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Water and Wastewater Rate Study
Final Report
April 10, 2012



9600 SW Oak Street, Suite 335
Tigard, Oregon 97223
☎ 503.517.0671



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Water and Wastewater Rate Study

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Executive Summary

Hubbard is the sole provider of water and wastewater services to customers within the urban services boundary of the City. Revenues required to fund the delivery of these services are obtained from monthly user fees which are set by the City Council via their City charter authority. The last time the Council adjusted water and wastewater rates was on October 15, 2006. Since that time, costs to operate, maintain, and improve the water and wastewater system have increased. With revenues flat, and costs rising, the City has drawn down reserves to fund the two utilities' revenue requirements. This study addresses the revenue required from rates needed to support future operations and maintenance costs for the two systems along with a funding plan for the water and wastewater capital needs identified in the City's water and wastewater master plans. With the active involvement of City staff, twenty year planning models were developed for this project; however, the focus for the rate study is for fiscal 2012 through fiscal 2022. These financial models have been reviewed with the City as they were developed and will be provided to Hubbard as a project deliverable.

The purpose of this study is to develop a cost of service-based methodology that will accurately determine the cost the city incurs to deliver water and wastewater services. The models that have been developed for this engagement have been populated with budget data for fiscal 2012, along with actuals for fiscal 2009, 2010, and 2011. During February and March of 2012, the project team presented eight (8) separate model runs to the City Council for their consideration. These model runs simulated the current service levels (CSL) of the two utilities, and sensitivity cases for a number of funding issues facing the City's two utilities. The results of each model run were expressed in terms of the rate impacts on the average single family residential customer's monthly bill for water and wastewater services. The Council prioritized its funding needs and by consensus, arrived at the preferred alternative rate adjustments as shown below in Table 1 for water and wastewater services:

Table 1 - Recommended Rate Adjustments for Water and Wastewater Services in Hubbard

Option, Choice, Mandate	Water	Wastewater	Total
Mandate – Compliance with water revenue bond covenants	\$3.82		\$3.82
Option/choice – water share of 1 FTE utility worker I (move the current part time position to full time status)	\$0.67		\$0.67
Future mandate - \$2 million wastewater beneficial reuse project (projected to be build by the end of fiscal 2016)		\$1.00	\$1.00
Total	\$4.49	\$1.00	\$5.49

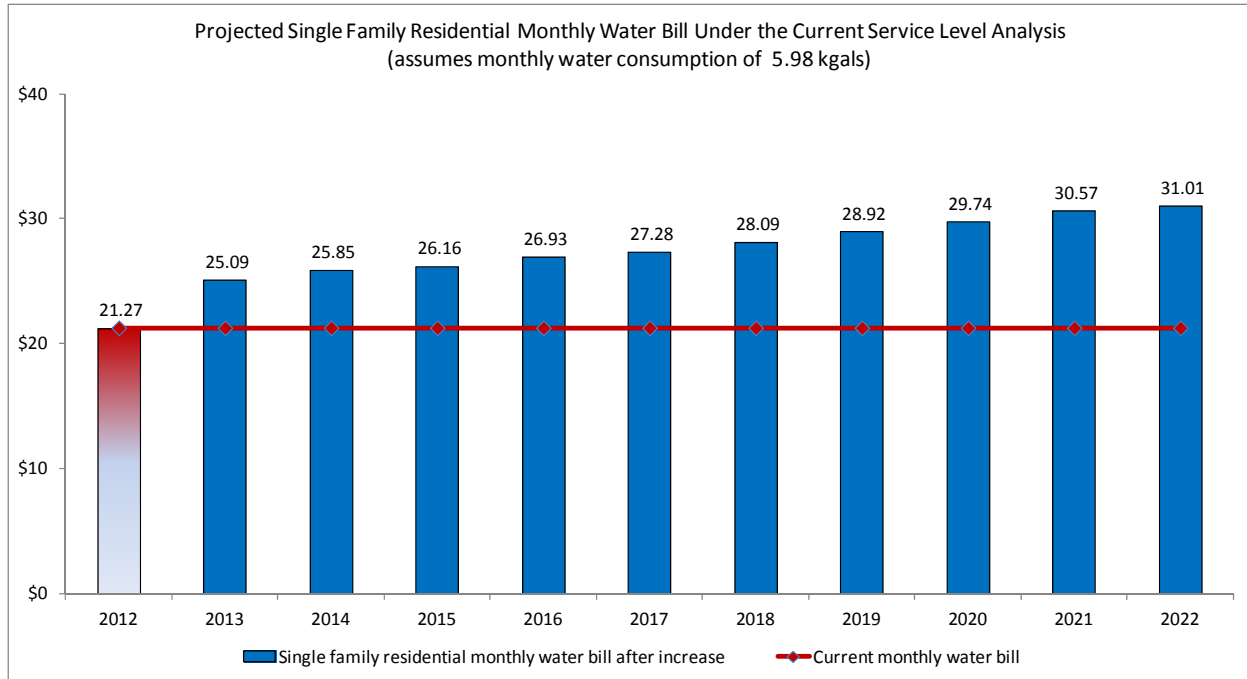
Based on consultation with the Council, the project team recommends the preferred alternative rate adjustments take effect on July 1, 2012 (coincident with the start of the City's new fiscal year). With regard to the water rates, it is recommended the \$4.49 increase be applied to the current schedule of bi-monthly water base charges. This would translate to an increase of \$8.98 to the bi-monthly water bill for the average Hubbard customer. With respect to wastewater rates, it is recommended the City Council direct City staff to dedicate the rate increase revenue to a reserve account established for the upcoming wastewater beneficial reuse/irrigation project is defined in *Alternate Discharge Alternative Study*, dated April, 2006.

Analysis Section

Establishing the Current Service Level - Water

The ten year forecast of an average single family residential customer's monthly water bill is shown below in Figure 1. This monthly bill is based upon the City's current rate schedule, and an assumed monthly water consumption of 5.98 k-gallons (i.e., 800 cubic feet).

Figure 1 - Forecast of Average Single Family Residential Water Bills Under the Current Service Level



As Figure 1 shows, modeling indicates a significant increase in water rates is required under the CSL case. The principal reason for the increase is that the City appears not to be meeting the rate covenant for the Series 2003 Water Refunding Bonds. The rate covenant for these refunding bonds states the following:

"The City covenants for the benefit of the Owners of all Series 2003 Bonds that it will charge rates and fees in connection with the operation of the System which, when combined with other Gross Revenues, including without limitation SDC Revenues, are adequate to generate (1) Net Revenues in each Fiscal Year at least equal to the sum of (a) 1.25 times Annual Debt Service due in that Fiscal Year on Outstanding Bonds

...If the Net Revenues fail to meet this level, the City will promptly increase its rates and fees or reduce expenses to a level so that Net Revenues (exclusive of transfers from the Rate Stabilization Account) are projected to meet the required level. The City will demonstrate its compliance by providing a report prepared at the time of the delivery of the City's year-end audit. This report will demonstrate the City's compliance with this covenant, or the methods by which the City intends to achieve compliance with this covenant."

In addition to failing to be in compliance with the rate covenant on the Series 2003 Water Refunding Bonds, the City is not fully funding the debt service reserve account established for these bonds. As of June 30, 2011, the City had \$38,075 deposited in the debt service reserve account. The debt service reserve account requirement as of that date should have been \$104,540. The process for determining

the amount of funds held in the debt service reserve account is stated in the prospectus for the 2003 Water Refunding Bonds, and states the following

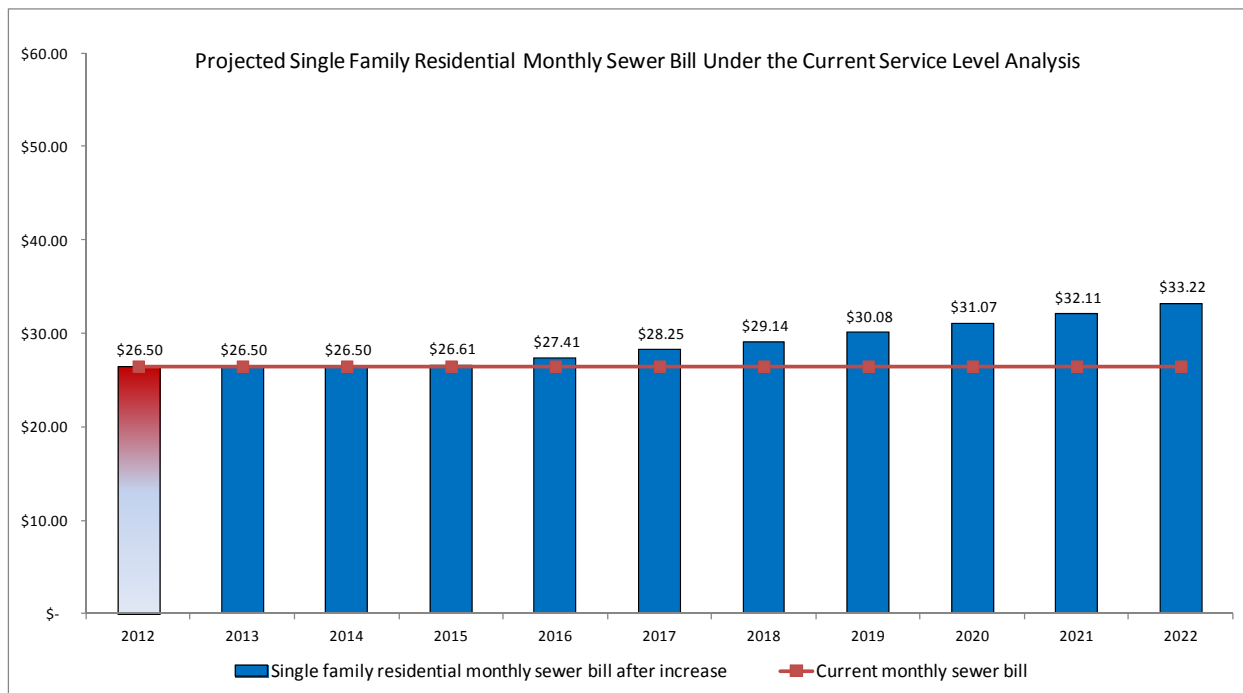
“Reserve Requirement means as of any date of calculation or valuation, for any Series of Outstanding Bonds, the lesser of: the greatest amount of principal, interest and premium, if any, required to be paid in any Fiscal Year on such Series of Bonds; 125% of the average amount of principal, interest and premium, if any, required to be paid on such Series of Outstanding Bonds during all Fiscal Years in which such Series of Bonds will be Outstanding, calculated as of the date of issuance of such Series of Bonds; or ten percent (10%) of the proceeds of such Series of Bonds; as “proceeds” are determined for purposes of Section 148(d) of the Code.”

