CITY OF BEVERLY HILLS
STAFF REPORT

Meeting Date: May 4, 2010

To: Honorable Mayor & City Council

From: Shana Epstein, Environmental Utilities Manager

Subject: Water Utility Operations and Revenue Requirements

Attachments: 1. Raftelis Financial Consultants, Inc. Water Rate Study

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INTRODUCTION

The Water Utility Enterprise Fund provides high quality and reliable water service to the City of Beverly Hills and a portion of West Hollywood. The history of Beverly Hills water precedes the creation of the City and continues to serve as one of its foundations. The City purchases 90% of its water from Metropolitan Water District (MWD) and locally produces the remaining supply for the community. The City staff annually operates four groundwater wells, operates a reverse osmosis treatment plant, rotates 1,000 valves, flushes 50 dead-end mains, performs leak detection on 50 miles of pipe and takes 4,376 water quality samples. These tasks are just some of the day to day functions of a water utility not to forget the intensive capital reinvestment required to ensure water quality and reliability. The Water Utility is self sufficient from the General Fund and their revenue stream is determined through rates for service. The purpose of this memorandum is to explain the Water Utility Services and obligations and how that assumes revenue requirements that include rate increases.

DISCUSSION

In order to operate, maintain and continue capital improvements, City staff with assistance from Raftelis Financial Consultants, Inc. (RFC) recommends that the overall revenue for the City's Water Enterprise Fund increase by 15% and 15% for the respective fiscal years 10/11 and 11/12. Even with this recommendation for the next two years, the Water Utility will be drawing from reserves to meet the revenue requirements to cover all costs – operations and maintenance, water purchases, debt service, and operation funded capital projects. The implication of this recommendation is that the City will not maintain a reserve balance of 50% of annual revenues until future years. In the second year of this rate increase reserves will be just under 25% of annual revenues. All customers were mailed a letter explaining the rates and the new rate tables on April 13, 2010.

	Recommend Operating Revenue	Revenue Requirement
FY 10/11	$29,159,532	$35,921,747
FY 11/12	$33,260,232	$37,362,358

In 2004, the City of Beverly Hills initiated a study to create a conservation rate structure that introduced a fourth tier and minimized the rate increases for the first tier of usage. The meter charge, which is a non volumetric charge, accounts for 10% of the Water Enterprise Fund revenue stream. The rest of the revenue is collected through the volumetric charges, which depends upon customers consuming to meet a number of fixed costs.

Given historic usage, RFC predicts 52% of the customers will experience a rate increase of less than 15%. Customer impacts for various customer classes are depicted in the table below for FY 10/11:

	Bi-Monthly Bill			
	Average Usage (hcf)	Total Current Bill	Total Proposed Bill	$ Increase
Residential 1" meter (Inside-City)	70	$ 261.80	$ 302.83	$ 41.03
Residential 2" meter (Inside-City)	150	$ 789.18	$ 948.61	$ 159.43
Multi-Family 1" meter (Inside-City) 13.3 hcf/unit	13.3	$ 73.53	$ 83.47	$ 9.94
Non-Residential 1" meter (Inside-City)	40	$ 191.85	$ 218.18	$26.33
Non-Residential 2" meter (Inside-City)	500	$ 2,117.83	$ 2,423.96	$306.13

For context the following comparison for the cost of water consumption is provided. Even with this rate increase proposal the City will still be providing water for less than one cent ($0.01) per gallon.

Type of Water	Amount of Water	Cost of Water	
16oz bottles in 40-pack packaging	5 gallons	29.50	
Delivered bottle water	5 gallons	7.50	
Bottle water at the store	5 gallons	4.88	
City's tap water	5 gallons	0.026	Current rate
City's tap water	5 gallons	0.030	Proposed FY 10/11 rate
City's tap water	5 gallons	0.034	Proposed FY 11/12 rate

Previous Rate Increase

For FY 08/09 and FY 09/10, the City of Beverly Hills increased the water utility's overall revenue by 8% and 8%. These increases in revenue paid for debt costs for Coldwater Cañon Reservoir and the purchase of the Water Treatment Plant. The City did not anticipate that MWD would increase rates off schedule and by a percentage of 21% in September of 2009. Typically, MWD increases rates on the first of January. MWD increased rates three months early to gain extra revenue and increased rates by greater

proportions in the past to account for the estimation of lost sales due to the natural and regulatory drought. In previous years MWD budgeted water sales at 2.2 million acre feet; MWD reduced this projection to 1.9 million acre feet. (One acre foot equals 326,000 gallons.) This increase compounded with releasing debt for the replacement of the steel reservoir tanks has required the City to use more reserves to meet revenue requirements than was anticipated when the last rate study was completed.

Key Assumptions

The City takes into account many factors when establishing revenue requirements for enterprise funds, which include covering costs and obligations as well as changing consumer behavior with regards to conservation. Below are some of the larger components:

