



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Water Quality Board
Myron E. Bateman, Chair
Shane E. Pace, Vice-Chair
Clyde L. Bunker
Steven K. Earley
Gregg A. Galecki
Jennifer Grant
Dr. James VanDerslice
Michael D. Luers
Alan Matheson
Walter L. Baker
Executive Secretary

Utah Water Quality Board Meeting
DEQ Board Room 1015
195 N 1950 W
Salt Lake City, UT 84116
June 22, 2016

Work Meeting Begins @ 8:30 a.m.

DEQ Branding Amy Christensen

Board Meeting Begins @ 9:00 a.m.
AGENDA

- A. **Water Quality Board Meeting – Roll Call**
- B. (Tab 1) **Minutes:**
Approval of Minutes for May 25, 2016 WQ Board Meeting Myron Bateman
- C. **1. Introduction of New Board Member: Dr. James VanDerslice** Myron Bateman
2. Attendance Requirement of Water Quality Board Members Walt Baker
3. Board Elections Walt Baker
- D. **Executive Secretary’s Report** Walt Baker
- E. (Tab 2) **Funding Requests:**
1. Financial Report Emily Cantón
2. Duchense City Project: Funding Authorization Request Lisa Nelson
3. Salem City: Introduction Loan Request Lisa Nelson
4. Tri-County Stonegate: Grant Authorization Request Lisa Nelson
- F. (Tab 3) **Other Business:**
1. 2016 Integrated Report Emilie Flemer & Jake VanderLaan
2. Nonpoint Source Pollution Program Annual Report Jim Bowcutt

Next Meeting August 24, 2016
DEQ Board Room 1015
195 N 1950 W
Salt Lake City, UT 84116

Revised 6/7/2016

In compliance with the American Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Ashley Nelsen, Office of Human Resources, at (801) 903-3978, TDD (801) 903-3978, at least five working prior to the scheduled meeting

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Mailing Address: P.O. Box 144870 • Salt Lake City, UT 84114-4870
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MINUTES

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

UTAH WATER QUALITY BOARD

Bear River Bird Refuge
2155 West Forest St.
Brigham City, UT 84302

UTAH WATER QUALITY BOARD MEMBERS PRESENT

Clyde Bunker	Steven Earley
Jennifer Grant	Myron Bateman
Michael Luers	Scott Baird
Shane Pace	

Excused: Gregg Galecki

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Walter Baker, Erica Gaddis, Leah Ann Lamb, Jenny Potter, Linda Gould, Lisa Nelson, Matthew Garn, Ally Gagon, Jeff Ostermiller, Jodi Gardberg, Emily Cantón, John Mackey, Beth Wondimu, Skyler Davies, Mike Allred.

OTHERS PRESENT

<u>Name</u>	<u>Organization Representing</u>
Steve Pettingill	Perry Willard WWP
Bruce Howard	Perry Willard WWP
Donna Sackett	Senator Lee's Office
Scott Archibald	Sunrise Engineering
Dick West	Willard Spur Committee
Bob Barnet	US Bird & Wildlife Service
Leland Myers	CDSO
Lee Perry	Utah House of Representatives
Karen Cronin	Perry City
Richard Jex	SCG Enterprisers
Jay Olsen	UDAF
Greg Westfall	Perry City
Amy Christensen	DEQ

Myron Bateman called the Board meeting to order at 9:06 AM and took roll call for the members of the Board and audience.

APPROVAL OF MINUTES OF THE APRIL 27, 2016 MEETING

Motion: It was motioned by Mr. Pace to approve the minutes for April 2016 Board meeting. Ms. Grant seconded the motion. The motion was unanimously passed.

EXECUTIVE SECRETARY REPORT

- Mr. Baker discussed with the board that Western Resource Advocates has sent a letter to EPA to ask it to withdraw primacy over NPDES delegation in Utah because of Senate Bill 110. We intend to bring back to the board in June rules that will govern the implementation of SB110 that hopefully address the concerns that Western Resource Advocates has.
- Gold King Mine Spill, Erica Gaddis represented Utah in New Mexico at the stake holder meeting. Notably absent was the state of Colorado, due to New Mexico's intent to sue the state of Colorado. The good news is that the tristate preparedness plan has been put in place to monitor and detect the 80% of the metals from the spill that remain in the water that will be rematerialized by spring run-off. EPA has set aside \$700,000 to allow this response plan to be put into action. There are still discussions on how to get this going, but this is great news for the monitoring efforts. The plan is to have monitoring done that can give warnings to each state on the metals levels so that preemptive actions can be taken.

FUNDING REQUESTS

Financial Reports: Ms. Cantón updated the Board on the Loan Funds, and Hardship Grant Funds, as seen in the Board Packet on pages 6-7.

Harmful Algal Bloom Request for Hardship Grant: Ms. Gaddis requested the Board approve a hardship grant for \$94,000 to purchase data samples to conduct harmful algal bloom monitoring of Utah Lake.

Motion: Following a discussion, a motion was made by Mr. Earley to approve the Hardship Grant for \$94,000. Mr. Pace seconded the motion. The motion was unanimously passed.

OTHER BUSINESS

Carl Adams Appointment as Signatory: Ms. Cantón requested to designate Carl Adams of the Watershed Protection Section for DWQ, as a signatory for official documents associated with the State non-point source program.

Motion: Following a discussion, a motion was made by Mr. Bunker to appoint Carl Adams as a signatory over state non-point source program official documents. Mr. Luers seconded the motion. The motion was unanimously passed.

Approval of Willard Spur Steering Committee Recommendations: Mr. Ostermiller presented Willard Spur Steering Committee Recommendations to the board. Recommendation 1: Incorporate best management practices into the UPDES Permit. Recommendation 2: Establish a beneficial use class for the Willard Spur. Recommendation 3: Proceed with site-specific standards development. Recommendation 4: Release contingency grant funds.

Motion: Following a discussion, a motion was made by Mr. Pace to delay the release of the \$1.5 million and any funds left in the operations until the UPDES permit is issued in the fall of 2016. Mr. Bunker seconded the motion. The motion was unanimously passed.

Nutrient Programs/LaVere Merritt Discussion: Ms. Gaddis presented to the board, DWQ's response to a letter sent from LaVere Merritt to the board discussing nutrient pollution threats to Utah Lake. A discussion with the board, as well as a power point was presented going over several points of the letter presented to the board the previous month. To hear and see this presentation please visit <http://www.utah.gov/pmn/index.html> for the full recording and power point presentation.

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

**Next Meeting June 22, 2016
DEQ Board Room 1015
195 N 1950 W
Salt Lake City, UT 84116**

Myron Bateman, Chair
Utah Water Quality Board

R305. Environmental Quality, Administration.

Rule R305-8. Board Member Attendance Requirements.

As in effect on June 1, 2016

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- [KEY](#)
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R305-8-101. Purpose and Authority.

The purpose of this rule is to establish standards for board member attendance at regularly scheduled board meetings. This rule is authorized by Section 19-1-201(1)(d)(i)(A).

R305-8-102. Notification Requirement.

A board member shall notify the board chair of an absence at least two business days prior to the board meeting in order to be excused. A board member who fails to notify the board chair of an absence at least two business days prior to the board meeting shall not be excused.

R305-8-103. Standards for Attendance.

- (1) In order to effectively execute board duties, board members shall regularly attend board meetings.
- (2) A board member shall be deemed to be out of conformity with the requirement to regularly attend board meetings if:
 - (a) the member has two unexcused absences from a board meeting within a one-year period;
 - (b) the member misses three consecutive meetings for any reason; or
 - (c) the member misses one-third of the total number of board meetings in a one year period.

R305-8-104. Remedy for Failure to Meet Standards for Attendance.

- (1) If a board member fails to meet standards for attendance, the board chair shall:
 - (a) notify the board member in writing; and
 - (b) schedule an agenda item for the next board meeting to consider dismissal of the board member.
- (2) The board member shall be given an opportunity to address the board at that meeting.
- (3) The Board may recommend to the Governor that the member be removed from the board.

