State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
Director

Utah Water Quality Board Meeting
DEQ Board Room 1015
195 North 1950 West
Salt Lake City, UT 84116

February 26, 2020
Meeting Begins at 8:30 am

AGENDA

Water Quality Board Meeting – Roll Call

A. Minutes:
Approval of minutes for January 22, 2020 Water Quality Board Meeting ... Jennifer Grant

B. Executive Secretary's Report .....Erica Gaddis

C. Funding Requests:
1. Financial Report ..... Emily Cantón
2. Wellington City – Request for Hardship Design Grant ..... Skyler Davies
3. Millville City – Funding Request Introduction.....Ken Hoffman
4. Lewiston City – Funding Request Introduction.....Beth Wondimu
5. South Davis Sewer District – Reauthorization Introduction ..... Ken Hoffman

D. Enforcement:
1. Pitman Settlement Agreement .....Sarah Ward

E. Public Comment Period

F. Meeting Adjournment

Next Meeting March 25, 2020 at 8:30 am
DEQ Board Room 1015
195 North 1950 West
Salt Lake City, UT 84116

Revised 2/6/2020
DWQ-2020-002552
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 lwyss@utah.gov at least five working days prior to the scheduled meeting.

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MINUTES

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

UTAH WATER QUALITY BOARD
195 North 1950 West
Room 1015
Salt Lake City, UT 84116

January 22, 2020
8:30 am

UTAH WATER QUALITY BOARD MEMBERS PRESENT

Scott Baird	Mike Luers
Steven Earley	Emily Niehaus (Via Phone)
Gregg Galecki	James Vanderslice
Brandon Gordon	James Webb
Jennifer Grant	

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Marsha Case	Ken Hoffman
Skyler Davies	Brenda Johnson
Judy Etherington	John Mackey
Angela Gunderson	Jerry Rogers
James Harris	Beth Wondimu

OTHERS PRESENT

Jeanette Johnson	
Donna Spangler	EDO
Melissa Reynolds	Holland & Hart
Nathan Bracken	Smith Hartvigsen
Rich Mickelsen	Timpanogos Special Service District
Brian Selck	Timpanogos Special Service District
Alejandra Maldonado	Utah Department of Health
Nathan LaCross	Utah Department of Health
Cory Christiansen	Water Works Engineering

Ms. Grant called the Water Quality Board meeting to order at 8:30 AM and took roll call for the members of the Board and audience.

APPROVAL OF MINUTES OF NOVEMBER 6, 2019 MEETING

Motion: Mr. Earley moved to approve the minutes of the November 6, 2019 meeting. Mr. Luers seconded the motion. The motion passed unanimously.

EXECUTIVE SECRETARY REPORT

National Level

- Dr. Gaddis updated the Board regarding the comments submitted to the EPA for the National Water Reuse Action Plan.
- Dr. Gaddis also updated the Board regarding the comments submitted to the EPA for the Water Quality Trading Baseline Policy.
- The EPA is scheduled to release lake numeric nutrient criteria; this is an update to the 2000-2001 criteria.

State Level

- Dr. Gaddis reported that the Utah Legislative session begins on January 27th.
    - There will be a House Bill introduced to modernize and align the language of the Title 19-5 Water Quality Act Code.
    - HB26 – Jordan River Recreation Area Funding Management
    - HB39 – Agricultural Water Optimization Task Force Amendments
    - HB41 – State Water Policy Amendments
    - SB26 – Water Banking Amendments
- The Division was successful in getting a water quality 3 million dollar recommendation for appropriation in the Governor's budget. This is a joint initiative with the Department of Agriculture for an agriculture water improvement project.

Division Level

- Dr. Gaddis updated the Board regarding the HAB Guidance. Dr. Kate Fickas Naleway and Dr. Nathan LaCross will be presenting this update to the Board as indicated in the packet.
- Both the Gray Water Rule Making and the Public Notice Rule Making are still out for public comment. Those items will be back before the Board in March for the final rule making.
    - The Gray Water Rule Making wording decision made by the Board at the November 2019 meeting has been changed from "May" to "Should" due to DAR guidance.
- Dr. Gaddis updated the Board regarding the Storm Water – Post Construction Retention Standard aspect of the MS4 permit.

- There will be three new projects presented to the Board as indicated in the packet. These projects will be introduced at the February meeting. It is recommended that the Water Quality Board have a Finance Subcommittee meeting prior to the March meeting when the projects come before the Board for funding.
    - There have also been several other new funding requests from cities around the state.
- Dr. Gaddis informed the Board that there will be an enforcement action coming before them regarding Pitman Farms in Moroni for $59,000 cash and approximately $43,000 in reimbursement costs to the Division.
- The Water Quality Board appreciation gifts will be given to the board members at the February meeting.
- Dr. Gaddis reported that in connection with the Water Quality Board Continuous Improvement Project there will be a survey emailed to board members.

INFORMATIONAL ITEMS

Water Banking Legislation: Mr. Nathan Bracken with Smith Hartvigsen presented the Board with Water Banking Legislation, SB 26.

Utah's Recreational Health Guidance For Harmful Algal Blooms Update: Dr. Kate Fickas Naleway with Water Quality and Dr. Nathan LaCross with the Utah Health Department presented the Recreational Health Guidance for Harmful Algal Blooms.

FUNDING REQUESTS

Financial Report: Mr. Rogers updated the Water Quality Board on the Loan Funds and Hardship Grant Funds, as indicated in the packet.

Summary of Current Financial Assistance Applications: Mr. Mackey updated the Water Quality Board on the Project Assistance Applications that were received in December 2019.

New Projects

- Wellington City – Hardship Design Grant
- Millville City – Construction Assistance
- Lewiston City – Construction Assistance

Existing Project

- South Davis Sewer District – Construction Assistance

OTHER BUSINESS

Utah Wastewater Operator Certification Council Recommendations. Ms. Etherington came before the Water Quality Board to make recommendations for appointments to the Utah Wastewater Operator Certification Council for February 1, 2020 through January 31, 2023.

Motion: **Mr. Luers moved to reappoint Dr. Jennifer Weidhaas, representing universities in Utah; and Phil Harold, representing vocational training to the Wastewater Operator Certification Council. Mr. Galecki seconded the motion. The motion passed by a majority vote with Ms. Niehaus objecting.**

Public Comments:

- Rich Mickelsen with Timpanogos Special Service District spoke about HABs signage around Utah Lake and urged Water Quality to follow guidelines set in place.

Meeting Adjournment

Motion: **Mr. Gordon moved to adjourn the meeting. Mr. Earley seconded the motion. The motion passed by a majority vote with Ms. Niehaus objecting.**

To listen to the full recording of the Board meeting go to: http://www.utah.gov/pmn/index.html

Next Meeting – February 26, 2020 at 8:30 am
195 North 1950 West
Room 1015
Salt Lake City, UT 84116

_____
Jennifer Grant, Chair
Utah Water Quality Board

LOAN FUNDS
FINANCIAL STATUS REPORT
FEBRUARY 2020

STATE REVOLVING FUND (SRF)	State Fiscal Year 2020	State Fiscal Year 2021	State Fiscal Year 2022	State Fiscal Year 2023	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026
Funds Available							
2016 - 2019 Capitalization Grants	24,671,801	-	-	-	-	-	-
2017 - 2019 State Match	4,800,000	-	-	-	-	-	-
Future Capitalization Grants (estimated)	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000
Future State Match (estimated)	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000
SRF - 2nd Round	85,090,030	105,055,417	43,702,114	2,565,540	(22,138,827)	(18,340,768)	8,419,247
Interest Earnings at 2.866%	1,016,223	3,011,203	1,252,634	73,536	-	-	241,321
Loan Repayments	4,702,658	14,684,494	18,091,792	17,121,097	17,247,059	17,160,015	15,904,662
Total Funds Available	129,880,712	132,351,114	72,646,540	29,360,173	4,708,232	8,419,247	34,165,230
Project Obligations							
Duchesne City	(27,295)	-	-	-	-	-	-
Logan City	(11,000,000)	(23,000,000)	(11,131,000)	-	-	-	-
Moab City	(80,000)	-	-	-	-	-	-
Salem City	(469,000)	-	-	-	-	-	-
Loan Authorizations							
Central Valley Water Reclamation Facility	(5,000,000)	(15,000,000)	(23,850,000)	(21,250,000)	-	-	-
Provo City	-	(15,000,000)	(25,000,000)	(23,000,000)	(15,800,000)	-	-
*South Davis Sewer District (with NPS)	(6,000,000)	(20,000,000)	(2,851,000)	-	-	-	-
South Salt Lake City	(2,249,000)	(2,249,000)	(2,249,000)	(2,249,000)	(2,249,000)	-	-
Planned Projects							
Future Project Reserve	-	(5,000,000)	(5,000,000)	(5,000,000)	(5,000,000)	-	-
*Millville City	-	(8,400,000)	-	-	-	-	-
Total Obligations	(24,825,295)	(88,649,000)	(70,081,000)	(51,499,000)	(23,049,000)	-	-
SRF Unobligated Funds	$ 105,055,417	$ 43,702,114	$ 2,565,540	$ (22,138,827)	$ (18,340,768)	$ 8,419,247	$ 34,165,230

UTAH WASTEWATER LOAN FUND (UWLF)	State Fiscal Year 2020	State Fiscal Year 2021	State Fiscal Year 2022	State Fiscal Year 2023	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026
Funds Available							
UWLF	20,400,624	13,089,215	10,548,007	13,945,613	16,893,901	19,825,492	22,756,526
Sales Tax Revenue	-	3,587,500	3,587,500	3,587,500	3,587,500	3,587,500	3,587,500
Loan Repayments	899,441	3,357,992	3,031,806	2,582,488	2,565,791	2,565,235	2,418,354
Total Funds Available	21,300,065	20,034,707	17,167,313	20,115,601	23,047,192	25,978,226	28,762,380
General Obligations							
State Match Transfers	(6,400,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)	(1,600,000)
DWQ Administrative Expenses	(810,850)	(1,621,700)	(1,621,700)	(1,621,700)	(1,621,700)	(1,621,700)	(1,621,700)
Project Obligations							
None at this time	-	-	-	-	-	-	-
Loan Authorizations							
Kane Co Water Conservancy Dist (Duck Creek)	(1,000,000)	-	-	-	-	-	-
Planned Projects							
*Millvile City	-	(3,200,000)	-	-	-	-	-
*Lewiston City	-	(3,065,000)	-	-	-	-	-
Total Obligations	(8,210,850)	(9,486,700)	(3,221,700)	(3,221,700)	(3,221,700)	(3,221,700)	(3,221,700)
UWLF Unobligated Funds	$ 13,089,215	$ 10,548,007	$ 13,945,613	$ 16,893,901	$ 19,825,492	$ 22,756,526	$ 25,540,680

*WQB Agenda Items

LOAN FUNDS
FINANCIAL STATUS REPORT
FEBRUARY 2020

Contingency Calculation for Authorized Projects							
Total Unobligated Loan Funds	$ 118,144,632	$ 54,250,121	$ 16,511,153	$ (5,244,926)	$ 1,484,724	$ 31,175,773	$ 59,705,910
25% Contingency for Authorized Projects	$ (3,562,250)	$ (13,062,250)	$ (13,487,500)	$ (11,624,750)	$ (4,512,250)	$ -	$ -
Remaining Balance	$ 114,582,382	$ 41,187,871	$ 3,023,653	$ (16,869,676)	$ (3,027,526)	$ 31,175,773	$ 59,705,910

*WQB Agenda Items

HARDSHIP GRANT FUNDS
FINANCIAL STATUS REPORT
FEBRUARY 2020

HARDSHIP GRANT FUNDS (HGF)	State Fiscal Year 2020	State Fiscal Year 2021	State Fiscal Year 2022	State Fiscal Year 2023	State Fiscal Year 2024	State Fiscal Year 2025	State Fiscal Year 2026
Funds Available							
Beginning Balance		2,955,095	4,397,233	5,053,027	5,674,476	6,262,215	6,813,587
Federal HGF Beginning Balance	6,702,128	-	-	-	-	-	-
State HGF Beginning Balance	1,988,697	-	-	-	-	-	-
Interest Earnings at 2.866%	103,794	84,702	126,038	144,835	162,648	179,494	195,298
UWLF Interest Earnings at 2.866%	243,643	375,176	302,338	399,723	484,230	568,258	652,270
Hardship Grant Assessments	632,902	974,418	854,384	731,418	623,670	514,199	396,397
Interest Payments	149,557	403,983	373,034	345,473	317,191	289,421	261,668
Advance Repayments	-	880,500		-	-	-	-
Total Funds Available	9,820,721	5,673,874	6,053,027	6,674,476	7,262,215	7,813,587	8,319,220
Financial Assistance Project Obligations							
Eagle Mountain City - Construction Grant	(510,000)	-	-	-	-	-	-
Emigration Sewer Imp Dist - Planning Grant	(26,158)	-	-	-	-	-	-
Green River	(54,000)	-	-	-	-	-	-
Kane Co Water Conservancy Dist (Duck Creek) - Hardship Grant	(2,034,500)	-	-	-	-	-	-
USU Extension - Hardship Grant	(3,083)	-	-	-	-	-	-
Wasatch Co. Study	(100,000)						
*Wellington City - Planning Advance	(44,026)	-	-	-	-	-	-
Non-Point Source/Hardship Grant Obligations							
Fitzgerald ARDL interest-rate buy down	(51,056)	-	-	-	-	-	-
McKees ARDL interest-rate buy down	(55,261)	-	-	-	-	-	-
Munk Dairy ARDL interest-rate buy down	(16,017)						
(FY11) Gunnison Irrigation Company	(48,587)	-	-	-	-	-	-
(FY12) Utah Department of Agriculture	(385,393)	-	-	-	-	-	-
(FY13) DEQ - Great Salt Lake Advisory Council	(173,009)	-	-	-	-	-	-
(FY15) DEQ - Ammonia Criteria Study	(46,630)	-	-	-	-	-	-
(FY15) DEQ - Nitrogen Transformation Study	(14,500)	-	-	-	-	-	-
(FY17) DEQ - GW Quality Study	(5,051)	-	-	-	-	-	-
(FY17) DEQ - Utah Lake Water Quality Study	(206,150)	(172,749)	-	-	-	-	-
UofU - Utah Lake Sediment - Water Nutrient Interactions	(70,785)	-	-	-	-	-	-
BYU - Bioassays to Investigate Nutrient Limitation	(41,798)	(26,282)	-	-	-	-	-
USU - Historic Trophic State/Nutrient Concentrations Paleo	(155,766)	(77,609)	-	-	-	-	-
FY 2015 - Remaining Payments	(4,223)	-	-	-	-	-	-
FY 2016 - Remaining Payments	(2,386)	-	-	-	-	-	-
FY 2017 - Remaining Payments	(29,723)	-	-	-	-	-	-
FY 2018 - Remaining Payments	(151,640)	-	-	-	-	-	-
FY 2019 - Remaining Payments	(602,220)	-	-	-	-	-	-
FY 2020 - Remaining Payments	(803,167)	-	-	-	-	-	-
Future NPS Annual Allocations	-	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
Planned Projects							
*Lewiston City - Hardship Design Advance	(186,000)	-	-	-	-	-	-
*Millville City - Hardship Design Advace	(694,500)						
*Wellington City - Hardship Design Grant	(350,000)						
Total Obligations	(6,865,626)	(1,276,641)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
HGF Unobligated Funds	$ 2,955,095	$ 4,397,233	$ 5,053,027	$ 5,674,476	$ 6,262,215	$ 6,813,587	$ 7,319,220