- *Operations and Maintenance* – Operating revenues, which typically means revenues collected for service provided, are expected to cover operating expenses on a one-to-one ratio. These expenses for the water utility include human resources, power, materials, water purchases, equipment, chemicals, contract services and other miscellaneous costs. These assumptions include personnel costs escalating at 2% and 3% respectively for FY 10/11 and FY 11/12.
- *AAA Bond Rating* – Solid bond ratings allow the City to borrow money at the lowest interest rate. One of the components of receiving AAA Bond Rating is the willingness to increase rates by an elected board to cover costs as they escalate and not to deplete other resources so the borrower is at risk not to pay back the debt service. When bonds are issued the City agrees to certain covenants.
    - The significant bond covenant that affects rates is that the City must have annual net revenues, which is gross revenue minus annual operations and maintenance costs (net of non-cash expenses) including parity debt service at least equal to 125% of those operating costs. Another way of stating this is the City needs to collect revenue that is 125% greater than the utility's operating costs.
- *Reserves:* As a policy in the adopted budget, the City's goal is to maintain 50% of annual revenues by specific enterprise funds in reserves. This policy holds the City in good standing in meeting bond requirements as well as being prepared if there is a natural disaster or other emergencies that requires costly capital improvements. That being said this proposed rate increase does not achieve this goal until the fifth year of the rate study which assumes rate increases for the next five years respectively out to FY 14/15 - 15%, 15%, 10%, 5% and 5%
- *Capital Improvements:* To ensure continued quality service to the community, the City must continue to reinvest in the water utility's infrastructure. If funds are available the utilities try to take advantage of better pricing by tackling large projects like the replacement of the five steel reservoir tanks. Currently, contractors are willing to lower prices to get the few jobs that are being released.
- *Components of Expenses Unique to Water:* Many of the costs for water for the City and its wholesaler are fixed. So MWD's rate increase is attributable to the issues surrounding the natural and regulatory drought. The less water sold the greater each unit of water costs due to fixed costs or purchasing other sources of water.

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Alternative Rate Increases

RFC and staff presented two alternative rate increases to the Public Works Commission. The Commission asked how a 12.5% across the board revenue increase would be implemented in addition to the below alternatives. This alternative increase required a $2.5 Million capital budget decrease for each of the next two fiscal years. The reserves level would be below the recommended 50% level for all five years in the forecast period. The bi-monthly rate change for R-1 customer under this alternative is $34.19 compared to $41.03 in the original recommendation of 15% (see table below). The differential rate impact to customers was not considered substantial enough to change the original staff recommendation.

Since that Public Works Commission Meeting, staff has been asked what would be the impact on the rates if we implemented a 7.5% increase every six months. The impact would be a slightly greater increase in year three due to the lost revenue in the first six months of each fiscal year. The recommended rate increase accounts for a 10% rate adjustment in year three; the six-month phase in alternative projects a 5.5% rate adjustment every six months or a 10.5% adjustment for a full year in year three. Under the six-month option, the reserves level would be lower than the recommended rate increase in the first four years but will be approximately the same in the fifth year.

The table below reflects the alternatives presented to the Public Works Commission:

	Recommended	**Alternative 1**	**Alternative 2**
Revenue Adjustments	15% average	10% average	5% average
Bi-monthly Rate Change for R-1 Customer (1 in, 70HCF)	$41.03	$27.35	$13.68
Reduction in CIP	None	($5mil) in FY 2011 ($5mil) in FY 2012	($5mil) in FY 2011 ($5mil) in FY 2012
Debt Coverage	Meet 125% over forecast period	Meet 125% over forecast period	Barely meet 125% over forecast period
Reserve Level	Reach 50% level by FY 2015	Reach 50% level by FY 2015	Drop to zero by FY 2015

The capital programs that would be eliminated from the budget in Alternative 1 and 2 are the development of a deep groundwater well in West Hollywood, emergency water connection with LADWP off of Loma Linda, and water main replacements of corrosion and aged pipes. 21% of the City's pipeline are 80 years old or older.

Conservation

On July 1, 2009, the City declared Emergency Water Conservation Stage B, which means mandatory water conservation of 10% from a baseline of average usage from 2004 to 2006. So far, the water customers have responded even though no penalty surcharges have been applied due to the late billing. The first penalty surcharge will be billed to a customer in May. If customers use more water than 90% of their baselines, then they will be charged two times the tier usage of the water consumed over 90%. The water restrictions are also in place and being enforced and violations are being processed. For landscaping water consumption, the City has been divided into two areas. The North side of Santa Monica Boulevard is allowed to water on Monday, Wednesday, and Friday. The South side is allowed to water on Tuesday, Thursday and Saturday. No watering is allowed between 9am and 5pm, and on Sundays. Customers not adhering to the irrigation restrictions are being fined $100 per incident. Customers were given a six month grace period before staff began writing citations.

If customers are looking for more tips to conserve, we encourage them to visit www.bewaterwise.com. At this same website, customers may apply for water efficient device rebates i.e., smart irrigation controllers, washers and toilets.

Other Utilities

In addition to the water utility, the City has two utilities that function independently as enterprise funds - wastewater and storm water. Currently, the wastewater utility enterprise fund has substantial revenues and reserves, so that a rate increase is not recommended for the next two fiscal years. Voter approval is required to implement rate increases for storm water. Currently, the storm water utility enterprise fund is underfunded to meet operational expenses and current capital improvement programs; this utility is not financially prepared to address near term regulatory requirements. For the past three years, the Solid Waste Utility Enterprise Fund has annually been loaning $600,000; the staff will be presenting alternatives to the City Council Liaison Committee in the near future.

FISCAL IMPACT

This recommended increase in rates is expected to generate an additional $3.5 and $4.0 million for FY 10/11 and FY 11/12, respectively, and still utilize $ 6.8 and $4.1 million of reserves, respectively, to meet the revenue requirements that include all the expenditures for the water utility. The revenue requirements are the necessary revenues to cover operations, capital, debt service and reserve costs.

RECOMMENDATION

This item is being submitted for information and discussion. No decision is being requested for consideration until the public hearing and first reading on June 3, 2010.

David Gustavson
Approved By

Attachment 1

Beverly Hills Water Rate Study

Executive Summary

February 24, 2010
Revised March 31, 2010

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February 24, 2010

Shana Epstein
Environmental Utilities Manager
Department of Public Works & Transportation
City of Beverly Hills
Beverly Hills, CA 90210

Subject: Executive Summary for Water Rate Study

Dear Ms. Epstein:

Raftelis Financial Consultants Inc. (RFC) is pleased to present this executive summary report on the water rate study to the City of Beverly Hills (City). This report summarizes the recommendations and findings of the study.

