

 $\begin{array}{c} \text{GARY R. HERBERT} \\ \textit{Governor} \end{array}$

SPENCER J. COX Lieutenant Governor

Department of Environmental Quality

Alan Matheson Executive Director

DIVISION OF WATER QUALITY Erica Brown Gaddis, PhD Director Water Quality Board
Jennifer Grant, Vice-Chair
Steven K. Earley
Gregg A. Galecki
Brandon Gordon
Michael D. Luers
Alan Matheson
Emily Niehaus
Dr. James VanDerslice
James Webb
Dr. Erica Brown Gaddis
Executive Secretary

Utah Water Quality Board Meeting DEQ Board Room 1015 195 North 1950 West Salt Lake City, UT 84116 May 22, 2019

New Board Member Orientation Begins at 8:30 am

New Board Member Orientation1. Division OverviewErica Gaddis2. Open Meetings, Conflicts, Ethics & RecordsCraig Anderson3. Overview of Financing ProgramsJohn Mackey4. Rule Making 101Jim Harris5. On BoardingBrenda Johnson
Board Meeting Begins at 9:30 am
AGENDA
Water Quality Board Meeting – Roll Call
A. Minutes: Approval of minutes for April 10, 2019 Water Quality Board Meeting Jennifer Grant
B. Election of New Chair and Vice Chair
C. Executive Secretary's Report Erica Gaddis
 D. Other Business: Recognition of Service on the Wastewater Operator Certification Council – Award to Gordon Evans
E. Funding Requests: 1. Financial Report

F. Public Comment Period

G. Meeting Adjournment

Next Meeting June 26, 2019 DEQ Board Room 1015 195 North 1950 West Salt Lake City, UT 84116

Revised 5/16/2019

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 <a href="https://www.layer.org/least-new/by-needed-needing-needed-needing-needed



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MINUTES

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

UTAH WATER QUALITY BOARD

Dixie Convention Center 1835 South Convention Center Drive St. George, UT 84790 April 10, 2019

UTAH WATER QUALITY BOARD MEMBERS PRESENT

Myron Bateman Jennifer Grant Steven Earley Mike Luers Gregg Galecki Jim Webb

Excused: Jim Vanderslice

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Chris Bittner Ken Hoffman Beth Wondimu **Judy Etherington** Harry Campbell Erica Gaddis Brenda Johnson **Emily Cantón** Jodi Gardberg John Mackey Kim Shelley Scott Daly Jim Harris Clanci Hawks Suzan Tahir **Skyler Davies**

OTHERS PRESENT

Name Organization Representing

Kevin Hall Central Weber Sewer Improvement District

Curt Nielson Ensign Engineering

Mitch Hogsett Forsgren
Dustin Atchisom Jacobs
Ruben VanTassell JBS

Kerry Eppich Mount Olympus Improvement District

Cory Wells Murray City
Giles Demke Orem City
Rebecca Andrus Provo City

Page 2 April 10, 2019 Water Quality Board Minutes

Name (continued) Organization Representing

David Meyer Redoubt Restoration

Richard Mickelsen Timpanogos Special Service District

Paul Fulgham Tremonton City

Rick Roberts

Mr. Bateman called the Board meeting to order at 8:30 AM and took roll call for the members of the Board and audience.

APPROVAL OF MINUTES OF MARCH 13, 2019 MEETING

Motion: Mr. Earley requested to make an amendment to the minutes for the

spelling of his last name to be changed from Early to Earley. Mr. Luers moved to approve the minutes with Mr. Earley seconding the motion. The motion passed unanimously with the revisions that Mr.

Earley requested.

EXECUTIVE SECRETARY REPORT

National Level

- Dr. Gaddis reported that she attended the Association of Clean Water Administrators (ACWA).
 - o David Ross, Assistant Administrator, Office of Water, of the EPA spoke about priorities that the Office of Water has identified for this year.
 - Modernizing regulatory programs
 - Water infrastructure
 - Improving drinking water and public health

Three things Mr. Ross thinks about the most.

- Workforce Development
- Water Reuse
- Water Quality Trading
- Dr. Gaddis reported on the new Waters Of The US (WOTUS) definition which will restrict WOTUS to:
 - o Perennial Tributary
 - o TNW including GSL
 - o Impoundments
 - o Adjacent wetlands (physically touch)
 - o Intermittent tributaries
- Dr. Gaddis reported on Integrated Planning:
 - o The Integrated Municipal Stormwater and Wastewater Planning Approach

Framework guidance was issued by EPA in 2012. The Water Infrastructure Improvement Act of 2018 was passed by congress which codified Integrated Planning into law. It allows communities to manage costs and prioritize Clean Water Act investments. It is championed by NACWA and US Conference of Mayors. There remains a need to update recommendations for determination of affordability. It provides flexibility for optimal sequencing and scheduling of work including capital investments.

