



State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kimberly D. Shelley  
Executive Director

DIVISION OF WATER QUALITY  
Erica Brown Gaddis, PhD  
Director

**Water Quality Board**  
Steven K. Earley, Chair  
James Webb, Vice Chair  
Carly Castle  
Brandon Gordon  
Michela Harris  
Joseph Havasi  
Trevor Heaton  
Michael D. Luers  
Kimberly D. Shelley  
Dr. Erica Brown Gaddis  
Executive Secretary

**Utah Water Quality Board Meeting**  
Via [Zoom](#)

*Anchor Location*  
**Water Quality Office**  
195 North 1950 West, 3<sup>rd</sup> floor  
Great Salt Lake West, Rm 3134  
Salt Lake City, UT 84116

*March 23, 2022*  
*Board Meeting Begins at 8:30 am*

**AGENDA**

**Water Quality Board Meeting – Roll Call**

**A. Minutes:**

Approval of Minutes for February 23, 2022 Water Quality Board Meeting ..... Steven Earley

**B. Executive Secretary’s Report** .....

Erica Gaddis

**C. Funding:**

1. Financial Report.....Krystol Carfaro

**D. Other**

- 1. Central Valley Water Reclamation Facility – Bond Indenture Modification Authorization .....Skyler Davies
- 2. Salina - Planning Advance Conversion to Grant ..... Ken Hoffman/Beth Wondimu
- 3. Big Water – Planning Advance..... Glen Lischeske
- 4. Millville – Supplemental Funding Authorization ..... Ken Hoffman/Beth Wondimu

**E. Public Comment Period**

**F. Meeting Adjournment**

**Next Meeting April 27, 2022 at 8:30 am**  
**DEQ Board Room 1015**  
**195 North 1950 West**  
**Salt Lake City, UT 84116**  
Via [Zoom](#)

In compliance with the American Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Larene Wyss, Office of Human resources, at (801) 536-4281, TDD (801) 536-4284, or by email at [lwys@utah.gov](mailto:lwys@utah.gov) at least five working days prior to the scheduled meeting.  
Revised 3/21/2022DWQ-2022-003725

195 North 1950 West • Salt Lake City, UT  
Mailing Address: PO Box 144870 • Salt Lake City, UT 84114-4870  
Telephone (801) 536-4300 • Fax (801) 536-4301 • TDD (801) 536-4284

[www.deq.utah.gov](http://www.deq.utah.gov)

Printed on 100% recycled paper



State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kimberly D. Shelley  
Executive Director

DIVISION OF WATER QUALITY  
Erica Brown Gaddis, PhD  
Director

**Water Quality Board**  
Steven K. Earley, Chair  
James Webb, Vice Chair  
Brandon Gordon  
Michela Harris  
Joseph Havasi  
Trevor Heaton  
Michael D. Luers  
Emily Niehaus  
Kimberly D. Shelley  
Erica Brown Gaddis, PhD  
Executive Secretary

**MINUTES**

**UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY  
UTAH WATER QUALITY BOARD  
MASOB  
and  
Via Zoom**

February 23, 2022  
8:30 am Board Meeting

**UTAH WATER QUALITY BOARD MEMBERS PRESENT**

Carly Castle	Trevor Heaton
Steven Earley	Mike Luers
Michela Harris	James Webb

Excused      Brandon Gordon

**DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT**

Jennifer Berjikian	John Mackey
Krystol Carfaro	Glen Lischeske
Eric Castrejon	Meg Osswald
Skyler Davies	Winnie Pan
Judy Etherington	Dave Pierson
Erica Gaddis	Jen Robinson
Clanci Hawks	Danny Ryan
Samantha Heusser	Lonnie Shull
Elise Hinman	Sarah Ward
Ken Hoffman	Sandy Wingert
Brenda Johnson	Yan Yan

**OTHERS PRESENT**

Jeff Den Bleyker	Jacobs
Soren Simonson	Jordan River Commission
Justine Marshall	Vineyard City
Nakeasha Scovill	Staker Parson Companies
Teresa Gray	Salt Lake City Dept of Public Utilities
Giles Demke	Orem City
Juan Garrido	Lindon City

**Mr. Earley called the Meeting to order at 8:30 AM.**

**ROLL CALL**

**Mr. Earley took roll call for the members of the Board and audience.**

**APPROVAL OF MINUTES OF JANUARY 26, 2022 BOARD MEETING**

**Motion: Mr. Webb moved to approve the minutes of the January 26, 2022 Board meeting.**

**Mr. Luers seconded the motion. The motion passed unanimously.**

**EXECUTIVE SECRETARY REPORT**

Dr. Gaddis addressed the Board with the following updates.

*National*

- *Waters of the United States (WOTUS)*
  - Rulemaking – agencies propose to reinstate the pre-2015 definition of “Waters of the United States”
- *Clean Water Act (CWA)*
  - 50<sup>th</sup> anniversary of the Clean Water Act

*Legislative*

- [HB232](#) Utah Lake Authority – will replace the Utah Lake Commission with a Utah Lake Authority.
- [HB240](#) Utah Lake Amendments – Utah Lake Restoration Act passed in 2018
- [HB269](#) Capital Assets Related to Water – Requires asset management for all water and wastewater utilities in the State.
- [HB410](#) Great Salt Lake Watershed Enhancement – establish a water trust for the Great Salt Lake
- [HB429](#) Great Salt Lake Amendments – appropriate \$5 million to the Division of Water Resources to create an integrated assessment program within the Division of Water Resources

*Division*

- *Spring Creek TMDL*
  - Was submitted to and approved by the EPA
- *Jordan River E.coli TMDL*
  - Will be submitted by to the Water Quality Board by summer
- *Lisbon Valley Mining Public Comment*
  - Public comment period is closed and staff are reviewing and responding to the comments and are working to finalize permitting this month

- *Harmful Algal Blooms (HABs) Report for Utah Lake*
  - 2021 Monitoring [report](#) published to the WQ website

### **FUNDING REQUESTS**

**Financial Report:** Ms. Carfaro updated the Water Quality Board on the Loan Funds and Hardship Grant Funds as indicated in the packet.

### **OTHER**

**Jordan River Blueprint Revision:** Mr. Simonson presented the Water Quality Board with the updated Jordan River Blueprint.

**Agricultural Water Optimization Task Force Report & Recommendations:** Mr. Den Bleyker presented the Water Quality Board with a report and recommendations of the Agricultural Water Optimization Task Force.

**Wastewater Operator Certification Council 2022-2025 Appointment Recommendations:** Ms. Etherington presented the Water Quality Board with the 2022-2025 Wastewater Operator Certification Council recommendations.

**Motion:** Mr. Luers moved to approve the appointment recommendations for the Wastewater Operator Certification Council for February 1, 2022 through January 31, 2025.

Mr. Webb seconded the motion. The motion passed unanimously.

### **PUBLIC COMMENTS**

No public comments

### **MEETING ADJOURNMENT**

**Motion:** Mr. Webb moved to adjourn the meeting.

Mr. Havasi seconded the motion. The motion passed unanimously.

To view the full recording of the Water Quality Board meeting.  
<https://deq.utah.gov/boards/utah-water-quality-board-meetings>

**Next Meeting –March 23, 2022**  
**Meeting begins at 8:30 am**



Page 4  
February 23, 2022  
Water Quality Board  
**Minutes**

**In-Person**  
**MASOB**  
**195 North 1950 West**  
**Board Room 1015**  
**Salt Lake City, UT 84116**

**Via Zoom**  
<https://us02web.zoom.us/j/7074990271>

---

Steven Earley, Chair  
Utah Water Quality Board

DWQ-2022-003135

LOAN FUNDS FINANCIAL STATUS REPORT MARCH 2022

	State Fiscal Year 2022	State Fiscal Year 2023	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026	State Fiscal Year 2027
<b>STATE REVOLVING FUND (SRF)</b>						
<b>Funds Available</b>						
Capitalization Grants Awards (FFY19 - 21)	\$22,092,801	\$0	\$0	\$0	\$0	\$0
State Match (FFY20 - 21)	\$3,343,000	\$0	\$0	\$0	\$0	\$0
Future Capitalization Grant	\$8,000,000	\$8,000,000	\$8,000,000	\$8,000,000	\$8,000,000	\$8,000,000
Future State Match (estimated)	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000
SRF - 2nd Round	\$49,261,168	\$13,758,637	\$867,271	-\$9,104,293	\$20,660,297	\$50,463,547
Interest Earnings at 0.4676%	\$76,782	\$58,502	\$3,688	\$0	\$87,848	\$214,571
Loan Repayments (5255)	\$3,220,886	\$17,484,132	\$20,400,749	\$20,164,590	\$20,115,402	\$18,678,941
<b>Total Funds Available</b>	<b>\$87,594,637</b>	<b>\$40,901,271</b>	<b>\$30,871,707</b>	<b>\$20,660,297</b>	<b>\$50,463,547</b>	<b>\$78,957,059</b>
<b>Project Obligations</b>						
Central Valley Water Reclamation Facility	(15,300,000)	(6,800,000)	-	-	-	-
Moab City	(80,000)	-	-	-	-	-
Provo City	(34,045,000)	(20,000,000)	(8,800,000)	-	-	-
South Salt Lake City (A)	(2,290,000)	(234,000)	-	-	-	-
Millville City	(1,150,000)	-	-	-	-	-
<b>Loan Authorizations</b>						
South Davis Sewer District (with NPS)		(7,000,000)	(7,176,000)		-	-
Mountain Green	(1,500,000)	(4,000,000)	(1,500,000)			
Payson City		(2,000,000)	(12,500,000)			
Provo City	(5,000,000)		(10,000,000)			
Millville	(8,011,000)					
South Salt Lake City	(1,760,000)					
<b>Planned Projects</b>						
*Millville	(4,700,000)					
<b>Total Obligations</b>	<b>(73,836,000)</b>	<b>(40,034,000)</b>	<b>(39,976,000)</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>SRF Unobligated Funds</b>	<b>\$ 13,758,637</b>	<b>\$ 867,271</b>	<b>\$ (9,104,293)</b>	<b>\$ 20,660,297</b>	<b>\$ 50,463,547</b>	<b>\$ 78,957,059</b>

	State Fiscal Year 2022	State Fiscal Year 2023	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026	State Fiscal Year 2027
<b>UTAH WASTEWATER LOAN FUND (UWLF)</b>						
<b>Funds Available</b>						
UWLF	23,978,484	14,847,049	11,386,936	14,183,627	17,314,762	20,293,015
Sales Tax Revenue	-	3,587,500	3,587,500	3,587,500	3,587,500	3,587,500
Loan Repayments (5260)	787,864	2,495,988	2,473,791	2,808,235	2,655,353	2,270,341
<b>Total Funds Available</b>	<b>24,766,349</b>	<b>20,930,536</b>	<b>17,448,227</b>	<b>20,579,362</b>	<b>23,557,615</b>	<b>26,150,857</b>
<b>General Obligations</b>						
State Match Transfers	(4,943,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)
DWQ Administrative Expenses	(832,300)	(1,664,600)	(1,664,600)	(1,664,600)	(1,664,600)	(1,664,600)
<b>Project Obligations</b>						
South Salt Lake City (B)	(3,112,000)	(1,779,000)	-	-	-	-

