



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
Jennifer Grant, Chair
Gregg A. Galecki, Vice Chair
Steven K. Earley
Brandon Gordon
Michael D. Luers
L. Scott Baird
Emily Niehaus
James Webb
Dr. James VanDerslice
Dr. Erica Brown Gaddis
Executive Secretary

Utah Water Quality Board Meeting
DEQ Board Room 1015
195 North 1950 West
Salt Lake City, UT 84116
January 22, 2020

AGENDA

Water Quality Board Meeting – Roll Call

A. Minutes:

Approval of minutes for November 6, 2019 Water Quality Board Meeting .. Jennifer Grant

B. Executive Secretary’s ReportErica Gaddis

C. Informational Items:

1. Water Banking Legislation..... Nathan Bracken, Smith Hartvigsen, PLLC
2. Utah’s Recreational Health Guidance for Harmful Algal Blooms Update.....Ben Holcomb

D. Funding:

1. Financial Report..... Jerry Rogers
2. Summary of Current Financial Assistance Applications..... John Mackey

E. Other Business:

1. Utah Wastewater Operator Certification Council Recommendations..... Judy Etherington

F. Public Comment Period

G. Meeting Adjournment

Next Meeting February 26, 2020
DEQ Board Room 1015
195 North 1950 West
Salt Lake City, UT 84116

Revised 1/14/2020

DWQ-2020-000482

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
Moab Arts & Recreation Center (MARC)
111 East 100 North
Stage Room
Moab, UT 84532

November 6, 2019

UTAH WATER QUALITY BOARD MEMBERS PRESENT

Scott Baird	Jennifer Grant
Steven Earley	Mike Luers
Gregg Galecki	Emily Niehaus
Brandon Gordon	

Excused: Jim Vanderslice
Jim Webb

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Robert Beers	Daniel Griffin
Jim Bowcutt	James Harris
Emily Cantón	Brenda Johnson
Skyler Davies	John Mackey
Matthew Garn	Lucy Parham

OTHERS PRESENT

Name	Organization Representing
Jeff Adams	
Dave Erley	Canyonlands Watershed Council Board Member
Molly Marcello	KZMU Radio Station
Arne Hultquist	UDWQ
Sarah Stock	Living Rivers
John Weisheit	Living Rivers - Colorado River Keeper
Orion Rogers	South Eastern Utah Health Department

Ms. Grant called the Board meeting to order at 1:30 pm and took roll call for the members of the Board and audience.

APPROVAL OF MINUTES OF AUGUST 28, 2019 MEETING

Motion: Mr. Galecki moved to approve the minutes of the August 28, 2019 meeting. Mr. Earley seconded the motion. The motion passed unanimously.

EXECUTIVE SECRETARY REPORT

National Level

- Dr. Gaddis updated the board on the Clean Water Act 401 Certification program. The EPA has proposed new regulations with this program that substantially limit state authority. The Division, in coordination with the Governor's office, has submitted a comment letter addressing key concerns of the proposed regulations.
- The EPA has launched a National Water Reuse Action Plan at the National ReUse Water conference that several Division staff members attended. The Division is planning to submit comments on this plan.
- Dr. Gaddis reported that there has been movement of the Waters of the US rulemaking regulations nationally. On September 11th the EPA repealed the Clean Water Rule that was put into place by the Obama administration in 2015. In January or February 2020 the EPA will roll out what will be called the Trump Rule, which will redefine the waters of the US.

State Level

- Dr. Gaddis reported that the Division has initiated a partnership with the Department of Agriculture and Food called the Agricultural Water Quality Improvement Project.
- The Division is coming close to an agreement with the Home Builders and the League of Cities and Towns regarding the post construction retention standards on the municipal stormwater permits.
- Dr. Gaddis gave an update on the Technology Based Phosphorus Effluent rule passed by the board in 2015. This rule goes into effect on January 1, 2020.
- Dr. Gaddis introduced the Reclaim 60 program. There is an estimated 15 billion dollar need across Utah over the next 40 years for water quality infrastructure.
- The EPA changed the recommended advisory concentrations for two cyanotoxins that will be adopted into the Division's Harmful Algal Bloom program this year.
- Dr. Gaddis reported that the Division is continuing to work with Millville City, which is one of the remaining unsewered communities in Cache Valley. The Board of Health put a moratorium on any further septic permitting which effectively stopped construction in the city. This has motivated the city to develop a plan for a sewer system, which will be an 8 to 10 million dollar project that will likely come before the board for financing in the next year.

- Dr. Gaddis also reported that there is a stormwater project in South Salt Lake that runs through the Central Valley Water Reclamation Facility property. The Division has been working with multiple agencies about how to pool funding to implement this project.

Division Level

- Dr. Gaddis gave a status report on the Water Quality Board Improvement project and introduced the Water Quality Board Member Handbook to the board members.

FUNDING REQUESTS

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

De-obligation of DEQ – Division of Water Quality Hardship Grant Funds: Ms. Cantón informed the Water Quality Board that the Division has concluded work on two projects, which were funded by hardship grant funds.

Munk Dairy Interest Buy Down Request: Mr. Bowcutt presented the Munk Dairy request for an Agricultural Resource Development Loan (ARDL) Interest Rate buy down from the Water Quality Board. Munk Dairy was recently approved for an ARDL loan from the Utah Department of Agriculture and Food (UDAF) for \$160,000. The estimated interest on this loan will be \$32,034 at 2.5%. UDAF has agreed to waive 1.25% of the interest, leaving \$16,017 in interest to be bought down by the Water Quality Board.

Motion: Mr. Galecki moved to approve the Munk Dairy Request. Mr. Gordon seconded the motion. The motion passed unanimously.

RULE MAKING

Request to Initiate Rulemaking on Rule R317-401 Graywater Systems: Mr. Beers presented a request for authorization to initiate rulemaking to revise Rule R317-401, Graywater Systems. The proposed amendment would:

1. Simplify the regulatory requirements for graywater system implementation, including home and business retrofits;
2. Incorporate nationally recognized standards, materials, practices and regulations;
3. Ensure proper application of graywater systems that both conserve water and protect public health and water quality; and
4. Implement regulatory processes to track, monitor, and correct permitted systems.

