



State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF WATER QUALITY
John K. Mackey, P.E.
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
John K. Mackey
Executive Secretary

**Utah Water Quality Board Meeting
MASOB
195 North 1950 West
Board Room 1015 & Via [Zoom](#)
Salt Lake City, UT 84116**

*October 26, 2022
Board Meeting Begins at 8:30 am*

AGENDA

Water Quality Board Meeting – Roll Call

A. Minutes:

Approval of Minutes for September 28, 2022 Water Quality Board Meeting..... Steven Earley

B. Executive Secretary’s Report John Mackey

C. Funding:

- 1. Financial Report..... Emily Cantón
- 2. Project Funding Process Discussion Ken Hoffman
 - a. Springdale – Project Funding Request..... Beth Wondimu & Ken Hoffman
 - b. Central Valley – Additional Project Funding Request..... Skyler Davies
 - c. Delta City – Project Funding Request..... George Meados
 - d. Hanksville – Project Funding Request..... George Meados
 - e. Long Valley SID – Project Funding Request..... Andrew Pompeo
 - f. North Logan – Project Funding Request..... Glen Lischeske
 - g. Lewiston – Additional Project Funding Request Beth Wondimu & Ken Hoffman
- 3. Board Funding Authorizations Ken Hoffman

D. Other

FY24 Hourly Rate Fee Changes for "Other Permits"..... Emily Cantón

E. Public Comment Period

F. Meeting Adjournment

**Next Meeting
December 14, 2022 at 8:30 am**

**DEQ Board Room 1015 & Via [Zoom](#)
195 North 1950 West
Salt Lake City, UT 84116**

Revised 10/20/2022
DWQ-2022-028631

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 at least five working days prior to the scheduled meeting.



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MINUTES

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

September 28, 2022
8:30 am Meeting

UTAH WATER QUALITY BOARD MEMBERS PRESENT

Carly Castle
Brandon Gordon
Joe Havasi
Mike Luers
Chris Otto (Alternate for Kim Shelley)

Excused Steven Earley
 Michela Harris
 Trevor Heaton
 Kim Shelley
 James Webb

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Paul Burnett	Brenda Johnson
Harry Campbell	Glen Lischeske
Emily Cantón	George Meados
Krystol Carfaro	Baylie Nusink
Eric Castrejon	Alan Ochoa
Skyler Davies	David Pierson
Judy Etherington	Danny Ryan
Dan Griffin	Jeff Studenka
Clanci Hawks	Jake VanderLaan
Ken Hoffman	Sandy Wingert
Ben Holcomb	Beth Wondimu

OTHERS PRESENT

Continued

Soren Simonson	Jordan River Commission
Kelvin Smith	Civil Science (Kanab City)
Jake Dutton	Kanab City
Haley Sousa	AG's Office
Melissa Reynolds	Holland & Hart
Mike Chambers	
Ryan York	Provo City
Renn Lambert	LimnoTech

Ms. Cantón called the Meeting to order at 8:30 AM and asked the attending Water Quality board members to appoint a chair pro tempore for the meeting.

APPROVAL OF MINUTES OF AUGUST 24, 2022 BOARD MEETING

Motion: Mr. Gordon moved to approve the minutes of the August 24, 2022 Board meeting.

Ms. Castle seconded the motion. The motion passed unanimously.

EXECUTIVE SECRETARY REPORT

Ms. Cantón addressed the Board regarding the following.

National

- Celebrated the 50th year of the Clean Water Act

Water Quality Division

- Southern Utah Reuse Program
- Submitted Budget for FY23-24

FUNDING REQUESTS

Financial Report: Ms. Carfaro updated the Water Quality Board on the Loan Funds and Hardship Grant Funds as indicated in the [packet](#).

Kanab City – Planning Advance: Mr. Hoffman presented the Board with a request to authorize a Hardship Planning Advance of \$29,800.

Motion: Mr. Gordon moved to approve authorize a hardship planning advance of \$29,900 to Kanab City 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.**
- 2. The planning advance must be expeditiously repaid to the Board once long-term project financing has been secured from the Board.**

3. **If the City does not return to the Board for project funding, the planning advance may be forgiven by staff as a grant if any of the following conditions are met:**
 - a. **The project is fully funded by another agency, fully funded privately, or fully funded from a combination of another agency and private funding.**
 - b. **If no project is funded after five years.**
4. **The City must agree to participate in the Municipal Wastewater Planning Program (MWPP).**
5. **As part of the facility planning, the City must complete a Water Conservation and Management Plan.**

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

RULEMAKING

Request to Initiate Rulemaking: Proposed Amendments to Standards of Water Quality for the State, UAC R317-2: Mr. Vander Laan and Mr. Holcomb presented the Board with a request to initial rulemaking for proposed amendments to standards of water quality for the state, UAC R317-2 and make a request for a Board Member to serve as hearing officer for rulemaking.

Motion: Mr. Luers moved to initiate Rulemaking for the Proposed Amendments to Standards of Water Quality for the State, UAC R317-2 and approved Soren Simonsen as hearing officer.

Ms. Castle seconded the motion. The motion passed unanimously.

PUBLIC COMMENTS

There were no public comments.

MEETING ADJOURNMENT

Motion: Mr. Gordon moved to adjourn the meeting.

Ms. Castle 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 –October 26, 2022

Meeting begins at 8:30 am

Page 4
September 28, 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>

Joe Havasi, Chair Pro Tempore
Utah Water Quality Board

DWQ-2022-029149

LOAN FUNDS FINANCIAL STATUS REPORT OCTOBER 2022

	State Fiscal Year 2023	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026	State Fiscal Year 2027	State Fiscal Year 2028
STATE REVOLVING FUND (SRF)						
CAP Grant Base Program						
Capitalization Grants Awards (FY22)	\$ 6,096,000					
Future Capitalization Grant (estimated)		\$ 6,000,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000
State Cap Grant Match (FY22)	\$ 1,219,200	\$ -	\$ -	\$ -	\$ -	\$ -
Future State Cap Grant Match (estimated)		\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000
Early Match	\$ 4,120,000					
CAP Grant General Supplemental						
General Supplemental Grants	\$ 9,378,000					
Future General Supplemental Grant (estimated)		\$ 10,294,350	\$ 11,234,025	\$ 12,169,025	\$ 12,169,025	
State General Supplemental Grants Match	\$ 937,800					
Future State Gen. Sup Grants Match (estimated)		\$ 1,029,435	\$ 2,246,805	\$ 2,433,805	\$ 2,433,805	
SRF - 2nd Round						
Account Balance	\$ 41,129,624	\$ 7,734	\$ 2,791,294	\$ 22,633,549	\$ 57,363,436	\$ 91,176,294.02
Interest Earnings at 0.2479%	\$ 76,470	\$ 33	\$ 11,869	\$ 96,238	\$ 243,909	\$ 387,682
Loan Repayments (5255)	\$ 8,305,924	\$ 20,400,748	\$ 20,164,590	\$ 20,165,402	\$ 18,728,941	\$ 22,461,849
Total Funds Available	\$ 71,263,018	\$ 38,932,299	\$ 43,648,582	\$ 64,698,019	\$ 98,139,116	\$ 121,225,825
CWSRF Program Obligations						
Admin Expenses 4% of all CAP Grant Awards	\$ (638,680)	\$ (696,774)	\$ (734,361)	\$ (771,761)	\$ (400,000)	\$ (400,000)
Cap Grant Principal Forgiveness (PF) (FY18-22)	\$ (13,534,600)					
Future Cap Grant (PF portion)		\$ (600,000)	\$ (600,000)	\$ (600,000)	\$ (600,000)	\$ (600,000)
General Supplemental Grants (PF portion)	\$ (4,595,220)					
Future General Supplemental Grants (PF portion)		\$ (5,044,232)	\$ (5,504,672)	\$ (5,962,822)	\$ (5,962,822)	
OSG Cost Share Balances (FY20-21)	\$ (80,784)					
Project Obligations						
Central Valley Water Reclamation Facility	\$ (6,100,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Moab City	\$ (80,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Provo City	\$ (27,045,000)	\$ (16,800,000)	\$ -	\$ -	\$ -	\$ -
South Salt Lake City (A)	\$ (524,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Millville City Loan	\$ (5,146,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Mountain Green	\$ (5,500,000)	\$ (1,500,000)	\$ -	\$ -	\$ -	\$ -
Payson City	\$ (2,000,000)	\$ (11,500,000)	\$ -	\$ -	\$ -	\$ -
Loan Authorizations						
South Davis Sewer District (with NPS)			\$ (14,176,000)	\$ -	\$ -	\$ -
Millville Refinance Loan	\$ (1,261,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Planned Projects						
Long Valley	\$ (1,250,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
North Logan	\$ (3,500,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -	\$ -
CWSRF Obligations	\$ (71,255,284.00)	\$ (36,141,005.50)	\$ (21,015,033.25)	\$ (7,334,583.25)	\$ (6,962,822.25)	\$ (1,000,000.00)
CWSRF Remaining Loan Balance	\$ 7,733.90	\$ 2,791,293.91	\$ 22,633,549.20	\$ 57,363,436.02	\$ 91,176,294.02	\$ 120,225,824.62

LOAN FUNDS FINANCIAL STATUS REPORT OCTOBER 2022

Add. Sub. - Principal Forgiveness						
PF Balances (max for FY18-22)	\$ 13,534,600	\$ 321,220	\$ 1,965,452	\$ 8,070,124	\$ 14,632,946	\$ 21,195,768.25
Future Cap Grant (PF portion)	\$ -	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000
General Supplemental Balances (PF portion)	\$ 4,595,220					
Future General Supplemental Grants (PF portion)		\$ 5,044,232	\$ 5,504,672	\$ 5,962,822	\$ 5,962,822	
Project Obligations						
South Salt Lake City (A)	\$ (3,760,000)					
Millville City	\$ (3,604,000)					
Provo City	\$ (4,000,000)	\$ (3,000,000)				
Payson City		\$ (1,000,000)				
Add. Sub. Authorizations						
Millville City Refinance	\$ (3,750,000)					
Planned Projects						
Lewiston	\$ (1,000,000)					
Hanksville	\$ (1,694,600)					
Principal Forgiveness Remaining Balance	\$ 321,220.00	\$ 1,965,451.50	\$ 8,070,123.75	\$ 14,632,946.00	\$ 21,195,768.25	\$ 21,795,768.25
	State Fiscal Year	State Fiscal Year	State Fiscal Year	State Fiscal Year	State Fiscal Year	State Fiscal Year
UTAH WASTEWATER LOAN FUND (UWLF)	2023	2024	2025	2026	2027	2028
Funds Available						
UWLF	\$ 27,222,351	\$ 10,940,005	\$ 12,704,861	\$ 13,586,791	\$ 14,128,839	\$ 14,285,875
Sales Tax Revenue	\$ 1,468,266	\$ 3,587,500	\$ 3,587,500	\$ 3,587,500	\$ 3,587,500	\$ 3,587,500
Loan Repayments (5260)	\$ 1,767,988	\$ 2,473,791	\$ 2,808,235	\$ 2,655,353	\$ 2,270,341	\$ 2,298,785
Total Funds Available	\$ 30,458,605	\$ 17,001,296	\$ 19,100,596	\$ 19,829,644	\$ 19,986,680	\$ 20,172,160
General Obligations						
State Match Transfers Base Cap Grant	\$ (1,219,200)	\$ (1,200,000)	\$ (1,200,000)	\$ (1,200,000)	\$ (1,200,000)	\$ (1,200,000)
State Match Transfers Gen. Supplemental Grant	\$ (937,800)	\$ -	\$ -	\$ -	\$ -	\$ -
State Match Transfers Gen. Supplemental Grant (est)		\$ (1,029,435)	\$ (2,246,805)	\$ (2,433,805)	\$ (2,433,805)	
State Match Reserve for Historic Cap Grant Values		\$ (368,400)	\$ (368,400)	\$ (368,400)	\$ (368,400)	\$ (368,400)
DWQ Administrative Expenses	\$ (1,698,600)	\$ (1,698,600)	\$ (1,698,600)	\$ (1,698,600)	\$ (1,698,600)	\$ (1,698,600)
Early Match	\$ (4,120,000)					
Project Obligations						
South Salt Lake City (B)	\$ (4,891,000)	\$ -	\$ -	\$ -	\$ -	\$ -
South Salt Lake City	\$ (982,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Loan Authorizations						
Spanish Fork	\$ (4,500,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Delta	\$ (200,000)					
Planned Projects						
Hanksville	\$ (350,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Long Valley	\$ (220,000)					
Springdale						
Lewiston	\$ (400,000)					
Total Obligations	\$ (19,518,600)	\$ (4,296,435)	\$ (5,513,805)	\$ (5,700,805)	\$ (5,700,805)	\$ (3,267,000)

LOAN FUNDS FINANCIAL STATUS REPORT OCTOBER 2022

UWLF Remaining Loan Balance	\$ 10,940,005	\$ 12,704,861	\$ 13,586,791	\$ 14,128,839	\$ 14,285,875	\$ 16,905,160
TOTAL LOAN FUND BALANCE	\$ 11,268,959	\$ 17,461,606	\$ 44,290,464	\$ 86,125,221	\$ 126,657,938	\$ 158,926,753
PROJECT RESERVE		\$ (5,000,000)	\$ (10,000,000)	\$ (15,000,000)	\$ (20,000,000)	\$ (25,000,000)
TOTAL AVAILABLE LOAN FUNDS	\$ 11,268,959	\$ 12,461,606	\$ 34,290,464	\$ 71,125,221	\$ 106,657,938	\$ 133,926,753

*WQB Agenda Items

HARDSHIP GRANT FUNDS FINANCIAL STATUS REPORT OCTOBER 2022

HARDSHIP GRANT FUNDS (HGF)	State Fiscal Year 2023	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026	State Fiscal Year 2027	State Fiscal Year 2028
Funds Available						
Beginning Balance		\$ 1,409,313.17	\$ 1,733,002.58	\$ 1,968,018.73	\$ 2,111,164.10	\$ 2,158,631.32
Federal HGF Beginning Balance (5250)	\$ 3,673,163.98	\$ -	\$ -	\$ -	\$ -	\$ -
State HGF Beginning Balance (5265)	\$ 2,893,172.75	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earnings at 0.2479%	\$ 12,208.46	\$ 5,992.40	\$ 7,368.73	\$ 8,368.02	\$ 8,976.67	\$ 9,178.50
UWLF Interest Earnings at 0.2479%	\$ 50,613.16	\$ 51,155.46	\$ 59,407.93	\$ 63,531.83	\$ 66,066.45	\$ 66,800.75
Hardship Grant Assessments (5255)	\$ 358,256.46	\$ 969,300.26	\$ 892,768.58	\$ 817,302.44	\$ 739,827.47	\$ 684,801.94
Interest Payments - (5260)	\$ 138,889.08	\$ 297,241.29	\$ 275,470.91	\$ 253,943.08	\$ 232,596.63	\$ 216,154.35
Advance Repayments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Funds Available	\$ 7,126,303.89	\$ 2,733,002.58	\$ 2,968,018.73	\$ 3,111,164.10	\$ 3,158,631.32	\$ 3,135,566.86
Financial Assistance Project Obligations						
Big Water Planning Grant	\$ (52,500.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Delta Design-Grant	\$ (200,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Dutch John-Planning	\$ (95,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Dutch John-HGF Loan	\$ (60,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Eagle Mountain City - Construction Grant	\$ (510,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Elwood-Planning	\$ (18,200.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Hanksville-Design	\$ (162,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Hinckley Hardship Planning Grant	\$ (15,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Kanab City Planning Advance	\$ (29,800.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Lewiston City - Design and Construction	\$ (460,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Long Valley-Design	\$ (103,700.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Millville City - Design and Construction	\$ (1,000,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Mount Pleasant Planning Advance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Spanish Fork - Hardship Grant	\$ (500,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Stockton-Planning	\$ (20,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Point Source/Hardship Grant Obligations						
McKees ARDL interest-rate buy down	\$ (55,261.00)	\$ -	\$ -	\$ -	\$ -	\$ -
Munk Dairy ARDL interest-rate buy down	\$ (16,017.00)	\$ -	\$ -	\$ -	\$ -	\$ -
(FY12) Utah Department of Agriculture	\$ (172,269.95)	\$ -	\$ -	\$ -	\$ -	\$ -
(FY15) DEQ - Ammonia Criteria Study	\$ (27,242.43)	\$ -	\$ -	\$ -	\$ -	\$ -
(FY17) DEQ - Utah Lake Water Quality Study	\$ (348,300.75)	\$ -	\$ -	\$ -	\$ -	\$ -
(FY23) DEQ Davis County Health Department	\$ (105,313.00)	\$ -	\$ -	\$ -	\$ -	\$ -
USU - Historic Trophic State/Nutrient Concentrations Paleo	\$ (77,867.75)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2018 - Remaining Payments	\$ (7,100.00)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2019 - Remaining Payments	\$ (88,688.36)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2020 - Remaining Payments	\$ (230,867.22)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2021 - Remaining Payments	\$ (147,078.69)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2022 - Remaining Payments	\$ (701,171.97)	\$ -	\$ -	\$ -	\$ -	\$ -
FY2023 - Remaining Payments	\$ (973,612.60)	\$ -	\$ -	\$ -	\$ -	\$ -
Future NPS Annual Allocations		\$ (1,000,000.00)	\$ (1,000,000.00)	\$ (1,000,000.00)	\$ (1,000,000.00)	\$ (1,000,000.00)
Planned Projects						
Lewiston De-Obligation	\$ 460,000.00					
Total Obligations	\$ (5,716,990.72)	\$ (1,000,000.00)	\$ (1,000,000.00)	\$ (1,000,000.00)	\$ (1,000,000.00)	\$ (1,000,000.00)
HGF Unobligated Funds	\$ 1,409,313.17	\$ 1,733,002.58	\$ 1,968,018.73	\$ 2,111,164.10	\$ 2,158,631.32	\$ 2,135,566.86

State of Utah
Wastewater Project Assistance Program
Project Priority List

As of August 10, 2022

Rank	Project Name	Funding Authorized	Total Points	Point Categories			
				Project Need	Potential Improvement	Population Affected	Special Consideration
1	South Salt Lake City (CVWRF)	X	143	50	23	10	60
	Central Valley (CVWRF)	R	143	50	23	10	60
2	South Davis Sewer District	X	138	50	18	10	60
3	Springdale		119	40	18	1	60
4	Spanish Fork Water Reclamation Facility	X	117	50	19	8	40
5	North Logan		86	25	14	7	40
6	Hanksville		76	50	5	1	20
7	Lewiston City	R	66	10	14	2	40
8	Dutch John (Dagget County)		28	10	17	1	0
9	Delta		24	0	0	4	20
10	Long Valley SID		11	10	0	1	0

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



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MEMORANDUM

TO: Utah Water Quality Board

THROUGH: John K. Mackey, P.E.

FROM: Engineering Section (Ken Hoffman P.E., Beth Wondimu P.E., Skyler Davis P.E., George Meados, Andrew Pompeo, & Glen Lischeske P.E.)

DATE: October 26, 2022

SUBJECT: Water Quality Board Meeting – FY 2023 Funding Request Staff Recommendations

BACKGROUND

Over the past few years the WQ Board has been cautious and responsible with fund balances by retaining reserve funds. However, due to the new incoming BIL funding and the increased requirements that will be placed upon these reserves, some of the past reserves were allocated in previous Board meetings to supplement projects that had seen increases in costs and to avoid potential additional requirements that would be associated with BIL funding. This has essentially left the funds at the incoming funding levels and a smaller reserve.

PROJECTS FOR WATER QUALITY BOARD CONSIDERATION

In June 2022, the Board received applications with the requested funding of nearly \$70 Million. As there are not sufficient funds to provide the funding requested, staff brought the requests to the Finance Committee for review. Staff prepared a brief summary of each project, provided below and following Table 1, which contains summary of Funding Requests. A cost model for each project is included as Attachments 1 through 7. As a note, when the Board funds Planning, Engineering, or construction management services staff needs to have the option to use Utah Wastewater Loan Fund or Hardship Grant Funds to avoid Federal Architectural and Engineering procurement requirements.