These matters were discussed in detail with the City Council at their regularly scheduled business meetings on February 14, 2012, and on March 13, 2012. Consensus was reached that water rates would have to be adjusted to bring the City into compliance with the contractual requirements associated with the issuance of the Series 2003 Water Refunding Bonds.

Establishing the Current Service Level - Wastewater

The corresponding ten year forecast of an average single family residential customer’s wastewater bill is shown below in Figure 2. This monthly bill is also based upon the City’s current rate schedule, with a fixed residential rate of \$26.50 per month.

Figure 2 - Forecast of Average Single Family Residential Wastewater Bills Under the Current Service Level



In the case of the wastewater CSL, the City appears to be in good financial shape, and our modeling indicates no wastewater rate adjustments would be required until fiscal 2015; keeping in mind, the CSL assumes there are no capital improvement spending over the entire forecast horizon. Unfortunately, the City is facing a regulatory mandate that will require significant investment in new wastewater infrastructure to achieve compliance with this regulatory mandate. This issue, and the financial implications are discussed in detail in the body of this report

Strategy for Evaluating Sensitivities to the Current Service Level

From the two CLS starting platforms, the project team ran sensitivity cases for the following City-identified increased service levels:

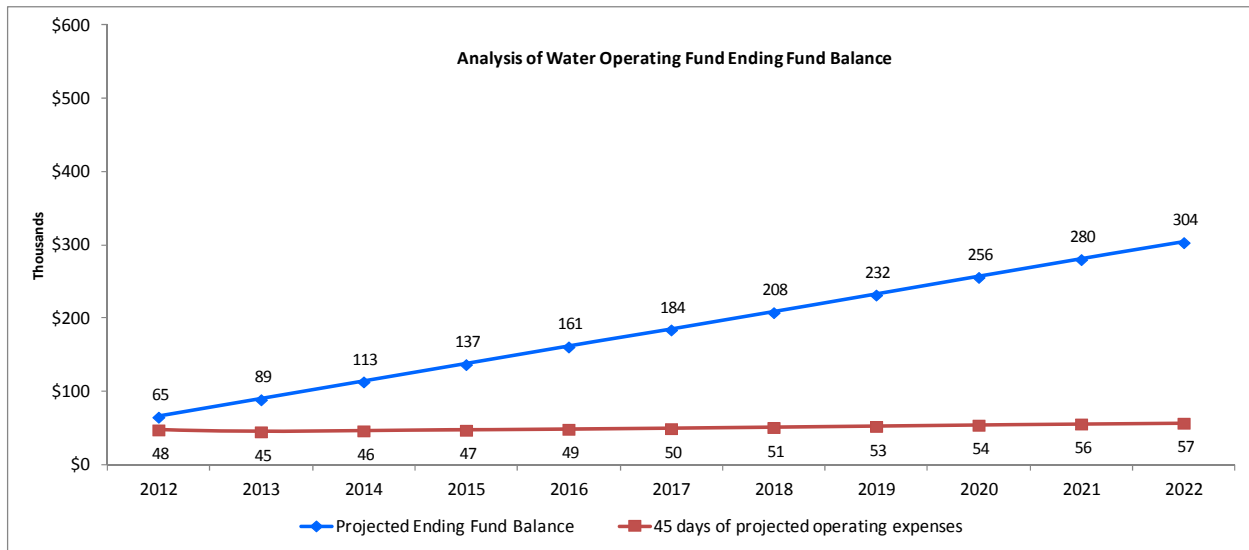
Build the water and wastewater contingencies up to recommended levels. City staff have concerns that the amount of cash reserves in the water and wastewater funds is insufficient to meet upset or emergency conditions. From a policy perspective, user charges must be sufficient to provide cash for the expenses of operating and maintaining the City's water and wastewater services. To ensure the fiscal and physical integrity of the City's infrastructure, cash needs will be defined to include sufficient reserves to accommodate routine fluctuations in revenues and expenses. The typical method for expressing the appropriate level of working capital reserves is in days of operating expenses. We suggest that the City consider the following target for working capital reserves:

- ✓ Wastewater: 30 days of wastewater system operating expenses
- ✓ Water: 45 days of water system operating expenses

The rationale for the higher reserve against water expenses is the greater volatility of water revenues as compared to wastewater revenues. Perhaps offsetting this is the fact that higher revenue periods occur at the start of the fiscal year, meaning the beginning balance is normally augmented before declining revenues cause a seasonal decline in fund balances. Nonetheless, the greater exposure to revenue risk merits a somewhat higher balance, as suggested above.

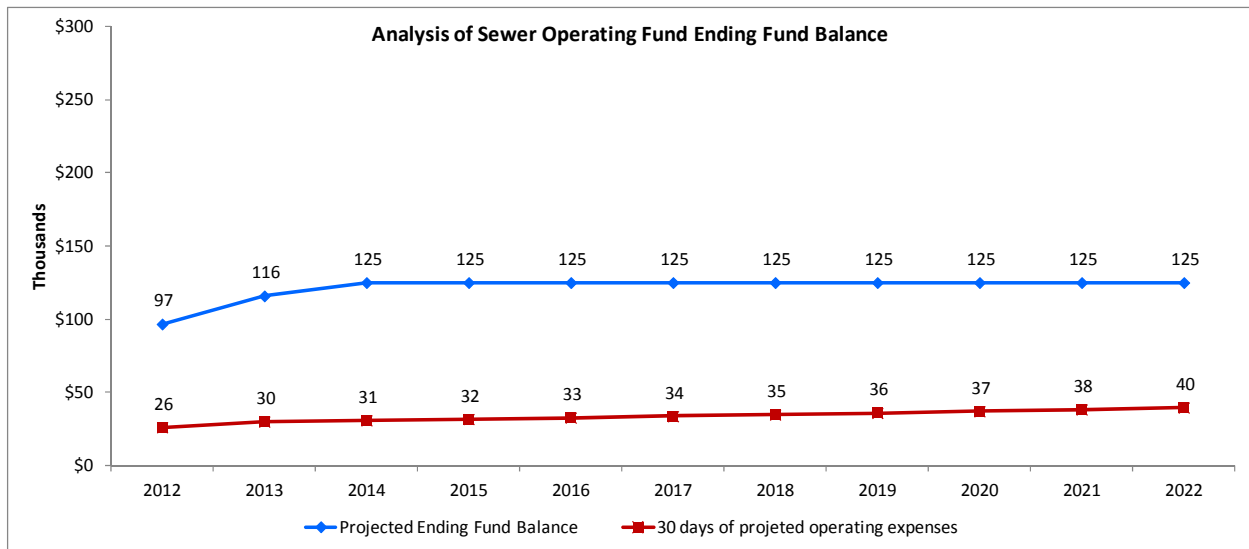
We have modeled these recommendations against the water and wastewater CSL cases. We have also asked City staff to update us on the current cash positions of the water and wastewater utilities. According to the trial balances for the water and wastewater utility funds, through accounting period 5 of fiscal 2011-12 (report date November 14, 2011) the water utility fund had a cash balance of \$143,961.33, and the wastewater utility fund had a cash balance of \$159,562.17. Our analysis of the CSL cases indicates these utilities have sufficient cash on hand to meet the recommended operating reserves discussed above. This is shown graphically below in figure 3 (water) and figure 4 (wastewater). Therefore, under the CSL forecast, no rate adjustments would be required if the City chose to implement our recommended decision rules for water and wastewater utility operating reserves.

Figure 3 - Forecasted Water Utility Fund Balance vs. 45 Days Operating Expenses – CSL



The rapidly increasing projected ending fund balance for the water utility fund is due to the rate increases that were required to meet the rate covenant of the Series 2003 Water Refunding Bonds. Since the CSL assumes no future capital improvement spending, the cash generated from the prescribed water rate increases is retained in the ending fund balance.

