



ADMINISTRATIVE REPORT

Date: January 20, 2012
Agenda Item No.: 5
Meeting Date: January 25, 2012

To: COST OF SERVICE AND RATE DESIGN CITIZEN ADVISORY COMMITTEE

From: SHANA EPSTEIN, VENTURA WATER GENERAL MANAGER

Subject: RECOMMENDATIONS STEMMING FROM COST OF SERVICE AND RATE DESIGN STUDY - REVISED

RECOMMENDATIONS

It is recommended that the Committee:

- a. Accept the assumptions in the long-range financial plan as stated in this report.
- b. *Accept a reserve target for the Water and Wastewater Enterprise Funds.*
- c. *Accept as recommended the revenue requirement adjustment to meet the fiscal needs and customer expectations of the Water and Wastewater Enterprise Funds for FY13 and FY14.*
- d. *Recommend a preferred rate structure to meet the pricing objectives exercise.*
- e. *Recommend a preferred option to fund the reuse/diversion program, a result of the settlement to protect the Santa Clara River Estuary.*

SUMMARY

In order to complete the Cost of Service and Rate Design Study, staff prepared a ten-year financial projection, which included operations and maintenance costs and capital improvement programs. During the November and December meetings of the Committee, staff and Raftelis Financial Consultants (RFC) presented a number of assumptions that are required to prepare such a projection. The purpose of a long-range planning exercise is to assist in determining how much funds should be collected in reserves to smooth out revenue requirement adjustments over the years, and avoid drastic rate fluctuations. To complete a long-range financial plan, a number of assumptions must be made to project all

costs in the water and wastewater enterprise funds budgets. The projected costs establish the basis of the revenue requirements. That is, rates must be designed to generate enough revenue to cover the projected expenditures for any given year.

It is important to note that the acceptance of the long-range financial plan does not supersede the annual budget adoption process. Annual budget modifications are expected in response to changing conditions and priorities. The significance of the financial plan process is to develop a strategic roadmap which includes debt timing and reserve levels to guide the long-range fiscal health of the organization.

In addition, the rate design is formulated through recognizing the collective pricing objectives resulting from the prioritization exercise completed in October. Modifying a rate structure has impacts to different customer classes and impacts on how those customers will consume water. Most importantly, the rate design is being evaluated through the lens of Proposition 218 to ensure all customers are paying rates equitable to the services that they receive.

DISCUSSION

Long Range Financial Plan Assumptions

The following information details the assumptions used in establishing the 10-year financial plan. While it is expected that changes will occur, they represent the best estimate today of how growth, costs and revenue patterns may shift in the future.

Growth rates

- Single Family Residential (SFR) – no growth in FY 2012 and 0.5% per year thereafter
- Multi-family Residential (MFR) – no growth in FY 2012 and 0.5% per year thereafter
- Commercial/Industrial – no growth in FY12 and 0.5% per year thereafter
- Other – no growth
- Outside City customers – no growth

Inflation Assumptions

- General – 3% per year
- Salaries – no change through FY15, and 0.5% per year thereafter
- Benefits – approximately 0.3% per year
- Utilities – 7.5% in FY13 and 5% per year thereafter
- Chemicals – 5% per year
- Capital – 3.5% per year

Reserves Targets

- Operating reserves – 3 months (or 25%) of operating expenses
- Capital reserves – 50% of average replacement CIP, increasing to 100% in FY17

Interest rates

- Reserves – Earn 1% in FY12 and 13, increasing at 0.5% per year until 2.5% in FY16
- New debt issue – 5.5%, 30-year term

Customer Water Consumption

- Usage projections – 2% reduction for two years, 1% reduction annually starting in FY15
- Historical usage – see June 2011 Urban Water Management Plan consumption and per capita daily use chart (Attachment A)

Wastewater Projections

- Infiltration and inflow – 7%
- Single family density – 2.6 people per household
- Multi-family density – 2.25 people per household
- Per capita daily generation – 53 gallons per person

Capital Improvement Program

While the operating budgets have remained fairly static within the framework of inflation and significant cost pressures from energy and chemical increases over time, funding the infrastructure renewal program represents the lion's share of future higher revenue requirements. The available funding avenues – cash, debt and/or grants – each have their advantages and disadvantages and require careful planning, timing and coordination for optimization. Based on the latest Water and Wastewater Master Plans and today's best estimates, the following projects by category are contained in the 10-year financial plan.