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

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Table 1: Summary of Project Requests

Table 1 - Summary of Funding Requests			
Entity	Planning, Engineering, & CMS	Construction	Total Requested Funding
Springdale	\$411,500	\$3,799,600	\$4,211,100
Central Valley	\$0	\$33,200,000	\$33,200,000
Delta	\$1,322,000	\$15,317,000	\$16,639,000
Hanksville	\$323,036	\$1,747,564	\$2,070,600
Long Valley SID	\$210,700	\$1,212,000	\$1,422,700
North Logan	\$0	\$10,550,000	\$10,550,000
Lewiston	\$0	\$2,144,000	\$2,144,000

INTEREST RATE STARTING POINT

Table 2 provides an example of how interest rates can be determined for each project. Recommended discounts are given in similar tables by individual project as applicable below. Consideration begins with the 20-year market rate of 4.00% based on the October 3, 2022 Daily Treasury Yield Curve¹.

Table 2-Interest Rate Factors

Market Rate (20-year basis)	4.00%	
Discount Factors:	Maximum Discount	Recommended Discount
SRF Programmatic Costs	1.00%	X.XX%
Fiscal Sustainability Credit	0.50%	X.XX%
Green Project Reserve	0.50%	X.XX%
Regionalization	0.25%	X.XX%
Economic Hardship	4.00%	X.XX%
Recommended Interest Rate		X.XX%

No Board direction has been given for rate reduction for economic hardship based on the Financial Burden Indicator. Staff has estimated a rate reduction of 0%-50% for Low burden, 25%-75% for Medium burden, and 50%-100% for High burden.

¹ https://home.treasury.gov/resource-center/data-chart-center/interest-rates/TextView?type=daily_treasury_yield_curve&field=tdr_date_value=2022

PROJECT SUMMARY AND STAFF COMMENTS

SPRINGDALE – (Beth Wondimu P.E. & Ken Hoffman P.E.)

The Town of Springdale is requesting funding of a \$4.2 million wastewater project. In addition to Springdale, the Town’s wastewater system is used by the neighboring community of Rockville as well as Zion National Park. Springdale’s collection system flows to treatment lagoons to the west of Rockville. Currently, Springdale’s wastewater is treated with a wastewater lagoon treatment facility that periodically discharges effluent water into the Virgin River. On May 6, 2021, Springdale received a Notice of Violation and Compliance Order (NOV/CO) from the Division of Water Quality (DWQ). The NOV/CO was a result of elevated total suspended solids (TSS) and *E. coli* levels in exceedance with their wastewater discharge permit. This project will allow Springdale City to maintain compliance with DWQ discharge requirements, specifically it will make it possible for the plant to make improvements that are predicted to help reduce the levels of TSS as well as reduce the levels of phosphorus in the treatment effluent. The proposed project is to construct or upgrade the sewer systems and lagoon treatment facility. Updated funding alternatives that include various mixtures of loan and grant are provided 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**. The August 2022 Board Feasibility Report is included as Enclosure 1. Springdale was fully funded by the Community Impact Board (CIB) during the October 2022 CIB meeting. To align with CIB’s funding, it would be most advantageous for the community to use Utah Wastewater Loan Funds if the Board provides any funding.

The suggested interest rate is calculated based on the project being funded from Utah Wastewater Loan Fund in the table below:

Market Rate (20-year basis)	4.00%	
Discount Factors:	Maximum Discount	Recommended Discount
SRF Programmatic Costs	1.00%	0.25%
Fiscal Sustainability Credit	0.50%	0.00%
Green Project Reserve	0.50%	0.00%
Regionalization	0.25%	0.00%
Economic Hardship (Medium)	4.00%	1.00%
Recommended Interest Rate		2.75%

On October 6, 2022, the CIB authorized funding in a total amount of \$3,616,000 as loan with an interest rate of 2.0% repayable over 30 years to Springdale. Staff does not have a recommended funding amount at this time. However, staff would recommend providing an exception to the current schedule and allow Springdale, if necessary, to come to the Board after bids have been opened and to ask for funding if the funds they have secured turn out to be inadequate to complete the project.

CENTRAL VALLEY WATER RECLAMATION FACILITY

Central Valley Water Reclamation Facility (CVWRF) provides wastewater treatment to several cities and districts in Salt Lake Valley. CVWRF is in the process of upgrading their water reclamation facility to a Biological Nutrient Removal treatment process to comply with the TBPEL as well as improve other aspects of water quality prior to discharge to the Jordan River. South Salt Lake City (SSL) was funded separately from CVWRF due to the increased hardship they are experiencing in comparison to the other entities served by CVWRF. CVWRF has bid the majority of the projects associated with the upgrades to the facility necessary to meet the TBPEL. Almost all of the projects came in higher than anticipated when CVWRF and SSL came to the Board. The overall improvement project has increased from approximately \$187 Million to \$305 Million.

CVWRF is seeking any amount of additional funding that the Board is able to provide. CVWRF continues to consider all funding options and will find ways to finance the projects, however, CVWRF recognizes the benefit of Water Quality Board Funds.

The federal money provided by the WQ Board to both CVWRF and South Salt Lake was used to fund the contract awarded for The Biological Nutrient Removal Basin (BNR) Project. The Bid contract included American Iron and Steel, Davis Bacon Wages, and Disadvantaged Business Enterprise requirements. It is anticipated that any additional funding would also be applied to that project, freeing up money from other sources to be utilized for the many other projects that are being constructed on a similar time frame with the BNR project.

Updated funding alternatives that include various loan rates are provided in Attachment 2. Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, the community has a Financial Burden of: **Low**. The August 2022 Board Feasibility Report is included as Enclosure 2. A suggested interest rate has not been calculated for CVWRF as no funding is being recommended at this time.

Based on feedback received during the September Finance Committee, meeting staff is not recommending a funding package for Central Valley beyond the previously authorized loan packages to Central Valley and South Salt Lake City.

DELTA

Delta City provides wastewater treatment to 3,500 residents. On August 24, 2022 the board authorized a hardship grant in the amount of \$200,000 and a short-term loan in the amount of \$200,000 at an interest rate of 0% over 5 years. Delta finished their wastewater master plan in 2019, and found deficiencies and system failures. Delta City's sewer system consists of six zones that need improvements. Improvements to Zone A include bypassing Lift Station A and replacing approximately 43,200 feet of clay pipe, asbestos cement pipe, and concrete pipes and manholes. Zone B and C improvements include replacing the force main line between Lift Station B and the lagoons, upgrading Lift Station C, and include replacing approximately 17,860 feet of clay pipe and asbestos cement pipe and associated manholes with these zones. Improvements to Zones D and E consist of replacing approximately 16,725 feet of concrete pipe and associated manholes. Zone F improvements include upgrading Lift Station F and installing a new force main line from Lift Station F to connect to the new force main interceptor from Lift Station B. Actual quantities

and prioritization of pipe replacement will be determined based on the results of the next sewer video inspection. The cost for these wastewater improvements were estimated at \$16,750,000. Delta was encouraged by staff to apply by the June 30, 2022 deadline. However, at this time staff is concerned the project is not fully developed in its scope and the projected rate increases. Staff believes Delta will reduce the scope of the project to reduce the required rate increase. In addition, staff and Delta believe they will be eligible for funding by USDA-RD.

Updated funding alternatives that include various mixtures of loan and grant are provided in Attachment 3. Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, the community has a Financial Burden of: **High**. The August 2022 Board Feasibility Report is included as Enclosure 3. A suggested interest rate has not been calculated for CVWRF as no funding is being recommended at this time.

Based on feedback received during the September Finance Committee meeting, staff is not recommending a funding package for Delta beyond the previously authorized \$400,000 Design Advance funding package of 50% grant and 50% loan. Delta should work with USDA-RD and/or the Community Impact Board and fully exhaust other options to secure funding for the project. If Delta cannot secure funding with CIB or USDA-RD they are encouraged to reapply to the Board at a later time when fund balances recover.

HANKSVILLE

Hanksville was authorized a hardship planning advance in the amount of \$36,000 at the December 15, 2021 board meeting. On August 24, 2022 the board authorized a design advance in the amount of \$162,000. The proposed project includes repairing lagoons that were damaged due to flooding on September 2, 2021. Along with lagoon repairs the lagoons have trouble maintaining 3 feet depth of water during the winter months. To maintain water depth, canal water is pumped into the lagoons. Therefore, Hanksville would like to divide the secondary cell to help maintain a consistent depth in the lagoons. In addition to maintaining minimum water depth, other improvements are recommended. These include lowering the first cell to allow for more hydraulic head between the flume and water surface of the primary cell, routing a section of pipe directly from the flume to the secondary cell for operational maintenance, and increasing the exterior dike height to better protect the cells from potential future flood events. The recommended increase in height is based on high water marks at the site along with accounts from Hanksville personnel of reported floodwater depths. Finally, the hydraulic conductivity of the clay liners will be assessed to determine whether or not the clay liners need to be replaced. The replacement of clay liners was assumed into the probable costs.

Hanksville had a sewer master plan developed in May 2022 which included a preliminary opinion of probable costs for the above projects of \$2,030,600. Once contingency and a local contribution of \$26,000 are considered, the total amount of money needed for this project is \$2,044,600. Currently, Hanksville has a monthly sewer fee of \$15.50. If Hanksville was required to find a private loan in the amount of \$2,044,600 their sewer cost as a percent of MAGI would be 6.20%. If Hanksville was provided a Water Quality Board loan in the amount of \$2,044,600, their sewer cost as a percent of MAGI would be 4.94%. If Hanksville was provided \$1,300,000 or \$1,694,600 in principal forgiveness, their sewer cost as a percent of MAGI would be 2.31% or 1.5%, respectively.

Updated funding alternatives that include various mixtures of loan and grant are provided in Attachment 4. Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, the community has a Financial Burden of: **High**. The August 2022 Board Feasibility Report is included as Enclosure 4.

The suggested interest rate is calculated in the table below:

Market Rate (20-year basis)	4.00%	
Discount Factors:	Maximum Discount	Recommended Discount
SRF Programmatic Costs	1.00%	1.00%
Fiscal Sustainability Credit	0.50%	0.00%
Green Project Reserve	0.50%	0.00%
Regionalization	0.25%	0.00%
Economic Hardship	4.00%	3.00%
Recommended Interest Rate		0.00%

Staff believes the project needs to be funded with a significant portion funded as principal forgiveness to make the project affordable. Staff believes without Board funding a project will not occur. It is worth noting every \$50,000 in loan results in a 0.1% of MAGI rate increase or \$2.14/month per connection. As Hanksville continues to repair and recover from the flood event, staff believes it is appropriate for the Board to target at rate as close to 1.4% MAGI as possible.

LONG VALLEY SID

At the August 24th Board Meeting, Long Valley was authorized a design advance of \$84,300. Long Valley is asking for a loan for the remaining \$1,274,200. The total amount that Long Valley is asking for is \$1,358,500. Long Valley SID is proposing the four following upgrades to increase the resiliency and automation of their system:

1. Replacing the old manual bar screen with an automatic screen auger to eliminate the need for manual service of the bar screens and remove non-organic solids to extend the lifespan of the lagoons.
2. Increase the volume of the lift station wet well to increase the holding capacity in the case of a power failure as well as handle higher flows during tourist season.
3. Extend the sewer line further into Mt. Carmel Junction and Glendale to hookup more buildings to the sanitary sewer. The sewer extension will allow more connections to abandon septic system and connect to a centralized sewer system, improving shallow ground water quality in local areas.
4. Map and inspect the sewer system and conduct repairs to prevent Infiltration and Inflow.

Long Valley needs to upgrade its system because of the lack of full-time employees, and the higher possibility of power outages due to their remoteness. Long Valley is also planning to expand the sewer collection lines to receive more sewage and take more septic systems out of service. Staff is

supportive of this project as a loan from the WQB would improve the resiliency and safety of this remote system, as well as connect more homes to sewer service.

Updated funding alternatives that include various mixtures of loan rates are provided in Attachment 5. Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, the community has a Financial Burden of: **Low**. The August 2022 Board Feasibility Report is included as Enclosure 5.

The suggested interest rate is calculated in the table below:

Market Rate (20-year basis)	4.00%	
Discount Factors:	Maximum Discount	Recommended Discount
SRF Programmatic Costs	1.00%	1.00%
Fiscal Sustainability Credit	0.50%	0.00%
Green Project Reserve	0.50%	0.00%
Adding service in currently unsewered area	4.00%	1.50%
Regionalization	0.25%	0.00%
Economic Hardship	4.00%	0.00%
Recommended Interest Rate		1.50%

Staff strongly support the extension of the sewer system into unsewered areas and septic system abandonment. Staff is recommending an additional rate reduction to support Long Valley undertaking this work. The sewer system expansion into unsewered areas comprises approximately 19.3% of the cost of the entire project.

NORTH LOGAN

North Logan is currently constructing a replacement for the existing main gravity trunk line taking all of North Logan’s sewer flows to the Logan City Treatment Plant. This trunk line will connect to existing infrastructure as well as new developments planned in the area – these developments are a major factor in the subsequent phases of the project. The upgrades are driven by growth and a capital improvement plan. The trunk line project is divided into seven phases. The first Phase is completed, Phase II is currently under construction, and Phase IV is ready to bid. The remaining Phases have been prioritized based on development pressure and avoiding additional costs caused by delays. The phases have been updated since the August Board meeting.

PHASE	BID	PHASE DETAILS	SEGMENT LENGTH	ANTICIPATED NORTH LOGAN COST
III	Yes	1800N 600W to 1650N 600W	1,128'	\$1.8M
IV	Late 2022	600W 1650N to 700W 1450N	2,022'	\$2.6 M
V	Spring 2023	1400N 800W to 1200N 800W	1,320'	\$0.895 M
VI	2024 - 2025	400W 2200N to 600W 1800N	3,825'	\$4.1 M
VII	2026 - 2027	2200N 150E to 2200N 100W	1,760'	\$1.7M
			Total	\$11.095M

Since the August Board meeting staff have determined Phase III would not be fundable due to all the programmatic requirements. Updated funding alternatives that include various mixtures of funding and loans are provided in Attachment 6. Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, the community has a Financial Burden of: **Medium**. The August 2022 Board Feasibility Report is included as Enclosure 6.

The suggested interest rate is calculated in the table below:

Market Rate (20-year basis)	4.00%	
Discount Factors:	Maximum Discount	Recommended Discount
SRF Programmatic Costs	1.00%	1.00%
Fiscal Sustainability Credit	0.50%	0.00%
Green Project Reserve	0.50%	0.00%
Regionalization	0.25%	0.00%
Economic Hardship	4.00%	1.00%
Recommended Interest Rate	2.00%	

Staff is recommending the Board consider funding North Logan’s Phase IV and V projects.

LEWISTON CITY

Lewiston is requesting additional funding for the project. Lewiston City was authorized by the Board a design advance of \$186,000 at the February 26, 2020 meeting. On March 25, 2020 the Board authorized a hardship grant of \$500,000 to construction assistance, which includes the design advance amount. The U.S. Department of Agriculture - Rural Development (USDA- RD) also authorized a loan of \$2,052,000 and was obligated at 1.875%, for a 40 years term and a grant of \$483,000 for the project. In addition, Lewiston self-funded an expected share at \$144,000. *The total project was anticipated at \$3.06 million.* The proposed project consists of improvements and upgrades that are needed to replace aging infrastructure, eliminate capacity limitations, improve wastewater treatment performance and enhance the overall system maintainability, flexibility, reliability, and customer service.

In June 2021, Lewiston bid the project and the lowest bid came in over the original construction estimate. With the higher than estimated construction bid, the overall project costs are now estimated to be \$5.3 million. The bids indicated that higher costs are due to higher pipe material costs and higher labor costs due to market conditions. *A total of \$5.3 million is needed to complete the project.* Of the entire \$5.3 million total project cost, Lewiston is short by \$2,144,000. Lewiston City requested additional funding of \$2,144,000 that will allow the project to begin. Updated funding alternatives that include various mixtures of loan and grant are provided in Attachment 4.

In addition, funding with USDA-RD indicated support for additional costs and a funding package in the form of 80:20 loan-to-grant proportions. Based on the cost model and the evident hardship, the Board could best assist Lewiston by bringing additional funds in the form of principal forgiveness. Without additional grant funding (principal forgiveness), the sewer rate exceeds

Board affordability criteria. Therefore, the board may consider funding additional principal forgiveness. Due to limitations of DWQ hardship funding, staff has suggested (below) an option of a funding package to repay the previous advances from the Hardship Grant Fund as a loan.

Updated funding alternatives that include various mixtures of loan and grant are provided in Attachment 7. Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, the community has a Financial Burden of: **High**. The August 2022 Board Feasibility Report is included as Enclosure 7.

The suggested interest rate is calculated in the table below:

Market Rate (20-year basis)	4.00%	
Discount Factors:	Maximum Discount	Recommended Discount
SRF Programmatic Costs	1.00%	1.00%
Fiscal Sustainability Credit	0.50%	0.00%
Green Project Reserve	0.50%	0.00%
Regionalization	0.25%	0.00%
Economic Hardship	4.00%	3.00%
Recommended Interest Rate	0.00%	

Staff supports bringing additional grant funds to Lewiston’s project so the project can be fully constructed as planned. Staff supports bringing an additional \$540,000 in grant funds and \$400,000 in loan funds. The current hardship planning and design grant having \$460,000 in undisbursed funds. Thus, staff recommends these hardship grant funds be recovered into the account and Board authorize \$1,000,000 in principal forgiveness.

STAFF RECOMMENDED FUNDING AMOUNTS FOR PROJECTS

Staff recommendations for funding these projects are outlined in the table below. These recommendations have a total commitment of \$8,354,600.

Summary of Funding Amount Recommendations

Entity	CWSRF	Principal Forgiveness	UWLF	Hardship Grant
Long Valley SID	\$1,250,000	\$0	\$220,000	\$0
Lewiston	\$0	\$1,000,000	\$400,000	-\$460,000
Hanksville	\$0	\$1,694,600	\$350,000	\$0
Springdale	\$0	\$0	\$0	\$0

North Logan	\$3,500,000	\$0	\$0	\$0
Delta	\$0	\$0	\$200,000 (previously authorized)	\$200,000
Central Valley	\$0	\$0	\$0	\$0

SPRINGDALE

Staff does not recommend any funding for Springdale at this time. If after bids are received if Springdale needs additional funding they are encouraged to reapply at any time to the Board.

CENTRAL VALLEY WATER RECLAMATION FACILITY

Staff does not recommend any additional funding for CVWRF at this time.

DELTA

Staff does not recommend any funding for Delta City at this time. If Delta cannot secure funding with CIB or USDA-RD they are encouraged to reapply at any time to the Board.

HANKSVILLE

Staff recommends the Water Quality Board **authorize funding in the amount of \$1,694,600 as principal forgiveness and \$350,000 as loan at an interest rate of 0% repayable over 30 years to Hanksville under the following special conditions:**

1. Hanksville must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
2. As part of the facility planning, Hanksville must complete a Water Conservation and Management Plan.
3. Hanksville must develop, commit to adopt, and implement a capital asset management plan that is consistent with EPA’s Fiscal Sustainability Plan guidance.

LONG VALLEY SID

Staff recommends the Water Quality Board **authorize funding in the amount of \$1,470,000 from at an interest rate of 1.5% repayable over 20 years Long Valley under the following special conditions:**

1. Long Valley must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
2. Long Valley must develop, commit to adopt, and implement a capital asset management plan that is consistent with EPA's Fiscal Sustainability Plan guidance.
3. As part of the facility planning, must complete a Water Conservation and Management Plan.

NORTH LOGAN

Staff recommends the Water Quality Board **authorize funding in the amount of \$3,500,000 as loan at an interest rate of 2.0% repayable over 30 years to North Logan to fund Phases IV and V under the following special conditions:**

1. North Logan must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
2. As part of the facility planning, North Logan must complete a Water Conservation and Management Plan.
3. North Logan must develop, commit to adopt, and implement a capital asset management plan that is consistent with EPA's Fiscal Sustainability Plan guidance.