*WQB Agenda Items

State of Utah
Wastewater Project Assistance Program
Project Priority List

As of Feb 18 2020

Rank	Project Name	Funding Authorized	Total Points	Point Categories			
				Project Need	Potential Improvement	Population Affected	Special Consideration
1	Provo City	x	144	50	24	10	60
2	Central Valley Water Reclamation Facility	x	143	50	23	10	60
3	South Davis Sewer District	x	138	50	18	10	60
4	Millville City		114	45	46	3	20
5	Wellington City		74	10	21	3	40
6	Lewiston City		67	10	16	1	40
7	Kane County Water Conservancy District (Duck Creek)	x	62	40	21	1	0

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WATER QUALITY BOARD
FEASIBILITY REPORT FOR HARDSHIP DESIGN GRANT
AUTHORIZATION

APPLICANT:	Wellington City 150 West Main Wellington, Utah 84542 Telephone: (435) 637-5213
PRESIDING OFFICIAL:	Joan Powell, Mayor
TREASURER/RECORDER:	Glenna Etzel, Recorder
CONSULTING ENGINEER:	Jesse Ralphs, PE Sunrise Engineering, Inc. Telephone: (435) 743-6151 25 East 500 North Fillmore, Utah 84631

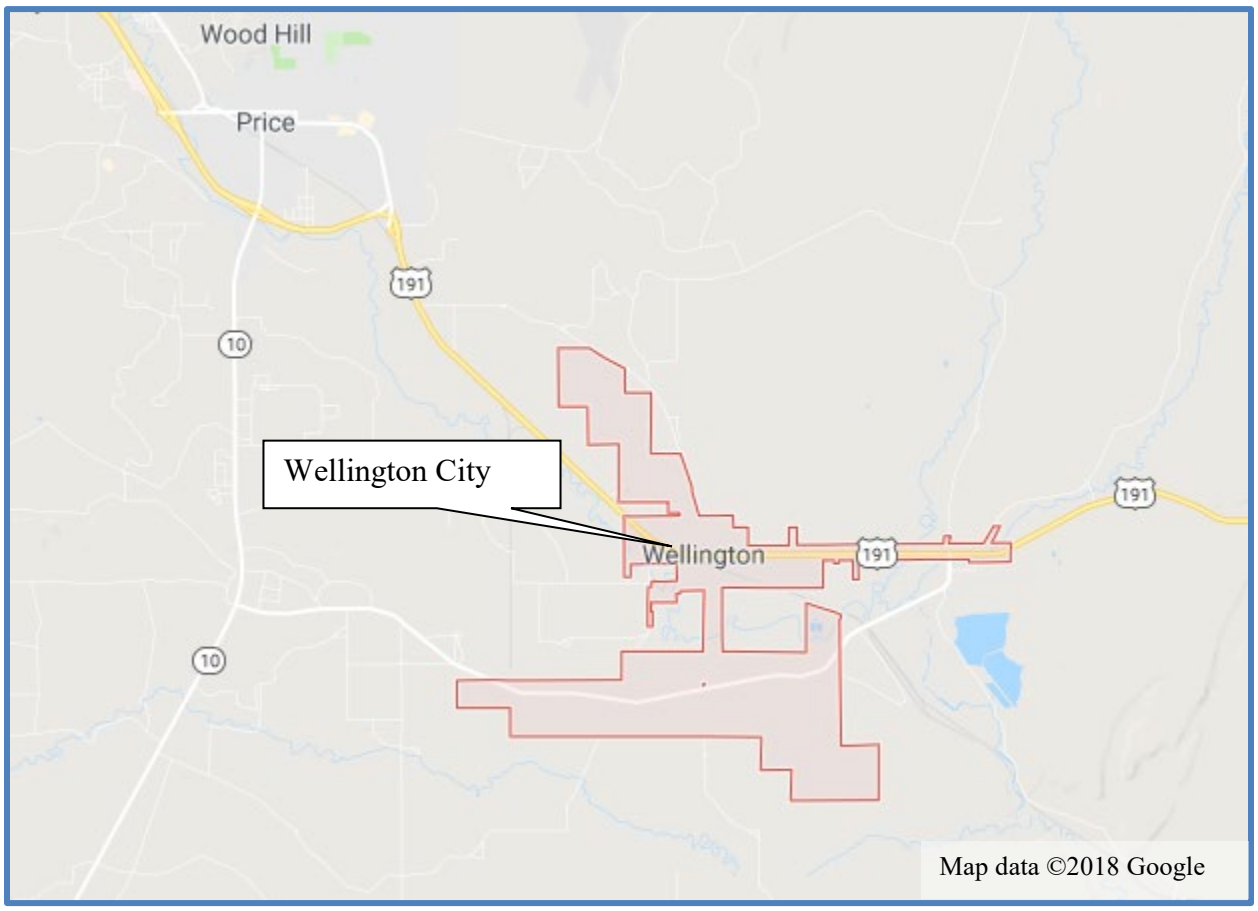
APPLICANT'S REQUEST:

Wellington City is requesting a hardship design grant in the amount of a $350,000 for design and other pre-construction costs related to replacement and renewal of major portions of the City's sewer system.

APPLICANT'S LOCATION:

Wellington City is the eastern-most city in the Price Valley about 125 miles southeast of Salt Lake City Utah.

FIGURE 1-MAP OF APPLICANT'S LOCATION



BACKGROUND:

Wellington City's sewer collection system is comprised of clay, concrete, and PVC pipe. The clay pipe and concrete pipe make up the majority of the system, and the PVC pipe is found primarily in the newer developments. The City has been aware for several years of severe corrosion and pipe failures in the existing concrete pipes, and widespread cracking, root intrusion, holes, and other failures in throughout the existing clay pipe. In response to these system concerns, the City has been investigating the extent of the degradation and planning for system improvements over the past few years.

The City began hiring a sewer camera and cleaning company to clean and video the existing collection system in 2011, and since that time has had the entire system cleaned and recorded. Areas of severe degradation and concern have been recorded multiple times during this period. The City obtained a $32,000 advance from the Water Quality Board, of which $31,000 was disbursed, and commissioned a Wastewater Master Plan in 2015. The plan documented the condition of the system and recommended immediate repairs to the more critical sections of the system. The City commissioned a follow-up project scoping assessment in August 2017 to summarize the recommendations, provide updated cost estimates, and investigate additional areas of concern for possible repair or replacement.

On December 3, 2018 the Water Quality Board authorized a construction advance of $96,600 to Wellington City to complete emergency repairs to a collapsed portion of the sewer main in Highway 6. As part of that authorization the board included a special condition that: "The City must provide a schedule for implementation of the necessary sewerage system improvements identified in the master plan within 6 months of authorization. If milestones provided by the City are not met, the City must repay the advance within 1 year." The board as part of the motion modified the special condition to include that the applicant must return to the board and present that schedule to the Board.

Wellington City completed the emergency repair under budget for a total cost of $52,573.86, and at the August 2019 Water Quality Board meeting provided the update the Board requested at authorization. The update is included the status of that project as well as their anticipated schedule going forward.

The City has reevaluated the recommendations that were provided in the previous master plan and have identified areas of the system that need to be repaired or replaced. The design being funded by this request would address those necessary repairs and improvements. The construction funding is being sought from other sources including the Permanent Community Impact Board (CIB) and United States Department of Agriculture, Rural Development Program (USDA RD).

PROJECT NEED:

Wellington City has experienced failures of its concrete and clay sewer lines some resulting in collapsed sections of pipe underneath Highway 6. As an example a section of the line collapsed under Hwy 6 around 2011, prompting an emergency repair that was performed using pipe bursting. The recently funded emergency repair prevented another collapse under the Highway. Many areas of the collection system are in need of repair or replacement to prevent future failures of the collection system.

The recommended collection system repairs include replacing approximately 31,000 feet of sewer lines, in various stages of failure. The failed pipes are primarily clay and concrete pipe,

and there is a small amount of PVC pipe that is also in a state of operational failure. As part of the recommended improvements, all manholes within the replaced sections would also be replaced, and sewer laterals that connect to the replaced pipes would be replaced to the property lines. In addition to replacing the failed sections of the existing system, the City is considering, if sufficient funding is obtained, installing a new force main to serve a section of the City that is currently not connected to the sewer and are susceptible to flooding from the nearby Price River.

PROJECT DESCRIPTION:

Wellington City has been evaluating the condition of the system, performing feasibility assessments of various alternatives, and developing a plan for addressing the system failures. During this process, the City has prioritized the recommended improvements as follows:

1. Remediate the failing concrete sewer pipes in Main Street/Highway 6 (~6,400 feet)
2. Replace the failing Vitrified Clay Pipe (VCP) throughout the core of the system (~19,600 feet)
3. Replace the failing PVC Pipe (Improperly installed/bedded) (~4,800 feet)

The total estimated cost of these improvements is $6.8 Million. The City has considered various phasing options, but in the end has determined that the most cost-effective approach in the long run will be to address all of the significant deficiencies now rather than put them off for future administrations to deal with. Some of the repairs will be completed by lining existing pipe, and others by outright replacement.

ALTERNATIVES EVALUATED:

Wellington City has evaluated several alternatives including:

1. Replacement of failed concrete pipe in HWY 6 as well as limited other failed pipes.
2. Replacement of clay pipes as well as alternative 1 above.
3. Replacement of all Non-PVC pipes and replacement of failed PVC pipes.

Wellingtons preferred alternative is alternative 3 as it would bring the system back to good condition, and ensure service to the entire city. The intent of this request would be to fund the design for the entire project, and then they would complete as much as possible with the funding they receive from other sources. If they end up phasing the project the design could still be used with minor modifications for each phase of the project.

POSITION ON PROJECT PRIORITY LIST:

This project is ranked 5th out of 8 projects on the Wastewater Treatment Project Priority List.

POPULATION GROWTH:

The City estimates that the population will grow at around 1%:

Year	Population
2010	1,676
2018	1,701
2020	1,735
2040	2,100

PUBLIC PARTICIPATION:

The City held a public information meeting in November 2017 and has been on the AOG local capital improvements priority list for sewer improvements for the past year. The City also met with representatives of UDOT in March 2018 to discuss the criteria for performing sewer replacement work within the UDOT right of way. The City held a public hearing on September 11, 2019 during which they discussed their requested funding and outlined the project for its citizens.

IMPLEMENTATION SCHEDULE:

Apply to WQB for Design Advance:	February 26, 2020
Start Design	2020
Start Construction	2020
Complete Construction	2022

APPLICANT'S CURRENT USER CHARGE:

The 2017 median adjusted gross income (MAGI) for Wellington City is $35,187, which is 77% of the state average MAGI. A city with less than 80% of the statewide MAGI is a common indicator used nationally of income hardship consideration. The City currently charges $29 per connection, which translates to 0.99 % of the MAGI.

COST ESTIMATE:

Planning (EA/PER)	$40,000
Pre-Construction Engineering	$388,000
Special Engineering	$21,000
Engineering CMS/Other	$520,000

Legal and Bonding	$20,000
Interim Financing Costs (BAN -USDA-RD)	$50,000
Construction	$4,800,075
Contingency	$960,015
Total Project Cost:	$6,799,090

EFFORTS TO SECURE FINANCING FROM OTHER SOURCES:

Wellington City is in the process of applying for construction assistance from both the Permanent Community Impact Board (CIB) and USDA Rural Development (RD). Together, these applications are expected to amount to $3,800,000 in low interest loan and $2,600,000 in grant, which will result in a sewer services fee of $54.49/ERU/Month, which is 1.86% of the median adjusted gross household income (MAGI). They also intend to provide $49,090 in local contribution.

COST SHARING:

Wellington City requests the following cost sharing approach for the project:

Funding Source	**Funding Amount**	**Percent of Project**
Wellington City (Cash)	$ 49,090	0.7%
WQB Grant (Request)	**$ 350,000**	**5.2%**
USDA-RD Grant (Request)	$ 1,400,000	20.6%
USDA-RD Loan (Request)	$ 3,000,000	44.1 %
CIB Grant (Request)	$ 1,200,000	17.6%
CIB Loan (Request)	$ 800,000	11.8%
Total Amount:	$ 6,779,090	100%

ESTIMATED ANNUAL COST FOR SEWER SERVICE:

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

Operations and Maintenance (O&M) – Annual	$204,000
Existing Debt – Annual	$8,000
Median Adjusted Gross Household Income (2017)	$35,187
Maximum Affordable Sewer Rate at 1.4 % MAGI	$41.05
Current ERC's	648

If the City is able to obtain their requested financing from all sources, a rate of $54.49/ERC/month would be required to fund their sewerage operations and debt service. This results in a rate that is 1.86% of MAGI which exceeds the board's 1.4% threshold for grant consideration.

STAFF COMMENTS AND RECOMMENDATION:

Wellington City has significant sewer system renewal and replacement needs. The City has recently taken steps in the right direction by inspecting their entire system and identifying the deficiencies. It is important that many of these deficiencies are addressed in the near future. This funding will allow them to begin the design as USDA RD will not provide funding until a contract for the project is secured. Both USDA RD and CIB are being asked to provide a significant grant component as part of their applications. Even if all of the requested grant from these two entities is provided, the requested loan portion will cause the project to significantly exceed the 1.4% affordability threshold.

The Water Quality Board has previously authorized a planning advance ($32,000) in December 2014 of which $31,000 was disbursed, and an emergency repair advance ($96,600) in December of 2018. It is not likely that either of the other funding agencies will reimburse for these advances. Wellington was able to complete the emergency repairs under budget for a total of $52,573.86. The other agencies are being asked to provide the majority of the funding for this project, as well as provided significant grant components to their funding, and the rates will significantly exceed 1.4% of MAGI with the requested funding. The staff recommendation is outlined below. This funding will demonstrate support from the Water Quality Board on this large project and allow design to be expedited, while providing a relatively small percentage of the overall project funding.