KEY

board membership, board attendance, board member dismissal

Date of Enactment or Last Substantive Amendment

6/8/2016

UT Admin Code R305-8. Board Member Attendance Requirements. June 1, 2016

December 19, 2012

Authorizing, Implemented, or Interpreted Law

19-1-201(1)(d)(i)(A)

**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	93,831,136	110,083,584	103,041,789	82,387,994	57,276,835	51,076,652	43,115,007	34,364,233	(25,881,623)	(22,064,581)	(20,066,391)	(18,610,878)
Interest Earnings at 0.6%	140,747	137,604	128,802	102,985	71,596	63,846	53,894	42,955	-	-	-	-
Loan Repayments	-	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	111,121,584	112,172,789	104,792,994	87,176,835	61,076,652	53,115,007	44,364,233	39,118,377	(22,064,581)	(20,066,391)	(18,610,878)	(13,874,097)
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)	-	-	-	-	-	-	-	-	-
Karnas 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	\$ 110,083,584	\$ 103,041,789	\$ 82,387,994	\$ 57,276,835	\$ 51,076,652	\$ 43,115,007	\$ 34,364,233	\$ (25,881,623)	\$ (22,064,581)	\$ (20,066,391)	\$ (18,610,878)	\$ (50,898,597)

	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
UTAH WASTEWATER LOAN FUND (UWLF)												
Funds Available												
UWLF	\$ 17,700,874	\$ 12,566,520	\$ 13,103,203	\$ 11,886,553	\$ 13,179,983	\$ 13,692,738	\$ 14,756,521	\$ 15,820,871	\$ 17,082,301	\$ 19,144,308	\$ 20,176,191	\$ 21,247,541
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	-	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	17,700,874	13,932,728	14,426,078	13,519,508	15,532,263	15,096,046	16,160,396	17,421,826	19,483,833	20,515,716	21,587,066	22,858,496
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	-	-	(2,200,000)	-	-	-	-	-	-	-	-	-
Wellington City	-	-	-	-	(1,500,000)	-	-	-	-	-	-	-
Total Obligations	(5,134,354)	(829,525)	(2,539,525)	(339,525)	(1,839,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)
UWLF Unobligated Funds	\$ 12,566,520	\$ 13,103,203	\$ 11,886,553	\$ 13,179,983	\$ 13,692,738	\$ 14,756,521	\$ 15,820,871	\$ 17,082,301	\$ 19,144,308	\$ 20,176,191	\$ 21,247,541	\$ 22,518,971

**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	\$ -	\$ 4,688,503	\$ 2,939,607	\$ 292,980	\$ 351,461	\$ 1,432,314	\$ 909,341	\$ 1,032,420	\$ 1,266,964	\$ 2,121,266	\$ 1,547,931	\$ 1,673,656
Federal HGF Beginning Balance	6,198,121	-	-	-	-	-	-	-	-	-	-	-
State HGF Beginning Balance	997,587	-	-	-	-	-	-	-	-	-	-	-
2014 Principal Forgiveness Amount	600,934	-	-	-	-	-	-	-	-	-	-	-
2016 Principal Forgiveness Amount	701,100	-	-	-	-	-	-	-	-	-	-	-
Interest Earnings at 0.6%	10,794	5,861	3,675	366	439	1,790	1,137	1,291	1,584	2,652	1,935	2,092
UWLF Interest Earnings at 0.6%	26,551	15,708	16,379	14,858	16,475	17,116	18,446	19,776	21,353	23,930	25,220	26,559
Hardship Grant Assessments	-	402,201	-	-	860,865	409,454	180,346	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	8,535,087	5,165,607	3,067,980	351,461	1,432,314	1,909,341	1,032,420	1,266,964	2,121,266	2,547,931	1,673,656	1,883,499
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 - Harmful Algal Bloom Study	(109,000)	-	-	-	-	-	-	-	-	-	-	-
(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												
*Duchesne City - Construction Grant	-	-	(800,000)	-	-	-	-	-	-	-	-	-
Kamas City - Planning Advance	-	-	(100,000)	-	-	-	-	-	-	-	-	-
*Tri-County - Construction Grant	(221,000)	-	-	-	-	-	-	-	-	-	-	-
Total Obligations	(3,846,584)	(2,226,000)	(2,775,000)	-	-	(1,000,000)	-	-	-	(1,000,000)	-	-
HGF Unobligated Funds	\$ 4,688,503	\$ 2,939,607	\$ 292,980	\$ 351,461	\$ 1,432,314	\$ 909,341	\$ 1,032,420	\$ 1,266,964	\$ 2,121,266	\$ 1,547,931	\$ 1,673,656	\$ 1,883,499

**State of Utah
Wastewater Project Assistance Program
Project Priority List**

FY16 Rank	Project Name	Funding Authorized	Total Points	Point Categories			
				Project Need	Potential Improvement	Population Affected	Special Consideration
1	Logan City	x	159	50	39	10	60
2	Price River Water Improvement District	x	145	70	48	7	20
3	Coalville City	x	142	40	40	2	60
4	Moab City	x	120	50	24	6	40
5	Eureka City	x	118	50	0	8	60
6	Salem City		108	50	12	6	40
7	White Hills - Eagle Mountain	x	106	40	5	1	60
8	Granger-Hunter Improvement District	x	105	35	0	10	60
9	Helper City	x	83	40	0	3	40
10	Long Valley Sewer Improvement District	x	79	10	7	2	60
11 (Tie)	Murray City	x	78	10	0	8	60
	Wellington City	x	78	35	1	2	40
13	Stonegate		76	70	5	1	0
14	Francis City	x	72	10	0	2	60
15	Payson City	x	70	10	13	7	40
16	Duchesne City		52	10	0	2	40



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Michael D. Luers
Alan Matheson
Walter L. Baker
Executive Secretary

Date Received: April 8, 2016

Presented to WQB: June 29, 2016

WATER QUALITY BOARD
FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT
AUTHORIZATION

APPLICANT:

Duchesne City
500 East Main Street
Duchesne City, Utah 84021
Telephone: (435) 738-2464

PRESIDING OFFICIAL:

RoJean Rowley, Mayor
Telephone: (435) 738-2464

CONTACT PERSON

Diane Miller, City Recorder

CONSULTING ENGINEER:

Byron Colton, P.E.
Horrocks Engineers, Inc
157 South, 300 East
Roosevelt, UT 84066
Telephone: (435) 722-0968

BOND COUNSEL:

Eric Johnson
Blaisdell, Church & Johnson, P.C.
5995 South, Redwood Road
Taylorsville, Utah 84123
(801) 261-3407

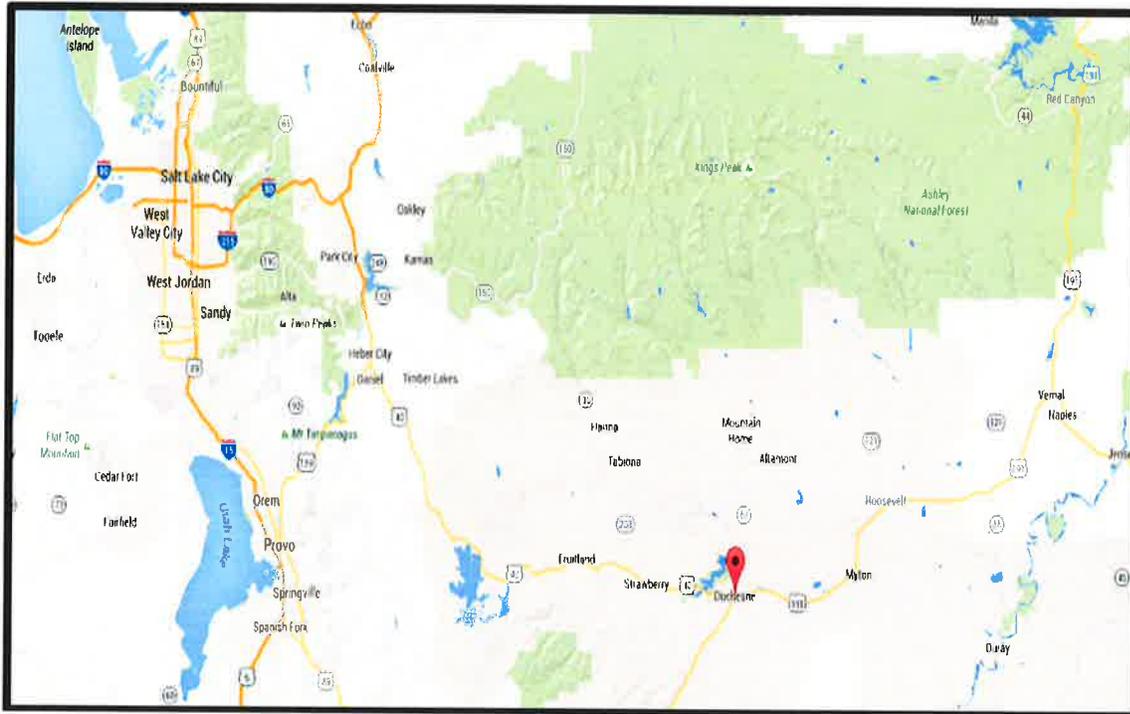
APPLICANT'S REQUEST:

Duchesne City is requesting financial assistance in the amount of \$2,700,000 in the form of a **\$1,350,000 grant and \$1,350,000 loan at 1.0% with a 30 year term** for the upgrade and rehabilitation of the City's lagoon wastewater treatment system. The City is also requesting a **\$156,000 advance** to help the City pay for the design and bidding expenses.

APPLICANT'S LOCATION:

Duchesne City is located in Duchesne County approximately 115 miles southeast of Salt Lake City.

MAP OF APPLICANT'S LOCATION



BACKGROUND UPDATE:

This project was presented as an introduction to the Water Quality Board meeting on April 27, 2016. This Feasibility Report has been updated to address questions raised by the Board at that time.

Duchesne City owns and operates a 25-acre, four cell lagoon system for treatment and disposal of the community's wastewater. The wastewater treatment plant was originally constructed in 1968 as a non-discharging lagoon system. The system was later converted to a discharging lagoon system with discharge to the Duchesne River under a UPDES permit. The need to discharge is intermittent and infrequent. The system was last upgraded in 1985 and has a design flow rate of 420,000 gallons per day (gpd). Lagoon Cell 1 provides primary treatment and Cells 2, 3 and 4 provide secondary treatment.

In 2014, staff assisted the City with an evaluation of accumulated sludge in the lagoon system. Three to four feet of sludge was present in the six feet deep lagoon Cells 1 and 2. This amount of sludge accumulation causes treatment limitations and nuisance conditions at certain times of year

and needs to be remediated. To minimize the impacts of this situation, the City has stopped receiving hauled septage which is protective of the treatment system, but does not support the septic tank maintenance objectives of the county and state.