LEWISTON CITY

Staff recommends the Water Quality Board **authorize funding in the amount of \$1,000,000 as principal forgiveness and \$400,000 loan at an interest rate of 0% repayable over 20 years to Lewiston under the following special conditions:**

1. The authorization of this funding package will unauthorize the undisbursed balances of Hardship Grant Agreement #C069 which is approximately \$460,00 in hardship grant funds.
2. Lewiston must pursue and retain remaining funding necessary to fully implement the project.
3. Lewiston must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
4. As part of the facility planning, Lewiston must complete a Water Conservation and Management Plan.
5. Lewiston must develop, commit to adopt, and implement a capital asset management plan that is consistent with EPA's Fiscal Sustainability Plan guidance.

NEXT FUNDING APPLICATION PROCESS

Staff anticipate the Board will authorize all available balances for FY23 during the October 2022 Board meeting. Currently, staff is scheduled to accept applications December 31, 2022. However, assuming all funds are authorized, staff suggests the next regular construction funding application date be set for **June 30, 2023**. Applications will continue to be accepted at any time for emergency construction projects, planning advances, and design advances.

DWQ-2022-029014

ATTACHMENT 2- Central Valley Cost Model

Central Valley - Water Quality Board												
20 Year Loan Static Cost Model Additional Funding Request												
Project Costs						Current Customer Base & User Charges						
BNR Process Basins					\$ 126,200,000	Total ERU's (Projected 2020)					\$ 175,630	
Blower Building					\$ 51,000,000	Weighted Average MAGI (2021):					\$ 42,801	
Total Project Cost:					\$ 177,200,000	Affordable Monthly Rate at 1.4%					\$ 49.93	
Project Funding						Funding Conditions						
Cash from member entities					\$ 21,095,665	Current Impact Fee					Varies	
*South Salt Lake Funding					\$ 11,146,000	Current Average Monthly Fee (per ERU)					\$ 27.65	
Publicly issued bonds@3.5%					\$ 46,658,335	Existing O&M expenses Treatment & Collection					Varies	
WQB Loan Existing					\$ 65,100,000	New O&M expenses Treatment					\$ 28,798,976	
WQB Loan Requested					\$ 33,200,000	Existing Sewer Debt Service					Varies	
Total Project Cost:					\$ 177,200,000	Existing Treatment Debt Service					\$ 20,375,081	
*SSL Obtained Separate Financing Through the WQB for their portion of the project						Loan Repayment Term:						
						Reserve Funding Period:						
						20						
						6						
ESTIMATED COST OF SEWER SERVICE												
WQB Loan Amount	WQB Loan Interest Rate	Annual WQB Loan Debt Service	Existing WQB Debt Service	Required other new Debt Service Payments*	Weighted Interest Rate for Project	Annual Sewer O&M Cost	Total Annual Sewer Cost	Monthly Treatment Cost/ERU	Increase in Cost Per ERU/Month Treatment Only	Average Per ERU/Month Cost	Weighted Average MAGI	Weighted Average Burden
						\$ 28,798,976	\$ 49,174,057	\$ 23.33		\$ 27.02	0.76%	Low
\$ 33,200,000	0.00%	\$ 1,660,000	\$ 3,791,797	\$ 3,282,931	1.97%	\$ 28,798,976	\$ 57,908,785	\$ 27.48	\$ 4.14	\$ 31.17	0.87%	Low
\$ 33,200,000	1.00%	\$ 1,839,788	\$ 3,791,797	\$ 3,282,931	2.13%	\$ 28,798,976	\$ 58,088,573	\$ 27.56	\$ 4.23	\$ 31.25	0.88%	Low
\$ 33,200,000	1.10%	\$ 1,858,367	\$ 3,791,797	\$ 3,282,931	2.15%	\$ 28,798,976	\$ 58,107,152	\$ 27.57	\$ 4.24	\$ 31.26	0.88%	Low
\$ 33,200,000	1.30%	\$ 1,895,848	\$ 3,791,797	\$ 3,282,931	2.19%	\$ 28,798,976	\$ 58,144,632	\$ 27.59	\$ 4.26	\$ 31.28	0.88%	Low
\$ 33,200,000	1.35%	\$ 1,905,285	\$ 3,791,797	\$ 3,282,931	2.20%	\$ 28,798,976	\$ 58,154,070	\$ 27.59	\$ 4.26	\$ 31.28	0.88%	Low
\$ 33,200,000	1.50%	\$ 1,933,758	\$ 3,791,797	\$ 3,282,931	2.23%	\$ 28,798,976	\$ 58,182,543	\$ 27.61	\$ 4.27	\$ 31.30	0.88%	Low
\$ 33,200,000	1.78%	\$ 1,987,552	\$ 3,791,797	\$ 3,282,931	2.29%	\$ 28,798,976	\$ 58,236,337	\$ 27.63	\$ 4.30	\$ 31.32	0.88%	Low
\$ 33,200,000	2.00%	\$ 2,030,403	\$ 3,791,797	\$ 3,282,931	2.33%	\$ 28,798,976	\$ 58,279,188	\$ 27.65	\$ 4.32	\$ 31.34	0.88%	Low
\$ 33,200,000	3.50%	\$ 2,335,988	\$ 3,791,797	\$ 3,282,931	2.69%	\$ 28,798,976	\$ 58,584,772	\$ 27.80	\$ 4.47	\$ 31.49	0.88%	Low
*3.5% interest rate used for estimating other new debt service												

ATTACHMENT 2 - Central Valley Cost Model (continued)

Central Valley - Water Quality Board
 20 Year Loan Static Cost Model Additional Funding Request

CENTRAL VALLEY CURRENT WEIGHTED AVERAGE MAGI CALCULATION				
Member Entity	MAGI	current monthly Average Bill	current % MAGI	Current ERUs
Cottonwood I.D.	\$ 50,400.00	\$ 20.00	0.48%	36,329
Granger-Hunter I.D.	\$ 36,400.00	\$ 29.50	0.97%	27,000
Kearns I.D.	\$ 37,300.00	\$ 39.99	1.29%	20,000
Murray City	\$ 45,200.00	\$ 56.28	1.49%	9,663
Mt. Olympus I.D.	\$ 45,200.00	\$ 21.00	0.56%	54,688
Taylorville-Bennion I.D.	\$ 41,400.00	\$ 28.86	0.84%	25,329
Weighted Average	\$42,800.59	\$27.02	0.77%	

CENTRAL VALLEY FINANCIAL NEED INDICATOR CALCULATION				
Member Entity	Unemployment Rate	Poverty Rate	Threshold LQI	Population Growth Rate
Cottonwood I.D.	3.58%	7.43%	\$ 39,447.50	31.28%
Granger-Hunter I.D.	4.20%	11.70%	\$ 34,429.00	8.49%
Kearns I.D.	4.60%	8.60%	\$ 40,896.00	4.98%
Murray City	4.20%	6.30%	\$ 33,595.00	5.83%
Mt. Olympus I.D.	4.20%	6.30%	\$ 33,595.00	5.83%
Taylorville-Bennion I.D.	4.50%	9.80%	\$ 37,209.00	2.72%
Weighted Average	4.10%	8.04%	\$ 35,785.06	10.87%
State Values	3.60%	9.10%	\$ 35,445.00	18.60%
Score	2.25	1.00	1.00	3.00
Weight	4.00	2.50	2.50	1.00
Weighted Score	9	2.5	2.5	3
Financial Need Indicator (Sum of weighted Scores/10)				1.7

Financial Burden Matrix					
	Modified MAGI				
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

Attachments
 October 26, 2022
 Water Quality Board Meeting
 FY 2023 Funding Requests

ATTACHMENT 3- Delta Cost Model

Project Costs		
Legal/Bonding	\$	30,000
DWQ Loan Origination Fee	\$	170,000
Funding Admin	\$	20,000
Environmental Services	\$	35,000
UDOT Coordination	\$	8,000
Engineering - Planning, Design, & CMS	\$	1,279,000
<i>Collections</i>	\$	9,195,196
<i>Lift station</i>	\$	1,376,400
<i>Mobilization</i>	\$	800,000
<i>General Project Items</i>	\$	1,322,500
<i>Construction subtotal</i>	\$	12,694,096
<i>Contingency</i>	\$	2,615,904
Total Project Cost:	\$	16,852,000

Current Customer Base & User Charges	
Initial Total Customer (ERU's)	1,108
MAGI for Delta City (2020):	\$44,200
Affordable Monthly Rate at 1.4%	\$51.57
Impact Fee (per ERU):	\$0
Current Monthly Fee (per ERU)	\$28.00
Debt Service	\$0
Annual O&M expense	\$265,396

Project Funding		
ARPA Funds	\$	213,000
Amount to be Funded	\$	16,639,000
WQB Grant	\$	-
Total Project Cost:	\$	16,852,000

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

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Loan	Private Loan Amount	WQB Loan Interest Rate	Private Loan Interest Rate*	WQB Loan Debt Service	WQB Loan Reserve	Private Loan Debt Service	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
	0	16,639,000	0.00%	4.00%	0	0	1,224,327	265,396	0	1,489,723	112.04	3.04%	HIGH
	16,639,000	0	0.00%	4.00%	831,950	207,988	0	265,396	0	1,305,334	98.17	2.67%	HIGH
	16,639,000	0	0.50%	4.00%	876,317	219,079	0	265,396	0	1,360,792	102.35	2.78%	HIGH
	16,639,000	0	1.00%	4.00%	922,055	230,514	0	265,396	0	1,417,965	106.65	2.90%	HIGH
	16,639,000	0	1.50%	4.00%	969,151	242,288	0	265,396	0	1,476,834	111.07	3.02%	HIGH
	16,639,000	0	2.00%	4.00%	1,017,587	254,397	0	265,396	0	1,537,379	115.63	3.14%	HIGH
500,000	16,139,000	0	0.00%	4.00%	806,950	201,738	0	265,396	0	1,274,084	95.82	2.60%	HIGH
1,000,000	15,639,000	0	0.00%	4.00%	781,950	195,488	0	265,396	0	1,242,834	93.47	2.54%	HIGH
1,500,000	15,139,000	0	0.00%	4.00%	756,950	189,238	0	265,396	0	1,211,584	91.12	2.47%	HIGH
2,000,000	14,639,000	0	0.00%	4.00%	731,950	182,988	0	265,396	0	1,180,334	88.77	2.41%	HIGH

*Staff Estimate

FNI Calculation					
	Local Value	State Value	Score	Weighting Factor	Weighting Score
Unemployment Rate	3.2%	3.6%	1.80	4	7.20
Poverty Rate	24.6%	9.1%	3.00	2.5	7.50
Threshold LQI	\$ 24,413	\$ 35,445	2.24	2.5	5.60
Population Growth Rate	8.2%	18.6%	2.11	1	2.11
Financial Need Indicator (Sum of weighted Scores/10)					2.24

2020 5 year ACS Table

** <https://data.census.gov/cedsci/>

Financial Burden Matrix					
	Modified MAGI				
	Below 1.4%	1.4% to 1.75%	1.75% to 2.1%	2.1% to 2.45	Above 2.45
FNI	Below 1.5	Low	Low	Medium	High
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

Table **

S2301

S1701

B19080

B01003

Attachments
 October 26, 2022
 Water Quality Board Meeting
 FY 2023 Funding Requests

ATTACHMENT 4- Hanksville Cost Model

Project Costs

Legal/Bonding	\$	15,000
Loan Origination Fee	\$	25,000
Planning Advance	\$	36,600
Engineering - Design	\$	188,000
Engineering - CMS	\$	135,000
Wastewater Treatment Plant	\$	1,483,000
Contingency (13%)	\$	188,000
Total Project Cost:	\$	2,070,600

Current Customer Base & User Charges

Initial Total Customer (ERU's)	81
MAGI for Hanksville Town (2020):	\$25,400
Affordable Monthly Rate at 1.4%	\$29.63
Impact Fee (per ERU):	\$0
Current Monthly Fee (per ERU)	\$15.50
Debt Service	\$3,228
Annual O&M expense	\$13,250

Project Funding

Local Contribution	\$	26,000
Amount to be Funded	\$	2,044,600
WQB Grant	\$	-
Total Project Cost:	\$	2,070,600

Funding Conditions

Loan Repayment Term:	30
Reserve Funding Period:	6

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Loan	Private Loan Amount	WQB Loan Interest Rate	Private Loan Interest Rate*	WQB Loan Debt Service	WQB Loan Reserve	Private Loan Debt Service	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
	0	2,044,600	0.00%	3.50%	0	0	111,168	13,250	3228	127,646	131.32	6.20%	HIGH
	2,044,600	0	0.00%	3.50%	68,153	17,038	0	13,250	3228	101,670	104.60	4.94%	HIGH
1,194,600	850,000	0	0.00%	3.50%	28,333	7,083	0	13,250	3228	51,895	53.39	2.52%	HIGH
1,294,600	750,000	0	0.00%	3.50%	25,000	6,250	0	13,250	3228	47,728	49.10	2.32%	MEDIUM
1,394,600	650,000	0	0.00%	3.50%	21,667	5,417	0	13,250	3228	43,561	44.82	2.12%	MEDIUM
1,494,600	550,000	0	0.00%	3.50%	18,333	4,583	0	13,250	3228	39,395	40.53	1.91%	MEDIUM
1,594,600	450,000	0	0.00%	3.50%	15,000	3,750	0	13,250	3228	35,228	36.24	1.71%	LOW
1,644,600	400,000	0	0.00%	3.50%	13,333	3,333	0	13,250	3228	33,145	34.10	1.61%	LOW
1,694,600	350,000	0	0.00%	3.50%	11,667	2,917	0	13,250	3228	31,061	31.96	1.51%	LOW
1,744,600	300,000	0	0.00%	3.50%	10,000	2,500	0	13,250	3228	28,978	29.81	1.41%	LOW

*Staff Estimate

FNI Calculation					
	Local Value	State Value	Score	Weighting Factor	Weighting Score
Unemployment Rate	0.0%	3.6%	1.00	4	4.00
Poverty Rate	5.7%	9.1%	1.00	2.5	2.50
Threshold LQI	\$ 19,700	\$ 35,445	2.78	2.5	6.95
Population Growth Rate	17.6%	18.6%	1.11	1	1.11
Financial Need Indicator (Sum of weighted Scores/10)					1.46

2020 5 year ACS Table

** <https://data.census.gov/cedsci/>

Financial Burden Matrix					
FNI	Modified MAGI				
	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

Table **
 S2301
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Attachments
 October 26, 2022
 Water Quality Board Meeting
 FY 2023 Funding Requests

ATTACHMENT 5- Long Valley Cost Model

Project Costs

Legal/Bonding	\$	20,000
DWQ Loan Origination Fee	\$	15,000
Engineering - Design	\$	84,300
Engineering - CMS	\$	126,400
<i>WWTP</i>	\$	269,000
<i>Lift Station</i>	\$	234,000
<i>Collection System</i>	\$	262,000
<i>Other</i>	\$	220,000
Construction subtotal	\$	985,000
Contingency (~20%)	\$	192,000
Total Project Cost:	\$	1,422,700

Current Customer Base & User Charges

Initial Total Customer (ERU's)	690
MAGI for Long Valley SID (2020):	\$37,029
Affordable Monthly Rate at 1.4%	\$43.20
Impact Fee/Hookup Fee (per ERU):	\$150
Current Monthly Fee (per ERU)	\$34.00
Debt Service	\$73,000
Annual O&M expense	\$36,000

Project Funding

Local Contribution	\$	64,200
Amount to be Funded	\$	1,358,500
WQB Grant	\$	-
Total Project Cost:	\$	1,422,700

Funding Conditions

Loan Repayment Term:	20
Reserve Funding Period:	6

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Loan	Private Loan Amount	WQB Loan Interest Rate	Private Loan Interest Rate*	WQB Loan Debt Service	WQB Loan Reserve	Private Loan Debt Service	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
	0	1,358,500		4.00%	0	0	99,961	36,000	73000	208,961	25.24	0.82%	LOW
	1,358,500	0	0.50%		71,547	17,887	0	36,000	73000	198,434	23.97	0.78%	LOW
	1,358,500	0	1.00%		75,282	18,820	0	36,000	73000	203,102	24.53	0.79%	LOW
	1,358,500	0	1.50%		79,127	19,782	0	36,000	73000	207,909	25.11	0.81%	LOW
	1,358,500	0	2.00%		83,081	20,770	0	36,000	73000	212,852	25.71	0.83%	LOW
	1,358,500	0	2.50%		87,144	21,786	0	36,000	73000	217,930	26.32	0.85%	LOW
	1,358,500	0	3.00%		91,313	22,828	0	36,000	73000	223,141	26.95	0.87%	LOW
	1,358,500	0	3.50%		95,586	23,896	0	36,000	73000	228,482	27.59	0.89%	LOW
	1,358,500	0	4.00%		99,961	24,990	0	36,000	73000	233,951	28.25	0.92%	LOW

*Staff Estimate

FNI Calculation

	Local Value	State Value	Score	Weighting Factor	Weighting Score
Unemployment Rate	2.9%	3.6%	1.65	4	6.60
Poverty Rate	19.7%	9.1%	3.00	2.5	7.50
Threshold LQI	\$ 25,336	\$ 35,445	2.14	2.5	5.35
Population Growth Rate	-5.7%	18.6%	3.00	1	3.00
Financial Need Indicator (Sum of weighted Scores/10)					2.25

2020 5 year ACS Table

** <https://data.census.gov/cedsci/>

Financial Burden Matrix

FNI	Modified MAGI				
	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

Attachments
 October 26, 2022
 Water Quality Board Meeting
 FY 2023 Funding Requests

ATTACHMENT 6- North Logan Cost Model

Project Costs

Legal/Bonding	\$	50,000
DWQ Loan Origination Fee	\$	55,040
Engineering - Design & CMS	\$	100,000
Phase III - Priority (Fall 2022)	\$	1,800,000
Phase IV (2023)	\$	2,600,000
Phase V (2023)	\$	900,000
Phases VI & VII (2024-2027)		
Construction subtotal	\$	5,300,000
Contingency (20%)		
Total Project Cost:	\$	5,504,000

Current Customer Base & User Charges

Initial Total Customer (ERU's)	3,231
MAGI for North Logan (2020):	\$51,900
Affordable Monthly Rate at 1.4%	\$60.55
Impact Fee (per ERU):	\$3,300
Current Monthly Fee (per ERU)	\$60.69
Debt Service	\$0
Annual O&M expense	\$2,101,000

Project Funding

Local Contribution	\$	-
Amount to be Funded	\$	5,504,000
WQB Grant	\$	-
Total Project Cost:	\$	5,504,000

Funding Conditions

Loan Repayment Term:	30
Reserve Funding Period:	6

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Loan	Private Loan Amount	WQB Loan Interest Rate	Private Loan Interest Rate*	WQB Loan Debt Service	WQB Loan Reserve	Private Loan Debt Service	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
-	0	5,504,000	0.00%	4.00%	0	0	318,297	2,101,000	0	2,419,297	62.40	1.44%	MEDIUM
-	5,504,000	0	0.00%	4.00%	183,467	45,867	0	2,101,000	0	2,330,333	60.10	1.39%	LOW
-	3,500,000	2,004,000	1.00%	4.00%	135,618	33,905	115,892	2,101,000	0	2,386,415	61.55	1.42%	MEDIUM
-	3,500,000	2,004,000	2.00%	4.00%	156,275	39,069	115,892	2,101,000	0	2,412,235	62.22	1.44%	MEDIUM
-	3,500,000	2,004,000	2.50%	4.00%	167,222	41,805	115,892	2,101,000	0	2,425,919	62.57	1.45%	MEDIUM
-	3,500,000	2,004,000	3.00%	4.00%	178,567	44,642	115,892	2,101,000	0	2,440,101	62.93	1.46%	MEDIUM
-	2,600,000	2,904,000	1.00%	4.00%	100,745	25,186	167,939	2,101,000	0	2,394,870	61.77	1.43%	MEDIUM
-	2,600,000	2,904,000	2.00%	4.00%	116,090	29,022	167,939	2,101,000	0	2,414,051	62.26	1.44%	MEDIUM
-	2,600,000	2,904,000	2.50%	4.00%	124,222	31,055	167,939	2,101,000	0	2,424,216	62.52	1.45%	MEDIUM
-	2,600,000	2,904,000	3.00%	4.00%	132,650	33,163	167,939	2,101,000	0	2,434,751	62.80	1.45%	MEDIUM