Figure 4 - Forecasted Wastewater Utility Fund Balance vs. 30 Days Operating Expenses - CSL

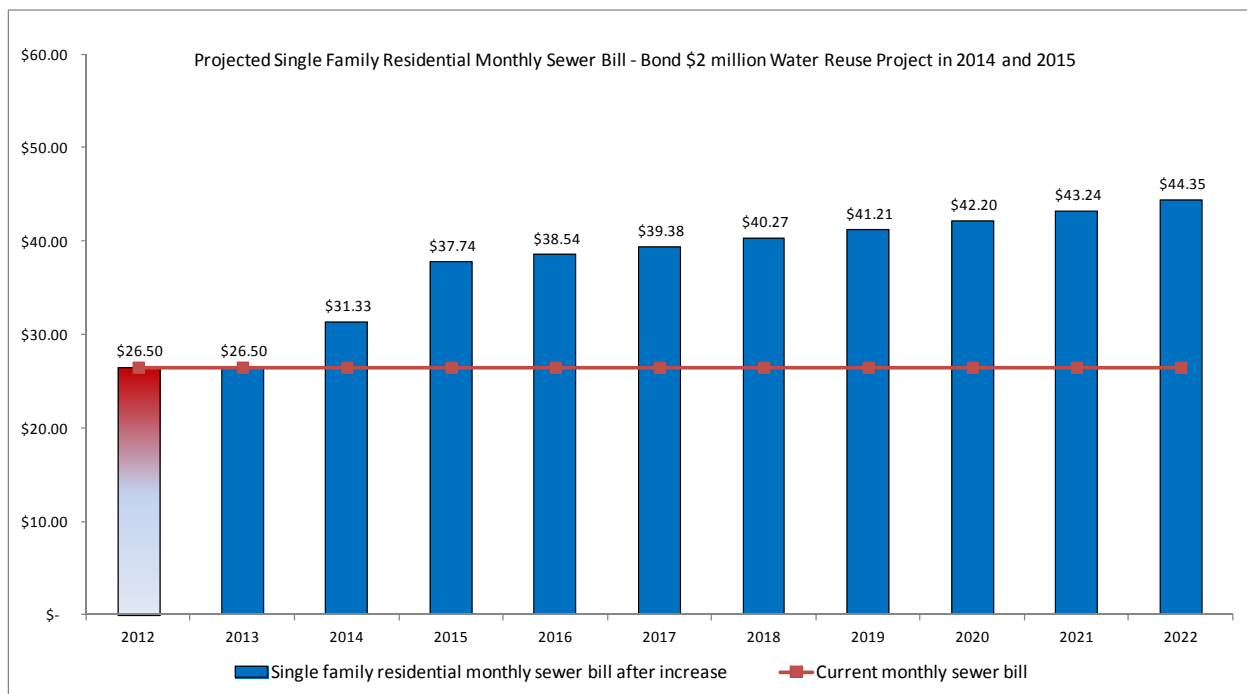


Fund the treated wastewater reuse project. The Oregon Department of Environmental Quality (DEQ) has determined the City is placing an Excess Thermal Load (ETL) on Mill Creek. The City’s current NPDES permit allows the City to discharge treated effluent from the wastewater treatment plant to this receiving stream year round (at river mile 6.2). The City has been notified by the DEQ that the new permit will limit future summer discharges to mill creek based upon a temperature limitation of 1.0 million k-calories per day as a weekly average. This limitation will in essence preclude the City from discharging treated wastewater effluent to Mill Creek during the summer period of May 1 – October 31.

This regulatory limitation is getting to be the norm for all communities that discharge to the Molalla/Pudding River drainage basin system. Our work with the Cities of Silverton and Molalla are cases in point. Both of these Cities are precluded from discharging during the summer. In the case of Silverton, summer discharges are diverted from Silver Creek to the Oregon Garden’s constructed wetland facility which cost the City approximately \$2 million to develop. In the case of Molalla, summer discharges are diverted from the Molalla river to a spray irrigation pipeline system. Treated effluent is pumped from Molalla’s treated effluent storage facultative lagoon to leased ranch land outside of town for land application. The cost of pipeline construction and long term ranch land lease cost the City approximately \$1.5 million.

Preliminary conversations with City staff indicate this range of investment will be required to develop an effluent reuse system for Hubbard. The project team prepared a wastewater rate sensitivity case assuming a total project cost of \$2 million, that will be funded from the proceeds of a new revenue bond issuance in fiscal 2014 and 2015. The wastewater rate impacts of that sensitivity case are shown below in Figure 5.

Figure 5 - Forecasted Wastewater Rate Impact of a \$2 Million Water Reuse Bond in Fiscal 2013



This sensitivity analysis assumed the City would fund the project with a 20 year loan drawn from the Clean Water State Revolving Loan Fund administered by the Oregon DEQ. These loans have terms that are more favorable than conventional serial revenue bonds. None the less, the rate impact of incurring a \$2 million debt on the wastewater system is significant. The results of this sensitivity analysis were shared with the City Council, and the consensus of opinion was some amount of advance funding from rates would be prudent now, given the magnitude of the project costs. After additional discussions, the Council, at their March 13, 2012 meeting agreed that a \$1 per month increase in wastewater rates now would be prudent. The Council also concurred that the revenues recovered from this \$1 per month rate increase should be directed to a reserve account for the project. Staff indicated that could be accomplished through the City’s budget preparations for the upcoming fiscal year 2012-13.

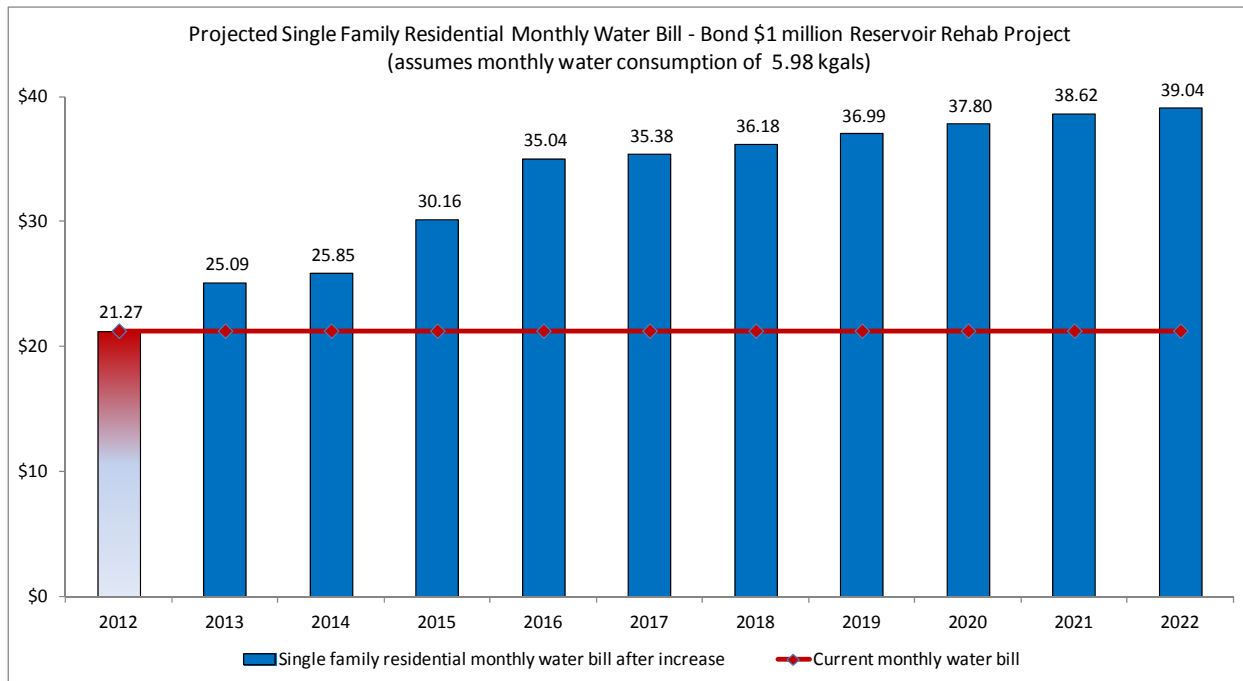
Fund the pressurized water system installation and ongoing maintenance. The City’s potable (culinary) water system is currently pressurized by the static water pressure of the City’s one above ground

distribution reservoir (tank). City staff have indicated the static water pressure of the distribution system averages 42 psi. AWWA standards for the safe operation of domestic plumbing fixtures is more like 55psi. Some residents, businesses and the Council have expressed an interest in researching potential options to increase the average water pressure throughout the City.

There are two options to increase the pressure of the City’s water distribution system. The first would be to install a pressure lift station below the distribution reservoir that would provide continuous pressure to the system at 55 psi. These types of systems cost roughly \$100,000 to install, but have high annual operation and maintenance costs for electricity, pump and SCADA maintenance. The second option would be to retrofit the distribution reservoir by raising it to a height that would achieve the higher static pressure of 55 psi. Assuming the original tank was built to an AWWA standard, and assuming an elevation gain of 20 to 25 feet, the total cost of such a retrofit (including seismic risk upgrades) could cost as much as \$1 million. The advantage of this option is once the higher static pressure is achieved, there is no incremental annual operations and maintenance cost for pumping and monitoring.

A water rate sensitivity analysis was prepared for this case that assumed the City opts to invest the \$1 million to raise the tank and make the structural upgrade to meet current seismic risk building codes. Funding for the project was assumed to come from the issuance of new water revenue bonds in fiscal 2015 and 2016. The water rate impacts of this sensitivity case are shown below in Figure 6.

Figure 6 - Forecasted Water Rate Impact of \$1 million Reservoir Rehab Project in Fiscal 2013



The reservoir rehab case assumes the City would already be raising water rates to comply with the rate covenant of the series 2003 water refunding bonds. To mitigate the rate impact of issuing new revenue bonds to fund the proposed \$1 million reservoir rehabilitation project, the forecast has applied the cash generated from the rate covenant-based increases along with approximately \$177k that is in the Water Construction Fund to buy down the amount borrowed for the project. Even with these moves, the resulting water rate increases are substantial, and potentially unrealistic. The results of this sensitivity

case was presented to the Council at their February 14, 2012 meeting, and the consensus of opinion was to defer this issue from current consideration. However, the Council did direct City Staff to continue investigating possible new funding sources for such a project, and to look for less expensive engineering options that could achieve the same goal of increasing the water distributions system’s overall static water pressure.