- Dr. Gaddis updated the board on the SRF reauthorization and increased amounts.
 - o Bill to reauthorize CWSRF was introduced in March 2019 for \$20 billion over 5 years (increase over \$1.7 million in FY2019). It is unclear how additional funds will be allocated.
 - o Water Resources Development Act on 2 year cycle (2014; 2016; 2018; 2020) and includes reauthorization of WIFIA

State Level

- Dr. Gaddis reported on the latest Gold King Mine spill.
 - o Extreme weather conditions and heavy snow knocked out power to the Gladstone Interim Water Treatment Plant (IWTP) at the Gold King Mine on March 13, 2019. Untreated mine water began to flow at a rate of approximately 264 gallons per minute (gpm) into Cement Creek, then to the Animas River and on to the San Juan River. In total, approximately 800,000 gallons of untreated mine water was released from the Gold King Mine. The release was smaller than the 2015 release that deposited 3 million gallons of metal-laden mine water into the San Juan watershed over a shorter period of time. Upon receiving the news of the plant shutdown, employees from the Utah Department of Environmental Quality (DEQ), along with teams from the US Geological Survey (USGS) field offices in New Mexico and Moab headed to the Four Corners region to collect water samples. DEQ will review the water-quality and sediment data collected in the San Juan River from March 18 to March 20, 2019, when available, to confirm this finding. Based on the size and duration of the release and the concentrations observed at the most downstream sampling location in Durango, DEQ does not expect that additional precautions for using the water in Utah are warranted.
- Dr. Gaddis reported on the NRCS Watershed Coordinators.
 - o In early March watershed coordinators were given access to their offices, computers and files at NRCS after being locked out for over 250 days.
 - o A new resolution is needed by June 1, 2019. The agreement will be between UDAF and NRCS.

- Dr. Gaddis reported to the Board regarding the denial of a UIC Permit for Millville City.
 - o An intent to deny the UIC permit for the Aqua Storage Recovery (ASR) was sent on Jan 22, 2019.
 - o Bear River Health Board issued a moratorium on septic permitting on March 13, 2019.
 - o The Millville City will likely come to Water Quality Board for funding of a sewer system.
- Dr. Gaddis congratulated the Engineering Section on their participation in the Division's Continuous Improvement Process.
 - The 2018 MWPP Survey was distributed over the internet via a Qualtrics application. DWQ also organized the survey into a simplified format and updated the questions to both simplify the reporting process and to improve the quality of the annual reports.
- Dr. Gaddis updated the Board regarding a Request for Information for Utah Lake algal treatment
 - o There were eight responses ranging in strategy from chemical to biological to physical.
 - o RFP for demonstration projects; plan to implement this summer
 - o Portion of \$500k for Utah Lake will be dedicated to this effort

Division Level

- Dr. Gaddis reported that for the first time the Division has entered the Operator Challenge at the WEAU meeting.
- Dr. Gaddis also reported that the Division has hired a number of new staff in the Monitoring Section.

FUNDING

SRF 2018 Annual Report: Ms. Cantón updated the Board on the FY 2018 Clean Water SRF Annual Report as indicated in the Packet.

SRF 2019 Intended Use Plan: Ms. Cantón requested approval from the Board to go to public comment for feedback regarding the FY 2019 Intended Use Plan.

Motion: Ms. Grant moved to approve that the SRF 201 Intended Use Plan be sent to public notice for public comment. Mr. Galecki seconded the motion. The motion passed unanimously.

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State Nonpoint Source Program Signatories: Ms. Cantón requested approval from the Board to add two additional signatories to the State Nonpoint Source Program: Ms. Jodi Gardberg and Mr. Jim Bowcutt.

Motion: Ms. Grant moved to add Ms. Gardberg and Mr. Bowcutt as

signatories on the State Nonpoint Source Program. Mr. Earley

seconded the motion. The motion passed unanimously.

RULE MAKING

Introduction to Graywater Rule Modification: Mr. Mackey introduced a proposed revision to UAC R317-401 as indicated in the packet.