*Staff Estimate

FNI Calculation

	Local Value	State Value	Score	Weighting Factor	Weighting Score
Unemployment Rate	3.0%	3.6%	1.70	4	6.80
Poverty Rate	13.9%	9.1%	1.96	2.5	4.90
Threshold LQI	\$ 31,298	\$ 35,445	1.47	2.5	3.68
Population Growth Rate	41.4%	18.6%	1.00	1	1.00
Financial Need Indicator (Sum of weighted Scores/10)					1.64

2020 5 year ACS Table

** <https://data.census.gov/cedsci/>

Financial Burden Matrix

FNI	Modified MAGI				
	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

Table **

S2301

S1701

B19080

B01003

Attachments
 October 26, 2022
 Water Quality Board Meeting
 FY 2023 Funding Requests

ATTACHMENT 7- Lewiston Cost Model

Project Costs				Current Customer Base & User Charges			
Legal/Bonding - Eniveromental			\$ 40,000	Initial Total Customer (ERU's)			280
DWQ Loan Origination Fee			\$ 21,000	MAGI for Lewiston City (2021):			\$47,000
Engineering - Design & CMS			\$ 433,000	Affordable Monthly Rate at 1.4%			\$54.83
<i>Collections</i>		\$ -		Impact Fee (per ERU):			\$2,278
<i>Lift station</i>		\$ -		Current Monthly Fee (per ERU)			\$48.00
<i>Headworks</i>		\$ -		Debt Service			\$0
<i>Treatment</i>		\$ 4,390,000		Annual O&M expense			\$121,500
Construction subtotal			\$4,390,000				
Contingency (10%)			\$ 439,000				
Total Project Cost:			\$5,323,000				
Project Funding				Funding Conditions			
Local Contribution			\$ 144,000	Loan Repayment Term:			20
Requested Funding by WQB			\$2,184,000	Reserve Funding Period:			6
WQB Existing Construction Grant			\$ 460,000				
USDA-RD Existing Grant			\$ 483,000	USDA-RD Funding Conditions			
USDA-RD Existing Loan			\$2,052,000	USDA-RD Loan Repayment Term			40
Total Project Cost:			\$5,323,000	USDA-RD Interest Rate			1.875%

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness + Existing Hardship Grant	WQB Loan	RD Grant including existing	Existing & Possible RD Loan	WQB Loan Interest Rate	Current RD Loan Interest Rate	WQB Loan Debt Service	WQB Loan Reserve	Market Loan Debt Service	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
460,000	0	919,800	3,799,200	0.00%	1.875%	0	0	169,820	121,500	0	291,320	86.70	2.21%	HIGH
460,000	2,184,000	483,000	2,052,000	0.00%	1.875%	109,200	27,300	91,722	121,500	0	349,722	104.08	2.66%	HIGH
1,000,000	1,644,000	483,000	2,052,000	0.00%	1.875%	82,200	20,550	91,722	121,500	0	315,972	94.04	2.40%	HIGH
1,000,000	400,000	731,800	3,047,200	0.00%	1.875%	20,000	5,000	136,207	121,500	0	282,707	84.14	2.15%	HIGH
1,500,000	400,000	631,800	2,647,200	0.75%	1.875%	21,612	5,403	118,327	121,500	0	266,842	79.42	2.03%	HIGH
2,000,000	644,000	483,000	2,052,000	0.00%	1.875%	32,200	8,050	91,722	121,500	0	253,472	75.44	1.93%	HIGH
2,500,000	144,000	483,000	2,052,000	0.00%	1.875%	7,200	1,800	91,722	121,500	0	222,222	66.14	1.69%	HIGH
2,644,000	0	483,000	2,052,000	0.00%	1.875%	0	0	91,722	121,500	0	213,222	63.46	1.62%	Medium

FNI Calculation							Financial Burden Matrix					
	Local Value	State Value	Score	Weighting Factor	Weighting Score	Table **	Modified MAGI					
							FNI	Below 1.4%	1.4% to 1.75%	1.75% to 2.1%	2.1% to 2.45	Above 2.45
Unemployment Rate	5.3%	3.6%	2.85	4	11.40	S2301						
Poverty Rate	16.6%	9.1%	2.50	2.5	6.25	S1701	Below 1.5	Low	Low	Medium	Medium	High
Threshold LQI	\$ 17,075	\$ 35,445	3.00	2.5	7.50	B19080	1.5 to 2.5	Low	Medium	Medium	High	High
Population Growth Rate	-1.4%	18.6%	3.00	1	3.00	B01003	Above 2.5	Medium	Medium	High	High	High
Financial Need Indicator (Sum of weighted Scores/10)					2.82							

2020 5 year ACS Table [** https://data.census.gov/cedsci/](https://data.census.gov/cedsci/)



State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

**Department of
Environmental Quality**

Kimberly D. Shelley
Executive Director

DIVISION OF WATER QUALITY

John K. Mackey, P.E.
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
John K. Mackey
Executive Secretary

**WATER QUALITY BOARD
FEASIBILITY REPORT FOR WASTEWATER COLLECTION & TREATMENT PROJECT**

INTRODUCTION

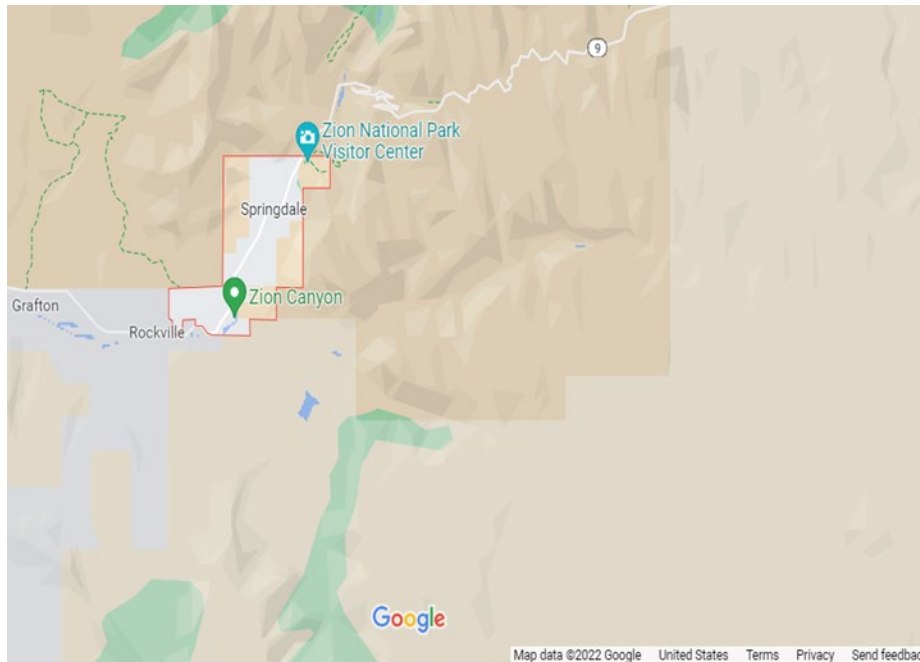
APPLICANT:	Town of Springdale 118 Lion Blvd, PO Box 187 Springdale Utah 84767 Phone: (435) 772-3434
PRESIDING OFFICIAL	Barbara Bruno, Mayor 118 Lion Blvd, PO Box 187 Springdale Utah 84767 Phone: (435) 772-3434
CONTACT:	Rick Wixom, Town Manager 118 Lion Blvd, PO Box 187 Springdale Utah 84767 Phone: (435) 772-3434
TREASURER:	Dawn Brecke, Town Treasurer 118 Lion Blvd, PO Box 187 Springdale Utah 84767 Phone: (435) 772-3434
CONSULTING ENGINEER:	Dustyn Shaffer, PE Sunrise Engineering 11 North 300 West Washington Utah 84780 Phone: (435) 652-8450

APPLICANT'S REQUEST

Springdale City is requesting financial assistance in the amount of a \$3,978,000 for lagoon treatment system improvement of a wastewater lagoon treatment facility plant.

APPLICANT'S LOCATION

Springdale is located in eastern Washington County, Utah on Highway 9 next to Zion National Park.



PROJECT BACKGROUND

The Town's wastewater system is used by the neighboring community of Rockville as well as Zion National Park. Springdale's collection system flows to treatment lagoons to the west of Rockville. Currently the Town's wastewater is treated with a wastewater lagoon treatment facility which periodically discharges effluent water into the Virgin River. The facility has two large ponds (3 cells) used for treating the influent wastewater. The first pond is separated into two parts, or cells, by a baffle wall and are used to provide aeration for BOD₅ and ammonia removal. The second pond (3rd cell) is used for sedimentation and clarification. The facility is currently equipped with three 20 HP blowers and oxygen diffusers. The facility also contains a UV building and re-aeration structure. The UV equipment is used to disinfect effluent that is released from the facility. Effluent then passes through a re-aeration structure, which entrains the effluent with dissolved oxygen by physical means before being discharged into the Virgin River.

The Town has a discharge permit that was renewed on May 1, 2019, allowing the Town to discharge the treated water from the lagoon to the Virgin River. The current permit limits for total suspended solids (TSS) and *E. coli* levels in the effluent, along with other metrics such as phosphorus loading.

On May 6, 2021, Springdale received a Notice of Violation and Compliance Order (NOV/CO) from the Division of Water Quality (DWQ). The NOV/CO was a result of elevated TSS and *E.*

coli levels in exceedance with their wastewater discharge permit. In 2020, a third-party engineering firm H&S Environmental LLC performed a study on the treatment system to determine what the cause of the high TSS were and how the Town could bring their TSS levels down to within the limits of their discharge permit. After the H&S study was completed Sunrise Engineering completed a wastewater master plan update May 2021. The master plan incorporated the study performed by H&S and provided the town with recommended improvements projects that would keep the wastewater system in compliance with the Utah State Code R317 and the Town's discharge permit.

The City's plan for compliance incorporates findings and recommendations from both the H&S study and the wastewater master plan update, along with additional analysis of specific treatment improvements such as intake screening and effluent filtration.

PROJECT NEED

The City identified possible improvements needed to help reduce the levels of TSS as well as reduce the levels of phosphorus in the treatment effluent. The Town is proposing the following:

The existing headwork will be replaced with the new headworks including powered screen. A powered screen is capable of removing large amounts of non-volatile solids such as rags and hygiene products that are often found in lagoons. This will help reduce the overall percentage of solids coming into the lagoon. Less solids entering the lagoons should reduce the rate of sludge build up in the lagoons and result in helping with TSS levels.

Post lagoon filtration would be an effective addition to improve the quality of effluent water from the lagoons. Sunrise Engineering and The Town of Springdale evaluated multiple options for post lagoon filtration and determined that a sand filter would be the preferable alternative. The project will include multiple improvements to the area around the UV building. The filter would be installed in a building located adjacent to the second lagoon and UV building. The building would house the sand filters as well as a booster pump, an air pump, and chemical pump. The booster pump will be used to add enough head to the lagoon effluent to send the water through the filters. The air pump will be used for the cleaning process of the sand filters. The chemical pump will add a polymer to be used as part of the filtration process.

The existing transfer structure currently operates by taking water from pond 1 at roughly the surface level and transfers it to pond 2 through a pipe. This setup allows for algae that is in pond 1 to get into pond 2. As stated above, the algae levels are a component of the TSS issues in the pond effluent.

During the improvements mentioned above for installing a new headworks and post lagoon filtration, the Town also intends to reconstruct the transfer structure. The modifications to the transfer structure would allow water going to pond 2 to be pulled from a lower level in pond 1 that is beneath the algae. It is anticipated that this would reduce the amount of algae getting into pond 2 via pond 1.

PROJECT DESCRIPTION

The Town is proposing to construct or upgrade the sewer systems & lagoon treatment facility. The Town proposal as follows:

- Replacing the existing headworks with a powered screen
- Modify transfer structure
- Installation of sand filter
- Purchase and install backup generator for UV building and filter station
- Install erosion control on River Bank

ALTERNATIVES EVALUATED

The Master Plan, May 2021 and Compliance Plan, dated in January 2022 evaluated the following alternatives:

- Investigate possible additions to the influent flow
- Install a headworks structure
- Remove sludge from cell 1 and 2
- Perform diagnostics BOD, TSS, and ammonia tests on each cell in the system
- Multiple level effluent draw-off structure and transfer structure between cells
- Construct a Mechanical Treatment Plant
- Install a filtration system
- Discharge to agricultural land
- UV system upgrades
- Erosion protection of the discharge to the river

The recommended alternative is construct new headwork, transfer structure, sand filter, generator and improve river bank erosion control.

POSITION ON PROJECT PRIORITY LIST

Springdale City is currently ranked No. 3 of 10 on the FY 2022 Wastewater Treatment Project Priority List (PPL).

POPULATION GROWTH:

The following Table 1 shows the current and project populations for the entirety of Town of Springdale (Source of Estimates: Governor's Office of Planning and Budget, GOMB):

Table 1

Year	Residents*
2010	529
2020	650
2021	754

*Total City population, including sewer customers served outside of Springdale

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

Springdale has not conducted a public meeting yet, as required by the Utah Wastewater State Revolving Fund (SRF) program. The Town will have held a final public hearing upon securing funding from the Water Quality Board.

IMPLEMENTATION SCHEDULE

Funding Authorization:	October 2022
Public Hearing:	November 2022
Advertise for Bids:	February 2023
Commence Construction:	April 2023
Complete Construction:	November 2023

APPLICANT’S CURRENT USER CHARGE

Currently, Springdale charges approximately \$24.65 per month per ERC systemwide. Typical, sewer user rates for residents is \$14 per month and \$21 per month for Springdale and Rockville, respectively. Springdale’s service area is approximately 25% residential, 40% Zion National Park, and 35% Industry (tourism). According to the Utah Water Quality Board’s affordability criteria of 1.4% of MAGI (\$34,900 for Springdale and \$32,100 for Rockville), the monthly rate for wastewater should exceed \$39.67 per month for grant fund consideration. The impact fee is \$1,823 and the hookup fee is \$170.

COST ESTIMATE

The total cost of the project is estimated to be \$4,151,600. A breakdown of these costs follows.

Legal/Bonding	\$20,000
DWQ Loan Origination Fee	\$40,000
Engineering - Design & CMS	\$411,500
Construction	\$2,830,700
Contingency	\$849,400
Total Project Cost:	\$4,151,600

COST SHARING

The total cost of the project is \$4,151,600.

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
Local Contribution	\$211,100	5%
WQB Funding	\$3,940,500	95%
Total Amount:	\$4,151,600	100%

ESTIMATED ANNUAL COST FOR SEWER SERVICE:

Staff developed static cost models (Attachment 1) to evaluate for supplemental funding by the Board. In the cost model, staff further evaluated the impact of the project just on the residential citizens. As noted systemwide residents comprise approximately 25% of the flow and would thus likely be responsible for approximately \$1,000,000 of the upgrades. This evaluation was run as the Board might want to consider a funding package focusing on residential user rates. Different funding options result in different annual sewer costs. A cost model is shown in Attachment 1, which analyzes many possible funding options. The resulting Total Annual Sewer Cost is shown for each funding option.

EFFORTS TO SECURE FINANCING FROM OTHER SOURCES:

The City is currently pursuing funding from the Community Impact Board (CIB) and is on the funding list for the October 2022 CIB meeting. CIB staff have indicated support for the project with potential funding from loan at 2.5% for a 30-year term.

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 **1.65** 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 Low.

STAFF COMMENTS

This project will allow Springdale City to maintain compliance with Division of Water Quality Discharge requirements, specifically it will make it possible for the plant to improvements that are predicted to help reduce the levels of TSS as well as reduce the levels of phosphorus in the treatment effluent. If this project is co-funded with CIB then most likely a funding package from Utah Wastewater Loan Fund and/or Hardship Grant Fund would be appropriate. A package from

these sources could easily be blended with a CIB loan package. Finally, if a funding package is targeted at residential user rates, special conditions addressing rate subsidies or differential rates may be needed or appropriate.

This is a project introduction, and staff recommendations will be provided at the request for funding authorization. Staff believes that this is an important project.



State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF WATER QUALITY
John K. Mackey, P.E.
Interim Director

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John K. Mackey
Interim Executive Secretary

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

INTRODUCTION

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

PRESIDING OFFICIAL: Phillip Heck, P.E. – General Manager

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FINANCIAL ADVISOR: David Robertson
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Salt Lake City, UT 84101
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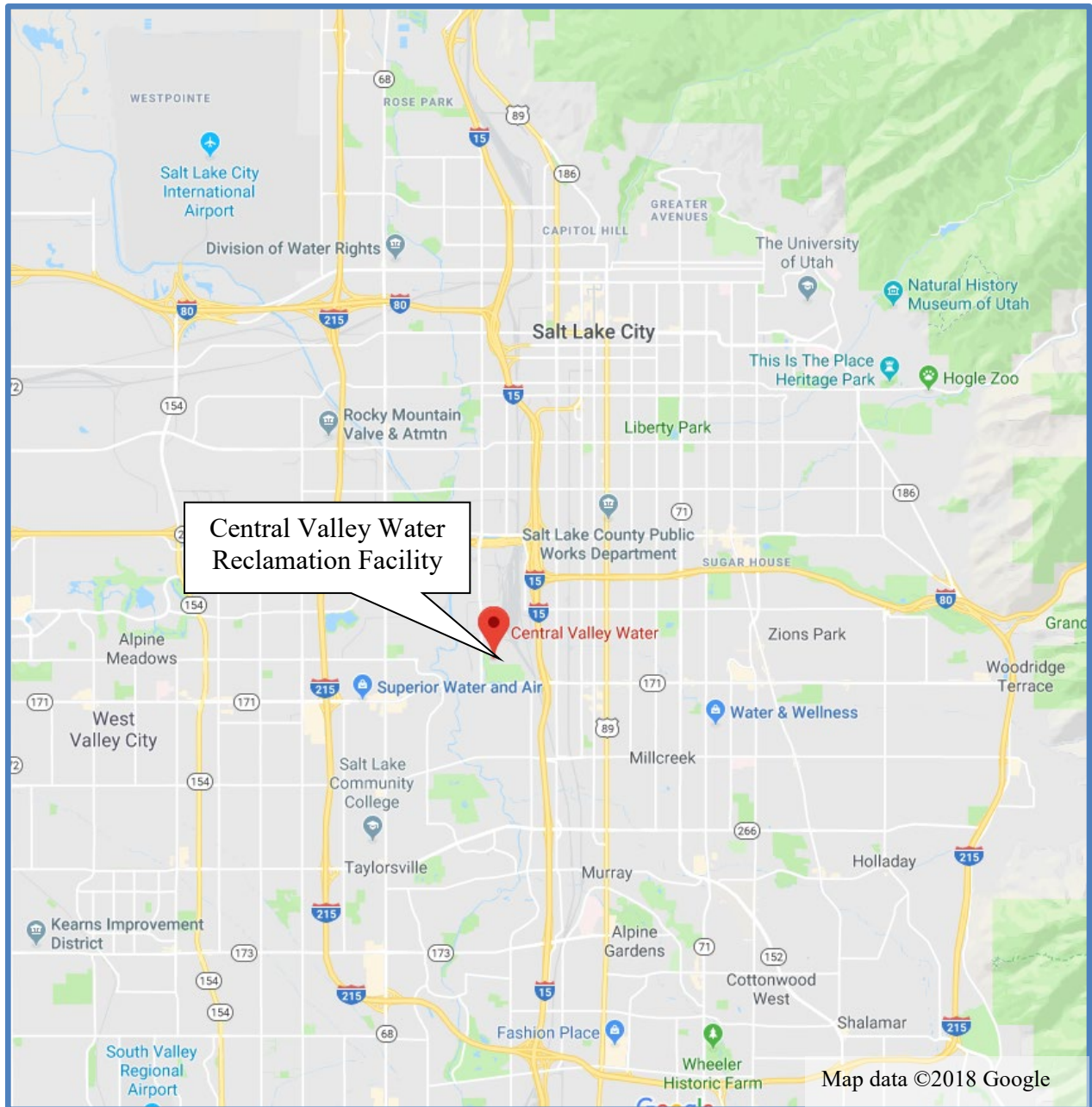
APPLICANT'S REQUEST:

The Central Valley Water Reclamation Facility (Central Valley) is requesting additional financial assistance in the amount of a \$33,200,000 loan for the upgrade of its Water Reclamation Facility.