Fund the cost of adding one full time equivalent Utility Worker I position, and assign the appropriate allocations of the cost to the water and wastewater funds. The adopted fiscal 2011-12 budget assumes the fully burdened annual cost of a Utility Worker I position is \$55,189 (\$32,004.00 for annual compensation, and \$23,184.55 for annual benefits). City Staff have indicated a desire to have this position filled and funded for the fiscal year 2012-13 (i.e., starting on July 1, 2012). The assumed funding sources for the annual cost of this position are:

Parks (General Fund) – 25%.....	\$13,797.25
Streets (Gas Tax and street fees) – 25%	13,797.25
Wastewater (Wastewater Rates) – 20%.....	11,037.80
Water (Water Rates) – 30%	<u>16,556.70</u>
Total.....	\$55,189.00

Labor costs are assumed to be an operating expense for each utility, and funded entirely from rates or property taxes in the case of parks. We have prepared separate water and wastewater rate sensitivity cases that insert the proportional costs of the proposed Utility Worker I position in fiscal 2013. Over the forecast, annual compensation costs for each utility are forecasted to increase by 3% per year. Increases in benefits costs are estimated to increase at twice the compensation rate (i.e., 6%) because of employer contributions to employee retirement accounts and health insurance premiums. The rate sensitivity cases that have been prepared take these assumptions into account. Figure 7 (Water) and Figure 8 (wastewater) show the rate impact of adding the Utility Worker I position versus the Current Service Level cases.

Figure 7 - Forecasted Water Rate Impact of adding a Utility Worker I Position in Fiscal 2013

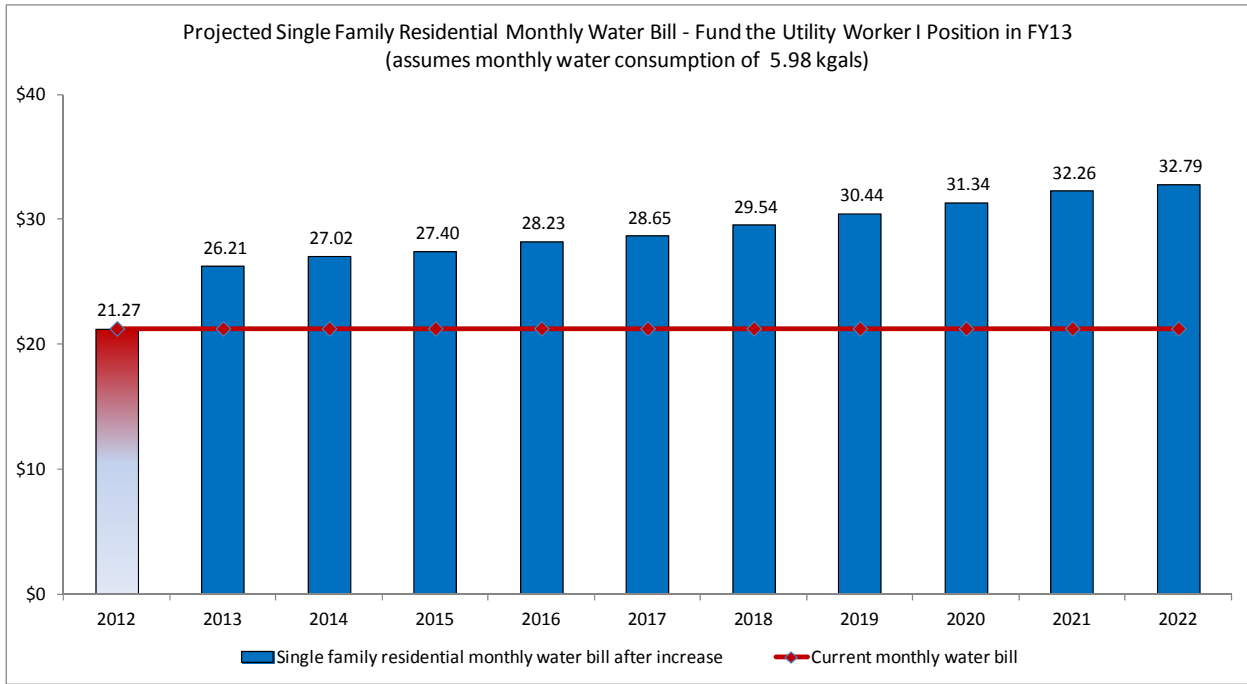
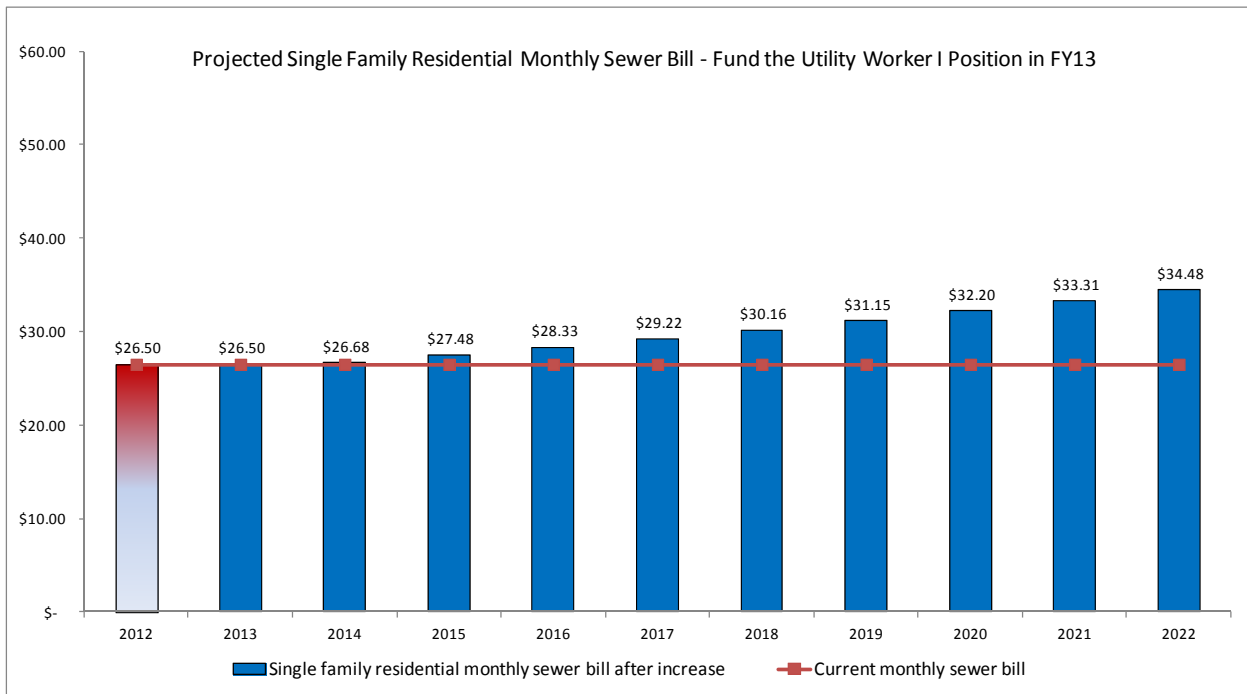


Figure 8 - Forecasted Wastewater Rate Impact of adding a Utility Worker I Position in Fiscal 2013



Based on this modeling, the addition of the Utility Worker I position would have a \$1.12 per month rate impact for water, and a nominal rate impact for wastewater services relative to the CSL cases that have been established for each utility. These results were shared with the Council at their February 14, 2012 meeting, and was met with trepidation. The Council understood the calculations, and the relative impact on the utilities. They had concern for the general fund given the fact that 25% of the added cost

of adding a new FTE would have to be borne by the Parks budget. The ultimate decision on when and if the position is added, will most likely be based upon the ability of the General Fund and the Street Fund to provide their pro rata share of funding support. At the end of their February 14th meeting, the Council directed staff to investigate alternatives to adding a new FTE and to prepare a report on the current status of uncompleted maintenance work due to a lack of staffing.

At the Council's March 13, 2012 meeting, staff presented an alternative to the hiring of an entirely new Utility Worker I position. Currently, the public works department has a half time position funded. Total compensation for this position is budgeted at \$26,500. Staff proposed to the Council that this position be upgraded to a full time position at a incremental annual cost of \$33,132; resulting in a full time equivalent cost of \$59,632. By upgrading the current fully funded part time position to full time status, the City would only be required to find funding for the \$33,132 incremental cost; not the \$55,189 for an entirely new Utility Worker I position. The breakdown of the funding requirements for this cost are shown below:

	Compensation	Benefits	Total
Part-time position already funded	\$ 15,370	\$ 11,130	\$ 26,500
Additional cost to bring PT to FT	<u>19,217</u>	<u>13,915</u>	<u>33,132</u>
Total budgeted FTE - Utility Worker I	\$ 34,587	\$ 25,045	\$ 59,632
Parks share of increment - 25%	\$ 4,804	\$ 3,479	\$ 8,283
Streets share of increment - 25%	4,804	3,479	8,283
Wastewater share of increment - 20%	3,843	2,783	6,626
Water share of increment - 30%	<u>5,765</u>	<u>4,175</u>	<u>9,940</u>
	\$ 19,217	\$ 13,915	\$ 33,132

The results of this new analysis were run through the water and wastewater rate models, and the results indicated the monthly impact on water rates would be \$0.67 per month to the average single family residential customer (vs. \$1.12 per month for the hiring of a new FTE). The monthly rate impact on wastewater rates was, as in the prior case, negligible. The results of this new sensitivity analysis were presented to the Council along with the maintenance work backlog analysis. After detailed discussion, the Council consensus was that staff's alternative recommendation to elevate the current part time position to full time status was the most cost effect way to bring more labor resources to bear on the matter of infrastructure maintenance backlog.

