the cracking and sinkholes are caused, in part, by soluble soils used in the 1978 project.
Bowen Collins & Associates performed a hydrologic and hydraulic analysis as part of a design report. It concluded that the auxiliary spillway could not pass the design storm without overtopping the dam. The primary outlet for the dam consists of a 24-inch reinforced concrete pipe. A video inspection of this pipe determined that it was in good condition. However, the pipe is over 40 years old and will exceed its design life before those improvements are constructed as part of the proposed project. Additionally, excavation of the embankment material near the pipeline presents a risk of cracking the pipe.
Rehabilitation of the dam will include:
• Removing and replacing problematic soils

• Capping the top of the embankment
• Armoring the upstream face with cobbles
• Installing a two-stage sand/gravel filter
• Lowering the crest elevation and sloping the exit channel to increase the capacity of the auxiliary spillway
• Removing and replacing the primary outlet pipe with a 30-inch HDPE pipe encased in Concrete.

Staff recommends the Board commit 28% of the project cost, up to $2,296,000, as a Dam Safety grant.

JULIETTE TENNERT what is the regular design life for like piping for this?
BEN MARETT This varies. The reinforced concrete pipe that is in there probably has 50 to 100 years.

SPENCER JONES moved that the Board commit 28% of the project cost, up to $2,296,000, as a Dam Safety grant. RANDY CROZIER seconded the motion. All voted in favor and the motion passed.

STATUTORY WATER BANK APPLICATION:
SHALAINE DEBERNARDI
The Water Banking Act in Utah Code, Section 73-31-104 describes the objectives of water banks.. (That section was shared).
As I read through all of the documentation associated with this application, I believe that is truly what they're trying to accomplish with this First Water Bank of Utah.Vernal City and Ashley Valley Water & Sewer Improvement District are considered co-Applicants on this application. The Applicants have completed all the statutory requirements. A lot of information was submitted to the Board with this application. I believe it has been very well thought out and very well prepared. They've already got draft bylaws in place, even though they can't be official until the Board says they can. They want to be open and transparent. There are already multiple contracts in place for water transactions in this basin and putting it into this bank is now an option. One of the points of this bank is to make it open and available to everyone. The electronic platform makes it so anyone can go online and see what's available.
Vernal City with their perfected water right does make them a qualified Applicant for a statutory water bank. The City and the Water Improvement district have been working hand in hand through this process.

RANDY CROZIER I understood there will be two reps from each entity and a consultant rep? I hope that you will put in the bylaws that sometimes you may not want a rep from your technical side on that Board.

RYAN GOODRICH the reason we looked at the consultant as a Board seat, initially was because WETx has spent a considerable amount of time and effort helping us to develop the software,

that transparency and marketplace and they are going to be instrumental in making sure that stays an open marketplace. So, we felt for at least the initial stages it would be beneficial.

KYLE STEPHENS this is a historical day. And I compliment the organizations for being forward thinking.

MIKE DAVIS my question goes along with Randy's about having a private entity on the board. Are there any limits to ownership or ability to lease as a board member? Any restrictions? Does this open it up for private entities to start to acquire the leases through the Board membership?

RYAN GOODRICH it wasn't the intention of the bank to give special treatment to board members, but anyone would have the opportunity.

EMILY LEWIS both the contract and statutory is that the independent local parties can design a transaction that they deem in their interest. There are no restrictions in the statute. Irrigation companies who may participate in the bank are also private entities. The intent is not to limit transactions.

SHALAINE DEBERNARDI I received a text from Andrew Dutson, the Regional Engineer for Water Rights that he had received public comments about procedures with Water Rights applications. But there was No Comment with respect to the Bank, and no other public comments over the last 30 days.

Based on all the information provided, staff recommends the board approve the First Water Bank of Utah Statutory Water Bank, and the initial members of the bank's governing body.

RANDY CROZIER moved that the Board approve the First Water Bank of Utah Statutory Water Bank, and the initial members will be Ryan Goodrich, Brownie Tomlinson, Keith Despain, Quinn Bennion and Tyler Dow of the bank's governing body. MIKE DAVIS seconded the motion. All voted in favor and the motion passed.

EMILY LEWIS December board meeting has a final wrap-up report, and there's an event on Nov 7th at the Hyatt Downtown for education, celebration and a public open house.

