



Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

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

State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Water Quality Board
James Webb, Chair
Michelle Kaufusi, Vice Chair
Carly Castle
Michela Harris
Joseph Havasi
Trevor Heaton
Robert Fehr
Jill Jones
Kimberly D. Shelley
John K. Mackey
Executive Secretary

Utah Water Quality Board Meeting
Dixie Convention Center & Via Zoom
1835 S. Convention Center Dr.
(Sunbrook Room)
St. George, Utah 84790
and
Via Zoom

April 23, 2024
Board Meeting Begins at 2:00 PM

AGENDA

Water Quality Board Meeting – Call to Order & Roll Call

Jim Webb

Minutes:

Approval of Minutes for March 27, 2024 Water Quality Board Meeting

Jim Webb

Executive Secretary Report

John K. Mackey

Funding:

1. Financial Status Report
2. Cedar City ARPA Reauthorization
3. Ash Creek SSD Virgin Authorization
4. Corinne Design Advance
5. Lewiston Reauthorization

Adriana Hernandez
Harry Campbell & Andrew Pompeo
Glen Lischeske
Beth Wondimu & Ken Hoffman
Beth Wondimu & Ken Hoffman

Rule Making:

1. Rulemaking Actions: R317-16 GSL Mineral Extraction Facility Operator Certification Approval/Summary of Public Comments & Responses

Ben Holcomb

Compliance & Enforcement:

1. Presentation of Division of Water Quality's Penalty Policy

Samantha Heusser & Haley Sousa

Other:

1. Wastewater Operator Certification Program 2023 Annual Report

Chad Burrell

Public Comment Period

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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April 23, 2024
Water Quality Board
Agenda

Meeting Adjournment

Jim Webb

**Next Meeting
May 22, 2024 at 8:30 am
MASOB & Via [Zoom](#)
195 North 1950 West
Salt Lake City, Ut 84116**

DWQ-2024-003039



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MINUTES

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

UTAH WATER QUALITY BOARD

MASOB, Board Room 1015

and
Via Zoom

March 27, 2024
8:30 am Meeting

UTAH WATER QUALITY BOARD MEMBERS PRESENT

Jim Webb	Carly Castle
Mayor Kaufusi	Michela Harris
Robert Fehr	
Jill Jones	
Joe Havasi	
John Mackey	
<u>Excused</u>	
Kim Shelley	
Trevor Heaton	

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT & ONLINE

Emily Cantón	Skyler Davis	David Jamison
Ken Hoffman	Samantha Heusser	James Harris
Clanci Hawks	Andrew Pompeo	Benj Morris
Haley Sousa	Lonnie Shull	Samuel Taylor
George Meados	Judy Etherington	
Ben Holcomb	Dave Pierson	
Beth Wondimu	Alex Heppner	
Linsey Shafer	Jennifer Robinson	
Robert Beers	Jeff Studenka	
Dan Griffin	Benj Morris	
Jennifer Berjikian	Tessa Scheuer	
Eric Castrejon	Amber Loveland	
Leanna Littler-Wolf	Harry Campbell	
Paul Burnett	Porter Henze	
Adrianna Hernandez	Brendon Quirk	
Justine Marshall	Mark Stanger	

OTHERS PRESENT & ONLINE

Travis Tyler
Greg Carling
Erin Christensen
Justin Atkinson
Janae Walt
Vern Maloy
Braxton Porter
Darlene Pope
Bobbi Lillegard
Mike Chandler
Elaine York

Mr. Webb, Chair, called the Meeting to order at 8:30 AM.

ROLL CALL

Mr. Webb took roll call for the members of the Board.

APPROVAL OF MINUTES OF January 24, 2024 BOARD MEETING

Mr. Webb moved to approve the minutes of the January 24, 2024 Board meeting.

Motion: Ms. Jones motioned to accept the minutes.

Mr. Fehr seconded the motion.

The motion passed unanimously to approve the January 24, 2024 meeting minutes.

EXECUTIVE SECRETARY REPORT

Mr. Mackey addressed the Board regarding the following:

- State/Division News:
 - Mr. Mackey expressed how there is no rest coming out of the Legislative Session, as they have come up with a number of interim items for us to work on as well as some new work associated with the new laws and he addressed the board on three of them to keep everyone up to date.
 - House Bill H.B.4,35 – This is an update of the previous bill relating to Minerals Development for the Great Salt Lake. Part of the component of this bill was development of the water distribution plan. This work will be done mostly by the State Engineer, Forestry Fire and State Lands. A part of what the water distribution looks at is how are we getting flows to the GSL and how are we going to manage the levels for example through the breach and the berm to protect lake water quality. Water Quality was tasked with development of effluent limitation on salinity for mineral producers discharging into the lake. This is something that we haven't had in the past. We were asked to complete this task by June 1, 2025 and what that means for the WQ Board is to be able to meet that schedule.

- House Bill H.B.4, 33 Brine Mining Operations. This is mostly work that would be done by the Division of Oil Gas & Mining. They were instructed to collaborate a study with WQ. What this bill looks at is there is a number of places in the State where groundwater usually deep water is highly safe. So this just isn't GSL related but there are other places like down in Creek River and other places around the State. Restrictions that may need to be in place to protect safety and to make sure that competitors are not infringing on each other's mineral rights as they sink these deep wells to be able to extract Brine. This has to do with a program that is called the Underground Projection Program, which we implement a safe drinking water and we administer is or disposal. So, this is just a study working to collaborate and make sure that we are addressing all of the concerns and issues and technical administrative needs that need to be addressed.
- House Bill H.B.2,80 – This is Water Amendments and this is a very broad bill. It is essentially a study that's looking at the mechanisms that the State has funding water structure, the priorities that the State has for using the money to fund water infrastructure and opportunities for optimizing the use of those funds. There are 5 agencies that administer those funds they are called the Water Development Boarding. The bill is asking us to look at our funds and look at the need for additional funds and help the Legislature prioritize five ways to fund major water.
- Mr. Mackey mentioned the State is nearing Spring Runoff Season, the State is seeing some flooding up in the North Agricultural areas as well as a lot of water coming out of Utah Lake and reports of flooding in the Narrows area. So, we are working to update our website. We did have some information posted last year to help people who are concerned about flooding and flood impact permits around their property.
- Mr. Mackey mentioned that Davis Sewer District reported that they have found other funds and decided that they won't need to use WQ Board funds for their project, so that's made a little bit more money available for other funding projects.
- Mr. Mackey noted that the April 24, 2024 Board Meeting will be taking place on Tuesday April 23, 2024 at 2:00 PM in St. George during the WEAU Conference. He noted there are many good things about the conference such as the Wastewater Treatment Facilities that organize some very exciting competitions. Mr. Mackey finished his report by introducing some new WQ employees.

FUNDING

Financial Status Report: Ms. Hernandez presented the financial status report to the Board as indicated in the packet.

Kane County Water Conservancy District, Duck Creek: Mr. Davies presented on behalf of Kane County's request for supplemental funding of \$320,000 for construction of a third lagoon wastewater treatment cell. In addition, KCWCD is requesting the scope of work for the funding authorized by the WQ Board on May 24, 2023 to be modified from primary cell rehabilitation and cost overruns of the existing project to add the construction of this third cell.

Motion: Ms. Jones motioned that the Board provide loan funds to the KCWCD Duck Creek project for a grant in the amount of \$281,000 and a loan in the amount of \$549,000 with 0% interest for 30 years with the staff recommendations.

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

Ash Creek Special Services District: Mr. Lischeske presented on behalf of ACSSD request for funding from the WQ Board in the amount of \$6,876,00 for the construction of a regional sewer lift station and pressure sewer force main to connect the Town of Virgin to the ACSSD collection system in La Verkin, UT.

Motion: Mr. Webb addressed that the WQ Board is not going to take an action on this project at this time. We are going to move forward and invite them back for an authorization/funding request to take place during the April 23, 2024 WQ Board Meeting.

Groundwater Protection:

Request for Authorization to Conduct Public Hearing & Comment Period for the Aquifer Classification Petition of the Shallow Aquifer of Davis County: Mr. Hall & Mr. Morris of WQ along with Janae Wallace from the Utah Geological Survey and Greg Carling from BYU presented to the Board.

Motion: Mr. Havasi motioned to authorize WQ staff to conduct a Public Hearing on the Aquifer Classification petition and to open a 90-day Public Comment Period.

Ms. Harris seconded the motion.
The motion passed by a vote of 5 yeas and 1 nay, as follows:

Mr. Webb- Yea
Mr. Fehr- Yea
Mr. Havasi- Yea
Mayor Kaufusi- Yea
Ms. Harris- Yea
Ms. Jones - Nay

PUBLIC COMMENTS

No comments were presented.

MEETING ADJOURNMENT

Motion: Ms. Jones motioned to adjourn the meeting.
Mr. Fehr seconded the motion to adjourn the meeting.

Next Meeting – April 23, 2024
Meeting begins at 2:00 pm

In-Person
MASOB
Dixie Convention Center
1835 S. Convention Center Dr.
St. George, Utah 84790
Via Zoom
<https://us02web.zoom.us/j/7074990271>

James Webb, Chair
Utah Water Quality Board

DWQ-2024-003219

PENDING

LOAN FUNDS FINANCIAL STATUS REPORT APRIL 2024

STATE REVOLVING FUND (SRF)	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026	State Fiscal Year 2027	State Fiscal Year 2028
CAP Grant Base Program					
Capitalization Grant Awards (FY22)	\$ -				
Future Capitalization Grant	\$ 3,952,000				
State Cap Grant Match (FY22)	\$ -	\$ -	\$ -	\$ -	\$ -
Future State Cap Grant Match	\$ 790,400	\$ -	\$ -	\$ -	\$ -
CAP Grant General Supplemental					
General Supplemental Grants (FY22)	\$ 9,378,000	\$ -	\$ -	\$ -	\$ -
Future General Supplemental Grant	\$ 10,983,000	\$ 11,234,025	\$ 12,169,025	\$ 12,169,025	\$ -
State General Supplemental Grants Match (FY22)	\$ 937,800				
Future State Gen. Sup Grants Match	\$ 1,098,300	\$ 2,246,805	\$ 2,433,805	\$ 2,433,805	\$ -
SRF - 2nd Round					
Account Balance	\$ 22,556,908	\$ (24,312,270)	\$ (3,160,174)	\$ 21,773,267	\$ 46,991,069
Interest Earnings at 5.4438%	\$ 306,988	\$ -	\$ -	\$ -	\$ -
Loan Repayments (5255)	\$ 921,625	\$ 17,272,300	\$ 17,225,194	\$ 16,977,794	\$ 20,691,107
Total Funds Available	\$ 50,925,021	\$ 6,440,860	\$ 28,667,850	\$ 53,353,891	\$ 67,682,176
CWSRF Program Obligations					
Admin Expenses for all CAP Grant Awards	\$ (1,037,080)	\$ (894,361)	\$ (931,761)	\$ (400,000)	\$ (400,000)
Cap Grant Principal Forgiveness (PF) (FY18-22)	\$ (12,358,600)				
Future Cap Grant (PF portion)	\$ (1,185,600)	\$ -	\$ -	\$ -	\$ -
General Supplemental Grants (PF portion)	\$ (4,595,220)				
Future General Supplemental Grants (PF portion)	\$ (5,381,670)	\$ (5,504,672)	\$ (5,962,822)	\$ (5,962,822)	
Project Obligations					
Moab City	\$ (80,000)	\$ -	\$ -	\$ -	\$ -
Provo City 262	\$ (8,800,500)	\$ -	\$ -	\$ -	\$ -
Provo City 262b	\$ (1,855,621)	\$ -	\$ -	\$ -	\$ -
Millville City Loan	\$ (2,146,000)	\$ -	\$ -	\$ -	\$ -
Mountain Green	\$ (2,234,000)	\$ -	\$ -	\$ -	\$ -
Payson City	\$ (13,425,000)	\$ -	\$ -	\$ -	\$ -
Millville Refinance Loan	\$ (1,261,000)				
Loan Authorizations					
Long Valley	\$ (1,250,000)				
North Logan	\$ (3,500,000)				
Mt. Pleasant	\$ (2,535,000)				
Monticello	\$ (1,214,000)				
Wolf Creek	\$ (3,202,000)	\$ (3,202,000)			
Brian Head	\$ (1,900,000)				

LOAN FUNDS FINANCIAL STATUS REPORT APRIL 2024

Planned Projects					
Ash Creek SSD - Virgin*	\$ (6,876,000)				
Lewiston*	\$ (400,000)				
CWSRF Obligations	\$ (75,237,291)	\$ (9,601,033)	\$ (6,894,583)	\$ (6,362,822)	\$ (400,000)
CWSRF Remaining Loan Balance	\$ (24,312,270)	\$ (3,160,174)	\$ 21,773,267	\$ 46,991,069	\$ 67,282,176
Add'l Subsidy - Principal Forgiveness					
PF Balances (max for FY18-22)	\$ 12,358,600	\$ 645,090	\$ 6,149,762	\$ 12,112,585	\$ 18,075,407
Future Cap Grant (PF portion)	\$ 1,185,600	\$ -	\$ -	\$ -	\$ -
General Supplemental Balances (PF portion)	\$ 4,595,220				
Future General Supplemental Grants (PF portion)	\$ 5,381,670	\$ 5,504,672	\$ 5,962,822	\$ 5,962,822	
Project Obligations					
South Salt Lake City (A)	\$ (2,584,000)	\$ -	\$ -	\$ -	\$ -
Millville City	\$ (3,604,000)	\$ -	\$ -	\$ -	\$ -
Provo City	\$ (7,000,000)	\$ -	\$ -	\$ -	\$ -
Payson City	\$ (1,000,000)	\$ -	\$ -	\$ -	\$ -
Millville City Refinance	\$ (3,750,000)	\$ -	\$ -	\$ -	\$ -
Hanksville	\$ (1,838,000)				
Add'l Subsidy Authorizations					
Planned Projects					
Lewiston*	\$ (3,100,000)				
Principal Forgiveness Obligations	\$ (22,876,000)	\$ -	\$ -	\$ -	\$ -
Principal Forgiveness Remaining Balance	\$ 645,090	\$ 6,149,762	\$ 12,112,585	\$ 18,075,407	\$ 18,075,407
	State Fiscal Year	State Fiscal Year	State Fiscal Year	State Fiscal Year	State Fiscal Year
UTAH WASTEWATER LOAN FUND (UWLF)	2024	2025	2026	2027	2028
Funds Available					
UWLF	\$ 36,734,370	\$ 23,586,945	\$ 25,609,099	\$ 27,314,701	\$ 28,775,621
Sales Tax Revenue	\$ (0)	\$ 3,587,500	\$ 3,587,500	\$ 3,587,500	\$ 3,587,500
State Match Appropriation	\$ 1,450,425				
Loan Repayments (5260)	\$ 752,000	\$ 2,606,859	\$ 2,477,307	\$ 2,232,625	\$ 2,259,259
Total Funds Available	\$ 38,936,795	\$ 29,781,304	\$ 31,673,906	\$ 33,134,826	\$ 34,622,380
General Obligations					

*WQB Agenda Items

LOAN FUNDS FINANCIAL STATUS REPORT APRIL 2024

State Match Transfers Base Cap Grant	\$ (790,400)	\$ -	\$ -	\$ -	\$ -
State Match Transfers Gen. Supplemental Grant	\$ (937,800)	\$ -	\$ -	\$ -	\$ -
State Match Transfers Gen. Supplemental Grant	\$ (1,098,300)	\$ (2,246,805)	\$ (2,433,805)	\$ (2,433,805)	\$ -
DWQ Administrative Expenses	\$ (481,350)	\$ (1,925,400)	\$ (1,925,400)	\$ (1,925,400)	\$ (1,925,400)
Project Obligations					
South Salt Lake City (B)	\$ (4,891,000)	\$ -	\$ -	\$ -	\$ -
South Salt Lake City (C)	\$ (982,000)	\$ -	\$ -	\$ -	\$ -
Hanksville	\$ (150,000)				
Grantsville	\$ (750,000)				
Loan Authorizations					
Spanish Fork	\$ (4,500,000)				
Long Valley	\$ (220,000)				
Kane County	\$ (549,000)				
Planned Projects					
Total Obligations	\$ (15,349,850)	\$ (4,172,205)	\$ (4,359,205)	\$ (4,359,205)	\$ (1,925,400)
UWLF Remaining Loan Balance	\$ 23,586,945	\$ 25,609,099	\$ 27,314,701	\$ 28,775,621	\$ 32,696,980
TOTAL LOAN FUND BALANCE	\$ (80,235)	\$ 28,598,687	\$ 61,200,553	\$ 93,842,097	\$ 118,054,563
PROJECT RESERVE	\$ -	\$ (5,000,000)	\$ (10,000,000)	\$ (15,000,000)	\$ (20,000,000)
TOTAL AVAILABLE LOAN FUNDS	\$ (80,235)	\$ 23,598,687	\$ 51,200,553	\$ 78,842,097	\$ 98,054,563