At the April 2016 meeting, the Board asked whether costs associated with sludge removal is considered routine operations and maintenance or a capital expenditure. Mr. Baker responded that lagoon systems need to remove sludge every 20-40 years, and is not something typically managed as routine maintenance. Duchesne last removed sludge from their lagoons approximately twenty years ago during the last facility upgrade and the proposed piping upgrades will give the City necessary operational flexibility to isolate individual cells for future cleaning operations.

The Board also asked how septage haulers were charged when hauled wastes were being accepted given that these wastes contributed to the sludge accumulation. The City was charging \$0.05/gallon with resulting revenues amounting to approximately \$18,000 per year (~ 8 percent of the City's annual sewer operations and maintenance cost). The City does intend to begin accepting septage upon completion of the facility upgrades, which provides an important water quality service to the region. The City is planning to do a rate analysis and increase its septage disposal rates accordingly prior to accepting septage again.

The Board's final question was regarding the proposed stream alteration and whether the City had considered the challenges of obtaining approval for the proposed stream alteration. The City's lagoons are located immediately adjacent to the Duchesne River and high spring flow in 2011 threatened the embankment that protects Cell #1. To ensure the lagoons are protected from such high flows, the City intends to re-route the stream where it intersects the lagoon bank (see Diagram 1). The City's engineer stated they are aware of the challenges and have incorporated sufficient time and funding in the project schedule to complete the work

PROJECT NEED:

Lagoon Cells 1 and 2 need to be remediated to restore the facility's design capacity of 0.42 MGD and to correct treatment deficiencies. To implement these corrective measures, the City needs to install pipes and gates that will allow it to bypass and isolate Cells 1 and 2 independently. This will allow the City to take a cell offline for rehabilitation. This proposed infrastructure will also provide the City with long-term flexibility in operating the lagoons, which will help relieve the solids accumulation problem in the future and improve treatment performance.

The facility's septage receiving capabilities need to be improved so this high-strength waste can be properly distributed in the lagoon cells to undergo treatment as designed. Past practice was to release the hauled waste on the lagoon bank which contributed to local accumulation, poor treatment, and deterioration of the lagoon bank.

The City also needs to protect its lagoon treatment plant infrastructure from high Duchesne River flows. By modifying the stream route back to its 2011 path long-term protection can be achieved.

ALTERNATIVES EVALUATION

The City and its consulting engineer prepared an engineering evaluation and facilities plan for upgrading the lagoon system. The follow alternatives were analyzed.

1. No action
2. Sludge reduction by proprietary supplement
3. Cleaning and Maintenance of Cell 1 only
4. Cleaning Cells 1 and 2 and Infrastructure Upgrades
5. Add a Cell, Clean Cells 1 and 2, and Infrastructure Upgrades
6. Land application
7. River Realignment
8. Analyze Collection System Impacted by Duchesne County Event Center

POSITION ON PROJECT PRIORITY LIST:

The Duchesne City project is ranked No. 16 out of 16 projects on the FY 2016 Wastewater Treatment Project Priority List.

POPULATION GROWTH:

Population growth through the year 2040 was estimated to be 1.3% in the funding application.

	<u>Year</u>	<u>Total</u>
Current Population	2016	1,876
Design Population:	2040	2,336

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

On March 22, 2016, the City held a public meeting to inform the community about the project and its intention to pursue funding for the project the City will hold a public hearing in June 2016.

IMPLEMENTATION SCHEDULE:

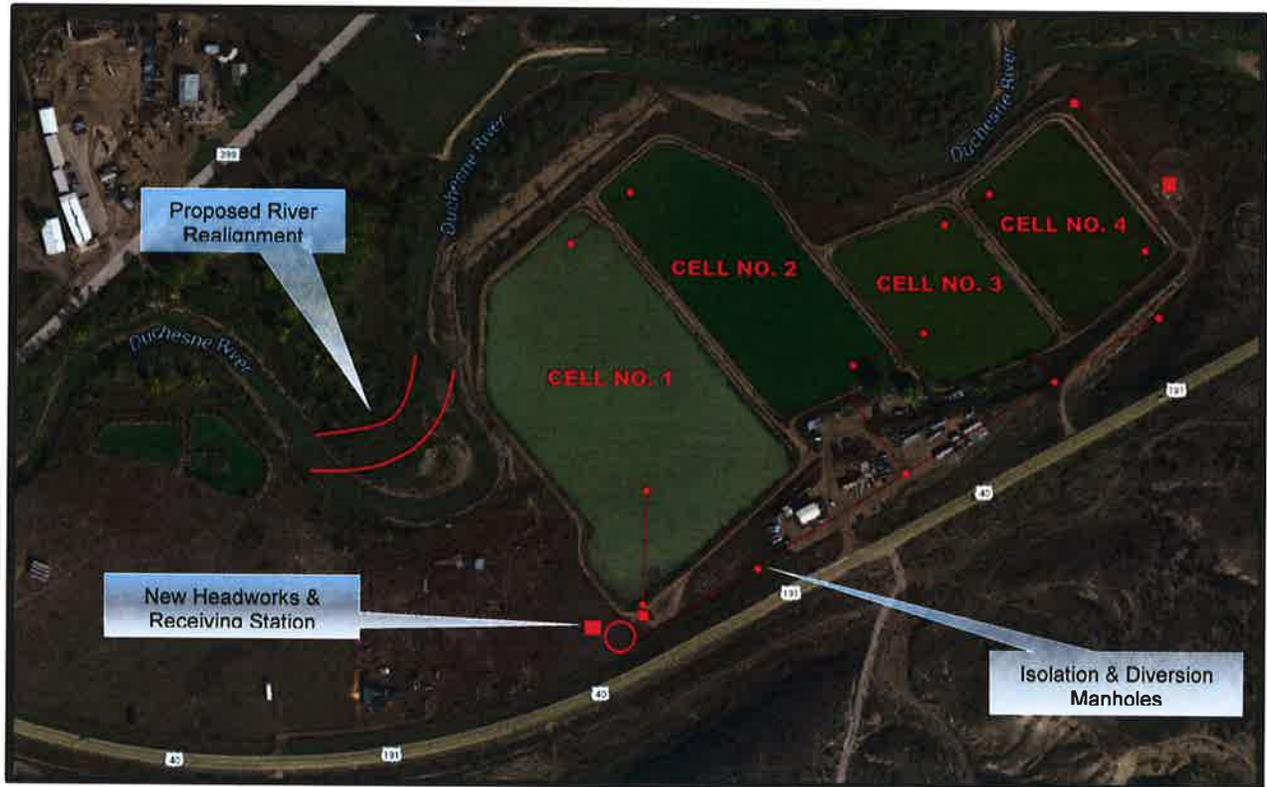
Public Meeting	March 22, 2016
Apply to WQB for Funding:	April 2016
WQB Funding Authorization:	June 2016
Public Hearing:	July 2016
Advertise EA (FONSI):	August 2016
Engineering Report Approval:	August 2016
Commence Design:	September 2016
Issue Construction Permit:	May 2017
Bid Opening:	June 2017
Commence Construction:	July 2017
Complete Construction:	July 2021

PROJECT DESCRIPTION:

The recommended alternative is to do the following:

- Dredging Cells 1 and 2
- Headworks upgrade, addition of diversion manholes, and bypass piping between cells
- River realignment

Diagram 1



COST ESTIMATE:

Task	Cost Estimate
Engineering – Facility Plan (City Funded)	\$70,000
Engineering-Design	\$156,000
Engineering - CMS	\$180,000
Construction	\$2,135,000
Contingency	\$182,000
DWQ Origination Fee	\$27,000
Legal and bonding	\$20,000
Total:	\$2,770,000

COST SHARING:

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

Funding Source	Funding Amount	Percent of Project
Duchesne City	\$ 70,000	3%
WQB Loan	\$ 2,700,000	97%
Total Amount:	\$ 2,770,000	100%

ESTIMATED ANNUAL COST FOR SEWER SERVICE:

Principal data and results based on a \$2,700,000 loan at 0.25% with a 30 year term are presented below.

Operation & Maintenance – Annual ¹	\$ 225,000
WQB Debt Service (0.25%; 30 yrs)	\$ 93,530
WQB Required Reserves (1½ pmt/6 yr)	\$ 23,382
Existing Sewer Debt Service (2012 CIB loan \$1,644,000 at 0%, 20 yrs)	\$ 82,000
Total Annual Cost	\$ 423,912
Monthly Cost / ERU	\$ 44.94
Cost calculated as % of 2014 MAGI (\$48,902)	1.10%
1.4% of 2014 MAGI (\$48,902)	\$ 57.05

¹ O&M cost amount updated since April 2016 WQB meeting

FINANCIAL ANALYSIS:

The Board has routinely relied upon its affordability criteria of keeping sewer rates for a community less than 1.4% of the MAGI. However, in 2014 the Water Resources Reform and Development Act of 2014 (WRRDA) amended the Clean Water Act, which modified some of the requirements of the Clean Water SRF program. One of those modifications was that consideration to income, unemployment data, and population trends be included in determining affordability. On June 24, 2015 the Board initiated rulemaking to comply with WRRDA by amending R317-101 to include the following language:

“Consideration will also be given to the applicant's unemployment data, population trends, and the applicant's level of contribution to the project.”