Motion: Ms. Niehaus moved to approve the Graywater Rule Change Request with the following changes:

- a. R317-401-1.5.(b) changed from "The local health department request for approval shall include a description of its plan to properly manage graywater systems to protect public health. This plan must include:" changed to "The local health department request for approval should include a description of its plan to properly manage graywater systems to protect public health. This plan should include"; and
- b. R317-401-1.5.(b)(i)(C) changed from "Local Board of Health and County Commission support for this request" changed to "Local Board of Health support for this request".

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

Public Notice Rule Revision: Mr. Garn presented the request for the Board's approval to commence rulemaking for proposed revisions to Utah's Utah Pollution Discharge Elimination System (UPDES) rules. With the approval of the Board, Division staff can initiate the formal rulemaking process with the Utah Division of Administrative Rules. The Board will be apprised of all comments received during the public comment period. After considering the comments received, staff will return to the Board with recommendations for changing or adopting the revisions.

**Motion: Mr. Luers moved to approve the Public Notice Rule Change Request.
Mr. Earley seconded the motion. The motion passed unanimously.**

OTHER BUSINESS

San Juan Watershed Program Update: Ms. Parham updated the Water Quality Board on the Gold King Mine spill (GKM) that occurred in August 2015 and ongoing studies to evaluate the effects of metals on the San Juan River and Lake Powell.

Public Comments:

- Mr. Dave Erley, a Canyonlands Watershed Council board member spoke in favor of the Graywater Rule.

Meeting Adjournment

Motion: Mr. Gordon moved to adjourn the meeting. Ms. Niehaus seconded the motion. The motion passed unanimously.

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November 6, 2019
Water Quality Board
Minutes

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

Next Meeting – December 3, 2019
195 North 1950 West
Salt Lake City, UT 84116

Jennifer Grant, Chair
Utah Water Quality Board

DWQ-2019-020781



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Executive Secretary

TO: Water Quality Board

THROUGH: Erica Brown Gaddis, PhD, Director

FROM: Nathan Bracken, Smith Hartvigsen, PLLC

DATE: January 22, 2020

SUBJECT: Water Banking Legislation, S.B. 26

Senator Jani Iwamoto and Representative Tim Hawkes have introduced S.B. 26 to create a water banking program in Utah. A water bank is a market tool that facilitates the voluntary, temporary transfer of water rights from one use to another. Most other western states have some form of banking, and the bill would further a number of recommendations in the Governor's 2017 Recommended Strategy, which identified water banking as a possible tool to support agriculture while also providing water for urban and environmental needs in the face of Utah's growing population. The legislation identifies the attainment of water quality standards to be one objective of a water bank and therefore could advance the mission of the Division of Water Quality in certain circumstances.

Since 2017, a diverse group of over 70 stakeholders representing agriculture, public water suppliers, conservation groups, and other interests developed the legislation by studying various basins throughout Utah and reviewing water banking programs in other western states. The group also met with water stakeholders in dozens of meetings throughout Utah to solicit comments and feedback on the legislation.

Based on its outreach efforts, the group determined that in order to be successful in Utah, water banks must be voluntary, temporary, and local. To support these goals, the bill would create the framework for a 10-year pilot program that would authorize water right holders to create and manage water banks for their local areas. Ideally, this would allow water banks to be specifically tailored to their regions' unique conditions and needs. During the pilot period the banking program would be monitored, evaluated, and modified as needed. The Board of Water Resources would oversee the creation and operation of water banks while the State Engineer would regulate water rights deposited in a bank.

The banking program is intended to build upon and utilize existing Utah law as much as possible. For instance, to deposit a water right into a bank, a right holder would file a change application pursuant to the current process. Similarly, Section 73-3-3.5 of the Utah Code would require shareholders seeking to deposit a water right into a bank to first obtain approval from their water company. The State Engineer's Office has also indicated that it would only approve the consumptive portion of a water right for use within a water bank and that it would impose conditions where necessary to govern the right's use within a bank to avoid impacts to other users. Once the State Engineer approves a water right for use within a bank, the right would be available for others to use for a variety of uses, including water quality and environmental purposes.

For more information, please see: <https://utahwaterbank.org/>.

DWQ-2020-000908



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MEMORANDUM

TO: Utah Water Quality Board

THROUGH: Erica Brown Gaddis, PhD, Executive Secretary

FROM: Ben Holcomb, Standards and Technical Services Section Manager

DATE: January 22, 2020

SUBJECT: Updates to Utah's Recreational Health Guidance for Harmful Algal Blooms

Background

Harmful algal blooms (HABs) in freshwater ecosystems consist of accumulations of cyanobacteria that can pose adverse health effects to humans either through direct contact with the cells or through the toxins they can produce. Often, humans are exposed to these conditions when they are recreating, primarily through full body contact, in waters of the state. In Utah, the local health departments (LHDs) have the authority to post health advisories and close waterbodies, specifically:

- A local health department may prepare, publish, and disseminate information necessary to inform and advise the public concerning the health and wellness of the population, specific hazards, and risk factors that adversely affect the health and wellness of the population. [UAC, 26A-1-114, (1)(i)(i)]
- A local health department may close theatres, schools, and other public places and prohibit gatherings of people when necessary to protect public health. [UAC, 26A-1-114 (1)(e)]

The Utah Division of Water Quality (DWQ) and Utah Department of Health (DOH) provide supporting roles to the LHDs. DWQ devises and executes sampling plans that prioritize waters that are at-risk for cyanobacteria blooms (eutrophic waters) and highest risk for human exposure (State Park beaches, drinking water sources). DWQ interprets results, and with the support of DOH, assists LHDs with recreational advisory decision-making.

Guidance

Given our respective expertise, DWQ and DOH, with feedback from the LHDs, have provided recreational health guidance for cyanobacteria exposure since 2015. In lieu of guidance that was absent at

the federal level (EPA, CDC), our agencies benchmarked with other state agencies, primarily Oregon and Washington, and the World Health Organization (WHO) (Table 1). In 2017, the EPA developed draft recreational health guidance for cyanobacteria exposure. This guidance was limited to providing recreational health thresholds for only two cyanotoxins: microcystin and cylindrospermopsin. Utah adopted these values into our guidance from 2017 through 2019. Recently, EPA finalized their guidance as Clean Water Act 304(a) human health criteria, and now, Utah is incorporating these updated thresholds into our guidance. The Utah Water Quality Board could adopt these criteria as water quality standards in the future for Clean Water Act purposes.