Staff recommends that the Water Quality Board authorize a **$350,000 Grant to the City of Wellington** for the Pre-Construction Engineering Costs for the project.

It is also recommended that the Water Quality Board authorize conversion of existing advances totaling **$83,573.86 to hardship grant** with the remaining **$45,026.14 of those funds being deobligated**.

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

SPECIAL CONDITIONS:

1. The City must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).

2. As part of the facility planning, the City must complete a Water Conservation and Management Plan.

3. The engineering contract for design and pre-construction services must be approved by the Division before work on the contract begins.

4. The City must pursue and retain additional funding necessary to implement this project or a substantive portion of the proposed project before funding will be made available from this grant.

DWQ-2020-004302
File: SRF-Wellington City, Admin, Section 1

ATTACHMENT 1

Wellington City - Water Quality Board

Static Cost Model

Project Costs	
Planning (EA/PER)	$40,000
Pre-Construction Engineerin	$388,000
Special Engineering	$21,000
Engineering CMS/Other	$520,000
Legal and Bonding	$20,000
Interim Financing Costs (BA	$50,000
Construction	$4,800,075
Contingency	$960,015
Total Project Cost:	$6,799,090

Project Funding	
Wellington City	$49,090
WQB Grant (Request)	$350,000
USDA-RD Grant (Request)	$1,400,000
USDA-RD Loan (Request)	$3,000,000
CIB Grant (Request)	$1,200,000
CIB Loan (Request)	$800,000
Total Required Funding	**$ 6,750,000**
Total Project Cost:	$ 6,799,090

Current Customer Base & User Charges	
Current (ERU):	624
MAGI (2017 CITY):	$35,187
Monthly User Fee (per ERU):	$29.00
1.4% MAGI User Fee	$41.05

Projected Annual Sewer O&M Cost	
Estimated Operating Expenses	$228,090

Funding Conditions	
Loan Repayment Term:	30 years
Reserve Funding Period:	6 years

TABLE 2- ESTIMATED COST OF SEWER SERVICE UNDER STRAIGHT-LINE AMORTIZATION (30 YEARS)

WQB Grant Amount	WQB Loan Amount	WQB Loan Interest Rate	WQB Loan Debt Service	WQB Loan Reserve	CIB Grant Amount	CIB Loan Amount	CIB Loan Interest Rate	CIB Loan Debt Service	USDA RD Grant Amount	USDA RD Loan Amount	USDA RD Interest Rate	USDA RD Debt Service	Annual Sewer O&M Cost	Existing Sewer Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI
$350,000	$0	0.0%	$0	$0	$2,000,000	$0	0.0%	$0	$4,400,000	$0	0.0%	$0	$228,090	$8,000	$236,090	$31.53	1.08%
$350,000	**$0**	**0.0%**	**$0**	**$0**	**$1,200,000**	**$800,000**	**1.0%**	**$30,998**	**$1,400,000**	**$3,000,000**	**2.4%**	**$140,955**	**$228,090**	**$8,000**	**$408,043**	**$54.49**	**1.86%**
$175,000	$175,000	0.0%	$5,833	$43,750	$1,200,000	$800,000	1.5%	$33,311	$1,400,000	$3,000,000	2.4%	$140,955	$228,090	$8,000	$459,939	$61.42	2.09%
$0	$350,000	0.0%	$11,667	$87,500	$1,200,000	$800,000	2.5%	$38,222	$1,400,000	$3,000,000	2.4%	$140,955	$228,090	$8,000	$514,433	$68.70	2.34%
$350,000	$0	0.0%	$0	$0	$1,000,000	$1,000,000	1.0%	$38,748	$1,000,000	$3,400,000	2.4%	$159,749	$228,090	$8,000	$434,587	$58.04	1.98%
$350,000	$0	0.0%	$0	$0	$1,000,000	$1,000,000	1.5%	$41,639	$1,000,000	$3,400,000	2.4%	$159,749	$228,090	$8,000	$437,478	$58.42	1.99%
$350,000	$0	0.0%	$0	$0	$1,000,000	$1,000,000	2.5%	$47,778	$1,000,000	$3,400,000	2.4%	$159,749	$228,090	$8,000	$443,616	$59.24	2.02%
$350,000	$0	0.0%	$0	$0	$0	$2,000,000	1.0%	$77,496	$0	$4,400,000	2.4%	$206,734	$228,090	$8,000	$520,320	$69.49	2.37%
$350,000	$0	0.0%	$0	$0	$0	$2,000,000	1.5%	$83,278	$0	$4,400,000	2.4%	$206,734	$228,090	$8,000	$526,102	$70.26	2.40%
$350,000	$0	0.0%	$0	$0	$0	$2,000,000	2.5%	$95,555	$0	$4,400,000	2.4%	$206,734	$228,090	$8,000	$538,379	$71.90	2.45%

*** BOLDED LINE IS THE REQUESTED FUNDING SCENARIO**

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

TABLE 1- ESTIMATED COST OF SEWER SERVICE UNDER STRAIGHT-LINE AMORTIZATION (20 YEARS)

WQB Grant Amount	WQB Loan Amount	WQB Loan Interest Rate	WQB Loan Debt Service	WQB Loan Reserve	CIB Grant Amount	CIB Loan Amount	CIB Loan Interest Rate	CIB Loan Debt Service	USDA RD Grant Amount	USDA RD Loan Amount	USDA RD Interest Rate	USDA RD Debt Service	Annual Sewer O&M Cost	Existing Sewer Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI
$350,000	$0	0.0%	$0	$0	$2,000,000	$0	0.0%	$0	$4,400,000	$0	0.0%	$0	$228,090	$8,000	$236,090	$31.53	1.08%
$350,000	$0	0.0%	$0	$0	$1,200,000	$800,000	1.0%	$44,332	$1,400,000	$3,000,000	2.4%	$190,176	$228,090	$8,000	$470,599	$62.85	2.14%
$175,000	$175,000	0.0%	$8,750	$43,750	$1,200,000	$800,000	1.0%	$44,332	$1,400,000	$3,000,000	2.4%	$190,176	$228,090	$8,000	$523,099	$69.86	2.38%
$0	$350,000	0.0%	$17,500	$87,500	$1,200,000	$800,000	2.5%	$51,318	$1,400,000	$3,000,000	2.4%	$190,176	$228,090	$8,000	$582,584	$77.80	2.65%
$350,000	$0	0.0%	$0	$0	$1,000,000	$1,000,000	0.0%	$50,000	$1,000,000	$3,400,000	2.4%	$215,533	$228,090	$8,000	$501,623	$66.99	2.28%
$350,000	$0	0.0%	$0	$0	$1,000,000	$1,000,000	1.0%	$55,415	$1,000,000	$3,400,000	2.4%	$215,533	$228,090	$8,000	$507,039	$67.71	2.31%
$350,000	$0	0.0%	$0	$0	$1,000,000	$1,000,000	2.5%	$64,147	$1,000,000	$3,400,000	2.4%	$215,533	$228,090	$8,000	$515,770	$68.88	2.35%
$350,000	$0	0.0%	$0	$0	$0	$2,000,000	0.0%	$100,000	$0	$4,400,000	2.4%	$278,925	$228,090	$8,000	$615,015	$82.13	2.80%
$350,000	$0	0.0%	$0	$0	$0	$2,000,000	1.0%	$110,831	$0	$4,400,000	2.4%	$278,925	$228,090	$8,000	$625,846	$83.58	2.85%
$350,000	$0	0.0%	$0	$0	$0	$2,000,000	2.5%	$128,294	$0	$4,400,000	2.4%	$278,925	$228,090	$8,000	$643,310	$85.91	2.93%

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
Director

WATER QUALITY BOARD
FEASIBILITY REPORT FOR SEWERAGE PROJECT
INTRODUCTION

APPLICANT:	Millville City 510 East 300 South Millville, UT 84326 Telephone: (435) 750-0924
PRESIDING OFFICIAL:	David Hair, Mayor
TREASURER/RECORDER:	Corey Twedt, Recorder
CONSULTING ENGINEER:	Chad Brown, Engineer Franson Civil Engineers 115 Golf Course Rd, Suite D Logan, UT 84321 (435) 754-7661
BOND COUNSEL:	Eric Johnson, Partner Blaisdell Church & Johnson, LLC 5995 South Redwood Rd Salt Lake City, UT 84123 (801) 261-3407

APPLICANT'S REQUEST:

Millville City is requesting financial assistance from the Utah Water Quality Board in the amount of $12,300,000 to construct a new sewerage system. The City is also requesting a design advance from the Utah Water Quality Board in the amount of $694,500.

APPLICANT'S LOCATION:

Millville City is located in Cache County. The City is approximately 7 miles from the Logan Treatment Plant and approximately 5 miles from the Hyrum Treatment Plant.

MAP OF APPLICANT'S LOCATION

BACKGROUND AND PROJECT NEED:

Since at least 1993, elevated concentrations of nitrate have been detected in the drinking water aquifer that supplies Millville City's drinking water (USGS Publication Water-Resources Investigations Report 93-4221, 1994). Nitrate affects the ability of the body to carry oxygen, and is particularly harmful to infants and young children. The primary drinking water standard maximum contaminant level (MCL) for nitrate as nitrogen (NO_3-N) is 10 mg/L.

Nitrate concentrations in the City's Glenridge Well have increased steadily over the years. In 1993, the ground water nitrate concentration was reported to be 3.3 mg/L and in the spring of 2019, a nitrate concentration of 8.8 mg/L was measured for the Glenridge Well (UGS Report of Investigation 275, 2016).

The primary sources of nitrate to the aquifer are believed to be agricultural and septic tank discharges into the subsurface from individual homes. Since at least the year 2000, increases in ground water nitrate concentrations have tracked population growth in the City implicating septic tanks as a principal source of the continuing degradation of ground water quality.

Septic tanks discharge approximately 50 - 60 mg/L of nitrogen into the subsurface, most of which becomes oxidized to nitrate in the shallow soils. There are a variety of site conditions that allow septic discharges to be protective of water supplies and an acceptable means for wastewater disposal. Conditions such as fast draining soils, and shallow, unconfined aquifers, increase the probability of contamination reaching the water supply. Under these conditions, as at Millville City, as the number of septic discharges increase over an aquifer, so does the risk of ground water contamination. In these cases, the housing density affects a community's ability to protect their water supply.

A septic density study completed for Cache Valley in 2003 (UGS Special Study 101, 2003) suggested that a density of three acres per home would limit ground water degradation to 1 mg/L. Today, the housing density in parts of Millville City is approximately one-half acre per home, exceeding the UGS study recommendation by six times. Figure 1 shows the highest housing densities (half-acre lots) in red, lowest densities in green and animal concentrations in purple; septic tanks are shown as "x". Figure 2 illustrated the nitrate concentrations and contaminant plume for this area.

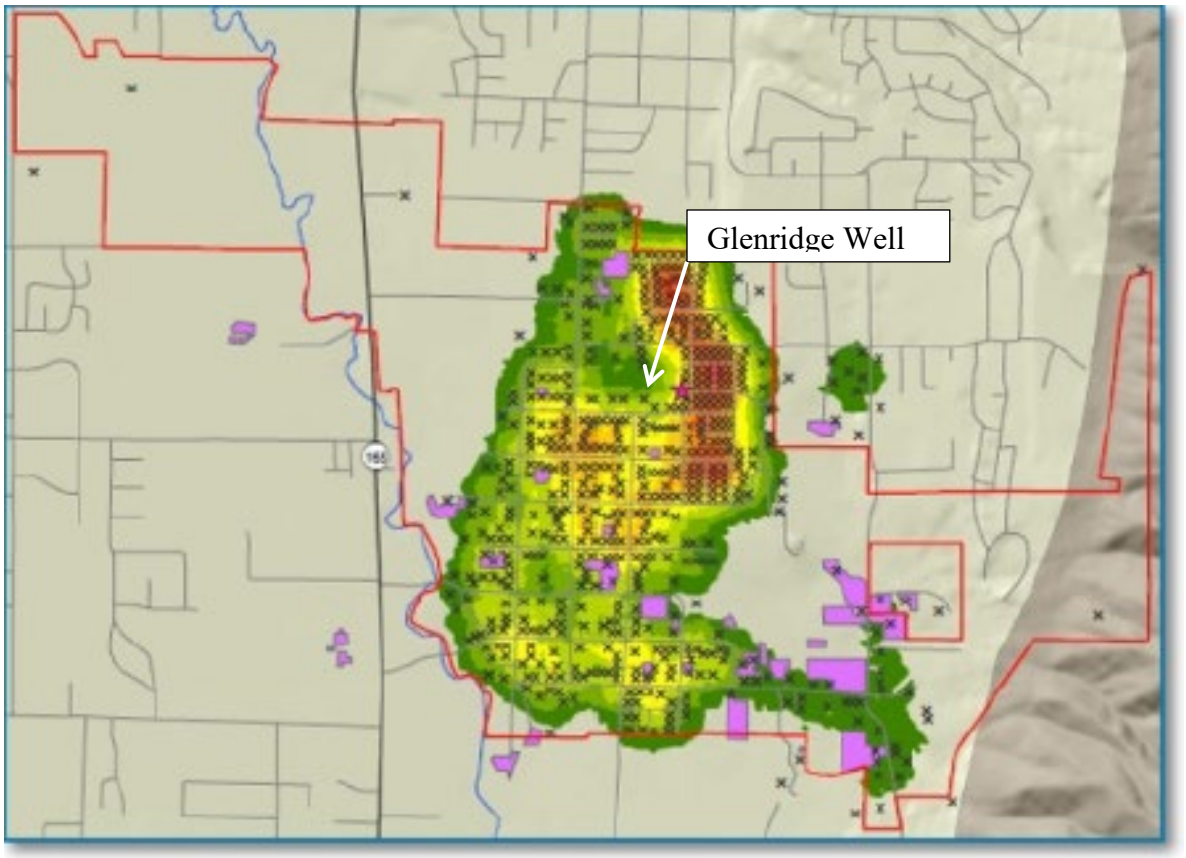


Figure 1. Septic tank locations, septic tank density, and locations of animal concentrations
From UGS Report of Investigation 275, 2016