OTHER BUSINESS

Utah Lake Water Quality Study Update: Mr. Daly gave an update as indicated in the packet.

Recognition of Service on the Wastewater Operator Certification Council: Mr. Bateman presented the award to Mr. Kerry Eppich.

Wastewater Operator Certification Council Annual Report for 2018: Mr. Demke gave an update as indicated in the packet.

Public Comments:

• Mr. Rich Mickelsen with Timpanogos Improvement District voiced his concerns about the Utah Lake study update.

Meeting Adjournment

Motion: Mr. Galecki moved to adjourn the meeting. Ms. Grant seconded

the motion. The motion passed unanimously.

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

Next Meeting – May 22, 2019 DEQ Board Room 1015 195 North 1950 West Salt Lake City, UT 84116

> Jennifer Grant, Vice-Chair Utah Water Quality Board

DWQ-2019-005335

LOAN FUNDS FINANCIAL STATUS REPORT MAY 2019

	State Fiscal Year						
STATE REVOLVING FUND (SRF)	2019	2020	2021	2022	2023	2024	2025
Funds Available							
2016 - 2018 Capitalization Grants	20,811,801	-	-	-	-	-	-
2017 - 2018 State Match	3,128,600	-	-	-	-	-	-
Future Capitalization Grants (estimated)	8,357,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000
Future State Match (estimated)	1,671,400	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000
SRF - 2nd Round	106,541,444	117,692,007	74,289,078	41,862,544	22,375,967	486,946	6,329,150
Interest Earnings at 2.5%	461,307	3,057,521	1,929,956	1,087,547	581,305	12,650	164,425
Loan Repayments	2,114,750	14,049,551	14,992,510	18,374,876	17,378,674	17,478,554	17,364,830
Total Funds Available	143,086,302	143,199,078	99,611,544	69,724,967	48,735,946	26,378,150	32,258,405
Project Obligations							
Duchesne City	(27,295)	-	-	-	-	-	-
Logan City	(23,131,000)	(23,000,000)	(23,000,000)	-	-	-	-
Logan City - Supplemental Loan		(6,000,000)	-	-	-	-	-
Moab City	(80,000)	-	-	-	-	-	-
Salem City	(2,156,000)	(4,313,000)	-	-	-	-	-
San Juan Spanish Valley SSD	-	(1,997,000)	-	-	-	-	-
Loan Authorizations							
Central Valley Water Reclamation Facility	-	(5,000,000)	(15,000,000)	(20,100,000)	(23,000,000)	(2,000,000)	-
Provo City	-	-	(15,000,000)	(25,000,000)	(23,000,000)	(15,800,000)	-
South Davis Sewer District (with NPS)	-	(26,351,000)	(2,500,000)	-	-	-	-
South Salt Lake City	-	(2,249,000)	(2,249,000)	(2,249,000)	(2,249,000)	(2,249,000)	-
Planned Projects							
None at this time							
Total Obligations	(25,394,295)	(68,910,000)	(57,749,000)	(47,349,000)	(48,249,000)	(20,049,000)	-
SRF Unobligated Funds	\$ 117,692,007	\$ 74,289,078	\$ 41,862,544	\$ 22,375,967	\$ 486,946	\$ 6,329,150	\$ 32,258,405

	State Fiscal Year						
UTAH WASTEWATER LOAN FUND (UWLF)	2019	2020	2021	2022	2023	2024	2025
Funds Available							
UWLF	\$ 19,369,724	\$ 2,602,499	\$ 6,336,349	\$ 10,288,941	\$ 13,915,347	\$ 17,092,435	\$ 20,252,826
Sales Tax Revenue	-	3,587,500	3,587,500	3,587,500	3,587,500	3,587,500	3,587,500
Loan Repayments	180,000	3,139,250	3,357,992	3,031,806	2,582,488	2,565,791	2,565,235
Total Funds Available	19,549,724	9,329,249	13,281,841	16,908,247	20,085,335	23,245,726	26,405,560
General Obligations							
State Match Transfers	(4,800,000)	(1,400,000)	(1,400,000)	(1,400,000)	(1,400,000)	(1,400,000)	(1,400,000)
DWQ Administrative Expenses	(398,225)	(1,592,900)	(1,592,900)	(1,592,900)	(1,592,900)	(1,592,900)	(1,592,900)
Project Obligations							
Grantsville City	(3,728,000)	-	-	-	-	-	-
Loan Authorizations							
Kane Co Water Conservancy Dist (Duck Creek)	(1,000,000)	-	-	-	-	-	-
Planned Projects							
Plain City	(2,521,000)	-	-	-	-	-	-
*Kearns	(4,500,000)						
Total Obligations	(16,947,225)	(2,992,900)	(2,992,900)	(2,992,900)	(2,992,900)	(2,992,900)	(2,992,900)
UWLF Unobligated Funds	\$ 2,602,499	\$ 6,336,349	\$ 10,288,941	\$ 13,915,347	\$ 17,092,435	\$ 20,252,826	\$ 23,412,660

