

**LOAN FUNDS
FINANCIAL PROJECTIONS**

	4th Qtr FY 2016 Apr - June 2016	1st Qtr FY 2017 July - Sept 2016	2nd Qtr FY 2017 Oct - Dec 2016	3rd Qtr FY 2017 Jan - Mar 2017	4th Qtr FY 2017 Apr - June 2017	1st Qtr FY 2018 July - Sept 2017	2nd Qtr FY 2018 Oct - Dec 2017	3rd Qtr FY 2018 Jan - Mar 2018	4th Qtr FY 2018 Apr - June 2018	1st Qtr FY 2019 July - Sept 2018	2nd Qtr FY 2019 Oct-Dec 2018	3rd Qtr FY 2019 Jan-Mar 2019
STATE REVOLVING FUND (SRF)												
Funds Available												
SRF - 1st Round (LOC) 2014 Cap Grant	2,049,381	-	-	-	-	-	-	-	-	-	-	-
Less: 2014 Principal Forgiveness Amount	(600,934)	-	-	-	-	-	-	-	-	-	-	-
SRF - 1st Round (LOC) 2015 Cap Grant	6,924,000	-	-	-	-	-	-	-	-	-	-	-
SRF - 1st Round (LOC) 2016 Cap Grant	6,611,000	-	-	-	-	-	-	-	-	-	-	-
Less: 2016 Principal Forgiveness Amount	(701,100)	-	-	-	-	-	-	-	-	-	-	-
State Match	2,867,354	-	-	-	-	-	-	-	-	-	-	-
SRF - 2nd Round	93,579,940	111,828,536	104,788,923	84,137,311	59,028,339	52,830,345	44,870,892	36,122,313	(24,121,345)	(20,304,302)	(18,306,112)	(16,850,600)
Interest Earnings at 0.6%	140,370	139,786	130,986	105,172	73,785	66,038	56,089	45,153	-	-	-	-
Loan Repayments	1,996,525	1,951,601	1,622,402	4,685,856	3,728,221	1,974,509	1,195,332	4,711,189	3,817,043	1,998,190	1,455,512	4,736,781
Total Funds Available	112,866,536	113,919,923	106,542,311	88,928,339	62,830,345	54,870,892	46,122,313	40,878,655	(20,304,302)	(18,306,112)	(16,850,600)	(12,113,819)
Project Obligations												
Eureka City	(400,000)	-	-	-	-	-	-	-	-	-	-	-
Francis City	(638,000)	-	-	-	-	-	-	-	-	-	-	-
Logan City	-	(9,131,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	-	-	-	-
Loan Authorizations												
Moab City	-	-	(10,405,000)	-	-	-	-	-	-	-	-	-
Anticipated Projects												
Ammonia Projects	-	-	-	-	-	-	-	-	-	-	-	(13,647,000)
Phosphorus Projects	-	-	-	-	-	-	-	-	-	-	-	(23,377,500)
Bear Lake SSD	-	-	(2,000,000)	-	-	-	-	-	-	-	-	-
Kamas City	-	-	-	-	-	-	-	(8,000,000)	-	-	-	-
Morgan City	-	-	-	-	-	-	-	(8,000,000)	-	-	-	-
Payson City	-	-	-	(6,900,000)	-	-	-	-	-	-	-	-
Provo City	-	-	-	-	-	-	-	(30,000,000)	-	-	-	-
Salem City	-	-	-	(13,000,000)	-	-	-	-	-	-	-	-
Spanish Fork	-	-	-	-	-	-	-	(8,000,000)	-	-	-	-
Town of Tropic	-	-	-	-	-	-	-	(1,000,000)	-	-	-	-
Total Obligations	(1,038,000)	(9,131,000)	(22,405,000)	(29,900,000)	(10,000,000)	(10,000,000)	(10,000,000)	(65,000,000)	-	-	-	(37,024,500)
SRF Unobligated Funds	\$ 111,828,536	\$ 104,788,923	\$ 84,137,311	\$ 59,028,339	\$ 52,830,345	\$ 44,870,892	\$ 36,122,313	\$ (24,121,345)	\$ (20,304,302)	\$ (18,306,112)	\$ (16,850,600)	\$ (49,138,319)