In addition, lab capability has changed tremendously through this time. During the early years of 2014-2016, cyanotoxin analyses were limited to a few labs: GreenWater Labs (GW) in Florida and EPA's lab in Colorado. Due to the high demand from other states experiencing blooms and shipping time, the slow turnaround time of results hindered decision-making. Thankfully, a local lab, Rushforth Phycology, was able to provide rapid (weekly) cell identification and quantification to assist with advisory decisions. Starting in 2017, the Utah Public Health Lab (UPHL) and Utah Department of Agriculture and Food Lab (UDAF) were able to provide cyanotoxin quantification with improved turnaround time. Also, a quicker and more cost-effective lab (PhycoTech) was discovered to provide cell identification and enumeration. Today, all of these labs can reasonably provide up to 24-hour turnaround time.

Table 1. DOH/DEQ HAB guidance and program history

Guidance Years	Benchmark	Labs
2015-2016	WHO, OR/WA	Rushforth, GW, EPA
2017-2019	WHO, EPA draft, OR/WA/CA	PhycoTech, UPHL/UDAF
2020-	WHO, EPA final, OR/WA/CA	PhycoTech, UPHL/UDAF

Utah's HAB program and guidance has evolved as cyanobacterial science, response processes, and laboratory capabilities have improved (Table 2). Although EPA's guidance and 304(a) criteria is limited to two cyanotoxins: microcystins (MCY) and cylindrospermopsin (CYL), literature reviews of health effects and improved analyses of other toxins such as anatoxin-a (ANA) and saxitoxins, provide states the ability to recommend appropriate thresholds for recreational health considerations. There are several other cyanotoxins such as anatoxin-a/s, lyngbyatoxins, lipopolysaccharides, and anabaenopeptins, to name a few that have been identified, but for various reasons are not suitable for routine analysis.

Utah, like most other states, also relies on measures of cyanobacteria concentrations (cell counts) in the water body as an independent line of protection for public health. There are several reasons that UDOH and DWQ have used this line of protection in addition to individual toxin thresholds.

- 1) Cyanobacteria cells counts provide a proxy measure of cyanotoxins, including those that are measurable and those that are not currently suitable for analysis. Although tremendous improvements to cyanotoxin analyses have been made, performance issues with labs continue to result in inadequate precision or timing for advisory decisions.
- 2) Exposure to cyanobacteria cells alone, even in the absence of analyzed toxins, have adverse inflammatory health effects. From EPA's guidance: "The number of cells in freshwater

reported to be statistically-associated with a significant increase in inflammatory endpoints ranged from 5,000 to 100,000 cells/ml”.

- 3) Through implementation of this program, DWQ has also learned that it is much easier to communicate quantitative measures (cells/ml) of a bloom to LHDs and the public rather than describe a visible surface scum, which many states rely upon as an indicator to recommend swimming advisories.
- 4) DWQ typically has the resources to visit affected waterbodies weekly at best. Cyanobacteria and associated toxins are variable and episodic over the course of a day, becoming elevated in minutes. Elevated cell counts are currently the most important early and integrative indicator for LHDs to act appropriately to warn the public about a public health threat.

Table 2. DOH/DEQ HAB guidance historical advisory thresholds

Guidance Years	Parameter	Recommended Action level: CAUTION	Recommended Action level: WARNING	Recommended Action level: DANGER
2015-2016	Cyanobacteria	20,000 cells/mL	100,000 cells/mL	10,000,000 cells/mL
	Microcystin	4 ug/L	20 ug/L	2,000 ug/L
	Cylindrospermopsin	N/A	N/A	N/A
	Anatoxin	N/A	N/A	20 ug/L
2017 2019	- Cyanobacteria	N/A	20,000 cells/mL	10,000,000 cells/mL
	Microcystin	N/A	4 ug/L	2,000 ug/L
	Cylindrospermopsin	N/A	8 ug/L	Best professional judgment
	Anatoxin	N/A	Detection	90 ug/L

DWQ and UDOH is in the process of revising the guidance for the 2020 HAB season. The draft guidance will be made available for public comment following consultation with local health departments before the January 22, 2020 Water Quality Board informational briefing.

**LOAN FUNDS
FINANCIAL STATUS REPORT
JANUARY FY20**

	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
STATE REVOLVING FUND (SRF)							
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	81,235,167	104,351,463	47,316,999	11,567,122	(7,621,656)	1,407,898	28,413,082
Interest Earnings at 2.866%	1,164,222	2,991,026	1,356,247	331,548	-	40,355	814,404
Loan Repayments	7,705,568	14,992,510	18,374,876	17,378,674	17,478,554	17,364,830	17,364,830
Total Funds Available	129,176,758	131,934,999	76,648,122	38,877,344	19,456,898	28,413,082	56,192,317
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							
*Millville City	-	(9,369,000)	-	-	-	-	-
Total Obligations	(24,825,295)	(84,618,000)	(65,081,000)	(46,499,000)	(18,049,000)	-	-
SRF Unobligated Funds	\$ 104,351,463	\$ 47,316,999	\$ 11,567,122	\$ (7,621,656)	\$ 1,407,898	\$ 28,413,082	\$ 56,192,317

	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 2025
UTAH WASTEWATER LOAN FUND (UWLF)							
Funds Available							
UWLF	\$ 19,951,624	\$ 11,747,295	\$ 12,406,087	\$ 15,803,693	\$ 18,751,981	\$ 21,683,572	\$ 24,614,606
Sales Tax Revenue	-	3,587,500	3,587,500	3,587,500	3,587,500	3,587,500	3,587,500
Loan Repayments	1,420,521	3,357,992	3,031,806	2,582,488	2,565,791	2,565,235	2,565,235
Total Funds Available	21,372,145	18,692,787	19,025,393	21,973,681	24,905,272	27,836,306	30,767,341
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)	-	-	-	-	-	-
Kearns	(1,414,000)	-	-	-	-	-	-
Planned Projects							
*Lewiston City	-	(3,065,000)	-	-	-	-	-
Total Obligations	(9,624,850)	(6,286,700)	(3,221,700)	(3,221,700)	(3,221,700)	(3,221,700)	(3,221,700)
UWLF Unobligated Funds	\$ 11,747,295	\$ 12,406,087	\$ 15,803,693	\$ 18,751,981	\$ 21,683,572	\$ 24,614,606	\$ 27,545,641