Water = Total \$120.4M

- Well Projects – \$25.7M
- Pipeline Projects – \$42.1M
- Tank Projects – \$7.2M
- Pump Station Projects – \$3.4M
- Facility Projects – \$7.9M
- Treatment Projects – \$34.1M

Wastewater = Total \$145.M

- Pipeline Projects – \$ 29.6M
- Lift Station Projects – \$6.6M
- Treatment Projects – \$35.8M
- Facility Projects – \$6.1M
- Estuary Protection Projects – \$67M

While the dollar amounts include an inflationary escalation factor for projects scheduled in later years, the total amount in the financial plan represents only 75% of the overall estimated costs. The total program includes 66 projects but based on historical project completion rates and shifts caused by changing priorities, scope changes, and other unforeseen factors, the plan anticipates that around 50 of these will actually require funding during the 10-year period. This aligns revenue requirements to more realistic timeframes since the capital program is the primary driver of rate increases.

Over the past ten years, the capital program has expended \$81.3 and \$64.8 million for 44 total projects for the water and wastewater systems, respectively. This included a new membrane filtration plant to treat Ventura River water and significant upgrades to the Ventura Water Reclamation Facility to improve treatment processes to meet strict new environmental regulations and modernize aging facility components. During the next ten years, the plan includes more pipeline replacements, new replacement wells as well as funding for a reuse diversion structure for the water currently discharged by the Reclamation Facility into the Santa Clara River Estuary.

Debt Issuance Ratios

As noted, borrowing money through bonds or other debt programs is one of the funding avenues historically used to support one-time capital projects and is a strong player in the financial portfolios of most utilities. The ratio between how much debt versus cash (or pay-as-you-go) requires the community and future generations to shoulder debt payments. Since debt funding for assets that have a long life expectancy will primarily benefit customers in the future, spreading those costs is often deemed an appropriate funding strategy.

Higher debt loads result in greater revenue needs over the long term, but cost less in the short term. Conversely, choosing to use today's cash to fund projects requires more short-term revenue, but costs less in the long run.

The revenue requirements for the proposed rates reflect a 67% debt ratio for the Water Fund and a 65% debt ratio for the Wastewater Fund.

Debt Service Revenue Requirement

A related issue, the balance between revenue and debt payments is also a factor in the financial planning strategy. Revenue levels must be set sufficiently to cover debt service requirements of at least 125% of net operating income. Currently, projected revenues will not be able to meet debt service coverage requirements in this fiscal year for the Wastewater Fund.

Outside City Rates

Customers outside of the City limits have been charged historically a rate differential of 70% as supported by the *Hansen v. City of Ventura* Supreme Court decision in 1986. Research has shown that the factors that existed at that time, namely financial

contributions to improve assets and water supply for former customers of Saticoy and Mound Water Company, are no longer valid. However, there are financial contributions from City customers that are appropriate to recover from outside City customers which are as follows:

- Property tax on water utility's assets: \$0.05/HCF. As the utilities' assets are City property and do not pay property taxes, the City's General Fund and its residents absorb this revenue loss which is not shared by outside City customers. *If the utilities were privately owned, property taxes would be collected by the City and that would increase the revenue to fund general expenses. The outside City customers, therefore, benefit from the fact that the assets are City owned and should pay a portion to offset this revenue loss.*
- Police and fire protection costs on water utility's assets: \$0.10/HCF. The assets are protected by Ventura's Police and Fire personnel who are funded by the City's General Fund.
- Differential water supply costs: \$0.58/HCF. The water utility's first responsibility is to provide water to City customers. Additional water supply and long-term planning is needed to serve outside City customers and that differential should be recovered.

Since these allocations are cost based (*Attachment B*) and meet Proposition 218 requirements, outside City customers during the next rate adjustments will be imposed a flat surcharge of \$0.73 per unit of water (HCF: hundred cubic feet=748 gallons).

