

Water Storage Facility - Potential Rate Impacts

2010-11 Water Rate Cycle:

The proposed water rate to be charged by the City to its customers for the upcoming 2010-11 cycle is anticipated to be **\$4.65** per unit (Water and Sewer Technical Review Committee has not yet set a rate to recommend to City Council). A typical water customer that uses 12-units of water per bill would pay approximately **\$59.27** every 2-months over the 2010-11 cycle.

2010-11 Water Rate:	\$ 4.65	per unit
x Average Units / Bill	12	
= Commodity Charge Component	\$ 55.80	
+ Customer Charge Component	\$ 3.47	
= Total Water Bill	\$ 59.27	2010-11 Cycle

The rate per unit is anticipated to provide adequate revenue flows to accomplish the following:

1. Enable the Water Division to breakeven (Operating Revenues – Operating Expenses)
2. Enable the Water Division to achieve compliance with the established target operating cash balance policy (5-year plan by contributing an annual amount towards the shortfall).
3. Pass-on the preliminary 2010-11 Water Rate increase from DWSD.

The Water Storage Facility should have no impacts on 2010-11 water rates.

If the City should proceed with the preliminary engineering phase of the Water Storage project in FY 2010 (estimated at \$500,000), those costs can be funded from the Water & Sewer Capital Fund with no impact on rates.

If the City should proceed with the construction phase of the project (estimated at \$11,050,000) we don't anticipate any construction until the spring of 2011. If this should be the timing of the construction phase, the Water & Sewer Capital Fund could contribute its share of the project initially (spring 2011), with funding to be transferred-in from one or more other predetermined sources anytime after July 1, which is the start of the next 2011-12 water rate cycle.

2011-12 Water Rate Cycle:

If the City should proceed with the construction phase of this project in the spring of 2011, and it is determined that funds should be borrowed from other predetermined sources on or after July 1, 2011, the 2011-12 Water Rate would need to be increased to provide for loan payments.

The exact amount of the loans and repayment schedules has yet to be determined, however using an interfund loan amount of \$5,000,000, an average interest rate of 2%, and a payback period of 10-years, the first year loan payment would amount to about \$600,000. Spreading this loan repayment amount by the 3,400,000 units sold to be projected to be sold, rates would increase by **\$0.18** per unit.

Principal Amount	\$ 5,000,000
# of Years	10
Principal / Year	\$ 500,000
Interest Rate	2.00%
Interest Year #1	\$ 100,000
Loan Service Year #1	\$ 600,000
Units Sold / Year	3,400,000
Loan Service / Unit	\$ 0.18

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Holding all other water rate determining factors equal, if the above interfund loan scenario moves forward in the 2011-12 cycle, water rates would increase to **\$4.83** a 3.9% increase from 2010-11. A typical water customer that uses 12-units of water per bill would pay approximately **\$61.43** every 2-months over the 2011-12 cycle.

2010-11 Water Rate:	\$ 4.65	per unit
+ 2011-12 Loan Service:	\$ 0.18	per unit
= 2011-12 Water Rate	\$ 4.83	per unit
x Average Units / Bill	12	
= Commodity Charge Component	\$ 57.96	
+ Customer Charge Component	\$ 3.47	
= Total Water Bill	\$ 61.43	2011-12 Cycle

2012-2013 Water Rate Cycle:

If the City should proceed with the construction phase of this project in FY 2011, it is possible that the Water Storage facility(ies) would be operational beginning with the 2012-13 rate cycle, and we are assuming that DWSD rates, received from Raphael Chirolla at DWSD become effective when the Water Storage facilities become online reflecting the City as a Max-day customer.

Utilizing the figures provided in April 2010 by Raphael Chirolla from DWSD the effective rate charged by DWSD to the City (including fixed and variable rate components) would decrease by approximately **(\$1.06)** per unit. Estimated annual operational cost increases (maintenance & utilities) would be \$70,000 per year resulting in a rate increase of **\$0.03** per unit. Annual depreciation costs (over 50-years) will also increase by \$231,000 per year for the new water storage facility would result in a rate increase of **\$0.07**. The **resulting net impact** is estimated to *decrease* water rates by **(\$0.96)** per unit.

If this savings were passed directly on to water customers through the rate, (again holding all potential rate determining factors equal) water rates could decrease to **\$3.87** per unit a 20% decrease from estimated 2011-12 rates. A typical water customer that uses 12-units of water per bill would pay approximately **\$49.91** every 2-months over the 2012-13 cycle.

2010-11 Water Rate:	\$ 4.65	per unit
+ 2011-12 Loan Service:	\$ 0.18	per unit
+ 2012-13 Net Rate Reduction	\$ (0.96)	per unit
= 2011-12 Water Rate	\$ 3.87	per unit
x Average Units / Bill	12	
= Commodity Charge Component	\$ 46.44	
+ Customer Charge Component	\$ 3.47	
= Total Water Bill	\$ 49.91	2012-13 Cycle

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Water & Sewer Capital Fund

The following three retained earnings forecasts represent the Water & Sewer Capital Fund under three different scenarios

This first forecast does not include the Water Storage project. As the retained earnings forecast shows retained earnings of the Water and Sewer Capital Fund grows with the addition of depreciation in each of the years going forward.

Year	W&S Capital Fund Balance - No Water Storage	
2009	\$ 9,900,000	actual
2010	\$ 13,000,000	estimated
2011	\$ 13,000,000	estimated
2012	\$ 16,600,000	estimated
2013	\$ 20,800,000	estimated

The following retained earnings forecast for the Water & Sewer Capital Fund includes preliminary engineering costs of \$500k (2010) and ½ of the construction costs of \$6M for the Water Storage project (2011)

Year	W&S Capital Fund Balance - P/E & 50% Construction	
2009	\$ 9,900,000	actual
2010	\$ 12,500,000	estimated
2011	\$ 6,500,000	estimated
2012	\$ 10,000,000	estimated
2013	\$ 14,100,000	estimated

This forecast indicates that Water and Sewer Capital Fund can fund ½ the project and not drop to danger low levels.

The following retained earnings forecast for the Water & Sewer Capital Fund includes preliminary engineering costs of \$500k (2010) and 100% of the construction costs of \$10.5M for the Water Storage project (2011)

Year	W&S Capital Fund Balance - P/E & 100% Construction	
2009	\$ 9,900,000	actual
2010	\$ 12,500,000	estimated
2011	\$ 2,000,000	estimated
2012	\$ 5,400,000	estimated
2013	\$ 9,500,000	estimated

This final scenario demonstrates that there may be the potential for the Water & Sewer Capital Fund to finance the entire Water Storage project, however retained earnings levels of the fund would be anticipated to be greatly reduced and could take a number of years to build back up.

The benefit of having the Water & Sewer Capital Fund finance the entire project is to eliminate the need for interfund loans and the resulting interfund loan repayments. If there are no interfund loans to re-pay, there is not a need to roll this expense into the water rate structure, which would result in a lower per unit water rate.

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The City could also elect to not pass on the full amount of the rate reduction in order to rebuild the Water & Sewer Capital Fund. This approach is similar to the Water Division making loan payment to another fund – except in this scenario the Water Division would be paying the loan service (free of interest charges) to itself in order to speed up its fund balance replenishment.

This approach could be a benefit to water customers in that if loan repayments were not needed during the 2011-12 cycle, there would not be a need to roll those costs into the 2011-12 water rates. Potential retained earnings replenishment plans for the Water & Sewer Capital Fund could take effect in line with when potential DWSD rate decreases take effect as part of the 2012-13 cycle.