**LOAN FUNDS
FINANCIAL STATUS REPORT
JANUARY FY20**

<i>Contingency Calculation for Authorized Projects</i>								
Total Unobligated Loan Funds	\$ 116,098,758	\$ 59,723,085	\$ 27,370,815	\$ 11,130,325	\$ 23,091,470	\$ 53,027,689	\$ 83,737,957	
25% Contingency for Authorized Projects	\$ (3,915,750)	\$ (13,062,250)	\$ (13,487,500)	\$ (11,624,750)	\$ (4,512,250)	\$ -	\$ -	
Remaining Balance	\$ 112,183,008	\$ 46,660,835	\$ 13,883,315	\$ (494,425)	\$ 18,579,220	\$ 53,027,689	\$ 83,737,957	

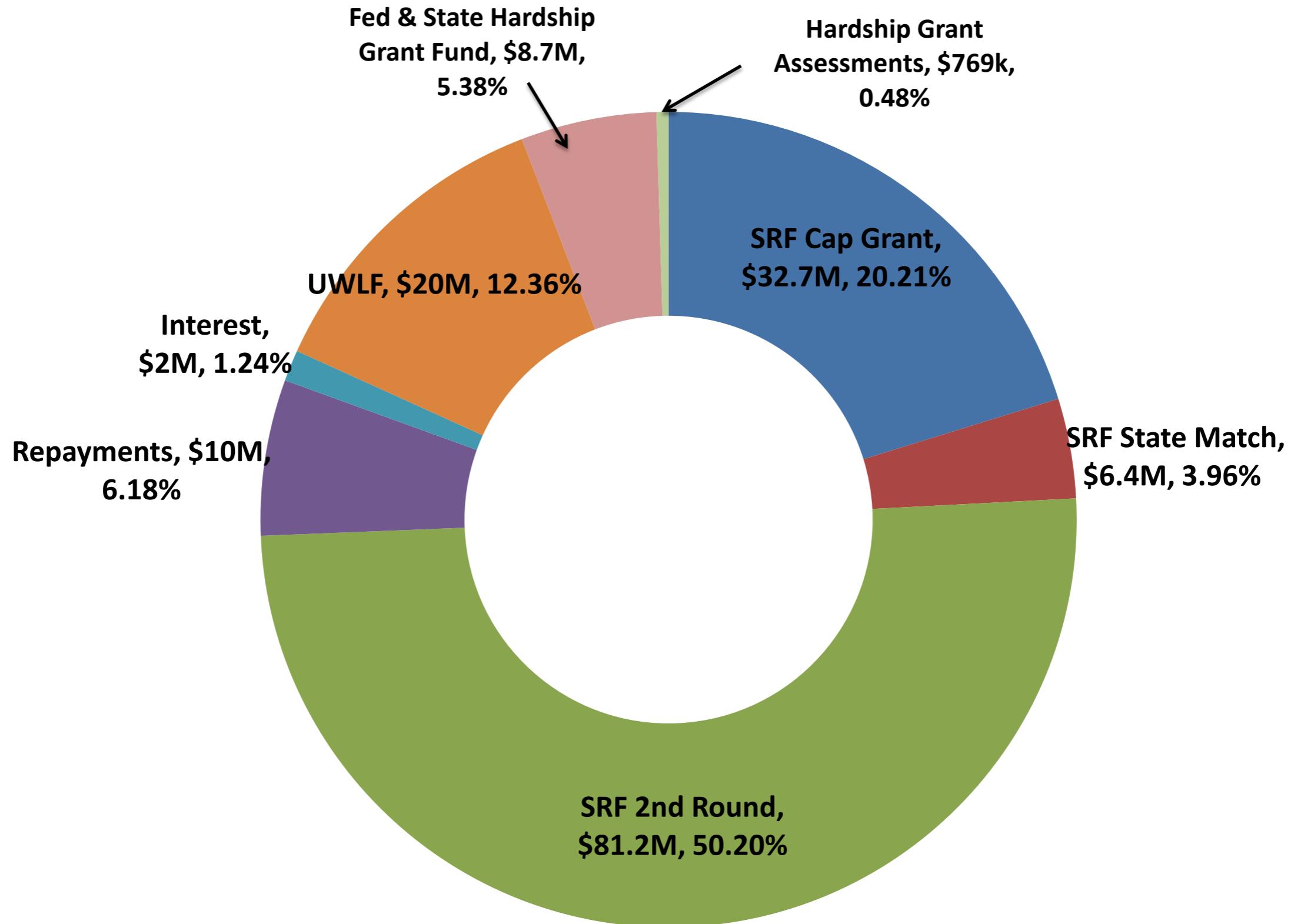
**HARDSHIP GRANT FUNDS
FINANCIAL STATUS REPORT
JANUARY FY20**

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		\$ 3,830,573	\$ 4,951,326	\$ 5,393,176	\$ 5,820,056	\$ 6,233,730	\$ 6,632,729
Federal HGF Beginning Balance	6,588,755	-	-	-	-	-	-
State HGF Beginning Balance	2,075,939	-	-	-	-	-	-
Interest Earnings at 2.866%	124,178	109,796	141,920	154,585	166,820	178,677	190,114
UWLF Interest Earnings at 2.866%	571,873	336,713	355,596	452,981	537,488	621,516	705,528
Hardship Grant Assessments	768,980	666,402	571,300	473,841	392,175	309,384	218,883
Interest Payments	158,665	403,983	373,034	345,473	317,191	289,421	261,668
Advance Repayments	-	880,500	-	-	-	-	-
Total Funds Available	10,288,391	6,227,967	6,393,176	6,820,056	7,233,730	7,632,729	8,008,922
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)	-	-	-	-	-	-
Lewiston - Planning Advance	-	-	-	-	-	-	-
USU Extension - Hardship Grant	(42,000)	-	-	-	-	-	-
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)	-	-	-	-	-	-
(FY11) DEQ - Willard Spur Study	(113,326)	-	-	-	-	-	-
(FY12) Utah Department of Agriculture	(395,162)	-	-	-	-	-	-
(FY13) DEQ - Great Salt Lake Advisory Council	(173,009)	-	-	-	-	-	-
(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	(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 Record	(155,766)	(77,609)	-	-	-	-	-
FY 2015 - Remaining Payments	(4,223)	-	-	-	-	-	-
FY 2016 - Remaining Payments	(97,168)	-	-	-	-	-	-
FY 2017 - Remaining Payments	(29,723)	-	-	-	-	-	-
FY 2018 - Remaining Payments	(162,531)	-	-	-	-	-	-
FY 2019 - Remaining Payments	(604,809)	-	-	-	-	-	-
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 Advance	(694,500)	-	-	-	-	-	-
*Wellington City - Hardship Design Grant	(350,000)	-	-	-	-	-	-
Total Obligations	(6,457,817)	(1,276,641)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
HGF Unobligated Funds	\$ 3,830,573	\$ 4,951,326	\$ 5,393,176	\$ 5,820,056	\$ 6,233,730	\$ 6,632,729	\$ 7,008,922