\*WQB Agenda Items

LOAN FUNDS FINANCIAL STATUS REPORT MARCH 2022

<b>Loan Authorizations</b>						
Spanish Fork	-	(4,500,000)	-	-	-	-
South Salt Lake City	(1,032,000)					
<b>Planned Projects</b>						
	-					
<b>Total Obligations</b>	<b>(9,919,300)</b>	<b>(9,543,600)</b>	<b>(3,264,600)</b>	<b>(3,264,600)</b>	<b>(3,264,600)</b>	<b>(3,264,600)</b>
<b>UWLF Unobligated Funds</b>	<b>\$ 14,847,049</b>	<b>\$ 11,386,936</b>	<b>\$ 14,183,627</b>	<b>\$ 17,314,762</b>	<b>\$ 20,293,015</b>	<b>\$ 22,886,257</b>
<b>Total Loan Fund Balance</b>	<b>28,605,685</b>	<b>12,254,207</b>	<b>5,079,334</b>	<b>37,975,059</b>	<b>70,756,562</b>	<b>101,843,315</b>
<b>Project Reserve</b>		<b>(5,000,000)</b>	<b>(10,000,000)</b>	<b>(15,000,000)</b>	<b>(20,000,000)</b>	<b>(25,000,000)</b>
<b>Total Available Loan Funds</b>	<b>28,605,685</b>	<b>7,254,207</b>	<b>(4,920,666)</b>	<b>22,975,059</b>	<b>50,756,562</b>	<b>76,843,315</b>

\*WQB Agenda Items

HARDSHIP GRANT FUNDS FINANCIAL STATUS REPORT MARCH 2022

HARDSHIP GRANT FUNDS (HGF)	State Fiscal Year 2022	State Fiscal Year 2023	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026	State Fiscal Year 2027
<b>Funds Available</b>						
Beginning Balance		1,651,673	1,888,641	2,263,874	2,554,292	2,660,021
Federal HGF Beginning Balance (5250)	3,742,166	-	-	-	-	-
State HGF Beginning Balance (5265)	2,527,140	-	-	-	-	-
Interest Earnings at 0.4676%	9,772	7,023	8,031	9,626	10,861	11,310
UWLF Interest Earnings at 0.4676%	37,374	63,130	48,417	60,309	73,622	86,286
Hardship Grant Assessments (5255)	323,764	1,097,077	1,021,544	945,012	767,302	690,077
Interest Payments - (5260)	93,310	319,738	297,241	275,471	253,943	232,597
Advance Repayments	-	-	-	-	-	-
<b>Total Funds Available</b>	<b>6,733,526</b>	<b>3,138,641</b>	<b>3,263,874</b>	<b>3,554,292</b>	<b>3,660,021</b>	<b>3,680,291</b>
<b>Financial Assistance Project Obligations</b>						
Eagle Mountain City - Construction Grant	(510,000)	-	-	-	-	-
Emigration Sewer Imp Dist - Planning Grant	(26,158)	-	-	-	-	-
Lewiston City - Design and Construction	(274,000)	-	-	-	-	-
Millville City - Design and Construction	(1,000,000)	-	-	-	-	-
Millville City - Loan Payoff Grant	(158,000)	-	-	-	-	-
Mount Pleasant Planning Advance	(50,000)	-	-	-	-	-
Spanish Fork - Hardship Grant	(250,000)	(250,000)	-	-	-	-
Salina Design Advance	(400,000)	-	-	-	-	-
Hanksville Planning Advance	(36,600)	-	-	-	-	-
<b>Non-Point Source/Hardship Grant Obligations</b>						
Fitzgerald ARDL interest-rate buy down	(51,056)	-	-	-	-	-
McKees ARDL interest-rate buy down	(55,261)	-	-	-	-	-
Munk Dairy ARDL interest-rate buy down	(16,017)	-	-	-	-	-
(FY12) Utah Department of Agriculture	(177,928)	-	-	-	-	-
(FY15) DEQ - Ammonia Criteria Study	(27,242)	-	-	-	-	-
(FY17) DEQ - Utah Lake Water Quality Study	(348,301)	-	-	-	-	-
(FY20) Wasatch Co Health Dept Ground WQ Study	-	-	-	-	-	-
USU - Historic Trophic State/Nutrient Concentrations Paleo	(78,070)	-	-	-	-	-
FY 2018 - Remaining Payments	(7,100)	-	-	-	-	-
FY 2019 - Remaining Payments	(113,336)	-	-	-	-	-
FY 2020 - Remaining Payments	(354,977)	-	-	-	-	-
FY 2021 - Remaining Payments	(263,101)	-	-	-	-	-
FY 2022 - Remaining Payments	(884,705)	-	-	-	-	-
Future NPS Annual Allocations	-	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
<b>Planned Projects</b>						
<b>Total Obligations</b>	<b>(5,081,853)</b>	<b>(1,250,000)</b>	<b>(1,000,000)</b>	<b>(1,000,000)</b>	<b>(1,000,000)</b>	<b>(1,000,000)</b>
<b>HGF Unobligated Funds</b>	<b>\$ 1,651,673</b>	<b>\$ 1,888,641</b>	<b>\$ 2,263,874</b>	<b>\$ 2,554,292</b>	<b>\$ 2,660,021</b>	<b>\$ 2,680,291</b>

**State of Utah**  
**Wastewater Project Assistance Program**  
**Project Priority List**

*As of March 8, 2022*

Rank	Project Name	Funding Authorized	Total Points	Point Categories			
				Project Need	Potential Improvement	Population Affected	Special Consideration
1	Provo City	X	144	50	24	10	60
2	South Salt Lake City (CVWRF)	X	143	50	23	10	60
3	South Davis Sewer District	X	138	50	18	10	60
4	Payson	X	120	35	17	8	60
5	Spanish Fork Water Reclamation Facility	X	117	50	19	8	40
6	Millville City	X	114	45	46	3	20
7	Mountain Green	X	108	50	14	4	40
8	Salina City		108	35	10	3	60
9	Lewiston City	X	67	10	16	1	40

X - funding authorized; R - Additional Funding Requested; 0 - Funding Not Yet Authorized



State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kimberly D. Shelley  
Executive Director

DIVISION OF WATER QUALITY  
Erica Brown Gaddis, PhD  
Director

**Water Quality Board**  
Steven K. Earley, Chair  
James Webb, Vice Chair  
Carly Castle  
Brandon Gordon  
Michela Harris  
Joseph Havasi  
Trevor Heaton  
Michael D. Luers  
Kimberly D. Shelley  
Erica Brown Gaddis, PhD  
Executive Secretary

**TO:** Water Quality Board

**THROUGH:** Erica Brown Gaddis, PhD

**FROM:** Skyler C. Davies, P.E.

**DATE:** March 23, 2022

**SUBJECT:** Central Valley Water Reclamation Facility Project  
Loan Supplemental Indenture Amendment Request Memo

On December 03, 2018 the Water Quality Board authorized a loan of \$65,100,000 at a 1.5% interest rate with a term of 20 years. At the time of closing the Division included the standard requirement that the district establish a “Repair and Replacement Fund” and a “Debt Service Reserve Account” these two accounts are generally restricted accounts that require division staff to sign off on any withdrawal. These requirements generally insure that an entity is meeting the 1.25% debt service coverage ratio as well as establishing a minimum requirement for fiscal sustainability. Central Valley Water Reclamation Facility (CVWRF) has requested that the requirements for these two reserve accounts be removed from the bond requirements. Attachment 1 is a memo from CVWRF requesting the amendment to the supplemental indenture which lays out the merits for the change. In summary of those merits CVWRF has increased cash reserves from \$1.2 Million to \$5.7 million and is targeting \$8.6 million, CVWRF has committed \$6.3 million a year of continued facility capital improvements and intends to increase that by 2% each year, CVWRF also budgets over \$3.3 million per year for facility maintenance, and finally the member entities provide financial strength to the organization.

CVWRF has seen an increase in costs throughout this project and is looking to mitigate the impact this will have to its customers. The requirement to start funding the reserve accounts currently goes into effect in August of this year, this would result in the obligation for CVWRF to begin depositing about \$79K per month between the two accounts. CVWRF would prefer to put these funds to work in their current reserves, making debt payments, or reducing the needed additional loan funds. This change will not affect the balance of Water Quality Board funds. It will provide some relief to CVWRF during the next six (6) years.

Page 2  
March 23, 2022  
Water Quality Board  
CVWR Facility Project  
Loan Supplemental Indenture Amendment Request Memo

Given the financial capacity of Central Valley Water Reclamation Facility and its ability to meet our debt coverage requirements, and its ongoing commitment to capital improvements and maintaining a reasonable maintenance budget, this request is reasonable. **Staff recommends that the board approve the requested Indenture Amendment, with the requirement that they maintain a minimum debt service coverage ratio of 1.25 throughout the life of the loan.**

The original Feasibility Report is included as attachment 2.

DWQ-2022-003409  
File: Central Valley Water Reclamation Facility, Admin, Section 1

March 23, 2022  
Water Quality Board  
CVWR Facility Project  
Loan Supplemental Indenture Amendment Request Memo  
**Attachment 1**



Central Valley Water  
Reclamation  
Facility

**Board Members**

Debra Armstrong, Chair  
Don Russell, Vice Chair  
Sharla Bynum  
Blair Camp  
Giles Demke  
Kim Galbraith  
Cheryle Hatch

**General Manager**

Phillip Heck, Ph.D., P.E.

December 20, 2021

Division of Water Quality  
Water Quality Board  
195 North 1950 West  
Salt Lake City, UT 84114

Dear Board Members:

Subject: Debt Service Reserve and Repair and Replacement Funds

Central Valley Water Reclamation Facility (CVWRF) would like to request the Utah Water Quality Board to allow the 2020A loan supplemental indenture be amended. CVWRF management would like the requirements for debt service reserve and repair and replacement be removed. The merits for this change are as follows:

- Since 2017 when the loan application was presented, CVWRF has increased our cash reserves from \$1.2 million to \$5.7 million and set our cash reserve target to \$8.6 million. The increase in reserve funds equates to a 475 percent increase over the last five years.
- CVWRF will complete phosphorus and nitrogen removal process upgrades and a total facility overhaul of other processes by the end of 2024.
- CVWRF has committed \$6.3 million a year of continued facility capital improvements into the future. This amount escalates by 2 percent each year.
- CVWRF budgets \$3.3 to \$3.7 million per year for facility maintenance.
- CVWRF's Member Entities (Owners) have \$98 million in cash and investments to further provide financial strength for our organization and theirs.

With consideration to the items listed above, CVWRF would like to request removal of these two indenture requirements for our \$65 million Division of Water Quality loan. This change will allow proceeds to be utilized for loan payments.

Thank you for your help with this change and we appreciate the financial support the Division of Water Quality and Utah Water Quality Board has provided to the Central Valley Water Reclamation Facility.

Sincerely,

CENTRAL VALLEY WATER RECLAMATION FACILITY

A handwritten signature in black ink, appearing to read 'Phillip Heck', is written over a horizontal line.