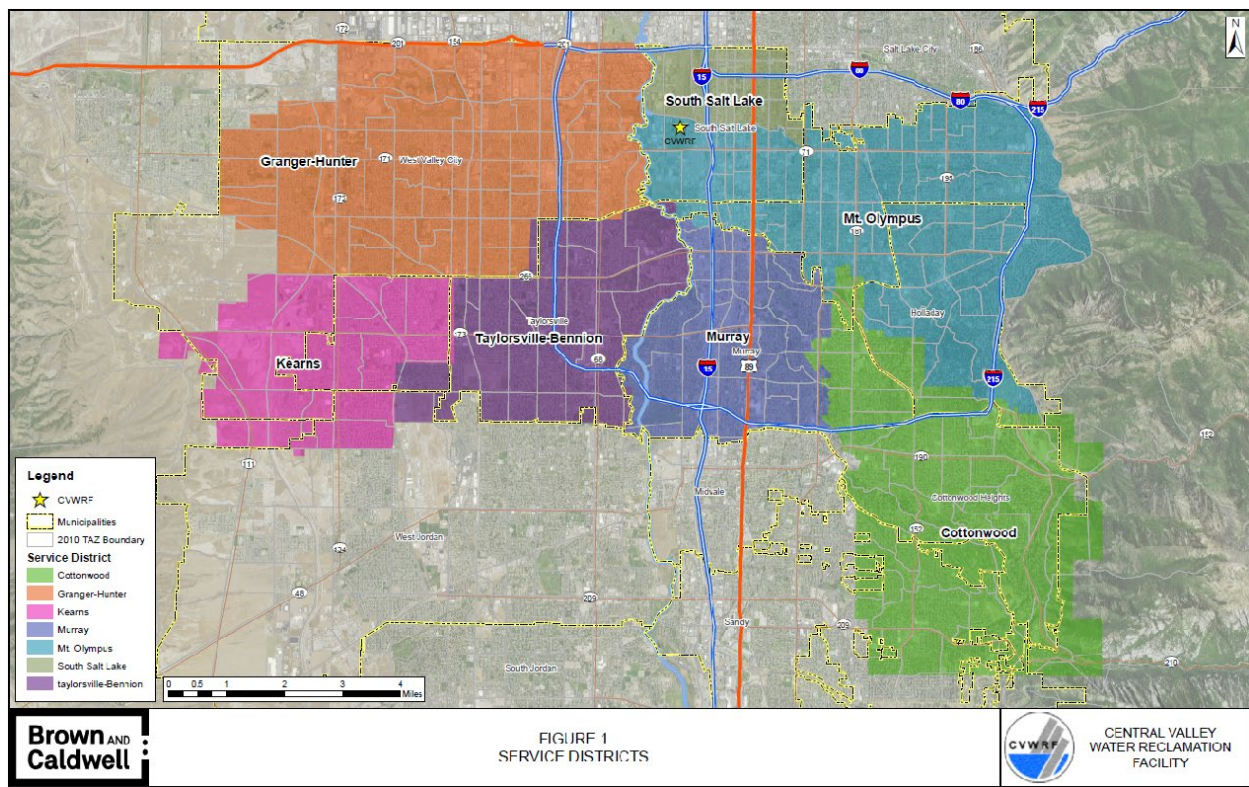
APPLICANT'S LOCATION:

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

MAP OF APPLICANT'S LOCATION



MAP OF APPLICANT'S SERVICE AREA



BACKGROUND:

In 1978, the Central Valley Water Reclamation Facility Board 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. The 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

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.

On December 3, 2018 the Water Quality Board authorized a loan of \$65,100,000 at a 1.5% interest rate with a term of 20 years.

Central Valley Water Reclamation Facility is located at 800 West Central Valley Road (3190 South) in South Salt Lake City. 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.

PROJECT NEED:

Currently, major process changes and facility improvements are being designed and constructed that will be 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 is being 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 for the next 30 years. In the next few years, Central Valley expects to invest over \$400 million in capital improvement projects that will upgrade, replace, and renew its wastewater infrastructure.

Central Valley has seen an increase in costs throughout this project and is looking to mitigate the impact this will have on its customers. Central Valley is well under construction of the upgrades and has secured the majority of contracts necessary to complete construction. However, due to the increases in costs, Central Valley is seeking additional bonds in both the public and private market. They are seeking funding from the Water Quality Board for the remainder of the BNR basin project and the blower building project that are already encumbered by federal requirements such as AIS and Davis Bacon Wages. They would then divert other funds that were for these projects to the projects that do not already have the federal funding requirements but are still needed for the full upgrade. Central Valley has so far obtained \$386 Million for the multiple projects that are in various stages of development.

Central Valley discharges wastewater into 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 reduce phosphorus to lessen the impact this plant has on the Jordan River.

POSITION ON PROJECT PRIORITY LIST:

This project is ranked 1st 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:

1. Respective entity boards have held public meetings regarding the rate increase. The respective boards/councils have generally received few comments regarding the anticipated rate increases.
2. In general member entities with higher existing 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 b) support the 20-year CIP plans.
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 bond proceeds.
5. Central Valley continues to have Board Meetings open to the public in which they update the Central Valley Board with the current status of the various projects. They also post video updates on their website.

IMPLEMENTATION SCHEDULE:

Apply to WQB for Funding:	June 2022
WQB Introduction	August 2022
WQB Funding Authorization:	October 2022
Facility Plan Approval:	Complete
Issue Construction Permit	Complete
Bid Opening	Complete
Complete Construction	December 2024
Complete Commissioning	May 2025

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 \$28 per ERU per month.

APPLICANT’S ALTERNATIVES EVALUATE:

Central Valley completed a report in 2015 titled “Evaluating the Technical and Economic Feasibility of Modifying the Central Valley 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.

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 (similar to OWASA)

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 would be provided on the biosolids dewatering process filtrate to minimize nutrient recycling and reduce the overall size of the mainstream treatment process. This process could be expanded into a five stage Bardenpho process in the future to achieve lower levels of Total Inorganic Nitrogen.

COST ESTIMATE:

Central Valley is moving forward with several phases of construction at this time. Two of those phases include the Blower Building and BNR Basins which have already been bid out with AIS, DBE, and Davis-Bacon Wage requirements included. The total cost of these two phases is \$177,200,000 of which Central Valley has so far received \$65,100,000 in financial assistance from the Water Quality Board. While this is close to the estimated cost of these phases at the time the project originally came before the Board, other phases of the project have continued to cost much more than anticipated. Central Valley has employed value engineering and modified time frames where possible but additional financing is necessary to complete the phases of the project required to meet phosphorus requirements.

COST SHARING:

Central Valley is proposing the following cost sharing for the identified projects. Central Valley intends to self-fund the remainder of its 20-year, \$400 million investment through member contributions and public market financing.

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
Central Valley Portion	\$ 79,000,000	44%
Existing WQB Loan	\$ 65,000,000	37%
WQB Loan	\$ 33,200,000	19%
Total	\$ 177,200,000	100%

ADDITIONAL DISCUSSION POINTS:

Central Valley Water Reclamation Facility serves seven separate entities. South Salt Lake City exceeded the 1.4% MAGI and has been given separate funding. Other entities still have some capacity to increase rates within this affordability criterion. Central Valley expects to request additional subsidy from the Board in the form of a reduced interest rate to assist those entities with a demonstrated hardship. The table below shows the current average combined rate for each member utility as well as the percent of MAGI that the current rate represents. As is shown in the table below, South Salt Lake City and Murray City exceed 1.4% of MAGI at their current user rates. User rates will increase further due to these projects.

	Average Monthly Current Sewer Bill	% MAGI
Cottonwood Improvement District	\$ 20.00	0.48%
Granger-Hunter Improvement District	\$ 29.50	0.97%
Kearns Improvement District	\$ 39.99	1.29%
Murray City	\$ 56.28	1.49%
Mt. Olympus Improvement District	\$ 21.00	0.56%
South Salt Lake City	\$ 45.00	1.57%
Taylorville-Bennion Improvement District	\$ 28.86	0.84%
Weighted Average w/o SSL	\$ 27.65	0.80%

STAFF RECOMMENDATIONS:

This project is being re-introduced. Staff recommendations will be made in a later Board meeting. A preliminary cost model is included as Attachment 1.

DWQ-2022-025759

File: Central Valley Water Reclamation Facility, Admin, Section 1

Central Valley - Water Quality Board 20 Year Loan Static Cost Model Additional Funding Request

Project Costs	
BNR Process Basins	\$ 126,200,000
Blower Building	\$ 51,000,000
Total Project Cost:	\$ 177,200,000

Project Funding	
Cash from member entities	\$ 21,095,665
*South Salt Lake Funding	\$ 11,146,000
Publicly issued bonds@3.5%	\$ 46,658,335
WQB Loan Existing	\$ 65,100,000
WQB Loan Requested	\$ 33,200,000
Total Project Cost:	\$ 177,200,000

*SSL Obtained Separate Financing Through the WQB for their portion of the project

Current Customer Base & User Charges	
Total ERU's (Projected 2020)	\$ 175,630
Weighted Average MAGI (2021):	\$ 42,801
Affordable Monthly Rate at 1.4%	\$ 49.93
Current Impact Fee	Varies
Current Average Monthly Fee (per ERU)	\$ 27.65
Existing O&M expenses Treatment & Collection	Varies
New O&M expenses Treatment	\$ 28,798,976
Existing Sewer Debt Service	Varies
Existing Treatment Debt Service	\$ 20,375,081
Weighted Average Current Sewer Bill:	\$ 27.02

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	Existing WQB Debt Service	Required other new Debt Service Payments*	Weighted Interest Rate for Project	Annual Sewer O&M Cost	Total Annual Sewer Cost	Monthly Treatment Cost/ERU	Increase in Cost Per ERU/Month Treatment Only	Average Per ERU/Month Cost	Weighted Average MAGI	Weighted Average Burden
						\$ 28,798,976	\$ 49,174,057	\$ 23.33		\$ 27.02	0.76%	Low
\$ 33,200,000	0.00%	\$ 1,660,000	\$ 3,791,797	\$ 3,282,931	1.97%	\$ 28,798,976	\$ 57,908,785	\$ 27.48	\$ 4.14	\$ 31.17	0.87%	Low
\$ 33,200,000	1.00%	\$ 1,839,788	\$ 3,791,797	\$ 3,282,931	2.13%	\$ 28,798,976	\$ 58,088,573	\$ 27.56	\$ 4.23	\$ 31.25	0.88%	Low
\$ 33,200,000	1.10%	\$ 1,858,367	\$ 3,791,797	\$ 3,282,931	2.15%	\$ 28,798,976	\$ 58,107,152	\$ 27.57	\$ 4.24	\$ 31.26	0.88%	Low
\$ 33,200,000	1.30%	\$ 1,895,848	\$ 3,791,797	\$ 3,282,931	2.19%	\$ 28,798,976	\$ 58,144,632	\$ 27.59	\$ 4.26	\$ 31.28	0.88%	Low
\$ 33,200,000	1.35%	\$ 1,905,285	\$ 3,791,797	\$ 3,282,931	2.20%	\$ 28,798,976	\$ 58,154,070	\$ 27.59	\$ 4.26	\$ 31.28	0.88%	Low
\$ 33,200,000	1.50%	\$ 1,933,758	\$ 3,791,797	\$ 3,282,931	2.23%	\$ 28,798,976	\$ 58,182,543	\$ 27.61	\$ 4.27	\$ 31.30	0.88%	Low
\$ 33,200,000	1.78%	\$ 1,987,552	\$ 3,791,797	\$ 3,282,931	2.29%	\$ 28,798,976	\$ 58,236,337	\$ 27.63	\$ 4.30	\$ 31.32	0.88%	Low
\$ 33,200,000	2.00%	\$ 2,030,403	\$ 3,791,797	\$ 3,282,931	2.33%	\$ 28,798,976	\$ 58,279,188	\$ 27.65	\$ 4.32	\$ 31.34	0.88%	Low
\$ 33,200,000	3.50%	\$ 2,335,988	\$ 3,791,797	\$ 3,282,931	2.69%	\$ 28,798,976	\$ 58,584,772	\$ 27.80	\$ 4.47	\$ 31.49	0.88%	Low

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

Central Valley Water Reclamation Facility Feasibility Report - Introduction
 August 24, 2022
 Attachment 1- Continued

Central Valley - Water Quality Board
 20 Year Loan Static Cost Model Additional Funding Request

CENTRAL VALLEY CURRENT WEIGHTED AVERAGE MAGI CALCULATION				
Member Entity	MAGI	current monthly Average Bill	current % MAGI	Current ERUs
Cottonwood I.D.	\$ 50,400.00	\$ 20.00	0.48%	36,329
Granger-Hunter I.D.	\$ 36,400.00	\$ 29.50	0.97%	27,000
Kearns I.D.	\$ 37,300.00	\$ 39.99	1.29%	20,000
Murray City	\$ 45,200.00	\$ 56.28	1.49%	9,663
Mt. Olympus I.D.	\$ 45,200.00	\$ 21.00	0.56%	54,688
Taylorville-Bennion I.D.	\$ 41,400.00	\$ 28.86	0.84%	25,329
Weighted Average	\$42,800.59	\$27.02	0.77%	

CENTRAL VALLEY FINANCIAL NEED INDICATOR CALCULATION				
Member Entity	Unemployment Rate	Poverty Rate	Threshold LQI	Population Growth Rate
Cottonwood I.D.	3.58%	7.43%	\$ 39,447.50	31.28%
Granger-Hunter I.D.	4.20%	11.70%	\$ 34,429.00	8.49%
Kearns I.D.	4.60%	8.60%	\$ 40,896.00	4.98%
Murray City	4.20%	6.30%	\$ 33,595.00	5.83%
Mt. Olympus I.D.	4.20%	6.30%	\$ 33,595.00	5.83%
Taylorville-Bennion I.D.	4.50%	9.80%	\$ 37,209.00	2.72%
Weighted Average	4.10%	8.04%	\$ 35,785.06	10.87%
State Values	3.60%	9.10%	\$ 35,445.00	18.60%
Score	2.25	1.00	1.00	3.00
Weight	4.00	2.50	2.50	1.00
Weighted Score	9	2.5	2.5	3
Financial Need Indicator (Sum of weighted Scores/10)				1.7

Financial Burden Matrix					
FNI	Modified MAGI				
	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



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John K. Mackey
Executive Secretary

WATER QUALITY BOARD
FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT

INTRODUCTION

APPLICANT:

Delta City
76 North 200 West
Delta, UT 84624
Telephone: (435) 864-2759

PRESIDING OFFICIAL

Mayor John Niles

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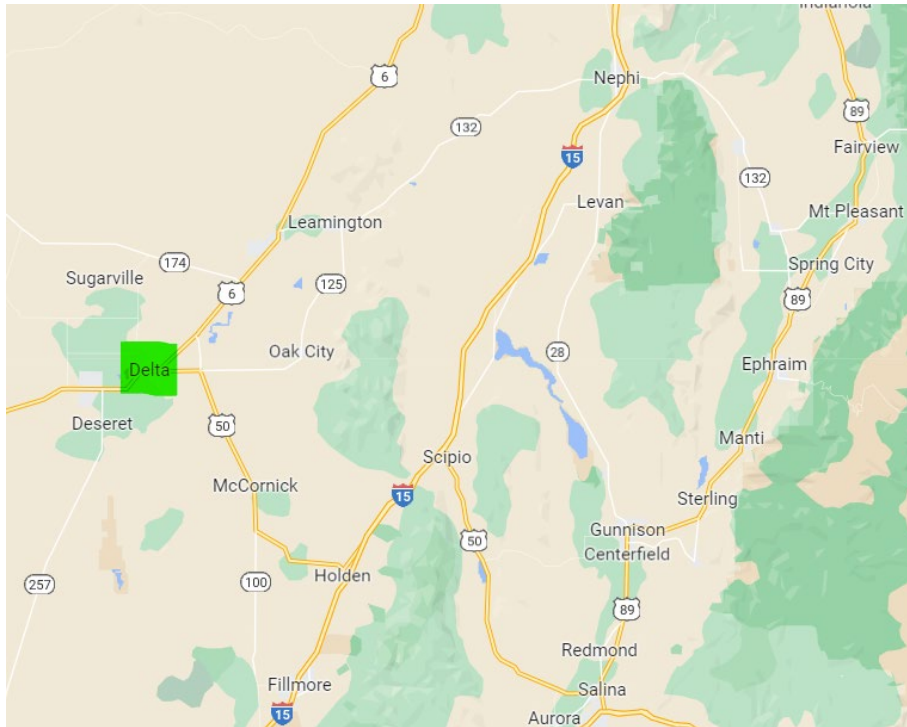
BOND COUNSEL:

APPLICANT'S REQUEST

Delta City is requesting funding from the Water Quality Board in the amount of **\$16,852,000** to upgrade a sewer lift station and piping by slip line and open cut installation. In addition, Delta City is requesting a **design advance in the amount of \$400,000** that is included within the funding application.

APPLICANT’S LOCATION

Delta City is located in Millard County.



PROJECT BACKGROUND

Delta City’s sewer system provides service to approximately 3,500 residents and is comprised of 143,088 feet of sewer pipe. It is estimated that the original parts of the sewer system, primarily comprised of clay and asbestos cement pipe are between 60 and 100 years old. The wastewater treatment system is comprised of a series of nine lagoon cells that provide a total of 100 acres and over 144,000,000 gallons of lagoon capacity. The estimated lagoon area to support the 20-year projected systems flows is approximately 47 acres. The city updated their master plan in 2019, and during that update the entire system was video inspected. This video inspection showed deficiencies and system failure that need to be addressed.

PROJECT NEED

Delta City would like to upgrade a lift station, replace approximately 77,600 linear feet of pipeline by both slip lining and open cut installation methods, replace manholes, set new manholes, replace service connections in the areas of open cut pipeline installation, and surface restoration.

PROJECT DESCRIPTION

Delta City's sewer system consists of six zones. Improvements to Zone A include bypassing Lift Station A and replacing approximately 43,200 feet of clay pipe, asbestos cement pipe, and concrete pipes and manholes. Zone B and C improvements include replacing the force main line between Lift Station B and the lagoons, upgrading Lift Station C, and include replacing approximately 17,860 feet of clay pipe and asbestos cement pipe and associated manholes with these zones. Improvements to Zones D and E consist of replacing approximately 16,725 feet of concrete pipe and associated manholes. Zone F improvements include upgrading Lift Station F and installing a new force main line from Lift Station F to connect to the new force main interceptor from Lift Station B. Actual quantities and prioritization of pipe replacement will be determined based on the results of the next sewer video inspection.

ALTERNATIVES EVALUATED

In addition to the project description, there are alternatives available to the City that they may choose to pursue in the future.

1. Bypass Lift Station B. Lift Station B currently serves approximately two-thirds of the city; however, if the City chooses to eliminate Lift Station A and bypass the flows to Zone F, the demand at Lift Station B would decrease considerably. With that in consideration, a redesign of approximately 7,100 linear feet of sanitary pipeline to the south of Lift Station B and then east to Lift Station E would enable the bypass of Station B. The flow from Zone B would be redirected to Zone E, then pumped through Lift Station E to the treatment lagoons. If the City chooses to eliminate Lift Station B and redirect Zone B to Lift Station E, Station E will need to be upgraded to accommodate the additional flows. It is also recommended that the force main from Station E to the lagoons be replaced at the same time.
2. Bypass Lift Station C and D. It may also be possible to eliminate Station C and Station D by installing deep interceptor lines to carry the flow to Station B or Station E. A threshold survey would be required in these zones to determine the actual required depth of the deep interceptors and possible reconfiguration of the collection zones. The wet wells at Station B and Station E would also need to be lowered to accommodate the deeper lines.