Contingency Calculation for Authorized Projects							
Total Unobligated Loan Funds	\$ 120,294,506	\$ 80,625,427	\$ 52,151,485	\$ 36,291,314	\$ 17,579,381	\$ 26,581,976	\$ 55,671,066
25% Contingency for Authorized Projects	\$ (250,000)	\$ (8,400,000)	\$ (8,687,250)	\$ (11,837,250)	\$ (12,062,250)	\$ (5,012,250)	\$ -
Remaining Balance	\$ 120,044,506	\$ 72,225,427	\$ 43,464,235	\$ 24,454,064	\$ 5,517,131	\$ 21,569,726	\$ 55,671,066

HARDSHIP GRANT FUNDS FINANCIAL STATUS REPORT MAY 2019

	State Fiscal Year						
HARDSHIP GRANT FUNDS (HGF)	2019	2020	2021	2022	2023	2024	2025
Funds Available							
Beginning Balance		\$ 2,452,017	\$ 2,472,281	\$ 2,771,506	\$ 3,055,137	\$ 3,315,328	\$ 3,554,868
Federal HGF Beginning Balance	5,825,419	-	_	-	_	-	-
State HGF Beginning Balance	1,861,194	-	-	-	-	-	-
Interest Earnings at 2.5%	33,282	63,701	64,227	72,001	79,369	86,129	92,352
UWLF Interest Earnings at 2.5%	83,868	67,610	164,612	267,296	361,507	444,044	526,148
Hardship Grant Assessments	246,906	768,980	666,402	571,300	473,841	392,175	309,384
Interest Payments	-	419,973	403,983	373,034	345,473	317,191	289,421
Advance Repayments	220,000	-	_	-	_	-	-
Total Funds Available	8,270,669	3,772,281	3,771,506	4,055,137	4,315,328	4,554,868	4,772,172
Financial Assistance Project Obligations							
Eagle Mountain City - Construction Grant	(510,000)	-	_	-	_	_	-
Emigration Sewer Imp Dist - Planning Grant	(26,158)	-	_	-	_	_	-
Kane Co Water Conservancy Dist (Duck Creek) - Hardship Grant	(2,034,500)						
Lewiston - Planning Advance	(40,000)						
USU Extension - Hardship Grant	(42,000)	-	-	-	-	-	-
Wellington City	(96,000)	-	-	-	-	-	-
Non-Point Source/Hardship Grant Obligations							
Fitzgerald ARDL interest-rate buy down	(51,056)						
McKees ARDL interest-rate buy down	(55,261)						
(FY11) Gunnison Irrigation Company	(48,587)	-	-	-	-	-	-
(FY11) DEQ - Willard Spur Study	(113,326)	-	-	-	-	-	-
(FY12) Utah Department of Agriculture	(461,074)	-	-	-	-	-	-
(FY13) DEQ - Great Salt Lake Advisory Council	(176,135)	-	-	-	-	-	-
(FY15) DEQ - Ammonia Criteria Study	(46,630)	-	-	-	-	-	-
(FY15) DEQ - Nitrogen Transformation Study	(14,500)	-	-	-	-	-	-
(FY16) DEQ - San Juan River Monitoring	(125,083)	-	-	-	-	-	-
(FY17) DEQ - GW Quality Study	(5,051)	-	-	-	-	-	-
(FY17) DEQ - Utah Lake Water Quality Study	(489,853)	(300,000)	-	-	-	-	-
FY 2015 - Remaining Payments	(4,223)	-	-	-	-	-	-
FY 2016 - Remaining Payments	(193,597)	-	-	-	-	-	-
FY 2017 - Remaining Payments	(95,387)	-	-	-	-	-	-
FY 2018 - Remaining Payments	(408,819)	-	-	-	-	-	-
FY 2019 - Remaining Payments	(727,412)						
Future NPS Annual Allocations	-	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
Planned Projects							
*Green River	(54,000)						
Total Obligations	(5,818,652)	(1,300,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
HGF Unobligated Funds	\$ 2,452,017	\$ 2,472,281	\$ 2,771,506	\$ 3,055,137	\$ 3,315,328	\$ 3,554,868	\$ 3,772,172