RFC recommends that the City retains the existing rate structure for all customer classes and implements a revenue adjustment of 15 percent each for FY 2011 and FY 2012. The City's reserves are depleted and under the proposed plan will meet target within the five year plan period.

	Revenue Adjustment
FY 2011	15%
FY 2012	15%

All assumptions, including all increases in operating and capital costs, purchased water and groundwater projections, etc. were factored into the rates. The various tables describing the calculation of the rates are included.

We appreciate the assistance you and Mr. Christian Di Renzo provided during the course of the study. If you have any questions, please call me at (626) 583-1894.

Sincerely,

Sudhir Pardiwala, Project Manager

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BACKGROUND

In 2008, Raftelis Financial Consultants, Inc. (RFC) reviewed and updated the rate structure of the City of Beverly Hills (City), which included a four-tiered increasing water rate structure for single family residences and multiple family residences and a uniform rate structure for non-residential customers. In fiscal year (FY) 2009-10, the City's water enterprise is facing challenges from increasing operating and capital costs. The Metropolitan Water District of Southern California (MWD) has increased its wholesale rates twice, in January and September of 2009; the later rate increase was significant at 21 percent. The purchased water cost is expected to increase further in future years due to the drought and water shortage. In addition, the City is replacing five steel reservoirs at a cost of about $9 million and incurring significant expenses for replacement of water mains and hydrants. To address these challenges and ensure the financial stability of the water enterprise, the City engaged RFC to update its financial planning model (Rate Model) and water rates.

The objective of the rate study was to develop a five-year financial plan that would allow the City to meet its financial objectives, primarily the funding of the increasing water operating and capital costs and ensuring long-term financial stability. Additionally, the rates should promote conservation. In keeping with its practice, the City will implement rates for two years.

PROCESS

RFC utilized an approach that is consistent with industry standards for conducting a water rate study. The process includes the following steps:

1. Calculation of revenues under existing rates;
2. Identification of revenue requirements)
    a. O&M expenses
    b. Capital expenses and capital financing
3. Cash flow analysis that compares the revenue under existing rates with the revenue requirements to determine the necessary revenue adjustments;
4. Cost of service analysis to allocate costs appropriately to customer classes; and
5. Rate structure design and rate calculation to promote conservation.

Based on the City's objective, RFC has developed a financial plan and performed a water rate study that accomplishes the following goals:

- Ensures revenue sufficiency to meet operating and capital expenses;
- Equitably allocates the costs to provide service to the City's customers; and
- Determines water rates that conform to cost of service principles and promote conservation.

DATA AND ASSUMPTIONS SUMMARY

In order to conduct the rate study, RFC compiled current and historical data from the City. This data included number of accounts, billable water usage, MWD's water supply allocation and rates, operating budgets, and capital improvement projects. The current budgeted data was the starting point for the financial plan. Historical data was used to help determine appropriate escalation factors. The following table shows the key assumptions RFC has used in this rate study.

Table 1 – Escalation Factors and Assumptions

	Projected FY 2011	Projected FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015
Inflation					
General O&M	4.00%	4.00%	4.00%	4.00%	4.00%
Personnel	2.00%	3.00%	3.00%	3.00%	3.00%
Supplies & Contract Services	0.00%	3.50%	3.50%	3.50%	3.50%
Internal Service Funds	2.00%	2.00%	2.00%	2.00%	2.00%
Capital	4.00%	4.00%	4.00%	4.00%	4.00%
Misc. Revenue	4.00%	4.00%	4.00%	4.00%	4.00%
CPI	0.94%	1.00%	3.00%	3.00%	3.00%
Financing Assumptions					
Debt Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%
Debt Term	30	30	30	30	30
Issuance Cost	2.50%	2.50%	2.50%	2.50%	2.50%
Month of Issue	1	1	1	1	1
Cash Flow Assumptions					
Reserve Target	50%	50%	50%	50%	50%
Reserve Interest Rate	2.00%	3.00%	4.00%	4.00%	4.00%
Required Debt Coverage Ratio	125%	125%	125%	125%	125%

RFC used the FY 2010 budgeted expenses to make projections for future years.

During the forecast period, the City is assumed to have no growth in the number of accounts and total water usage. Due to the drought, MWD has mandated a water usage cutback on its agencies. The City's water usage is currently within MWD's allocation and the City is assumed to maintain the same level of water usage during the forecast period. Due to conservation, the usage projected here is about 8.5 percent less than projected in the last rate study. The City's drought ordinance is set up to provide water allocations and penalties for excessive usage and should provide the City adequate revenues in case usage exceeds MWD's allocations. Usage less than the projections shown here could result in a deficit that would need to be mitigated by higher rates or reduced reserves. The account and usage data used for the study is shown in Table 2.

Table 2 – Accounts and Usage Data

2009 Data	Inside City		Outside City	
	# of Accounts	Usage (AF)	# of Accounts	Usage (AF)
Residential - Single	6,101	5,799	812	215
Residential - Multi	1,216	1,735	366	554
Residential - Duplex	227	118	248	92
Commercial/ Industrial	1,033	1,986	450	363
Municipal/Irrigation	204	348	29	45
Total	8,781	9,986	1,905	1,269

The City's projected groundwater production is 1,302 acre-feet annually during the forecast period. Accounting for the groundwater production and the water loss obtained from the City's operating budget, the projected annual water purchases will be around 10,931 acre-feet, which is in line with MWD's projections for the City. Water purchase and production data is shown in Table 3 below.

