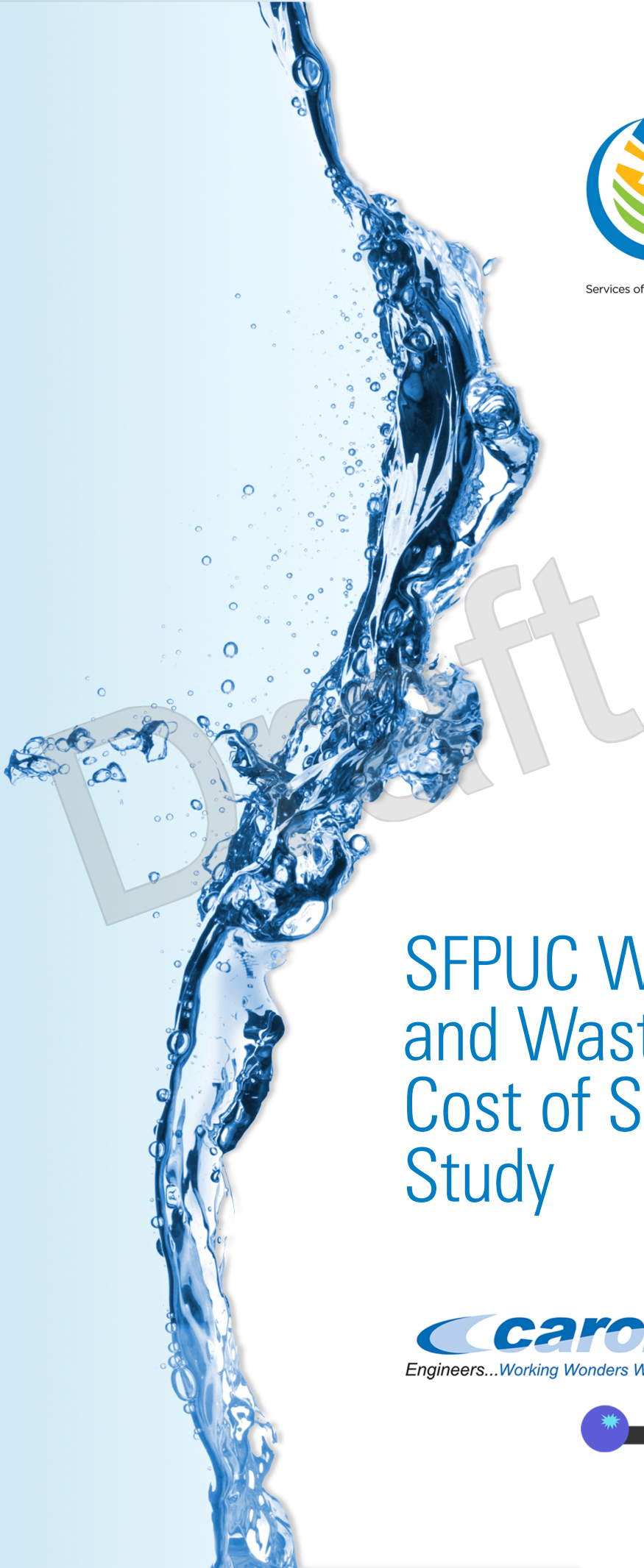




San Francisco  
**Water**  
**Power**  
**Sewer**

Services of the San Francisco Public Utilities Commission

January 2014



# SFPUC Water and Wastewater Cost of Service Study

**carollo**

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## San Francisco Public Utilities Commission

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## CHAPTER 1 Executive Summary

# Introduction

The San Francisco Public Utilities Commission (SFPUC) maintains rates to equitably recover the costs from users to operate, service debt, and perform repairs and replacements for water supply, conveyance, and treatment systems, and the wastewater collection and treatment systems. This executive summary documents the results of the cost-of-service study and identifies the recommended rate revenue requirements and structures that are appropriate to meet the SFPUC funding needs and achieving pricing objectives. The focus of this report is to detail the process utilized to achieve cost recovery and substantiate that customers are paying their fair and proportionate share of the system costs.

## BACKGROUND

The SFPUC is an enterprise department of the City and County of San Francisco that provides water, wastewater, and municipal power services to San Francisco. The SFPUC is responsible for the maintenance, operation, and development of three utility enterprises: the Water Enterprise, the Wastewater Enterprise, and the Power Enterprise (which is a component of Hetch Hetchy Water and Power). The Water Enterprise provides potable water to retail customers within the City, to certain retail customers outside the City, and to wholesale customers in Alameda, San Mateo, and Santa Clara counties. The Wastewater Enterprise provides wastewater collection, treatment, and disposal services for the City as well as treatment services for Brisbane and Bay Shore Districts. The SFPUC operates a combined wastewater and storm water system. The SFPUC's enterprises are operated and managed as separate financial entities with separate enterprise funds.

## Cost of Service Requirements

The SFPUC activities are supported through monthly rates for service; miscellaneous installment and service fees and capacity charges; and non-operating revenues, such as interest earnings. In 1999, San Francisco voters passed Proposition H, which restricted the City's abilities to increase rates without voter approval. In November 2002, San Francisco voters passed a Charter amendment (Proposition E) that repealed a rate freeze on water and sewer rates and established a Rate Fairness Board (RFB) to facilitate public input regarding water and sewer rate setting. The passing of this amendment allows the City to fund the repair and upgrade of the system through the issuance of revenue bonds without voter approval, while at the same time also protecting ratepayers by requiring that at least every five years an independent rate study be completed. This study satisfies that requirement for water and sewer rates.

Retail rates are set by the SFPUC Commission (Commission) pursuant to the authority and provisions set forth by the San Francisco Charter (Section 8B.125). All budgets, rates, fees, and charges presented by SFPUC staff to the Commission must conform to the SFPUC Rates Policy, which is guided by four key principles: affordability; compliance; sufficiency; and transparency. The SFPUC also approves the wholesale rate in accordance with the requirements of the Water Supply Agreement with the SFPUC's wholesale water customers.

## SCOPE OF SERVICES

Following a competitive proposal process, the SFPUC hired the Carollo Engineers (Carollo) – Patricia McGovern Engineers (PME) Joint Venture (Carollo/PME JV) to develop an updated cost of service study for the Water and Wastewater Enterprises. The objectives of the Study were to evaluate the financial impacts of the SFPUC's 10-year financial plan from fiscal years ending ("FYE") 2015 through FYE 2024 and to provide water and wastewater rate structure and revenue adjustment recommendations for the next five years.

The Study recommendations and resulting rate structures need to be in compliance with the City of San Francisco ("City") Charter based on the following objectives:

- Provide sufficient revenues for the operations, maintenance, and repair of the enterprise consistent with good utility practice;
- Provide sufficient revenues to maintain financial condition and bond ratings;
- Meet requirements and covenants under all bond indentures;
- Develop rates based on cost of service principles and requirements; and

- Develop capacity fees that equitably recover costs from new development and upsize in usage.

In accomplishing this scope, Carollo, the lead firm, led the development of the financial projections, fiscal and rate policy review, and the rate and capacity charge design. In addition, Carollo led policy discussions, which included weekly meetings with SFPUC staff. PME led the development of the wastewater cost allocation and indirect cost study. This included working with the SFPUC to explore and vet allocations and charges based on SFPUC costs.

## SYSTEM OVERVIEW

### Water System

The SFPUC is the largest water purveyor in Northern California, serving a population of 2.6 million people in more than 30 cities. Customers are divided into three categories: 1) retail customers in the City and County of San Francisco; 2) wholesale customer agencies on the San Francisco Peninsula, in the South Bay, and parts of the East Bay; and 3) the retail customers outside of San Francisco. Approximately one-third of the SFPUC water supply is served to retail customers; the remaining two-thirds is served to wholesale customers.

The SFPUC is nearing completion of the Water System Improvement Program (WSIP). The WSIP is a \$4.6 billion multi-year capital program to enhance SFPUC's ability to provide reliable, affordable, high-quality drinking water to its 27 wholesale customers and retail customers in an environmentally sustainable manner. The WSIP is structured to meet water quality regulatory requirements, improve seismic and delivery reliability, and meet water supply reliability goals.

### Wastewater System

The wastewater collection, treatment, and disposal/reuse system consists of a combined sewer system which collects both sanitary sewer and wet weather flows, three water pollution control plants, and effluent outfalls to the San Francisco Bay and Pacific Ocean. The combined sewer system reduces pollution in the San Francisco Bay and Pacific Ocean by treating wet weather flows and urban runoff that would otherwise discharge to the Bay and Ocean. The SFPUC treats all sanitary flows during dry weather months before discharging the treated effluent to the San Francisco Bay and the Pacific Ocean.

The SFPUC has developed and began the implementation of the Sewer System Improvement Program (SSIP) in order to continue to meet the level of service goals for the Wastewater Enterprise and address aging infrastructure requirements. The SSIP will be implemented in three phases. The Commission approved the levels of service and authorized staff to commence planning and development of the first phase in August 2012. This phase consists of \$2.7 billion of capital projects through the year 2021.

## FINDINGS AND RECOMMENDATIONS

Carollo/PME JV's review and analysis confirms the SFPUC rates and capacity charge structures are sound and adhere to industry best practices. This report documents the recommended updates to the rates and charges to remain compliant with cost of service requirements based on the unique nature of the SFPUC water and wastewater systems and customer demand patterns. In addition to achieving cost recovery and ratepayer equity objectives, the rate and capacity charge analyses presented within this report were developed to continue to promote efficient use of water and the City's natural resources.

On January 17th, 2014, the Governor of California declared a drought emergency, calling for voluntary water demand reductions. The City and County of San Francisco in turn requested a 10 percent voluntary reduction in water usage from its water customers. The analysis presented within this report was developed prior to the drought emergency declaration. Consequently, Carollo/PME JV recommends that the SFPUC continue to monitor rate revenues over the five-year rate period and make any necessary rate adjustments as revenues do not materialize as originally projected. Additionally, the SFPUC is required to fund a proportionate share of regional water operational and maintenance (O&M) costs. The SFPUC per capita retail water demands are amongst the lowest in California, resulting in a higher conservation potential by Bay Area Water Supply and Conservation Agency (BAWSCA) member agencies, which exhibit greater per capita water demands and outdoor irrigation usage. As a result, the SFPUC might be re-

quired to fund a greater share of costs in the future, which could also impact the study forecast.

### Cost of Service Analysis

The purpose of a cost-of-service analysis is to provide a rational basis for distributing the costs of the SFPUC water and wastewater systems to each customer class in proportion to the demands they place on the system. A detailed cost allocation was developed for both the Water and Wastewater Enterprises based on the unique attributes of each system in order to meet the equity requirements of Proposition 218, the San Francisco (City? or City and County?) Charter, and SFPUC policy.

The Charter requires that the City of San Francisco perform a cost of service study at least every five years so that revenues from rates are adequately funding utility operations, maintenance, and ongoing capital needs, and equitably recover costs from system users. Additionally, in California, water rates must adhere to the cost of service

requirements imposed by Proposition 218 of the State Constitution. Proposition 218 requires that property-related fees and charges, including water and wastewater rates, do not exceed the proportional cost of providing the service. Article X (2) of the State Constitution establishes the need to preserve the State's water supplies and discourages the wasteful or unreasonable use of water by encouraging conservation. The rates presented within this report adhere to cost of service principles, as well as industry standards set by the American Water Works Association (AWWA) and the Water Environment Federation (WEF). Additionally, the SFPUC water and wastewater rate structures are conservation oriented, conforming with regulatory standards such as BMP 1.4, and designed to promote the efficient use of water.

### Water Rates

Carollo/PME JV analyzed the revenue requirements of SFPUC retail water customers, net of payments from the wholesale customers. This analysis has two main purposes: 1) it serves as

Table 1.1 | SFPUC Water Enterprise Revenues and Expenditures<sup>(1)</sup>

FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Revenues</b>										
Rate Revenues (prior to rate increase)	\$178.9	\$191.5	\$215.6	\$242.7	\$268.3	\$291.2	\$316.0	\$343.0	\$372.3	\$392.9
Wholesale Revenues	156.0	241.5	242.2	241.7	251.3	293.0	316.6	297.6	300.6	314.7
Other Non-Rate Revenues	22.0	22.6	23.3	24.0	24.7	25.5	26.2	27.0	27.8	28.7
<b>Total Revenues</b>	<b>\$356.9</b>	<b>\$455.7</b>	<b>\$481.0</b>	<b>\$508.4</b>	<b>\$544.3</b>	<b>\$609.6</b>	<b>\$658.8</b>	<b>\$667.6</b>	<b>\$700.7</b>	<b>\$736.2</b>
<b>Expenditures</b>										
Operations	\$210.1	\$217.7	\$225.7	\$233.9	\$242.5	\$251.3	\$260.5	\$270.1	\$280.0	\$290.3
Debt Service	144.7	212.3	238.1	249.9	283.5	329.1	349.3	369.8	377.3	402.0
Revenue Funded Capital	99.1	114.3	57.2	44.3	39.5	88.7	93.8	69.1	77.7	67.4
<b>Total Expenditures</b>	<b>\$453.8</b>	<b>\$544.3</b>	<b>\$521.0</b>	<b>\$528.1</b>	<b>\$565.4</b>	<b>\$669.1</b>	<b>\$703.6</b>	<b>\$709.0</b>	<b>\$734.9</b>	<b>\$759.7</b>
<b>Annual Rate Increases</b>										
Operating Cash Flow Surplus (Deficiency) Before Rate Increase	\$(96.9)	\$(88.6)	\$(40.0)	\$(19.7)	\$(21.1)	\$(59.5)	\$(44.8)	\$(41.4)	\$(34.2)	\$(23.5)
Recommended Rate Increase	6.5%	12.0%	12.0%	10.0%	8.0%	8.0%	8.0%	8.0%	5.0%	5.0%
Additional Revenue from Rate Increase	\$11.6	\$23.0	\$25.9	\$24.3	\$21.5	\$23.3	\$25.3	\$27.4	\$18.6	\$19.6
Operating Cash Flow Surplus (Deficiency) After Rate Increase	(85.3)	(65.6)	(14.1)	4.5	0.3	(36.2)	(19.5)	(13.9)	(15.6)	(3.8)

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.



a means to evaluate the fiscal health of the Water Enterprise and adequacy of current rate levels; and 2) it sets the basis for near- and long-term rate planning. The foundation of the analysis of revenues is based on relevant financial information provided by the SFPUC, including existing debt service and future payments, current reserve ending fund balances, future expenses, future revenues, and other financial information.

Based on the findings of this study, the Water Enterprise must increase retail rates by an average of 10.0 percent over the next five years in order to fund operational needs, to meet debt service obligations associated with the \$4.6 billion WSIP, and to continue to meet levels of service objectives. This results in five-year annual increases of 12 percent, 12 percent, 10 percent, 8 percent, and 8 percent for FYE 2015 through FYE 2019.

The resulting revenues, expenditures, and cash flows are illustrated in Table 1.1.

The recommended rate increases are necessary to collect sufficient revenues to pay operational and capital expenditures, including the debt service obligations associated with the WSIP.

As illustrated in Table 1.1, these annual increases are not sufficient to fully fund capital projects in FYE 2015 and 2016 and later years. The deficiencies represent the amount of reserves used to fund the remaining portion of capital projects. The reserves used are primarily derived from a prepayment by BAWSCA for remaining capital cost of assets in existence as of the effective date of the 2009 WSA. The prepayment is available to mitigate retail rate increases through the funding of capital projects, as the SFPUC attempts to balance rate increases with annual expenditure needs.

### Existing Water Rates

The SFPUC’s existing rate structure consists of two components: a commodity charge and a monthly service charge. This is a commonly applied rate structure throughout the State of California and the United States. The commodity component (volumetric) is assessed based on metered water usage per hundred cubic feet (Ccf) and, by design, is intended to recover the cost incurred for delivering each unit of water. The monthly service charge is intended to recognize that the utility incurs fixed costs to provide the avail-

ability of water service and customer service functions, which must be recovered independent of monthly water demands and consumption.

For single-family residential (SFR) customers, the commodity component comprises a two-tier, inclining block rate structure. Under the current rate structure, usage above 3 Ccf is charged a higher per unit charge to reflect the added cost to supply peak water demands. Multi-family residential (MFR) is similar; however, the commodity component is per dwelling unit rather than SFR’s per account. For example, a MFR complex with 10 units would have 10 times the water allotment for Tier 1 (10 units x 3 Ccf = 30 units). Non-residential customers pay a uniform commodity rate, due to the large demand and use disparity among users within that customer class. In addition to the commodity charge, all customer classes pay a monthly service charge based on the size of the meter. The SFPUC also assesses private fire protection service rates according to meter size.

Table 1.2 summarizes the current monthly water rates and charges to the various customer classes.

### Recommended Water Rates

The water rate design analysis determines how the costs are recovered by each customer class through specified water rates. The focus of this process is to achieve full cost recovery and substantiate that customers are paying their fair and proportionate share of system costs.

The SFPUC water system comprises various facilities each designed and operated to perform a necessary function. The SFPUC’s budget was analyzed line-item by line-item and operations and maintenance (O&M) expenditures, debt service, and other expenditures were distributed between the available cost categories.

Table 1.2 | **SFPUC Retail Water Rate Charges (Effective 7/1/2013)**

Meter Size	Monthly Service Charge	Monthly Fire Service Charge	Customer Class	Tier Block (Ccf)	Commodity Rate (\$/Ccf)
5/8 in	\$8.40	-	Residential		
3/4 in	\$10.30	-	Single Family	0-3	\$4.20
1 in	\$13.50	\$1.90		>3	\$5.50
1-1/2 in	\$21.80	\$2.40			
2 in	\$32.20	\$5.00	Multi Family	0-3	\$4.50
3 in	\$55.80	\$13.80		>3	\$5.90
4 in	\$89.50	\$29.50	Non-Residential		
6 in	\$173.80	\$85.40	General Uses	All Usage	\$5.40
8 in	\$275.60	\$182.00	Public Uses	All Usage	\$5.40
10 in	\$393.70	\$327.50	Interruptible	All Usage	\$3.25
12 in	\$731.70	\$528.80	Docks and Shipping	All Usage	\$5.40
16 in	\$1,272.70	-	Builders and Contractors	All Usage	\$5.40

- **Base:** Operating and capital costs incurred by the water system to provide a basic level of service to each customer.
- **Peak Day:** Costs incurred to meet peak day demands for water in excess of basic demand (base). This cost also includes capital costs related to sizing the system to meet excess demand. This allocation also includes basic water supply and distribution costs.
- **Peak Hour:** Similar to peak day, peak hour represents those operating and capital related costs incurred to meet peak hour demands. The size of the SFPUC’s water system is designed to meet peak hour demands. This cost includes capital costs related to sizing the system to meet excess demand.
- **Customer Service:** Fixed expenditures that relate to operational support activities, including accounting, billing, customer service, and administrative and technical support. These expenditures are essentially common

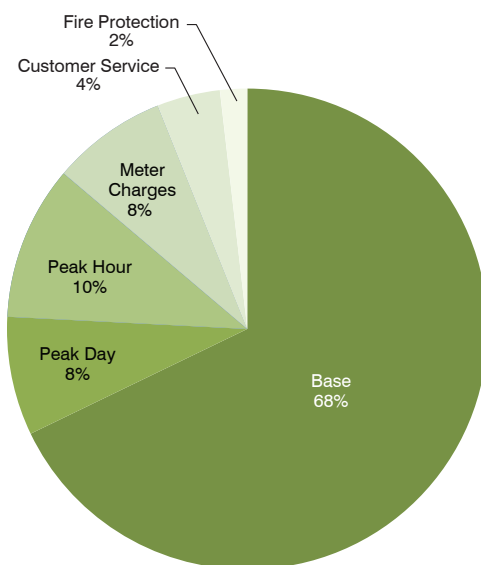


Figure 1.1 | **SFPUC Water Enterprise Functional Cost Allocation**

to all customers and are reasonably uniform across the different customer classes.

- **Meter Charges:** Meter and capacity-related costs, such as meter maintenance and peaking charges, that are included based on the meters hydraulic capacity. Additionally, as the system’s

facilities are designed to meet peaking requirements, a portion of the capacity-related costs, including debt service, are allocated to meter charges.

- **Fire Service:** Capacity-related costs that are incurred based on the excess capacity that must be designed into the system in order to provide private fire service.

To account for possible year-to-year fluctuations between cost categories, the forecasted expenditures were averaged over the five-year rate period between FYE 2015 and FYE 2019.

Based on the analysis described within this report, the result of the functional allocation is presented in Figure 1.1. This allocation is built from the SFPUC’s existing base and peak factors, which are used as the basis of the existing rates. The meter charges, customer service, and fire service components collectively represent 14 percent of forecasted costs. These components will be the foundation for the recommended monthly service charge. The remaining 86 percent of costs are allocated to the base and peak compo-

Table 1.3 | **Recommended Commodity Rates**

Annual Increase	Existing Rates	Recommended Rates				
	Effective 7/1/2013	Effective 7/1/2014	Effective 7/1/2015	Effective 7/1/2016	Effective 7/1/2017	Effective 7/1/2018
Customer Class		12%	12%	10%	8%	8%
Single Family Residential <sup>(1)</sup>						
Tier 1 (0-4 Ccf)	\$ 4.20	\$4.86	\$5.45	\$6.00	\$6.48	\$7.00
Tier 2 (>4 Ccf)	5.50	6.53	7.32	8.06	8.71	9.41
Multi-Family Residential						
Tier 1 (0-3 Ccf)	4.50	4.98	5.58	6.14	6.64	7.18
Tier 2 (>3 Ccf)	5.90	6.69	7.50	8.25	8.91	9.63
Non-Residential						
Commercial, Industrial, General	5.40	5.80	6.50	7.15	7.73	8.35
Public Uses	5.40	5.57	6.24	6.87	7.42	8.02
Interruptible	3.25	5.26	5.90	6.49	7.01	7.58
Docks and Shipping	5.40	7.67	8.59	9.45	10.21	11.03
Builders and Contractors	5.40	6.97	7.81	8.60	9.29	10.04

Note:

(1) Based on detailed analysis of usage by single family residential users, it is recommended that the tier break be increased from 3 Ccf (the current structure) to 4 Ccf. This is discussed in detail in Chapter 4.

Table 1.4 | Recommended Monthly Service Charge

Annual Increase	Existing Rates	Recommended Rates				
		12%	12%	10%	8%	8%
Meter Size	Effective 7/1/2013	Effective 7/1/2014	Effective 7/1/2015	Effective 7/1/2016	Effective 7/1/2017	Effective 7/1/2018
5/8 in	\$8.40	\$ 8.81	\$9.87	\$0.86	\$11.73	\$ 12.67
3/4 in	10.30	11.09	12.43	13.68	14.78	15.97
1 in	13.50	15.66	17.54	19.30	20.85	22.52
1-1/2 in	21.80	27.08	30.33	33.37	36.04	38.93
2 in	32.20	40.79	45.69	50.26	54.29	58.64
3 in	55.80	72.77	81.51	89.67	96.85	104.60
4 in	89.50	118.46	132.68	145.95	157.63	170.25
6 in	173.80	232.69	260.62	286.69	309.63	334.41
8 in	275.60	369.76	414.14	455.56	492.01	531.38
10 in	393.70	529.67	593.24	652.57	704.78	761.17
12 in	731.70	986.57	1,104.96	1,215.46	1,312.70	1,417.72
16 in	1,272.70	1,717.61	1,923.73	2,116.11	2,285.40	2,468.24

Table 1.5 | Recommended Monthly Fire Service Charge

Annual Increase	Existing Rates	Recommended Rates				
		12%	12%	10%	8%	8%
Meter Size	Effective 7/1/2013	Effective 7/1/2014	Effective 7/1/2015	Effective 7/1/2016	Effective 7/1/2017	Effective 7/1/2018
1 in	\$1.90	\$7.77	\$8.71	\$9.59	\$10.36	\$11.19
1-1/2 in	2.40	11.30	12.66	13.93	15.05	16.26
2 in	5.00	15.54	17.41	19.16	20.70	22.36
3 in	13.80	25.44	28.50	31.35	33.86	36.57
4 in	29.50	39.57	44.32	48.76	52.67	56.89
6 in	85.40	74.90	83.89	92.28	99.67	107.65
8 in	182.00	117.30	131.38	144.52	156.09	168.58
10 in	327.50	166.76	186.78	205.46	221.90	239.66
12 in	528.80	308.09	345.07	379.58	409.95	442.75

nents, and are the basis for the recommended commodity rates. For context, the BMP 1.4 defines rate structures that promote conservation having 70% or more revenue generated from the variable rate component.

Once costs have been equitably allocated to each functional component, the SFPUC has some flexibility in

designing the rate structure in order to meet its various policy objectives. In determining the appropriate rate level and structure, Carollo/PME JV analyzed various rate design alternatives and the corresponding customer and utility implications. Several criteria were considered and discussed at length with SFPUC staff.

Table 1.3 shows the recommended water commodity rates for FYE 2015 through 2019. Table 1.3 and Table 1.4 show the recommended monthly fixed service charges for FYE 2015 through 2019.

Figure 1.2 compares a typical SFR user with the current rate structure and the

recommended rates against the current rate structures of nearby utilities.

### Wastewater Rates

Similar to the analysis completed for the Water Enterprise, Carollo/PME JV analyzed the revenue requirements of SFPUC wastewater customers. The following elements were analyzed in order to determine the necessary rate increases for the Wastewater Enterprise: Operation and Maintenance Expenditures; Annual Debt Service; Capital Expenditures; Policy Requirements and Coverage; and Offsetting Revenues. These components were reviewed to determine the overall revenue requirements of the utility.

Based on the findings of this study, the Wastewater Enterprise must increase rate revenues by an average of 7.6 percent over the next five years in order to fund operations and capital obligations, and to begin to fund the SSIP. Annual capital expenditures are expected to increase substantially in upcoming years with the start of the SSIP. Most notably, FYE 2018 is pro-

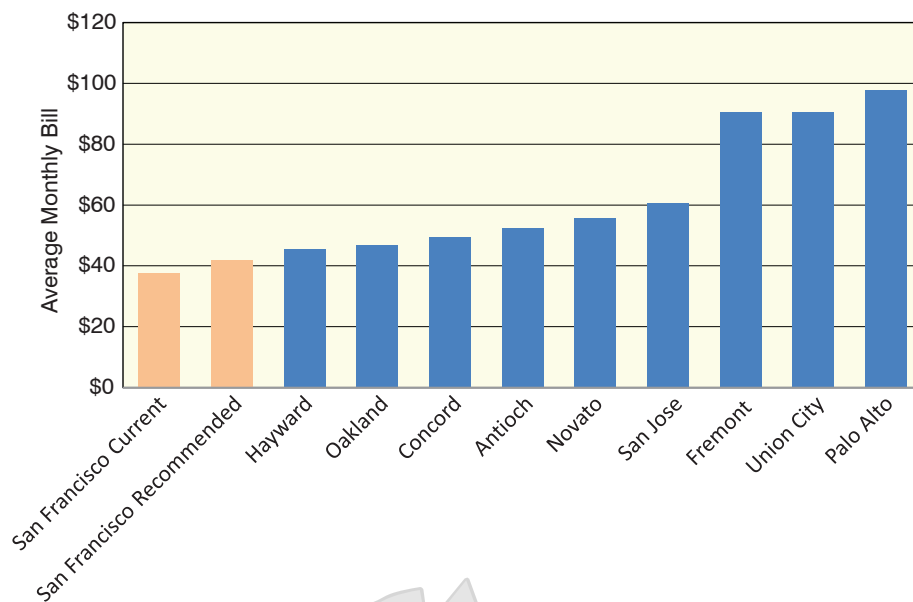


Figure 1.2 | Local Monthly Water Bill Comparison Survey for a SFR Customer

jected to require more than \$1.4 billion in investments, and funded primarily using bonds. This increase in capital spending is one of the main driving factors for future projected rate increases. To counteract the variability and sharp increases in capital spending from year to year, the magnitude of annual rate

increases has been smoothed so that the impact to customers is realized gradually over multiple years. These recommended wastewater annual rate increases are illustrated in Table 1.6.

Although the recommended rate increases result in a surplus within

Table 1.6 | SFPUC Wastewater Enterprise Revenues and Expenditures with Smoothed Rate Increases

FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Revenues</b>										
Rate Revenue Prior to Rate Increase	\$236.1	\$247.9	\$260.3	\$273.3	\$289.7	\$321.6	\$357.0	\$396.2	\$439.8	\$488.2
Non-Rate Revenues	9.8	10.1	10.5	10.9	11.3	12.3	13.3	14.4	15.7	17.1
<b>Total Revenues</b>	<b>\$245.9</b>	<b>\$258.1</b>	<b>\$270.8</b>	<b>\$284.2</b>	<b>\$301.1</b>	<b>\$333.9</b>	<b>\$370.3</b>	<b>\$410.7</b>	<b>\$455.5</b>	<b>\$505.3</b>
<b>Expenditures</b>										
Operations	\$146.4	\$151.8	\$157.5	\$163.3	\$169.4	\$175.7	\$182.2	\$189.0	\$196.1	\$203.4
Debt Service	48.7	48.6	73.8	79.2	96.0	129.6	159.8	240.0	293.0	347.5
Revenue Funded Capital	41.8	42.4	44.0	45.9	47.9	50.9	53.0	55.1	58.1	57.8
<b>Total Expenditures</b>	<b>\$236.8</b>	<b>\$242.9</b>	<b>\$275.3</b>	<b>\$288.4</b>	<b>\$313.3</b>	<b>\$356.3</b>	<b>\$395.0</b>	<b>\$484.0</b>	<b>\$547.2</b>	<b>\$608.6</b>
<b>Annual Rate Increases</b>										
Operating Cash Flow Surplus (Deficiency) Before Rate Increase	\$9.1	\$15.2	\$(4.5)	\$(4.2)	\$(12.2)	\$(22.4)	\$(24.8)	\$(73.4)	\$(91.6)	\$(103.3)
Recommended Rate Increase	5.0%	5.0%	5.0%	6.0%	11.0%	11.0%	11.0%	11.0%	11.0%	12.0%
Additional Revenue From Rate Increase	\$11.8	\$12.4	\$13.0	\$16.4	\$31.9	\$35.4	\$39.3	\$43.6	\$48.4	\$58.6
Operating Cash Flow Surplus (Deficiency) After Rate Increase	20.9	27.6	8.5	12.2	19.6	12.9	14.5	(29.8)	(43.3)	(44.7)

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

the five-year rate-setting timeframe, beyond this period expenditures are projected to increase with annual debt service payments related to funding of the SSIP. These investments and associated debt service, along with inflationary operational costs result in the annual increases in revenue needs in future years. To account for this increase and reduce the need for a rapid rate increase in a single year, it is recommended that rates are increased in advance of this requirement. For this reason, Carollo/PME JV is recommending revenue increases in FYE 2015 through 2019 slightly above the annual need in each of the respective years in order to more evenly spread the total increase over the five years of projected rate increases.

**Existing Wastewater Rates**

The SFPUC last performed a cost of service rate analysis in 2009. Based on the recommendations at that time, the SFPUC transitioned from a three-tiered rate structure, which was implemented in 2005, to the current two-tiered structure for residential customers. Similar to the water rates, the current wastewater rates consist of a flow-based tiered rate structure for residential customers and a uniform (non-tiered) flow-based rate for non-residential customers with an additional separate charge for each unit associated with strength. Unlike water rates, retail wastewater revenues are based entirely on flow-based charges, as there is no monthly service charge associated with the wastewater rate structure. The rate is charged based on the assumed amount of metered water usage that is returned to the wastewater system. To calculate this amount, the customer’s water usage is adjusted by a return-to-sewer factor (flow factor), which represents the assumed discharge units. For non-residential customers, the rate is separated into strength- and flow-based rates. The

Table 1.7 | **SFPUC Wastewater Enterprise Current Rates**

Single-Family Residential	
Tier 1 (0-3 units)	\$7.90 per Ccf
Tier 2 (>3 units)	10.53 per Ccf
Multi-Family Residential	
Tier 1 (0-3 units)	\$8.25 per Ccf
Tier 2 (>3 units)	11.01 per Ccf
Non-Residential	
Flow	\$6.6203 per Ccf
COD	0.2178 per lb
TSS	0.8907 per lb
FOG	1.1145 per lb

strength charges are assessed based on the estimated effluent strength discharged to the wastewater system per hundred Ccf, which is specific to user category.

Table 1.7 summarizes the current monthly wastewater rates and charges to the various customer classes.

**Recommended Wastewater Rates**

The purpose of a cost of service analysis is to provide a rational basis for the distribution of system expenditures to each customer in proportion to the demands they place on the system.

It is necessary to allocate costs to billable constituents that can both be measured at the treatment facilities and estimated or measured for each user. The O&M expenditures and the capital costs for each debt service and future capital projects were assigned to each associated billable constituents: flow and strength. The SFPUC applies separate allocations for O&M and capital costs in order to more accurately reflect appropriate cost relationships. This process allows the SFPUC to recover a proportionate share of annual costs related to O&M and capital from each user through the annual user rate, based on their individual flow and loading discharges.

The SFPUC’s budget was analyzed on a per line-item basis, and annual costs were attributed to the following components:

- **Flow:** Operating and capital costs incurred by the wastewater system to handle the quantity of flows discharged to or collected by the system.
- **Strength:**
  - **Chemical Oxygen Demand (COD):** Costs incurred to remove and dispose of organic compounds.
  - **Total Suspended Solids (TSS):** Costs associated with removing and disposing of small particles in the wastewater.
  - **Fats, Oils, and Grease (FOG):** Costs for cleaning collection system and treating and disposing of fats, oils, and greases discharged to the sewer system.

A detail cost allocation was developed, which is discussed in detail in Chapter 6. The result of the functional allocation is presented in Figure 1.3.

**Residential Rates**

Residential rates are based on water consumption with a return to sewer factor and recovered through a tiered rate structure. It is recommended that the Wastewater Enterprise remove the tier structure from both SFR and MFR rates. This is explained in more detail in Chapter 6. Because the wastewater rates are based on water demands, a return to sewer factor is applied to the water consumption records to account for water used for irrigation. The return to sewer factor varies between SFR and MFR customers, recognizing the greater level of outside irrigation by SFR users. Finally, the wastewater loading strength is assumed to be commensurate for all residential wastewater users at 684 mg/L COD, 279 mg/L

SS, and 85 mg/L FOG.

### Non-Residential Rates

Non-residential rates are calculated by dividing the total annual costs associated with each loading by their associated total annual loadings.

Non-residential rates are based on quantity of flow and the strength characteristics. Non-residential rates are assigned by SIC code and are derived using the same loading assumptions used as the basis of the existing rates. The cost per unit (measured in Ccf) of water discharged to the system will vary by SIC code to reflect the assumed loadings concentrations based on the commercial property type.

increases defined by the revenue requirement analysis. These rates are summarized in Table 1.8.

Figure 1.4 compares a typical SFR user's total combined monthly bill (water and wastewater) with the current rate

structure and the recommended rates against the current rate structures of other agencies.

### FUTURE CONSIDERATIONS

Although it is recommended that the SFPUC implement the wastewater rates presented in Chapter 6, it is also recommended that the SFPUC continue to collect data and evaluate the feasibility and benefit of modifying the wastewater rate to include a wet weather component. Additionally, Carollo/PME JV recommends that the SFPUC implement a grant program that incents onsite mitigation of wet weather flows, which could also serve as the next step in completing the necessary analyses and assessment for implementing a wet weather related charge.

Further refinement of the parcel data will be necessary and can be conducted in parallel with defining the suitable rate structures in order to obtain an

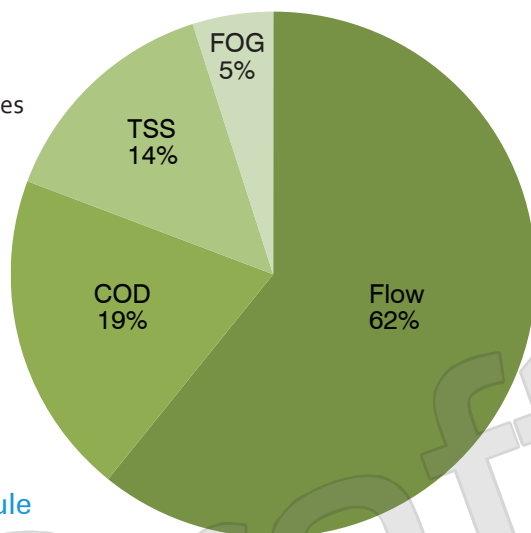


Figure 1.3 | SFPUC Wastewater Enterprise Functional Cost Allocation

### Recommended Rate Schedule

The annual wastewater rates from FYE 2015 through FYE 2019 are determined using the annual rate

Table 1.8 | SFPUC Wastewater Enterprise Recommended Annual Rates

Annual Increase		5.0%	5.0%	6.0%	11.0%	11.0%
	Effective 7/1/2013	Effective 7/1/2014	Effective 7/1/2015	Effective 7/1/2016	Effective 7/1/2017	Effective 7/1/2018
	Existing Unit Charge	Recommended Unit Charge				
Single Family Residential <sup>(1),(2)</sup>						
Tier 1 (per Ccf 0-4 Ccf)	\$7.90	\$8.77	\$9.21	\$9.77	\$10.85	\$12.05
Tier 2 (per Ccf >4 Ccf)	10.53	11.66	12.25	12.99	14.42	16.01
SFR Non-Tiered Rate (Recommended)						
All Discharge (per Ccf)	N/A	\$9.93	\$10.43	\$11.06	\$12.28	\$13.64
Multi-Family Residential Tiered Rates <sup>(1)</sup>						
Tier 1 (per Ccf 0-3 Ccf)	\$8.25	\$9.01	\$9.47	\$10.04	\$11.15	\$12.38
Tier 2 (per Ccf >3 Ccf)	11.01	11.99	12.59	13.35	14.82	16.46
MFR Non-Tiered Rate (Recommended)						
All Discharge (per Ccf)	N/A	\$9.93	\$10.43	\$11.06	\$12.28	\$13.64
Non-Residential Rates						
Volume of Wastewater Discharged (per Ccf)	\$6.6203	\$6.1452	\$6.4525	\$6.8397	\$7.5921	\$8.4273
COD (per lb)	0.2178	0.4395	0.4615	0.4892	0.5431	0.6029
Suspended Solids (per lb)	0.8907	0.8282	0.8697	0.9219	1.0234	1.1360
Oil/Grease (per lb)	1.1145	0.8671	0.9105	0.9652	1.0714	1.1893

Note:

(1) If two-tier structure is continued.

(2) The tier break at 4 Ccf is shown to remain consistent with the recommended single family residential water commodity rate structure.

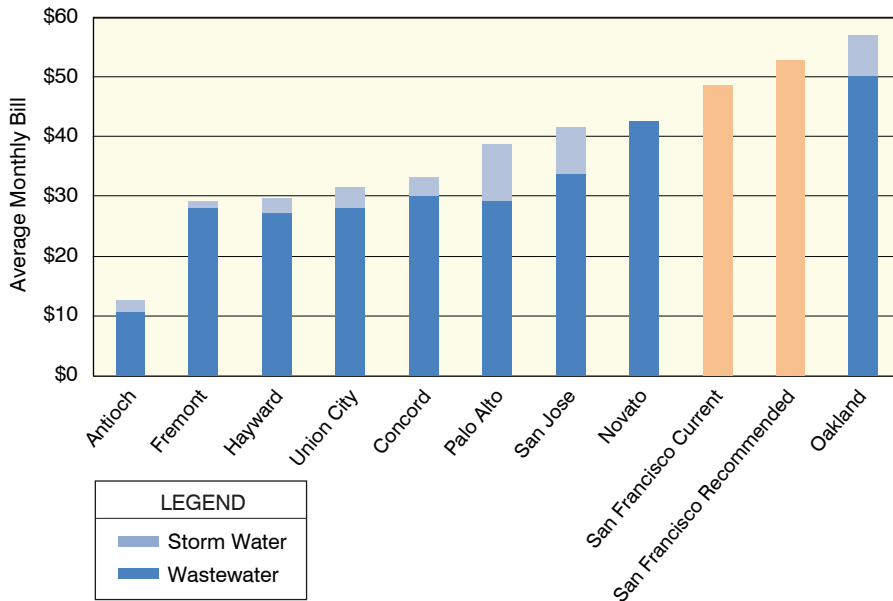


Figure 1.4 | **Single Family Residential Monthly Wastewater and Storm Water Bill Comparison Survey**

accurate depiction of the impacts to all customers. A public outreach campaign will be necessary to understand the public’s receptiveness for separate wet and dry weather rate components, and to educate them on the benefits received. Finally, the customer data system must be updated to accommodate the new billing structure.

### CAPACITY CHARGES

A capacity charge is designed to recover a fair and proportionate share of the costs to provide capacity to serve future users, and is imposed as a condition of service for new wastewater usage, increase in usage, or change in usage. The SFPUC adopted a Wastewater Capacity Charge in July 2005 and a Water Capacity Charge in 2007. The capacity charge adopted by the SFPUC is based on the Equity Buy-In methodology. Conceptually, this methodology requires future users to buy into the system at a value commensurate to the equity contributed by existing users.

Capacity charges are calculated by dividing ratepayer equity by the total available capacity of the wastewater or water system. Ratepayer equity is defined as the value of the existing system, less outstanding debt principal and accumulated depreciation. Available capacity is defined as the total capacity available to be served by the system.

### Existing Water Capacity Charges

The water capacity charge became effective on January 1, 2009 pursuant to Resolution No. 07-0099. The resolution requires any user requesting a new connection to the water distribution system, or requiring additional capacity as a result of any addition, improvement, modification, or change in use of an existing connection, to pay a capacity charge. The current water capacity charge is \$1,191 per 5/8-inch meter as of July 1, 2013.

### Existing Wastewater Capacity Charges

The wastewater capacity charge became effective in 2005. On January 1, 2009, the Resolution No. 05-0045 was updated and requires any user requesting a new connection or requiring additional wastewater collection and treatment capacity to pay a wastewater capacity charge. The current wastewater capacity charge is \$3,514 per equivalent dwelling unit (EDU) as of July 1, 2013.

### Capacity Charge Methodology

The equity buy-in capacity charge approach requires that new users buy into the wastewater or water system on par with the average equity that existing users have funded through rates and charges. Ratepayer equity comprises two components: net capital asset equity and reserves.

### Net Capital Asset Equity

Net capital asset equity represents the current value of the physical wastewater or water systems funded by existing ratepayers, net of accumulated depreciation. Capital costs not funded by existing ratepayers, such as grant-funded assets, are excluded from the ratepayers’ equity calculation. Additionally, capital costs financed through bonds are reduced by the total of the outstanding debt principal to reflect those costs not yet paid for by ratepayers. This analysis includes only the net capital assets associated with the portion of the SFPUC system that provides service to inside-City service area and suburban retail customers. Regional and wholesale assets are not included in the calculations.

## Recommended Capacity Charges

The recommended capacity charge is calculated by dividing the ratepayer equity by available capacity. These calculations are illustrated in Table 1.9 and discussed in detail in Chapter 8.

Based on the methodology delineated within Chapter 8, it is recommended that the SFPUC adopt a water capacity charge of \$1,239 per 5/8-inch meter equivalent (ME) and wastewater capacity charge of \$4,218 per 5/8-inch ME.

It is recommended that the SFPUC impose both the water capacity charge and wastewater capacity charge based on the size of the assessed water meter. For the water system, meter size is commensurate with capacity, as well as water flow rates and pressure requirements, and is considered a reasonable estimation of a new customer's potential demand on the system. It is assumed that the greater the size of the meter, the greater the capacity demand that the user will place on the water system. Meter Equivalents also provide a reasonable estimation of wastewater discharged back into the system, which provides a sound basis for imposing the wastewater capacity charge. This approach is addressed in detail in Chapter 8. As with the existing wastewater capacity charge, non-residential capacity charges will also reflect the assumed discharge strength.

Table 1.9 | **SFPUC Recommended Capacity Charge Calculation for FYE 2015**

	Water Capacity Charge	Wastewater Capacity Charge
Ratepayer Equity	\$786,620,828	\$1,965,705,899
Number of ME's or EDU's	635,000	466,000
Recommended Ratepayer Equity per EDU or ME	\$1,239	\$4,218
Existing Ratepayer Equity per EDU or 200 gpd of Flow	\$1,191	\$3,514
Recommended Percentage Increase	4.0%	20.0%



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## CHAPTER 2 Background

# Introduction

The San Francisco Public Utilities Commission (SFPUC) is an enterprise department of the City and County of San Francisco that provides water, wastewater, and municipal power services to San Francisco. The SFPUC is responsible for the maintenance, operation, and development of three utility enterprises: the Water Enterprise, the Wastewater Enterprise and the Power Enterprise (which is a component of Hetch Hetchy Water and Power).

The Water Enterprise provides drinking water to retail customers in the City, to certain retail customers outside the City and to wholesale customers in three other Bay Area counties. The Wastewater Enterprise provides wastewater and storm water collection, treatment and disposal services for the City. Hetch Hetchy Water and Power operates the Hetch Hetchy Project, comprised of dams (including O'Shaughnessy Dam), reservoirs (including Hetch Hetchy Reservoir),

hydroelectric generator and transmission facilities and water transmission facilities from Hetch Hetchy Valley to the connection with the Water Enterprise and, through the SFPUC's Power Enterprise, provides hydroelectric, solar and other power for municipal and public infrastructure, services and facilities (the "Power Enterprise"). The SFPUC's enterprises are operated and managed as separate financial entities with separate enterprise funds.

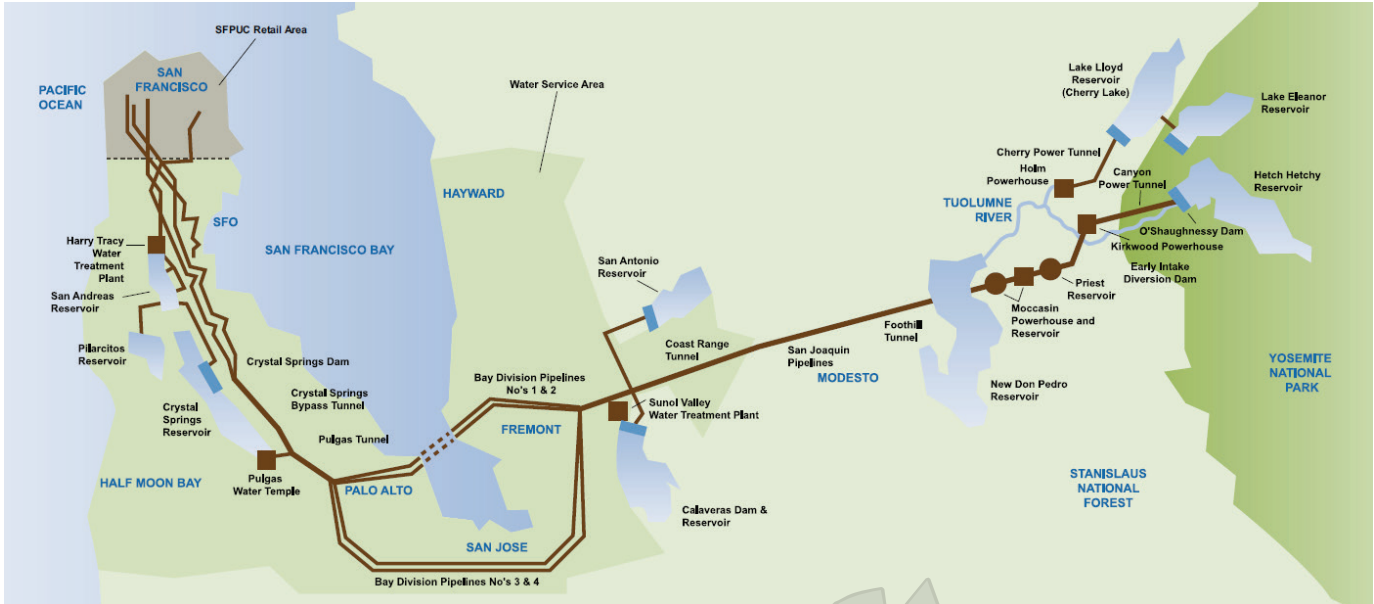


Figure 2.1 | The SFPUC Water Service Area

## ORGANIZATIONAL STRUCTURE

The SFPUC is organized along specific functional enterprise activities, and includes separate common support services divisions and is headed by the General Manager. The General Manager reports directly to the five-member Commission, and has overall responsibility for providing high quality and reliable services, and with meeting present and future needs in an environmentally responsible and fiscally prudent manner. Each functional enterprise activity is headed by an Assistant General Manager. The specific enterprise divisions include: water, wastewater, and power. The common support bureaus include: infrastructure, external affairs, and the Business Services Bureau. The Infrastructure Division is responsible for managing the major capital construction programs for the enterprise divisions. The External Affairs Bureau is responsible for the external public outreach services, policy development, and alignment. Business Services has the responsibility for financial services, customer support, Information Technology,

Human Resources, Assurance of Internal Controls, Fleet and Records Management for the SFPUC.

Within the SFPUC, the Water Enterprise is responsible for the day-to-day operation and maintenance, and for the long-term planning of water supply, treatment, and distribution facilities for the City and County of San Francisco and contract wholesale customers. The Wastewater Enterprise (WWE) is responsible for the day-to-day operation and maintenance, and for the long-term planning of sewer collection, treatment, and disposal facilities for the City and County of San Francisco. The Hetch Hetchy Water and Power Enterprise is responsible for the generation, transmission, and distribution of hydro-power from Hetch Hetchy to selected municipal customers within San Francisco and the Modesto and Turlock Irrigation Districts.

## WATER ENTERPRISE FACILITIES

The SFPUC is the largest water purveyor in Northern California, serving a population of nearly 2.6 million people in over 30 cities.

Customers are divided into three categories: retail customers in the City and County of San Francisco; wholesale customer agencies on the San Francisco Peninsula, in the South Bay and parts of the East Bay; and the retail customers outside of San Francisco.

The SFPUC Water Service Area is shown in Figure 2.1. About one third of SFPUC's water supply is served to retail customers; the remaining two thirds is served to wholesale customers.

Source water comes from three systems. These are the Hetch Hetchy system (Hetch Hetchy, Lake Lloyd, and Lake Eleanor Reservoirs), the Alameda Reservoirs (Calaveras and San Antonio), and the Peninsula Reservoirs (Crystal Springs, Pilarcitos, and San Andreas). Average annual water production of the SFPUC is approximately 300 million gallons per day (mgd). About 85 percent (255 mgd) is derived from the Hetch Hetchy system, 10 percent (29 mgd) from the Alameda Reservoirs, and 5 percent (15 mgd) from the Peninsula Reservoirs.

## The Water System Improvement Program (WSIP)

The WSIP is a \$4.6 billion multi-year capital program to enhance SFPUC's ability to provide reliable, affordable, high quality drinking water to its 27 wholesale customers and regional retail customers in an environmentally sustainable manner. The recommended WSIP is structured to meet water quality regulatory requirements, improve seismic and delivery reliability, and meet water supply reliability goals.

Projects within the WSIP continue to incorporate key principles of SFPUC, including sustainability and environmental stewardship policies. The objectives of the program are to:

- Furnish system improvements to provide high quality water that reliably meets current and foreseeable local, state, and federal requirements.
- Reduce vulnerability of the water system to damage from earthquakes.
- Increase reliability of the system to deliver water by improving redundancy needed to accommodate planned outages for maintenance and unplanned outages resulting from facility failure.
- Provide near-term improvement of water supply/drought protection.
- Set forth long-term water supply/drought management options for technical evaluation, cost analysis, and environmental review.
- Enhance sustainability through improvements that optimize protection of the natural and human environment.

As of June 30, 2013, more than two thirds of all projects have been completed. Rate increases are recommended to accommodate the remaining \$1.1 billion to be spent on the WSIP, as will be discussed in Chapter 3.



Figure 2.2 | **Wastewater Facilities and Dry Weather Capacities**

### WASTEWATER ENTERPRISE FACILITIES

The wastewater collection, treatment and disposal/reuse system consists of a combined sewer system (which treats both sanitary sewer and wet weather flows), three water pollution control plants, and effluent outfalls to the San Francisco Bay and Pacific Ocean. The combined sewer system reduces pollution in the San Francisco Bay and Pacific Ocean by treating wet weather flows, and urban runoff that would otherwise discharge to the Bay and Ocean. The collection system consists of approximately 900 miles of sewer system piping throughout the City.

The SFPUC treats all sanitary flows during dry weather months before discharging the treated effluent to the Pacific Ocean and San Francisco Bay.

Dry weather flows, including street runoff, receive full secondary

treatment at either the Oceanside or Southeast wastewater treatment plants (Figure 2.2). Wet weather flows receive either secondary treatment at Oceanside or Southeast facilities, or primary treatment at the North Point wet weather facilities.

As shown in Figure 2.3, wet weather flows receive an equivalent of primary treatment within the transport storage structures that surround the perimeter of San Francisco before being discharged to the Bay and/or Pacific Ocean.

As a result from the last major wastewater system upgrade in the 1970s, the transport storage structures were designed to capture, store, and treat combined sanitary and wet weather flows. They were designed to allow for some overflows of wet weather primary treated flow while still protecting receiving waters.

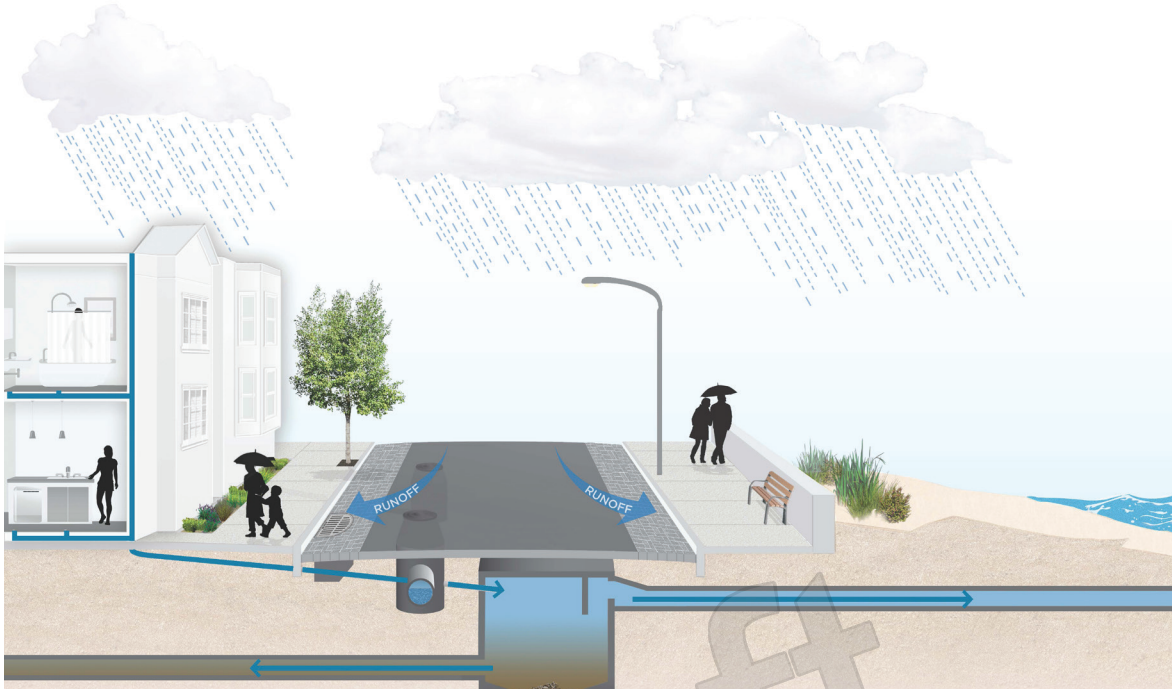


Figure 2.3 | San Francisco Combined System and Transport Storage Structures Illustration

### The Sewer System Improvement Program (SSIP)

Due primarily to aging infrastructure requirements, but also to meet anticipated regulatory requirements and future capacity needs, the SFPUC is developing the Sewer System Improvement Program (SSIP). The SSIP will help the SFPUC to meet the level of service goals for the WWE.

The SSIP has been organized for future implementation in three phases. The Commission approved the levels of service and authorized staff to commence planning an development of the first phase in August 2012 by unanimous vote. This phase consists of \$2.7 billion of capital projects through the year 2021.

In developing the SSIP, the SFPUC has endorsed specific, measurable goals and objectives that will guide project selection and will be utilized to evaluate program implementation and success. These goals and objectives are presented in Table 2.1.

This level of funding is the basis for the analysis of sewer system rates and charges developed in this report.

Provide a Compliant, Reliable, Resilient, and Flexible System that can Respond to Catastrophic Events	Integrate Green and Grey Infrastructure to Manage Storm Water and Minimize Flooding	Provide Benefits to Impacted Communities
The SSIP will ensure treatment of flows within 72 hours of a major earthquake.	The use of innovative green storm water projects together with upgrades to sewer pipelines (grey) will minimize storm water impacts on neighborhoods and the sewer system.	SSIP projects will provide both economic and job benefits to the communities it serves.
Modify the System to Adapt to Climate Change	Achieve Economic and Environmental Sustainability	Maintain Ratepayer Affordability
New facilities will be built using a climate change design criterion so that the sewer system will be better able to respond to rising sea levels and other impacts.	The SFPUC will beneficially reuse and conserve the by-products of our wastewater and storm water treatment systems.	Through the multi-phased SSIP implementation approach, the SFPUC will keep the average customer bills less than 2.5% of an average household income for a single-family residence.

Table 2.1 SFPUC Wastewater SSIP Goals and Objectives

## COST RECOVERY

The SFPUC activities are supported through monthly rates for service; miscellaneous fees and capacity charges; and non-operating revenues, such as interest earnings. In 1999, San Francisco voters passed Proposition H, which restricted the City's abilities to increase rates without voter approval. In November 2002, San Francisco voters passed a Charter amendment (Proposition E) that repealed a rate freeze on water and sewer rates and established a Rate Fairness Board (RFB) to facilitate public input regarding water and sewer rate setting. The passing of this amendment allows the City to fund the repair and upgrade of the system through the issuance of revenue bonds without voter approval.

Retail rates are set by the SFPUC Commission (Commission) pursuant to the authority and provisions set forth by the San Francisco Charter (Section 8B.125). All budgets, rates, fees, and charges presented by SFPUC staff to the Commission must conform to the SFPUC Rates Policy, which is guided by four key principles: affordability; compliance; sufficiency; and transparency. The SFPUC also approves the wholesale rate in accordance with the requirements of the Water Supply Agreement with the SFPUC's wholesale water customers.

## RATEPAYER ASSURANCE SCORECARD

The SFPUC attempts to balance efficient use of rate payer revenues with environmental and safety concerns. In order to do so, the office of the controller developed a Ratepayer Assurance Scorecard, which determines the effectiveness of the current rates using tangible metrics. The scorecard evaluates the following nine key benchmark measures from the SFPUC strategic sustainability plan in order to assess the needs of the utility:

1. Preventative maintenance ratio
2. Number of incidents of fines/sanctions
3. Average residential bill as a percentage of SF median income
4. Cost per person per day
5. Credit rating
6. Percent of calls answered within 20 seconds
7. Amount of water sold to SF residential customers and unauthorized discharges from combined sewer system
8. Percent of local hire employee hours
9. Recordable injury rate

These measures used are categorized as either asset management, mission management sustainability, or personal management and average together to give an overall score.

This scorecard is an innovative means to evaluate the utility's performance; it is recommended that this scorecard be continuously updated to reflect an accurate depiction of the success of the Enterprises. An example of this scorecard is presented in the appendix of this report.

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## CHAPTER 3

### Water Enterprise Revenue Requirements

# Introduction

The San Francisco Public Utilities Commission (SFPUC) is the third largest municipal utility in California and provides retail and wholesale water service to nearly 2.6 million residential, commercial, and industrial customers in the Bay Area. Approximately one-third of delivered water is sent to retail customers in San Francisco, while wholesale deliveries to 27 suburban agencies comprise the other two-thirds. These wholesale agencies are collectively represented by the Bay Area Water Supply and Conservation Agency (BAWSCA). The SFPUC entered into a Water Supply Agreement (WSA) in 2009 that details the annual wholesale revenue requirements to be collected from wholesale agencies.

Carollo/PME JV analyzed the revenue requirements of SFPUC retail water customers, net of payments from the wholesale customers. This analysis has two main purposes: 1) it serves as a means to evaluate the fiscal health of the Water Enterprise and adequacy of current rate levels; and 2) it sets the basis for near- and long-term rate planning. The foundation of the analysis of revenues is based on relevant financial information provided by the SFPUC, including existing debt service and future payments, current reserve ending fund balances, future expenses, future revenues, and other financial information.

Based on the findings of this study, it is recommended that the Water Enterprise increase retail rates by an average of 10.0 percent over the next five years in order to fund operational and capital needs, to meet debt service obligations associated with the \$4.6 billion Water System Improvement Program (WSIP), and to continue to meet levels of service objectives. These recommended rate increases are discussed in detail within this chapter.

On January 17th, 2014, the Governor of California declared a drought emergency, calling for voluntary water demand reductions. The City and County of San Francisco in turn requested a 10 percent voluntary reduction in water usage from its water customers. The analysis presented within this report was developed prior to the drought emergency declaration. Consequently, Carollo/PME JV recommends that the SFPUC continue to monitor rate revenues over the five-year rate period and make any necessary rate adjustments as revenues do not materialize as originally projected. Additionally, retail customers of the SFPUC are required to fund a proportionate share of regional water operational and maintenance (O&M), relative to wholesale customers. The SFPUC per capita retail water demands are amongst the lowest in California, resulting in a higher conservation potential by Bay Area Water Supply and Conservation Agency (BAWSCA) member agencies, which exhibit greater per capita water demands and outdoor irrigation usage. As a result, the SFPUC might be required to fund a greater share of costs in the future, which could also impact the study forecast.



## REVENUE REQUIREMENTS OVERVIEW

A revenue requirements analysis determines the annual system revenue necessary to be recovered through water rates and charges in order to meet the Water Enterprise’s expected financial obligations. The revenue requirement comprises five components: 1) Operations and Maintenance Expenditures; 2) Annual Debt Service; 3) Capital Expenditures; 4) Policy Requirements and Coverage; and 5) Offsetting Revenues.

The revenue requirement analysis considered the following two tests to determine whether rates are sufficient:

- **Cash Flow Test** - The Water Enterprise must generate annual utility revenues adequate to meet general cash needs.
- **Bond Coverage Test** - Annual rate revenues must satisfy debt coverage obligations, as required by indenture.

The cash flow test identifies the amount of annual revenues that must be generated in order to meet annual expenditure obligations. These obligations include operations and maintenance (O&M) expenses, debt service payments, policy-driven additions to working capital, replacement funding, and rate-funded capital expenditures. These expenses, less offsetting revenues from other sources, are compared to total annual projected retail revenues. Shortfalls are then used to estimate the need for rate increases.

The bond coverage test measures the ability of a utility to meet both legal and policy-driven revenue obligations. The SFPUC is required to collect sufficient funds through rates so that the annual net revenues for operational expenditures plus available reserves meet or exceeds 1.25 times total annual debt service. This coverage factor is set by indenture in order to maintain compliance with the SFPUC’s legal ob-

ligations. In addition, the SFPUC must maintain net revenues alone at 1.00 times total annual debt service.

While Carollo/PME JV analyzed the annual cash flow of the Water Enterprise, the main driver was the indenture requirement. The SFPUC has the ability to use reserves to satisfy the annual cash flow test in order to minimize rate spikes.

The following section explains the cost categories included in the annual revenue requirement analysis for the Water Enterprise.

## DATA AND ASSUMPTIONS

### Operating Needs

Operating needs are expenditures that the utility incurs in the day-to-day operations of its systems, such as employee salaries and benefits, system maintenance, fuel, and chemicals. As part of the multi-year budget, an operating forecast is developed for the Water Enterprise. The operating budget expenditures include costs related to administration, retail distribution, water quality, water supply and treatment, natural resources, water resour-

es, and other miscellaneous expenses.

The SFPUC’s FYE 2014 operating budget served as the basis for forecasting future operating expenses for the Water Enterprise. The budget was compared to the current internal financial forecast and discussed with SFPUC staff to identify any anomalies or one-time expenditures not appropriate to include when projecting into future years. Staff also reviewed the budget to identify costs that may need to be adjusted due to future operational changes. This includes any incremental costs due to the WSIP. Unless adjusted based on specifically known future changes, costs incurred in future years were projected using escalation factors that were reviewed with SFPUC staff. In the past, costs of the SFPUC have been escalated at 3.0 percent annually, regardless of cost category. To refine this broad assumption, individual line item costs were assigned one of the escalation factors shown in Table 3.1 to better account for variability between cost categories. These escalation factors were then applied to the appropriate categories of expenditures to forecast costs incurred by the utility.

Table 3.1 | SFPUC Cost Escalation Factors

Cost Escalator <sup>(1)</sup>	Description
Labor Cost Inflation	Labor and fringe benefit rates are assumed to increase at 4.0%.
Construction Cost Inflation	Although capital cost inflation is commonly linked to the Engineering News Record (ENR) Construction Cost Index (CCI), the inflation rate assumes a long-term average of 3.5%.
General Cost Inflation	This rate applies to most expenses in the operating expense forecast, and the City’s expected long-term inflation rate of 3.0%.
Power and Chemicals Inflation	Costs associated with power and chemicals are assumed to increase by 5% annually. In general, power and chemical costs tend to increase more rapidly than general costs.
Customer Account Growth	Customer accounts are projected to increase at an annualized rate of 0.5%. Fixed monthly charges will increase based on this growth rate.
Demand Change	The SFPUC projects continued conservation and per capital water demand reductions. Coupled with customer account growth, the annualized aggregate water demand is projected to remain flat for the forecast period.

Note:  
 (1) Sources were reviewed with SFPUC staff for concurrence of escalation factors.

Table 3.2 | **SFPUC Water Enterprise Operating Expenditures**

Department	Expenditures <sup>(1)</sup>									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Administration	\$91.8	\$94.9	\$98.2	\$101.5	\$105.0	\$108.6	\$112.4	\$116.2	\$120.2	\$124.4
City Distribution	36.0	37.3	38.7	40.2	41.7	43.2	44.8	46.5	48.3	50.1
Water Quality	15.2	15.8	16.3	16.9	17.6	18.2	18.9	19.6	20.3	21.1
Water Supply and Treatment	48.1	50.0	52.0	54.1	56.3	58.5	60.8	63.3	65.8	68.5
Natural Resources	10.7	11.1	11.6	12.0	12.5	12.9	13.4	14.0	14.5	15.0
Water Resources	8.3	8.6	8.9	9.2	9.5	9.8	10.2	10.5	10.9	11.2
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Expenditures</b>	<b>\$210.0</b>	<b>\$217.7</b>	<b>\$225.7</b>	<b>\$233.9</b>	<b>\$242.5</b>	<b>\$251.3</b>	<b>\$260.5</b>	<b>\$270.1</b>	<b>\$280.0</b>	<b>\$290.3</b>

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

In future years, there will be additional incremental O&M costs associated with capital assets from the WSIP. These will be in addition to the escalated O&M costs discussed above. For FYE 2015, the total operating costs of the utility are projected to be \$217.7 million. These costs, along with costs for FYE 2016 through 2023 were estimated using the FYE 2014 budget and applying appropriate annual escalation factors presented in Table 3.1. The details of these costs are shown in Table 3.2.

### Capital Funding

The WSIP is one of the largest water infrastructure programs in the nation and the largest infrastructure program ever undertaken by the City of San Francisco, since the initial building of the water system. The WSIP reached the peak of construction in 2012 with 18 projects valued at \$2.6B in construction with all major projects launched. Currently, more than two thirds of the 81 WSIP projects have been completed. The program is funded by bond measures approved by San Francisco voters in November 2002, and will be paid for by both retail customers in San Francisco

and the 27 wholesale customers. The WSIP provides regional water supply reliability including supply, transmission, treatment, and regional storage. These costs are shared by both retail and wholesale users. In addition to the regional system, the SFPUC also operates a retail distribution system that solely benefits the retail customers and, as a result, costs associated with this system are fully borne by retail customers.

### BAWSCA Prepayment

In FYE 2013, the SFPUC received a prepayment from BAWSCA in the amount of \$356 million, paying off debt service obligations on assets in service as of the effective date of the 2009 WSA, as permitted by section 5.03.F thereof. A portion of this payment, \$109 million, was used to reduce principal payments on existing debt as a benefit to retail water customers only. This is applied to specific bonds and reduces the annual debt service payment required of retail customers until FYE 2019, which results in an aggregate reduction of \$111 million, which includes the resulting decrease in interest of \$2 million. Another portion of the prepayment

will be used to fund anticipated capital projects to reduce the need for funding directly from rate revenues. The remaining \$247 million reflects reserves to be used at a future time.

### Debt Service

The SFPUC finances major capital improvements, in part, by issuing debt for two primary reasons. First, given the size of the capital program, the SFPUC does not have the available financial reserves that would otherwise be required to fund the capital improvement program, nor would it be reasonable to increase the water rates and charges in order to cash fund these improvements. Second, spreading the debt service costs for long-lasting projects over the repayment period provides intergenerational equity by effectively spreading the financial burden between both existing and future users of the system. This approach allows the SFPUC to better match the cost of improvements with the customers benefitting from the improvements. The source of funding for routine or annual repair and replacement (R&R) projects should more appropriately be funded on a pay-as-you-go basis.

Table 3.3 | **SFPUC Water Enterprise Debt Service**

FYE	Original Annual Payment <sup>(1)</sup>	Less Defeasance from BAWSCA <sup>(1)</sup>	Adjusted Annual Payment <sup>(1)</sup>
2014	170.6	(25.9)	144.7
2015	235.5	(23.2)	212.3
2016	257.3	(19.1)	238.1
2017	267.7	(17.8)	249.9
2018	296.8	(13.3)	283.5
2019	332.7	(3.6)	329.1
2020	349.3	-	349.3
2021	369.8	-	369.8
2022	377.3	-	377.3
2023	402.0	-	402.0

Source: SFPUC provided schedule of annual payments on existing debt.

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

The SFPUC has existing debt obligations from past capital projects that were debt financed. The annual payments for existing debt are calculated on a fiscal year basis and were provided by the SFPUC. As noted above, a portion of the prepayment received from BAWSCA was used to reduce debt obligations of the retail customers.

In addition to annual payments for existing debt, the SFPUC anticipates

issuing additional bonds to finance WSIP projects, as well as a portion of R&R projects. The following assumptions were made to calculate projected annual payments necessary on new debt issuances:

- Term of 30 years.
- Annual interest rate of 5 percent.
- Three years of capitalized interest.

Because the SFPUC uses three years of capitalized interest, debt service payments begin three years following the date of issuance. This delays the impact to annual rate revenue requirements, which allows the SFPUC to increase rates over a multi-year period ahead of forecasted payments, instead of implementing increases in a single year. This use of long-term debt is a reasonable approach as it also allows the SFPUC to more accurately match the capital expenditures with the rate-payers benefitting from the projects by having both existing and future customers pay for these improvements. Table 3.3 summarizes the assumed total debt schedule of the utility including both existing and future debt after the BAWSCA prepayment is applied to the existing debt. This amount also includes a portion of Hetch Hetchy debt for which the Water Enterprise is responsible.

### Revenue Funded Capital

In addition to issuing debt, the SFPUC funds a portion of R&R projects through current year revenues. The amount of capital projects funded using current year revenues has been determined by the SFPUC and the revenues are delineated as either local or regional, depending on the associated projects. All local projects are funded solely through retail rates, while the regional projects are split between wholesale and retail revenues proportional to their total annual deliveries. These amounts are summarized in Table 3.4 and shown in Figure 3.2.

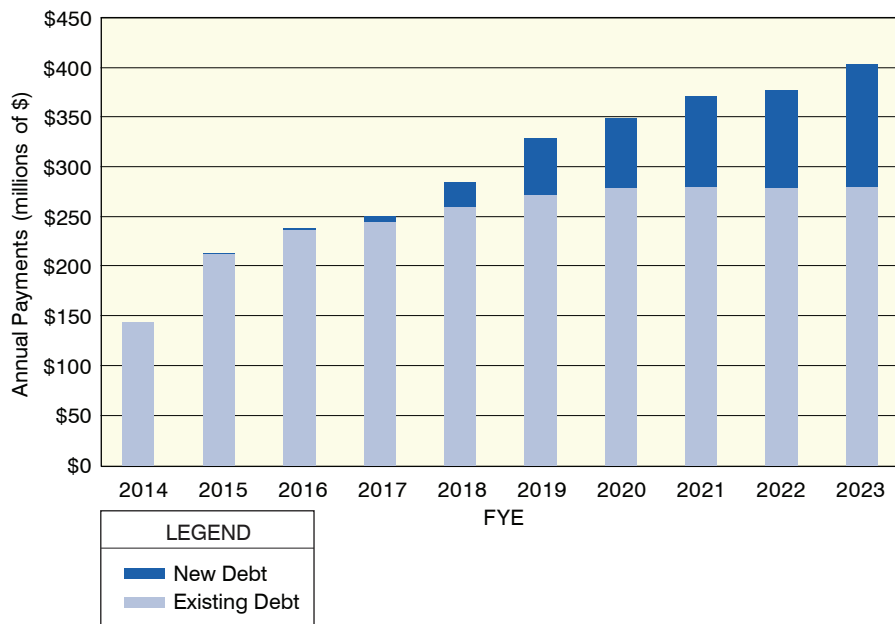


Figure 3.1 | **SFPUC Water Enterprise Projected Annual Debt Service Payments**

Carollo/PME JV recommended the SFPUC maintain an active pay-as-you-go program, rather than relying exclusively on debt, which would spread replacement costs to future generations. The pay-as-you-go funding strategy would also tie to the SFPUC Asset Management Program. Based on the rate increase recommendations presented later in Table 3.9, the SFPUC would have some financial capacity to increase annual funding in FYE 2017 and 2018.