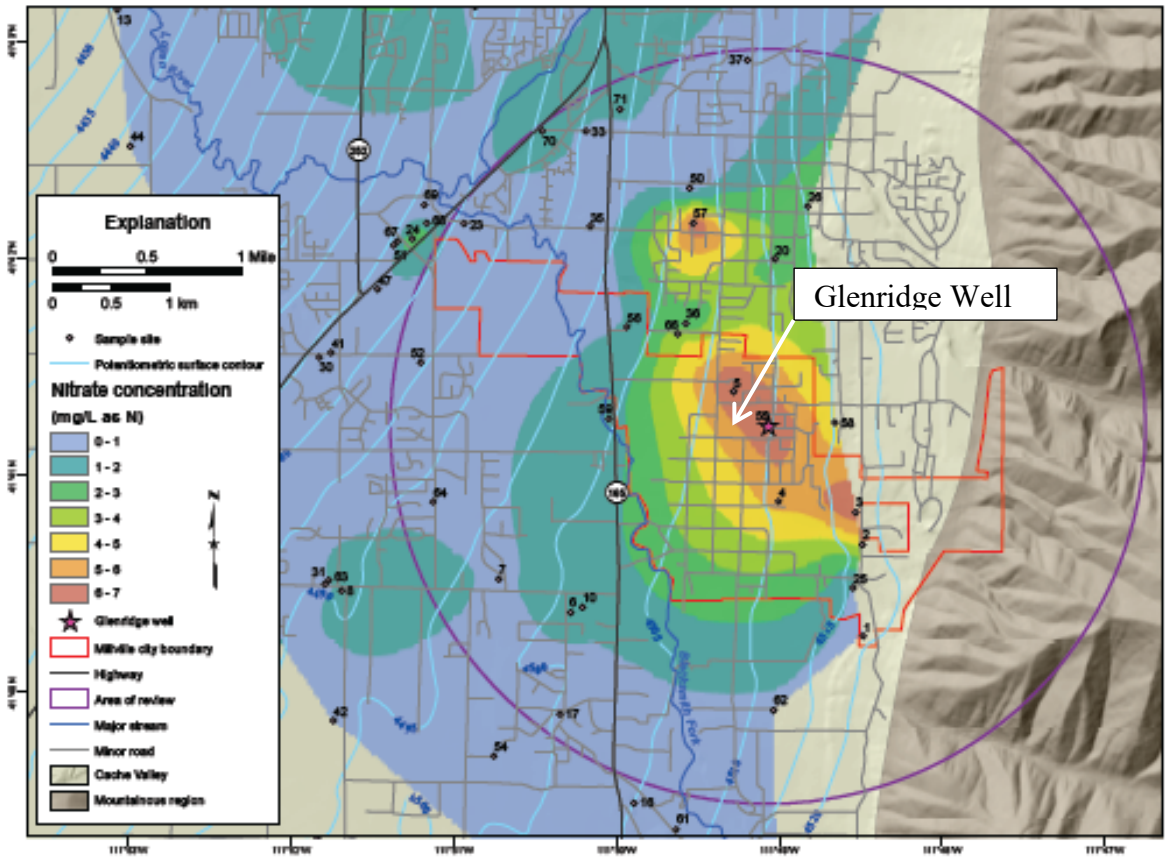


Figure 2. Nitrate Concentrations in the Millville Area
From UGS Report of Investigation 275, 2016

In the 1980s and 1990s, most of southern Cache Valley was sewered. The Water Quality Board authorized a loan for $7.7 million for the cities of Nibley and Millville to connect to the Logan Wastewater Treatment Plant in 2001. Millville later elected to withdraw from the agreement to sewer before the loan closed leaving this city as the only remaining community in the area to rely on septic tanks for sewage treatment. The Water Quality Board also authorized a $3.5 million loan in 1989 for Providence City to connect to the Logan Wastewater Treatment Plant and a $4.2 million loan to Hyrum in 2003 to construct a new treatment plant.

Concern over rising nitrate concentrations in the Glenridge Well led the city to apply to the Division for an aquifer storage and recovery (ASR) permit in 2018 with the hope of diluting the nitrate in the aquifer with spring water and thereby extending the life of the well. A pilot test for this concept was conducted in 2014 and the results were considered when reviewing the city's ASR application. The Division's review of the ASR application was conducted in partnership with the Division of Drinking Water. The Division denied the permit for the ASR project for the following three reasons:

1) There was concern that the project could push the nitrate plume down-gradient to the Providence City drinking water wells. There is evidence that this occurred during the pilot as concentrations in one of Providence City's wells (Alder-West Well) increased from 4.5 mg/L to 8.6 mg/L following the two pilot tests. Concentrations came down to 5.9 mg/L after 22 months.
2) The pilot project did not demonstrate that long term operation of the project would produce the intended results to dilute nitrate concentrations.
3) Millville City had not made any attempt to reduce their contribution to the nitrate problem through source control (sewer of the city).

The Bear River Health Department (BRHD) administers the septic permitting program in Cache Valley. Following the Division's denial of the aquifer storage and recovery project, BRHD made the decision to put a moratorium on any further septic permitting in the area. Although DEQ does not have authority to issue such a moratorium, the Division was consulted by the BRHD before this action was taken.

As a result of the Division's ASR permit denial and the Board of Health's moratorium, Millville has moved swiftly to develop plans to sewer the community.

PROJECT DESCRIPTION:

Millville City is estimated to have a current population of 2,050 with 630 culinary connections, 10 of which are commercial. Millville is a growing community and projects to reach buildout in the next 30-40 years with a population of 6,646 and 2,014 residential connections.

The proposed project consists of four principal parts: (1) constructing 15.6 miles of new sewerage system that will provide sewer service throughout the community; (2) connecting the new sewerage system to a regional wastewater treatment facility; (3) connecting private properties to the sewerage system; and (4) properly decommissioning the existing septic tanks.

Regional Treatment Capacity

About three years ago, sewer service was provided to the new Millville High School at the northeast side of town. This line was sized to accommodate future connections from the City. The line connects with the Nibley City sewerage system from which the wastewater is conveyed to the Logan City regional treatment plant. Both Nibley and Logan cities have indicated willingness to provide capacity to convey (Nibley) and treat (Logan) Millville’s new discharge. Logan City was required by the Water Quality Board to implement impact fees for its service as a condition of a Board loan to Logan. Logan’s impact fee of $2,300 per connection amounts to a project cost of approximately $1.6 million to Millville. As an alternative, Millville City has been negotiating with Hyrum City to try and establish a mechanism to defer this cost and ultimately regionalize the Hyrum system, possibly with a new district being formed. These two alternatives are discussed further below.

Funding House Laterals and Septic Tank Decommissioning
Funding laterals and septic tank decommissioning on private property is generally prohibited under our loan program for two principal reasons. Under the SRF and Utah statute, funding a treatment works (and sewerage system) project means the Board is funding public assets and their improvement with public dollars. These laws are generally silent on what cannot be funded but have been interpreted as meaning that this funding (category) cannot directly benefit private properties beyond the public benefit of the service provided. The second reason is one of practicality. Conducting construction work on private property is difficult at best, even with access agreements in place.

Because of the high cost of sewering the community and the financial hardship that will result, the City asked staff to review the possibility of providing financial assistance toward constructing the private house laterals and decommissioning of septic tanks. USDA Rural Development and/or Community Impact Board (CIB), who are expected to be financing partners on this project, indicated that these parts of the project are not eligible for funding under their wastewater project loan programs. Having reviewed the ground water situation in Millville City, our rules for funding, and the challenges associated with implementing such a project (on private properties), we believe this could be done within the constraints of the law, EPA and program guidance, and to the benefit of many homeowners in the City.

Whereas the legal and programmatic framework discussed above limits funding for "treatment works" to public projects, the same framework for "state nonpoint source" projects opens financial assistance to both private and public entities. Within Utah Administrative Code R317, Environmental Quality, Water Quality, Rule R317-101, Utah Wastewater Project Assistance Program, Subpart 5, Financial Assistance for Onsite Wastewater Systems, there is an allowance for providing assistance for laterals and septic tank decommissioning to connect homes to sewer under certain conditions. The principal condition that must be met is that the systems being replaced (with laterals) have "malfunctioned or are in non-compliance with state administrative rules or local regulations governing the same." We believe that systemic discharge of septic tanks (as defined in R317-4, Onsite Wastewater Systems) has been the primary cause of the well documented groundwater pollution in the aquifer that supplies Millville City's drinking water resulting in noncompliance with drinking water regulations and ground water quality standards.

Hardship criteria (income less than 150% of the state MAGI) specified in Rule R317-101-5 must be met for each homeowner receiving assistance. We estimate that more than half of City homeowners may be eligible to receive some assistance for their laterals and their septic tank decommissioning. The same rule specifies that impact fees are an ineligible cost under this program.

ALTERNATIVES EVALUATED:

Millville City's Draft Capital Facilities Plan evaluates several alternatives for implementing a city-wide sewerage system in order to eliminate septic tank discharges to their ground water.

1. No Action;
2. Collection systems variations;
3. Construction of a Millville City treatment plant;
4. Forming a new Sewer District with a regional treatment plant;
5. Connecting to the Logan City Regional Wastewater Treatment Plant through Nibley; and
6. Connecting to the Hyrum City Wastewater Treatment Plant through a new pump station and force main.

The most feasible alternatives are to construct a new sewerage system and connect to either Logan or Hyrum's existing treatment systems with Millville's preferred alternative being to connect to Hyrum. Life cycle cost estimates reviewed with the City's engineer place these two alternatives about even. Both alternatives are subject to the parties reaching agreeable terms and interlocal agreements.

The Logan treatment plant is a large new facility with capacity to treat the 220,000 gpd of estimated additional flow from Millville. Hyrum City is planning (staff is currently reviewing their construction plans) to add 500,000 gpd of additional capacity in the next year, which will also accommodate Millville's wastewater. Both plants, when construction is completed, will be modern advanced facilities.

Both facilities are subject to total maximum daily load (TMDL) restrictions for phosphorus with Hyrum's being the most stringent due to their discharge to (the small) Spring Creek, a tributary to the Bear River system. Hyrum uses membrane bioreactor technology and chemical addition for phosphorus control that allows them to produce some of the best effluent in the state. They have an extensive Type 1 reuse system that enables them to beneficially use and not discharge effluent to the creek during the critical summer months. Past the upgrade that is planned, further expansion will require reevaluation of the Spring Creek TMDL and associated waste load allocations.

POSITION ON PROJECT PRIORITY LIST:

This project is ranked 4th out of 7 projects on the Wastewater Treatment Project Priority List. 4th is the highest currently unfunded project.

POPULATION GROWTH:

Millville is estimated to have a population of 2,050 and 630 culinary connections, 10 of which are commercial. Millville is a growing community and projects to reach buildout in the next 30-40 years with a population of 6,646 and 2,014 residential connections.

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

In a letter dated March 14, 2019, Mayor Hair reached out to residents notifying them of the elevated nitrate levels and potential for a sewer project. Millville held a public hearing on September 23, 2019 on the City Council resolution to issue $15 million dollars of Water and Sewer Revenue Bonds. During the hearing the sewer project was introduced and public comment was invited. From the meeting minutes, the public is supportive of the project but encouraged Millville staff to exhaust options other than connecting to Logan.

IMPLEMENTATION SCHEDULE:

The proposed schedule for implementation of the construction project is as follows:

WQB Introduction	February 2020
WQB Funding Authorization:	March 2020
Start Construction	2020
Complete Construction	2023

APPLICANT'S CURRENT USER CHARGE:

Millville residents currently pay a sewer user charge of approximately $2/month. This fee pays for the capacity Millville previously purchased in the gravity main through Nibley to the Nibley pump station, and from there into Logan. With the construction of the sewer system, Millville will have to maintain the new sewer which is estimated to cost approximately $9/month per household.

For wastewater treatment, Millville will need to send its wastewater either to the Logan Wastewater Treatment Plant or the Hyrum Wastewater Treatment Plant. Millville estimates treatment fees at Logan would be about $22.50/month per household connection. In addition, Millville would have to pay Logan impact fees of $2,300/connection. Millville is currently negotiating with Hyrum for treatment. Hyrum has indicated they are open to bringing Millville on as a partner and potentially charging $29/month with no impact fee. For cost modeling purposes herein, staff used the $29/month potential fee without impact fee.

The 2017 median adjusted gross income (MAGI) for Millville City is $55,905, which is 22 percent higher that the state average of $45,895. Based on the Board's affordability criterion of 1.4% MAGI, potential grant funding should be considered for a sewer bill of greater than $65.22.

COST ESTIMATE:

Millville has estimated this project to have 2 major cost components: 1. Laterals and Septic Tank Abandonment, and 2. Sewer Construction.

Laterals and Septic Tank Abandonment

Cost to construct laterals and septic tank abandonment on private property is estimated to be approximately **$3.4 million** or approximately $5,400 per household.

Collection System and Pressure Line

The estimated cost of Millville collection system and pressure line project construction is estimated to be **$9.0 million**.

The combined projects are outlined in the following table:

Item	**Funded Project Cost**
Legal/Bonding	$ 50,000
DWQ Loan Origination	$ 55,000
Environmental	$ 50,000
Construction – Collections	$ 4,396,000
Construction – Pressure Line	$ 1,551,000
Laterals	$ 2,765,000
Septic Tank Abandonment	$ 630,000
Engineering, CMS	$ 1,346,000
Contingency (18%)	$ 1,869,000
Total	**$ 12,392,000**

EFFORTS TO SECURE FINANCING FROM OTHER SOURCES:

Millville is in the process of applying for construction assistance from both the Community Impact Board (CIB) and USDA Rural Development (RD). Early discussions have indicated neither CIB nor RD could fund laterals or impact fees. CIB has indicated that, as Cache County is not a major energy producing county, they would likely only be able to bring loan to the project. RD expects to be able to bring a mix of loan and grant and has given indication the project would rank highly and bring a 30/70 or 40/60 grant/loan mix. RD's loan interest rate is expected to be at their current intermediate rate of 2.25 percent with an extended loan term of up to 40 years.

COST SHARING:

Millville has estimated funding through the sale of a bond for Sewer Projects on the open market at 5.5% with a 40 year term. Millville is examining the possibility of funding all cost components so residents are not faced with any large bills and costs are instead wrapped into monthly

payments. Staff modeled a 30 year 5.5% loan which resulted in a $138/month sewer bill or 3.0% of MAGI. In this case, and without other subsidized assistance, Millville citizens would pay one of the highest rates in the State.

The 2017 median adjusted gross income (MAGI) for Millville City is $55,905, which is 22 percent higher that the state average of $45,895. Staff prepared a cost model for evaluation of possible loan terms and affordability. Static Model 1 (Attachment 1) presents a 30 year loan approach. Based on the Board's affordability criterion of 1.4% MAGI, potential grant funding should be considered for a sewer bill of greater than $65.22. This model shows that for the proposed Sewer Construction project, the maximum affordable 30 year term loan would be $5.0 million at 0% interest. Here, to keep the financing within the Board's affordability criterion, the $12.4 million project would require $7.4 million grant component.

Laterals and Septic Tank Abandonment

Based on staff's interpretation of Rule R317-101-5 discussed above, the construction of laterals and septic tank abandonment are only eligible to be funded under the Utah Wastewater Project Assistance Program within the Financial Assistance for Onsite Wastewater Systems Program (OWS Program). Only those residents with a total household income of no greater than 150% of the Statewide MAGI would be eligible under the OWS Program. Statewide MAGI (2017) is currently $45,895 which would yield a total household income of less than $68,843 to be eligible.

