Eg

LOAN FUNDS
FINANCIAL PROJECTIONS

STATE REVOLVING FUND (SRF)	4th Qtr FY2015 Apr - June 2015	1st Qtr FY 2016 July - Sept 2015	2nd Qtr FY 2016 Oct - Dec 2015	3rd Qtr FY 2016 Jan - Mar 2016	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
Funds Available												
SRF - 1st Round (LOC) 2014 Cap Grant	5,665,381	-	-	-	-	-	-	-	-	-	-	-
Less: 2014 Principal Forgiveness Amount	(600,934)	-	-	-	-	-	-	-	-	-	-	-
SRF - 1st Round (LOC) 2015 Cap Grant	7,067,520	-	-	-	-	-	-	-	-	-	-	-
State Match	1,472,400	-	-	-	-	-	-	-	-	-	-	-
SRF - 2nd Round	80,901,562	93,915,681	92,220,100	93,938,951	68,881,161	72,538,775	62,586,525	54,287,160	48,090,875	41,879,210	33,911,513	25,149,234
Interest Earnings at 0.6%	121,352	117,395	115,275	117,424	86,101	90,673	78,233	67,859	60,114	52,349	42,389	31,487
Loan Repayments	655,400	1,925,024	1,603,576	4,724,786	3,571,513	1,957,076	1,622,402	4,685,856	3,728,221	1,979,954	1,195,332	4,711,189
Total Funds Available	95,282,681	95,958,100	93,938,951	98,781,161	72,538,775	74,586,525	64,287,160	59,040,875	51,879,210	43,911,513	35,149,234	29,891,860
Project Obligations												
Eureka City	-	(400,000)	-	-	-	-	-	-	-	-	-	-
Francis City	-	(3,338,000)	-	-	-	-	-	-	-	-	-	-
Granger-Hunter Improvement District	(702,000)	-	-	-	-	-	-	-	-	-	-	-
Kearns Improvement District (2011)	(665,000)	-	-	-	-	-	-	-	-	-	-	-
Loan Authorizations												
Logan City	-	-	-	-	-	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)
Anticipated Projects												
Ammonia Projects	-	-	-	-	-	-	-	-	-	-	-	(13,647,000)
Phosphorus Projects	-	-	-	-	-	-	-	-	-	-	-	(23,377,500)
Bear Lake SSD	-	-	-	-	-	(2,000,000)	-	-	-	-	-	-
Moab City	-	-	-	(10,000,000)	-	-	-	-	-	-	-	-
Payson City	-	-	-	(6,900,000)	-	-	-	-	-	-	-	-
Salem City	-	-	-	(13,000,000)	-	-	-	-	-	-	-	-
Wellington City	-	-	-	-	-	-	-	(950,000)	-	-	-	-
Total Obligations	(1,367,000)	(3,738,000)	-	(29,900,000)	-	(12,000,000)	(10,000,000)	(10,950,000)	(10,000,000)	(10,000,000)	(10,000,000)	(47,024,500)
SRF Unobligated Funds	$ 93,915,681	$ 92,220,100	$ 93,938,951	$ 68,881,161	$ 72,538,775	$ 62,586,525	$ 54,287,160	$ 48,090,875	$ 41,879,210	$ 33,911,513	$ 25,149,234	$ (17,132,640)

UTAH WASTEWATER LOAN FUND (UWLF)	4th Qtr FY 2015 Apr - June 2015	1st Qtr FY 2016 July - Sept 2015	2nd Qtr FY 2016 Oct - Dec 2015	3rd Qtr FY 2016 Jan - Mar 2016	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
Funds Available												
UWLF	$ 13,880,085	$ 11,073,160	$ 9,609,710	$ 10,419,060	$ 11,765,795	$ 13,544,157	$ 14,570,840	$ 15,380,190	$ 16,673,620	$ 18,606,375	$ 19,670,158	$ 20,479,508
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	115,000	469,200	252,000	789,385	1,221,012	469,333	252,000	736,080	1,375,404	506,433	252,000	704,080
Total Funds Available	13,995,085	12,439,235	10,758,585	12,105,320	13,883,682	14,910,365	15,719,715	17,013,145	18,945,900	20,009,683	20,819,033	22,080,463
General Obligations												
State Match Transfer	(1,472,400)	-	-	-	-	-	-	-	-	-	-	-
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)	(339,525)
Project Obligations												
Murray City	(1,110,000)	-	-	-	-	-	-	-	-	-	-	-
Loan Authorizations												
Eagle Mountain City - White Hills	-	(490,000)	-	-	-	-	-	-	-	-	-	-
Planned Projects												
*Helper City	-	(2,000,000)	-	-	-	-	-	-	-	-	-	-
Total Obligations	(2,921,925)	(2,829,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)	(339,525)
UWLF Unobligated Funds	$ 11,073,160	$ 9,609,710	$ 10,419,060	$ 11,765,795	$ 13,544,157	$ 14,570,840	$ 15,380,190	$ 16,673,620	$ 18,606,375	$ 19,670,158	$ 20,479,508	$ 21,740,938