### Policy Requirements and Coverage

As of the beginning of FYE 2014, the SFPUC’s available reserves totaled approximately \$252 million. The SFPUC’s available reserves act in part as an operating reserve. Per SFPUC policy, the amount held in these reserves must be equal to or exceed 15 percent of operating expenses; however, the SFPUC currently exceeds this policy requirement and has accordingly planned to cash fund a portion of retail ratepayers’ share of future capital projects using

Table 3.4 | **SFPUC Annual Revenue Funded Capital**

FYE	Regional Revenue <sup>1</sup>	Local Revenue <sup>1</sup>	BAWSCA Prepayment <sup>1</sup>	Total <sup>1</sup>
2014	35.1	2.3	61.7	99.1
2015	48.9	1.0	64.4	114.3
2016	53.3	3.9	-	57.2
2017	44.3	-	-	44.3
2018	39.5	-	-	39.5
2019	68.7	20.0	-	88.7
2020	68.8	25.0	-	93.8
2021	28.9	30.0	-	58.9
2022	28.4	35.0	-	63.4
2023	11.4	40.0	-	51.4

Source: 10-year CIP provided by SFPUC staff. The BAWSCA Prepayment column benefits only the retail ratepayers.

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

available reserves.

In addition, by indenture, the SFPUC is required to maintain at least 1.25 times coverage ratio of annual debt service inclusive of reserves. This coverage is calculated as the ratio of net revenues available, including reserves, to total annual debt service requirements. In addition, the SFPUC main-

tains at least 1.00 times coverage ratio of net revenues for operating expenditures, excluding reserves, to total annual debt service requirements. The actual coverage ratio, including and excluding reserves, is expected to be 2.27 times and 1.10 times, respectively for FYE 2014.

Due to the remainder of the BAWSCA prepayment being placed in these unrestricted reserves, no additional revenue must be collected to meet these requirements during the five year rate-setting time frame. However, in future years, this prepayment may be applied to rate-funded capital or be used to reduce the need for future revenue bonds. As a result, this prepayment will no longer be available to meet these reserve requirements, which could trigger the need to collect additional revenue to meet the operating reserve and debt coverage requirements.

### Offsetting Revenues

Beyond retail water rates and charges, the SFPUC collects revenues through other funding sources, such as capacity charges, interest earnings, late payments, lease revenues, and most notably, revenues from wholesale

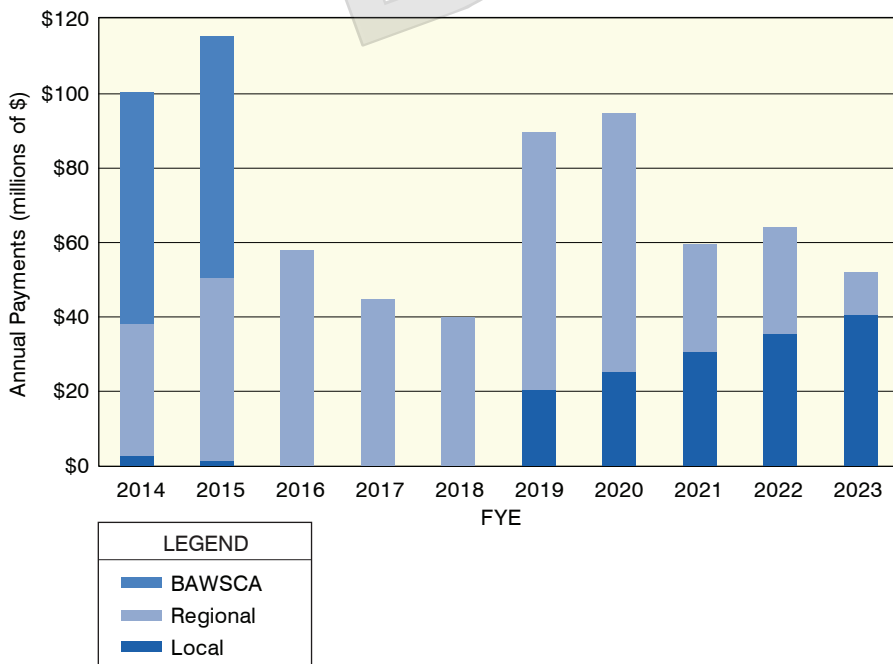


Figure 3.2 | **SFPUC Water Enterprise Projected Revenue Funded Capital**

customers. These offsetting revenues reduce the total rate revenue that must be collected from retail customers. Similar to the operating costs, most offsetting revenues are escalated from FYE 2013 revenues, by applying factors discussed with and approved by the SFPUC. These factors were discussed in Table 3.1. Additionally, the Water Enterprise collects revenue from wholesale customers that receive service from the SFPUC. The revenues collected from the wholesale customers are based on calculations for determining the Wholesale Revenue Requirement (WRR) set forth in the WSA between the SFPUC and BAWSCA, and are outside the scope of this study. It is, however, necessary to estimate projected wholesale revenues, as they are an offset to the retail revenue requirement. While other offsetting revenues may be adequately predicted by escalating current year revenues, because the wholesale revenues are based on actual annual demands, they can vary significantly from one year to the next. Consequently, wholesale revenues must be calculated and monitored on an annual basis, as wholesale customer payments represent a significant portion of the Water Enterprise revenues, which could result in a need to adjust the retail rate projections if wholesale revenues do not materialize as projected, particularly in light of the 2014 drought declaration. The determination of the wholesale revenue is discussed in more detail below.

**Allocation of Costs to BAWSCA Customers**

While operating costs have historically been recovered from wholesale customers on a cash basis, as of FYE 2009, the contract between the SFPUC and BAWSCA was modified from a utility basis to a cash-basis for capital cost recovery as well. As a result, wholesale customers are

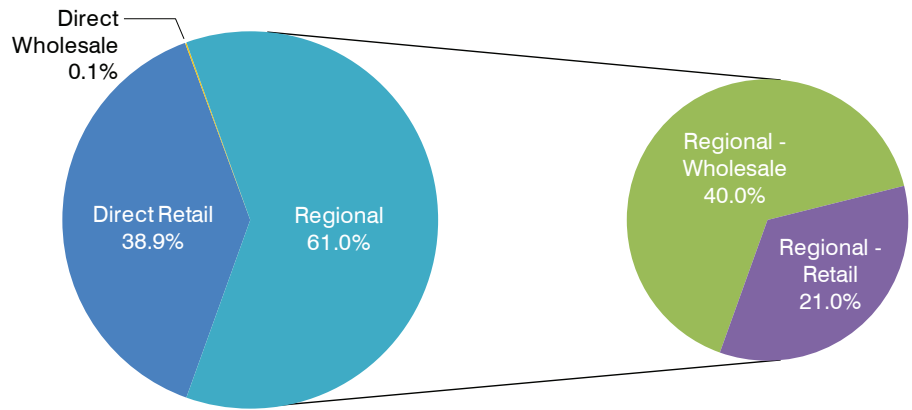


Figure 3.3 | SFPUC Water Enterprise Allocation of FYE 2015 O&M Costs to Wholesale and Retail Customers

now responsible for all expenses incurred by the SFPUC, based on their proportional annual use of Regional Water enterprise assets. The WRR, calculated annually, consists of a portion of operating and general expenses, and capital costs of the regional water system. The revenue collected from wholesale customers is dependent upon the cost split between direct retail, direct wholesale, and shared regional costs, as well as the proportion of annual water deliveries to wholesale customers relative to retail customers.

**Operating Costs**

Direct retail costs are recovered solely from retail customers; likewise, direct wholesale costs are recovered solely from wholesale customers. Both retail and wholesale customers are responsible for costs associated with the regional system, based on their proportional annual water usage. Using SFPUC assumptions, O&M expenses can be attributed to systems according to the following percentages: for FYE 2015, O&M costs are projected to benefit direct retail (38.9 percent), direct wholesale (0.1 percent), and regional (61.0 percent). Of this 61.0 percent that benefits regional customers, the costs are allocated to wholesale and retail customers based on their proportional annual

water usage. For FYE 2015, wholesale customers are expected to receive 65.6 percent of total water deliveries. In total, wholesale customers are responsible for 40.1 percent (the portion attributed to direct wholesale and regional wholesale) of operating costs in FYE 2015. Carollo/PME JV evaluated the reasonableness of these allocations provided by the SFPUC. However, the SFPUC’s detailed allocation serves as the basis for this revenue requirement analysis.

**Capital Costs**

Similar to operating costs, capital expenditures are allocated between retail and wholesale customer categories. Each capital project is allocated to either the local retail or wholesale based on direct benefit, or are considered regional projects and are allocated to retail and wholesale customers based on proportional benefit. Consequently, wholesale customers are only responsible for costs associated with direct wholesale projects and a portion of regional projects proportional to their water consumption.

Each water revenue bond issuance has a defined list of projects for which the debt was issued, which is used to split costs between retail and regional projects. These splits were detailed by SFPUC staff and are based on the wholesale contract.

Table 3.5 | **SFPUC Capital Cost Allocated to Regional Water System**

Bond Issuance	Allocable to the Regional System (Percent)
2006 Water Bond, Series A	53.19
2009 Water Bond, Series A	57.92
2009 Water Bond, Series B	87.37
2010 Water Bond, Series B	92.90
2010 Water Bond, Series D	97.24
2010 Water Bond, Series E	93.38
2010 Water Bond, Series F	100.00
2010 Water Bond, Series G	100.00
2011 Water Bond, Series A	92.12
2011 Water Bond, Series B	100.00
2012 Water Bond, Series A	69.34

Table 3.5 summarizes the portion of each bond issuance that is allocated to regional water supply. Applying these percentages and using a weighted average, wholesale customers are responsible for 44.5 percent of the annual payment for existing debt for FYE 2015. It is important to note that only the retail customers' share of existing debt will receive a benefit from the BAWSCA prepayment. The wholesale customers do not benefit from this reduction of debt, apart from lower interest payments obtained through BAWSCA's refinancing of the debt. Thus, the proportional split is applied to pre-defeasance debt to determine the appropriate contribution required from wholesale customers. A similar method is applied to future projects

costs listed in the 10- year CIP. Future capital projects are assumed to benefit local or regional customers. Again, the wholesale customers only benefit from the regional projects, and thus are only financially responsible for their portion of these projects. As defined by the SFPUC, these projects are funded either with pay-go or through revenue bonds. Those that are funded via future revenue bonds are allocated to retail and wholesale customers in a similar manner to the existing debt payments. All debt associated with regional projects are allocated to retail and wholesale customers proportional to their assumed annual water consumption. Table 3.6 identifies the total annual forecasted O&M and capital needs of the system and the calculated allocations to retail and wholesale customers.

In addition to paying a portion of operating and capital costs, wholesale customers are also responsible for their share of debt coverage, according to the contractual agreement between the SFPUC and the wholesale customers. This amount required for this coverage is determined in a similar way as that for the retail customers. Annual revenue plus reserves less expenditures must equal or exceed 1.25 times the annual debt service. This, along with their share of operating costs and capital costs delineated in Table 3.6 makes up the expected wholesale revenue offset. What remains is the retail revenue requirement to be fully recovered through retail water rates.

## PROJECTED REVENUE REQUIREMENTS

Based on the study projections, the SFPUC must increase rates annually in order to meet projected revenue needs due to annual increases in expenditures. In addition to revenue from these recommended rate increases, the SFPUC will experience some increase in revenues due to projected customer growth. The fixed charges recovered on a per account basis will increase. As discussed earlier, the annual consumption is projected to remain constant and thus, no additional revenue is projected from the variable consumption charges.

As discussed earlier in this chapter, in order to achieve adequate collection of revenues, both the cash flow test and bond coverage test must be met for each given year. Table 3.7 summarizes the costs and offsetting revenues of the Water Enterprise for FYE 2015. In FYE 2015, the rate increase is driven by the annual cash needs of the utility. This is in large part due to the increase in debt service payments associated with the funding of the WSIP, as well as revenue funded capital. The amount of capital funding required directly from revenues in FYE 2015 is more than double the amount that was revenue funded in FYE 2014.

This process was repeated for a ten-year forecast and the resulting revenue needs, as well as the unsmoothed rate increases, are presented in Table 3.8.

Table 3.6 | **SFPUC Water Enterprise Annual Expenditure Allocation Summary<sup>1</sup>**

FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
O&M Allocated to Wholesale	\$85.8	\$88.4	\$91.0	\$93.7	\$96.5	\$99.4	\$102.4	\$105.5	\$108.7	\$111.9
Capital and Debt Allocated to Wholesale	66.3	144.0	148.1	146.5	152.8	189.4	209.2	190.2	191.6	200.5
Wholesale Share of Coverage	<u>3.9</u>	<u>9.1</u>	<u>3.1</u>	<u>1.5</u>	<u>2.0</u>	<u>4.1</u>	<u>4.9</u>	<u>1.9</u>	<u>0.4</u>	<u>2.2</u>
<b>Total Wholesale Revenue Offset</b>	<b>156.0</b>	<b>241.5</b>	<b>242.2</b>	<b>241.7</b>	<b>251.3</b>	<b>293.0</b>	<b>316.6</b>	<b>297.6</b>	<b>300.6</b>	<b>314.7</b>

Note: (1)

Presented in million dollars, calculations in tables may not foot due to rounding.

Table 3.7 | SFPUC Water Enterprise FYE 2015 Revenue Requirement

Revenue Component	FYE 2015 Total <sup>(1)</sup>	Description
Operating Costs	\$217.7	The Operating Budget funds the day-to-day operations of the SFPUC.
Debt Service	212.3	The SFPUC uses debt to fund capital and refund previous debt (long-term debt only).
Revenue Funded Capital	49.9	The SFPUC funds R&R projects through current year revenues. (This excludes contributions from the BAWSCA prepayment).
Offsetting Revenues	(264.1)	Additional non-operating revenues generated from sources outside traditional water rates and charges are applied as a credit to reduce required rates and charges revenues. Includes the revenue collected from wholesale customers, property taxes refunds, lease revenues, interest earnings, and other revenues.
Remaining Coverage and Reserve Driven Needs	-	Revenue requirements associated with meeting the SFPUC's Financial Management Policies. This requirement is already met for FYE 2015.
Water Sales Revenue Requirement	\$215.7	Total revenue requirements associate with SFPUC's operating costs, debt service, and offsetting revenues. This also includes coverage and reserves needs.
Less Current Projected Revenues	<u>\$(191.5)</u>	Projected revenue prior to rate increase
Additional Revenue Required	\$24.2	Additional revenue required from rate increase (Revenue requirement less projected revenues)

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

As illustrated in Table 3.8, there is a need for significant rate increases in order to meet all obligations of the utility. Although Carollo/PME JV is only recommending the next five years of rate increases, it is important to plan for expenditure increases beyond this time

frame in order to mitigate sudden rate increases, which could otherwise occur following the five-year rate period.

Toward the end of the ten-year forecast, there are more local revenue funded capital projects than regional.

While the overall amount of revenue funded capital decreases, the increase in local revenue funding responsibility shifts the burden more heavily on retail customers and away from wholesale customers. This is the cause for divergence of expenditures from

Table 3.8 | SFPUC Water Enterprise Revenues and Expenditures<sup>(1)</sup>

FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Revenues</b>										
Rate Revenue (prior to rate increase)	\$178.9	\$191.5	\$216.8	\$256.8	\$263.7	\$290.8	\$352.4	\$362.6	\$376.0	\$394.2
Wholesale Revenues	156.0	241.5	242.2	241.7	251.3	293.0	316.6	297.6	300.6	314.7
Non-Rate Revenues	<u>22.0</u>	<u>22.6</u>	<u>23.3</u>	<u>24.0</u>	<u>24.7</u>	<u>25.5</u>	<u>26.2</u>	<u>27.0</u>	<u>27.8</u>	<u>28.7</u>
Total Revenues	\$356.9	\$455.7	\$482.3	\$522.6	\$539.7	\$609.2	\$695.3	\$687.2	\$704.5	\$737.5
<b>Expenditures</b>										
Operations	210.1	217.7	225.7	233.9	242.5	251.3	260.5	270.1	280.0	290.3
Debt Service	144.7	212.3	238.1	249.9	283.5	329.1	349.3	369.8	377.3	402.0
Pay-As-You-Go	<u>99.1</u>	<u>114.3</u>	<u>57.2</u>	<u>44.3</u>	<u>39.5</u>	<u>88.7</u>	<u>93.8</u>	<u>58.9</u>	<u>63.4</u>	<u>51.4</u>
Total Expenditures	\$453.8	\$544.3	\$521.0	\$528.1	\$565.4	\$669.1	\$703.6	\$698.8	\$720.7	\$743.7
<b>Annual Rate Increases</b>										
Operating Cash Flow Surplus (Deficiency) Before Rate Increase	\$(96.9)	\$(88.6)	\$(38.7)	\$(5.6)	\$(25.7)	\$(59.9)	\$(8.4)	\$(11.6)	\$(16.2)	\$(6.1)
Unsmoothed Rate Increase	6.5%	12.6%	17.9%	2.2%	9.7%	20.6%	2.4%	3.2%	4.3%	1.6%
Additional Revenue from Rate Increase	\$11.6	\$24.2	\$38.7	\$5.6	\$25.7	\$59.9	\$8.4	\$11.6	\$16.2	\$6.1
Operating Cash Flow Surplus (Deficiency) After Rate Increase	(85.3)	(64.4) <sup>(2)</sup>	-	-	-	-	-	-	-	-

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

(2) This deficiency represents amount of BAWSCA prepayment used to fund capital projects as projected by SFPUC's 10-year CIP.

revenues seen in the later years of the projected expenditures. Although the expenditures begin to plateau toward the end of the five years, beyond this time frame, expenditures are projected to increase with annual debt service payments related to funding of system rehabilitation and reliability associated with the WSIP. These investments and associated debt service results in the annual increases in revenue needs with annual debt service payments and inflationary operational costs. The five year rate recommendations, in part, attempt to plan for future projected expenditures by accounting for this increase and reduce the need for a rapid rate increase in a single year.

While the Water Enterprise has available cash in its operating reserve due to the BAWSCA prepayment, it is rec-

ommended that these rate increases be less than that shown in Table 3.8 and smoothed so that one year alone does not have an abrupt increase. Carollo/PME JV reviewed the publicly-available Commission-approved rate increases that have been proposed by the SFPUC and concur that these increases are adequate and appropriate based on projected expenditures. Table 3.9 shows the recommended annual rate increases and resulting cash flow.

The rate increases recommended in Table 3.9 are the recommended annual increases that the Water Enterprise should implement in order to collect sufficient funds to pay operational and capital expenditures, including the debt service obligations associated with the WSIP. As illustrated in Table 3.9 and Figure 3.4, these rate increases

are not sufficient to fully fund all annual cash needs of the utility in FYE 2015 and 2016 and 2019. The SFPUC attempts to balance rate increases with annual expenditure needs. The prepayment from BAWSCA discussed earlier is available to mitigate rate increases through the funding of capital projects. The negative cash flow in Table 3.9 illustrates the amount of reserves used to fund capital expenditures. It is important to note that the amount in reserves is still adequate for the bond coverage, despite the negative cash flow. This is shown in the last two rows of Table 3.9. Both bond coverage tests are met annually. As noted earlier, the SFPUC will be required to revisit this forecast if wholesale revenues do not materialize as projected.

Table 3.9 | SFPUC Water Enterprise Revenues and Expenditures<sup>(1)</sup>

FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Revenues</b>										
Rate Revenues (prior to rate increase)	\$178.9	\$191.5	\$215.6	\$242.7	\$268.3	\$291.2	\$316.0	\$343.0	\$372.3	\$392.9
Wholesale Revenues	156.0	241.5	242.2	241.7	251.3	293.0	316.6	297.6	300.6	314.7
Other Non-Rate Revenues	22.0	22.6	23.3	24.0	24.7	25.5	26.2	27.0	27.8	28.7
<b>Total Revenues</b>	<b>\$356.9</b>	<b>\$455.7</b>	<b>\$481.0</b>	<b>\$508.4</b>	<b>\$544.3</b>	<b>\$609.6</b>	<b>\$658.8</b>	<b>\$667.6</b>	<b>\$700.7</b>	<b>\$736.2</b>
<b>Expenditures</b>										
Operations	\$210.1	\$217.7	\$225.7	\$233.9	\$242.5	\$251.3	\$260.5	\$270.1	\$280.0	\$290.3
Debt Service	144.7	212.3	238.1	249.9	283.5	329.1	349.3	369.8	377.3	402.0
Revenue Funded Capital	99.1	114.3	57.2	44.3	39.5	88.7	93.8	69.1	77.7	67.4
<b>Total Expenditures</b>	<b>\$453.8</b>	<b>\$544.3</b>	<b>\$521.0</b>	<b>\$528.1</b>	<b>\$565.4</b>	<b>\$669.1</b>	<b>\$703.6</b>	<b>\$709.0</b>	<b>\$734.9</b>	<b>\$759.7</b>
<b>Annual Rate Increases</b>										
Operating Cash Flow Surplus (Deficiency) Before Rate Increase	\$(96.9)	\$(88.6)	\$(40.0)	\$(19.7)	\$(21.1)	\$(59.5)	\$(44.8)	\$(41.4)	\$(34.2)	\$(23.5)
Recommended Rate Increase	6.5%	12.0%	12.0%	10.0%	8.0%	8.0%	8.0%	8.0%	5.0%	5.0%
Additional Revenue from Rate Increase	\$11.6	\$23.0	\$25.9	\$24.3	\$21.5	\$23.3	\$25.3	\$27.4	\$18.6	\$19.6
Operating Cash Flow Surplus (Deficiency) After Rate Increase	(85.3)	(65.6)	(14.1)	4.5	0.3	(36.2)	(19.5)	(13.9)	(15.6)	(3.8)
<b>Debt Service Coverage</b>										
With Reserves	2.27	1.73	1.57	1.60	1.51	1.38	1.37	1.29	1.31	1.33
Without Reserves	1.10	1.23	1.18	1.20	1.14	1.16	1.21	1.15	1.16	1.16

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.



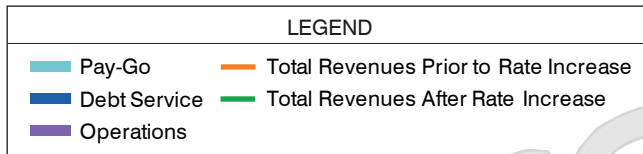
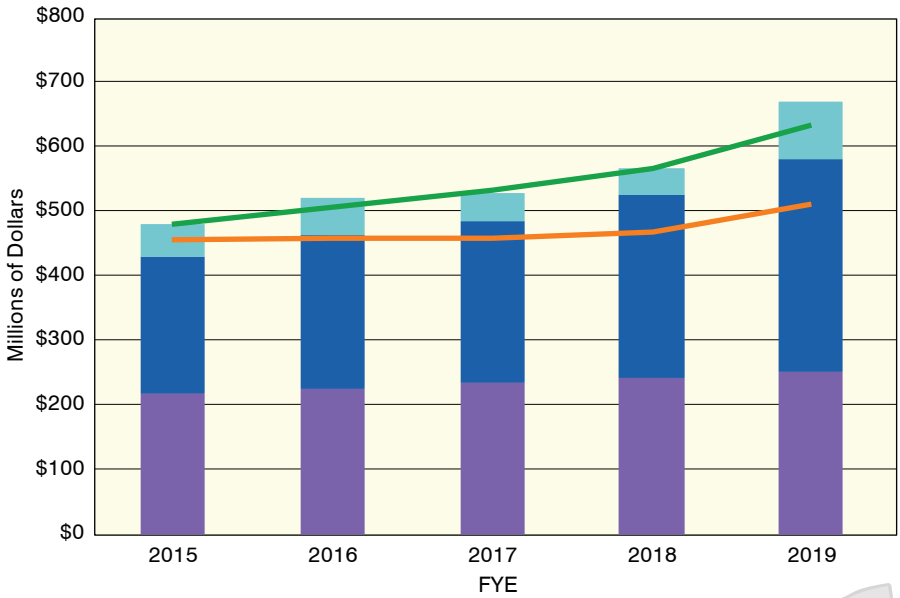


Figure 3.4 | SFPUC Water Enterprise Projected Expenditure

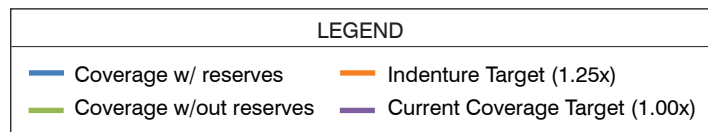
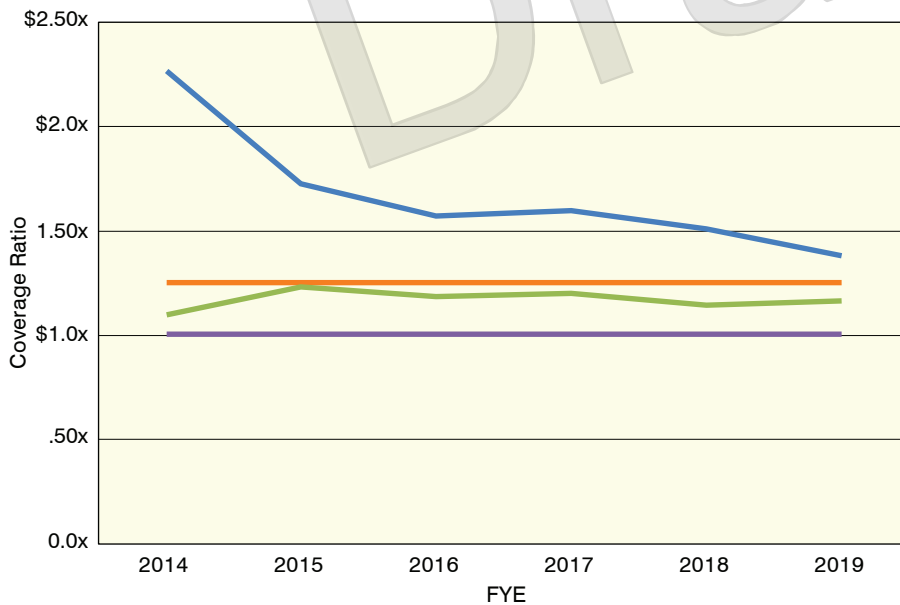


Figure 3.6 | SFPUC Water Enterprise Resulting Annual Coverage Factor from Recommended Rate Increases

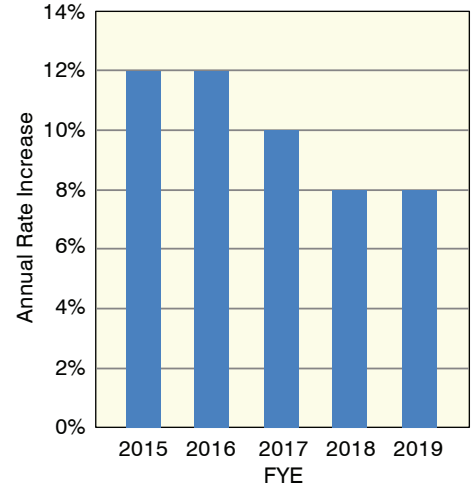


Figure 3.5 | SFPUC Water Enterprise Recommended Annual Rate Increases

Figure 3.5 summarizes the recommended annual retail rate increases for the five-year rate-setting period. With the successful completion of the \$4.6 billion WSIP, the need for significant annual water rate increases will attenuate; however, as the SFPUC has and will continue to use three years of capitalized interest, increases in annual debt service payments will continue to increase over and just beyond the forecast period. With the successful completion of the WSIP, the SFPUC will focus on implementation of the Sewer System Improvement Program and other miscellaneous capital projects not associated with the WSIP. As shown later in the wastewater forecast, wastewater rate increases will continue as water rate increases attenuate.

### ADDITIONAL CONSIDERATIONS

As mentioned earlier in the report, it is crucial that the SFPUC maintain a 1.25 times coverage ratio of annual debt service. Failure to meet this requirement could result in a damaged credit rating, which could have significant interest rate cost impacts due to the amount of debt expected

Table 3.10 | SFPUC Water Enterprise Operating Reserve Cash Flow<sup>1</sup>

FYE	2014	2015	2016	2017	2018	2019
Beginning Fund Balance	\$251.8	\$169.5	\$105.9	\$93.1	\$100.4	\$103.8
Net Cash Flow	(85.3)	(65.6)	(14.1)	4.5	.3	(36.2)
Interest Earnings	3.0	2.0	1.3	2.8	3.0	4.2
<b>Ending Fund Balance</b>	<b>\$169.5</b>	<b>\$105.9</b>	<b>\$93.1</b>	<b>\$100.4</b>	<b>\$103.8</b>	<b>\$71.7</b>
Percent of O&M Expenditures	74%	50%	42%	44%	44%	29%
Percent of Debt Service	117%	50%	39%	40%	37%	22%

to be issued in upcoming years. Figure 3.6 shows the debt coverage with and without reserves resulting from the recommended rate increases. Table 3.10 and Figure 3.7 show the resulting operating reserve fund from the cash flow presented in Table 3.9. As shown in Figure 3.7, it is recommended that the Water Enterprise use available reserves to fund annual expenditures in order to lessen the annual rate increase for retail customers.

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

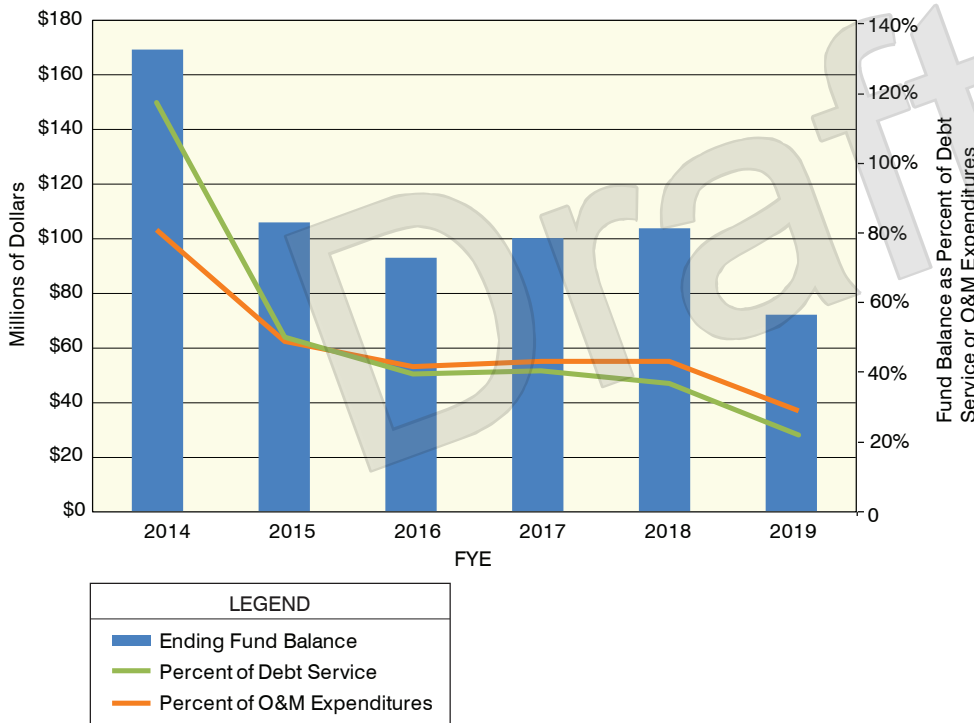


Figure 3.7 | SFPUC Water Enterprise Operating Reserve Fund

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## CHAPTER 4 Water Rates

# Introduction

The San Francisco Public Utilities Commission (SFPUC) maintains rates to equitably recover the costs from users to operate, service debt, and perform repairs and replacements for the overall water system. The focus of this chapter is to detail the process utilized to set rates to achieve full cost recovery and substantiate that customers are paying their fair and proportionate share of the system costs.

The SFPUC retail service area has among the lowest per capita water consumption in the State of California. In addition to achieving cost recovery and ratepayer equity objectives, several rate alternatives were analyzed to evaluate the impact of price on water consumption and to encourage further conservation. Based on available information, Carollo/PME JV analyzed consumption and billing records in order to best understand customer demands, potential of additional conservation, and expected price sensitivities. The findings and recommendations for the SFPUC water rates are detailed within this chapter.

### OVERVIEW OF RATE SETTING PROCESS

The City Charter Section 8B.125 requires that the SFPUC perform a cost of service study at least every

five years. This provision is designed to maintain revenues from rates to adequately fund utility operations, maintenance, and ongoing capital needs, and equitably recover costs from system users. Additionally, in the State of California, water rates must adhere to the cost of service proportionality requirements imposed by Proposition 218 of the State Constitution. Proposition 218 requires that property-related fees and charges, including water rates, do not exceed the proportional cost of providing the service. Article X (2) of the State Constitution establishes the need to preserve the State's water supplies and discourages the wasteful or unreasonable use of water by encouraging conservation. To achieve these requirements, Carollo/PME JV conducted the following study elements shown in Figure 4.1.

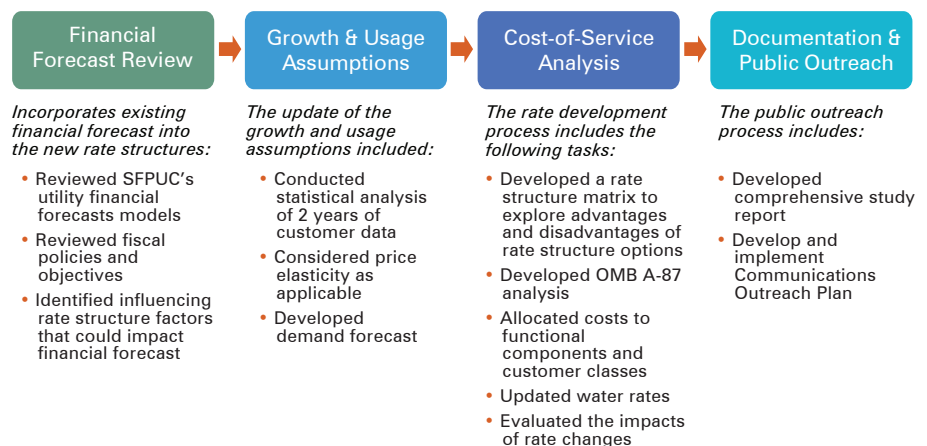


Figure 4.1 | **Flowchart for Cost of Service Rate-Setting Process**

When meeting proportionality requirements of Proposition 218 and the requirements of the City Charter, the SFPUC has some flexibility to develop rates that also achieve the City's policy objectives and promote community values. These policies do include water conservation to promote the efficient use of the City's natural resources. The recommended rate structure is designed to account for the unique nature of the SFPUC's water system, as well as the demand and usage characteristics of an ecologically-minded service population.

### Future Considerations

In performing this water rate structure analysis, Carollo/PME JV worked in close collaboration with SFPUC staff to gather and validate study data. As part of this process, Carollo/PME JV reviewed the SFPUC customer and financial data for reasonableness. However, Carollo/PME JV did not independently audit nor verify the accuracy of the SFPUC's customer billing or financial records used as the foundation of this analysis. In particular, summary-level customer data was provided and used as the basis for the findings presented within this report. The projections and forecasts of this analysis are based on reasonable expectation of future events. Should cost escalation, operating expenditures, capital needs, or customer demands vary from projected levels prior to Fiscal Year Ending (FYE) 2019, the SFPUC might require an additional Proposition 218 process to adjust rates above currently projected levels. The SFPUC might similarly be required to begin a new Proposition 218 process should revenues not materialize as projected. As the SFPUC continues to gather additional data through its recently implemented automated meter infrastructure (AMI) system, it might be possible in future rate efforts to create additional or more specific rate subclasses within non-residential customer classes for greater transparency.

## COST OF SERVICE ANALYSIS

The purpose of a cost-of-service analysis is to provide a rational basis for distributing the full retail costs of the SFPUC water system (identified in Chapter 3) to each customer class in proportion to the demands they place on the system. A detailed cost allocation was developed by assigning costs to one of six functional categories, and then allocating costs to each customer class based on its respective demand on the system. The allocation developed through this study provides a stable method for allocating costs within the water system, which could be sustained unless substantial changes in cost drivers or customer consumption patterns occur.

The cost of service allocation completed in this study was established on the base-extra capacity method as defined by the American Water Works Association (AWWA)<sup>1</sup>. This methodology separates costs between base costs and extra capacity costs, based on the actual operating history and design criteria of the SFPUC's system. Based on this methodology, revenue requirements are allocated based on the demand placed on the water system.

### Functional Cost Allocation Components

This functional cost allocation assigns the annual revenue requirement, outlined in Chapter 3, for FYE 2015, by major function. The water utility's primary functions are related to three flow or commodity components (base, peak day, and peak hour), which will be the basis of the water commodity rate, and three customer-related costs (customer service, meter charges, and fire service), which will be the basis of the fixed water service and fire protection charges. These six elements are referred to as functional cost categories.

<sup>1</sup> Manual of Water Supply Practices M1 - Principles of Water Rates, Fees, and Charges, Sixth Edition

The SFPUC's budget was analyzed line-item by line-item and operations and maintenance (O&M) expenditures, debt service, and other expenditures were distributed between the available cost categories. The details of this allocation are shown in the functional allocation in Appendix E.

- **Base:** Operating and capital costs incurred by the water system to provide a basic level of service to each customer.
- **Peak Day:** Costs incurred to meet peak day demands for water in excess of basic demand (base). This cost also includes capital costs related to oversizing the system to meet excess demand. This allocation also includes basic water supply and distribution costs.
- **Peak Hour:** Similar to peak day, peak hour represents those operating and capital related costs incurred to meet peak hour demands. The size of the SFPUC's water system is designed to meet peak hour demands. This cost includes capital costs related to oversizing the system to meet excess demand. This allocation also includes basic water supply and distribution costs.
- **Customer Service:** Fixed expenditures that relate to operational support activities including accounting, billing, customer service, and administrative and technical support. These expenditures are essentially common to all customers and are reasonably uniform across the different customer classes.
- **Meter Charges:** Meter and capacity-related costs, such as meter maintenance and peaking charges, that are included based on the meter's hydraulic capacity. Additionally, as the system's facilities are designed to meet

peaking requirements, a portion of the capacity-related costs, including debt service, are allocated to meter charges.

- **Fire Service:** Capacity-related costs that are incurred based on the incremental, excess capacity that must be designed into the system in order to provide private fire protection service. Additional information on private fire service will be discussed later in this chapter.

To account for possible year-to-year fluctuations between cost categories, the forecasted expenditures were averaged over the five-year rate period between FYE 2015 and FYE 2019.

### Allocation of Costs to Functional Components

The SFPUC water system comprises both regional and local facilities, which are both necessary to deliver water to retail water customers. A detailed functional allocation analysis was prepared by separately identifying line-item expenditures (water assets, debt service, and operation and maintenance costs), and allocating a portion of costs

to each functional component based on the specific function provided. This allocation is derived from the SFPUC's existing base and peak factors, which are used as the basis of the existing rates. Carollo/PME JV discussed these factors with SFPUC staff for reasonableness based on existing system conditions. The SFPUC should revisit these factors during the next cost of service study once new AMI data becomes available and the SFPUC can evaluate account level peak demand factors.

Carollo/PME JV first reviewed the SFPUC's existing water assets and allocated each to the representative function component. Beyond existing assets, each existing debt service was reviewed and allocated based on the specific use of those funds. Finally, each of the individual operating budget line items was reviewed and its corresponding costs allocated based on the service provided.

Table 4.1 summarizes the allocation factors applied to system assets. Similarly, bond debt service was allocated to functional rate components based on the individual capital projects financed by each issuance. Table 4.2

provides the weighted average of these allocations for each debt issuance. Based on the recommended rate structure, an additional 10 percent of the annual debt service is reallocated to Meter Capacity Charges and recovered through the fixed portion of each bill. In doing so, the SFPUC recovers a portion of its fixed capital expenditures through the fixed monthly charge based on meter size. This approach appropriately requires customers to fund a small portion of system infrastructure costs through the fixed monthly component of the rates based on their share of reserved system capacity whether or not water is consumed.

Each operating budget line item was allocated to its appropriate functional rate components. Table 4.3 provides the allocation summarized by category to each of the functional rate components for the rate period from FYE 2015 through FYE 2019. In order to account for changes in expenditures, it is important to average the expenditures over the entire rate forecast period. The expenditures shown in Table 4.3 are the average annual expenditures for this five-year period.

Table 4.1 | SFPUC Water System Asset Allocation

Water Assets	Value	Percent Allocation (%)						Total
		Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Private Fire Protection	
Source of Supply	\$34,585,201	100	-	-	-	-	-	100
Pumping Plant	44,109,606	86	14	-	-	-	-	100
Transmission	42,422,271	86	14	-	-	-	-	100
Treatment	30,059,154	86	14	-	-	-	-	100
Storage	65,102,794	46	8	41	-	-	5	100
Distribution	138,720,574	46	8	43.5	-	-	2.5	100
Meters	12,266,961	-	-	-	100	-	-	100
Services	20,694,286	-	-	-	-	100	-	100
Laboratory	-	86	14	-	-	-	-	100
General Plant	3,754,239	59	8	22	3	5	3	100
Total Dollar Allocation	\$391,715,086	\$230,824,483	\$32,944,356	\$87,662,891	\$12,385,667	\$20,894,542	\$7,003,148	\$391,715,086
Total Percent Allocation	100%	59%	8%	22%	3%	5%	3%	100%

Table 4.2 | SFPUC Water Enterprise Debt Service Allocation

Debt Service	Average Annual Payment for FYE 2015 to FYE 2019	Percent Allocation (%)						Total
		Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Private Fire Protection	
1991A	\$1,280,000	53	8	20	13	5	2	100
2006A	20,981,728	77	14	-	10	-	-	100
2006B	10,047,966	53	8	20	13	5	2	100
2006C	3,754,622	53	8	20	13	5	2	100
2009A	16,850,223	77	8	5	10	-	-	100
2009B	11,456,551	78	10	2	10	-	-	100
2010A	4,514,479	-	-	-	10	90	-	100
2010B	23,261,027	79	11	-	10	-	-	100
2010C	1,135,367	53	8	20	13	5	2	100
2010D	6,159,903	79	11	1	10	-	-	100
2010E	5,052,361	78	12	-	10	-	-	100
2010F	3,976,520	78	12	-	10	-	-	100
2010G	5,462,497	82	8	-	10	-	-	100
2011A	11,654,917	82	8	-	10	-	-	100
2011B	593,237	73	13	-	10	-	5	100
2011C	2,210,023	73	13	-	10	-	5	100
2011D	3,471,237	53	8	20	13	5	2	100
2012A	13,949,115	53	8	20	13	5	2	100
2012B	683,450	53	8	20	13	5	2	100
2012C	4,403,500	53	8	20	13	5	2	100
2012D	4,728,675	53	8	20	13	5	2	100
BAWSCA Defeasement	(15,406,241)	69	9	6	11	4	1	100
Total Dollar Allocation	\$140,221,155	\$107,300,283	\$14,541,976	\$9,953,713	\$16,799,315	\$6,149,126	\$882,983	\$140,221,155
Total Percent Allocation		69%	9%	6%	11%	4%	1%	100%

Table 4.3 | SFPUC Water Enterprise Average O&amp;M Cost Allocation FYE 2015 Through FYE 2018

Category	Average Cost for FYE 2015 to FYE 2019	Percent Allocation (%)						Total
		Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Private Fire Protection	
Administration	\$101,640,206	37	-	-	8	8	-	100
City Distribution	\$40,221,573	62	10	23	-	-	5	100
Water Quality	\$16,966,243	62	10	23	-	-	5	100
Water Supply and Treatment	\$54,185,846	62	10	23	-	-	5	100
Natural Resources	\$12,027,208	100	-	-	-	-	0	100
Water Resources	\$9,186,969	62	10	23	-	-	5	100
Total Dollar Allocation	\$234,228,045	\$155,916,098	\$15,122,485	\$34,781,716	\$10,091,620	\$10,754,883	\$7,561,243	100
Total Percent Allocation	100%	67%	6%	15%	4%	5%	3%	100%

To obtain an overall percentage allocation, operating expenses, existing and future debt service, other expenses and offsetting revenues are weighted based on their average annual expenditures over the five year rate-setting period, as shown in Table 4.4. Once the overall percentage allocation to functional category has been defined, those percentages are applied to the full revenue requirements for FYE 2015 in order to calculate the unit costs.

Based on the analysis described above, the result of the functional allocation is summarized in Table 4.4 and presented in Figure 4.2. The meter charges, customer service, and fire service components collectively represent 14 percent of forecasted costs, and will be the foundation for the recommended monthly service charge. The remaining 86 percent of costs are allocated to the base and peak components, and are the basis for the recommended commodity rates.

There is significant debate over the proper allocation ratio between fixed and variable costs in rate design. The California Urban Water Conservation Council (CUWCC) has historically pro-

moted a target of at least a 70/30 split (variable/fixed) of revenues as defined in Best Management Practice 1.4. This split is thought to provide sufficient revenue stability (in the form of fixed charges), while still providing adequate conservation incentives. However, many retail agencies have moved to a higher fixed-to-variable ratio due to revenue fluctuations caused by unpredictable consumption patterns. The CUWCC has shifted its requirement, allowing agencies to establish specific water reduction and usage targets, rather than apply a one-size-fits-all solution.

Based on discussions with staff, the SFPUC maintains a lower fixed ratio to give users greater control over their monthly bills. Although a greater fixed charge can lead to greater revenue stability, a lower fixed ratio provides for greater affordability and a greater incentive to conserve. Additionally, the SFPUC does not experience a significant amount of seasonal water demand variability, resulting in stable year-over-year revenues despite recovering most costs through the commodity portion of the rates. However, while the per capita water demands

within the City of San Francisco are among the lowest in the country, the SFPUC continues to experience water reductions, which must be accounted for within the annual financial forecast. When compared to the results from the 2009 study, the recommended functional allocation slightly shifts costs to the fixed component, from 10 to 14 percent. As a result, the remaining variable allocation is reduced from 90 to 86 percent.

## UNIT COST AND CUSTOMER ALLOCATION

The unit costs of service are developed by dividing the total annual costs allocated to each of the six functional cost components by the total annual service units of the respective component. The total annual costs allocated to each cost component are determined by applying the percent allocation summarized in Figure 4.2 to the annual revenue requirement for FYE 2015 of \$214.5 million as presented in Chapter 3. The annual service units are based on data from customer billing.



Table 4.4 | SFPUC Water Enterprise Allocation of Net Revenue Requirements

	Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Private Fire Protection	Total
Operating Expense	\$155,916,098	\$15,122,485	\$34,781,716	\$10,091,620	\$10,754,883	\$7,561,243	\$234,228,045
Debt Service	181,042,199	24,535,922	16,794,383	28,344,613	10,375,102	1,489,811	262,582,030
Other Expense	31,497,428	3,707,099	4,821,114	3,592,855	1,975,141	846,054	46,439,692
Offsetting Revenues	(188,446,309)	(22,179,245)	28,844,298	21,495,735	(11,817,093)	(5,061,866)	(277,844,546)
Total Allocation	\$180,009,416	\$21,186,262	\$27,552,916	\$20,533,353	\$11,288,032	\$4,835,242	\$265,405,222
Total Percent Allocation	68	8	10	8	4	2	100

Note: The numbers presented in this table are averaged over FYE 2015 through FYE 2019.

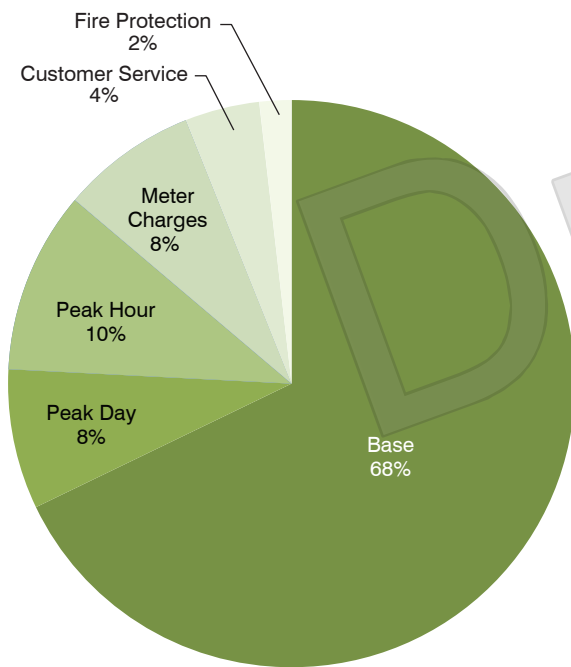


Figure 4.2 | SFPUC Water Enterprise Functional Cost Allocation

### Consumption and Billing Analysis

Carollo/PME JV worked with the SFPUC to develop appropriate consumption and customer billing data sets taken from the SFPUC’s customer service and billing system. These data sets were analyzed to determine the number of accounts by meter size and customer class, as well as the usage characteristics of each customer class.

Based on available consumption and customer records, Table 4.5 details the total units of service for each customer class and functional category. This customer data is then used to determine appropriate proportional allocation of revenue needs to customer classes.

### Unit Cost Development

In order to allocate the cost of service to various user classes, unit costs of service are developed for each functional cost component. Table 4.6 shows the unit costs by functional category. As shown in the table, the total FYE 2015 rate revenue requirements are allocated

to each functional component using the allocation presented in Figure 4.2. The total cost for each functional category is then divided by the total number of associated units of service to determine appropriate unit costs for the Water Enterprise. Based on functional category, the units of service are water consumed, meter equivalents, annual bills (based on accounts), and fire protection meters.

- **Base Costs** – The base component is allocated by total sales volume. Base units of service are founded on annual water consumption in hundred cubic feet (Ccf).
- **Peaking Costs** – The peaking component cost is based on the system’s peak ratio developed from the ratio between annualized winter consumption and annual consumption. Peak day units are based on the extra capacity needed to serve beyond base demand to meeting maximum day demand. Peak hour units are based on the extra capacity needed to serve maximum hour demands in excess maximum day demands, in Ccf.
- **Customer and Service** – For the fixed components, the customer component unit cost is based on the number of accounts, and the service component is based on equivalent meters, which is a measure of the maximum flow rate by meter size. The unit of service for meter charges is established from the total annual meter equivalents. The Customer Services units of service are derived from the annual number of accounts.

Table 4.5 | SFPUC Water Enterprise Unit of Service by Customer Class

	Base	Peak Day	Peak Hour	Meter Capacity Charges	Customer Services	Private Fire Protection
	Annual Usage <sup>1</sup>	Max Day Usage <sup>1</sup>	Max Hour Usage <sup>1</sup>	Meter Equivalents	Customer Accounts	Hydrant Equivalents
Single Family	7,848,355	2,354,507	11,144,664	123,882	112,870	-
Multi-family	10,778,776	3,233,633	15,305,861	94,366	37,669	-
Commercial, Industrial, General	10,529,786	4,211,914	16,847,658	61,537	17,041	-
Public Uses	1,163,145	348,944	1,646,050	15,339	1,704	-
Interruptible	1,075,849	322,755	1,522,511	4,789	1,518	-
Docks and Shipping	281,798	338,158	870,756	51	3	-
Fire Service	22,709	9,084	36,334	-	8,578	230,428
Builders and Contractors	76,582	68,924	193,752	1,906	202	-
Contract	134,945	121,451	341,393	260	14	-
Airport	575,054	517,549	1,454,887	550	6	-
Total	32,486,998	11,459,443	49,238,386	302,679	179,604	230,428

Note:

(1) Units is Ccf (1 Ccf = 748 gallons).

- **Fire Meter Equivalents** – Similar to the service charges, fire meter equivalents are derived based on meter equivalents. The total number of meter equivalents is based on private fire protection meters.

For the meter capacity charges and fire protection, equivalent meters are used, as opposed to accounts, in order to recognize the fact that larger meters have a higher water flow potential and utilize greater system capacity. The meter maintenance portion of the monthly fixed charge also accounts for meter size, as it is more expensive to install, maintain, and replace larger meters. Meter equivalents are derived

based on the hydraulic capacity (gallons per minutes) respective to the size of the meter. Meter equivalents are set based on the hydraulic flow of a 5/8 inch meter.

### Customer Class Allocation

The unit costs of each component shown in Table 4.6 are then applied to each customer classes' projected use, accounts, and meter equivalents to derive customer class allocations. Projections are based on current use and accounts with assumed growth. As such, costs are allocated to each customer class based on their respective base usage and peaking factors to reflect the use of the overall system.

Table 4.7 details the proportional cost allocation for each customer class based on the information in Table 4.5 and Table 4.6.

### RATE DESIGN

The water rate design analysis determines how the costs are recovered by each customer through specified water rates. The focus of this process is to achieve full cost recovery and substantiate that customers are paying their fair and proportionate share of system costs.

The SFPUC's existing rate structure consists of two components: a commodity charge (variable) and a monthly service charge (fixed).

Table 4.6 | SFPUC Water Enterprise FYE 2015 Unit Costs

	Base	Peak Day	Peak Hour	Meter Capacity Charges	Customer Services	Private Fire Protection
Allocation Percentages	68%	8%	10%	8%	4%	2%
Allocable to Component	\$145,484,954	\$17,122,895	\$22,268,472	\$16,595,210	\$9,123,072	\$3,907,879
Total Units	32,486,998	11,459,443	49,238,386	302,679	179,604	230,428
Allocation Basis	Annual Usage	Max Day Usage	Max Hour Usage	Meter Equivalents	Customer Accounts	Hydrant Equivalents
Per Unit Cost	\$4.48	\$1.49	\$0.45	\$4.57	\$4.23	\$1.41

Table 4.7 | SFPUC Water Enterprise Allocation of Revenue Requirements by Customer Class

	Base	Peak Day	Peak Hour	Meter Capacity Charges	Customer Services	Private Fire Protection	Total
Single Family	\$35,146,909	\$3,518,144	\$5,040,268	\$6,792,165	\$5,733,270	-	\$56,230,756
Multi-family	48,270,069	4,831,749	6,922,204	5,173,884	1,913,400	-	67,111,306
Commercial, Industrial, General	47,155,032	6,293,514	7,619,494	3,373,936	865,615	-	65,307,592
Public Uses	5,208,856	521,397	744,440	840,999	86,551	-	7,402,243
Interruptible	4,817,922	482,265	688,568	262,567	77,107	-	6,328,429
Docks and Shipping	1,261,962	505,281	393,807	2,769	171	-	2,163,990
Fire Service	101,697	13,573	16,433	-	435,708	3,907,879	4,475,289
Builders and Contractors	342,953	102,987	87,626	104,502	10,252	-	648,321
Contract	604,318	80,655	97,648	14,232	693	-	797,545
Airport	<u>2,575,237</u>	<u>773,330</u>	<u>657,985</u>	<u>30,155</u>	<u>305</u>	-	<u>4,037,011</u>
Total	\$145,484,954	\$17,122,895	\$22,268,472	\$16,595,210	\$9,123,072	\$3,907,879	\$214,502,482

This is a commonly applied rate structure throughout the State of California and the United States. The commodity component is assessed based on metered water usage per Ccf and, by design, is intended to recover the cost incurred for delivering each unit of water. The monthly service charge is intended to recognize that the utility incurs fixed costs to provide the availability of water service, which must be recovered independent of monthly water demands and consumption.

As part of this analysis, the current water rate structure was reviewed to determine its current efficacy in addressing the desired objectives identified throughout the rate study process. As the SFPUC continues to refine its rate structure based on changing demands, legal guidelines, and regulatory changes, Carollo/PME JV analyzed various rate structure adjustments in order to recover the forecasted revenues needs and achieve the policy objectives of the SFPUC. Table 4.8 summarizes the current water rates and charges to the various customer classes.

### Selecting Rate Structures

Once costs have been equitably allocated to each functional component, the SFPUC has some flexibility in designing the rate structure in order to meet its various policy objectives. In determining the

appropriate rate level and structure, Carollo/PME JV analyzed various rate design alternatives and the corresponding customer and utility implications. Beyond the identified study objectives, several additional criteria were considered and discussed at length with SFPUC staff.

Table 4.8 | Current SFPUC Retail Water Rate Charges (Effective 7/1/2013)

Meter Size	Monthly Service Charge	Monthly Fire Service Charge	Customer Class	Tier Block (Ccf)	Commodity Rate (\$/Ccf)
5/8 in	\$8.40	-	Residential		
3/4 in	\$10.30	-	Single Family	0-3	\$4.20
1 in	\$13.50	\$1.90		>3	\$5.50
1-1/2 in	\$21.80	\$2.40			
2 in	\$32.20	\$5.00	Multi Family	0-3	\$4.50
3 in	\$55.80	\$13.80		>3	\$5.90
4 in	\$89.50	\$29.50	Non-Residential		
6 in	\$173.80	\$85.40	General Uses	All Usage	\$5.40
8 in	\$275.60	\$182.00	Public Uses	All Usage	\$5.40
10 in	\$393.70	\$327.50	Interruptible	All Usage	\$3.25
12 in	\$731.70	\$528.80	Docks and Shipping	All Usage	\$5.40
16 in	\$1,272.70	-	Builders and Contractors	All Usage	\$5.40

The following is a partial list of the additional elements desired in the rate structure:

- Clear and understandable.
- Encourage conservation and water efficiency.
- Follow cost of service principles.
- Provide revenue stability.
- Affordable.
- Comply with legal and regulatory requirements;
- Abide by policy objectives.

Given the numerous and, at times, competing elements, selection of an appropriate rate structure is complex. There is no single structure that meets all objectives equally, nor are all objectives or elements valued the same by the utility or customers. Each criteria or element has merit and plays an important role in the rates implementation and overall effectiveness. These elements and competing objectives were discussed and evaluated at length throughout the financial and rate study process.

### Monthly Service Charge

By design, the current monthly service charge includes a customer service component and a fixed-capacity cost component based on meter size. The customer service component recovers expenses associated with billing, collection, and customer service. This component is the same for all customers regardless of meter size. The meter capacity component captures maintenance costs related to meters and services, as well as a portion of the Water Enterprise’s capital costs. This component varies based on meter size to reflect the difference in potential demand that can be placed on the system by different sized meters.

Similar to the existing charge, the recommended monthly service charge is a combination of the customer service and meter charges functional components. To determine this charge, the

meter charges unit cost presented in Table 4.6 is multiplied by the meter capacity ratios previously utilized by the SFPUC to calculate the meter capacity cost. These ratios mirror the ratios identified in the AWWA M22 Manual Sizing Water Service Lines and Meters . The ratios reflect a reasonable cost and benefit factor associated with greater hydraulic flow capacity. The meter capacity cost is then added to the customer service unit cost to calculate the total monthly service charge.

The recommended monthly service charge and calculation of components are detailed in Table 4.9.

### Residential Commodity Rates

In addition to the monthly service charge, residential customers pay a commodity rate per unit of water. Carollo/PME JV worked with SFPUC staff to discuss, review, and analyze various recommended commodity rate structures. Based on these discussions, Carollo/PME JV recommends the SFPUC retain its current water rate structure for residential customers, but modify the tier break for SFR customers to better reflect current usage patterns.

Current residential commodity rates are designed to encourage water conservation. Single-family residential (SFR) and multi-family residential (MFR) commodity rates are charged on an inclining block rate schedule. Currently, usage above 3 Ccf per month is charged a higher per unit charge to reflect the added cost to supply peak water demands for SFR customers. The charged assessed MFR customers is similar; however, the commodity component is per dwelling unit, rather than SFR’s per account. For example, a MFR complex with 10 units would have 10 times the water allotment for Tier 1 (10 units x 3 Ccf = 30 units).

All monthly water usage occurring in the first tier is charged at the first tier commodity rate of \$4.20 or \$4.50 per Ccf, for SFR and MFR respectively. For each unit in the second, SFR and MFR customers are charged at a rate of \$5.50 and \$5.90, respectively.

In order to meet the proportionality requirements of cost of service, the tiered rates for SFR and MFR individually must reflect the demand placed on the system and the cost to serve those customers.

Table 4.9 | SFPUC Water Enterprise Calculation of Recommended FYE 2015 Monthly Service Charge

Meter Size	Meter Ratio	Meter Charge (Unit x Ratio)	Customer Service Cost	Monthly Service Charge
A	B	C = B * \$4.57	D	E = C + D
5/8 in	1.0	\$4.57	\$4.23	\$8.81
3/4 in	1.5	\$6.85	\$4.23	\$11.09
1 in	2.5	\$11.42	\$4.23	\$15.66
1-1/2 in	5.0	\$22.84	\$4.23	\$27.08
2 in	8.0	\$36.55	\$4.23	\$40.79
3 in	15.0	\$68.53	\$4.23	\$72.77
4 in	25.0	\$114.22	\$4.23	\$118.46
6 in	50.0	\$228.45	\$4.23	\$232.69
8 in	80.0	\$365.52	\$4.23	\$369.76
10 in	115.0	\$525.43	\$4.23	\$529.67
12 in	215.0	\$982.33	\$4.23	\$986.57
16 in	375.0	\$1,713.37	\$4.23	\$1,717.61

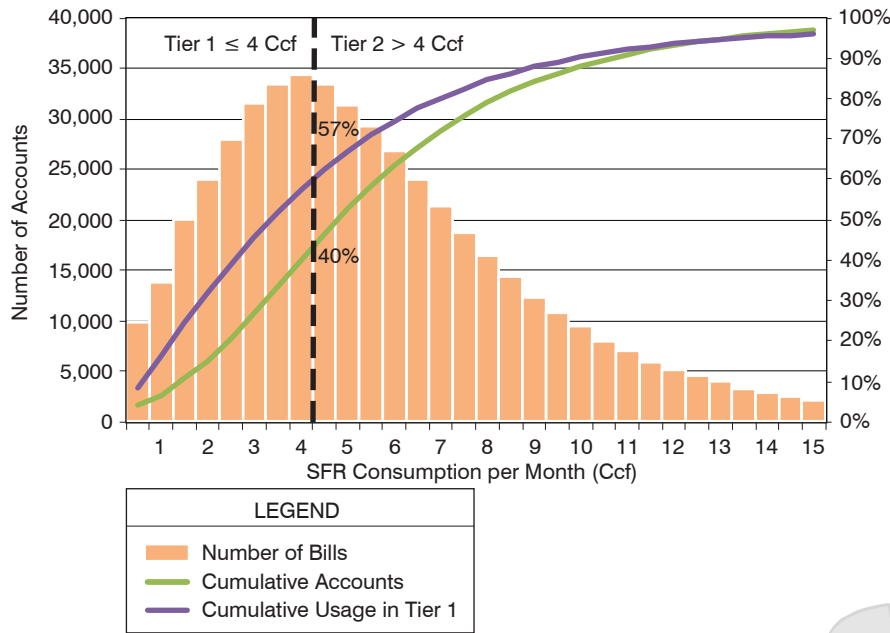


Figure 4.3 | SFPUC Water Enterprise Single-Family Residential Monthly Consumption Profile

Table 4.10 | SFPUC Water Enterprise SFR Recommended Rates

	Base Costs	Peak Costs	Total Commodity Costs	Consumption (Ccf)	Unit Cost (\$/Ccf)
	A	B	C	D	E
Basis of Calculation			A + B		C/D
Tier 1	\$20,170,699	\$1,711,682	\$21,882,381	\$4,504,146	\$4.86
Tier 2	14,976,210	6,846,729	21,822,939	3,344,209	\$6.53
Total	\$35,146,909	\$8,558,411	\$43,705,320	\$7,848,355	

The current tier structure is determined based on SFPUC residential users' monthly use pattern over the course of a year. The existing residential tiers were derived by evaluating all residential water usage throughout the retail system. Consistent with this current rate structure, a tier break at 3 Ccf for SFR would result in a unit charge for Tier 1 usage and Tier 2 usage of \$4.48 and \$6.49, respectively.

Because water consumption patterns differ between SFR and MFR within the retail area, Carollo/PME JV evaluated each class separately to determine the appropriate tier break (usage allowance) at which to transition from Tier 1 to Tier 2. Figure 4.3 provides a detailed histogram of monthly SFR usage based on an average year. The vertical bars represent the number of monthly bills at each unit of consumption.

Based on the detailed consumption analysis, it is recommended that the tier break for SFR customers be moved to 4 Ccf to accommodate the typical SFR non-peak usage. This first tier (0-4 Ccf per month) would encompass 40 percent of SFR bills and 57 percent of SFR customers' annual water demands.

Based on the cost-of-service analysis and SFR usage, SFR consumption that falls within Tier 1 is primarily non-peak water usage and is used consistently throughout the course of the year. The Tier 1 rate is set to recover the cost of non-peak water delivery and a minimal share of peak costs, accounting for the peak demand that does occur under 4 Ccf.

Tier 2 then accounts for the majority of costs associated with peaking not accounted for in Tier 1.

Table 4.10 details the method for determining rates for SFR users. Figure 4.4 illustrates the impact of these recommended water rate to SFR customers with a 5/8-inch meter across various usage levels.

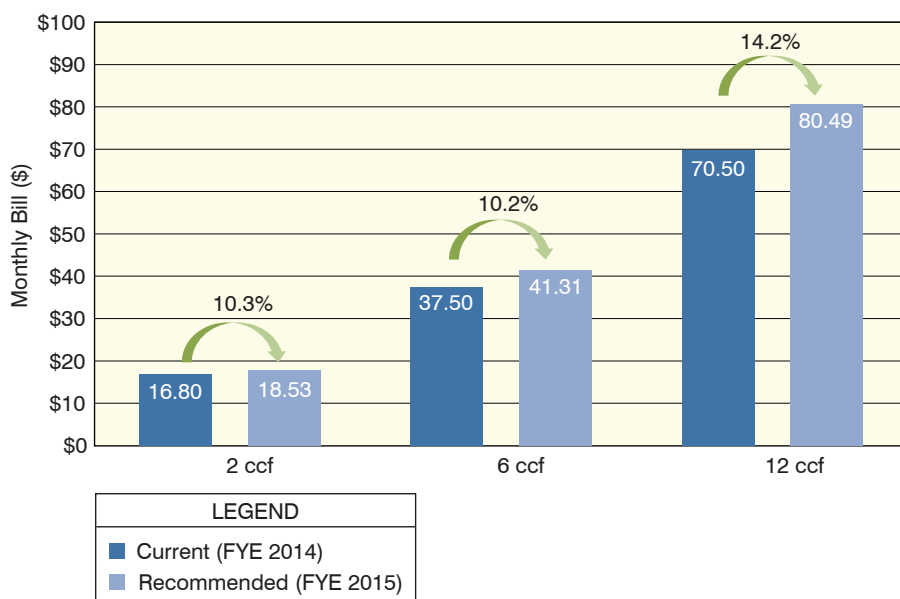


Figure 4.4 | Single-Family Residential Customer Impacts

A similar analysis was completed for MFR customers. A detailed histogram of MFR usage is shown in Figure 4.5. Based on this analysis, the current tier break at 3 Ccf is appropriate for MFR customers.

Similar to SFR, MFR consumption that falls within Tier 1 would be charged at the base unit cost or commodity rate, which is set to recover the base (non-peak) costs and accounts for a small portion of costs related to peaking or extra capacity. Based on the tier break of 3 Ccf, some peaking occurs within Tier 1, which is then reflected in the Tier 1 rate. Tier 2 would account for the majority of system peaking and, accordingly, is allocated the majority of peak day and peak hour costs in the recommended rate structure. Table 4.11 details the method for determining rates for MFR users. Figure 4.6 illustrates the impact of these recommended water rates to MFR customers with a 5/8-inch meter across various usage levels.

### Adjustment for Large Households

The passage of California Assembly Bill (AB) 2882 in 2008 permitted the implementation of water budget rate structures. Specifically, it states, "The use of allocation-based conservation water pricing by public entities that sell and distribute water is one effective means by which waste or unreasonable use of water can be prevented." While this bill allows utilities to adopt a conservation charge in excess of base usage, the revenues collected must still meet the cost-of-service requirements imposed by Proposition 218.

The SFPUC's current tiered rate structure is intended to equitably recover peak and non-peak usage, as well as incentivize conservation. However, the current structure is based on class average water demands and does not specifically account for household size and the potential

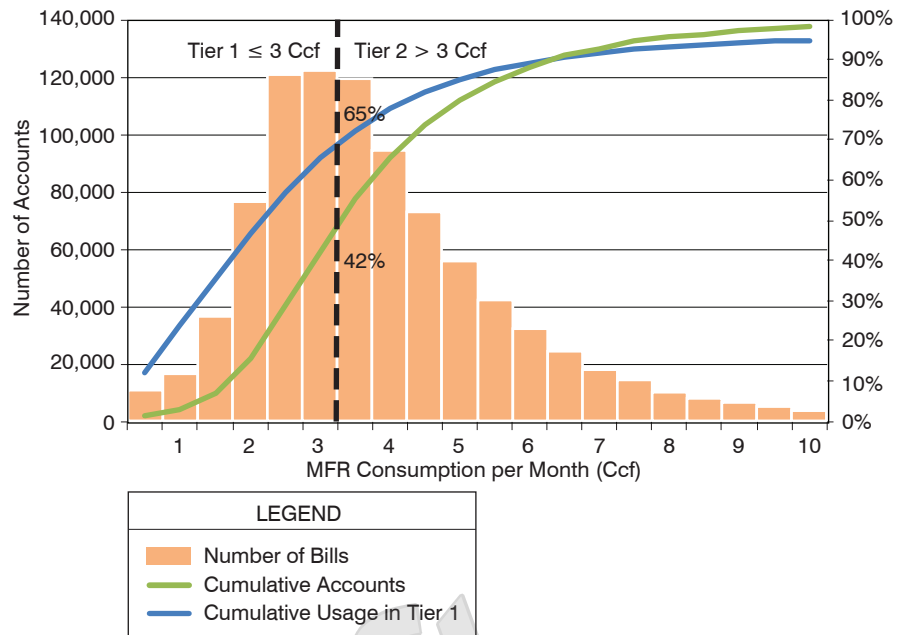


Figure 4.5 | SFPUC Water Enterprise Multi-Family Residential Monthly Consumption Profile

Table 4.11 | SFPUC Water Enterprise MFR Recommended Rates

	Base Costs	Peak Costs	Total Commodity Costs	Consumption (Ccf)	Unit Cost (\$/Ccf)
	A	B	C	D	E
Basis of Calculation			A + B		C/D
Tier 1	\$31,566,866	\$3,526,186	\$35,093,052	\$7,048,926	\$4.98
Tier 2	16,703,204	8,227,767	24,930,971	3,729,849	\$6.69
Total	\$48,270,069	\$11,753,953	\$60,024,022	\$10,778,776	

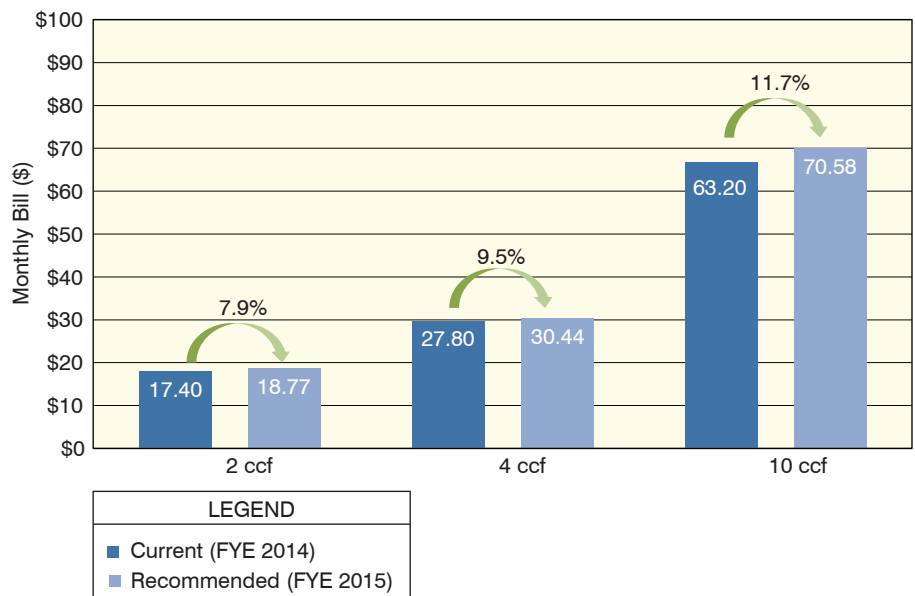


Figure 4.6 | Multi-Family Residential Customer Impacts

for higher base (non-peak) water demands due to a greater number of occupants. As a result, the SFPUC could consider adjusting the first tier for SFR customers to include additional units of water for those customers with a higher number of occupants. This adjustment would be premised on the idea that these households will have a higher base (non-peak) water demand due to higher occupancy levels, rather than incidental (peak) water demands. A recommended approach would be to extend the first tier for large households, based on the number of residents. This increase in the usage allowance would recognize the reduced cost to serve non-peak water compared to peak water demands.

Based on preliminary occupancy information provided by the SFPUC and corresponding water demands, an adjusted tier structure could be established as illustrated in Table 4.12.

Table 4.12 | **Adjustment to Tiers Based on Number of Occupants**

Number of Occupants	Tier 1 Usage	Tier 2 Usage
1-5	0-4 Ccf	5+ Ccf
6-7	0-5 Ccf	6+ Ccf
8-9	0-6 Ccf	7+ Ccf
10+	0-7 Ccf	8+ Ccf

This rate structure adjustment accounts for incremental non-peak water demands with additional occupants. Consequently, the increase in the Tier 1 allowance accounts for water demand overlaps by occupants in larger households, such as water for cooking, rather than increasing the tier allowance proportionally from the base Tier 1 usage allowance. These adjustments are based on preliminary data collected and provided by the SFPUC. However, due to limited available data, the SFPUC should continue to collect information on household size and corresponding water demands and adjust the tier allowance as necessary based on refined data.

Currently, the SFPUC has limitations in restructuring tiers based on household size. The first limitation is the availability of data. The SFPUC does not currently have a comprehensive database of household size for all single-family residential customers. Collecting and analyzing this data is a time intensive process. Additionally, the SFPUC's billing system would need to be altered to incorporate the additional information on household size and be able in order to appropriately extend the first tier based on this information.