POSITION ON PROJECT PRIORITY LIST

Delta City is currently ranked No. **9** of 10 on the FY 2020 Wastewater Treatment Project Priority List (PPL).

POPULATION GROWTH

Based on the 2020 US Census data, the 2020 population was 3,604. According to the State's projections, the City of Delta has a growth rate of 8%.

Year	Population
2020	3,604
2040	3,892
2050	4,539

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT

Public participation will be solicited through public meetings/hearings, information/fact sheets, and social media.

IMPLEMENTATION SCHEDULE

The estimated completion date for the upgrade of the sewer system is 2024.

APPLICANT’S CURRENT USER CHARGE

Currently, Delta City charges approximately \$28.00 per month per ERU. According to the Water Quality Board’s criteria of 1.4% of MAGI (\$44,200 for Delta), a rate of \$51.57 per month for wastewater service should be exceeded for grant consideration. The impact fee is \$0 and the hookup fee is \$800.00.

COST ESTIMATE

The total cost of the project is estimated to be \$16,852,000. A breakdown of these cost follows.

Pump Stations	\$1,376,400
Collection Sewers	\$9,195,196
Mobilization	\$800,000
General Project Items	\$1,322,500
Legal/Bonding	\$30,000
Engineering – Planning	\$35,000
Engineering - Design	\$613,000
Engineering- CMS	\$600,000
Engineering – Other	\$31,000
Funding Admin	\$20,000
Environmental Services	\$35,000
UDOT Coordination	\$8,000
Loan Origination Fee	170,000
Contingency	\$2,615,904
Construction Total	\$15,169,000
Total Project Cost:	16,852,000

COST SHARING

The total cost of the project is \$16,750,000.

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
American Rescue Plan – Local Appropriation	\$213,000	1.3%
WQB Funding	\$16,639,000	98.7%
Total Amount:	\$16,852,000	100%

ESTIMATED ANNUAL COST FOR SEWER SERVICE

Different funding options result in different annual sewer costs. A cost model is shown in Attachment 1, which analyzes many possible funding options. The resulting total annual sewer cost is shown for each funding option.

EFFORTS TO SECURE FINANCING FROM OTHER SOURCES

In the 2019 Master Plan the City evaluated the potential of going to USDA-RD for funding the project. The Master Plan encourages to City to apply to USDA-RD.

STAFF COMMENTS CONSTRUCTION FUNDING

Staff encouraged Delta City to apply to the Water Quality Board for consideration. This project will allow Delta City to maintain their sewer system along with updating necessary lift stations for an improved flow. The project, if completed under the current scope without grant assistance, will result in a High Financial Burden for the community. Based on discussions with the City and projected rates, the project scope may be re-evaluated to address the most critical needs of the system if substantial grant funding cannot be obtained. This is a project introduction, and staff recommendations will be provided at the request for funding authorization. Staff believes that this is an important project.

STAFF RECOMMENDATION DESIGN ADVANCE

Staff supports the design advance to keep this project proceeding in a timely manner and funding of the design would cause a hardship on the community. However, due to Hardship Grant Fund balances and the sizable amount of the advance request staff is concerned if full funding is feasible. Staff believes this should be funded as 50% Grant and 50% Advance to be repaid as a short-term loan.

STAFF RECOMMENDATION

Staff recommends the **Water Quality Board authorize a hardship design grant in the amount \$200,000 and a short-term loan in the amount of \$200,000 at an interest rate of 0% repayable over 5 years** to the Delta City under following the special conditions:

1. The Division of Water Quality must approve the engineering agreement and plan of design before the advance will be executed.
2. The loan will be repaid in five annual installments beginning one year from the date the loan is fully disbursed or the project is otherwise completed.
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.

ATTACHMENT 1

ATTACHMENT 1 Delta - Water Quality Board 20 Year Loan Static Cost Model

Project Costs

Legal/Bonding	\$	30,000
DWQ Loan Origination Fee	\$	170,000
Funding Admin	\$	20,000
Environmental Services	\$	35,000
UDDT Coordination	\$	8,000
Engineering - Planning, Design, & CMS	\$	1,279,000
<i>Collections</i>	\$	3,195,196
<i>Lift station</i>	\$	1,376,400
<i>Mobilization</i>	\$	800,000
<i>General Project Items</i>	\$	1,322,500
Construction subtotal	\$	12,694,096
Contingency	\$	2,615,904
Total Project Cost:	\$	16,852,000

Project Funding

ARPA Funds	\$	213,000
Amount to be Funded	\$	16,639,000
WQB Grant	\$	-
Total Project Cost:	\$	16,852,000

Current Customer Base & User Charges

Initial Total Customer (ERU's)	1,108
MAGI for Delta City (2020):	\$44,200
Affordable Monthly Rate at 1.4%:	\$51.57
Impact Fee (per ERU):	\$0
Current Monthly Fee (per ERU)	\$28.00
Debt Service	\$0
Annual O&M expense	\$265,396

Funding Conditions

Loan Repayment Term:	20
Reserve Funding Period:	6

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Loan	Private Loan Amount	WQB Loan Interest Rate	Private Loan Interest Rate*	WQB Loan Debt Service	WQB Loan Reserve	Private Loan Debt Service	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
	0	16,639,000	0.00%	4.00%	0	0	1,224,327	265,396	0	1,489,723	112.04	3.04%	HIGH
	16,639,000	0	0.00%	4.00%	831,950	207,988	0	265,396	0	1,305,334	98.17	2.67%	HIGH
	16,639,000	0	0.50%	4.00%	876,317	219,079	0	265,396	0	1,360,792	102.35	2.78%	HIGH
	16,639,000	0	1.00%	4.00%	922,055	230,514	0	265,396	0	1,417,965	106.65	2.90%	HIGH
	16,639,000	0	1.50%	4.00%	969,151	242,288	0	265,396	0	1,476,834	111.07	3.02%	HIGH
	16,639,000	0	2.00%	4.00%	1,017,587	254,397	0	265,396	0	1,537,379	115.63	3.14%	HIGH
500,000	16,139,000	0	0.00%	4.00%	806,950	201,738	0	265,396	0	1,274,084	95.82	2.60%	HIGH
1,000,000	15,639,000	0	0.00%	4.00%	781,950	195,488	0	265,396	0	1,242,834	93.47	2.54%	HIGH
1,500,000	15,139,000	0	0.00%	4.00%	756,950	189,238	0	265,396	0	1,211,584	91.12	2.47%	HIGH
2,000,000	14,639,000	0	0.00%	4.00%	731,950	182,988	0	265,396	0	1,180,334	88.77	2.41%	HIGH

*Staff Estimate

FNI Calculation

	Local Value	State Value	Score	Weighting Factor	Weighting Score
Unemployment Rate	3.2%	3.6%	1.80	4	7.20
Poverty Rate	24.6%	9.1%	3.00	2.5	7.50
Threshold LQI	\$ 24,413	\$ 35,445	2.24	2.5	5.60
Population Growth Rate	8.2%	18.6%	2.11	1	2.11
Financial Need Indicator (Sum of weighted Scores/10)					2.24

Financial Burden Matrix

	Modified MAGI					
	FNI	Below 1.4%	1.4% to 1.75%	1.75% to 2.1%	2.1% to 2.45	Above 2.45
S2301	Below 1.5	Low	Low	Medium	Medium	High
S1701	1.5 to 2.5	Low	Medium	Medium	High	High
B19080	Above 2.5	Medium	Medium	High	High	High
B01003						



State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF WATER QUALITY
John K. Mackey, P.E.
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
John K. Mackey
Executive Secretary

WATER QUALITY BOARD
FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT

INTRODUCTION

APPLICANT:

Hanksville Town
30 South Highway 95, PO Box 127
Hanksville, UT 84734
Telephone: (435) 542-3451

PRESIDING OFFICIAL

Mayor Jefren Pei

CONTACT:

Lisa Wells, Clerk

TREASURER:

Jessica Alvey

CONSULTING ENGINEER:

Daniel Hawley, Project Manager
Jones & DeMille Engineering
1535 South 100 West
Richfield, UT 84701
(435) 896-8266

BOND COUNSEL:

Chamberlain Associates
225 North 100 East
Richfield, UT 84701
(435) 896-4461

FINANCIAL ADVISOR

None

APPLICANT'S REQUEST

Hanksville Town is requesting project construction financial assistance in the amount of \$2,007,600 to repair damaged lagoon embankments and protect them from future flood events. In addition, Hanksville Town is requesting a design advance in the amount of \$162,000 that is included within the funding application.

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

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APPLICANT’S LOCATION

Hanksville Town is located in Wayne County.



PROJECT BACKGROUND

The Town of Hanksville installed their total containment sewer lagoons and sewer collection system in the late 1980’s. The existing lagoons are located along the banks of the Fremont River. The lagoons consist of two cells which are equal in size at about 3.4 acres each. The Town developed a sewer master plan on May 31, 2022 detailing water balance and necessary improvements for the lagoons.

PROJECT NEED

On September 2, 2021 a major flash flooding event along the Fremont River basin caused the water in the river to over top the existing sewer lagoons embankments and eroded out dikes, headworks structures, transfer structures, and silted in portions of the ponds before spilling back over the dikes into the river. Therefore, there is a need to repair the current lagoons to ensure proper operation. Along with lagoon repairs the lagoons have trouble maintaining 3 feet of water during the winter

months when tourism is low. To maintain water depth, canal water is pumped into the lagoons. Therefore, the Town would like to divide the secondary cell to help maintain a consistent depth in the lagoons.

PROJECT DESCRIPTION

To balance the seasonal flow variations more efficiently and maintain healthy lagoon depth it is proposed that the secondary cell be divided by one dike into two cells for a total of three cells. It is recommended that the clay liner in all the ponds be reconstructed. By dividing the secondary cell such that the downstream cell from the primary cell is 1.0 acre, a better balance between the primary and secondary can be struck to maintain 3 feet in each cell with little supplemental canal water addition. Based on the water balance, some canal water will still be needed to be used to increase the water depth slightly to maintain 3-foot depth in both cells through the winter months. If growth projections are correct, supplemental canal water will only be needed until 2031. Where canal water currently comes at little to no cost to the town this option is recommended. Attachment 2 shows the proposed improvements.

In addition to maintaining minimum water depth, other improvements are recommended. These include lowering the first cell to allow for more hydraulic head between the flume and water surface of the primary cell, routing a section of pipe directly from the flume to the secondary cell for operational maintenance, and increasing the exterior dike height to prevent future flood events from damaging the cells again. The recommended increase in height is based on high water marks at the site along with accounts from town personnel of reported floodwater depths. With this information a hydraulic analysis of the lagoon site was performed to determine a new proposed outer dike elevation that would provide three feet of freeboard between a design flood event and the top of the dike.

The hydraulic conductivity of the existing clay liner of the primary and secondary ponds will be evaluated to ensure it is near 8×10^{-7} cm/s. If the hydraulic conductivity of the clay liner is higher or lower than this value, the clay liner must be rehabilitated or modified to match the target value. For cost estimating purposes it was assumed that the liner is not in good condition and will need to be replaced.

ALTERNATIVES EVALUATED

Other than the water balance analysis, other factors that influence the preliminary design include: minimize the amount of earthwork needed to rehabilitate the existing lagoons; mitigate the hazards posed by future flood events such as additional bank armoring; use existing facilities and equipment where possible; and maintain the same relative footprint of the lagoons/facility area. A design that follows these parameters will provide a safe cost-effective solution for the wastewater treatment problems in Hanksville. In addition to these improvements, the flume structure should be replaced, and new equipment installed to better monitor and measure inflows. It may also be beneficial to video and clean some of the sewer pipe upstream from the flume structure.

POSITION ON PROJECT PRIORITY LIST

Hanksville Town is currently ranked No. 6 of 10 on the FY 2023 Wastewater Treatment Project Priority List (PPL).

POPULATION GROWTH

Based on the 2010 US Census data the 2020 population was 281. According to the State's projections the Town of Hanksville has a growth rate of 18% from 2010 to 2020. This results in a build out population of 462 people in 2050.

Year	Population
2020	281
2040	391
2050	462

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT

The Town of Hanksville has held several public town council meetings where the repairs of the lagoons was discussed.

EFFORTS TO SECURE FINANCING FROM OTHER SOURCES

The Town of Hanksville applied for ARPA funds and is applying \$26,000 of local ARPA funds to Design costs.

IMPLEMENTATION SCHEDULE

The estimated completion date for lagoon rehabilitation and improvements is early 2024.

APPLICANT'S CURRENT USER CHARGE

Currently, Hanksville Town charges approximately \$15.50 per ERU. According to the Utah Water Quality Board's criteria of 1.4% MAGI (\$25,400 for Hanksville), a rate of \$29.63 per month for wastewater service should be exceeded for grant consideration. The impact fee is \$0 and the hookup fee is \$1,000.

COST ESTIMATE

The total cost of the design advance is estimated to be \$188,000. A breakdown of these costs follows.

Consulting Engineer	\$120,000
Legal	\$15,000
Survey	\$13,000
Environmental	\$10,000
Geotechnical Report	\$30,000
Total Design Advance Cost	\$188,000

The total cost of the project is estimated to be \$2,055,600. A breakdown of these costs follows:

Admin (Legal Fees and Financial)	\$15,000
Planning	\$36,600
Design	\$188,000
CMS	\$135,000
Loan Origination Fee	\$25,000
Wastewater Treatment Plant	\$1,671,000 (\$188,000 Contingency)
Total Project Costs	\$2,070,600

COST SHARING

The total cost of project funding is \$2,070,600.

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
ARPA Funds (Advanced for Master Plan)	\$26,000	1%
WQB Funding	\$2,044,600	99%

ESTIMATED ANNUAL COST FOR SEWER SERVICE

Different funding options result in different annual sewer costs. A 30-year loan cost model is shown in Attachment 1, which analyzes many possible funding options. The resulting total annual sewer cost is shown for each funding option.

STAFF COMMENTS CONSTRUCTION FUNDING

Looking at the cost model, Hanksville can afford a loan of approximately \$225,000 to \$750,000 and be in the Low to Medium affordability range (1.4% to 2.45% respectively). In addition, to achieve an affordable project a substantial amount of grant money must be brought to this project. Typically, the Board does not require funding of a reserve payment or funding of an emergency repair and replacement fund. Staff believes it may be appropriate to require funding the emergency repair and replacement fund for the full value of the project. The applicant’s construction funding request is only a project introduction. Staff believes that this is an important project.

STAFF COMMENTS DESIGN ADVANCE

Staff supports the design advance to keep this project proceeding in a timely manner and funding of the design would cause a hardship on the community. Staff believes this should be funded as an Advance at this time and not a grant. During project funding it may be appropriate to apply the loan portion of a funding package to repay design services.

STAFF RECOMMENDATION

Staff recommends the Water Quality Board authorize a hardship design advance in the amount **\$162,000** to the Town of Hanksville under following the special conditions:

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

ATTACHMENT 1

ATTACHMENT 1
HANKSVILLE - Water Quality Board
30 Year Loan Static Cost Model

Project Costs

Legal/Bonding	\$	15,000
Loan Origination Fee	\$	25,000
Planning Advance	\$	36,600
Engineering - Design	\$	188,000
Engineering - CMS	\$	135,000
Wastewater Treatment Plant	\$	1,483,000
Contingency (13%)	\$	188,000
Total Project Cost:	\$	2,070,600

Current Customer Base & User Charges

Initial Total Customer (ERU's)	81
MAGI for Hanksville Town (2020):	\$25,400
Affordable Monthly Rate at 1.4%	\$29.63
Impact Fee (per ERU):	\$0
Current Monthly Fee (per ERU)	\$15.50
Debt Service	\$3,228
Annual O&M expense	\$13,250

Project Funding

Local Contribution	\$	26,000
Amount to be Funded	\$	2,044,600
WQB Grant	\$	-
Total Project Cost:	\$	2,070,600

Funding Conditions

Loan Repayment Term:	30
Reserve Funding Period:	6

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Loan	Private Loan Amount	WQB Loan Interest Rate	Private Loan Interest Rate*	WQB Loan Debt Service	WQB Loan Reserve	Private Loan Debt Service	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
	0	2,044,600	0.00%	3.50%	0	0	111,168	13,250	3228	127,646	131.32	6.20%	HIGH
	2,044,600	0	0.00%	3.50%	68,153	17,038	0	13,250	3228	101,670	104.60	4.94%	HIGH
1,300,000	744,600	0	0.50%	3.50%	26,790	6,697	0	13,250	3228	49,965	51.40	2.43%	MEDIUM
1,400,000	644,600	0	1.00%	3.50%	24,977	6,244	0	13,250	3228	47,699	49.07	2.32%	MEDIUM
1,500,000	544,600	0	1.50%	3.50%	22,677	5,669	0	13,250	3228	44,824	46.12	2.18%	MEDIUM
1,600,000	444,600	0	2.00%	3.50%	19,851	4,963	0	13,250	3228	41,292	42.48	2.01%	MEDIUM
1,650,000	394,600	0	0.00%	3.50%	13,153	3,288	0	13,250	3228	32,920	33.87	1.60%	LOW
1,700,000	344,600	0	1.50%	3.50%	14,349	3,587	0	13,250	3228	34,414	35.41	1.67%	LOW
1,750,000	294,600	0	1.50%	3.50%	12,267	3,067	0	13,250	3228	31,812	32.73	1.55%	LOW
1,800,000	244,600	0	2.00%	3.50%	10,921	2,730	0	13,250	3228	30,130	31.00	1.46%	LOW

*Staff Estimate

FNI Calculation				
	Local Value	State Value	Score	Weighting Factor
Unemployment Rate	0.0%	3.6%	1.00	1.95
Poverty Rate	5.7%	9.1%	1.00	2.50
Threshold LQI	\$ 19,700	\$ 33,445	1.00	2.78
Population Growth Rate	17.6%	18.6%	1.11	1.11
Financial Need Indicator (Sum of weighted Scores/10)				1.46

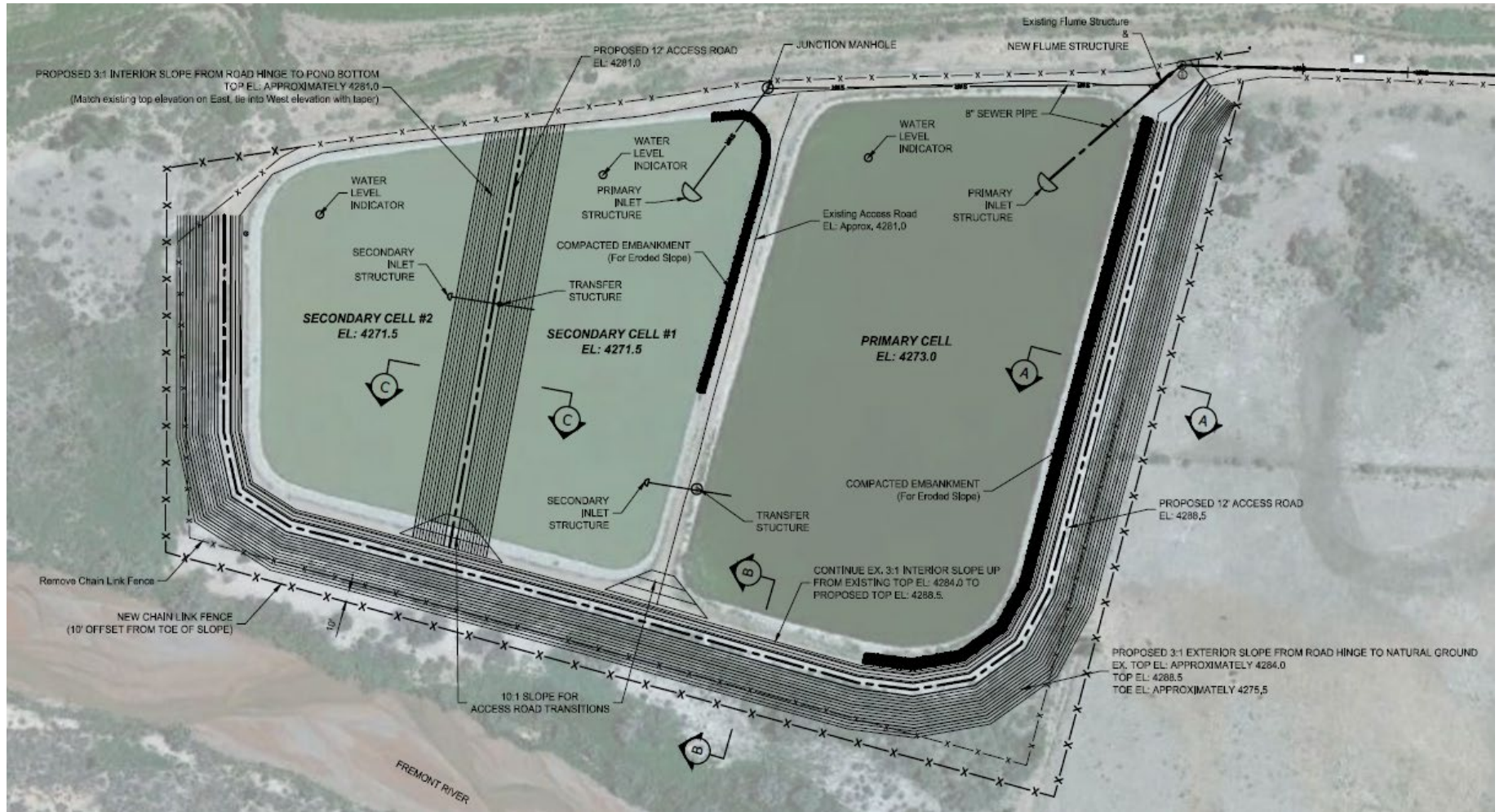
Table **

Financial Burden Matrix					
FNI	Modified MAGI				
	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