*Projects being presented to the WQB
Date Printed: 5/20/2015

HARDSHIP GRANT FUNDS
FINANCIAL PROJECTIONS

HARDSHIP GRANT FUNDS (HGF)	4th Qtr FY 2015 Apr - June 2015	1st Qtr FY 2016 July - Sept 2015	2nd Qtr FY 2016 Oct - Dec 2015	3rd Qtr FY 2016 Jan - Mar 2016	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
Funds Available												
Beginning Balance	$ -	$ 1,872,379	$ 145,003	$ (1,715,353)	$ (1,546,966)	$ (387,575)	$ (915,594)	$ (896,355)	$ (633,295)	$ 444,774	$ (103,292)	$ (76,943)
Federal HGF Beginning Balance	4,853,951	-	-	-	-	-	-	-	-	-	-	-
State HGF Beginning Balance	429,412	-	-	-	-	-	-	-	-	-	-	-
2014 Principal Forgiveness Amount	600,934	-	-	-	-	-	-	-	-	-	-	-
Interest Earnings at 0.6%	7,925	2,340	181	(2,144)	(1,934)	(484)	(1,144)	(1,120)	(792)	556	(129)	(96)
UWLF Interest Earnings at 0.6%	20,820	13,841	12,012	13,024	14,707	16,930	18,214	19,225	20,842	23,258	24,588	25,599
Hardship Grant Assessments	363,904	424,442	-	104,451	930,197	402,201	-	201,698	850,685	379,454	-	180,346
Interest Payments	-	58,000	2,450	53,057	216,420	53,335	2,170	43,257	197,334	48,667	1,890	33,132
Advance Repayments	1,613,500	-	-	-	-	-	-	-	-	-	-	-
Total Funds Available	7,890,446	2,371,003	159,647	(1,546,966)	(387,575)	84,406	(896,355)	(633,295)	444,774	896,708	(76,943)	162,038
Project Obligations												
Blanding City - Planning Advance	(39,900)	-	-	-	-	-	-	-	-	-	-	-
Eagle Mountain City - White Hills - Construction Grant	-	(580,000)	-	-	-	-	-	-	-	-	-	-
Echo Sewer SSD - Construction Grant	(251,000)	-	-	-	-	-	-	-	-	-	-	-
Eureka City - Construction Grant	-	(646,000)	-	-	-	-	-	-	-	-	-	-
Francis City - Construction Grant	-	-	(1,875,000)	-	-	-	-	-	-	-	-	-
Hildale City - Planning Grant	(40,000)											
Long Valley SID - Construction Grant	(1,150,000)	-	-	-	-	-	-	-	-	-	-	-
Payson City - Planning Advance	(88,000)	-	-	-	-	-	-	-	-	-	-	-
Salem City - Planning Advance	(112,300)	-	-	-	-	-	-	-	-	-	-	-
San Juan Spanish Valley - Planning Grant	(75,000)	-	-	-	-	-	-	-	-	-	-	-
TriCounty Health Dept. - Planning Grant	(45,000)											
Virgin Town - Planning Advance	(36,000)	-	-	-	-	-	-	-	-	-	-	-
Wellington - Planning Advance	(32,000)	-	-	-	-	-	-	-	-	-	-	-
Planned Projects												
*DWQ-Central Utah Pulic Health Dept - Planning Grant	(50,000)	-	-	-	-	-	-	-	-	-	-	-
Non-Point Source Project Obligations												
(FY11) Gunnison Irrigation Company	(48,587)	-	-	-	-	-	-	-	-	-	-	-
(FY11) DEQ - Willard Spur Study	(285,778)	-	-	-	-	-	-	-	-	-	-	-
(FY12) UDAF	(947,714)	-	-	-	-	-	-	-	-	-	-	-
(FY13) DEQ - Great Salt Lake Advisory Council	(400,000)	-	-	-	-	-	-	-	-	-	-	-
(FY14) UACD	(56,524)	-	-	-	-	-	-	-	-	-	-	-
(FY15) DEQ - Nitrogen Transformation Study	(150,000)											
(FY15) North Summit Irrigation Company	(350,000)	-	-	-	-	-	-	-	-	-	-	-
(FY15) Utah Open Lands	(100,000)	-	-	-	-	-	-	-	-	-	-	-
FY 2011 - Remaining Payments	(32,178)	-	-	-	-	-	-	-	-	-	-	-
FY 2012 - Remaining Payments	(59,713)	-	-	-	-	-	-	-	-	-	-	-
FY 2013 - Remaining Payments	(241,809)	-	-	-	-	-	-	-	-	-	-	-
FY 2014 - Remaining Payments	(651,405)	-	-	-	-	-	-	-	-	-	-	-
FY 2015 - Remaining Payments	(775,159)	-	-	-	-	-	-	-	-	-	-	-
FY 2016 Allocation	-	(1,000,000)	-	-	-	-	-	-	-	-	-	-
FY 2017 Allocation	-	-	-	-	-	(1,000,000)	-	-	-	-	-	-
FY 2018 Allocation	-	-	-	-	-	-	-	-	-	(1,000,000)	-	-
Non-Point Source Projects In Planning												
None at this time	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligations	(6,018,067)	(2,226,000)	(1,875,000)	-	-	(1,000,000)	-	-	-	(1,000,000)	-	-
HGF Unobligated Funds	$ 1,872,379	$ 145,003	$ (1,715,353)	$ (1,546,966)	$ (387,575)	$ (915,594)	$ (896,355)	$ (633,295)	$ 444,774	$ (103,292)	$ (76,943)	$ 162,038

*Projects being presented to the WQB
Date Printed: 5/20/2015

State of Utah
Wastewater Project Assistance Program
Project Priority List

FY15 Rank	Project Name	Funding Authorized	Total Points	Point Categories				Description of Project Status
				Project Need	Potential Improvement	Population Affected	Special Consideration	
1	Logan City	x	159	50	39	10	60	Planning
2	Price River Water Improvement District	x	145	70	48	7	20	Design
3	Coalville City	x	142	40	40	2	60	Construction
4	Eureka City	x	118	50	0	8	60	Construction
5	Echo City	x	112	70	41	1	0	Construction
6	Snyderville Basin WRD	x	107	10	29	8	60	Design
7	White Hills - Eagle Mountain	x	106	40	5	1	60	Design
8 (Tie)	Kearns Improvement District	x	105	40	16	9	40	Construction
	Granger-Hunter Improvement District	x	105	35	0	10	60	Construction
10	Ephraim	x	102	40	16	6	40	Construction
11	Salem City	x	94	50	18	6	20	Planning
12	Helper City		83	40	0	3	40	Planning
13	Long Valley Sewer Improvement District	x	79	10	7	2	60	Construction
14 (Tie)	Murray City	x	78	10	0	8	60	Construction
	Wellington City	x	78	35	1	2	40	Planning
16	Francis City	x	72	10	0	2	60	Design
17	Payson City	x	70	10	13	7	40	Planning
18	Midvalley Improvement District	x	68	40	0	8	20	Design/Construction

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
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
Jennifer M. Grant
Hugh E. Rodier
Amanda Smith
Walter L. Baker
Executive Secretary

467.

Project Number: _____
Date Received: May 5, 2015
Date to be presented to the WQB: May 27, 2015

