

State of Utah GARY R. HERBERT Governor

GREG BELL Lieutenant Governor

## Department of Environmental Quality

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

TO:	Water Quality Board		
THROUGH:	Walter L. Baker, P.E.		
FROM:	Johnathan Cook, P.E. Environmental Engineer		
DATE:	March 10, 2015		
SUBJECT:	Refinance Willard City Bond - \$10,740,000		

The City of Willard has asked the Division of Water Quality to consider refinancing their sewer bond. This bond was for the construction of a collection system for Willard and construction of the regional treatment plant with Perry. Willard has informed Staff that they will be able to make this year's payment on the bond. However, they are projecting that they 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:

 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.

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.

We have 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 ( $\approx 1\%$ ) 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 \$2,332,320 in Hardship Grant Fund (HGF) money to be transferred to the Utah Wastewater Loan Fund (UWLF). I have summarized the costs below for various percentages of grant and what it would make their sewer bill below.

Estimated Cost of Refinance					
% of Principal					
converted to	Additional	Refinance	WQB Loan	Monthly	
Grant	WQB Grant	Bond Amount	Debt Service	Sewer Bill	% MAGI
0%	\$0	\$10,848,000	\$361,600	\$73.04	1.65%
4%	\$433,920	\$10,414,080	\$347,136	\$71.01	1.60%
10%	\$1,084,800	\$9,763,200	\$325,440	\$67.96	1.53%
13%	\$1,410,240	\$9,437,760	\$314,592	\$66.44	1.50%
20%	\$2,169,600	\$8,678,400	\$289,280	\$62.89	1.42%
21.5%	\$2,332,320	\$8,515,680	\$283,856	\$62.13	1.40%

Estimated Cost of Refinance

Staff also investigated if there is a mechanism available that would allow the Division to compel Willard to payback some of the grant funds in the event that they do begin seeing growth. So far Staff has not been able to find such a mechanism.

Preferring not to have to grant Willard an additional \$2.3 million, Staff began investigating other options for refinancing the bond. It was determined that the best available option would be to refinance their bond at 30-years and reduce the payments on the bond for the first three years.

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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 not recommending an amortization that requires a 1.4% MAGI (\$62.12 per month per ERU) because it allows the City to increase sewer rates if growth continues to be slow. In the event that Willard does not have 2.7% growth, they would be able to raise sewer rates to the 1.4% MAGI affordability guidelines and have little risk of running into another potential bond default situation.

The proposed refinance amortization also has an early principal repayment provision similar to the original bond. However, since the base amortization is taking 70% to 80% of the ERUs for years 10 through 30, it has been reduced. The original bond's early principal repayment provision was set at \$250 per ERU after

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900 ERUs are connected to the system. The proposed refinance early principal repayment provision 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 cost any additional grant funds, it does come at a cost. Staff has calculated the present value loss of the refinance using an assumed discount factor of 1%, the approximate rate at which loans are being made from the UWLF. Using this factor, the UWLF loses \$404,100 in purchasing power for funding other projects in 2015 dollars.

Staff recommending the Board authorize refinancing the Willard bond at \$10,740,000 for 30 years at 0% with the referenced graduated repayment amortization and early principal repayment clause with the following special conditions:

- 1. Willard must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
- 2. Willard must establish a depreciation reserve fund and fully fund depreciation annually for the life of these facilities or the term of the bond, whichever is less, insofar as it is affordable, as determined by raising rates annually up to 1.34% MAGI as necessary to fund depreciation unless repayments to the bond require raising the sewer bill up to the maximum affordable limit (1.4% MAGI) or higher.

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