There are several institutional and many logistical challenges to providing assistance for this part of the project. The best fit for funding some or all of this part of the project would be through grant funding on a standalone "laterals" project. This would free up the use of federal funds, including principal forgiveness, for the collection system part of the project and eliminate the need to secure and administer potentially 100s of small grants. Staff conceives that this funding would be administered as a block grant from the Board to Millville City, who would take responsibility for its administration with agreed upon guidelines from the Board. Conceptually, this is an agreeable approach for Millville.

Collection System and Pressure Line

The collection system and pressure line projects could be funded with 1st or 2nd round federal money or from the Utah Loan fund. Depending on funding levels, access to additional grant funds would probably need to be through federal dollars and as principal forgiveness. Since the project may have a mix of Board funding and RD funding the project will likely be constructed under 1st round funding standards.

STAFF COMMENTS:

Staff supports the Millville collection and lateral projects. It is an important project for Millville

in order to protect the community's drinking water source and to plan for the future in their service area. Because of the distinct differences between the "laterals" and the collections proper projects, staff plans to prepare two packages for presentation to the Board for Authorization at the next Board meeting: (1) Hardship Grant Authorization Request for construction of laterals and septic tank decommissioning, and (2) Wastewater Project Authorization for the construction of the collection system project.

STAFF RECOMMENDATION:

Millville has requested a Design Advance. Staff recommends that the Water Quality Board authorize a **$694,500 Advance to the Millville City** for the design of the sewer system which would then be rolled into the future funding for the construction project. It is recommended that this funding is subject to these special conditions:

1. The City must submit the engineering services contract to the Director for review and approval prior to executing the contract. The contract must include provisions for compliance with Plan of Operations consistent with R317-101-3.
2. The City must continue to actively pursue additional funding needed to fully implement this project.
3. The design advance must be repaid within one year of engineering contract completion date or the date of its termination.

Attachments: Millville City Static Cost Model 1
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DWQ-2020-004306
File: Millville City, Admin, Section

ATTACHMENT 1 – MILLVILLE CITY STATIC COST MODEL 1

STATIC COST MODEL 1 - Millville 30 year loan

Project Costs

Legal/Bonding	$	50,000
DWQ Loan Origination Fee	$	42,000
Collection Sewers	$	4,396,000
Pressure Line	$	1,551,000
Laterials	$	2,765,000
Septic Tank Abandonment	$	630,000
Engineering	$	1,289,175
Contingency (approx 18% const. cost)	$	1,668,825
Total Project Cost:	$	12,392,000

Project Funding

Applicant Contribution	$	-
WQB Loan	Varies Below	
WQB Grant	Varies Below	
Total Project	**$**	**12,392,000**

Current Customer Base & User Charges

ERU's	672
MAGI (2017):	$55,905
Affordable Monthly Rate at 1.4%	$65.22
Current Impact Fee (per ERU):	TBD
Current Monthly User Fee (per ERU)	$2.00
Existing O&M expenses Treatment & Collection	$0
New O&M expenses Treatment & Collection	$303,856
Existing Sewer Debt Service	$15,000

Funding Conditions

Loan Repayment Term:	30
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 Sewer Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI
-	12,392,000	5.50%	852,636	213,159	303,856	15,000	1,384,651	171.71	3.69%
-	12,392,000	0.00%	413,067	103,267	303,856	15,000	835,189	103.57	2.22%
1,000,000	11,392,000	0.00%	379,733	94,933	303,856	15,000	793,523	98.40	2.11%
2,000,000	10,392,000	0.00%	346,400	86,600	303,856	15,000	751,856	93.24	2.00%
3,000,000	9,392,000	0.00%	313,067	78,267	303,856	15,000	710,189	88.07	1.89%
4,000,000	8,392,000	0.00%	279,733	69,933	303,856	15,000	668,523	82.90	1.78%
5,000,000	7,392,000	0.00%	246,400	61,600	303,856	15,000	626,856	77.74	1.67%
6,000,000	6,392,000	0.00%	213,067	53,267	303,856	15,000	585,189	72.57	1.56%
7,000,000	5,392,000	0.00%	179,733	44,933	303,856	15,000	543,523	67.40	1.45%
7,400,000	**4,992,000**	**0.00%**	**166,400**	**41,600**	**303,856**	**15,000**	**526,856**	**65.33**	**1.40%**
7,900,000	4,492,000	0.00%	149,733	37,433	303,856	15,000	506,023	62.75	1.35%
8,400,000	3,992,000	0.00%	133,067	33,267	303,856	15,000	485,189	60.17	1.29%

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
Director

WATER QUALITY BOARD
FEASIBILITY REPORT FOR CONSTRUCTION ASSISTANCE
INTRODUCTION

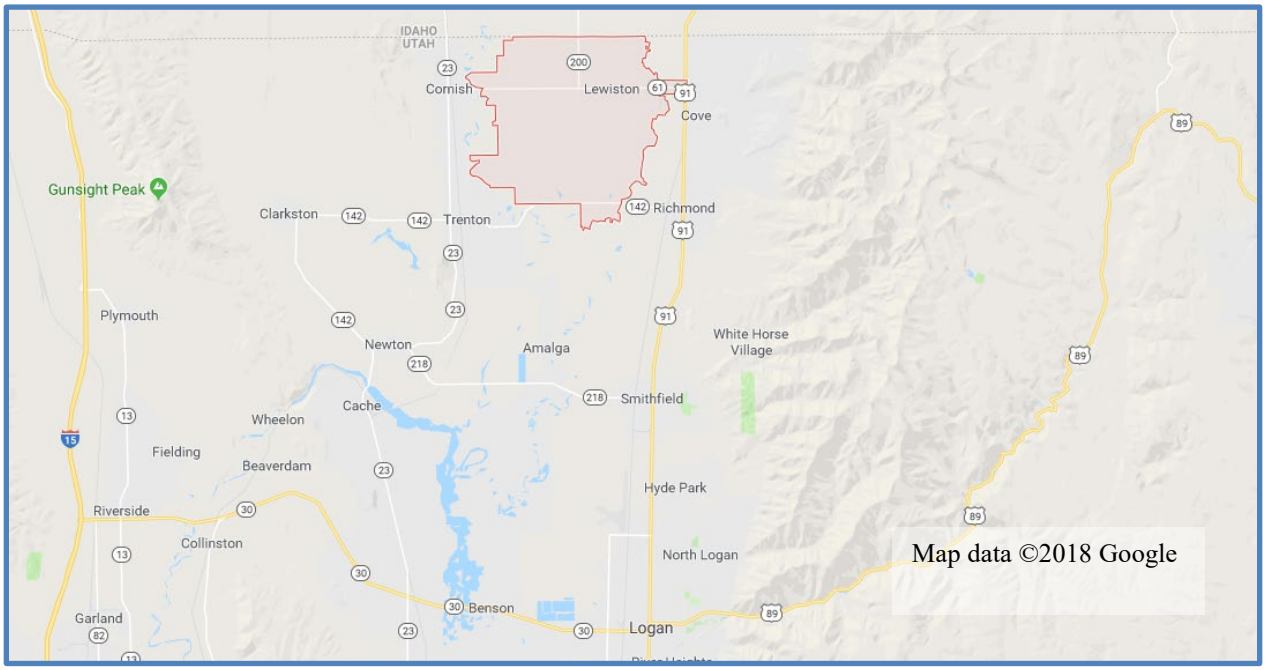
APPLICANT:	Lewiston City 29 South Main Lewiston, Utah 84320 435-258-2141
PRESIDING OFFICIAL:	Mayor Kelly Field
CONTACT PERSON:	Mayor Kelly Field
TREASURER:	Mary Simpson
RECORDER:	Julie Bergeson
CONSULTING ENGINEER:	Gary Vance, P.E. J-U-B Engineers 466 North 900 West Kaysville, Utah 84103 801-547-0393
CITY ATTORNEY:	Miles P. Jensen Olson & Hoggan P.C. 130 South Main, Suite 200 Logan, Utah 84321 435-752-1551
BOND COUNSEL:	TBD

APPLICANT'S REQUEST:

Lewiston City is requesting financial assistance in the amount $3,064,000 for construction of sewerage and treatment works improvements. The City is also requesting a hardship design advance in the amount of $186,000.

APPLICANT'S LOCATION

Lewiston City is located approximately 104 miles north of Salt Lake City on the Utah-Idaho border. The City is located in the northern portion of Cache County.



BACKGROUND

The City owns and operates sewerage and lagoon wastewater treatments systems. The collection system includes one lift station, approximately 3.3 miles of 8-inch and 1.3 miles of 10-inch bell and spigot concrete pipe that were constructed in 1974. The treatment system was also 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 two or three months out of the year to the Cub River.

PROJECT NEED

The existing lift station is 50 years old and has reached the end of its useful life. The existing pumps are old and seasonally have insufficient capacity to meet demand, necessitating operation of the redundant spare pump to keep pace with the incoming flow. Maintenance of these pumps has become increasingly costly as a result of their age, increased utilization, and configuration is

nearing capacity and will not be able to meet the needs of the city in the very near future. A new lift station and pumps configuration is proposed to overcome these issues, prevent sewer back up, and provide continued reliable service as the community grows.

Two sewer system improvements are needed to eliminate a sewage conveyance bottleneck and reroute a line that cannot be maintained because a large commercial structure was built on top of it. The gravity sewer that receives wastewater from the lift station has insufficient slope to accommodate seasonal peak flows, resulting in backups into the lift station and risk of sewer surcharge and the possibility of overflow. The City proposed to upsize and steepen this line to overcome this bottleneck. The covered line must be rerouted so that it can be properly serviced.

The existing lagoon treatment system has several deficiencies:

- The headworks facility has no screening or grinding equipment, which results in accumulation of trash and other floating debris accumulating on the lagoon banks and causing odor.
- The organic loading to the primary cell periodically causes treatment limitations in this cell.
- The existing chlorination and dechlorination systems do not have proper storage facilities and control equipment, which has resulted in extensive corrosion of equipment and in the building.
- The treatment system has been challenged to comply with its dissolved oxygen discharge limit in part because they have no effluent reaeration system.
- The City is also planning for long-term effluent phosphorus compliance with the technology-based phosphorus effluent cap for lagoons.

The City completed a Wastewater Collections and Treatment System Facilities Master 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 with the phosphorus loading cap and growth in the community.

PROJECT DESCRIPTION:

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

- Construct a new lift station with increased capacity
- Replace/reroute 7,200 feet of sewers
- Manually cleaned racks are proposed to be incorporated into the headworks that will minimize nuisance conditions and reduce labor costs.
- Floating mechanical aerators are proposed to increase treatment capacity and improve treatment performance.
- Chlorination and dechlorination facilities will be modernized and fitted with code compliant safety and control equipment.

- The City is proposing to construct an effluent reaeration system to ensure compliance with its dissolved oxygen limit.
- The City intends to provide for future Type 2 reuse water pumping in conjunction with the reaeration structure proposed above. This feature of the reaeration system will simplify future implementation of reuse and phosphorus compliance.

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

The recommended alternative is No. 2, which is the collection and lagoon systems improvement.

PROJECT PRIORITY LIST

The proposed project was ranked 7 out of 8 on the project priority list.

POPULATION GROWTH

The population of the City is projected to grow at an annual rate of 2.09% by the Governor's Office of Planning and Budget. Current populations and associated equivalent residential units (ERUs) are shown in the table below along with the 20-year projection.

	Year	Population[1]	ERU[2]
Current	2019	1776	280
Design	2039	2515	456

[1] The average population growth through the year 2039 is estimated to be 2.09% from 2020-2030, 3.16% from 2030-2040 by the Governor's Office of Planning and Budget

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

The City held a public meeting on December 2019, as required by the Utah Wastewater State Revolving Fund (SRF) program. The City will hold a final public hearing once funding is secured. The City has taken the following steps to include the public in their proposed project planning:

The City has had several public meetings regarding the project over the past year. The City believes the public is well informed on the need for the project including replacing the existing sewer lift station, collection system improvements, and upgrades at the lagoon treatment system. In July 2019 the public was notified of a sewer rate increase and sewer connection fee increase to support the upcoming sewer improvements project. The proposed project has been discussed as an agenda item in several public City Council meetings over the past year, including most recently in December 2019 and January 2020. The City Council is supportive of the project and demonstrated their support by (1) increasing sewer rates; (2) increasing sewer connection fees; (3) adopting the Wastewater Facilities Master Plan; and (4) applying for financial assistance with both Division of Water Quality (DWQ) and U.S. Department of Agriculture - Rural Development (USDA –RD).

IMPLEMENTATION SCHEDULE:

Public Meeting	December 2019
Apply to WQB for Funding:	February 2020
Public Hearing:	February 2020
WQB Funding Authorization:	March 2020
Advertise EA (FONSI):	March 2020
Engineering Report Approval:	March 2020
Commence Design:	March 2020
Issue Construction Permit:	July 2020
Advertise for Bids:	July 2020
Bid Opening:	August 2020
Loan Closing:	August 2020
Commence Construction:	September 2020
Complete Construction:	July 2021

APPLICANT'S CURRENT USER CHARGE:

Currently, the City charges a sewer user fee of approximately $31.00 per residential and non-residential connection per month. This rate of $31.00 is below the affordable criteria. The city's median adjusted gross income (MAGI) in 2017 was $42,525. There are approximately 280 ERUs in the City and 93 percent of the statewide median.

COSTS SHARING:

The total cost of the project is $3,064,000. The following cost sharing is proposed for this project:

Funding Source	Cost Sharing	Percent of Project
WQB Financial Assistance	$3,064,000	100%
USDA - RD	TBD	TBD
Total:	$3,064,000	100%

EFFORTS TO SECURE FINANCING FROM OTHER SOURCES:

The City is in the process of applying for additional financial assistance from USDA- RD. This request will be presented during the USDA-RD's meeting that will be held in February 2020.

COST ESTIMATE:

Engineering - Planning	$41,000
Engineering - Design	$165,000
Engineering – Other	$41,000
Engineering – CMS	$186,000
Construction	$2,067,500
Contingency	$414,000
DWQ Loan Origination Fee	$20,500
Environmental/ NEPA	41,000
Legal/Bonding/ Easement/Water Rights	$88,000
Total:	$3,064,000

ESTIMATED ANNUAL COST FOR SEWER SERVICE:

The static model financing alternatives considered are given in Attachment 1. Staff developed a static cost models to evaluate several financing alternatives for the project. The basic cost data used in modeling financial alternatives for the project are provided below.