HARDSHIP GRANT FUNDS FINANCIAL STATUS REPORT APRIL 2024

	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026	State Fiscal Year 2027	State Fiscal Year 2028
HARDSHIP GRANT FUNDS (HGF)					
Funds Available					
Beginning Balance	\$ -	\$ 2,615,674	\$ 2,565,885	\$ 2,464,118	\$ 2,309,644
Federal HGF Beginning Balance (5250)	\$ 2,680,618	\$ -	\$ -	\$ -	\$ -
State HGF Beginning Balance (5265)	\$ 6,272,084	\$ -	\$ -	\$ -	\$ -
Hardship Grant Assessments (5255)	\$ 117,831	\$ 689,765	\$ 657,624	\$ 624,522	\$ 590,676
Interest Payments - (5260)	\$ 64,230	\$ 260,446	\$ 240,609	\$ 221,004	\$ 206,353
Advance Repayments	\$ -	\$ -	\$ -	\$ -	\$ -
Total Funds Available	\$ 9,134,763	\$ 3,565,885	\$ 3,464,118	\$ 3,309,644	\$ 3,106,673
St George Appropriation					
Beginning Balance	\$ 13,066,000				
Authorizations					
St. George Graveyard Wash Res	\$ (13,066,000)				
Total Funds Available	\$ -	\$ -	\$ -	\$ -	\$ -
Financial Assistance Project Obligations					
Big Water-Planning Grant	\$ (28,241)	\$ -	\$ -	\$ -	\$ -
Delta - Design Grant	\$ (159,500)	\$ -	\$ -	\$ -	\$ -
Dutch John - Planning	\$ (95,000)	\$ -	\$ -	\$ -	\$ -
Dutch John - HGF Loan	\$ (60,000)	\$ -	\$ -	\$ -	\$ -
Eagle Mountain City - Construction Grant	\$ (510,000)	\$ -	\$ -	\$ -	\$ -
Elwood - Planning	\$ (18,200)	\$ -	\$ -	\$ -	\$ -
Grantsville - Design Advance	\$ (300,000)	\$ -	\$ -	\$ -	\$ -
Kanab City Planning Advance	\$ (29,800)	\$ -	\$ -	\$ -	\$ -
Lewiston City - Design and Construction	\$ (460,000)	\$ -	\$ -	\$ -	\$ -
Lewiston City - De-Obligation	\$ 460,000	\$ -	\$ -	\$ -	\$ -
Long Valley - Design	\$ (103,700)	\$ -	\$ -	\$ -	\$ -
Millville City - Construction Grant	\$ (1,000,000)	\$ -	\$ -	\$ -	\$ -
Spanish Fork - Hardship Grant	\$ (500,000)	\$ -	\$ -	\$ -	\$ -
Stockton - Planning	\$ (20,000)	\$ -	\$ -	\$ -	\$ -
Spring City - Design Advance	\$ (174,250)	\$ -	\$ -	\$ -	\$ -
Non-Point Source/Hardship Grant Obligations					
OSG Cost Share Balances (FY20-21)	\$ (56,000)	\$ -	\$ -	\$ -	\$ -
McKees ARDL interest-rate buy down	\$ (55,261)	\$ -	\$ -	\$ -	\$ -
Munk Dairy ARDL interest-rate buy down	\$ (16,017)	\$ -	\$ -	\$ -	\$ -
(FY12) Utah Department of Agriculture	\$ (122,748)	\$ -	\$ -	\$ -	\$ -
(FY15) DEQ - Ammonia Criteria Study	\$ (27,242)	\$ -	\$ -	\$ -	\$ -
(FY17) DEQ - Utah Lake Water Quality Study	\$ (348,301)	\$ -	\$ -	\$ -	\$ -
(FY19) USU - Nutrient Concentrations Paleolimnology of Utah Lake	\$ (4,715)	\$ -	\$ -	\$ -	\$ -
FY 2018 - Remaining Payments	\$ (7,100)	\$ -	\$ -	\$ -	\$ -
FY 2019 - Remaining Payments	\$ (45,522)	\$ -	\$ -	\$ -	\$ -
FY 2020 - Remaining Payments	\$ (104,425)	\$ -	\$ -	\$ -	\$ -

HARDSHIP GRANT FUNDS FINANCIAL STATUS REPORT APRIL 2024

FY 2021 - Remaining Payments	\$ (109,105)	\$ -	\$ -	\$ -	\$ -
FY 2022 - Remaining Payments	\$ (423,540)	\$ -	\$ -	\$ -	\$ -
FY 2023 - Remaining Payments	\$ (500,074)				
FY 2024 - Remaining Payments	\$ (919,576)				
Future NPS Annual Allocations		\$ (1,000,000)	\$ (1,000,000)	\$ (1,000,000)	\$ (1,000,000)
Authorizations					
Kane County - Hardship Grant	\$ (281,000)				
Rockville Town - Hardship Grant	\$ (27,172)				
Mt. Pleasant - Hardship Grant	\$ (135,000)				
Richmond - Short Term Loan	\$ (99,800)				
Hyrum - Short Term Loan	\$ (74,900)				
Virgin Town - Short Term Loan	\$ (60,000)				
Planned Projects					
Corinne - Planning Advance*	\$ (102,900)				
Total Obligations	\$ (6,519,089)	\$ (1,000,000)	\$ (1,000,000)	\$ (1,000,000)	\$ (1,000,000)
HGF Unobligated Funds	\$ 2,615,674	\$ 2,565,885	\$ 2,464,118	\$ 2,309,644	\$ 2,106,673

*WQB Agenda Items



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MEMORANDUM

TO: Water Quality Board

THROUGH: John K. Mackey, P.E.

FROM: Andrew Pompeo, P.E. and Harry Campbell, P.E.

DATE: April 24, 2024

SUBJECT: Cedar City Reauthorization for Change in Scope of Work

BACKGROUND

On December 14, 2022 the Water Quality Board authorized funding in the amount of \$1,354,000 from the Southern Utah Reuse ARPA Grant Program funding to Cedar City for the construction of a reuse trunk line and pump station under the following special conditions:

1. Cedar City must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
2. Cedar City must develop, commit to adopt, and implement a capital asset management plan that is consistent with EPA's Fiscal Sustainability Plan guidance.

APPLICANT'S REQUEST

Cedar City is requesting a **scope of work amendment** to the Board's December 14, 2022 authorization for the inclusion of construction of filtration and UV disinfection at their wastewater treatment plant.

PROJECT NEED

Both municipal and agricultural users depend on the groundwater in the basin. Due to drought conditions, the Cedar Valley is continuing to see declines in the water table. This impacts all water users in the basin.

The Cedar City Valley aquifer is currently being managed by the Utah Division of Water Rights (DWR) under a Groundwater Management Plan. If the water table continues to decline in the aquifer, then the DWR will begin to curtail the use of underground water rights according to the priority date of the water right. Cedar City has adequate water rights currently to satisfy the demands of its population. However, in the future, the cuts will have a significant negative impact on Cedar City's water rights portfolio.

Cedar City Regional Wastewater Facility (CCRWTF) is located at the low (north) end of the valley. Cedar City is in the south end of the valley. The treated wastewater effluent and any new drinking water developed from well fields in the north end of the valley will need to be pumped back to Cedar City. It is anticipated that the pumping system will need to convey approximately 2,045 gpm.

Irrigation in and around Cedar City (agriculture, parks, and secondary water for lawn watering) uses 75% of the underground water that is pumped and used in the basin. Currently the yearly flow of wastewater (3,300 acre-ft, although this will increase as Cedar City grows) is disposed of by land application on 420 acres west of CCRWTF. It is estimated that 40% of irrigation water is lost to evaporation. Considering the current demand for groundwater, diverting the wastewater for irrigation purposes would change a disposal problem into a resource that would replace a significant part of the 75% of the basin groundwater supply that is consumed for irrigation.

Changing to irrigating public parks and lawns requires the treated effluent meet Type I standards. The regulations require that Type I effluents must be filtered. Since CCRWTF does not currently provide filtration it must be constructed.

PROJECT DESCRIPTION

Amended Project:

Phase 1: Improve the water quality of the treated effluent from the CCRWTF from Type II to Type I using membrane filtration. This will be accomplished by constructing a new tertiary treatment and disinfection facility at the outlet of the WWTP. Estimated cost of \$5,000,000.

Phase 2: Convey the Type I effluent from the CCRWTF to Cedar City's secondary irrigation system or other agricultural user. It is anticipated that this will be accomplished by means of a distribution storage basin, pump station, and pressurized pipeline. Estimated cost of \$10,000,000

Phase 3: Store the winter effluent in an open reservoir at the CCRWTF land application site. This reservoir will be used to store treated effluent during the winter months and then distribute the water to customers during the summer months.

Cedar City is requesting a scope of work amendment to include the construction of a filtration and disinfection system to produce Type I treated effluent. This will allow Cedar City to convey Type I treated effluent to their secondary irrigation system in the city. The originally authorized reuse trunk line and pump station are still part of the planned project.

This change in scope of work will allow Cedar City great flexibility in the utilization of ARPA funds for the overall projects as the construction of the filtration membrane and disinfection system can be completed faster than the construction of the reuse trunk line and pump station.

STAFF COMMENTS

Staff have reviewed the revised application and the addition of filtration and disinfection for the production of treated effluent to meet Type I standards is eligible under the Southern Utah Reuse Grant Program. If the amendment is made, staff will add the amendment to the existing ARPA Grant Agreement. This is a minor modification and can be completed quickly and easily.

This project will help to slow the decline of the Cedar Valley aquifer and assist all users in the valley to come into compliance with the goals of the Groundwater Management Plan which is to stop the decline of the water table. Any projects that can be done to minimize the decline in the aquifer may allow the Division of Water Rights to delay or halt cuts that might occur. This will allow Cedar City to continue providing culinary and secondary water to its customers. In turn, this will allow the residents in the area to continue to enjoy the quality of life that is available in Cedar City.

This Change in Scope of Work will aid in Cedar City's ability to meet the December 2026 deadline of construction completion, as the installation and construction of the filtration and disinfection (Phase 1) can be completed much faster than the construction of the reuse trunk line and pump station. Overall, staff is very supportive about Cedar City's addition of Phase 1.

STAFF RECOMMENDATION

Staff recommends the Board amend the December 14, 2022 authorization to allow Cedar City to request reimbursement for the construction of a project including both filtration and disinfection for the production of treated effluent meeting Type I standards.

ATTACHMENT 1-Cedar City’s Updated Application

Timestamp	3/20/2024 23:52:05
Contact Name	Jonathan Stathis
Contact Email	jstathis@cedarcityut.gov
1. Please describe your reuse project.	Wastewater effluent reuse from the Cedar City Regional Wastewater Treatment Facility.
2. How will your project mitigate drought impacts on a rural community?	This project will help to mitigate drought impacts in the Cedar City community by providing for wastewater effluent to be reused. Both municipal and agricultural users depend on the groundwater in the basin. Due to the drought conditions, the Cedar Valley aquifer is continuing to see declines in the water table. This impacts all water users in the basin. Currently, the wastewater effluent is land applied near the treatment plant. It is proposed the effluent be treated to Type 1 quality so that it can be used for reuse in the City's secondary irrigation system. This project will include treating the effluent to Type 1 using a filtration process. Further work will need to be done to convey the effluent into the City's secondary irrigation system.
3. How will your project mitigate drought impacts on local agriculture?	This project will help to mitigate drought impacts on local agriculture by reusing the effluent, thereby reducing pumping from the aquifer. Agriculture uses approximately 75% of the underground water in the basin. Agricultural users are seeing impacts on pumping levels and power costs as the water table continues to decline. By reusing the effluent, this will help to alleviate the effects of drought on local agriculture.
4. How will the project replace a current use of potable quality water? Please provide data on the historical potable quality water use the reuse project will replace.	As part of this current project, it is proposed that the amended scope of work include the following item: (1) design, obtain State approval, and construct a filtration process to treat the effluent water to Type 1 quality. As part of future projects, it is proposed to: (1) construct a pump station and pipeline to convey the effluent from the wastewater treatment plant to the City's secondary irrigation system; (2) install a storage facility to store the treated Type 1 effluent during the winter months. This project will ultimately allow approximately 3,300 acre-feet of effluent water to be reused annually in Cedar City's secondary irrigation system. This will help to slow the decline of the Cedar City Valley aquifer and assist all users in the valley to come into compliance with the goals of the Groundwater Management Plan which is to stop the decline of the water table.
5. Will the project help mitigate a water quality issue or a public health hazard? Please describe.	No.
6. a. What is the estimated cost of the project?	Approximately \$5,000,000 to construct the filtration process to treat the effluent to Type 1 quality. This cost is based on the amended scope of work.

6. b. How much local funds will be brought to the project?	Local funds would be provided according to the required match.
6. c. Does the project currently have any grant funds awarded to it by another funding agency?	No.
6. d. How will the remainder of the project be funded if only partial grant funds are obligated or if bids come in over the estimate?	Funding will be provided through available cash on hand, if there is enough available. Otherwise, the funding would come from bonding and be paid back with user rates.
6. e. Has your project been bid?	No.
6. f. Has your project started construction?	No.
6. g. Has your project completed construction?	No.
7. How will the project enrich the community?	The State of Utah Division of Water Rights has implemented a Groundwater Management Plan for the Cedar Valley aquifer. This plan will significantly reduce the ability of Cedar City to be able to supply water in the future as the plan is implemented through priority cuts to water rights. Any projects that can be done to minimize the decline in the aquifer may allow the Division of Water Rights to delay or halt cuts that might occur. This will allow Cedar City to continue providing culinary and secondary water to its customers. In turn, this will allow the residents in the area to continue to enjoy the quality of life that is available in Cedar City.
8. a. What is the population the project will serve?	38,692
8. b. What zip codes will this project serve?	84720 and 84721
8. c. What is your average monthly user fee for wastewater service?	\$23.00 per month

Project 3.b. Cedar City IPR: Priority Level 3

Cedar City proposes to conduct an Indirect Potable Reuse (IPR) project. The total cost of the project is estimated to be \$10,000,000. The balance of funding not provided through a Board award for the project will be through available city money, or from bonding. Cedar City and the Cedar Valley are suffering from low water table conditions. Specifically, the water table is very low on the east side of the valley where the land is more arable. To mitigate this, Cedar City plans to pump treated effluent from their treatment plant to recharge basins near the Cedar City Airport. Cedar City plans one water line to carry water 8 miles from the treatment plant to the recharge basins. Another water line will be installed to carry groundwater from underneath the current land application site next to the wastewater treatment facility to the drinking water treatment facility to supplement the drinking water supply. They hope to recharge the aquifer using treated effluent from the treatment facility. Cedar City has not included any more upgrades to their facility in this scenario. The project has not been bid yet and Cedar City has not hired an engineer. A timetable for the project is shown below:

Item	Begin Date	End Date
Design phase	July 1, 2023	December 31, 2023
Bidding phase	January 1, 2023	February 28, 2023
Construction phases	March 1, 2024	December 31, 2024
Pipeline materials acquisition and construction	March 1, 2024	October 31, 2024
Pump materials acquisition and construction	March 1, 2024	December 31, 2024

Division Staff Comments:

Staff has previously met with Cedar City in relation to this project. At this time a feasibility report has not been reviewed by the Division for concept approval or a permit application submitted. The Division is concerned the project may not be feasible as an indirect potable reuse project without substantial additional nitrogen treatment or other contaminants of emerging concerns. In the Cedar City Return Effluent Reuse Feasibility Study 2018 (Carollo Engineers) the least expensive alternative with IPR was approximately \$78 million. At this time no IPR project has been completed in the State of Utah and will face substantial regulatory review with permitting from Divisions of Water Resources, Water Rights, Drinking Water, and Water Quality. Staff is concerned these regulatory reviews might not be able to be completed within the ARPA timeframe. However, the Division is actively looking for a community to be the State leader in an IPR project.

UPDATE

In clarification to staff concerns from the Finance Committee meeting and response to the follow up questions. Cedar City has clarified the bulk of this project is for the construction of a reuse trunk line, culinary line, and pump station from the wastewater treatment plant to town. Based on

this information \$4,276,800 of culinary line is ineligible. Staff is more encouraged by the construction of a reuse trunk line and pump station. Staff supports funding of up to \$5,026,800 of the project. Cedar City continues to want to pursue IPR, however if this is not a feasible option they will use the trunk line to facilitate land application of treated effluent. Since this was a newly identified component of the project staff were not able to recalculate the score for the project but believes this could potentially add 5 points.

Recommendation:

If the Board would like to make a motion to fund this project staff recommends the following motion: the Board authorize funding in the amount of \$0-\$5,026,800 as ARPA grant funding to Cedar City for the construction of a reuse trunk line and pump station under the following special conditions:

1. Cedar City must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
2. Cedar City must develop, commit to adopt, and implement a capital asset management plan that is consistent with EPA's Fiscal Sustainability Plan guidance.



State of Utah

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Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of Environmental Quality

Kimberly D. Shelley
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Water Quality Board
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Michela Harris
Joseph Havasi
Trevor Heaton
Jill Jones
Kimberly D. Shelley
John K. Mackey

WATER QUALITY BOARD FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT AUTHORIZATION

APPLICANT: Ash Creek Special Services District
1350 Sandhollow Road
Hurricane, UT 84737
Telephone: 435-635-2348

PRESIDING OFFICIAL: Mike Chandler, General Manager
Email: mike@ashcreekssd.com

TREASURER/RECORDER: Greg Kleinman, Treasurer

CONSULTING ENGINEER: Steve Jackson, P.E.
Jackson Engineering
Telephone: 801-558-5293

BOND COUNCIL: Randall Larsen
Gilmore & Bell PC
Telephone: 801-364-5080

FINANCIAL ADVISOR: Mark Anderson, Vice President
Zion's Public Finance
Telephone: 801-844-7373

APPLICANT'S REQUEST

Ash Creek Special Services District (ACSSD) is requesting funding from the Water Quality Board (Board) in the amount **\$6,876,000** for the construction of a regional sewer lift station and pressure sewer force main to connect the Town of Virgin to the ACSSD collection system in La Verkin, UT.

APPLICANT'S LOCATION

The project is primarily located between the Towns of Virgin and La Verkin, Northeast of St. George in Washington County.



PROJECT BACKGROUND

The Town of Virgin does not currently have a sanitary sewer collection system. Existing residential dwellings rely on private septic systems for sewage disposal, including several Large Underground Wastewater Disposal Systems (LUWDS). Since the town is located close to the Virgin River, there is concern about potential for degradation of surface water quality in the area due to the increased number of onsite systems, including other developments planned in the area.

In 2022 a study was completed by Sunrise Engineering, commissioned by the State of Utah (2022 Update Virgin Town Wastewater Study), which outlined several options for wastewater treatment in the region. These alternatives included a proposed sewer system connecting to the regional treatment facility in La Verkin. In February 2024, Town of Virgin voted to annex into ACSSD.