Phillip Heck, Ph.D., P.E.  
General Manager



March 23, 2022

Water Quality Board

CVWR Facility Project

Loan Supplemental Indenture Amendment Request Memo

**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Date Received: March 6, 2018

Date to be presented to the WQB: December 03, 2018

**WATER QUALITY BOARD  
FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT  
AUTHORIZATION**

APPLICANT: Central Valley Water Reclamation Facility  
800 Central Valley Road  
Salt Lake City, Utah 84119

PRESIDING OFFICIAL: Tom Holstrom, P.E. – General Manager

CONTACT PERSON: Phillip Heck, P.E. – Asst. General Manager

TREASURER/RECORDER: Justin Zollinger, CPA, -CFO

CONSULTING ENGINEER: Trevor Lindley, P.E.  
Brown & Caldwell  
6975 Union Park Center #490  
Salt Lake City, UT 84047  
Telephone: (801) 316-9802

BOND COUNSEL: Chapman and Cutler LLP  
215 S State Street  
Salt Lake City, UT 84111  
Telephone (801) 533-0066

FINANCIAL ADVISOR: David Robertson  
Lewis Young, Robertson & Burningham, Inc.  
41 North Rio Grande Street, Ste. 101  
Salt Lake City, UT 84101  
Telephone (801) 596-0700

**APPLICANT'S REQUEST:**

**The Central Valley Water Reclamation Facility (Central Valley) is requesting financial assistance in the amount of an \$81,100,000 loan for the upgrade of its Water Reclamation Facility.**

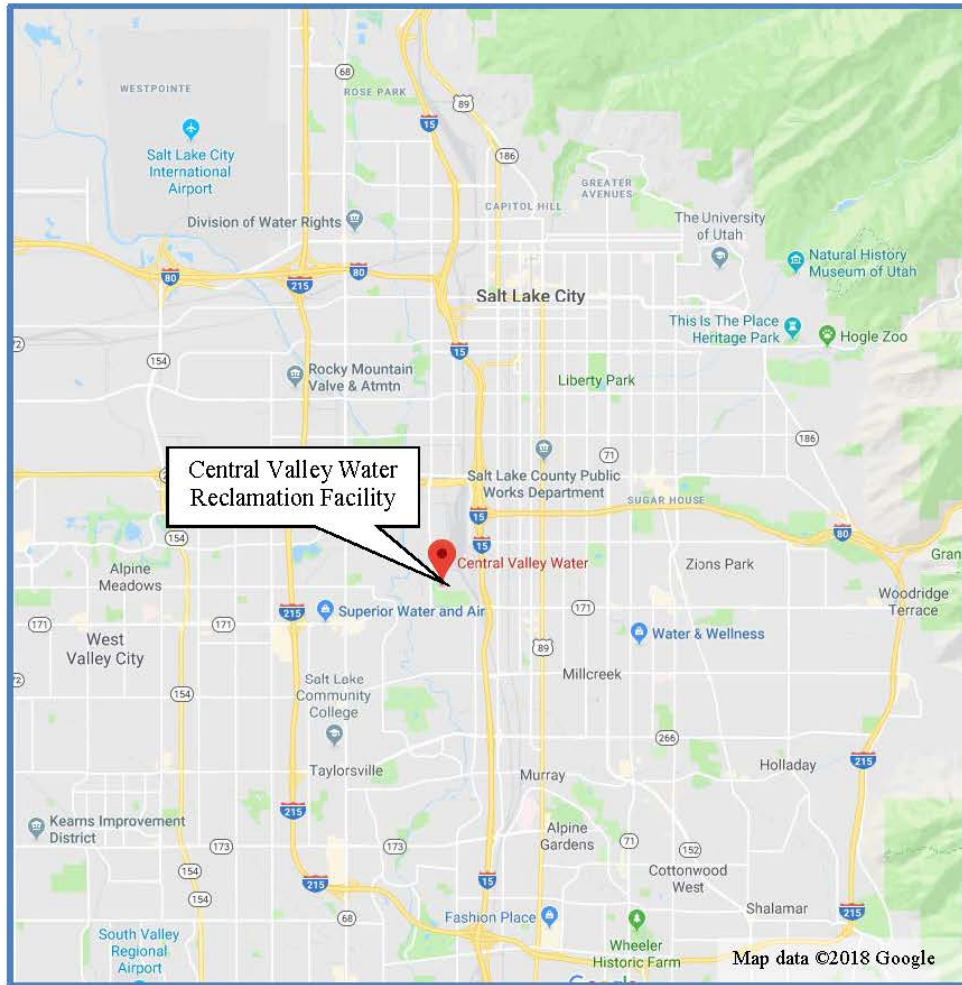
**APPLICANT'S LOCATION:**

The Central Valley Water Reclamation Facility is located at 800 Central Valley Road, Salt Lake City, UT. Maps showing this location and Central Valley's service area follow.

March 23, 2022  
Water Quality Board  
CVWR Facility Project  
Loan Supplemental Indenture Amendment Request Memo  
**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization  
December 3, 2018  
Page 2

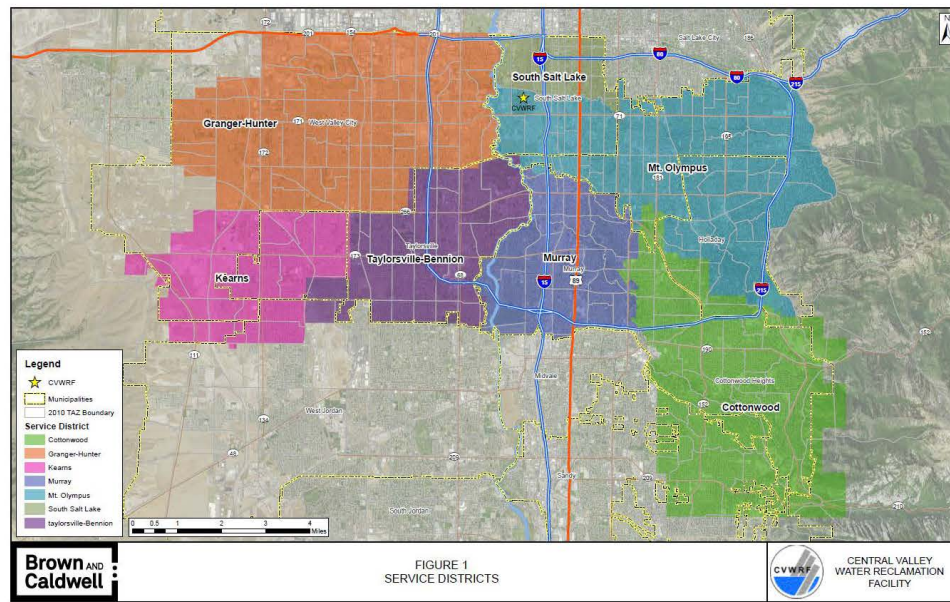
**MAP OF APPLICANT'S LOCATION**



March 23, 2022  
Water Quality Board  
CVWR Facility Project  
Loan Supplemental Indenture Amendment Request Memo  
**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization  
December 3, 2018  
Page 3

**MAP OF APPLICANT'S SERVICE AREA**



**BACKGROUND:**

In 1978, the Central Valley Water Reclamation Facility Board (Central Valley) was organized as an Inter-Local Agreement Agency. Members of the Board represent five special service districts and two cities that previously owned and operated wastewater collection systems and five small treatment plants. Central Valley Water Reclamation Facility was constructed between 1981 and 1987, replacing the five treatment facilities with a regional treatment plant. Central Valley's member agencies are listed below:

- Cottonwood Improvement District
- Granger-Hunter Improvement District
- Kearns Improvement District
- Mt. Olympus Improvement District
- Murray City
- South Salt Lake City
- Taylorsville-Bennion Improvement District

March 23, 2022

Water Quality Board

CVWR Facility Project

Loan Supplemental Indenture Amendment Request Memo

**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization

December 3, 2018

Page 4

The facility was constructed with a combination of U.S. EPA Construction Grants and local funds. The facility underwent major expansion and improvement projects in 1994, 2001, and 2005 to add both liquid and solids treatment capacity. In 2010, the facility made a major process change to eliminate the use of liquefied chlorine gas for effluent disinfection. With this project, the original chlorine contact process was replaced with the safer ultraviolet light (UV) disinfection process.

Central Valley Water Reclamation Facility is located at 800 West Central Valley Road (3190 South) in South Salt Lake City. Central Valley was built on property owned by one of the centrally located member entities. The facility is designed and built to treat 75 million gallons of wastewater each day; Central Valley serves over 500,000 people in Salt Lake County.

Central Valley is currently in compliance with all UPDES permits.

**PROJECT NEED:**

Central Valley discharges wastewater into Mill Creek, then the Jordan River, which has been identified as impaired for Dissolved Oxygen (DO) and Total Dissolved Solids (TDS) based on the 2004-303(d) assessment process as defined in the Clean Water Act. This project will significantly reduce phosphorus and total nitrogen discharges to the lower Jordan River system, as well as improving compliance with ammonia and whole effluent toxicity (WET) requirements.

**PROJECT DESCRIPTION:**

Major process changes and facility improvements are being designed that will be constructed and in service by 2025. These improvements are in response to aging infrastructure issues of the original plant, which is now 30 years old, and a new rule from the State of Utah Division of Water Quality (DWQ) governing discharges of phosphorus. Central Valley's treatment process will be upgraded to a state-of-the-art biological nutrient removal (BNR) process and all major mechanical and electrical systems will be rehabilitated or replaced, so that the facility can successfully serve the public through the design year 2045. The new facilities will have an advanced treatment design capacity of 83.9 MGD. In the next 20 years, Central Valley expects to invest over \$300 million in capital improvement projects that will upgrade, replace, and renew its wastewater infrastructure.

**APPLICANT'S ALTERNATIVES EVALUATED:**

Central Valley completed a report in 2015 titled "Evaluating the Technical and Economic Feasibility of Modifying the CVWRF to Achieve Nutrient Removal". This document is the summary report of an extensive evaluation of chemical and biological nutrient removal alternatives for the water reclamation facility conducted by Brown and Caldwell and a technical advisory team of national and international experts on wastewater nutrient removal. This report utilized several technical memoranda that evaluated alternatives, and solicited outside peer review of the treatment alternatives from a Technical Advisory Committee.

March 23, 2022

Water Quality Board

CVWR Facility Project

Loan Supplemental Indenture Amendment Request Memo

**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization

December 3, 2018

Page 5

The following alternatives were evaluated to determine the preferred alternative for Central Valley:

Alternative 1a:	Chemical phosphorus (P) removal
Alternative 1b:	Chemical P removal and tertiary denitrification filters
Alternative 2a:	Full biological nutrient removal (BNR) activated sludge
Alternative 2b:	BNR activated sludge and chemical P removal
Alternative 3:	BNR activated sludge preceded with trickling filters

The do nothing alternative would result in non-compliance with the TBPEL phosphorus rule.

Alternative 2a was selected as the preferred alternative. The report recommends a phased biological treatment approach starting with an anaerobic/oxic (A/O) process mode, for meeting an effluent phosphorus limit of 1 mg/L. In addition, side stream nutrient removal will be provided on the biosolids dewatering process filtrate to minimize nutrient recycling and reduce the overall size of the mainstream treatment process. This process can be expanded into a five stage Bardenpho process in the future to achieve lower levels of Total Inorganic Nitrogen.

The principal wastewater treatment systems that will be constructed with Water Quality Board financial assistance are listed. These projects include \$13.5 million in Green Project Reserve eligible construction.

- Fermentation/Primary Solids Thickening
- Biological Nutrient Removal Basins
- Sidestream Phosphorus Removal
- Sidestream Nitrogen Removal

**POSITION ON PROJECT PRIORITY LIST:**

This project is ranked 3rd of 10 projects on the Wastewater Treatment Project Priority List.

**POPULATION GROWTH:**

**Population and Connection Projections**

Year	Residents
2014	473,734
2040	543,126
Build Out	586,376

(Source: Technical Memorandum No. 2 –Design Criteria Prepared May 8, 2015)

**PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:**

Public participation and support for this project has been demonstrated in the following ways:

March 23, 2022

Water Quality Board

CVWR Facility Project

Loan Supplemental Indenture Amendment Request Memo

**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization

December 3, 2018

Page 6

1. Respective member entities have held public meetings regarding the rate increase. These boards/councils have received few comments regarding the anticipated rate increases.
2. In general, member entities with higher current rates or higher ongoing collection system commitments have expressed more concern about overall rate impacts but have stated their support for the project.
3. Central Valley's Board made a motion in August of 2016 to a) support the nutrient projects as envisioned in the 2015 Nutrient Feasibility Study, and b) support the 20 year capital improvement plans (CIP).
4. In October of 2016, Central Valley's Board approved the 2017 budget on a vote of 6-1; this budget included a number of 2017 expenditures related to the cogeneration system and nutrient project. Central Valley's Board adopted its 2018 budget 7-0 in favor, including \$44 million of capital improvements funded by member entity cash and public bond proceeds.

**EFFORTS TO SECURE FINANCING FROM OTHER SOURCES:**

CVWRF is not eligible to receive financing through other public financing sources such as CIB and RD. They have gone through the process of obtaining a bond rating and have secured market financing for several other projects currently under construction. They also anticipate applying for and obtaining market financing for other portions of the project not funded by the WQB. Additionally, around \$21 Million of the overall project is being financed in cash from member entities.