State of Utah Wastewater Project Assistance Program Project Priority List

As of May 14, 2019

				Point Categories			
Rank	Project Name	Funding Authorized	Total Points	Project Need	Potential Improvement	Population Affected	Special Consideration
1	Provo City	Х	144	50	24	10	60
2	Central Valley Water Reclamation Facility	Х	143	50	23	10	60
3	South Davis Sewer District	х	138	50	18	10	60
4	Plain City		105	50	10	5	40
5	Kearns		74	5	0	9	60
6	Kane County Water Conservancy District (Duck Creek)	х	62	40	21	1	0



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WATER QUALITY BOARD REQUEST FOR HARDSHIP PLANNING ADVANCE TO PREPARE WASTEWATER COLLECTION/TREATMENT FEASIBILITY STUDY AUTHORIZATION

APPLICANT:	City of Green River
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460 East Main Street Green River, Utah 84525 Telephone: 435-564-3448

PRESIDING OFFICIAL: Mayor Travis Bacon

TREASURER/ RECORDER: Conae Black

CONSULTING ENGINEER: Devan Shields, P.E.

Sunrise Engineering, Inc.

25 East 500 North Fillmore, Utah 84631

435-743-6151

CITY ATTORNEY: Jeremy Cook

Cohne Kinghorn

111 East Broadway Eleventh Floor

Salt Lake City, Utah 84111

801-363-4300

BOND COUNSEL: Richard Chamberlain

Chamberlain Associates 225 North 100 East Richfield, Utah 84701

435-896-5441

APPLICANT'S REQUEST:

Green River City (the City) is requesting a hardship planning advance in the amount of \$54,000 to complete a wastewater facility plan to evaluate alternatives and to identify needed

Green River City – Planning Advance Request May 22, 2019 Page 2

wastewater collection and treatment system improvements.

APPLICANT'S LOCATION

Green River City is located in Emery County. Green River is a community at the eastern edge of Emery County.



PROJECT NEED

The City has historically had a stable population and modest growth rate. However, new initiatives in strategic planning for the City may boost growth rates in coming years. In conjunction with the new strategic plan, the City needs to evaluate its sanitary sewer infrastructure to be ready for growth and reduce the risk of problems related to insufficient capacity of its collection and treatment systems.

The sanitary sewer system consists of 13 miles of collection lines ranging from 4-inch to 18-inch diameter pipe. The majority of the pipe is PVC, but there are some sections of existing clay tile pipe, Asbestos cement pipe, and concrete pipe that have been problematic. The system also includes four lift stations. A four-cell lagoon system treats the wastewater collected by the collection system. The lagoons are designed as a total containment system with one primary cell, two secondary cells, and a winter storage cell. The City was issued a Utah Pollutant Discharge Elimination System (UPDES) permit to allow discharge into the Green River in 1996. After having trouble meeting the terms of the permit, the City added an aeration system in 1999.

Green River City – Planning Advance Request May 22, 2019 Page 3

The City had a general facilities plan completed in 2013 that included some aspects of the sewer system but has not prepared a sanitary sewer system master plan or capital facilities plan.

The City currently charges residential sewer rates of \$32.25 per month. This rate equates to 1.42 percent of their 2017 MAGI (\$27,290) and exceeding the Board's affordability criterion of 1.4 percent MAGI. Green River City's 2017 MAGI is 59% of the statewide average of \$45,895, which indicated that this is a low income community.

PROJECT DESCRIPTION:

The proposed City Wastewater Capital Improvements Plan will update the general facilities plan that was completed in 2013 and will evaluate capacity of entire sanitary sewer system. The plan will project growth and wastewater loads based on the recently completed strategic plan through a minimum 20-year study period.

Creating an updated hydraulic model of the collection system will be a significant value of the project. The hydraulic model will be used to model projected development and identify needed improvements and can be applied in the future to evaluate the impact of developments to the system. An analysis of the lagoon system will be included as part of this scope of work. This includes reviewing capacity of the lagoon system and evaluating any changes that have occurred in the system since then.