Table 3 – Water Purchase/Production Projections

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Billable Water Flow	11,254	11,254	11,254	11,254	11,254	11,254	11,254
Plus Water Loss	6%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Total Water Needed (Purchased & Produced)	11,969	12,233	12,233	12,233	12,233	12,233	12,233
Groundwater Production	964	1,302	1,302	1,302	1,302	1,302	1,302
MWD Purchases (acre feet)	11,005	10,931	10,931	10,931	10,931	10,931	10,931
MWD projection		10,908	10,908	10,908	10,908	10,908	10,908

Tables 4 and 5 represent the projected O&M and capital expenses for the City in the next five years. These projections are based on the City's FY 2010 budget and the escalation factors shown in Table 1.

Table 4 – Operation and Maintenance (O&M) Expenses

	Budgeted FY 2010	Projected FY 2011	Projected FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015
Salaries and Benefits	$ 2,590,918	$ 2,642,737	$ 2,722,019	$ 2,803,679	$ 2,887,790	$ 2,974,423
Materials and Supplies	$ 9,928,932	$ 10,688,294	$ 11,353,593	$ 11,706,075	$ 12,270,690	$ 12,974,506
Contractual Services	$ 1,130,100	$ 1,130,100	$ 1,169,654	$ 1,210,592	$ 1,252,962	$ 1,296,816
Internal Services Fund Charges	$ 5,464,414	$ 5,573,702	$ 5,685,176	$ 5,798,880	$ 5,914,857	$ 6,033,154
Other Charges	$ 71,478	$ 74,337	$ 77,311	$ 80,403	$ 83,619	$ 86,964
Other Contractual Services	$ 652,518	$ 678,619	$ 705,764	$ 733,994	$ 763,354	$ 793,888
TOTAL (excluded depreciation)	**$ 19,838,361**	**$ 20,787,789**	**$ 21,713,516**	**$ 22,333,623**	**$ 23,173,272**	**$ 24,159,752**

Table 5 – Capital Improvement Projects (CIP) – Inflated

CIP #	Project Name	Budgeted FY 2010	Projected FY 2011	Projected FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015
***	Project Management	$ -	$ 900,700	$ 936,728	$ 974,197	$ 1,013,165	$ -
195	Street Resurfacing	$ 275,000	$ 286,000	$ 297,440	$ 309,338	$ 321,711	$ 334,580
387	Water Main and Hydrant Replacement	$ 4,537,264	$ 3,848,000	$ 4,110,080	$ 4,274,483	$ 4,445,463	$ 4,623,281
576	Replace Coldwater Canyon Reservoir	$ -	$ -	$ -	$ -	$ -	$ -
602	Irrigation Upgrades	$ 150,000	$ 147,420	$ 153,317	$ 159,449	$ 165,827	$ 172,461
647	General Land Acquisition	$ -	$ -	$ -	$ -	$ -	$ -
669	Water Meter Replacement	$ -	$ -	$ -	$ -	$ -	$ -
795	Water Treatment Plant	$ -	$ 78,000	$ -	$ 224,973	$ -	$ -
796	Reservoir Replacement and Repair	$ 784,504	$ 4,944,912	$ 5,209,751	$ 803,834	$ 250,000	$ 250,000
880	Water Facility Improvements	$ -	$ -	$ -	$ -	$ -	$ 32,112
896	Public Works Asset Management System	$ 26,500	$ 27,560	$ -	$ -	$ -	$ 32,241
916	Wells Rehab and Groundwater Development	$ 1,710,000	$ 1,560,000	$ 108,160	$ 112,486	$ 116,986	$ 121,665
TOTAL CIP		**$ 7,483,268**	**$ 11,792,592**	**$ 10,815,476**	**$ 6,858,761**	**$ 6,313,152**	**$ 5,566,340**

REVENUE ADJUSTMENTS

RFC reviewed the operating and capital expenses and the revenues under the current rates to determine the revenue adjustments over the planning period.

Revenue requirements for the five-year planning period were projected from the City's FY 2010 budget. The projections indicated that the City needs rate adjustments over the next few years. The key reasons for the rate increases are the increasing purchased water cost from MWD and major capital projects, such as replacement of reservoirs, mains and hydrants. The proposed rate adjustments will be effective in July of each year.

The City's current practice is to maintain an operating reserve balance of 50 percent of the total revenues. The City's reserves are depleted because of the capital improvement program. To minimize impacts on customers, we recommend the following revenue adjustments over the five year plan period:

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
15%	15%	10%	5%	5%

Under the proposed plan, the City will meet the debt coverage requirement of 125 percent. Figure 1 shows the revenue adjustments and debt coverage level during the plan period. As shown, the revenues projected to be generated from rates are sufficient to maintain a debt coverage ratio above the 125 percent requirement.