2020 5 year ACS Table

** <https://data.census.gov/cedsci/>

ATTACHMENT 2





State of Utah

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Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF WATER QUALITY
John K. Mackey, P.E.
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
John K. Mackey
Executive Secretary

WATER QUALITY BOARD
FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT
INTRODUCTION

APPLICANT: Long Valley SID
PO Box 218
Glendale, Utah 84729
Telephone: 435-691-2760

PRESIDING OFFICIAL JD Maxwell, President
PO Box 218
Glendale, Utah 84729
Telephone: 435-691-2760

CONTACT: Ray Spencer, Secretary
PO Box 218
Glendale, Utah 84729
Telephone: 435-691-2760

TREASURER: Ray Spencer

CONSULTING ENGINEER: James Saunders
Jones and DeMille Engineering
1535 South 100 West
Richfield, Utah 84701
Phone: 435-896-8266

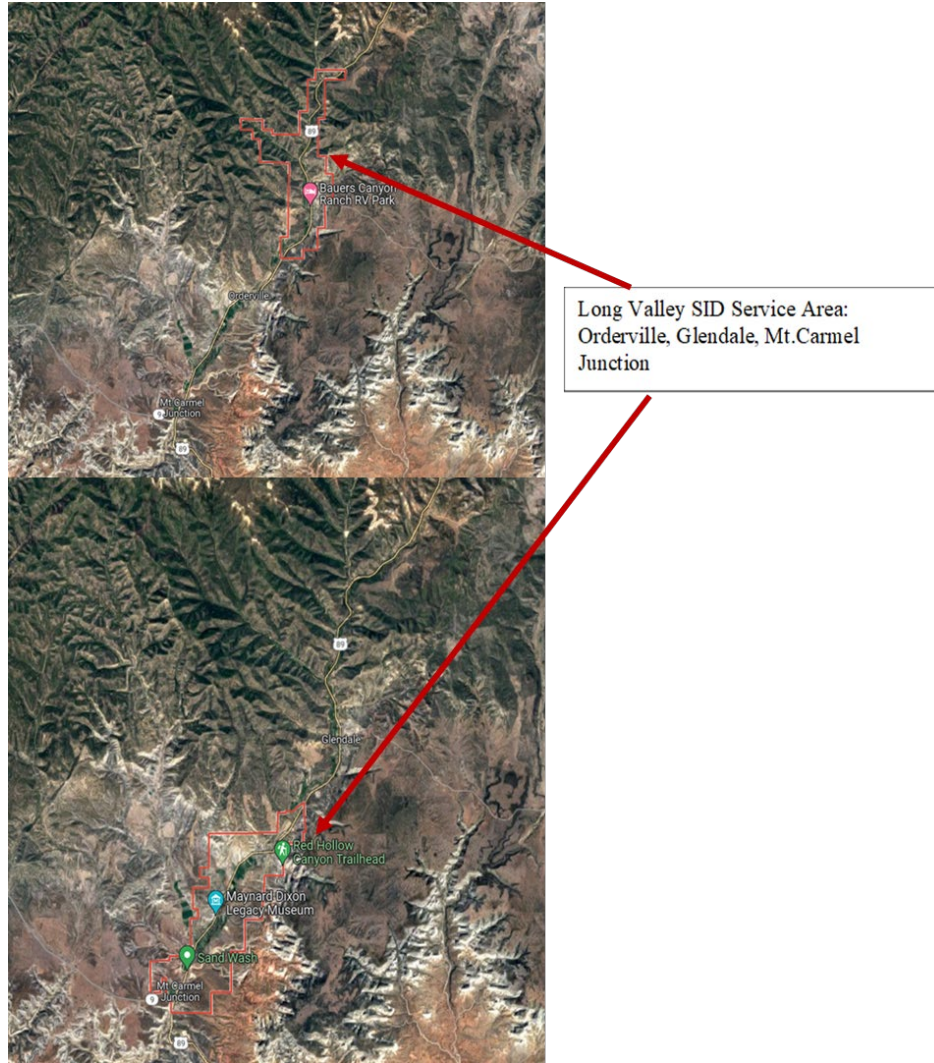
BOND COUNSEL: Richard Chamberlain
Chamberlain Associates
225 North 100 East
Richfield, Utah 84701
435-896-4461

APPLICANT'S REQUEST

Long Valley SID is requesting funding from the Water Quality Board in the amount of **\$1,358,500** for the modification of their wastewater treatment system and an expansion of their sewer system and lift station wet well. In addition, Long Valley SID is requesting a **design advance in the amount of \$84,300** that is included within the funding application.

APPLICANT'S LOCATION

Long Valley SID is located in Kane County, approximately 81 miles east of St. George, Utah.



FACILITY BACKGROUND

The treatment facility was built around 1979. In 2015, Long Valley SID completed major upgrades to their facility. During the project, improvements were made to the influent flowmeter and lift station. In addition, they relined their non-discharging lagoon to meet compliance with R317-3. During relining, gravel sinkholes underneath the lagoon were fixed. Further, the project added a secondary cell, a tertiary cell, and an additional primary cell for redundancy.

The monthly average flow into the lagoons is 56,000 gallons per day. The projected remaining lifespan of the lagoons is 14 years until upgrades are needed. The treatment facility is currently at 60% capacity.

PROJECT NEED

Long Valley SID is expanding the sewer system in Mt. Carmel Junction and Glendale. To do this, the sewer line needs to be installed underneath Highway 89 in both Glendale and Mt. Carmel Junction. Use of a boring machine is necessary, which will increase the cost of expanding the sewer system. In addition, the last camera inspection of the sewer system was in 2011 and another inspection is necessary to determine where the pipes need repair.

Long Valley SID's non-discharging treatment lagoon facility is in a very remote part of Utah and struggles with staffing certified operators. Due to the remote location, they have no full-time employees so responding to emergencies in a timely manner is very challenging. Also, the facility is prone to power outages so a bigger wet well for more equalization in this event is necessary to prevent overflows. In addition, there needs to be an automated grit removal method, as the current bar screen relies on a worker to manually clean the screens.

PROJECT DESCRIPTION

Long Valley SID is proposing the four following upgrades to increase the resiliency and automation of their system:

1. Replacing the old manual bar screen with an automatic screen auger to eliminate the need for manual service of the bar screens and remove non-organic solids to extend the lifespan of the lagoons.
2. Increase the volume of the lift station wet well to increase the holding capacity in the case of a power failure as well as handle higher flows during tourist season.
3. Extend the sewer line further into Mt. Carmel Junction and Glendale to hookup more buildings to the sanitary sewer.
4. Map and inspect the sewer system and conduct repairs to prevent Infiltration and Inflow.

POSITION ON PROJECT PRIORITY LIST

Long Valley SID is currently ranked No. **10** of 10 on the FY 2023 Wastewater Treatment Project Priority List (PPL).

POPULATION GROWTH

Based on data from the United States Census Website, the 2020 population was estimated at 910. Using Jones and DeMille's estimates for population growth from 1980 to 2021, Orderville has an average growth rate of 0.75 % and Glendale has an average growth rate of 1.16 %. Using those growth rates, the combined build out population in 2042 is estimated to be 1,108 people.

Year	Glendale	Orderville +Carmel	Total
2020	312	598	910
2042	403	705	1,108
2062	508	819	1,327

(Source: Long Valley Sewer Improvement District Sanitary Sewer Master Plan – Jones and DeMille – 2022)

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

Long Valley SID had a meeting on June 9, 2022 to discuss and agree to move forward on the project. This meeting was open to the public.

IMPLEMENTATION SCHEDULE

Apply to WQB for Funding:	July 2022
WQB Funding Authorization:	October 2022
Submit Information for Engineering Report Approval:	January 2023
Issue Construction Permit:	March 2023
Advertise for Bids:	March 2023
Bid Opening:	March 2023
Loan Closing:	April 2023
Commence Construction:	April 2023
Complete Construction:	August 2023

APPLICANT’S CURRENT USER CHARGE

Currently, Long Valley SID charges approximately \$34.00 per month per ERC. According to the Utah Water Quality Board’s affordability criteria of 1.4% of MAGI (\$37,029 for Long Valley SID service areas), the monthly rate for wastewater services should exceed \$43.20 per month for grant fund consideration. There is no impact fee and the hookup fee is \$150.

COST ESTIMATE

The total cost of the project is estimated to be \$1,422,700. A breakdown of these costs follows.

Legal/Bonding	\$20,000
DWQ Loan Origination Fee	\$15,000
Engineering - Design	\$84,300
Engineering - Design & CMS	\$126,400
Construction	\$985,000
Contingency	\$192,000
Total Project Cost:	\$1,422,700

COST SHARING

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
Local Contribution	\$64,200	3.1%
WQB Funding	\$1,358,500	96.9%
Total Amount:	\$1,422,700	100%

ESTIMATED ANNUAL COST FOR SEWER SERVICE

Different funding options result in different annual sewer costs. A cost model is shown in Attachment 1, which analyzes many possible funding options. The resulting Total Annual Sewer Cost is shown for each funding option.

STAFF COMMENTS

This is a project introduction, and staff recommendations will be provided at the request for funding authorization. This project will allow Long Valley SID to provide resiliency to the treatment facility by increasing capacity at the lift station and in the treatment lagoons. The increased capacity of the system will decrease the chance of an overflow in the event of a power outage and extend the lifespan of the lagoons. Staff supports the project.

STAFF COMMENTS DESIGN ADVANCE

Staff supports the design advance to keep this project proceeding in a timely manner and funding of the design would cause a hardship on the community. Staff believes this should be funded as an Advance at this time and not a grant. During project funding it may be appropriate to apply the loan portion of a funding package to repay design services.

STAFF RECOMMENDATION

Staff recommends the Water Quality Board authorize a **hardship design advance in the amount \$84,300** to the Long Valley SID under following the special conditions:

1. The Division of Water Quality must approve the engineering agreement and plan of design before the advance will be executed.
2. The Design Advance must be expeditiously repaid to the Board once long-term project financing has been secured.
3. Long Valley must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
4. As part of the facility planning, Long Valley must complete a Water Conservation and Management Plan.

ATTACHMENT 1

Attachment 1 Long Valley SID - Water Quality Board 20 Year Loan Static Cost Model

Project Costs

Legal/Bonding	\$	20,000
DWQ Loan Origination Fee	\$	15,000
Engineering - Design	\$	84,300
Engineering - CMS	\$	126,400
<i>WWTP</i>	\$	269,000
<i>Lift Station</i>	\$	234,000
<i>Collection System</i>	\$	262,000
<i>Other</i>	\$	220,000
<i>Construction subtotal</i>	\$	985,000
Contingency (~20%)	\$	192,000
Total Project Cost:	\$	1,422,700

Current Customer Base & User Charges

Initial Total Customer (ERU's)	690
MAGI for Long Valley SID (2020):	\$37,029
Affordable Monthly Rate at 1.4%	\$43.20
Impact Fee/Hookup Fee (per ERU):	\$150
Current Monthly Fee (per ERU)	\$34.00
Debt Service	\$73,000
Annual O&M expense	\$36,000

Project Funding

Local Contribution	\$	64,200
Amount to be Funded	\$	1,358,500
WQB Grant	\$	-
Total Project Cost:	\$	1,422,700

Funding Conditions

Loan Repayment Term:	20
Reserve Funding Period:	6

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Loan	Private Loan Amount	WQB Loan Interest Rate	Private Loan Interest Rate*	WQB Loan Debt Service	WQB Loan Reserve	Private Loan Debt Service **	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
	0	1,358,500		2.60%	0	0	65,774	36,000	73000	174,774	21.11	0.68%	LOW
	1,358,500	0	3.00%		91,313	22,828	0	36,000	73000	223,141	26.95	0.87%	LOW
	1,358,500	0	2.50%		87,144	21,786	0	36,000	73000	217,930	26.32	0.85%	LOW
	1,358,500	0	2.00%		83,081	20,770	0	36,000	73000	212,852	25.71	0.83%	LOW
	1,358,500	0	1.50%		79,127	19,782	0	36,000	73000	207,909	25.11	0.81%	LOW
	1,358,500	0	1.00%		75,282	18,820	0	36,000	73000	203,102	24.53	0.79%	LOW
	1,358,500	0	0.50%		71,547	17,887	0	36,000	73000	198,434	23.97	0.78%	LOW

*Staff Estimate

**Estimated 30 year term

FNI Calculation

	Local Value	State Value	Score	Weighting Factor	Weighting Score
Unemployment Rate	2.9%	3.6%	1.65	4	6.60
Poverty Rate	19.7%	9.1%	3.00	2.5	7.50
Threshold LQI	\$ 25,336	\$ 35,445	2.14	2.5	5.35
Population Growth Rate	-5.7%	18.6%	3.00	1	3.00
Financial Need Indicator (Sum of weighted Scores/10)					2.25

Table **

S2301
S1701
B19080
B01003

Financial Burden Matrix

FNI	Modified MAGI				
	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

2020 5 year ACS Table

** <https://data.census.gov/cedsci/>



State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF WATER QUALITY
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Trevor Heaton
Michael D. Luers
Kimberly D. Shelley
John K. Mackey
Executive Secretary

WATER QUALITY BOARD FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT

INTRODUCTION

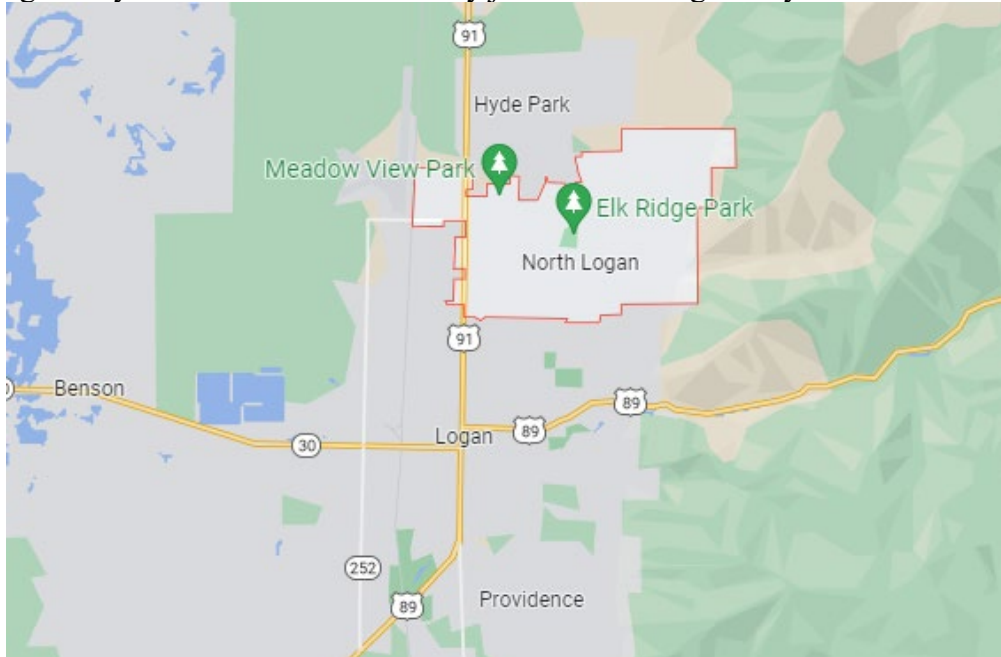
APPLICANT:	North Logan City 2076 N 1200 E North Logan, UT 84341 Telephone: 435-753-1310
PRESIDING OFFICIAL	Lyndsay Peterson, Mayor
CONTACT:	Alan Luce, City Administrator
TREASURER:	Scott Bennett, Recorder
CONSULTING ENGINEER:	Lance Anderson, City Engineer Cache Landmark 95 Golf Course Road #101 Logan, UT 84321 Telephone: 435-713-0099
BOND COUNSEL:	Gilmore & Bell 15 West South Temple, #1450 Salt Lake, Utah 84101 801-258-2722
FINANCIAL ADVISOR	Brain Baker, Financial Advisor Zion Bank Public Finance, Suite 309 Provo, Utah 84601 801-369-4093

APPLICANT'S REQUEST

North Logan City is requesting funding from the Water Quality Board in the amount **\$10,550,000** for the construction of a new gravity sewer trunk line leading to Logan City. Construction is currently underway, with Phase 1 completed and Phases 2 and 3 currently under construction. The final phases 4 and 5 are anticipated to begin as soon as funding is available. The total cost of the remaining project is estimated to be \$10,550,000.

APPLICANT'S LOCATION

North Logan City is located in Cache County just north of Logan City.



PROJECT BACKGROUND

In 2011, Logan City started working with North Logan City, Hyde Park City, and Smithfield City to develop options to upgrade their main trunk lines that eventually go to the Logan wastewater facultative lagoons. Logan City hired Sunrise Engineering to complete the study that looked at wastewater treatment, along with all of the various options for each of the participating cities to upgrade their main sewer trunk lines. The study indicated that the shared trunk line for Smithfield and Hyde Park would require a lift station. North Logan City had the opportunity to tie into this lift station and size it accordingly. However, the previous administration and staff of North Logan City were hesitant about tying into a lift station, so North Logan City chose a future option to replace the main gravity trunk line with a larger shared gravity trunk line that Logan would tie into with some of their needs. At that time the estimated cost from Sunrise Engineering to replace/upsized the main North Logan City gravity trunk line was approximately \$1,000,000. North Logan City started to put together plans for the replacement of that trunk line at a future date. Fast forward 10 year and North Logan City has started working with Logan City to install this major trunk line. The current estimate for the cost of the entire project is over \$10,500,000.

PROJECT NEED

The current sewer system is not adequate for increased flows due to anticipated development in North Logan. The current project includes scheduled development and allows for future development by increasing the capacity of conveyance of sewage to Logan City.

ALTERNATIVES EVALUATED

The new North Logan City Administration, Engineer (Cache Landmark), and Staff have inherited the option to reinstall the gravity trunk line. Upon learning that the trunk line would cost \$10,000,000 as opposed to \$1,000,000, North Logan looked into other options. A study was completed to analyze the option to install a new tri-city wastewater mechanical treatment plant with Hyde Park and Smithfield that would be located just west of the Logan Airport. This option did not seem feasible at the time. They also met with Logan City, Hyde Park, and Smithfield to discuss the option of upgrading the sewer lift station that is shared by Smithfield and Hyde Park City to include North Logan City. The lift station and the associated trunk lines were not built to handle North Logan's sewage so this was not a viable alternative.