Based on the findings of the system evaluation, a Capital Improvement Plan will be developed to identify improvements needed to meet current and projected needs. The plan will incorporate an implementation schedule and cost estimates for the improvements. The plan will also incorporate an evaluation of sewer rates based on probable project costs to identify rate adjustments needed to fund improvements.

NEPA work and preparation of the environmental report are not included in this facilities master plan, and would need to be evaluated at a later time.

IMPLEMENTATION SCHEDULE:

The facility plan is scheduled to take six months with an estimated completion in September 2019.

PROJECT PRIORITY LIST

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

COST ESTIMATE:

The City is requesting \$54,000 from the Water Quality Board to fund this Study.

Green River City – Planning Advance Request May 22, 2019 Page 4

STAFF COMMENTS AND RECOMMENDATION:

Green River City's current sewer rates exceed the Board's hardship criterion of 1.4 percent MAGI. Any future capital project by the City would result in higher sewer rates without a subsidized loan. A planning advance received from the Board would most likely be repaid from a grant or principal forgiveness subsidy. Given the current hardship conditions of the community and the limited affordability of future financing for a capital project, the Board should consider authorizing a planning grant to Green River City rather than a planning advance.

Staff recommends the Board <u>authorize a hardship planning grant of \$54,000</u> to Green River City to be repaid when a project is identified and funded.

SPECIAL CONDITIONS:

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

DWQ-2019-002824

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File: SRF-Green River, Planning, Section 1



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Dr. James VanDerslice
James Webb
Dr. Erica Brown Gaddis

Executive Secretary

Application Number:

Date Received: April

April 10, 2019

Date to be presented to the WQB:

May 22, 2019

WATER QUALITY BOARD FEASIBILITY REPORT FOR PLANNING ADVANCE INTRODUCTION

APPLICANT: Kearns Improvement District

5350 West 5400 South Kearns, UT 84118

Telephone: (801) 968-1011

PRESIDING OFFICIAL: Pamela Gill, General Manager

TREASURER/RECORDER: Bruce Hicken, Finance Director

CONSULTING ENGINEERS: Mary Allen Keith Larson, P.E.

Hansen Allen & Luce Bowen & Collins 859 South Jordan Parkway 154 East 14075 South South Jordan, UT 84095 Draper, UT 84020

(801)-566-5599 (801) 495-2224

BOND COUNSEL: Randy Larsen

Gilmore Bell

15 West South Temple, Suite 1450

Salt Lake City, UT 84101

(801) 364-5080

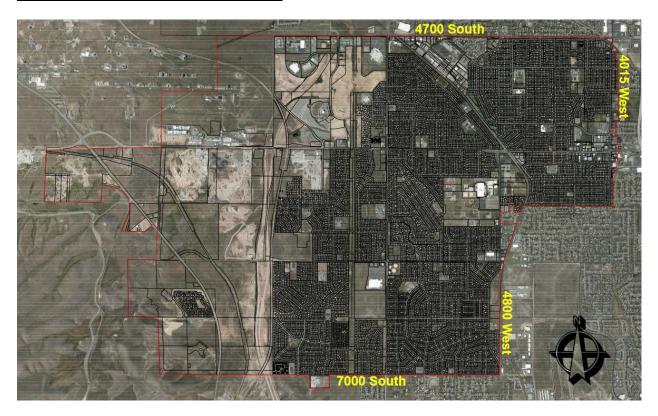
APPLICANT'S REQUEST:

Kearns Improvement District is requesting construction assistance in the form of a loan from the Utah Water Quality Board in the amount of \$4,595,000 for construction of a new pump station and sewer collection lines in support of community growth.

APPLICANT'S LOCATION:

Kearns Improvement District is located in Salt Lake County.

MAP OF APPLICANT'S LOCATION



BACKGROUND AND PROJECT NEED:

Kearns Improvement District (KID) provides water and sewer services to the Kearns community and portions of West Jordan City, West Valley City and Taylorsville City. KID has grown from 3,100 connections in 1957 to over 13,500 connections today. As the Kearns community grew, the original sewer plant did not have the capacity needed to serve our customers. In 1981, KID partnered with six other entities to construct the Central Valley Water Reclamation Facility to treat the sewage flow. KID owns an equity interest in the regional Central Valley Water Reclamation Facility. KID has completed a Sewer Master Plan and new collection lines are necessary to prepare for service area growth.

PROJECT DESCRIPTION:

The project will replace or construct new sewer lines in KID.