When establishing loan term, the Board applies basic affordability criteria of 1.4% of the MAGI for sewer rates. The affordable criteria analysis is based on a local MAGI of $42,523 and the affordable monthly sewer bill of $49.61/month/ERU. The current sewer rate in Lewiston is $31 per month and the City intends to raise the sewer user rate by $5 per month each year for the foreseeable future. A loan at 0% interest would result in a sewer fee equating to 2.75% of MAGI. To maintain a sewer rate below 1.4% MAGI, Lewiston City would require $2,600,000 in grant and $464,000 in loan at 0% (see Attachment 1 for financing scenarios). In order to make it affordable, the City prefers a higher grant component and smaller loan to fund from the Water Quality Board.

STAFF COMMENTS AND RECOMMENDATION:

This is a project introduction, and staff recommendations will be provided at the request for funding authorization. Staff supports the city's project to build a collection and treatment improvements that will protect the water quality. The proposed project is a critical element of the City's facility master plan. An updated collection and treatment improvements will enable the City to sustain its public health, current rate of growth and aging infrastructure.

DWQ-2020-001642
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File: SRF-Lewiston City, Planning, Section 1

Lewiston City - 20 Year Loan Static Cost Model (Attachment 1)

Project Costs

Engineering - Planning	$	41,000
Legal/Bonding	$	88,000
DWQ Loan Origination F	$	20,500
Engineering - Design	$	165,000
Engineering - other	$	41,000
Engineering - CMS	$	186,000
Construction	$	2,067,500
Contingency	$	414,000
Environment/NEPA	$	41,000
Total Project Cost:	**$**	**3,064,000**

Current Customer Base & User Charges

Initial Total Customer (ERU's)	280
MAGI for Lewiston City (2017):	$42,523
Affordable Monthly Rate at 1.4%	$49.61
Impact Fee (per ERU):	$2,278
Current Monthly Fee (per ERU)	$31.00
Annual O&M expensive	$136,500
Propose Monthly Fee (per ERU)	$36

Project Funding

USDA - RD		TBD
WQB Financl Assistance	**$**	**3,064,000**
Total Project Cost:	**$**	**3,064,000**

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 *	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI
-	3,064,000	0.00%	153,200	38,300	136,500	328,000	97.62	2.75%
500,000	2,564,000	0.00%	128,200	32,050	136,500	296,750	88.32	2.49%
1,000,000	2,064,000	0.00%	103,200	25,800	136,500	265,500	79.02	2.23%
1,500,000	1,564,000	0.00%	78,200	19,550	136,500	234,250	69.72	1.97%
2,000,000	1,064,000	0.00%	53,200	13,300	136,500	203,000	60.42	1.70%
2,600,000	464,000	0.00%	23,200	5,800	136,500	165,500	49.26	1.39%
2,500,000	564,000	1.50%	32,851	8,213	136,500	177,563	52.85	1.49%
2,500,000	564,000	2.00%	34,492	8,623	136,500	179,615	53.46	1.51%
2,500,000	564,000	2.25%	35,330	8,833	136,500	180,663	53.77	1.52%
2,500,000	564,000	2.75%	37,039	9,260	136,500	182,799	54.40	1.54%

* Includes $46,500 Asset Renewal

WATER QUALITY BOARD
FEASIBILITY REPORT FOR WASTEWATER TREATMENT REAUTHORIZATION
INTRODUCTION

APPLICANT:	South Davis Sewer District 1800 W 1200 N West Bountiful, UT 84087
PRESIDING OFFICIAL:	Dee C. Hansen, P.E., Chairman of the Board
TREASURER/RECORDER:	Dal D. Wayment P.E., Treasurer
CONSULTING ENGINEER:	L. Scott Rogers, P.E. Principal Aqua Engineering 533 W 2600 S #275 Bountiful, UT 84010 Telephone: 801-299-1327
BOND COUNSEL:	James Burr, Attorney at Law Chapman and Cutler LLP 215 S State Street Salt Lake City, UT 84111 Telephone 801-533-0066

APPLICANT'S REQUEST:

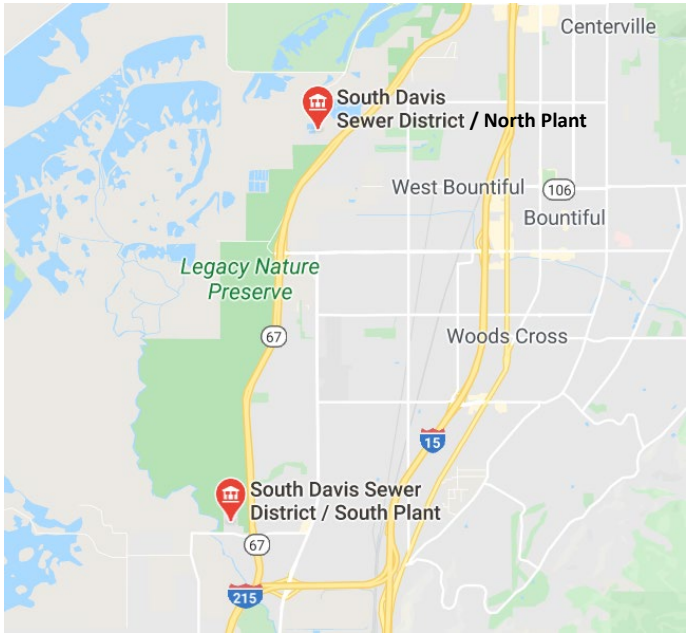
South Davis Sewer District (SDSD) is requesting the construction loan authorized by the Utah Water Quality Board (Board) for construction of a new tertiary wastewater treatment extension at SDSD's South Plant in February 2017 be reauthorized for use on an in-kind project at SDSD's North Plant. SDSD is requesting the reauthorized loan conditions match those of the original authorization: *loan of $28,851,000 with an interest rate of 0.55% and a 20-year term, including $2,500,000 in principal reserved for SRF eligible nonpoint source project funding.*[1]

[1] As motioned by Mr. Luers and seconded by Ms. Grant on February 22, 2017. This motion passed with Mr. Galecki and Mr. Bunker voting in opposition.

APPLICANT'S LOCATION:

South Davis Sewer District is located in Davis County and provides wastewater services to the southern half of Davis County; consisting of Bountiful, Centerville, North Salt Lake, West Bountiful, Woods Cross, and the unincorporated areas south of Lund Lane. South Davis Sewer District operates two treatment plants a North Plant (12 MGD) in West Bountiful and a South Plant (4 MGD) in North Salt Lake.

MAP OF APPLICANT'S LOCATION



BACKGROUND:

The District owns two wastewater treatment plants and provides sewer services to 27,124 equivalent residential units (ERU). SDSD is facing more stringent nutrient limits for phosphorus and ammonia. In December 2017, the ammonia effluent limits were lowered on both the South and North Plants based on an updated Jordan River Watershed wasteload analysis that evaluated all POTWs discharges to the Jordan River. At the North Plant, monthly average effluent limits were reduced for: Spring (Apr-Jun) from 15.0 mg/L to 12.0 mg/L, and Summer (Jul-Sep) 9.0 mg/L to 8.0 mg/L. At the South Plant, monthly average effluent limitations were reduced for: Winter (Mar) 15.0 to 8.0 mg/L, Spring (Apr-Jun) from 20.0 mg/L to 12.0 mg/L, and Summer (Jul-Sep) 20.0 mg/L to 8.0 mg/L. SDSD has found it challenging to comply with these limitations because their trickling filters are not always effective for removal of ammonia. In addition, the South Plant has been struggling with an industrial discharger coming online and

overloading the plant with high ammonia loads.

In addition on January 1, 2020, the technology based phosphorus effluent limit (TBPEL) with its annual average of 1.0 mg/L total phosphorus limit became effective. Both plants are currently complying with this standard using chemical addition.

PROJECT NEED

SOUTH PLANT UPDATE

The SDSD South Plant was originally placed in service in 1962, and was last expanded and upgraded in 1994. The SDSD South Plant serves the cities of North Salt Lake, Woods Cross and a portion of Bountiful. It has a design flow rate of 4 million gallons per day (MGD). The South Plant uses a two-stage trickling filter treatment process with chlorination and dechlorination. The plant consists of fine screens, one grit chamber, three primary clarifiers, one primary trickling filter, one intermediate clarifier, two final trickling filters, two final clarifiers, two granular media filters (not in use), one chlorine contact chamber, a re-aeration basin, dechlorination, sludge gravity thickener, two anaerobic digesters run in series, and sludge drying beds.

Wasatch Resource Recovery (WWR) is Utah's first and only anaerobic digestion system dedicated to food waste conversion operated under a public-private partnership between ALPRO Energy & Water and SDSD. WRR processes organic wastes such as food scraps, liquid waste and food manufacturing waste products. The process turns the organic wastes into sustainable resources: biogas and bio-based fertilizer. Construction of WRR was completed in 2018 and accepted the first loads of food waste in February 2019. WRR was expected to generate a significant load of ammonia to the South Plant. Based on the expected ammonia load and the TBPEL, the SDSD elected to pursue an innovative algae treatment technology with the company CLEARAS.

CLEARAS offers a biological-based wastewater treatment solution for nutrient recovery. CLEARAS promises a technology to cost-effectively recover phosphorus and nitrogen. CLEARAS is a bolt-on technology utilizing glass tubing and LED lights to grow algae, a membrane for algae separation, a centrifuge to dewater the algae, and a drum drier to dry the algae into a marketable product.

In 2017, the Board authorized a construction loan for $26.3 million toward the construction of a 4.0 mgd CLEARAS treatment system at the South Plant. In order to certify algae for future sale, SDSD constructed a 10 gpm South Plant Pilot Plant (South Pilot). Utilizing the South Pilot, DWQ staff required SDSD to demonstrate CLEARAS's treatment performance and to establish design parameters for the full scale construction. Over the span of the past three years the South Pilot has failed to consistently and effectively treat South Plant effluent phosphorus. In conjunction with these pilot studies, numerous experiments and investigations were conducted. The results of these investigations indicated that the South Plant wastewater inhibits the growth

of algae which is critical to CLEARAS's treatment system. Although SDSD has not been able to pin point the source of this inhabitation/toxicity, the most likely cause is wastewater from two refineries that are connected to the plant. It is believed CLEARAS's treatment system works best at plants that serve municipal wastewater without significant industrial inputs. This led SDSD to propose to move the CLEARAS treatment system to the North Plant.

With the startup of the WRR next to the South Plant, the South Plant has begun receiving a higher load of ammonia and has been unable to treat this load and comply with effluent limitation. Effluent limit exceedances began in July 2019 and peaked in January 2020 at 119 mg/L, well in excess of the 30 mg/L daily maximum effluent limitation. Based on these discharges, DWQ issued a Notice of Violation on December 18, 2019 to SDSD. Settlement and compliance plans for resolution of these violations are being negotiated.

Due to these conditions SDSD is, at least for now, abandoning the CLEARAS treatment system for use at the South Plant.

NORTH PLANT UPDATE

The SDSD North Wastewater Treatment Plant (North Plant) serves the cities of Centerville, Woods Cross, West Bountiful and portions of Bountiful with a daily average design flow of 12 million gallons per day (MGD) and a design population equivalent of 75,000. The facility functions in single-stage trickling filter mode. Unit operations and processes at the North Plant include influent pumping, screening, grit removal, primary clarification, biological processing using trickling filters, secondary clarification, chlorination, and dechlorination prior to release into the State Canal. Sludge generated during unit processes is stabilized in two-stage mesophilic anaerobic digesters and dried in drying beds.

During 2018, SDSD was investigating why CLEARAS at the South Pilot wasn't working. As part of the investigation, CLEARAS supplied a mobile pilot system to the North Plant (North Pilot). The North Pilot was operated from approximately September-November 2018. During this operation the North Pilot ran with no issues on North Plant effluent reducing TP concentrations to well below 1.0 mg/L. To further evaluate the South Pilot problems, South Plant effluent was trucked to the North Pilot and the North Pilot ceased proper treatment of this effluent after approximately two weeks. Later, North Plant effluent was trucked to the South Pilot with successful results. At this time, the South Pilot has been successfully running on trucked North Plant effluent since December 4, 2019. From December 4, 2019 to January 13, 2020 the average effluent North Plant TP concentration trucked to the South Pilot was 1.69 mg/L and for this period, the South Pilot produced an average effluent concentration of 0.20 mg/L total phosphorus. From January 14, 2020 to February 12, 2020 the average effluent North Plant TP concentration trucked to the South Pilot was 1.03 mg/L. During this time, the South Pilot produced an average effluent concentration of 0.11 mg/L total phosphorus. Lower North Plant TP concentrations observed during this period resulted from chemical additions at the North Plant for phosphorus control. Further, during this run ammonia was monitored and was being reduced from an average concentration of 10.5 mg/L to an average of 1.5 mg/L or less.

ALTERNATIVES EVALUATED:

These pilot studies have led SDSD to prepare a Capital Facilities Plan to evaluate projects needed at the South and North Plants.

The alternatives evaluated for the South Plant are as follows.

	Capital Costs	O&M	20-Year Net Present Value
Chemical precipitation and Denitrification Filter	$13	$1.5	$35
Biological Nutrient Removal	$36	$0.8	$48
Chemical Addition and Anoxic Basin	$20	$0.5	$28
Aeration for Ammonia Nitrification	$6	$0.3	$10

Based on this analysis, SDSD plans to add a nitrification tank to the South Plant at the approximate cost of $6.1 million. This project will convert the ammonia to nitrate and is anticipated to be in compliance with ammonia effluent limitations by June 2021. In addition to this aeration project, the South Plant is in need of $4.2 million in Plant Rehabilitation. To complete these projects at the South Plant, SDSD secured a $12.2 million loan from Zions Bank at a 2.05% interest rate.

The alternatives evaluated at the North Plant are as follows.

	Capital Costs	O&M	20-Year Net Present Value
Chemical precipitation and Denitrification Filter	$19.4	$2.9	$84
Biological Nutrient Removal	$58	$1	$79
Chemical Addition and Anoxic Basin	$31	$1	$52
Without algae revenue			
6 mgd of CLEARAS	$37	$1.4	$66
12 mgd of CLEARAS	$64	$1.4	$116
With projected algae revenue			
6 mgd of CLEARAS	$37	-$1.1	$20
12 mgd of CLEARAS	$64	-$2.6	$22

Based on this alternatives analysis and the pilot projects, SDSD plans to pursue a 6 mgd CLEARAS project at the North Plant. SDSD believes in the CLEARAS treatment process and has a contract currently to sell the algae for $0.75 a pound for the next few years. This project is projected to be completed in mid-2024. However, this project could be interrupted as the North Plant has exceeded its monthly average ammonia effluent limitation during November 2019, December 2019, and January 2020. If these exceedances continue, the North Plant will need to

investigate expediting this project or implementing an alternative nitrification project such as the one the South Plant is undertaking.