All impact fees, fund balance, and facility fees have been exhausted up to this point. Funding options have been looked at through US Department of Agriculture Rural Development (USDA-RD), Community Impact Board (CIB), CDBG, Rural Water, Division of Water Resources, Cares Act, and ARPA. North Logan's population now exceeds the 10,000-threshold utilized by USDA-RD.

PROJECT DESCRIPTION

North Logan is currently constructing a replacement for the existing main gravity trunk line taking all of North Logan's sewer flows to the Logan City Treatment Plant. This trunk line will connect to existing infrastructure as well as new developments planned in the area – these developments are a major factor in the subsequent phases of the project. The upgrades are driven by growth and a capital improvement plan.

The trunk line project is divided into six phases. The first Phase is completed with Phases 2 and 3 currently under construction. The remaining Phases have been prioritized based on development pressure and avoiding additional costs caused by delays. See Implementation Schedule for additional details.

POPULATION GROWTH

Based on the 2020 US Census data, the population was estimated at 10,978. According to the State's projections, the City of North Logan had a growth rate of 2.9 % from 2010 to 2020, and is projected to continue to grow at a rate of 2.1% through 2040.

Year	Population
2020	10,978
2040	16,708 (projected)
2050	18,597 (projected)

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

North Logan has discussed the project in City Council meetings relating to the capital improvements plan, impact fees, and user fee increases. The project was also noticed in a newsletter to the public. Public hearings at the City Council received positive feedback.

IMPLEMENTATION SCHEDULE

PHASE	ESTIMATE	DATES
1		Completed
2		Under Construction
3 – Priority	\$1,950,000	To be completed Fall 2022
4 – 1500 N to 1800 N	\$3,200,000	Development Pressure 2023 – construction needed to avoid higher costs
4 – 1200 N to 1400 N	\$1,200,000	Construction Begins 2023 – Leg that connects previous legs to have operational sewer
5 – Residential Development	\$4,200,000	Development Pressure 2023-2025

APPLICANT’S CURRENT USER CHARGE

Currently, North Logan charges approximately \$60.69 per month per ERC. According to the Utah Water Quality Board’s affordability criteria of 1.4% of MAGI (\$51,900 for North Logan), the monthly rate for wastewater should exceed \$60.55 per month for grant fund consideration.

COST ESTIMATE

The total cost of the project is estimated to be \$10,550,000. A breakdown of these costs follows.

Total Project

Phase 1 & 2	Funded
Legal/Bonding	\$50,000
DWQ Loan Origination Fee	\$129,376
Phase 3	\$1,950,000
Phase 4.1	\$3,200,000
Phase 4.2	\$1,200,000
Phase 5	\$4,200,000
Contingency (20%)	\$2,110,000
Total Project Cost:	\$12,937,600

ESTIMATED ANNUAL COST FOR SEWER SERVICE

Different funding options result in different annual sewer costs. A cost model is shown in Attachment 1, which analyzes many possible funding options. The resulting total annual sewer cost is shown for each funding option. Full funding packages at 0% interest to private market funding result in projected rates from \$68.09 to \$72.49.

STAFF COMMENTS AND RECOMMENDATION

Staff is supportive of this project, but recognizes due to fund balances the entire cost is unlikely to be covered at this time. It appears that Phase 3 is already under construction, making it difficult to provide funds through our programs for the \$1,950,000 for this phase. Staff believes it would be appropriate for the Board to evaluate funding the full Phase 4 construction in the amount of \$4,400,000 or part of

Phase 4 at \$3,200,000 or \$1,200,000. It is staff's understanding North Logan City is looking for project funding in any amount as securing funding has been very challenging. This is an introduction and a recommendation will not be made at this time.

DWQ-2022-026592

ATTACHMENT 1

Attachment 1 North Logan - Water Quality Board 30 Year Loan Static Cost Model

Project Costs

Legal/Bonding	\$ 50,000
DWQ Loan Origination Fee	\$ 129,376
Engineering - Design & CMS	\$ 100,000
<i>Phase 3 - Priority (Fall 2022)</i>	\$ 1,950,000
<i>Phase 4.1 - 1500 N to 1800 N (2023)</i>	\$ 3,200,000
<i>Phase 4.2 - 1200 N to 1400 N (2023)</i>	\$ 1,200,000
<i>Phase 5 - Residential Development (2023-2025)</i>	\$ 4,200,000
Construction subtotal	\$ 10,550,000
Contingency (20%)	\$ 2,110,000
Total Project Cost:	\$ 12,937,600

Current Customer Base & User Charges

Initial Total Customer (ERU's)	3,231
MAGI for North Logan (2020):	\$51,900
Affordable Monthly Rate at 1.4%	\$60.55
Impact Fee (per ERU):	\$3,300
Current Monthly Fee (per ERU)	\$60.69
Debt Service	\$0
Annual O&M expense	\$2,101,000

Project Funding

Local Contribution	\$ -
Amount to be Funded	\$ 12,937,600
WQB Grant	\$ -
Total Project Cost:	\$ 12,937,600

Funding Conditions

Loan Repayment Term:	30
Reserve Funding Period:	6

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Loan	Private Loan Amount	WQB Loan Interest Rate	Private Loan Interest Rate*	WQB Loan Debt Service	WQB Loan Reserve	Private Loan Debt Service	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
-	0	12,937,600	0.00%	3.50%	0	0	703,435	2,101,000	0	2,804,435	72.33	1.67%	MEDIUM
-	12,937,600	0	0.00%	3.50%	431,253	107,813	0	2,101,000	0	2,640,067	68.09	1.57%	MEDIUM
-	12,937,600	0	1.00%	3.50%	501,308	125,327	0	2,101,000	0	2,727,634	70.35	1.63%	MEDIUM
-	12,937,600	0	2.00%	3.50%	577,663	144,416	0	2,101,000	0	2,823,079	72.81	1.68%	MEDIUM
-	12,937,600	0	3.00%	3.50%	660,067	165,017	0	2,101,000	0	2,926,083	75.47	1.74%	MEDIUM
-	4,400,000	8,537,600	1.00%	3.50%	170,492	42,623	464,201	2,101,000	0	2,778,315	71.66	1.66%	MEDIUM
-	4,400,000	8,537,600	1.50%	3.50%	183,212	45,803	464,201	2,101,000	0	2,794,216	72.07	1.67%	MEDIUM
-	4,400,000	8,537,600	2.00%	3.50%	196,460	49,115	464,201	2,101,000	0	2,810,775	72.49	1.68%	MEDIUM

*Staff Estimate

FNI Calculation					
	Local Value	State Value	Score	Weighting Factor	Weighting Score
Unemployment Rate	3.0%	3.6%	1.70	4	6.80
Poverty Rate	13.9%	9.1%	1.96	2.5	4.90
Threshold LQI	\$ 31,298	\$ 35,445	1.47	2.5	3.68
Population Growth Rate	41.4%	18.6%	1.00	1	1.00
Financial Need Indicator (Sum of weighted Scores/10)					1.64

2020 5 year ACS Table

** <https://data.census.gov/cedsci/>

Financial Burden Matrix					
FNI	Modified MAGI				
	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

Table **

S2301

S1701

B19080

B01003



State of Utah

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John K. Mackey
Executive Secretary

MEMORANDUM

TO: Utah Water Quality Board

THROUGH: John K. Mackey, P.E., Director

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

DATE: August 24, 2022

SUBJECT: Lewiston City – Sewage and Treatment System Improvement
\$2,144,000 Additional Supplemental Funding Request Re-Introduction

The Water Quality Board (Board) authorized a design advance of \$186,000 at the February 26, 2020 Board meeting. On March 25, 2020 the Water Quality Board authorized a hardship grant of \$500,000.00 in construction assistance, which included a \$40,000 planning advance and the \$186,000 design advance. The U.S. Department of Agriculture - Rural Development (USDA- RD) also authorized loan and grant funding in support of the project. USDA- RD authorized an assistance package for the balance needed in the form of 81:19 loan-to-grant proportions: \$2,052,000 loan with an interest rate of 1.875% and a 40-year term and a grant of \$483,000 for the project. In addition, Lewiston self-funded an anticipated share at \$144,000. The previous Board Authorization dated on March 25, 2020 is attached to this memo.

BID OVERRUN

In March 2021, the city bid the project and the lowest bid came in over the original construction estimate. With the higher than estimated construction bid, the project cost increased from \$3.06 million for construction work to a project total of \$5.3 million. Due to the increase in cost, the funding was not sufficient to complete the project. This cost increase is due to the current bidding environment, supply chain issues, tight labor market, and remote project location. The cost of PVC sewer pipes have increased significantly with limited availability. In addition to the current bidding environment, the city saw cost increases due to some project changes to accommodate unanticipated railroad right of way and re-routing of sewer pipes associated with an industrial site. Because this cost escalation, the city needs additional funding to continue with the project.

APPLICANT’S REQUEST

Lewiston City is requesting that the Board authorize additional funding of \$2,144,000 to pay for cost growth on their construction project. This will be bringing its total financing for the project to \$5.3 million.

PROJECT DESCRIPTION

The proposed project consists of the following improvements and upgrades. These improvements are needed to replace aging infrastructure, eliminate capacity limitations, improve wastewater treatment performance and enhance the overall system maintainability, flexibility, reliability, and customer service.

- Abandon existing lift station and associated 10” sewer line. Replace with 9200 LF of new/upgraded 18” gravity sewer line. Eliminating the aging and problematic lift station will reduce O&M requirements and the new sewer line will increase the overall capacity of the systems
- A new mechanical screen will be installed at the headworks area to remove rags and reduce downstream maintenance. A new metering manhole will also be installed at the headworks to accurately record flow rates to the lagoons.
- Floating mechanical aerators are proposed to increase treatment capacity and improve treatment performance.
- Chlorination and dechlorination facilities will be modernized and fitted with code compliant safety and control equipment. The new equipment will be located in separate buildings to reduce corrosion associated with high humidity from open tankage.
- The City is proposing to construct an effluent reaeration system to ensure compliance with its dissolved oxygen limit.
- 3-phase power will be provided to the headworks area and aerators to improve reliability and longevity of the new equipment.
- The City intends to provide for future Type 2 reuse water pumping in conjunction with the reaeration structure proposed above. This feature of the reaeration system will simplify future implementation of reuse (land application) and phosphorus compliance.

POSITION ON PROJECT PRIORITY LIST

Lewiston City is currently ranked No. 7 of 10 on the FY 2022 Wastewater Treatment Project Priority List (PPL).

PROJECT COST ESTIMATE

The total cost of the project is estimated to be \$5.3 million. Over the past year, construction costs have increase rapidly and Lewiston’s original cost estimate of \$3.06 million for the entire project, has risen to \$5.3 million. A comparison of the original cost, additional cost estimate with today’s cost estimate is given in Table 1. J.U.B. Engineering has reviewed costs.

Table 1 – TOTAL PROJECT COST			
Item	Description	Original Cost March 2020	Revise Cost July 2022
1	Engineering - Planning	\$41,000	\$41,000
2	Engineering - Design	\$165,000	\$165,000
2	Engineering – other	\$41,000	\$22,000
3	Engineering – CMS	\$186,000	\$186,000
4	Construction	\$2,067,500	\$4,390,000 ¹
5	Contingency	\$414,000	\$439,000 ²
6	DWQ Loan Origination Fee	\$20,500	\$21,000
7	Environmental NEPA	\$41,000	\$40,000
8	Legal/Bonding	\$88,000	\$40,000
	Total Project Costs:	\$3,064,000	\$5,323,000

1. The revised construction cost is based on the actual hard bid on July 15, 2021.
2. The estimated \$439,000 is to cover cost escalation and construction contingency.

UPDATED IMPLEMENTATION SCHEDULE

Advertise for Re-Bids:	November 2022
Re-Bid Opening:	December 2022
Commence Construction:	February 2023
Complete Construction:	June 2024

APPLICANT’S CURRENT USER CHARGE

Currently, the City charges approximately \$48 per month per ERC. According to the Utah Water Quality Board’s affordability criteria of 1.4% of MAGI (\$47,000 for Lewiston City), the monthly rate for wastewater services should exceed \$54.83 per month for grant fund consideration. The impact fee is \$2,278 and the hookup fee is \$350.

COST SHARING

The total cost of the project is \$5,323,000.

Funding Source	Cost Sharing	Percent of Project
Local Contribution	\$ 144,000	2.7%
Amount to be WQB Funded	\$ 2,144,000	40%
WQB Existing Design Grant	\$ 186,000	3.5%
WQB Existing Construction Grant	\$ 314,000	5.8%
USDA-RD Existing Grant	\$ 483,000	9.1%
USDA-RD Existing Loan	\$ 2,052,000	38.5%
Total Project Cost:	\$ 5,323,000	100%

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 2.82 which is the upper-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 High.

ESTIMATED ANNUAL COST FOR SEWER SERVICE

Staff developed static cost models (Attachment 1) to evaluate for additional funding by the Board. Different funding options result in different annual sewer costs. A cost model is shown in Attachment 1, which analyzes many possible funding options. The resulting Total Annual Sewer Cost is shown for each funding option.

This static model shows that in all cases, the sewer rates with current funding will exceed \$48 per month of the 2020 MAGI. That is, without additional grant funding (principal forgiveness), the sewer rate will exceed Board affordability criteria. Funding alternatives that include various mixtures of loan and grant are provided in Attachment 1. In 2021, the community discussed additional funding with USDA-RD. USDA-RD indicated support for additional and a funding package in the form of 80:20 loan-to-grant proportions. Staff has used this alternative funding option in the cost model. Staff estimates this funding option would result in a \$86.28 user rate (2.2% of MAGI).

STAFF COMMENTS

This is a project re-introduction, and staff recommendations will be provided at the request for funding authorization. Staff believes that this is an important project. The total cost is \$5.3 million. This increase in cost is due to the recent market fluctuations that have hit the construction industry particularly hard. Of the entire \$5.3 million total project cost, Lewiston is short by \$2,144,000. Based on the cost model and the evident hardship, the Board could best assist the community by bringing additional funds in the form of principal forgiveness. If the Board elected, \$274,000 of the previously authorized hardship grant funds could be re-obligated as principal forgiveness and return those balances as available in the fund. The authorization of principal forgiveness funds would add disadvantaged business enterprises and Davis Bacon Wages to the bid package. However, American Iron Steel (AIS) and Build America, Buy America (BABA) will already be required by USDA-RD. Finally, the Board could consider issuing an Utah Wastewater Loan Fund authorization for design services and further recover \$274,000 into the Hardship Grant Fund.

ATTACHMENT 1

ATTACHMENT 1
Lewstion City - Water Quality Board
20 Year Loan Static Cost Model

Project Costs		
Legal/Bonding - Eniveromental		\$ 40,000
DWQ Loan Origination Fee		\$ 21,000
Engineering - Design & CMS		\$ 433,000
<i>Collections</i>	\$ -	
<i>Lifi station</i>	\$ -	
<i>Headworks</i>	\$ -	
<i>Treatment</i>	\$ 4,390,000	
Construction subtotal		\$ 4,390,000
Contingency (10%)		\$ 439,000
Total Project Cost:		\$ 5,323,000

Current Customer Base & User Charges	
Initial Total Customer (ERU's)	280
MAGI for Lewstion City (2021):	\$47,000
Affordable Monthly Rate at 1.4%	\$54.83
Impact Fee (per ERU):	\$2,278
Current Monthly Fee (per ERU)	\$48.00
Debt Service	\$0
Annual O&M expense	\$121,500

Project Funding		
Local Contribution		\$ 144,000
Amount to be WQB Funded		\$ 2,144,000
WQB Existing Design Grant		\$ 186,000
WQB Existing Construction Grant		\$ 314,000
USDA-RD Existing Grant		\$ 483,000
USDA-RD Existing Loan		\$ 2,052,000
Total Project Cost:		\$ 5,323,000

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

USDA-RD Funding Conditions	
USDA-RD Loan Repayment Term	40
USDA-RD Interest Rate	1.875%

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness + Existing Hardship Grant	WQB Loan	RD Grant including existing	Existing & Possible RD Loan	WQB Loan Interest Rate	Current RD Loan Interest Rate	WQB Loan Debt Service	WQB Loan Reserve	Market Loan Debt Service	Annual Sewer	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
500,000	0	911,800	3,767,200	0.00%	1.875%	0	0	168,390	121,500	0	289,890	86.28	2.20%	HIGH
500,000	2,144,000	483,000	2,052,000	0.00%	1.875%	107,200	26,800	91,722	121,500	0	347,222	103.34	2.64%	HIGH
1,000,000	1,644,000	483,000	2,052,000	0.00%	1.875%	82,200	20,550	91,722	121,500	0	315,972	94.04	2.40%	HIGH
1,500,000	1,144,000	483,000	2,052,000	0.00%	1.875%	57,200	14,300	91,722	121,500	0	284,722	84.74	2.16%	HIGH
2,000,000	644,000	483,000	2,052,000	0.00%	1.875%	32,200	8,050	91,722	121,500	0	253,472	75.44	1.93%	HIGH
1,000,000	226,000	766,600	3,186,400	0.00%	1.875%	11,300	2,825	142,429	121,500	0	278,054	82.75	2.11%	HIGH
1,500,000	226,000	666,600	2,786,400	0.00%	1.875%	11,300	2,825	124,549	121,500	0	260,174	77.43	1.98%	HIGH
2,000,000	226,000	566,600	2,386,400	0.00%	1.875%	11,300	2,825	106,669	121,500	0	242,294	72.11	1.84%	Medium
2,458,000	226,000	475,000	2,020,000	0.00%	1.875%	11,300	2,825	90,292	121,500	0	225,917	67.24	1.72%	Medium

-Final Rows represent principal forgiveness less \$226,000 for planning and design as Utah Wastewater Loan Fund Loan in order to meet procurement requirements

FNI Calculation						
	Local Value	State Value	Score	Weighting Factor	Weighting Score	
Unemployment Rate	5.3%	3.6%	2.85	4	11.40	
Poverty Rate	16.6%	9.1%	2.50	2.5	6.25	
Threshold LQI	\$ 17,075	\$ 35,445	3.00	2.5	7.50	
Population Growth Rate	-1.4%	18.6%	3.00	1	3.00	
Financial Need Indicator (Sum of weighted Scores/10)						2.82

2020 5 year ACS Table [** https://data.census.gov/cedsci/](https://data.census.gov/cedsci/)

Financial Burden Matrix					
FNI	Modified MAGI				
	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

Table **

S2301
S1701
B19080
B01003



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Michael D. Luers
Kimberly D. Shelley
John K. Mackey
Executive Secretary

MEMORANDUM

To: Utah Water Quality Board

Through: John K. Mackey, P.E.
Executive Secretary

From: Emily Cantón
Assistant Director

Date: October 26, 2022

Subject: FY24 Fee Schedule Changes

Each year, DEQ accepts public comment on its Draft Fee Schedule. The schedule includes the current fee rate, the proposed fee rate, an estimated quantity of fees that will be collected, and the projected revenue change. A number of fees on the schedule are tied to an hourly rate that is calculated by the DEQ Office of Support Services. For FY24, the hourly rate is proposed to increase from \$110/hr to \$115/hr.

After the public hearing was held on September 19, 2022, the Division of Water Quality noted that the hourly rate had not been updated for the following fees:

- Others permits, etc. - Construction permits and sales and use tax exemptions (per hour)
- All Others permits - UPDES, Ground Water, & Underground Injection Control permits not listed above including permit renewals and modifications (per hour)

Since it was the intent to have all hourly rates changed to the new rate, the Division submitted the revised amount of \$115/hr in its fee information submitted to the Governor's Office of Planning and Budget (GOPB). However, we also included a note that the correction would be presented in a future Water Quality Board meeting.

The table below provides information regarding the estimated impact of the fee change.

Fee Name	Current Fee (FY23)	Proposed Fee (FY24)	Fee Change	Qty (Hours)	Revenue Change
Other Permits, Construction permits and sales and use tax exemptions (per hour)	\$110	\$115	\$5	207	\$1,035
All Other Permits, UPDES, Ground Water, & Underground Injection Control permits not listed above including permit renewals and modifications	\$110	\$115	\$5	531	\$2,655

This agenda item requires no action from the Board. However, any public comments regarding the proposed fee change outlined today will be taken into consideration.