ALTERNATIVES EVALUATED:

The No Action alternative is not acceptable to the community. No alternatives other than providing these sewer services were considered.

POSITION ON PROJECT PRIORITY LIST:

This project is ranked 5th out of 6 projects on the Wastewater Treatment Project Priority List. Additional projects are expected to be added to the priority list in June 2019 when other funding applications are received under the Board's semi-annual review process.

POPULATION GROWTH:

There are an estimated 19,511 ERUs in KID's service area. The following service area populations were estimated by KID.

Year	Population
2015	50,096
2020	51,537
2030	57,302
2040	62,708

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

KID has held public hearings on the Sewer Master Plan and invited public comment. There has been no opposition. Additionally, the proposed projects were included in KID's 2019 approved budget and were presented in a public hearing with no opposition.

IMPLEMENTATION SCHEDULE:

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

WQB Introduction	May 22, 2019
WQB Funding Authorization:	June 26, 2019
Start Construction	Fall 2019
Complete Construction	Summer 2020

APPLICANT'S CURRENT USER CHARGE:

The 2017 median adjusted gross income (MAGI) for KID is \$37,205, which is 19 percent lower that the state average of \$45,895. The current user fee is \$28.05 per month to KID for collections plus an additional \$5.00 per month for Central Valley capital improvements and a total of \$33.95 per month. Fees for treatment by Central Valley will increase by an additional \$8 per month by 2024. The 2024 user fee will then be least \$41.05 per month. Based on the Board's affordability

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criterion of 1.4% MAGI, the maximum affordable sewer bill for KID is \$43.41.

COST ESTIMATE:

The estimated cost of KID's collection system project construction is outlined in the following table:

Item	Funded Project Cost
Legal/Bonding	\$ 50,000
DWQ Loan Origination	\$ 45,000
Engineering, CMS	\$ 600,000
Construction – Collections	\$ 3,400,000
Construction - Pump Stations	\$ 2,400,000
Total	\$ 6,495,000
KID Local Contribution	\$ 1,900,000
WQB Loan	\$ 4,595,000

COST SHARING:

Funding Source	Cost Sharing	Percent of Project
Local Contribution (cash)	\$ 1,900,000	29%
WQB Loan (Incl. 1% origination fee)	\$ 4,595,000	71%
Total	\$ 6,495,000	100%

KID's financial advisor has estimated funding through the sale of a \$4.5 million bond on the open market using 3.25% as interest rate and a 20 year term. Staff prepared a cost model for evaluation of possible Board loan terms and affordability. Static Model 1 (Attachment 1) presents a conventional 20 years loan approach. This model shows that for the proposed \$4.595 million loan at 3.25%, the average user rate would be \$34.38 per ERU per month, equating to about 1.109 percent of the 2017 MAGI. In comparison, the static model shows that a 0 percent interest loan would result in an average user rate of \$34.02, which equates to 1.097 percent of 2017 MAGI. The project is thus affordable by Board criterion and by simple analysis, a Board loan has little impact on the community's sewer rate. Actual debt service cost savings from a Board loan are nonetheless significant and these are also shown in the cost model (Attachment 1).

Considering the Board's limited funds, the Board may want to consider supporting this project at a reduced funding level. Loan scenarios for Board financing at \$1 million and \$2 million with the loan balance funded by the street are also included in Attachment 1.

STAFF COMMENTS:

Staff supports the KID collections project. It is an important project for KID in order to plan for future growth in their service area. Staff requests direction from the Board on funding this project, including reduced level funding.

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SPECIAL COSIDERATIONS:

This feasibility report is an introduction of the proposed project to the Board and as such there are no staff recommendations. Staff will provide recommendations to the Board with the request for funding authorization.

Attachments: KID City Static Cost Model 1 U:\ENG_WQ\0-Projects\Kearns 2019\Kearns Feasibility Report.docx File: Kearns Improvement District, Admin, Section DWQ-2019-005259

ATTACHMENT 1

Kearns - Water Quality Board20 Year Loan Static Cost Models for Reduced Funding Amounts

Project Costs	Total
Loan Origination Fee	varies
Financing Process Costs	\$ 50,000
Engineeemig	\$ 600,000
Construction	\$ 5,800,000
Total Project Cost:	\$ 6,450,000

Project Funding							
Local Contribution		\$ 1,900,000					
Additional bonds @	varies below						
WQB Loan		varies belov					
Total Project Cost:		\$ 6,450,000					