A grant program could be established to begin collecting data regarding household size. Such a program would offer customers a grant in exchange for data. The program would be open to all single-family residential customers and would initially be a voluntary program. The phased implementation of the program would lend itself to data gathering on performance and costs in the early demonstration phase of the program in order to collect data, and to obtain better estimates of costs and benefits before rolling out the full program.

Once implemented, the SFPUC would need a verification process. While a simple self-verification process would be easier to maintain, as shown by the CAP program audit, the SFPUC might need a more stringent process to verify the information provided by customers to avoid integrating false information into the billing system.

This program would likely be provided to SFR customers only. When considering MFR users, given the existing rate structure and the use of a master meter, the program would benefit the landlord, as opposed to the individual tenant. This would likely not provide the desired incentive to encourage tenants to conserve.

## Commercial/General Use Commodity Rates

Currently, non-residential users pay a uniform commodity rate (\$5.40 per Ccf) for general usage due to the large disparity in usage among customers in this class. Unlike residential customers who are relatively homogeneous, non-residential users are diverse and vary significantly in size and usage, even between similar businesses. As the SFPUC continues to gain additional data through its AMI system, it might be possible in future rate efforts to create additional or more specific rate sub-classes within the non-residential class, as system data can demonstrate unique customer demand patterns and costs. No change is recommended in rate structure at this time. The recommended non-residential rate retains the existing uniform commodity rate structure. According to the updated cost of service analysis, it is recommended that the rate be increased to \$5.80 for FYE 2015. The methodology for determining this rate is shown in Table 4.13.

## Interruptible Rates

In general, interruptible service and rates are most appropriate for occasions when maximum-day or maximum-hour water demands consistently approach the physical limitations of supply or treatment capacity, or when peak load growth projections show a rapid increase in peak demands on the utility's system. In such cases, providing interruptible service to some large customers might allow the utility to postpone investment in new supply, treatment, and delivery facilities. A utility may avoid or defer installing capacity to meet the portion of load that is served on an interruptible basis, which will reduce capital outlays and may also avoid or delay a potential rate increase, thereby providing benefits to all customers.

Table 4.13 | SFPUC Water Enterprise Recommended Rates for General Use

	Consumption (Ccf)	Base Costs	Peak Costs	Total Commodity Costs	Unit Cost (\$/Ccf)
	A	B	C	D	E
Basis of Calculation				B + C	D/A
All Usage	10,529,786	\$47,155,032	\$13,913,008	\$61,068,040	\$5.80

Table 4.14 | SFPUC Water Enterprise Recommended Rates for Interruptible Use

	Consumption (Ccf)	Total Commodity Costs	Unit Cost (\$/Ccf)
	A	B	C
Basis of Calculation			B/A
All Usage	1,142,108	\$6,003,111	\$5.26

The SFPUC's water system is designed to meet potable water demands, including peak usage. The dry period between 1986 and 1992 and more recent drought conditions indicated that the supply was less reliable than previously projected<sup>2</sup>. Measures were taken to reduce demands where possible, including continued conservation. During water shortages, reducing the quantity of water delivered might be required in order to provide adequate water service to system customers.

The SFPUC implemented an interruptible water rate in 2007. Currently, interruptible users do not pay for capital costs associated with system capacity reserved to provide water during drought conditions, and instead, pay O&M costs only. The rate is currently available for municipal irrigation users at a rate of \$3.25 per Ccf.

### Recommended Interruptible Rate

Capacity has been built into the system to provide water service for all customers at all times, including times of water shortages. During non-shortage

<sup>2</sup>2000 Water Supply Master Plan, pg. 5

periods, unused capacity can be utilized to serve interruptible users. Because interruptible users are served with reserve in-system storage capacity, the interruptible service rate would not include capital-related costs associated with this reserve capacity within the regional storage system. The capital cost component to maintain this capacity should be borne by those users reserving the capacity. Thus, this cost would be recovered from retail customers. However, interruptible users would still be required to pay for all capital costs associated with the treatment and delivery of water<sup>3</sup>. The operational costs for treatment and delivery of water would be borne by the users consuming the water. There is an assumed nexus between the quantity of water taken and the cost to provide that water. This means the interruptible users must pay their share of operational costs in addition to the aforementioned capital costs.

As a conservative approach, it has been assumed that all irrigation users will

<sup>3</sup> The SFPUC treats all water and does not have a separate transmission or distribution system to provide untreated water to irrigation customers.

use this rate. Based on these assumptions, the recommended interruptible rate for FYE 2015 is \$5.26 per Ccf.

### Implementation Process

Interruptible service carries some potential risks to the end users. Consequently, the Water Enterprise should implement a process for interruptible users, whereby they would sign a contract acknowledging that water service can be turned off during water shortages or in other cases where available water resources are limited. Additionally, users would agree that the interruption of service would not endanger public health and safety. The SFPUC had previously restricted the subscription to the interruptible water rates to municipal irrigation customers, because of the concern of ensuring that water service interruption does not cause public health and safety issues. However, through discussions with SFPUC staff, it is believed that additional private customers, such as golf courses, that use the water service for non-potable, irrigation purposes only, could become eligible for the interruptible water service. Moreover, users, such as hospitals, schools, and other critical non-irrigation accounts should not be provided interruptible service because of their services' direct link to public health and safety. Finally, because users who agree to participate in the interruptible service might not receive water service or could receive a reduced quantity of water during water shortages, the SFPUC must require evidence that provisions have been made to deal with potential interruptions.

### Private Fire Protection Rates

Fire protection service is a service that the SFPUC makes available for use by the customer, upon election. Although most public or private fire service connections are rarely used, the SFPUC must be ready to provide the necessary water quantities and pressures at all times throughout the distribution system. Utilities generally provide



public fire protection through hydrants owned by that agency. Further, utilities typically provide individual customers additional fire protection through private hydrants, standpipes, or sprinkler connections. Although private fire protection connections do not use water except in case of fire, they do consume available capacity within the system.

In addition to the adjustments to the potable retail rate structure, Carollo/PME JV has analyzed the costs associated with providing private fire protection service. Following the cost of service principles outlined above, this analysis isolated costs related to providing system capacity to store and deliver water for fire suppression to privately owned and operated fire sprinkler systems.

The private fire protection charge is designed to recover a proportionate share of system costs for non-public fire system requirements and excludes any costs of the Auxiliary Water System that are funded through property taxes.

In addition to the funding fire system costs, the monthly fire protection rates include a customer service component, which is charged to each water utility bill regardless of service type.

This component was not included in the current rates, which is one of the main drivers for the increase in monthly fire service charge. The application of the monthly billing charge results in a different monthly charge ratio between meter sizes than currently exists. This customer service charge component is consistent with the other rates and cost of service principles. In addition to this charge, costs for storage and delivery to private fire service is recovered based on meter equivalent basis.

### Other Commodity Rates

Non-residential commodity rates are calculated using the base-extra capacity method, consistent with the AWWA M1 manual. As shown in Table 4.15, it is recommended that customers be assessed a unit charge specific to customer class, which in some cases is different from the general use unit rate. This methodology leads to an increase in some rates, such as those for docks and shipping, for example. The main reason for the divergence from the general use rate is due to the difference in peak day and peak hour factors, also known as peaking factors. These peaking factors are based on a

customer’s peak day and peak hour consumption relative to their average base usage. The current water rate schedule assumes all customer classes have equivalent peaking factors, meaning their consumption profiles are, on average, the same. The recommended rates utilize the SFPUC’s peaking factor assumptions specific to customer class. Customer classes that peak on the system more often are assessed a greater unit charge per Ccf to reflect the extra capacity that must be reserved for these customers’ peak usage.

### SFPUC Water Enterprise Recommended Retail Rate Schedule

The individual rates discussed above are summarized in Table 4.15, which provides the overall recommended rate schedule for FYE 2015.

These rates for FYE 2015 are then escalated annually based on the revenue requirement findings in Chapter 3. The resulting recommended rates for FYE 2015 through 2019 are summarized in Tables 4.16, 4.17, and 4.18.

Throughout the rate-setting process, Carollo/PME JV worked closely with SFPUC staff to evaluate the impact

Table 4.15 | Recommended Water Rate Charges (Effective 7/1/2014)

Meter Size	Monthly Service Charge	Monthly Fire Service Charge	Customer Class	Tier Block (Ccf)	Commodity Rate (\$/Ccf)
5/8 in	\$8.81	-		Residential	
3/4 in	11.09	-	Single Family	0-4	\$4.86
1 in	15.66	\$7.77		>4	6.53
1-1/2 in	27.08	11.30			
2 in	40.79	15.54	Multi Family	0-3	\$4.98
3 in	72.77	25.44		>3	6.69
4 in	118.46	39.57		Non-Residential	
6 in	232.69	74.90	General Uses	All Usage	\$5.80
8 in	369.76	117.30	Public Uses	All Usage	5.57
10 in	529.67	166.76	Interruptible	All Usage	5.26
12 in	986.57	308.09	Docks and Shipping	All Usage	7.67
16 in	1,717.61	-	Builders and Contractors	All Usage	6.97

Note: These rates also apply to retail customers outside the City and County of San Francisco.

Table 4.16 | **Recommended Monthly Service Charge**

Annual Increase	Existing Rates	Recommended Rates				
		12%	12%	10%	8%	8%
Meter Size	Effective 7/1/2013	Effective 7/1/2014	Effective 7/1/2015	Effective 7/1/2016	Effective 7/1/2017	Effective 7/1/2018
5/8 in	\$8.40	\$ 8.81	\$9.87	\$10.86	\$11.73	\$ 12.67
3/4 in	10.30	11.09	12.43	13.86	14.78	15.97
1 in	13.50	15.66	17.54	19.30	20.85	22.52
1-1/2 in	21.80	27.08	30.33	33.37	36.04	38.93
2 in	32.20	40.79	45.69	50.26	54.29	58.64
3 in	55.80	72.77	81.51	89.67	96.85	104.60
4 in	89.50	118.46	132.68	145.95	157.63	170.25
6 in	173.80	232.69	260.62	286.69	309.63	334.41
8 in	275.60	369.76	414.14	455.56	492.01	531.38
10 in	393.70	529.67	593.24	652.57	704.78	761.17
12 in	731.70	986.57	1,104.96	1,215.46	1,312.70	1,417.72
16 in	1,272.70	1,717.61	1,923.73	2,116.11	2,285.40	2,468.24

Table 4.17 | **Recommended Monthly Fire Service Charge**

Annual Increase	Existing Rates	Recommended Rates				
		12%	12%	10%	8%	8%
Meter Size	Effective 7/1/2013	Effective 7/1/2014	Effective 7/1/2015	Effective 7/1/2016	Effective 7/1/2017	Effective 7/1/2018
1 in	\$1.90	\$7.77	\$8.71	\$9.59	\$10.36	\$11.19
1-1/2 in	2.40	11.30	12.66	13.93	15.05	16.26
2 in	5.00	15.54	17.41	19.16	20.70	22.36
3 in	13.80	25.44	28.50	31.35	33.86	36.57
4 in	29.50	39.57	44.32	48.76	52.67	56.89
6 in	85.40	74.90	83.89	92.28	99.67	107.65
8 in	182.00	117.30	131.38	144.52	156.09	168.58
10 in	327.50	166.76	186.78	205.46	221.90	239.66
12 in	528.80	308.09	345.07	379.58	409.95	442.75

of the recommended rate structure's impact to water customers. Based on the new cost of service analysis and recommended rates, there will be a shift between customer classes. This shift is shown in Figure 4.6. In this figure, the recommended customer class allocation is compared to the current rate structure's allocation applied to the revenue requirements of FYE 2015. This change, although slight, is due to

the shift between cost components that resulted from the detailed functional allocation.

### Other Service Charges

There are a number of service charges that the SFPUC charges for special water service, such as special shipping service for docks and shipping, and builders and contractors. It is recommended that the SFPUC charge a

service fee comparable to the 8-inch meter monthly service charge for docks and shipping. This is an assumed meter size for these customers. For FYE 2015, this recommended charge is \$369.76. For builders and contractors, it is recommended that the SFPUC impose a charge based on the size of the meter, according to the monthly service charge presented in Table 4.16.

Table 4.18 | **Recommended Commodity Rates**

Annual Increase	Existing Rates	Recommended Rates				
		12%	12%	10%	8%	8%
Customer Class	Effective 7/1/2013	Effective 7/1/2014	Effective 7/1/2015	Effective 7/1/2016	Effective 7/1/2017	Effective 7/1/2018
<b>Single Family Residential</b>						
Tier 1 (0-4 Ccf)	\$ 4.20	\$4.86	\$5.45	\$6.00	\$6.48	\$7.00
Tier 2 (>4 Ccf)	5.50	6.53	7.32	8.06	8.71	9.41
<b>Multi-Family Residential</b>						
Tier 1 (0-3 Ccf)	4.50	4.98	5.58	6.14	6.64	7.18
Tier 2 (>3 Ccf)	5.90	6.69	7.50	8.25	8.91	9.63
<b>Non-Residential</b>						
Commercial, Industrial, General	5.40	5.80	6.50	7.15	7.73	8.35
Public Uses	5.40	5.57	6.24	6.87	7.42	8.02
Interruptible	3.25	5.26	5.90	6.49	7.01	7.58
Docks and Shipping	5.40	7.67	8.59	9.45	10.21	11.03
Builders and Contractors	5.40	6.05	6.78	7.46	8.06	8.71

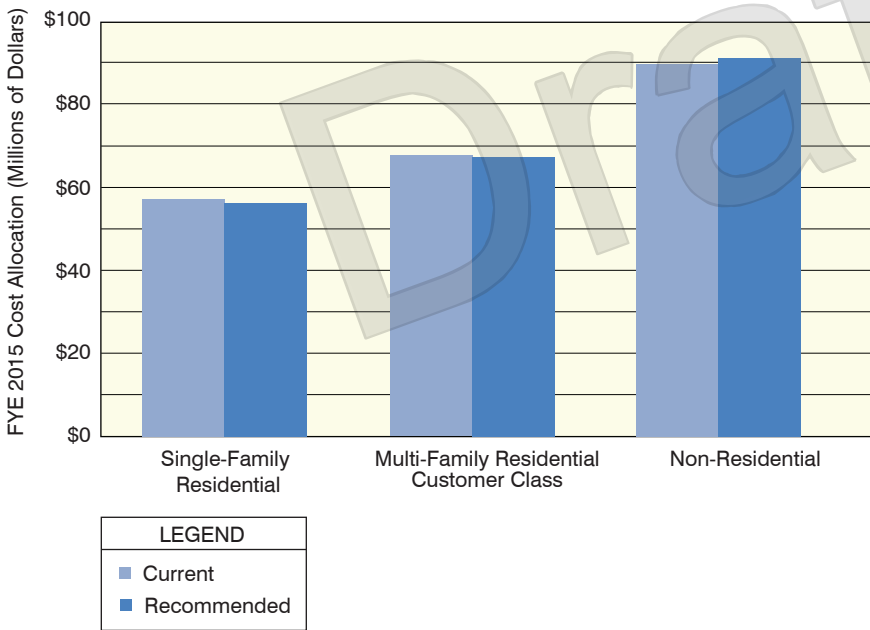


Figure 4.7 | **Comparison of Customer Allocation by Rate Structure**

## ADDITIONAL CONSIDERATIONS

### Sustainability Charges

The SFPUC Water Enterprise maintains watersheds and other natural resources as a means of supplying and storing water. Currently, the costs associated with maintaining these natural assets are being recovered

through the SFPUC potable water supply. The SFPUC expressed interest in evaluating a separate charge to recover costs specifically associated with green infrastructure.

A natural resources surcharge was discussed as a potential method to better communicate the fact that the SFPUC is the steward of a limited

natural asset. It was determined that the current rate structure does provide an economic incentive to use water and these natural resources efficiently. A natural resources surcharge was discussed and many forms considered, including implementing a surcharge that would be additive to the second tier of the residential rates, effectively creating a third tier, as well as a charge per account to acknowledging that all SFPUC customers benefit from these natural systems. At this time, Carollo/PME JV recommends the SFPUC further examine the rationale of a natural resources surcharge.

### Low-Income Discounts

The SFPUC currently provides low-income discounts for SFR customers in order to make SFPUC services affordable to low-income households. The SFPUC has a number of assistance programs in place, including the Community Assistance Program (CAP), the Low-Income Non-Profit Housing (LINPH) discount, and the Mayor’s Community House Program.

The CAP, implemented in 2004, provides a 15 percent discount on water and 35 percent discount on wastewater service charges to eligible SFRs based on income limitations. The CAP income requirements range from a maximum annual income of \$31,020 for a one- or two-person household to \$79,260 for an eight-person household. Additionally, CAP applicants are required to participate in a free water conservation home evaluation. This program was evaluated by the Controller’s Office in 2013. The findings were that many program participants could not verify eligibility. The SFPUC subsequently removed these ineligible customers from this program and established an income verification requirement. The LINPH discount, implemented in 2006, provides rate relief to low-income multi-family residential residents in housing owned and operated by non-profit organizations. The LINPH discount provides a 15 percent discount on all water and sewer service charges to qualified low-income multi-family housing developments registered with the Mayor’s Office of Housing.

The SFPUC provides a discount on sewer service charges to single room occupancy boarding houses, motels, and hotels participating in the Mayor’s Community House Program, implemented in 1994. This program provides transitional housing to homeless individuals and general assistance recipients. Participants enrolled in the program receive a 15 percent discount on water charges and a 50 percent discount on sewer charges based on the percentage of rooms occupied by eligible individuals.

While Proposition 218 limits recovery and adjustments to cost recovery, the SFPUC is exploring various means to continue to fund these low-income discounts. These discussions included the possibility of using revenue from the utility tax as a funding source.

One possible option would be to request voter approval to extend the utility tax, as well as request incremental utility tax revenue from the rate increases to become available to fund these low-income programs. Other possibilities for funding low-income programs include collecting donations or usage of the general fund.

A survey of low-income programs of neighboring jurisdictions was conducted and is discussed in more detail in the appendix of this report.

### Water Rate Comparison

Carollo/PME JV conducted a water rate survey of nearby utilities. Although utilities are not always alike, it is common to examine comparisons between similar or neighboring utilities. Figure

4.7 compares a typical SFR user with the current rate structure and the recommended rates against the current rate structures of nearby utilities.

It is necessary to highlight that the SFPUC is a system with a distinctive retail customer base. Care should be taken in drawing conclusions from such comparisons as factors including locations, source of supply, customer profiles, age of the system, and various operational and capital-related needs vary from agency to agency. As illustrated in Figure 4.8, despite the recommended increase to customers, water rates are in line with the average of nearby agencies. Additional information regarding other agencies is presented in the appendix of this report.

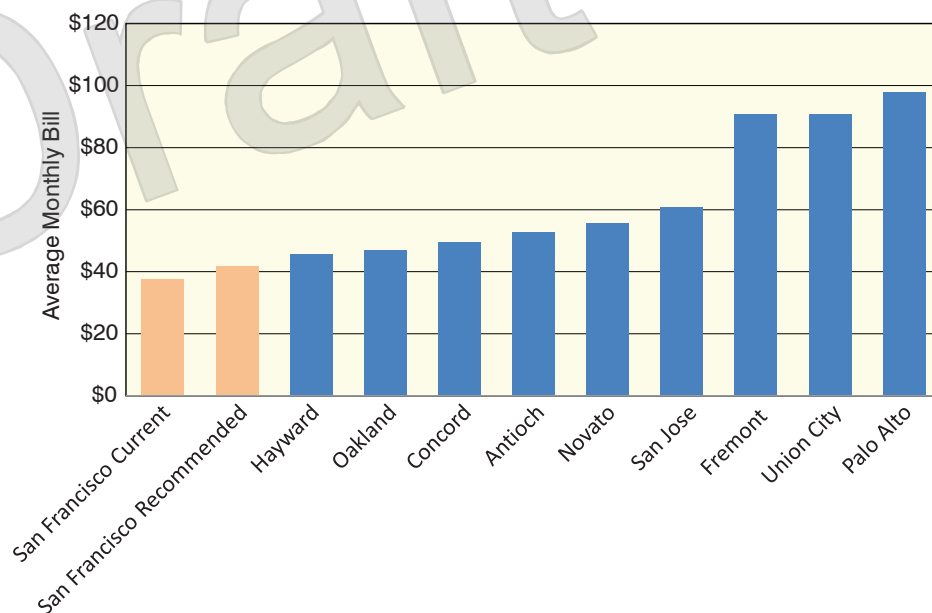


Figure 4.8 | Local Monthly Water Bill Comparison Survey for a SFR Customer Based on Average Water Demands by Agency

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# Introduction

## CHAPTER 5 Wastewater Enterprise Revenue Requirements

The wastewater collection, treatment and disposal/reuse system consists of a combined sewer system (which treats both sanitary sewer and wet weather flows), three water pollution control plants, and effluent outfalls to the San Francisco Bay and Pacific Ocean. The combined sewer system reduces pollution in the San Francisco Bay and Pacific Ocean by treating wet weather flows, and urban runoff that would otherwise discharge to the Bay and Ocean. The collection system is comprised of approximately 900 miles of sewer system piping throughout the City.

Similar to the analysis completed for the Water Enterprise, Carollo/PME JV analyzed the revenue requirements of the Wastewater Enterprise. The following elements were analyzed in order to determine the necessary cost of service adjustments for the Wastewater Enterprise: operations and maintenance expenditures; annual debt service; capital expenditures; policy requirements and coverage; and offsetting revenues. These components were reviewed to determine the overall revenue requirements of the utility. Based on the findings of this study, Carollo/PME JV recommends the Wastewater Enterprise increase rate revenues by an average of 7.6 percent over the next five years in order to fund operations and debt service obligations, and to begin to fund the Sewer System

Improvement Plan (SSIP) program. Annual capital expenditures will increase substantially in upcoming years with the start of the SSIP. Most notably, FYE 2018 is projected to require over \$1.4 billion in investments, funded primarily using bonds. This increase in capital spending is one of the main driving factors for future projected rate increases. To counteract the variability and sharp increases in capital spending from year to year, the magnitude of annual rate increases has been smoothed so that the impact to customers is realized gradually over multiple years instead of implemented at once. The recommended rate increases for the Wastewater Enterprise are discussed in detail within this chapter.

## REVENUE REQUIREMENTS OVERVIEW

A revenue requirements analysis determines the annual system revenue necessary to be recovered through wastewater rates and charges in order to meet a the Wastewater Enterprise’s expected financial obligations. The revenue requirement is derived of five components: 1) Operations and Maintenance Expenditures; 2) Annual Debt Service; 3) Capital Expenditures; 4) Policy Requirements and Coverage; and, 5) Offsetting Revenues.

The revenue requirement analysis considered the following two tests to determine whether rates are sufficient:

- **Cash Flow Test** - The Wastewater Enterprise must generate annual utility revenues adequate to meet general cash needs.
- **Bond Coverage Test** - Annual rate revenues must satisfy debt coverage obligations as required by indenture.

The cash flow test identifies the amount of annual revenues that must be generated in order to meet annual expenditure obligations. These obligations include operations and maintenance expenses, debt service

payments, policy-driven additions to working capital, replacement funding, and revenue funded capital expenditures. These expenses are compared to total annual projected revenues. Shortfalls are then used to estimate the need for rate increases.

The bond coverage test measures the ability of a utility to meet both legal and policy-driven revenue obligations. The SFPUC is required to collect sufficient funds through rates so that the annual net revenues for operational expenditures plus reserves meet or exceed 1.25 times total annual debt service. This coverage factor is set by indenture in order to maintain compliance with the SFPUC’s current bond legal obligations. In addition, the SFPUC’s must maintain net revenues alone at 1.00 times total annual debt service.

While Carollo/PME JV analyzed the SFPUC’s annual cash flow, the main driver was the indenture requirement. The SFPUC has the ability to use reserves to satisfy the annual cash flow test in order to avoid increasing user rates.

The following section explains the cost categories included in the annual revenue requirement analysis for the Wastewater Enterprise.

## DATA AND ASSUMPTIONS

### Operating Needs

Operating needs are expenditures that the utility incurs in the day-to-day operations of its systems – for example: employee salaries and benefits, system maintenance, fuel, and chemicals. The operating budget expenditures include costs related to administration, maintenance, operations, environmental engineering, planning and regulations, collection systems, wastewater labs, and other miscellaneous expenses.

The SFPUC’s FYE 2014 operating budget served as the basis for forecasting future operating expenses for the Wastewater Enterprise. The budget was compared to the current internal financial forecast and discussed with SFPUC staff to identify any anomalies or one-time expenditures not appropriate to include when projecting into future years. Staff also reviewed the budget to identify costs that may need to be adjusted due to future operational changes resulting from the implementation of the SSIP program. Unless adjusted based on specifically known future changes, costs incurred in future years were projected using escalation factors that were reviewed with SFPUC staff. In the past, costs incurred by

Table 5.1 | **SFPUC Cost Escalation Factors**

Cost Escalator	Description
Labor Cost Inflation	Labor rates are assumed to increase at 4.0%.
Construction Cost Inflation	Although capital cost inflation is commonly linked to the Engineering News Record (ENR) Construction Cost Index (CCI), the inflation rate assumes a long-term average of 3.5%.
General Cost Inflation	This rate applies to most expenses in the operating expense forecast, and the City’s expected long-term inflation rate of 3.0%.
Power and Chemicals Inflation	Costs associated with power and chemicals are assumed to increase by 5% annually. In general, power and chemical costs tend to increase more rapidly than general costs.
Customer Account Growth	Customer accounts are projected to increase at an annualized rate of 0.5%.
Demand Change	The SFPUC projects continued conservation and per capital wastewater flow reductions. Coupled with customer account growth, the annualized aggregate wastewater discharge is projected to remain flat for the forecast period.

Table 5.2 | SFPUC Wastewater Enterprise Operating Expenditures

Department	Expenditures <sup>(1)</sup>									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Administration	\$36.1	\$37.4	\$38.7	\$40.1	\$41.5	\$43.	\$44.5	\$46.1	\$47.8	\$49.5
Maintenance	26.6	27.6	28.7	29.8	30.9	32.1	33.4	34.7	36.	37.4
Operations	36.3	37.6	39.0	40.5	42.0	43.6	45.2	46.9	48.6	50.5
Environmental Engineering	4.1	4.3	4.5	4.7	4.8	5.0	5.2	5.4	5.7	5.9
Planning and Regulations	7.3	7.6	7.8	8.1	8.5	8.8	9.1	9.5	9.8	10.2
Collection Systems	31.5	32.6	33.8	35.1	36.4	37.7	39.1	40.6	42.0	43.6
Wastewater Labs	4.5	4.7	4.9	5.0	5.2	5.4	5.7	5.9	6.1	6.4
Incremental SSIP Expenditures	<u>0.3</u>	<u>0.4</u>	<u>0.4</u>	<u>0.5</u>	<u>2.0</u>	<u>3.8</u>	<u>8.0</u>	<u>8.3</u>	<u>8.6</u>	<u>8.9</u>
<b>Total Expenditures</b>	<b>\$146.7</b>	<b>\$152.2</b>	<b>\$157.9</b>	<b>\$163.8</b>	<b>\$171.4</b>	<b>\$179.5</b>	<b>\$190.2</b>	<b>\$197.3</b>	<b>\$204.7</b>	<b>\$212.3</b>

Note:  
 (1) Presented in million dollars, calculations in tables may not foot due to rounding.

the SFPUC have been escalated at 3.0 percent annually, regardless of cost category. To refine this broad assumption, individual line-item costs were assigned escalation factors in Table 5.1 to better account for variability between specific costs. These escalation factors were then applied to the appropriate categories of expenditures to forecast costs incurred by the utility. By escalat-

ing costs from the FYE 2014 budget using the escalation factors discussed in Table 5.1, operating costs are projected to be \$152.2 million in FYE 2015. This includes incremental costs associated with the SSIP program in addition to the escalated operating expenses. The details of these expenditures are shown in Table 5.2.

### Capital Funding

As described in detail in Chapter 2 (Background), the Sewer System Improvement Plan (SSIP) is in place to improve the reliability and performance of the SFPUC's current combined sewer system. It is funded through annual payments to debt service and current year revenues. Unlike the WSIP program, the 20-year SSIP has just begun and has yet to reach its peak of construction. On the contrary, there is a significant increase in capital funding requirements within a ten-year forecast.

### Debt Service

The SFPUC finances major capital improvements, in part, by issuing debt for two primary reasons. First, given the size of SSIP program, the SFPUC does not have available the financial reserves that would otherwise be required to fund the capital improvement program nor would it be reasonable to increase the wastewater rates and charges in order to cash fund these improvements. Secondly, spreading the debt service costs for the project over the repayment period provides

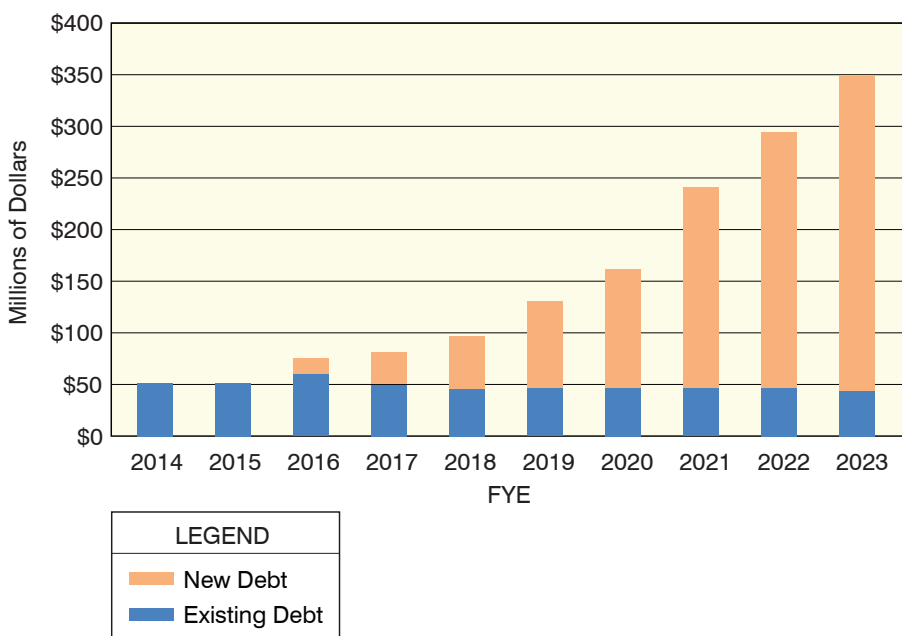


Figure 5.1 | SFPUC Wastewater Enterprise Annual Debt Service Payments



Table 5.3 | **SFPUC Wastewater Enterprise Debt Obligations Through FYE 2024**

FYE	Annual Payment (millions of dollars)
2014	48.7
2015	48.6
2016	73.8
2017	79.2
2018	96.0
2019	129.6
2020	159.8
2021	240.0
2022	293.0
2023	347.5

Source: SFPUC provided schedule of annual payments on existing debt.

intergenerational equity by effectively spreading the financial burden between both existing and future users of the system. This approach allows the SFPUC to better match the cost of improvements with those benefitting from the improvements. The SFPUC has existing obligations from past capital projects that were debt financed. The annual payments for existing debt are calculated on a fiscal year basis and were provided by the SFPUC. Due to the increasing costs of the SSIP program in the near future, the SFPUC anticipates issuing additional bonds to finance capital projects as well as a portion of rehabilitation and replacement (R&R) projects. The following assumptions were made to calculate annual payments necessary on new debt issuances:

- Term of 30 years
- Annual interest rate of 5 percent
- Two years of capitalized interest

Because the SFPUC uses two years of capitalized interest, the debt service payments begin two years following the date of issuance. This delays the impact to annual revenue requirements, which allows the SFPUC to increase

rates over a multi-year period ahead of forecasted payments, instead of implementing increases in a single year. This use of long-term debt is a reasonable approach as it also allows the SFPUC to more accurately match the capital expenditures with the ratepayers benefitting from the projects by requiring both existing and future customers to pay for these improvements.

Table 5.3 and Figure 5.1 show the projected annual payments for both existing and future debt: With annual expenditures for the SSIP program increasing significantly in the near future, debt service will continue to increase as well. In the next ten years, annual payments related to debt are projected to increase sevenfold. This considerable increase in debt service is one of the main drivers for the recommended rate increases.

**Revenue Funded Capital**

In addition to issuing debt, the SFPUC funds a portion of rehabilitation and replacement (R&R) projects through current year revenues. These annual amounts are determined by the SFPUC and are summarized in Table 5.4 and Figure 5.2.

**Policy Requirements and Coverage**

The SFPUC’s unrestricted reserves act as an operating reserve. For debt service coverage, the SFPUC is required to maintain at least a 1.25 times coverage ratio of annual debt service. This coverage is calculated as the ratio of net revenues after operating expenditures, including reserves, to total annual debt service requirements. In addition, the SFPUC maintains at least 1.00 times coverage ratio of net revenues, excluding reserves, to total annual debt service requirements.

**Offsetting Revenues**

Beyond revenue collected from rates and charges, the SFPUC collects revenues through other non-operating funding sources, which are used as a credit against the rate revenue needed to be collected. Most notably, these revenues include service payments collected from Brisbane and Bayshore Sanitary Districts, determined by contract separately, and other miscellaneous revenues, such as interest earnings. For FYE 2015, the service payments from Brisbane and Bayshore are projected to total \$7.2 million.

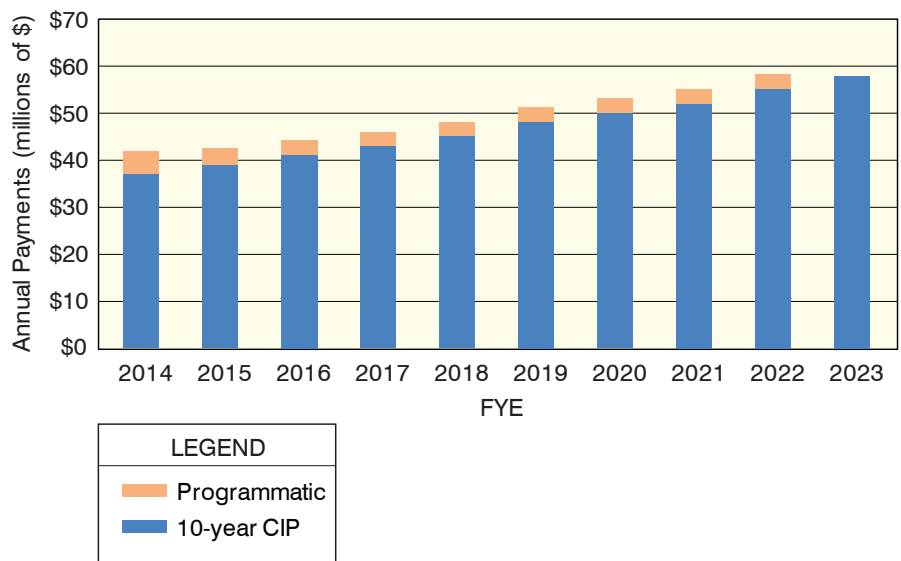


Figure 5.2 | **SFPUC Wastewater Enterprise Annual Revenue Funded Capital**

Table 5.4 | **SFPUC Wastewater Enterprise Annual Revenue Funded Capital**

Revenue Funded (millions of dollars)			
FYE	10-year CIP	Programmatic	Total
2014	37.0	4.8	41.8
2015	39.0	3.4	42.4
2016	41.0	3.0	44.0
2017	43.0	2.9	45.9
2018	45.0	2.9	47.9
2019	48.0	2.9	50.9
2020	50.0	3.0	53.0
2021	52.0	3.1	55.1
2022	55.0	3.1	58.1
2023	57.8	0.0	57.8

Offsetting revenues are escalated from FYE 2013 revenues by applying factors discussed with and approved by the SFPUC. Most offsetting revenues are escalated by general inflation. Revenues collected from providing service to special districts are escalated based on the discharge forecast, as well as the annual rate increase.

## PROJECTED REVENUE REQUIREMENTS

Based on the study projections, current revenues will not be sufficient in future years to fund necessary expenses due to the aforementioned increases in annual capital expenditures. In the absence of any annual rate increases, revenues are not anticipated to increase.

Although additional customers are expected to connect to the system, consumption and thus the number of discharge units from associated customers is projected to remain constant

on an annual basis. As discussed earlier in this chapter, the SFPUC must meet both the cash flow test and bond coverage test for any given year in order to achieve adequate collection of revenues. Shown in Table 5.5 is a summary of costs and offsetting revenues associated with the wastewater enterprise for FYE 2015. This process was repeated for the ten-year forecast and the resulting revenue needs are presented in Table 5.6.

Table 5.6 shows revenues before and after adjustments from unsmoothed rate increases. As seen in this table, rate increases are required to meet funding obligations of the utility. While the Wastewater Enterprise has available cash in its operating reserve, it is recommended that these rate increases be smoothed so that one year alone does not have an abrupt increase. Carollo/PME JV reviewed the publicly-available Commission-approved rate increases that have been proposed by the SFPUC and concur that these increases are adequate and appropriate based on projected expenditures. Table 5.7 shows the recommended annual rate increases and resulting cash flow. Although the recommended rate increases result in excess cash flow within the five year rate-setting time frame, beyond this period, expenditures are projected to increase with annual debt service payments related to funding of the SSIP, as shown in Figure 5.3. These investments and associated debt service, along with inflationary operational costs result in the annual increases in revenue needs in future years. To account for this increase and

Table 5.5 | **SFPUC Wastewater Enterprise FYE 2015 Revenue Requirement**

Revenue Component	FYE 2015 Total <sup>(1)</sup>	Description
Operating Costs	151.8	The Operating Budget funds the day-to-day operations of the SFPUC.
Debt Service	48.6	The SFPUC uses debt to fund capital and refund previous debt (long-term debt only).
Pay-Go	42.4	The SFPUC funds R&R projects through current year revenues
Offsetting Revenues	(10.1)	Additional revenues generated from sources, outside traditional wastewater rates and charges are applied as a credit to reduce required rates and charges revenues. Includes the revenue collected from property taxes, interest earnings, and miscellaneous revenues.
Remaining Coverage and Reserve Driven Needs	-	Revenue requirements associated with meeting the SFPUC's Financial Management Policies.
Wastewater Sales Revenue Requirement	232.7	Total revenue requirements associate with SFPUC's operating costs, debt service, and offsetting revenues. This also includes coverage and reserves needs.
Less Current Projected Revenue	(247.9)	Projected revenue prior to rate increase
Additional Revenue Required	-	Additional revenue required from rate increase (Revenue requirement less projected revenues)

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

Table 5.6 | SFPUC Wastewater Enterprise Revenues and Expenditures<sup>(1)</sup>

FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenues										
Rate Revenue Prior to Rate Increase	\$236.1	\$247.9	\$247.9	\$265.2	\$277.8	\$302.3	\$344.6	\$382.1	\$470.0	\$530.6
Non-Rate Revenues	9.8	10.1	10.1	10.6	11.0	11.7	12.9	14.0	16.6	18.3
<b>Total Revenues</b>	<b>\$245.9</b>	<b>\$258.1</b>	<b>\$258.1</b>	<b>\$275.8</b>	<b>\$288.8</b>	<b>\$314.0</b>	<b>\$357.5</b>	<b>\$396.1</b>	<b>\$486.6</b>	<b>\$548.9</b>
Expenditures										
Operations	\$146.4	\$151.8	\$157.5	\$163.3	\$169.4	\$175.7	\$182.2	\$189.0	\$196.1	\$203.4
Debt Service	48.7	48.6	73.8	79.2	96.0	129.6	159.8	240.0	293.0	347.5
Revenue Funded Capital	41.8	42.4	44.0	45.9	47.9	50.9	53.0	55.1	58.1	57.8
<b>Total Expenditures</b>	<b>\$236.8</b>	<b>\$242.9</b>	<b>\$275.3</b>	<b>\$288.4</b>	<b>\$313.3</b>	<b>\$356.3</b>	<b>\$395.0</b>	<b>\$484.0</b>	<b>\$547.2</b>	<b>\$608.6</b>
Annual Rate Increases										
Operating Cash Flow Surplus (Deficiency) Before Rate Increase	\$9.1	\$15.2	(\$17.2)	(\$12.6)	(\$24.5)	(\$42.3)	(\$37.5)	(\$87.9)	(\$60.6)	(\$59.7)
Unsmoothed Rate Increases	5.00%	0.00%	6.96%	4.76%	8.82%	13.99%	10.89%	23.01%	12.89%	11.25%
Additional Revenue From Rate Increase	11.8	-	17.2	12.6	24.5	42.3	37.5	87.9	60.6	59.7
Operating Cash Flow Surplus (Deficiency) After Rate Increase	20.9	15.2	-	-	-	-	-	-	-	-

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

Table 5.7 | SFPUC Wastewater Enterprise Revenues and Expenditures with Smoothed Rate Increases

FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenues										
Rate Revenue Prior to Rate Increase	\$236.1	\$247.9	\$260.3	\$273.3	\$289.7	\$321.6	\$357.0	\$396.2	\$439.8	\$488.2
Non-Rate Revenues	9.8	10.1	10.5	10.9	11.3	12.3	13.3	14.4	15.7	17.1
<b>Total Revenues</b>	<b>\$245.9</b>	<b>\$258.1</b>	<b>\$270.8</b>	<b>\$284.2</b>	<b>\$301.1</b>	<b>\$333.9</b>	<b>\$370.3</b>	<b>\$410.7</b>	<b>\$455.5</b>	<b>\$505.3</b>
Expenditures										
Operations	\$146.4	\$151.8	\$157.5	\$163.3	\$169.4	\$175.7	\$182.2	\$189.0	\$196.1	\$203.4
Debt Service	48.7	48.6	73.8	79.2	96.0	129.6	159.8	240.0	293.0	347.5
Revenue Funded Capital	41.8	42.4	44.0	45.9	47.9	50.9	53.0	55.1	58.1	57.8
<b>Total Expenditures</b>	<b>\$236.8</b>	<b>\$242.9</b>	<b>\$275.3</b>	<b>\$288.4</b>	<b>\$313.3</b>	<b>\$356.3</b>	<b>\$395.0</b>	<b>\$484.0</b>	<b>\$547.2</b>	<b>\$608.6</b>
Annual Rate Increases										
Operating Cash Flow Surplus (Deficiency) Before Rate Increase	\$9.1	\$15.2	\$(4.5)	\$(4.2)	\$(12.2)	\$(22.4)	\$(24.8)	\$(73.4)	\$(91.6)	\$(103.3)
Recommended Rate Increase	5.0%	5.0%	5.0%	6.0%	11.0%	11.0%	11.0%	11.0%	11.0%	12.0%
Additional Revenue From Rate Increase	11.8	12.4	13.0	16.4	31.9	35.4	39.3	43.6	48.4	58.6
Operating Cash Flow Surplus (Deficiency) After Rate Increase	20.9	27.6	8.5	12.2	19.6	12.9	14.5	(29.8)	(43.3)	(44.7)

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

reduce the need for a significant rate increase in a single year, it is recommended that rates are increased in advance of this requirement. For this reason, Carollo is recommending revenue increases in FYE 2015 through 2019 slightly above the annual need in each of the respective years by spreading the total increase evenly over the five years of projected rate increases in order to dampen large annual rate increases. These recommended annual rate increases are shown in Figure 5.4. Additionally, the short-term cash flows will help to mitigate future debt issuance costs by allowing the SFPUC to cash fund a portion of the SSIP.

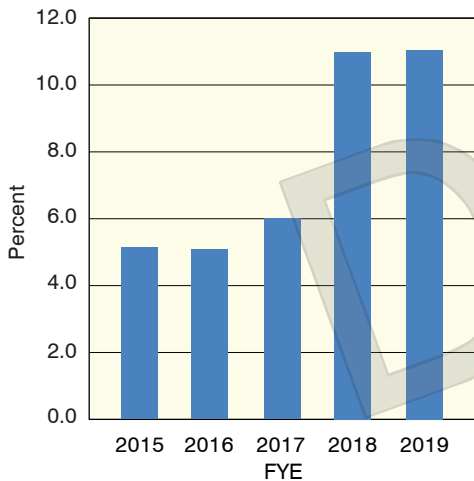


Figure 5.4 | SFPUC Wastewater Enterprise Recommended Annual Rate Increases

### ADDITIONAL CONSIDERATIONS

As noted above, it is crucial that the SFPUC maintain a 1.25 times coverage ratio of annual debt service. Failure to meet this requirement could result in a damaged credit rating, which could have significant interest rate cost impacts due to the amount of debt expected to be issued in upcoming years. Figure 5.5 shows the forecasted debt coverage ratios with and without reserves resulting from the recommended rate increases.

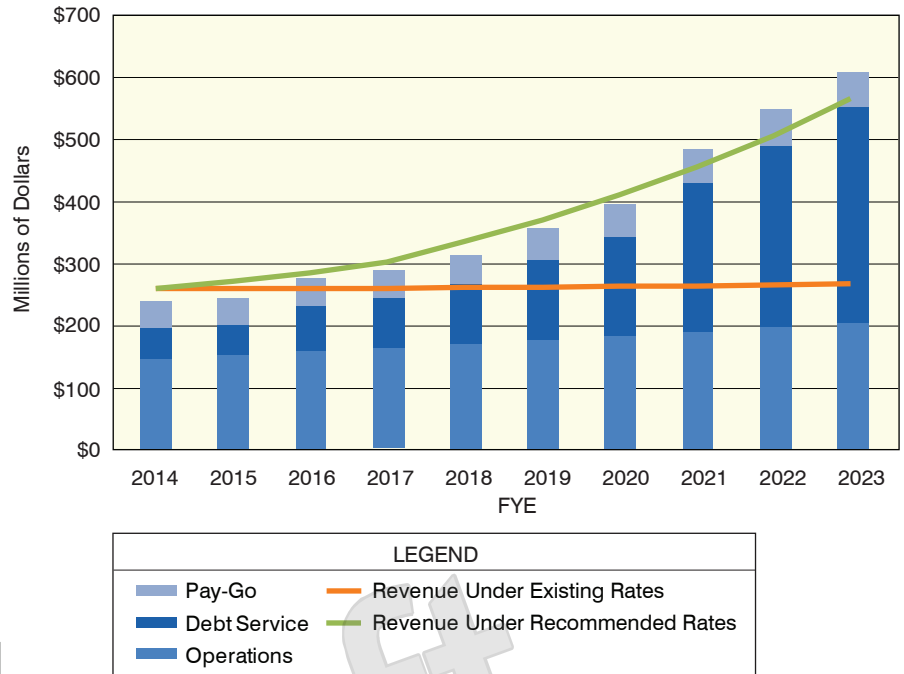


Figure 5.3 | SFPUC Wastewater Enterprise Projected Expenditures

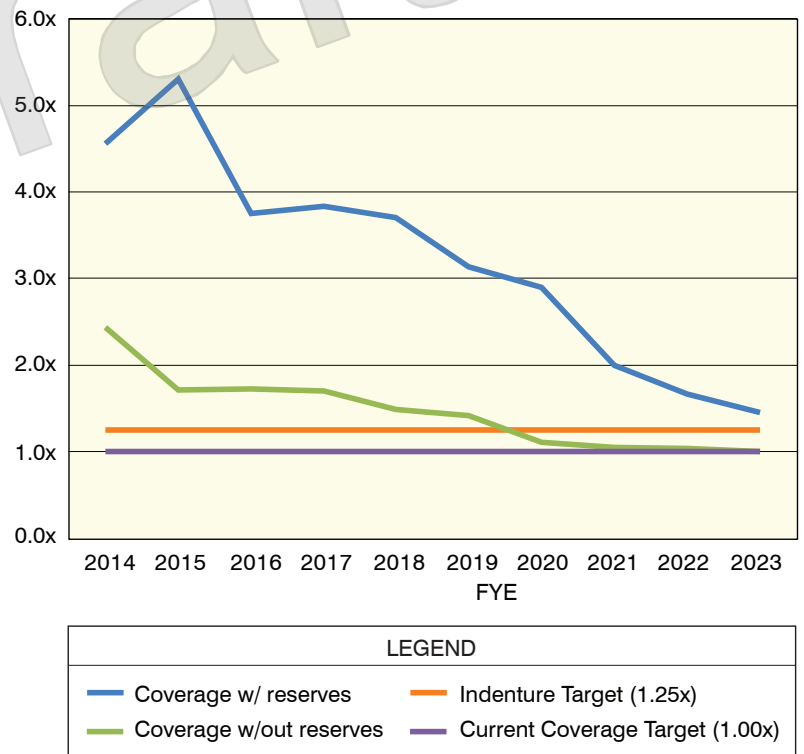


Figure 5.5 | SFPUC Wastewater Enterprise Recommended Annual Rate Increases

Table 5.8 and Figure 5.6 show the resulting operating reserve fund from the cash flow presented in Table 5.7 for the rate-setting period. As shown in Figure 5.6, it is recommended that the Wastewater Enterprise build-up the balance of the operating reserve in order to mitigate the later annual rate increases that would otherwise be needed for future expenditures.

Table 5.8 | SFPUC Wastewater Enterprise Operating Fund Balance

FYE	Expenditures <sup>(1)</sup>					
	2014	2015	2016	2017	2018	2019
<b>Beginning Fund Balance</b>	<b>\$88.2</b>	<b>\$110.1</b>	<b>\$139.1</b>	<b>\$150.4</b>	<b>\$167.0</b>	<b>\$191.7</b>
Net Cash Flow	20.9	27.6	8.5	12.2	19.6	12.9
Interest Earnings	<u>1.1</u>	<u>1.4</u>	<u>2.8</u>	<u>4.5</u>	<u>5.0</u>	<u>7.7</u>
<b>Ending Fund Balance</b>	<b>\$110.1</b>	<b>\$139.1</b>	<b>\$150.4</b>	<b>\$167.0</b>	<b>\$191.7</b>	<b>\$212.3</b>
Percent of O&M Expenditures	75%	91%	95%	102%	112%	118%
Percent of Debt Service	226%	286%	204%	211%	200%	164%

Note:

(1) Presented in million dollars, calculations in tables may not foot due to rounding.

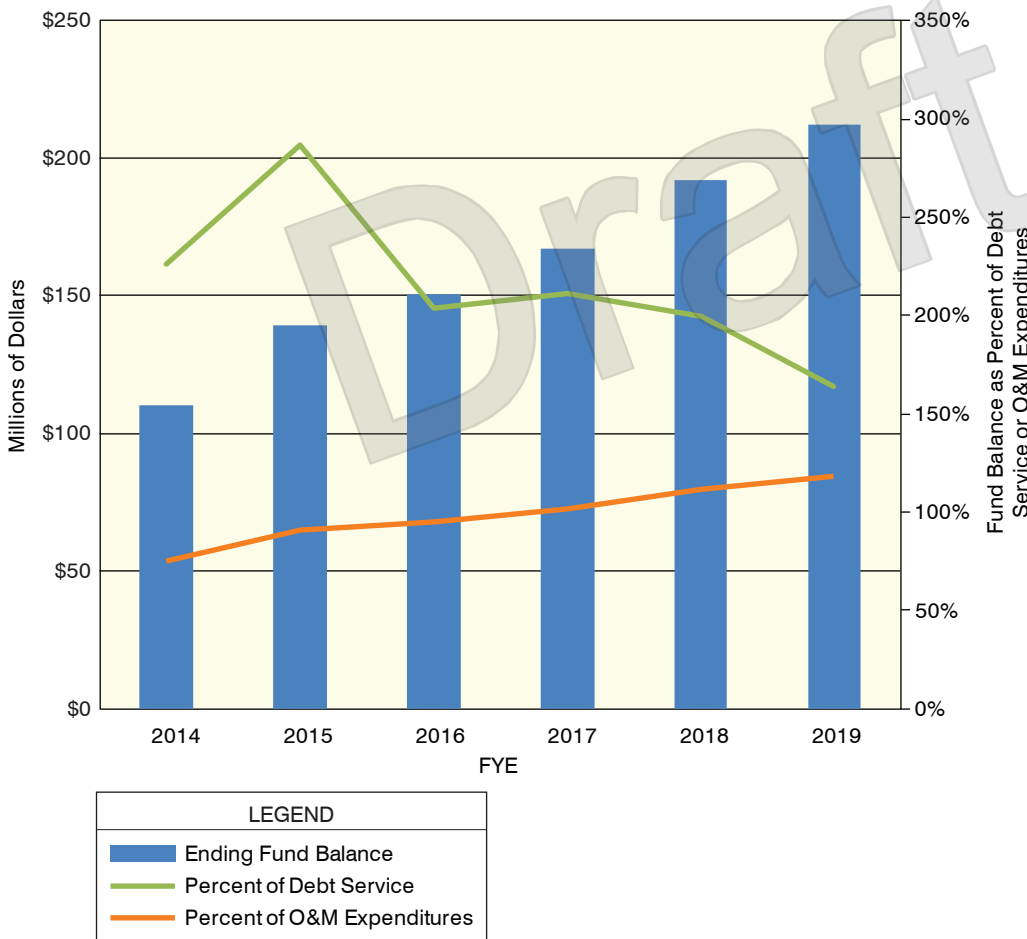


Figure 5.6 | SFPUC Wastewater Enterprise Operating Fund Balance



## CHAPTER 6 Wastewater Rates

# Introduction

The SFPUC maintains rates to equitably recover the costs from users to operate, service debt, and perform repairs and replacements for wastewater collection and treatment systems. The focus of this chapter is to detail the process utilized to achieve full cost recovery and substantiate that customers are paying their fair and proportionate share of the system costs.

### OVERVIEW OF RATE SETTING PROCESS

The City Charter Section 8B.125 requires that the SFPUC perform a cost of service study at least every five years. This provision is designed to maintain that revenues from rates are adequately funding utility operations, maintenance, and ongoing capital needs, while equitably recovering costs from system users. Additionally, in the State of California, utility rates must adhere to the cost of service requirements imposed by Proposition 218 of the State Constitution. Proposition 218 requires that property related fees and charges, including water and wastewater rates, do not exceed the propor-

tional cost of providing the service. To achieve these requirements, Carollo/PME JV conducted the following study elements, shown in Figure 6.1.

As the SFPUC can demonstrate that it has met the proportionality requirements of Proposition 218 and the requirements of the City Charter, the SFPUC has some flexibility to develop rates that also achieve the City's policy objectives and promote community values. The recommended rate structure is designed to account for the unique nature of the SFPUC's wastewater system as well as the discharge characteristics of an ecologically minded service population.

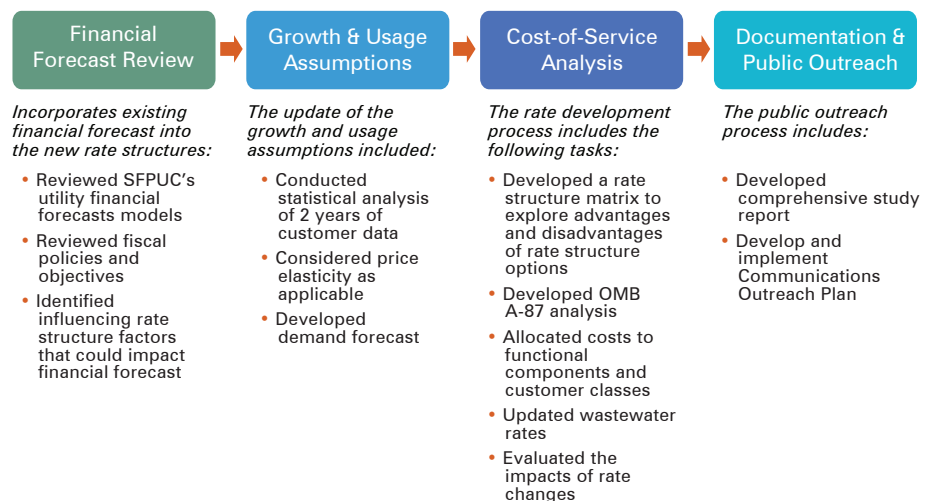


Figure 6.1 | Flowchart for Cost of Service Rate-Setting Process

## Future Considerations

In performing this wastewater rate structure analysis, Carollo/PME JV worked in close collaboration with SFPUC staff to gather and validate study data. Carollo/PME JV reviewed the SFPUC customer and financial data for reasonableness; however, Carollo/PME JV did not independently audit nor verify the accuracy of the SFPUC's customer billing or financial records used as the foundation of this analysis. In particular, summary level customer data was provided and used as the basis for the findings presented within this report. The projections and forecasts of this analysis are based on reasonable expectation of future events. Should cost escalation, operating expenditures, or capital needs vary from projected levels prior to Fiscal Year Ending (FYE) 2019, the SFPUC may require an additional Proposition 218 process to increase rates above currently projected levels. The SFPUC may similarly be required to begin a new Proposition 218 process should revenues not materialize as projected. As the SFPUC continues to gather additional customer data and evaluates the impacts of wet weather cost drivers, it might be possible in future rate efforts to create additional or more specific rate sub-classes within the non-residential customer class for greater transparency.

## COST OF SERVICE ANALYSIS

The purpose of a cost of service analysis is to provide a rational basis for the distribution of system expenditures to each customer in proportion to the demands they place on the system. A detailed cost allocation was developed by assigning costs to one of four functional categories, and then allocating costs to each customer class based on its respective demand on the system.

The allocation developed through this study provides a stable method for allocating costs within the wastewater system

## Functional Cost Allocation Components

It is necessary to allocate costs to cost categories that can be both measured at the treatment facilities and estimated or measured for each user. For the SFPUC wastewater facilities, these cost categories include flow and strength – Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), and Fats, Oils, and Greases (FOG). These cost categories are referred to as billable constituents. O&M expenditures and the capital costs for each debt service and future capital projects were assigned to each associated billable constituents. The SFPUC applies separate allocations for O&M and capital costs in order to more accurately reflect appropriate cost relationships. This process allows the SFPUC to recover a proportionate share of annual costs related to capital and O&M from each user through the annual user rate based on their individual flow and loading discharges.

The SFPUC's budget was analyzed on a per line-item basis and annual costs were attributed to the billable constituents:

- **Flow:** Operating and capital costs incurred by the wastewater system to handle the quantity of flows discharged to or collected by the system.
- **Chemical Oxygen Demand (COD):** Costs incurred to remove and dispose of organic compounds.
- **Suspended Solids (TSS):** Costs associated with removing and disposing of small particles in the wastewater.

- **Fats, Oils, and Grease (FOG):** Costs for cleaning collection system and treating and disposing of fats, oils, and greases discharged to the sewer system.

The details of this are presented in Appendix D. Over time, the expenditures associated with each billable constituent change, but the process-specific percentage allocations to billable constituent should remain constant, absent a significant process change. To account for the variability in costs, the functional cost allocation apportions the annual revenue requirement over an average of the forecasted expenditures from FYE 2015 through FYE 2019 by major function of the wastewater utility. Utilizing the five-year average accounts for slight annual shifts in costs over the course of the study period.

## Allocation of Costs to Functional Components

Operations and maintenance (O&M) costs incurred by the SFPUC result from materials, power, chemical costs, and labor. These costs were identified and allocated to constituents for each process within each treatment facility. The allocation percentages for O&M costs, by unit process, are presented in Table 6.1.

Capital costs include the costs of planning, engineering, and constructing treatment and collection facilities for the purpose of providing additional capacity, replacing existing facilities, or for improving the level of service through either higher levels of treatment or more efficient treatment systems. Capital cost allocations differ from O&M cost allocations because billing parameters influencing the costs to construct a process are not always the same as the parameters influencing the operations of a process. The allocation percentages for capital costs, by unit process, are presented in Table 6.2.

Table 6.1 | SFPUC Wastewater Enterprise Operation and Maintenance Cost Allocation

Treatment Process	COD	TSS	FOG	Flow
<b>SOUTHEAST PLANT (SEP)</b>				
Influent Pumping	-	5%	-	95%
Headworks and Grit Removal	-	60%	-	40%
Primary Sedimentation	-	60%	-	40%
Secondary Aeration	80%	-	-	20%
Secondary Clarifiers	80%	-	-	20%
Disinfection	-	-	-	100%
Solids Thickening	77%	19%	4%	-
Solids Blending	51%	34%	15%	-
Digester and Gas Management	51%	34%	15%	-
Centrifuge	60%	40%	-	-
SEP Effluent (Booster) Pump Station	-	-	-	100%
Hauling	60%	40%	-	-
<b>OCEANSIDE PLANT (OSP)</b>				
Influent Pumping	-	5%	-	95%
Screening and Vortex Grit Tanks	-	60%	-	40%
Primary Clarifiers	-	60%	-	40%
Secondary Aeration	80%	-	-	20%
Secondary Clarifiers	80%	-	-	20%
Gravity Belt Thickener	26%	60%	15%	-
Anaerobic Digesters	26%	60%	15%	-
Belt Filter Press	30%	70%	-	-
Cyclone Classifier	30%	70%	-	-
<b>NORTH POINT FACILITY (NPF)</b>				
Screening	-	-	-	100%
Grit Chambers	-	-	-	100%
Primary Clarifiers	-	50%	-	50%
Hypochlorite Storage & Dosing System	-	-	-	100%
Dechlorination	-	-	-	100%
<b>COLLECTION SYSTEM</b>				
Collection System	-	-	15%	85%
Channel Pump Station	-	5%	3%	92%
All Other Pump Stations	-	5%	3%	92%
Grease Recovery and Recycle	-	-	100%	-



Table 6.2 | SFPUC Wastewater Enterprise Capital Cost Allocation

	COD	TSS	FOG	Flow
<b>SOUTHEAST PLANT (SEP)</b>				
Influent Pumping	-	-	-	100%
Headworks	-	20%	-	80%
Primary Sedimentation	-	19%	2%	79%
Secondary Aeration	95%	-	-	5%
Secondary Clarifiers	32%	8%	-	60%
Disinfection	-	-	-	100%
Solids Thickening	77%	19%	4%	-
Biosolids Handling	54%	36%	10%	-
SEP Effluent (Booster) Pump Station	-	-	-	100%
<b>OCEANSIDE PLANT (OSP)</b>				
Influent Pumping	-	-	-	100%
Screening and Vortex Grit Tanks	-	20%	-	80%
Primary Sedimentation	-	19%	2%	79%
Secondary Aeration	95%	-	-	5%
Secondary Clarifiers	32%	8%	-	60%
Biosolids Processing	27%	63%	100%	-
OSP Effluent Discharge	-	-	-	100%
<b>NORTH POINT FACILITY (NPF)</b>				
Influent Pumping	-	-	-	100%
Screening	-	-	-	100%
Grit Chambers	-	-	-	100%
Primary Clarifiers	-	-	-	100%
Hypochlorite Storage and Dosing System	-	-	-	100%
Dechlorination	-	-	-	100%
Effluent Discharge	-	-	-	100%
<b>COLLECTION SYSTEM</b>				
Collection System	-	-	-	100%
Channel PS	-	-	-	100%
All Other PSs	-	-	-	100%
Green infrastructure (Early Imp Projects)	-	-	-	100%
Grease Recovery and Recycle	-	-	100%	-

These process-specific capital allocations are applied to annual debt service payments on existing debt, as well as projected future debt service required to fund planned capital project expenditures.

The Sewer System Improvement Program (SSIP) outlines the capital improvement projects that are planned through FYE 2032, and are the basis of the future capital expenditures. Projects outlined in the SSIP were

categorized by the associated assets, and subsequently allocated to the billable constituents. The planned projects for the entire SSIP (Phase I, II, and III) were used to allocate costs to the billable constituents to account for all of these future investments, not just costs incurred during the upcoming five-year rate period. For example, the SFPUC will soon begin construction of the new digesters, which are primarily associated with COD and TSS. Taken in isolation, near-term projects would result in

a temporary cost allocation shift to the loading parameters. Over time, the allocation would then shift back towards flow as the SFPUC completes the SSIP. Taking into account the allocation of total SSIP avoids large annual swings in costs from one billable constituent to another and reduces temporary cost shifts between customer classes.

The resulting allocation to be applied to the annual revenue requirement is presented in Table 6.3 and Figure 6.2.

Table 6.3 | **SFPUC Wastewater Enterprise Allocation of Average Net Revenue Requirements**

	Flow	COD	TSS	FOG	Total
Operating Expenses	\$86,755,907	\$38,058,097	\$28,362,233	\$10,798,453	\$163,974,690
Existing Debt	54,785,619	16,406,209	11,148,842	3,126,737	\$85,467,407
Rate Funded Capital	51,880,689	5,757,666	3,634,494	1,001,445	\$62,274,294
Other Non-Rate Revenues	(6,837,902)	(2,128,980)	(1,525,291)	(527,689)	\$(11,019,863)
<b>Total Allocation (\$)</b>	<b>\$186,584,313</b>	<b>\$58,092,993</b>	<b>\$41,620,277</b>	<b>\$14,398,945</b>	<b>\$300,696,527</b>
Total Allocation (%)	62%	19%	14%	5%	100%

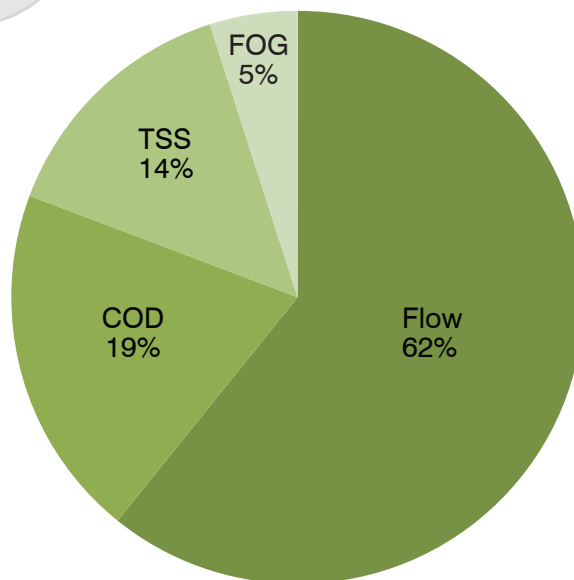


Figure 6.2 | **SFPUC Wastewater Enterprise Functional Cost Allocation**

## UNIT COST AND CUSTOMER ALLOCATION

The unit costs of service are determined by dividing the total annual costs allocated to each parameter by the total annual service units of the respective component. The total annual costs allocated to each parameter are determined by applying the percent allocation summarized in Figure 6.2 to the annual revenue requirement as presented in Chapter 5. The annual service units are based on data from customer billing.

### Wastewater Data and Discharge Characteristics

The customer data for this rate analysis relied solely on the summary level data provided by the SFPUC. Consistent with the assumptions made for the water system, account growth is expected to increase at 0.5 percent annually. Despite account growth, the annual number of discharge units is assumed to remain at existing levels throughout the study's forecast. This assumption is consistent with the forecasted water demand analyzed earlier in Chapter 4 of this report.

Given the similarity in residential wastewater characteristics, Single Family Residential (SFR) and Multi-Family Residential (MFR) share wastewater strength assumptions. In contrast to residential customers, non-residential wastewater strength characteristics vary greatly within the class, depending on the type of business. For example, restaurants, office buildings, hotels, etc. have different levels of strength, and are thus assigned different standard industrial classification (SIC) codes.

Based on available historical customer data and these forecasting assumptions, Table 6.4 details the total units of service for each customer class and functional category predicted for FYE 2015. This customer data is then used

Table 6.4 | **SFPUC Wastewater Enterprise Forecasted FYE 2015 Units of Service by Customer Class**

Customer Class	Flow (Ccf)	COD (lbs)	TSS (lbs)	FOG (lbs)
Single Family Residential	6,690,708	28,550,165	11,645,463	3,547,902
Multi-Family Residential	10,946,136	46,719,799	19,056,758	5,988,422
Non-Residential	8,648,705	39,174,555	12,804,370	4,840,860
<b>Total</b>	<b>26,285,549</b>	<b>114,444,520</b>	<b>43,506,591</b>	<b>14,377,184</b>

to determine appropriate proportional allocation of revenue needs to customer classes.

### Unit Cost Development

In order to allocate costs of service to the different user classes, unit costs of service were developed for each functional component. As shown below in Table 6.5, the unit costs of service are developed by dividing the total annual costs allocated to each functional component by the total annual service units of the respective category.

The flow unit cost is billed based on the assumed discharge or return to the SFPUC sewer collection system. The calculated commodity unit represents

100 cubic feet (1 Ccf) of discharge flow, which is derived by adjusting metered water usage by a standard discharge factor (90 percent for SFR, 95 percent for MFR, and 90 percent for non-residential). The strength-based unit costs are billed based on the pounds of COD, TSS, and FOG returned to the system.

### Customer Class Allocation

The unit costs of each component shown in Table 6.5 are then applied to each customer classes' projected discharge flow and loadings from Table 6.4 to derive customer class allocations (Table 6.6). This allows for costs to be allocated to each customer class based on their respective proportional use of the overall system.

Table 6.5 | **SFPUC Wastewater Enterprise – Functional Unit Costs**

	Functional Component			
	Flow	COD	TSS	FOG
Allocation Percentage	62%	19%	14%	5%
Allocable to Component	\$161,527,944	\$50,291,697	\$36,031,099	\$12,465,314
Total Units	26,285,549	114,444,520	43,506,591	14,377,184
Allocation Basis	Discharge Units ( Ccf)	Total Pounds of COD	Total Pounds of TSS	Total Pounds of FOG
<b>Unit Cost</b>	\$6.1451 Per Ccf	\$0.4394 Per lb COD	\$0.8282 Per lb TSS	\$0.8670 Per lb FOG

Table 6.6 | **SFPUC Wastewater Enterprise Allocation of Revenue Requirements by Customer Class**

Customer Class	Flow	COD	TSS	FOG	Total
Single Family Residential	\$41,115,225	12,546,134	9,644,488	3,076,104	\$66,381,951
Multi-Family Residential	\$67,265,358	20,530,629	15,782,343	5,192,085	\$108,770,415
Non-Residential	\$53,147,361	17,214,934	10,604,268	4,197,125	\$85,163,688
<b>Total</b>	<b>\$161,527,944</b>	<b>\$50,291,697</b>	<b>\$36,031,099</b>	<b>\$12,465,314</b>	<b>\$260,316,0533</b>

Throughout the rate-setting process, Carollo/PME JV worked closely with SFPUC staff to evaluate the impact of the recommended rate structure's impact to wastewater customers. Based on the new cost of service analysis and recommended rates, there will be a shift between customer classes. This shift is shown in Figure 6.3. In this figure, the recommended customer class allocation is compared to the current rate structure's allocation applied to the revenue requirements of FYE 2015.

## RATE DESIGN

The rate design determines how the costs, identified in Table 6.6, are recovered by each customer through specific wastewater rates. The focus of this process is to achieve full cost recovery and substantiate that customers are paying their fair and proportionate share of system costs.

As part of this analysis, the existing wastewater rate structure was reviewed to assess its effectiveness in addressing the SFPUC's utility cost-of-service and conservation objectives. The SFPUC last performed a cost of service rate analysis in 2009. Based on the recommendations at that time, the SFPUC transitioned from a three-tiered rate structure, which was implemented in 2005, to the current

Figure 6.3 | **Comparison of Cost Allocation by Rate Structure**

two-tiered structure for residential customers. Similar to the water rates, the current wastewater rates consist of a flow-based tiered rate structure for residential customers and a uniform (non-tiered) flow-based rate for non-residential customers with an additional separate charge for each unit associated with strength. Unlike water rates, retail wastewater revenues are recovered entirely on flow-based charges, as there is no monthly service charge associated with the wastewater rate structure. The rate is charged based on the assumed

amount of metered water usage that is returned to the wastewater system. To calculate the monthly wastewater discharge, the customer's water usage is adjusted by a return-to-sewer factor and represents the assumed discharge units. For non-residential customers, the rate is separated into strength and flow based rates. The strength charges are assessed based on the estimated effluent strength discharged to the wastewater system per hundred cubic feet (Ccf), which is specific to user category.

Table 6.7 | **SFPUC Wastewater Enterprise Current Rates**

Single-Family Residential	
Tier 1 (0-3 units)	\$7.90 per Ccf
Tier 2 (>3 units)	10.53 per Ccf
Multi-Family Residential	
Tier 1 (0-3 units)	\$8.25 per Ccf
Tier 2 (>3 units)	11.01 per Ccf
Non-Residential	
Flow	\$6.6203 per Ccf
COD	0.2178 per lb
TSS	0.8907 per lb
FOG	1.1145 per lb

Table 6.7 shows the current wastewater rates for residential and non-residential users.

### Selecting Rate Structures

Once costs have been equitably allocated to each functional component, the SFPUC has some flexibility in designing the rate structure in order to meet its various policy objectives. In determining the appropriate rate level and structure, Carollo/PME JV analyzed various rate design alternatives and the corresponding customer and utility implications. Beyond the identified study objectives, Carollo/PME JV identified additional criteria for considerations and discussed them at length with SFPUC staff. The following is a partial list of the additional elements desired in the rate structure:

- Clear and Understandable.
- Encourage Conservation and Water Efficiency.
- Follow Cost of Service Principles.
- Provide Revenue Stability.
- Affordable.
- Comply with Legal and Regulatory Requirements.
- Abide by policy objectives.

Given the numerous and, at times, competing elements, selection of an appropriate rate structure is complex.

There is no single structure that meets all objectives equally, nor are all objectives or elements valued the same by the utility or customers. Each criteria or element has merit and plays an important role in the rates implementation and overall effectiveness. These elements and competing objectives were discussed and evaluated at length throughout the financial and rate study process.

### Residential Wastewater Rates

Similar to residential water customers, SFR and MFR wastewater customers are evaluated separately to determine unit costs more specific to their customer category. The existing residential rates consist of a two-tier rate structure. For single-family residential, the current rate for each of the first three discharge units is \$7.90 and \$10.53 for each additional discharge unit. Likewise, multi-family residential customers are charged \$8.25 per unit for the first three units and \$11.01 for any additional unit. Residential rates are tiered to further encourage efficient use of water.