Horrocks Engineers, on behalf of the City, has submitted a letter (Attachment 2) requesting that the Board consider the City’s economic trends, unemployment and population trends rather than rely solely on MAGI as the basis for determining affordable funding terms for this project. The City states that the 2014 MAGI data is not indicative of the community’s economy or ability to repay a loan, and has included additional information on the City’s current financial condition and economic trends.

The residents of Duchesne City are heavily dependent on income from local oil production and the dramatic decline in oil prices has been primarily responsible for the City's economic downturn. Since 2014, oil prices have dropped from \$85/barrel to a low of \$32/barrel (January, 2016). Correspondingly, revenue from building permits has decreased and unemployment for the City has risen from 3.1% to 11.3%, well above the current state average of 3.7 percent.

Staff is in agreement with the City that the downturn in the local economy has resulted in a significant economic hardship that warrants additional consideration not currently accounted for in the cost model. Staff's recommendation is based on consideration of the City's poverty rate, unemployment, population trends, user rate increase as well as MAGI.

STAFF RECOMMENDATION:

Staff is supportive of this important water quality project and recommends that the Board authorize a **loan in the amount of \$2,700,000 for 30 years, with an interest rate of 0.25 % and a design advance of \$156,000.**

SPECIAL CONDITIONS:

1. Should Duchesne City obtain funding for this project from other sources, the Board reserves the right to revise the terms of the Board's funding authorization.
2. Duchesne City must agree to continue to participate annually in the Municipal Wastewater Planning Program (MWPP).
3. Duchesne City must complete a Water Conservation and Management Plan.

ATTACHMENT 1

Duchesne City - Water Quality Board
30 Year Loan Static Cost Model

Project Costs

Planning (City Funded)	\$	70,000
Legal/Bonding	\$	20,000
DWQ Loan Origination Fee	\$	27,000
Engineering - Design	\$	156,000
Engineering - CMS	\$	180,000
Construction	\$	2,135,000
Contingency (~5% const. cost)	\$	182,000
Total Project Cost:	\$	2,770,000

Project Funding

Local	\$	70,000
CIB Loan		
CIB Grant		
WQB Loan	\$	2,700,000
WQB Grant		
Total Project Cost:	\$	2,770,000

Current Customer Base & User Charges

Total ERU's	786
Duchesne City MAGI (2014):	\$48,902
Affordable Monthly Rate at 1.4%	\$57.05
Current Impact Fee (per ERU):	\$5,500.00
Current Monthly Fee (per ERU)	\$21.00
Existing O&M expenses Treatment & Collection	\$225,000
New O&M expenses Treatment & Collection	\$225,000
Existing Sewer Debt Service	\$82,000

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	WQB Debt Service & Loan Reserves	Annual Sewer O&M Cost	Existing Debt Service	Total Annual Sewer Cost	Monthly Sewer Rate	Sewer Cost as a % of MAGI
1,350,000	1,350,000	1.00%	52,310	13,077	65,387	225,000	82,000	372,387	39.48	0.97%
-	2,700,000	0.00%	90,000	22,500	112,500	225,000	82,000	419,500	44.48	1.09%
-	2,700,000	0.25%	93,530	23,382	116,912	225,000	82,000	423,912	44.94	1.10%
-	2,700,000	0.50%	97,143	24,286	121,429	225,000	82,000	428,429	45.42	1.11%
-	2,700,000	0.65%	99,351	24,838	124,189	225,000	82,000	431,189	45.72	1.12%
-	2,700,000	0.75%	100,840	25,210	126,050	225,000	82,000	433,050	45.91	1.13%
-	2,700,000	1.00%	104,620	26,155	130,775	225,000	82,000	437,775	46.41	1.14%
-	2,700,000	1.15%	106,927	26,732	133,659	225,000	82,000	440,659	46.72	1.15%
-	2,700,000	1.25%	108,482	27,121	135,603	225,000	82,000	442,603	46.93	1.15%
-	2,700,000	1.50%	112,426	28,106	140,532	225,000	82,000	447,532	47.45	1.16%
-	2,700,000	1.75%	116,450	29,113	145,563	225,000	82,000	452,563	47.98	1.18%



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Gregg A. Galecki
Jennifer Grant
Dr. James VanDerslice
Michael D. Luers
Alan Matheson
Walter L. Baker
Executive Secretary

Date Received: June 6, 2016

Date to be presented to the WQB: June 22, 2016

WATER QUALITY BOARD
FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT
INTRODUCTION

APPLICANT: Salem City
30 West 100 South, PO Box 901
Salem, Utah 84653
Telephone: 801-423-2770 EIN#: 87-6000-277

PRESIDING OFFICIAL: Mayor Randy Brailsford

CONTACT PERSON: Bruce Ward, City Engineer

TREASURER: Jeffrey Nielson, Finance Director/Recorder

CONSULTING ENGINEER: Jason Broome, Senior Project Manager
Forsgren Associates, Inc.
370 East 500 South, Suite 200
Salt Lake City, Utah 84111
801-364-4785

CITY ATTORNEY: S. Junior Baker, Salem City
30 West 100 South, PO Box 901
Salem, Utah 84653
Telephone: 801-423-2770

BOND COUNSEL: Randall Larsen
Ballard Sparh
201 S. Main Street, Suite 800
Salt Lake City, Utah 84111
801-531-3000

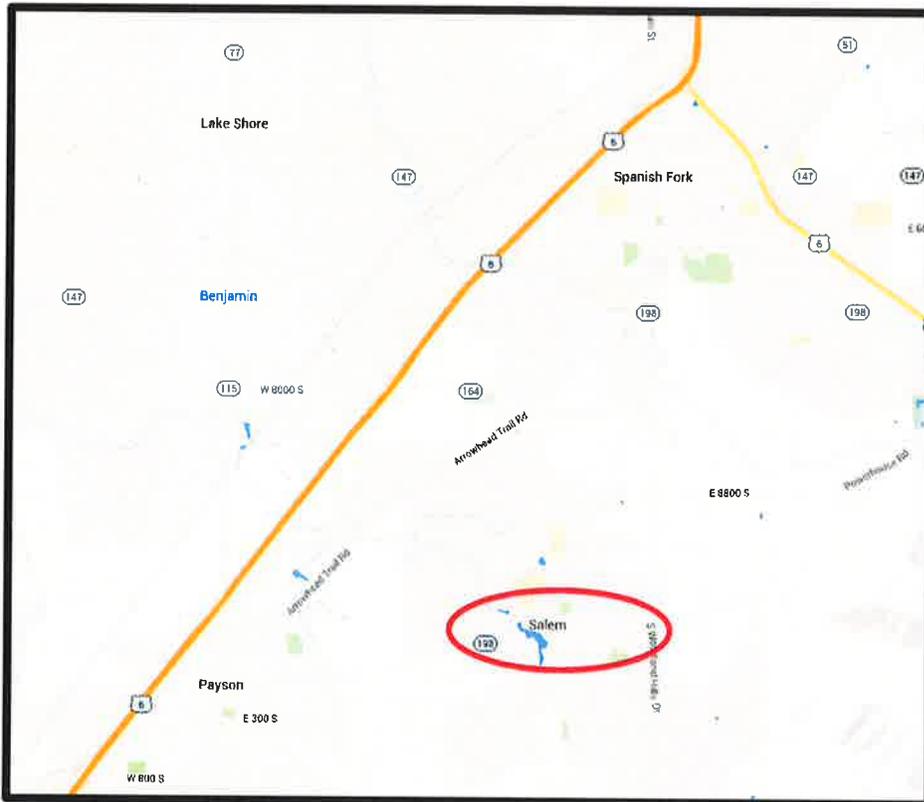
APPLICANT'S REQUEST:

Salem City requests a **loan in the amount of \$13,000,000 at 1.15% for a term of 20 years** to construct a new mechanical wastewater treatment plant. This new treatment plant is necessary to meet the current EPA ammonia standard. The City is also requesting an **\$875,000 advance** to help fund the upfront pre-construction costs (design, environmental, property, easements and rights-of-way).

APPLICANT’S LOCATION:

Salem City is located in Utah County approximately 60 miles south of Salt Lake City.

MAP OF APPLICANT’S LOCATION



PROJECT NEED:

On January 28, 2015, the Water Quality Board (“Board”) authorized a planning advance to Salem City to develop a Facility Plan to address the deficiencies of their lagoon system and investigate alternatives. The City’s current UPDES permit includes a compliance schedule for the City to meet the EPA ammonia limit. The Technology Based Phosphorus Effluent Limit (TBPEL) also implements a cap of 125% on the City’s current baseline for phosphorus.

Salem City currently owns and operates a three cell discharging facultative lagoon which was constructed in 1988, designed for an average flow of 1.25 MGD and a peak flow of 2 MGD. The facility discharges to Beer Creek then ultimately flows to Utah Lake which is listed as impaired on EPA’s 303d list for total phosphorus and total dissolved solids. The City’s lagoons are unable to meet EPA’s ammonia standard and with the projected growth for the City, the

TBPEL cap will be exceeded within 5 to 6 years after the cap is established. A TMDL for total phosphorus would likely necessitate an upgrade of the lagoon system for phosphorus removal as well.