Fund the cost of acquisition, installation, and maintenance of the proposed on-line utility bill payment system. The City's current utility billing software vendor (Springbrook) has an online payment module that the City could implement. The costs associated with implementing this module were presented to the City Council on November 8, 2011 and consisted of the following forecasted annual costs:

Software purchase cost and setup fees to Springbrook.....	\$ 0
Annual subscription fees - 100% participation (\$0.05 x 950 x 12).....	570
Annual transaction fees - 100% participation (\$1.00 x 950 x 6)	5,700
Additional transaction fees for partial payments (\$1.00 x 95 x 6)	570
Merchant fees for credit card transaction.....	<u>Not Recommended</u>
Total estimated annual cost	\$6,840

The most problematic assumptions in this estimate of the total annual cost of operating the online bill-pay module is the participation rate. Because costs are entirely “transaction” based, the total annual costs could be as low as zero with no participation, and as high as \$10,000 if there are a large number of customers who choose to make partial payments on their bi-monthly utility bills. For this analysis, we have assumed a very high level of customer participation (i.e., 100%), and a conservative estimate that ten percent of customers will make partial payments on their bi-monthly bills. City staff have indicated the total annual estimated costs of the system would be allocated as follows:

Streets	8%
Wastewater.....	50%
Water	42%

At the direction of staff, rate sensitivity cases for water and wastewater were prepared assuming the program is implemented and funded in fiscal 2013 with a total annual cost of \$6,840 (i.e., \$3,420 for wastewater, and \$2,872.80 for water). The rate impacts of these modest cost increases for each utility are shown below in Figure 9 (water), and Figure 10(wastewater).

Figure 9 - Forecasted Water Rate Impact of adding online utility bill pay in Fiscal 2013

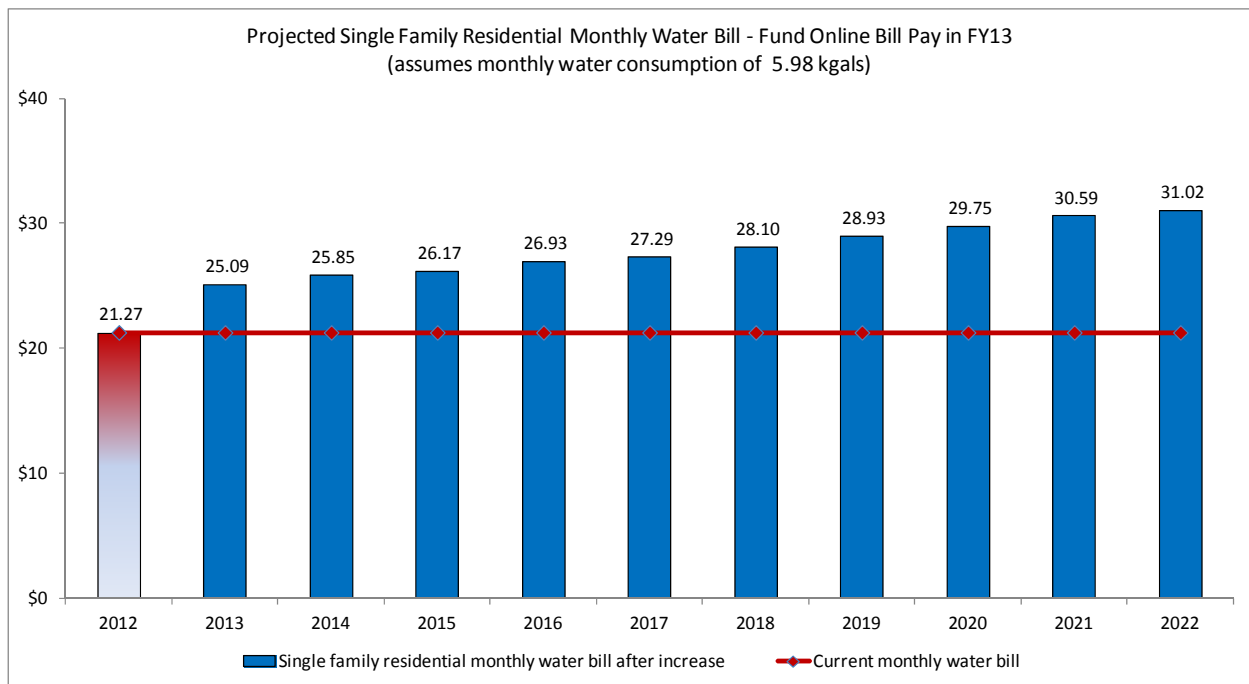
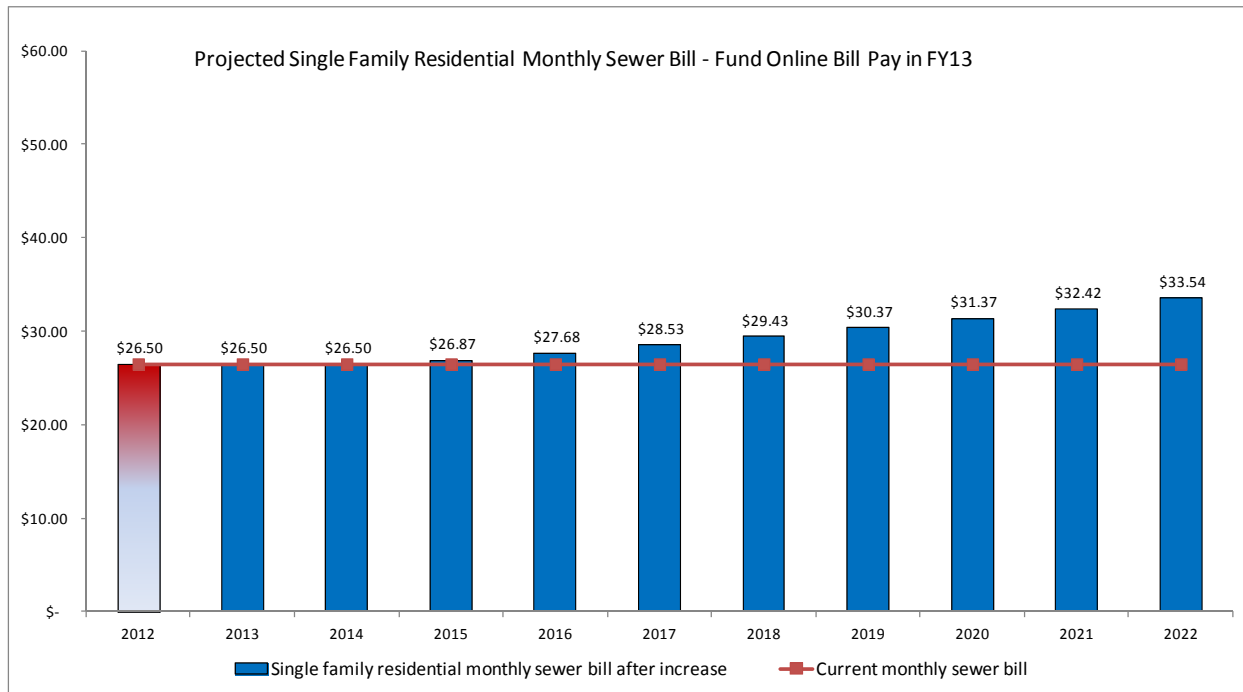


Figure 10 - Forecasted Wastewater Rate Impact of adding online utility bill pay in Fiscal 2013



As the data in Figures 9 and 10 show, the very low costs of implementing the on-line bill pay module have effectively no impact on the rate profiles for water and wastewater services versus the CSL cases for each utility.

Fund the new accounting treatment for automatic overtime/vacation time pay-out. According to City staff, the City currently budgets 200 hours per year for compensated leave time buy-out. The City is considering the option of increasing this to a total of 500 hours per year, reasoning that the high accrual will allow for better management of staffing workloads versus having affected staff taking the time off and still being compensated. As discussed above, labor related costs are assumed to be an operating expense for each utility, and funded entirely from rates. In this scenario, the City would want to know the rate impact to water and wastewater customers of moving to the higher annual accrual amounts. With the benefit of the City’s adopted fiscal 2011-12 budget, the project team crafted a scenario that calculates the total unfunded annual accrual amount for the affected public works positions, and the resulting impacts on the water and wastewater utilities.

The data in Table 2 assumes fully burdened hourly rates based on 2,080 payable hours in a fiscal year. For ease of this analysis, the project team assumed the calculated unfunded annual accrual for compensated leave time is allocated to the funding sources in the same spread pattern that was used for the allocation of the cost of adding the proposed Utility Worker I position analyzed above. Specifically the calculated unfunded accrual amount would be assigned 25% to parks (i.e., general fund), 25% to streets (gas tax and street fees), 20% to wastewater (sewer rates), and 30% to water (water rates).