WATER QUALITY BOARD
REQUEST FOR HARDSHIP PLANNING GRANT TO
PREPARE GROUNDWATER QUALITY STUDY
AUTHORIZATION

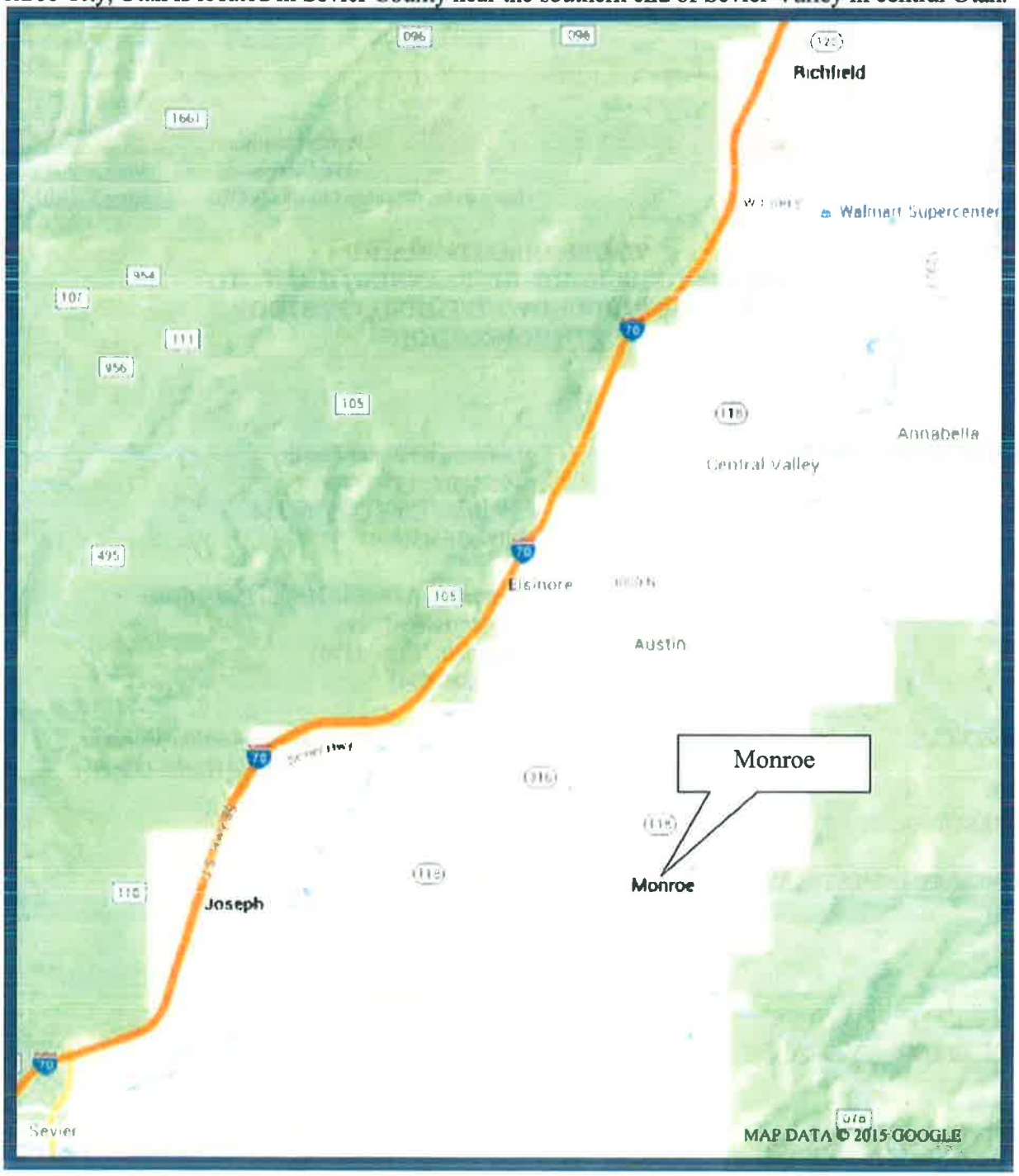
APPLICANTS:	Division of Water Quality 195 North 1950 West Salt Lake City, Utah 84114 801-536-4300 Central Utah Public Health Department 70 Westview Drive Richfield, Utah 84701 435-896-5451
CONTACTS:	John Mackey – Engineering Section Manager Nathan Selin – Environmental Health Director
TREASURER:	N/A
PRINCIPAL INVESTIGATOR:	Mike Lowe Utah Geological Survey 1594 W. North Temple Salt Lake City, UT 84116 801-537-3300
CITY ATTORNEY:	N/A

APPLICANT'S REQUEST:

The Division of Water Quality requests a **hardship planning grant in the amount of $49,300** to complete a baseline groundwater quality study in conjunction with the Central Utah Public Health Department to evaluate conditions and potential sources of pollution in the vicinity of Monroe, Utah.

APPLICANT'S LOCATION

Monroe City, Utah is located in Sevier County near the southern end of Sevier Valley in central Utah.



BACKGROUND

Monroe City has a population of approximately 2,300 residents in 865 households. The population of Monroe grew by over 20 percent in each of the last two decades. Irrigated agriculture is the largest land use in the valley. The median adjusted gross household income (MAGI) for Monroe was $37,115 in 2013 as compared with $40,489 for the state of Utah.

The community uses onsite systems (septic tanks) for wastewater disposal. Groundwater occurs in a basin fill aquifer and is relatively shallow at 50 to 100 feet below ground surface. This groundwater is used by private well owners as their primary drinking water source and as a supplement to Monroe's community water supply. Protecting this groundwater from negative impacts such as nitrate contamination from septic systems, fertilizers, or concentrated animal operations is important to ensure a safe and sufficient supply of drinking water for current and future residents and businesses.

The purpose of the proposed study is to establish baseline groundwater quality conditions in the vicinity of Monroe City. The study results will inform the Division of Water Quality and the Central Utah Public Health Department on the current quality of the groundwater underlying the City and the immediately surrounding area, providing accurate data on which the health department and the City can base its planning decisions and protect its groundwater supplies.

PROJECT DESCRIPTION:

The proposed study will be conducted by the Utah Geological Survey under direct contract with the Division. The proposed grant would be issued to the Division, at the request of the Central Utah Public Health Department, to facilitate (simplify) fund management and disbursement of payment requests. The study incorporates groundwater monitoring and surface investigations that will establish both the baseline groundwater quality and an inventory of potential groundwater contamination sources including onsite wastewater systems, agricultural, and other sources.

The study shall include the following tasks and deliverables:

- Identify and review existing groundwater data;
- Identify potential sources of groundwater contamination;
- Assemble existing well logs to establish general lithology and identify protective and confining layers;
- Identify 12 to 15 existing water wells and 3 to 5 important surface waters across the study area that will be sampled;
- Install five new permanent monitoring wells;
- Measure potentiometric elevations and collect 20 groundwater and surface water samples. Analyze all samples for general chemistry and anthropogenic markers;
- Perform statistical of water quality data;
- Prepare a Groundwater Baseline Quality Report. The report shall: (1) summarize methods used and the study results; (2) provide well completion logs for all new wells; (3) tabulate all water quality results; (4) discuss potential anthropogenic impacts to groundwater; (5) establish a baseline potentiometric surface map; and (6) provide concentration maps for important water quality parameters, describing graphically the overall groundwater quality in the study area.

IMPLEMENTATION SCHEDULE:

The study will be conducted between July 1, 2015 and June 30, 2016. Drilling will be completed in summer 2015 and sampling will be completed before winter 2015. The final report will be issued on or before June 30, 2016.

PROJECT PRIORITY LIST

A construction project is not anticipated at this time; therefore, the study is not given a priority listing. The study results are expected to inform decision makers for community planning, including the impacts that the community is having, e.g., by septic tank densities, on its groundwater.

COST ESTIMATE:

The proposed study will cost $76,500. The Utah Geological Survey plans to share the cost of their labor and expenses in the amount of $27,200. The balance of $49,300 is the requested amount that would be paid by the grant requested from the Water Quality Board.

Project Management and Administration	$	15,000
Field Work and Report Preparation	$	31,800
Laboratory Costs	$	7,700
Monitoring Well Construction	$	22,000
Total	**$**	**76,500**

Cost Sharing:

Utah Geological Survey	$	27,200
Water Quality Board Grant	$	49,300
Total	**$**	**76,500**

STAFF COMMENTS AND RECOMMENDATION:

This project is being presented as an authorization request to the Water Quality Board. Staff recommends the Board authorize the $49,300 requested for hardship planning grant to the Division. The grant is needed to assist Central Utah Public Health Department in developing this important planning tool.