ALTERNATIVES EVALUATION

Regional options were thoroughly explored and evaluated but with the selection criteria factored in, including capital and lifecycle costs, the recommended alternative was for Salem to replace their existing lagoon with a new mechanical treatment plant. The following are the alternatives that were evaluated:

- Upgrade existing lagoon
- Regional Alternatives
 - Salem/Payson/Spanish Fork Plant
 - Salem/Payson Plant
 - Salem/Spanish Fork Plant.
- Mechanical Treatment Systems
 - BNR-Oxidation Ditch (the Recommended Alternative)
 - BNR-Activated Sludge
 - BNR-Membrane Bioreactor (MBR)
 - BNR-Sequencing Batch Reactor (SBR)

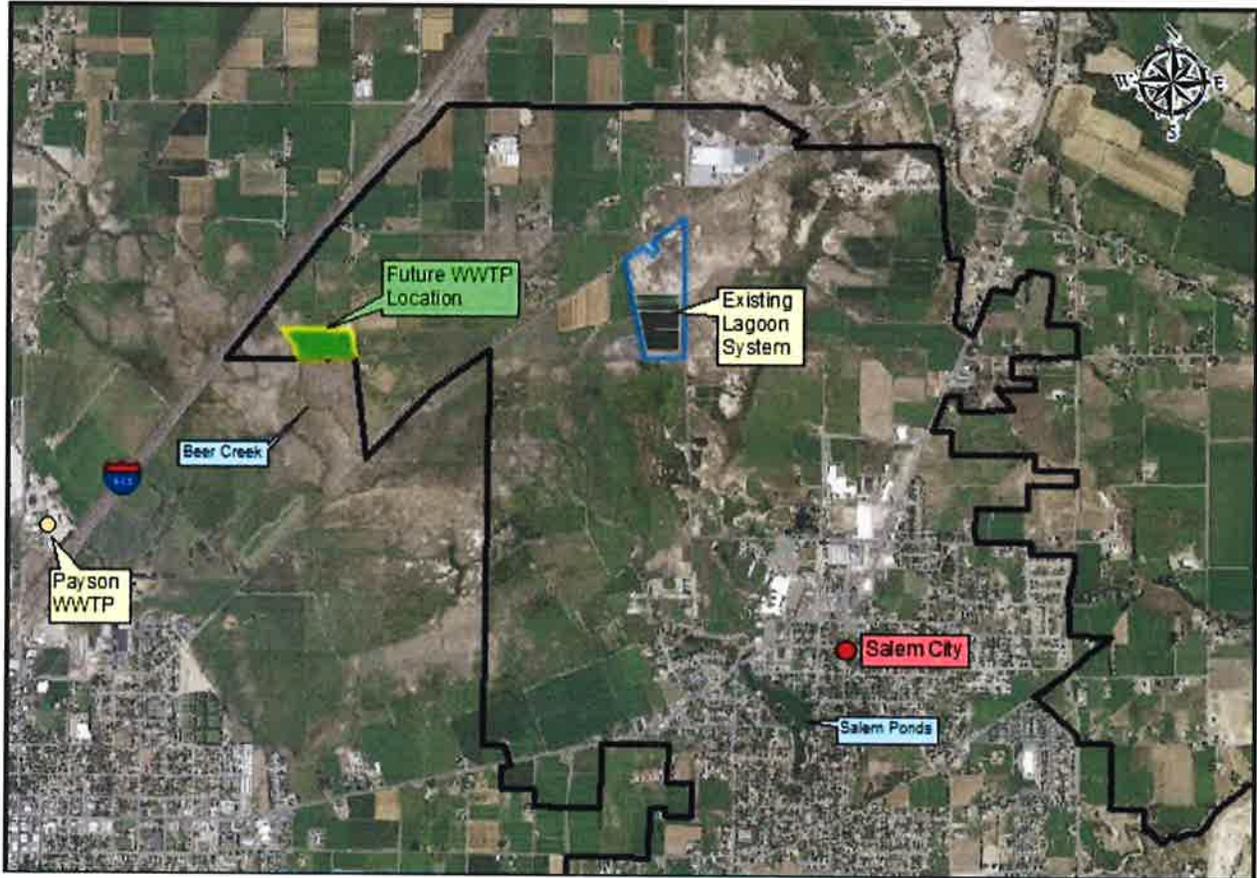
PROJECT DESCRIPTION:

The recommended alternative for the City is to construct a new 1.5 mgd mechanical treatment plant (Oxidation Ditch with Biological Nutrient Removal). This alternative was selected after evaluating and ranking criteria such as capital costs, life cycle costs, effluent disposal, expandability, public perception as well as process stability, flexibility and complexity.

The treatment process will be divided into two (2) separate trains to provide for flexibility in treating varying flows and to allow for maintenance work. The following are the components of the recommended project:

- Influent Lift Station
- Headworks building, screened effluent
- Process Tank
 - Anaerobic Zone
 - Anoxic Zone
 - Aerobic Zone
- Secondary Clarifiers
- RAS/WAS Pump Station
- Scum Pump Station
- UV Disinfection
- Biosolids System

Diagram 1



POSITION ON PROJECT PRIORITY LIST:

The Salem City project is ranked No. 6 out of 16 projects on the FY 2016 Wastewater Treatment Project Priority List.

POPULATION GROWTH:

Population growth through the year 2040 was estimated using a 4% growth rate.

<u>Year</u>	<u>ERUs</u>	<u>Total Population</u>
2016	2,228	7,237
2020	2,818	9,157
2040	6,174	20,064

PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:

On May 26, 2016 the City hosted an Open House for the residents of Salem City that staff attended.

IMPLEMENTATION SCHEDULE:

Public Meeting	May 26, 2016
Introduction to WQB for Funding:	June 22, 2016
WQB Funding Authorization:	August 24, 2016
* Submit Facility Plan to DWQ	August 1, 2016
Advertise EA (FONSI):	September 2016
Commence Design:	September 2016
Facility Plan Approval	October 2016
* Submit Plans & Specs	February 1, 2018
Issue Construction Permit:	March 2018
Bid Opening:	May 2018
* Commence Construction:	February 1, 2019
* Startup	August 1, 2021
* Complete Construction:	August 1, 2022

(Dates with an asterisk are from the Compliance Schedule in the UPDES permit)

COST ESTIMATE:

Task	Cost Estimate
Financial/Legal	\$ 60,000
Repay Planning Advance	\$ 75,000
Engineering – Environmental (NEPA, ADR, Surveying)	\$ 115,000
Engineering-Design	\$ 760,000
Engineering – CMS and Startup	\$ 1,010,000
Construction	\$ 9,631,000
Contingency	\$ 1,419,000
Utility Extensions (Electric, Gas, Etc.,)	\$ 300,000
Property/Rights-of-Way	\$ 500,000
DWQ Origination Fee	\$ 130,000
Total:	\$ 14,000,000

COST SHARING:

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

Funding Source	Funding Amount	Percent of Project
Salem City (Cash)	\$ 500,000	
Salem City (upfront costs)	\$ 500,000	7%
<u>WQB Loan</u>	<u>\$ 13,000,000</u>	<u>93%</u>
Total Amount:	\$ 14,000,000	100%

ESTIMATED ANNUAL COST FOR SEWER SERVICE:

Salem City 2014 MAGI	\$ 54,213
Affordable Monthly Rate (1.4% of MAGI)	\$ 63.25
Operation & Maintenance - Annual	\$ 1,100,000
WQB Debt Service (1.15%; 20 yrs)	\$ 731,327
WQB Required Reserves (1½ pmt/6 yr)	\$ 182,832
Existing Sewer Debt Service	\$ 0
Total Annual Cost	\$ 1,421,159
Monthly Cost / ERU	\$ 59.56
Cost calculated as % of MAGI (\$54,213)	1.32%

STAFF RECOMMENDATION:

This funding request is being presented as an introduction of the project. Staff comments and recommendations will be included when Salem returns with their request for funding authorization however, staff is anticipating a recommendation that the Board authorize a loan in the amount of \$13,000,000 at 1.15% with a term of 20 years.

ATTACHMENT 1

Salem City - Water Quality Board
20 Year Loan Static Cost Model

Project Costs		
Financial/Legal	\$	60,000
Repay Planning Advance	\$	75,000
Engineering - Environmental	\$	115,000
Engineering - Design	\$	760,000
Engineering - CMS	\$	1,010,000
Construction	\$	9,631,000
Contingency (~15% const. cost)	\$	1,419,000
Utility Extensions (Electric, Gas, etc)	\$	300,000
Property/Rights-of-Way	\$	500,000
DWQ Origination Fee	\$	130,000
Total Project Cost:	\$	14,000,000

Project Funding		
Local Contribution (Cash)	\$	500,000
Local Contribution (upfront expenses)	\$	500,000
WQB Loan	\$	13,000,000
Total Project Cost:	\$	14,000,000

Current Customer Base & User Charges	
Total ERU's (Projected 2020)	2,818
Salem City MAGI (2014):	\$54,213
Affordable Monthly Rate at 1.4%	\$63.25
Current Impact Fee	\$1,792.00
¹ Current Monthly Fee (per ERU)	\$24.00
Existing O&M expenses Treatment & Collection	\$507,000
New O&M expenses Treatment & Collection	\$1,100,000
Existing Sewer Debt Service	\$82,000

¹ Calculated assuming 10,000 gal/month usage \$24 base + \$0.50/1000 (over 10,000 gal)