PROJECT DESCRIPTION:

The proposed project is to implement a tertiary treatment technology that can be incorporated into the treatment train without significant modification to, or disruption of, the existing plant. The proposed project will add an algae blending tank (trickling filter effluent equalization tank), greenhouses, the algae reactor system, membrane filtration tanks, ultraviolet light (UV) disinfection, centrifuges (for dewatering the algae product), drum driers, and associated infrastructure. The project is proposed to treat 6.0 mgd or about half the flow of the North Plant. The project will treat half of the plant the flow and remove total phosphorus from 1.8 mg/L to 0.2 mg/L. This stream would then be blended with the remainder of the plant effluent (about 6 MGD) resulting in an average total effluent concentration of less than 1.0 mg/L. In addition, the project should remove ammonia down to 1.5 mg/L resulting in a blended effluent ammonia concentration of approximately 6.0 mg/L, which will comply with the ammonia effluent limits at the North Plant.

POSITION ON PROJECT PRIORITY LIST:

This project is ranked **No. 3** of 9 projects on the Wastewater Treatment Project Priority List.

POPULATION GROWTH:

The population of Davis County is projected to grow at an annual rate of 1.6% by the Governor's Office of Planning and Budget. Current population and associated effective residential units (ERUs) are shown in the table below.

	SDSD
2014 Population	91,359
2014 ERUs	27,124
2040 Population	105,608
2040 ERUs	38,474

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

SDSD has conducted multiple public Board meetings over the past 2 years regarding their treatment plant projects. The SDSD Board authorized SDSD management to pursue funding for

the project. In addition, SDSD held a public hearing on a $5/month user rate increase. Overall, the public sentiment at this hearing was that the public was impressed by the length of time since the last rate increase.

IMPLEMENTATION SCHEDULE:

The schedule for implementation of the SDSD for the North Plant construction project is as follows:

WQB Introduction	January 30, 2017
WQB Funding Authorization:	February 22, 2017
WQB Reauthorization	February 2020
Bid Opening	December 2021
Complete Construction	December 2024

APPLICANT'S CURRENT USER CHARGE:

The 2014 median adjusted gross income (MAGI) for SDSD was approximately $53,250, which was 27 percent higher that the state average of $41,923. The SDSD had not increased user fees since 1988 but since 2017 has increased them by $5/month. The current user fee is $10 per month per residence or residential equivalent. The District also collects a property tax assessment. Together with the monthly sewer fees, the average monthly fee received per ERU is $20.27. The maximum affordable sewer fee based on 1.4% of the MAGI is $62.12 per month per ERU.

COST SHARING:

The SDSD has paid for development of the Capital Facilities Plan and will complete the design without need of financial support. The SDSD intends to expedite project preparation by beginning engineering design using a portion of the local contribution. In total, the SDSD will bring $10,484,000 in local contribution to the project.

Funding Source	Cost Sharing	Percent of Project
Local Contribution (cash)	$ 10,484,000	28%
WQB Loan	$ 26,351,000	72%
Total	$ 36,835,000	100%

EFFORTS TO SECURE FINANCING FROM OTHER SOURCES:

Currently, SDSD has been able to secure private funding at 2.05%; however SDSD has stated that securing similar funding for an innovative process might be more challenging.

COST ESTIMATE:

The estimated cost of the proposed WWTP project is outlined in the following table:

Item	SDSD Contribution	Funded Project Cost
Legal/Bonding		$ 50,000
DWQ Loan Origination		$ 263,000
Construction	$ 5,720,000	$ 19,686,000
Contingency 25%		$ 6,352,000
Engineering 15%	$ 4,764,000	
Total	$ 10,484,000	$ 26,351,000
Project Cost	**$ 36,835,000**	

ESTIMATED ANNUAL COST FOR SEWER SERVICE:

Staff prepared a static cost model for this project, provided here as Attachment 1. A second cost model was developed for all the SDSD projects totaling $58 million. This model shows the project is affordable at interest rates above 5.5%. In addition, these cost models do not reflect the projected algae revenue. The SDSD Facilities Plan estimates an income of $2,463,750 a year in revenue from the sale of algae. This is based on an 80% algae recovery and a sales price of $0.60 per pound.

During February 2017 when the original project financing was authorized, lending rates for municipal AAA and AAA rated bonds (Municipal Market Data and 11-Bond indices) were reported at 2.64% to 3.37%, respectively, averaging together about 3.0%. At the time of authorization staff recommended the Board discount the interest rate for this project rate by 1.5% based on the following factors:

1. The project's need, including water quality protection and regional importance;
2. "Green Reserve" contribution;
3. Water Quality Board support for innovation that will benefit the State and advance the state of wastewater design; and
4. First and Second Round funding requirements.

NONPOINT SOURCE PROJECT FUNDING:

Nonpoint source pollution generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage or hydrologic modification. Nonpoint source pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. Funding nonpoint source pollution control projects is difficult because the projects are not readily tied to a sufficient revenue stream that would repay a loan, and grant funds are limited. Federal SRF funds can be used to support nonpoint source projects such as: (1) decentralized treatment or septic system rehabilitation or replacement, (2) stormwater best management practices (BMPs) implementation, (3) agriculture and forestry BMPs implementation, (4) conservation easement purchases or land acquisition for riparian protection, (5) wetland protection and construction, (6) underground storage tank remediation and removal, (7) monitoring, capping, and on-site treatment at brownfield sites and sanitary landfills, and (8) remediation of mining sites.

At the time of authorization SDSD requested additional funding to conduct nonpoint source project(s) in partnership with the Board and as part of the District's proposed project. The Board has previously partnered with other utilities to support important nonpoint source projects such as the Ogden River Restoration project that was funded by Central Weber Sewer Improvement District.

The mechanism proposed for funding the joint nonpoint source projects, is to provide loan funds in excess of those required for the base project and then offset the additional loan repayment amount with a reduced interest rate that holds the loan affordability constant. In effect, this mechanism enables the Board to make hardship grant assessment funds available today at their net present value, as opposed to receiving them over the term of a loan as with "interest." Funds used in this manner are subject to the requirements of the SRF grant as opposed to the requirements of the Hardship Grant Fund.

Staff analyzed several loan scenarios that would add $1,000,000 to $3,000,000 in principal to the base loan amount. Then, staff discounted the interest rate in the analysis to arrive at approximately the same annual loan payment as the base loan case. A summary of these scenarios with a base project interest rate of 1.5% and 20 years term (recommended above) is provided in the following table. A more detailed summary that varies the base project interest rate is provided in Attachment 3.

Nonpoint Source Funding	WQB Loan Amount	DWQ Staff Recommended Interest Rate	WQB Loan Debt Service	Sewer Cost as a Percent of MAGI
0	$26,326,000	1.50%	$1,533,377	0.4969%
$1,000,000	$27,336,000	1.10%	$1,530,130	0.4966%
$1,500,000	$27,841,000	0.90%	$1,527,329	0.4964%
$2,000,000	$28,346,000	0.75%	$1,531,552	0.4968%
$2,500,000	**$28,851,000**	**0.55%**	**$1,527,304**	**0.4964%**
$3,000,000	$29,356,000	0.40%	$1,530,227	0.4966%

*An additional breakdown of Interest rates and Debt Service breakdown are included as Attachment 3.

This analysis shows how the February 2017 authorization interest rate was reduced from the recommended 1.5% to 0.55% to include $2.5 million in NPS funding. Since the authorization was awarded, DWQ staff and SDSD staff worked to identify high priority nonpoint source projects for this funding. DWQ issued an RFP for low impact development (LID) demonstration projects and identified three priority projects which were presented to the Board in March 2018. The Board voted to use $1,000,000 of the SDSD nonpoint source funding for the following projects:

- $341,000 for the University of Utah
- $347,400 for Woods Cross City
- $311,600 for Sandy City

These awards are contingent on SDSD's loan closing and have not yet been executed. SDSD has again agreed to carry NPS funding with their reauthorized project.

STAFF COMMENTS:

The proposed advanced biological algae treatment is a developing technology. The District conducted pilot-scale tests treating North Plant effluent and demonstrated remarkable results in removing ammonia, total inorganic nitrogen, and phosphorus. The technology is currently being scaled up to production (full) scale application in several locations; however, it is not a "time tested" or "tried and proven" technology. If successful, this technology could be a game changer for nutrient removal and energy efficiency at POTWs in Utah and the industry.

As a tertiary "bolt-on" technology with demonstrated capability for nutrient removal and seemingly good potential for producing a steady revenue stream, the technology offers potential for cost effective nutrient control. Important considerations that will affect the cost effectiveness of the technology include: (1) the ability to economically separate and concentrate algae to market specifications; (2) the reliability and robustness of the market for the product algae; and (3) cost of raw materials (e.g., carbon dioxide must be supplied to the algae reactors).

The importance of the algae-product revenue stream to the economic feasibility of the project is at least somewhat facility dependent. Coupled with SDSD's low rates and large service area, this utility is well insulated from the higher risk of implementing a developing / innovative technology in other locations. As an innovative process the project does carry more risk and uncertainty than traditional technologies.

The attached static cost model (Attachment 2) shows that the required user rates will be below the Board's affordability criteria of 1.4% of MAGI, i.e., a loan is affordable at interest rates that exceed those of the current market. Staff believes the project will satisfy Green Project Reserve capitalization grant requirements.

Staff supports SDSD's project to build an innovative treatment technology with to potential to be a game changer for nutrient treatment and treatment sustainability. This is a project introduction, and staff recommendations will be provided at the request for funding authorization.

Attachments: South Davis Cost Model 1 – North Plant 6 mgd CLEARAS
South Davis Cost Model 2 – All Projects
Nonpoint Source Funding Amount and Interest Rate Options

File:SDSD, Admin, Section 1
DWQ-2020-004822

Attachment 1 – Static Cost Model 1 - South Davis – North Plant 6 mgd CLEARAS

STATIC COST MODEL 1 - South Davis - North Plant 6 mgd CLEARAS

Project Costs

Legal/Bonding	$	50,000
DWQ Loan Origination Fee	$	263,000
North Plant ABNR	$	25,406,000
Engineering	$	4,764,000
Contingency (approx 20% const. cost)	$	6,352,000
Total Project Cost:	$	36,835,000

Project Funding

Applicant Contribution	$	10,484,000
WQB Loan	$	26,351,000
Total Project	**$**	**36,835,000**

Current Customer Base & User Charges

	ERU's	27,124
	MAGI (2017):	$53,250
	Affordable Monthly Rate at 1.4%	$62.13
	Current Impact Fee (per ERU):	$1,596.00
	Current Monthly User Fee (per ERU)	$20.27
	Existing O&M expenses Treatment & Collection	$6,213,949
	New O&M expenses Treatment & Collection	$7,563,949
0%	Existing Sewer Debt Service	$0

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 Sewer Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI
-	36,835,000	2.05%	2,263,592	565,898	7,563,949	0	10,393,439	31.93	0.72%
-	26,351,000	0.00%	1,317,550	329,388	7,563,949	0	9,210,887	28.30	0.64%
-	26,351,000	0.25%	1,352,409	338,102	7,563,949	0	9,254,460	28.43	0.64%
-	26,351,000	0.50%	1,387,814	346,953	7,563,949	0	9,298,716	28.57	0.64%
-	26,351,000	0.75%	1,423,761	355,940	7,563,949	0	9,343,650	28.71	0.65%
-	26,351,000	1.00%	1,460,249	365,062	7,563,949	0	9,389,260	28.85	0.65%
-	26,351,000	1.25%	1,497,274	374,319	7,563,949	0	9,435,542	28.99	0.65%
-	**26,351,000**	**1.50%**	**1,534,833**	**383,708**	**7,563,949**	**0**	**9,482,491**	**29.13**	**0.66%**
-	26,351,000	1.75%	1,572,923	393,231	7,563,949	0	9,530,103	29.28	0.66%
-	26,351,000	2.00%	1,611,541	402,885	7,563,949	0	9,578,375	29.43	0.66%
-	26,351,000	2.25%	1,650,681	412,670	7,563,949	0	9,627,301	29.58	0.67%
-	36,835,000	5.50%	3,082,328	770,582	7,563,949	0	11,416,859	35.08	0.79%

Attachment 2 – Static Cost Model 2 – South Davis – All Projects

STATIC COST MODEL 2 - South Davis - All Projects

Project Costs

Legal/Bonding	$	50,000
DWQ Loan Origination Fee	$	263,000
North Plant ABNR	$	36,521,125
North Plant Rehabilitation	$	10,755,375
South Plant Nutrient Removal	$	6,139,275
South Plant Rehabilitiation	$	4,181,154
Total Project Cost:	$	57,909,929

Current Customer Base & User Charges

ERU's	27,124
MAGI (2014):	$53,250
Affordable Monthly Rate at 1.4%	$62.13
Current Impact Fee (per ERU):	$1,596.00
Current Monthly User Fee (per ERU)	$20.27
Existing O&M expenses Treatment & Collection	$6,213,949
New O&M expenses Treatment & Collection	$7,823,949
Existing Sewer Debt Service	$0

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 Sewer Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI
-	57,909,929	2.05%	3,558,693	889,673	7,823,949	0	12,272,315	37.70	0.85%
-	57,909,929	0.00%	2,895,496	723,874	7,823,949	0	11,443,320	35.16	0.79%
-	57,909,929	0.25%	2,972,104	743,026	7,823,949	0	11,539,079	35.45	0.80%
-	57,909,929	0.50%	3,049,910	762,478	7,823,949	0	11,636,337	35.75	0.81%
-	57,909,929	0.75%	3,128,910	782,228	7,823,949	0	11,735,087	36.05	0.81%
-	57,909,929	1.00%	3,209,097	802,274	7,823,949	0	11,835,320	36.36	0.82%
-	57,909,929	1.25%	3,290,465	822,616	7,823,949	0	11,937,030	36.67	0.83%
-	57,909,929	1.50%	3,373,006	843,252	7,823,949	0	12,040,207	36.99	0.83%
-	57,909,929	1.75%	3,456,715	864,179	7,823,949	0	12,144,842	37.31	0.84%
-	57,909,929	2.00%	3,541,581	885,395	7,823,949	0	12,250,926	37.64	0.85%
-	57,909,929	2.25%	3,627,598	906,899	7,823,949	0	12,358,446	37.97	0.86%
-	57,909,929	5.50%	4,845,864	1,211,466	7,823,949	0	13,881,279	42.65	0.96%