**IMPLEMENTATION SCHEDULE:**

Apply to WQB for Funding:	March 4, 2018
WQB Introduction	April 18, 2018
WQB Funding Authorization:	December 3, 2018
Facility Plan Approval:	December 2018
Issue Construction Permit	October 2019
Bid Opening	November 2019
Complete Construction	June 2024
Complete Commissioning	December 2024

**FISCAL SUSTAINABILITY REVIEW:**

CVWRF has taken a proactive approach to fiscal sustainability. CVWRF recently completed a Condition Assessment and Asset Management Plan (AMP) for its wastewater interceptor piping and treatment plant to identify the renewal needs of the system's 30-year old infrastructure. The AMP identified an estimated \$150 million in necessary restorations to CVWRF's collection system piping and treatment facilities that will be needed over the next 20 years to serve the local community through the year 2035. These costs and improvements are in addition to the CIP projects that would be financed with this assistance application. The improvements will replace aging and degraded mechanical and electrical equipment in the treatment plant and rehabilitate

March 23, 2022

Water Quality Board

CVWR Facility Project

Loan Supplemental Indenture Amendment Request Memo

**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization

December 3, 2018

Page 7

corroded collection system pipes to meet the future needs of our community and ensure compliance with State and Federal regulatory requirements. CVWRF has identified the necessary service rate increases and funding needed to renew their existing infrastructure and has implemented a plan to complete the necessary renewal over the next several years. CVWRF is also undertaking a cogeneration system upgrade to replace and modernize with an energy efficient system.

CVWRF also participates in MWPP self-assessment in which they indicated that they maintain a Plan of Operations, have updated their Capital Facility Plan within the last five years, that they use an Asset Management System, and that they fund sewer system capital improvements annually with sewer revenues at 2% or more of the total replacement cost.

**APPLICANT'S CURRENT USER CHARGE:**

Central Valley serves seven (7) entities, each with their own rate structure; some charge a monthly base rate, some charge by winter water usage, and some use taxes to supplement their sewer budget, or a combination of these. Staff estimated that the weighted average combined user charge for Central Valley customers is about \$21 per ERU per month.



March 23, 2022  
 Water Quality Board  
 CVWR Facility Project  
 Loan Supplemental Indenture Amendment Request Memo  
**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization  
 December 3, 2018  
 Page 8

**COST ESTIMATE:**

Central Valley will complete its 60 percent design in November 2018. The total cost of this phase of the CIP is anticipated to be \$177,059,000 including contingency of about 17 percent. A breakdown of these costs follows:

Item	Cost Estimate
Loan Origination Fee	\$811,000
Financing Process Costs	150,000
Engineering	\$13,000,000
Construction	\$141,798,000
Contingency	\$21,300,000
Sub-Total	\$177,059,000

**COST SHARING:**

Central Valley is requesting \$81,100,000 in financial assistance from the Water Quality Board. Central Valley intends to self-fund the remainder of its \$177 million investment through member contributions and public market financing.

Funding Source	Cost Sharing	Percent of Project
CVWSRF Other Funding Sources*	\$95,959,000	54.2%
WQB (Loan to Central Valley)	\$81,100,000	45.8%
Total	\$177,059,000	100%

\*Includes \$11.14M South Salt Lake portion of the project

**ESTIMATED ANNUAL COST FOR SEWER SERVICE**

Staff developed cost models to evaluate several financing alternatives for the project. The basic cost model data used in modeling financial alternatives for the project are provided below:

Operations and Maintenance (O&M) – Annual \$24,914,000  
 Existing Debt – Annual \$2,633,000  
 Weighted Median Adjusted Gross Household Income (2016) \$40,346  
 Weighted Maximum Affordable Sewer Rate at 1.4 % MAGI \$47.07

The static model financing alternatives considered are given in Attachment 1. The static cost model shows that the weighted required user rates will be below the Board’s affordability criterion of 1.4% of MAGI, i.e., a loan is affordable at market rates. Current market rates index (from 11/16/18) are as follows:

US 20-year Treasury Bond<sup>1</sup> 3.35%  
 US 30-year Treasury Bond<sup>1</sup> 3.25%  
 MBIS Municipal Bond Index, 20-year<sup>2</sup> 3.524%

1. U.S. Department of The Treasury <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield>  
 2. EMMA Municipal Securities and Rulemaking Board. <https://emma.msrb.org/ToolsAndResources/MarketIndicators>



March 23, 2022

Water Quality Board

CVWR Facility Project

Loan Supplemental Indenture Amendment Request Memo

**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization

December 3, 2018

Page 9

The bottom of Attachment 1 indicates how each of the member entities is affected by various interest rates.

South Salt Lake City is a member of Central Valley and has a combined sewer rate of \$42.00 per month (1.65% MAGI). South Salt Lake City has applied for separate funding from the Water Quality Board for their portion of the Central Valley CIP project due to their increased hardship over other member entities. South Salt Lake requested that the board provide additional subsidy for their portion of the project recognizing this City's hardship. As a 6.29 percent owner of Central Valley WRF, South Salt Lake City's cost for the \$177 million project is \$11.14 million.

**STAFF COMMENTS:**

Staff supports the Central Valley Water Reclamation Facility (CVWRF) Upgrade project. It is an important water quality project that will enable CVWRF to meet the new TBPEL requirement, reduce phosphorus and nitrogen discharges to the impaired Jordan River, improve compliance with whole effluent toxicity (WET) requirements in their discharge permit, and provide cost effective and efficient service to the largest population service area in the state.

Staff recommends the Board consider a loan interest rate based on the following discounting factors. The 20-year market loan rate is 3.53 percent based on the MBIS Municipal Bond Index which is 0.26% above the 20-year US Treasury bond. Note that 1 percent interest on an \$81,100,000 loan is \$8.8 million in interest earned over a 20 year term.

Market Rate (20 year basis)		3.53 %
Discount Factors:	Maximum Discount	Applied Discount
Economic Hardship	3.53 %	--
Other Hardship	1.0 %	--
SRF Programmatic Costs	1.0 %	0.5 %
Fiscal Sustainability Credit	0.5 %	0.5 %
Green Project Reserve	0.5 %	0.5%
Regionalization	0.25 %	0.25 %
<b>Recommended Interest Rate</b>		<b>1.78%</b>

Although Central Valley is requesting \$81,100,000 in financial assistance from the Water Quality Board, staff has determined that, to continue to support other important water quality projects in the state and maintain positive fund balances through the critical construction period, the board is not able to fully fund this large project. In discussions with the board, Central Valley, and other applicants, the maximum funding available to support the project on Central Valley's schedule is \$65,100,000. Central Valley has agreed (in concept) to fund the remainder of this portion of the project as well as their \$177 million overall project through member contributions and public market financing.

March 23, 2022  
 Water Quality Board  
 CVWR Facility Project  
 Loan Supplemental Indenture Amendment Request Memo  
**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization  
 December 3, 2018  
 Page 10

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
CVWSRF Other Funding Sources*	\$111,959,000	67.8%
WQB (Loan to Central Valley)	\$65,100,000	32.2%
<b>Total</b>	<b>\$177,059,000</b>	<b>100%</b>

\*Includes \$11.14M South Salt Lake portion of the project and additional \$24 Million Not Funded by The WQB

Central Valley will need to bond for the additional funds on the public market. Assuming the additional funds will be obtained with an interest rate of 3.5 percent, the overall interest rate for CVWRF will increase by 0.19 percent from borrowing the additional \$16 million through the market financing package. The resulting overall interest rate for the entire \$177 million bond package would become 2.75% instead of 2.56%, were the Board able to fund the requested \$81.1 million.

Reducing the interest rate to 1.5% for CVWRF, on the smaller loan, would result in a 2.63% weighted interest rate for their entire financing package. A cost model based on the reduced funding amount is shown in Attachment 2, including a weighted interest rate based on the WQB loan and the increased public financing required. The table below shows a comparison between the requested funding and the funding provided by the reduced WQB funding amount and interest rate.

Financing	WQB Funding @ Int. Rate	Initial Market Funding @ Int. Rate <sup>1</sup>	Additional Market Funding @ Int. Rate <sup>1</sup>	Equivalent 20-year Weighted Interest Rate
Requested	\$81,100,000@ 1.78%	\$95,959,000@ 3.5%	0@ 3.5%	2.56%
Recommended	\$65,100,000@ 1.50%	\$95,959,000@ 3.5%	\$16,000,000@ 3.5%	2.63%

<sup>1</sup> Note: The calculations presented in this table are based on current market interest rates. DWQ staff recognize that interest rates are currently rising and may be as high as 4 – 5% at the time that CVWRF applies for a market loan.

**STAFF RECOMMENDATION:**

Staff recommends that the Board authorize funding to Central Valley Water Reclamation Facility **for a loan of \$65,100,000 at an interest rate of 1.5% repayable over 20 years**, subject to the following special conditions:

1. The District must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
2. The District must pursue and retain remaining funding necessary to fully implement the project.
3. Central Valley must agree to present its project at a Water Quality Board meeting within one year from completion of construction.

March 23, 2022  
 Water Quality Board  
 CVWR Facility Project  
 Loan Supplemental Indenture Amendment Request Memo  
**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization  
 December 3, 2018  
 Attachment 1

ATTACHMENT 1														
Central Valley WRF - Water Quality Board														
20 Year Loan Static Cost Model TREATMENT ONLY														
<b>Project Costs</b>		<b>Total</b>											<b>Current Customer Base &amp; User Charges</b>	
Loan Origination Fee	\$	811,000										Total ERU's (Projected 2020)	\$	175,630
Financing Process Costs	\$	150,000										Weighted Average MAGI (2016):	\$	40,346
Engineering		13,000,000										Affordable Monthly Rate at 1.4%	\$	47.07
Construction		141,798,000										Current Impact Fee		Varies
Contingency (-15%)		21,300,000										Current Average Monthly Fee (per ERU)	\$	21.09
<b>Total Project Cost:</b>		<b>177,059,000</b>										Existing O&M expenses Treatment & Collecti		Varies
												New O&M expenses Treatment	\$	24,914,308
												Existing Sewer Debt Service		Varies
<b>Project Funding</b>													<b>Funding Conditions</b>	
Cash from member entities	\$	21,104,665										Loan Repayment Term:		20
*South Salt Lake Funding	\$	11,137,000										Reserve Funding Period:		6
Publicly issued bonds@3.5%	\$	63,717,335												
WQB Loan	\$	81,100,000												
<b>Total Project Cost:</b>		<b>177,059,000</b>												
SSL has a \$11,248,000 Request due to \$111,000 Loan Origination Fee														
<b>ESTIMATED COST OF SEWER SERVICE</b>														
WQB Loan Amount	WQB Loan Interest Rate	Annual WQB Loan Debt Service	WQB Loan Reserve	WQB Debt Service & Loan Reserves	Required other new Debt Service Payments*	Weighted Interest Rate for Project	Existing Debt Payments	Annual Sewer O&M Cost	Total Annual Sewer Cost	Monthly Treatment Cost/ERU	Increase in Cost Per ERU/Month Treatment Only			
\$ -	0.00%	\$ -	\$ -	\$ -	\$ -		\$ 2,633,217	\$ 24,914,308	\$ 27,547,525	\$ 13.07				
\$ 81,100,000	0.00%	\$ 4,055,000	\$ 1,013,750	\$ 5,068,750	\$ 4,483,220	1.62%	\$ 2,633,217	\$ 24,914,308	\$ 37,099,495	\$ 17.60	\$ 4.53			
\$ 81,100,000	1.00%	\$ 4,494,182	\$ 1,123,546	\$ 5,617,728	\$ 4,483,220	2.14%	\$ 2,633,217	\$ 24,914,308	\$ 37,648,473	\$ 17.86	\$ 4.79			
\$ 81,100,000	1.10%	\$ 4,539,565	\$ 1,134,891	\$ 5,674,456	\$ 4,483,220	2.19%	\$ 2,633,217	\$ 24,914,308	\$ 37,705,201	\$ 17.89	\$ 4.82			
\$ 81,100,000	1.25%	\$ 4,608,134	\$ 1,152,033	\$ 5,760,167	\$ 4,483,220	2.27%	\$ 2,633,217	\$ 24,914,308	\$ 37,790,912	\$ 17.93	\$ 4.86			
\$ 81,100,000	1.30%	\$ 4,631,122	\$ 1,157,780	\$ 5,788,902	\$ 4,483,220	2.30%	\$ 2,633,217	\$ 24,914,308	\$ 37,819,647	\$ 17.94	\$ 4.87			
\$ 81,100,000	1.50%	\$ 4,723,729	\$ 1,180,932	\$ 5,904,661	\$ 4,483,220	2.41%	\$ 2,633,217	\$ 24,914,308	\$ 37,935,407	\$ 18.00	\$ 4.93			
\$ 81,100,000	1.78%	\$ 4,855,135	\$ 1,213,784	\$ 6,068,919	\$ 4,483,220	2.56%	\$ 2,633,217	\$ 24,914,308	\$ 38,099,664	\$ 18.08	\$ 5.01			
\$ 81,100,000	2.00%	\$ 4,959,810	\$ 1,239,952	\$ 6,199,762	\$ 4,483,220	2.67%	\$ 2,633,217	\$ 24,914,308	\$ 38,230,508	\$ 18.14	\$ 5.07			
\$ 81,100,000	3.27%	\$ 5,588,176	\$ 1,397,044	\$ 6,985,220	\$ 4,483,220	3.37%	\$ 2,633,217	\$ 24,914,308	\$ 39,015,966	\$ 18.51	\$ 5.44			