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

ESTIMATED COST OF SEWER SERVICE

WQB Loan Amount	WQB Loan Interest Rate	Annual WQB Loan Debt Service	WQB Loan Reserve	WQB Debt Service & Loan Reserves	Annual Sewer O&M Cost	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI
13,000,000	0.00%	650,000	162,500	812,500	1,100,000	1,912,500	56.56	1.25%
13,000,000	1.00%	720,399	180,100	900,499	1,100,000	2,000,499	59.16	1.31%
13,000,000	1.15%	731,327	182,832	914,159	1,100,000	2,014,159	59.56	1.32%
13,000,000	1.25%	738,665	184,666	923,331	1,100,000	2,023,331	59.83	1.32%
13,000,000	1.50%	757,195	189,299	946,493	1,100,000	2,046,493	60.52	1.34%
13,000,000	2.00%	795,037	198,759	993,797	1,100,000	2,093,797	61.92	1.37%
13,000,000	2.50%	833,913	208,478	1,042,391	1,100,000	2,142,391	63.35	1.40%
13,000,000	3.00%	873,804	218,451	1,092,255	1,100,000	2,192,255	64.83	1.43%



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Dr. James VanDerslice
Michael D. Luers
Alan Matheson
Walter L. Baker
Executive Secretary

Date Received: April 2016

Date to be presented to the WQB: June 22, 2016

WATER QUALITY BOARD
FEASIBILITY REPORT FOR NONPOINT SOURCE POLLUTION PROJECT

AUTHORIZATION

APPLICANT:	TriCounty Health Department 133 S 500 E Vernal Zip Code: 84078 435-247-1172
PRESIDING OFFICIAL:	Jordan D. Mathis - Health Officer
CONTACT PERSON:	Jordan D. Mathis - Health Officer
TREASURER:	Wendi Long (Uintah County Treasurer)
CONSULTING ENGINEER:	Aaron Averett 363 East Main Street Sunrise Engineering Inc. Vernal, UT 84078 435-789-7364
CITY ATTORNEY:	Jared Tingey Duchesne County Attorney PO Box 206 Duchesne, UT 84021 435-738-1236

APPLICANT'S REQUEST:

TriCounty Health Department requests a hardship grant in the amount of \$221,000 to construct a land drain to address public health and water quality concerns associated with the failing and improperly functioning onsite systems in the Stonegate subdivision.

APPLICANT'S LOCATION

The Stonegate Subdivision is located in unincorporated Duchesne County approximately one mile west of Roosevelt City.



UPDATE

Staff presented this project to the Water Quality Board (Board) as an introduction on April 27, 2016. The Board had questions and concerns about the proposed project, including concerns that the project would not address the root cause and could possibly delay implementation of the recommended alternative. There was also concern about the irrigation practices on the surrounding properties and what impact that might be having on the affected area.

Drainage is an important component of the recommended alternative and installation of a land drain was initially considered as the most cost-effective option in early discussions. It is difficult to predict exactly how effective the land drain will be at lowering the groundwater in the affected area, but even lowering it a few feet would allow these shallow systems to operate as designed and reduce the risk to public health and water quality. It could be that this land drain might even be sufficient to address the current drainage problems, at far less expense than installing sewer.

BACKGROUND

The Board authorized a planning grant to TriCounty Health Department (TriCounty) on April 27, 2015, to fund a facility plan to evaluate alternatives to address public health and water quality issues in the Stonegate subdivision. Stonegate is located in the Hancock Cove area of Duchesne County just to the east of Roosevelt City (the City). This subdivision (comprised of ~ 49 residences) has experienced multiple failed septic tanks associated with high groundwater and it is suspected that many others are not operating as intended. Failing and poorly functioning septic systems pose a risk to public health and water quality because they are a potential source of contamination from disease-causing bacteria, viruses, household chemicals and nitrates

The facility plan was completed at the end of 2015 and the recommended alternative was to install gravity sewer in the Stonegate subdivision and connect to Roosevelt City's sewer system. However, Roosevelt City's policy is that they don't provide extra-territorial service for sewer and Stonegate would need to be annexed into the City to receive this service. A public meeting with the residents of Stonegate was held on November 10, 2015, to present the results of the planning effort including the alternatives evaluated. Roosevelt City stated that they wanted to be a good neighbor to the residents of Stonegate and should they choose to be annexed into Roosevelt, then Roosevelt would sponsor funding efforts and provide sewer service to the subdivision. In December 2015, residents submitted an annexation plan that was accepted by the City.

In January 2016, the City prepared and submitted funding applications to the Board and CIB to fund the sewer construction project. However, on February 11, 2016, before funding requests were presented to either agency, fifteen residents of Stonegate filed a claim informing five government entities that they intend to sue. Roosevelt City and TriCounty were two of those named entities. Roosevelt City subsequently withdrew their funding applications from both agencies and informed the residents of Stonegate that they would not move forward until the residents waived their right to sue Roosevelt City.

TriCounty continues to work diligently to address these public health concerns and risks to groundwater contamination. As a preliminary and mitigating step in resolving this problem, TriCounty is proposing to install a land drain on the property to the west of Stonegate. Historical data as well as engineering analysis indicate that groundwater in the subdivision is consistently 2-3 feet from the ground surface and the expectation is that this land drain will help lower the water table and improve the functioning of the septic tanks.

Duchesne County is equally committed to addressing this problem and is supportive of this project. The County is going to provide the gravel for the land drain, which accounts for nearly 20% of the total project cost and has committed to providing maintenance work to ensure the land drain continues to function as designed. TriCounty has committed to conducting physical inspection and clean outs of the land drain on a bimonthly basis.

PROJECT DESCRIPTION:

TriCounty intends to construct a 10-12 foot deep land drain to be located on property up gradient and to the west of Stonegate. The drain will be located in an easement located 100-ft west of the property line and TriCounty is in the process of finalizing this easement. The land drain will be approximately three thousand feet long and will outfall into an existing wash to the southeast of the property.

Annexation into Roosevelt and installing sewer in the subdivision still remains the long-term goal, but installing the land drain now will provide immediate improvement in the functioning of the affected septic tanks. Doing nothing puts public health and water quality at risk.

TriCounty is taking the lead as the funding applicant and sponsoring government body because of the immediate public health concerns.

PROJECT PRIORITY LIST

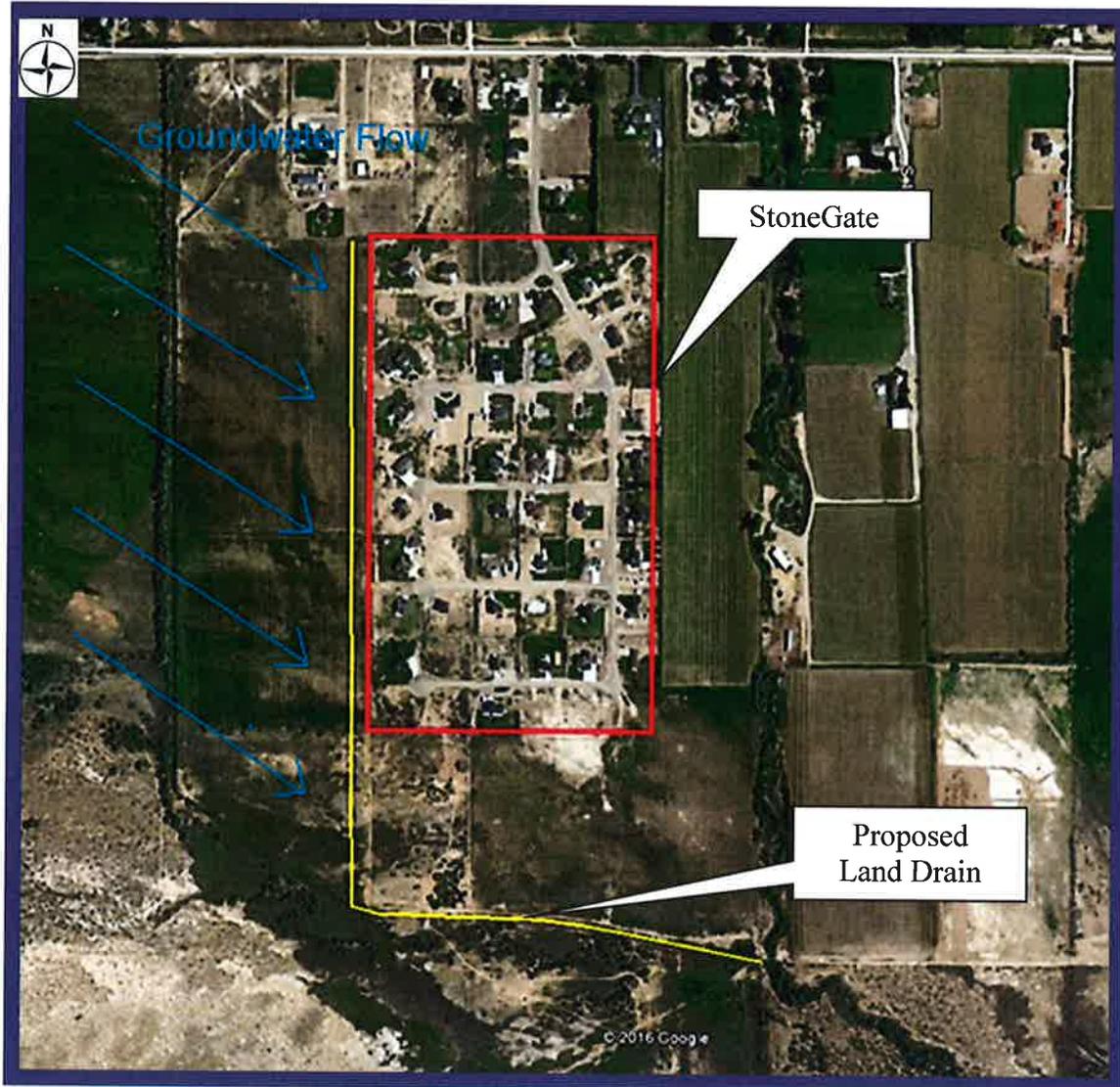
This project is currently ranked **13th** out of 16 projects.