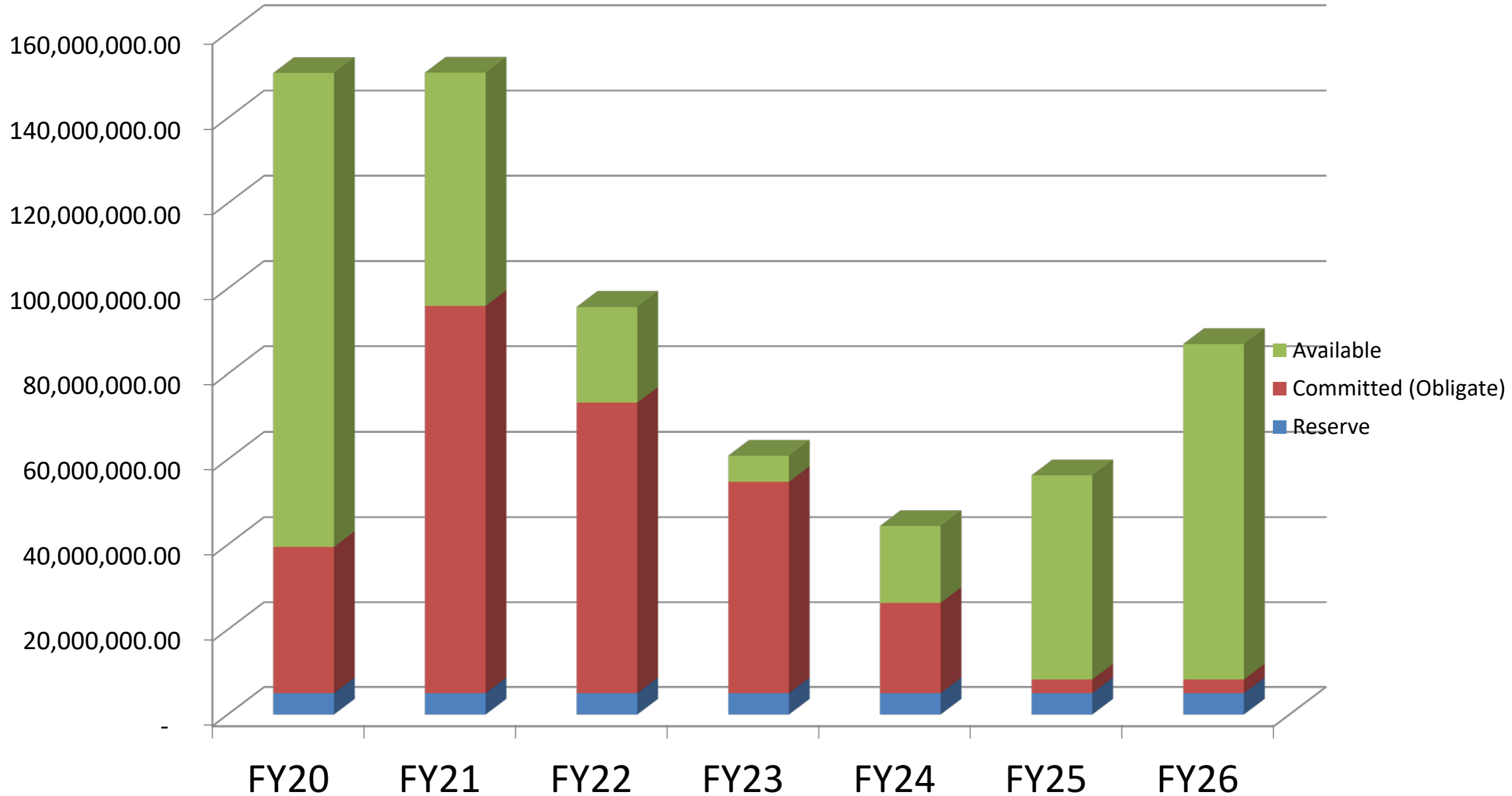
State of Utah
Wastewater Project Assistance Program
Project Priority List
As of Jan 7 2020

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	Kearns	x	74	5	0	9	60
	Wellington City		74	10	21	3	40
7	Lewiston City		67	10	16	1	40
8	Kane County Water Conservancy District (Duck Creek)	x	62	40	21	1	0