Units of wastewater discharge are determined based on metered water consumption. To recognize that a portion of residential water usage does not return to the wastewater system, a standard customer return factor of 90 percent and 95 percent are applied to water usage of SFR and MFR, respectively. The return to sewer factor varies between SFR and MFR customers, recognizing the greater level of outside irrigation by single-family users. Customers may dispute this flow factor.

Finally, the wastewater loading strength is assumed to be commensurate for all residential wastewater users at 684 mg/L COD, 279 mg/L TSS, and 85 mg/L FOG. Because of this standardized assumption, the costs associated with loadings may be rolled up into one rate applied to residential

users based on discharge flow. In other words, the charge assessed for flow include costs associated with loadings. This is standard industry practice.

### Single-Family Residential

Residential rates have two tiers. Tier 1 is applied to up to three discharge units per month. The Tier 2 rate is applied to all units thereafter. For SFR users, a tier break at 4 Ccf results in 48 percent of discharge flow in the first tier and the remaining 52 percent of flow is charged in the second tier. Consistent with the current rate structure and the SFPUC's policy to encourage conservation, if the rate at the second tier is set to be 1.33 times the rate of a unit within the first tier, dividing the costs amongst the two tiers accordingly results in a charge of \$8.47 per Ccf for Tier 1 and \$11.27 for each additional Ccf that falls in Tier 2. To be consistent with the recommended water tier structure, if the tier break were to be moved to 4 Ccf, the resulting rates for Tier 1 and Tier 2 would be \$8.77 and \$11.66, respectively.

However, the SFPUC wastewater system and peak capacity requirements are driven primarily by wet weather flows into the system, rather than strictly incremental dry weather customer discharges. As a result, Carollo/PME JV recommends transitioning from the current tiered rate structure to a flat per Ccf rate for all wastewater discharged to the system. This rate is determined by taking the full amount of costs allocated to SFR customers and dividing by all discharge units. This would result in a rate of \$9.93 per Ccf for all Ccf discharged to the system. Again, the amount discharged is assumed to be 90% of monthly water consumed. This flat per unit charge continues to encourage conservation as it is directly tied to the customer's water demands.

Figure 6.4 illustrates the impact of transitioning away from a tiered rate structure for SFR customers.

### Multi-Family Residential

Although multi-family users have the same wastewater characteristics in terms of loadings, they generally produce less flow than a typical SFR account. This is due to a lower number of residents per MFR unit than SFR unit. As a result and given the same tier allotments, less MFR discharge is realized in the second tier. The majority of discharge units falls within Tier 1, accounting for 69 percent of units. Consistent with the current rate structure, if the rate at the second tier is set to be 1.33 times the rate of a unit within the first tier, the resulting rates would be \$9.01 for discharge within the first year and \$11.99 for all other discharge. The 1.33 price differential is based on the SFPUC’s objective of encouraging efficient use of water resources and to reflect the incremental cost of higher discharge. When compared to the SFR recommended rate, MFR are higher per discharge unit. All customer classes share the same unit cost per flow, developed in Table 6.5. Given MFR’s greater amount of discharge within Tier 1 and a higher discharge factor, the MFR rates for both Tier 1 and Tier 2 would be greater than the those for SFR. However, similar to SFR, it is recommended that the tiers be removed from the wastewater rates. Because SFR and MFR customers have the same loadings assumptions, their per unit rates would be equivalent at \$9.93 per Ccf.

Figure 6.5 illustrates the impact of transitioning away from a tiered rate structure for SFR customers.

### Non-Residential Wastewater Rates

Non-residential users currently pay a uniform volume rate of \$6.6203 for each unit of wastewater flow, which

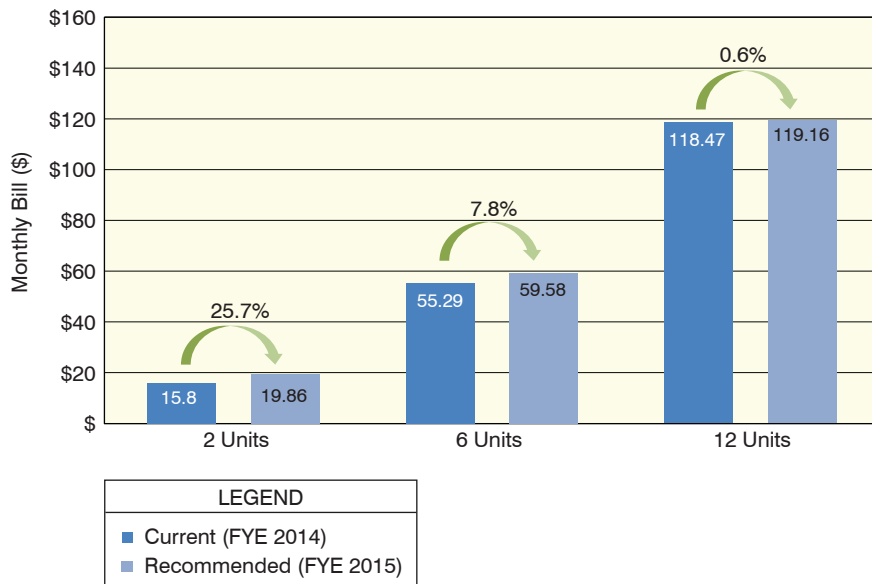


Figure 6.4 | SFPUC Wastewater Enterprise Single-Family Residential Customer Impacts

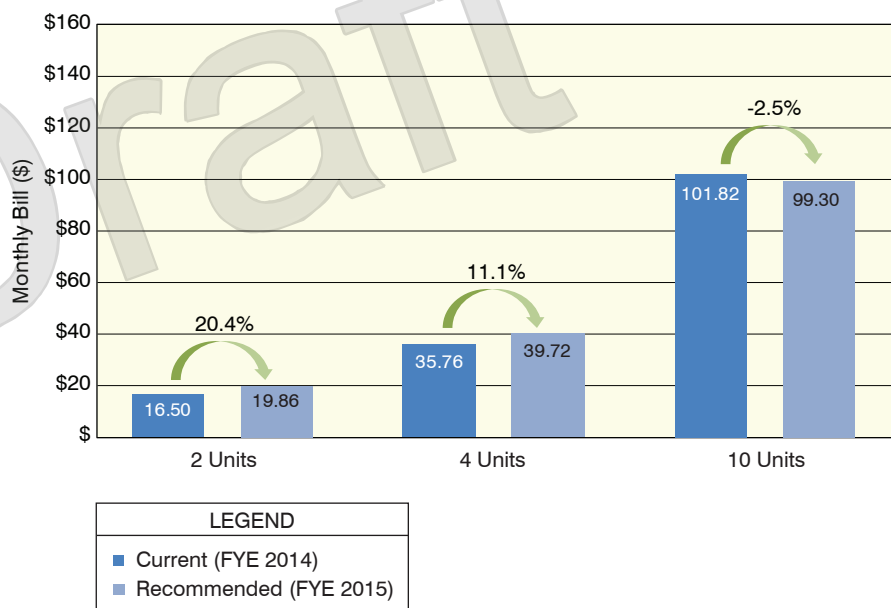


Figure 6.5 | SFPUC Wastewater Enterprise Multi-Family Residential Customer Impacts

is based on a 90 percent return factor applied to metered water usage for non-residential customers. In addition, non-residential customers are assessed separately for each billable constituent. These charges are based on the assumed loading concentrations (strength parameter) that are returned per discharge unit for various types of non-residential customers. For COD,

the current charge is \$0.2178 per pound. The strength charges for TSS and FOG are \$0.8907 and \$1.1145 per pound, respectively. Non-residential strengths can vary significantly between users. Defined strengths are based on periodic sampling data on a customer-by-customer basis or the customer’s standard industrial classification (SIC) code, if no sampling data is available.

As discussed, the recommended rates are calculated by dividing the total annual costs associated with each loading by their associated total annual units. Non-residential customers are billed by applying the appropriate SIC code classification to the recommended unit costs. This means the cost per unit (Ccf) of water discharged to the system will vary by SIC code to reflect the assumed loadings concentrations specific to commercial property type. Figure 6.6 shows the monthly impact to a sample of various non-residential customers, comparing the current rates in FYE 2014 to the recommended rates in FYE 2015.

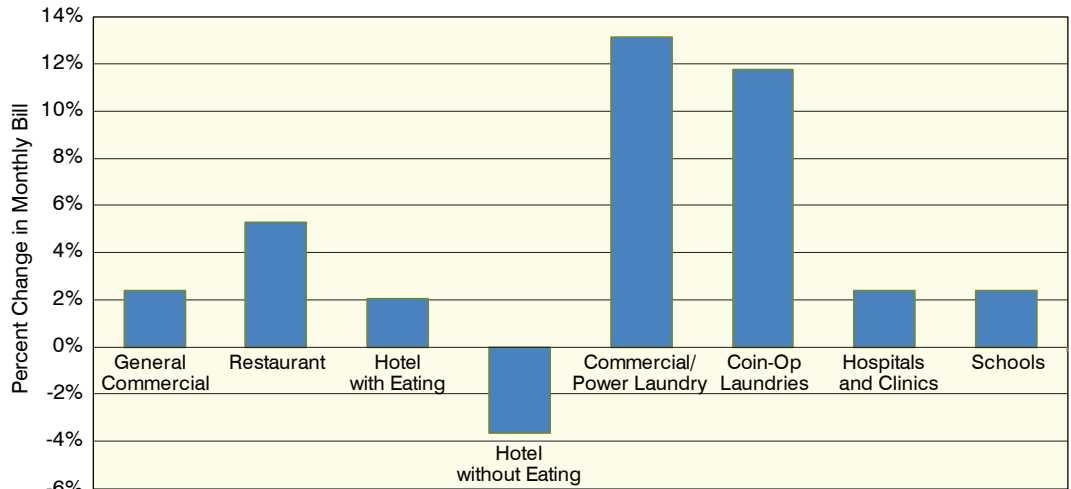


Figure 6.6 | Change in Monthly Bill for Non-Residential Customers from FYE 2014 Current Rates to FYE 2015 Recommended rates

### SFPUC Wastewater Enterprise Recommended Rate Schedule

The annual wastewater rates through FYE 2019 are determined using the annual rate increases defined by the revenue requirement analysis, which was

described in detail in Chapter 5. These increases are applied to the FYE 2015 rates to escalate rates for later years. These are summarized in Table 6.8.

Table 6.8 | SFPUC Wastewater Enterprise Recommended Annual Rates

Annual Increase		5.0%	5.0%	6.0%	11.0%	11.0%
	Effective 7/1/2013	Effective 7/1/2014	Effective 7/1/2015	Effective 7/1/2016	Effective 7/1/2017	Effective 7/1/2018
	Existing Unit Charge	Recommended Unit Charge				
Single Family Residential <sup>(1),(2)</sup>						
Tier 1 (per Ccf 0-4 Ccf)	\$7.90	\$8.77	\$9.21	\$9.77	\$10.85	\$12.05
Tier 2 (per Ccf >4 Ccf)	10.53	11.66	12.25	12.99	14.42	16.01
SFR Non-Tiered Rate (Recommended)						
All Discharge (per Ccf)	N/A	\$9.93	\$10.43	\$11.06	\$12.28	\$13.64
Multi-Family Residential Tiered Rates <sup>(1)</sup>						
Tier 1 (per Ccf 0-3 Ccf)	\$8.25	\$9.01	\$9.47	\$10.04	\$11.15	\$12.38
Tier 2 (per Ccf >3 Ccf)	11.01	11.99	12.59	13.35	14.82	16.46
MFR Non-Tiered Rate (Recommended)						
All Discharge (per Ccf)	N/A	\$9.93	\$10.43	\$11.06	\$12.28	\$13.64
Non-Residential Rates						
Volume of Wastewater Discharged (per Ccf)	\$6.6203	\$6.1452	\$6.4525	\$6.8397	\$7.5921	\$8.4273
COD (per lb)	0.2178	0.4395	0.4615	0.4892	0.5431	0.6029
Suspended Solids (per lb)	0.8907	0.8282	0.8697	0.9219	1.0234	1.1360
Oil/Grease (per lb)	1.1145	0.8671	0.9105	0.9652	1.0714	1.1893

Note:

(1) If two-tier structure is continued.

(2) The tier break at 4 Ccf is shown to remain consistent with the recommended single family residential water commodity rate structure.

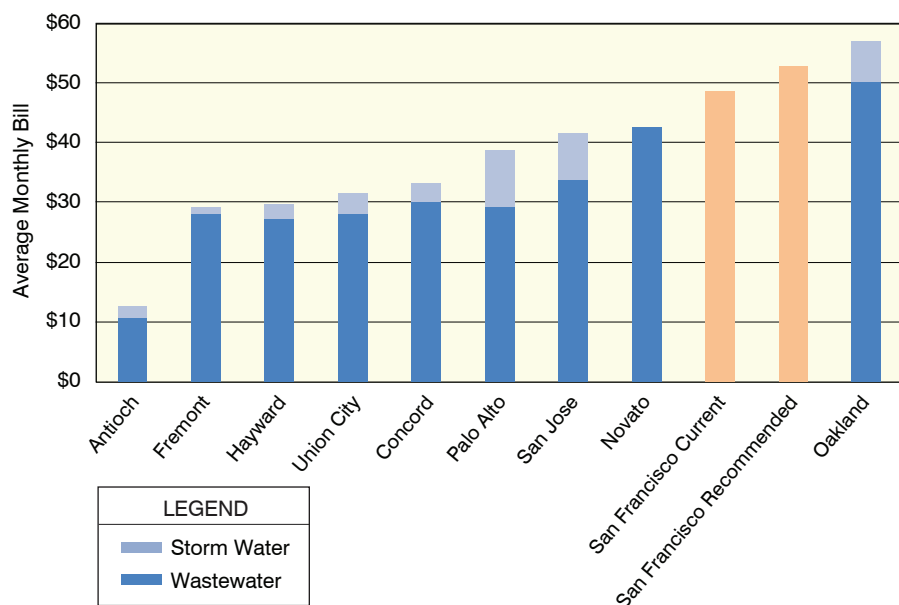


Figure 6.7 | **Local Monthly Wastewater and Storm Water Bill Comparison Survey for a SFR Customer**

## ADDITIONAL CONSIDERATIONS

### Customer Data and Discharge Characteristics

Although the existing rate structure is reasonable, the SFPUC has not updated its flow and loading assumptions for residential or commercial customers in several years. In order to do so, the SFPUC would need an extensive sampling program. As no better data or existing standards are available, there is not a strong basis for changing the customer loading assumptions at this point in time. However, we do acknowledge that this could create a continued or growing cost-of-service gap and recommend that a flow and loading study be prepared in the future to confirm the appropriateness of these assumptions. Although the wastewater system is largely unchanged since the 2009 cost-of-service

study, aggressive conservation and other factors might cause a shift in the concentration assumptions. In addition, as of January 17, 2014, Governor Jerry Brown declared a drought emergency in California. As he has asked all citizens to reduce water use by at least 20%, there might be a further shift in concentration due to constant amount of loadings discharged to the system with reduced flow.

### Wastewater Rate Comparison

Carollo/PME JV conducted a rate survey of nearby utilities. Although utilities are not always alike, it is common to examine comparisons between similar or neighboring utilities.

Figure 6.7 compares a typical single-family residential user's overall monthly bill with those of nearby utilities. This comparison shows the total combined average monthly bill (including costs

associated with water, wastewater, and storm water) to account for San Francisco's combined system. This comparison also accounts for the different water use patterns of other cities.

Care should be taken in drawing conclusions from such comparisons as factors including locations, customer profiles, age of the system, and various operational and capital related needs vary from agency to agency. As illustrated, despite the recommended increase to customers, wastewater rates are in line with the average of nearby agencies.

### Wet Weather Considerations

Because the SFPUC operates a combined sanitary and storm sewer system, the SFPUC might wish to investigate the benefits of a separate wet weather rate component. This would result in a separate dry weather rate based on discharged flow and wet weather rate based on contributions to non-point source runoff. This separation of rates would provide transparency and better communicate to the ratepayers the benefit received by treating wet weather runoff. This approach also allows the SFPUC the ability to show the importance of treating wet weather flows due to street pollutants. Although not recommended at this time due to administrative and data limitations and a desire for extensive stakeholder outreach and input, Carollo/PME JV's preliminary analysis discusses the benefits of enhanced transparency and, with that, the ability to encourage green storm water reduction incentives. These benefits are discussed in more detail in the following chapter.



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## CHAPTER 7

### Future Considerations

# Introduction

As described in the Background section of this report, the SFPUC operates a combined sanitary and wet weather sewer system that was designed and constructed to protect receiving waters. This wastewater system is one of two combined systems within California and represents a higher level of service than other wastewater providers within the state. The SFPUC is a pioneer of wet weather management, and the agency's policies helped shape EPA's Combined System Overflow (CSO) Control Policy, which regulates combined systems nationwide. The SFPUC implemented a wet weather management system and constructed a transport storage system, which has helped the SFPUC comply with the CSO Control Policy and drastically decrease the number of combined sewer overflows.<sup>1</sup> Many large combined systems such as Portland, Philadelphia, and Washington D.C. are now challenged with meeting the requirements of the CSO Control Policy and are in the process of building similar types of wet weather facilities for their combined systems.

The SFPUC primarily funds all activities of the wastewater enterprise, including wet weather management and infrastructure investments, through the wastewater user fees (rates). Although minimal or cyclical, some additional revenues are generated by capacity charges, interest earnings, and miscellaneous revenues. Wastewater rates are assessed based on a customer's water consumption – the actual flow through the meter, most of which is discharged to the sewer system. This rate structure is premised on an underlying assumption that there is a strong correlation between a customer's water consumption and the quantity of wastewater discharged back into the sewer system. This is a reasonable and widely applied approach to determining a customer's dry weather impact to the system; however, the SFPUC could continue to explore the increasingly common practice of separately assessing a customer's wet weather flow contributions to the system.

In the future, following the completion of necessary engineering and fiscal analyses not yet complete, policy maker consideration of a wet weather rate component based on specific wet weather contributions might create greater incentives for customers to implement wet weather management techniques. If warranted by the engineering and fiscal analyses, the SFPUC could provide a cost-of-service rate adjustment for low impact design (LID) and other mitigation efforts. Such an adjustment might incent customers to implement wet weather management techniques such as green roofs, pervious pavement, and bioretention and provide recognition of the customer's contribution to greening the City. Based on these findings, Carollo/PME JV recommends that the SFPUC continue to explore cost-of-service rate adjustments and refine the necessary data to fully evaluate a separate wet weather rate component. Additionally, Carollo/PME JV recommends that the

<sup>1</sup> For example, on the Westside, the construction of the transport storage system has resulted in a decrease in the average overflows from 114 per year to eight per year. Wet-weather flows receive primary treatment before being discharging to the receiving waters.

SFPUC implement a grant program that will allow the agency to collect information regarding the benefit of green programs and could serve as the next step in completing the necessary analyses and assessment for implementing a wet weather related charge.

## WET WEATHER COST ALLOCATION

The current SFPUC wastewater rate structure, which recovers all wastewater costs based on metered water, is common throughout California and the United States. This structure meets all legal requirements as the rates presented within Chapter 6 were developed based on cost-of-service principles. Agencies have broad authority to impose cost-of-service based wastewater, water, and solid waste user fees under Proposition 218 through a public notification and commission/council/board approval process. Because the SFPUC collects and treats wet weather flows in a combined system, costs for addressing these flows may be collected through a wastewater rate without the requirement of a public vote.

When developing a rate structure, there are three general steps that are required, which are consistent with the approaches described in Chapter 4 and Chapter 6, for water and wastewater rate setting, respectively. These steps are as follows:

- 1. Functional Allocation:** The first step is the functional cost allocation. In the case of implementing a separate wastewater rate component for wet weather, flow related costs are allocated between wet or dry weather cost categories.
- 2. Cost Recovery Method:** The next step is to determine the metric for allocating and recovering costs to customer classes. Common

allocation factors include the gross area of the parcel, the impervious area of the parcel, the pollutant contribution, a flat fee per account, or a combination of these.

- 3. User Charges:** Finally, user charges are calculated. Residential customers are often charged a flat monthly rate based on a class average or can be subject to a tier based on property size (e.g., < 5,000 square feet). Non-residential customers are often charged based on their specific parcel characteristics.

The following sections illustrate how the SFPUC could develop a separate wet weather cost allocation component.

### 1. Wet Weather Functional Allocation

During the rate setting process, a functional allocation was developed to track costs back to the billable constituents; flow, Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), and Fats, Oils, and Greases (FOG). This process is discussed in Chapter 6. To implement a separate wet weather cost component, the flow could be broken down into wet and dry weather related costs. An allocation between dry and wet weather flow could be calculated based on the wastewater system design and operational parameters. This analysis also accounts for historical flow during both dry weather conditions and wet weather conditions. Separate allocations could be applied to Operations and Maintenance (O&M) costs and capital costs to accurately reflect cost relationships.

O&M costs incurred by the SFPUC result from materials, power, chemical costs, and labor. These costs identified as being related to flow in Chapter 6 would be allocated to wet or dry

weather for each process within each treatment facility. Variable costs such as those associated with energy for pumping and chemical addition are directly related to the volume of water treated. Therefore, associated costs would be allocated based upon dry and wet weather average annual flows.

A capital cost allocation could be developed, accounting for existing and projected capital expenditures and debt service. Wastewater facilities are designed to accommodate both base and peak wastewater flows, as discussed in Chapter 6. Certain processes, such as the headworks, are designed to accommodate peak wet weather flows. Conversely, other treatment processes within the wastewater system are operated on a steady state basis and are designed based on average flows. The dry weather portion would be allocated using the base flow and the wet weather portion would be allocated using the incremental peak flow.

Applying the overall wet and dry weather allocations to total flow revenue requirements would result in the wet weather revenue requirement.

### 2. Cost Recovery Method

As discussed in detail in Chapter 6, unit costs of service are calculated by dividing the total annual costs allocated to each billable constituent by the total annual service units of the respective constituent. The unit costs for loadings (COD, TSS, FOG) from this process would remain unchanged; however, following the functional allocation outlined above for wet weather, the flow component would be separated into two components: wet weather flow and dry weather flow. This would allow wet weather and dry weather costs to be recovered from customers based on different metrics.

There are a number of accepted cost recovery methods for wet weather related costs. The three cost recovery mechanisms that would be most applicable to the SFPUC are the following:

- **Flat Fee Per Account:** Every like parcel City-wide, or within a designated user category, is charged the same amount (\$/account).
- **Impervious Surface Area:** Every like parcel City-wide, or within a designated user category, is charged a uniform unit cost per impervious square footage (\$/sf).
- **Gross Surface Area:** Every like parcel City-wide, or within a designated user category, is charged a uniform unit cost per gross square footage (\$/sf).

The resulting rate could be implemented based on a single metric or a combination of these metrics. However, it is critical that the chosen metrics provide a sound nexus between the SFPUC expenditures and the service provided. The resulting rates must also be understandable to the public and supported through a comprehensive public outreach process.

### 3. User Charges

The SFPUC's wastewater rate categories include single-family residential, multi-family residential, and non-residential and industrial customers based upon standard industrial classification (SIC) code. These existing rate categories provide a reasonable basis for imposing a wet weather rate component, but could be adjusted as necessary during the implementation process, if a more refined classification is required to equitably recover wet weather costs.

The SFPUC could implement the wet weather charges based on a class average or individual parcel information. For example, many agencies impose a flat charge for single-family based on a

class average and bill large commercial customers based on the site-specific data, such as the impervious square footage of the parcel. Residential and commercial customer charges could also be tiered based on impervious or gross area of the parcel so that smaller, more uniform customers are charged based on class averages, while larger parcels are charged on site-specific conditions. For example, anything greater than 10,000 square feet of gross area could be given a site-specific charge based on a rate per square feet of impervious surface area.

### COST ALLOCATION ADJUSTMENT

As discussed, the separated wet weather cost component could be assessed based on wet weather metrics such as land use, impervious area, or development type. Any such rate structure should account for a customer's actions to reduce stormwater runoff.

Cost-of-service based adjustments should account for two factors: (1) avoided variable costs; and (2) reduction in a proportionate share of system costs due to reduced capacity requirements.

As the SFPUC reduces variable operational costs due to the reduction in wastewater volumes because of action by customers, a direct offset could be recognized through a flow adjustment. As an example, reducing flows would also reduce power required for treatment and pumping and chemicals for wastewater treatment, as well as increase the longevity of mechanical equipment due to reduced wear associated with lower usage. This cost savings is a relatively small amount. With respect to the SFPUC, the proportional shift of costs would provide the greater rate reduction impact and be the main driver.

The SFPUC incurs fixed costs, such as staffing, regardless of the level of onsite mitigation provided by an individual customer. Cost-of-service principles require costs to be appropriately allocated to customers based on their proportional use of the system. As a customer reduces wastewater contributions to the system due to stormwater management practices, that customer's proportionate share of system costs would be reduced, which would be recognized on the customer's bill.

### Types of Adjustments

A flow factor adjustment, or "Green-Factor", could be made on a customer's bill based on wet weather management techniques implemented by that customer. For example, if a customer were to implement pervious pavement or a green roof, then the customer's billing flow factor could be adjusted to reflect the shift in proportional cost responsibilities due to avoided wet weather flows to the sewer system. The Urban Watershed Management Program evaluated the technical aspects of a GreenFactor (flow factor) and the wet weather flows diverted from the combined system and the wet weather flows diverted from the combined system.

A flat dollar credit could be given to customers each month on their bill who have installed LID measures, such as rainbarrels or greenroofs, or for those that exceed the Stormwater Design Guidelines. The program could incent individuals to implement LID measures. Implementing the Green Flow Factor as an adjustment to the monthly bill could also incent customers to maintain the project and extend its useful life past the originally estimated value.

Table 7.1 | Comparison of Adjustment Alternatives

Alternatives	Description	Ease of Administration	Ease of Communicating to Public	Cost-of-service Requirement	Incent Ongoing Maintenance	Incent Customer to Install Mitigation Measure	Provides Customer Funding For Initial Capital
Fixed Monthly Credit	Flat amount for all qualifying customers	✓	✓	✓	✓	✓	
Variable Green Factor Credit	Monthly credit based on degree of impact	✓	✓	✓	✓	✓	
One-Time Grant	Upfront credit based on initial investment	✓	✓			✓	✓
Ongoing Grant	Credit for duration of program based on maintaining system	✓	✓		✓	✓	

A one-time payment could be provided to system users that implement new LID measures. The advantage to this one-time grant program is that it could provide funding to customers for the initial capital costs of the project. The disadvantage with a one-time grant is that the customer does not have an incentive to maintain the LID project nor extend its useful life. On-bill messaging with any of these alternatives could inform customers how to save every month.

At first, the program could be limited to a defined number of applicants in order to evaluate the effectiveness of the program. As part of this initial phase, the program would be voluntary, rather than being administered as an automatic rate adjustment and would have a minimum wet weather reduction threshold, limiting the financial adjustment to larger mitigation projects.

Table 7.1 above summarizes available cost adjustments, including rate credits and grant programs, and some considerations of each adjustment.

### Existing Programs

The SFPUC’s Wastewater Enterprise Urban Watershed Management Program administers two incentive programs for residences to implement green infrastructure – the Watershed Stewardship Grant Program and the Rainwater Harvesting Subsidy

Program. The Watershed Stewardship Grant Program offers grants for community-based green infrastructure projects. The Rainwater Harvesting Subsidy Program provides discounts on rain barrel and cisterns. Further use of these could be considered under a grant-based wet weather incentive.

### IMPLEMENTATION

There are several steps that need to be taken prior to the implementation of a separate wet weather charge.

The basis of the wet weather charge, such as impervious versus gross square footage would need to be determined through a public outreach and input process. Parcel data would also need to be refined. Programs might need to be developed to assist customers with high wet-weather contributions to mitigate their runoff. A major public outreach campaign will be essential to the success of this effort. Finally, the billing system will need to be modified to bill wastewater under two separate methods. The following sections describe these implementation challenges in more detail.

### Data Requirements

In order to implement a cost component based on surface area, City-wide parcel data is necessary to identify square footage of impervious or gross surface area. The Department of Public Works holds an extensive Geographical

Information System (GIS) database of City surface area based on multispectral satellite imagery. This database could likely be used as the basis of the parcel information when establishing wet weather charges.

The GIS data needs to be refined using logic specific to the area of wet weather contributions. For instance, the boundary conditions of the study area would need to be defined. Considerations include the following:

- Areas outside of the City that runoff into the City system
- Customer parcels that do not drain to the City system, but still benefit from the system at large
- Separate sewered areas with their own Municipal Separate Storm Sewer Systems (MS4) permits

Additionally, the SFPUC will need to obtain more site-specific information to refine estimates of runoff, and might also provide information for mitigation possibilities.

Obtaining and validating site-specific gross and impervious surface area data can be administratively burdensome. This data collection process can occur as part of the development process for new construction and through a verification process for existing customers, by regularly updating multispectral satellite imagery.

## Billing System Modifications

Implementing a wet weather cost allocation component would require substantial modifications to the billing system. Based on previous reconfiguration efforts to the billing system, the process could take several months to achieve final implementation. In addition to modifying the billing system, the SFPUC will need to add customers that do not currently receive wastewater service, but contribute wet weather runoff into the system.

## Customer Impacts

Before implementing any change to the rate structure, it is important to identify and evaluate shifts not only between overall user categories, but between specific sub-categories. Implementing a wet weather component allocated based on assumed runoff contributions may affect users differently and will result in a cost allocation adjustment between customers. A significant consideration to implementing a wet weather rate component is the financial impact to large land-based customers such as schools and parks. Contribution of wet weather runoff from parks is unique due to their large total property size and pervious area. Further analysis on this issue is needed.

## Schools, Parks and Other Large Land-based Landowners

San Francisco schools are amongst the largest landowners within the City and County of San Francisco. Much of this land is covered in hardscape, contributing wet weather flows to the SFPUC's wastewater system. A programmatic wet weather mitigation program for large land-based customers could have significant and tangible benefits for reducing wet weather flows into the SFPUC combined wastewater system. The SFPUC could consider implementing joint project and grant programs for large land-based customers. The programs would evaluate the overall

wet weather reductions that could be achieved through onsite mitigation measures and locations and property attributes, and the potential to co-locate SFPUC stormwater control facilities.

Beyond infrastructure investments, the SFPUC currently partners with local schools to assist with public outreach and education. As the SFPUC considers implementing a wet weather rate component, it is essential to have a strong public outreach program in order to garner public support. The SFPUC could consider expanding the teaming partnership with local schools for these efforts, shifting some public outreach costs to the schools.

In developing a wet weather rate component, it is important to accurately account for runoff contributions by customer class. Many agencies create a separate rate class for the park system due to the unique runoff characteristics typically associated with open spaces. For example, with the City and County of San Francisco, the average runoff of Golden Gate Park per 1,000 square feet is roughly half that of the average City-wide runoff due to the ground infiltration rates. More detailed site-specific analysis would be necessary for the park system and other large land customers to refine the assumptions for their site-specific characteristics.

## New Customers

Some parcel owners, such as parking lot owners who currently do not have metered service, do not currently receive wastewater services, but do contribute wet weather flows to the system. These properties would become customers of the wastewater enterprise with the implementation of a wet weather associated fee. The SFPUC would need to identify and account for such properties.

## Rate Resolution

If the SFPUC proceeds with the implementation of a wet weather recovery charge, the SFPUC Rules and Regulations Governing Water Service to Customers, Resolution No. 19.786,<sup>2</sup> will need to be updated to reflect any new rate changes. The resolution should account for the parameters by which rates are imposed and costs assigned, as well as the adjustment process. The resolution would also need to clearly define who owns, and who is responsible for the maintenance of, wet weather management facilities. Finally, the resolution should define any enforcement mechanisms available to the SFPUC to recover unpaid wet weather utility bills, including suspension of water service or a lien against the property.

## Public Outreach

As the SFPUC considers incorporating a wet weather rate component, it is vital that the SFPUC develop a public outreach program that promotes community involvement through each stage of the decision-making process. Communicating the service requirements associated with the SFPUC's unique combined system will play a large role in gaining public understanding of allocating wet weather costs separately from dry weather costs.

The importance of establishing a sound public outreach program is heightened by the requirement to communicate the system and opportunities to derive customer savings related to wet weather investments and costs. The SFPUC's public outreach program has been successful in the public's understanding of the system reliability and resiliency, as well as the required funding to achieve its level of service objectives. At the outset of a program to potentially implement a wet-weather

<sup>2</sup> SFPUC Rules and Regulations Governing Water Service to Customers (<http://www.sfwater.org/modules/showdocument.aspx?documentid=8>).

related cost allocation plan, it is prudent to incorporate major stakeholders early on in the process in order to give the community a voice to influence decision-making and rate structure alternatives, by working with established citizens’ groups, such as the Citizens’ Advisory Committee and Rate Fairness Board, to champion the project and the need for new or expanded programs. These advisory groups are comprised of a cross-section of the community, including a representative from commercial properties with large impervious areas.

The SFPUC Communications Division has been integral to the Rate Study process. The outreach program for any wet weather rate component should build on the successes of the SFPUC communications program. In discussions with the Communications Division, identifying impacted customers and having a proposed mitigation plan for these customers is vital before going public.

### Timing and Costs

It is estimated to take upwards of two years to work through these aforementioned engineering study, assessment, and implementation requirements. Table 7.2 summarizes these tasks, identifies challenges, and provides a preliminary estimated budget for each task.

There are two critical time-intensive elements essential to implementing a successful wet weather rate – meaningful public engagement and participation, and accurate customer data. The latter requires the collection and confirmation of data. Prior to implementing separated rate components, the SFPUC could consider providing initial monetary incentives to customers with on-site mitigation measures in an effort to gather more data about these customer’s characteristics and, at the same time, immediately provide incentives for low impact development.

### FINDINGS AND RECOMMENDATION

It is our recommendation that the SFPUC implement the wastewater rates presented in Chapter 6, but continue to collect data and evaluate the feasibility and benefit of modifying the wastewater rate to include a wet weather component. Additionally, Carollo/PME JV recommends that the SFPUC implement a grant program that incents onsite mitigation of wet weather flows, which could also serve as a first step to collect flow impact information and study the implementation of a more comprehensive wet weather allocation. The implementation of a separate wet weather rate component meets the rate policies outlined by the SFPUC, including the following:

1. Provide a high level of transparency of costs for dry and wet weather collection, treatment and disposal as the SFPUC implements the SSIP.

Table 7.2 | **Implementation and Continued Costs**

	Requirements	Challenges	Estimated Budget
<b>Data Collection</b>	Establish task orders with DPW to create repository of citywide parcel data and impervious runoff coefficients	Will require extensive parcel data reconciliation and analysis to match parcel data with SFPUC billing data	\$500K-\$700K
<b>Engineering Analyses</b>	Establish a defensible method for cost recovery; Integrate research with LID/stormwater planning	May require individual parcel surveys for large landowners (big lot retail)	\$200K
<b>Customer Service and Billing</b>	Convert billing system to account for impervious surface area; enroll new sewer (wet weather-only) customers	Requires significant modification to billing system, new data integration, and new customer accounts	\$2.5M
<b>Public Outreach and Education</b>	Create public outreach and education plan	Will require extensive public outreach and education on the combined system and wet weather costs; may require cost mitigations programs and/or credits	\$1M
<b>Incentive Programs</b>	Create incentive programs to mitigate bill impacts and promote LID through rate adjustments and/or credits	Will require a detailed implementation plan to be phased-in and revisited over several years	Unknown

2. Communicate the high level of service provided by the SFPUC's combined system, and identifying a dry weather charge that is comparable to other separate systems.
3. Create an avenue to incent customers to implement wet weather management practices.

Further refinement of the parcel data will be necessary and can be conducted in parallel with defining the suitable rate structures in order to obtain an accurate depiction of the impacts to all customers. A public outreach campaign will be necessary to understand the public's receptiveness for separate wet and dry weather rate components, and to educate them on the benefits received. Finally, the customer data system must be updated to accommodate the new billing structure.

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## CHAPTER 8 Water and Wastewater Capacity Charges

# Introduction

A Capacity Charge is designed to recover a fair and proportional share of the cost to provide capacity to serve future users, and is imposed as a condition of service for new usage, increase in usage, or change in usage. The San Francisco Public Utilities Commission (SFPUC) adopted a Wastewater Capacity Charge in July 2005 and a Water Capacity Charge in 2007. The Capacity Charge adopted by the SFPUC is based on a Buy-In methodology. Conceptually, this methodology requires future users to buy into the value of the existing systems, which recognizes the fact the SFPUC water and wastewater systems have adequate capacity to serve both existing and future customers.

This Report Chapter delineates the methodology for the existing Water and Wastewater Capacity Charges and the calculation of the recommended updated Capacity Charges.

### EXISTING WASTEWATER CAPACITY CHARGE

The Wastewater Capacity Charge went into effect July 1, 2005 in accordance with Resolution No. 05-0045. On January 1, 2009 the Resolution No. 05-0045 was updated pursuant to City and SFPUC Resolution No. 07-0100 adopted on June 12, 2007. The resolutions require any user requesting a new connection or requiring additional wastewater collection and treatment capacity to pay a Wastewater Capacity Charge. The Capacity Charge is adjusted annually based on ENRCCI values.

The current Wastewater Capacity Charge is \$3,514 per equivalent dwelling unit (EDU) as of July 1, 2013.

### EXISTING WATER CAPACITY CHARGE

The Water Capacity Charge went into effect January 1, 2009 pursuant to City and County of San Francisco Public Utilities Commission (SFPUC) Resolution No. 07-0099 adopted on June 12, 2007. The resolution requires any user requesting a new connection to the water distribution system, or requiring additional capacity as a result of any addition, improvement, modification, or change in use of an existing connection, to pay a capacity charge. The Capacity Charge is adjusted annually based on ENRCCI values.

The current Water Capacity Charge is \$1,191 per 5/8-inch meter as of July 1, 2013.

## METHODOLOGY

Two general types of Capacity Charges are used to recover system investments from new users. The first approach, the buy-in methodology, is designed to recover costs from development for past investments made by existing users to provide available capacity for future users. The second approach, the incremental cost method, recovers costs of planned investments that the utility will undertake to add capacity necessary to serve future development.

The City of San Francisco has experienced minimal projected growth in flow since the last capacity charge study completed in 2007 and the population is projected to grow at 0.5% per year through the rate projection period ending in FYE 2019, whereas, water use is projected to be flat given ongoing conservation initiatives. Planned capital investments will be undertaken primarily to repair or replace existing system infrastructure for both the wastewater and in-City water system (portion of the SFPUC water system designed to provide potable water service to users residing within or immediately adjacent to the City limits). Moreover, excess capacity is available in both systems to serve the projected growth. The buy-in approach is most appropriate when the existing system has adequate capacity to serve both existing and future users and no significant capacity related capital improvements are planned. Consequently, the buy-in approach best reflects the cost of providing available capacity for the City of San Francisco.

## CAPACITY CHARGE CALCULATION

Capacity Charges are calculated by dividing existing ratepayer equity by the total available capacity of the wastewater or water system. Ratepayer equity is defined as the value of the

existing system less outstanding debt principal and accumulated depreciation. Available capacity is defined as the total number of equivalent dwelling units (EDUs) serviceable or to be served by the system.

### Ratepayer Equity

The buy-in capacity charge approach requires that new users buy into the wastewater or water system equity that existing users have funded through rates and charges. Ratepayer equity is comprised of two components - net capital asset equity and reserves.

### Net Capital Asset Equity

Net capital asset equity represents the current value of the physical wastewater or water systems funded by existing ratepayers, net of accumulated depreciation. Capital costs not funded by existing ratepayers, such as grant funded assets, are excluded from the ratepayers' equity calculation. Additionally, capital costs financed through bonds are reduced by the total of the outstanding debt principal, to reflect those costs not yet incurred by ratepayers. This analysis includes only the net capital assets associated with the portion of the SFPUC system that provides service to in-City service area and suburban retail customers. Regional and wholesale assets are not included in the calculations. The following are components that are considered in the calculation of the recommended capacity charges:

- Trended Existing Plant-In-Service – Current value of the existing water or wastewater system. Original costs are escalated to December 2013 dollars using Engineering News Record Construction Cost Index (ENRCCI).
- Construction Work-In-Progress – Capital projects currently under construction, not captured in the Existing Plant-In-Service asset records.

- Depreciation – Represents the loss in value of the system as the useful life of that asset is exhausted.
- Outstanding Debt Principal – Outstanding debt principal represents amortized capital project costs not yet funded by existing ratepayers. As debt is retired, through the use of either user rates or capacity charge revenues, the retired debt principal becomes part of the asset equity.
- Unamortized Grants – Grant funded assets are excluded from the capital asset equity, because these are system assets not funded by ratepayers.

### Reserves

Reserves and funds contributed by existing ratepayers are also included when calculating ratepayer equity. Some examples of reserves include:

- Deposits with Fiscal Agent – Reserve funds held by a fiscal agent as a condition of the bond indenture.
- Cash in Capital Projects Fund – Reserve funds available for capital only projects.
- Cash in Unrestricted Funds – Reserve funds available to meet Enterprise expenditure needs.
- The calculations of ratepayer equity for the Wastewater and Water Enterprise are illustrated in Table 8.1 and 8.2, respectively.

### Note on Physical Assets

Due to the naming convention used on the SFPUC's asset list, Carollo/PME JV was unable to identify replacement assets on an asset-by-asset basis. Assets replaced by newly acquired assets were not removed from the Existing Plant-In-Service calculation. However, because the calculation accounts for asset depreciation, only the monetary value associated with the remaining useful life of each asset is considered in the calculation.

## System Capacity

Under the buy-in methodology, future users are required to reimburse existing users for equity that they had contributed over time through rates and fees. This is determined by dividing the total ratepayer equity by the system capacity. System capacity is defined as the total capacity within the wastewater or water system available to serve system users.

## Wastewater Capacity

The SFPUC provides wastewater service to the customers within the City of San Francisco and adjacent communities. The wastewater treatment facilities have a total average dry weather flow (ADWF) capacity of 85 mgd at the Southeast WWTP, and 21 mgd at the Oceanside WWTP, for a total of 106 mgd. This capacity serves both customer discharges, as well as groundwater infiltration. An analysis of the wastewater system in 2007 found that 12.8 mgd of groundwater was infiltrating the wastewater collection system, and subsequently being treated at the Southeast and Oceanside WWTPs. This level of infiltration will vary by year and weather patterns. Taking groundwater infiltration into account, the treatment capacity available to serve wastewater customers is 93.2 mgd.

The current Capacity Charge is calculated based on the total system capacity available to serve customers, 93.2 mgd. Assuming 200 gpd demand per 5/8" meter equivalent (ME), this translates to 466,000 MEs.

## Water Capacity

The SFPUC provides water to roughly 2.6 million people in the San Francisco Bay Area. The water system is comprised of five supply reservoirs, two treatment plants plus the UV treatment facilities, 233 miles of transmission pipelines, 21 pump stations, 26 distribution reservoirs and tanks,

Table 8.1 | SFPUC Wastewater Capacity Charge Calculation of Ratepayer Equity

	Trended Original Cost <sup>(1)</sup>
Land, Building and Equipment	\$8,465,894,331
plus: Construction Work-in-Progress	176,711,000
less: Accumulated Depreciation	(5,443,887,049)
less: Outstanding Bonds and Loans	(852,294,000)
less: Unamortized Grants	(755,023,383)
Net Capital Assets	1,591,400,899
plus: Deposits with Fiscal Agent	31,305,000
plus: Cash in Capital Projects Fund	251,439,000
plus: Unrestricted Reserves	91,561,000
Fund Balances	374,305,000
Total Wastewater Ratepayer Equity (as of FYE 2013)	\$1,965,705,899

Notes:

(1) ENRCCI 20-City Average December 2013.

Table 8.2 | SFPUC Water Capacity Charge Calculation of Ratepayer Equity

	Trended Original Cost <sup>(1)</sup>
Land, Building and Equipment	\$3,747,151,725
plus: Construction Work-in-Progress	427,455,364
less: Accumulated Depreciation	(2,575,874,063)
less: Outstanding Bonds and Loans	(1,262,807,199)
less: Unamortized Grants	(136,340)
Net Capital Assets	335,789,487
plus: Deposits with Fiscal Agent	44,194,978
plus: Cash in Capital Projects Fund	303,759,730
plus: Unrestricted Reserves	102,876,633
Fund Balances	450,831,341
Total Wastewater Ratepayer Equity (as of FYE 2013)	\$786,620,828

Notes:

(1) ENRCCI 20-City Average December 2013.

and 1,250 miles of in-city distribution mains. This system supplies water to in-City customers, as well as suburban retail and wholesale customers.

The capacity charge presented in this report will be levied only on in-City customers and suburban retail customers. Available capacity within the system does not adequately reflect the water demands that the system was designed to provide. Consequently, total system

capacity expressed in meter equivalents (MEs) is the most appropriate capacity basis of the system.

A hydraulic analysis of the in-City and suburban retail system in 2007 found the maximum system capacity to be 127 million gallons per day, equivalent to 635,000 Meter Equivalents (MEs). Capital improvements since 2007 have not increased the capacity of the in-City and suburban retail system.

Therefore, this analysis will retain the maximum system capacity of 635,000 MEs for the calculation of capacity charges.

## FINDINGS AND RECOMMENDATIONS

The final Capacity Charge is calculated by dividing the ratepayer equity by available capacity. These calculations are illustrated in Table 8.3.

Based on the methodology delineated above, it is recommended that the SFPUC adopt a residential wastewater capacity charge of \$4,218 per 5/8 inch meter equivalent and a water capacity charge of \$1,239 per 5/8 inch meter equivalent. It is recommended that the SFPUC impose a water capacity charge based on the size of the assessed water meter, increasing the charge commensurate to the increase in flow rate above a 5/8 inch meter. Meter size is commensurate with flow rate and reflects the potential capacity demand on the system. It is assumed that the greater the size of the meter, the greater the capacity demand that the user will place on the water system.

## IMPLEMENTATION

As discussed above, Capacity Charges are calculated based on an average single-family residential customer system demands. The SFPUC then imposes the charge based on capacity requirements of each individual new development or upsize in capacity of an existing connection.

### Water Capacity Charges

Currently, the Water Capacity Charge for single-family and multi-family dwellings is assessed based upon the individual units square footage and meter size requirement, the charge imposed is the lesser of the two. For commercial users, the charge is based on the meter size. Carollo recommends the Water Capacity Charge be

Table 8.3 | SFPUC Recommended Capacity Charge Calculation for FYE 2015

	Water Capacity Charge	Wastewater Capacity Charge
Ratepayer Equity	\$786,620,828	\$1,965,705,899
Number of ME's	635,000	466,000
Recommended Ratepayer Equity per EDU or ME	\$1,239	\$4,218
Existing Ratepayer Equity per ME	\$1,191	\$3,514
Recommended Percentage Increase	4.0%	20.0%

imposed based solely on meter size for all customer classes. Meter sizing, for non-irrigation customers, accounts for required water flows and system pressure, which is based on the number of installed fixture units. As such, meter size provides an accurate estimate of the amount of demand placed on the system and can be used as a measure for imposing and streamlining the assessment of capacity charges.

### Wastewater Capacity Charges

Currently, all Wastewater Capacity Charges are imposed based on square footage by Standard Industrial Classification (SIC) code, which accounts for assumed wastewater flows and strength by property type. The SFPUC could consider imposing the Wastewater Capacity Charge based upon Water MEs, rather than square footage. While square footage is a commonly and readily accepted method for determining system capacity requirements for developments, it is based on an average system demand within the customer class. MEs, which provide a reasonable estimation of wastewater discharged back to the system based on conversations with the SFPUC staff, is also a sound basis for imposing the Wastewater Capacity Charge. Wastewater strength and concentration assumptions would continue to be imposed by property type or SIC code. Properties with mixed use would be assigned a loading ratio based on proportional square footage of each use.

For example, for a building that is 700 sq ft. of residential use and 300 sq ft. used for a restaurant (with a factor of 1.2), the resulting loading ratio would be  $70\% * (1.0) + 30\% * (1.2) = 1.06$ .

The following section presents the development and assessment of MEs based Wastewater capacity charges.

### Functional Allocation of Wastewater Capacity Charges

The first step in the development of the capacity fees was to perform a functional allocation of wastewater capacity charges. In-depth evaluation of the assets and capacity charge provides a simple and useful method of analyzing system assets, and the subsequent capacity fee that they pass on to each user. The Functional Allocation breaks down the capacity charge by allocating asset values and liabilities based on the following functional cost components:

- Flow
- Chemical Oxygen Demand (COD)
- Total Suspended Solids (TSS)
- Fats, Oils, Greases (FOG)

Table 8.4 shows the percentage allocations for each distinct asset and liability group.

Table 8.5 shows net assets and capacity charge per ME broken down by functional component.

Table 8.4 | Functional Components of Wastewater Capacity Charge

	Functional Component			
	Dry Weather Flow	COD	TSS	FOG
Physical Assets <sup>(1)</sup>	76%	13%	9%	2%
Construction in Progress <sup>(2)</sup>	78%	10%	9%	2%
Existing Debt <sup>(3)</sup>	85%	7%	6%	2%
Non-physical Assets <sup>(4)</sup>	72%	16%	10%	2%

Notes:

(1) Based on asset list provided by SFPUC.

(2) Based on allocation of 2010 A and B Bonds.

(3) Based on allocation of all existing debt (2010 A and B Bonds and 2013 A and B Bonds).

(4) Allocated "As All Others", the weighted average allocation of all other categories.

Table 8.6 | Loading Concentration Assumptions for SFPUC Designated SIC Groups

	COD (mg/l)	TSS (mg/l)	FOG (mg/l)
<b>SIC Group 4<sup>(1)</sup></b>	<b>684</b>	<b>279</b>	<b>85</b>
SIC Group 1	0	0	0
SIC Group 2	194	56	26
SIC Group 3	640	239	63
SIC Group 5	641	224	86
SIC Group 6	396	59	100
SIC Group 7	1387	171	112
SIC Group 8	1539	181	125
SIC Group 9	1616	284	137
SIC Group 10	1153	303	251
SIC Group 11	4921	1371	559

Note:

(1) SIC Group 4 contains all residential accounts, group 4 concentrations are the assumed concentrations of a representative EDU.

Table 8.7 | SIC Group Wastewater Loading Ratios

	COD	TSS	FOG
<b>SIC Group 4<sup>(1)</sup></b>	<b>1</b>	<b>1</b>	<b>1</b>
SIC Group 1	0	0	0
SIC Group 2	0.3	0.2	0.3
SIC Group 3	0.9	0.9	0.7
SIC Group 5	0.9	0.8	1.0
SIC Group 6	0.6	0.2	1.2
SIC Group 7	2.0	0.6	1.3
SIC Group 8	2.3	0.6	1.5
SIC Group 9	2.4	1.0	1.6
SIC Group 10	1.7	1.1	3.0
SIC Group 11	8.2	4.9	6.6

Note:

(1) Because group 4 concentrations are the assumed concentrations of a representative EDU, all group 4 SIC Group Loading Ratios are equal to one.

Table 8.5 | Functional Components of Wastewater Capacity Charge

Functional Component	Net of Assets	Charge per ME
Flow	\$1,407,469,287	\$3,020
COD	313,669,857	673
TSS	197,438,690	424
FOG	47,128,065	101
<b>Total</b>	<b>\$1,965,705,899</b>	<b>\$4,218</b>

The SFPUC has assumed varying loading concentrations to customer groups based on SIC code. Consequently, component capacity charges per ME must be adjusted for each SIC group's unique loading assumptions. Table 8.6 presents the loading assumptions for each SIC group designated by the SFPUC.

To simplify the process of adjusting loading component capacity charges, ratios comparing each loading component in each SIC group, to that of a residential account have been calculated. Those ratios are used to scale the loading component capacity charges based on each SIC groups loading assumptions. SIC Group Loading Ratios are presented in Table 8.7.

### Wastewater Capacity Charges for Industrial Customers

If a new customer does not fall within one of the established SIC Groups, the Wastewater Capacity Charge may need to be assessed based on the customer's specific flow and loading. In such a case, the capacity charge can be calculated based on the customer's expected flow (gpd) and loadings (COD, TSS, and FOG in lbs/day), and the unit Capacity Charge for each component. Unit capacity charges are shown in Table 8.8.

The capacity charge is calculated by multiplying the Flow and Non Loading component unit charges by the expected flow in gpd, and multiplying each loading component unit charge by its respective expected loading. The products are then summed to calculate

Table 8.8 | Wastewater Unit Capacity Charges for Industrial Customers – For FYE 2015

Capacity Charge Component	Unit Capacity Charge	Units
Flow	\$15.10	GPD
COD	591.68	lbs/day
TSS	913.06	lbs/day
FOG	715.35	lbs/day

Table 8.9 | Example Capacity Charges for Assumed Industrial Customer

Capacity Charge Component		Expected Flow/ Loading <sup>(1)</sup>		Unit Capacity Charge		Component Capacity Charge
Flow	GPD	1000	X	\$15.10	=	\$15,102
COD	lbs/day	10	X	591.68	=	5,917
TSS	lbs/day	20	X	913.06	=	18,261
FOG	lbs/day	1	X	715.35	=	715
<b>Total Capacity Charge</b>						<b>\$39,995</b>

the total capacity charge. Table 8.9 provides an example calculation for an assumed industrial customer.

### Wastewater Capacity Charge Schedule

Based on the recommended charge per ME, Table 8.10 shows the resulting charge by meter size and SIC code.

### Possible Usage Based Adjustments

The wastewater capacity charges developed in this study assume full discharge to the wastewater system

by any new or changed connections requiring increased capacity. The SFPUC may consider adjusting the wastewater capacity charge based on projected customer usage patterns, particularly for customers who choose to install sustainable technologies that serve to reduce the burden that they place on the wastewater system. As sustainable design and LEED certification have become increasingly central concerns for developers, property owners, and tenants, the SFPUC expects the installation of such technologies to become more widespread.

Onsite treatment and reuse installations such as graywater systems, blackwater systems, and onsite uses of storm water prevent wet weather flows from entering the combined sewer system and help to reduce the flow demand on the wastewater system. Adjusting capacity charges to reflect decreased demand may prove to be an effective way of incentivizing the installation of onsite treatment and reuse systems. This adjustment would be specific to the customer and would require analysis of the avoided demand.

Table 8.10 | Recommended Wastewater Capacity Charge Schedule

Meter Size	Capacity Factor	SIC 4	SIC 1	SIC 2	SIC 3	SIC 5	SIC 6	SIC 7	SIC 8	SIC 9	SIC 10	SIC 11
5/8 in	1	\$4,218	\$ -	\$3,327	\$4,088	\$4,094	\$3,619	\$4,778	\$4,958	\$5,205	\$4,914	\$10,610
3/4 in	1.5	6,327	-	4,991	6,132	6,140	5,428	7,167	7,438	7,807	7,371	15,915
1 in	2.5	10,546	-	8,318	10,220	10,234	9,046	11,945	12,396	13,012	12,284	26,525
1-1/2 in	5	21,091	-	16,636	20,440	20,468	18,093	23,891	24,792	26,024	24,569	53,050
2 in	8	33,746	-	26,618	32,704	32,749	28,949	38,225	39,667	41,639	39,310	84,880
3 in	15	63,274	-	49,908	61,320	61,404	54,279	71,673	74,376	78,073	73,706	159,151
4 in	25	105,456	-	83,180	102,201	102,340	90,465	119,454	123,960	130,122	122,843	265,251
6 in	50	210,913	-	166,360	204,402	204,680	180,929	238,909	247,920	260,244	245,687	530,503
8 in	80	337,460	-	266,177	327,043	327,488	289,487	382,254	396,672	416,390	393,098	848,804
10 in	115	485,099	-	382,629	470,124	470,764	416,138	549,490	570,217	598,560	565,079	1,220,156
12 in	215	906,924	-	715,349	878,927	880,124	777,997	1,027,307	1,066,057	1,119,048	1,056,452	2,281,162

Although onsite mitigation may reduce demands placed on the system, the adjusted charge should still recognize that the SFPUC system as a backstop in the case of onsite system failure. This still requires a reservation of capacity of the system and thus, requires some portion of a capacity charge to be paid, regardless of amount of avoidance.

### USE OF CAPACITY CHARGE REVENUE

Currently, the SFPUC has roughly \$30 million in reserves from previously assessed capacity charges. This and all future revenues collected from capacity charges should only be used for funding of capital projects. Due to the nature of the SFPUC's system, the capacity charge acts as a reimbursement to existing customers that have funded the system over time through rates. Accordingly, it would be appropriate to fund rehabilitation and replacements projects for the long-term benefit of future and existing ratepayers.

### CAPACITY CHARGE COMPARISON

Carollo/PME JV conducted a survey of nearby utilities. Although utilities are not always alike, it is common to examine comparisons between similar or neighboring utilities.

Figure 8.1 and Figure 8.2 compare a typical capacity charge per equivalent dwelling unit for water and wastewater capacity charges, respectively, within California. Care should be taken in drawing conclusions from such comparisons as factors including locations, customer profiles, age of the system, and various operational and capital related needs vary from agency to agency. As illustrated, despite the recommended increase to customers, capacity charges are in line with the average of nearby agencies.

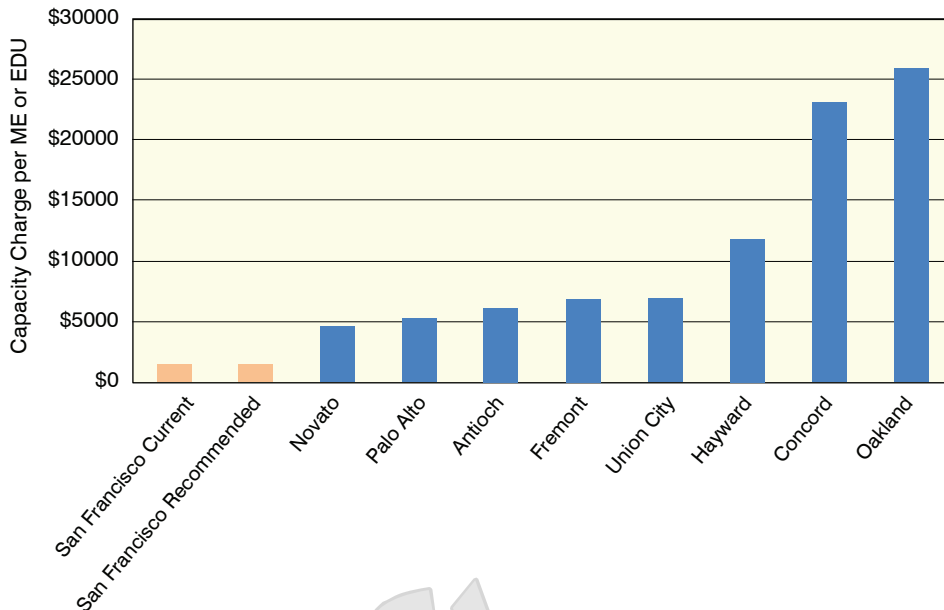


Figure 8.1 | Water Capacity Charge Survey of Nearby Agencies

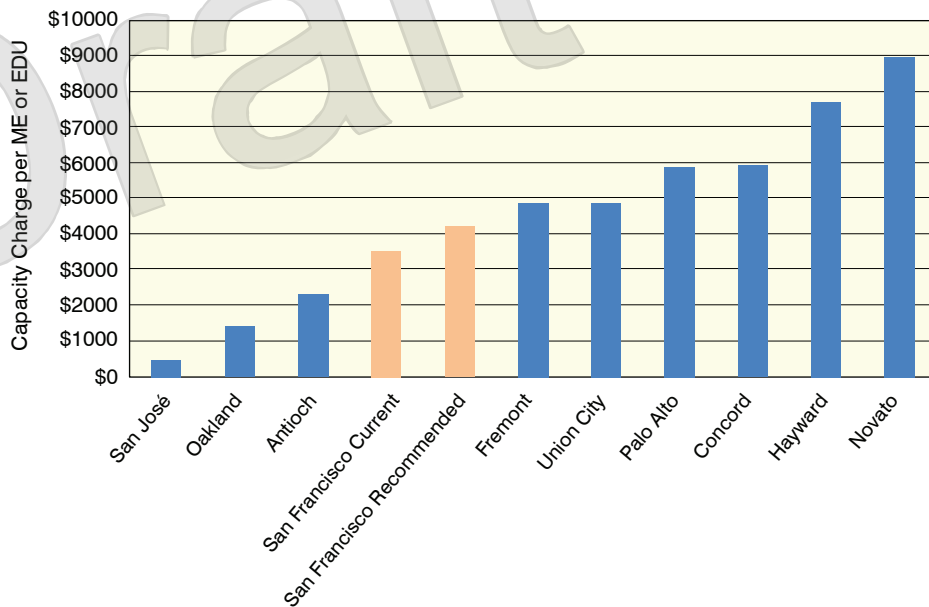


Figure 8.2 | Wastewater Capacity Charge Survey of Nearby Agencies







## Appendix A: **Example Scorecard**

Draft



# SFPUC Ratepayer Assurance Scorecard CITY AND COUNTY OF SAN FRANCISCO

# A-

## OFFICE OF THE CONTROLLER

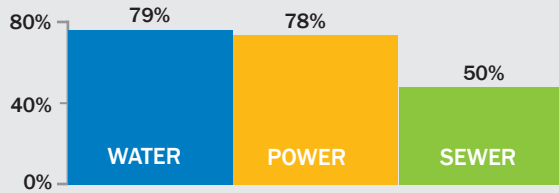
FY 2012-13

ASSET  
MANAGEMENT

### 1. Preventative Maintenance

Combined Utility Avg Benchmark = 80%

## B-



STEWARDSHIP

### 2. Regulatory Compliance

Meets or Exceeds the Standard

## A

# 0

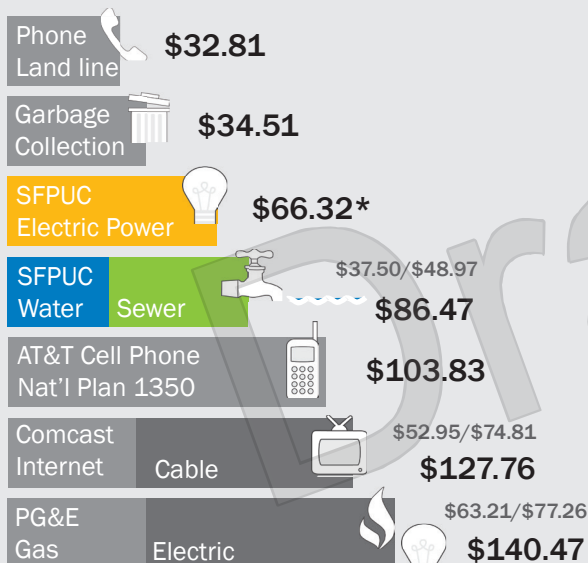
Zero fines or sanctions for  
**WATER POWER** or **SEWER**  
Enterprises

STEWARDSHIP

MISSION MANAGEMENT  
SUSTAINABILITY

### 3. Average Monthly Bill

## A



CA Average Combined Utility Bills = **\$178.89**

\* SFPUC provides electricity to Hunter's Point and Treasure Island.

SERVICE

### 4. Cost of Service

\$1.70 per person/day

## B+

CA Average Cost/Person/Day = **\$1.99**



SERVICE

### 5. Credit Ratings

Maintained Low Risk

## A

**AA-** WATER

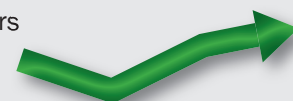
Investment Grade rated by  
S&P/Moody's

**Aa3** SEWER

STEWARDSHIP

### 6. Customer Service Quality

% of Retail Customers  
that rate SFPUC  
good or better



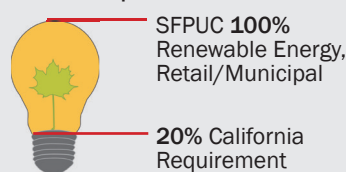
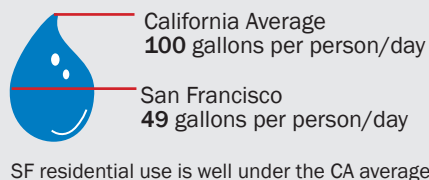
## B

**86%**  
YTD

SERVICE

### 7. Environmental Stewardship - All Enterprises Exceed Standards

## A



# 0

**SEWER**  
Zero unauthorized  
discharges in  
3 years

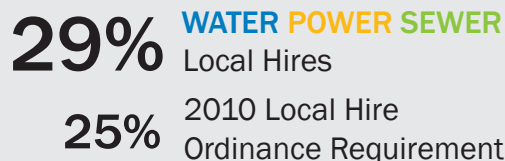
ENVIRONMENTAL STEWARDSHIP

PERSONNEL  
MANAGEMENT

### 8. Contracted Hours

Exceeds Minimum Local Hire  
Ordinance by 4%

## A



RESPECT/EQUAL OPPORTUNITY

### 9. Lost Time Incidents

Per 100 Employees  
Needs Improvement

## C

**3.2**  
out of 100



SAFETY



# SFPUC Ratepayer Assurance Scorecard

## CITY AND COUNTY OF SAN FRANCISCO

### OFFICE OF THE CONTROLLER

# A-

FY 2012-13

#### PURPOSE

The San Francisco Public Utilities Commission (SFPUC) is an agency of the City and County of San Francisco that provides high-quality drinking water to a population of approximately 2.6 million people, including retail customers in San Francisco and wholesale customers located in San Mateo, Santa Clara, and Alameda Counties. The SFPUC provides wastewater services to over 800,000 residents of San Francisco and green hydroelectric solar power to the City's municipal departments.

The [SFPUC's Ratepayer Assurance Policy](#) was adopted on October 23, 2012 and is reviewed annually as part of the budget process to ensure measurable, verifiable, wise use of ratepayer resources for all enterprises- **Water (W)**, **Power (P)**, and **Sewer (WW)**. The policy promotes accountability and transparency with an annual scorecard developed and performed by the Office of the Controller, City Services Auditor (CSA).

This scorecard provides useful information to the ratepayers and the Commission using metrics that measure the performance of ratepayer strategies and policies in mitigating risk and taking advantage of opportunities to yield positive outcomes. Each metric addresses one of the following policy categories of Asset Management, Mission Management & Sustainability, and Personnel Management in line with the [Effective Utility Management \(EUM\)](#) initiative and model. For further information, please refer to the [SFPUC Ratepayer Assurance Scorecard Manual](#).

#### GRADING SCALE

The measures are graded based on the standard academic scale illustrated below. Grades are based on comparison to a relevant industry standard, best practice, comparison to peer jurisdictions, or comparison to SFPUC standard or policy:

Grade	Description	Score Range
A	Exceptionally	3.8 - 4.0
A-	Above Standard	3.4 - 3.7
B+	Slightly Above or Meets Standard	3.1 - 3.3
B		2.8 - 3.0
B-		2.4 - 2.7

Grade	Description	Score Range
C+	Slightly	2.1 - 2.3
C	Below	1.8 - 2.0
C-	Standard	1.4 - 1.7

Grade	Description	Score Range
D+	Below Standard	1.1 - 1.3
D		0.8 - 1.0
D-		0.4 - 0.7
F	Critically Below Standard	0.0 - 0.3

#### FY13 SUMMARY

The SFPUC in the aggregate scored slightly above average or a letter grade A-. The SFPUC exceeded benchmarks for five (56%) of the measures and met industry benchmarks for three (33%) of measures. One measure (11%) were slightly below the standard and need improvement.

Policy Category	#	Measure	W	P	WW	Average Score	Grade
Asset Management	1	<b>Stewardship:</b> Preventive maintenance ratio	B	B	C	2.7	B-
	2	<b>Regulatory Compliance:</b> Number of incidents of fines/sanctions	A	A	A	4.0	A
Mission Management & Sustainability	3	<b>Service:</b> Average monthly combined water, power, and sewer residential bill	A	A	A	4.0	A
	4	<b>Service:</b> Cost per person per day	A	B	B	3.3	B+
	5	<b>Stewardship:</b> Credit rating	A	NA	A	4.0	A
	6*	<b>Service:</b> Percent of retail customers that rate SFPUC as good or better	B	B	B	3.0	B
	7	<b>Environmental Stewardship:</b> Amount of water sold to SF residential customers Emissions-free municipal and retail electricity supplied Unauthorized discharges from combined sewer system	A	A	A	4.0	A
Personnel Management	8*	<b>Respect/Equal Opportunity:</b> Percent of local hire hours	A	A	A	4.0	A
	9*	<b>Safety:</b> Recordable lost time rate	C	C	C	2.0	C
<b>Overall</b>			<b>A-</b>	<b>A-</b>	<b>B+</b>	<b>3.4</b>	<b>A-</b>

\*Measures are rated such that the corresponding enterprise grade is the same as the overall grade.



## Appendix B: **Miscellaneous Fees**

Draft

# PROJECT MEMORANDUM

**Project Name:** Utility Rate Study **Date:** November 22, 2013  
**Client:** San Francisco Public Utilities Commission **Project Number:** 09194A.00  
**Prepared By:**  
**Reviewed By:**  
**Subject:** Miscellaneous Charges  
**Distribution:** SFPUC Staff

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## 1.0 INTRODUCTION

The SFPUC imposes user fees for services ranging from meter installations to account setups. These services are not of general system benefit and are therefore recovered directly from individual users through a fee. As is appropriate, the SFPUC establishes these fees based on the actual costs incurred to provide these services.

As part of the 2014 Cost of Service Study, Carollo/PME JV reviewed and updated the SFPUC's miscellaneous charges and user fees. Carollo/PME JV also reviewed the SFPUC's installation charges for consistency with industry practices and proportionate cost recovery. The charges presented within this memorandum are applicable to retail water and wastewater customers.

Tables 1 and 2 list the SFPUC installation charges and miscellaneous fees.

SIZE	TYPE	12/13
1"	STANDARD SERVICE	\$7,310
1 -1/2"	STANDARD SERVICE	\$9,900
2"	STANDARD SERVICE	\$9,900
3"	STANDARD SERVICE	\$23,120
4"	STANDARD SERVICE	\$23,120
6"	STANDARD SERVICE	\$27,140
8"	STANDARD SERVICE	\$31,110
1 -1/2"	FIRE SERVICE	\$9,420
2"	FIRE SERVICE	\$9,420
4"	FIRE SERVICE	\$15,190
6"	FIRE SERVICE	\$17,990
8"	FIRE SERVICE	\$20,640
V	COMBINATION SERVICE	\$7,310
1 -1/2"	COMBINATION SERVICE	\$9,900
2"	COMBINATION SERVICE	\$9,900
1"	NON-STANDARD SERVICE	\$7,310
1 -1/2"	NON-STANDARD SERVICE	\$9,900
2"	NON-STANDARD SERVICE	\$9,900

Table 1. Current Installation Rates

## PROJECT MEMORANDUM

	Fee	Current Fee (\$)
I.	Return Check Charge	85.00
II.	New Account Fee	35.00
III.	48 Hour Notice	36.00
IV.	Shut-Off/Turn-On Fee	36.00
V.	Lock-Charge	14.00
VI.	Guaranteed Deposit (New Customer)	\$50/Minimum
VII.	Builder's & Contractor's	125.00
VIII.	Flow Restricting Installations	
	5/8"-1" Meter	205.00
	1-1/2 - 2" Meter	295.00
IX.	Dock & Shipping Supply	290.00
X.	Lien Fee	\$50 or 10% of balance owing whichever is greater plus 1% for each month delinquent.

Table 2. Current Service Fees

## 2.0 INSTALLATION CHARGES

The SFPUC recently updated its installation charges.<sup>1</sup> The SFPUC prepared an analysis (included as an appendix to this memorandum) that outlined the methodology and calculations for determining the FYE 2014 installation charges. As the analysis details, the updated charges were determined based on actual labor and material expenditures as reported by the SFPUC work order system, Maximo, from the previous three (3) years of new service installations, FYE 2010 through 2013. Based on this review, rates were adjusted to recover the average calculated full cost associated with providing this service.

Rates include labor, equipment, materials and supplies for excavation, plating, piping, backfill, and pavement restoration from the tap into the main up to and including the installation of the water meter and meter box. The recommended rates are 18-50% higher than FYE 2013 reflecting increasing costs of construction labor, materials, and equipment.

Based on the results of the SFPUC's analysis, Table 3 provides the recommended rates for FYE 2014.

SIZE	TYPE	12/13	Recommended 13/14	% CHANGE TOTAL
1"	STANDARD SERVICE	\$7,310	\$8,630	18.1%
1 -1/2"	STANDARD SERVICE	\$9,900	\$12,130	22.5%
2"	STANDARD SERVICE	\$9,900	\$12,130	22.5%
3"	STANDARD SERVICE	\$23,120	\$34,680	50.0%
4"	STANDARD SERVICE	\$23,120	\$34,680	50.0%
6"	STANDARD SERVICE	\$27,140	\$40,710	50.0%
8"	STANDARD SERVICE	\$31,110	\$46,670	50.0%
1 -1/2"	FIRE SERVICE	\$9,420	\$11,540	22.5%
2"	FIRE SERVICE	\$9,420	\$11,540	22.5%
4"	FIRE SERVICE	\$15,190	\$22,790	50.0%
6"	FIRE SERVICE	\$17,990	\$26,990	50.0%
8"	FIRE SERVICE	\$20,640	\$30,960	50.0%
V	COMBINATION SERVICE	\$7,310	\$8,630	18.1%
1 -1/2"	COMBINATION SERVICE	\$9,900	\$12,130	22.5%
2"	COMBINATION SERVICE	\$9,900	\$12,130	22.5%

<sup>1</sup> Water Service Installation Charges Memorandum

## PROJECT MEMORANDUM

1"	NON-STANDARD SERVICE	\$7,310	\$8,630	18.1%
1 -1/2"	NON-STANDARD SERVICE	\$9,900	\$12,130	22.5%
2"	NON-STANDARD SERVICE	\$9,900	\$12,130	22.5%

Table 3. Recommended Installation Charges

In addition to the costs of installing new meters, the SFPUC also prepared recommendations for meter decrease, increase, reset or relocation charges, found in the attached memo.