COST ESTIMATE:

Engineering (Planning)	\$	7,000
Engineering (Design)	\$	37,000
Engineering (other)	\$	8,000
Engineering (CMS)	\$	33,000
Construction	\$	405,000
Contingency (~ 11%)	\$	45,000
Rights of Way, Easements, Misc.	\$	6,000
Geotech, mapping	\$	9,000
Total	\$	550,000

COST SHARING:

<u>Funding Source</u>		<u>Cost Sharing</u>
Local Contribution (gravel donated by Duchesne County)	\$	93,000
Local Contribution (cash)	\$	15,000
CIB Grant	\$	221,000
WQB Grant	\$	221,000
Total	\$	550,000



IMPLEMENTATION SCHEDULE:

WQB Funding Introduction:	April 27, 2016
WQB Funding Authorization:	June 22, 2016
Complete Design:	August 2016
Issue Construction Permit	November 2016
Bid Opening	December 2016
Complete Construction	July 2017

STAFF COMMENTS AND RECOMMENDATION:

Staff recommends the Board authorize the requested amount of **\$221,000 as grant**, subject to the special conditions stated. Staff is recommending grant because there is no revenue stream associated with this project.

SPECIAL CONDITIONS:

1. TriCounty Health Department will obtain at least \$221,000 to fund the balance of the project from either the Permanent Community Impact Board (CIB) or other sources.
2. TriCounty Health Department will submit written documentation of easement ownership and maintenance responsibility for the land drain until such time as it is decommissioned.



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Alan Matheson
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Walter L. Baker
Executive Secretary

MEMORANDUM

TO: Water Quality Board

THROUGH: Walter L. Baker P.E. 

FROM: Emilie Flemer
Jake Vander Laan

DATE: June 13, 2016

SUBJECT: Integrated Report FY2016

Every two years, the Division of Water Quality (DWQ) compiles all existing and readily available water quality data to assess the conditions of the surface waters within the State of Utah. These data are used to determine if the waterbody's designated beneficial uses are supported according to Utah's water quality standards. Beneficial uses assessed in this Report include potential sources of drinking water, primary and secondary contact recreation, aquatic life, and agriculture.

On June 10th, 2016 DWQ released the Draft 2016 Integrated Report (IR) for a 60 day public comment period. The Draft Integrated Report (and its accompanying information) is available on DWQ's Assessment Program's website, located here:

<http://www.deq.utah.gov/ProgramsServices/programs/water/wqmanagement/assessment/currentIR2016.htm>

DWQ staff will be presenting the highlights of this report, including those summarized below, at the June Water Quality Board meeting.

Assessment Results

Within the Draft 2016 Integrated Report (IR), DWQ reports on the condition of 750 River and Stream segments (15,583 River and Stream miles) and 142 Lakes and Reservoirs (1,467,222 Lake and Reservoir acres including the Great Salt Lake). A summary of this assessment is summarized below:

Assessment Status	Assessed Stream Segments	Assessed Stream Miles	Assessed Lakes	Assessed Lake Acres
Meeting Water Quality Standards	152	3,299 (21%)	58	57,369 (4%)
Not Meeting Water Quality Standards	264	7,292 (47%)	61	288,580 (20%)
Insufficient Information to Assess (i.e., Follow up Monitoring Needed)	353	4,992 (32%)	23	1,121,274 (76%)*

- The Great Salt Lake accounts for 1,090,361 lake acres in the state.

San Juan River

The Division of Water Quality (DWQ) completed a full assessment of data collected on multiple dates from the San Juan River following the Gold King Mine release in Colorado on August 5, 2015. Data collected in fall 2015, during monsoonal storm events, resulted in DWQ listing two segments of the San Juan River as impaired for several metals.

Harmful Algal Blooms

DWQ's harmful algal bloom assessment (HAB) program made significant progress in 2015 including the development and application of an HAB assessment methodology for Utah waterbodies in the 2016 IR. Recreational use of one waterbody, Utah Lake, was identified as impaired for the occurrence of HABs due to blooms that occurred at three locations in the lake October 10-22, 2014. DWQ is working to increase monitoring and assessment of harmful algal bloom occurrence in important recreational and drinking water source waters statewide.

DWQ evaluated data related to harmful algal blooms that could pose a health risk to recreational users in Farmington Bay. Data were submitted to DWQ by the Central Davis Sewer District and Utah State University and were compared to indicators of human health risks for harmful algal blooms (HABs). In the Draft 2016 Integrated Report DWQ discusses the recreational uses of Farmington Bay, HAB indicators, and the results of the evaluation.

Data from Farmington Bay show frequent and extensive Harmful Algal Blooms that pose a risk to human health risk. UDWQ intends to fully assess recreational uses for Farmington Bay in the 2018 Integrated Report. In the interim, UDWQ will work with the Davis County Health Department to manage the public health risks posed by HABs in Farmington Bay while continuing to collect additional data and develop appropriate assessment methodologies.

Jordan River High Frequency Data Pilot Study

DWQ evaluated methods for assessing high frequency dissolved oxygen measurements collected by the Jordan River/Farmington Bay Water Quality Council. These data were collected from several fixed sites on the Jordan Rove from 3300 South downstream to Cudahy Lane Bridge. The analysis confirms that dissolved oxygen is a continuing problem on the lower Jordan River. DWQ now has a draft methodology for the future assessment of high frequency dissolved oxygen, which will be used on other sites where this type of data is readily available.

303(d) Vision

In 2016, DWQ adopted a new framework for implementing the Clean Water Act (CWA) Section 303(d) Program. The new Program Vision enhances overall efficiency of the CWA 303(d) Program, focuses on priority waters, and provides flexibility in using alternative tools in addition to Total Maximum Daily Loads (TMDLs) to restore and protect water quality. With the recognition that there is not a “one size fits all” approach to restoring and protecting water resources, Utah has developed tailored strategies to fulfill its responsibilities in the context of water quality goals.



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MEMORANDUM

TO: Water Quality Board Members
THROUGH: Walter L. Baker P.E. 
FROM: Jim Bowcutt
Nonpoint Source Program Coordinator
DATE: June 6, 2016
SUBJECT: State Nonpoint Source Program Annual Report for FY16

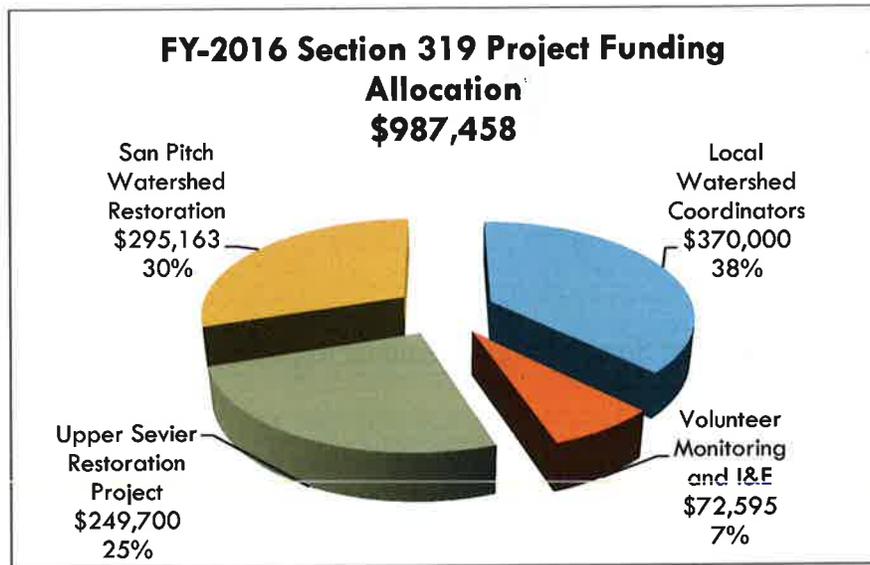
The Division of Water Quality receives grant funds to help implement nonpoint source pollution control projects throughout the state. These grants include Section 319(h) funds from the Environmental Protection Agency and State Nonpoint Source funds authorized by the Water Quality Board. Every year an annual report is submitted to EPA on the accomplishments of the State's Nonpoint Source Program. Staff will present a summary of this report to the Water Quality Board during the meeting scheduled for May June 22nd, 2016.

Attached is an executive summary of the Annual Nonpoint Source Program Report and grant applications received for the 2017 fiscal year.

State of Utah Nonpoint Source (NPS) Annual Report Utah Water Quality Board Meeting June 22nd, 2016

Section 319 Nonpoint source funds

- In FY-16 the State of Utah received \$1,428,000 in Federal Section 319(h) funds. Of these funds, \$440,542 was used for staffing and support, while the remaining \$987,458 was dedicated to 4 projects.