Attachment 3 – Nonpoint Source Funding Amount and Interest Rate Options

Base Project Loan, $26,355,000

Interest Rate	Debt Service
1.25%	1,495,854
1.30%	1,503,316
1.35%	1,510,799
1.40%	1,518,304
1.45%	1,525,830
1.50%	**1,533,377**
1.55%	1,540,946
1.60%	1,548,535
1.65%	1,556,146
1.70%	1,563,778
1.75%	1,571,431
1.80%	1,579,105
1.85%	1,586,800
1.87%	1,589,884

+$1,000,000 in Non-point source

Interest Rate	Debt Service
0.85%	1,492,055
0.90%	1,499,625
0.95%	1,507,218
1.00%	1,514,833
1.05%	1,522,470
1.10%	**1,530,130**
1.15%	1,537,812
1.20%	1,545,516
1.25%	1,553,242
1.30%	1,560,991
1.35%	1,568,761
1.40%	1,576,554
1.45%	1,584,369
1.50%	1,592,205

+$1,500,000 in Non-point source

Interest Rate	Debt Service
0.65%	1,489,006
0.70%	1,496,625
0.75%	1,504,267
0.80%	1,511,931
0.85%	1,519,619
0.90%	**1,527,329**
0.95%	1,535,062
1.00%	1,542,818
1.05%	1,550,596
1.10%	1,558,397
1.15%	1,566,221
1.20%	1,574,067
1.25%	1,581,936
1.30%	1,589,828

+$2,000,000 in Non-point source

Interest Rate	Debt Service
0.50%	1,492,883
0.55%	1,500,570
0.60%	1,508,281
0.65%	1,516,015
0.70%	1,523,772
0.75%	**1,531,552**
0.80%	1,539,356
0.85%	1,547,183
0.90%	1,555,033
0.95%	1,562,906
1.00%	1,570,803
1.05%	1,578,722
1.10%	1,586,665
1.15%	1,594,630

+$2,500,000 in Non-point source

Interest Rate	Debt Service
0.30%	1,488,421
0.35%	1,496,150
0.40%	1,503,903
0.45%	1,511,679
0.50%	1,519,480
0.55%	**1,527,304**
0.60%	1,535,152
0.65%	1,543,023
0.70%	1,550,919
0.75%	1,558,838
0.80%	1,566,780
0.85%	1,574,747
0.90%	1,582,737
0.95%	1,590,750

+$3,000,000 in Non-point source

Interest Rate	Debt Service
0.15%	1,491,028
0.20%	1,498,819
0.25%	1,506,634
0.30%	1,514,474
0.35%	1,522,338
0.40%	**1,530,227**
0.45%	1,538,139
0.50%	1,546,076
0.55%	1,554,037
0.60%	1,562,023
0.65%	1,570,032
0.70%	1,578,066
0.75%	1,586,123
0.80%	1,594,205

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
Director

MEMORANDUM

TO: Water Quality Board

THROUGH: Erica Brown Gaddis
Director

FROM: Sarah Leavitt Ward
Environmental Scientist III

DATE: February 26, 2020

SUBJECT: Request for Approval of Settlement Agreement and Order on Consent for Pitman Family Farms, Inc.

The Utah Water Quality Act, Utah Code Section 19-5-104 (3)(h)(i) and,(ii), requires that any settlement negotiated by the Director with a civil penalty in excess of $25,000 must be reviewed and approved or disapproved by the Water Quality Board.

Pitman Family Farms, Inc. (Pitman) operates the Moroni City Wastewater Reclamation Facility (MCWRF) which is owned by the town of Moroni and covered by UPDES Permit number UT0020222. The UPDES permit is held by Pitman because the MCWRF mostly processes waste from Pitman's turkey processing plant. About 10% of the effluent stream is municipal waste from the town of Moroni and the remaining roughly 90% from the turkey processing plant. Pitman also operates an anaerobic pond associated with its turkey processing plant, which is covered by Ground Water Discharge and Construction Permit, UGW390005.

Pitman assumed operations of MCWRF and the associated turkey processing plant in January 2018. As a result of poor operating practices of the previous owner, weather events, and facility design, there were 103 violation events from January 2018 through March 2019. Pitman has since been working with the Director and Division of Water Quality to improve operations and negotiate the proposed Settlement Agreement and Order on Consent for past violations which is the subject of this Memorandum.

The negotiated penalty is $347,790. Attached for your reference is the proposed Settlement Agreement and Order on Consent, UTM-19-01.

The terms of the financial settlement in the UTM-19-01:

Penalty Held in Abeyance	$244,328
Payment to the Environmental Mitigation and Response Fund	$59,000
Penalty Paid to the State of Utah	$1,000
Total Civil Penalty	**$304,238**
Administrative Cost Reimbursement to DWQ	$43,552
Total Settlement	**$347,790**

The severity of the penalty for UTM-19-01 is due to the number of events and potential for significant environmental impacts created by the violations. However, to achieve the shared goal of avoiding future water quality issues, the proposed Settlement Agreement and Order on Consent agrees to hold $244,238 of the civil penalty amount in abeyance provided Pitman completes improvements to the facility, undertakes new sampling requirements, and avoids future violations. For the remainder of the civil penalty Pitman has agreed to pay $59,000 to the Environmental Mitigation and Response Fund (Utah Code Section 19-1-603) and $1,000 to the State of Utah within 30 days of the effective date of the agreement. In addition, Pitman has agreed to reimburse the Division for expenses associated with responding to the violations.

The public comment period for the proposed Settlement Agreement and Order on Consent ran from January 16, 2020 through February 18, 2020 (copy attached). No comments were received.

The proposed Settlement Agreement and Order on Consent represents a fair and reasonable settlement. It is Staff's recommendation that this settlement be approved.

Attachments:
1. Settlement Agreement and Order on Consent (DWQ-2020-000288)
2. Public Notice (DWQ-2020-000286)

DWQ-2020-004222

PITMAN FAMILY FARMS, INC. **C/O Mary Pitman, Registered Agent** **15 East 1900 South Feed Mill Road** **P.O. Box 368** **Moroni, UT 84646** **UPDES Permit No. UT0020222**	**DOCKET NO.** **UTM-19-01** **SETTLEMENT AGREEMENT AND ORDER ON CONSENT**

This Settlement Agreement and Order (hereinafter "Agreement") is entered into voluntarily by and between the Director of the Utah Division of Water Quality (hereinafter the "Director"), and Pitman Family Farms Inc. (hereinafter "Pitman" or "Respondent"), jointly referred to hereafter as "the Parties." By entering into this Agreement, the parties wish, without further administrative or judicial proceedings, to resolve the issues arising out of alleged violations of the Utah Water Quality Act, Utah Code § 19-5-101 *et seq*. (the "Act"), and corresponding regulations in the Utah Administrative Code.

1. The Director has authority to administer the Act pursuant to Utah Code Section 19-1-105(1)(e), and to issue orders as specified in Utah Code Section 19-5-106(2)(d) and Section 19-5-111. The Director also has authority to settle any civil action initiated to compel compliance with the Act and implementing regulations pursuant to Utah Code Section 19-5-106(2)(k).

2. Pitman is a California Corporation registered and doing business in the State of Utah that operates a turkey processing plant located in Moroni, San Pete County, Utah.

3. The Director has been delegated authority by the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program under the Federal Clean Water Act (CWA), the Utah version of which is the Utah Pollutant Discharge Elimination System (UPDES).

4. Pitman operates the Moroni City Wastewater Reclamation Facility which is owned by the town of Moroni under valid UPDES Permit number UT0020222, which allows and controls wastewater discharge from the Moroni City Wastewater Reclamation Facility. Pitman also operates an anerobic pond associated with its turkey processing plant, which is covered by Ground Water Discharge and Construction Permit, UGW390005.

5. The Parties now desire to resolve all alleged violations without additional administrative proceedings except to the extent provided herein by entering into this Agreement. The Parties enter into this Agreement to address all known violations alleged by the Director of the Act, corresponding rules, UPDES Permit number UT0020222 and Ground Water Discharge and Construction Permit No. UGW390005 up to the effective date of this Agreement including those outlined in the attached Administrative Penalty Discussion. Entering into this Agreement does not constitute any admission of liability by Pitman.

ORDER

The Director hereby orders, and Pitman agrees, to the following terms to fully resolve the matter up to the Effective Date of this agreement:

1. Pitman agrees to pay as follows:
    a. A civil penalty in the amount of $304,238 (total penalty amount, including the amount to be held in abeyance), $244,238 of which will be held in abeyance pursuant to paragraph 2, below;
    b. $59,000 to be paid the Environmental Mitigation and Response Fund according to Utah Code Section 19-1-603 within 30 days of the Effective Date of this Agreement.
    c. $1,000 to be paid to the State of Utah within 30 days of the Effective Date of this Agreement; and
    d. $43,552 to be paid to the Division of Water Quality ("Division") within 30 days of the Effective Date of the Agreement for the Division's investigative response costs associated with this enforcement action.

Payment is to be made within 30 days of the Effective Date of this Agreement by certified check made payable to the State of Utah delivered or mailed to:

Department of Environmental Quality
Division of Water Quality
P. O. Box 144870
Salt Lake City, Utah 84114-4870

2. The Director agrees to hold in abeyance $244,238 in civil penalties, so long as Pitman completes the following tasks within the timeframes outlined:
    a. Meets all payment terms outlined above in Item 1 of this Order.
    b. Ensures that concrete on the San Pitch River, near the Feed Mill property, is fully cleaned up consistent with and in the time frame provided by Utah Division of Water Rights Stream Alteration Permit No. 19-65-0001 (Order of the State Engineer dated April 9, 2019).
    c. Starts immediate monitoring of process wastewater flowing out of its anaerobic pond for BOD, TSS, TKN, total phosphorus, and oil and grease twice a week for a year. The effluent flow rate from the pond shall be taken with a continuous meter, which must be installed within 30-days of the Effective Date of this Agreement. For BOD_5, TSS and total phosphorus sampling must be either flow proportional composite as stated in the UPDES Permit or utilizing a 24-hour composite sampler. If a composite sampler is used, a sample must be taken every hour during the 24-hour sampling period. TKN and oil and grease must be collected as grab samples. The samples must be analyzed by a state certified lab utilizing methods stated in 40 CFR 136.

d. Does not violate the Act, corresponding rules, UPDES Permit No. UT0020222 or Ground Water Discharge and Construction Permit, UGW390005 beginning with the Effective Date of this Agreement until April 2021 and at least 18 months after all engineering improvements are fully implemented. If new violations occur, the following penalty amounts will no longer be held in abeyance and will become due and payable to the State of Utah, in addition to any penalties imposed for the new violations:
    i. $10,000 per violation per day for discharge violations, including but not limited to UPDES Permit limit exceedances, spills, or overflows.
    ii. $500 per occurrence for recordkeeping violations or other violations determined by the Director to be minor.
    iii. Timely payment in full of the proper portion of the penalty constitutes compliance with the corresponding portion of the Order and does not extend the term of this Agreement.

3. If the Director determines that Pitman has not complied with any of the terms contained in Order paragraphs 1 and 2 above, Pitman shall be required to pay the proper portion of the penalty, as set forth above, within 30 days from the date the Director notifies Pitman of the amounts due. If the Director determines that Pitman violated the Act and requires payment, Pitman may challenge the fact of the violation according to Utah Code 19-1-301 and Utah Admin. Code 305-7 but may not challenge the penalty amounts as provided by this Agreement.

4. If Pitman complies with Order paragraphs 1 and 2, above, it shall be relieved of any further obligation or liability under this Agreement.

5. As of the Effective Date, this Agreement will be a final administrative order subject to the civil enforcement provisions of Utah Code Section 63G-4-501 and other applicable law, including Utah Code Section 19-5-115.

6. Nothing in this Agreement shall limit the power and authority of the Division, Director or the State of Utah to take, direct, or order all actions necessary, including the assessment of civil penalties, in connection with future violations, to protect public health, welfare, or the environment, or to prevent, abate, or minimize an actual, potential, or threatened release of pollutants or contaminants to waters of the State. Further, nothing in this Agreement shall prevent the Director or the Water Quality Board from seeking equitable relief to enforce the terms of this Agreement, from taking other legal or equitable action as they deem appropriate and necessary in connection with future violations, or from requiring Respondent in the future to perform additional activities pursuant to the Act or any other applicable law in connection with future violations.

7. Nothing in this Agreement shall constitute a waiver by Pitman of any claims it may have against third parties for costs, damages, or other actions associated with the release described above.

8. This Agreement shall become effective when it is signed by the Director and Pitman ("Effective Date").

9. This Agreement is binding upon each of the Parties and their respective heirs, successors, and assigns. Any change in ownership or corporate or legal status, including but not limited to, any transfer of assets or real or personal property, shall in no way alter the status or responsibilities of the parties under this Agreement.

10. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

11. Nothing in this Agreement shall constitute or be considered as a release from any claims, to include natural resource damage claims, cause of action, or demand in law or equity which the State of Utah may have against Respondent, or any other person, firm, partnership or corporation for any liability arising out of or relating in any way to the release of pollutants to waters of the State.

[SIGNATURE PAGE FOLLOWS]

IT IS SO AGREED AND ORDERED:

FOR UTAH DIVISION OF WATER QUALITY

By_____

Erica Brown Gaddis, PhD

Director

Date: **_____**

FOR Pitman Family Farms, Inc.

By_____

Title: _____

Date: _____

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
Director

January 16, 2020

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY
PUBLIC NOTICE OFSETTLEMENT AGREEMENT AND ORDER ON CONSENT
PITMAN FAMILY FARMS, INC., DOCKET NO. UTM-19-01

PURPOSE OF PUBLIC NOTICE

This notice is to declare that the State of Utah has reached a settlement agreement with Pitman Family Farms, Inc. This Public Notice is issued pursuant to Utah Administrative Code R317-8-1.9, to provide opportunity for public comment on the proposed Settlement Agreement and Order on Consent. The proposed order is for the purpose of resolving alleged violations of Utah Code Annotated 19-5 (Water Quality Act), and is a resolution of potential enforcement proceedings brought against Pitman Family Farms, Inc.

PUBLIC COMMENTS

Public comments are invited any time prior to close of business **February 18, 2020**. Comments may be directed to the Department of Environmental Quality, Division of Water Quality, 195 North 1950 West, PO Box 144870, Salt Lake City, Utah 84114-4870.

FURTHER INFORMATION

The Settlement Agreement and Order on Consent is available for public review under "Public Notices" at https://deq.utah.gov/public-notices-archive/water-quality-public-notices. If internet access is not available, a copy may be obtained by calling Sarah Leavitt Ward at 801-536-4320. Written public comments can be submitted to: Sarah Leavitt Ward, PO Box 144870, Salt Lake City, Utah 84114-4870 or by email at: sleavitt@utah.gov. After considering and responding to public comment the Director of the Division of Water Quality will present the settlement agreement for approval to the Utah Water Quality Board.

DWQ-2020-000286