Figure 1 – Revenue Adjustments and Debt Coverage

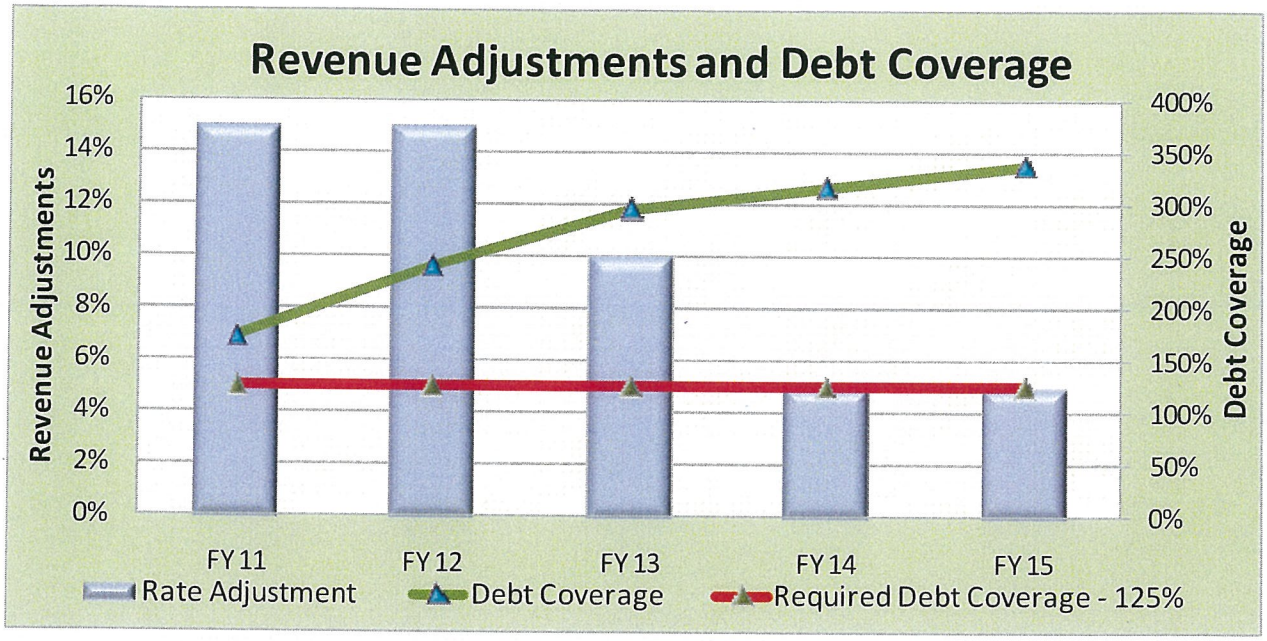
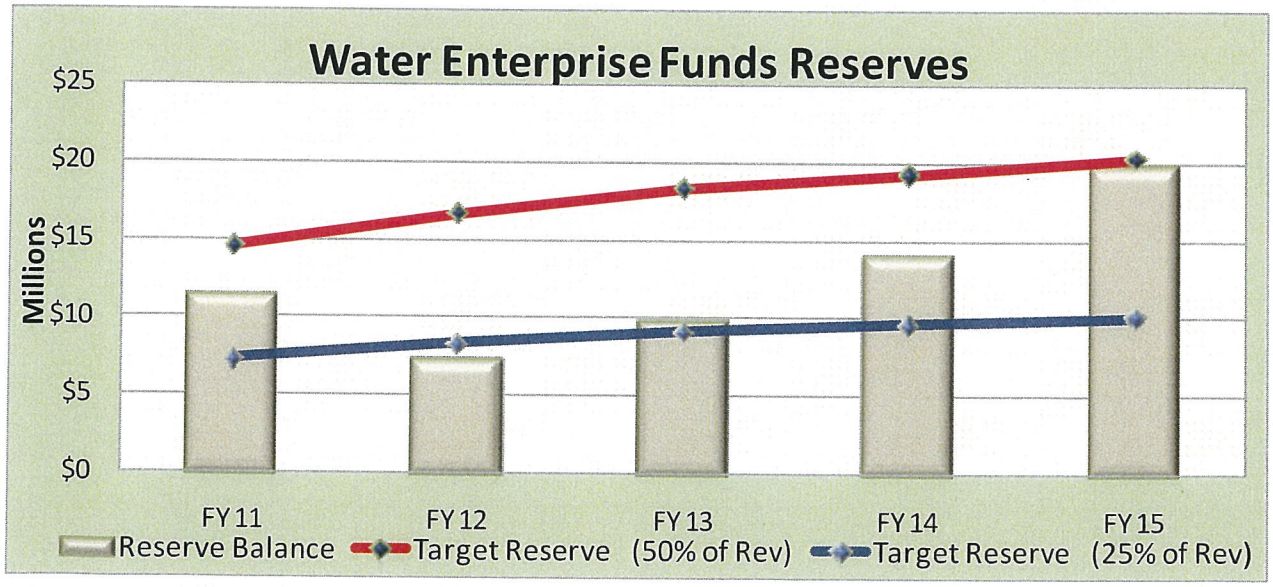