Reserve Policy

The City's current Financial Administrative Policy and Procedures regarding financial reserves for Enterprise Funds do not set a specific level for fund balance reserves but allow for:

- Timely replacement of rolling stock and other equipment and infrastructure repairs and/or replacement.
- Adequate cash flow.
- Funds for emergency purchases.
- Maintenance of a ratio of net operating income to debt service requirements of at least 125% (1.25:1).

A more structured policy is a common business practice for modern utilities. The assumptions in the financial plan include an Operating Reserves target of 3 months (or 25%) of operating expenses and a Capital Reserves target of 50% of average replacement of assets, gradually increasing to 100% in FY17. The Operating Reserves will allow for adequate cash flow during disasters or other emergencies and the Capital Reserves will assist in building financial stability to support a healthy replacement program going forward.

Revenue Requirement Adjustment

The long term financial plan, based on the projected operating, debt payments and capital improvement expenses as well as reserve requirements, reflects the need for next fiscal

year of \$1.6M and \$1.4M more revenue for the Water and Wastewater Fund, respectively. For FY14, another \$1.7M for Water and \$1.0M for Wastewater is projected. *For FY12, the financial plan reflects a beginning balance of \$21M and \$35M for the Water and Wastewater Fund, respectively. These balances, or retained earnings fluctuate year to year based on the actual amount of capital and operating funds expended. These funds are budgeted to near-term capital projects and are reflected in the cash flow projections for each utility.*

Rate Structure

The rate structure itself has remained essentially unchanged since its inception in the early 1990s. One of the objectives of the Cost of Service Study was to re-evaluate the equity and effectiveness of the rate structure to serve this community’s needs in the future. Based on the pricing objectives exercise, the Committee was presented with six different rate structures that identified customer class impacts at the December 14, 2011 meeting. *Those scenarios were narrowed down to three for each utility and customer impacts were shown with the new revenue requirements as projected in the first year of the financial plan at the January 18, 2012 meeting. The Committee generally agreed at the meeting that Scenario 2 for water rates and Scenario 3 for wastewater rates closely met the pricing objectives. The following provides an overview of all the presented options.*

Water Overview

Bi-monthly water charges are currently assessed based on a flat meter charge plus a per unit cost for each HCF used during the period. At this time, the meter service charge is approximately 19% of the total utility’s expense. To aid in revenue stability, it is recommended that this charge be increased to recover 25% of expenses. There are three scenarios proposed for the volumetric charges with Scenario 2 recommended based on its better alignment with current usage patterns.

WATER (SERVICE CHARGE 25% + HCF VOLUME)					
1	Current	Tier 1 (0-16)	Tier 2 (17-42)	Tier 3 (43+)	
2	Revise 3 Tiers	Tier 1 (0-14)	Tier 2 (15-30)	Tier 3 (31+)	
3	Revise 3-Tiers+Add 4th	Tier 1 (0-14)	Tier 2 (15-26)	Tier 3 (27-38)	Tier 4 (38+)

Wastewater Overview

The current wastewater rate structure sets each residential customer into one of six flat tiers each July for the next year based on the lowest water consumption during the previous November to April, when landscape watering is minimized due to rain and cooler weather. Scenario 2 proposes a flat bi-monthly charge for all residential customers.

Scenario 3 proposes to assign each residential customer a charge based on the average water consumption during the previous November to February (four months) as the best estimate of each household’s flow to the collection system. Instead of six tiers, a fixed charge plus the average consumption number would be charged starting in July for the following year.

In recognition of irrigation usage even during the winter months of November to February, the flow charge is recommended to be capped at 20 HCF for single family and 16 HCF for multi-family customers. Approximately 16% of single family and 4% of multi-family households' actual water usage exceeded these caps during the proposed time period last fiscal year. The Committee requested more analysis as to impacts of removing the cap or changing the level of the cap.

While more complicated to implement and explain, Scenario 3 is recommended for its nexus to water usage. Customers who use less water would experience reductions in both their water and their wastewater charges and greater water efficiency would be encouraged.