Table 2 - Forecast of Unfunded Annual Accrual for Compensated Leave/Vacation Time

	Fiscal 2012 Total Compensation and Benefits	Fiscal 2012 Hourly Rate @ 2,080 hours	Current Accrual @ 200 hours per year	Proposed Accrual @ 500 hours per year	Unfunded Accrual
<i>Estimation of unfunded overtime/vacation time payout:</i>					
Public Works Superintendent	\$ 105,924.10	\$ 50.93	\$ 10,185.01	\$ 25,462.52	\$ 15,277.51
Public Works Administrative Assistant	70,937.31	34.10	6,820.90	17,052.24	10,231.34
Utility Worker II	76,269.27	36.67	7,333.58	18,333.96	11,000.38
Utility Worker I	55,188.55	26.53	5,306.59	13,266.48	7,959.89
Total	\$ 308,319.23		\$ 29,646.08	\$ 74,115.20	\$ 44,469.12

Unfunded Accrual	25% Parks	25% Streets	20% Wastewater	30% Water
<i>Assignment of unfunded overtime/vacation time payout to funding source:</i>				
Public Works Superintendent	\$ 3,819.38	\$ 3,819.38	\$ 3,055.50	\$ 4,583.25
Public Works Administrative Assistant	2,557.84	2,557.84	2,046.27	3,069.40
Utility Worker II	2,750.09	2,750.09	2,200.08	3,300.11
Utility Worker I	1,989.97	1,989.97	1,591.98	2,387.97
Total	\$ 11,117.28	\$ 11,117.28	\$ 8,893.82	\$ 13,340.74

As the data in the above referenced Table 2 shows, for this scenario, the annual unfunded accrual for wastewater amounts to \$8,893.82, and the corresponding amount for water amounts to \$13,340.74. We have prepared rate sensitivity cases for water and wastewater assuming the program is implemented and funded in fiscal 2013 with a total annual unfunded accruals in these amounts starting in fiscal 2013. The resulting rate impact of these assumptions are shown below in Figure 11 (water) and Figure 12 (wastewater).

Figure 11 - Forecasted Water Rate Impact of increasing the comp time accrual in Fiscal 2013

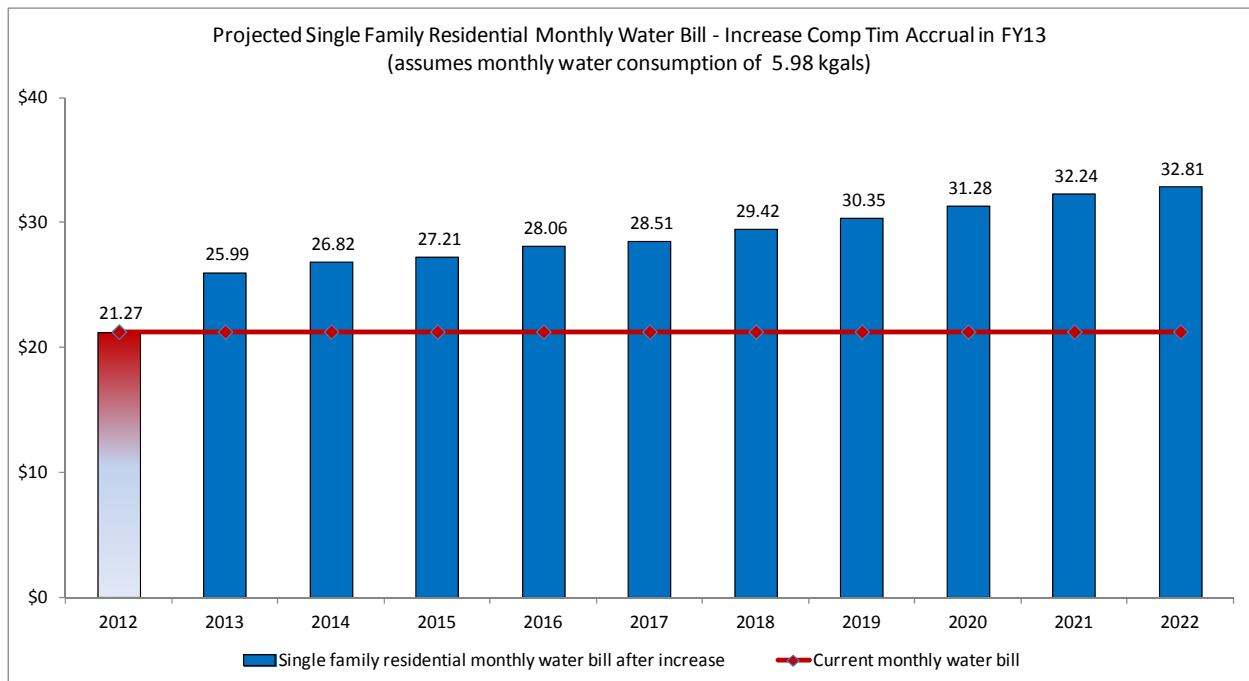
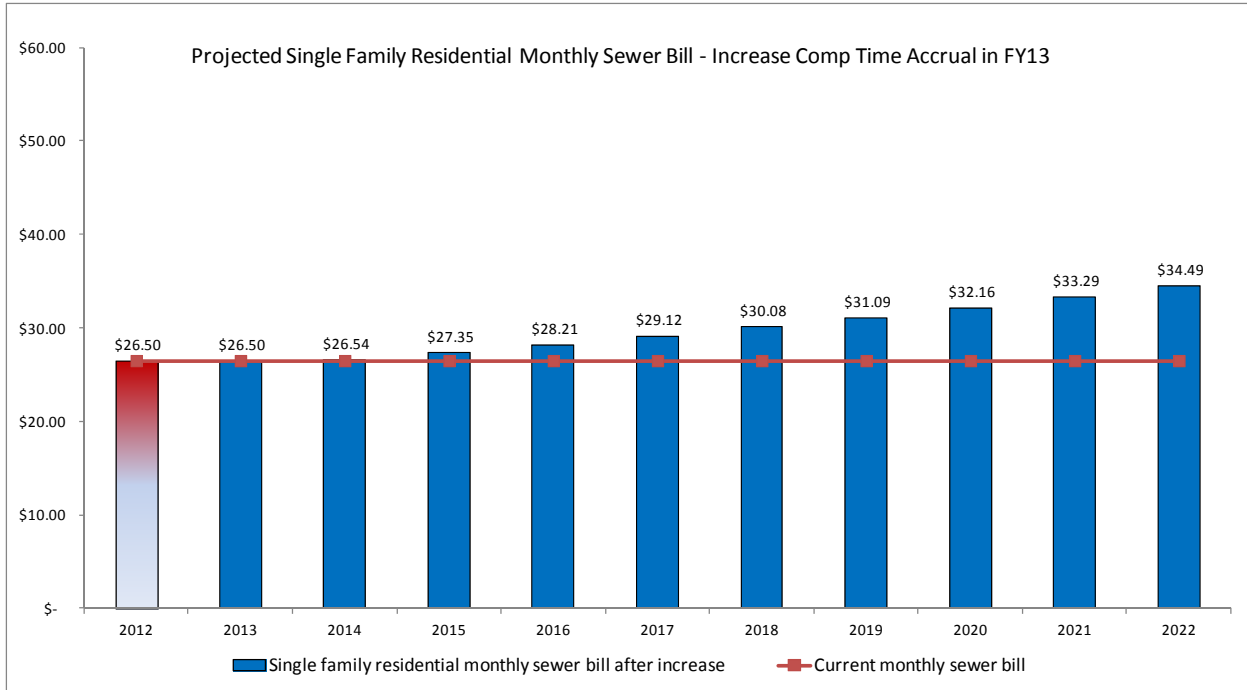


Figure 12 - Forecasted Wastewater Rate Impact of increasing the comp time accrual in Fiscal 2013



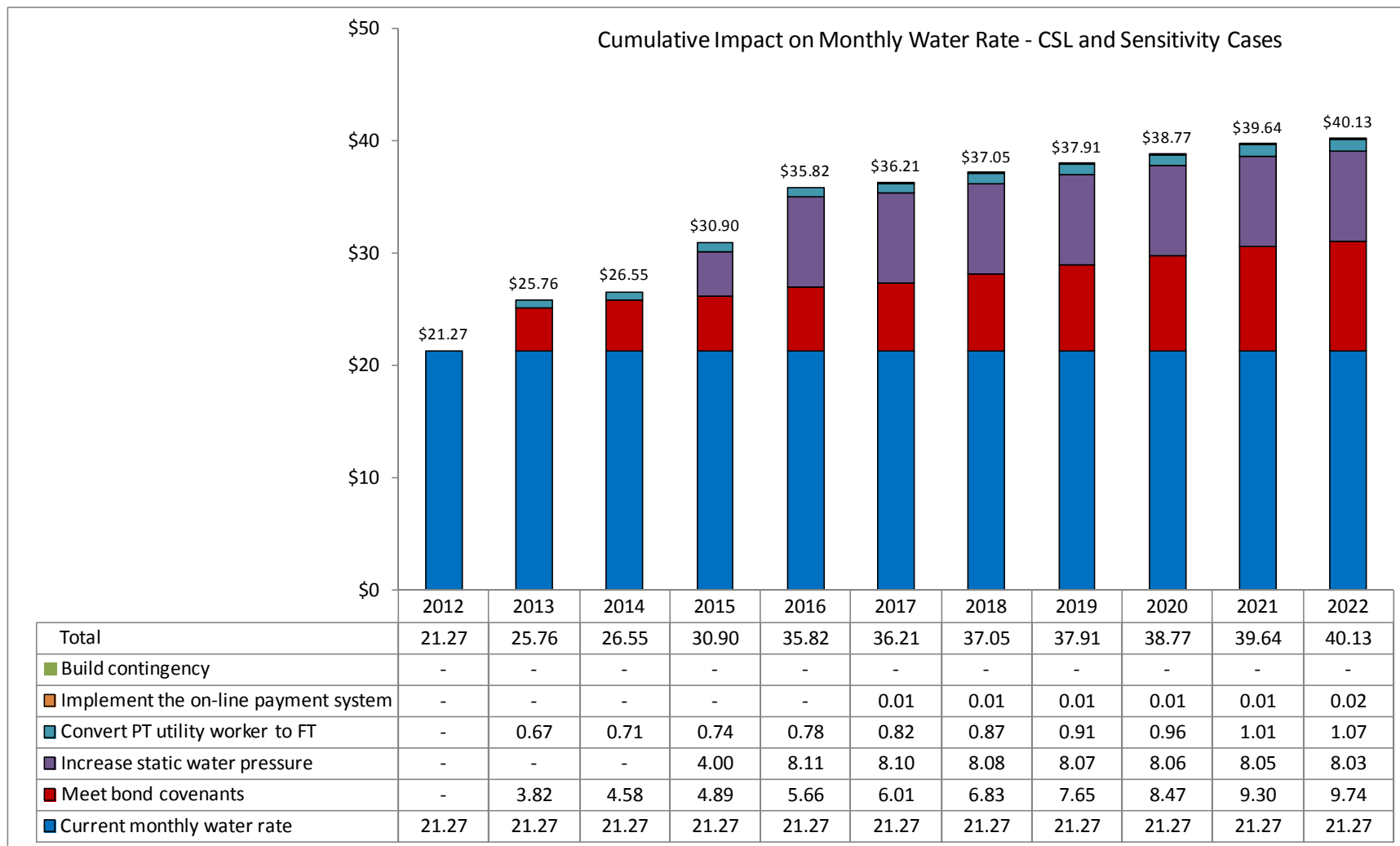
The modeling for this case indicates a \$0.90 per month rate impact for water and only a modest impact on wastewater services relative to the CSL's established for each utility. Furthermore, is it likely that our calculation of the unfunded comp time accrual is conservative, and high relative to the City's methodology for the calculations.