The recommended rates are a result of three years of installation records. As the SFPUC has not update these rates in some time, this approach best allows theis recommended over a applying an escalator to account for possible changes in processes (timing) or materials. Based on our review, Carollo/PME JV concurs that this is an appropriate calculation and that the fees be adjusted to reflect current information.

### 3.0 MISCELLANEOUS CHARGES

For other services where actual cost data were not readily available or applicable, a unit cost “build-up” approach was utilized. This approach calculates various cost components for individual fees. These components then build upon each other to comprise the total cost for providing the service. This methodology is appropriate for services with a relatively uniform level of effort, time, and materials.

There are three steps associated with developing the updated user fees. The first step is to calculate a position’s fully burdened hourly rate. This is accomplished through a variety of steps utilizing information from the recently completed Cost Allocation Plan. To account for various staff that may perform the service, an average hourly cost (non-loaded) is adjusted by the indirect cost allocation rate. This adjustment accounts for overhead costs related to program management, materials, and other indirect services. Additionally, to recover costs associated with benefits, the hourly rate is adjusted by the calculated benefits multiplier.

The second step is to estimate the amount of time required to perform the requested service. Although the time might vary slightly for each occurrence, it is appropriate to define an average estimated time. Once the estimated time is defined, the total labor cost is calculated by multiplying the calculated fully-burdened hourly rate by the estimated staff time.

The third and final step is to define other direct costs associated with performing the activities necessary to support the service. Once these three steps are completed, the costs are added together and define the agency’s full cost of provide the service. Table 4 provides the cost build-up results analyzed for this review.



**PROJECT MEMORANDUM**

	<b>Fee</b>	<b>Title</b>	<b>Hourly Rate (\$)</b>	<b>Estimated Hours</b>	<b>Subtotal Labor (\$)</b>	<b>Overhead &amp; Fringes (\$)</b>	<b>Other Costs (\$)</b>	<b>Calculated Full Cost (\$)</b>
I.	Return Check Charge	Sr. Water Ser Clerk	32.45	0.65	21.09	24.89	50.00	96.00
II.	New Account Fee	Sr. Water Ser Clerk	32.45	0.15	4.87	5.74	0.00	
		Water Ser Inspector	47.21	0.45	<u>21.25</u>	<u>25.07</u>	<u>0.00</u>	
		<b>Subtotal</b>			<b>26.11</b>	<b>30.81</b>	<b>0.00</b>	57.00
III.	48 Hour Notice	Water Ser Inspector	47.21	0.45	21.25	25.07	0.00	
		Sr. Water Ser. Clerk	32.45	0.05	<u>1.62</u>	<u>1.91</u>	<u>0.00</u>	
		<b>Subtotal</b>			<b>22.87</b>	<b>26.98</b>	<b>0.00</b>	50.00
IV.	Shut-Off/Turn-On Fee	Water Ser Inspector	47.21	0.45	21.25	25.07	0.00	
		Sr. Water Ser. Clerk	32.45	0.05	<u>1.62</u>	<u>1.91</u>	<u>0.00</u>	
		<b>Subtotal</b>			<b>22.87</b>	<b>26.98</b>	<b>0.00</b>	50.00
V.	Lock-Charge						14.00	14.00
VI.	Guaranteed Deposit (New Customer)							N/A
VII.	Builder's & Contractor's Supply for Metered Service	Sr. Water Ser. Clerk	32.45	0.50	16.23	19.15	0.00	
		Water Meter Repair	35.59	1.00	<u>35.59</u>	<u>41.99</u>	<u>0.00</u>	
		<b>Subtotal</b>			<b>51.81</b>	<b>61.14</b>	<b>0.00</b>	113.00
VIII.	Flow Restricting Installations							
	5/8"-1" Meter	Sr. Water Ser Clerk	32.45	2.00	64.90	76.58	0.00	
		Water Ser Inspector	47.21	1.00	<u>47.21</u>	<u>55.71</u>	<u>0.00</u>	
		<b>Subtotal</b>			<b>112.11</b>	<b>132.29</b>	<b>0.00</b>	245.00
	1-1/2 - 2" Meter	Sr. Water Ser Clerk	32.45	2.00	64.90	76.58	0.00	
		Utility	46.29	2.00	<u>92.58</u>	<u>109.24</u>	<u>0.00</u>	

**PROJECT MEMORANDUM**

	Plumber						
	<b>Subtotal</b>			<b>157.48</b>	<b>185.82</b>	<b>0.00</b>	344.00
IX. Dock & Shipping Supply	Sr. Water	32.45	0.35	11.36	13.40	0.00	
	Ser. Clerk						
	Water						
	Ser. Inspector	47.21	1.00	<u>94.43</u>	<u>111.42</u>	<u>0.00</u>	
	<b>Subtotal</b>			<b>105.78</b>	<b>124.82</b>	<b>0.00</b>	231.00

Table 4: Miscellaneous Fee Build-Up Analysis

Based on the results of the analysis above, Table 5 presents the recommended rates for each miscellaneous charge. It should be noted that penalty charges may differ from the SFPUC costs to perform these services as they are intended to be punitive.

	Fee	Recommended Fee (\$)	Basis of Charge
I.	Return Check Charge	96.00	Research and collection of account. Note: Other Cost of \$50 is the cost that the CCSF Treasurer's Office charge SFPUC for each NSF check.
II.	New Account Fee	57.00	Administrative processing and field (read/turn on meter) labor costs related to setting up new account.
III.	48 Hour Notice	50.00	Administrative processing (i.e. issue work order and process payment) and field labor costs (i.e. post shut-off notice or collect payment).
IV.	Shut-Off/Turn-On Fee	50.00	Administrative processing (i.e. issue work order and process payment) and field labor costs (i.e. read meter and shut-off or turn on service).
V.	Lock-Charge	14.00	Cost of meter lock.
VI.	Guaranteed Deposit (New Customer)	N/A	Consumption history of prior account (twice monthly consumption bill), or on current number of occupants (if no history available).
VII.	Builder's & Contractor's	113.00	Supply for Metered Service. Administrative costs for connection of meter at \$125 plus deposit of \$800 for 1" meter and \$2,700 for 3" meter that is refundable when account is closed.
VIII.	Flow Restricting Installations		Material, labor, equipment and overhead charges.
	5/8"-1" Meter	245.00	
	1-1/2 - 2" Meter	344.00	
IX.	Dock & Shipping Supply	231.00	Administrative costs for setting up billing account and field work to provide connecting equipment.
X.	Lien Fee	\$50 or 10% of balance owing whichever is greater plus 1% for each month delinquent.	Administrative labor to process lien. Fee set by Administrative Code.

Table 5. Recommended Miscellaneous Rates

## PROJECT MEMORANDUM


### 4.0 IMPLEMENTATION

To provide cost recovery in future years, it is recommended that the SFPUC adjust the proposed installation and miscellaneous charges using CPI for annual inflation or adjust the assumed average hourly rate. Unless there are changes in specific processes, the estimated staff time should remain consistent from year to year. Additionally, while there may be minor fluctuations in the SFPUC cost allocation plan, unless there are significant budget or structural changes, the cost allocation factor used in the above analysis should not require annual adjustments, and thus the charges should continue to be an accurate representation of cost incurred.

Draft



INTEROFFICE MEMORANDUM

DATE: July 31, 2013  
 TO: Marge Vizcarra, Customer Service Bureau Manager  
 FROM: David A. Briggs, Local and Regional Water System Manager   
 SUBJECT: **FY 2013/2014 WATER SERVICE INSTALLATION CHARGES**

Attached please find our recommended FY13/14 flat rate schedule for new water service installations. This schedule has been reviewed by the Finance Department. Please implement the new rate schedule effective July 1, 2013.

The rates on this schedule are 18-50% higher (rounded up to the nearest \$10) than FY12/13 reflecting increasing cost of construction labor, materials and equipment.

Should you have any questions, please do not hesitate to call me at (415) 550-4901.

DB:na

Attachments: Flat Rates FY 2013-2014

Cc: Harlan Kelly Jr., SFPUC General Manager w/o attachments  
 Mike Carlin, Deputy General Manager of Water w/o attachments  
 Amy Javelosa-Rio, Rate Administrator w/attachments  
 Carlos Jacobo, Finance w/ attachments  
 Richard Gonzales, Superintendent of Construction and Maintenance CDD w/attachments  
 Katie Miller, CDD Engineering Manager w/attachments  
 Tami Gowan, CSB w/attachments  
 Virginia Sarmiento, CSB w/attachments  
 John Cretan, Principal Administrative Analyst w/attachments  
 Patricia Mattias, Estimator CDD w/attachments

**Edwin M. Lee**  
 Mayor

**Art Torres**  
 President

**Vince Courtney**  
 Vice President

**Ann Moller Caen**  
 Commissioner

**Francesca Vietor**  
 Commissioner

**Anson Moran**  
 Commissioner

**Harlan L. Kelly, Jr.**  
 General Manager



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Draft

**FY 2013-2014**  
**Water Installation Service Charges**  
**For Single Services**

SIZE	TYPE	RATE
1"	STANDARD SERVICE	\$8,630
1 -1/2"	STANDARD SERVICE	\$12,130
2"	STANDARD SERVICE	\$12,130
3"	STANDARD SERVICE	\$34,680
4"	STANDARD SERVICE	\$34,680
6"	STANDARD SERVICE	\$40,710
8"	STANDARD SERVICE	\$46,670
1 -1/2"	FIRE SERVICE	\$11,540
2"	FIRE SERVICE	\$11,540
4"	FIRE SERVICE	\$22,790
6"	FIRE SERVICE	\$26,990
8"	FIRE SERVICE	\$30,960
1"	COMBINATION SERVICE	\$8,630
1 -1/2"	COMBINATION SERVICE	\$12,130
2"	COMBINATION SERVICE	\$12,130
1"	NON-STANDARD SERVICE	\$8,630
1 -1/2"	NON-STANDARD SERVICE	\$12,130
2"	NON-STANDARD SERVICE	\$12,130

**NOTES:**

1. RATES INCLUDE LABOR, EQUIPMENT, MATERIALS AND SUPPLIES FOR EXCAVATION, PLATING, PIPING, BACKFILL, AND PAVEMENT RESTORATION FROM THE TAP INTO THE MAIN UP TO AND INCLUDING THE INSTALLATION OF THE WATER METER AND METER BOX.

2. THERE WILL BE \$2,200 ADDITIONAL PAVING COST FOR TRENCHES IN STREETS UNDER PAVING MORATORIUM OR THAT ARE CONCRETE.

# FY 2013-2014 Water Installation Service Charges For Multiple Services

**A) FEE CALCULATION FOR MULTIPLE SERVICES WILL BE THE SUM OF THE FOLLOWING:**  
*\*Applications with 3 services maximum and no more than one service 4" or larger. Other applications will be custom priced.*

1. THE RATE OF THE APPLICATION'S MOST COSTLY SERVICE AS SHOWN IN THE TABLE BELOW.

2. THE SECONDARY RATE(S) OF REMAINING SERVICE(S).

## B) FEE TABLE

SIZE	TYPE	FY 13/14 PRIMARY RATE	FY 13/14 SECONDARY RATE
1"	STANDARD SERVICE	\$7,060	\$3,440
1 -1/2"	STANDARD SERVICE	\$8,430	\$4,610
2"	STANDARD SERVICE	\$8,430	\$4,610
3"	STANDARD SERVICE	\$36,030	\$29,520
4"	STANDARD SERVICE	\$36,030	\$29,520
6"	STANDARD SERVICE	\$42,470	\$36,030
8"	STANDARD SERVICE	\$48,740	\$41,910
1 -1/2"	FIRE SERVICE	\$9,410	\$5,580
2"	FIRE SERVICE	\$9,410	\$5,580
4"	FIRE SERVICE	\$23,340	\$17,000
6"	FIRE SERVICE	\$27,780	\$21,440
8"	FIRE SERVICE	\$32,070	\$25,710
1'	COMBINATION SERVICE	\$7,060	\$3,440
1 -1/2"	COMBINATION SERVICE	\$8,430	\$4,610
2"	COMBINATION SERVICE	\$8,430	\$4,610
1"	NON-STANDARD SERVICE	\$7,060	\$3,440
1 -1/2"	NON-STANDARD SERVICE	\$8,430	\$4,610
2"	NON-STANDARD SERVICE	\$8,430	\$4,610

## C) Example

A Customer submits an application for a new 6" Fire, one 2" Standard, and one 1" Non-Standard services

The rate of the most costly service is for the 6" Fire service	\$27,780
The secondary rate for 2" Standard service	\$4,610
The secondary rate for 1" Non-Standard service	\$3,440
<b>Total Fee</b>	<b>\$35,830</b>

### NOTES:

1. RATES INCLUDE LABOR, EQUIPMENT, MATERIALS AND SUPPLIES FOR EXCAVATION, PLATING, PIPING, BACKFILL, AND PAVEMENT RESTORATION FROM THE TAP INTO THE MAIN UP TO AND INCLUDING THE INSTALLATION OF THE WATER METER AND METER BOX.

2. THERE WILL BE \$2,200 ADDITIONAL PAVING COST FOR TRENCHES IN STREETS UNDER PAVING MORATORIUM OR THAT ARE CONCRETE.

# FY 2013-2014

## Meter Decrease, Increase, Reset OR Relocation Charges Summary

1. The Customer Service Bureau shall investigate the request and establish that a meter size change is warranted based on the present fixture count for the property being served, and that the service will deliver adequate flow to support the meter size required. The City Distribution Division shall establish the new location of the meter.
  
2. All requests for meter **DECREASE** for services 3-inches and larger will be transmitted to the City Distribution Division for estimate. The estimate will be either for the cost to revise the metering device or for the recommendation for installation of a new service based on the age, location, and meter configuration of the existing service.
  
3. On existing 2-inch and smaller service pipes, all meter **DECREASES** shall be \$1,460
  
4. On existing adequate 2-inch copper service, meter **INCREASE** from 1-1/2 inch to 2-inch \$1,460
  
5. On existing adequate 3/4 -inch copper service, meter **INCREASE** from 5/8-inch or 3/4-inch to either 3/4-inch or 1-inch \$1,460
  
6. On existing adequate 1-inch copper or plastic service, meter **INCREASE** from 5/8-inch or 3/4-inch to either 3/4-inch or 1-inch \$1,460
  
7. On existing 2-inch or less copper or plastic service, a meter **RESET** \$1,110
  
8. On existing 2-inch copper service, a meter **RELOCATION** of no more than 2 feet \$3,370
  
9. On existing 1-inch copper or plastic services, Meter **RELOCATION** of no more than 2 feet \$2,050

NOTE: If meter increase or decrease is done in conjunction with meter relocation, use the relocation fee only. If a service line change is required, new service installation flat rate charges apply.



**APPENDIX A  
DETERMINATION OF FY 13/14 FLAT RATES**

The FY 13-14 Flat Rates for Water Service Installations were determined by comparing actual expenditures, as reported by Maximo, to actual fees collected by the Customer Service Bureau. The data gathered was from the previous three (3) years of new service installations, FY 10-13. The past 3 years of data was used to increase the sample size with the goal of extrapolating more statistically significant data that somewhat follows a bell curve (95% of data points within 2 standard deviations from avg.) Unfortunately, due to the unique nature of each data point, we were unable to come to any statistically based conclusion. However, with a large enough sample size we believe the average data tells us, with a certain level of confidence, how to change the rates to truly reflect the costs incurred by the SFPUC. Below is a breakdown of each category of new water service installation and the recommended rate change.

**1" Standard Service Installations**

	Labor Cost	Material Cost	Equipment	Total	
<b>Total 126 SVCS</b>	Maximo Data	\$184,022	\$53,351	\$25,458	\$262,831
	75% OH	\$138,016			
<b>26 Outliers</b>	24.75% handling and taxes		\$13,204		
	<b>Subtotal</b>	<b>\$322,038</b>	<b>\$66,555</b>	<b>\$25,458</b>	
	15% admin	\$48,306	\$9,983	\$3,819	
	<b>Total</b>	<b>\$370,344</b>	<b>\$76,539</b>	<b>\$29,277</b>	<b>\$476,160</b>
	Per svc avg				\$4,762
	Paving				\$3,000
	Top and Bottom 10% (26 svcs) excluded	FY 10-13 Actual 75%OH			\$7,762
		FY 10-13 Actual 116%OH			\$8,629
		FY 12-13 Flat Rate			\$7,310
	Actual as % of Flat Rate				75% OH 106.2%
					116% OH <b>118.0%</b>

Our current Fringe and Benefit factor is 116% therefore the increase for FY13-14 should be 18%. Since there was insufficient data for 1" Non-Standard and Combo services, we will apply the same increase to all categories of 1" diameter.

Flat Rate	FY 12-13	Factor	FY 13-14	Rounded
1" Standard	\$7,310.00	118%	<b>\$8,625.80</b>	<b>\$8,630.00</b>
1" Combination	\$7,310.00	118%	<b>\$8,625.80</b>	<b>\$8,630.00</b>
1" Non-Standard	\$7,310.00	118%	<b>\$8,625.80</b>	<b>\$8,630.00</b>

**APPENDIX A  
DETERMINATION OF FY 13/14 FLAT RATES**

**2" Fire Service Installations**

	Labor Cost	Material Cost	Equipment	Total	
<b>Total 72 SVCS</b>	Maximo Data	\$140,476	\$79,069	\$18,689	\$238,234
	75% OH	\$105,357			
<b>14 Outliers</b>	24.75% handling and taxes		\$19,570		
	<b>Subtotal</b>	<b>\$245,832</b>	<b>\$98,639</b>	<b>\$18,689</b>	
	15% admin	\$36,875	\$14,796	\$2,803	
	<b>Total</b>	<b>\$282,707</b>	<b>\$113,435</b>	<b>\$21,492</b>	<b>\$417,634</b>
	Per svc avg				\$7,201
	Paving				\$3,200
	Top and Bottom 10% (26 svcs) excluded	FY 10-13 Actual 75%OH			\$10,401
		FY 10-13 Actual 116%OH			\$11,543
		FY 12-13 Flat Rate			\$9,420
	Actual as % of Flat Rate			75% OH	110.4%
				116% OH	122.5%

Our current Fringe and Benefit factor is 116% therefore the increase for FY13-14 should be 22.5%. Since there was insufficient data for 2" Standard, Non-Standard and Combo services, we will apply the same increase to all categories of 2" and 1-1/2" diameter.

Flat Rate	FY 12-13	Factor	FY 13-14	Rounded
1-1/2" Standard	\$9,900.00	122.5%	\$12,127.50	\$12,130.00
1-1/2" Combination	\$9,900.00	122.5%	\$12,127.50	\$12,130.00
1-1/2" Non-Standard	\$9,900.00	122.5%	\$12,127.50	\$12,130.00
1-1/2" Fire	\$9,420.00	122.5%	\$11,539.50	\$11,540.00
2" Standard	\$9,900.00	122.5%	\$12,127.50	\$12,130.00
2" Combination	\$9,900.00	122.5%	\$12,127.50	\$12,130.00
2" Non-Standard	\$9,900.00	122.5%	\$12,127.50	\$12,130.00
2" Fire	\$9,420.00	122.5%	\$11,539.50	\$11,540.00

**APPENDIX A  
DETERMINATION OF FY 13/14 FLAT RATES**

**3" and Larger Standard and Fire Service Installations**

	4" Fire	6" Fire	8" Fire	Total
# of Service Installs	37	12	2	
Total including OH/Taxes/Admin	\$899,668	\$273,699	\$39,722	
Per Svc Avg	\$24,315.36	\$22,808.29	\$19,861.16	
Paving	\$4,600	\$4,600	\$4,800	
<b>Total Actual</b>	<b>\$28,915</b>	<b>\$27,408</b>	<b>\$24,661</b>	<b>\$80,985</b>
Flat Rate Fee	\$15,190	\$17,990	\$20,640	<b>\$53,820</b>
<b>Actual as % of Fee</b>				<b>150%</b>

Most large services are either Custom priced jobs or part of a Multiple Service Installation. Therefore, the sample size is quite small. In an effort to find a more representative price change for this group, the sum of the average actual cost was compared to the sum of the constituent fees. The resulting increase for FY13-14 should be 50%. Since there was insufficient data for 3" and larger Standard Services, we will apply the same increase to all categories of 3" diameter and larger Standard Services .

Flat Rate	FY 12-13	Factor	FY 13-14	Rounded
3" Standard	\$23,120.00	150%	\$34,680.00	\$34,680.00
4" Standard	\$23,120.00	150%	\$34,680.00	\$34,680.00
6" Standard	\$27,140.00	150%	\$40,710.00	\$40,710.00
8" Standard	\$31,110.00	150%	\$46,665.00	\$46,670.00
4" Fire	\$15,190.00	150%	\$22,785.00	\$22,790.00
6" Fire	\$17,990.00	150%	\$26,985.00	\$26,990.00
8" Fire	\$20,640.00	150%	\$30,960.00	\$30,960.00

**Multiple Service Installations**

The Primary and Secondary Rates within the Multiple Services Rates table will see the same changes as noted above for the Single Service Rates.

**Meter Modify Prices**

Due to lack of data, we will utilize the CPI adjustment factor of 2.22% provided by Controller's Office for FY 2013-14.

**APPENDIX B**  
**Water Installation Service Charges**  
**12/13 To 13/14 Cost Comparison**

SIZE	TYPE	12/13	PROPOSED 13/14	% CHANGE TOTAL	\$CHANGE TOTAL
1"	STANDARD SERVICE	\$7,310	\$8,630	18.1%	\$1,320
1 -1/2"	STANDARD SERVICE	\$9,900	\$12,130	22.5%	\$2,230
2"	STANDARD SERVICE	\$9,900	\$12,130	22.5%	\$2,230
3"	STANDARD SERVICE	\$23,120	\$34,680	50.0%	\$11,560
4"	STANDARD SERVICE	\$23,120	\$34,680	50.0%	\$11,560
6"	STANDARD SERVICE	\$27,140	\$40,710	50.0%	\$13,570
8"	STANDARD SERVICE	\$31,110	\$46,670	50.0%	\$15,560
1 -1/2"	FIRE SERVICE	\$9,420	\$11,540	22.5%	\$2,120
2"	FIRE SERVICE	\$9,420	\$11,540	22.5%	\$2,120
4"	FIRE SERVICE	\$15,190	\$22,790	50.0%	\$7,600
6"	FIRE SERVICE	\$17,990	\$26,990	50.0%	\$9,000
8"	FIRE SERVICE	\$20,640	\$30,960	50.0%	\$10,320
1'	COMBINATION SERVICE	\$7,310	\$8,630	18.1%	\$1,320
1 -1/2"	COMBINATION SERVICE	\$9,900	\$12,130	22.5%	\$2,230
2"	COMBINATION SERVICE	\$9,900	\$12,130	22.5%	\$2,230
1"	NON-STANDARD SERVICE	\$7,310	\$8,630	18.1%	\$1,320
1 -1/2"	NON-STANDARD SERVICE	\$9,900	\$12,130	22.5%	\$2,230
2"	NON-STANDARD SERVICE	\$9,900	\$12,130	22.5%	\$2,230

**NOTES:**

1. RATES INCLUDE LABOR, EQUIPMENT, MATERIALS AND SUPPLIES FOR EXCAVATION, PLATING, PIPING, BACKFILL, AND PAVEMENT RESTORATION FROM THE TAP INTO THE MAIN UP TO AND INCLUDING THE INSTALLATION OF THE WATER METER AND METER BOX.
2. THERE WILL BE \$2,200 ADDITIONAL PAVING COST FOR TRENCHES IN STREETS UNDER PAVING MORATORIUM OR THAT ARE CONCRETE.



Appendix C:  
**10/10/10 Agency Survey**

Draft

## PROJECT MEMORANDUM

**Project Name:** Utility Rate Study **Date:** December 17, 2013  
**Client:** San Francisco Public Utilities Commission **Project Number:** 09194A.00  
**Prepared By:** Kimberly West, PME  
**Reviewed By:** Patricia McGovern, PME  
**Subject:** 10/10/10 Survey of Other Agencies Rate Structures  
**Distribution:** SFPUC Staff

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### 1.0 INTRODUCTION

The San Francisco Public Utilities Commission (SFPUC) is directing a rate study to examine its current rate structure and how that structure may change to meet future needs and goals. One component of this study is to survey other utility agencies' water, wastewater, and stormwater programs for comparison with SFPUC practices. Utility agencies in 30 cities have been selected for the survey including twelve (12) Bay Area cities, eight (8) greater California cities, and ten (10) cities in the US outside of California. The survey presents data on water rates, wastewater rates, stormwater rates, and low-income assistance programs as applicable to each City. This memorandum is intended to describe the survey content and methodology.

### 2.0 SURVEY CONTENT

The survey reports fixed service charges and volumetric consumption charges for water, wastewater, and stormwater from the Bay Area, California, and nationally. Data from 12 cities are tabulated for the Bay Area: San Francisco, Antioch, Berkeley, Concord, Fremont, Hayward, Novato, Oakland, Palo Alto, San Jose, Santa Clara, and Union City. The California information compiles data from Bakersfield, Fresno, Los Angeles, Riverside, Sacramento, San Diego, Santa Cruz, and Stockton. Cincinnati, Houston, Las Vegas, New York City, Philadelphia, Phoenix, Portland, San Antonio, Seattle, and Washington, D.C. are included for the national survey.

The components of the rate structure for each service is provided as it applies to each City. Conservation incentives, low-income rate assistance, and other fees and surcharges (fire service charge, monthly backflow prevention surcharge, elevation surcharges, etc.) were all identified as part of the water charge, when provided. Connection fees and capacity charges are also obtained for both water and wastewater for each City, where available.

All billing rates for the Bay Area, California, and USA surveys are given as monthly charges, regardless of the billing schedule, to provide a uniform cost comparison. For example, although most stormwater fees are charged annually as an additional line item charge on a property tax bill, the rate listed in the matrix is the calculated monthly rate.

To provide a standard for comparison, water and wastewater bills have been calculated for each city considered in the survey for a single-family residential moderate customer who uses 4 hundred cubic feet (ccf) of water per month and for a heavier-use customer who uses 18 ccf of water each month. When example monthly bills are provided, they generally include typical miscellaneous fees, median elevation surcharges, if applicable, and exclude private fire service charges, unless otherwise noted. If rates vary by season or household details other than water consumption, an assumption was made and noted.

## PROJECT MEMORANDUM

Because one of SFPUC's goals is to build a rate structure that will consider and protect low-income users, details of the low-income assistance programs available for water utilities in the Bay Area and greater California cities are highlighted.

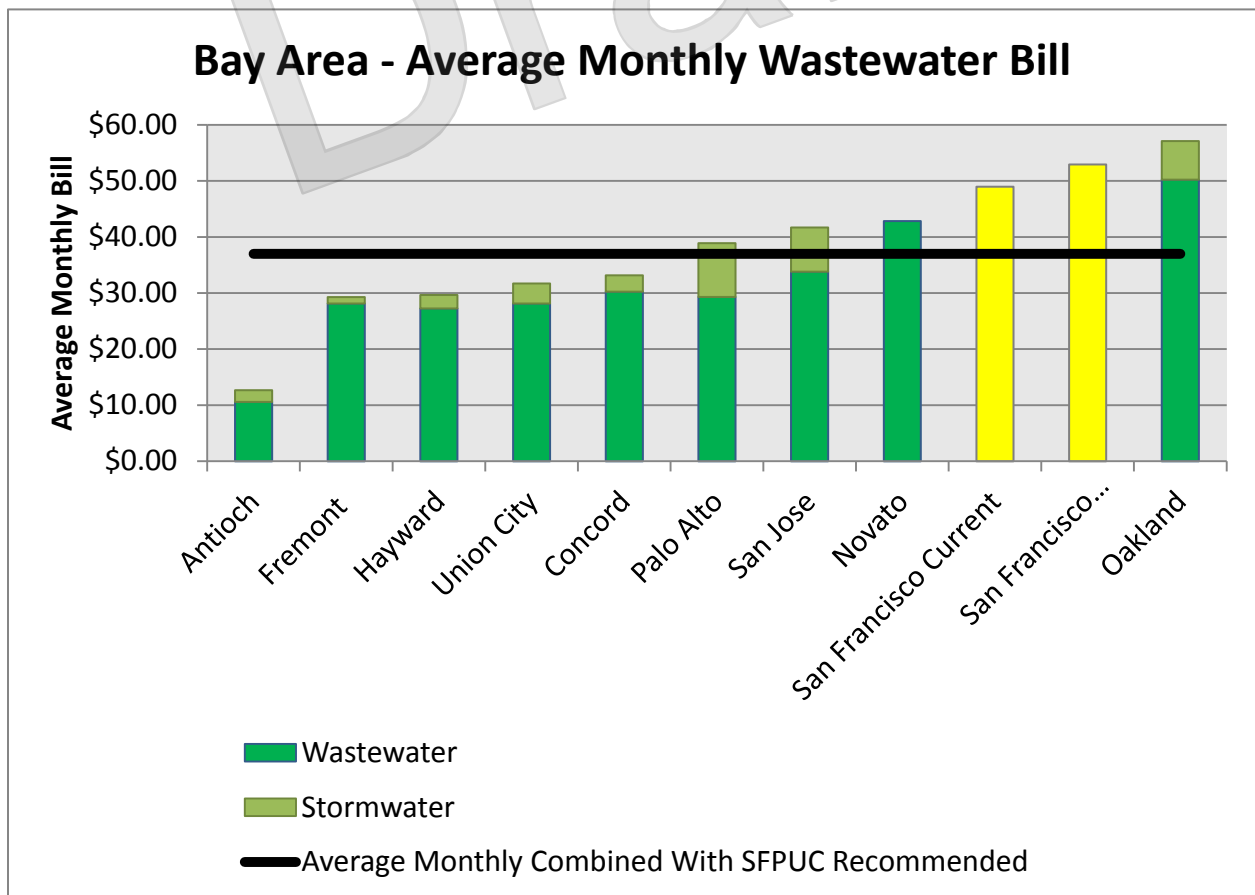
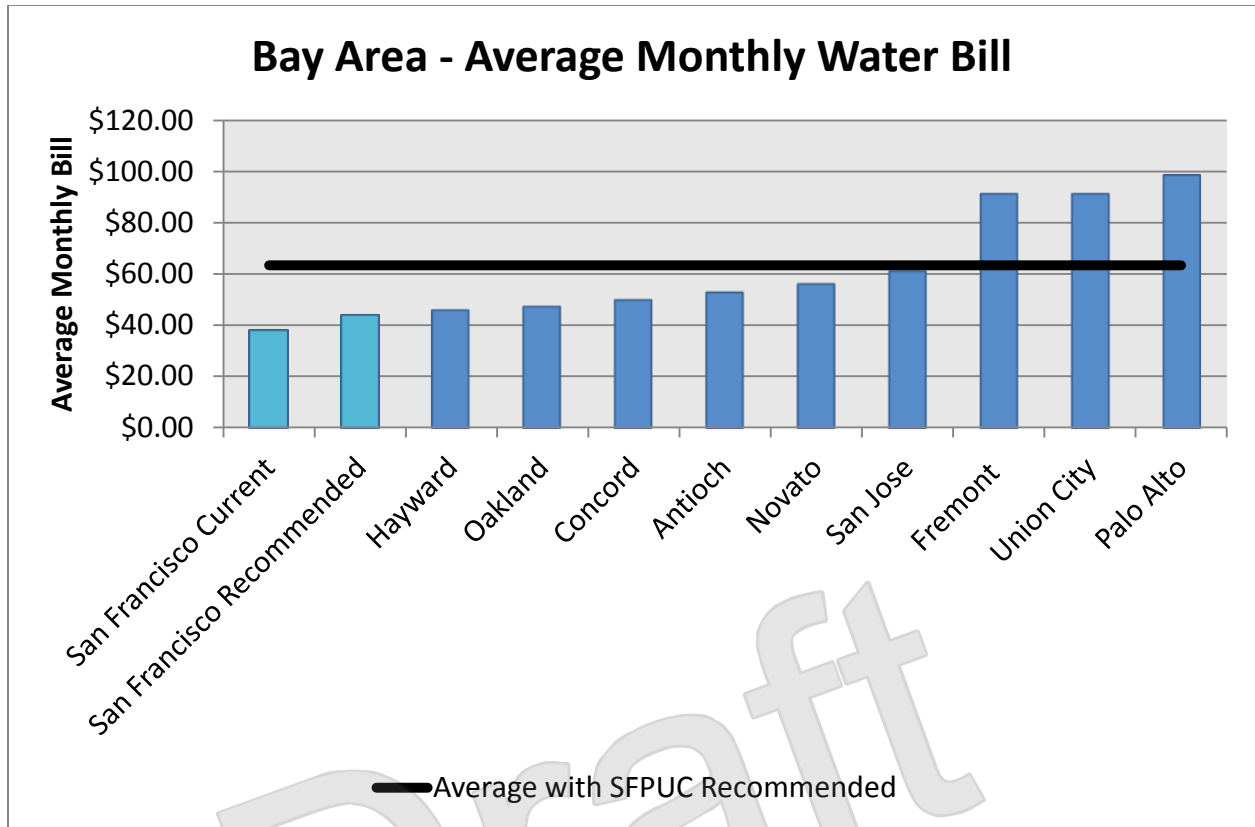
### 3.0 ASSUMPTIONS, METHODOLOGY, AND LIMITATIONS

The websites of all cities and agencies that were selected for the survey were reviewed to obtain basic information on the City, the water services provided, and the rates. The majority of the information gathered for this survey is based on the information accessible on the City's website. For example, connection fees/capacity charges were taken from Master Fee Schedules for each City, which are included on their websites. Many of these Master Plans listed "connection fee" or "capacity charge" as a separate line item. If no information on connection fees and capacity charges were available from Master Fee Schedules, the capacity fee/connection fee was left blank on the survey. This does not necessarily mean that there are no capacity charges or connection fees.

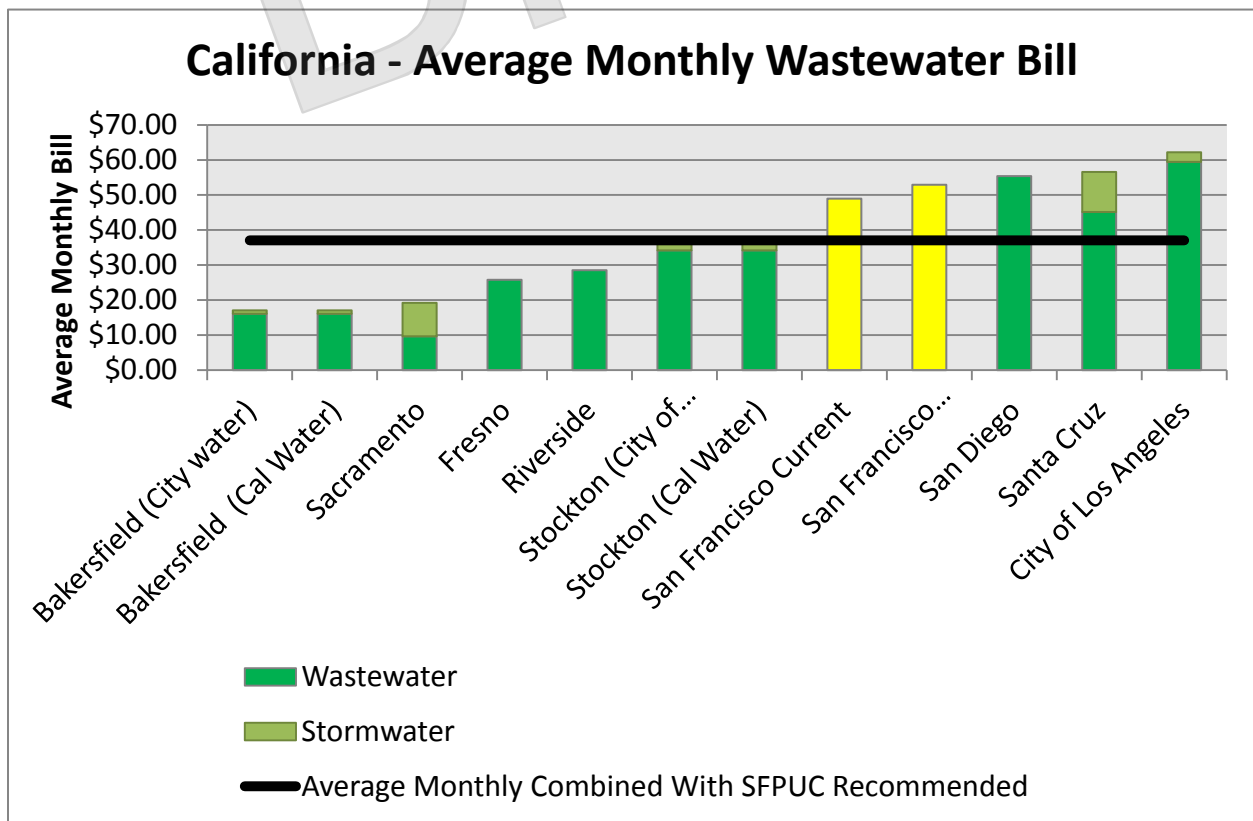
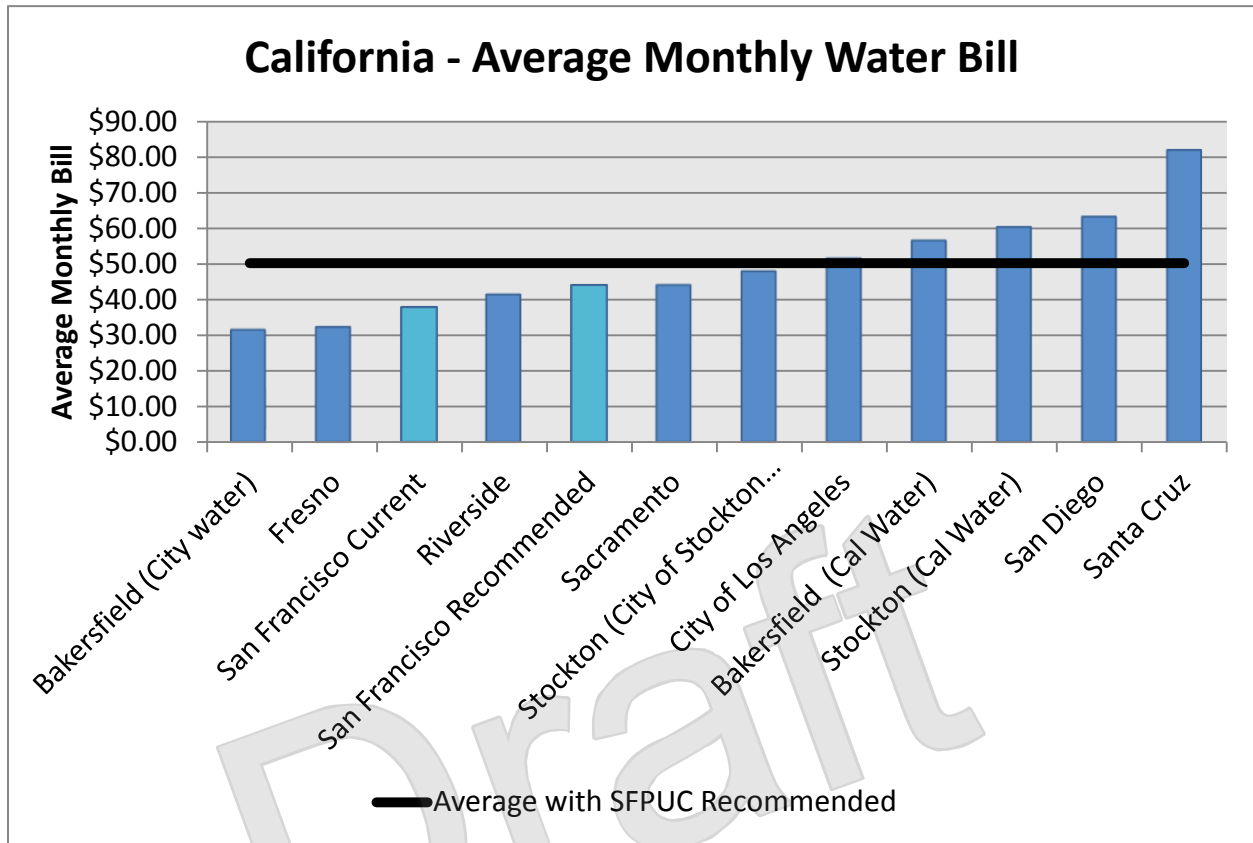
Follow-up phone calls were made to gather more specific information on fees for city collection systems not assessed by the treatment agency, stormwater charges, installation/ connection fees and any other data gaps. In most cases, these questions required further research by the agency contact, resulting in the need to call back. Some agencies and city administrations have been reluctant to respond to inquiries; however, extensive research has yielded answers to most of the questions.

The survey reports residential billing rates for single-family households with a 5/8 inch meter. Rate data was initially collected in April 2013. Many rates changed in July 2013; other rates are set to change in October 2013. In most cases, rates have been updated to reflect current rates as of July 30, 2013. Anticipated rate changes are identified using footnotes, and proposed new rates are presented in cases where available. In all cases, the sources of the reported rates are provided for reference.

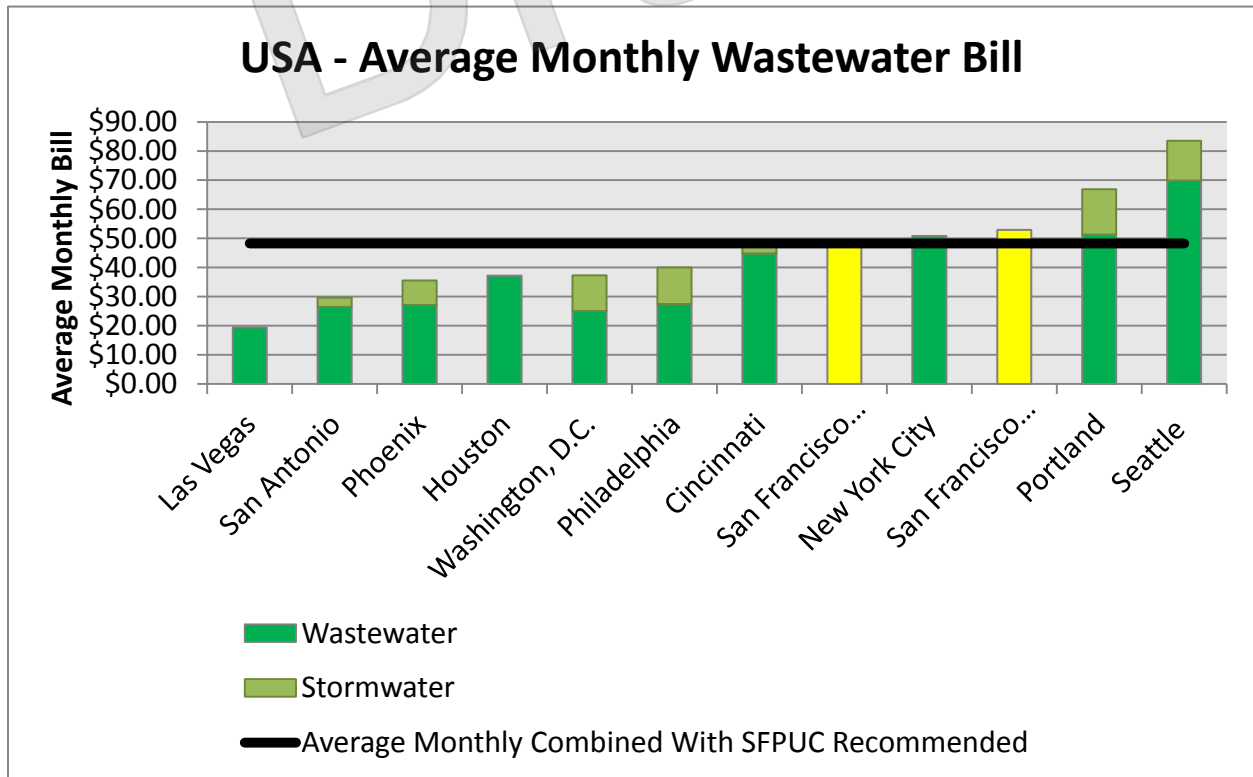
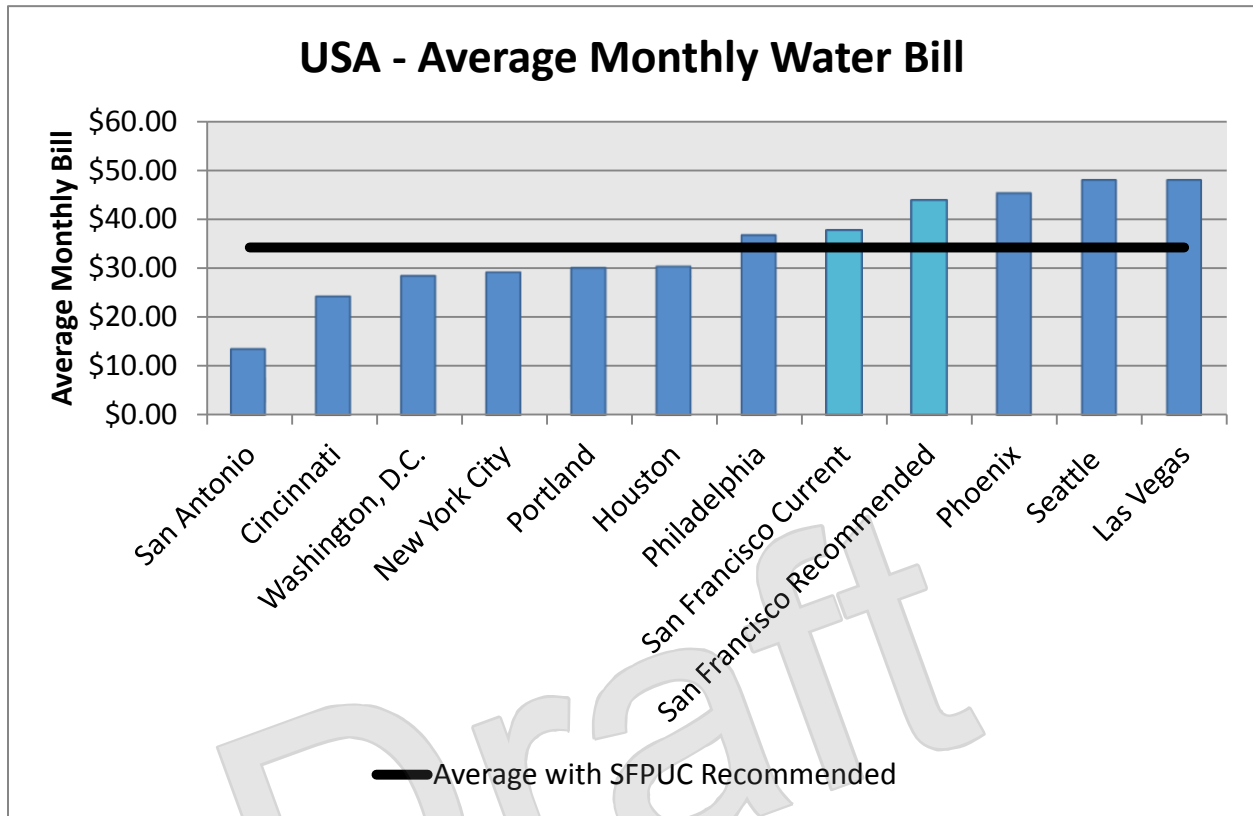
The following Figures are the result of the survey.







PROJECT MEMORANDUM



## PROJECT MEMORANDUM

Single Family Residential Monthly Discounts	San Francisco (SFPUC)	EBMUD Oakland/Berkeley	Fresno	Palo Alto	Sacramento	San Jose	City of Los Angeles
Median Household Income (2009)	\$70,770	\$51,473/ \$60,625	\$43,223	\$118,989	\$47,107	\$76,495	\$48,617
Name of Program	<b>Community Assistance Program (CAP)</b>	Customer Assistance Program (CAP)	<i>None</i>	Rate Assistance Program (RAP)	Customer Assistance Program (CAP)	Water Rate Assistance Program (WRAP)	Low Income Discount Program (LIDP) and Lifeline Discount
Type of Discount	<b>15% discount on water bill and 35% discount on sewer bill</b>	50% discount on water, 35% on sewer bill	<i>Program is currently being phased out</i>	20% discount on stormwater charges	Discounts up to 83% per month on sewer and water	15% discount on water, wastewater, and stormwater	31% LIDP discount on sewer bill and water discount of up to \$10/month; Lifeline Discount of up to \$10/month on water .
Funding Source	<b>Unclaimed funds; customer donations; misc. revenues</b>	1% general property tax	N/A	Ratepayer revenue	Customer donations administered and managed by the Salvation Army	\$0.20 monthly surcharge on all non-low income customers <sup>2</sup>	LIDP funded through surcharges on electric bills; Lifeline Discounts funded through surcharge on water bills
Annual Estimated Budget	\$2,075,918	\$1,100,000	N/A	\$15,105	\$11,170	\$2,768,400	N/A



## Appendix D: **Wastewater Model**

Draft



	FY 2012 2013	FY 2013 2014	FY 2014 2015	FY 2015 2016	FY 2016 2017	FY 2017 2018	FY 2018 2019	FY 2019 2020	FY 2020 2021	FY 2021 2022	FY 2022 2023
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**O&M Assumptions**

**Cost Escalators**

General Inflation Plus Growth	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
General Inflation	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Labor Inflation	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Construction Inflation	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Power and Chemicals Inflation	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Consumption	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Customer Growth	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
No Annual Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**O&M Summary**

**Revenues**

Rate Revenues	\$ 236,114,334	\$ 236,114,334	\$ 247,920,051	\$ 260,316,053	\$ 273,331,856	\$ 289,731,767	\$ 321,602,262	\$ 356,978,510	\$ 396,246,146	\$ 439,833,223	\$ 488,214,877
Non-Rate Revenues	9,788,965	9,788,965	10,131,159	10,490,463	10,867,731	11,343,090	12,266,870	13,292,266	14,430,456	15,693,846	17,096,209
<b>Total Revenues</b>	<b>\$ 245,903,299</b>	<b>\$ 245,903,299</b>	<b>\$ 258,051,210</b>	<b>\$ 270,806,516</b>	<b>\$ 284,199,587</b>	<b>\$ 301,074,857</b>	<b>\$ 333,869,132</b>	<b>\$ 370,270,776</b>	<b>\$ 410,676,602</b>	<b>\$ 455,527,069</b>	<b>\$ 505,311,086</b>
<i>Calculation Check</i>	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct

**Expenditures**

Administration	\$ 35,450,547	\$ 36,098,059	\$ 37,385,071	\$ 38,718,072	\$ 40,098,708	\$ 41,528,687	\$ 43,009,776	\$ 44,543,807	\$ 46,132,676	\$ 47,778,349	\$ 49,482,862
Maintenance	25,963,679	26,604,431	27,628,420	28,691,962	29,796,590	30,943,896	32,135,535	33,373,226	34,658,753	35,993,973	37,380,811
Operations	35,647,699	36,293,146	37,646,142	39,049,803	40,506,034	42,016,812	43,584,190	45,210,298	46,897,346	48,647,628	50,463,526
Environmental Engineering	3,898,990	4,140,083	4,305,061	4,476,616	4,655,011	4,840,519	5,033,422	5,234,016	5,442,608	5,659,517	5,885,075
Planning and Regulations	7,384,825	7,276,897	7,555,471	7,844,750	8,145,148	8,457,093	8,781,030	9,117,423	9,466,752	9,829,516	10,206,234
Collection Systems	31,144,431	31,476,307	32,635,938	33,838,475	35,085,512	36,378,703	37,719,763	39,110,472	40,552,677	42,048,293	43,599,307
Wastewater Labs	4,348,266	4,490,551	4,667,203	4,850,817	5,041,668	5,240,041	5,446,234	5,660,556	5,883,327	6,114,881	6,355,565
Incremental SSIP Expenditures	-	302,835	364,961	430,856	500,703	2,036,198	3,802,558	7,965,365	8,269,327	8,584,745	8,930,246
<b>Total Expenditures</b>	<b>\$ 143,838,437</b>	<b>\$ 146,682,309</b>	<b>\$ 152,188,267</b>	<b>\$ 157,901,351</b>	<b>\$ 163,829,373</b>	<b>\$ 171,441,948</b>	<b>\$ 179,512,508</b>	<b>\$ 190,215,163</b>	<b>\$ 197,303,467</b>	<b>\$ 204,656,903</b>	<b>\$ 212,303,626</b>
<i>Calculation Check</i>	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct

**Net Operating Surplus (Deficiency) - Excluding Debt and Capital Replacement**

	\$ 102,064,862	\$ 99,220,990	\$ 105,862,942	\$ 112,905,165	\$ 120,370,214	\$ 129,632,909	\$ 154,356,623	\$ 180,055,614	\$ 213,373,135	\$ 250,870,166	\$ 293,007,461
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**O&M Detail - Revenues (prior to annual rate increase)**

Acct Code	Line Item Description	Type	Revenue Escalator	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
<b>Waste Water Sales</b>													
	Single Family	Rates	Consumption	\$ 58,683,151	\$ 58,683,151	\$ 61,617,309	\$ 64,698,174	\$ 67,933,083	\$ 72,009,068	\$ 79,930,066	\$ 88,722,373	\$ 98,481,834	\$ 109,314,836
	Multi-Residential	Rates	Consumption	95,606,863	95,606,863	100,387,206	105,406,566	110,676,895	117,317,508	130,222,434	144,546,902	160,447,061	178,096,238
	Non-Residential	Rates	Consumption	81,824,320	81,824,320	85,915,536	90,211,312	94,721,878	100,405,191	111,449,762	123,709,236	137,317,251	152,422,149
	Special Districts (contract accounts)	Non-Rate	Consumption	6,843,877	6,843,877	7,186,071	7,545,374	7,922,643	8,398,002	9,321,782	10,347,178	11,485,367	12,748,758
	Biodiesel Revenue	Non-Rate	No Annual Increase	846,681	846,681	846,681	846,681	846,681	846,681	846,681	846,681	846,681	846,681
	Treasure Island - Utilities Revenues	Non-Rate	No Annual Increase	719,000	719,000	719,000	719,000	719,000	719,000	719,000	719,000	719,000	719,000
	City Property Rental	Non-Rate	No Annual Increase	908,082	908,082	908,082	908,082	908,082	908,082	908,082	908,082	908,082	908,082
79999	Other Non-Operating Revenue	Non-Rate	No Annual Increase	462,075	462,075	462,075	462,075	462,075	462,075	462,075	462,075	462,075	462,075
76199	Gain/Loss - Sale of Fixed Assets	Non-Rate	No Annual Increase	7,363	7,363	7,363	7,363	7,363	7,363	7,363	7,363	7,363	7,363
76251	Sale of Scrap and Waste	Non-Rate	No Annual Increase	1,887	1,887	1,887	1,887	1,887	1,887	1,887	1,887	1,887	1,887
<b>Total Operating Revenues</b>				<b>\$ 245,903,299</b>	<b>\$ 245,903,299</b>	<b>\$ 258,051,210</b>	<b>\$ 270,806,516</b>	<b>\$ 284,199,587</b>	<b>\$ 301,074,857</b>	<b>\$ 333,869,132</b>	<b>\$ 370,270,776</b>	<b>\$ 410,676,602</b>	<b>\$ 455,527,069</b>

**O&M Detail - Expenditures**

Acct Code	Line Item Description	Type	Expense Escalator	Board Adopted	Board Adopted	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
<b>Administration</b>													
001	Salaries	On-Going	Labor Inflation	\$ 1,359,154	\$ 1,376,369	\$ 1,431,424	\$ 1,488,681	\$ 1,548,228	\$ 1,610,157	\$ 1,674,563	\$ 1,741,546	\$ 1,811,208	\$ 1,883,656



		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022			
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023			
013	Mandatory Fringe Benefits	On-Going	Labor Inflation		3,060,631	3,339,610	3,473,194	3,612,122	3,756,607	3,906,871	4,063,146	4,225,672	4,394,699	4,570,487	4,753,306
020	COWCAP	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Inflation Plus Growth		1,865,802	1,890,323	1,956,484	2,024,961	2,095,835	2,169,189	2,245,111	2,323,690	2,405,019	2,489,194	2,576,316
040	Materials and Supplies	On-Going	General Inflation Plus Growth		220,402	220,402	228,116	236,100	244,364	252,916	261,768	270,930	280,413	290,227	300,385
060	Capital Purchases	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
081UA	UA Services of SFPUC	On-Going	General Inflation Plus Growth		24,888,031	25,181,625	26,062,982	26,975,186	27,919,318	28,896,494	29,907,871	30,954,647	32,038,059	33,159,391	34,319,970
081	Services of Other Departments	On-Going	General Inflation Plus Growth		4,056,527	4,089,730	4,232,871	4,381,021	4,534,357	4,693,059	4,857,316	5,027,322	5,203,279	5,385,393	5,573,882
	[Other]	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
<b>Total Administration</b>					<b>\$ 35,450,547</b>	<b>\$ 36,098,059</b>	<b>\$ 37,385,071</b>	<b>\$ 38,718,072</b>	<b>\$ 40,098,708</b>	<b>\$ 41,528,687</b>	<b>\$ 43,009,776</b>	<b>\$ 44,543,807</b>	<b>\$ 46,132,676</b>	<b>\$ 47,778,349</b>	<b>\$ 49,482,862</b>
<b>Maintenance</b>															
001	Salaries	On-Going	Labor Inflation		12,585,516	12,871,975	13,386,854	13,922,328	14,479,221	15,058,390	15,660,726	16,287,155	16,938,641	17,616,187	18,320,834
013	Mandatory Fringe Benefits	On-Going	Labor Inflation		5,139,751	5,694,819	5,922,612	6,159,516	6,405,897	6,662,133	6,928,618	7,205,763	7,493,993	7,793,753	8,105,503
020	Overhead	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Inflation Plus Growth		2,726,218	2,726,408	2,821,832	2,920,596	3,022,817	3,128,616	3,238,117	3,351,452	3,468,752	3,590,159	3,715,814
040	Materials and Supplies	On-Going	General Inflation Plus Growth		2,283,952	2,310,168	2,391,024	2,474,710	2,561,325	2,650,971	2,743,755	2,839,786	2,939,179	3,042,050	3,148,522
060	Capital Purchases	On-Going	General Inflation Plus Growth		467,436	244,209	252,756	261,603	270,759	280,235	290,044	300,195	310,702	321,577	332,832
081	Services of Other Departments	On-Going	General Inflation Plus Growth		2,760,806	2,756,852	2,853,342	2,953,209	3,056,571	3,163,551	3,274,275	3,388,875	3,507,486	3,630,248	3,757,306
	[Other]	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
<b>Total Maintenance</b>					<b>\$ 25,963,679</b>	<b>\$ 26,604,431</b>	<b>\$ 27,628,420</b>	<b>\$ 28,691,962</b>	<b>\$ 29,796,590</b>	<b>\$ 30,943,896</b>	<b>\$ 32,135,535</b>	<b>\$ 33,373,226</b>	<b>\$ 34,658,753</b>	<b>\$ 35,993,973</b>	<b>\$ 37,380,811</b>
<b>Operations</b>															
001	Salaries	On-Going	Labor Inflation		11,730,872	11,937,268	12,414,759	12,911,349	13,427,803	13,964,915	14,523,512	15,104,452	15,708,630	16,336,976	16,990,455
013	Mandatory Fringe Benefits	On-Going	Labor Inflation		4,182,515	4,609,981	4,794,380	4,986,155	5,185,602	5,393,026	5,608,747	5,833,097	6,066,420	6,309,077	6,561,440
020	Overhead	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Inflation Plus Growth		4,647,181	4,647,181	4,809,832	4,978,176	5,152,413	5,332,747	5,519,393	5,712,572	5,912,512	6,119,450	6,333,631
040	Materials and Supplies	On-Going	General Inflation Plus Growth		5,707,645	5,780,445	5,982,761	6,192,157	6,408,883	6,633,194	6,865,355	7,105,643	7,354,340	7,611,742	7,878,153
060	Capital Purchases	On-Going	General Inflation Plus Growth		72,800	-	-	-	-	-	-	-	-	-	-
081	Services of Other Departments	On-Going	General Inflation Plus Growth		9,306,686	9,318,271	9,644,410	9,981,965	10,331,334	10,692,930	11,067,183	11,454,534	11,855,443	12,270,383	12,699,847
	[Other]	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
<b>Total Operations</b>					<b>\$ 35,647,699</b>	<b>\$ 36,293,146</b>	<b>\$ 37,646,142</b>	<b>\$ 39,049,803</b>	<b>\$ 40,506,034</b>	<b>\$ 42,016,812</b>	<b>\$ 43,584,190</b>	<b>\$ 45,210,298</b>	<b>\$ 46,897,346</b>	<b>\$ 48,647,628</b>	<b>\$ 50,463,526</b>
<b>Environmental Engineering</b>															
001	Salaries	On-Going	Labor Inflation		2,758,634	2,864,109	2,978,673	3,097,820	3,221,733	3,350,602	3,484,627	3,624,012	3,768,972	3,919,731	4,076,520
013	Mandatory Fringe Benefits	On-Going	Labor Inflation		1,015,312	1,150,930	1,196,967	1,244,846	1,294,640	1,346,425	1,400,282	1,456,294	1,514,545	1,575,127	1,638,132
020	Overhead	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Inflation Plus Growth		71,122	71,122	73,611	76,188	78,854	81,614	84,471	87,427	90,487	93,654	96,932
040	Materials and Supplies	On-Going	General Inflation Plus Growth		53,922	53,922	55,809	57,763	59,784	61,877	64,042	66,284	68,604	71,005	73,490
060	Capital Purchases	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
081	Services of Other Departments	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
	[Other]	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
<b>Total Environmental Engineering</b>					<b>\$ 3,898,990</b>	<b>\$ 4,140,083</b>	<b>\$ 4,305,061</b>	<b>\$ 4,476,616</b>	<b>\$ 4,655,011</b>	<b>\$ 4,840,519</b>	<b>\$ 5,033,422</b>	<b>\$ 5,234,016</b>	<b>\$ 5,442,608</b>	<b>\$ 5,659,517</b>	<b>\$ 5,885,075</b>
<b>Planning and Regulations</b>															
001	Salaries	On-Going	Labor Inflation		3,202,514	3,267,348	3,398,042	3,533,964	3,675,322	3,822,335	3,975,228	4,134,238	4,299,607	4,471,591	4,650,455
013	Mandatory Fringe Benefits	On-Going	Labor Inflation		1,364,939	1,509,155	1,569,521	1,632,302	1,697,594	1,765,498	1,836,118	1,909,563	1,985,945	2,065,383	2,147,998
020	Overhead	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Inflation Plus Growth		2,435,381	2,114,393	2,188,397	2,264,991	2,344,265	2,426,315	2,511,236	2,599,129	2,690,098	2,784,252	2,881,701
040	Materials and Supplies	On-Going	General Inflation Plus Growth		16,991	21,001	21,736	22,497	23,284	24,099	24,943	25,816	26,719	27,654	28,622
060	Capital Purchases	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
081	Services of Other Departments	On-Going	General Inflation Plus Growth		365,000	365,000	377,775	390,997	404,682	418,846	433,506	448,678	464,382	480,635	497,458
	[Other]	On-Going	General Inflation Plus Growth		-	-	-	-	-	-	-	-	-	-	-
<b>Total Planning and Regulations</b>					<b>\$ 7,384,825</b>	<b>\$ 7,276,897</b>	<b>\$ 7,555,471</b>	<b>\$ 7,844,750</b>	<b>\$ 8,145,148</b>	<b>\$ 8,457,093</b>	<b>\$ 8,781,030</b>	<b>\$ 9,117,423</b>	<b>\$ 9,466,752</b>	<b>\$ 9,829,516</b>	<b>\$ 10,206,234</b>



		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
<b>Collection Systems</b>														
001	Salaries	On-Going	Labor Inflation	\$ 7,907,388	\$ 8,114,904	\$ 8,439,500	\$ 8,777,080	\$ 9,128,163	\$ 9,493,290	\$ 9,873,022	\$ 10,267,942	\$ 10,678,660	\$ 11,105,806	\$ 11,550,039
013	Mandatory Fringe Benefits	On-Going	Labor Inflation	3,134,680	3,477,206	3,616,294	3,760,946	3,911,384	4,067,839	4,230,553	4,399,775	4,575,766	4,758,797	4,949,148
020	Overhead	On-Going	General Inflation Plus Growth	-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Inflation Plus Growth	2,981,056	3,126,294	3,235,714	3,348,964	3,466,178	3,587,494	3,713,057	3,843,014	3,977,519	4,116,732	4,260,818
040	Materials and Supplies	On-Going	General Inflation Plus Growth	731,245	731,245	756,839	783,328	810,744	839,120	868,490	898,887	930,348	962,910	996,612
060	Capital Purchases	On-Going	General Inflation Plus Growth	637,479	260,710	269,835	279,279	289,054	299,171	309,642	320,479	331,696	343,305	355,321
081	Services of Other Departments [Other]	On-Going	General Inflation Plus Growth	15,752,583	15,765,948	16,317,756	16,888,878	17,479,988	18,091,788	18,725,001	19,380,376	20,058,689	20,760,743	21,487,369
	<b>Total Collection Systems</b>			\$ 31,144,431	\$ 31,476,307	\$ 32,635,938	\$ 33,838,475	\$ 35,085,512	\$ 36,378,703	\$ 37,719,763	\$ 39,110,472	\$ 40,552,677	\$ 42,048,293	\$ 43,599,307
<b>Wastewater Labs</b>														
001	Salaries	On-Going	Labor Inflation	\$ 2,665,804	\$ 2,722,816	\$ 2,831,729	\$ 2,944,998	\$ 3,062,798	\$ 3,185,310	\$ 3,312,722	\$ 3,445,231	\$ 3,583,040	\$ 3,726,362	\$ 3,875,416
013	Mandatory Fringe Benefits	On-Going	Labor Inflation	1,058,418	1,173,690	1,220,638	1,269,463	1,320,242	1,373,051	1,427,973	1,485,092	1,544,496	1,606,276	1,670,527
020	Overhead	On-Going	General Inflation Plus Growth	-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Inflation Plus Growth	173,497	143,497	148,519	153,718	159,098	164,666	170,429	176,394	182,568	188,958	195,572
040	Materials and Supplies	On-Going	General Inflation Plus Growth	309,095	283,568	293,493	303,765	314,397	325,401	336,790	348,577	360,778	373,405	386,474
060	Capital Purchases	On-Going	General Inflation Plus Growth	141,452	166,980	172,824	178,873	185,134	191,613	198,320	205,261	212,445	219,881	227,577
081	Services of Other Departments [Other]	On-Going	General Inflation Plus Growth	-	-	-	-	-	-	-	-	-	-	-
	<b>Total Wastewater Labs</b>			\$ 4,348,266	\$ 4,490,551	\$ 4,667,203	\$ 4,850,817	\$ 5,041,668	\$ 5,240,041	\$ 5,446,234	\$ 5,660,556	\$ 5,883,327	\$ 6,114,881	\$ 6,355,565
<b>Total Operating Expenditures</b>				\$ 143,838,437	\$ 146,379,474	\$ 151,823,306	\$ 157,470,495	\$ 163,328,670	\$ 169,405,750	\$ 175,709,950	\$ 182,249,798	\$ 189,034,140	\$ 196,072,158	\$ 203,373,380
<b>Incremental SSIP Expenditures</b>														
	SSIP Incremental O&M	On-Going	No Annual Increase		\$ 302,835	\$ 364,961	\$ 430,856	\$ 500,703	\$ 2,036,198	\$ 3,802,558	\$ 7,965,365	\$ 8,269,327	\$ 8,584,745	\$ 8,930,246
	[Other]	On-Going	Labor Inflation		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	[Other]	On-Going	General Inflation Plus Growth		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Other Expenditures</b>				\$ -	\$ 302,835	\$ 364,961	\$ 430,856	\$ 500,703	\$ 2,036,198	\$ 3,802,558	\$ 7,965,365	\$ 8,269,327	\$ 8,584,745	\$ 8,930,246
<b>Total O&amp;M Expenditures</b>				\$ 143,838,437	\$ 146,682,309	\$ 152,188,267	\$ 157,901,351	\$ 163,829,373	\$ 171,441,948	\$ 179,512,508	\$ 190,215,163	\$ 197,303,467	\$ 204,656,903	\$ 212,303,626



	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Summary</b>											
<b>Total Debt Service</b>											
<b>Existing Debt</b>											
Principal Payments	\$ 23,095,000	\$ 32,805,000	\$ 30,895,000	\$ 31,115,000	\$ 20,870,000	\$ 20,015,000	\$ 21,010,000	\$ 22,085,000	\$ 23,240,000	\$ 22,880,000	\$ 20,370,000
Interest Payments	14,826,294	15,857,818	17,710,093	28,643,227	27,643,852	26,741,402	25,803,927	24,814,702	23,731,577	22,628,577	21,669,308
<b>Total Existing Debt</b>	<b>\$ 37,921,294</b>	<b>\$ 48,662,818</b>	<b>\$ 48,605,093</b>	<b>\$ 59,758,227</b>	<b>\$ 48,513,852</b>	<b>\$ 46,756,402</b>	<b>\$ 46,813,927</b>	<b>\$ 46,899,702</b>	<b>\$ 46,971,577</b>	<b>\$ 45,508,577</b>	<b>\$ 42,039,308</b>
<b>Future Debt</b>											
Principal Payments	\$ -	\$ -	\$ -	\$ -	\$ 5,153,720	\$ 9,709,542	\$ 15,483,240	\$ 26,711,002	\$ 35,426,920	\$ 63,954,497	\$ 77,818,492
Interest Payments	-	-	-	14,087,470	25,578,550	39,548,193	67,348,489	86,186,855	157,552,496	183,510,555	227,625,233
<b>Total Future Debt</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 14,087,470</b>	<b>\$ 30,732,270</b>	<b>\$ 49,257,735</b>	<b>\$ 82,831,729</b>	<b>\$ 112,897,856</b>	<b>\$ 192,979,417</b>	<b>\$ 247,465,052</b>	<b>\$ 305,443,725</b>
<b>Total Payment:</b>	<b>\$ 37,921,294</b>	<b>\$ 48,662,818</b>	<b>\$ 48,605,093</b>	<b>\$ 73,845,696</b>	<b>\$ 79,246,122</b>	<b>\$ 96,014,137</b>	<b>\$ 129,645,656</b>	<b>\$ 159,797,558</b>	<b>\$ 239,950,993</b>	<b>\$ 292,973,628</b>	<b>\$ 347,483,032</b>

Existing Debt Service	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Total Existing Debt</b>											
<b>Total Debt from Debt Map</b>											
Principal Payment	\$ 23,095,000	\$ 32,805,000	\$ 30,895,000	\$ 31,115,000	\$ 20,870,000	\$ 20,015,000	\$ 21,010,000	\$ 22,085,000	\$ 23,240,000	\$ 22,880,000	\$ 20,370,000
Interest Payment	14,826,294	15,857,818	17,710,093	28,643,227	27,643,852	26,741,402	25,803,927	24,814,702	23,731,577	22,628,577	21,669,308
<b>Total Payment:</b>	<b>\$ 37,921,294</b>	<b>\$ 48,662,818</b>	<b>\$ 48,605,093</b>	<b>\$ 59,758,227</b>	<b>\$ 48,513,852</b>	<b>\$ 46,756,402</b>	<b>\$ 46,813,927</b>	<b>\$ 46,899,702</b>	<b>\$ 46,971,577</b>	<b>\$ 45,508,577</b>	<b>\$ 42,039,308</b>

**New Debt Assumptions**

Revenue Bonds:												
Issuance Costs	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Reserve Amount	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Amortization Period	30 years	30 years	30 years	30 years	30 years	30 years	30 years	30 years	30 years	30 years	30 years	30 years
Months of Capitalized Interest	36 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months

(1) Current PUC Funding Assumptions FYE2013

Projected Debt Service	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Borrowing Calculations	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Projected New Revenue Bonds</b>											
New Bond Par Amount	\$ 233,852,000	\$ 195,029,514	\$ 239,955,000	\$ 474,336,000	\$ 334,887,000	\$ 1,214,074,000	\$ 483,986,000	\$ 796,893,000	\$ 474,212,000	\$ 329,283,000	\$ 283,698,860
Plus: Issuance Costs	5,634,988	4,699,506	5,782,048	11,429,783	8,069,566	29,254,795	11,662,313	19,202,241	11,426,795	7,934,530	6,836,117
Plus: Reserve Amount	-	-	-	-	-	-	-	-	-	-	-
Plus: Capitalized Interest	42,262,410	35,246,298	43,365,361	85,723,373	60,521,747	219,410,964	87,467,349	144,016,807	85,700,964	59,508,976	51,270,878
<b>Total Bond Amount Issued:</b>	<b>\$ 281,749,398</b>	<b>\$ 234,975,318</b>	<b>\$ 289,102,410</b>	<b>\$ 571,489,157</b>	<b>\$ 403,478,313</b>	<b>\$ 1,462,739,759</b>	<b>\$ 583,115,663</b>	<b>\$ 960,112,048</b>	<b>\$ 571,339,759</b>	<b>\$ 396,726,506</b>	<b>\$ 341,805,855</b>
<b>Annual Payments on Projected Bonds</b>											
Principal Payments	\$ -	\$ -	\$ -	\$ -	\$ 5,153,720	\$ 9,709,542	\$ 15,483,240	\$ 26,711,002	\$ 35,426,920	\$ 63,954,497	\$ 77,818,492
Interest Payments	-	-	-	14,087,470	25,578,550	39,548,193	67,348,489	86,186,855	157,552,496	183,510,555	227,625,233
<b>Total Payment:</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 14,087,470</b>	<b>\$ 30,732,270</b>	<b>\$ 49,257,735</b>	<b>\$ 82,831,729</b>	<b>\$ 112,897,856</b>	<b>\$ 192,979,417</b>	<b>\$ 247,465,052</b>	<b>\$ 305,443,725</b>