SPECIAL CONDITIONS:

1. The Division of Water Quality must approve the engineering agreement and plan of study before the grant agreement will be executed.
2. This Planning Advance is a grant and will not be repaid.

U:\ENG_WQ\Jkmackey\0Projects\Monroe\Central Utah PHD Feasibility Report 2015-05-26.doc
File: SRF-Central Utah Public Health Department/Planning/Section 1

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
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
Jennifer M. Grant
Hugh E. Rodier
Gregg A. Galecki
Amanda Smith
Walter L. Baker
Executive Secretary

TO: Water Quality Board

THROUGH: Walter L. Baker, P.E. WB

FROM: Johnathan Cook, P.E.
Environmental Engineer

DATE: March 10, 2015

SUBJECT: Refinance Willard City Bond - $10,740,000

In December 2008, the Water Quality Board closed a $12,000,000, 0% interest, 30-year loan with Willard City for the construction of it wastewater collection system and its portion of the cost for the regional wastewater treatment facility that would be owned jointly with Perry City. Additionally a $5,636,000 Hardship Grant was provided Willard City. The City has asked the Division of Water Quality (DWQ) to consider refinancing its sewer bond in the principal amount of $ $10,740,000. Willard City has informed Staff that it will be able to make this year's payment on the bond. However, the City is projecting that it will not have sufficient funds to make a full payment on the bond next year.

There are several reasons why Willard is having difficulty making their bond payment:

1) The main problem has been a dramatic reduction in growth in Willard during the recession. At the time of the bond authorization, the Governor's Office for Planning and Budget (GOPB) was predicting a 4% growth rate. A growth rate of 2.7% was assumed in the bond. Estimates from the US Census Bureau show a 0.21% population decline in Willard and GOPB growth estimates have been reduced to 0.7% for the period from 2010 to 2040.

   In terms of connections to the system, the growth estimate used in the original bond predicted a growth from 662 ERUs in 2007 to 797 ERUs in 2014. The current number of ERUs connected to the system is 676.5. This equates to an average growth rate of 0.31%.

2) The operations and maintenance costs are significantly higher than originally anticipated. In the original bond, O&M costs were anticipated to be $105,500 for both collection and treatment. In actuality, the O&M costs for Willard this year are $117,161 for treatment only. The estimated additional O&M cost for the collection system is $42,178.

195 North 1950 West • Salt Lake City, UT
Mailing Address: P.O. Box 144870 • Salt Lake City, UT 84114-4870
Telephone (801) 536-4300 • Fax (801) 536-4301 • T.D.D. (801) 536-4414
www.deq.utah.gov
Printed on 100% recycled paper

The O&M costs for the treatment plant are greater than originally anticipated because language in the interlocal agreement that requires costs to be split based upon the percentage of ownership of the plant instead of percentage of flow into the plant. Perry City requested that the interlocal agreement be drafted this way and it was signed by both cities.

Staff has discussed the interlocal agreement with Perry City to get an idea if it were changed to split O&M costs based upon flow, would it assist Willard City without harming Perry. It turns out that Willard is currently paying 33% of the O&M costs for the plant and not the 39% that they own. Perry wants Willard to begin paying the full 39% next year.

In conversations with Perry, it became clear that they are subsidizing their payment on their sewer bond with other revenue because they have had also had dramatically reduced growth. Perry projects that as long as they maintain their current level of growth (≈1%) and shift 6% more of the O&M costs to Willard, they will be able to continue to be able to make full payments on their bond with the Division.

If Perry were to have to pay their current percentage of flow into the treatment plant, approximately 72%, it would likely result in them also making a request to the Water Quality Board to refinance their bond.

In order to get a worst case refinance scenario for the Division, Staff investigated how much grant would have to be provided to Willard in order to reduce the principal on the bond down to a level where they could have a static payment and maintain a sewer bill at 1.4% of their MAGI, $62.12/month. It would require $2,352,000 in Hardship Grant Fund (HGF) money to be transferred to the Utah Wastewater Loan Fund (UWLF). The costs for various percentages of grant and what it would make their sewer bill are summarized below.

Estimated Cost of Refinance

% of Principal converted to Grant	Additional WQB Grant	Refinance Bond Amount	WQB Loan Debt Service	Monthly Sewer Bill	% MAGI
0%	$0	$10,740,000	$358,000	$73.04	1.65%
4.4%	$472,000	$10,268,000	$342,267	$71.00	1.60%
13.1%	$1,412,000	$9,328,000	$310,933	$66.56	1.50%
21.9%	$2,352,000	$8,388,000	$279,600	$62.12	1.40%

Staff investigated other options for refinancing the bond. It was determined that the best available option would be to refinance Willard's bond with a 30-year term and reduce the payments on the bond for the first three years. The suggested payment schedule for the refinanced is provided in the following table. The original bond payment schedule is also provided in the table for comparison.

Refinance Payment Comparison

Year	Original Bond	Refinanced Bond
1 (2012)	$300,000	$300,000
2	$310,000	$310,000
3	$320,000	$320,000
4	$330,000	$330,000
5 (2016)	$340,000	$53,000
6	$350,000	$53,000
7	$355,000	$53,000
8	$360,000	$270,000
9	$365,000	$273,000
10	$370,000	$275,000
11	$375,000	$278,000
12	$380,000	$281,000
13	$385,000	$284,000
14	$390,000	$287,000
15	$395,000	$298,000
16	$400,000	$310,000
17	$405,000	$321,000
18	$410,000	$333,000
19	$415,000	$345,000
20	$420,000	$358,000
21	$425,000	$371,000
22	$430,000	$385,000
23	$440,000	$398,000
24	$450,000	$412,000
25	$460,000	$429,000
26	$470,000	$445,000
27	$480,000	$462,000
28	$490,000	$480,000
29	$490,000	$498,000
30	$490,000	$517,000
31		$537,000
32		$557,000
33		$577,000
34 (2045)		$600,000

This refinance scenario maintains the existing sewer bill of $59.50 per month per ERU. This is equivalent to 1.34% of Willard's 2013 MAGI. Staff is recommending a loan amortization that targets 1.34% of MAGI instead of 1.4% of MAGI ($62.12 per month per ERU) because the former allows the City to reasonably increase sewer rates if growth continues to be slow. In the event that Willard City does not experience 2.7% growth, it would be able to raise its sewer rates to the 1.4% MAGI level and avoid the risk of another potential bond default situation.

Staff proposes that the refinance amortization also include an early principal repayment provision similar to one in the original bond, however, it has been reduced to allow the City to apply its increased revenues to principal payments. The original bond's early principal repayment provision was set at $250 per ERU after 900 ERUs are connected to the system. The proposed early principal repayment provision under the refinanced bond is set at $71 per ERU after 800 ERUs are connected to the system.

Finally, it bears mentioning that even though the proposed refinance does not require the Board to authorize additional grant funds, it does come at a cost. Staff calculates that the present value cost of refinancing Willard City's bond is $404,100, based on a discount rate of 1%, the approximate interest rate on loans from the UWLF.