WASTEWATER		
1: Current Annual Tiers	2: Residential Flat Charge	3: Fixed + Flow Charge
Tier 1 (0-8)	Single Family	Single Family (capped at 20 HCF)
Tier 2 (9-10)	Multi-Family	Multi-Family (capped at 16 HCF)
Tier 3 (11-12)		
Tier 4 (13-14)		
Tier 5 (15-16+)		
Tier 6 (17+)		

Revenue and Rate History

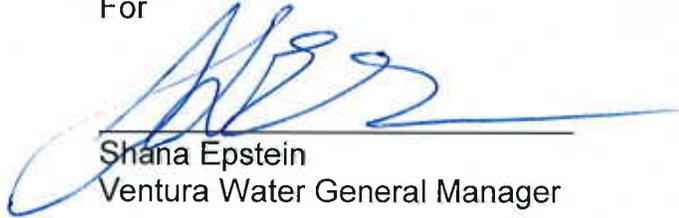
Revenue history from FY95 through FY10 reflects a net increase of \$9,709,164 and \$7,593,055 for the Water and Wastewater Funds, respectively (Attachment C). Water residential and non-residential history is detailed for tier ranges, unit costs, and meter service charges (Attachment D). Wastewater rate history is charted for all customer groups (Attachment E).

Estuary Protection Funding Options

The long range financial plan includes projected capital program funding to support the timeline to build a diversion infrastructure as defined by the settlement agreement for the Santa Clara River Estuary. The plan begins collecting revenue in FY13 with the goal of building a portion of the funds in a reserve which will provide stability to incur additional debt to fund the entire project at the point when its full scope is determined. There are two alternatives:

- *Merge the cost into the rate adjustments without separation from other revenue requirements.*
- *Identify the amount separately for each customer on the utility bill as, for example, an Environmental Estuary Protection charge.*

Prepared by Nancy Broschart, Management Analyst
For



Shana Epstein
Ventura Water General Manager

Attachment A – 2010 Urban Water Management Plan Base Daily Per Capita Water Use Chart

Attachment B – Outside City Rate Differential Calculation

Attachment C – Water and Wastewater Funds Revenue History

Attachment D – Water Rate History

Attachment E – Wastewater Rate History

2010 URBAN WATER MANAGEMENT PLAN

Kennedy/Jenks Consultants

TABLE 2-3
BASE DAILY PER CAPITA WATER USE

Base Period Year		Distribution System Population	Daily System Gross Water Use (mgd)	Annual Daily per Capita Water Use (gcpd)	10 Year Average ^(a)	5 Year Average ^(a)
Sequence Year	Calendar Year					
Year 1	1995	101,022	16.9	161.6		
Year 2	1996	101,793	17.0	166.7		
Year 3	1997	102,409	17.1	166.6		
Year 4	1998	102,954	17.1	168.5		
Year 5	1999	103,808	17.8	171.4		
Year 6	2000	104,522	18.1	183.1		
Year 7	2001	105,251	18.8	178.3		
Year 8	2002	106,280	17.2	161.5		
Year 9	2003	107,906	17.3	160.4		
Year 10	2004	108,559	19.0	180.9	169.7	
Year 11	2005	109,153	18.0	165.2	170.1	
Year 12	2006	110,049	18.3	148.5	168.3	
Year 13	2007	110,691	16.8	152.9	166.9	161.8
Year 14	2008	111,439	16.6	149.1	165.1	159.3
Year 15	2009	112,496	15.7	139.3	161.9	151.0
Period Selected					161.0	161.6

Note:

(a) Average of previous 10 or 5 year period.

Note: This chart appears on page 2-5 of the 2010 UWMP. The entire document can be accessed at www.cityofventura.net/water/conservation.

Attachment B

Outside City Rate Differential Calculation

		NOTES
Property Tax Component		
Total Utility Assets	\$156,163,699	
Estimated Property Tax (a)	276,410	Assets City-owned and tax not assessed
<i>Unit Cost (\$/hcf)</i>	<i>\$0.05</i>	Divide (a) by total water sales of 6.2 million hcf*
Police and Fire Component		
Total City Assets	\$10,734,000	
Percentage of Utility Assets (b)	1.5%	
Police and Fire Budget (c)	44,000,000	Estimated GF budget
<i>Unit Cost (\$/hcf)</i>	<i>\$0.10</i>	(b) x (c) divided by 6.2 million hcf
Water Supply Component		
United water total cost	\$2.05	
Average treated water cost	1.47	
Difference (\$ per hcf)	\$0.58	
TOTAL RATE DIFFERENTIAL PER HCF	\$0.73	

*HCF = 748 gallons