	FY 2012 2013	FY 2013 2014	FY 2014 2015	FY 2015 2016	FY 2016 2017	FY 2017 2018	FY 2018 2019	FY 2019 2020	FY 2020 2021	FY 2021 2022	FY 2022 2023
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**Reserve Balance Assumptions**

**All Reserves<sup>1</sup>**

Fund Interest Earnings Rate	1.20%	1.20%	1.20%	2.00%	3.00%	3.00%	4.00%	4.00%	4.00%	4.00%	4.00%
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<sup>1</sup> Interest Earnings based on US Treasury yield curve published 3/1/2011

**Capital Funding**

**Funding Sources (from 10-Year CIP)**

Revenue Bonds	\$ 233,852,000	\$ 195,029,514	\$ 239,955,000	\$ 474,336,000	\$ 334,887,000	\$ 1,214,074,000	\$ 483,986,000	\$ 796,893,000	\$ 474,212,000	\$ 329,283,000	\$ 283,698,860
Revenue Funded	33,800,000	37,000,000	39,000,000	41,000,000	43,000,000	45,000,000	48,000,000	50,000,000	52,000,000	55,000,000	57,750,140
Capacity Fees	-	-	-	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	-	5,000,000	-

**Funding Sources (from Programmatic CIP)**

Revenue Funded	\$ 3,781,249	\$ 4,778,577	\$ 3,437,713	\$ 2,982,000	\$ 2,850,000	\$ 2,885,000	\$ 2,941,000	\$ 3,000,000	\$ 3,060,000	\$ 3,122,000	\$ -
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<b>Total</b>	<b>271,433,249</b>	<b>236,808,091</b>	<b>282,392,713</b>	<b>522,318,000</b>	<b>384,737,000</b>	<b>1,265,959,000</b>	<b>538,927,000</b>	<b>853,893,000</b>	<b>529,272,000</b>	<b>392,405,000</b>	<b>341,449,000</b>
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<b>Bond Issuance</b>	<b>\$ 233,852,000</b>	<b>\$ 195,029,514</b>	<b>\$ 239,955,000</b>	<b>\$ 474,336,000</b>	<b>\$ 334,887,000</b>	<b>\$ 1,214,074,000</b>	<b>\$ 483,986,000</b>	<b>\$ 796,893,000</b>	<b>\$ 474,212,000</b>	<b>\$ 329,283,000</b>	<b>\$ 283,698,860</b>
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**Cash Balance**

<b>Beginning Balance</b>	<b>\$ 64,674,765</b>	<b>\$ 88,202,878</b>	<b>\$ 110,149,460</b>	<b>\$ 139,052,353</b>	<b>\$ 150,357,527</b>	<b>\$ 167,042,959</b>	<b>\$ 191,694,712</b>	<b>\$ 212,311,275</b>	<b>\$ 235,294,783</b>	<b>\$ 214,925,119</b>	<b>\$ 180,263,061</b>
Interest Earnings	776,097	1,058,435	1,321,794	2,781,047	4,510,726	5,011,289	7,667,788	8,492,451	9,411,791	8,597,005	7,210,522
[Additions to Reserves]	-	-	-	-	-	-	-	-	-	-	-
[Use of Reserves]	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow	26,562,319	20,888,147	27,581,099	8,524,127	12,174,706	19,640,465	12,948,774	14,491,057	(29,781,455)	(43,259,063)	(44,709,680)
<b>Ending Balance</b>	<b>\$ 92,013,181</b>	<b>\$ 110,149,460</b>	<b>\$ 139,052,353</b>	<b>\$ 150,357,527</b>	<b>\$ 167,042,959</b>	<b>\$ 191,694,712</b>	<b>\$ 212,311,275</b>	<b>\$ 235,294,783</b>	<b>\$ 214,925,119</b>	<b>\$ 180,263,061</b>	<b>\$ 142,763,903</b>

Target % of Non-Debt Expenditures	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Balance Target	\$ 35,472,231	\$ 36,789,026	\$ 38,154,920	\$ 39,571,751	\$ 41,041,427	\$ 42,565,929	\$ 44,147,310	\$ 45,787,703	\$ 47,489,319	\$ 49,254,454	

	FY 2012 2013	FY 2013 2014	FY 2014 2015	FY 2015 2016	FY 2016 2017	FY 2017 2018	FY 2018 2019	FY 2019 2020	FY 2020 2021	FY 2021 2022	FY 2022 2023
<b>Cash Flow Test</b>											
<b>Revenues</b>											
Rate Revenues	\$ 236,114,334	\$ 236,114,334	\$ 247,920,051	\$ 260,316,053	\$ 273,331,856	\$ 289,731,767	\$ 321,602,262	\$ 356,978,510	\$ 396,246,146	\$ 439,833,223	\$ 488,214,877
Non-Rate Revenues	9,788,965	9,788,965	10,131,159	10,490,463	10,867,731	11,343,090	12,266,870	13,292,266	14,430,456	15,693,846	17,096,209
<b>Total Revenues</b>	<b>\$ 245,903,299</b>	<b>\$ 245,903,299</b>	<b>\$ 258,051,210</b>	<b>\$ 270,806,516</b>	<b>\$ 284,199,587</b>	<b>\$ 301,074,857</b>	<b>\$ 333,869,132</b>	<b>\$ 370,270,776</b>	<b>\$ 410,676,602</b>	<b>\$ 455,527,069</b>	<b>\$ 505,311,086</b>
<b>Expenditures</b>											
Administration	\$ 35,450,547	\$ 36,098,059	\$ 37,385,071	\$ 38,718,072	\$ 40,098,708	\$ 41,528,687	\$ 43,009,776	\$ 44,543,807	\$ 46,132,676	\$ 47,778,349	\$ 49,482,862
Maintenance	25,963,679	26,604,431	27,628,420	28,691,962	29,796,590	30,943,896	32,135,535	33,373,226	34,658,753	35,993,973	37,380,811
Operations	35,647,699	36,293,146	37,646,142	39,049,803	40,506,034	42,016,812	43,584,190	45,210,298	46,897,346	48,647,628	50,463,526
Environmental Engineering	3,898,990	4,140,083	4,305,061	4,476,616	4,655,011	4,840,519	5,033,422	5,234,016	5,442,608	5,659,517	5,885,075
Planning and Regulations	7,384,825	7,276,897	7,555,471	7,844,750	8,145,148	8,457,093	8,781,030	9,117,423	9,466,752	9,829,516	10,206,234
Collection Systems	31,144,431	31,476,307	32,635,938	33,838,475	35,085,512	36,378,703	37,719,763	39,110,472	40,552,677	42,048,293	43,599,307
Wastewater Labs	4,348,266	4,490,551	4,667,203	4,850,817	5,041,668	5,240,041	5,446,234	5,660,556	5,883,327	6,114,881	6,355,565
Debt Service	37,921,294	48,662,818	48,605,093	73,845,696	79,246,122	96,014,137	129,645,656	159,797,558	239,950,993	292,973,628	347,483,032
<b>Total Operating Expenditures</b>	<b>\$ 181,759,731</b>	<b>\$ 195,042,292</b>	<b>\$ 200,428,400</b>	<b>\$ 231,316,192</b>	<b>\$ 242,574,792</b>	<b>\$ 265,419,887</b>	<b>\$ 305,355,606</b>	<b>\$ 342,047,356</b>	<b>\$ 428,985,133</b>	<b>\$ 489,045,786</b>	<b>\$ 550,856,412</b>
<b>Policy Expenditures</b>											
Additions to meet min fund balance reserves	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Funded Capital (PAYGO)	37,581,249	41,778,577	42,437,713	43,982,000	45,850,000	47,885,000	50,941,000	53,000,000	55,060,000	58,122,000	57,750,140
<b>Total Policy Expenditures</b>	<b>\$ 37,581,249</b>	<b>\$ 41,778,577</b>	<b>\$ 42,437,713</b>	<b>\$ 43,982,000</b>	<b>\$ 45,850,000</b>	<b>\$ 47,885,000</b>	<b>\$ 50,941,000</b>	<b>\$ 53,000,000</b>	<b>\$ 55,060,000</b>	<b>\$ 58,122,000</b>	<b>\$ 57,750,140</b>
<b>Total Expenditures for Cash Flow Test</b>	<b>\$ 219,340,980</b>	<b>\$ 236,820,869</b>	<b>\$ 242,866,113</b>	<b>\$ 275,298,192</b>	<b>\$ 288,424,792</b>	<b>\$ 313,304,887</b>	<b>\$ 356,296,606</b>	<b>\$ 395,047,356</b>	<b>\$ 484,045,133</b>	<b>\$ 547,167,786</b>	<b>\$ 608,606,552</b>
<b>Cash Flow Surplus (Deficit)</b>	<b>\$ 26,562,319</b>	<b>\$ 9,082,431</b>	<b>\$ 15,185,097</b>	<b>\$ (4,491,676)</b>	<b>\$ (4,225,205)</b>	<b>\$ (12,230,030)</b>	<b>\$ (22,427,474)</b>	<b>\$ (24,776,579)</b>	<b>\$ (73,368,531)</b>	<b>\$ (91,640,718)</b>	<b>\$ (103,295,465)</b>

<b>Debt Coverage Test</b>											
Required Coverage Factor (without Reserves)	1.00 x	1.00 x	1.00 x	1.00 x	1.00 x	1.00 x	1.00 x	1.00 x	1.00 x	1.00 x	1.00 x
Required Coverage Factor (with Reserves)	1.25 x	1.25 x	1.25 x	1.25 x	1.25 x	1.25 x	1.25 x	1.25 x	1.25 x	1.25 x	1.25 x
<b>Revenues</b>											
Rate Revenues (prior to rate increase)	\$ 236,114,334	\$ 236,114,334	\$ 247,920,051	\$ 260,316,053	\$ 273,331,856	\$ 289,731,767	\$ 321,602,262	\$ 356,978,510	\$ 396,246,146	\$ 439,833,223	\$ 488,214,877
Non-Rate Revenues	9,788,965	9,788,965	10,131,159	10,490,463	10,867,731	11,343,090	12,266,870	13,292,266	14,430,456	15,693,846	17,096,209
<b>Total Revenues without Reserves</b>	<b>\$ 245,903,299</b>	<b>\$ 245,903,299</b>	<b>\$ 258,051,210</b>	<b>\$ 270,806,516</b>	<b>\$ 284,199,587</b>	<b>\$ 301,074,857</b>	<b>\$ 333,869,132</b>	<b>\$ 370,270,776</b>	<b>\$ 410,676,602</b>	<b>\$ 455,527,069</b>	<b>\$ 505,311,086</b>
Reserves	\$ 65,450,862	\$ 89,261,313	\$ 111,471,254	\$ 141,833,400	\$ 154,868,253	\$ 172,054,248	\$ 199,362,501	\$ 220,803,726	\$ 244,706,575	\$ 223,522,124	\$ 187,473,583
<b>Total Revenues with Reserves</b>	<b>\$ 311,354,161</b>	<b>\$ 335,164,612</b>	<b>\$ 369,522,463</b>	<b>\$ 412,639,916</b>	<b>\$ 439,067,840</b>	<b>\$ 473,129,105</b>	<b>\$ 533,231,632</b>	<b>\$ 591,074,503</b>	<b>\$ 655,383,177</b>	<b>\$ 679,049,193</b>	<b>\$ 692,784,670</b>
<b>Expenditures</b>											
Water Expenditures	\$ 143,838,437	\$ 146,379,474	\$ 151,823,306	\$ 157,470,495	\$ 163,328,670	\$ 169,405,750	\$ 175,709,950	\$ 182,249,798	\$ 189,034,140	\$ 196,072,158	\$ 203,373,380
Total Debt	37,921,294	48,662,818	48,605,093	73,845,696	79,246,122	96,014,137	129,645,656	159,797,558	239,950,993	292,973,628	347,483,032
<b>Subtotal Expenditures</b>	<b>\$ 181,759,731</b>	<b>\$ 195,042,292</b>	<b>\$ 200,428,400</b>	<b>\$ 231,316,192</b>	<b>\$ 242,574,792</b>	<b>\$ 265,419,887</b>	<b>\$ 305,355,606</b>	<b>\$ 342,047,356</b>	<b>\$ 428,985,133</b>	<b>\$ 489,045,786</b>	<b>\$ 550,856,412</b>
Additional Coverage Required without Reserves	-	-	-	-	-	-	-	-	-	-	-
Additional Coverage Required with Reserves	9,480,323	12,165,704	12,151,273	18,461,424	19,811,530	24,003,534	32,411,414	39,949,389	59,987,748	73,243,407	86,870,758
<b>Debt Coverage Surplus (Deficit) without Reserves</b>	<b>\$ 64,143,568</b>	<b>\$ 50,861,008</b>	<b>\$ 57,622,810</b>	<b>\$ 39,490,324</b>	<b>\$ 41,624,795</b>	<b>\$ 35,654,970</b>	<b>\$ 28,513,526</b>	<b>\$ 28,223,421</b>	<b>\$ (18,308,531)</b>	<b>\$ (33,518,718)</b>	<b>\$ (45,545,325)</b>
<b>Debt Coverage Surplus (Deficit) with Reserves</b>	<b>\$ 120,114,107</b>	<b>\$ 127,956,616</b>	<b>\$ 156,942,790</b>	<b>\$ 162,862,300</b>	<b>\$ 176,681,517</b>	<b>\$ 183,705,684</b>	<b>\$ 195,464,613</b>	<b>\$ 209,077,758</b>	<b>\$ 166,410,295</b>	<b>\$ 116,759,999</b>	<b>\$ 55,057,500</b>
<b>Pre-Adjustment Coverage Factor</b>	<b>2.69 x</b>	<b>2.05 x</b>	<b>2.19 x</b>	<b>1.53 x</b>	<b>1.53 x</b>	<b>1.37 x</b>	<b>1.22 x</b>	<b>1.18 x</b>	<b>0.92 x</b>	<b>0.89 x</b>	<b>0.87 x</b>
<b>Pre-Adjustment Coverage Factor</b>	<b>4.42 x</b>	<b>3.88 x</b>	<b>4.48 x</b>	<b>3.46 x</b>	<b>3.48 x</b>	<b>3.16 x</b>	<b>2.76 x</b>	<b>2.56 x</b>	<b>1.94 x</b>	<b>1.65 x</b>	<b>1.41 x</b>

FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2023

<b>Revenue Requirement - Rate Adjustments</b>											
Revenue Surpluses (Shortfalls)	\$ 120,114,107	\$ 9,082,431	\$ 15,185,097	\$ (4,491,676)	\$ (4,225,205)	\$ (12,230,030)	\$ (22,427,474)	\$ (24,776,579)	\$ (73,368,531)	\$ (91,640,718)	\$ (103,295,465)
Test Driving Deficiency	Surplus	Surplus	Surplus	Cash Flow	Cash Flow	Cash Flow	Cash Flow	Cash Flow	Cash Flow	Cash Flow	Cash Flow
Month Rate Adjustment Is Implemented	July	July	July	July	July	July	July	July	July	July	July
Calculated Rate Increase	0.00%	0.00%	0.00%	1.73%	1.55%	4.22%	6.97%	6.94%	18.52%	20.84%	21.16%
<b>Rate Increase</b>	<b>0.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>6.00%</b>	<b>11.00%</b>	<b>11.00%</b>	<b>11.00%</b>	<b>11.00%</b>	<b>11.00%</b>	<b>12.00%</b>
Cumulative Rate Increase	0.00%	0.00%	5.00%	10.25%	16.87%	29.72%	43.99%	59.83%	77.41%	96.92%	120.56%
<b>Change in Rate Revenues</b>											
Rate Revenues Pre-Adjustment	\$ 236,114,334	\$ 236,114,334	\$ 247,920,051	\$ 260,316,053	\$ 273,331,856	\$ 289,731,767	\$ 321,602,262	\$ 356,978,510	\$ 396,246,146	\$ 439,833,223	\$ 488,214,877
Additional Rate Revenue From Adjustment	-	11,805,717	12,396,003	13,015,803	16,399,911	31,870,494	35,376,249	39,267,636	43,587,076	48,381,654	58,585,785
<b>Total Rate Revenues After Adjustment</b>	<b>\$ 236,114,334</b>	<b>\$ 247,920,051</b>	<b>\$ 260,316,053</b>	<b>\$ 273,331,856</b>	<b>\$ 289,731,767</b>	<b>\$ 321,602,262</b>	<b>\$ 356,978,510</b>	<b>\$ 396,246,146</b>	<b>\$ 439,833,223</b>	<b>\$ 488,214,877</b>	<b>\$ 546,800,662</b>

<b>Post Adjustment Cash Flow and Coverage</b>											
<b>Revenues</b>											
Total Post Adjustment Rate Revenues	\$ 236,114,334	\$ 247,920,051	\$ 260,316,053	\$ 273,331,856	\$ 289,731,767	\$ 321,602,262	\$ 356,978,510	\$ 396,246,146	\$ 439,833,223	\$ 488,214,877	\$ 546,800,662
Non-Rate Revenue	9,788,965	9,788,965	10,131,159	10,490,463	10,867,731	11,343,090	12,266,870	13,292,266	14,430,456	15,693,846	17,096,209
<b>Total Year End Revenues</b>	<b>\$ 245,903,299</b>	<b>\$ 257,709,016</b>	<b>\$ 270,447,212</b>	<b>\$ 283,822,318</b>	<b>\$ 300,599,498</b>	<b>\$ 332,945,351</b>	<b>\$ 369,245,380</b>	<b>\$ 409,538,413</b>	<b>\$ 454,263,678</b>	<b>\$ 503,908,723</b>	<b>\$ 563,896,872</b>
Revenues plus Reserves	\$ 337,916,480	\$ 367,858,476	\$ 409,499,565	\$ 434,179,845	\$ 467,642,457	\$ 524,640,064	\$ 581,556,656	\$ 644,833,196	\$ 669,188,798	\$ 684,171,784	\$ 706,660,775
<b>Expenditures</b>											
Operating	\$ 143,838,437	\$ 146,379,474	\$ 151,823,306	\$ 157,470,495	\$ 163,328,670	\$ 169,405,750	\$ 175,709,950	\$ 182,249,798	\$ 189,034,140	\$ 196,072,158	\$ 203,373,380
Debt Service	37,921,294	48,662,818	48,605,093	73,845,696	79,246,122	96,014,137	129,645,656	159,797,558	239,950,993	292,973,628	347,483,032
Policy Expenditures	37,581,249	41,778,577	42,437,713	43,982,000	45,850,000	47,885,000	50,941,000	53,000,000	55,060,000	58,122,000	57,750,140
<b>Total Year End Expenditures</b>	<b>\$ 219,340,980</b>	<b>\$ 236,820,869</b>	<b>\$ 242,866,113</b>	<b>\$ 275,298,192</b>	<b>\$ 288,424,792</b>	<b>\$ 313,304,887</b>	<b>\$ 356,296,606</b>	<b>\$ 395,047,356</b>	<b>\$ 484,045,133</b>	<b>\$ 547,167,786</b>	<b>\$ 608,606,552</b>
<b>Net Year End Cash Flow</b>	<b>\$ 26,562,319</b>	<b>\$ 20,888,147</b>	<b>\$ 27,581,099</b>	<b>\$ 8,524,127</b>	<b>\$ 12,174,706</b>	<b>\$ 19,640,465</b>	<b>\$ 12,948,774</b>	<b>\$ 14,491,057</b>	<b>\$ (29,781,455)</b>	<b>\$ (43,259,063)</b>	<b>\$ (44,709,680)</b>
<b>Coverage w/out reserves</b>	<b>2.69 x</b>	<b>2.29 x</b>	<b>2.44 x</b>	<b>1.71 x</b>	<b>1.73 x</b>	<b>1.70 x</b>	<b>1.49 x</b>	<b>1.42 x</b>	<b>1.11 x</b>	<b>1.05 x</b>	<b>1.04 x</b>
<b>Coverage w/ reserves</b>	<b>5.12 x</b>	<b>4.55 x</b>	<b>5.30 x</b>	<b>3.75 x</b>	<b>3.84 x</b>	<b>3.70 x</b>	<b>3.13 x</b>	<b>2.89 x</b>	<b>2.0 x</b>	<b>1.67 x</b>	<b>1.45 x</b>

Functional Allocation	Total Flow	Wet Weather Flow	Dry Weather Flow	COD	TSS	FOG	As All Other	Total	Notes/Source
As All Other	0%	0%	0%	0%	0%	0%	100%	100%	
Future Capital Projects	35%	17%	17%	36%	23%	6%	0%	100%	Source: SSIP List of projects from K3 group. Allocation based on SF-specific unit process. Biosolids splits based on info and discussions with Bonnie Jones
Fixed Assets	91%	35%	56%	6%	3%	0%	0%	100%	Source: Asset List. Allocation based on SF-specific system. Input from Jon Liocorno. Biosolids splits based on info and discussions with Bonnie Jones.

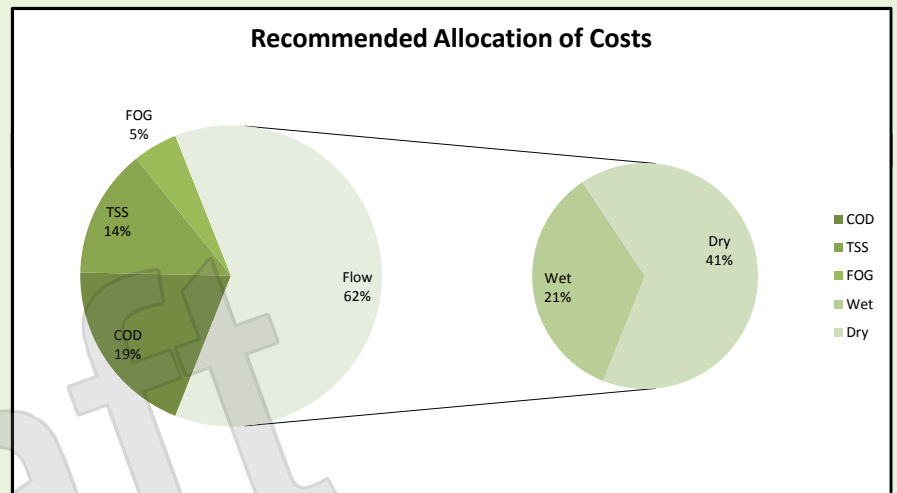
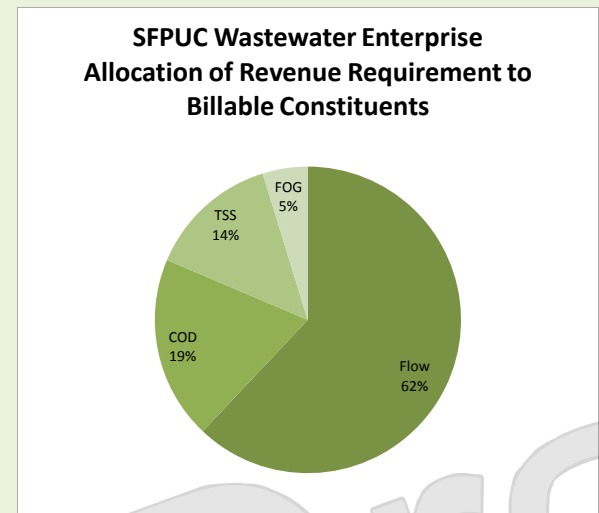
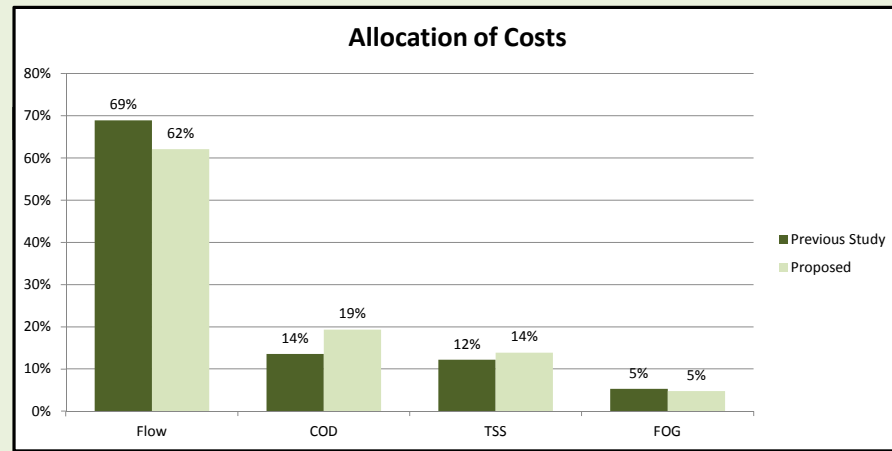
Existing Revenue Bonds	Average from 2015 to 2019	Total Flow	Wet Weather Flow	Dry Weather Flow	COD	TSS	FOG	As All Other	Total	Notes/Source
<b>2010 A</b>	\$ 6,334,880 [Input]	78%	29%	49%	10%	9%	2%	0%	100%	Source: Bond list of projects from Mike Brown. Allocation based on SF-specific unit process. Biosolids splits based on info and discussions with Bonnie Jones
<b>2010 B</b>	\$ 6,945,527 [Input]	78%	29%	49%	10%	9%	2%	0%	100%	Source: Bond list of projects from Mike Brown. Allocation based on SF-specific unit process. Biosolids splits based on info and discussions with Bonnie Jones
<b>2013 A</b>	\$ 16,480,760 Fixed Assets	91%	35%	56%	6%	3%	0%	0%	100%	Refunding bond - Assumed same allocation as existing assets
<b>2013 B</b>	\$ 12,023,333 [Input]	84%	32%	52%	6%	6%	3%	0%	100%	Source: Bond list of projects from Mike Brown. Allocation based on SF-specific unit process. Biosolids splits based on info and discussions with Bonnie Jones
Subtotal	\$ 41,784,500	\$ 35,445,447	\$ 13,479,002	\$ 21,966,446	\$ 3,049,549	\$ 2,433,279	\$ 813,904	\$ 42,320		
Reallocation of As All Others		\$ 35,936	\$ 13,666	\$ 22,270	\$ 3,092	\$ 2,467	\$ 825	\$ (42,320)		
<b>Total Dollar Allocation</b>	<b>\$ 41,784,500</b>	<b>\$ 35,481,383</b>	<b>\$ 13,492,667</b>	<b>\$ 21,988,716</b>	<b>\$ 3,052,641</b>	<b>\$ 2,435,746</b>	<b>\$ 814,729</b>	<b>\$ -</b>		
<b>Total Percent Allocation</b>		<b>85%</b>	<b>32%</b>	<b>53%</b>	<b>7%</b>	<b>6%</b>	<b>2%</b>	<b>0%</b>		

O&M Allocation	Average from 2015 to 2019	Allocation	Total Flow	Wet Weather Flow	Dry Weather Flow	COD	TSS	FOG	As All Other	Total	Notes/Source
<b>Total Dollar Allocation</b>	\$ 163,974,690		\$ 86,755,907	\$ 25,083,040	\$ 61,672,868	\$ 38,058,097	\$ 28,362,233	\$ 10,798,453	\$ -		
<b>Total Percent Allocation</b>		<b>100%</b>	53%	15%	38%	23%	17%	7%	0%		Source: O&M CIP from Master Plan. Allocation based on SF-specific unit process. Labor breakdown based on interview with George Engel, Herb Dang, and John Powell. Biosolids splits based on info and discussions with Bonnie Jones.
<b>Total O&amp;M Allocation</b>			53%	15%	38%	23%	17%	7%	0%		

Rev Req Allocation	Average from 2015 to 2019	Allocation	Total Flow	Wet Weather Flow	Dry Weather Flow	COD	TSS	FOG	As All Other	Total	Notes/Source
<b>Expense Categories</b>											
Operating Expenses	\$ 163,974,690	[O&M Allocation]	53%	15%	38%	23%	17%	7%	0%	100%	
Existing Debt	\$ 50,089,500	[Existing Debt]	85%	32%	53%	7%	6%	2%	0%	100%	
Future Debt	\$ 35,381,841	[Future Debt]	35%	17%	17%	36%	23%	6%	0%	100%	
Rate Funded Capital	\$ 46,219,143	Fixed Assets	91%	35%	56%	6%	3%	0%	0%	100%	
Additional Revenues From Rate Delay	\$ -	As All Other	0%	0%	0%	0%	0%	0%	100%	100%	
Year End Cash Flow	\$ 16,173,834	As All Other	0%	0%	0%	0%	0%	0%	100%	100%	
<b>Less: Offsetting Revenues</b>											
Other Non-Rate Revenues	\$ (11,019,863)	As All Other	0%	0%	0%	0%	0%	0%	100%	100%	
Total Revenue to be Collected	\$ 300,819,145		\$ 183,386,237	\$ 63,425,189	\$ 119,961,048	\$ 57,097,273	\$ 40,906,901	\$ 14,152,145	\$ 5,276,589		
Reallocation of As All Others			3,274,161	1,132,387	2,141,773	1,019,409	730,348	252,671	(5,276,589)		
<b>Total Dollar Allocation</b>	<b>\$ 300,819,145</b>		<b>\$ 186,660,398</b>	<b>\$ 64,557,576</b>	<b>\$ 122,102,822</b>	<b>\$ 58,116,682</b>	<b>\$ 41,637,249</b>	<b>\$ 14,404,817</b>	<b>\$ -</b>		
<b>Total Rev Req Allocation</b>			62%	21%	41%	19%	14%	5%	0%		

Summary	Total Flow	COD	TSS	FOG	Total
Operating Expenses	\$ 86,755,907	\$ 38,058,097	\$ 28,362,233	\$ 10,798,453	\$ 163,974,690
Existing Debt	54,785,619	16,406,209	11,148,842	3,126,737	85,467,407
Rate Funded Capital	51,880,689	5,757,666	3,634,494	1,001,445	62,274,294
Other Non-Rate Revenues	(6,837,902)	(2,128,980)	(1,525,291)	(527,689)	(11,019,863)
Total Revenue to be Collected	\$ 186,584,313	\$ 58,092,993	\$ 41,620,277	\$ 14,398,945	\$ 300,696,528

Unit Cost Calculation		Total Flow	Wet Weather Flow	Dry Weather Flow	COD	TSS	FOG	As All Other	Total
Units	Rev Req for 2015	26,285,549	Impervious Surface Area (1000 sq ft) 528,074	26,285,549	114,444,520	43,506,591	14,193,203		
Costs	\$ 260,316,053	\$ 161,527,944	\$ 55,865,372	\$ 105,662,572	\$ 50,291,697	\$ 36,031,099	\$ 12,465,314		
<b>Unit Costs</b>		<b>\$6.1452 per ccf</b>	<b>\$ 8.8159</b>	<b>\$4.0198 per ccf</b>	<b>\$0.4395 per lb</b>	<b>\$0.8282 per lb</b>	<b>\$0.8783 per lb</b>		
			per Impervious Surface Area (1000 sq ft)						



Draft



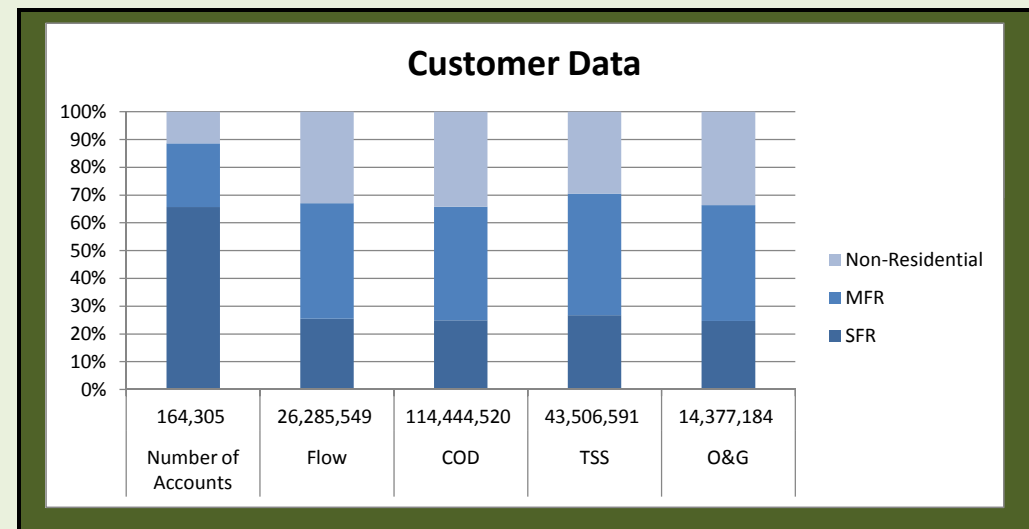
TSS	Discharge Forecast	12,804,370	12,804,370	12,804,370	12,804,370	12,804,370	12,804,370	12,804,370	12,804,370	12,804,370	12,804,370	12,804,370
Impervious Surface Area (1000 sq ft)	Schools and Parks Reduction: 24943	214,584	214,584	214,584	214,584	214,584	214,584	214,584	214,584	214,584	214,584	214,584
Gross Surface Area (1000 sq ft)	Schools and Parks Reduction: 37415	536,953	536,953	536,953	536,953	536,953	536,953	536,953	536,953	536,953	536,953	536,953
Impervious and Gross Surface Area		1,556,966	1,556,966	1,556,966	1,556,966	1,556,966	1,556,966	1,556,966	1,556,966	1,556,966	1,556,966	1,556,966

[Other 1]												
Number of Accounts	Customer Growth	0	0	0	0	0	0	0	0	0	0	0
Flow	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
O&G	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
COD	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
TSS	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
Impervious Surface Area (1000 sq ft)			0	0	0	0	0	0	0	0	0	0
Gross Surface Area (1000 sq ft)			0	0	0	0	0	0	0	0	0	0
Impervious and Gross Surface Area			0	0	0	0	0	0	0	0	0	0

[Other 2]												
Number of Accounts	Customer Growth	0	0	0	0	0	0	0	0	0	0	0
Flow	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
O&G	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
COD	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
TSS	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
Impervious Surface Area (1000 sq ft)			0	0	0	0	0	0	0	0	0	0
Gross Surface Area (1000 sq ft)			0	0	0	0	0	0	0	0	0	0
Impervious and Gross Surface Area			0	0	0	0	0	0	0	0	0	0

[Other 3]												
Number of Accounts	Customer Growth	0	0	0	0	0	0	0	0	0	0	0
Flow	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
O&G	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
COD	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
TSS	Discharge Forecast	0	0	0	0	0	0	0	0	0	0	0
Impervious Surface Area (1000 sq ft)			0	0	0	0	0	0	0	0	0	0
Gross Surface Area (1000 sq ft)			0	0	0	0	0	0	0	0	0	0
Impervious and Gross Surface Area			0	0	0	0	0	0	0	0	0	0

Summary	Total	SFR	MFR	Non-Residential
Number of Accounts	164,305	107,934	37,720	18,651
Flow	26,285,549	6,690,708	10,946,136	8,648,705
COD	114,444,520	28,550,165	46,719,799	39,174,555
TSS	43,506,591	11,645,463	19,056,758	12,804,370
O&G	14,377,184	3,547,902	5,988,422	4,840,860





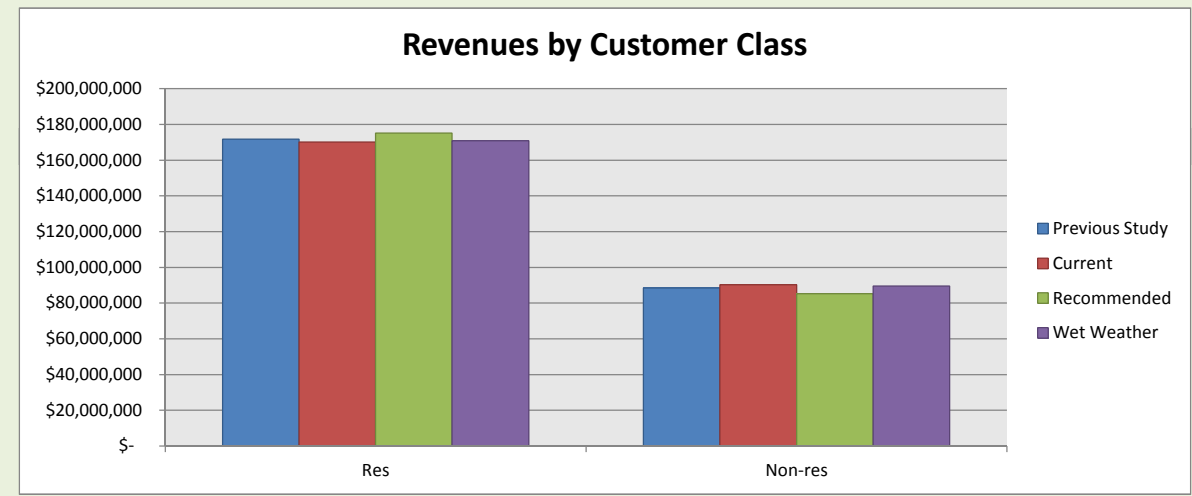
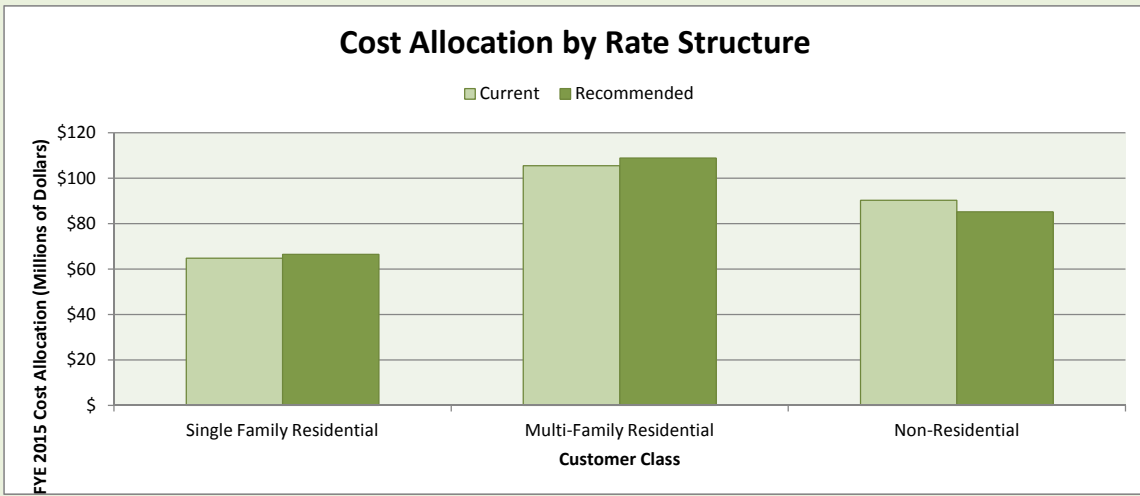
Test Year	2015	Total Flow	Wet Weather Flow	Dry Weather Flow	COD	TSS	FOG	Total
From Functional Allocation		62%	21%	41%	19%	14%	5%	100%
Cost Allocated to Category		\$ 161,527,944	\$ 55,865,372	\$ 105,662,572	\$ 50,291,697	\$ 36,031,099	\$ 12,465,314	\$ 260,316,053

Basis of Allocation to Customer Class	Number of Accounts	Flow	Impervious Surface Area (1000 sq ft)	Flow	COD	TSS	O&G
Unit	Units	CCF	1000 sq ft	CCF	lbs	lbs	lbs
Single Family Residential	107,934	6,690,708	191,617	6,690,708	28,550,165	11,645,463	3,547,902
Multi-Family Residential	37,720	10,946,136	121,872	10,946,136	46,719,799	19,056,758	5,988,422
Non-Residential	18,651	8,648,705	214,584	8,648,705	39,174,555	12,804,370	4,840,860
[Other 1]	-	-	-	-	-	-	-
[Other 2]	-	-	-	-	-	-	-
[Other 3]	-	-	-	-	-	-	-
<b>Total</b>	<b>164,305</b>	<b>26,285,549</b>	<b>528,074</b>	<b>26,285,549</b>	<b>114,444,520</b>	<b>43,506,591</b>	<b>14,377,184</b>

Basis of Allocation to Customer Class	Flow	Impervious Surface Area (1000 sq ft)	Flow	COD	TSS	O&G
Single Family Residential	25.5%	36.3%	25.5%	24.9%	26.8%	24.7%
Multi-Family Residential	41.6%	23.1%	41.6%	40.8%	43.8%	41.7%
Non-Residential	32.9%	40.6%	32.9%	34.2%	29.4%	33.7%
[Other 1]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
[Other 2]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
[Other 3]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Allocated Costs	Total Flow	Wet Weather Flow	Dry Weather Flow	COD	TSS	FOG	Total	With Wet Weather Allocation	Current
Single Family Residential	\$ 41,115,225	\$ 20,271,363	\$ 26,895,287	12,546,134	9,644,488	3,076,104	\$ 66,381,951	\$ 72,433,375	\$ 64,698,174
Multi-Family Residential	67,265,358	12,892,944	44,001,246	20,530,629	15,782,343	5,192,085	108,770,415	98,399,246	105,406,566
Non-Residential	53,147,361	22,701,066	34,766,039	17,214,934	10,604,268	4,197,125	85,163,688	89,483,432	90,211,312
[Other 1]	-	-	-	-	-	-	-	-	-
[Other 2]	-	-	-	-	-	-	-	-	-
[Other 3]	-	-	-	-	-	-	-	-	-
<b>Allocated Customer Costs</b>	<b>\$ 161,527,944</b>	<b>\$ 55,865,372</b>	<b>\$ 105,662,572</b>	<b>\$ 50,291,697</b>	<b>\$ 36,031,099</b>	<b>\$ 12,465,314</b>	<b>\$ 260,316,053</b>	<b>\$ 260,316,053</b>	<b>\$ 260,316,053</b>

Correct







SFPUC  
Wastewater Financial Model  
Rate Design



**Option 1: Recommended Rates**  
**Option 2: Retain Tiers**

Rate Design Assumptions					
<b>SFR</b>					
	Current Rate			Tier 1 Upper Limit	3 ccf
Tier 1	\$ 7.90	No tier		Price Differential	1.33
Tier 2	\$ 10.53				
<b>MFR</b>					
	Current Rate			Tier 1 Upper Limit	3 ccf
Tier 1	\$ 8.25	No tier		Price Differential	1.33
Tier 2	\$ 11.01				
<b>Single Family Residential</b>		<b>Option 1</b>		<b>Option 2</b>	
Dry Weather					
Annual Usage (ccf)		\$ 66,381,951		\$ 66,381,951 Dry Weather Flow	
Tier 1	3,192,054 48%	4.270 lbs COD		\$ 8.47 per ccf \$11.32 per Tgal	
Tier 2	3,498,654 52%	1.742 lbs TSS		\$ 11.27 per ccf \$15.06 per Tgal	
Total	6,690,708	\$ 9.93 per ccf 0.530 lbs FOG			
Wet Weather		N/A		\$ 28.33 per account	
<b>Multi-Family Residential</b>		<b>Option 1</b>		<b>Option 2</b>	
Annual Usage (ccf)					
		\$ 108,770,415		\$ 108,770,415 Dry Weather Flow	
Tier 1	7,505,853 69%	4.270 lbs COD		\$ 9.01 per ccf \$12.04 per Tgal	
Tier 2	3,440,283 31%	1.742 lbs TSS		\$ 11.99 per ccf \$16.03 per Tgal	
Total	10,946,136	\$ 9.93 per ccf 0.530 lbs FOG			
Wet Weather		N/A		\$ 28.33 per account	
<b>Non-Residential</b>		<b>Option 1</b>		<b>Option 2</b>	
Units					
Total Flow	\$ 53,147,361 8,648,705	\$ 6.1452 per ccf		N/A	
COD	\$ 17,214,934 39,174,555	\$ 0.4395 per lb		\$ 0.4395 per lb	
TSS	\$ 10,604,268 12,804,370	\$ 0.8282 per lb		\$ 0.8282 per lb	
FOG	\$ 4,197,125 4,840,860	\$ 0.8671 per lb		\$ 0.8671 per lb	
Dry Weather Flow	\$ 34,766,039 8,648,705	N/A		\$ 4.0198 per ccf	
Wet Weather Flow	(specific to Option)	N/A		\$ 28.33 per account	



	FY 2012 2013	FY 2013 2014	FY 2014 2015	FY 2015 2016	FY 2016 2017	FY 2017 2018	FY 2018 2019	FY 2019 2020	FY 2020 2021	FY 2021 2022	FY 2022 2023
<b>Rate Revenue Under Existing Rates</b>		\$ 247,920,051	\$ 247,920,051	\$ 247,920,051	\$ 247,920,051	\$ 247,920,051	\$ 247,920,051	\$ 247,920,051	\$ 247,920,051	\$ 247,920,051	\$ 247,920,051
<b>Total Revenue Under Existing Rates</b>		\$ 257,709,016	\$ 258,051,210	\$ 258,410,513	\$ 258,787,782	\$ 259,263,141	\$ 260,186,921	\$ 261,212,317	\$ 262,350,506	\$ 263,613,897	\$ 265,016,260

**Cash Flow**

**Revenues**

Rate Revenues with Rate Increase	\$ 236,114,334	\$ 247,920,051	\$ 260,316,053	\$ 273,331,856	\$ 289,731,767	\$ 321,602,262	\$ 356,978,510	\$ 396,246,146	\$ 439,833,223	\$ 488,214,877	\$ 546,800,662
Non-Rate Revenues	9,788,965	9,788,965	10,131,159	10,490,463	10,867,731	11,343,090	12,266,870	13,292,266	14,430,456	15,693,846	17,096,209
<b>Revenue Under Recommended Rates</b>	<b>\$ 245,903,299</b>	<b>\$ 257,709,016</b>	<b>\$ 270,447,212</b>	<b>\$ 283,822,318</b>	<b>\$ 300,599,498</b>	<b>\$ 332,945,351</b>	<b>\$ 369,245,380</b>	<b>\$ 409,538,413</b>	<b>\$ 454,263,678</b>	<b>\$ 503,908,723</b>	<b>\$ 563,896,872</b>

**Expenditures**

Operations	\$ 143,838,437	\$ 146,379,474	\$ 151,823,306	\$ 157,470,495	\$ 163,328,670	\$ 169,405,750	\$ 175,709,950	\$ 182,249,798	\$ 189,034,140	\$ 196,072,158	\$ 203,373,380
Debt Service	37,921,294	48,662,818	48,605,093	73,845,696	79,246,122	96,014,137	129,645,656	159,797,558	239,950,993	292,973,628	347,483,032
Pay-Go	37,581,249	41,778,577	42,437,713	43,982,000	45,850,000	47,885,000	50,941,000	53,000,000	55,060,000	58,122,000	57,750,140
<b>Total Expenditures</b>	<b>\$ 219,340,980</b>	<b>\$ 236,820,869</b>	<b>\$ 242,866,113</b>	<b>\$ 275,298,192</b>	<b>\$ 288,424,792</b>	<b>\$ 313,304,887</b>	<b>\$ 356,296,606</b>	<b>\$ 395,047,356</b>	<b>\$ 484,045,133</b>	<b>\$ 547,167,786</b>	<b>\$ 608,606,552</b>
<b>Operating Cash Flow Surplus (Deficiency)</b>	<b>\$ 26,562,319</b>	<b>\$ 20,888,147</b>	<b>\$ 27,581,099</b>	<b>\$ 8,524,127</b>	<b>\$ 12,174,706</b>	<b>\$ 19,640,465</b>	<b>\$ 12,948,774</b>	<b>\$ 14,491,057</b>	<b>\$ (29,781,455)</b>	<b>\$ (43,259,063)</b>	<b>\$ (44,709,680)</b>

**New Rate Summary**

Rate Adjustment	FYE 2014 Current	FYE 2015 Recommended	FYE 2016 5.00%	FYE 2017 6.00%	FYE 2018 11.00%	FYE 2019 11.00%	FYE 2020 11.00%	FYE 2021 11.00%	FYE 2022 11.00%	FYE 2023 12.00%
<b>SFR Tiered Rates</b>										
Tier 1	\$ 7.90	\$ 8.47	\$ 8.90	\$ 9.44	\$ 10.48	\$ 11.64	\$ 12.93	\$ 14.36	\$ 15.94	\$ 17.86
Tier 2	10.53	11.27	11.83	12.54	13.92	15.46	17.17	19.06	21.16	23.70
<b>SFR Non-Tiered Rate</b>	N/A	9.93	10.43	11.06	12.28	13.64	15.15	16.82	18.68	20.93
<b>MFR Tiered Rates</b>										
Tier 1	\$ 8.25	\$ 9.01	\$ 9.47	\$ 10.04	\$ 11.15	\$ 12.38	\$ 13.75	\$ 15.27	\$ 16.95	\$ 18.99
Tier 2	11.01	11.99	12.59	13.35	14.82	16.46	18.28	20.30	22.54	25.25
<b>MFR Non-Tiered Rate</b>	N/A	9.93	10.43	11.06	12.28	13.64	15.15	16.82	18.68	20.93
<b>Non-Residential Rates</b>										
Volume of Wastewater Discharged	\$ 6.6203	\$ 6.1452	\$ 6.4525	\$ 6.8397	\$ 7.5921	\$ 8.4273	\$ 9.3544	\$ 10.3834	\$ 11.5256	\$ 12.9087
COD per lb.	0.2178	0.4395	0.4615	0.4892	0.5431	0.6029	0.6693	0.7430	0.8248	0.9238
Suspended Solids per lb.	0.8907	0.8282	0.8697	0.9219	1.0234	1.1360	1.2610	1.3998	1.5538	1.7403
Oil/Grease per lb.	1.1145	0.8671	0.9105	0.9652	1.0714	1.1893	1.3202	1.4655	1.6268	1.8221

Wastewater Enterprise FY 2014 - 2023 Ten Year CIP

	A	B	C	D	E	F	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	USES	Project	Available Balance as of 6/30/13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	1	FY 13-22	FY 14-23	Change		
2	<b>Sewer System Improvement Program</b>													2					
3	Program Wide Efforts	CWWSIPPR / PL	3,384,668	22,000,000	22,000,000	20,000,000	20,000,000	13,000,000	18,000,000	19,000,000	16,000,000	16,000,000	16,000,000	3	111,000,000	182,000,000	71,000,000		
4	Biofuel/Alternative Energy Studies	CWWBAE	7,765,147	0	0	0	0	0	0	0	0	0	0	4	5,000,000	0	(5,000,000)		
5	<b>Subtotal</b>			<b>22,000,000</b>	<b>22,000,000</b>	<b>20,000,000</b>	<b>20,000,000</b>	<b>13,000,000</b>	<b>18,000,000</b>	<b>19,000,000</b>	<b>16,000,000</b>	<b>16,000,000</b>	<b>16,000,000</b>	5	<b>116,000,000</b>	<b>182,000,000</b>	<b>66,000,000</b>		
6	<b>Treatment Facilities</b>													6					
7	Biosolids/Digester Project	CWWSIPDP	34,643,856	40,000,000	38,100,000	171,000,000	68,300,000	801,900,000	34,200,000	54,800,000	48,000,000	24,700,000	14,200,000	7	1,698,000,000	1,295,200,000	(402,800,000)		
8	Southeast Plant - New 250 MGD Grit Improvements	CWWSIPSE02	2,931,679	3,000,000	3,000,000	13,300,000	14,000,000	129,800,000	12,100,000	7,900,000	1,800,000	0	0	8	0	184,900,000	184,900,000		
9	Transport/Storage & Combined Sewer Discharge Structures		0	0	0	0	0	0	0	0	0	0	0	9	40,000,000	0	(40,000,000)		
10	Southeast Plant	CWWSIPSE	23,293,939	22,500,000	49,300,000	79,600,000	59,300,000	69,400,000	123,500,000	59,500,000	51,670,000	128,250,000	25,500,000	10	273,000,000	668,520,000	395,520,000		
11	North Point Facility	CWWSIPTNP	1,227,376	7,250,000	3,500,000	5,200,000	16,750,000	8,400,000	8,800,000	15,600,000	38,600,000	39,800,000	12,300,000	11	54,750,000	156,200,000	101,450,000		
12	Treatment Plant Improvements	CWWSIPTP00	17,950,000	0	0	0	0	0	0	0	0	0	0	12	0	0	0		
13	Westside PS and FM		0	2,400,000	2,900,000	5,000,000	7,900,000	75,700,000	6,100,000	4,700,000	1,400,000	200,000	0	13	0	106,300,000	106,300,000		
14	Oceanside Plant	CWWSIPTPOP	1,546,265	2,700,000	6,200,000	8,400,000	15,000,000	2,700,000	19,500,000	35,900,000	2,500,000	150,000	9,700,000	14	46,700,000	102,750,000	56,050,000		
15	<b>Subtotal</b>			<b>77,850,000</b>	<b>103,000,000</b>	<b>282,500,000</b>	<b>181,250,000</b>	<b>1,087,900,000</b>	<b>204,200,000</b>	<b>178,400,000</b>	<b>143,970,000</b>	<b>193,100,000</b>	<b>61,700,000</b>	15	<b>2,112,450,000</b>	<b>2,513,870,000</b>	<b>401,420,000</b>		
16	<b>Sewer/Collection System</b>													16					
17	Central Bayside System Improvements	CWWSIPCT	21,959,745	6,300,000	13,900,000	21,900,000	45,030,000	22,000,000	158,800,000	505,000,000	215,400,000	36,500,000	98,000,000	17	1,038,000,000	1,122,830,000	84,830,000		
18	Collection System - Interceptors/Tunnels/Odor Control	CWWSIPCS	24,816,230	10,600,000	11,000,000	31,800,000	7,800,000	8,600,000	9,770,000	3,740,000	1,850,000	1,381,000	1,544,000	18	268,941,000	88,085,000	(180,856,000)		
19	Transport/Storage & Combined Sewer Discharge Structures		0	2,000,000	5,500,000	9,300,000	10,900,000	10,000,000	11,800,000	10,900,000	7,200,000	6,400,000	6,600,000	19	0	80,600,000	80,600,000		
20	Pump Stations / FM Improvements	CWWSIPPS	1,020,000	370,000	1,300,000	4,600,000	8,310,000	10,700,000	15,600,000	14,899,000	20,600,000	27,000,000	27,800,000	20	103,000,000	131,179,000	28,179,000		
21	Force Main Improvements (combined with Pump Stations)	CWWSIPNC	6,369,941	0	0	0	0	0	0	0	0	0	0	21	46,535,000	0	(46,535,000)		
22	<b>Subtotal</b>			<b>19,270,000</b>	<b>31,700,000</b>	<b>67,600,000</b>	<b>72,040,000</b>	<b>51,300,000</b>	<b>195,970,000</b>	<b>534,539,000</b>	<b>245,050,000</b>	<b>71,281,000</b>	<b>133,944,000</b>	22	<b>1,456,476,000</b>	<b>1,422,694,000</b>	<b>(33,782,000)</b>		
23	<b>Flood Control</b>													23					
24	Drainage Basin / Early Implementation Projects	CWWSIPFCDB	12,307,185	10,000,000	25,600,000	15,400,000	2,500,000	780,000	340,000	140,000	0	0	0	24	291,659,000	54,760,000	(236,899,000)		
25	Low Impact Design Program	CWWLID	2,135,789	0	0	0	0	0	0	0	0	0	0	25	49,000,000	0	(49,000,000)		
26	Green Infrastructure Projects		0	0	0	0	2,940,000	3,600,000	7,800,000	5,560,000	4,300,000	10,600,000	27,800,000	26	0	62,600,000	62,600,000		
27	Advance Rainfall Predictions & Operational Decision System	CWWSIPFCRP	40,000	2,830,000	11,700,000	8,270,000	560,000	520,000	200,000	140,000	0	0	0	27	0	24,220,000	24,220,000		
28	Watershed Assessment	CWWSIPUW	672,066	3,000,000	3,000,000	0	0	0	0	0	0	0	0	28	10,000,000	6,000,000	(4,000,000)		
29	<b>Subtotal</b>			<b>15,155,040</b>	<b>40,300,000</b>	<b>23,670,000</b>	<b>6,000,000</b>	<b>4,900,000</b>	<b>8,340,000</b>	<b>5,840,000</b>	<b>4,300,000</b>	<b>10,600,000</b>	<b>27,800,000</b>	29	<b>350,659,000</b>	<b>147,580,000</b>	<b>(203,079,000)</b>		
30	<b>SSIP TOTAL</b>			<b>162,063,886</b>	<b>134,950,000</b>	<b>393,770,000</b>	<b>279,290,000</b>	<b>1,157,100,000</b>	<b>426,510,000</b>	<b>737,779,000</b>	<b>409,320,000</b>	<b>290,981,000</b>	<b>239,444,000</b>	30	<b>4,035,585,000</b>	<b>4,266,144,000</b>	<b>230,559,000</b>		
31	<b>Wastewater Interim CIP</b>													31					
32	Pump Stations		0	0	0	0	0	0	0	0	0	0	0	32	4,000,000	0	(4,000,000)		
33	Sewer/Collection System		0	0	0	0	0	0	0	0	0	0	0	33	8,834,000	0	(8,834,000)		
34	Treatment Facilities		0	0	0	0	0	0	0	0	0	0	0	34	13,060,000	0	(13,060,000)		
35	<b>Subtotal CENMSCIC</b>			<b>52,831,711</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	35	<b>25,894,000</b>	<b>0</b>	<b>(25,894,000)</b>		
36	<b>Renewal and Replacement</b>													36					
37	Collection System - Condition Assessment	CWWRNROI	4,965,961	3,000,000	3,000,000	0	0	0	0	0	0	0	0	37	9,000,000	6,000,000	(3,000,000)		
38	Collection System - Sewer Improvements	CWWRNRCS	22,175,165	42,339,000	52,499,000	54,338,000	56,240,000	58,209,000	60,246,000	62,354,000	64,536,000	66,796,000	69,134,000	38	557,880,000	586,691,000	28,811,000		
39	Collection System - Spot Sewer	VARIOUS	1,061,383	18,600,000	19,251,000	19,925,000	20,622,000	21,345,000	22,091,000	22,864,000	23,665,000	14,000,000	14,490,000	39	190,362,000	196,853,000	6,491,000		
40	<b>Subtotal</b>			<b>28,202,509</b>	<b>63,939,000</b>	<b>74,750,000</b>	<b>74,263,000</b>	<b>79,554,000</b>	<b>82,337,000</b>	<b>85,218,000</b>	<b>88,201,000</b>	<b>80,796,000</b>	<b>83,624,000</b>	40	<b>757,242,000</b>	<b>789,544,000</b>	<b>32,302,000</b>		
41	Treatment Plant Improvements	CWWRNRTF	5,186,391	11,849,000	12,442,000	13,063,000	13,715,000	14,402,000	15,121,000	15,878,000	16,673,000	17,506,000	18,381,000	41	139,244,000	149,030,000	9,786,000		
42	<b>Treasure Island</b>													42					
43	New Wastewater Treatment Facility	CWP110	8,835,159	4,370,000	5,463,000	38,240,000	12,020,000	12,018,000	12,018,000	12,018,000	12,018,000	0	0	43	109,265,000	108,165,000	(1,100,000)		
44	<b>Subtotal</b>			<b>8,835,159</b>	<b>4,370,000</b>	<b>5,463,000</b>	<b>38,240,000</b>	<b>12,020,000</b>	<b>12,018,000</b>	<b>12,018,000</b>	<b>12,018,000</b>	<b>12,018,000</b>	<b>0</b>	44	<b>109,265,000</b>	<b>108,165,000</b>	<b>(1,100,000)</b>		
45	<b>Wastewater Facilities &amp; Infrastructure</b>													45					
46	Collection System Division Consolidation	CWWFAC02	3,262,649	10,000,000	0	0	0	0	0	0	0	0	0	46	20,000,000	10,000,000	(10,000,000)		
47	Ocean Beach Protection	CWWFAC01	2,926,797	1,500,000	0	0	0	0	0	0	0	0	0	47	3,000,000	1,500,000	(1,500,000)		
48	Southeast Community Center Improvements	CWWFAC03	352,145	15,000,000	0	0	0	0	0	0	0	0	0	48	17,500,000	15,000,000	(2,500,000)		
49	<b>Subtotal</b>			<b>6,541,591</b>	<b>26,500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	49	<b>40,500,000</b>	<b>26,500,000</b>	<b>(14,000,000)</b>		
50	<b>Total USES</b>			<b>263,661,247</b>	<b>241,608,000</b>	<b>289,655,000</b>	<b>519,336,000</b>	<b>381,887,000</b>	<b>1,263,074,000</b>	<b>535,986,000</b>	<b>850,893,000</b>	<b>526,212,000</b>	<b>389,283,000</b>	<b>341,449,000</b>	50	<b>5,107,730,000</b>	<b>5,339,383,000</b>	<b>231,653,000</b>	
51	<b>SOURCES</b>			<b>Available Balance</b>	<b>FY 13-14</b>	<b>FY 14-15</b>	<b>FY 15-16</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>	<b>FY 19-20</b>	<b>FY 20-21</b>	<b>FY 21-22</b>	<b>FY 22-23</b>	51	<b>FY 13-22</b>	<b>FY 14-23</b>	<b>Change</b>	
52	<b>Revenue Funding</b>													52					
53	Revenue		-	37,000,000	39,000,000	41,000,000	43,000,000	45,000,000	48,000,000	50,000,000	52,000,000	55,000,000	57,750,140	53	443,000,000	467,750,140	24,750,140		
54	BAB Interest Income		-	0	0	0	0	0	0	0	0	0	0	54	800,000	0	(800,000)		
55	<b>Total Revenue Sources</b>			<b>0</b>	<b>37,000,000</b>	<b>39,000,000</b>	<b>41,000,000</b>	<b>43,000,000</b>	<b>45,000,000</b>	<b>48,000,000</b>	<b>50,000,000</b>	<b>52,000,000</b>	<b>55,000,000</b>	<b>57,750,140</b>	55	<b>443,800,000</b>	<b>467,750,140</b>	<b>23,950,140</b>	
56	<b>Debt Funding</b>													56					
57	Revenue Bonds		-	195,029,514	239,955,000	474,336,000	334,887,000	1,214,074,000	483,986,000	796,893,000	474,212,000	329,283,000							

Wastewater Enterprise FY 2014 - 2023 Ten Year Programmatic Plan

San Francisco Public Utilities Commission

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	USES	Project	Available Balance as of 6/30/13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	1	FY 13-22	FY 14-23	Change			
2	<b>Program/Project</b>																			
3	Treasure Island Facilities Maintenance	PUW511	1,200,649	1,200,000	1,236,000	1,273,000	1,331,000	1,350,000	1,390,000	1,432,000	1,475,000	1,519,000	0	3	13,406,000	12,206,000	(1,200,000)			
4	Low Impact Development	PWW100	733,461	1,181,000	681,000	681,000	681,000	681,000	681,000	681,000	681,000	681,000	0	4	8,110,000	6,629,000	(1,481,000)			
5	Youth Employment Project	PYEAES06	8,355	697,864	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	0	5	3,756,546	3,097,864	(658,682)			
6	Surety Bond Program	PUW513	0	31,713	31,713	0	0	0	0	0	0	0	0	6	94,314	63,426	(30,888)			
7	Southeast Community Center Program	PWW101	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0			
8	<b>Subtotal</b>		<b>1,942,465</b>	<b>3,110,577</b>	<b>2,248,713</b>	<b>2,254,000</b>	<b>2,312,000</b>	<b>2,331,000</b>	<b>2,371,000</b>	<b>2,413,000</b>	<b>2,456,000</b>	<b>2,500,000</b>	<b>0</b>	<b>8</b>	<b>25,366,860</b>	<b>21,996,290</b>	<b>(3,370,570)</b>			
9														<b>9</b>						
10	525 Golden Gate - Operations & Maintenance	PUW514	20,410	692,000	713,000	734,000	756,000	779,000	802,000	826,000	850,000	875,000	0	10	7,721,000	7,027,000	(694,000)			
11	525 Golden Gate - Lease Payments	PUW515	787,393	2,424,000	2,424,000	2,424,000	2,424,000	2,424,000	2,424,000	2,425,000	2,424,000	2,424,000	0	11	23,675,000	21,817,000	(1,858,000)			
12	<b>Subtotal</b>		<b>807,803</b>	<b>3,116,000</b>	<b>3,137,000</b>	<b>3,158,000</b>	<b>3,180,000</b>	<b>3,203,000</b>	<b>3,226,000</b>	<b>3,251,000</b>	<b>3,274,000</b>	<b>3,299,000</b>	<b>0</b>	<b>12</b>	<b>31,396,000</b>	<b>28,844,000</b>	<b>(2,552,000)</b>			
13														<b>13</b>						
14														<b>14</b>						
15	<b>Total USES</b>		<b>2,750,268</b>	<b>6,226,577</b>	<b>5,385,713</b>	<b>5,412,000</b>	<b>5,492,000</b>	<b>5,534,000</b>	<b>5,597,000</b>	<b>5,664,000</b>	<b>5,730,000</b>	<b>5,799,000</b>	<b>0</b>	<b>15</b>	<b>56,762,860</b>	<b>50,840,290</b>	<b>(5,922,570)</b>			
16														<b>16</b>						
17	<b>SOURCES</b>		<b>Available Balance</b>	<b>FY 13-14</b>	<b>FY 14-15</b>	<b>FY 15-16</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>	<b>FY 19-20</b>	<b>FY 20-21</b>	<b>FY 21-22</b>	<b>FY 22-23</b>	<b>17</b>	<b>FY 13-22</b>	<b>FY 14-23</b>	<b>Change</b>			
18	Infrastructure - Recovery Capital (O&M)		0	200,000	206,000	212,000	218,000	225,000	232,000	239,000	246,000	253,000	0	18	2,091,000	2,031,000	(60,000)			
19	Infrastructure - Recovery Capital (Lease)		0	696,000	1,190,000	1,666,000	1,872,000	1,872,000	1,872,000	1,873,000	1,872,000	1,872,000	0	19	14,945,000	14,785,000	(160,000)			
20	Federal Bond Interest Subsidy		0	552,000	552,000	552,000	552,000	552,000	552,000	552,000	552,000	552,000	0	20	5,520,000	4,968,000	(552,000)			
21	Revenue		0	4,778,577	3,437,713	2,982,000	2,850,000	2,885,000	2,941,000	3,000,000	3,060,000	3,122,000	0	21	34,206,860	29,056,290	(5,150,570)			
22	<b>Total SOURCES</b>		<b>0</b>	<b>6,226,577</b>	<b>5,385,713</b>	<b>5,412,000</b>	<b>5,492,000</b>	<b>5,534,000</b>	<b>5,597,000</b>	<b>5,664,000</b>	<b>5,730,000</b>	<b>5,799,000</b>	<b>0</b>	<b>22</b>	<b>56,762,860</b>	<b>50,840,290</b>	<b>(5,922,570)</b>			
23														<b>23</b>						
24	Total Sources		-	6,226,577	5,385,713	5,412,000	5,492,000	5,534,000	5,597,000	5,664,000	5,730,000	5,799,000	0	24	56,762,860	50,840,290	(5,922,570)			
25	Total Uses		-	6,226,577	5,385,713	5,412,000	5,492,000	5,534,000	5,597,000	5,664,000	5,730,000	5,799,000	0	25	56,762,860	50,840,290	(5,922,570)			
26	NET (Sources - Uses)		0	0	0	0	0	0	0	0	0	0	0	26	0	0	0			

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O&M PERCENTAGE ALLOCATIONS

	COD	TSS	FOG	FLOW		
				TOTAL	DRY	WET
<b>SOUTHEAST PLANT (SEP)</b>						
Influent Pumping		5%		95%	79%	16%
Headworks and Grit Removal		60%		40%	33%	7%
Primary Clarifiers		60%		40%	33%	7%
Aeration Basins	80%			20%	17%	3%
Secondary Clarifiers	80%			20%	17%	3%
Chlorination and Dechlorination				100%	83%	17%
Solids Thickening	77%	19%	4%	0%	0%	0%
Solids Blending	51%	34%	15%	0%	0%	0%
Digester and Gas Management	51%	34%	15%	0%	0%	0%
Centrifuge (Dewatering, Loadout, and Hauling)	60%	40%		0%	0%	0%
SEP Effluent (Booster) PS				100%	83%	17%
Hauling	60%	40%	0%	0%	0%	0%
Chemicals						
Labor						
Other						

SEP Total

<b>OCEANSIDE PLANT (OSP)</b>						
Influent Pumping (Westside PS)		5%		95%	70%	25%
Screening and Vortex Grit Tanks		60%		40%	30%	10%
Primary Clarifiers		60%		40%	30%	10%
Aeration Basins	80%			20%	15%	5%
Secondary Clarifiers	80%			20%	15%	5%
Gravity Belt Thickener	26%	60%	15%			
Anaerobic Digesters	26%	60%	15%			
Belt Filter Press	30%	70%				
Cyclone Classifier	30%	70%				
HVAC						
Chemicals						
Labor						

OSP Total

<b>NORTH POINT FACILITY (NPF)</b>						
Screening				100%	0%	100%
Grit Chambers				100%	0%	100%
Primary Clarifiers		50%		50%	0%	50%
Hypochlorite Storage & Dosing System				100%	0%	100%
Dechlorination				100%	0%	100%
Chemicals						
Labor						

NPF Total

<b>COLLECTION SYSTEM</b>						
Collection System	0%		15%	85%	65%	20%
Channel PS		5%	3%	92%	70%	22%
All Other PSs		5%	3%	92%	70%	22%
Grease Recovery and Recycle			100%			

Collection Total

**CAPITAL ALLOCATION**

	COD	TSS	FOG	FLOW TOTAL	FLOW DRY	FLOW WET
<b>SOUTHEAST PLANT (SEP)</b>						
Influent Pumping				100%	63%	37%
Headworks		20%		80%	50%	30%
Primary Clarifiers		19%	2%	79%	50%	29%
Aeration	95%			5%		
Secondary Clarifiers	32%	8%		60%	38%	22%
Chlorination and Dechlorination				100%	63%	37%
Solids Thickening	77%	19%	4%			
Biosolids Handling	54%	36%	10%			
SEP Effluent (Booster) PS				100%	63%	37%

SEP R&R  
SEP All/Other

SEP Total

<b>OCEANSIDE PLANT (OSP)</b>						
Influent Pumping, Screening and Vortex Grit Tanks		10%		90%	56%	34%
Primary Clarifiers		19%	2%	79%	49%	30%
Aeration	95%			5%		
Secondary Clarifiers	32%	8%		60%	37%	23%
Biosolids Processing	27%	63%	10%			
OSP Effluent Discharge				100%	62%	38%

OSP All/Other

OSP Total

<b>NORTH POINT FACILITY (NPF)</b>						
NPF Total				100%	0%	100%

<b>COLLECTION SYSTEM</b>						
Collection System				100%	63%	37%
Grease Recovery and Recycle			100%			

Collection Total

ALL OTHER  
ADMINISTRATION

**CAPITAL ASSETS**

	SEP		OSP		NP
COD	0.60	0.54	0.30	0.27	
TSS	0.40	0.36	0.70	0.63	
FOG	-	0.10	-	0.10	
Flow - Dry		63%		62%	0%
Flow - Wet		37%		38%	100%



## Appendix E: **Water Model**

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FY 2012 2013	FY 2013 2014	FY 2014 2015	FY 2015 2016	FY 2016 2017	FY 2017 2018	FY 2018 2019	FY 2019 2020	FY 2020 2021	FY 2021 2022	FY 2022 2023
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**O&M Assumptions**

**Cost Escalators**

General Escalation	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Labor Inflation	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Power and Chemicals	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Construction Inflation	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Potable Water Demand Growth	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Customer Growth	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Price Elasticity of Demand	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%
Conservation Offset	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%
Customer Growth Plus Demand	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
No Annual Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**Wholesale Contribution (Future years to be updated)**

J-Table Consumption Proportion	65.27%	65.82%	65.60%	65.60%	65.60%	65.60%	65.60%	65.60%	65.60%	65.60%	65.60%
Regional Water O&M Expenses	60.99%	60.99%	60.99%	60.99%	60.99%	60.99%	60.99%	60.99%	60.99%	60.99%	60.99%
Direct Wholesale O&M Expenses	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%
Regional Administrative and General Expenses	65.73%	65.72%	65.72%	65.72%	65.72%	65.72%	65.72%	65.72%	65.72%	65.72%	65.72%
Direct Wholesale Administrative and General Expenses	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Wholesale O&M Expenses	39.93%	40.27%	40.13%	40.13%	40.13%	40.13%	40.13%	40.13%	40.13%	40.13%	40.13%
Wholesale Administrative and General Expenses	43.05%	43.05%	43.05%	43.05%	43.05%	43.05%	43.05%	43.05%	43.05%	43.05%	43.05%
Source of Supply	40.24%	40.27%	40.24%	40.24%	40.24%	40.24%	40.24%	40.24%	40.24%	40.24%	40.24%
Administration	36.60%	36.60%	36.60%	36.60%	36.60%	36.60%	36.60%	36.60%	36.60%	36.60%	36.60%
Pumping	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Treatment	64.37%	65.61%	64.37%	64.37%	64.37%	64.37%	64.37%	64.37%	64.37%	64.37%	64.37%
Transmission & Distribution	30.59%	30.60%	30.59%	30.59%	30.59%	30.59%	30.59%	30.59%	30.59%	30.59%	30.59%
Customer Accounts	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Services of SFPUC Bureaus	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%
Other Admin/General Expenses	26.46%	26.46%	26.46%	26.46%	26.46%	26.46%	26.46%	26.46%	26.46%	26.46%	26.46%
Compliance Audit	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
No Contribution	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