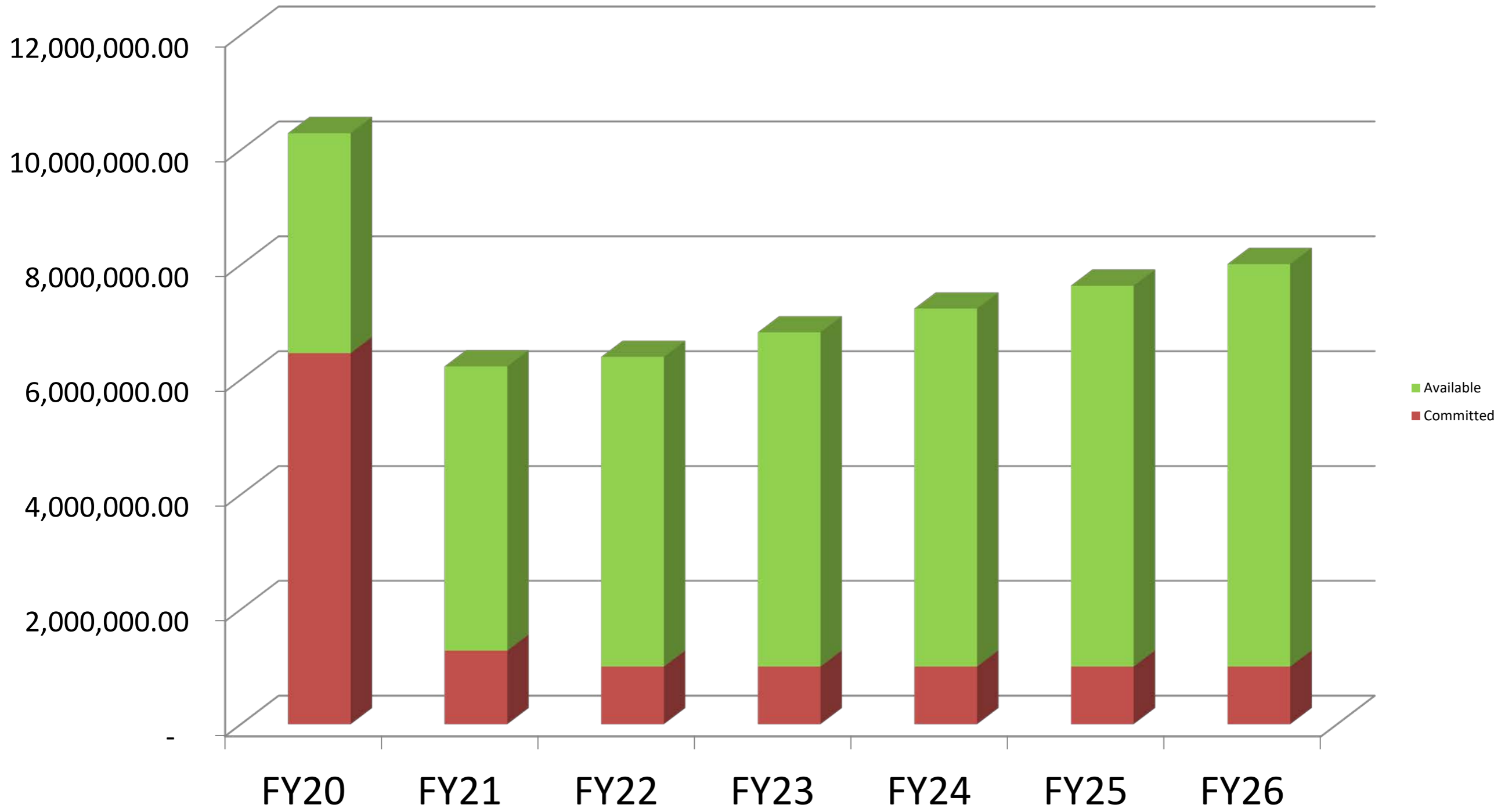
FY20 Funding Sources



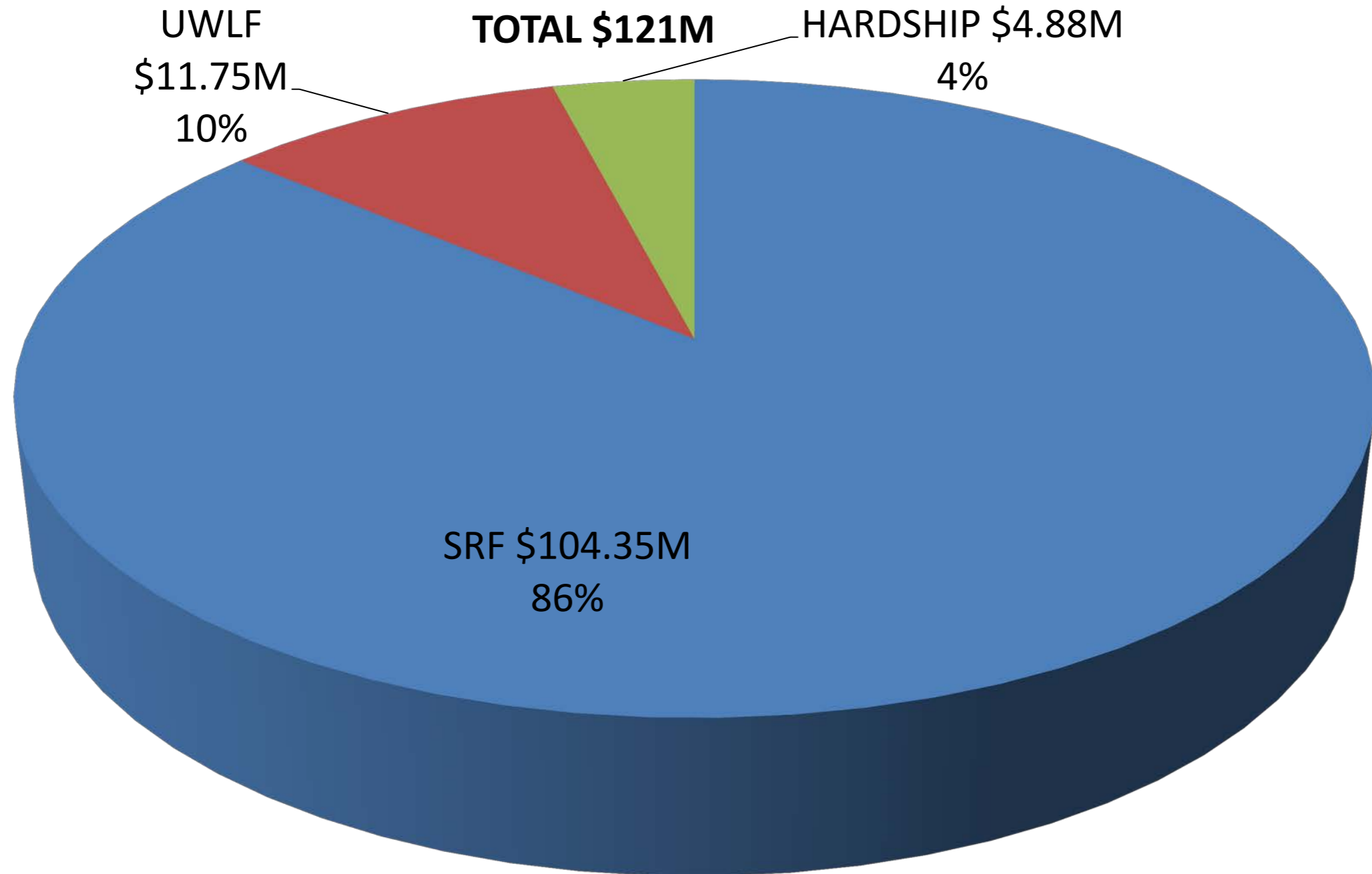
Loan Funds *as of Jan 2020*



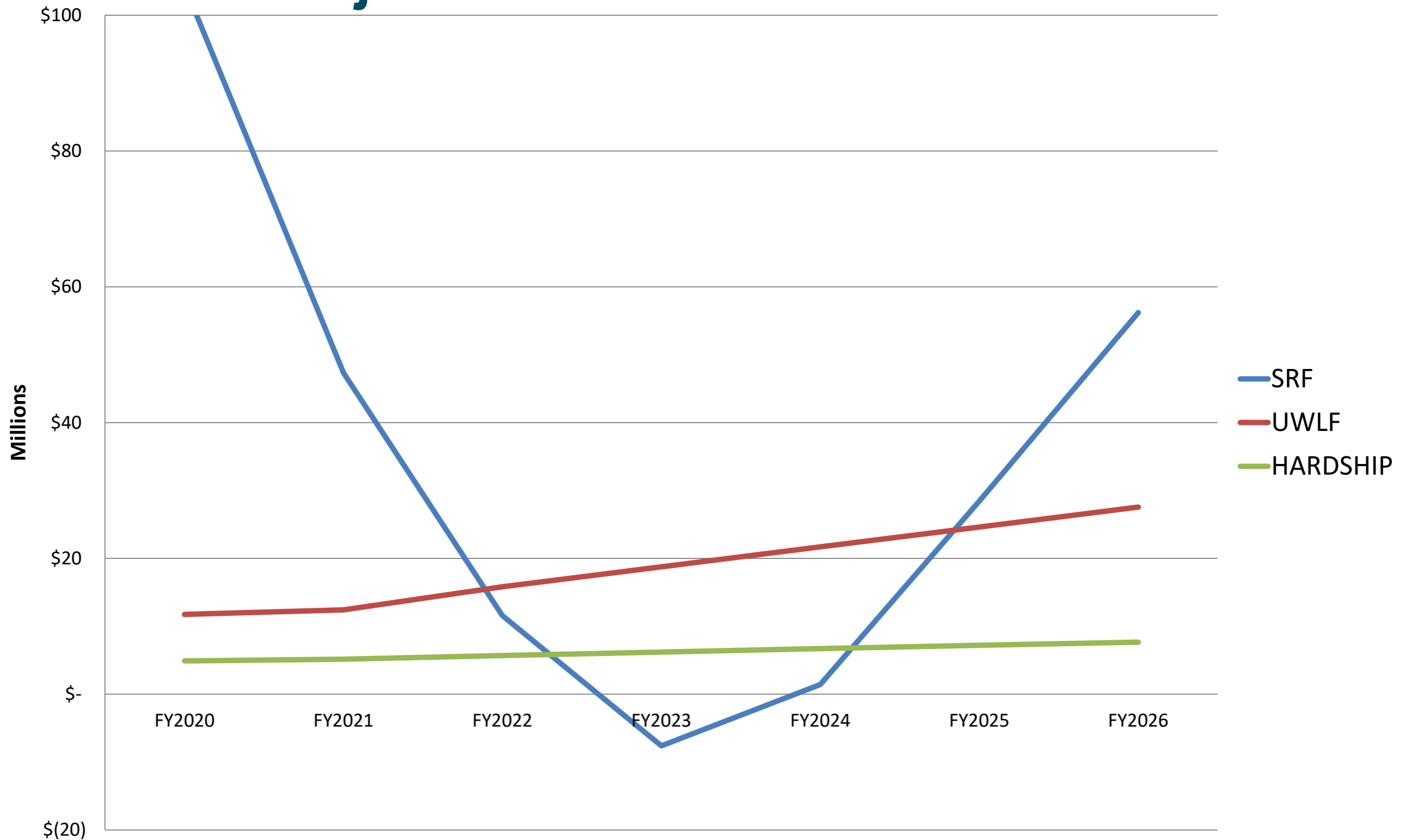
Grant Funds *as of Jan 2020*



FY20 Available Funding



Projected End of Year Balances





State of Utah

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Department of
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DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
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Emily Niehaus
James Webb
Dr. James VanDerslice
Dr. Erica Brown Gaddis
Executive Secretary

MEMORANDUM

TO: Utah Water Quality Board

THROUGH: Erica Brown Gaddis, PhD, Director

FROM: John Mackey, P.E., Engineering Section Manager

DATE: January 22, 2020

SUBJECT: Project Assistance Applications Received in December 2019

At the April 10, 2019 Water Quality Board (the Board) meeting, the Board decided to review State Revolving Fund (SRF) applications on a six month cycle. The Board agreed that with this approach we would set application deadlines in June and December. The Division received three applications in December 2019. A brief summary of these applications is provided below. Detailed feasibility reports for these projects will be provided by staff for the February meeting.

In addition to the three new projects, staff has reviewed and updated the PPL ranking for one existing project: South Davis Sewer District – Tertiary Wastewater Treatment Extension (algae-based nutrient removal/recovery system). Staff has requested the District to present its revised project to the Board for re-authorization due to substantive changes that are proposed to the scope of that project. A summary of this project is also provided.

On January 22, 2020, staff will present an updated project priority list (PPL) that includes the three new projects. We expect to introduce these projects to the Board in February then return to the Board for financial assistance authorizations in March. The Board may wish to hold a finance committee meeting to review the projects in the interim, presumably following the February meeting.