\*3.5% interest rate used for estimating other new debt service

Sewer Bill by Entity Various Interest Rates										
Member Entity	MAGI	current monthly Average Bill	current % MAGI	1% Loan New Monthly Average Bill	1% Loan % MAGI	1.5% Loan New Monthly Average Bill	1.5% Loan % MAGI	1.78% Loan New Monthly Average Bill	1.78% Loan % MAGI	1.78% Loan New Monthly Average Bill
Cottonwood I.D.	\$ 56,460.00	\$ 20.00	0.43%	\$ 24.79	0.53%	\$ 24.93	0.53%	\$ 25.01	0.53%	\$ 25.01
Granger-Hunter I.D.	\$ 34,991.00	\$ 24.50	0.84%	\$ 29.29	1.00%	\$ 29.43	1.01%	\$ 29.51	1.01%	\$ 29.51
Kearns I.D.	\$ 34,579.00	\$ 30.55	1.06%	\$ 35.34	1.23%	\$ 35.48	1.23%	\$ 35.56	1.23%	\$ 35.56
Murray City	\$ 41,429.00	\$ 29.33	0.85%	\$ 34.12	0.99%	\$ 34.26	0.99%	\$ 34.34	0.99%	\$ 34.34
Mt. Olympus I.D.	\$ 35,284.00	\$ 15.00	0.51%	\$ 19.79	0.67%	\$ 19.93	0.68%	\$ 20.01	0.68%	\$ 20.01
Taylorville-Bennion I.D.	\$ 39,029.00	\$ 19.36	0.60%	\$ 24.15	0.74%	\$ 24.29	0.75%	\$ 24.37	0.75%	\$ 24.37
Weighted Average	40,346.03	21.09	0.65%	25.88	0.80%	26.01	0.81%	26.09	0.81%	26.09

Note: South Salt Lake's MAGI is covered in there Board Packet based on their separate financing package.

March 23, 2022  
 Water Quality Board  
 CVWR Facility Project  
 Loan Supplemental Indenture Amendment Request Memo  
**Attachment 2 –December 2018 Authorization Central Valley Water Reclamation Facility**

Central Valley Water Reclamation Facility Feasibility Report - Authorization  
 October 24, 2018  
 Attachment 2

Project Costs		Total
Loan Origination Fee		\$ 651,000
Financing Process Costs		\$ 310,000
Engineering		\$ 13,000,000
Construction		\$141,798,000
Contingency (~15%)		\$ 21,300,000
<b>Total Project Cost:</b>		<b>\$177,059,000</b>

Project Funding	
Cash from member entities	\$ 21,104,665
*South Salt Lake Funding	\$ 11,137,000
Publicly issued bonds@3.5%	\$ 79,717,335
WQB Loan	\$ 65,100,000
<b>Total Project Cost:</b>	<b>\$177,059,000</b>

SSL has a \$11,248,000 Request due to \$111,000 Loan Origination Fee

Current Customer Base & User Charges	
Total ERU's (Projected 2020)	\$ 175,630
Weighted Average MAGI (2016):	\$ 40,346
Affordable Monthly Rate at 1.4%	\$ 47.07
Current Impact Fee	Varies
Current Average Monthly Fee (per ERU)	\$ 21.09
Existing O&M expenses Treatment & Collecti	Varies
New O&M expenses Treatment	\$ 24,914,308
Existing Sewer Debt Service	Varies

Funding Conditions	
Loan Repayment Term:	20
Reserve Funding Period:	6

**ESTIMATED COST OF SEWER SERVICE**

WQB Loan Amount	WQB Loan Interest Rate	Annual WQB Loan Debt Service	WQB Loan Reserve	WQB Debt Service & Loan Reserves	Required other new Debt Service Payments*	Weighted Interest Rate for Project	Existing Debt Payments	Annual Sewer O&M Cost	Total Annual Sewer Cost	Monthly Treatment Cost/ERU	Increase in Cost Per ERU/Month Treatment Only
\$ -	0.00%	\$ -	\$ -	\$ -	\$ -		\$ 2,633,217	\$ 24,914,308	\$ 27,547,525	\$ 13.07	
\$ 65,100,000	0.00%	\$ 3,255,000	\$ 813,750	\$ 4,068,750	\$ 5,608,998	2.01%	\$ 2,633,217	\$ 24,914,308	\$ 37,225,273	\$ 17.66	\$ 4.59
\$ 65,100,000	1.00%	\$ 3,607,537	\$ 901,884	\$ 4,509,421	\$ 5,608,998	2.42%	\$ 2,633,217	\$ 24,914,308	\$ 37,665,944	\$ 17.87	\$ 4.80
\$ 65,100,000	1.10%	\$ 3,643,966	\$ 910,992	\$ 4,554,958	\$ 5,608,998	2.46%	\$ 2,633,217	\$ 24,914,308	\$ 37,711,480	\$ 17.89	\$ 4.82
\$ 65,100,000	1.30%	\$ 3,717,460	\$ 929,365	\$ 4,646,825	\$ 5,608,998	2.54%	\$ 2,633,217	\$ 24,914,308	\$ 37,803,348	\$ 17.94	\$ 4.87
\$ 65,100,000	1.35%	\$ 3,735,965	\$ 933,991	\$ 4,669,957	\$ 5,608,998	2.56%	\$ 2,633,217	\$ 24,914,308	\$ 37,826,479	\$ 17.95	\$ 4.88
<b>\$ 65,100,000</b>	<b>1.50%</b>	<b>\$ 3,791,797</b>	<b>\$ 947,949</b>	<b>\$ 4,739,747</b>	<b>\$ 5,608,998</b>	<b>2.63%</b>	<b>\$ 2,633,217</b>	<b>\$ 24,914,308</b>	<b>\$ 37,896,269</b>	<b>\$ 17.98</b>	<b>\$ 4.91</b>
\$ 65,100,000	1.78%	\$ 3,897,279	\$ 974,320	\$ 4,871,598	\$ 5,608,998	2.75%	\$ 2,633,217	\$ 24,914,308	\$ 38,028,121	\$ 18.04	\$ 4.97
\$ 65,100,000	2.00%	\$ 3,981,302	\$ 995,326	\$ 4,976,628	\$ 5,608,998	2.84%	\$ 2,633,217	\$ 24,914,308	\$ 38,133,150	\$ 18.09	\$ 5.02
\$ 65,100,000	3.27%	\$ 4,485,700	\$ 1,121,425	\$ 5,607,125	\$ 5,608,998	3.40%	\$ 2,633,217	\$ 24,914,308	\$ 38,763,648	\$ 18.39	\$ 5.32

\*3.5% interest rate used for estimating other new debt service

Note: It should be noted that the reduced "Increase in cost per ERU/Month..." is lower in this scenario due to the decrease in Debt Service and Loan reserve funds however, this is a temporary reduction in cost that after the 6 year reserve is funded, will be a net increase in cost per ERU/month.

Sewer Bill by Entity Various Interest Rates										
Member Entity	MAGI	current	current	1% Loan	1% Loan	1.5% Loan	1.5% Loan	1.78% Loan	1.78% Loan	
		monthly Average Bill	% MAGI	New Monthly Average Bill	% MAGI	New Monthly Average Bill	% MAGI	New Monthly Average Bill	% MAGI	
Cottonwood I.D.	\$ 56,460.00	\$ 20.00	0.43%	\$ 24.80	0.53%	\$ 24.91	0.53%	\$ 24.97	0.53%	
Granger-Hunter I.D.	\$ 34,991.00	\$ 24.50	0.84%	\$ 29.30	1.00%	\$ 29.41	1.01%	\$ 29.47	1.01%	
Kearns I.D.	\$ 34,579.00	\$ 30.55	1.06%	\$ 35.35	1.23%	\$ 35.46	1.23%	\$ 35.52	1.23%	
Murray City	\$ 41,429.00	\$ 29.33	0.85%	\$ 34.13	0.99%	\$ 34.24	0.99%	\$ 34.30	0.99%	
Mt. Olympus I.D.	\$ 35,284.00	\$ 15.00	0.51%	\$ 19.80	0.67%	\$ 19.91	0.68%	\$ 19.97	0.68%	
Taylorville-Bennion I.D.	\$ 39,029.00	\$ 19.36	0.60%	\$ 24.16	0.74%	\$ 24.27	0.75%	\$ 24.33	0.75%	
Weighted Average	40,346.03	21.09	0.65%	25.89	0.80%	26.00	0.81%	26.06	0.81%	

Note: South Salt Lake's MAGI is covered in their Board Packet based on their separate financing package.



State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kimberly D. Shelley  
Executive Director

DIVISION OF WATER QUALITY  
Erica Brown Gaddis, PhD  
Director

**Water Quality Board**  
Steven K. Earley, Chair  
James Webb, Vice Chair  
Brandon Gordon  
Michela Harris  
Joseph Havasi  
Trevor Heaton  
Michael D. Luers  
Emily Niehaus  
Kimberly D. Shelley  
Dr. Erica Brown Gaddis  
Executive Secretary

**MEMORANDUM**

**TO:** Utah Water Quality Board

**THROUGH:** Erica Gaddis

**THROUGH:** Ken Hoffman

**FROM:** Beth Wondimu

**DATE:** March 23, 2022

**SUBJECT:** Salina City Request for Reauthorization - Conversion to Hardship Design Grant

On October 27, 2021, the Utah Water Quality Board (Board) authorized a \$400,000 Design Advance to Salina City (City). On February 3, 2022, the Permanent Community Impact Board (PCIB) authorized financial assistance of \$13,962,000 including a \$6,981,000 Grant and a \$6,981,000 loan, with a 30-year term and 0.5% interest rate for improvements to their sewer and wastewater treatment systems. The City also intends to provide \$200,000 in local contribution. At the time of authorization, the total cost of the project was estimated to be \$14.5 million. The previous Board Authorization dated on October 27, 2021 is attached to this memo.

In September 2021, The City also applied for construction assistance from the Governor's Office of Planning and Budget (GOPB), requesting American Rescue Plan Act (ARPA) grant funding in the amount of \$1,000,000. The City did not obtain the requested grant from the GOPB.

The Board authorized the design advance anticipating that the City would repay the Board once the project is funded for construction. The project has now been fully funded by PCIB but PCIB cannot repay a Board Design Advance. At this time the Board could require the design advance be repaid or reauthorized as a hardship design grant. for design and other pre-construction costs related to replacement and renewal of major portions of the City's sewer and treatment system.