Staff recommends the Water Quality Board authorize the refinancing of Willard City's bond at $10,740,000 for 30 years at 0% with the referenced graduated repayment schedule and early principal repayment clause with the following special conditions:

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

U:\ENG_WQ\Jpcook\Projects\Willard\Refinance\2015-02-11 Reauthorization for Willard memo - WQB.docx

Willard refinance with 0.5% principal payments for the first 3 years. Cash Flow Model (2016 dollars)

WQB Loan Terms

11/2014 Balance =		11,070,000
Refinance Amount =		10,740,000
DWQ Loan Origination =		-
Refinance Bond Amount =		10,740,000
Loan Term:		30
Interest Rate:		0 0%
Average Annual Payment:	$	358,000

Annual Sewer Expenses (Estimated)

Refinanced Bond Amount	$	10,740,000
Estimated O&M Cost:	$	182,772
Annual O&M Cost Increase:		1 80%
Existing Debt Service:	$	-
Incremental Increase Year 1 - 10 =		20 0% / ERU
Incremental Increase Year 11 - 20 =		70 5% / ERU
Incremental Increase Year 20 - 30 =		80 0% / ERU

Sewer Revenue Sources (Projected)

Beginning Cash:	$	-
Initial Customers (ERU):		677
Projected Growth Rate:		2 70%
Willard Impact Fee:	$	7,200
2013 MAGI:	$	53,249
Existing Monthly User Charge 1 34%:	$	59 50
Monthly User Charge 1 4% MAGI:	$	62 12

Sewer Revenue Projections

Year	Growth Rate (%)	Annual Growth (ERU)	Total Users (ERU)	User Charge Revenue	Impact Fee Revenue	Total Revenue	Base WQB Loan Repayment	Additional WQB Loan Repayment	Amortized WQB Loan Repayment	Early Repayment Provision	Amortized w/ Early Repayment	WQB Loan Reserves	Current Principal	Remaining Principal	Existing Sewer Debt Service	O&M Expenses	Total Expenses	Beginning Cash	Ending Cash Flow	Net Revenue	Debt Service Ratio
2016	0 0%	0	677	483,021	-	483,021	53,000	-	53,000	-	53,000	53,700	10,740,000	10,687,000	-	182,772	289,472	0	193,549	193,549	5 67
2017	0 0%	0	677	483,021	-	483,021	53,000	-	53,000	-	53,000	53,700	10,687,000	10,634,000	-	207,082	313,782	193,549	362,788	169,239	5 21
2018	0 0%	0	677	483,021	-	483,021	53,000	-	53,000	-	53,000	53,700	10,634,000	10,581,000	-	210,810	317,510	362,788	528,299	165,511	5 14
2019	2 7%	18	695	495,873	129,600	625,473	270,000	-	270,000	-	270,000	53,700	10,581,000	10,311,000	-	214,604	538,304	528,299	615,468	87,169	1 52
2020	2 7%	19	714	509,439	136,800	646,239	270,000	3,000	273,000	-	273,000	53,700	10,311,000	10,041,000	-	218,467	542,167	615,468	719,539	104,072	1 57
2021	2 7%	19	733	523,005	136,800	659,805	270,000	5,000	275,000	-	275,000	53,700	10,041,000	9,771,000	-	222,400	546,100	719,539	833,245	113,705	1 59
2022	2 7%	20	753	537,285	144,000	681,285	270,000	8,000	278,000	-	278,000	53,700	9,771,000	9,501,000	-	226,403	550,103	833,245	964,427	131,182	1 64
2023	2 7%	20	773	551,565	144,000	695,565	270,000	11,000	281,000	-	281,000	53,700	9,501,000	9,231,000	-	230,478	554,178	964,427	1,105,813	141,387	1.66
2024	2 7%	21	794	566,559	151,200	717,759	270,000	14,000	284,000	-	284,000	53,700	9,231,000	8,961,000	-	234,627	558,327	1,105,813	1,265,246	159,432	1 70
2025	2 7%	21	815	581,533	151,200	732,753	270,000	17,000	287,000	1,030	288,030	53,700	8,961,000	8,691,000	-	238,850	562,550	1,265,246	1,433,449	170,203	1 72
2026	2 7%	22	837	597,261	158,400	755,661	270,000	28,000	298,000	2,592	300,592		8,691,000	8,421,000	-	243,149	569,149	1,435,449	1,677,960	242,512	1 72
2027	2 7%	23	860	613,683	165,600	779,283	270,000	40,000	310,000	4,225	314,225		8,421,000	8,151,000	-	247,526	517,526	1,677,960	1,939,717	261,757	1 72
2028	2 7%	23	883	630,105	165,600	795,705	270,000	51,000	321,000	5,858	326,858		8,151,000	7,881,000	-	251,982	521,982	1,939,717	2,213,441	273,723	1 69
2029	2 7%	24	907	647,241	172,800	820,041	270,000	63,000	333,000	7,562	340,562		7,881,000	7,611,000	-	256,517	526,517	2,213,441	2,506,964	293,524	1 69
2030	2 7%	24	931	664,377	172,800	837,177	270,000	75,000	345,000	9,266	354,266		7,611,000	7,341,000	-	261,135	531,135	2,506,964	2,813,007	306,042	1 67
2031	2 7%	25	956	682,227	180,000	862,227	270,000	88,000	358,000	11,041	369,041		7,341,000	7,071,000	-	265,835	535,835	2,813,007	3,139,399	326,392	1 67
2032	2 7%	26	982	700,791	187,200	887,991	270,000	101,000	371,000	12,887	383,887		7,071,000	6,801,000	-	270,620	540,620	3,139,399	3,486,770	347,371	1 66
2033	2 7%	27	1,009	720,069	194,400	914,469	270,000	115,000	385,000	14,804	399,804		6,801,000	6,531,000	-	275,491	545,491	3,486,770	3,855,748	368,978	1 66
2034	2 7%	27	1,036	739,347	194,400	933,747	270,000	128,000	398,000	16,721	414,721		6,531,000	6,261,000	-	280,450	550,450	3,855,748	4,239,045	383,297	1 64
2035	2 7%	28	1,064	759,339	201,600	960,939	270,000	142,000	412,000	18,709	430,709		6,261,000	5,991,000	-	285,498	555,498	4,239,045	4,644,486	405,441	1 64
2036	2 7%	29	1,093	780,045	208,800	988,845	270,000	159,000	429,000	20,768	449,768		5,991,000	5,721,000	-	290,637	560,637	4,644,486	5,072,694	428,208	1 63
2037	2 7%	29	1,122	800,751	208,800	1,009,551	270,000	175,000	445,000	22,827	467,827		5,721,000	5,451,000	-	295,869	565,869	5,072,694	5,516,376	443,682	1 60
2038	2 7%	30	1,152	822,171	216,000	1,038,171	270,000	192,000	462,000	24,957	486,957		5,451,000	5,181,000	-	301,194	571,194	5,516,376	5,983,353	466,977	1 60
2039	2 7%	31	1,183	844,305	223,200	1,067,505	270,000	210,000	480,000	27,158	507,158		5,181,000	4,911,000	-	306,616	576,616	5,983,353	6,474,242	490,889	1 59
2040	2 7%	32	1,215	867,153	230,400	1,097,553	270,000	228,000	498,000	29,430	527,430		4,911,000	4,641,000	-	312,135	582,135	6,474,242	6,989,661	515,418	1 58
2041	2 7%	33	1,248	890,715	237,600	1,128,315	270,000	247,000	517,000	31,773	548,773		4,641,000	4,371,000	-	317,753	587,753	6,989,661	7,530,223	540,562	1 57
2042	2 7%	34	1,282	914,991	244,800	1,159,791	270,000	267,000	537,000	34,187	571,187		4,371,000	4,101,000	-	323,473	593,473	7,530,223	8,096,541	566,318	1 56
2043	2 7%	35	1,317	939,981	252,000	1,191,981	270,000	287,000	557,000	36,672	593,672		4,101,000	3,831,000	-	329,295	599,295	8,096,541	8,689,227	592,686	1 55
2044	2 7%	36	1,353	965,685	259,200	1,224,885	270,000	307,000	577,000	39,228	616,228		3,831,000	3,561,000	-	335,223	605,223	8,689,227	9,308,889	619,662	1 54
2045	2 7%	37	1,390	992,103	266,400	1,258,503	270,000	330,000	600,000	41,855	228,315		3,561,000	3,291,000	-	341,257	611,257	9,308,889	9,956,136	647,246	1 53
							7,449,000	3,291,000	10,740,000	413,540	10,740,000										