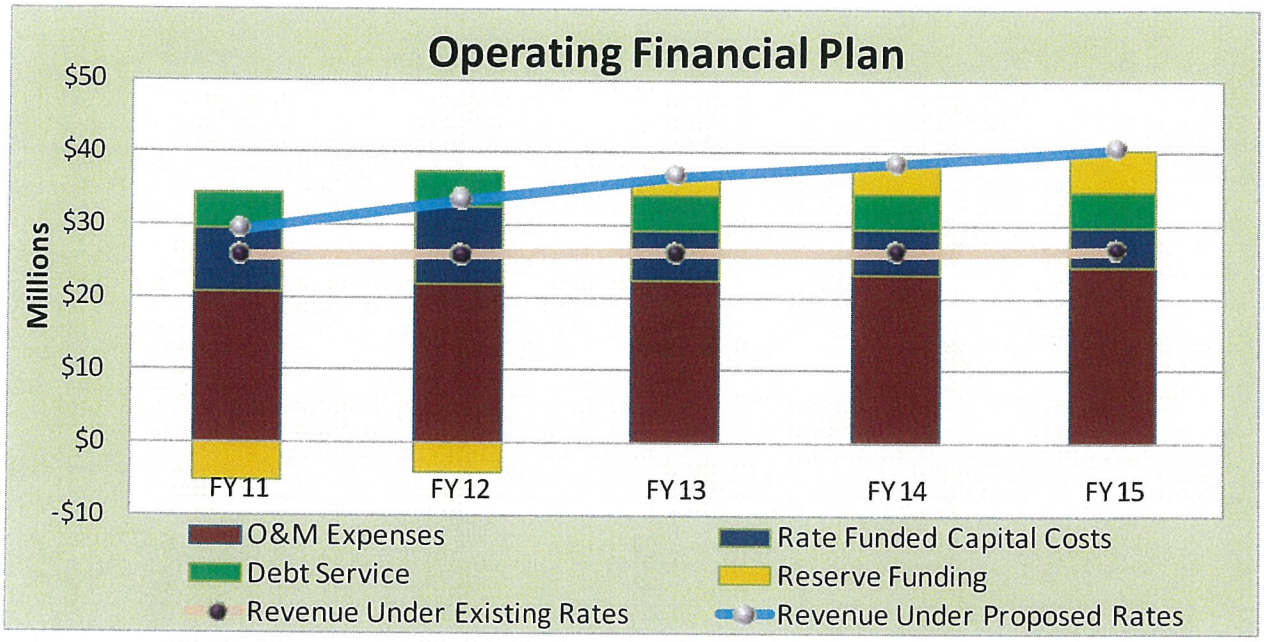
Figure 2 shows the water enterprise reserve balance levels. The reserve is being depleted in the early years to fund capital projects. The City should gradually replenish the reserves so that they meet targets by the end of the plan period. This will be accomplished from revenues generated from proposed rates.

Figure 2 – Water Enterprise Fund Reserves



The total projected revenue requirements for the City, which include projected O&M expenses, debt service, rate funded capital costs, revenues under existing and proposed rates, as well as the replenishment of the reserve fund are shown in Figure 3.

Figure 3 – Water Operating Financial Plan



COST OF SERVICE

The cost of service is developed to recover all revenue requirements needed from the City's users. The cost of service allocations in this study are based on the Base-Extra Capacity method endorsed by the American Water Works Association (AWWA), a nationally recognized industry group. Under the Base-Extra Capacity method, revenue requirements are allocated to different user classes proportionately to their use of the water system. Allocations are based on average day (Base) usage, maximum day (Max Day) usage, maximum hour peak (Max Hour) usage, meter services and billing and collection. For this rate study, RFC used the same peaking factors that were used in the last water rate study for each customer class.

PROPOSED RATES

RFC recommends that the City retains the use of a rate structure that includes both a fixed bi-monthly service charge and a quantity or quality charge.

Service Charge: We suggest that the City continues to utilize a bi-monthly service charge varying with meter sizes. The service charge is composed of a fixed customer charge that is constant for all meters and a meter charge that varies with the capacity of the meter.

Quantity Charge:

Single Family Residences (SFR): RFC recommends retaining the same four-tiered rate structure and tiers for single family residential customers. The **bi-monthly tiers** and usage levels in each tier are:

	Water Usage (ccf)		% of Usage	% of Bills in
	From	To	in the Block	the Block
Tier 1	0	10	14%	3%
Tier 2	11	55	47%	49%
Tier 3	56	120	25%	34%
Tier 4	121	& Higher	14%	14%

Multiple Family Residences (MFR): The rate structure for MFR customers will not change as well. The **bi-monthly tiers** and usage levels in each tier are:

	Water Usage (ccf)		% of Usage	% of Bills in
	From	To	in the Block	the Block
Tier 1	0	4	31%	3%
Tier 2	5	9	33%	33%
Tier 3	10	16	23%	42%
Tier 4	17	& Higher	13%	22%

Non- Residential: RFC recommends continuing a uniform rate for non-residential customers.

Outside-City Customers: RFC projections are based on the City retaining the current outside-City rate differential of 125 percent of inside-city rates.

Fire Service: The fire service charge is recommended to be escalated by Consumer Price Index (CPI).

Table 6 shows the proposed rates for the first two years of the plan period. Table 7 shows the proposed rates for fire service. The proposed FY 2011 rates for fire service are based on a CPI increase of 0.94 percent from November 2008 to November 2009, while the rates for FY 2012 are based on City's CPI projection of one percent. These projections are based on the rates calculated in our prior study.

Table 6 – Proposed Rates for FY 2011 and FY 2012

Bi-Monthly Service Charge

Meter Size	Current FY 2010		Proposed FY 2011		Proposed FY 2012	
	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City
1" or less	$ 28.25	$ 35.31	$ 30.58	$ 38.23	$ 35.17	$ 43.96
1 1/2"	$ 48.51	$ 60.64	$ 52.57	$ 65.71	$ 60.46	$ 75.58
2"	$ 72.83	$ 91.04	$ 78.96	$ 98.70	$ 90.80	$ 113.50
3"	$ 129.58	$ 161.98	$ 140.53	$ 175.66	$ 161.61	$ 202.01
4"	$ 210.65	$ 263.31	$ 228.48	$ 285.60	$ 262.76	$ 328.45
6"	$ 413.32	$ 516.65	$ 448.38	$ 560.48	$ 515.63	$ 644.54

Quantity Charge (in 100 cu ft , ccf)

Single- Family Residential Rates & Duplexes (SFR)

	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City
1 to 10	$ 2.49	$ 3.11	$ 2.76	$ 3.45	$ 3.17	$ 3.96
11 to 55	$ 3.10	$ 3.88	$ 3.58	$ 4.48	$ 4.12	$ 5.15
56 to 120	$ 4.61	$ 5.76	$ 5.57	$ 6.96	$ 6.41	$ 8.01
121 & up	$ 8.41	$ 10.51	$ 10.63	$ 13.29	$ 12.22	$ 15.28