**APPLICANT'S REQUEST:**

The City is requesting that the Board reauthorize the advance as a **hardship design grant in the amount of a \$400,000.**

**PROJECT NEED & PROJECT DESCRIPTION**

See Page 1 of the attached Salina’s Feasibility Report: Authorization.

**POSITION ON PROJECT PRIORITY LIST**

Salina City is currently ranked No. **8** of 9 on the FY 2022 Wastewater Treatment Project Priority List (PPL).

**APPLICANT’S CURRENT USER CHARGE:**

The City currently charges residential sewer rates of \$22 per month. Based on the Utah Water Quality Board’s hardship criterion of 1.4% of MAGI (\$38,200 for Salina City in 2020), the maximum affordable rate for wastewater service is \$44.56 per ERU per month

**COST ESTIMATE:**

The total cost of this project is estimated to be \$14,562,000. A breakdown of these costs follows:

Planning (EA/PER)	\$20,000
Pre-Construction Engineering	\$691,000
Special Engineering (Survey, Geotech & Environmental)	\$115,000
Engineering CMS/Other	\$1,098,000
Legal - Bonding	\$30,000
Legal - Right of way & Easement	\$20,000
Construction – Lagoon Treatment System & SCADA upgrades	\$1,382,000
Construction – Collection System – new lift station	\$1,148,500
Construction – Collection System – existing lift station upgrades	\$56,500
Construction – Collection System – sewer	\$6,918,500
Construction – Interception sewer	\$400,200
Land acquisition	\$25,000
Mobilization	\$880,000
Contingency	\$1,777,300
<b>Total Project Cost:</b>	<b>\$14,562,000</b>

The PCIB’s authorization of February 22, 2022, the Monthly Sewer Cost per ERU would rise to approximately \$51 per month (depending on the manner used to make up for the unsuccessful bid for a GOPB grant), exceeding the 1.4% MAGI hardship metric threshold by about \$6.50 per month on the average sewer bill. The City is planning to increase significantly its sewer rate or monthly sewer cost after all funds are secured.

**APPLICANT’S REQUESTED FUNDING PACKAGE:**

Salina City is proposing the following cost sharing for the identified project.

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
Applicant Cash	\$200,000	1.3%
<b>DWQ Hard Design Grant</b>	<b>\$400,000</b>	<b>2.7%</b>
PCIB Grant	\$6,981,000	48%
PCIB Loan	\$6,981,000	48%
Total	\$14,562,000	100%

**DIVISION OF WATER QUALITY STAFF COMMENTS:**

The Salina City Sewer Improvement Project will address sewer and treatment facilities. The City identified deficiencies and system failure in the wastewater master plan. Staff supports the City’s request for funding as we believe that the project is essential to upgrade the collection system and lagoon treatment system improvements. Supporting this portion of the project with hardship grant funds will demonstrate support from the DWQ and allow design to be expedited so that construction can quickly proceed.

Staff recommends that the Water Quality Board authorize conversion of the existing design advance to a **\$400,000 Hardship Design Grant to the City of Salina City** for the design and pre-construction engineering services for the project.

It is recommended that this funding is subject to the following special conditions:

**SPECIAL CONDITIONS:**

1. The engineering contract for design and pre-construction services must be approved by the Division before work on the contract begins.
2. A construction permit must be obtained from the Division prior to advertising the project for bids.
3. The City must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
4. As part of the facility planning, the City must complete a Water Conservation and Management Plan.
5. The City must pursue and retain additional funding necessary to implement this project or a substantive portion of the proposed project before funding will be made available from this grant.





State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kimberly D. Shelley  
Executive Director

DIVISION OF WATER QUALITY  
Erica Brown Gaddis, PhD  
Director

**Water Quality Board**

Steven K. Earley  
Brandon Gordon  
Michela Harris  
Joseph Havasi  
Trevor Heaton  
Michael D. Luers  
Emily Niehaus  
Kimberly D. Shelley  
James Webb  
Dr. Erica Brown Gaddis  
*Executive Secretary*

**WATER QUALITY BOARD  
FEASIBILITY REPORT FOR HARDSHIP DESIGN GRANT  
AUTHORIZATION**

APPLICANT: Salina City  
PO Box 69  
Salina Utah 84654  
Telephone: 435-529-7304

PRESIDING OFFICIAL: Mayor Jed Maxwell

TREASURER: Kathy Maxwell

RECORDER: Ashlee Larsen

CITY ATTORNEY: David A. Blackwell  
David A. Blackwell  
PO Box 727  
Ferron, Utah 84523  
435-749-9888

BOND COUNSEL: Richard Chamberlain  
Chamberlain Associates  
225 North 100 East  
Richfield, Utah 84701  
435-896-4461

**APPLICANT'S REQUEST:**

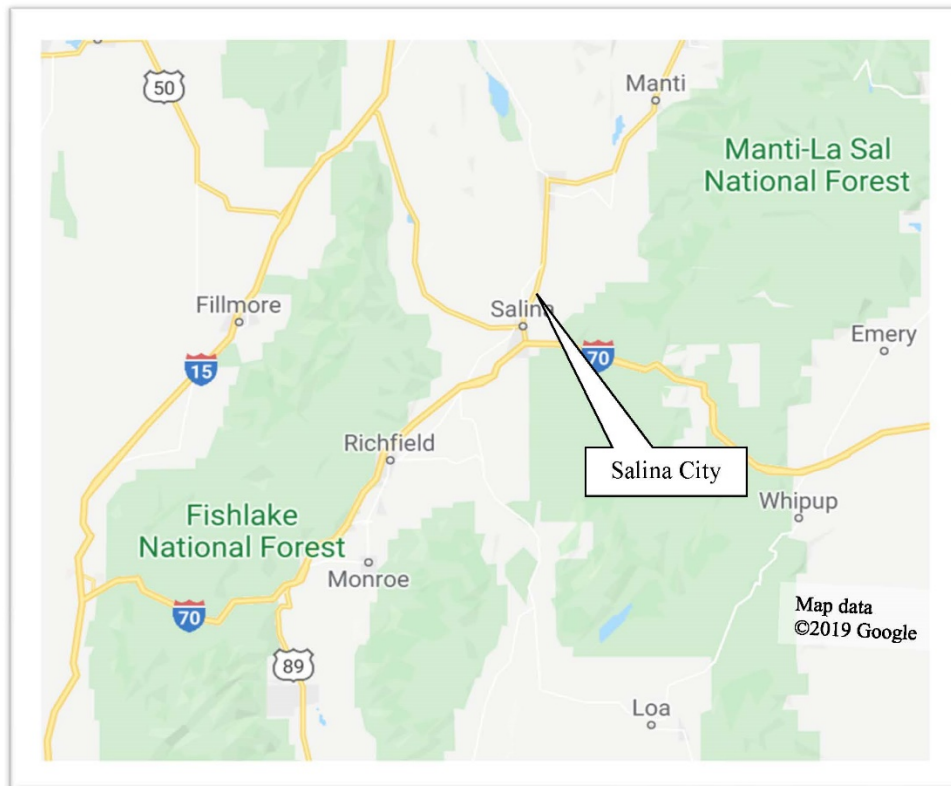
Salina City is requesting a **hardship grant of \$400,000** for design and other pre-construction costs related to improvement of a wastewater collection and lagoon treatment facility plant.



Page 2  
October 27, 2021  
Salina City – Feasibility Design Advance Authorization Report

**APPLICANT'S LOCATION**

Salina City is located in Sevier County. Salina is a community at the northern edge of Sevier County.



**BACKGROUND:**

The original wastewater collection system was installed in the 1930s. The sanitary collection system consists of 23 miles of gravity sewer lines. The Salina City wastewater collection system is comprised of approximately 119,703 feet of sewer pipe, including approximately 4,910 feet of vitrified clay pipe (VCP), 23,570 feet of concrete pipe, 1,830 feet of double walled PVC pipe, 370 feet of ductile pipe, and 89,023 feet of PVC pipe. Approximately one-third of the system was replaced with PVC pipe during a project in 2001.

The system also includes one lift station and 1 mile of pressurized sewer line. The lift station carries the wastewater from the southwest corner of the City to the location of the lagoon system.

Page 3  
October 27, 2021  
Salina City – Feasibility Design Advance Authorization Report

The lagoon treatment system was constructed in 1986. A three-cell lagoon system treats the wastewater collected by the collection system. The lagoons are designed as a total containment system with one primary cell, one secondary cell, and a winter storage cell. Salina City cleaned and video inspected the collection system in 2020.

**PROJECT NEED:**

*Collection System*

The proposed improvements identified include replacing approximately 44,100 feet of sewer mains along with associated manholes and service connections and installing a new sewer interceptor line to the lagoons for future growth.

*Lift Station Rehab*

The existing lift station has an emergency generator. However, the generator is inadequate to sufficiently power the lift station in emergency situations. In order to best estimate the needed size of a generator for current and future demands, it is essential for the electrical analysis of the lift station to be completed. In addition, the odor control system in the lift station is insufficient to operate correctly and should be prioritized for replacement.

*New Lift Station*

The City identified a low area southwest of Sunset Drive that has already had the collection system constructed with very flat slopes, and that continues to receive additional development pressure. In order to better serve this area and accommodate the continued growth in this area, a lift station will be constructed along with required appurtenances.

*Lagoon Upgrades*

The existing lagoons do not have an adequate headworks system, and currently do not have any screening capability. A new headworks building with screens will be constructed at the lagoon to remove undesirable solids such as trash, wipes, and other decomposable products.

**PROJECT DESCRIPTION:**

The City has prioritized the recommended improvements as follows:

1. Improvement of existing lift station
2. Instating of new lift station
3. Replacement failing VCP, concrete, double walled PVC and ductile iron pipe
4. Upgrade headworks building and add new screen to the Lagoon System

**ALTERNATIVES EVALUATED**

Saline City has evaluated alternatives included.

1. No action and continue to use the existing collection and treatment lagoon system.
2. Replacement of all non-PVC pipes and replacement of failed PVC pipes, upgrade of lift station, and Lagoon headworks & screen.

Page 7  
 March 23, 2022  
 Water Quality Board  
 Salina City – Conversion to Hardship Design Grant  
**Attachment 1**

Page 4  
 October 27, 2021  
 Salina City – Feasibility Design Advance Authorization Report

The recommended alternative is No. 2, which are replacement of failed sewer pipelines, construct a new lift station and improvement of lagoon headwork and screen.

**IMPLEMENTATION SCHEDULE**

Apply to WQB for Design Advance:	October 2021
Start Design	November 2021
Start Construction	May 2022
Complete Construction	May 2023

**PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:**

The City held a public meeting in September 2021 to discuss the system-wide repair and replacement needs as required by the Utah Wastewater State Revolving Fund (SRF) program. The City will hold a final public hearing once funding is secured.

**APPLICANT’S CURRENT USER CHARGE:**

The City currently charges residential sewer rates of \$22 per month.

**COST ESTIMATE**

Planning (EA/PER)	\$20,000
Pre-Construction Engineering	\$691,000
Special Engineering (Survey, Geotech & Environmental)	\$115,000
Engineering CMS/Other	\$1,098,000
Legal - Bonding	\$30,000
Legal - Right of way & Easement	\$20,000
Construction – Collection System – sewer	\$6,918,500
Construction – Collection System – existing lift station upgrades	\$56,500
Construction – Collection System – new lift station	\$1,148,500
Construction – Interception sewer	\$400,200
Construction – Lagoon Treatment System & SCADA upgrades	\$1,382,000
Land acquisition	\$25,000
Mobilization	\$880,000
Contingency	\$1,777,300
<i>Total Project Cost:</i>	<i>\$14,562,000</i>

**EFFORTS TO SECURE FINANCING FROM OTHER SOURCES:**

The City is in the process of applying for construction assistance from both the Permanent Community Impact Board (CIB) and Governor's Office of Planning and Budget (GOPB) for

Page 5  
 October 27, 2021  
 Salina City – Feasibility Design Advance Authorization Report

American Rescue Plan Act (ARPA) grant funding.