- In addition to the FY-16 funds Utah continues to manage five other federal grant awards, which have been expended to a varied degree. Table 1 summarizes grant awards by year and the approximate percentage that has already been expended in each grant.

Table 1

Section 319(h) Nonpoint Source Funding Project Allocations			
Federal Fiscal Year	Grant Award	Total Expenditures	Percent Expended
FY-11	\$832,921	\$776,468	93%
FY-12	\$830,800	\$751,529	90%
FY-13	\$861,621	\$711,371	83%
FY-14	\$893,621	\$591,299	66%
FY-15	\$888,621	\$452,198	51%
FY-16	\$987,458	\$0	0%
Total	\$5,603,363	\$4,168,672	74%

- The targeted basin funding cycle is now being fully implemented (See Table 2). Since the State began using the targeted basin funding cycle projects are being implemented faster, the quality of projects has improved, the effectiveness of projects is more easily identified, and more partners have begun to align their technical and financial assistance programs with the targeted basin schedule.

Table 2

Basin Priority Funding Schedule						
Watershed	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
(1) Jordan/ Utah lake						
(2) Colorado River						
(3) Sevier, Cedar-Beaver						
(4) Bear River						
(5) Weber River						
(6) Uinta Basin						

- The Bear River is the targeted basin for FY 2017.

Projects Funded in FY-2017

- 57 Grant Applications were received totaling \$4,636,508.
- These projects will be ranked prior to the Water Quality Board Meeting and the projects selected for funding will be provided at the Board Meeting.

Table 3 FY-2017 NPS Proposals Received

Project Title	Watershed	Sponsor	Contact	Project Type	Amount Requested
New MST Protocols in the Bear and Jordan River	Bear/ Jordan River	University of Utah	Ramesh Goel	Research	\$52,096.00
I&E Conservation District Tool Purchase	Cedar / Beaver	I&E Conservation District	David Dodds	Equipment	\$4,285.00
Helper City Project	Colorado River	Helper City	Jona Skerl	Stream Bank	\$37,448.00
Emigration Canyon Creek Septic Search	Jordan River	Johanson Surveying	Nathan Beseio	Research	\$100,000.00
Jordan River Ecosystem Restoration at 1700 South	Jordan River	Salt Lake County	Robert Thompson	Streambank	\$554,565.00
E.coli Source I.D and Pet Waste I&E	Jordan River	Salt Lake County	Marinan Rice	Research/I&E	\$159,297.00
Big Bend Restoration	Jordan River	City of West Jordan	Eric McCulley	Stream Bank	\$69,164.00
Septic Tank Removal Near Jordan River	Jordan River	Salt lake Garfield & Western Railway Co.	Chris Weesner	Septic	\$33,600.00
Little Mountain Cattle Co. Feedlot Relocation	Lower Bear River	Private Landowner	Buzz Nelson	AFO/CAFO	\$40,000.00
Mantua's Maple and Dam Creek Projects	Lower Bear River	Northern Utah Conservation District	Margie	Stream Bank	\$45,740.00
Logan River Restoration	Middle Bear River	Blacksmith Fork Conservation District	Margie	Stream Bank	\$818,488.00
Chris Allen Cover Crop	Middle Bear River	Private Landowner	Margie	Cover Crop	\$13,590.00
Keith Meikle Cover Crop	Middle Bear River	Private Landowner	Margie	Cover Crop	\$11,307.00
Homgren Brother's Fencing	Middle Bear River	Private Landowner	Buzz Nelson	Stream Bank	\$34,250.00
Stuart Nature Park	Middle Bear River	Blacksmith Fork Conservation District	Margie	Stream Bank	\$127,500.00
Pamela Bingham Stream Bank	Middle Sevier	Private Landowner	Pam Bingham	Stream Bank	\$19,740.00
Otter Creek Watershed Plan Development	Middle Sevier	Piute Conservation District	Tracy Balch	Watershed Planning	\$60,000.00
Otter Creek Restoration Project	Middle Sevier	Bureau of land Management	Justin Jimenez	Stream Bank	\$60,000.00
Main Creek Stream Restoration Below Roundy Lane	Provo River	Wasatch Conservation District	Daniel Gunnell	Stream Bank	\$21,682.00
Main Creek Restoration Below Round Valley Lane	Provo River	Wasatch Conservation District	Daniel Gunnell	Stream Bank	\$16,050.00
Little Hobble Creek Restoration above Round Valley	Provo River	Wasatch Conservation District	Daniel Gunnell	Stream Bank	\$6,420.00
Spring Creek Restoration Above Ruondy Lane	Provo River	Wasatch Conservation District	Daniel Gunnell	Stream Bank	\$22,470.00
Wallsburg Phosphorous Testing	Provo River	Wasatch Conservation District	Daniel Gunnell	Research	\$5,610.00
Lower Spring Creek Restoration	Provo River	Wasatch Conservation District	Daniel Gunnell	Stream Bank	\$32,100.00
Water Quality Monitoring of Juniper Treatment Programs	Raft River/GSL	UGS	Hugh Hurlow	Research	\$7,219.00
Cameron Parry Stream Bank	San Pitch	San Pete Conservation District	John Saunders	Stream Bank	\$19,800.00
Margaret Southards Irrigation System	South East Colorado	Private Landowner	Arne Hultquist	Irrigation	\$26,500.00
Flora Najafi Irrigation	South East Colorado	Private Landowner	Arne Hultquist	Irrigation	\$17,632.50
Steve Redd	South East Colorado	Private Landowner	Arne Hultquist	AFO/CAFO	\$127,537.00
South East Colorado Technical Assistance	South East Colorado	Grand Conservation District	Mike Allred	Technical Assistance	\$35,000.00
Local Watershed Coordinators	Statewide	Utah Division of Water Quality	Jim Bowcutt	Technical Assistance	\$400,000.00
2016-2017 Water Week Library Program	Statewide	Intermountain Section AWWA	Alane Boyd	I & E	\$5,200.00
Utah Watershed Coordinating Council	Statewide	Utah Watershed Coordinating Council	Jim Bowcutt	Watershed Group Support	\$10,000.00
Envirothon	Statewide	UACD	Loralie Cox	I&E	\$5,000.00
Producer Website	Statewide	USU	Rhonda Miller	I&E	\$10,000.00
Engaging Youth Livestock Producers in Manure Management	Statewide	Utah State University	Joshua Dallin	I&E	\$8,276.00
Utah Water Watch	Statewide	Utah State University	Nancy Mesner	I&E	\$75,630.00
Duchesne River Areal Survey	Uinta Basin	Utah Division of Wildlife Resources	Trina Hedrick	Project Planning	\$28,200.00
Pelican Lake Drainage Watershed Plan	Uinta Basin	Utah Division of Wildlife Resources	Trina Hedrick	Watershed Planning	\$40,000.00
Lower Strawberry River Pipeline	Uinta Basin	Duchesne Conservation District	Darrel Gilman	Irrigation	\$204,785.00
Dan Peart Bear River Stream Bank	Upper Bear River	Bear Lake Regional Commission	Mitch Poulsen	Stream Bank	\$68,220.00
Peart Land and Livestock Spring Restoration	Upper Bear River	Bear Lake Regional Commission	Mitch Poulsen	Stream Bank	\$12,140.00
Charles Rex Streambank Stabilization	Upper Bear River	Bear Lake Regional Commission	Mitch Poulsen	Stream Bank	\$33,000.00
Lanny Weston Streambank Stabilization	Upper Bear River	Bear Lake Regional Commission	Mitch Poulsen	Stream Bank	\$57,816.00
Norm Weston Stream Bank	Upper Bear River	Bear Lake Regional Commission	Mitch Poulsen	Stream Bank	\$23,606.00
Enberg Canal Pre-Disaster Mitigation	Upper Bear River	Bear Lake Regional Commission	Mitch Poulsen	Canal Improvements	\$61,500.00
Mike Tebbs Irrigation Project	Upper Sevier	Private Landowner	Wally Dodds	Irrigation	\$34,263.00
Terry Welch Stream Restoration	Upper Sevier	Private Landowner	Wally Dodds	Stream Bank	\$28,700.00
Bob Williams Stream Bank	Upper Sevier	Private Landowner	Wally Dodds	Stream Bank	\$70,200.00
Paul Partridge Stream Bank	Upper Sevier	Private Landowner	Wally Dodds	Stream Bank	\$66,000.00
Watershed Education in the Provo River Watershed	Utah Lake	Provo River Watershed Council	D Smith	I & E	\$15,000.00
Utah lake P Study	Utah Lake	University of Utah	Ramesh Goel	Research	\$127,776.00
Thanksgiving Point ECO Challenge	Utah lake/Jordan River	Thanksgiving Point Institute	K Shoemaker	I&E	\$7,000.00
Jason Morgan Irrigation Project	Weber	Private Landowner	Andy Pappas	Irrigation	\$20,000.00
Ron Boyer Stream Bank Project	Weber	Private Landowner	Andy Pappas	Stream Bank	\$36,250.00
Stephens and Pace Ranch Conservation Easement	Weber	Summit Land Conservancy	Jennifer Buchi	Conservation Easement	\$10,000.00
Thurston Ranch Riparian Fence	Weber	Trout Unlimited	Paul Burnett	Stream Bank	\$8,855.00
				Total	\$4,636,507.50