Multi- Family Residential Rates (MFR)

1 to 4	$ 2.49	$ 3.11	$ 2.76	$ 3.45	$ 3.17	$ 3.96
5 to 9	$ 3.10	$ 3.88	$ 3.58	$ 4.48	$ 4.12	$ 5.15
10 to 16	$ 4.61	$ 5.76	$ 5.57	$ 6.96	$ 6.41	$ 8.01
17 & up	$ 8.41	$ 10.51	$ 10.63	$ 13.29	$ 12.22	$ 15.28

Non- Residential Rates

All water used	$ 4.09	$ 5.11	$ 4.69	$ 5.86	$ 5.39	$ 6.74

Table 7 – Proposed Rates for Fire Service

Fire Protection Service Charge

Meter Size	Current FY 2010		Proposed FY 2011		Proposed FY 2012	
	Inside City	Outside City	Inside City	Outside City	Inside City	Outside City
2"	$ 23.47	$ 33.95	$ 23.69	$ 29.61	$ 23.93	$ 29.91
2 1/2"	$ 35.02	$ 50.66	$ 35.35	$ 44.19	$ 35.70	$ 44.63
3"	$ 51.01	$ 73.79	$ 51.49	$ 64.36	$ 52.00	$ 65.01
4"	$ 98.51	$ 142.53	$ 99.44	$ 124.29	$ 100.43	$ 125.54
6"	$ 269.01	$ 389.19	$ 271.54	$ 339.42	$ 274.25	$ 342.82
8"	$ 563.07	$ 814.62	$ 568.36	$ 710.45	$ 574.05	$ 717.56
10"	$ 1,005.40	$ 1,454.57	$ 1,014.85	$ 1,268.56	$ 1,025.00	$ 1,281.25

RECOMMENDATIONS

RFC recommends that the City adopt revenue adjustments of 15 percent per year for FY 2011 and 2012. The City will build its reserve to the target level over the five year plan.

CUSTOMER IMPACTS

Before implementing any rate structure recommendations, it is important to understand the impacts on customers. RFC worked closely with City staff to ensure that the new rate structure would recover the necessary revenue requirements while at the same time maintaining manageable customer impacts.

Since residential customers represent a large part of the City's customer base, RFC has developed the following tables and figures that demonstrate the impacts of the proposed rates for FY 2011 across varying usage levels.

Table 8 shows the rate impacts on customers at varying usage levels and also the percentage of bills falling within that level. Both the dollar and percentage impacts increase with usage level. The table also highlights the impacts on customers with average usage of 70 ccf bi-monthly. Table 9 shows the comparison between existing and proposed rates of different customer classes under average bi-monthly water usage.

Figure 4 shows a graphical presentation of the level of rate increases experienced by residential customers with 1-inch or smaller meter. The red line represents the percentage change in bi-monthly bills and the blue area represents the cumulative percentage of bills at each level of usage for residential customers with 1-inch or smaller meter.