The total cost of the project is estimated at \$14,562,000. The City is requesting \$400,000 in grant from the Water Quality Board to fund design work. The City will request CIB fund in the amount of \$12,962,000. This request will be presented during the CIB’s meeting that will be held in December 2021. In addition, the City has requested the GOPB Grant funding in the amount of \$1,000,000 in September 2021. The City also intends to provide \$200,000 in local contribution.

**COST SHARING:**

The following is the summary of cost sharing is proposed for this project:

<b>Funding Source</b>	<b>Cost Sharing</b>	<b>Percent of Project</b>
Local Contribution	\$200,000	1%
WQB Grant – Design Advance	\$400,000	3%
CIB Grant & Loan	\$12,962,000	89%
GOPB (state) Grant	\$1,000,000	7%
Total:	\$14,562,000	100%

**ESTIMATED ANNUAL COST FOR SEWER SERVICE:**

The static model of financing alternatives considered is given in Attachment 1. The basic cost model used in financial alternatives for the project are provided below:

Operation & Maintenance – Annual	\$340,800
Existing Sewer Debt Service - Annual	\$3,528
Current ERC	1,102
Current Monthly Cost / ERU	\$22.00
WQB hardship consideration threshold 1.4% MAGI (\$42,500 in 2020)	\$49.58
Estimated monthly rate for 20-year loan at 0%	\$93.94

If the City is able to obtain its requested funding from all other sources, the City will likely have to raise its sewer rates above \$90 per month to afford of this project.

**FINANCIAL BURDEN EVALUATION:**

The cost for sewer service shows the City will qualify for grant consideration as part of a funding package under the State Affordability Criteria. In accordance with the Board’s Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, staff utilized data from the United State Census Bureau (census) website (<https://data.census.gov/cedsci/>) to calculate the City’s Financial Need Indicator (FNI). The calculated FNI is 2.15 which is the mid-range of the FNI. Staff compared this FNI to the percent modified MAGI in the Financial Burden Matrix and displayed the Financial Burden in Attachment 1. **Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, the community has a Financial Burden of Medium or High.**

Page 6  
October 27, 2021  
Salina City – Feasibility Design Advance Authorization Report

**STAFF COMMENTS AND RECOMMENDATION:**

Staff supports the City’s request for funding as it believes that the project is essential to upgrade the collection system and lagoon treatment system improvements. Funding this design advance will demonstrate support from the Water Quality Board and allow design to be expedited while providing a relevantly small percentage of the overall project funding. As the City is proposing a multi-agency funding package, staff reached out to CIB to discuss repayment of a DWQ Design Advance at construction funding. CIB clearly stated: CIB cannot repay a DWQ Board Planning or Design Advance as part of a construction funding package. Utah rule requires “once the long-term project financing has been secured, the Project Design Advance must be expeditiously repaid to the Board.” Staff believes this allows the Board four options; 1) require the City to return to the Board to fund part of the construction funding, 2) provide all or part of the advance as a loan which would require a loan closing, 3) provide terms for the design advance to be repaid to the hardship grant fund, or 4) provide the design advance as 100% grant funding.

Staff is concerned if this is provided as a design grant that the lack of the funds returning to the hardship grant fund could hinder the Board’s ability to provide planning or design advances to communities in the future. If the Board wishes to support the City with grant funding, staff believes the Board has a much greater financial capability to bring principal forgiveness as part of a construction funding package. Thus, staff is recommending the Board select Option 1 for the City to return to the Board to fund at a minimum the construction of the upgrades to the lagoon treatment system. By having the City return, the Board will be able to consider bringing principal forgiveness as part of a construction funding package.

**STAFF RECOMMENDATION:**

Staff recommends that the Water Quality Board **authorize a \$400,000 Design Advance** to the Salina City for the Pre-Construction Engineering Cost for the Project.

It is recommended that this funding is subject to the following special condition:

**SPECIAL CONDITIONS:**

1. The City must return to the Board for some construction project funding assistance.
2. The Design Advance must be expeditiously repaid to the Board once long-term project financing has been secured.
3. The City must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
4. As part of the facility planning, the City must complete a Water Conservation and Management Plan.

**Salina City – Water Quality Board  
 20 Year Loan Static Cost Model**

**(Attachment 1)**

<b>Project Description</b>		<b>Current Customer Base &amp; User Charges</b>								
Planning	\$20,000	Initial Total Customer (ERU's)	1,102							
Land/Right-of-way	\$20,000	MAGI for Salina City (2020):	\$42,500							
Legal/Bonding	\$30,000	Affordable Monthly Rate at 1.4%	\$49.58							
Engineering - Geotech.	\$115,000	Impact Fee (per ERU):	\$2,900							
Engineering - Design	\$691,000	Current Monthly Fee (per ERU)	\$21.50							
Engineering - CMS	\$1,098,000	Existing Sewer Debt Service	\$3,528							
Construction	\$10,855,000	Annual O&M expensive	\$340,800							
Contingency	\$1,733,000	Financial Need Indicator	2.15							
<b>Total Project Cost:</b>	<b>\$14,562,000</b>									
<b>Project Funding</b>		<b>Funding Conditions</b>								
Local Contribution	\$200,000	Loan Repayment Term:	20							
<b>WQB/CIB/GOPE Financing</b>	<b>\$14,362,000</b>	Reserve Funding Period:	6							
<b>Total Project Cost:</b>	<b>\$ 14,562,000</b>									
<b>ESTIMATED COST OF SEWER SERVICE</b>										
WQB Grant Amount	WQB Loan Amount	WQB Loan Interest Rate	WQB Loan Debt Service	WQB Loan Reserve	Annual Sewer O&M Cost	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI	Financial Burden
-	14,362,000	0.00%	718,100	179,525	340,800	\$3,528	1,241,953	93.92	2.65%	High
2,000,000	12,562,000	0.00%	628,100	157,025	340,800	\$3,528	1,129,453	85.41	2.41%	High
4,500,000	10,062,000	0.00%	503,100	125,775	340,800	\$3,528	973,203	73.59	2.08%	High
<b>4,350,000</b>	<b>10,212,000</b>	<b>0.00%</b>	<b>510,600</b>	<b>127,650</b>	<b>340,800</b>	<b>\$3,528</b>	<b>982,578</b>	<b>74.30</b>	<b>2.10%</b>	<b>Medium</b>
7,100,000	7,462,000	0.00%	373,100	93,275	340,800	\$3,528	810,703	61.31	1.73%	Medium
9,000,000	5,562,000	0.00%	278,100	69,525	340,800	\$3,528	691,953	52.33	1.48%	Medium
9,600,000	4,962,000	0.00%	248,100	62,025	340,800	\$3,528	654,453	49.49	1.40%	Medium
9,760,000	4,802,000	0.00%	240,100	60,025	340,800	\$3,528	644,453	48.73	1.38%	low
10,000,000	4,562,000	0.00%	228,100	57,025	340,800	\$3,528	629,453	47.60	1.34%	low
12,000,000	2,562,000	0.00%	128,100	32,025	340,800	\$3,528	504,453	38.15	1.08%	low

Page 5  
 March 23, 2022  
 Water Quality Board  
 Salina City – Conversion to Hardship Design Grant  
**Attachment 1**

Page 8  
 October 27, 2021  
 Salina City – Feasibility Design Advance Authorization Report

<b>Table 1. FNI Calculation</b>					
	Local Value	State Value	Score	Weighting	Weighting
unemployment rate	5.3%	3.6%	2.01	4	8.04
Poverty Rate	15.2%	9.8%	2.08	2.5	5.20
Threshold LQI	\$ 24,500	\$ 33,773	2.10	2.5	5.25
Population Growth Rate	-1.9%	16.5%	3.00	1	3.00
Financial Need Indicator (Sum of weighted Scores/10)					<b>2.15</b>
2020 Population for 5 years	2,580	3,096,848			
2010 Population for 5 years	2,630	2,657,236			
<b>Financial</b>					
Modified					
FNI	Below 1.4%	1.4% to 1.75%	1.75% to 2.1%	2.1% to 2.45	Above 2.45
Below 1.5	Low	Low	Medium	Medium	High
1.5 to 2.5	Low	Medium	Medium	High	High
Above 2.5	Medium	Medium	High	High	High



State of Utah

SPENCER J. COX  
*Governor*

DEIDRE HENDERSON  
*Lieutenant Governor*

Department of  
Environmental Quality

Kimberly D. Shelley  
*Executive Director*

DIVISION OF WATER QUALITY  
Erica Brown Gaddis, PhD  
*Director*

**Water Quality Board**  
Steven K. Earley, Chair  
James Webb, Vice Chair  
Carly Castle  
Brandon Gordon  
Michela Harris  
Joseph Havasi  
Trevor Heaton  
Michael D. Luers  
Kimberly D. Shelley  
Erica Brown Gaddis, PhD  
*Executive Secretary*

**WATER QUALITY BOARD  
REQUEST FOR HARDSHIP PLANNING ADVANCE FOR  
SEWER AND TREATMENT FACILITY FEASIBILITY STUDY**

**APPLICANT:** Big Water Town  
Big Water Town Hall, 60 Aaron Burr, Drawer 410127  
Big Water, UT 84741  
Telephone: 435-675-3760

**PRESIDING OFFICIAL:** David Schmuker

**CONTACT:** David Schmuker, Mayor

**TREASURER/RECORDER:** Amber Banfill

**CONSULTING ENGINEER:** Dustyn Shaffer  
Sunrise Engineering  
11 North 300 West  
Washington, UT 84780  
Telephone: 435-652-8450

**CITY ATTORNEY:**

**BOND COUNSEL:**

**APPLICANT'S REQUEST**

Big Water Town (Big Water) is requesting a **hardship planning advance** in the amount of **\$52,500** to develop a study for determining the feasibility of a sewer collection system and treatment facility in the service area of Big Water.



## **APPLICANT'S LOCATION**

Big Water is located in Kane County east of Kanab.



## **PROJECT NEED**

Currently, most homes located within Big Water are served by on-site wastewater treatment systems. In 2006, Big Water conducted a preliminary facility master plan study to consider the construction of a citywide sewer system. In 2011, the town requested financial assistance for the construction of a wastewater collection and treatment system. The project was ultimately not implemented, and the homes in the area have some of the smallest lot sizes in the State with little room for replacement area.

A new study is necessary to determine the feasibility of a sewer system with the intent to construct a new treatment facility.

## **PROJECT DESCRIPTION**

The proposed project would be the production of a wastewater capital facilities master plan. The completion of this plan will be put out to competitive bid. The scope of planning work would include:

- Evaluation of existing on-site treatment systems and viability of connection to a new sewer system
- Treatment system alternatives analysis, including cost analysis
- Development of a master plan and capital facilities plan to outline recommended improvements and priorities

### **IMPLEMENTATION SCHEDULE**

The plan completion date is estimated to be in Summer 2022, with construction estimated to be completed in 2025.

### **IMPLEMENTATION SCHEDULE**

This is a planning project. It will be ranked when a recommended project scope of work has been identified and a request for funding has been submitted.

### **COST ESTIMATE**

The estimated cost for the plan is \$52,500.

### **STAFF COMMENTS AND RECOMMENDATION**

This is a small rural community with limited capital reserves, as well as no existing revenue stream for a wastewater study to be conducted, as such staff believes a planning grant is more appropriate than an advance.

Staff recommends the Board **authorize a hardship planning grant of \$52,500** to Big Water Town under the following special conditions:

1. The Division of Water Quality must approve the engineering agreement and plan of study before the advance will be executed.