Current Customer Base & User Charges	
Total ERU's (Projected 2020)	19,511
MAGI KID	\$ 37,205
Affordable Monthly Rate at 1.4%	\$ 43.41
Current Impact Fee	\$ 2,943
Current Average Monthly Fee (per ERU)	\$ 33.05
Existing O&M expenses Treatment & Collection	\$ 6,512,327
Existing Sewer Debt Service	\$ 1,225,000

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

ESTIMATED COST OF SEWER SERVICE

WQB	WQB	Anı	nual WQB	Aı	mortized		Required	Estimated Total		Weighted							M	onthly	Sewer Cost
Loan	Loan	Loan		Closing		other new Debt		Savings from		Interest Rate	Existing Debt		Annual Sewer		Total Annual		Treatment		as a
Am ount	Interest Rate	Debt Service		Cost		Service Payemnts*		WQB Loan		for Project	Payments		O&M Cost		Sewer Cost		Cost/ERU		% of MAGI
\$ 126		\$	88 2 2	\$		\$	312,944	\$	12	3.25%	\$	1,225,000	\$	6,512,327	\$	8,050,271	\$	34.38	1.109%
\$ 1,000,000	0.50%	\$	52,666	\$	3,000	\$	244,165	\$	262,249	2.65%	\$	1,225,000	\$	6,512,327	\$	8,034,158	\$	34.31	1.107%
\$ 1,000,000	1.00%	\$	55,415	\$	3,000	\$	244,165	\$	207,271	2.76%	\$	1,225,000	\$	6,512,327	\$	8,036,907	\$	34.33	1.107%
\$ 1,000,000	1.50%	\$	58,246	\$	3,000	\$	244,165	\$	150,663	2.87%	\$	1,225,000	\$	6,512,327	\$	8,039,738	\$	34.34	1.108%
\$ 1,500,000	0.50%	\$	79,000	\$	3,250	\$	209,776	\$	418,373	2.34%	\$	1,225,000	\$	6,512,327	\$	8,026,102	\$	34.28	1.106%
\$ 1,500,000	1.00%	\$	83,123	\$	3,250	\$	209,776	\$	335,907	2.51%	\$	1,225,000	\$	6,512,327	\$	8,030,226	\$	34.30	1.106%
\$ 1,500,000	1.50%	\$	87,369	\$	3,250	\$	209,776	\$	250,994	2.67%	\$	1,225,000	\$	6,512,327	\$	8,034,471	\$	34.32	1.107%
\$ 2,000,000	1.00%	\$	110,831	\$	3,500	\$	175,386	\$	464,543	2.26%	\$	1,225,000	\$	6,512,327	\$	8,023,544	\$	34.27	1.105%
\$ 2,000,000	1.50%	\$	116,491	\$	3,500	\$	175,386	\$	351,326	2.48%	\$	1,225,000	\$	6,512,327	\$	8,029,205	\$	34.29	1.106%
\$ 2,000,000	2.00%	\$	122,313	\$	3,500	\$	175,386	\$	234,887	2.70%	\$	1,225,000	\$	6,512,327	\$	8,035,027	\$	34.32	1.107%
\$ 4,550,000	0.00%	\$	227,500	\$	4,775	\$	=	\$	1,613,378	0.00%	\$	1,225,000	\$	6,512,327	\$	7,964,827	\$	34.02	1.097%
\$ 4,550,000	2.00%	\$	278,263	\$	4,775	\$	*	\$	598,117	2.00%	\$	1,225,000	\$	6,512,327	\$	8,015,590	\$	34.24	1.104%
\$ 4,550,000	2.25%	\$	285,021	\$	4,775	\$	24	\$	462,950	2.25%	\$	1,225,000	\$	6,512,327	\$	8,022,348	\$	34.26	1.105%
\$ 4,550,000	2.50%	\$	291,869	\$	4,775	\$	€	\$	325,990	2.50%	\$	1,225,000	\$	6,512,327	\$	8,029,196	\$	34.29	1.106%
\$ 4,550,000	2.75%	\$	298,806	\$	4,775	\$	5	\$	187,251	2.75%	\$	1,225,000	\$	6,512,327	\$	8,036,133	\$	34.32	1.107%
\$ 4,550,000	3.00%	\$	305,831	\$	4,775	\$	¥	\$	46,749	3.00%	\$	1,225,000	\$	6,512,327	\$	8,043,158	\$	34.35	1.108%

^{*3.25%} interest rate used for estimating other new debt service