<sup>1</sup> General Inflation sourced from BLS CPI

<sup>2</sup> Labor Inflation sourced from

**O&M Summary**

**Revenues**

Rate Revenues (prior to rate increase)	\$ 178,046,142	\$ 178,936,373	\$ 191,520,073	\$ 215,574,994	\$ 242,651,213	\$ 268,250,916	\$ 291,159,545	\$ 316,024,570	\$ 343,013,068	\$ 372,306,384	\$ 392,876,312
Non-Rate Revenues	214,614,691	177,970,512	264,142,447	265,467,413	265,754,791	276,047,316	318,423,716	342,821,221	324,602,702	328,429,130	343,308,720
<b>Total Revenues</b>	<b>\$ 392,660,833</b>	<b>\$ 356,906,884</b>	<b>\$ 455,662,520</b>	<b>\$ 481,042,407</b>	<b>\$ 508,406,004</b>	<b>\$ 544,298,232</b>	<b>\$ 609,583,261</b>	<b>\$ 658,845,790</b>	<b>\$ 667,615,770</b>	<b>\$ 700,735,514</b>	<b>\$ 736,185,032</b>
Calculation Check	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct

**Expenditures**

Administration	\$ 92,933,206	\$ 91,754,653	\$ 94,899,172	\$ 98,153,701	\$ 101,522,168	\$ 105,008,644	\$ 108,617,346	\$ 112,352,648	\$ 116,219,079	\$ 120,221,337	\$ 124,364,291
City Distribution	34,947,094	35,989,227	37,330,442	38,722,355	40,166,905	41,666,107	43,222,053	44,836,916	46,512,953	48,252,508	50,058,016
Water Quality	14,721,470	15,187,412	15,751,211	16,336,252	16,943,344	17,573,328	18,227,080	18,905,506	19,609,550	20,340,190	21,098,443
Water Supply and Treatment	47,393,688	48,121,984	50,035,834	52,027,773	54,101,063	56,259,107	58,505,453	60,843,799	63,278,003	65,812,090	68,450,253
Natural Resources	10,322,949	10,733,839	11,143,297	11,568,537	12,010,171	12,468,838	12,945,199	13,439,942	13,953,784	14,487,466	15,041,762
Water Resources	8,127,931	8,291,023	8,575,978	8,870,931	9,176,240	9,492,275	9,819,421	10,158,076	10,508,654	10,871,583	11,247,307
Other	21,585,000	-	-	-	-	-	-	-	-	-	-
<b>Total Expenditures</b>	<b>\$ 230,031,338</b>	<b>\$ 210,078,138</b>	<b>\$ 217,735,935</b>	<b>\$ 225,679,549</b>	<b>\$ 233,919,892</b>	<b>\$ 242,468,300</b>	<b>\$ 251,336,552</b>	<b>\$ 260,536,888</b>	<b>\$ 270,082,024</b>	<b>\$ 279,985,175</b>	<b>\$ 290,260,073</b>
Calculation Check	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct	Correct

**Net Operating Surplus (Deficiency) - Excluding Debt and Capital Replacement**

	\$ 162,629,495	\$ 146,828,746	\$ 237,926,585	\$ 255,362,858	\$ 274,486,112	\$ 301,829,932	\$ 358,246,709	\$ 398,308,903	\$ 397,533,747	\$ 420,750,339	\$ 445,924,959
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**O&M Detail - Revenues**

Rate Code Line Item Description	Type	Revenue Escalator	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
<b>Fixed Water Sales</b>												
W-1A Single Family Residential	Rates	Customer Growth	\$ 10,646,392	\$ 10,699,624	\$ 11,452,075	\$ 12,890,456	\$ 14,509,497	\$ 16,040,249	\$ 17,410,086	\$ 18,896,907	\$ 20,510,703	\$ 22,262,317
W-1B Multi-Family Residential	Rates	Customer Growth	4,968,066	4,992,906	5,344,032	6,015,243	6,770,757	7,485,072	8,124,298	8,818,113	9,571,179	10,388,558



			FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
			2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
W-1C	Builders & Contractors	Rates	279,730	281,129	300,899	338,692	381,232	421,452	457,444	496,509	538,911	584,934	617,252
	Commercial	Rates	3,013,679	3,028,747	3,241,744	3,648,907	4,107,210	4,540,520	4,928,281	5,349,156	5,805,974	6,301,804	6,649,979
	Combo - Non-Residential	Rates	120,639	121,242	129,769	146,067	164,414	181,759	197,281	214,129	232,416	252,264	266,202
	Combo - Residential	Rates	893,777	898,246	961,415	1,082,169	1,218,089	1,346,598	1,461,597	1,586,417	1,721,897	1,868,947	1,972,207
	Docks & Ships	Rates	31,250	31,406	33,615	37,837	42,589	47,082	51,103	55,467	60,204	65,346	68,956
W-2	Fire - Non-Residential	Rates	2,642,590	2,655,803	2,842,572	3,199,599	3,601,469	3,981,424	4,321,438	4,690,488	5,091,056	5,525,832	5,831,135
W-2	Fire - Residential	Rates	877,680	882,068	944,100	1,062,679	1,196,151	1,322,345	1,435,273	1,557,846	1,690,886	1,835,288	1,936,687
W-1C	Industrial Water	Rates	45,971	46,201	49,450	55,661	62,652	69,262	75,177	81,597	88,565	96,128	101,440
	Irrigation - Non-Residential	Rates	103,273	103,789	111,088	125,041	140,746	155,595	168,883	183,305	198,960	215,951	227,882
	Irrigation - Residential	Rates	64,845	65,169	69,752	78,513	88,374	97,698	106,041	115,097	124,927	135,595	143,087
	Municipal - Combo	Rates	25,751	25,880	27,700	31,179	35,095	38,797	42,111	45,707	49,610	53,847	56,822
	Municipal - Fire	Rates	321,326	322,933	345,643	389,056	437,921	484,122	525,466	570,340	619,047	671,914	709,037
W-34	Municipal - Irrigation	Rates	219,236	220,332	235,827	265,447	298,787	330,309	358,517	389,135	422,367	458,437	483,766
	Municipal - Water	Rates	455,199	457,475	489,647	551,147	620,371	685,820	744,389	807,959	876,959	951,852	1,004,441
	Suburban	Rates	115,656	116,234	124,408	140,034	157,622	174,252	189,133	205,285	222,816	241,844	255,206
<b>Total Fixed Water Sales</b>			<b>\$ 24,825,060</b>	<b>\$ 24,949,185</b>	<b>\$ 26,703,737</b>	<b>\$ 30,057,726</b>	<b>\$ 33,832,976</b>	<b>\$ 37,402,356</b>	<b>\$ 40,596,517</b>	<b>\$ 44,063,459</b>	<b>\$ 47,826,479</b>	<b>\$ 51,910,860</b>	<b>\$ 54,778,935</b>
<b>Variable Water Sales</b>													
	Single Family Residential	Rates	\$ 35,714,243	\$ 35,892,814	\$ 38,416,976	\$ 43,242,149	\$ 48,673,362	\$ 53,808,402	\$ 58,403,640	\$ 63,391,311	\$ 68,804,929	\$ 74,680,869	\$ 78,806,987
	Multi-Family Residential	Rates	49,832,731	50,081,895	53,603,904	60,336,554	67,914,825	75,079,840	81,491,658	88,451,045	96,004,765	104,203,572	109,960,819
	Builders & Contractors	Rates	360,311	362,113	387,578	436,258	491,052	542,858	589,218	639,537	694,154	753,434	795,062
	Commercial	Rates	44,642,697	44,865,910	48,021,106	54,052,557	60,841,558	67,260,342	73,004,375	79,238,949	86,005,955	93,350,864	98,508,499
	Combo - Non-Residential	Rates	1,424,967	1,432,092	1,532,804	1,725,324	1,942,025	2,146,908	2,330,254	2,529,258	2,745,257	2,979,702	3,144,330
	Combo - Residential	Rates	4,324,228	4,345,849	4,651,471	5,235,696	5,893,299	6,515,042	7,071,427	7,675,326	8,330,799	9,042,250	9,541,834
	Docks & Ships	Rates	74,307	74,678	79,930	89,969	101,269	111,953	121,514	131,891	143,155	155,380	163,965
	Fire - Non-Residential	Rates	59,020	59,315	63,486	71,460	80,435	88,921	96,515	104,758	113,704	123,414	130,233
	Fire - Residential	Rates	17,979	18,069	19,340	21,769	24,503	27,088	29,401	31,912	34,637	37,596	39,673
	Industrial Water	Rates	464,829	467,153	500,005	562,806	633,494	700,328	760,136	825,051	895,511	971,987	1,025,690
	Irrigation - Non-Residential	Rates	918,898	923,492	988,437	1,112,584	1,252,325	1,384,445	1,502,677	1,631,006	1,770,293	1,921,477	2,027,638
	Irrigation - Residential	Rates	701,433	704,940	754,515	849,282	955,952	1,056,804	1,147,056	1,245,014	1,351,338	1,466,743	1,547,780
	Municipal - Combo	Rates	172,761	173,625	185,835	209,176	235,448	260,288	282,517	306,644	332,831	361,255	381,214
	Municipal - Fire	Rates	3,388	3,405	3,645	4,103	4,618	5,105	5,541	6,014	6,528	7,085	7,477
	Municipal - Irrigation	Rates	1,771,685	1,780,543	1,905,760	2,145,124	2,414,551	2,669,286	2,897,243	3,144,668	3,413,223	3,704,712	3,909,397
	Municipal - Water	Rates	5,395,367	5,422,343	5,803,670	6,532,611	7,353,107	8,128,859	8,823,064	9,576,554	10,394,391	11,282,072	11,905,407
	Suburban	Rates	7,342,239	7,378,950	7,897,875	8,889,848	10,006,413	11,062,090	12,006,792	13,032,172	14,145,120	15,353,113	16,201,373
<b>Total Variable Water Sales</b>			<b>\$ 153,221,082</b>	<b>\$ 153,987,187</b>	<b>\$ 164,816,336</b>	<b>\$ 185,517,268</b>	<b>\$ 208,818,237</b>	<b>\$ 230,848,561</b>	<b>\$ 250,563,028</b>	<b>\$ 271,961,111</b>	<b>\$ 295,186,589</b>	<b>\$ 320,395,524</b>	<b>\$ 338,097,377</b>
<b>Other</b>													
	Low Income Discounts	Non-Rate	(616,923)	(620,007)	(623,107)	(626,223)	(629,354)	(632,501)	(635,663)	(638,842)	(642,036)	(645,246)	(648,472)
	Other Property Rentals	Non-Rate	9,987,079	10,286,692	10,595,292	10,913,151	11,240,546	11,577,762	11,925,095	12,282,848	12,651,333	13,030,873	13,421,799
	SFWD Property Tax Reimbursements	Non-Rate	(2,492)	(2,567)	(2,644)	(2,723)	(2,805)	(2,889)	(2,976)	(3,065)	(3,157)	(3,251)	(3,349)
68100	Treasure Island - Utilities Revenues	Non-Rate	1,181,000	1,216,430	1,252,923	1,290,511	1,329,226	1,369,103	1,410,176	1,452,481	1,496,055	1,540,937	1,587,165
78001	Water Service Installation Charges	Non-Rate	2,291,000	2,359,730	2,430,522	2,503,438	2,578,541	2,655,897	2,735,574	2,817,641	2,902,170	2,989,235	3,078,912
79999	Other Non-Operating Revenue	Non-Rate	3,500,000	3,605,000	3,713,150	3,824,545	3,939,281	4,057,459	4,179,183	4,304,559	4,433,695	4,566,706	4,703,707
	City Distribution - Shops 08699 Interdepartmental Recov	Non-Rate	30,337	31,247	32,185	33,150	34,145	35,169	36,224	37,311	38,430	39,583	40,771
086JV	Water Quality - Engineering, Expenditure Recovery from	Non-Rate	10,217	10,524	10,840	11,165	11,500	11,845	12,200	12,566	12,943	13,331	13,731
086AC	Water Quality, Expenditure Recovery from Airport	Non-Rate	120,000	123,600	127,308	131,127	135,061	139,113	143,286	147,585	152,012	156,573	161,270
086WP	Natural Resources, Expenditure Recovery from Cleanwa	Non-Rate	427,884	440,721	453,942	467,560	481,587	496,035	510,916	526,243	542,031	558,292	575,040
75940	Port Penalty and Service Charges	Non-Rate	(51,165)	(52,700)	(54,281)	(55,909)	(57,587)	(59,314)	(61,094)	(62,926)	(64,814)	(66,759)	(68,761)
76199	Gain/Loss - Sale of Fixed Assets	Non-Rate	3,251,181										
76251	Sale of Scrap and Waste	Non-Rate	32,781	33,764	34,777	35,821	36,895	38,002	39,142	40,316	41,526	42,772	44,055
78902	NSF Checks	Non-Rate	(55,092)	(56,745)	(58,447)	(60,201)	(62,007)	(63,867)	(65,783)	(67,756)	(69,789)	(71,883)	(74,039)
8699	525 Golden Gate (08699) - Does not appear in 2A	Non-Rate	3,874,000	3,990,220	4,109,927	4,233,224	4,360,221	4,491,028	4,625,759	4,764,531	4,907,467	5,054,691	5,206,332
	BABs DSRF Interest Income	Non-Rate	614,839	614,839	614,839	614,839	614,839	614,839	614,839	614,839	614,839	614,839	614,839
	Wholesale Revenues Offsetting Expenditures in model	Non-Rate	[Calculated]										
<b>Total Other</b>			<b>\$ 214,614,691</b>	<b>\$ 177,970,512</b>	<b>\$ 264,142,447</b>	<b>\$ 265,467,413</b>	<b>\$ 265,754,791</b>	<b>\$ 276,047,316</b>	<b>\$ 318,423,716</b>	<b>\$ 342,821,221</b>	<b>\$ 324,602,702</b>	<b>\$ 328,429,130</b>	<b>\$ 343,308,720</b>
<b>Total Operating Revenues</b>			<b>\$ 392,660,833</b>	<b>\$ 356,906,884</b>	<b>\$ 455,662,520</b>	<b>\$ 481,042,407</b>	<b>\$ 508,406,004</b>	<b>\$ 544,298,232</b>	<b>\$ 609,583,261</b>	<b>\$ 658,845,790</b>	<b>\$ 667,615,770</b>	<b>\$ 700,735,514</b>	<b>\$ 736,185,032</b>
<b>Option 1 BMP 1.4</b>			86.06%	86.06%	86.06%	86.06%	86.06%	86.06%	86.06%	86.06%	86.06%	86.06%	86.06%
<b>Option 2 BMP 1.4</b>													

FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	

O&M Detail - Expenditures

FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	

Acct Code Line Item Description

Type Expense Escalator

Board Adopted	Board Adopted	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
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**Administration**

1	Salaries	On-Going	Labor Inflation	\$ 1,299,457	\$ 1,318,886	\$ 1,371,641	\$ 1,426,507	\$ 1,483,567	\$ 1,542,910	\$ 1,604,626	\$ 1,668,812	\$ 1,735,564	\$ 1,804,987	\$ 1,877,186
013	Mandatory Fringe Benefits	On-Going	Labor Inflation	4,183,520	4,559,960	4,742,358	4,932,053	5,129,335	5,334,508	5,547,889	5,769,804	6,000,596	6,240,620	6,490,245
020	COWCAP	On-Going	General Escalation	-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Escalation	2,192,843	1,926,290	1,984,079	2,043,601	2,104,909	2,168,056	2,233,098	2,300,091	2,369,094	2,440,167	2,513,372
040	Materials and Supplies	On-Going	General Escalation	43,602	53,412	55,014	56,665	58,365	60,116	61,919	63,777	65,690	67,661	69,691
060	Capital Purchases	On-Going	General Escalation	-	-	-	-	-	-	-	-	-	-	-
081	Services of Other Departments	On-Going	General Escalation	7,127,013	7,160,367	7,375,178	7,596,433	7,824,326	8,059,056	8,300,828	8,549,853	8,806,348	9,070,539	9,342,655
081UA	UA Services of SFPUC	On-Going	General Escalation	43,014,870	43,426,680	44,729,480	46,071,365	47,453,506	48,877,111	50,343,424	51,853,727	53,409,339	55,011,619	56,661,968
091	Hetch Hetchy [Other]	On-Going	Labor Inflation	35,071,901	33,309,058	34,641,420	36,027,077	37,468,160	38,966,887	40,525,562	42,146,585	43,832,448	45,585,746	47,409,176
		On-Going	General Escalation	-	-	-	-	-	-	-	-	-	-	-

**Total Administration**

**Wholesale Split**

Wholesale O&M Expenses

\$ 92,933,206	\$ 91,754,653	\$ 94,899,172	\$ 98,153,701	\$ 101,522,168	\$ 105,008,644	\$ 108,617,346	\$ 112,352,648	\$ 116,219,079	\$ 120,221,337	\$ 124,364,291
37,111,827	36,949,431	38,086,266	39,392,419	40,744,300	42,143,541	43,591,836	45,090,939	46,642,670	48,248,912	49,911,620

**City Distribution**

001	Salaries	On-Going	Labor Inflation	\$ 18,099,106	\$ 18,410,263	\$ 19,146,674	\$ 19,912,540	\$ 20,709,042	\$ 21,537,404	\$ 22,398,900	\$ 23,294,856	\$ 24,226,650	\$ 25,195,716	\$ 26,203,545
013	Mandatory Fringe Benefits	On-Going	Labor Inflation	7,025,188	7,743,557	8,053,299	8,375,431	8,710,449	9,058,866	9,421,221	9,798,070	10,189,993	10,597,592	11,021,496
020	Overhead	On-Going	General Escalation	-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Escalation	2,053,790	2,053,790	2,115,404	2,178,866	2,244,232	2,311,559	2,380,906	2,452,333	2,525,903	2,601,680	2,679,730
040	Materials and Supplies	On-Going	General Escalation	2,422,639	2,420,889	2,493,516	2,568,321	2,645,371	2,724,732	2,806,474	2,890,668	2,977,388	3,066,710	3,158,711
060	Capital Purchases	On-Going	General Escalation	861,149	862,903	888,790	915,454	942,917	971,205	1,000,341	1,030,351	1,061,262	1,093,100	1,125,893
081	Services of Other Departments [Other]	On-Going	General Escalation	4,485,222	4,497,825	4,632,760	4,771,743	4,914,895	5,062,342	5,214,212	5,370,638	5,531,757	5,697,710	5,868,641
		On-Going	General Escalation	-	-	-	-	-	-	-	-	-	-	-

**Total City Distribution**

**Wholesale Split**

Wholesale O&M Expenses

\$ 34,947,094	\$ 35,989,227	\$ 37,330,442	\$ 38,722,355	\$ 40,166,905	\$ 41,666,107	\$ 43,222,053	\$ 44,836,916	\$ 46,512,953	\$ 48,252,508	\$ 50,058,016
13,955,728	14,492,796	14,981,976	15,540,598	16,120,345	16,722,026	17,346,480	17,994,580	18,667,230	19,365,373	20,089,985

**Water Quality**

001	Salaries	On-Going	Labor Inflation	\$ 7,536,065	\$ 7,690,684	\$ 7,998,311	\$ 8,318,244	\$ 8,650,974	\$ 8,997,013	\$ 9,356,893	\$ 9,731,169	\$ 10,120,415	\$ 10,525,232	\$ 10,946,241
013	Mandatory Fringe Benefits	On-Going	Labor Inflation	2,818,074	3,127,017	3,252,098	3,382,182	3,517,469	3,658,168	3,804,494	3,956,674	4,114,941	4,279,539	4,450,720
020	Overhead	On-Going	General Escalation	-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Escalation	2,997,932	2,963,774	3,052,687	3,144,268	3,238,596	3,335,754	3,435,826	3,538,901	3,645,068	3,754,420	3,867,053
040	Materials and Supplies	On-Going	General Escalation	1,028,324	1,044,256	1,075,584	1,107,851	1,141,087	1,175,319	1,210,579	1,246,896	1,284,303	1,322,832	1,362,517
060	Capital Purchases	On-Going	General Escalation	338,499	359,105	369,878	380,974	392,404	404,176	416,301	428,790	441,654	454,903	468,551
081	Services of Other Departments [Other]	On-Going	General Escalation	2,576	2,576	2,653	2,733	2,815	2,899	2,986	3,076	3,168	3,263	3,361
		On-Going	General Escalation	-	-	-	-	-	-	-	-	-	-	-

**Total Water Quality**

**Wholesale Split**

Wholesale O&M Expenses

\$ 14,721,470	\$ 15,187,412	\$ 15,751,211	\$ 16,336,252	\$ 16,943,344	\$ 17,573,328	\$ 18,227,080	\$ 18,905,506	\$ 19,609,550	\$ 20,340,190	\$ 21,098,443
5,878,853	6,115,943	6,321,497	6,556,294	6,799,940	7,052,774	7,315,147	7,587,423	7,869,979	8,163,210	8,467,523

**Water Supply and Treatment**

001	Salaries	On-Going	Labor Inflation	\$ 19,486,097	\$ 19,859,292	\$ 20,653,664	\$ 21,479,810	\$ 22,339,003	\$ 23,232,563	\$ 24,161,865	\$ 25,128,340	\$ 26,133,473	\$ 27,178,812	\$ 28,265,965
013	Mandatory Fringe Benefits	On-Going	Labor Inflation	7,700,555	8,504,990	8,845,190	9,198,997	9,566,957	9,949,635	10,347,621	10,761,526	11,191,987	11,639,666	12,105,253
020	Overhead	On-Going	General Escalation	-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going	General Escalation	3,227,572	3,248,572	3,346,029	3,446,410	3,549,802	3,656,296	3,765,985	3,878,965	3,995,334	4,115,194	4,238,650
040	Materials and Supplies	On-Going	Power and Chemicals	9,327,894	9,327,394	9,793,764	10,283,452	10,797,624	11,337,506	11,904,381	12,499,600	13,124,580	13,780,809	14,469,849
060	Capital Purchases	On-Going	General Escalation	585,773	563,069	579,961	597,360	615,281	633,739	652,751	672,334	692,504	713,279	734,677
081	Services of Other Departments [Other]	On-Going	General Escalation	7,065,797	6,618,667	6,817,227	7,021,744	7,232,396	7,449,368	7,672,849	7,903,035	8,140,126	8,384,329	8,635,859
		On-Going	General Escalation	-	-	-	-	-	-	-	-	-	-	-

**Total Water Supply and Treatment**

**Wholesale Split**

Wholesale O&M Expenses

\$ 47,393,688	\$ 48,121,984	\$ 50,035,834	\$ 52,027,773	\$ 54,101,063	\$ 56,259,107	\$ 58,505,453	\$ 60,843,799	\$ 63,278,003	\$ 65,812,090	\$ 68,450,253
18,926,134	19,378,635	20,081,082	20,880,515	21,712,597	22,578,694	23,480,228	24,418,686	25,395,615	26,412,630	27,471,415

**Natural Resources**

001	Salaries	On-Going	Labor Inflation	\$ 5,950,474	\$ 6,095,016	\$ 6,338,817	\$ 6,592,369	\$ 6,856,064	\$ 7,130,307	\$ 7,415,519	\$ 7,712,140	\$ 8,020,625	\$ 8,341,450	\$ 8,675,108
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			FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
			2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
013	Mandatory Fringe Benefits	On-Going Labor Inflation	2,384,432	2,649,280	2,755,251	2,865,461	2,980,080	3,099,283	3,223,254	3,352,184	3,486,272	3,625,723	3,770,752
020	Overhead	On-Going General Escalation	-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going General Escalation	1,229,762	1,229,762	1,266,655	1,304,655	1,343,794	1,384,108	1,425,631	1,468,400	1,512,452	1,557,826	1,604,560
040	Materials and Supplies	On-Going General Escalation	402,460	402,460	414,534	426,970	439,779	452,972	466,561	480,558	494,975	509,824	525,119
060	Capital Purchases	On-Going General Escalation	171,556	173,056	178,248	183,595	189,103	194,776	200,619	206,638	212,837	219,222	225,799
081	Services of Other Departments [Other]	On-Going General Escalation	184,265	184,265	189,793	195,487	201,351	207,392	213,614	220,022	226,623	233,421	240,424
	<b>Total Natural Resources</b>		<b>\$ 10,322,949</b>	<b>\$ 10,733,839</b>	<b>\$ 11,143,297</b>	<b>\$ 11,568,537</b>	<b>\$ 12,010,171</b>	<b>\$ 12,468,838</b>	<b>\$ 12,945,199</b>	<b>\$ 13,439,942</b>	<b>\$ 13,953,784</b>	<b>\$ 14,487,466</b>	<b>\$ 15,041,762</b>
	<b>Wholesale Split</b>	Wholesale O&M Expenses	4,122,353	4,322,497	4,472,184	4,642,847	4,820,090	5,004,169	5,195,349	5,393,906	5,600,128	5,814,313	6,036,771
<b>Water Resources</b>													
001	Salaries	On-Going Labor Inflation	\$ 2,473,349	\$ 2,526,276	\$ 2,627,327	\$ 2,732,420	\$ 2,841,717	\$ 2,955,386	\$ 3,073,601	\$ 3,196,545	\$ 3,324,407	\$ 3,457,383	\$ 3,595,678
013	Mandatory Fringe Benefits	On-Going Labor Inflation	988,855	1,096,191	1,140,039	1,185,640	1,233,066	1,282,388	1,333,684	1,387,031	1,442,513	1,500,213	1,560,222
020	Overhead	On-Going General Escalation	-	-	-	-	-	-	-	-	-	-	-
021	Non Personal Services	On-Going General Escalation	849,532	849,532	875,018	901,268	928,307	956,156	984,840	1,014,386	1,044,817	1,076,162	1,108,447
38	City Grants	On-Going General Escalation	2,995,125	2,995,125	3,084,979	3,177,528	3,272,854	3,371,040	3,472,171	3,576,336	3,683,626	3,794,135	3,907,959
040	Materials and Supplies	On-Going General Escalation	369,650	369,650	380,740	392,162	403,927	416,044	428,526	441,381	454,623	468,262	482,309
060	Capital Purchases	On-Going General Escalation	35,000	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,046	44,337	45,667
081	Services of Other Departments [Other]	On-Going General Escalation	416,420	419,249	431,826	444,781	458,125	471,868	486,024	500,605	515,623	531,092	547,025
	<b>Total Natural Resources</b>		<b>\$ 8,127,931</b>	<b>\$ 8,291,023</b>	<b>\$ 8,575,978</b>	<b>\$ 8,870,931</b>	<b>\$ 9,176,240</b>	<b>\$ 9,492,275</b>	<b>\$ 9,819,421</b>	<b>\$ 10,158,076</b>	<b>\$ 10,508,654</b>	<b>\$ 10,871,583</b>	<b>\$ 11,247,307</b>
	<b>Wholesale Split</b>	Wholesale O&M Expenses	3,245,798	3,338,780	3,441,832	3,560,207	3,682,737	3,809,573	3,940,868	4,076,782	4,217,481	4,363,136	4,513,927
<b>Total Operating Expenditures</b>			<b>\$ 208,446,338</b>	<b>\$ 210,078,138</b>	<b>\$ 217,735,935</b>	<b>\$ 225,679,549</b>	<b>\$ 233,919,892</b>	<b>\$ 242,468,300</b>	<b>\$ 251,336,552</b>	<b>\$ 260,536,888</b>	<b>\$ 270,082,024</b>	<b>\$ 279,985,175</b>	<b>\$ 290,260,073</b>
<b>Other Expenditures</b>													
	Main Break	One-Time General Escalation	\$ 13,000,000	-	-	-	-	-	-	-	-	-	-
	Bureau Cost	One-Time General Escalation	8,585,000	-	-	-	-	-	-	-	-	-	-
	[Other]	On-Going General Escalation	-	-	-	-	-	-	-	-	-	-	-
	[Other]	On-Going General Escalation	-	-	-	-	-	-	-	-	-	-	-
	[Other]	On-Going General Escalation	-	-	-	-	-	-	-	-	-	-	-
	[Other]	On-Going General Escalation	-	-	-	-	-	-	-	-	-	-	-
	[Other]	On-Going General Escalation	-	-	-	-	-	-	-	-	-	-	-
	[Other]	On-Going General Escalation	-	-	-	-	-	-	-	-	-	-	-
	<b>Total Other Expenditures</b>		<b>\$ 21,585,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
	<b>Wholesale Split</b>	No Contribution	-	-	-	-	-	-	-	-	-	-	-
<b>Total O&amp;M Expenditures</b>			<b>\$ 230,031,338</b>	<b>\$ 210,078,138</b>	<b>\$ 217,735,935</b>	<b>\$ 225,679,549</b>	<b>\$ 233,919,892</b>	<b>\$ 242,468,300</b>	<b>\$ 251,336,552</b>	<b>\$ 260,536,888</b>	<b>\$ 270,082,024</b>	<b>\$ 279,985,175</b>	<b>\$ 290,260,073</b>
	<b>Wholesale Split</b>		<b>\$ 83,240,693</b>	<b>\$ 84,598,082</b>	<b>\$ 87,384,837</b>	<b>\$ 90,572,880</b>	<b>\$ 93,880,010</b>	<b>\$ 97,310,777</b>	<b>\$ 100,869,908</b>	<b>\$ 104,562,316</b>	<b>\$ 108,393,103</b>	<b>\$ 112,367,575</b>	<b>\$ 116,491,241</b>





**SFPUC**  
Water Financial Model  
Debt Service



	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2011 Bond, Series B	65.27%	65.82%	65.60%	65.60%	65.60%	65.60%	65.60%	65.60%	65.60%	65.60%	65.60%
2012 Bond, Series A	45.26%	45.64%	45.48%	45.48%	45.48%	45.48%	45.48%	45.48%	45.48%	45.48%	45.48%

Existing Debt Service		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Total Existing Debt</b>												
<b>Split out wholesale by each bond</b>												
<b>1991 Bond</b>												
Principal Payment	Senior	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,333,333	\$ 3,066,667	\$ 700,000	\$ -	\$ -	\$ -
	<b>Total Payment:</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,333,333	\$ 3,066,667	\$ 700,000	\$ -	\$ -	\$ -
Wholesale Share	No Share	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>2002 Bond, Series A</b>												
Principal Payment	Senior	\$ 1,261,667	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Payment		\$ 56,775	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>Total Payment:</b>	\$ 1,318,442	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wholesale Share	No Share	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>2002 Bond, Series B</b>												
Principal Payment	Senior	\$ 2,435,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Payment		\$ 97,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>Total Payment:</b>	\$ 2,532,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wholesale Share	No Share	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>2006 Bond, Series A</b>												
Principal Payment	Senior	\$ 10,166,667	\$ 10,688,333	\$ 11,238,333	\$ 11,815,000	\$ 12,420,000	\$ 13,055,000	\$ 13,726,667	\$ 14,431,667	\$ 15,170,000	\$ 15,946,667	\$ 16,766,667
Interest Payment		\$ 22,000,071	\$ 21,491,738	\$ 20,957,321	\$ 20,395,404	\$ 19,804,654	\$ 19,183,654	\$ 18,530,904	\$ 17,844,571	\$ 17,122,988	\$ 16,364,488	\$ 15,567,154
	<b>Total Payment:</b>	\$ 32,166,738	\$ 32,180,071	\$ 32,195,654	\$ 32,210,404	\$ 32,224,654	\$ 32,238,654	\$ 32,257,571	\$ 32,276,238	\$ 32,292,988	\$ 32,311,154	\$ 32,333,821
Wholesale Share	2006 Bond, Series A	\$ 11,167,222	\$ 11,266,133	\$ 11,233,285	\$ 11,238,432	\$ 11,243,404	\$ 11,248,288	\$ 11,254,888	\$ 11,261,401	\$ 11,267,246	\$ 11,273,584	\$ 11,281,493
<b>2006 Bond, Series B</b>												
Principal Payment	Senior	\$ 3,765,000	\$ 3,951,667	\$ 4,148,333	\$ 7,075,000	\$ 8,768,333	\$ 7,326,667	\$ 7,740,000	\$ 9,376,667	\$ 8,238,333	\$ 7,636,667	\$ 7,976,667
Interest Payment		\$ 4,010,563	\$ 3,822,313	\$ 3,624,729	\$ 3,417,313	\$ 3,063,563	\$ 2,684,479	\$ 2,391,413	\$ 2,074,863	\$ 1,679,829	\$ 1,329,700	\$ 1,011,600
	<b>Total Payment:</b>	\$ 7,775,563	\$ 7,773,979	\$ 7,773,063	\$ 10,492,313	\$ 11,831,896	\$ 10,011,146	\$ 10,131,413	\$ 11,451,529	\$ 9,918,163	\$ 8,966,367	\$ 8,988,267
Wholesale Share	No Share	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>2006 Bond, Series C</b>												
Principal Payment	Senior	\$ 2,775,000	\$ 2,886,667	\$ 3,011,667	\$ 3,145,000	\$ 3,280,000	\$ 2,025,000	\$ 2,191,667	\$ 3,293,333	\$ 2,256,667	\$ 1,608,333	\$ 1,683,333
Interest Payment		\$ 1,517,973	\$ 1,406,973	\$ 1,291,506	\$ 1,150,673	\$ 1,014,690	\$ 875,177	\$ 787,729	\$ 692,417	\$ 533,167	\$ 425,550	\$ 353,175
	<b>Total Payment:</b>	\$ 4,292,973	\$ 4,293,640	\$ 4,303,173	\$ 4,295,673	\$ 4,294,690	\$ 2,900,177	\$ 2,979,396	\$ 3,985,750	\$ 2,789,833	\$ 2,033,883	\$ 2,036,508
Wholesale Share	No Share	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>2009 Bond, Series A</b>												
Principal Payment	Senior	\$ 7,015,000	\$ 7,376,667	\$ 7,760,000	\$ 8,156,667	\$ 8,573,333	\$ 9,011,667	\$ 9,476,667	\$ 9,945,000	\$ 10,443,333	\$ 10,981,667	\$ 11,541,667
Interest Payment		\$ 19,910,304	\$ 19,629,704	\$ 19,334,638	\$ 18,971,638	\$ 18,563,804	\$ 18,193,238	\$ 17,832,771	\$ 17,453,704	\$ 16,988,571	\$ 16,466,404	\$ 15,917,321
	<b>Total Payment:</b>	\$ 26,925,304	\$ 27,006,371	\$ 27,094,638	\$ 27,128,304	\$ 27,137,138	\$ 27,204,904	\$ 27,309,438	\$ 27,398,704	\$ 27,431,904	\$ 27,448,071	\$ 27,458,988
Wholesale Share	2009 Bond, Series A	\$ 10,178,817	\$ 10,295,624	\$ 10,294,173	\$ 10,306,964	\$ 10,310,320	\$ 10,336,067	\$ 10,375,782	\$ 10,409,698	\$ 10,422,312	\$ 10,428,454	\$ 10,432,601











	FY 2012 2013	FY 2013 2014	FY 2014 2015	FY 2015 2016	FY 2016 2017	FY 2017 2018	FY 2018 2019	FY 2019 2020	FY 2020 2021	FY 2021 2022	FY 2022 2023
Months of Capitalized Interest	36 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months	36 months

(1) Current PUC Funding Assumptions FY2013

**Projected Debt Service - Regional**

*Borrowing Calculations*

**Projected New Revenue Bonds**

New Bond Par Amount	\$ 2,073,000	\$ 9,954,000	\$ 248,201,000	\$ 304,982,000	\$ 5,320,000	\$ 20,050,000	\$ 30,853,000	\$ 236,227,006	\$ 500,000	\$ 500,000	\$ 500,000
Plus: Issuance Costs	49,952	239,855	5,980,747	7,348,964	128,193	483,133	743,446	5,692,217	12,048	12,048	12,048
Plus: Reserve Amount	-	-	-	-	-	-	-	-	-	-	-
Plus: Capitalized Interest	374,639	1,798,916	44,855,602	55,117,229	961,446	3,623,494	5,575,843	42,691,628	90,361	90,361	90,361
<b>Total Bond Amount Issued:</b>	<b>\$ 2,497,590</b>	<b>\$ 11,992,771</b>	<b>\$ 299,037,349</b>	<b>\$ 367,448,193</b>	<b>\$ 6,409,639</b>	<b>\$ 24,156,627</b>	<b>\$ 37,172,289</b>	<b>\$ 284,610,851</b>	<b>\$ 602,410</b>	<b>\$ 602,410</b>	<b>\$ 602,410</b>

**Annual Payments on Projected Bonds**

Principal Payments	\$ -	\$ -	\$ -	\$ -	\$ 45,686	\$ 267,340	\$ 5,750,656	\$ 12,759,500	\$ 13,514,719	\$ 14,632,325	\$ 16,043,891
Interest Payments	-	-	-	124,880	722,234	15,660,734	33,745,611	33,428,118	33,960,213	35,087,212	48,515,560
<b>Total Payment:</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 124,880</b>	<b>\$ 767,919</b>	<b>\$ 15,928,074</b>	<b>\$ 39,496,267</b>	<b>\$ 46,187,618</b>	<b>\$ 47,474,932</b>	<b>\$ 49,719,536</b>	<b>\$ 64,559,451</b>

**Amortization Tables**

**Projected Revenue Bonds**

*Principal Payments*

FY 2012 2013	FY 2013 2014	FY 2014 2015	FY 2015 2016	FY 2016 2017	FY 2017 2018	FY 2018 2019	FY 2019 2020	FY 2020 2021	FY 2021 2022	FY 2022 2023
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**New Revenue Bonds**

*Interest Payments*

FY 2012 2013	FY 2013 2014	FY 2014 2015	FY 2015 2016	FY 2016 2017	FY 2017 2018	FY 2018 2019	FY 2019 2020	FY 2020 2021	FY 2021 2022	FY 2022 2023
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Month Rate Adjustment Is Implemented	July	July	July	July	July	July	July	July	July	July	July
Percent of Rate-Increase Applicable Revenue	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Calculated Rate Increase	0.00%	19.69%	12.65%	18.54%	8.13%	7.87%	20.44%	14.17%	12.06%	9.19%	5.98%
Adjusted Rate Increase	0.00%	19.69%	12.65%	18.54%	8.13%	7.87%	20.44%	14.17%	12.06%	9.19%	5.98%
<b>Rate Increase</b>	<b>0.00%</b>	<b>6.50%</b>	<b>12.00%</b>	<b>12.00%</b>	<b>10.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>5.00%</b>	<b>5.00%</b>
Cumulative Rate Increase	0.00%	0.00%	12.00%	25.44%	37.98%	49.02%	60.94%	73.82%	87.73%	97.11%	106.97%
<b>Change in Rate Revenues</b>											
Rate Revenues Pre-Adjustment	\$ 178,046,142	\$ 178,936,373	\$ 191,520,073	\$ 215,574,994	\$ 242,651,213	\$ 268,250,916	\$ 291,159,545	\$ 316,024,570	\$ 343,013,068	\$ 372,306,384	\$ 392,876,312
Calculated Rate Increase	\$ -	\$ 35,239,771	\$ 24,222,778	\$ 39,963,545	\$ 19,717,126	\$ 21,110,498	\$ 59,519,720	\$ 44,770,660	\$ 41,375,373	\$ 34,212,125	\$ 23,474,934
Additional Rate Revenue From Override	-	(23,608,907)	(1,240,369)	(14,094,546)	4,547,996	349,576	(36,226,956)	(19,488,694)	(13,934,328)	(15,596,806)	(3,831,119)
<b>Total Rate Revenues After Adjustment</b>	<b>\$ 178,046,142</b>	<b>\$ 190,567,237</b>	<b>\$ 214,502,482</b>	<b>\$ 241,443,993</b>	<b>\$ 266,916,335</b>	<b>\$ 289,710,990</b>	<b>\$ 314,452,308</b>	<b>\$ 341,306,535</b>	<b>\$ 370,454,113</b>	<b>\$ 390,921,703</b>	<b>\$ 412,520,127</b>

**Post Adjustment Cash Flow and Coverage**

<b>Revenues</b>											
Total Post Adjustment Rate Revenues	\$ 178,046,142	\$ 190,567,237	\$ 214,502,482	\$ 241,443,993	\$ 266,916,335	\$ 289,710,990	\$ 314,452,308	\$ 341,306,535	\$ 370,454,113	\$ 390,921,703	\$ 412,520,127
Wholesale Revenue	190,020,044	155,989,764	241,505,221	242,153,938	241,744,701	251,319,635	292,956,837	316,592,889	297,589,995	300,608,436	314,655,719
Non-Rate Revenue	24,594,647	21,980,748	22,637,226	23,313,475	24,010,089	24,727,681	25,466,879	26,228,331	27,012,707	27,820,694	28,653,001
<b>Total Year End Revenues</b>	<b>\$ 392,660,833</b>	<b>\$ 368,537,749</b>	<b>\$ 478,644,928</b>	<b>\$ 506,911,406</b>	<b>\$ 532,671,125</b>	<b>\$ 565,758,305</b>	<b>\$ 632,876,024</b>	<b>\$ 684,127,756</b>	<b>\$ 695,056,816</b>	<b>\$ 719,350,833</b>	<b>\$ 755,828,847</b>
<b>Expenditures</b>											
Operating	\$ 230,031,338	\$ 210,078,138	\$ 217,735,935	\$ 225,679,549	\$ 233,919,892	\$ 242,468,300	\$ 251,336,552	\$ 260,536,888	\$ 270,082,024	\$ 279,985,175	\$ 290,260,073
Debt Service	129,182,714	144,664,206	212,294,651	238,141,403	249,920,238	283,477,430	329,076,428	349,309,562	369,762,606	377,309,796	402,033,342
Revenue Funded Capital	17,366,500	37,404,312	49,854,712	57,185,000	44,283,000	39,463,000	88,690,000	93,770,000	58,928,000	63,386,000	51,377,000
<b>Total Year End Expenditures</b>	<b>\$ 376,580,552</b>	<b>\$ 392,146,656</b>	<b>\$ 479,885,298</b>	<b>\$ 521,005,952</b>	<b>\$ 528,123,130</b>	<b>\$ 565,408,730</b>	<b>\$ 669,102,980</b>	<b>\$ 703,616,450</b>	<b>\$ 698,772,629</b>	<b>\$ 720,680,971</b>	<b>\$ 743,670,415</b>
Gross Year End Cash Flow	\$ 16,080,281	\$ (23,608,907)	\$ (1,240,369)	\$ (14,094,546)	\$ 4,547,996	\$ 349,576	\$ (36,226,956)	\$ (19,488,694)	\$ (3,715,814)	\$ (1,330,137)	\$ 12,158,432
<b>Year End Debt Coverage (without Reserves)</b>	<b>1.26 x</b>	<b>1.10 x</b>	<b>1.23 x</b>	<b>1.18 x</b>	<b>1.20 x</b>	<b>1.14 x</b>	<b>1.16 x</b>	<b>1.21 x</b>	<b>1.15 x</b>	<b>1.16 x</b>	<b>1.16 x</b>
<b>Year End Debt Coverage (with Reserves)</b>	<b>3.19 x</b>	<b>2.27 x</b>	<b>1.73 x</b>	<b>1.57 x</b>	<b>1.60 x</b>	<b>1.51 x</b>	<b>1.38 x</b>	<b>1.37 x</b>	<b>1.29 x</b>	<b>1.31 x</b>	<b>1.33 x</b>
<b>Expenditures Coverage</b>	<b>108%</b>	<b>81%</b>	<b>49%</b>	<b>41%</b>	<b>43%</b>	<b>43%</b>	<b>29%</b>	<b>21%</b>	<b>20%</b>	<b>19%</b>	<b>24%</b>



**SFPUC**  
Water Financial Model  
Functional Allocation



Allocation Test Years  
Start **FYE 2015**  
End **FYE 2019**

Functional Allocation			Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	As All Other	Total	Notes/Sources	
<b>Asset Allocation</b>												
<b>Value</b>												
<b>Water Assets</b>												<a href="#">Allocation of Net Plant Assets from Previous Study</a>
Source of Supply	\$ 34,585,201	100%	100%						0%	100%		
Pumping Plant	\$ 44,109,606	100%	86%	14%					0%	100%		
Transmission	\$ 42,422,271	80%	86%	14%					0%	100%		
Treatment	\$ 30,059,154	100%	86%	14%					0%	100%		
Storage	\$ 65,102,794	60%	46%	8%	46%				0%	100%		
Distribution	\$ 138,720,574	80%	46%	8%	41%			5%	0%	100%		
Meters	\$ 12,266,961	100%				100%			0%	100%		
Services	\$ 20,694,286	100%					100%		0%	100%		
Hydrants	\$ -	100%						100%	0%	100%		
Customer Billing	\$ -	100%					100%		0%	100%		
Laboratory	\$ -	100%	86%	14%					0%	100%		
General Plant	\$ 3,754,239	100%							100%	100%		
Asset Allocation Subtotal \$ 391,715,086			\$ 228,612,237	\$ 32,628,614	\$ 86,822,721	\$ 12,266,961	\$ 20,694,286	\$ 6,936,029	\$ 3,754,239	100%		
Reallocation of As All Others			\$ 2,212,246	\$ 315,742	\$ 840,170	\$ 118,706	\$ 200,256	\$ 67,119	\$ (3,754,239)	100%		
<b>Total Dollar Allocation \$ 391,715,086</b>			<b>\$ 230,824,483</b>	<b>\$ 32,944,356</b>	<b>\$ 87,662,891</b>	<b>\$ 12,385,667</b>	<b>\$ 20,894,542</b>	<b>\$ 7,003,148</b>	<b>\$ -</b>	<b>100%</b>		
<b>Total Percent Allocation</b>			<b>59%</b>	<b>8%</b>	<b>22%</b>	<b>3%</b>	<b>5%</b>	<b>2%</b>	<b>0%</b>			

Allocations	Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	As All Other	Total
Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%
Base Only	100%						0%	100%
Max Day	81%	14%				5%	0%	100%
Max Hour	60%	20%	15%			5%	0%	100%
Peak Only		25%	75%				0%	100%
Customer Service Only					100%		0%	100%
Meter Charges				100%			0%	100%
Base/Peak	62%	10%	23%			5%	0%	100%
Base/Peak/Capacity	40%	40%		20%			0%	100%
Account/Meter				50%	50%		0%	100%
As All Other							100%	100%
User Input								

Debt Allocation			Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	As All Other	Total	Notes/Sources
1991A	\$1,280,000	Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%	Refunding bond - Assumed same allocation as existing assets
2006A	20,981,728	[Input]	85%	15%	0%	0%	0%	0%	0%	100%	<a href="#">Debt allocated based on weighted average of projects included</a>
2006B	10,047,966	Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%	Refunding bond - Assumed same allocation as existing assets
2006C	3,754,622	Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%	Refunding bond - Assumed same allocation as existing assets
2009A	16,850,223	[Input]	86%	9%	5%	0%	0%	0%	0%	100%	<a href="#">Debt allocated based on weighted average of projects included</a>
2009B	11,456,551	[Input]	87%	11%	3%	0%	0%	0%	0%	100%	<a href="#">Debt allocated based on weighted average of projects included</a>
2010A	4,514,479	Customer Service Only	0%	0%	0%	0%	100%	0%	0%	100%	
2010B	23,261,027	[Input]	87%	12%	0%	0%	0%	0%	0%	100%	<a href="#">Debt allocated based on weighted average of projects included</a>
2010C	1,135,367	Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%	Refunding bond - Assumed same allocation as existing assets
2010D	6,159,903	[Input]	87%	12%	1%	0%	0%	0%	0%	100%	<a href="#">Debt allocated based on weighted average of projects included</a>
2010E	5,052,361	[Input]	87%	13%	0%	0%	0%	0%	0%	100%	<a href="#">Debt allocated based on weighted average of projects included</a>
2010F	3,976,520	[Input]	86%	14%	0%	0%	0%	0%	0%	100%	<a href="#">Debt allocated based on weighted average of projects included</a>
2010G	5,462,497	[Input]	91%	9%	0%	0%	0%	0%	0%	100%	<a href="#">Debt allocated based on weighted average of projects included</a>
2011A	11,654,917	[Input]	91%	9%	0%	0%	0%	0%	0%	100%	<a href="#">Debt allocated based on weighted average of projects included</a>
2011B	593,237	Max Day	81%	14%	0%	0%	0%	5%	0%	100%	Debt issued for Hetch Hetchy distribution
2011C	2,210,023	Max Day	81%	14%	0%	0%	0%	5%	0%	100%	Debt issued for local main
2011D	3,471,237	Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%	Refunding bond - Assumed same allocation as existing assets
2012A	13,949,115	Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%	
2012B	683,450	Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%	
2012C	4,403,500	Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%	Refunding bond - Assumed same allocation as existing assets

2012D	4,728,675	Fixed Assets	59%	8%	22%	3%	5%	2%	0%	100%
BAWSCA Defeasement	(15,406,241)	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
	\$ 155,627,397		\$ 119,222,537	\$ 16,157,751	\$ 11,059,681	\$ 1,373,973	\$ 6,832,363	\$ 981,092	\$ (15,406,241)	
Reallocation of As All Others			(11,802,364)	(1,599,527)	(1,094,847)	(136,016)	(676,366)	(97,123)	15,406,241	
<b>Total Dollar Allocation</b>	<b>\$ 140,221,155</b>		<b>\$ 107,420,173</b>	<b>\$ 14,558,224</b>	<b>\$ 9,964,835</b>	<b>\$ 1,237,957</b>	<b>\$ 6,155,997</b>	<b>\$ 883,969</b>	<b>\$ -</b>	
	<b>90%</b>		<b>77%</b>	<b>10%</b>	<b>7%</b>	<b>1%</b>	<b>4%</b>	<b>1%</b>	<b>0%</b>	
<b>Percent to Reallocate</b>	<b>10%</b>					<b>100%</b>				
<b>Total Percent Allocation</b>			<b>69%</b>	<b>9%</b>	<b>6%</b>	<b>11%</b>	<b>4%</b>	<b>1%</b>	<b>0%</b>	

Refunding bond - Assumed same allocation as existing assets

\$ 107,300,283 \$ 14,541,976 \$ 9,953,713 \$ 16,799,315 \$ 6,149,126 \$ 882,983

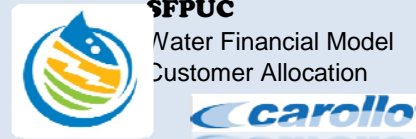
O&M Allocation	Costs	Allocation	Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	As All Other	Total
<b>Administration</b>										
Salaries	\$ 1,485,850	Account/Meter	0%	0%	0%	50%	50%	0%	0%	100%
Hetch Hetchy	\$ 37,525,821	Base Only	100%	0%	0%	0%	0%	0%	0%	100%
Mandatory Fringe Benef	\$ 5,137,229	Meter Charges	0%	0%	0%	100%	0%	0%	0%	100%
COWCAP	\$ -	Meter Charges	0%	0%	0%	100%	0%	0%	0%	100%
Non Personal Services	\$ 2,106,749	Meter Charges	0%	0%	0%	100%	0%	0%	0%	100%
Materials and Supplies	\$ 58,416	Meter Charges	0%	0%	0%	100%	0%	0%	0%	100%
Capital Purchases	\$ -	Meter Charges	0%	0%	0%	100%	0%	0%	0%	100%
UA Services of SFPUC	\$ 7,831,164	Customer Service Only	0%	0%	0%	0%	100%	0%	0%	100%
Services of Other Depart	\$ 47,494,977	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
[Other]	\$ -	Customer Service Only	0%	0%	0%	0%	100%	0%	0%	100%
<b>City Distribution</b>										
Salaries	\$ 20,740,912	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Mandatory Fringe Benef	\$ 8,723,853	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Overhead	\$ -	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Non Personal Services	\$ 2,246,193	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Materials and Supplies	\$ 2,647,683	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Capital Purchases	\$ 943,741	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Services of Other Depart	\$ 4,919,190	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
[Other]	\$ -	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
<b>Water Quality</b>										
Salaries	\$ 8,664,287	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Mandatory Fringe Benef	\$ 3,522,882	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Overhead	\$ -	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Non Personal Services	\$ 3,241,426	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Materials and Supplies	\$ 1,142,084	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Capital Purchases	\$ 392,747	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Services of Other Depart	\$ 2,817	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
[Other]	\$ -	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
<b>Water Supply and Treatment</b>										
Salaries	\$ 22,373,381	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Mandatory Fringe Benef	\$ 9,581,680	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Overhead	\$ -	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Non Personal Services	\$ 3,552,905	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Materials and Supplies	\$ 10,823,345	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Capital Purchases	\$ 615,818	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Services of Other Depart	\$ 7,238,717	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
[Other]	\$ -	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
<b>Natural Resources</b>										
Salaries	\$ 6,866,615	Base Only	100%	0%	0%	0%	0%	0%	0%	100%
Mandatory Fringe Benef	\$ 2,984,666	Base Only	100%	0%	0%	0%	0%	0%	0%	100%
Overhead	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	100%
Non Personal Services	\$ 1,344,969	Base Only	100%	0%	0%	0%	0%	0%	0%	100%
Materials and Supplies	\$ 440,163	Base Only	100%	0%	0%	0%	0%	0%	0%	100%
Capital Purchases	\$ 189,268	Base Only	100%	0%	0%	0%	0%	0%	0%	100%
Services of Other Depart	\$ 201,527	Base Only	100%	0%	0%	0%	0%	0%	0%	100%
[Other]	\$ -	Base Only	100%	0%	0%	0%	0%	0%	0%	100%
		0.051348284								
<b>Water Resources</b>										
Salaries	\$ 2,846,090	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Mandatory Fringe Benef	\$ 1,234,963	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Overhead	\$ -	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Non Personal Services	\$ 929,118	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%

City Grants	\$ 3,275,714	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Materials and Supplies	\$ 404,280	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Capital Purchases	\$ 38,279	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
Services of Other Depart	\$ 458,525	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
[Other]	\$ -	Base/Peak	62%	10%	23%	0%	0%	5%	0%	100%
<b>Other Expenditures</b>										
Main Break	\$ -	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
Bureau Cost	\$ -	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
[Other]	\$ -	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
[Other]	\$ -	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
[Other]	\$ -	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
[Other]	\$ -	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
[Other]	\$ -	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
O&M Allocation Subtotal:	\$ 234,228,045		\$ 124,300,621	\$ 12,056,063	\$ 27,728,945	\$ 8,045,318	\$ 8,574,090	\$ 6,028,032	\$ 47,494,977	
Reallocation of As All Others			31,615,478	3,066,422	7,052,771	2,046,302	2,180,793	1,533,211	(47,494,977)	
<b>Total Dollar Allocation</b>	<b>\$ 234,228,045</b>		<b>\$155,916,098</b>	<b>\$15,122,485</b>	<b>\$34,781,716</b>	<b>\$10,091,620</b>	<b>\$10,754,883</b>	<b>\$7,561,243</b>	<b>\$ -</b>	
<b>Total Percent Allocation</b>	<b>100%</b>		<b>67%</b>	<b>6%</b>	<b>15%</b>	<b>4%</b>	<b>5%</b>	<b>3%</b>	<b>0%</b>	
<b>Total O&amp;M Allocation Override</b>									100%	
<b>Total O&amp;M Allocation</b>			<b>67%</b>	<b>6%</b>	<b>15%</b>	<b>4%</b>	<b>5%</b>	<b>3%</b>	<b>0%</b>	

Rev Req Allocation	Costs	Allocation	Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	As All Other	Total
<b>Expense Categories</b>										
Operating Expenses	\$ 234,228,045	[O&M Allocation]	67%	6%	15%	4%	5%	3%	0%	100%
Debt Service	\$ 262,582,030	[Debt Allocation]	69%	9%	6%	11%	4%	1%	0%	100%
Additions to meet min ft	\$ 55,895,142	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
Additional Revenues From Override		As All Other	0%	0%	0%	0%	0%	0%	100%	100%
Year End Cash Flow	\$ (9,332,860)	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
<b>Less: Offsetting Revenues</b>										
Other Non-Rate Revenue	\$ (277,967,136)	As All Other	0%	0%	0%	0%	0%	0%	100%	100%
Total Revenue to be Colle	\$ 265,405,222		\$ 336,958,297	\$ 39,658,407	\$ 51,576,100	\$ 38,436,233	\$ 21,129,985	\$ 9,051,054	\$ (231,404,854)	
Reallocation of As All Others			(156,948,881)	(18,472,145)	(24,023,184)	(17,902,879)	(9,841,952)	(4,215,812)	231,404,854	
<b>Total Dollar Allocation</b>	<b>\$ 265,405,222</b>		<b>\$ 180,009,416</b>	<b>\$ 21,186,262</b>	<b>\$ 27,552,916</b>	<b>\$ 20,533,353</b>	<b>\$ 11,288,032</b>	<b>\$ 4,835,242</b>	<b>\$ -</b>	
<b>Total Rev Req Allocation</b>			<b>68%</b>	<b>8%</b>	<b>10%</b>	<b>8%</b>	<b>4%</b>	<b>2%</b>	<b>0%</b>	

<b>BMP 1.4</b>		
Option 1	V/(V+M)	88%
Option 2		

	Operating	Capital	
Rev Req			
Operating Expenses	\$ 234,228,045		
Debt Service		\$ 262,582,030	
Additions to meet min fun	\$ 55,895,142		
Additional Revenues From	\$ -		
Year End Cash Flow	\$ (9,332,860)		
<b>Subtotal</b>	<b>\$ 280,790,328</b>	<b>\$ 262,582,030</b>	<b>\$ 543,372,358</b>
<b>Offsetting rev</b>			
Wholesale	\$ 94,003,682	\$ 159,932,384	
Other	\$ 24,031,070		
<b>Subtotal</b>	<b>\$ 118,034,752</b>	<b>\$ 159,932,384</b>	
<b>Total</b>	<b>\$ 162,755,576</b>	<b>\$ 102,649,646</b>	<b>\$ 265,405,222</b>
	61.32%	38.68%	



Test Year 2015

	Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	Total
From Functional Allocation	68%	8%	10%	8%	4%	2%	100%
Cost Allocated to Category	\$ 145,484,954	\$ 17,122,895	\$ 22,268,472	\$ 16,595,210	\$ 9,123,072	\$ 3,907,879	\$ 214,502,482

Basis of Allocation to Customer Class	Percent of Capital Included	Usage	Maximum Day Usage	Maximum Hour Usage	Meter Equivalents	Customer Accounts	Hydrant Equivalents
		CCF	CCF	CCF	Units	Units	Units
	38.68%						
Single Family Residential	100%	7,848,355	2,354,507	11,144,664	123,882	112,870	-
Multi-family Residential	100%	10,778,776	3,233,633	15,305,861	94,366	37,669	-
Commercial, Industrial, General	100%	10,529,786	4,211,914	16,847,658	61,537	17,041	-
Public Uses	100%	1,163,145	348,944	1,646,050	15,339	1,704	-
Interruptible	85%	1,075,849	322,755	1,522,511	4,789	1,518	-
Docks and Shipping	100%	281,798	338,158	870,756	51	3	-
Fire Service	100%	22,709	9,084	36,334	-	8,578	230,428
Builders and Contractors	100%	76,582	68,924	193,752	1,906	202	-
Contract	100%	134,945	53,978	215,912	260	14	-
Non-Res Irrigation	100%	-	-	-	-	-	-
Res Irrigation	100%	-	-	-	-	-	-
Airport	100%	575,054	517,549	1,454,887	550	6	-
<b>Total</b>		<b>32,486,998</b>	<b>11,459,443</b>	<b>49,238,386</b>	<b>302,679</b>	<b>179,604</b>	<b>230,428</b>

Percent Allocated to Each Customer Class	Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection
Single Family Residential	24.2%	20.5%	22.6%	40.9%	62.8%	0.0%
Multi-family Residential	33.2%	28.2%	31.1%	31.2%	21.0%	0.0%
Commercial, Industrial, General	32.4%	36.8%	34.2%	20.3%	9.5%	0.0%
Public Uses	3.6%	3.0%	3.3%	5.1%	0.9%	0.0%
Interruptible	3.3%	2.8%	3.1%	1.6%	0.8%	0.0%
Docks and Shipping	0.9%	3.0%	1.8%	0.0%	0.0%	0.0%
Fire Service	0.1%	0.1%	0.1%	0.0%	4.8%	100.0%
Builders and Contractors	0.2%	0.6%	0.4%	0.6%	0.1%	0.0%
Contract	0.4%	0.5%	0.4%	0.1%	0.0%	0.0%
Non-Res Irrigation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Res Irrigation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Airport	1.8%	4.5%	3.0%	0.2%	0.0%	0.0%
<b>Allocated Customer Costs</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Allocated Costs	Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	Total
Single Family Residential	35,146,909	3,518,144	5,040,268	6,792,165	5,733,270	-	\$ 56,230,756
Multi-family Residential	48,270,069	4,831,749	6,922,204	5,173,884	1,913,400	-	67,111,306
Commercial, Industrial, General	47,155,032	6,293,514	7,619,494	3,373,936	865,615	-	65,307,592
Public Uses	5,208,856	521,397	744,440	840,999	86,551	-	7,402,243



Interruptible	4,817,922	482,265	688,568	262,567	77,107	-	6,328,429
Docks and Shipping	1,261,962	505,281	393,807	2,769	171	-	2,163,990
Fire Service	101,697	13,573	16,433	-	435,708	3,907,879	4,475,289
Builders and Contractors	342,953	102,987	87,626	104,502	10,252	-	648,321
Contract	604,318	80,655	97,648	14,232	693	-	797,545
Non-Res Irrigation	-	-	-	-	-	-	-
Res Irrigation	-	-	-	-	-	-	-
Airport	2,575,237	773,330	657,985	30,155	305	-	4,037,011
<b>Allocated Customer Costs</b>	<b>\$145,484,954</b>	<b>\$17,122,895</b>	<b>\$22,268,472</b>	<b>\$16,595,210</b>	<b>\$9,123,072</b>	<b>\$3,907,879</b>	<b>\$ 214,502,482</b>

Checks	Correct	Correct	Correct	Correct	Correct	Correct	Correct
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Unit Charges	Consumption	Consumption	Consumption	Meter Equivalents	Customer Accounts	Hydrant Equivalents	
Customer Accounts	\$ 4.48	\$ 1.49	\$ 0.45	\$ 4.57	\$ 4.23	\$ 1.41	

Recovered through Fixed Meter Charges	0%	0%	0%	100%	100%	100%	
Recovered through Variable Rates	100%	100%	100%	0%	0%	0%	

Monthly Fixed Meter Charges									
5/8 in	1.00	\$ -	\$ -	\$ -	\$ 4.57	\$ 4.23	\$ -	\$ 8.81	
3/4 in	1.50	\$ -	\$ -	\$ -	\$ 6.85	\$ 4.23	\$ -	\$ 11.09	
1 in	2.50	\$ -	\$ -	\$ -	\$ 11.42	\$ 4.23	\$ -	\$ 15.66	
1-1/2 in	5.00	\$ -	\$ -	\$ -	\$ 22.84	\$ 4.23	\$ -	\$ 27.08	
2 in	8.00	\$ -	\$ -	\$ -	\$ 36.55	\$ 4.23	\$ -	\$ 40.79	
3 in	15.00	\$ -	\$ -	\$ -	\$ 68.53	\$ 4.23	\$ -	\$ 72.77	
4 in	25.00	\$ -	\$ -	\$ -	\$ 114.22	\$ 4.23	\$ -	\$ 118.46	
6 in	50.00	\$ -	\$ -	\$ -	\$ 228.45	\$ 4.23	\$ -	\$ 232.69	
8 in	80.00	\$ -	\$ -	\$ -	\$ 365.52	\$ 4.23	\$ -	\$ 369.76	
10 in	115.00	\$ -	\$ -	\$ -	\$ 525.43	\$ 4.23	\$ -	\$ 529.67	
12 in	215.00	\$ -	\$ -	\$ -	\$ 982.33	\$ 4.23	\$ -	\$ 986.57	
16 in	375.00	\$ -	\$ -	\$ -	\$ 1,713.37	\$ 4.23	\$ -	\$ 1,717.61	

Fire							
				\$ -	\$ 435,708.19	\$ 3,907,878.63	
		Meters	Hydrant Equiv	-	4.23	1.413	
5/8 in	1.00	-	-	\$ -		\$ -	
3/4 in	1.50	-	-	\$ -		\$ -	

1 in	2.50	535	1,338	\$ -	\$ 4.23	\$ 3.53	\$ 7.77
1-1/2 in	5.00	2,838	14,191	\$ -	\$ 4.23	\$ 7.07	11.30
2 in	8.00	30,493	243,941	\$ -	\$ 4.23	\$ 11.31	15.54
3 in	15.00	11,724	175,866	\$ -	\$ 4.23	\$ 21.20	25.44
4 in	25.00	31,491	787,264	\$ -	\$ 4.23	\$ 35.33	39.57
6 in	50.00	18,716	935,788	\$ -	\$ 4.23	\$ 70.66	74.90
8 in	80.00	6,737	538,949	\$ -	\$ 4.23	\$ 113.06	117.30
10 in	115.00	180	20,675	\$ -	\$ 4.23	\$ 162.53	166.76
12 in	215.00	219	47,123	\$ -	\$ 4.23	\$ 303.85	308.09
16 in	375.00	-	-	\$ -	-	-	-
		102,933	2,765,135				

Single Family Residential Tiers		Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	Total
		\$ 35,146,909	\$ 3,518,144	\$ 5,040,268	\$ -	\$ -	\$ -	\$ 43,705,320
Projected Water Usage (ccf)	% of Peak	<u>Consumption</u>			<u>Base</u>	<u>Peak</u>	<u>Total</u>	<u>Proposed Rate</u>
Tier 1	0%		3,578,671	46%	\$ 16,026,191	\$ -	\$ 16,026,191	\$ 4.48
Tier 2	100%	3.0 ccf	4,269,684	54%	\$ 19,120,718	\$ 8,558,411	\$ 27,679,129	\$ 6.49
Tier 3	No 0%	9.0 ccf	-	0%	\$ -	\$ -	\$ -	\$ -
Total			7,848,355		\$ 35,146,909	\$ 8,558,411	\$ 43,705,320	

Single Family Residential with Large Family Adjustment		Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	Total
		\$ 35,146,909	\$ 3,518,144	\$ 5,040,268	\$ -	\$ -	\$ -	\$ 43,705,320
Projected Water Usage (ccf)	% of Peak	<u>Consumption</u>			<u>Base</u>	<u>Peak</u>	<u>Total</u>	<u>Proposed Rate</u>
Tier 1	20%		4,504,146	57%	\$ 20,170,699	\$ 1,711,682	\$ 21,882,381	\$ 4.86
Tier 2	80%	4.0 ccf	3,344,209	43%	\$ 14,976,210	\$ 6,846,729	\$ 21,822,939	\$ 6.53
Tier 3	No 0%	9.0 ccf	-	0%	\$ -	\$ -	\$ -	\$ -
Total			7,848,355		\$ 35,146,909	\$ 8,558,411	\$ 43,705,320	
Adjustment for large household								
		6-7	4,563,485			\$ 21,882,381	\$ 4.80	
		8-9	3,284,870			\$ 21,822,939	\$ 6.65	
		10+				\$ -		
			7,848,355					

Multi Family Residential Tiers		Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	Total
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			\$ 48,270,069	\$ 4,831,749	\$ 6,922,204	\$ -	\$ -	\$ -	\$ 60,024,022
Projected Water Usage (ccf)		% of Peak		<u>Consumption</u>		<u>Base</u>	<u>Peak</u>	<u>Total</u>	<u>Proposed Rate</u>
Tier 1		30%		7,048,926	65%	\$ 31,566,866	\$ 3,526,186	\$ 35,093,052	\$ 4.98
Tier 2		70%	3.0 ccf	3,729,849	35%	\$ 16,703,204	\$ 8,227,767	\$ 24,930,971	\$ 6.69
Tier 3	No	0%	7.0 ccf	-	0%	\$ -	\$ -	\$ -	\$ -
Total				10,778,776		\$ 48,270,069	\$ 11,753,953	\$ 60,024,022	

Interruptible Rate			Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	Total
Percent of Capital Included in Charge		85%	\$ 4,817,921.52	\$ 482,265.46	\$ 688,568.40	\$ 262,566.89	\$ 77,106.83	\$ -	\$ 6,328,429.11
Price			<b>Annual Revenue from Meter Charges</b>						
5/8 in	\$	8.81	\$ 325,317.84						
3/4 in	\$	11.09	<b>Remaining to be Collected from Consumption Charges</b>						
1 in	\$	15.66	\$ 6,003,111.27						
1-1/2 in	\$	27.08	<b>Units (ccf)</b>						
2 in	\$	40.79	1,142,108						
3 in	\$	72.77	<b>Unit Charge</b>						
4 in	\$	118.46	<b>Current Rate</b>						
6 in	\$	232.69	<b>Percent Change</b>						
8 in	\$	369.76	\$ 5.26						
10 in	\$	529.67	\$ 3.25						
12 in	\$	986.57	61.7%						
16 in	\$	1,717.61	<b>Reduction from General Rate:</b>						
Annual Revenue	\$	325,317.84	9%						
W-1C			Base	Peak Day	Peak Hour	Meter Charges	Customer Service	Fire protection	Total
Costs	\$	47,155,031.70	\$ 6,293,514.14	\$ 7,619,494.24	\$ -	\$ -	\$ -	\$ -	\$ 61,068,040.07
Units									10529786
Unit Charge									\$ 5.80

	Allocated Cost	Usage (ccf)	Unit Cost (\$/ccf)
Commercial, Industrial, General	\$ 61,068,040	10,529,786	\$ 5.80
Public Uses	\$ 6,474,693	1,163,145	\$ 5.57
Interruptible	\$ 5,988,755	1,142,108	\$ 5.24
Docks and Shipping	\$ 2,161,050	281,798	\$ 7.67
Fire Service	\$ 131,702	22,709	\$ 5.80
Builders and Contractors	\$ 533,567	76,582	\$ 6.97
Contract	\$ 782,621	134,945	\$ 5.80
Non-Res Irrigation	\$ -	0	#DIV/0!
Res Irrigation	\$ -	0	#DIV/0!