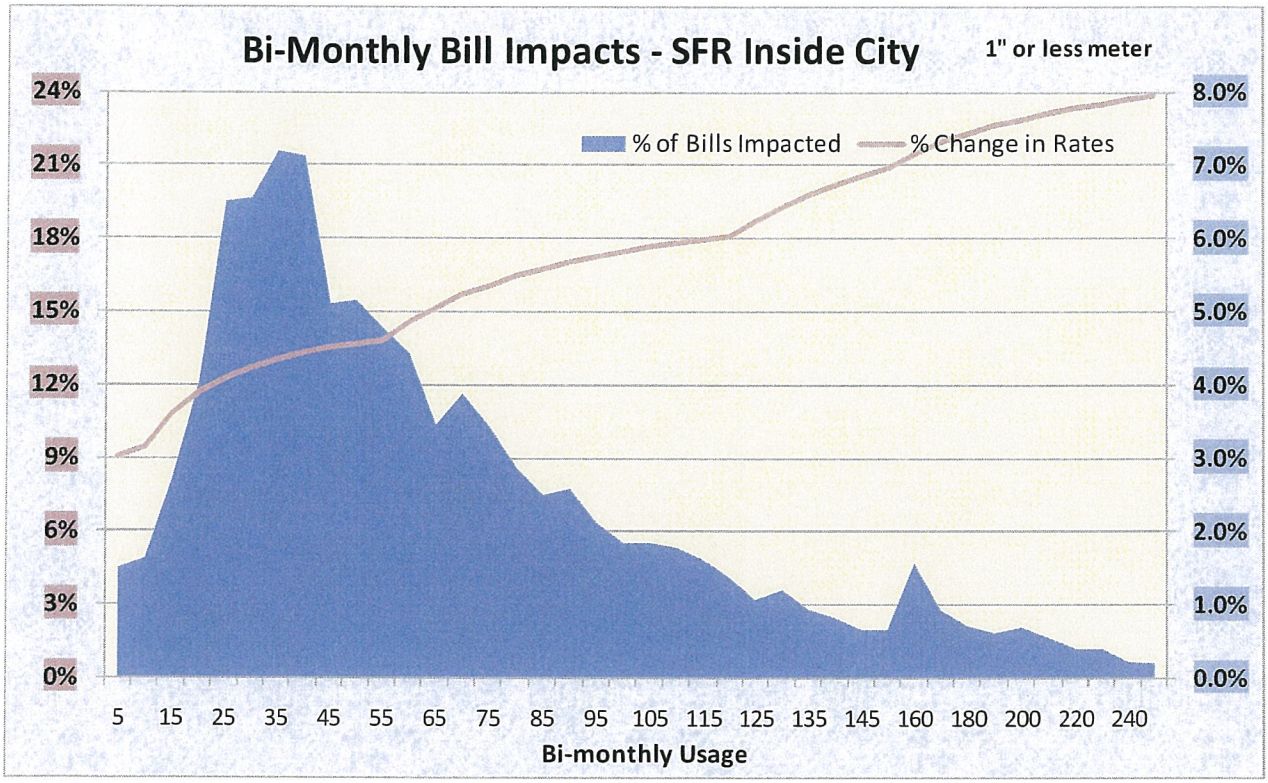
Table 8 – Customer Impacts

Bi-Monthly Usage (hcf)	Existing	Proposed	% Change	$ Change	% of Bills in the Block
5	$ 40.70	$ 44.38	9%	$ 3.68	1.51%
10	$ 53.15	$ 58.18	9%	$ 5.03	1.64%
15	$ 68.65	$ 76.08	11%	$ 7.43	2.72%
20	$ 84.15	$ 93.98	12%	$ 9.83	4.03%
25	$ 99.65	$ 111.88	12%	$ 12.23	6.51%
30	$ 115.15	$ 129.78	13%	$ 14.63	6.56%
35	$ 130.65	$ 147.68	13%	$ 17.03	7.20%
40	$ 146.15	$ 165.58	13%	$ 19.43	7.13%
45	$ 161.65	$ 183.48	14%	$ 21.83	5.11%
50	$ 177.15	$ 201.38	14%	$ 24.23	5.16%
55	$ 192.65	$ 219.28	14%	$ 26.63	4.79%
60	$ 215.70	$ 247.13	15%	$ 31.43	4.44%
65	$ 238.75	$ 274.98	15%	$ 36.23	3.46%
70	$ 261.80	$ 302.83	16%	$ 41.03	3.89%
75	$ 284.85	$ 330.68	16%	$ 45.83	3.44%
80	$ 307.90	$ 358.53	16%	$ 50.63	2.89%
85	$ 330.95	$ 386.38	17%	$ 55.43	2.51%
90	$ 354.00	$ 414.23	17%	$ 60.23	2.59%
95	$ 377.05	$ 442.08	17%	$ 65.03	2.13%
100	$ 400.10	$ 469.93	17%	$ 69.83	1.85%
105	$ 423.15	$ 497.78	18%	$ 74.63	1.85%
110	$ 446.20	$ 525.63	18%	$ 79.43	1.79%
115	$ 469.25	$ 553.48	18%	$ 84.23	1.62%
120	$ 492.30	$ 581.33	18%	$ 89.03	1.38%
125	$ 534.35	$ 634.48	19%	$ 100.13	1.08%
130	$ 576.40	$ 687.63	19%	$ 111.23	1.21%
135	$ 618.45	$ 740.78	20%	$ 122.33	0.95%
140	$ 660.50	$ 793.93	20%	$ 133.43	0.84%
145	$ 702.55	$ 847.08	21%	$ 144.53	0.67%
150	$ 744.60	$ 900.23	21%	$ 155.63	0.67%
160	$ 828.70	$ 1,006.53	21%	$ 177.83	1.57%
170	$ 912.80	$ 1,112.83	22%	$ 200.03	0.93%
180	$ 996.90	$ 1,219.13	22%	$ 222.23	0.72%
190	$ 1,081.00	$ 1,325.43	23%	$ 244.43	0.62%
200	$ 1,165.10	$ 1,431.73	23%	$ 266.63	0.70%
210	$ 1,249.20	$ 1,538.03	23%	$ 288.83	0.56%
220	$ 1,333.30	$ 1,644.33	23%	$ 311.03	0.41%
230	$ 1,417.40	$ 1,750.63	24%	$ 333.23	0.41%
240	$ 1,501.50	$ 1,856.93	24%	$ 355.43	0.23%
250	$ 1,585.60	$ 1,963.23	24%	$ 377.63	0.21%

Table 9 – Customer Impacts for Different Customer Classes

	Bi-Monthly Bill			
	Average Usage (hcf)	Total Current Bill	Total Proposed Bill	$ Increase
Residential 1" meter (Inside-City)	70	$261.80	$302.83	$41.03
Residential 2" meter (Inside-City)	150	$789.18	$948.61	$159.43
Multi-Family 1" meter (Inside-City) 13.3 hcf/unit	13.3	$73.53	$83.47	$9.94
Non-Residential 1" meter (Inside-City)	40	$ 191.85	$ 218.18	$26.33
Non-Residential 2" meter (Inside-City)	500	$ 2,117.83	$ 2,423.96	$306.13

Figure 4 – Customer Rate Impacts



RATE SURVEY

Comparing water rates with other representative communities can provide insights into a utility's pricing policies related to water service. Care should be taken, however, in drawing conclusions from such a comparison. High rates may not mean the utilities are operated and managed poorly. Many factors affect the level of costs and the pricing structure employed to recover those costs. Some of the most prevalent factors include geographic location, demand, water source, customer constituency, level of treatment, level of grant funding, age of system, level of general fund subsidization, and rate-setting methodology.

Figure 5 compares bi-monthly bills under existing and proposed rates to other bills within the region, using regional charges that will be in effect at the time of the City's rates increase. In order to provide a meaningful comparison, all bills are calculated on a bi-monthly basis for an SFR customer using a 1" meter and an assumed bi-monthly usage of 70 hundred cubic feet, which is the average usage for SFR customers in Beverly Hills. From the figure, the City's bi-monthly residential water charge is still comparable to other agencies even after the rate adjustments.

Figure 5 – Bi-monthly Single Family Water Charges Comparison