The Town of Virgin is the 19th largest community in the State without a sanitary sewer system. The community is under significant growth and development pressures. The Division of Water Quality (Division) has encouraged construction of a sanitary sewer system trunkline to service the Town of Virgin for several years. Most of the recent pursuits have required consideration of extensive grant dollars and most recently the Division attempted to access American Rescue Plan Act (ARPA) funds to construct this trunkline.

In late 2023, Division staff were approached about a commercial development proposing to construct a trunkline to connect a commercial facility to ACSSD. Division Staff determined it was a great opportunity to construct a trunkline large enough to service both the commercial development and the Town of Virgin. Since this would primarily serve commercial development grant funds will not be discussed. This project is attempting to move quickly. For these reasons, Division staff agreed to bring this project as soon as possible in front of the Board “off schedule.”

PROJECT NEED

This project will provide a regional sewer lift station for the Town of Virgin and will mitigate current and future wastewater flows by conveying the flows to the ACSSD lagoons and/or new confluence park treatment plants. The following facilities are anticipated to be connected: White Bison Resort (168 RV Pads, and 47 Glamping Sites); Zions Sunset Convenience Store and Restaurant; Kerlin Mobile Home Park; K&K Properties Residential project; and Smith Residential Project.

Once the future gravity sewer line is constructed through the Town of Virgin to the proposed Regional Sewer Lift Station, the majority of the towns Commercial Projects will be taken off the their LUWDS and conventional septic systems. These include: Zion River RV Park; Furber Resort; Zion Wildflower Resort; Auto Camp Resort; and the Fairfield inn and Suites; eliminating an approximate 109,000 GPD of sewage treatment by LUWDS and septic systems overall.

ALTERNATIVES EVALUATED

An alternatives analysis was included in the 2022 Town of Virgin Wastewater Study. The analysis included alternative onsite treatment, construction of a new lagoon facility, and a sewer line connection to ACSSD. ACSSD concluded that a pressurized force main would be the best option for providing for current and future needs in the Town of Virgin.

PROJECT DESCRIPTION

The project will be divided into two initial phases (Phase 1A and 1B). Phase 1A will include the construction of a regional sewer lift station in the Town of Virgin and an 8-inch pressurized force main providing a connection between the Lift Station and the regional sewer treatment facility in La Verkin. This will also provide connections to a limited number of approved and existing projects, as outlined in the “Project Needs” section. Phase 1B will include connections for several other existing communities, and provide the backbone for future connections in the Town of Virgin.

POPULATION GROWTH

Based on 2020 and 2010 census data, the annual growth rate in the Town of Virgin is 1.18%, which is lower than the state average. However, looking at only data from the past 5 years, as was recommended by the 2022 Wastewater Study, the annual population growth rate is much higher (3.32%).

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT

In February 2024, the Town of Virgin approved annexation into ACSSD. One of the primary goals of this project is to create a public/private partnership with the existing and anticipated communities that are or would be connected to onsite systems without this project. ACSSD anticipates this project to include \$767,000 in private contributions.

IMPLEMENTATION SCHEDULE

Construction is expected to begin this year as soon as funding is approved. Construction is expected to be completed by the end of 2024.

APPLICANT'S CURRENT USER CHARGE

The current user charges for ACSSD is \$36.75 per month per residential connection and \$18.90 per month per RV pad connection. The proposed project indicates debt service being paid by 297 Equivalent Residential Connections (ERC). Based on the attached cost model a 0% interest loan with a 30-year term would be approximately \$57/month for debt service. Adding in operation and maintenance of the collection system and a treatment fee from ACSSD, the monthly rate per ERC would be approximately \$145.

COST ESTIMATE

The total estimated cost of the project is **\$7,643,000**, and the request for funding is **\$6,876,000**. This includes 15% Engineering Design & Construction Management Services (CMS) and a 50% contingency with the cost estimate. Note that the 50% contingency has been increased from the application, which originally had a 10% contingency. A breakdown of the cost by project is included below.

Construction Phase 1A	\$3,100,000
Construction Phase 1B	\$1,867,000
50% Contingency (1A+1B)	\$2,484,000
Engineering Design & CMS	\$82,000
DWQ Loan Origination Fee	\$70,000
Legal/Bonding	\$40,000
Total Cost	\$7,643,000
Local Contributions	-\$767,000.00
Request for Funding	\$6,876,000

STAFF COMMENTS

Division Staff is very supportive of this project. The Town of Virgin is one of the larger unsewered areas in the State of Utah, and a public/private partnership leading to the construction of a sewer collection system and connection to a nearby treatment facility would solve many environmental concerns about onsite systems in the area. The Town of Virgin, ACSSD, and private entities in the region have all shown support for the project.

STAFF RECOMMENDATION

Division Staff recommend that the Board authorize funding in the amount of **\$6,876,000 as a loan at an interest rate of 0.0% repayable over 30 years under the following special conditions:**

1. ACSSD must agree comply with the provisions of Utah Admin. Code R317-101-3 including but not limited:
 - a. Participation annually in the Municipal Wastewater Planning Program (MWPP);
 - b. Develop, commit to adopt, and implement a capital assessment management plan; and
 - c. Submission of the sewer use ordinance or resolution and user charge system to the division for review and approval to insure adequate provisions for debt retirement, operation and maintenance, or both.

**Town of Virgin (ACSSD) - Water Quality Board
 30 Year Loan Static Cost Model**

Project Costs

Legal/Bonding	\$	40,000
DWQ Loan Origination Fee	\$	70,000
Engineering - Design & CMS	\$	82,000
Phase 1A - Regional LS & Force Main	\$	3,099,675
Phase 1B - Local LS & Connection	\$	1,867,250
Construction subtotal	\$	4,966,925
Contingency (50%)	\$	2,483,463
Total Project Cost:	\$	7,642,388

Anticipated Customer Base & User Charges

Estimated Total Customer (ERC's)	297	Taken From 2022 Study
MAGI for Virgin (2021):	\$47,100	
State Affordability Criteria (1.4%)	\$54.95	
Estimated Impact Fee (per ERU):	\$2,000	
Current ACSSD Monthly Fee (per ERU)	\$36.75	
Debt Service	\$0	
Annual O&M expense	\$100,000	

Project Funding

Local Contribution	\$	766,600
Amount to be Funded	\$	6,875,788
WQB Grant	\$	-
Total Project Cost:	\$	7,642,388

Funding Conditions

Loan Repayment Term:	30
Reserve Funding Period:	6

ESTIMATED COST OF SEWER SERVICE

WQB Grant	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	Treatment fee	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
	0	6,875,788	0.00%	4.50%	0	0	422,115	100,000	130,977	653,092	183.25	4.67%	MEDIUM
	6,875,788	0	0.00%	4.50%	229,193	57,298	0	100,000	130,977	517,468	145.19	3.70%	MEDIUM
	6,875,788	0	0.50%	4.50%	247,383	61,846	0	100,000	130,977	540,206	151.57	3.86%	MEDIUM
	6,875,788	0	1.00%	4.50%	266,424	66,606	0	100,000	130,977	564,007	158.25	4.03%	MEDIUM
	6,875,788	0	1.50%	4.50%	286,302	71,576	0	100,000	130,977	588,855	165.22	4.21%	MEDIUM
	6,875,788	0	2.00%	4.50%	307,003	76,751	0	100,000	130,977	614,731	172.48	4.39%	MEDIUM
	6,875,788	0	2.50%	4.50%	328,509	82,127	0	100,000	130,977	641,613	180.03	4.59%	MEDIUM
	6,875,788	0	3.00%	4.50%	350,798	87,699	0	100,000	130,977	669,474	187.84	4.79%	MEDIUM
	6,875,788	0	3.50%	4.50%	373,846	93,461	0	100,000	130,977	698,284	195.93	4.99%	MEDIUM

*Staff Estimate

FNI Calculation					
	Local Value	State Value	Score	Weighting Factor	Weighting Score
Unemployment Rate	4.2%	3.6%	2.30	4	9.20
Poverty Rate	23.4%	9.1%	3.00	2.5	7.50
Threshold LQI	\$ 32,025	\$ 35,445	1.39	2.5	3.48
Population Growth Rate	12.0%	18.6%	2.29	1	2.29
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



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John K. Mackey

**WATER QUALITY BOARD
FEASIBILITY REPORT FOR HARDSHIP PLANNING ADVANCE
AUTHORIZATION**

APPLICANT: Corinne City
2420 N 4000 W
Corinne, Utah 84307
Telephone: 435-744-5566

PRESIDING OFFICIAL: Mayor Shane Baton

CONTACT PERSON JL Nicholas
Telephone: 435.720.7961

TREASURER/ RECORDER: Kendra Norman

ENGINEER: Joshua Nelson – Engineer
Sunrise Engineering
Telephone: 435-563-3734

CITY ATTORNEY: Craig Smith, Partner
Smith Hartvigsen
Telephone: 801-413-1600

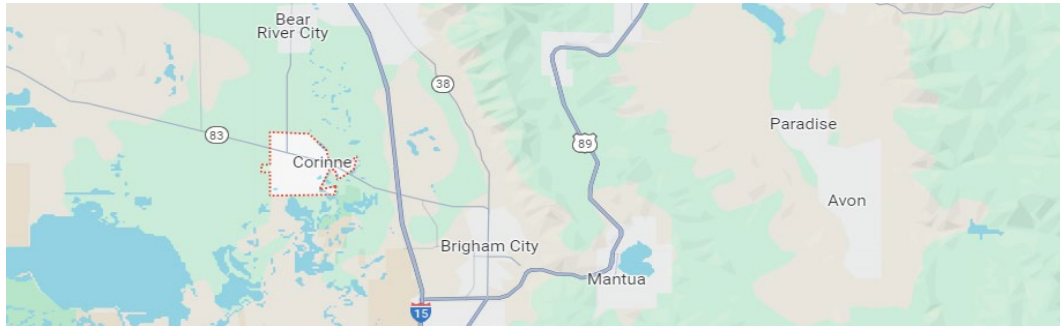
BOND COUNSEL: Adam Long
Smith Hartvigsen
Telephone: 801- 416-1600

APPLICANT'S REQUEST:

Corinne City (Corinne) is requesting a hardship planning advance in the amount of a **\$102,900** for preparation of a Preliminary Engineer Report (PER) related to the improvement of its sanitary sewer collection system (collection system) and wastewater lagoon treatment system (lagoon system).

APPLICANT’S LOCATION

Corinne City is located in Box Elder County, Utah.



BACKGROUND:

The collection system and lagoon system serve Corinne, which has a current population of 830 people. Corinne’s Utah Pollutant Discharge Elimination System (UPDES) Permit, issued by the Division of Water Quality (Division) was renewed in 2021. Corinne’s lagoon system has been operating at 0.07 Million Gallons a Day (MGD) for many years. During storm events the lagoon system has substantially increased flows, indicating issues with high amounts of inflow and infiltration (I&I) into the collection system. In addition, Corinne is on the Northeastern edge of the Great Salt Lake which has shallow groundwater. During 2023 and 2024 Corinne’s lagoon system exceeded effluent limits for Biochemical Oxygen Demand (BOD) five (5) times, pH nine (9) times, and total suspended solids (TSS) once. The annual average flow for 2023 was 0.18 MGD.

Through funding from the Community Impact Board (CIB) Corinne conducted a study in 2022 of the collection system and lagoon system which identified deficiencies in sewer pipes; an insufficient headworks; and inadequate screening capability. The 2022 study only completed an initial engineering assessment of the collection system and lagoon system; a complete preliminary engineering report with a robust alternatives analysis was not completed as part of the 2022 study.

PROJECT NEED:

Corinne’s lagoon system has had violations of its UPDES permit. To prevent future violations of their UPDES permit and protect water quality, Corinne needs to address the inflow and infiltration issues in the collection system and then potentially complete a lagoon system upgrade.

PROJECT DESCRIPTION:

The initial engineering assessment identified that Corinne needs to repair or replace approximately 22,000 linear feet of sewer line and associated manholes; and a lagoon system redesign. Corinne has prioritized the recommended improvements:

1. Improvement of existing sewer lines.
2. Redesign of the lagoon cells.
3. Headworks upgrade and replace its screen in the lagoon system.

The proposed project includes the improvement of the collection system and lagoon system:

Collection System

The Corinne collection system was installed in 1970 with pipe sizes ranging from 8” to 12” in size and constructed primarily of reinforced concrete pipe. The original collection system has experienced very limited changes and but has been expanded with growth. There are four (4) main portions of the Corinne collection system.

The first section is known as Ag Park, includes the industrial/commercial buildings around Mule Ranch Road and the Walmart distribution center. The Ag Park flows are pumped into a manhole that is near Mule Ranch Road and Hwy 13. The second section is on the north side of Corinne which encompasses the residential areas north of Hwy 13 from roughly 4100 W to 3800 W with flows generally conveyed to the south to the mainline along Hwy 13. The third section is on the south side of Corinne from 4100 W to 3800 W with flows primarily being conveyed east to the mainline in 3800 W. The fourth Section is the Country Meadows Subdivision, which has its own lift station to convey wastewater flows into a manhole on 4100 W.

Corrine proposes to replace the oldest areas, which are on the north and south sides. These areas are the primary source of the inflow and infiltration (I&I) that is contributing 35%-55% of the annual flows into the Corinne lagoon system. It is anticipated that if Corrine replaces the collection system in these areas, their lagoon system will be able to meet their UPDES discharge limitations.

Lagoon System

The wastewater lagoon system was constructed in 1971 with seven cells. In 1981 it was expanded to eight cells. The facility consists of a bar screen; 45⁰ V-notch inlet weir; comminutor; sump and pump station; eight facultative lagoons operating in a series; a Steven discharge flow recorder; and a gas chlorine system.

The second portion of this project includes designing a small headworks facility; reconfiguring the lagoon ponds; and replacing the force main to the lagoons. The headworks facility will be used to clean solids out of the wastewater before it is pumped into the lagoons. The lagoon reconfiguration is needed due to failing dikes and failing cross-connecting pipes in the lagoons. The new force main will be replacing an aging transit force main line that is brittle and at-risk of failure due to its age. Due to the proximity of the force main to the Bear River, this line and associated lift station is critical infrastructure and it’s important that we have confidence in its long-term operation.

Corrine anticipates installing a new primary cell or reconfiguring the existing lagoon treatment cells to enlarge the primary cell so its large enough to provide proper biological treatment. Corrine would like to install an automated screen and grit removal system before the existing lift station to eliminate plastics, and non-biodegradable solids from entering the lagoon system. Corrine also plans to construct a force main.

ALTERNATIVES EVALUATED

The initial engineering evaluation included two alternatives:

1. No action and continue to use the existing collection and lagoon systems.

2. Replacement of old sewer pipes and upgrade of lagoon headworks & screen.

The recommended alternative is No. 2, which are replacement of failed sewer pipelines and improvement of lagoon headwork and screen system. The PER will evaluate more alternatives including a in-depth analysis of sections of sewer where cured in place lining in an option.

IMPLEMENTATION SCHEDULE

Apply to WQB for Planning Advance:	March 2024
Start Construction	March 2025
Complete Construction	September 2026

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

Corrine held a public meeting in January 2024 to discuss the master plans, including system-wide repair and replacement needs, as required by the Utah Wastewater State Revolving Fund (SRF) program. Corrine will hold another public meeting in April 2024 for rate increases and impact fee increases to support the project.

APPLICANT’S CURRENT USER CHARGE:

Operation & Maintenance – Annual	\$160,000
Existing Sewer Debt Service	\$0
Current ERC	316
Current Monthly Cost / ERU	\$25.00

Division staff has been informed that Corrine is holding a meeting to potentially raise the sewer user rate to \$75 per month on April 16, 2024.

COST ESTIMATE

Preliminary Engineering Report	\$102,900
Pre-Construction Engineering	\$833,100
Engineering CMS/Other	\$1,650,000
Legal – Bonding, Right of Way & Easement	\$100,000
Construction	\$11,233,000
Contingency	\$1,694,000
Total Project Cost:	\$15,613,000

Preliminary Engineering Report

Task	Cost
Funding	\$15,600
Preliminary Engineering Report	\$40,400
Wastewater Flow Metering	\$30,300
Sewer System Data Collection and Review	\$16,600

Total	\$102,900
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COST SHARING:

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

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
Local Contribution	\$0	0%
WQB or USDA-RD Funding	\$15,613,000	100%
Total:	\$15,613,000	100%

ESTIMATED ANNUAL COST FOR SEWER SERVICE:

According to the Board’s affordability criteria a sewer user rate should exceed 1.4% of MAGI to be considered for grant funds. Corrine’s 2021 MAGI is \$50,700 and which means rates should exceed \$59.15 per month/ERU for grant consideration. A static cost model was prepared and included as Attachment 1. The cost model analyzes several possible funding options including estimates for municipal bond market; a 0% 30-year loan at 0% from the Board; USDA-RD 80:20 loan-to-grant ratio (40 year @ 2.75%); USDA-RD 70:30 loan-to-grant ratio; and co-funding with the Board bringing \$1,428,571 principal forgiveness funds. These scenarios result in a **monthly sewer user fee of between \$167-230 per month.**

To bring an additional \$1,000,000 in total grant funds to the project the Board would need to authorize \$1,428,571 due to USDA-RD’s grant funds reducing proportionally. This is due to USDA-RD bringing grant as 30% of their funding, not the total project.

FINANCIAL NEED INDICATOR:

In accordance with Board guidance Division staff calculated a Financial Need Indicator (FNI) in the cost model. Division staff utilized data from the United State Census Bureau (census) website (<https://data.census.gov/cedsci/>) to collect Corrine’s indicator values and State of Utah average indicator values. Table 1 applied the range scoring criteria to determine a score for each indicator in relation to the State average value. The calculation of the scores and the financial burden matrix resulted in an FNI of **1.22**. Division staff compared this FNI to the modified % MAGI to calculate the Financial Burden. Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, the proposal project would result in the community having a Financial Burden of **High**.