The results of this sensitivity case was presented to the City Council at their February 14th meeting, and was discussed at some length in detail. The final consensus of the Council was that the accruing of 200 hours of overtime/vacation time for the public works staff would be sufficient for the upcoming fiscal year 2012-13. The Council did direct staff to monitor the total compensated time payout levels, and if it appears that 200 hours is not enough to meet the City's needs, staff should petition the Council to revisit the issue.

Council Preferred Rate Option - CSL, and Sensitivity Cases

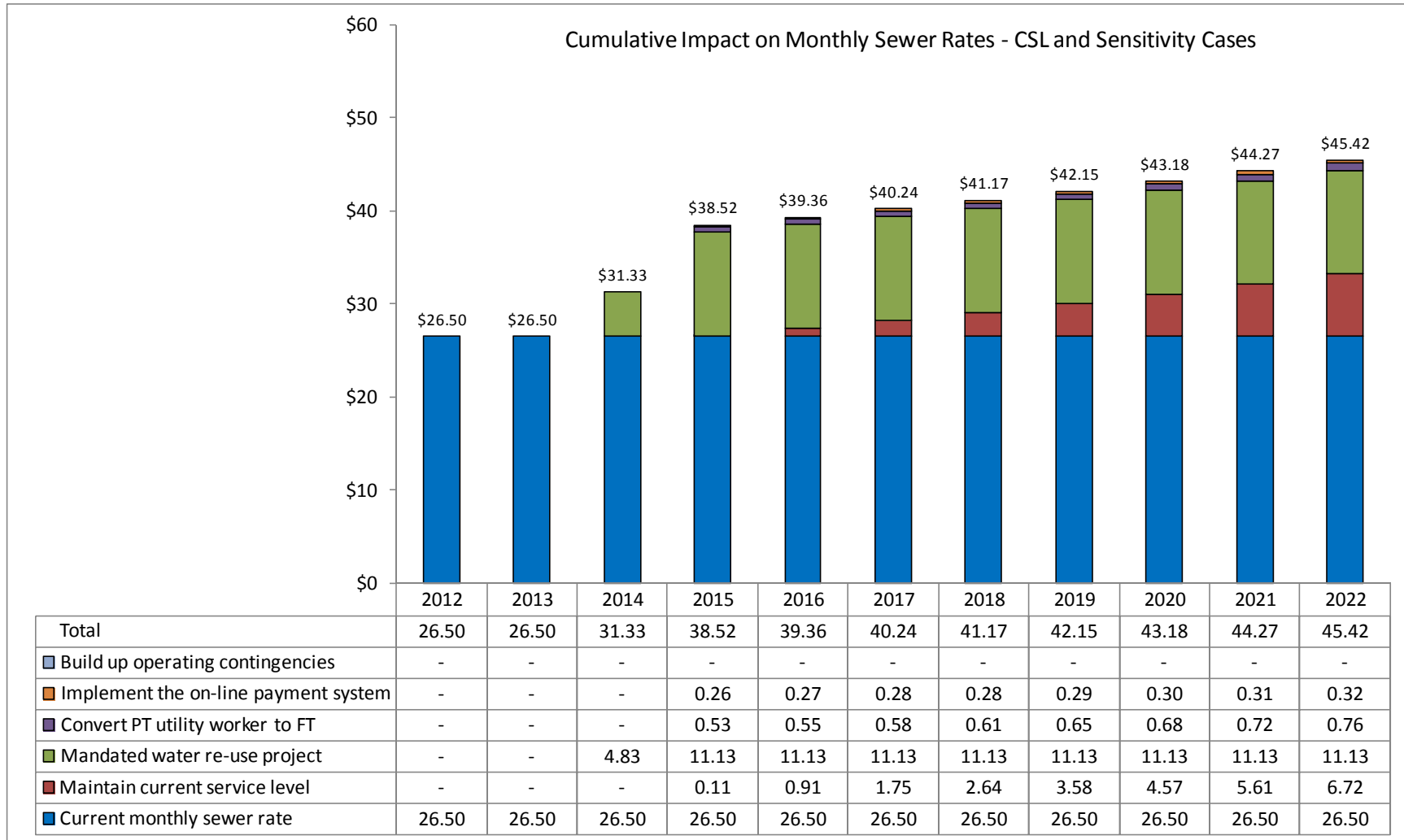
With the benefit of City Council input, the project team took an incremental approach for this study, taking each of the sensitivity cases into account for rate impacts. From there, the project team worked with City staff to calculate the full cost of water and wastewater services for each enhanced service level. These cost pools were then be used to calculate the full water and wastewater rates that should be charged to recover the total cost of delivering services. To show this graphically, we have tallied the results of the CSL and the sensitivity cases approved by Council consensus that were modeled, and graphed the incremental impacts of each case on monthly water and wastewater rates for an average single family residential customer. The results are shown below in Figure 13 (water) and Figure 14 (wastewater).

Figure 13 - Cumulative Impacts on Monthly Water Rates



The data in Figure 13 shows the rate impact of bringing the water utility into compliance with the rate covenant would require a \$3.82 per month rate increase in fiscal 2013 for an average single family residential customer. In addition, the rate impact of converting the current public works part time position to full time is \$0.67 per month. That translates into a cumulative monthly rate increase of \$4.49 in fiscal 2013 without any other program additions.

Figure 14 - Cumulative Impact on Monthly Wastewater Rates



The data in Figure 14 shows the rate impact of bonding \$2 million for the proposed water reuse project in fiscal 2014 and 2015 would add \$11.13 to the average monthly wastewater bill for a single family residential customer by the end of 2015. With this large rate impact looming over the horizon, the Council has, by consensus of opinion, determined that a \$1 per month rate increase is warranted to start saving for the eventual cost of the water reuse project. .

Conclusions and Recommendations

The last time the City raised water and wastewater rates was October, 2006. Since that time, due to the combination of increases in operations and maintenance costs, principally associated with debt service on the Series 2003 Water Refunding Bonds, and the 2006 Clean Water State Revolving loan; in concert with ever increasing employer contributions to employee retirement and health care benefit accounts, the City has drawn down reserves to a point where rate adjustments are necessary.

Water Rate Recommendations

For the water system, modeling indicates a significant increase in water rates is required under the CSL case. The principal reason for the increase is that the City appears not to be meeting the rate covenant for the Series 2003 Water Refunding Bonds. In addition to failing to be in compliance with the rate covenant, the City is not fully funding the debt service reserve account established for these bonds. As of June 30, 2011, the City had \$38,075 deposited in the debt service reserve account. The debt service reserve account requirement as of that date should have been \$104,540. These matters were discussed in detail with the City Council at their regularly scheduled business meetings on February 14, 2012, and on March 13, 2012. Consensus was reached that water rates would have to be adjusted to bring the City into compliance with the contractual requirements associated with the issuance of the Series 2003 Water Refunding Bonds. The monthly rate impact to get the City into compliance with the bond covenants on the average single family residential customer is \$3.82.

Concerning the public works department staffing issue. At the Council's March 13, 2012 meeting, staff presented an alternative to the hiring of an entirely new Utility Worker I position. Currently, the public works department has a half time position funded. Total compensation for this position is budgeted at \$26,000. Staff proposed to the Council that this position be upgraded to a full time position at an incremental annual cost of \$33,132; resulting in a full time equivalent cost of \$59,632. By upgrading the current fully funded part time position to full time status, the City would only be required to find funding for the \$33,132 incremental cost; not the \$55,189 for an entirely new Utility Worker I position. The results of this new analysis were run through the water and wastewater rate models, and the results indicated the monthly impact on water rates would be \$0.67 per month to the average single family residential customer (vs. \$1.12 per month for the hiring of a new FTE). The monthly rate impact on wastewater rates was, as in the prior case, negligible. The results of this new sensitivity analysis were presented to the Council along with the maintenance work backlog analysis. After detailed discussion, the Council consensus was that staff's alternative recommendation to elevate the current part time position to full time status was the most cost effect way to bring more labor resources to bear on the matter of infrastructure maintenance backlog.