New Projects

Wellington City – Hardship Design Grant

Wellington City is requesting a hardship grant in the amount of \$350,000 to fund the design phase of their planned city-wide sewer rehabilitation project. The City has completed a draft capital facilities plan establishing the need and requirements over 30,000 feet of concrete, vitrified clay,

and PVC pipe considered to be failing, including 6,400 feet of concrete pipes in Main Street / Highway 6, a major transportation corridor in central Utah.

The 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, which will result in a sewer services fee well in excess of 1.4 percent of the median adjusted gross household income (MAGI). There are approximately 650 equivalent residential units (ERU) in the City and the local MAGI is \$35,187 or 77 percent of the statewide median. The proposed project is ranked 5 out of 8 (tie) on the project priority list.

Millville City – Construction Assistance

Millville City is requesting financial assistance in the amount \$12,297,000 to construct a new sewerage system, including a design advance in the amount \$694,500. The City has completed a draft capital facilities plan establishing the need and requirement for 82,000 feet of new sewer pipes, manholes, appurtenances, and repairs. The new sewerage will connect to the Nibley City sewer, which conveys sewage to Logan City for treatment. The project will eliminate wastewater discharges from onsite (septic) systems to ground water, which is contaminated with elevated concentrations of nitrate. A moratorium on new building has been placed on the City by the Bear River Health Department due to concerns over the impacts of onsite systems on the drinking water supply of Millville and surrounding communities.

The City is in the process of applying for additional financial assistance from USDA RD. The assistance request includes costs for septic tank abandonment and laterals totaling about \$3 million which is not eligible for reimbursement under the SRF. Impact fees for payment to Logan City in the amount \$1.6 million are also included in the assistance request. There are approximately 650 households in Millville City and the local MAGI is \$55,905 or 122 percent of the statewide median. Coupled with the cost of wastewater treatment (Logan City), the cost of this project will result in a sewer bill that exceeds 1.4 percent of the City MAGI. The proposed project is ranked 4 out of 8 on the project priority list.

Lewiston City – Construction Assistance

Lewiston City is requesting financial assistance in the amount \$3,043,000 to construct a sewerage system and treatment works improvements, including a design advance in the amount \$186,000. The City has completed a draft capital facilities plan establishing the need and requirements for a new lift station, 7,200 feet of sewer pipe capacity upgrades, a treatment plant headworks upgrade, increased lagoon aeration capacity, new chlorination and dechlorination facilities, and a new effluent re-aeration facility. These improvements are needed to upgrade and increase capacity of 50 year old sewerage facilities and improve wastewater treatment performance and reliability.

The City is in the process of applying for additional financial assistance from USDA RD. There are approximately 280 ERUs in the City and the local MAGI is \$42,523 or 93 percent of the

statewide median. The cost of this project will result in a sewer services fee well in excess of 1.4 percent of the local MAGI. The proposed project is ranked 7 out of 8 on the project priority list.

Existing Projects

South Davis Sewer District – Construction Assistance

South Davis Sewer District (SDSD) operates two wastewater treatment facilities: the South Davis South Plant (SDSD-South) and South Davis North Plant (SDSD-North). SDSD received a construction assistance loan authorization for the SDSD-South in the amount of \$28,851,000 with an interest rate of 0.55 percent and a term of 20 years. This loan included \$2,500,000 for sponsored non-point source / innovative storm water projects that were coupled to a commensurate loan interest rate reduction designed to offset the sponsored project costs. The proposed project is construction of an innovative tertiary treatment process designed to remove nitrogen and phosphorus to ultralow concentrations uptake by algae in a “photo bioreactor.” Byproduct algae will be processed for sale in a viable market.

The project was originally proposed to be constructed at the SDSD-South plant, where it would be part of their integrated resource and energy recovery program. Large-scale pilot testing of the developmental process at SDSD-South identified background water quality problems that inhibited the effectiveness of the algae treatment and prevented meeting important goals for the system. Subsequent large-scale pilot testing using wastewater from the SDSD-North plant helped confirm the presence of an inhibitor in the SDSD-South wastewater and also showed that the treatment objectives for the photo bioreactor can be met at the SDSD-North plant.

SDSD is requesting the terms, amounts, and non-point source funding all remain the same and be re-authorized for use at the SDSD-North plant project. Although the primary objectives for the proposed project remain intact, the project that the Board authorized has changed in several substantive ways, particularly with regard to plant location, point of discharge/receiving water, integration with energy recovery operations, and the relative plant volume that will be treated and SDSD-North. These are all points that staff wants the Board to understand and consider before completing this investment.

The District provides sewer service to 27,500 ERUs. The local MAGI is about \$53,972 (Bountiful) or 118 percent of the statewide median. The proposed project is ranked 3 out of 8 on the project priority list.



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Executive Secretary

MEMORANDUM

TO: Utah Water Quality Board

FROM: Judy Etherington, DWQ, Wastewater Certification Program Coordinator

THROUGH: Erica Brown Gaddis, PhD, Director;
John Mackey, P.E., Engineering Section Manager; and
Lenora Sullivan, Data and Information Services Section Manager

DATE: January 22, 2020

SUBJECT: Recommendations for Appointment to the Utah Wastewater Operator Certification Council for February 1, 2020 through January 31, 2023

As of January 31, 2020, the terms of two members of the Utah Wastewater Operator Certification Council expire. The members with expiring terms are Dr. Jennifer Weidhaas, representing universities in Utah; and Phil Harold, representing vocational training. Other current members of the Council include Giles Demke, Paul Fulgham, Brent Justensen, Brian Lamar, and Blaine Shipley.

Recommendations for appointment to these positions were solicited from individuals and organizations in the wastewater sector and educational institutions. Individuals are appointed for a three-year term. Council members may be reappointed, but they do not automatically succeed themselves. The names recommended to the Board at this time are selected from written recommendations received by the Division of Water Quality prior to December 31, 2019.

At this time, it is recommended that *Dr. Jennifer Weidhaas*, who currently is an associate professor in environmental engineering at the University of Utah, and *Phil Harold*, the wastewater circuit rider for the Rural Water Association of Utah, be re-appointed to serve as the two at large members who “may represent (1) an educational institution in Utah; (2) those who are currently certified as wastewater operators in the private sector; or (3) vocational training.”

This is a request for Board approval of these two reappointments for the term February 1, 2020 through January 31, 2023.

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