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UTAH WASTEWATER LOAN FUND (UWLF)												
Funds Available												
UWLF	\$ 18,019,874	\$ 12,665,995	\$ 13,542,203	\$ 14,275,553	\$ 15,568,983	\$ 16,081,737	\$ 17,145,520	\$ 18,209,870	\$ 19,471,300	\$ 21,533,308	\$ 22,565,191	\$ 23,636,541
Sales Tax Revenue	-	896,875	896,875	896,875	896,875	896,875	896,875	896,875	896,875	896,875	896,875	896,875
Loan Repayments	120,000	469,333	426,000	736,080	1,455,404	506,433	507,000	704,080	1,504,657	474,533	514,000	714,080
Total Funds Available	18,139,874	14,032,203	14,865,078	15,908,508	17,921,262	17,485,045	18,549,395	19,810,825	21,872,833	22,904,716	23,976,066	25,247,496
General Obligations												
State Match Transfer	(2,867,354)	-	-	-	-	-	-	-	-	-	-	-
DWQ Administrative Expenses	(339,525)	-	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)
Project Obligations												
Helper City	(1,157,000)	-	-	-	-	-	-	-	-	-	-	-
Murray City	(1,110,000)	-	-	-	-	-	-	-	-	-	-	-
Loan Authorizations												
Eagle Mountain City - White Hills	-	(490,000)	-	-	-	-	-	-	-	-	-	-
Planned Projects												
Duchesne City	-	-	(250,000)	-	-	-	-	-	-	-	-	-
Wellington City	-	-	-	-	(1,500,000)	-	-	-	-	-	-	-
Total Obligations	(5,473,879)	(490,000)	(589,525)	(339,525)	(1,839,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)
UWLF Unobligated Funds	\$ 12,665,995	\$ 13,542,203	\$ 14,275,553	\$ 15,568,983	\$ 16,081,737	\$ 17,145,520	\$ 18,209,870	\$ 19,471,300	\$ 21,533,308	\$ 22,565,191	\$ 23,636,541	\$ 24,907,971

**HARDSHIP GRANT FUNDS
FINANCIAL PROJECTIONS**

	4th Qtr FY 2016 Apr - June 2016	1st Qtr FY 2017 July - Sept 2016	2nd Qtr FY 2017 Oct - Dec 2016	3rd Qtr FY 2017 Jan - Mar 2017	4th Qtr FY 2017 Apr - June 2017	1st Qtr FY 2018 July - Sept 2017	2nd Qtr FY 2018 Oct - Dec 2017	3rd Qtr FY 2018 Jan - Mar 2018	4th Qtr FY 2018 Apr - June 2018	1st Qtr FY 2019 July - Sept 2018	2nd Qtr FY 2019 Oct-Dec 2018	3rd Qtr FY 2019 Jan-Mar 2019
HARDSHIP GRANT FUNDS (HGF)												
Funds Available												
Beginning Balance	\$ -	\$ 4,979,934	\$ 3,231,527	\$ 777,813	\$ 839,887	\$ 1,924,337	\$ 1,404,965	\$ 1,531,650	\$ 1,769,804	\$ 2,627,720	\$ 2,058,005	\$ 2,187,353
Federal HGF Beginning Balance	6,163,529	-	-	-	-	-	-	-	-	-	-	-
State HGF Beginning Balance	983,132	-	-	-	-	-	-	-	-	-	-	-
2014 Principal Forgiveness Amount	600,934	-	-	-	-	-	-	-	-	-	-	-
2016 Principal Forgiveness Amount	701,100	-	-	-	-	-	-	-	-	-	-	-
Interest Earnings at 0.6%	10,720	6,225	4,039	972	1,050	2,405	1,756	1,915	2,212	3,285	2,573	2,734
UWLF Interest Earnings at 0.6%	27,030	15,832	16,928	17,844	19,461	20,102	21,432	22,762	24,339	26,917	28,206	29,546
Hardship Grant Assessments	355,073	402,201	-	-	860,865	409,454	-	180,346	787,051	356,178	-	158,498
Interest Payments	-	53,335	108,319	43,257	203,074	48,667	103,497	33,132	44,313	43,906	98,569	22,694
Advance Repayments	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds Available	8,841,518	5,457,527	3,360,813	839,887	1,924,337	2,404,965	1,531,650	1,769,804	2,627,720	3,058,005	2,187,353	2,400,825
Project Obligations												
Big Plains - Planning Grant	(38,000)	-	-	-	-	-	-	-	-	-	-	-
DWQ-Central Utah Pulic Health Dept - Planning Grant	(50,000)	-	-	-	-	-	-	-	-	-	-	-
Eagle Mountain City - White Hills - Construction Grant	-	(580,000)	-	-	-	-	-	-	-	-	-	-
Emigration Sewer Imp Dist - Planning Grant	(60,000)	-	-	-	-	-	-	-	-	-	-	-
Eureka City - Construction Grant	-	(646,000)	-	-	-	-	-	-	-	-	-	-
Francis City - Construction Grant	-	-	(1,875,000)	-	-	-	-	-	-	-	-	-
Tooele County - Planning Grant	(95,000)	-	-	-	-	-	-	-	-	-	-	-
Wellington City - Planning Advance	(32,000)	-	-	-	-	-	-	-	-	-	-	-
Non-Point Source Project Obligations												
(FY11) Gunnison Irrigation Company	(48,587)	-	-	-	-	-	-	-	-	-	-	-
(FY11) DEQ - Willard Spur Study	(113,326)	-	-	-	-	-	-	-	-	-	-	-
(FY12) Utah Department of Agriculture	(717,351)	-	-	-	-	-	-	-	-	-	-	-
(FY13) DEQ - Great Salt Lake Advisory Council	(339,418)	-	-	-	-	-	-	-	-	-	-	-
(FY14) UACD	(47,394)	-	-	-	-	-	-	-	-	-	-	-
(FY15) DEQ - Ammonia Criteria Study	(75,000)	-	-	-	-	-	-	-	-	-	-	-
(FY15) DEQ - Nitrogen Transformation Study	(150,000)	-	-	-	-	-	-	-	-	-	-	-
(FY16) DEQ - San Juan River Monitoring	(200,000)	-	-	-	-	-	-	-	-	-	-	-
FY 2012 - Remaining Payments	(59,540)	-	-	-	-	-	-	-	-	-	-	-
FY 2013 - Remaining Payments	(56,769)	-	-	-	-	-	-	-	-	-	-	-
FY 2014 - Remaining Payments	(225,246)	-	-	-	-	-	-	-	-	-	-	-
FY 2015 - Remaining Payments	(387,029)	-	-	-	-	-	-	-	-	-	-	-
FY 2016 Allocation	(821,924)	-	-	-	-	-	-	-	-	-	-	-
FY 2017 Allocation	-	(1,000,000)	-	-	-	-	-	-	-	-	-	-
FY 2018 Allocation	-	-	-	-	-	(1,000,000)	-	-	-	-	-	-
FY 2019 Allocation	-	-	-	-	-	-	-	-	-	(1,000,000)	-	-
Planned Projects												
*DEQ - Harmful Algal Bloom Study	(124,000)	-	-	-	-	-	-	-	-	-	-	-
Duchesne City - Construction Grant	-	-	(608,000)	-	-	-	-	-	-	-	-	-
Kamas City - Planning Advance	-	-	(100,000)	-	-	-	-	-	-	-	-	-
Stonegate - Construction Grant	(221,000)	-	-	-	-	-	-	-	-	-	-	-
Total Obligations	(3,861,584)	(2,226,000)	(2,583,000)	-	-	(1,000,000)	-	-	-	(1,000,000)	-	-
HGF Unobligated Funds	\$ 4,979,934	\$ 3,231,527	\$ 777,813	\$ 839,887	\$ 1,924,337	\$ 1,404,965	\$ 1,531,650	\$ 1,769,804	\$ 2,627,720	\$ 2,058,005	\$ 2,187,353	\$ 2,400,825