Total Principal Payment = 10,740,000

When ERUs exceed 800 , Willard must pay an additional $ 71 00 per ERU

Willard refinance with 0.5% principal payments for the first 3 years. Cash Flow Model (2016 dollars)

WQB Loan Terms

11/2014 Balance =		11,070,000
Refinance Amount =		10,740,000
DWQ Loan Origination =		-
Refinance Bond Amount =		10,740,000
Loan Term:		30
Interest Rate:		0.0%
Average Annual Payment:	$	358,000

Annual Sewer Expenses (Estimated)

Refinanced Bond Amount	$	10,740,000
Estimated O&M Cost:	$	182,772
Annual O&M Cost Increase:		1.80%
Existing Debt Service:	$	-
Incremental Increase Year 1 - 10 =		20.0% / ERU
Incremental Increase Year 11 - 20 =		70.5% / ERU
Incremental Increase Year 20 - 30 =		80.0% / ERU

Sewer Revenue Sources (Projected)

Beginning Cash:	$	-
Initial Customers (ERU):		677
Minimum Growth Rate:		0.23%
Willard Impact Fee:	$	7,200
2013 MAGI:	$	53,249
Existing Monthly User Charge 1.34%:	$	59.50
Monthly User Charge 1.4% MAGI:	$	62.12

2.70%

Sewer Revenue Projections

Year	Growth Rate (%)	Annual Growth (ERU)	Total Users (ERU)	User Charge Revenue	Impact Fee Revenue	Total Revenue	Base WQB Loan Repayment	Additional WQB Loan Repayment	Amortized WQB Loan Repayment	Early Repayment Provision	Amortized w/ Early Repayment	WQB Loan Reserves	Current Principal	Remaining Principal	Existing Sewer Debt Service	O&M Expenses	Total Expenses	Beginning Cash	Ending Cash Flow	Net Revenue	Debt Service Ratio
2016	0.0%	0	677	483,021	-	483,021	53,000	-	53,000	-	53,000	53,700	10,740,000	10,687,000	-	182,772	289,472	0	193,549	193,549	5.67
2017	0.0%	0	677	483,021	-	483,021	53,000	-	53,000	-	53,000	53,700	10,687,000	10,634,000	-	207,082	313,782	193,549	362,788	169,239	5.21
2018	0.0%	0	677	483,021	-	483,021	53,000	-	53,000	-	53,000	53,700	10,634,000	10,581,000	-	210,810	317,510	362,788	528,299	165,511	5.14
2019	0.2%	2	679	485,812	14,400	520,212	270,000	-	270,000	-	270,000	53,700	10,581,000	10,311,000	-	214,604	538,304	528,299	510,207	(18,092)	1.13
2020	0.2%	2	681	507,303	14,400	521,703	270,000	3,000	273,000	-	273,000	53,700	10,311,000	10,041,000	-	218,417	542,167	510,207	489,743	(20,464)	1.11
2021	0.2%	2	683	508,794	14,400	523,194	270,000	5,000	275,000	-	275,000	53,700	10,041,000	9,771,000	-	222,400	546,100	489,743	466,837	(22,906)	1.09
2022	0.2%	2	685	510,285	14,400	524,685	270,000	8,000	278,000	-	278,000	53,700	9,771,000	9,501,000	-	226,403	550,103	466,837	441,419	(25,418)	1.07
2023	0.2%	2	687	511,776	14,400	526,176	270,000	11,000	281,000	-	281,000	53,700	9,501,000	9,231,000	-	230,478	554,178	441,419	413,417	(28,002)	1.05
2024	0.2%	2	689	513,267	14,400	527,667	270,000	14,000	284,000	-	284,000	53,700	9,231,000	8,961,000	-	234,627	558,327	413,417	382,758	(30,660)	1.03
2025	0.2%	2	691	514,758	14,400	529,158	270,000	17,000	287,000	-	287,000	53,700	8,961,000	8,691,000	-	238,850	562,550	382,758	349,366	(33,392)	1.01
2026	0.2%	2	693	516,249	14,400	530,649	270,000	28,000	298,000	-	298,000		8,691,000	8,421,000	-	243,169	573,169	349,366	360,865	17,500	0.96
2027	0.2%	2	695	517,740	14,400	532,140	270,000	40,000	310,000	-	310,000		8,421,000	8,151,000	-	247,526	577,526	360,865	381,479	14,614	0.92
2028	0.2%	2	697	519,231	14,400	533,631	270,000	51,000	321,000	-	321,000		8,151,000	7,881,000	-	251,982	581,982	381,479	393,129	11,649	0.88
2029	0.2%	2	699	520,722	14,400	535,122	270,000	63,000	333,000	-	333,000		7,881,000	7,611,000	-	256,517	586,517	393,129	401,734	8,605	0.84
2030	0.2%	2	701	522,213	14,400	536,613	270,000	75,000	345,000	-	345,000		7,611,000	7,341,000	-	261,135	591,135	401,734	407,212	5,478	0.80
2031	0.2%	2	703	523,704	14,400	538,104	270,000	88,000	358,000	-	358,000		7,341,000	7,071,000	-	265,835	595,835	407,212	409,481	2,269	0.76
2032	0.2%	2	705	525,195	14,400	539,595	270,000	101,000	371,000	-	371,000		7,071,000	6,801,000	-	270,620	540,620	409,481	408,456	(1,025)	0.72
2033	0.2%	2	707	526,686	14,400	541,086	270,000	115,000	385,000	-	385,000		6,801,000	6,531,000	-	275,491	545,491	408,456	404,051	(4,405)	0.69
2034	0.2%	2	709	528,177	14,400	542,577	270,000	128,000	398,000	-	398,000		6,531,000	6,261,000	-	280,450	550,450	404,051	396,177	(7,875)	0.66
2035	0.2%	2	711	529,668	14,400	544,068	270,000	142,000	412,000	-	412,000		6,261,000	5,991,000	-	285,498	555,498	396,177	384,747	(11,430)	0.63
2036	0.2%	2	713	531,159	14,400	545,559	270,000	159,000	429,000	-	429,000		5,991,000	5,721,000	-	290,637	560,637	384,747	369,669	(15,078)	0.59
2037	0.2%	2	715	532,650	14,400	547,050	270,000	175,000	445,000	-	445,000		5,721,000	5,451,000	-	295,869	565,869	369,669	350,850	(18,819)	0.56
2038	0.2%	2	717	534,141	14,400	548,541	270,000	192,000	462,000	-	462,000		5,451,000	5,181,000	-	301,194	571,194	350,850	328,197	(22,653)	0.54
2039	0.2%	2	719	535,632	14,400	550,032	270,000	210,000	480,000	-	480,000		5,181,000	4,911,000	-	306,616	576,616	328,197	301,613	(26,584)	0.51
2040	0.2%	2	721	537,123	14,400	551,523	270,000	228,000	498,000	-	498,000		4,911,000	4,641,000	-	312,155	582,155	301,613	271,001	(30,612)	0.48
2041	0.2%	2	723	538,614	14,400	553,014	270,000	247,000	517,000	-	517,000		4,641,000	4,371,000	-	317,753	587,753	271,001	236,261	(34,740)	0.46
2042	0.2%	2	725	540,105	14,400	554,505	270,000	267,000	537,000	-	537,000		4,371,000	4,101,000	-	323,473	593,473	236,261	197,293	(38,968)	0.43
2043	0.2%	2	727	541,596	14,400	555,996	270,000	287,000	557,000	-	557,000		4,101,000	3,831,000	-	329,295	599,295	197,293	153,993	(43,300)	0.41
2044	0.2%	2	729	543,087	14,400	557,487	270,000	307,000	577,000	-	577,000		3,831,000	3,561,000	-	335,223	605,223	153,993	106,258	(47,736)	0.39
2045	0.2%	2	731	544,578	14,400	558,978	270,000	330,000	600,000	-	600,000		3,561,000	3,291,000	-	341,257	611,257	106,258	53,979	(52,279)	0.36
							7,449,000	3,291,000	10,740,000	-	10,740,000										