State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kimberly D. Shelley  
Executive Director

DIVISION OF WATER QUALITY  
Erica Brown Gaddis, PhD  
Director

**Water Quality Board**  
Steven K. Earley, Chair  
James Webb, Vice Chair  
Carly Castle  
Brandon Gordon  
Michela Harris  
Joseph Havasi  
Trevor Heaton  
Michael D. Luers  
Kimberly D. Shelley  
Erica Brown Gaddis, PhD  
Executive Secretary

**MEMORANDUM**

**TO:** Utah Water Quality Board

**THROUGH:** Erica Brown Gaddis, PhD

**FROM:** Beth Wondimu, P.E. and Ken Hoffman P.E.

**DATE:** March 23, 2022

**SUBJECT:** Millville City's Additional Funding of New Wastewater Collection System

**PROJECT UPDATE**

On January 26, 2022, Millville City (City) appeared in front of the Water Quality Board (Board) to request assistance with the affordability of their City sewer collection system. The project was bid in March 2021. The bid was \$25,931,777 for construction work with a project total of \$30,060,000. During the appearance the City believed they had a viable bid and agreement for adjustment of the price due to cost increases of materials with a contractor. However, during the bonding process the City's attorney found these adjustments did not meet State procurement requirements which does not allow the City to change unit prices. Because of this reason, the City was required to re-bid the project.

On March 17, 2022, Millville re-bid the sewer project and the bid came in over the original construction estimate. Only one bidder was received in the amount of: \$29.3 million. The bid is good for 30 days or until April 16, 2022. The bid has been reviewed by Franson Engineering and the costs have been compared. The analysis of the bid indicated that higher costs are due to:

- Higher pipe material costs.
- Higher costs of concrete due to market conditions
- Higher cost of asphalt

Using the increased materials and the amount of the \$29.3 million bid, the City's shortfall will be in the amount of \$4.7 million. Previous Board Authorization memos dated in April 2021 and January 26, 2022 are attached to this memo.

## **APPLICANT’S REQUEST**

Under the current market conditions, a total of \$34.8 million is needed to fund the project. **Millville City is requesting \$4.7 million in additional assistance with an escalating repayment amortization schedule.**

## **CURRENT FUNDING PACKAGES**

### *US Department of Agriculture – Rural Development (USDA-RD)*

The USDA-RD has authorized two funding packages of loan and grant funding in support of the project. USDA-RD Package 1 is a loan of \$5,011,000 with an interest rate of 1.5% and a 40-year term and a grant of \$2,949,000. USDA-RD Package 2 is a loan of \$9,700,000 with an interest rate of 1.75% and a 40-year term and a grant of \$6,400,000. USDA-RD Package 2 includes authorization for funding private laterals but will not be funding any laterals.

### *Water Quality Board*

On January 26, 2022, the Board authorized a refinance of the Package 1 USDA-RD \$5,011,000 loan comprised of \$3,750,000 million in principal forgiveness and \$1,261,000 of loan at 0% for a term of 30 years after completion of drawing USDA-RD funds. Also, the Board previously authorized funding comprised of \$4,500,000 in principal forgiveness and \$500,000 of loan at 0% for a term of 30 years. In addition, the Board authorized \$1,000,000 from the Hardship Grant Fund to pay the construction of private laterals for citizens meeting the affordability criteria set forth in R317-101-5.A.3. Finally, the Board authorized \$151,768 from the Hardship Grant Fund to pay off the existing UWLF debt.

## **PROJECT NEED**

The proposed project consists of a new sewerage system with a new pump station and force main that connects to Hyrum City’s existing treatment systems. Millville is the second largest unsewered community in the State of Utah. Millville’s plan to implement a public sewerage system will protect a valuable regional drinking water resource and contribute to orderly growth in the area. The recommended alternative would connect the city’s sewer to the regional wastewater treatment plant in Hyrum City, linking the regional needs for water quality protection.

## **PROJECT DESCRIPTION**

See Page 2 of the attached Authorization Reports.

## **POSITION ON PROJECT PRIORITY LIST**

Millville City is currently ranked No. 6 of 8 on the FY 2021 Wastewater Treatment Project Priority List (PPL).

**APPLICANT’S CURRENT USER CHARGE**

Currently, Millville City charges \$2.00 per month per ERU to service the debt on their portion of the Nibley trunk line connecting to Hyrum. On March 10, 2022, believing the bid was still good the City Council set a monthly sewer rate of \$88.97. Due to State law an impact fee cannot be set yet, however the City is projecting a \$5,000 impact fee for the collections system. Hyrum’s impact fee of approximately \$2,450 will be in addition to this.

**COST ESTIMATE**

The total cost of the project is estimated to be \$34,760,000. A breakdown of these costs is as follows.

	Collection	Laterals
Legal/Bonding	\$50,000	
DWQ Loan Origination Fee	\$64,610	
Collection Sewers	\$29,300,000	
Laterals		\$1,000,000
Interest on Construction Loans	\$1,094,390	
Engineering, CMS, & Environmental	\$1,200,000	
Contingency (7% const. bid)	\$2,051,000	
Subtotals	\$33,857,610	\$1,000,000
<b>Total Project Cost:</b>		<b>\$ 34,760,000</b>

**ESTIMATED ANNUAL COST FOR SEWER SERVICE**

With the new project cost and the previous Board and USDA-RD authorizations, Millville’s ratepayers will pay \$88.97 or 1.80% of the MAGI towards their sewer bills. The Utah Water Quality Board’s State Affordability Criterion of 1.4% of MAGI (\$59,200 for Millville City) or \$69.07 per month for the City will be exceeded by the project allowing for the consideration of grant funds as part of a funding package. Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, the community has a Financial Burden of: **Medium**.

**PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT**

On March 10, 2022, the City held a public meeting to discuss the project and set user fees. Overall, the public was very supportive of the project.

**STAFF DISCUSSION**

It is critical this bid be awarded and funding closed prior to May 14, 2022. If the project is not closed by May 14 it will have to be re-bid with Build America, Buy America Act requirements which staff estimates will increase costs further and may make the project unaffordable. Staff prepared a revenue and expenses model to evaluate if an escalating amortization schedule could achieve a 1.25 debt to service ratio. The model assumes half the growth projected by Millville with revenue from the increased ERU’s and impact fees. Staff did not find the 1.25 debt to service ratio to be attainable.

However, USDA-RD only requires a 1.1 ratio and the included model shows an approximate amortization schedule to maintain a 1.1 debt service ratio. Staff finds this amortization schedule and debt service ratio acceptable.

### **STAFF RECOMMENDATION**

Staff recommends the Board authorize a \$4,700,000 loan at 0% for a term of 30 years, in addition to the previous authorizations by the Board. This is subject to the following special conditions:

1. Millville City must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
2. As part of the facility planning, Millville City must complete a Water Conservation and Management Plan.
3. Millville City must pursue and retain remaining funding necessary to fully implement the collection system project.
4. Millville City must develop and implement an asset management program that is consistent with EPA's Fiscal Sustainability Plan guidance.
5. The funding authorizations will expire on May 14, 2022 if the City has not awarded the construction contract by that date.
6. Staff may negotiate with the City an escalating principal repayment schedule.
7. Staff may allow for a debt service ratio of 1.1.

**ATTACHMENT 1**

Year	Revenue			Expenses					DWQ				Total Expense	Balance	Debt Service Ratio	
	ERUs	An. Impact Fee	Total Revenue	Hyrum	O&M	RD Loan	BPR	SLAR	Loan 1 and 2	Reserve	Loan 3	Loan 3				
	Growth Rate	Impact Fee	User Rate	31.86	9.11	9,700,000	4.21	2.03	\$1.261 & \$0.5		\$4.7	Reserve				
	2.25%	5000	88.97			338,256										1.1
2022	724		8,688										-	8,688		
2023	741		17,784										-	17,784		
2024	758	85,000	894,271	289,799	82,865	338,256	38,294	18,465	13,000	8,806	33,000	23,508	845,992	48,279	1.10	
2025	775	85,000	912,421	296,298	84,723	338,256	39,153	18,879	14,000	8,806	39,000	23,508	862,623	49,798	1.10	
2026	792	85,000	930,571	302,797	86,581	338,256	40,012	19,293	16,000	8,806	44,000	23,508	879,254	51,317	1.10	
2027	810	90,000	954,788	309,679	88,549	338,256	40,921	19,732	19,000	8,806	49,000	23,508	897,451	57,337	1.11	
2028	828	90,000	974,006	316,561	90,517	338,256	41,831	20,170	21,000	8,806	55,000	23,508	915,648	58,358	1.11	
2029	847	95,000	999,291	323,825	92,594	338,256	42,790	20,633	23,000	8,806	61,000	23,508	934,412	64,879	1.13	
2030	866	95,000	1,019,576	331,089	94,671	338,256	43,750	21,096	25,000	8,806	67,000	23,508	953,176	66,400	1.13	
2031	885	95,000	1,039,861	338,353	96,748	338,256	44,710	21,559	27,000	8,806	73,000	23,508	971,940	67,921	1.13	
2032	905	100,000	1,066,214	346,000	98,935	338,256	7,000	22,046	33,000	8,806	89,000	23,508	966,550	99,664	1.19	
2033	925	100,000	1,087,567	353,646	101,121	338,256		22,533	38,000	8,806	101,000	23,508	986,870	100,697	1.19	
2034	946	105,000	1,114,987	361,675	103,417	338,256		23,045	47,000	-	124,000	-	997,392	117,595	1.22	
2035	967	105,000	1,137,408	369,703	105,712	338,256		23,556	52,000		137,000	-	1,026,228	111,180	1.20	
2036	989	110,000	1,165,896	378,114	108,117	338,256		24,092	58,000		155,000	-	1,061,580	104,316	1.18	
2037	1011	110,000	1,189,384	386,526	110,523	338,256		24,628	63,000	-	168,000	-	1,090,932	98,452	1.17	
2038	1034	115,000	1,218,940	395,319	113,037	338,256		25,188	67,000	-	179,000	-	1,117,800	101,140	1.17	
<b>2039</b>	<b>1057</b>	<b>115,000</b>	<b>1,243,495</b>	<b>404,112</b>	<b>115,551</b>	<b>338,256</b>		<b>25,749</b>	<b>69,000</b>	<b>-</b>	<b>185,000</b>	<b>-</b>	<b>1,137,668</b>	<b>105,827</b>	<b>1.17</b>	
2040	1081	120,000	1,274,119	413,288	118,175	338,256		26,333	71,000	-	191,000	-	1,158,052	116,067	1.19	
2041	1105	120,000	1,299,742	422,464	120,799	338,256		26,918	74,000	-	196,000	-	1,178,436	121,306	1.19	
2042	1130	125,000	1,331,433	432,022	123,532	338,256		27,527	76,000	-	202,000	-	1,199,336	132,097	1.21	
2043	1155	125,000	1,358,124	441,580	126,265	338,256		28,136	78,000	-	208,000	-	1,220,236	137,888	1.21	
2044	1181	130,000	1,390,883	451,520	129,107	338,256		28,769	80,000	-	214,000	-	1,241,652	149,231	1.23	
2045	1208	135,000	1,424,709	461,843	132,059	338,256		29,427	82,000	-	220,000	-	1,263,584	161,125	1.24	
2046	1235	135,000	1,453,535	472,165	135,010	338,256		30,085	84,000	-	226,000	-	1,285,516	168,019	1.25	
2047	1263	140,000	1,488,429	482,870	138,071	338,256		30,767	87,000	-	231,000	-	1,307,964	180,465	1.26	
2048	1291	140,000	1,518,323	493,575	141,132	338,256		31,449	89,000	-	237,000	-	1,330,412	187,911	1.27	
2049	1320	145,000	1,554,285	504,662	144,302	338,256		32,155	91,000	-	243,000	-	1,353,376	200,909	1.29	
2050	1350	150,000	1,591,314	516,132	147,582	338,256		32,886	93,000	-	249,000	-	1,376,856	214,458	1.30	
2051	1380	150,000	1,623,343	527,602	150,862	338,256			95,000	-	255,000	-	1,366,719	256,624	1.37	
2052	1411	155,000	1,661,440	539,454	154,251	338,256			98,000	-	260,000	-	1,389,960	271,480	1.39	
2053	1443	160,000	1,700,605	551,688	157,749	338,256			78,000	-	209,000	-	1,334,693	365,912	1.59	