State of Utah

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Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
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Alan Matheson
Walter L. Baker
Executive Secretary

MEMORANDUM

TO: Utah Water Quality Board
THROUGH: Walter L. Baker, P.E. 
FROM: Erica Gaddis
DATE: May 16, 2016
SUBJECT: Request for the Water Quality Board to approve a hardship grant for a maximum of \$94,000 to conduct harmful algae bloom monitoring of Utah Lake

Utah Lake is a popular destination for thousands of recreationists every year. Boating, water skiing, fishing, and swimming are all popular activities during the summer months. The State of Utah recognizes the value of this important resource and has established and maintains Utah Lake State Park that averaged almost 300,000 annual visits from 2007-2011. In addition to the lake's benefits to recreationists, Utah Lake is home to a threatened endemic fish species (June Sucker) and provides vital habitat for many other species of wildlife.

Blue-green algae, which can produce toxins harmful to humans, livestock, and pets, threaten the recreational uses of Utah Lake. In October 2014, a toxic blue-green algal bloom resulted in the Utah County Health Department issuing a warning to recreational users of the lake. Because of the episodic nature of blue-green algal blooms, it is difficult to detect when a bloom is occurring. As a result, local health departments make decisions about whether warning signs should be posted at the lake based on visual observation. In August 2015, this resulted in a warning sign posted at Utah Lake when the algal bloom turned out not to be toxic. The proposed new program will provide for an early warning monitoring system for Utah Lake and funding to characterize the nature of blooms when they occur. This system will provide protection of public health without the need to unnecessarily post warnings based on visual observation alone. This should reduce public health warnings on the lake, preserving the economic benefit of the Utah Lake State Park to the community.

The new activity will be a Utah Lake Harmful Algal Bloom Early Warning System, composed of three continuous monitoring stations that will be deployed at three separate locations within the lake. The Utah County Health Department, in coordination with the Division of Water Quality, will be able to notify the public of any precautions advised to protect their health. In the future, the

sondes could also be deployed to other waters threatened with harmful algal blooms such as Pineview Reservoir, East Canyon Reservoir, Farmington Bay, or Scofield Reservoir.

One-time costs in the amount of \$94,000 will fund the purchase of:

- a) three monitoring buoys, which include solar panels, battery, cellular modem for wirelessly serving data, and software for tracking and analyzing the data (~\$55,000)
- b) three data sondes, which includes sensors to measure turbidity, dissolved oxygen, pH, conductivity, temperature, and phycocyanin which is a measure of blue-green algae (~\$39,000)

The Division of Water Quality will absorb into its monitoring budget any O&M cost for the sondes as well as the cost of analyzing algal samples.