Total Principal Payment =	10,740,000

When ERUSs exceed 800, Willard must pay an additional $ 64.00 per ERU

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

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

EB.

Water Quality Board
Myron E. Bateman, Chair
Shane E. Pace, Vice-Chair
Clyde L. Bunker
Jennifer M. Grant
Hugh E. Rodier
Gregg A. Galecki
Amanda Smith
Walter L. Baker
Executive Secretary

Application Number: _____
Date Received: May 15, 2015
Date to be presented to the WQB: May 27, 2015

WATER QUALITY BOARD
FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT
INTRODUCTION

APPLICANT:	Helper City 73 South Main Street Helper, UT 84526 Telephone: (435) 472-5391
PRESIDING OFFICIAL:	Edward Chavez, Mayor
TREASURER/RECORDER:	Jona Skerl, Recorder
CONSULTING ENGINEER:	Chad Brown, PE Franson Civil Engineers Telephone: (801) 756-0309
BOND COUNSEL:	TBD

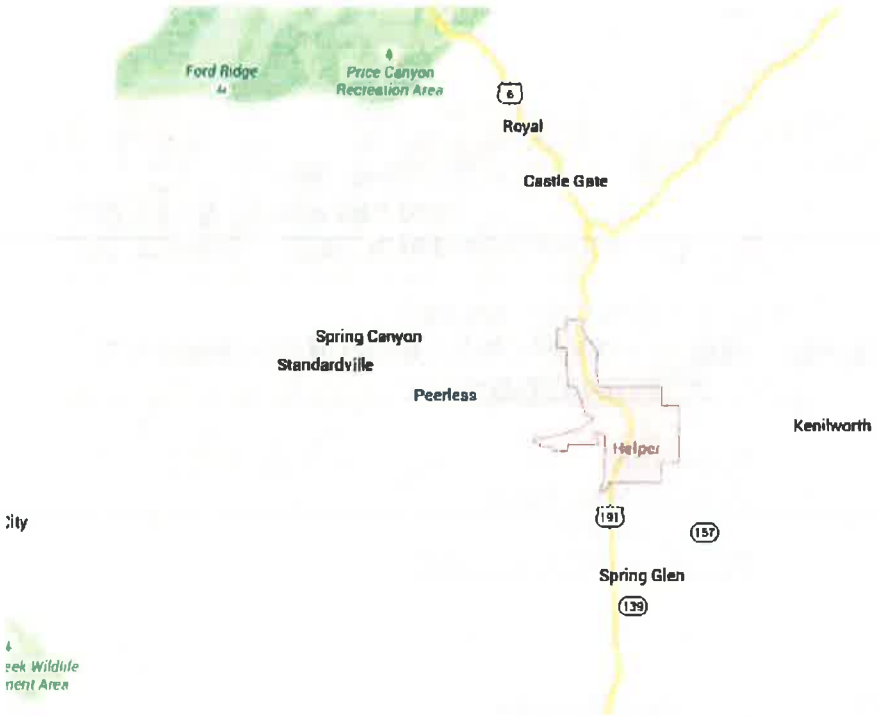
APPLICANT'S REQUEST:

Helper is requesting financial assistance in the amount of a $2,314,000 loan with a repayment term of 30 years at 0% for the completion of the sewer replacement project that is replacing mains throughout the city.

APPLICANT'S LOCATION:

Helper City is located at the mouth of Price Canyon, alongside the Price River.

MAP OF APPLICANT'S LOCATION



BACKGROUND:

Helper has primarily developed along with coal mining and power plant operations in the region. The 2010 Census population for Helper was 2,201. Currently, sewage is collected in the City's sewerage system and delivered to the Price River Water Improvement District where it is treated and then discharged into the Price River.

PROJECT NEED:

The sewerage system in Helper City was constructed before the 1950s and was primarily comprised of clay pipe. A visual inspection of sewer lines in 2011 determined that the sewer system was deteriorating rapidly. In January 2012, a capital facilities master plan was completed that recommended replacing sewers in seven areas in the City. Also in 2012, Helper obtained $5,500,000 in funds from the Community Impact Board (CIB) for this project.

Helper has since been bidding the master plan recommended projects as separate phases. Five of seven projects that were funded by CIB have been completed and the sixth project can be completed with the existing funding. Due primarily to increases in construction costs since 2012 when the CIB loan was closed, there are insufficient funds remaining from the CIB loan to

complete the last remaining area, Area 2.