EFFORTS TO SECURE FINANCING FROM OTHER SOURCES:

The total cost of the project is \$15,613,000. Corrine is requesting \$102,900 from the Board to fund a planning advance. Corrine is in the process of applying for construction assistance and is working on securing project construction funding through the U.S. Department of Agriculture - Rural Development (USDA- RD).

STAFF COMMENTS:

Division staff supports Corrine’s request for funding because staff believes the project is essential to help collection and lagoon treatment system improvements. This funding will demonstrate support from the Board. The PER will identify a project that Corrine can afford to fund and that can improve as much of their failing infrastructure as possible. The PER will involve reviewing data Corrine already has such as depths and sizes of the sewer system along with sewer videos to determine the most critical parts of the system that need to be replaced. The PER will meet the application requirements for the USDA-RD and the Clean Water State Revolving Fund (CWSRF).

Utah regulations require that “once the long-term project financing has been secured, the Project Planning Advance must be expeditiously repaid to the Board.” Under the regulation the Board may issue a Planning Advance, Planning Grant, or Short-Term Planning Unsecured Loan.

STAFF RECOMMENDATION:

Division staff recommend that the Board authorize a planning advance of \$102,900 to Corinne under the following special conditions:

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

Corinne City - Water Quality Board & 20 Year Loan Static Cost Model (Attachment 1)

Project Description	
Land/Right-of-way	\$100,000
Engineering - Design	\$936,000
Engineering - CMS	\$1,650,000
Construction	\$11,233,000
Contingency	\$1,694,000
Total Project Cost:	\$15,613,000

Project Funding	
Local Contribution	
WQB/USDA-RD Financing	\$15,613,000
Total Project Cost:	\$15,613,000

Current Customer Base & User Charges

Initial Total Customer (ERU's)	316
MAGI for Salina City (2021):	\$50,700
Affordable Monthly Rate at 1.4%	\$59.15
Impact Fee (per ERU):	\$15,200
Current Monthly Fee (per ERU)	\$25.00
Existing Sewer Debt Service	\$0
Annual O&M expensive after project complet	\$160,000
Affordable monthly sewer fee	\$78.57
Financial Need Indicator	1.22

2.15

Funding Conditions

Loan Repayment Term:	20
Reserve Funding Period:	6

ESTIMATED COST OF SEWER SERVICE

WQB Grant Amount	WQB Loan Amount	WQB Loan Interest Rate	WQB Loan Debt Service	WQB Loan Reserve	Annual Sewer O&M Cost	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI	Financial Burden
-	15,613,000	0.00%	780,650	195,163	160,000	\$0	1,135,813	299.53	7.09%	High
936,000	14,677,000	0.00%	733,850	183,463	160,000	\$0	1,077,313	284.10	6.72%	High
1,000,000	14,613,000	0.00%	730,650	182,663	160,000	\$0	1,073,313	283.05	6.70%	High
2,000,000	13,613,000	0.00%	680,650	170,163	160,000	\$0	1,010,813	266.56	6.31%	High
4,500,000	11,113,000	0.00%	555,650	138,913	160,000	\$0	854,563	225.36	5.33%	High
4,350,000	11,263,000	0.00%	563,150	140,788	160,000	\$0	863,938	227.83	5.39%	High
7,100,000	8,513,000	0.00%	425,650	106,413	160,000	\$0	692,063	182.51	4.32%	High
9,000,000	6,613,000	0.00%	330,650	82,663	160,000	\$0	573,313	151.19	3.58%	High
9,600,000	6,013,000	0.00%	300,650	75,163	160,000	\$0	535,813	141.30	3.34%	High
9,760,000	5,853,000	0.00%	292,650	73,163	160,000	\$0	525,813	138.66	3.28%	High
10,000,000	5,613,000	0.00%	280,650	70,163	160,000	\$0	510,813	134.71	3.19%	High
12,000,000	3,613,000	0.00%	180,650	45,163	160,000	\$0	385,813	101.74	2.41%	High

Financial Need Indicator

Indicators	Local Value	State Value	Score	Weighting Factor	Weighted Score
unemployment rate	2.7%	3.6%	1.55	4.00	6.20
Poverty Rate	7.6%	9.8%	1.00	2.50	2.50
Threshold LQI	\$37,125.00	\$33,773.00	1.00	2.50	2.50
Population Growth F	22.6%	16.5%	1.00	1.00	1.00
Financial Need Indicator (Sum of weighted Scores/10)					1.22

2022.5 year ACS Table

Table 1 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

Corinne City - April 2024

in this table in yellow cells only

Entity Name	Local Value	State Value
unemployment	2.70%	3.60%
Poverty Rate	7.60%	9.80%
Threshold LQI	\$37,125	\$33,773
2019 Population	777	3,096,848
2010 Population	634	2,857,236
Population Growth	22.6%	16.5%

data.census

Select this Table or 2020 if available later
 2019 ACS 5-Year Estimates Subject Tables
 2019 ACS 5-Year Estimates Subject Tables
 2019 ACS 5-Year Estimates Detailed Tables
 2019 ACS 5-Year Estimates Detailed Tables
 2010 ACS 5-Year Estimates Detailed Tables
 Calculated

Links to utah tables

- <https://data.census.gov/cedsci/table?q=s2301%20utah&tid=ACST5Y2019.S2301>
- <https://data.census.gov/cedsci/table?q=s1701%20utah&tid=ACST5Y2019.S1701>
- <https://data.census.gov/cedsci/table?q=B19080%20utah&tid=ACSDT5Y2019.B19080>
- <https://data.census.gov/cedsci/table?q=B01003%20utah&tid=ACSDT5Y2019.B01003>
- <https://data.census.gov/cedsci/table?q=B01003%20utah&tid=ACSDT5Y2010.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
James Webb,
Chair
Michelle Kaufusi, Vice Chair
Carly Castle Robert Fehr
Michela Harris
Joseph Havasi
Trevor Heaton
Jill Jones
Kimberly D. Shelley
John K. Mackey

MEMORANDUM

TO: Utah Water Quality Board

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

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

DATE: April 24, 2024

SUBJECT: Lewiston City – Sewage and Treatment System Improvement
Update on Board Authorized Funding – Special Condition for Funding

BACKGROUND

Lewiston City (Lewiston) has requested authorization for funding from the Water Quality Board (Board) several times over the last few years. The Board authorized a design advance of \$186,000 at the February 26, 2020 meeting. On March 15, 2020, the Board authorized a principal forgiveness grant of \$500,000 for construction assistance, which includes the design advance amount of \$186,000. In August 2022, the Board authorized additional supplemental funding of \$2,144,000 to pay for increased costs on their construction project. The U.S. Department of Agriculture - Rural Development (USDA-RD) also authorized loan and grant funding in support of the project. USDA- RD authorized funding in the form of a 80:20 loan-to-grant proportion, which included a \$2,052,000 40-year loan with an interest rate of 1.875% and a grant of \$483,000 for the project. Lewiston also intended to provide \$144,000 in local contributions. The total funding across sources was about \$5.3 million.

Currently, Lewiston's proposed project includes improving its sewer collection system to connect to the regional wastewater treatment plant in Richmond City (Richmond). On October 25, 2023, Lewiston appeared in front of the Board to present its sewer collection system upgrade to connect to the Richmond Membrane Bioreactor (MBR) treatment plant. Lewiston has \$1,500,000 in the sewer fund from selling land for commercial development.

On October 25, 2023, the Board authorized a revised funding package in the amount of \$3,100,000 as principal forgiveness and \$400,000 loan at an interest rate of 0% repayable over 30 years to Lewiston under the following special conditions:

1. Lewiston must pursue and retain remaining funding necessary to fully implement the project. Lewiston must reappear in front of the Board no later than April 2024 if all necessary funds have not been secured by that time;
2. Hold a public meeting detailing the project and the projected monthly user rates prior to the April Board meeting;
3. Draft an interlocal agreement with Richmond including monthly treatment costs and impact fees to be collected prior to the April Board meeting;
4. Lewiston must agree to participate annually in the Municipal Wastewater Planning Program (MWPP);
5. As part of the facility planning, Lewiston must complete a Water Conservation and Management Plan; and

6. Lewiston must develop, commit to adopt, and implement a capital asset management plan that is consistent with EPA’s Fiscal Sustainability Plan guidance.

As the project is not yet fully funded Lewiston is reappearing in front of the Board as required by the special conditions of the authorization.

PUBLIC MEETING SUMMARY

On January 10, 2024, Lewiston held an open house for all residents who are connected to the sewer system. Postcard invitations were mailed to each residence on January 3, 2024. Mayor Jeff Hall was joined by the Lewiston Council, Holly Jo Karren (Richmond City Administrator), and Bryce Wood (Richmond City Councilmember). Mayor Hall spoke about the history and the current state of the Lewiston sewer system; the attempts and challenges Lewiston has faced in securing funding; and the current shortfall of funding necessary to repair the sewer system. Mayor Hall outlined the new plan of abandoning the Lewiston sewer ponds, and piping sewage to Richmond's MBR plant. Mayor Hall also explained that sewer rates will go up regardless of the final solution. Mayor Hall presented the estimates he had received of approximately \$110 monthly base fee per sewer hookup.

Residents questioned if all options had been looked at and considered. Mayor Hall explained all the options that had been researched, and why going to Richmond was Lewiston’s best option. Residents were concerned with the increase in fees and Mayor Hall reiterated rates will go up considerably, no matter the solution. This proposed sewer pond abandonment plan would result in a significant increase in rates, but Lewiston has taken steps to help minimize the financial stress put on residents. Mayor Hall also explained that this was a long-term solution that offered a stable rate.

A concern was raised about the longevity of the proposed solution due to Richmond’s continued growth. Holly Jo Karren responded to the concern that if the proposed plan was approved, Lewiston would be a permanent part of the Richmond sewer system. Lewiston would not be "kicked off" to make more room for Richmond residents. She explained how Richmond has managed growth so far; how there is still room for Lewiston; and how Richmond is currently researching an expansion project for the MBR plant. Richmond is in full support of connecting Lewiston on to their sewer system because it would benefit both cities.

After all the questions had been asked by residents, Mayor Hall summarized why the Lewiston feels that this is the best solution, especially for the long term. There was general agreement among those present that going to Richmond was the best option, even though nobody wants to see a rate increase. Residents were encouraged to reach out to the Mayor or any City Councilmember if they have questions, comments, or concerns going forward.

PROJECT FUNDING STATUS

Funding Source	Cost Sharing
Local Contribution	\$1,500,0000
WQB Funding	\$3,500,000
USDA-RD Existing Funding (still not approved for Project Scope Change)	\$2,535,000
Unfunded	\$3,012,000
Total Project Cost:	\$10,547,000

The Introduction Report from the August 23, 2023, Board Meeting, is attached to this memo as Attachment 1. There are no substantive changes to the cost model Board made its funding decision on. Lewiston intends to reapply to USDA-RD for the previously authorized funds for the project scope change to improve collections and convey the Lewiston’s wastewater to Richmond's MBR wastewater treatment system for treatment and disposal. In addition, Lewiston will need to secure the unfunded portion of the project, which can be applied for through the USDA-RD project cost overrun process. For USDA-RD to consider the scope change and cost overrun funding an updated Preliminary Engineering Report is required in accordance with their rules.

STAFF DISCUSSION

The Bipartisan Infrastructure Law funding grant agreement with the Board requires 49% of the funding be awarded as principal forgiveness. This requirement is the source of the principal forgiveness authorized for this project and is under requirements of timely use of funds. Due to the timely use of funds requirements Division staff is concerned about having this authorized funding exceed a year from authorization. Thus, Division staff is focused on addressing any funding issues related to this project by the October 2024 Board meeting.

Lewiston continues to make progress on this project. Division staff is currently focused on getting the project fully funded through USDA-RD or through the 2024 Board application process. As USDA-RD has more potential to bring additional grant funds to the project, Division staff has encouraged Lewiston to continue to pursue this route. In addition, Richmond has been working hard to evaluate the costs to take on these new flows and appropriately evaluate the additional costs. Division staff is supportive of the continued authorization of these funds with a focus of a fully funded project in November 2024.

STAFF RECOMMENDATION

Division staff recommends the Board amended the October 25, 2023 authorization with the following revised special conditions:

1. Lewiston must submit an updated capital facilities plan/preliminary engineering report to USDA-RD and the Division by June 30, 2024;
2. Lewiston must re-apply to USDA-RD for the new scope of work connect to the Richmond MBR treatment plant and apply to USDA-RD for the remainder of the required funding by June 30, 2024;
3. Lewiston must apply to the Board for an additional funding by June 30, 2024;
4. Lewiston must complete an interlocal agreement with Richmond, including monthly treatment costs and impact fees to be collected prior to the August Board Meeting;
5. Lewiston must agree to participate annually in the Municipal Wastewater Planning Program (MWPP);
6. As part of the facility planning, Lewiston must complete a Water Conservation and Management Plan; and
7. As part of its Plan of Operations, Lewiston must develop and implement an asset management program that is consistent with the State Revolving Fund's Fiscal Sustainability Plan.

Attachment 1

WATER QUALITY BOARD FEASIBILITY REPORT FOR SEWER IMPROVEMENT PROJECT

INTRODUCTION

APPLICANT: Lewiston City
29 South Main
Lewiston, Utah 84320
Telephone: 435-258-2141

CONTACT PERSON: Mayor Jeff Hall

TREASURER/RECORDER: Mary Simpson

CONSULTING ENGINEER: Gary Vance, P.E.
J-U-B Engineers.
801-547-0393

CITY ATTORNEY: Miles P. Jensen
Olson & Hoggan P.C.
435-752-1551

BOND COUNSEL: Eric Johnson
Blaisdell Church & Johnson

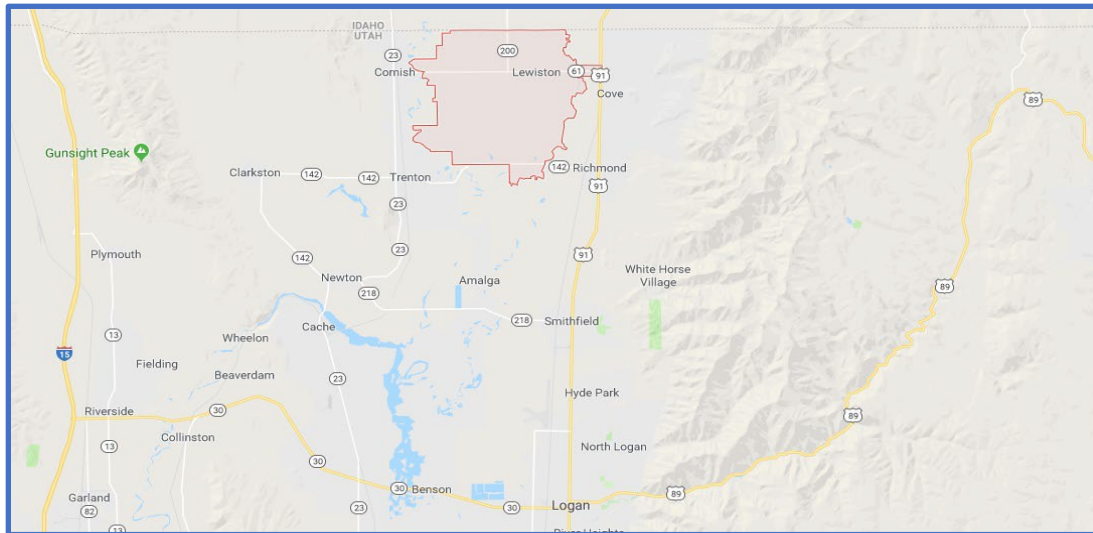
FINANCIAL ADVISOR: Cody Deeter
EFG Consulting, LLC

APPLICANT'S REQUEST:

Lewiston City is requesting funding from the Water Quality Board in the amount of **\$6,512,000** to upgrade the sewer system and connect its collection system to the Richmond MBR treatment plan

APPLICANT'S LOCATION

Lewiston City is located approximately 27 miles north of Lewiston on the Utah-Idaho Border. The City is located in the northern portion of Cache County.



BACKGROUND

The City owns and operates a collection and lagoon wastewater systems. The system as currently configured is not capable of meeting the capacity and the future needs of the city. The collection system includes a lift station, around 3.3 miles of 8", 1.3 miles of 10" of bell and spigot concrete pipe constructed in 1974. The treatment system was constructed in 1974 and was designed as a three-cell total containment facultative lagoon treatment system. Chlorine disinfection and sulfur dioxide de-chlorination were added to the treatment facility in 1999. The lagoons discharge intermittently to the Cub River.

PROJECT NEED

The City completed a Wastewater Collection System and Treatment Facilities Plan in January 2020. The Facilities Plan recommended updated collection, treatment and land application to deal with future capacity and nutrient limits that could be imposed by the Cub River TMDL, phosphorus load cap rule, and growth in the community.

ALTERNATIVES EVALUATED

The Facilities Plan evaluated the following alternatives:

- Alternative 1: No action
- Alternative 2: Upgrade Collection and Lagoon Systems
- Alternative 3: Upgrade Lagoons, Winter Storage, and Land Apply All Effluent
- Alternative 4: Full Regionalization with Richmond

Alternative 3

Alternative 3 consists of improvements and upgrades to replace aging infrastructure, eliminate capacity limitations, improve lagoon wastewater treatment performance and enhance the overall system maintainability, flexibility, reliability, and customer service prior to discharge into the Cub River. The Alternative includes construction of a new lift station, 7,200 feet of sewer pipe capacity upgrades, treatment plant headworks upgrade, increased lagoon aeration capacity, new chlorination and de-chlorination facilities, and a new effluent reaeration facility. These improvements are needed to upgrade lift station and improve wastewater lagoon treatment performance and reliability.

Lewiston pursued Alternative 3 bidding the project twice. Lewiston appeared in front of the Board twice first receiving a \$500,000 hardship grant. After bids came in high Lewiston reappeared in front of the Board resulting in undisbursed hardship grant funds de-obligated and \$1,400,000 in funding authorized including a \$400,000 loan at 0% for a term of 30 year and \$1,000,000 in principal forgiveness. After the bids came in high again in winter 2023 Lewiston enquired if the Board had additional grant funds but they had been all authorized during October 2022. Lewiston did not indicate any interest if returning for addition loan funds which were available. Lewiston did not apply to United States Department of Agriculture-Rural Development (USDA-RD) which likely had additional funds available as a grant/loan blend.