Wastewater Rate Recommendations

In the case of the wastewater CSL, the City appears to be in good financial shape, and our modeling indicates no wastewater rate adjustments would be required until fiscal 2015; keeping in mind, the CSL assumes there is no capital improvement spending over the entire forecast horizon. Unfortunately, the City is facing a regulatory mandate that will require significant investment in new wastewater infrastructure to achieve compliance with this regulatory mandate. The City has been notified by the DEQ that the new discharge permit will limit future summer discharges to mill creek based upon a temperature limitation of 1.0 million k-calories per day as a weekly average. This limitation will in essence preclude the City from discharging treated wastewater effluent to Mill Creek during the summer period of May 1 – October 31.

The project team prepared a wastewater rate sensitivity case assuming a total project cost of \$2 million, that will be funded from the proceeds of a new revenue bond issuance in fiscal 2014 and 2015. This sensitivity analysis assumed the City would fund the project with a 20 year loan drawn from the Clean Water State Revolving Loan Fund administered by the Oregon DEQ. The rate impact of bonding \$2 million for the proposed water reuse project in fiscal 2014 and 2015 would add \$11.13 to the average monthly wastewater bill for a single family residential customer by the end of 2015. With this large rate impact looming over the horizon, the Council has, by consensus of opinion, determined that a \$1 per month rate increase is warranted now to start saving for the eventual cost of the water reuse project. The Council also concurred that the revenues recovered from this \$1 per month rate increase should be directed to a reserve account for the project. Staff indicated that could be accomplished through the City’s budget preparations for the upcoming fiscal year 2012-13.

Summary of Rate Recommendations

Itemized below in Table 3 is a summary of our recommended water and wastewater rate increases. We suggest the Council adopt these rate increases in time for implementation on July 1, 2012 (i.e., the start of fiscal 2012-13). We further suggest the water rate increases be applied to the monthly base charges for all water customer classes in insure predictable revenue recovery.

Table 3 - Recommended Rate Adjustments for Water and Wastewater Services in Hubbard

Option, Choice, Mandate	Water	Wastewater	Total
Mandate – Compliance with water revenue bond covenants	\$3.82		\$3.82
Option/choice – water share of 1 FTE utility worker I (move the current part time position to full time status)	\$0.67		\$0.67
Future mandate - \$2 million wastewater beneficial reuse project (projected to be build by the end of fiscal 2016)		\$1.00	\$1.00
Total	\$4.49	\$1.00	\$5.49

The financial models that were developed for this project consist of two linked Microsoft Excel workbook files. There is one workbook for the water system, and one for the wastewater system. The culinary water model consists eight (8) of interlocking spreadsheets that simulate the financial linkages the City uses to manage the water enterprise funds. The wastewater model also consists of eight (8) interlocking spreadsheet files, and also simulates the City’s financial management practices for the wastewater system. These models also have the capability to “interact” with each other, by allowing transfers of cash between the two utilities. Both models developed for this project are deliverables and will be provided to the City upon completion of services.

Attached to this report in Appendix A and B, are draft rate resolutions for City Council consideration.

Appendix A – Draft Water Rate Resolution No. 522-2012

RESOLUTION NO. 522-2012

A RESOLUTION AMENDING NEW WATER RATES FOR THE CITY OF HUBBARD AND REPEALING RESOLUTION NO. 430-2006.

WHEREAS, Section 13.15.170 of the Hubbard Municipal Code provides for water rates and charges be established by resolution of the City Council; and

WHEREAS, it is necessary from time to time to amend water rates and charges to ensure that as an enterprise fund, the water fund is a self-supporting activity; and

WHEREAS, water rates and charges shall comply with the rate covenant provision set forth in Section 9 of Resolution No. 355-2003, **NOW, THEREFORE**,

THE CITY COUNCIL OF THE CITY OF HUBBARD RESOLVES AS FOLLOWS:

Section 1: The City of Hubbard does adopt a new water rate schedule as set forth in Exhibit “A” attached hereto and by this reference incorporated herein and entitled City of Hubbard Water Rates & Charges.

Section 2: Resolution No. 430-2006 is hereby repealed.

Section 3: This resolution shall be effective July 1, 2012.

ADOPTED BY THE CITY COUNCIL this 10th day of April 2012.

APPROVED:

Tom McCain, Mayor

ATTEST:

Vickie Nogle, MMC
Director of Admin / City Recorder

APPROVED AS TO FORM:

Robert L. Engle, City Attorney

Exhibit "A"

City of Hubbard Water Rates & Charges

Effective July 1, 2012

A) Rates for water meters with a diameter of 2" or less:

Meter Size	Bimonthly Base Rate*	Volume 1 (Gallons)	Rate/1,000 (After 6,000)	Volume 2 (Gallons)	Rate/1,000 (After Vol. 2)
5/8"	\$38.98	6,000	\$2.10	25,000	\$3.00
1"	\$97.45	6,000	\$2.10	100,000	\$3.00
1 1/2"	\$194.90	6,000	\$2.10	225,000	\$3.00
2"	\$311.84	6,000	\$2.10	375,000	\$3.00

B) Rates for services requiring water meters larger than 2" to be negotiated.

C) Multiple residential accounts with a common water meter: \$38.98 bimonthly rate times the number of residential units for the first 6,000 gallons times the number of residential units. For each 1,000 gallons thereafter, to and including 25,000 gallons times the number of residential units, \$2.10. For each 1,000 gallons thereafter, \$3.00.

D) Hydrant sales: \$60.57 connection fee plus \$3.00 per 1,000 gallons. All hydrant sales must be approved by the Public Works Superintendent.

E) Derivation of new bimonthly base rate for Resolution No. 522-2012

Meter Size	AWWA Flow Factor (GPM) *	Flow Factor Equivalence	Bimonthly Base Rate		
			Current Rate (Res. No. 430-2006)	Rate increase per Equivalent Residential Meter	Proposed Rate (Res. No. 522-2012)
5/8"	10	1.00	\$ 30.00	\$ 8.98	\$ 38.98
1"	25	2.50	\$ 75.00		\$ 97.45
1 & 1/2"	50	5.00	\$ 150.00		\$ 194.90
2"	80	8.00	\$ 240.00		\$ 311.84

* Per American Water Works Association standards effective January 1, 2003 for cold water meters-displacement type, bronze main case. ANSI approval October 11, 2002. American Water Works Association ANSI/AWWA C700-02 (Revision of ANSI/AWWA C700-95).

Appendix B – Draft Wastewater Rate Resolution No. 523-2012

RESOLUTION NO. 523-2012

A RESOLUTION AMENDING NEW SEWER RATES FOR THE CITY OF HUBBARD AND REPEALING RESOLUTION NO. 429-2006.

WHEREAS, Section 13.20.030 of the Hubbard Municipal Code provides for sewer rates and charges be established by resolution of the City Council; and

WHEREAS, it is necessary from time to time to amend sewer rates and charges to ensure that as an enterprise fund, the sewer fund is a self-supporting activity, **NOW, THEREFORE**,

THE CITY COUNCIL OF THE CITY OF HUBBARD RESOLVES AS FOLLOWS:

Section 1: The City of Hubbard does adopt a new sewer rate schedule as set forth in Exhibit “A” attached hereto and by this reference incorporated herein and entitled City of Hubbard Sewer Rates & Charges.

Section 2: Resolution No. 429-2006 is hereby repealed.

Section 3: This resolution shall be effective July 1, 2012.

ADOPTED BY THE CITY COUNCIL this 10th day of April 2012.

APPROVED:

Tom McCain, Mayor

ATTEST:

Vickie Nogle, MMC
Director of Admin / City Recorder

APPROVED AS TO FORM:

Robert L. Engle, City Attorney

Exhibit "A"

City of Hubbard Sewer Rates & Charges

Effective July 1, 2012

1. Residential:
 - A. Single Family \$27.50 per month
 - B. Multiple Family \$27.50 per month per dwelling unit
 - C. Mobile Home Park \$27.50 per month per dwelling unit

2. Non-residential:
 - A. Low (BOD* < 400) \$3.3125 per 1,000 gallons of water use
With monthly minimum of \$27.50

Ex: Automotive Dealer w/o Repair On Site
Beauty Shop
Church
Clinic
Gasoline Service Station
Grocery Store or Mini-Mart w/o Food Preparation
Nursery
Office
Retail, General Merchandise
Warehouse
 - B. Medium (BOD* 401 < 800) \$3.975 per 1,000 gallons of water use
with monthly minimum of \$32.80

Ex: Car Wash
Grocery Store or Mini-Mart w/ Food Preparation w/ Grease Trap
Restaurant w/ Grease Trap
 - C. High (BOD* > 800) \$4.6375 per 1,000 gallons of water use
with monthly minimum of \$38.10

Ex: Automotive Repair
Automobile Dealer w/ Repair On Site
Bakery (stand-alone or part of grocery store or mini-mart)
Grocery Store or Mini-Mart w/ Food Preparation w/o Grease Trap
Machine Shop
Malt Beverage Processing
Manufacturing
Meat Market/Processor
Metal Fabrication
Restaurant w/o Grease Trap
Tavern

*BOD (Biochemical oxygen demand) is the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five days at 20 degrees Celsius expressed in milligrams per liter.