ACQUISITION AND DISPOSAL OF REAL PROPERTY RULE:

MARISA EGBERT

In the August 10th Briefing meeting, the Board of Water Resources requested that the Division of Water Resources write a Rule for the acquisition and disposal of real property. We've been scrambling between the briefing meeting and now, and an adjustment was made to the motion that we hope envelops what was discussed during the briefing. Staff recommends the board adopt the rule as written, and direct the Division to draft a policy as discussed. That policy will include written findings if we're not going to the public market and specify reporting to the board.

JULIETTE TENNERT I will note that Liz Harris worked with Marisa and the division to prepare a detailed rule, and we've had time to review that rule. For the record, Liz would you mind giving us a reminder about the process for what happens.

LIZ HARRIS Sure. This rule is required by Utah Code 79-2-403 which says if an agency is acquiring or disposing of property there needs to be a rule to govern those transactions. There was also a new statute passed this last legislative session that says if you're transferring property to another public agency you don't have to have an appraisal to establish value. So the focus is on how you establish the value when the division is required to get congruent value for the property with the proposed purchase or sale terms. If the board votes to adopt the rules we'll go through the administrative rule process.

DAN VAN HORN moved that the Board adopt the rules as written and direct the division to draft a policy as previously discussed. MIKE DAVIS seconded the motion. All voted in favor and the motion passed.

CLOUD SEEDING REPORT AND REQUEST FOR FUNDING:
TODD STONELY
New Activities in 2023

- Increased budget, totaling $17,350,000
- Pilot aerial seeding in Southern Utah program. (feasibility study)
- Built 20 remote generators
- Deployed 3 (sited and operated)
- New study with USU Climate Center (to identify new places)
- The first Cloud Seeding Symposium

We have Program Support from the Lower Colorado River Basin.

- Central Arizona Water District
- Six Agency Committee
- Southern Nevada Water Authority
- Contract agreement expires 2025
- We are discussing to extend the contract agreement

New activities for the 2024 year will be in the amount of $4,993,150.
Board action is requested . Staff recommends the board commit up to $200,000 for the 2023-2024 Operational Cloud Seeding Program, with a maximum state cost-share of 50 percent with local sponsors.

RANDY CROZIER moved that the Board commit up to $200,000 for the 2023-2024 Operational Cloud Seeding Program, with a maximum state cost-share of 50 percent with local sponsors. SPENCER JONES seconded the motion. All voted in favor and the motion passed.
CHARLES HOLMGREN did not vote, because of a potential conflict of interest.

2024 BOARD MEETING SCHEDULE

2024 Board Meeting Dates
January 25 - Thursday
March 20 - Wednesday (St. George)
May 9 - Thursday
June 20 - Thursday
August 15 - Thursday
October 10 - Thursday
December 11 - Wednesday

KYLE STEPHENS moved that the Board accept the dates for the 2024 Board meetings. CHARLES HOLMGREN seconded the motion. All voted in favor and the motion passed.

DIRECTOR'S REPORT:
Candice Hasenyager
Interim meetings are next week. Emily Lewis and I will be presenting on a statewide water marketing strategy that she's been working on.
The River Basin Planning section has been working on and analyzing water use data.

- In the next couple of months, a report on MNI water use will be released.

Conservation update-incentives landscapes.

- Modify landscapes from grass into water wise landscaping
- We have had over 3,700 applications and almost 2 million feet of grass has been replaced
- Today in Vegas we received our first water senses award at the Water Smart Innovations conference.

Watershed Councils

- 6 out of the 12 are now organized throughout the state.

Colorado River

- Upper Colorado River Commission special meeting/confirm 2024 pilot project
- Passed a drought response operations agreement resolution

The Bureau of Reclamation had their notice of intent regarding the environmental impact statement for 2026.
The 7 Basin States are working on a consensus alternative for the post 2026 operations.
Bear River Commission on Nov 14th will be the next meeting
Utah Water Ways was created. This is a non-profit, public, and private partnership to help educate on water conservation. Tage Flint is the new Director.
The Cloud Seeding Symposium was a success.

ADJOURNMENT

KYLES STEPHENS moved to adjourn. The Board meeting adjourned at **12:05 pm.**