Alternative 3 project is a total of \$6,436,000. In addition to the \$1,400,000 of Board funding previously discuss, the Alternative had funds authorized from USDA-RD as a \$2,052,000 1.875% interest 40-year loan and \$483,000 of grant funds for a total of \$2,535,000. Lewiston City now has \$1,500,000 in the sewer fund from sale of land for commercial development. The following cost sharing is proposed for this project including lagoon treatment system:

Funding Source	Cost Sharing	Percent of Project
Local Sewer Fund	\$1,500,000	23%
WQB Funding	\$1,400,000	22%
USDA-RD Funding	\$2,535,000	39%
Total:	\$6,436,000	100%
Funding Shortfall	\$1,001,000	16%

Staff has included a cost model for Alternative 3 as Attachment 1. Staff indicated to Lewiston that as it is a new fiscal year there are additional principal forgiveness funds available which Alternative 3 would be eligible for Board consideration. Lewiston stated they wished to pursue Alternative 4 to connect to Richmond's treatment plant. As Alternative is substantially different from the previous project scope of work staff has removed Lewiston's previous Board authorization from the August 2023 Financial Report. Lewiston hopes to redirect the USDA-RD funding to Alternative 4, however during a phone call with USDA-RD staff they indicated this would be challenging.

Alternative 4

The proposed project would include the improvement of the collection system, connecting to the regional Richmond MBR wastewater treatment facility. It will address current and future treatment needs by pumping sewer flows to the Richmond City mechanical treatment plant, thereby eliminating the current Lewiston treatment lagoons. The City feels that this regionalization of treatment will be a long-term solution for the community. Effluent quality will be greatly improved by regionalizing and treating the city's sewer in Richmond's MBR. This also opens up Type 1 reuse opportunities.

The existing collection system lift station is over 50 years old and is undersized for current and future flows. The main sewer trunk line is also aging and has inadequate capacity and experiences surcharging within the system. The proposed project will address the existing lift station aging and main trunk deficiencies. The recommended Alternative is No. 4, which is to improve the collection system and connect to the Richmond MBR treatment works.

PROJECT DESCRIPTION

The proposed project will improve collections and convey the city's wastewater to Richmond City's MBR wastewater treatment system for treatment and disposal. As part of this project, the following improvements will be implemented:

Refurbish the Existing Lift Station. This lift station and the equipment is old and showing signs of corrosion, the lift station will be refurbished with a new lining system, new pumps and rails, controls, SCADA and backup power

New Pump Station. A new pump station will be installed near the bottom of the system that will pump the City sewer flows through a force main to an intermediate pump station. The new pump station will be complete with SCADA and backup power.

Force Main. A new 2-mile force main pipe will be installed from the new pump station and south along 800 E where it will transition into a gravity system.

Gravity System. A new 1/2-mile gravity sewer will be installed to convey the flows from the force main along 800 E down the hill and under the Cub River to the Intermediate Pump Station.

Intermediate Pump Station. A new intermediate pump station will be installed on the west side of the Cub River that will pump the City sewer flows through a 2.21-mile force main to the Richmond Treatment Plant headworks. The new pump station will be complete with SCADA and backup power.

POPULATION GROWTH

The population of the City is projected growth at an annual rate used will be 1.20% by United States Census Bureau. Current populations and associated ERUs are shown in the table below along with the 20-year projections.

	<u>Year</u>	<u>Population</u>	<u>ERU²</u>	<u>Population on Sewer</u>	<u>ERU on Sewer²</u>
Current	2020	1,776	456	885	300
Design	2039	2,515	796	1,440	488

²ERU = Equivalent Residential Connection.

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

Public Meetings and several City Council meetings were held to discuss the initial project and potential funding of Alternative 3. City council has discussed the Alternative 3 in several open public meetings. The council was in favor of a project that will serve long term needs and the elimination of the City's lagoon treatment facility provided that the financial aspects can be satisfied. This includes the support of the council to raise user rates to meet those financial needs. It is not clear the City Council discussed the sort of rates estimated for Alternative 4.

The public hearings will be held as required when funding is authorized. The City will hold a final public hearing once funding is secured.

IMPLEMENTATION SCHEDULE:

Public Meeting	July 2023
Apply to WQB for Funding:	August 2023
Public Hearing:	October 2023
WQB Funding Authorization:	September 2023
Advertise EA (FONSI):	October 2023
Engineering Report Approval:	Novenary 2023
Commence Design:	December 2023
Issue Construction Permit:	October 2024
Advertise for Bids:	January 2025
Bid Opening:	February 2025
Loan Closing:	April 2025
Commence Construction:	June 2025
Complete Construction:	June 2026

PROJECT PRIORITY LIST

The proposed project was ranked 7 out of 11 on the project priority list.

APPLICANT’S CURRENT USER CHARGE:

Currently, the City charges a sewer user fee of approximately \$53.00 per residential and non-residential connection per month. There are approximately 456 ERUs in the City with 300 ERUs on the sewer. The City’s median adjusted gross income (MAGI) in 2021 was \$47,000 and the affordable monthly fee was \$54.83. The cost of this project will result in a sewer services exceeding 1.4% of the local MAGI if the Richmond MBR for treatment in be selected.

COSTS SHARING:

The following cost sharing is proposed for this project including treatment connecting Richmond MBR treatment system:

Funding Source	Cost Sharing	Percent of Project
Local Cost	\$1,500,000	14%
WQB Funding	\$6,512,000	62%
USDA-RD Funding	\$2,535,000	24%
Total:	\$10,547,000	100%

COST ESTIMATE:

Project Costs

Legal/Bonding/ Easement/Water Rights/ Environmental/ NEPA	\$297,000
DWQ Loan Origination Fee	60,000
Engineering - Design & CMS	\$710,000
Capacity Purchase to Richmond City’s Treatment	\$2,280,000
Construction	\$6,000,000
Contingency (21%)	\$1,200,000
Total:	\$10,547,000

EFFORTS TO SECURE FINANCING FROM OTHER SOURCES:

The City intends to reapply to USDA-RD to apply the previously authorized Alternative 3 funds to Alternative 4. This request will be presented during the USDA-RD’s meeting that will be held in September 2023.

ESTIMATED ANNUAL COST FOR SEWER SERVICE:

In order to develop a valid detailed cost model staff requires the cost to purchase capacity in the Richmond treatment plant and the monthly rate for treatment at the Richmond treatment plant. These costs would be defined in an interlocal agreement between Lewiston and Richmond which does not exist yet. These costs will be taken from the Preliminary Engineering Report (PER) from March 2020. Discussion were held with Richmond during the preparation of this report but costs may be outdated. The PER estimates \$2,280,000 in capacity cost and \$47/month per ERU in treatment costs.

According to the Richmond website the sewer fee is \$77/month for up to 20,000 gallons of wastewater discharged into the system. The PER estimates the City's annual average wastewater flow at approximately 100,000 gpd. Assuming Richmond applied the \$77 per 20,000 gallons this results in a cost of approximately \$40/month per ERU. The website states the impact fee to Richmond for a 4" connection in 2023 is \$7,952.

Staff developed static cost model for Alternative 4 (Attachment 2) to evaluate funding by the Board. The cost model analyzes several possible funding options. The resulting Total Annual Sewer Cost is shown for each funding option. Staff estimates the City will grow by 126 ERUs over 19 years with an impact fee of \$8,056 per ERU that is \$80,0650/yr. in impact fees. Incorporating these impact fees and \$3,800,000 in principal forgiveness (the maximum staff believes is available for the FY23 application period) from the Board the projected **sewer rate is \$109**. In order to reduce the monthly rate more the City would either have to find additional City funds, grant funds from another source, get Richmond to dismiss the impact fees, or reduce the monthly treatment fee.

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 1.14 which is the bottom of the 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 or Attachment 2.

Based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, Alternative 3 would result in the community having a Financial Burden of Low. However, based on the Financial Burden Evaluation Policy for the Utah Wastewater Project Assistance Program, Alternative 4 would result in the community having a Financial Burden of **High**.

STAFF COMMENTS

The recommended Alternative 4 would connect the City's sewer to the regional wastewater treatment plant in Richmond City, linking the regional needs for water quality protection. Staff supports the city's project to improve a collection and treatment improvements that will protect the water quality. Alternative 4 will enable the City to sustain its public health, current rate of growth and aging infrastructure. Through regionalization of wastewater treatment services, the City utilities often benefit from reduced capital and operational costs, and increased economies of scale. Efficiencies of regionalization are achieved in administrative tasks (billing, planning, rate setting or engineering services) and operational tasks (equipment maintenance, sampling, laboratory testing, day-to-day operations).

Staff remains uncertain if the City is fully prepared to take on Alternative 4 at the projected monthly sewer rates. Staff would feel more comfortable proceeding with a funding authorization if the City held a public meeting detailing the project and the projected monthly user rates. In addition, a draft interlocal agreement would greatly aid cost evaluations.

Staff does not have a strong preference between Alternative 3 and 4. Both are good projects which will protect water quality and result in a long-term solution for Lewiston. Lewiston has appeared in front of the Board other times in pursuit of a project. Staff would like to see a successful project in Lewiston and is concerned about the bidding environment and the potential impacts of a Board authorization on USDA-RD funds.

One idea is a potential Board authorization which might offer Lewiston some discretion in the Alternative ultimately selected. One such approach the Board might consider is an authorization at a grant/loan ratio with a not to exceed total funding amount. This is not a typical authorization from the Board but would give the Executive Secretary to the Board the ability to set the final grant and loan amounts after bids are received. Staff has added a "WQB Grant Percent" column in the Attached Cost Models so the Board can consider the concept.

Another potential idea would be to reserve some funds on the Financial Report and ask Lewiston to report back a meeting potentially later than October when project details are more developed. While this idea might add clarity for staff and the Board it would pose challenges to Lewiston's leadership while trying to do outreach on a very financially challenging project. Staff would encourage Board discussion on this topic with Lewiston and during the September Finance Committee meeting.

No staff recommendations for funding are included in this report, as this is an introduction of the project.

DWQ-2023-121503

File: SRF-Lewiston City, Administration, Section 1

ATTACHEMENT 1

Lewiston City - Water Quality Board

30 Year Loan Static Cost Model - Lewiston's Collection and Lagoon treatment system

Project Costs				Current Customer Base & User Charges			
Legal/Bonding - Environmental		\$	40,000	Initial Total Customer (ERU's)			300
DWQ Loan Origination Fee		\$	-	MAGI for Lewiston City (2021):			\$47,000
Engineering - Design & CMS		\$	433,000	Affordable Monthly Rate at 1.4%			\$54.83
<i>Collections</i>	\$	1,700,000		Impact Fee (per ERU):			\$8,065
<i>Lift station</i>	\$	1,500,000		Current Monthly Fee (per ERU)			\$53.00
<i>Headworks</i>	\$	1,300,000		Debt Service			\$0
<i>Lagoon Treatment</i>	\$	1,000,000		Annual O&M expense			\$109,000
<i>Construction subtotal</i>		\$	5,500,000				
Contingency		\$	463,000				
Total Project Cost:		\$	6,436,000				
Project Funding				Funding Conditions			
Local Sewer Fund		\$	1,500,000	Loan Repayment Term:			30
Requested Funding		\$	2,401,000	Reserve Funding Period:			6
USDA-RD Existing Grant		\$	483,000				
USDA-RD Existing Loan		\$	2,052,000				
Total Project Cost:		\$	6,436,000				
USDA-RD Funding Conditions							
				USDA-RD Loan Repayment Term			40
				USDA-RD Interest Rate			1.875%

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Grant Percent	WQB Loan	RD Loan	WQB Loan Interest Rate	RD Loan Interest Rate	WQB Loan Debt Service	WQB Loan Reserve	RD Loan Debt Service	Annual Sewer	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
-	0%	2,401,000	2,052,000	0.00%	1.875%	80,033	20,008	91,722	109,000	220,114	61.14	1.56%	Medium
1,000,000	42%	1,401,000	2,052,000	0.00%	1.875%	46,700	11,675	91,722	109,000	259,097	71.97	1.84%	low
1,400,000	58%	1,001,000	2,052,000	0.00%	1.875%	33,367	8,342	91,722	109,000	242,430	67.34	1.72%	low
1,850,000	77%	551,000	2,052,000	0.00%	1.875%	18,367	4,592	91,722	109,000	223,680	62.13	1.59%	low
2,000,000	83%	401,000	2,052,000	0.00%	1.875%	13,367	3,342	91,722	109,000	217,430	60.40	1.54%	low
2,350,000	98%	51,000	2,052,000	0.00%	1.875%	1,700	425	91,722	109,000	202,847	56.35	1.44%	low
2,401,000	100%	0	2,052,000	0.00%	1.875%	0	0	91,722	109,000	200,722	55.76	1.42%	low

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	0.5%	3.6%	1.00	4	4.00	S2301						
Poverty Rate	3.2%	8.8%	1.00	2.5	2.50	S1701	Below 1.5	Low	Low	Medium	Medium	High
Threshold LQI	\$42,063	\$37,685	1.00	2.5	2.50	B19080	1.5 to 2.5	Low	Medium	Medium	High	High
Population Growth Rate	13.6%	19.0%	2.43	1	2.43	B01003	Above 2.5	Medium	High	High	High	High
Financial Need Indicator (Sum of weighted Scores/10)												

2020 5 year ACS Table

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

Attachment 1 – Alternative 3 Lagoon Upgrades

ATTACHEMENT 2

Lewiston City - Water Quality Board

30 Year Loan Static Cost Model - Connect to Richmond MBR Treatment Plant

Project Costs		Current Customer Base & User Charges	
Legal - Right of Way	\$ 60,000	Initial Total Customer (ERU's)	300
Legal/Bonding -	\$ 59,000	MAGI for Lewiston City (2021):	\$47,000
DWQ Loan Origination Fee	\$ 60,000	Affordable Monthly Rate at 1.4%	\$54.83
Engineering - Design	\$ 355,000	Impact Fee (per ERU):	\$8,065
Engineering - CMS	\$ 325,000	Current Monthly Fee (per ERU)	\$53.00
Engineering - Planning	\$ 30,000	Existing Debt	\$0
Capacity Purchase to Richmond	\$ 2,280,000	Annual O&M Collection	\$109,000
Environmental	\$ 59,000	Richmond Impact fee 4" (2023)	\$7,952
Legal Services	\$ 119,000	Annual O&M for Richmond's Treatment	\$169,200
Construction - Pump Station	\$1,700,000	Monthly Treatment to Richmond	\$47
Construction - Collection Sewer	\$1,500,000		
Construction - Mobilization/Demobilization	\$ 500,000	Funding Conditions	
Construction - 8" PVC Force Main	\$1,500,000	Loan Repayment Term:	30
Construction - Decommission :Lagoon	\$ 800,000	Reserve Funding Period:	10
Construction subtotal	\$ 6,000,000		
Contingency (21%)	\$ 1,200,000	USDA-RD Funding Conditions	
Total Project Cost:	\$ 10,547,000	USDA-RD Loan Repayment Term	40
		USDA-RD Interest Rate	1.875%
Project Funding			
Requested Funding by WQB	\$ 6,512,000		
Lewiston Sewer Fund	\$ 1,500,000		
USDA-RD Existing Grant	\$ 483,000		
USDA-RD Existing Loan	\$ 2,052,000		
Total Project Cost:	\$ 10,547,000		

ESTIMATED COST OF SEWER SERVICE

Principal Forgiveness	WQB Grant Percent	WQB Loan	Existing RD Loan	WQB Loan Interest Rate	RD Loan Interest Rate	WQB Loan Debt Service	WQB Loan Reserve	RD Loan Debt Service	Annual O&M - collection & Treatment	Total Annual Sewer Cost	Monthly Sewer Cost/ ERU	Sewer Cost as % of MAGI	Financial Burden
1,200,000	18%	5,312,000	2,052,000	0.00%	1.875%	177,067	26,560	91,722	278,200	573,549	159.32	4.07%	HIGH
1,500,000	23%	5,012,000	2,052,000	0.00%	1.875%	167,067	25,060	91,722	278,200	562,049	156.12	3.99%	HIGH
2,000,000	31%	4,512,000	2,052,000	0.00%	1.875%	150,400	22,560	91,722	278,200	542,882	150.80	3.85%	HIGH
2,177,500	33%	4,334,500	2,052,000	0.00%	1.875%	144,483	21,673	91,722	278,200	536,078	148.91	3.80%	HIGH
3,000,000	46%	3,512,000	2,052,000	0.00%	1.875%	117,067	17,560	91,722	278,200	504,549	140.15	3.58%	HIGH
3,800,000	58%	2,712,000	2,052,000	0.00%	1.875%	90,400	13,560	91,722	278,200	473,882	131.63	3.36%	HIGH

FNI Calculation	Lewiston City	Financial Burden Matrix											
		Local Value	State Value	Score	Weighting Factor	Weighting Score	Table **	Modified MAGI					
Unemployment Rate		0.5%	3.6%	1.00	4	4.00	S2301	FNI	Below 1.4%	1.4% to 1.75%	1.75% to 2.1%	2.1% to 2.45	Above 2.45
Poverty Rate		3.2%	8.8%	1.00	2.5	2.50	S1701	Below 1.5	Low	low	Medium	Medium	High
Threshold LQI		\$42,063	\$37,685	1.00	2.5	2.50	B19080	1.5 to 2.5	Medium	Medium	Medium	High	High
Population Growth Rate		13.6%	19.0%	2.43	1	2.43	B01003	Above 2.5	Medium	Medium	High	High	High
Financial Need Indicator (Sum of weighted Scores/10)						1.14							

2020 5 year ACS Table

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

Attachment 2 – Alternative 4 Connection to Richmond MBR Treatment Plant



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
James Webb, Chair
Michelle Kaufusi, Vice Chair
Carly Castle
Michela Harris
Joseph Havasi
Trevor Heaton
Robert Fehr
Jill Jones
Kimberly D. Shelley
John K. Mackey
Executive Secretary

TO: Utah Water Quality Board

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

FROM: Ben Holcomb, Standards & Tech Services Manager

DATE: April 23, 2024

SUBJECT: Rulemaking Actions: R317-16. Great Salt Lake Mineral Extraction Facility Operator Certification Approval

During the 2023 Utah legislative session, the legislature passed HB 513 “Great Salt Lake Amendments”, which requires the Department of Environmental Quality’s (DEQ) approval of operator certification that a proposed mineral extraction project will “not negatively impact the biota or chemistry of Great Salt Lake”. To establish the necessary procedures for certification, the Division of Water Quality (DWQ) requested approval to initiate an informal rulemaking process and engage in stakeholder outreach at the October 25, 2023 Water Quality Board (Board) meeting.