ALTERNATIVES TO BE EVALUATED:

An alternatives analysis was performed for the project in the capital facilities master plan. Staff will review the Capital Facilities Master Plan for compliance with DWQ SRF funding requirements to make sure the alternatives analysis meets our requirements prior to closing the loan.

Helper City holds a current construction permit issued by the Division when the project was originally planned, anticipating full funding by CIB.

POSITION ON PROJECT PRIORITY LIST:

This project is ranked 15th out of 16 projects on the Wastewater Treatment Project Priority List.

POPULATION GROWTH:

Helper City is not expected to see a substantial amount of growth, on average, about 0.3% per year. The anticipated closure of Rocky Mountain Power's Carbon Power plant and associated losses in jobs that support the power plant may also adversely affect the community's population and growth rate, which could be an additional hardship. The Governor's Office for Planning and Budget shows the following projections for Helper City:

Year	Population
2010	2,201
2020	2,221
2030	2,272
2040	2,351
2050	2,425
2060	2,508

PROJECT SCHEDULE:

Introduction to the WQB	May 27, 2015
Apply to WQB for Authorization:	June 24, 2015
Facility Plan Approval	July 2015
Rebid Project	August 2015
Loan Closing	September 2015
Construction Completion	December 2016

COST ESTIMATE:

Bonding	$35,000
DWQ Loan Origination Fee (1%)	$23,000
Engineering – Construction Services	$200,000
Administration	$6,000
Legal – ROW & Easements	$10,000
Construction	$1,855,000
Contingency	$185,000
Total Project Cost:	$2,314,000

APPLICANT'S CURRENT USER CHARGE:

Currently Helper charges a base sewer fee of $35.00 per month per Equivalent Residential Connection (ERU). Staff estimates that Helper will need to increase its basic sewer rate to about $42/month to pay for its current sewer debt obligation.

STAFF RECOMMENDATION::

The Water Quality Board established a loan affordability criterion of 1.40 percent of the local median adjusted household income (MAGI) that is used by staff to recommend financing conditions. The attached cost model (Attachment 1) shows that to achieve affordable financing, a loan of $1,314,000 at 0% interest for 30 years coupled with a grant of $1,000,000 would be applicable. This financing package would require Helper to increase its basic sewer rate to $46.73 per effective residential unit per month, an increase of $11.73 per month.

Helper requested supplemental funding of $2,000,000 for 30 years at 0% from CIB for this project. The CIB advanced the request to its priority list (which is over extended) for $2,000,000 for 30 years at 2.5%, which is equivalent to 1.56% of the MAGI. The applicant's request for $2,314,000 from the Water Quality Board at 0% interest for 30 years (1.51% MAGI) should also be considered by the board in establishing an appropriate financing package for supporting the final phase of Helper's sewer improvement project. This is an introduction of the Helper project and staff proposes to return to the board in June to request authorization at that time. Staff requests that the board consider its financing alternatives for the Helper project in light of information presented to the board by the applicant, the board's affordability criteria including affordability and local economic conditions, and the alternative financing that may be available through CIB.

SPECIAL CONSIDERATIONS:

Special conditions will be recommended with the request for loan authorization..

U:\ENG_WQ\Jpcook\Projects\Helper\Authorization\2015-05-14 Feasibility Cosntruction Helper.docx
File: Helper, Admin, Section 1

Helper City
2015 SEWER LINE REPLACEMENT PROJECT

Project Costs	
Bonding	35,000
Loan Origination Fee	23,000
Construction	1,855,000
Contingency	185,000
Engineering - Basic	-
Engineering - Special Services	200,000
Administration	6,000
Legal- ROW & Easements	10,000
Land	-
Total Project Cost:	**2,314,000**

Project Funding	
Applicant Contribution	-
CIB	2,314,000
	2,314,000

Project Funding	
Grant	-
Loan	2,314,000
	2,314,000

Current Customer Base & User Charges	
Residential Customers (connections):	927
Comm/Indust Customers (connections):	69
Additional based upon 2014 billing (ERUs):	54
Total 2014 ERUs:	1,050
MAGI for Price (2013)	$39,942
Current Impact Fee (per ERU):	$250
Current Monthly User Fee (per ERU)	$35.00
Current Monthly User Fee (% MAGI)	1.05%

Annual Sewer O&M Cost	
Existing O&M expenses Treatment & Collection	277,200
New O&M expenses Treatment & Collection	$268,885

Existing Sewer Debt Service	
Existing Sewer Debt Service	$263,000

Funding Conditions	
Loan Repayment Term:	30
Reserve Funding Period:	5

ESTIMATED COST OF SEWER SERVICE

DWQ Grant Amount	DWQ Loan Amount	DWQ Loan Interest Rate	DWQ Loan Debt Service	DWQ Loan Reserve	Annual Sewer O&M Cost	Existing Sewer Debt Service	Total Annual Sewer Cost	Monthly Sewer Cost/ERU	Sewer Cost as a % of MAGI
-	**2,314,000**	**0.00%**	**$77,133.33**	**23,140**	**268,885**	**$263,000**	**$632,158.33**	**50.17**	**1.51%**
-	2,314,000	0.50%	$83,255.22	24,977	268,885	$263,000	640,117	50.80	1.53%
-	2,314,000	1.00%	$89,663.13	26,899	268,885	$263,000	648,447	51.46	1.55%
-	2,314,000	1.50%	$96,353.08	28,906	268,885	$263,000	657,144	52.15	1.57%
-	2,314,000	2.00%	$103,319.92	30,996	268,885	$263,000	666,201	52.87	1.59%
-	2,314,000	2.50%	$110,557.46	33,167	268,885	$263,000	675,610	53.62	1.61%
1,000,000	1,314,000	0.00%	$43,800.00	13,140	268,885	$263,000	$588,825	46.73	1.40%
1,000,000	1,314,000	0.50%	$47,276.30	14,183	268,885	$263,000	593,344	47.09	1.41%
1,000,000	1,314,000	1.00%	$50,915.02	15,275	268,885	$263,000	598,075	47.47	1.43%
1,000,000	1,314,000	1.50%	$54,713.89	16,414	268,885	$263,000	603,013	47.86	1.44%
1,000,000	1,314,000	2.00%	$58,670.00	17,601	268,885	$263,000	608,156	48.27	1.45%
1,000,000	1,314,000	2.50%	$62,779.82	18,834	268,885	$263,000	613,499	48.69	1.46%
2,256,000	$0	0.00%	$0.00	-	268,885	$263,000	$531,885.00	42.21	1.27%

*Bonding and Loan Origination not required for 100% Grant

2013 CIB Bond	Total
125000	125000
128000	128000
132000	132000
135000	135000
138000	138000
142000	142000
145000	145000
149000	149000
153000	153000
156000	156000
160000	160000
164000	164000
168000	168000
173000	173000
177000	177000
181000	181000
186000	186000
191000	191000
195000	195000