Since that time, DWQ has written two versions of the draft rules and held two separate, informal public comment periods and worked with the Division of Forestry, Fire, and State Lands (FFSL) to ensure compatibility with their associated HB513 draft rules. Most recently, the Board approved the initiation of formal rulemaking at the January 24, 2024 Board meeting. This was followed by the publication of the draft rules by the Office of Administrative Rules (OAR) on February 15, 2024. The draft rules were on public notice with a 30-day comment period ending March 18, 2024.

Attached is a summary of public comments received on the draft rule and DWQ’s responses. The nature of the changes to R317-16 were related to: changes to HB513 requirements that occurred in the 2024 legislative session; refinements to definitions; minor additions to the feasibility assessment requirements; changes to citations to ensure compatibility with FFSL rules; and general edits for clarity. In consultation with OAR, it was determined that the proposed changes are substantive and require an additional 30-day public comment period.

DWQ staff requests approval of the proposed amendments and response to comments; and staff approval to submit the revised R317-16 to OAR before May 1, 2024 in order to publish another public comment period beginning May 15, 2024. Subsequent to this 30-day period and barring any substantive changes, DWQ will return to the Board in June 2024 to request formal adoption of the rule.

Attachments:

1. Markup R317-16. Great Salt Lake Mineral Extraction Facility Operator Certification Approval
2. Summary of Public Comments and Responses

R317. Environmental Quality, Water Quality.

R317-16. Great Salt Lake Mineral Extraction Facility Operator Certification Approval.

R317-16-1. Purpose and Authority.

- (1) Authority. This rule is promulgated pursuant to Section 65A-6-4.
- (2) Purpose. To implement administrative rules for approval of operator certification according to Section 65A-6-4 and to protect the biota and chemistry of Great Salt Lake from possible negative impacts in connection with brine processing and mineral extraction activities.

R317-16-2. Definitions.

The following definitions apply for purposes of this rule only:

- (1) "Application for Operator Certification Approval" or "Application" means a request for approval of an operator's certification that its operations will not negatively impact biota or chemistry of Great Salt Lake, and includes the specific information detailed in Sections R317-16-3 and R317-16-5.
- (2) "Biota" means all plants, fungi, animals, protists, bacteria, and archaea in Great Salt Lake.
- (3) "Brine Depletion" means the volume of brine water consumed through processing and operations, calculated by subtracting the volume of returned water from the volume of brine water.
- (4) "Brine Water" means water diverted from Great Salt Lake.
- (5) "Certification Decision" includes the following:
 - (a) "Operator Certification Approval" means a permit order, as defined in Subsection 19-1-301.5(1)(f)(i), indicating the director's approval of an operator's certification.
 - (b) "Operator Certification Denial" means a permit order, as defined in Subsection 19-1-301.5(1)(f)(i), indicating the director's denial of an operator's certification.
- (6) "Chemistry" means the properties, composition, and structure of the elements and compounds, and interactions thereof, making up the waters, brines, and substrate of Great Salt Lake.
- (7) "Director" means the director of the Utah Division of Water Quality.
- (8) "Discharge" means any water, substance, or pollution placed into a receiving water; which may include any combination of treated, processed, ~~mitigation~~, or returned waters.
- (9) "Division" means the Utah Division of Water Quality.
- (10) "Draft Certification Decision" means a document indicating the director's preliminary decision to approve or deny an operator's certification. A draft certification decision is not a permit order.
- (11) "Externally Sourced Water" means water diverted from sources other than Great Salt Lake and used for processing and operations.
- (12) "Feasibility Assessment" means the same as that term defined in ~~Section Title R652-21-200~~.
- (13) "FFSL" means the Utah Department of Natural Resources, Division of Forestry, Fire, and State Lands.
- (14) "Foreign materials" means materials added to a discharge or a commercial process.
- (15) "GSL" means Great Salt Lake.
- ~~(16) "Mitigation Water" means the water diverted from sources other than Great Salt Lake and delivered to Great Salt Lake to compensate for brine depletion, pursuant to Section 65A-6-4. Mitigation water may not include wastewater reuse.~~
- ~~(17)~~ "Negative Impact" includes any activity or action that:
 - (a) causes pollution, or negatively alters the salinity or other aspects of water chemistry in Great Salt Lake;
 - (b) negatively alters the volume or timing of water flows to Great Salt Lake, or water levels in Great Salt Lake or Great Salt Lake wetlands;
 - (c) reduces, degrades, or otherwise negatively alters habitat in and around Great Salt Lake; or
 - (d) results in harmful physiological impacts to Great Salt Lake biota, including disruptions to survival, reproduction, or growth.
- ~~(17)~~ "Operator" means a person submitting an application for operator certification approval to pursue extraction of Great Salt Lake elements or minerals to the Division of Water Quality.
- ~~(18)~~ "Operator Certification" means a statement by an operator that its operation will not negatively impact the biota or chemistry of Great Salt Lake.
- ~~(2019)~~ "Pollution" means the same as that term is used in Section 19-5-102.
- ~~(2120)~~ "Returned Water" means any water discharged into Great Salt Lake from commercial operations.
- ~~(2221)~~ "Total Water" means the sum of externally sourced water and brine water.
- ~~(2322)~~ "UPDES" means Utah Pollutant Discharge Elimination System.
- ~~(2423)~~ "Water Depletion" means the volume of total water consumed through processing and operations, calculated by subtracting the volume of returned water from the volume of ~~brine total~~ water.

R317-16-3. Feasibility Assessment -- Certification Approval by Rule.

- (1) The operator shall request a pre-filing meeting with the division and with FFSL at least 30 days before submitting a feasibility application with FFSL. The division and FFSL may jointly waive or shorten the requirement for a pre-filing meeting request.
- (2) For the feasibility assessment only, a UPDES permit is considered a feasibility assessment certification approval by rule.

- (a) The term of a UPDES permit issued for the feasibility assessment shall be the duration of the feasibility assessment.
- (b) If the operation is non-discharging during the feasibility assessment and does not require a UPDES permit, the operator shall nonetheless comply with Subsection R317-16-3(3).
- (i) The director will issue a certification decision using the procedures listed in Sections R317-16-6 and R317-16-7.
- (ii) The term of a feasibility assessment certification approval shall be the duration of the feasibility assessment.
- (3) To obtain feasibility assessment certification approval by rule, the operator shall submit, on a form provided by the division:
 - (a) information listed in this section pertaining to the feasibility assessment; and
 - (b) an application for a UPDES permit.
 - (4) Feasibility assessment information required:
 - (a) project information:
 - (i) mass balance of principal GSL salinity constituents, including all target and non-target minerals across the principal mineral processing steps;
 - (ii) a water balance at design flow, low flow conditions, and across a range of lake levels;
 - (iii) generated waste containment and disposal infrastructure descriptions, including residuals and disposal methods;
 - (iv) location and acreage of lakebed used for project facilities during the feasibility assessment and operations phases, if different;
 - (v) supporting documentation submitted to federal agencies, including maps, plans, specifications, project dimensions, copies of associated federal applications, biological and engineering studies, environmental assessment or environmental impact statements, or alternative analyses, as applicable;
 - (vi) estimated water depletion and brine depletion; and
 - (vii) plan to determine rate of extraction for the targeted and non-targeted minerals or elements and estimated rate of depletion of the targeted and non-targeted minerals or elements in GSL;
 - (b) withdrawal information:
 - (i) names and locations of the brine water and externally sourced water where withdrawals will occur, including the precise latitude and longitude to the fifth decimal place in decimal degrees and to the tenth of a degree in degrees-minutes-seconds notation;
 - (ii) detailed information on the quantity of brine water and externally sourced water withdrawn; and
 - (iii) detailed information on the timing of the withdrawals.
 - (iv) detailed description of the operator's plan for measuring the amount of brine water, externally sourced water, and returned water.
 - (c) discharge information:
 - (i) characterization of the physical, chemical, biological, thermal, and other pertinent properties of the discharge; at a minimum: pH, total alkalinity, total dissolved solids, total suspended solids, sulfate, nitrate, nitrite, carbonate, bicarbonate, chloride, hydroxide, chemical oxygen demand, biological oxygen demand, silica, zinc, magnesium, sodium, calcium, potassium, boron, bromine, aluminum, iron, and silicon; range of temperatures expected in effluent; density range of effluent to be discharged; and quantity of foreign materials that would be discharged to the GSL on an annual basis;
 - (ii) for operations that are non-discharging during the feasibility assessment, a determination of whether discharge will occur during the operations phase and an evaluation of how the operator will obtain information to characterize its operations discharge during the feasibility assessment.
 - (d) impacted habitat:
 - (i) description of existing GSL habitat and biota in and around the area of operation;
 - (ii) description of the potential physical impact to habitat and biota in and around the withdrawal and discharge locations;
 - (iii) evaluation of the least degrading reasonable alternatives;
 - (iv) plan to mitigate any negative impacts of the proposed operation; and
 - (v) plan to ensure existing beneficial uses will be maintained and protected.
 - (e) monitoring and inspection plan:
 - (i) a description of the methods and means to monitor the quality and characteristics of the discharge and the operation of the equipment or facilities employed in control of any proposed discharge;
 - (ii) plan to monitor and address long-term cumulative effects of withdrawals and discharges associated with the operation on the biota and chemistry of the GSL including available baseline data; and
 - (iii) a map showing the locations of proposed monitoring points.
 - (f) evidence supporting the operator certification:
 - (i) consideration of both short-term effects and long-term impacts of the project;
 - (ii) examples of evidence supporting a certification may include:
 - (A) a quantitative comparison of influent and effluent volume and chemical composition;
 - (B) modeled annual impacts to salinity or concentrations of other ~~important~~ chemical parameters in GSL;
 - (C) evaluation of impacts to GSL biota including:
 - (I) a quantitative comparison of effluent chemical concentrations to applicable water quality standards; or
 - (II) other scientifically defensible biological response thresholds;
 - (D) other scientifically defensible means for evaluating project impacts on GSL chemistry and biota.

R317-16-4. Operations Application Procedures.

(1) The operator shall request a pre-filing meeting with the division and with FFSL at least 30 days before submitting an application for operator certification approval. The division and FFSL may jointly waive or shorten the requirement for a pre-filing meeting request.

(2) The operator shall submit an application for operator certification approval simultaneously with the application to FFSL pursuant to Subsection 65A-6-4(6)(b)(iii).

(3) Applications for operator certification approval shall be submitted on the form provided by the division. Unless extended in writing by the division, the operator must obtain all information submitted with the application within one year of filing the application.

(4) The operator shall submit a UPDES application simultaneously with the application for operator certification approval. UPDES permit approval is not a certification decision. The director shall issue a certification decision separate from a UPDES permit.

(5) Within 45 days of receiving the application for operator certification approval, the division will notify the operator whether the application is complete. If an application is incomplete, the division shall notify the operator of the missing information.

(a) An operator may submit the missing information within 45 days after the division's notice of incompleteness.

(b) The division may administratively deny an incomplete application not remedied within 45 days, and the operator must resubmit a new application for operator certification approval.

(6) The operator shall notify the director in writing of changes that may affect the application for operator certification.

(7) If an operator who is required to obtain an operator certification approval fails to do so, the director may process an application for operator certification approval after-the-fact. An application after-the-fact shall be reviewed under the same standards as a timely application for operator certification approval. The director may require full restoration or other actions as a pre-condition of processing the application. An operator submitting an after-the-fact application shall have the burden of proving what the original baseline conditions were, and an application may be denied in the absence of such proof.

(8) The operator is responsible for payment of hourly fees, established pursuant to Subsection 19-1-201(6)(i). The operator shall submit a fee retainer, specified in the application form, together with its application for certification approval. The division will not begin review of the application for certification approval until it has received the fee retainer. The division will invoice the operator on a routine basis, and may stop review of the application for nonpayment.

R317-16-5. Operations Application Content.

Unless otherwise determined in writing by the director, the application for operator certification approval shall include the following:

(1) all information required under Subsection R317-16-3(4), revised and updated to reflect the scale of the operations design;

(2) a summary of any changes made as a result of the feasibility assessment;

(3) a summary of findings establishing the operator's feasibility assessment had no negative impact on the biota or chemistry of GSL;

(4) all data and data analysis related to GSL biota and chemistry derived from the feasibility assessment;

(5) a UPDES permit application;

(6) any other information related to the operation's impact to the biota or chemistry of GSL, as requested by the director; and

(7) a statement that the proposed project will not negatively impact the biota or chemistry of GSL.

R317-16-6. Draft Certification Decision.

(1) Within 60 days of receiving a complete application for operator certification approval, the director shall issue a draft certification decision.

(2) The draft certification decision shall be subject to a public notice and comment period of at least 30 days.

(3) The division will publish the public notice using the following methods:

(a) Utah Department of Environmental Quality website; and

(b) the Utah Public Notices website.

(4) The director may, at the director's discretion, hold a public hearing to take oral comments if:

(a) the director receives a request in writing not more than 15 days after the publication date of the draft certification decision; and

(b) the request is from:

(i) another state agency;

(ii) ten interested persons; or

(iii) an interested association having not fewer than ten members.

(5) Public notice of a public hearing shall be given at least seven days in advance of the hearing. Public notice of a hearing may be combined and provided at the same time as public notice of any of the following:

(a) a draft certification decision issued under this rule;

(b) a draft UPDES permit issued under Rule R317-8; or

(c) a draft water quality certification issued under Rule R317-15.

(6) The director shall consider the comments received during the public notice and comment period in finalizing the certification decision.

R317-16-7. Certification Decision.

(1) After review of the application for operator certification approval and consideration of comments received during the public notice period, the director shall issue one of the following certification decisions:

- (a) operator certification approval; or
- (b) operator certification denial.
 - (i) If the director issues an operator certification denial, the denial shall include reasons for denial.
 - (ii) If the director issues an operator certification denial, the director will notify FFSL of the denial.

(2) The certification decision shall include a summary of the comments received during the public notice and comment period and state whether any changes were made to the certification decision as a result of the comments.

R317-16-8. Term of Operator Certification Approval.

(1) An operator certification approval shall be effective for a term of ten years.

(2) An operator shall submit an application for operator certification approval to renew its operator certification approval no later than 180 days before the expiration of the certification approval.

(a) If an operator certification approval lapses before the director issues a certification decision on a timely renewal application, the operator certification approval will continue until the director issues a certification decision on the renewal application.

(b) Review of the operator's application to renew its operator certification approval will follow all procedures specified in this rule.

(c) Failure to submit an application for operator certification approval to renew shall, on the certification approval's expiration date, result in a lapse of the operator certification approval.

(d) The director will notify the operator and FFSL of the lapse. The director's notification is not a permit order.

R317-16-9. Reevaluation of Operator Certification Approval.

(1) If any of the following occur, the director may notify the operator that it must resubmit, within 60 days, an application for operator certification approval for reevaluation:

- (a) the operator's failure to fully disclose all relevant facts in the application;
- (b) the operator's misrepresentation of any relevant fact at any time;
- (c) existence of evidence that the operation is negatively impacting the biota or chemistry of GSL;
- (d) request for a major modification in the operator's UPDES permit as defined by Subsection R317-8-5.6;
- (e) lapse of the operator's certification approval; or
- (f) the emergency trigger as defined in Section ~~65A-17-101(5)~~ ~~R652-21-1403~~.

(2) The reevaluation will follow all procedures specified in this rule.

R317-16-10. Transfer of Operator Certification Approval For Non-Discharging Operations.

(1) For non-discharging operations, the operator shall give written notice to the director of any transfer of the operator certification approval at least 30 days in advance of the effective date of the transfer.

(2) The notice shall include a written agreement between the existing and new operator establishing a specific date for transfer of certification responsibility.

(3) The notice shall contain the following contact information:

- (a) legal name, permanent address and telephone number;
- (b) name and permanent address of the operator's registered agent in Utah;
- (c) name, address, email address and telephone number of the primary contact for the application, including the person to whom requests for additional information should be addressed; and
- (d) signature of the operator; a corporate application must be signed by an officer of the corporation.

R317-16-11. Effect of Operator Certification Approval on Other Required Permits.

(1) Operator certification approval does not exempt the operator from complying with or obtaining any other permits required by federal, state, or local law.

(2) An operator certification approval is required in addition to a UPDES permit for facilities subject to this rule; however, reporting required by the operator certification approval may also be required through the UPDES permit, at the director's discretion.

KEY: Water Quality

Date of Last Change: 2024

Authorizing, and Implemented or Interpreted Law: 65A-6-4

R317-16 Public Comment and Response Table

Commenter Name	Topic	Rule Section Number and Page Number	Comment/Suggested Revision	DWQ Response
US Magnesium	Definitions	R317-16-2	There are many defined terms, e.g., Director, Division Brine Water that are used throughout the proposed rule that are defined (and capitalized in the definitions) but are not capitalized in the text of the proposed rulemaking. This is potentially confusing and could be addressed by carefully looking at each definition and capitalizing the use of the term consistently throughout.	Thank you for this comment. The Division of Water Quality ("DWQ") received guidance from the Office of Administrative Rules that directed DWQ to uncapitalize defined terms throughout the entire body of the rules. <i>See</i> Kenneth A. Hansen, <i>Rulewriting Manual for Utah Rulewriters</i> , 12th edition.
US Magnesium	Definitions	R317-16-2 (8)	It is unclear why DWQ seeks to revise the definition of Discharge from what has been in the Water Quality Act and implementing rules for years. Having multiple definitions creates potential confusion. The breadth of the definition under the Water Quality Act should cover activities regulated by DWQ under Utah Code 65A-6-4(6)(b). Notably, if this definition persists, it should be limited to Great Salt Lake only and not to any other receiving waters.	DWQ tends to agree and does not wish to create potential confusion. However, the regulatory authority granted to DWQ in Utah Code § 65A-6-4(6)(b) is broader than the regulatory authority granted to DWQ in the Utah Water Quality Act ("WQA"). Because of this broader scope of review, the definition of "Discharge" in these rules provide greater specificity than the definition in the WQA. Additionally, Utah Admin. Code R317-16-2 contains limiting language and specifies that the definitions only apply to this section of administrative code, thereby limiting its applicability to discharges to Great Salt Lake ("GSL").
US Magnesium	Definitions	R317-16-2 (14)	The use of the term foreign materials appears unnecessary given the breadth of the definition of Discharge (even if revised as suggested in the comment). Notably, the use of the term in this proposed rulemaking is properly limited to discharges. Still, the definition in these rules should not include materials added to a commercial process which are arguably not within DWQ's authority under the referenced statutory provision absent a discharge.	This definition, and supporting information required during the Feasibility Assessment and Operations Application, is necessary for DWQ to evaluate the potential impact of an operation on the chemistry and biota of GSL.
US Magnesium	Feasibility Assessment	R317-16-3 (2)(a)	Should this read that the UPDES permit shall be FOR the duration of the feasibility assessment?	DWQ believes the rule, as written, is clear.
US Magnesium	Feasibility Assessment	R317-16-3 (2)(b)	The reference is confusing. Why would an operation that is not discharging need to apply for a UPDES permit? See referenced section below.	DWQ recognizes that there may be portions of the UPDES permit application that are not applicable to a feasibility phase non-discharging operation. However, in an effort to

Commenter Name	Topic	Rule Section Number and Page Number	Comment/Suggested Revision	DWQ Response
				minimize regulatory burden, DWQ compared the information requested in a UPDES permit application with the additional requirements in Utah Admin. Code R317-16-3(4) to ensure there was not any duplicative overlap. For a non-discharging feasibility phase operation, the UPDES permit may serve only to obtain the applicant's contact information, while the remainder is simply filled out with "N/A." Nonetheless, even for non-discharging feasibility phase operations, going through the UPDES application at the feasibility phase will serve to raise the applicant's awareness to the information that will be required for an application for the operations phase.
US Magnesium	Feasibility Assessment	R317-16-3 (4)	See referenced in 2(b) above. Why would a non-discharging operation still need to submit an application for a UPDES permit?	See comment above.
US Magnesium	Feasibility Assessment	R317-16-3 (4)	It will be important that these requirements align with FFSL requirements.	DWQ has worked with FFSL in an effort to align respective rules associated with requirements in Utah Code § 65A-6-4. FFSL may require additional or different information to approve a Feasibility Assessment project based on FFSL's additional regulatory responsibilities. The information required by DWQ provides the basis for developing a UPDES permit and a Certification Approval.
US Magnesium	Feasibility Assessment	R317-16-3 (4) (d)	Both ii and iii are vague such that the scope of what is being required is unclear. How does this alternatives analysis interface with antidegradation review or other alternatives analyses required by other programs?	The alternative analysis requested in this clause does not interface with DWQ ADR or other alternative analyses requirements. Rather, the proposed language indicates how an operator should consider potential impacts to habitat across alternative approaches, similar to ADR and other alternative analyses.
US Magnesium	Feasibility Assessment	R317-16-3 (4) (e) (ii)	Insert clarifying language "associated with the operation"	DWQ incorporated the recommendation.
US Magnesium	Feasibility Assessment	R317-16-3 (4) (f) (ii) (B)	The term important chemical parameters is undefined. Since this is an example of evidence that may support a certification, consider striking the reference to "important".	DWQ incorporated the recommendation.

Commenter Name	Topic	Rule Section Number and Page Number	Comment/Suggested Revision	DWQ Response
US Magnesium	Operations Application Procedures	R317-16-4 (7)	This is an undefined term and vague.	DWQ believes the commenter is questioning the meaning of "full restoration." This term has been used in DWQ's rules regarding 401 certifications for many years without issue. DWQ interprets this term the same as it has in other contexts.
US Magnesium	Draft Certification Decision	R317-16-6	This section is replete with the use of defined terms that are not capitalized. (This is not the only section but is an example of the general comment included above in the definitions.)	DWQ received guidance from the Office of Administrative Rules that directed the Division to uncapitalize defined terms throughout the entire body of the rules. See Kenneth A. Hansen, <i>Rulewriting Manual for Utah Rulewriters</i> , 12th edition.
US Magnesium	Certification Decision	R317-16-7 (1)	Should clarify reference to appeal processes for a certification denial.	Utah Code § 19-1-301.5 and Utah Admin. Code R305-7-101 <i>et seq.</i> identify appeal processes applicable to all divisions within the Department of Environmental Quality, including DWQ. There are conceivably hundreds of locations throughout the rules of each division within the Department that authorize appeal. Attempting to reference these appeal processes in each instance where appeal is authorized is unnecessary.
US Magnesium	Term of Operator Certification Approval.	R317-16-8 (2) (d)	There should be an opportunity for an operator to appeal a finding that a certification has lapsed.	A lapse of a certification approval is purely factual and does not require any subjective judgment. Either the effective date of the certification approval has expired or it has not. Either the operator submitted a renewal application 180 days in advance of the expiration of the certification approval, or the operator did not. If the operator did not submit a renewal application, either the Director waived the requirement or the Director did not. These are purely factual, and not subject to differing opinions.
US Magnesium	Transfer of Operator Certification Approval For Non-Discharging Operations	R317-16-10	Are certifications for discharging operations transferable? If not, why not?	<p>Yes, certification approvals for discharging operations are transferrable. DWQ tried to be cognizant of avoiding duplication in its overlapping regulations. Because the UPDES regulations provide rules and processes for transfer of a UPDES permit, DWQ determined it was unnecessary for an operation to submit two forms for transfer: one form for transfer of the UPDES permit and one form for transfer of the certification approval. Rather, for discharging operations, the form for transfer of the UPDES permit is sufficient to transfer the certification approval also.</p> <p>For non-discharging operations, because the operation is not covered under a UPDES</p>

Commenter Name	Topic	Rule Section Number and Page Number	Comment/Suggested Revision	DWQ Response
				<p>permit, there would not be any analogous form for transfer. As such, this section applies to non-discharging operations, as those operations are not covered under any other forms that DWQ would receive.</p> <p>DWQ will update its UPDES transfer of ownership form to allow operators to indicate the desire to transfer both UPDES permit and certification approval.</p>
Blake Bingham (Division of Water Rights)	Defined Terms relating to Water	R317-16-2(24)	It appears that the calculation of "Water Depletion" is identical to "Brine Depletion". Resolve this by replacing the term "Brine Water" with the term "Total Water". (24) "Water Depletion" means the volume of Total Water consumed through processing and operations, calculated by subtracting the volume of Returned Water from the volume of Brine Total Water.	DWQ incorporated the recommendation.
Blake Bingham (Division of Water Rights)	Feasibility Assessment Information Requirements	R317-16-3(4)(a)(vi)	Recommend the inclusion of estimated Brine Depletion in addition to Water Depletion in order to identify the amount of brine that will be depleted.	DWQ incorporated the recommendation.
Blake Bingham (Division of Water Rights)	Feasibility Assessment Information Requirements	R317-16-3(4)(b)	Recommend the inclusion of a description of the Operator's plan to measure the amount of various types of water as follows: (iv) A detailed description of the Operator's plan for measuring the amount of Brine Water, Externally Sourced Water, Returned Water, and Mitigation Water.	DWQ incorporated the recommendation.
Blake Bingham (Division of Water Rights)	References to Draft Rule R655-21	R317-16-2(12); R317-16-9(1)(f)	This rule references various sections of FFSL's last draft version of their proposed lithium rules R655-21, which hasn't been finalized or adopted. Consequently, any references may become invalid if the adopted version of R655-21 is different from the draft version (which is likely given the pending legislation under HB 453).	In Utah Admin. Code R317-16-2(12), DWQ changed the reference from the specific subsection in FFSL's proposed rule, to the title of FFSL's existing rule. Additionally, DWQ verified with FFSL that "Feasibility Assessment" does not appear in other programs it administers. Following promulgation of FFSL's rules, DWQ will update that reference to identify the specific subsection.



Commenter Name	Topic	Rule Section Number and Page Number	Comment/Suggested Revision	DWQ Response
				In Utah Admin. Code R317-16-9(1)(f), DWQ changed the reference from FFSL's rules to the definition provided in Utah Code § 65A-17-101(5).



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
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John K. Mackey
Executive Secretary

MEMORANDUM

TO: Water Quality Board

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

FROM: Samantha Heusser, Compliance & Enforcement Section Manager

DATE: April 23, 2024

SUBJECT: Section 104 Powers and duties of Board;
Penalty Criteria for Civil Settlement Negotiations

Utah Code § 19-5-104 outlines powers and duties of the Water Quality Board (Board). As detailed in Utah Code § 19-5-104(g), the Board reviews settlements negotiated by the Director of the Division of Water Quality (DWQ) that require a civil penalty of \$25,000 or more to ensure compliance with the applicable rules and regulations. The Board may approve or disapprove the settlement.

An overview of DWQ's penalty policy will be presented by Samantha Heusser, DWQ's Compliance and Enforcement Section Manager and Haley Sousa, Assistant Attorney General.

DWQ's penalty policy is in Utah Administrative Code R317-1-8. A copy the penalty is attached.

R317-1-8. Penalty Criteria for Civil Settlement Negotiations.

8.1 Introduction. Section 19-5-115 of the Water Quality Act provides for penalties of up to \$10,000 per day for violations of the act or any permit, rule, or order adopted under it and up to \$25,000 per day for willful violations. Because the law does not provide for assessment of administrative penalties, the Attorney General initiates legal proceedings to recover penalties where appropriate.

8.2 Purpose and Applicability. These criteria outline the principles used by the State in civil settlement negotiations with water pollution sources for violations of the UWPCA and/or any permit, rule or order adopted under it. It is designed to be used as a logical basis to determine a reasonable and appropriate penalty for all types of violations to promote a swifter resolution of environmental problems and enforcement actions.

To guide settlement negotiations on the penalty issue, the following principles apply: (1) penalties should be based on the nature and extent of the violation; (2) penalties should at a minimum, recover the economic benefit of noncompliance; (3) penalties should be large enough to deter noncompliance; and (4) penalties should be consistent in an effort to provide fair and equitable treatment of the regulated community.

In determining whether a civil penalty should be sought, the State will consider the magnitude of the violations; the degree of actual environmental harm or the potential for such harm created by the violation(s); response and/or investigative costs incurred by the State or others; any economic advantage the violator may have gained through noncompliance; recidivism of the violator; good faith efforts of the violator; ability of the violator to pay; and the possible deterrent effect of a penalty to prevent future violations.

8.3 Penalty Calculation Methodology. The statutory maximum penalty should first be calculated, for comparison purposes, to determine the potential maximum penalty liability of the violator. The penalty which the State seeks in settlement may not exceed this statutory maximum amount.

The civil penalty figure for settlement purposes should then be calculated based on the following formula: $CIVIL\ PENALTY = PENALTY + ADJUSTMENTS - ECONOMIC\ AND\ LEGAL\ CONSIDERATIONS\ PENALTY$: Violations are grouped into four main penalty categories based upon the nature and severity of the violation. A penalty range is associated with each category. The following factors will be considered to determine where the penalty amount will fall within each range:

- A. History of compliance or noncompliance. History of noncompliance includes consideration of previous violations and degree of recidivism.
- B. Degree of willfulness and/or negligence. Factors to be considered include how much control the violator had over and the foreseeability of the events constituting the violation, whether the violator made or could have made reasonable efforts to prevent the violation, whether the violator knew of the legal requirements which were violated, and degree of recalcitrance.
- C. Good faith efforts to comply. Good faith considers the openness in dealing with the violations, promptness in correction of problems, and the degree of cooperation with the State.

Category A - \$7,000 to \$10,000 per day. Violations with high impact on public health and the environment to include:

1. Discharges which result in documented public health effects and/or significant environmental damage.
2. Any type of violation not mentioned above severe enough to warrant a penalty assessment under category A.

Category B - \$2,000 to \$7,000 per day. Major violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

1. Discharges which likely caused or potentially would cause (undocumented) public health effects or significant environmental damage.
2. Creation of a serious hazard to public health or the environment.
3. Illegal discharges containing significant quantities or concentrations of toxic or hazardous materials.
4. Any type of violation not mentioned previously which warrants a penalty assessment under Category B.

Category C - \$500 to \$2,000 per day. Violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

1. Significant excursion of permit effluent limits.
2. Substantial non-compliance with the requirements of a compliance schedule.
3. Substantial non-compliance with monitoring and reporting requirements.
4. Illegal discharge containing significant quantities or concentrations of non-toxic or non-hazardous materials.
5. Any type of violation not mentioned previously which warrants a penalty assessment under Category C.

Category D - up to \$500 per day. Minor violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

1. Minor excursion of permit effluent limits.
2. Minor violations of compliance schedule requirements.
3. Minor violations of reporting requirements.
4. Illegal discharges not covered in Categories A, B and C.
5. Any type of violations not mentioned previously which warrants a penalty assessment under category D.

ADJUSTMENTS: The civil penalty shall be calculated by adding the following adjustments to the penalty amount determined above: 1) economic benefit gained as a result of non-compliance; 2) investigative costs incurred by the State and/or other governmental levels; 3) documented monetary costs associated with environmental damage.

ECONOMIC AND LEGAL CONSIDERATIONS: An adjustment downward may be made or a delayed payment schedule may be used based on a documented inability of the violator to pay. Also, an adjustment downward may be made in consideration of the potential for protracted litigation, an attempt to ascertain the maximum penalty the court is likely to award, and/or the strength of the case.

8.4 Mitigation Projects. In some exceptional cases, it may be appropriate to allow the reduction of the penalty assessment in recognition of the violator's good faith undertaking of an environmentally beneficial mitigation project. The following criteria should be used in determining the eligibility of such projects:

- A. The project must be in addition to all regulatory compliance obligations;
- B. The project preferably should closely address the environmental effects of the violation;
- C. The actual cost to the violator, after consideration of tax benefits, must reflect a deterrent effect;
- D. The project must primarily benefit the environment rather than benefit the violator;
- E. The project must be judicially enforceable;
- F. The project must not generate positive public perception for violations of the law.

8.5 Intent of Criteria/Information Requests. The criteria and procedures in this section are intended solely for the guidance of the State. They are not intended, and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the State.

8.6 Expedited Settlement Offer (ESO). Only enforcement cases classified as Category C or Category D violations may qualify for an ESO in lieu of the penalty process found in Subsection R317-1-8.3 Penalty Calculation Methodology. Except in cases where recidivism has been established by a pattern of non-compliance, an ESO may be used when violations are readily identifiable, readily correctable, and do not cause significant harm to human health or the environment.

- A. A violator is not compelled to sign an ESO. If the violator does not sign the ESO, then the penalty will be recalculated according to Subsection R317-1-8.3.
- B. The violator has 30 days total from receipt of the ESO to sign and return the ESO to the division. If the violator signs the ESO, then the violator must comply with its conditions within 15 days after receipt of the final ESO signed by the director, or as otherwise designated in the ESO. If the violator signs the ESO they agree to waive:
 - 1. The right to contest the findings and specified penalty amount;
 - 2. The opportunity for an administrative hearing pursuant to Section 19-1-301; and
 - 3. The opportunity for judicial review.
- C. Deficiency Form. A deficiency form is used to list the violations and corresponding penalties. Multiple violations at a site are totaled providing a final penalty commensurate with the extent of non-compliance. Penalties developed for the list of program violations on the deficiency form should be estimated at about 60% of the penalty as calculated in Subsection R317-1-8.3.



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MEMORANDUM

TO: Utah Water Quality Board

FROM: Judy Etherington
Wastewater Certification Program Coordinator

DATE: April 23, 2024

SUBJECT: Presentation of the Utah Wastewater Operator Certification Program
2023 Annual Report to the Water Quality Board

The Utah Water Quality Board has requested a yearly report of the Wastewater Operator Certification Program activities. The Utah Wastewater Operator Certification Program 2023 Annual Report is being presented by Mr. Chad Burrell, who currently serves as Chair of the Wastewater Operator Certification Council. The information contained within the attached report is for the 2023 calendar year.

Enclosure: Utah Wastewater Operator Certification Council 2023 Annual Report (DWQ-2024-002284)

DWQ-2024-002285



UTAH DEPARTMENT of
**ENVIRONMENTAL
QUALITY**

Utah Wastewater Operator Certification Program 2023 Annual Report

Sunrise from North Davis Sewer District

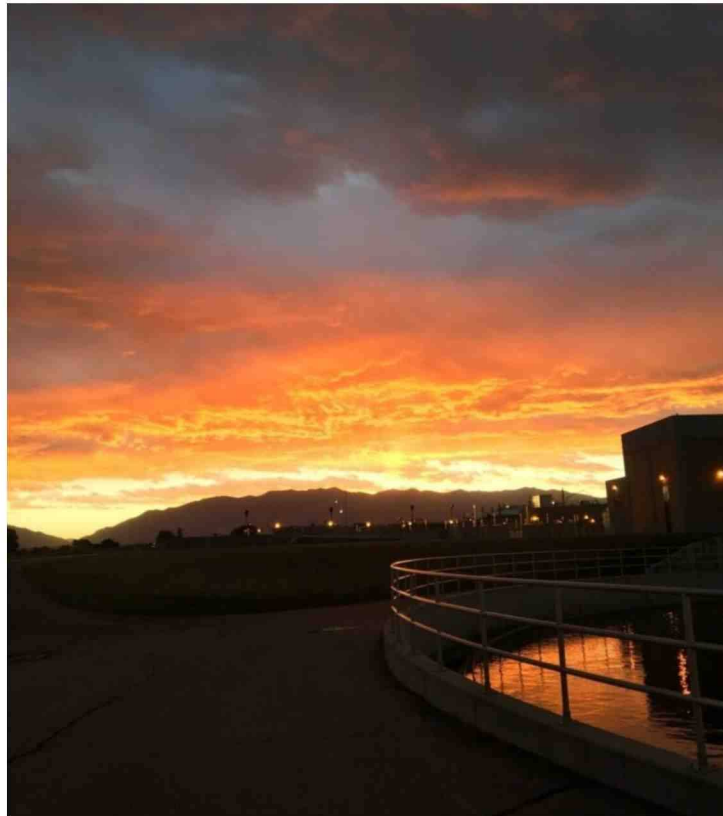


Photo courtesy of Brian Lamar

Prepared by
The Division of Water Quality

April 2024

UTAH WASTEWATER OPERATOR CERTIFICATION PROGRAM 2023 ANNUAL REPORT

Prepared by

Tessa Scheuer and Judy Etherington

Wastewater Operator Certification Program Coordinators

Utah Department of Environmental Quality

Division of Water Quality

195 North 1950 West

Salt Lake City, UT 84116

Presented to the Water Quality Board on April 23, 2024

by the Utah Wastewater Operator Certification Council

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Introduction

In March of 1991, following over 20 years of voluntary certification, wastewater works operator certification became mandatory. Wastewater operator certification is administered by the Division of Water Quality under rules adopted by the Utah Water Quality Board. The Board established the Utah Wastewater Operator Certification Council to provide guidance and stakeholder involvement in the program. During 2014, the Board adopted major revisions to Rule R317-10 that incorporated changes required by Senate Bill 21 (2012 General Session) which changed the duties and responsibilities of the environmental boards, their executive secretaries, and division directors. In response to those changes, the Board approved a revision of the rule that organizes the Utah Wastewater Operator Certification Council with members appointed by the Board to work in an advisory capacity to the director of the Division of Water Quality for the certification program.

THE UTAH WASTEWATER OPERATOR CERTIFICATION COUNCIL

On January 31, 2023, the terms of two council members expired. During the January 2023 Utah Water Quality Board meeting, the Board approved appointment of Dr. Ben Willardson, and reappointment of Phil Harold to fill the vacancies for the next 3-year term. The Council members serving during 2023 were:

Chad Burrell, Chair, represented certified wastewater treatment operators. He is the Operations and Safety Manager for Snyderville Basin Water Reclamation District and is certified as both a Grade IV Wastewater Treatment Operator and Grade IV Collection Operator. His term expires January 31, 2024.

Brian Lamar, Vice-chair, represented certified wastewater treatment operators. He currently works at North Davis Sewer District and is certified as a Grade IV Wastewater Treatment Operator, Grade IV Collections Operator, and Grade II Biosolids Land Application Operator. His term expires January 31, 2025.

Giles Demke, represented the management of municipal wastewater systems. He is the General Manager of the Mt. Olympus Improvement District and is certified as a Grade IV Wastewater Treatment Operator. His term expires January 31, 2025.

Phil Harold represented vocational training. He is the wastewater circuit rider for the Rural Water Association of Utah and is certified as both restricted Grade II Collection Operator and restricted Small Lagoon System Operator. His term expires January 31, 2026.

Rob Jaterka represented certified wastewater collection operators. He is the District Inspector for Magna Water District and is certified as both a Grade IV Collection Operator and Grade I Wastewater Treatment Operator. His term expires January 31, 2024.

Blaine Shipley, represented certified wastewater collection operators. He is employed as Plant Superintendent for Price River Water Improvement District and is certified as both a Grade IV Collection Operator and Grade IV Wastewater Treatment Operator. His term expires January 31, 2025.

Dr. Ben Willardson represented Utah universities. He teaches the water related courses at Utah Valley University. His term expires January 31, 2026.

The council held three meetings during the year to evaluate requests for continuing education courses, consider reciprocity requests, plan for administering exams, review exam scores and comment forms, and discuss ways to improve the certification program. All meetings continued to include participants using teleconferencing platforms, and most communications with the program coordinator were done virtually—striving for majority consensus before any actions were taken.

Examinations

The Division of Water Quality continued to maintain membership as a certifying authority with Water Professionals International (WPI), formerly the Association of Boards of Certification (ABC). Since 1972, Water Professionals International has been the central water industry authority that ensures that women and men in the industry are prepared to meet the standards that their communities can trust in through testing and certification services headquartered in Urbandale, Iowa. The role of WPI is to provide examination services to the Utah Wastewater Operator Certification program, which includes exam development, scoring, and compilation of exam results. A contract for exam services between WPI (ABC) and the Division of Water Quality is in effect for state fiscal years 2024-28. Exams were offered in conjunction with the Rural Water Association of Utah's Annual and Fall Conferences. Regularly scheduled Spring and Fall exam sessions were held in multiple locations. All sessions used the standard paper-based format (PBT).

The registration and attendance of the 2023 exam sessions are shown in Table 1. These totals include the traditional mandatory exams, as well as the voluntary ones that are available and provided by WPI, but are not required by Utah's wastewater operator certification program.

Table 1 - 2023 Exam Registration and Attendance

	Spring Exam Sessions		Fall Exam Sessions	
	March	April	September	November
Locations	St. George (in conjunction with RWAU Annual Conference)	Bluffdale (SVSD)	Layton (in conjunction with RWAU Fall Conference)	Bluffdale (SVSD)
		Ogden (CWSID)		Ogden (CWSID)
		Price (SEUHD)		Provo (HCH)
		Provo (UTHJB)		Richfield (CUHD)
		Salt Lake (DEQ)		Salt Lake (DEQ)
		St. George (ACSSD)		St. George (ACSSD)
				Vernal (TriCo HD)
Applications Received	94	257	131	220
Total Scored*	93	250	129	218

* Some individuals did not show up to take the exams at that time, but may have rescheduled for a future session using the previously ordered booklet.

EXAMINATION PROCEDURES

Exam sessions were proctored by members of DWQ staff, DEQ District Engineers, Local Health Department staff, current Council members, or other individuals delegated by Council members.

All examinations, regardless of grade, consist of 100 scored questions using a multiple-choice format. Answer sheets for PBT format are shipped to WPI for scoring. WPI compiles the results for each session and returns them to DWQ by electronic format for recording in the database and dissemination to the examinees. Each examinee is provided an individual statistical report, and variations of summary reports showing the cumulative results of the general areas detailed in the need-to-know criteria for all Utah examinees taking the same test during that session. Current WPI exams use a cut score of 70 for passing an exam.

EXAM CONTENT

The exams administered in 2023 were compiled from WPI's data bank, including the Small Lagoon System exam, which is a customized exam using questions from the same data bank, but developed with 50 Wastewater Treatment I and 50 Collection I items to meet the need of smaller wastewater systems in Utah. The wastewater treatment and collection exams are "WPI 2019 standardized" exams which meet ISO 17024 standard to ensure the validity, reliability, and legal defensibility of the certification exams. Exam questions are reviewed by WPI's technical committees on a regular basis to ensure applicability to current wastewater technologies and processes. The Collection and Wastewater Treatment exams also have ten unscored, unidentified questions that are being pre-tested to see whether they would be good questions to use in future exams. Utah's participation in the pre-testing of potential questions allows our operators' knowledge, skills, and abilities to be included in the evaluation of applicability for future exams. Cumulative Totals for the 2023 mandatory wastewater exam classifications are shown in Table 2.

Table 2 - Cumulative 2023 Exam Scores (Mandatory)

Exam-Grade	Total Examinees	High Score	Low Score	#Pass (≥70%)	Pass %
C-I	35	86	25	20	57
C-II	106	89	35	49	46
C-III	42	91	40	11	26
C-IV	119	92	39	34	29
SLS-I	15	80	48	10	67
T-I	99	89	26	29	29
T-II	105	89	34	25	24
T-III	35	84	49	6	17
T-IV	103	81	41	22	21
Totals	659			206	31

Three voluntary classifications of wastewater-related certifications were again offered in 2023. They include Biosolids Land Applier Grades I - II, Wastewater Laboratory Analyst Grades I - IV, and Plant Maintenance Technologist Grades I - III. Mandatory exams include Collections Grades I - IV, Wastewater Treatment Grade I - IV, and Small Lagoons System Grade I.

This is the fourth year using the 2019 version standardized exams that are based on the same need-to-know criteria as the previous 2017 version. As predicted by WPI, the overall passing rates may dip when the new forms are introduced, but without any prerequisites for testing, there is really no basis for comparison. Table 3 shows overall passing rates for mandatory exams for the past five years.

Table 3 - Passing Rate Comparison for Mandatory Exams for 2019 through 2023

Exam-Grade	2019 Pass %	2020 Pass %	2021 Pass %	2022 Pass %	2023 Pass %
C-I	62	59	48	66	57
C-II	46	35	43	36	46
C-III	24	21	5	30	26
C-IV	20	26	30	30	29
SLS-I	71	52	71	68	67
T-I	23	30	29	29	29
T-II	26	25	25	32	24

Exam-Grade	2019 Pass %	2020 Pass %	2021 Pass %	2022 Pass %	2023 Pass %
T-III	13	6	18	13	17
T-IV	19	13	12	12	21
Overall	29	27	27	30	31

EXAMINATION REVIEW

No further changes have been made to the certification rule since it was amended January 24, 2018, removing the option of a post-exam review of actual questions and answers by the examinees. The rule still provides the opportunity for the Council to review the questions, along with the WPI accepted answers, for any questions for which a comment form was submitted during the testing sessions. This provides an opportunity for the Council to respond directly to the examinee's comment and also evaluate whether a recommendation should be made to WPI regarding the validity of the question in future exams. Responses from the Council to the comments received are sent to the individuals following the review. In a few instances, the Council requested clarification or further review of the question item by WPI. Each individual was previously provided a statistical breakdown of their proficiency in the areas of testing as described in the published need-to-know criteria. The examinee, as well as those assisting them in their exam preparations, are able to use those results to focus study efforts for future testing opportunities.

Training

COOPERATION WITH TRAINING PROVIDERS

During 2023, more modifications were made to most of the certification-related training classes offered through cooperative efforts with the Water Environment Association of Utah or the Rural Water Association of Utah so that they could be delivered in-person, virtually, or in a dual format. Division of Water Quality staff and Certification Council members participated as instructors and presenters at conferences, seminars, and training sessions which provided training to wastewater personnel. The objective of these training opportunities was to facilitate compliance with UPDES permits, review subject matter in preparation for operator examinations, and earn required continuing education credits for renewals.

Some council members and staff also continue supporting the Utah Water and Wastewater Training Coalition providing a centralized calendar of seminars and training to make it easier for water and wastewater professionals to find local training and continuing education for their respective fields. The council continues to support participation in an “on-line” calendar format. This calendar has facilitated the communication and coordination between the members of the Coalition as well as the operators. Division of Water Quality staff and representatives of the member organizations maintain their respective calendar information. Members of the Coalition are: Division of Drinking Water, Division of Water Quality, American Water Works Association, Water Environment Association of Utah, Rural Water Association of Utah, American Backflow Prevention Association, and Rural Community Assistance Corporation.

Individual wastewater facility owners and managers continue to provide updated training for their personnel either “in house” or using professional training and assistance providers, including U. S. Environmental Protection Agency resources. Training is often conducted through virtual meeting platforms, as well as in person, allowing interactive participation by all. Dedication and ingenuity were definitely observed while meeting compliance, certification, and safety requirements. The majority of those not renewing particular certifications were no longer in the industry due to retirement or change of employment, or had advanced to a higher certification and no longer needed to maintain the lower certifications.

Renewal and Compliance

Wastewater Operator Certifications may be valid for up to three years. Certifications will expire on December 31st of the expiration year unless they have been renewed. Continuing education during the three-year period prior to the expiration date, in wastewater-related subject matter, is a prerequisite for renewal. The number of credits required is dependent upon the grade of certification being renewed. Reinstatement of the certificate is also allowed within the year following expiration, provided that the operator has earned the required training credits prior to the certificate's expiration. All publicly-owned wastewater works are required to have adequately certified individuals "in charge" of both the wastewater treatment and collection systems as specified in Rule R317-10 Certification of Wastewater Works Operators. The statistics in Table 4 represent the certification actions taken during 2023 to comply with various aspects of the certification rule.

Table 4 - Certification Actions for 2023

Action	Number
Number of "new operators" added to wastewater certification database during 2023	150
Certificates expired 2022, reinstated prior to December 31, 2023 deadline	46
Certificates expired 2022, reinstated with "Change in Status" prior to December 31, 2023 deadline	3
"Change in Status" certificates issued for current certifications	12
Certificates expiring December 31, 2023 – notices mailed March 2023	595
Certificates expiring December 31, 2023 – notices mailed September 2023	439
Certificates expiring 2023 renewals received prior to December 31, 2023	354
Certificates expiring 2023, renewed along with "Change in Status" requests	13
Early renewals for certificates expiring after 2023	5
Early renewal with "Change in Status" for certificates expiring after 2023	4
Certificates issued by "reciprocity" (equivalent certification from another state)	5
Issued Letter-of-Intent to issue certificate by "reciprocity"	0
Number of "reciprocity" requests denied in 2023	0
Number of "active" individuals in database (participated in certification within last 3 years)	1819
Number of certified wastewater operators as of January 1, 2024(all categories)	1,342
Number of certified "treatment" operators	541
WW Treatment Grade I	131
WW Treatment Grade II	159
WW Treatment Grade III	47
WW Treatment Grade IV	252
Number of certified "collection" operators	947
Collection Grade I	112
Collection Grade II	306
Collection Grade III	83
Collection Grade IV	489
Number of certified "small lagoon system" operators	130
Total number of current wastewater operator certifications as of January 1, 2024	1,747
Number of operators holding two classes of certifications, but not more than two during 2023	270
Number of operators holding three classes of certifications	32
Total number of current voluntary certifications (Biosolids Land Applier, WW Laboratory, Plant Maintenance)	98
Total number of publicly owned wastewater collection systems	197
Municipal Collection Class I systems	96

Action	Number
Municipal Collection Class II systems	50
Municipal Collection Class III systems	27
Municipal Collection Class IV systems	24
Total number of publicly owned wastewater treatment facilities	124
Municipal Treatment Class I facilities	73
Municipal Treatment Class II facilities	9
Municipal Treatment Class III facilities	22
Municipal Treatment Class IV facilities	20
Municipal Small Lagoon System I facilities (combination Treatment I & Collection I included in the above numbers)	63

As an alternative to employing a certified operator as Direct Responsible Charge (DRC), the owner of a municipal wastewater system may choose to contract with an individual or another entity with an appropriately certified operator to meet the certification requirement. New contracts to meet the requirements for Direct Responsible Charge (DRC) operators were submitted and approved during 2023 for Henefer Town and Emigration Improvement District. Other contracts in place during 2023 were for Canyon Land Improvement District, Little Mountain Service Area, Mexican Hat Special Service District, North Fork Special Service District, North Village Special Service District, Oakley City, Powder Mountain Water and Sewer Improvement District, Strawberry Lakeview Special Service District, Twin Creeks Special Service District, and Wolf Creek Water and Sewer Improvement District.

Certification Council Meetings

There were three Council meetings held during 2023. The following items may be of special note:

- The Council members discussed the consistently low exam scores, but also noted that WEAU and individual facilities are being more aggressive in providing wastewater-specific training to operators. Although the training isn't directly geared towards passing exams, it should help operators better understand the many different facets of wastewater collection and treatment processes.
- There were a record 659 exams administered during the year.
- Applications were received from operators requesting reciprocal certificates. Their previous certificates were issued from Florida, Colorado, and California. All requests were approved with certificates issued.
- Accommodations were made by council members and staff to administer a couple exams orally in conjunction with regular testing dates. All orally administered exams required at least one council member to participate, along with one other member or staff to verify accuracy in reading exam items.
- The Council heard a request for acceptance of “wastewater-related” experience being adequate to meet the minimum requirements of an operator to change the status, restricted to unrestricted, when the experience submitted was not directly related to the classification of the certificate. It was determined that the rule does not currently require that the experience be “respectively” in collections or wastewater treatment, as some other states require. When the rule is opened for review in the future, this may be addressed if the council determines it to be important at that time.
- The Council meetings were conducted both in person and virtually to accommodate council members’ schedules. It allowed for discussion of the necessary agenda items, but also reduced travel for the participants. There was a quorum present at each meeting.
- There was discussion about whether leadership training courses should receive full credit. Some courses being submitted for wastewater credit are long enough that an operator could receive all of the required continuing education credit for the wastewater certification renewal from a leadership course and not have any “wastewater-related” training. The current database doesn’t allow for categories of training to be designated and tracked separately. At present, full credit is given for the leadership courses, with the expectation that those attending those courses are probably already attending other relevant training.
- During the contract renewal process with WPI, the Division of Water Quality pursued plans to implement the computer-based testing (CBT) through PSI testing services. There seem to be advantages for reduced workload for DWQ staff and more flexibility for operators. A proposed fee schedule for FY2025, including the CBT exam process, was drafted and opened to public comment. It will be submitted to the legislature for approval when it convenes in 2024. Several discussions and meetings of DWQ staff with WPI were held to work out the exam process and prepare for implementation in 2024.
- The Council reviewed several online courses geared towards helping operators obtain wastewater training. Those included American Water College, Water Otter, University of Florida TREEO, and NEZAT. Topics related to wastewater were approved.