Water Enterprise FY 2014 - 2023 Ten Year Programmatic Plan

San Francisco Public Utilities Commission

Water Enterprise FY 2014 - 2023 Ten Year Programmatic Plan													San Francisco Public Utilities Commission					
A	B	C	D	E	F	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	USES	Project	Available Balance as of 6/30/13		FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	1	FY 13-22	FY 14-23	Change
2	<b>Project</b>														2			
3	Natural Resources Planning	CUW257	5,672,113		500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	0	5,000,000	4,500,000	(500,000)
4	Long Term Monitoring & Permit Program	CUW271	4,547,603		3,520,000	4,629,000	6,752,000	14,506,000	8,996,000	5,289,000	5,284,000	5,789,000	6,151,000	0	4	68,722,000	60,916,000	(7,806,000)
5	Water Resource Planning & Development	PUW502	1,819,482		2,100,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	0	0	5	9,100,000	9,100,000	0
6	Landscape Conservation Program	CUW265	3,255,384		1,500,000	2,000,000	2,000,000	0	0	0	0	0	0	0	6	5,500,000	5,500,000	0
7	AWSS Maintenance	FUW101	564,003		500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	0	7	4,500,000	4,500,000	0
8	Treasure Island Facilities Maintenance	PUW511	713,790		1,132,000	1,165,000	1,200,000	1,236,000	1,273,000	1,311,000	1,350,000	1,390,000	1,431,000	0	8	11,488,000	11,488,000	0
9	Youth Employment Project	PYEAES06	71,750		1,290,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	0	9	10,490,000	10,490,000	0
10	Watershed Protection	FUW10201	0		1,996,000	1,696,000	1,196,000	1,196,000	1,196,000	1,196,000	1,196,000	1,196,000	1,196,000	0	10	13,260,000	12,064,000	(1,196,000)
11	Surety Bonds Program	PUW513	0		31,712	31,712	0	0	0	0	0	0	0	0	11	63,424	63,424	0
12	17th & Folsom Remediation	PUW516	1,200,000		0	0	0	0	0	0	0	0	0	0	12	0	0	0
13	<b>Subtotal</b>		<b>17,844,125</b>		<b>12,569,712</b>	<b>12,671,712</b>	<b>14,298,000</b>	<b>20,088,000</b>	<b>14,615,000</b>	<b>10,946,000</b>	<b>10,980,000</b>	<b>11,525,000</b>	<b>10,928,000</b>	<b>0</b>	13	<b>128,123,424</b>	<b>118,621,424</b>	<b>(9,502,000)</b>
14															14			
15	525 Golden Gate - Operations & Maintenance	PUW514	323,758		2,240,000	2,300,000	2,370,000	2,440,000	2,513,000	2,588,000	2,665,000	2,745,000	2,827,000	0	15	22,688,000	22,688,000	0
16	525 Golden Gate - Lease Payment	PUW515	261,556		9,167,000	9,166,000	9,167,000	9,169,000	9,168,000	9,168,000	9,169,000	9,167,000	9,169,000	0	16	82,510,000	82,510,000	0
17	<b>Subtotal</b>		<b>585,314</b>		<b>11,407,000</b>	<b>11,466,000</b>	<b>11,537,000</b>	<b>11,609,000</b>	<b>11,681,000</b>	<b>11,756,000</b>	<b>11,834,000</b>	<b>11,912,000</b>	<b>11,996,000</b>	<b>0</b>	17	<b>105,198,000</b>	<b>105,198,000</b>	<b>0</b>
18															18			
19			<b>18,429,439</b>		<b>23,976,712</b>	<b>24,137,712</b>	<b>25,835,000</b>	<b>31,697,000</b>	<b>26,296,000</b>	<b>22,702,000</b>	<b>22,814,000</b>	<b>23,437,000</b>	<b>22,924,000</b>	<b>0</b>	19	<b>233,321,424</b>	<b>223,819,424</b>	<b>(9,502,000)</b>
20															20			
21	<b>SOURCES</b>			<b>Available Balance</b>	<b>FY 13-14</b>	<b>FY 14-15</b>	<b>FY 15-16</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>	<b>FY 19-20</b>	<b>FY 20-21</b>	<b>FY 21-22</b>	<b>FY 22-23</b>	21	<b>FY 13-22</b>	<b>FY 14-23</b>	<b>Change</b>
22	Infrastructure - Recovery Capital (O&M)		0		930,000	958,000	987,000	1,016,000	1,046,000	1,077,000	1,109,000	1,142,000	1,176,000	0	22	9,441,000	9,441,000	0
23	Infrastructure - Recovery Capital (Lease)		0		3,806,000	3,426,000	2,903,000	2,650,000	2,650,000	2,650,000	2,650,000	2,649,000	2,650,000	0	23	26,034,000	26,034,000	0
24	Federal Bond Interest Subsidy		0		2,089,000	2,089,000	2,089,000	2,089,000	2,089,000	2,089,000	2,089,000	2,089,000	2,089,000	0	24	18,801,000	18,801,000	0
25	Revenue		0		17,151,712	17,664,712	19,856,000	25,942,000	20,511,000	16,886,000	16,966,000	17,557,000	17,009,000	0	25	179,045,424	169,543,424	(9,502,000)
26	<b>Total SOURCES</b>		<b>0</b>		<b>23,976,712</b>	<b>24,137,712</b>	<b>25,835,000</b>	<b>31,697,000</b>	<b>26,296,000</b>	<b>22,702,000</b>	<b>22,814,000</b>	<b>23,437,000</b>	<b>22,924,000</b>	<b>0</b>	26	<b>233,321,424</b>	<b>223,819,424</b>	<b>(9,502,000)</b>
27															27			
28	Total Sources		-		23,976,712	24,137,712	25,835,000	31,697,000	26,296,000	22,702,000	22,814,000	23,437,000	22,924,000	0	28	233,321,424	223,819,424	(9,502,000)
29	Total Uses		-		23,976,712	24,137,712	25,835,000	31,697,000	26,296,000	22,702,000	22,814,000	23,437,000	22,924,000	0	29	233,321,424	223,819,424	(9,502,000)
30	NET (Sources - Uses)				0	0	0	0	0	0	0	0	0	0	30	0	0	0

Water Enterprise FY 2014 - 2023 Ten Year CIP

	A	B	C	D	E	F	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	USES	Project	Available Balance as of 6/30/13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	1	FY 13-22	FY 14-23	Change		
2	<b>REGIONAL WATER</b>																		
3	<b>Water Treatment Program</b>																		
4	Tesla UV Facility	CUW27201	270,956	600,000	600,000	600,000	600,000	280,000	280,000	280,000	280,000	280,000	280,000	4	4,233,000	4,080,000	(153,000)		
5	SVWTP & East Bay Fields	CUW27202	323,737	1,900,000	5,900,000	700,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	5	12,400,000	11,300,000	(1,100,000)		
6	HTWTP & West Bay Fields	CUW27203	88,175	2,336,000	2,341,000	2,347,000	1,052,000	1,209,000	1,214,000	1,221,000	1,228,000	1,234,000	1,234,000	6	15,212,000	15,416,000	204,000		
7		<b>Subtotal</b>	<b>682,868</b>	<b>4,836,000</b>	<b>8,841,000</b>	<b>3,647,000</b>	<b>2,052,000</b>	<b>1,889,000</b>	<b>1,894,000</b>	<b>1,901,000</b>	<b>1,908,000</b>	<b>1,914,000</b>	<b>1,914,000</b>	7	<b>31,845,000</b>	<b>30,796,000</b>	<b>(1,049,000)</b>		
8	<b>Water Transmission Program</b>																		
9	Unallocated Budget	CUW27300	935,233	0	0	0	0	0	0	0	0	0	0	9	0	0	0		
10	Pipeline Inspection and Repair Project	CUW27302	816,528	1,010,000	1,010,000	1,010,000	1,010,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	10	10,450,000	10,520,000	70,000		
11	Pipeline Improvement Program	CUW27305	673,607	800,000	4,100,000	7,600,000	300,000	7,100,000	50,800,000	50,100,000	100,000	100,000	100,000	11	121,700,000	121,100,000	(600,000)		
12	Valve Replacement	CUW27306	506,000	508,000	508,000	1,013,000	1,013,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	12	10,300,000	11,142,000	842,000		
13	Metering Upgrades	CUW27303	(358)	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	13	2,000,000	2,000,000	0		
14	Corrosion Protection Capital Upgrades	CUW27301	386,433	1,550,000	1,850,000	1,850,000	1,850,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	14	18,050,000	18,500,000	450,000		
15	Pump Station Upgrades	CUW27304	5,000	1,025,000	910,000	910,000	910,000	1,180,000	1,180,000	1,180,000	1,180,000	1,180,000	1,180,000	15	9,655,000	10,835,000	1,180,000		
16	Vault Upgrades	CUW27307	338,000	338,000	338,000	338,000	338,000	675,000	675,000	675,000	675,000	675,000	675,000	16	5,065,000	5,402,000	337,000		
17	Calaveras Micro Turbine		0	2,500,000	1,500,000	0	0	0	0	0	0	0	0	17	4,900,000	4,000,000	(900,000)		
18	Town of Sunol Fire Suppression System	CUW26308	448,531	6,084,000	0	0	0	0	0	0	0	0	0	18	4,830,000	6,084,000	1,254,000		
19		<b>Subtotal</b>	<b>4,108,974</b>	<b>14,015,000</b>	<b>10,416,000</b>	<b>12,921,000</b>	<b>5,621,000</b>	<b>13,485,000</b>	<b>57,185,000</b>	<b>56,485,000</b>	<b>6,485,000</b>	<b>6,485,000</b>	<b>6,485,000</b>	19	<b>186,950,000</b>	<b>189,583,000</b>	<b>2,633,000</b>		
20	<b>Water Supply &amp; Storage Program</b>																		
21	Dam Structural Upgrades (w/geotech)	CUW274	378,000	728,000	653,000	6,653,000	5,553,000	378,000	378,000	378,000	278,000	278,000	278,000	21	15,655,000	15,555,000	(100,000)		
22	Desalination - Regional		0	2,500,000	4,500,000	4,000,000	2,500,000	20,000,000	20,000,000	15,450,000	0	0	0	22	68,950,000	68,950,000	0		
23		<b>Subtotal</b>	<b>378,000</b>	<b>3,228,000</b>	<b>5,153,000</b>	<b>10,653,000</b>	<b>8,053,000</b>	<b>20,378,000</b>	<b>20,378,000</b>	<b>15,828,000</b>	<b>278,000</b>	<b>278,000</b>	<b>278,000</b>	23	<b>84,605,000</b>	<b>84,505,000</b>	<b>(100,000)</b>		
24	<b>Watersheds &amp; Land Management</b>																		
25	Unallocated Budget	CUW27500	4,550,526	0	0	0	0	0	0	0	0	0	0	25	0	0	0		
26	Watershed Structures Upgrades	CUW27511/02/03	532,442	710,000	710,000	710,000	710,000	710,000	710,000	710,000	710,000	710,000	710,000	26	7,100,000	7,100,000	0		
27	Watershed Roads and ROW Management	CUW27512/15	60,613	3,604,000	3,404,000	2,804,000	1,504,000	1,504,000	1,504,000	1,504,000	1,504,000	1,504,000	1,504,000	27	34,200,000	20,340,000	(13,860,000)		
28	Watershed Cottage/Buildings Upgrades	CUW27513	486,000	486,000	486,000	486,000	486,000	486,000	486,000	486,000	486,000	486,000	486,000	28	4,860,000	4,860,000	0		
29	EBRPD Water System	CUW27514	42,532	800,000	500,000	0	0	0	0	0	0	0	0	29	1,500,000	1,300,000	(200,000)		
30		<b>Subtotal</b>	<b>5,672,113</b>	<b>5,600,000</b>	<b>5,100,000</b>	<b>4,000,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	30	<b>47,660,000</b>	<b>33,600,000</b>	<b>(14,060,000)</b>		
31	<b>Communication &amp; Monitoring Program</b>																		
32	Microwave Backbone Upgrade	CUW27601	445,000	530,000	2,500,000	1,500,000	0	0	0	0	0	0	0	32	5,050,000	4,530,000	(520,000)		
33	WSTD Security System		0	0	1,000,000	500,000	550,000	550,000	500,000	500,000	500,000	500,000	500,000	33	0	5,100,000	5,100,000		
34		<b>Subtotal</b>	<b>445,000</b>	<b>530,000</b>	<b>3,500,000</b>	<b>2,000,000</b>	<b>550,000</b>	<b>550,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	34	<b>5,050,000</b>	<b>9,630,000</b>	<b>4,580,000</b>		
35	<b>Buildings and Grounds Programs</b>																		
36	Unallocated Budget	CUW27700	3,653,720	0	0	0	0	0	0	0	0	0	0	36	0	0	0		
37	Sunol Yard Upgrade	CUW27701/02	1,191,093	5,113,000	18,775,000	12,675,000	525,000	0	0	0	0	0	0	37	24,438,000	37,088,000	12,650,000		
38	Millbrae Yard Upgrade	CUW27703	1,971,282	10,320,000	2,620,000	54,990,000	4,160,000	0	0	0	0	0	0	38	72,090,000	72,090,000	0		
39		<b>Subtotal</b>	<b>6,816,095</b>	<b>15,433,000</b>	<b>21,395,000</b>	<b>67,665,000</b>	<b>4,685,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	39	<b>96,528,000</b>	<b>109,178,000</b>	<b>12,650,000</b>		
40	<b>REGIONAL WATER TOTAL</b>																		
41			<b>18,103,050</b>	<b>43,642,000</b>	<b>54,405,000</b>	<b>100,886,000</b>	<b>23,661,000</b>	<b>39,002,000</b>	<b>82,657,000</b>	<b>77,414,000</b>	<b>11,871,000</b>	<b>11,877,000</b>	<b>11,877,000</b>	41	<b>452,638,000</b>	<b>457,292,000</b>	<b>4,654,000</b>		
42	<b>LOCAL WATER</b>																		
43	<b>Local Water Conveyance /Distribution System</b>																		
44	Local Water Conveyance /Distribution System	CUW280/260	28,408,129	44,185,000	53,700,000	53,700,000	53,700,000	53,700,000	53,700,000	53,700,000	53,700,000	53,700,000	53,700,000	44	498,406,000	527,485,000	29,079,000		
45	Buildings & Grounds Improvements - Local	CUW688	3,186,085	500,000	500,000	525,000	525,000	525,000	25,000	0	0	0	0	45	5,100,000	2,600,000	(2,500,000)		
46	SF Eastside Recycled Water - Local		0	0	0	0	0	183,640,000	7,460,000	7,520,000	1,380,000	0	0	46	200,000,000	200,000,000	0		
47	Pacific Rod & Gun Club Remediation Project		0	1,400,000	10,950,000	0	0	0	0	0	0	0	0	47	0	12,350,000	12,350,000		
48	Systems Monitoring & Control		0	0	1,510,000	5,900,000	5,800,000	0	0	0	0	0	0	48	0	13,210,000	13,210,000		
49	Water Storage Facilities		0	0	200,000	420,000	5,760,000	2,360,000	0	0	0	0	0	49	0	8,740,000	8,740,000		
50	Other Recycled Water Projects - Local	CUW278	505,000	910,000	986,000	3,925,000	0	0	0	0	0	0	0	50	6,326,000	5,821,000	(505,000)		
51	Treasure Island Capital Upgrades	CUW270	6,961,558	3,000,000	3,000,000	0	0	0	0	0	0	0	0	51	6,000,000	6,000,000	0		
52		<b>LOCAL WATER TOTAL</b>	<b>39,060,772</b>	<b>49,995,000</b>	<b>70,846,000</b>	<b>64,470,000</b>	<b>65,785,000</b>	<b>240,225,000</b>	<b>61,185,000</b>	<b>61,220,000</b>	<b>55,080,000</b>	<b>53,700,000</b>	<b>53,700,000</b>	52	<b>715,832,000</b>	<b>776,206,000</b>	<b>60,374,000</b>		
53	<b>Subtotal (less: Auxiliary Water Supply System)</b>																		
54			<b>57,163,822</b>	<b>93,637,000</b>	<b>125,251,000</b>	<b>165,356,000</b>	<b>89,446,000</b>	<b>279,227,000</b>	<b>143,842,000</b>	<b>138,634,000</b>	<b>66,951,000</b>	<b>65,577,000</b>	<b>65,577,000</b>	54	<b>1,168,470,000</b>	<b>1,233,498,000</b>	<b>65,028,000</b>		
55	<b>Auxiliary Water Supply System</b>																		
56		CUWAWS	54,785,300	29,814,000	89,300,000	8,686,000	0	0	0	100,000,000	0	0	0	55	93,982,000	227,800,000	133,818,000		
57			<b>111,949,122</b>	<b>123,451,000</b>	<b>214,551,000</b>	<b>174,042,000</b>	<b>89,446,000</b>	<b>279,227,000</b>	<b>143,842,000</b>	<b>138,634,000</b>	<b>166,951,000</b>	<b>65,577,000</b>	<b>65,577,000</b>	57	<b>1,262,452,000</b>	<b>1,461,298,000</b>	<b>198,846,000</b>		
58	<b>SOURCES</b>																		
59		Available Balance		FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	59	FY 13-22	FY 14-23	Change		
60	<b>Revenue Funding</b>																		
61	Regional Revenue		-	17,942,600	31,204,000	33,404,000	18,341,000	18,952,000	51,804,000	51,804,000	11,371,000	11,377,000	11,377,000	61	287,035,000	257,576,600	(29,458,400)		
62	Local Revenue		-	2,310,000	986,000	3,925,000	0	0	20,000,000	25,000,000	30,000,000	35,000,000	40,000,000	62	116,326,000	157,221,000	40,895,000		
63		<b>Total Revenue Sources</b>	<b>0</b>	<b>20,252,600</b>	<b>32,190,000</b>	<b>37,329,000</b>	<b>18,341,000</b>	<b>18,952,000</b>	<b>71,804,000</b>	<b>76,804,000</b>	<b>41,371,000</b>	<b>46,377,000</b>	<b>51,377,000</b>	63	<b>403,361,000</b>	<b>414,797,600</b>	<b>11,436,600</b>		
64	<b>Debt Funding</b>																		
65	Regional Bonds		-	9,954,000	23,201,000	67,482,000	5,3												

# **Rate Fairness Board**

**SFPUC Response to RFB Comments from January 31, 2014**

**February 11, 2014**

**Crispin Hollings, Director of Financial Planning  
Business Services**



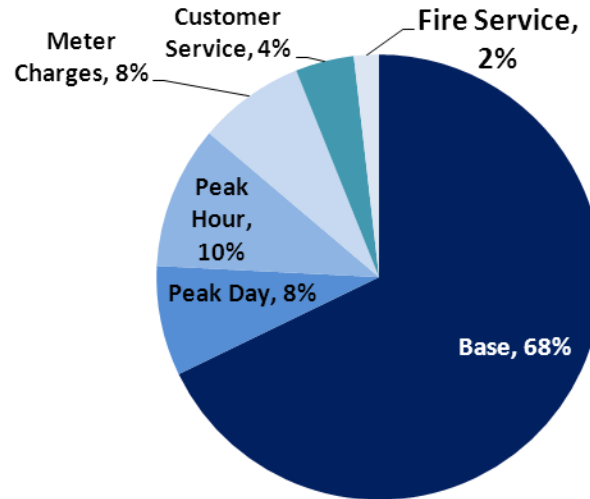
# Private Fire Service

## FYE2015 – FYE2018 Rate Proposal

Private Fire Service Rates					
	Current Rate	Proposed			
		FYE 2015	FYE 2016	FYE 2017	FYE 2018
Monthly Service Charge:					
1 in	\$1.90	\$7.77	\$8.71	\$9.59	\$10.36
1-1/2 in	\$2.40	\$11.30	\$12.66	\$13.93	\$15.05
2 in	\$5.00	\$15.54	\$17.41	\$19.16	\$20.70
3 in	\$13.80	\$25.44	\$28.50	\$31.35	\$33.86
4 in	\$29.50	\$39.57	\$44.32	\$48.76	\$52.67
6 in	\$85.40	\$74.90	\$83.89	\$92.28	\$99.67
8 in	\$182.00	\$117.30	\$131.38	\$144.52	\$156.09
10 in	\$327.50	\$166.76	\$186.78	\$205.46	\$221.90
12 in	\$528.80	\$308.09	\$345.07	\$379.58	\$409.95

# Fire Service

## FYE2015 – FYE2018 Rate Proposal



SFPUC Water Enterprise Functional Cost Allocation

- Allocation for Fire Service accounts for capacity-related costs incurred based on excess capacity that must be designed into the system to provide private fire service
- Prior study allocation based on assumption of 0.5% total water demand
- Fire Service charges are calculated similarly to potable service meter charges
  - Both include fixed allocation for customer service costs
  - Both are based on meter equivalents





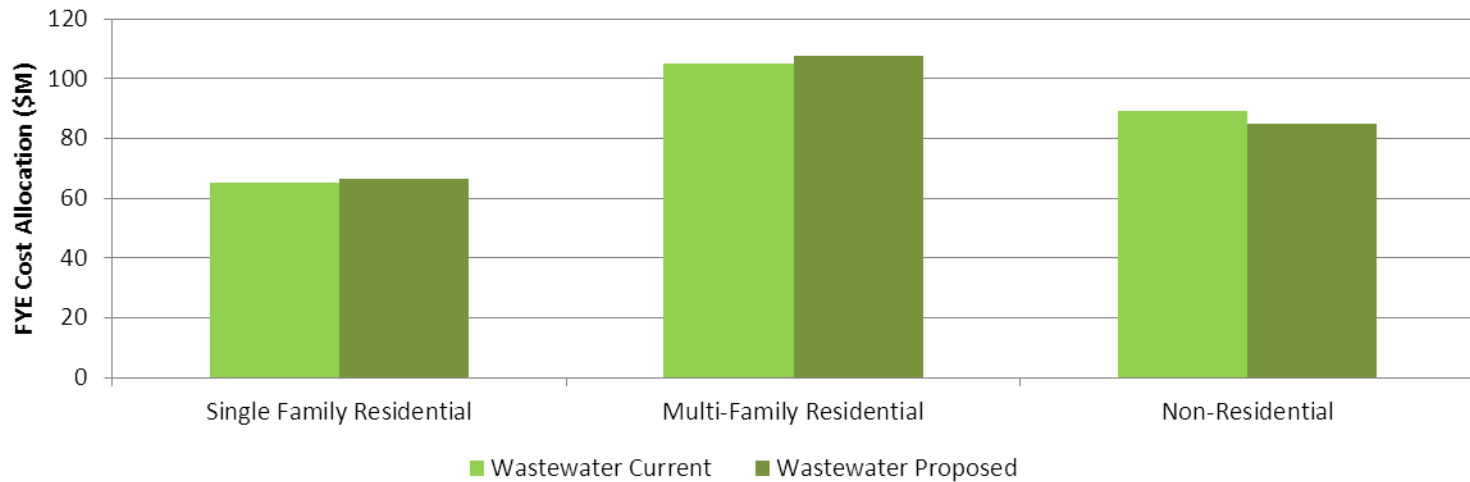
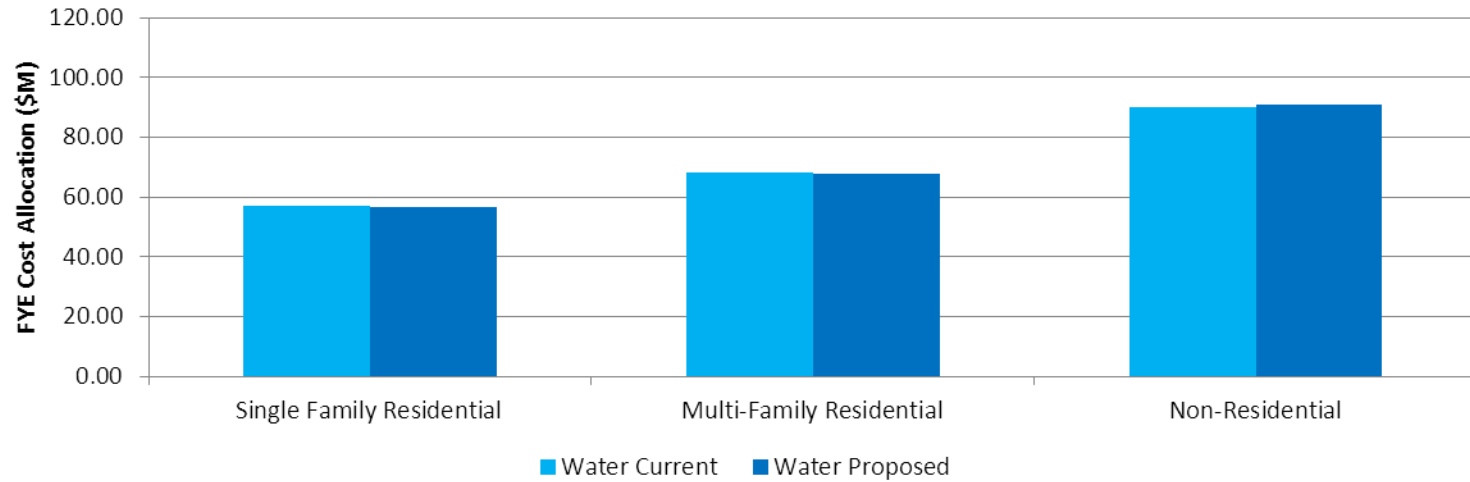
# Meter Charges

## FYE2015 – FYE2018 Rate Proposal

	Meter Charges	Fire Service
Cost Allocation	\$16,595,210	\$3,907,879
Units of Service	302,679	230,428
Cost/Unit	4.57	1.41

Meter Size	Meter Equivalent	Fixed Meter Charge			Fire Service Charge		
		Meter Charge	Customer Service	Total	Meter Charge	Customer Service	Total
5/8 in	1.0	\$4.57	\$4.23	\$8.80			
3/4 in	1.5	\$6.85	\$4.23	\$11.09			
1 in	2.5	\$11.42	\$4.23	\$15.66	\$3.53	\$4.23	\$7.77
1-1/2 in	5.0	\$22.84	\$4.23	\$27.08	\$7.07	\$4.23	\$11.30
2 in	8.0	\$36.55	\$4.23	\$40.78	\$11.31	\$4.23	\$15.54
3 in	15.0	\$68.53	\$4.23	\$72.77	\$21.20	\$4.23	\$25.43
4 in	25.0	\$114.22	\$4.23	\$118.46	\$35.33	\$4.23	\$39.56
6 in	50.0	\$228.45	\$4.23	\$232.68	\$70.66	\$4.23	\$74.90
8 in	80.0	\$365.52	\$4.23	\$369.75	\$113.06	\$4.23	\$117.29
10 in	115.0	\$525.43	\$4.23	\$529.67	\$162.53	\$4.23	\$166.76
12 in	215.0	\$982.33	\$4.23	\$986.56	\$303.85	\$4.23	\$308.09
16 in	375.0	\$1,713.37	\$4.23	\$1,717.60			

# Customer Class Cost Allocation





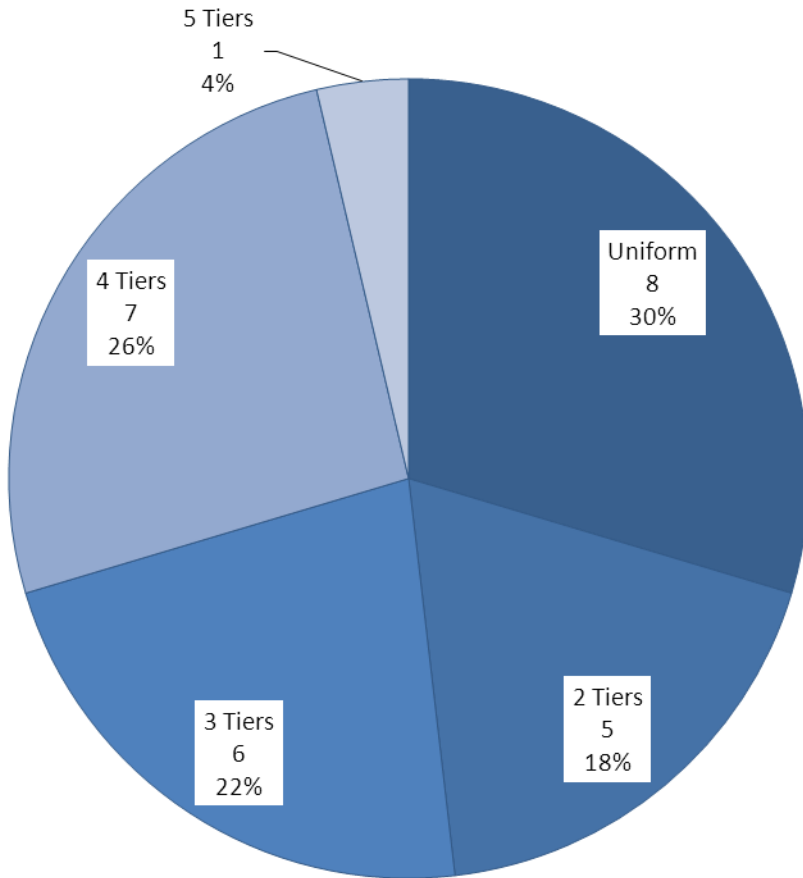
# Large Household Water-Budget Program

Proposed Grant Program - FYE2015 to FYE2018

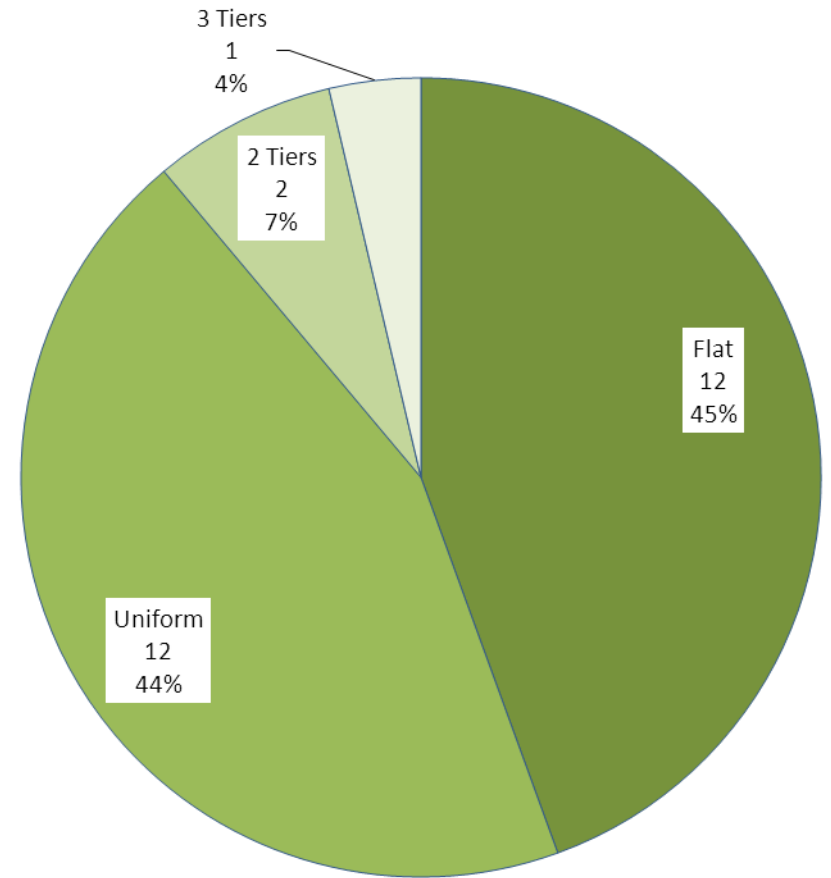
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- Proposal to offer monthly grants to Large Household accounts who enroll and share consumption data to study large household service delivery
- Program benefits for SFPUC
  - Encourages water conservation and rate-payer awareness by incentivizing customers with high water usage to participate in water-use evaluations
  - Will help SFPUC to better understand peaking costs associated with higher occupancy households
  - Program data may inform options regarding future water-budget based rates
- Program will be evaluated prior to next rate study

# Agencies and Rate Structure



Water



Wastewater



# Agencies and Rate Structure

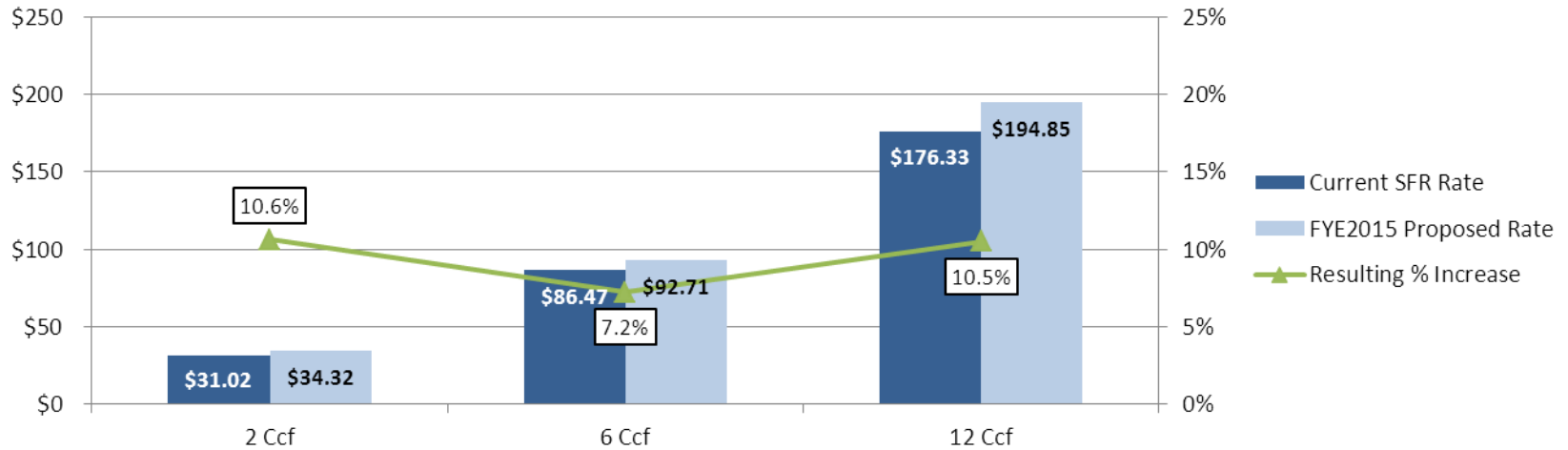
	Water	
	Tiered	Uniform
Bakersfield	3	
Cincinnati	3	
Dallas	4	
Fremont		x
Fresno		x
Hayward	4	
Houston	2	
Las Vegas	4	
Los Angeles	2	
New York City		x
Novato	4	
oakland	3	
Palo Alto	2	
Philadelphia	4	
Phoenix	3	
Portland, OR		x
Riverside	4	
Sacramento		x
San Antonio	4	
San Diego	3	
San Francisco	2	
San Jose	2	
Santa Clara		x
Santa Cruz	5	
Seattle, WA	3	
Walnut Creek		x
Washington, D.C.		x

	Wastewater		
	Tiered	Uniform	Flat
Bakersfield			x
Cincinnati	3		
Dallas		x	
Fremont			x
Fresno			x
Hayward			x
Houston	2		
Las Vegas			x
Los Angeles		x	
New York City		x	
Novato			x
oakland		x	
Palo Alto			x
Philadelphia		x	
Phoenix		x	
Portland, OR		x	
Riverside			x
Sacramento		x	
San Antonio		x	
San Diego		x	
San Francisco	2		
San Jose			x
Santa Clara			x
Santa Cruz			x
Seattle, WA		x	
Walnut Creek			x
Washington, D.C.		x	

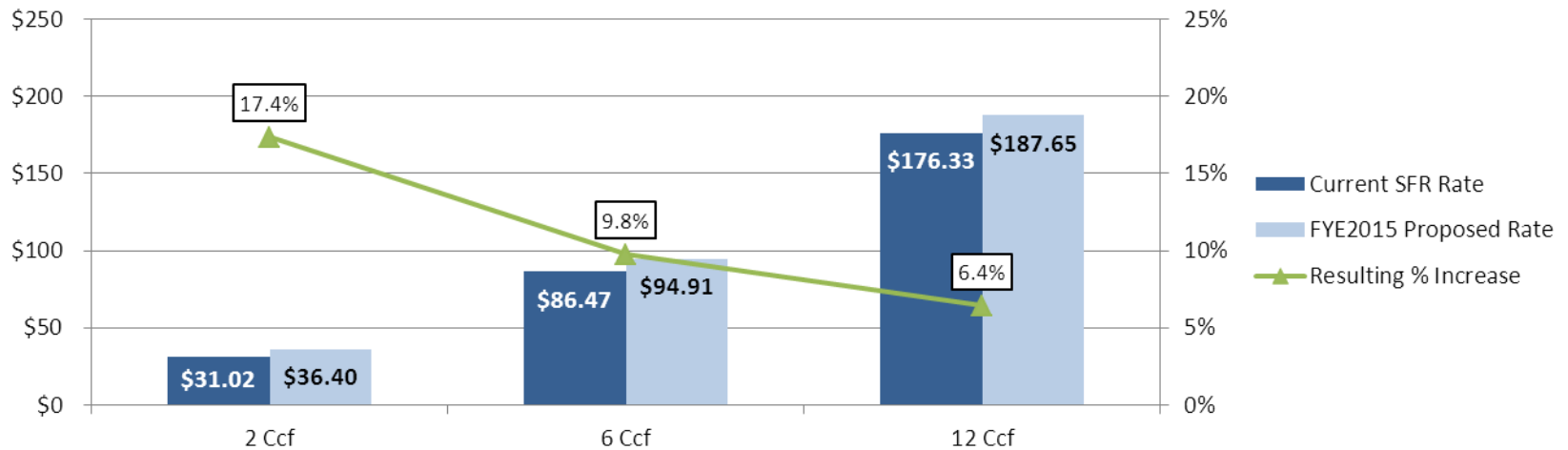
# Combined Water/Sewer Bill Comparisons

## 2-Tier vs Uniform Sewer Rate – Single Family Residential

### 2 Tier Sewer Rate



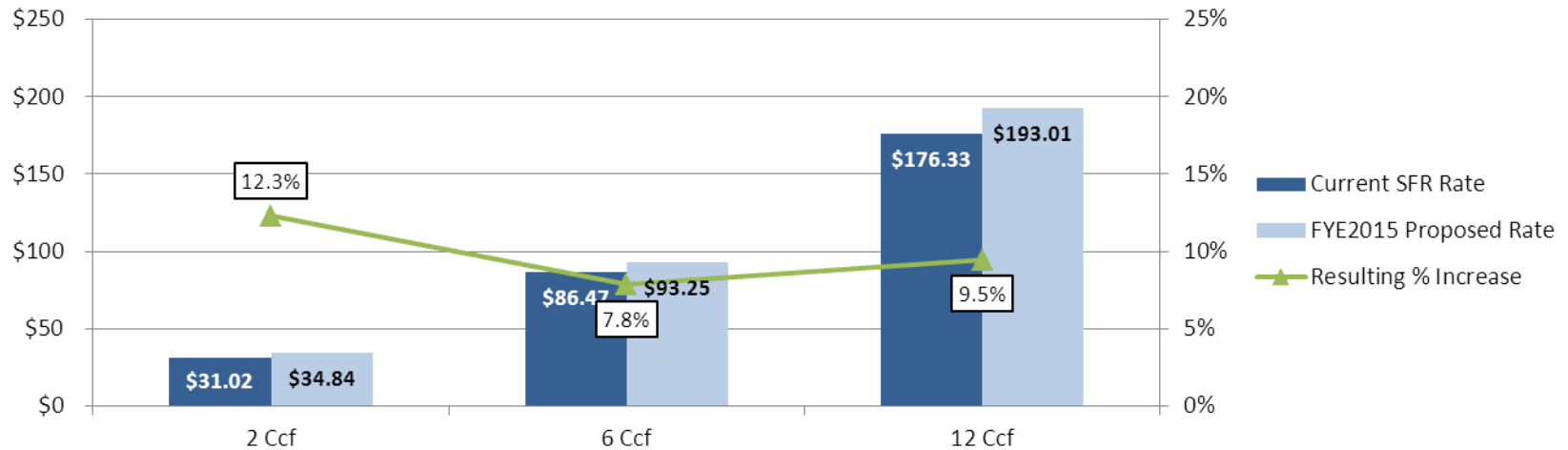
### Uniform Sewer Rate - Independent Consultant Recommendation



# Combined Water/Sewer Bill Comparisons

## Uniform Sewer Rate Phase-In Proposal – Single Family Residential

### 2 Tier to Uniform Sewer Rate Phase In - Staff Proposal





# Combined Water/Sewer Bill Comparisons

## Uniform Sewer Rate Phase-In Proposal – Single Family Residential

	Current	Proposed			
Average Monthly Bill (\$)	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
24/7 Operations	\$52.09	\$53.65	\$55.26	\$56.92	\$58.63
Water Capital Improvements	\$16.23	\$19.38	\$23.72	\$27.71	\$30.60
Sewer Capital Improvements	\$18.15	\$20.22	\$22.46	\$26.01	\$32.27
<b>Total Bill</b>	<b>\$86.47</b>	<b>\$93.25</b>	<b>\$101.45</b>	<b>\$110.64</b>	<b>\$121.51</b>
Percent Increase		7.8%	8.8%	9.1%	9.8%
Bill as percent of household income	1.3%	1.4%	1.4%	1.5%	1.6%
Pennies per gallon	1.93¢	2.08¢	2.26¢	2.47¢	2.71¢
Cost per person/day	\$0.96	\$1.04	\$1.13	\$1.23	\$1.35

\*Monthly bill for a Single Family Residential account with 5/8” meter consuming 6 Ccf per month





# Combined Water/Sewer Bill Comparisons

## Uniform Sewer Rate Phase-In Proposal – Multi Family Residential\*

	Current	Proposed			
Monthly Bill (36 Ccf)	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Monthly Bill (\$)	\$575.86	\$628.54	\$675.22	\$727.47	\$788.76
% Annual Change	5.8%	9.1%	7.4%	7.7%	8.4%

\*Monthly bill for a 6-unit MFR building with 3/4" meter consuming 36 Ccf per month

Average number of dwelling units in MFR building in San Francisco is 6 units as reported by Customer Service Data.



# Interruptible Water Service

## Total Revenues

<b>Interruptible Rate</b>	<b>Actuals FYE 2012-2013</b>	<b>Projected FYE 2013-2014</b>	<b>Projected FYE 2014-2015</b>
<b>Total Interruptible Revenue</b>	\$2,149,674	\$2,290,227	\$3,591,547
<b>Total Retail Revenue</b>	\$177,202,892	\$189,857,287	\$209,237,919
<b>Interruptible Share</b>	1.2%	1.2%	1.7%



# Front Yard Ambassadors Program

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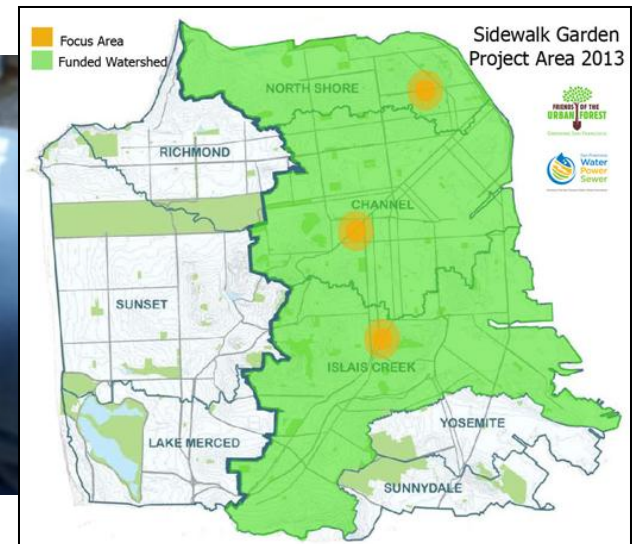
The **Front Yard Ambassadors Program** gives Sunset District residents the opportunity transform their front yards into green, permeable landscapes.

- Program provides reduced permit fees, plants and other landscaping, and construction support for participants.
- Must be residents of District 4, have homeowner approval, and agree to maintain the landscaping as long as they reside on the property.
- Block level participation requires 5 houses on one block to participate in the program.
- 10 homes are participating in pilot round and will participate in a planting day on February 22. Supervisor Tang's office anticipates 30-60 homes will participate in this first grant cycle.

Funding is provided by one-time SFPUC grant to Friends of the Urban Forest and discretionary funding through Supervisor Tang's office. FUF is administering program logistics and screening applications.

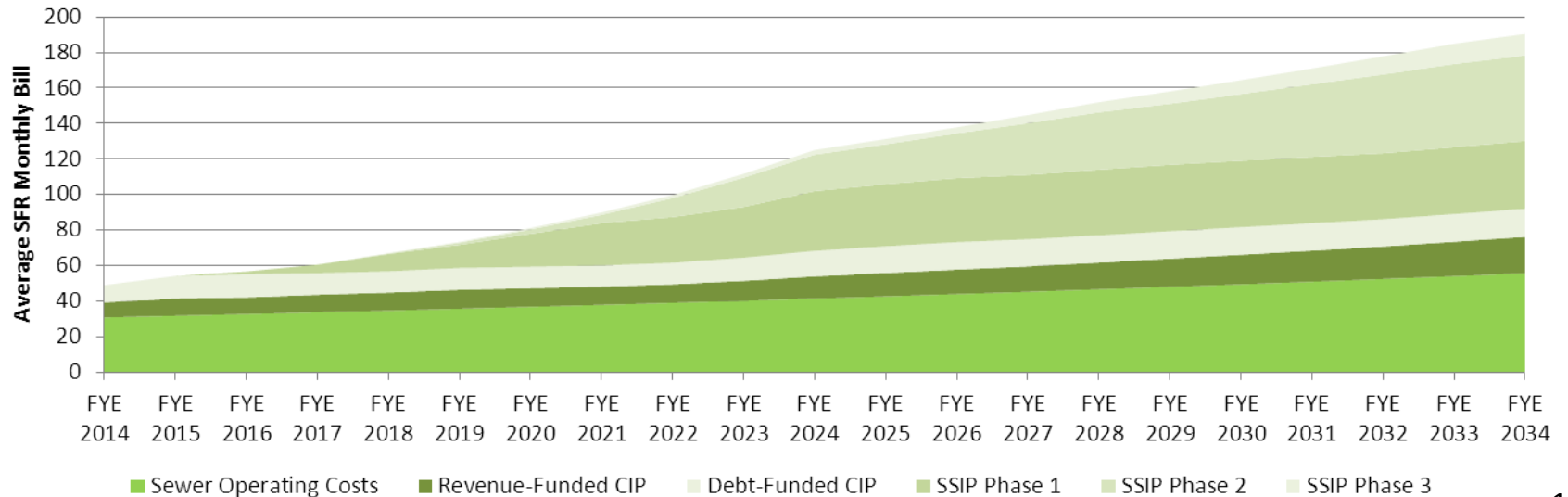
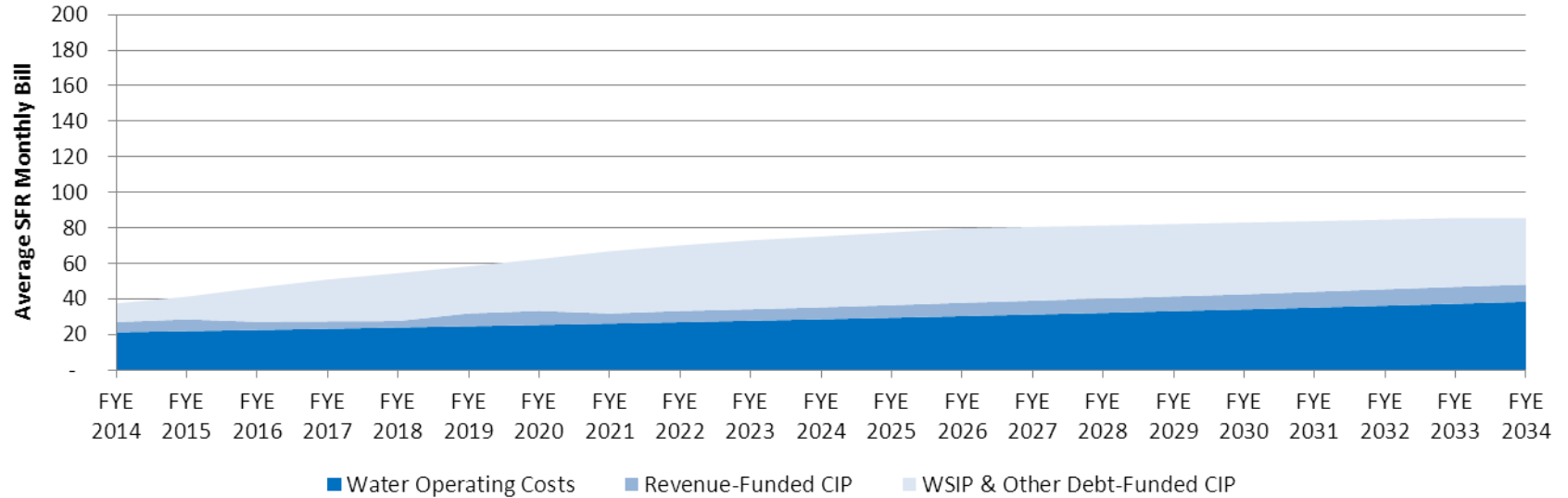
# The Sidewalk Garden Project

- Joint project with SFPUC and Friends of the Urban Forest (launched in May 2013)
- Program works with San Francisco residents to:
  - Create sidewalk gardens to slow down and clean stormwater
  - Replace concrete sidewalks with thriving gardens to capture stormwater
  - Reduces the burden on our sewer system while beautifying San Francisco neighborhoods and protecting the environment

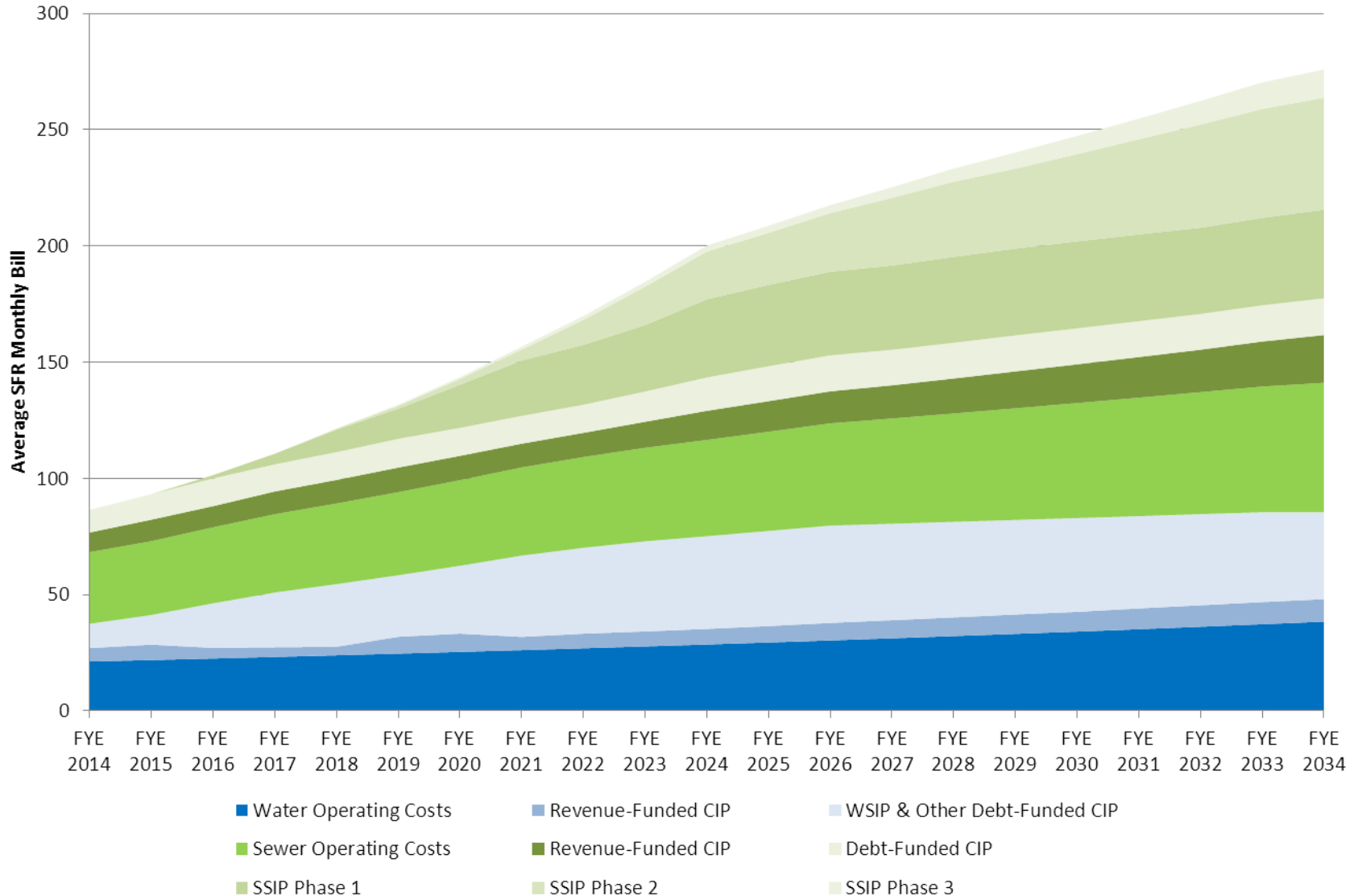


For questions on project requirements and neighborhood applications, contact Friends of the Urban Forest at 415-268-0772 or email contact form on [www.fuf.net](http://www.fuf.net)

# Revenue Requirement Drivers



# Revenue Requirement Drivers



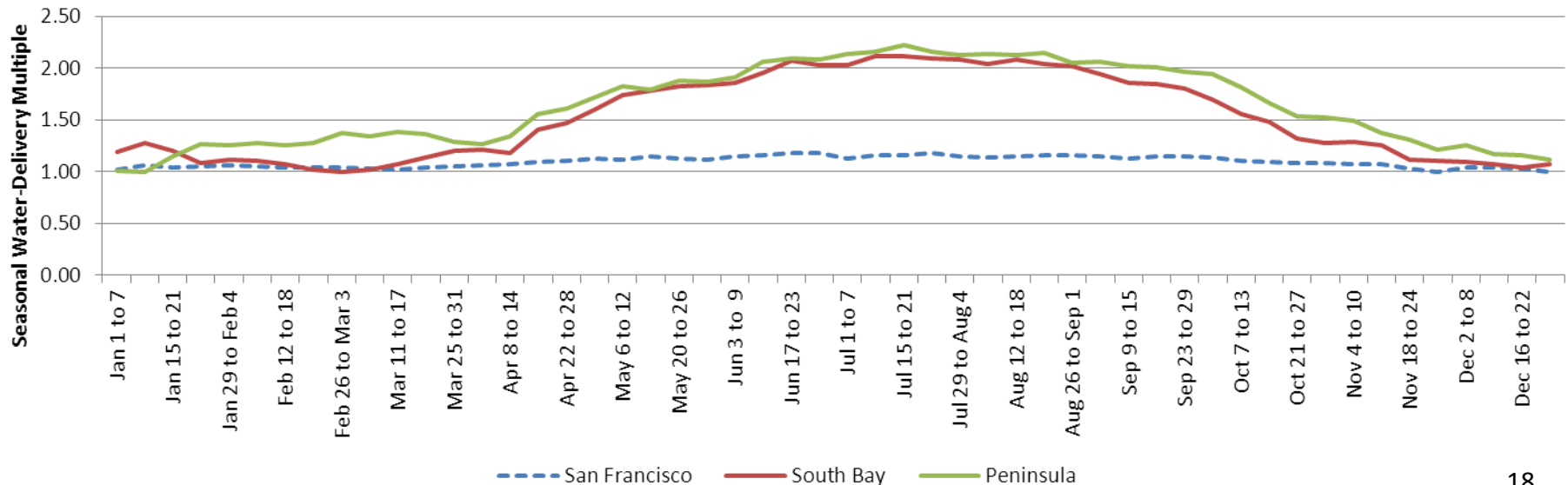
# Time of Use/Seasonal Water Rates

## Time of Use Rates

- Currently insufficient data to develop time-of-use rates for retail water
- New AMI meters may provide opportunity to understand time-of-use patterns

## Seasonal Rates

- Seasonal rates tied to tangible occurrence; i.e. change in seasons
- Seasonal pricing is aimed at reducing discretionary water use, which mainly consists of outdoor water use, for lawns & gardens, which increases in summer
- San Francisco water use has little seasonal variation





# Accounts & Water Use by Customer Class

<b>Breakdown</b>	<b>Total Number of Accounts</b>		<b>Total Annual Ccf</b>	
Single Family	110,062	64%	7,848,355	27%
Multi-Family	41,121	24%	10,778,776	37%
Non-Residential	20,054	12%	10,529,786	36%



# Tiers & Cost of Service

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## Tier 1

- Tier 1 rate is set to recover the cost of non-peak water delivery and a minimal share of peak costs
- Tier 1 rate is set primarily to cover operating and capital costs incurred to provide a basic level of service to each customer

## Tier 2

- Tier 2 then accounts for the majority of costs associated with peaking not accounted for in Tier 1
- Tier 2 rate is set to cover costs incurred to meet peak day demands in excess of basic demand
- Peaking costs also include capital costs related to sizing the system to meet excess demand

# Questions?

1 **San Francisco Public Utilities Rate Fairness Board**

2  
3 **Minutes Tuesday, February 11, 2014**

4  
5 5:30 p.m.  
6 525 Golden Gate Avenue 2<sup>nd</sup> Floor  
7 O'Shaughnessy Conference Room  
8 San Francisco, CA 94102  
9

10  
11 **1. Call to Order and Roll Call**

12 Chair Kevin Cheng called the meeting to order at 5:45 p.m.

13 Present: Kevin Cheng, Howard Ash, Patricia Breslin, Anthony Ababon, Risa  
14 Sandler, and Mirian Saez.  
15

16 **2. Public Comment: Members of the public may address the Rate Fairness**  
17 **Board (RFB) on matters that are within the RFB's jurisdiction and are not on**  
18 **today's agenda**

19 **Public Comment:**

20 Mr. David Pilpel, member of the SFPUC Citizens' Advisory Committee, noted that  
21 he had received a copy of independent rate consultant's SFPUC Utility Rate Study  
22 report and thanked SFPUC staff for their work in getting it to him.  
23

24 **3. Chair's Report**

- 25 • [SFPUC Water/Sewer FYE15-FYE18 Proposed Rates – Finance Update](#)  
26 • [SFPUC Water/Sewer FYe15-FYE18 Proposed Rates – Communication Update](#)  
27

28 Director of Financial Planning Crispin Hollings introduced Rob Grantham of Carollo  
29 Engineers who gave a brief summary of the completed SFPUC Utility Rate Study  
30 report.  
31

32 Deputy Director of Communications Deborah Chilvers presented an update on the  
33 draft Proposition 218 notice and outreach efforts being coordinated by the SFPUC  
34 Communications group.  
35

36 Director of Financial Planning Crispin Hollings presented the Finance update  
37 regarding the SFPUC Water/Sewer FYE15-FYE18 Proposed Rates.  
38

39 Chair Cheng made the following requests for additional information:

- 40 a. Provide summary feedback from community outreach efforts.  
41

42 Member Ash made the following requests for additional information:

- 43 a. Determine if fire service rates are required as part of Proposition 218  
44 noticing.  
45 b. Explain why the proposed fire service charges changed from what was set  
46 in 2009.  
47 c. Explain how advanced metering infrastructure (AMI) will impact Customer  
48 Service costs.  
49

50 **Public Comment:**

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Ms. Joan Girardot, Coalition for San Francisco Neighborhoods, noted that she was opposed to the Large Household Grant program, that she was concerned about tiers in the proposed water rate structure, and that she was glad to see the tiers being phased out of the wastewater rate structure.

Ms. Judy Berkowitz, Coalition for San Francisco Neighborhoods, requested the following additional information:

- a. Show seasonal water usage by customer class.

Mr. David Pilpel, member of the SFPUC Citizens' Advisory Committee, noted that he was opposed to the Large Household Grant program and requested the following additional information:

- a. Show how meter size relates to flow rate.
- b. Show the number of SFPUC meters by meter size.
- c. Provide wet-weather-mitigation project cost by unit of diverted water.
- d. Overview of SFPUC low income program discounts and staff consideration to change the discount to a uniform amount.

Ms. Lorrain Lucas, Coalition for San Francisco Neighborhoods, requested information regarding all SFPUC grant programs. Director of Communications, Tyrone Jue, noted that this information would be provided as part of a Sunshine Request.

#### 4. **Approval of RFB Minutes of January 31, 2014**

Member Ash noted that the date on the printed version of the minutes was incorrect and moved to postpone approval of the minutes until the next meeting of the Rate Fairness Board.

##### **Public Comment:**

Mr. Pilpel requested various edits that were provided to the meeting secretary.

On the motion to postpone approval:

Ayes: Cheng, Ash, Breslin, Ababon, Saez, Sandler

#### 5. **Announcements, Comments, Questions, and Future Agenda Items**

Mr. Hollings noted that, per general consensus of Rate Fairness Board members, the next meeting of the Rate Fairness Board would take place on March 14, 2014 at 2:00pm.

##### **Public Comment:**

Mr. Pilpel noted that this date would provide time for Rate Fairness Board deliberation on the proposed water and sewer rates in advance of the April 22, 2014 Commission meeting.

#### 5. The meeting adjourned at 7:45 PM.

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
A Department of the City and County of San Francisco, California



# Building on Our Strengths

## Annual Report for Fiscal Year 2009-10



## TABLE OF CONTENTS

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4-9	What We Do
4-5	Water
6-7	Power
8-9	Wastewater
10	Sustainability
11-13	Financial Performance
14	New Sustainable Headquarters
15	Community Involvement



*Worker at Mt. Davidson Tank*

# GENERAL MANAGER'S MESSAGE

The San Francisco Public Utilities Commission (SFPUC) is pleased to present its Annual Report for the 2009-10 fiscal year that ended on June 30, 2010.

The report provides examples of how the SFPUC has continued to build on its strengths—rebuilding water and wastewater infrastructure; advancing green power and environmental initiatives; constructing a new sustainable headquarters and engaging our communities.


Despite the economic downturn, we continued to maintain strong financial health and to meet challenges with resilience. With the prudent management of resources, including funds already secured through low-cost successful bond sales, we moved forward the \$4.6 billion Water System Improvement Program and the development of the Sewer System Improvement Program. We are also leading the efforts in developing renewable energy for San Francisco. Our continued work ensures that our customers receive reliable and high-quality water, power and sewer services.

Our commitment to sustainability has won national recognition. In FY 2009-10, the SFPUC received major awards for environmental leadership from the San Francisco Planning and Urban Research Association, and the National Association of Environmental Professionals. Our three Wastewater Treatment Plants at Oceanside, Southeast and Treasure Island also received Platinum and Gold awards from the National Association of Clean Water Agencies.

The SFPUC is recognized for fiscal transparency and accountability and is the recipient of two Government Finance Officers Association's awards: (1) the Distinguished Budget Presentation Award and (2) the Achievement for Excellence in Financial Reporting Award for the Comprehensive Annual Financial Report.

We are proud to be your sustainable water, power and sewer utility.

Sincerely,



Ed Harrington  
General Manager



# WHO WE ARE

The SFPUC is a department of the City and County of San Francisco that provides retail drinking water and wastewater services to San Francisco, wholesale water to three Bay Area counties, and green hydroelectric and solar power to San Francisco's municipal departments.

The SFPUC is comprised of three essential 24/7 service utilities: Water, Wastewater and Power. These functions are supported operationally by the Business Services, Infrastructure and External Affairs bureaus.

Headquartered at 1155 Market Street in San Francisco, the SFPUC has some 2,300 employees working in 7 counties with a combined annual operating budget of over \$700 million.

Our mission is to provide our customers with high-quality, efficient and reliable water, power, and sewer services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to the SFPUC's care.





The San Francisco Public Utilities Commission (SFPUC) consists of five members, nominated by the Mayor and approved by the Board of Supervisors. Their responsibility is to provide operational oversight in areas such as rates and charges for services approval of contracts, and organizational policy.



**Francesca Vietor**  
President



**Anson B. Moran**  
Vice President



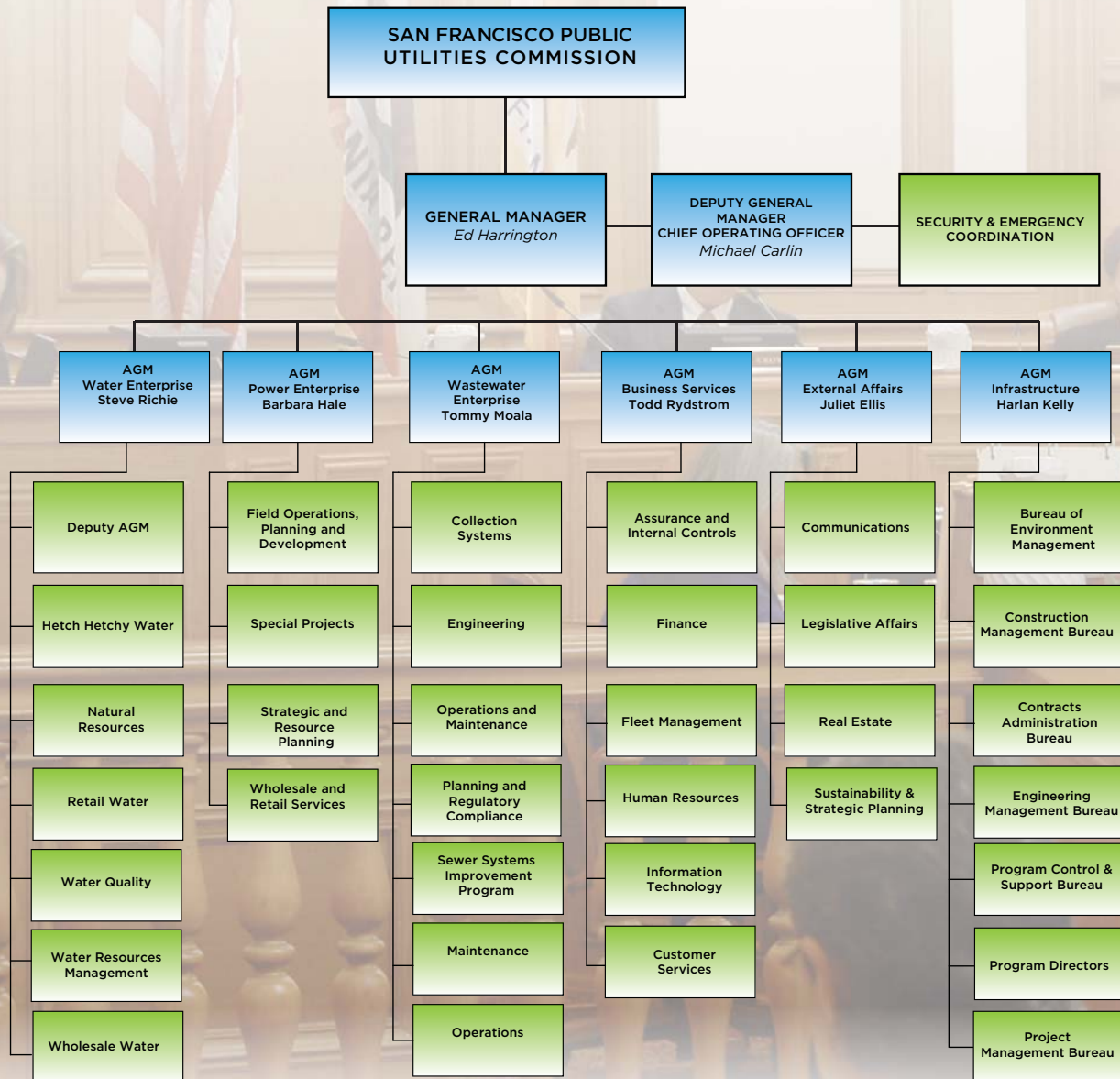
**Ann Moller Caen**  
Commissioner



**Art Torres**  
Commissioner



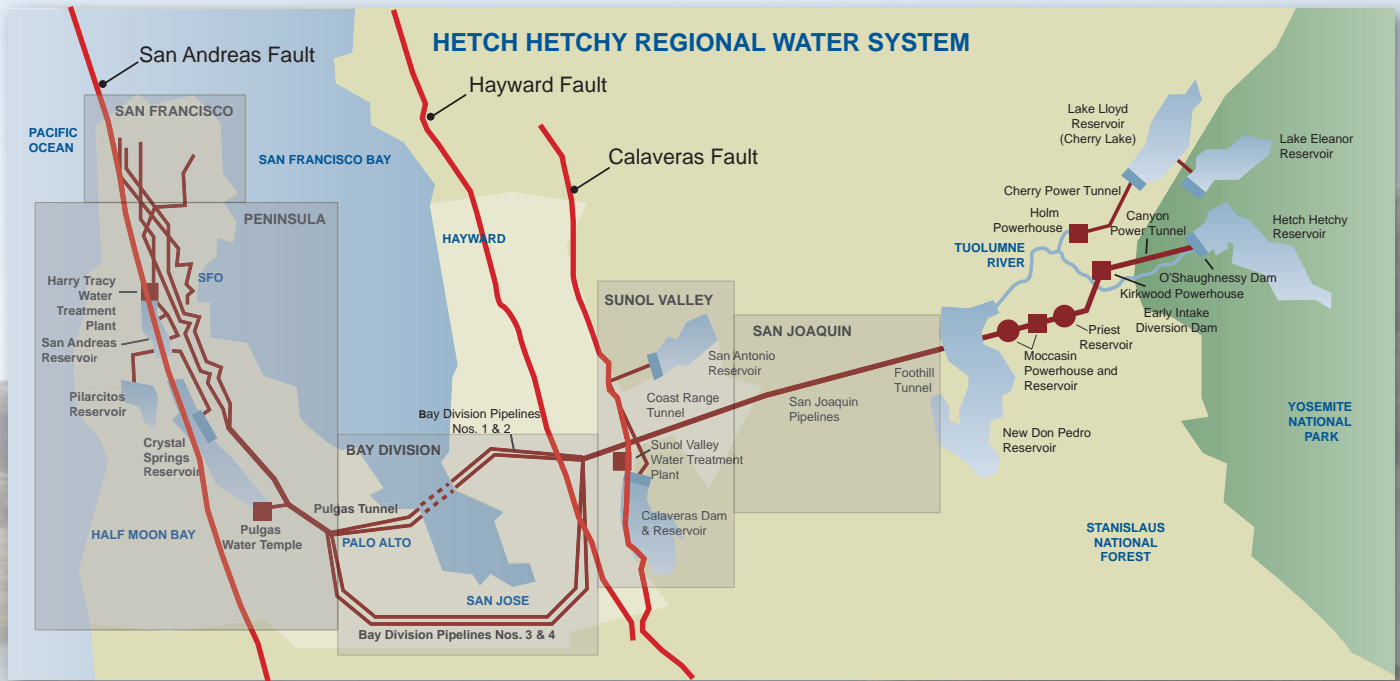
**Vince Courtney**  
Commissioner



# WHAT WE DO

## WATER ENTERPRISE

The SFPUC provides high-quality drinking water from the Hetch Hetchy system to 2.5 million people in the San Francisco Bay Area. About one-third of the delivered water goes to retail customers in San Francisco and two-thirds to 27 water agencies in three Bay Area counties – San Mateo, Santa Clara and Alameda. The SFPUC Water Enterprise is responsible for managing the transmission, treatment, storage and distribution of potable water to San Francisco's wholesale and retail customers.



### Water System Improvement Program (WSIP)

The Hetch Hetchy regional water system crosses three major California earthquake faults. Constructed over the last century, parts of our system are reaching the end of their useful life and are vulnerable to earthquake damage or failure. To address these issues, in 2002, the SFPUC embarked on a \$4.6 billion bond-funded, multi-year program to upgrade its regional and local water system, known as the Water System Improvement Program (WSIP). This program is structured to cost-effectively meet water quality requirements, improve seismic and delivery reliability, and meet water supply objectives projected through the year 2030.



Construction on Bay Division Pipelines Nos. 3 & 4 Crossovers

### Quick Facts

- 2.5 million people served
- 86 construction projects spanning 7 counties
- 260 million gallons per day provided to customers
- 175,000 plus retail customer accounts
- 100% of customer inquiries or complaints responded to within 2 business days
- Crossing 3 major earthquake faults
- 167 miles of gravity driven regional water system consisting of:
  - 60 miles of tunnels
  - 11 reservoirs
  - 5 pump stations
  - 3 water treatment plants
- 1,235 miles of pipelines in the City

## Major Accomplishments in Fiscal Year 2009-10

- ◆ Launched the Automated Water Meter Program to improve efficiency and customer service reliability and to reduce operating costs.
- ◆ The successful Coast Range Tunnel shutdown, affording maintenance and inspection of the tunnel and construction of crucial pipeline connections in the Sunol Valley, allowed the SFPUC to perform other critical upgrades to improve and protect water supplies. The complicated shutdown required the services of two contractors working at three locations, plus ventilation of the tunnel itself, to prevent dangerous methane buildup.
- ◆ Secured project approvals and funding for Harding Park Recycled Water project to help the agency diversify potable water resources.
- ◆ Over 4,000 toilet rebates and over 5,000 washer rebates were provided in FY 2009-10, an over 25 percent increase in rebates since FY 2008-09.

## Awards

- ◆ The National Association of Environmental Professionals presented SFPUC with a National Environmental Excellence Award for its Water System Improvement Program (WSIP) Environmental Impact Report and its environmental leadership.
- ◆ The Municipal Fiscal Advisory Committee (MFAC) and the San Francisco Planning & Urban Research Association (SPUR) presented the SFPUC's Water System Improvement Program with the annual Good Government Award, SPUR's first-ever Planning and Infrastructure Award.
- ◆ The American Society of Civil Engineers (ASCE) named SFPUC Engineer Johanna Wong as the 2009 Outstanding Civil Engineer in the Public Sector in the State of California.



Lincoln Park Pump Station Upgrades project



Construction on New Crystal Springs Bypass Tunnel

## Environmental Spotlight

As part of ongoing water conservation efforts, the SFPUC has launched successful programs, such as the Water-Saving Hero Campaign and rebate programs, for energy-saving washers and toilets.

Since 1990, the SFPUC has upgraded or rebated over:

- 80,000 toilets
- 15,000 clothes washers
- Conducted over 13,000 water conservation audits
- 52 gallons per person per day of usage for San Francisco residents

In February 2010, the SFPUC began installing high-efficiency toilets for free in San Francisco low-income homes, using local plumbers. By the end of June 2010, over 900 toilets were installed and over the next few years, SFPUC anticipates replacing up to 6,000 toilets, which could save an estimated 50-plus million gallons of water a year.



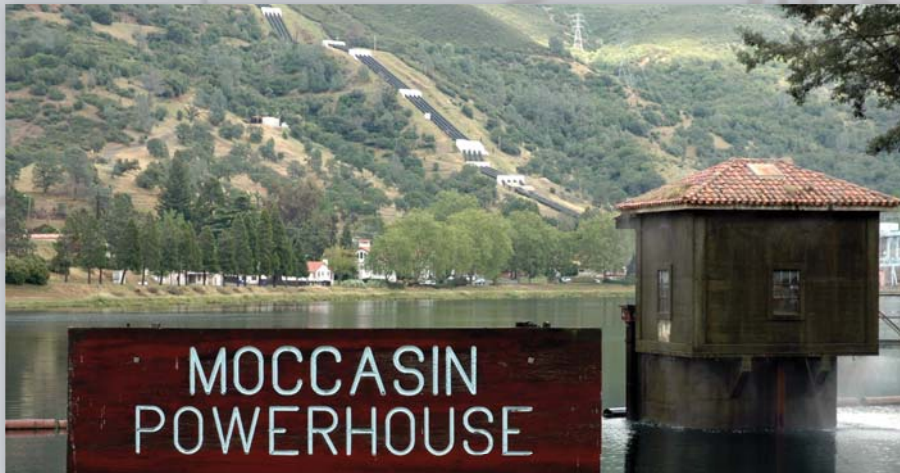
# WHAT WE DO

## POWER ENTERPRISE

The SFPUC provides green hydroelectric and solar power from the Hetch Hetchy Water System to municipal customers, including municipal departments in San Francisco, and the Turlock and Modesto Irrigation Districts. The SFPUC Power Enterprise's services include: providing reliable electricity service, transmission and power scheduling, implementing energy efficiency improvements in City buildings, installing solar photovoltaic generation on City buildings, improving street safety with street lighting services, utilities planning for redevelopment projects, and planning for a continued renewable electricity portfolio through energy resource planning efforts.



The SFPUC is leading the City's efforts to develop green and sustainable energy for the future by increasing reliance on green energy and reducing the amount of pollution and greenhouse gas (GHG) generated by San Francisco's residents and businesses.



*Moccasin Power House provides hydroelectric energy to municipal customers*



### Quick Facts

- SFPUC provides **100%** renewable power to municipal customers including:
  - San Francisco Municipal Railway
  - Recreation and Parks Department
  - Port of San Francisco
  - San Francisco International Airport
  - San Francisco General Hospital and Laguna Honda Hospital
  - Moscone Center
- **24,000** streetlights are owned, operated and maintained by SFPUC
- **43,973** total streetlights powered by the SFPUC's clean, green energy
- **5,500,000** reduced kilowatt hours projected for FY 2009-10
- **1,383** gigawatt hours of power generated to meet San Francisco's needs



## Major Accomplishments in Fiscal Year 2009 - 2010

- Completed building efficiency retrofits in 50 city-owned facilities, including:

- Davies Symphony Hall
- City Hall
- The Main Library
- Public Health's headquarters

Total savings of 5.5 million kilowatt hours per year and 1.3 megawatt demand reduction.

- Replaced 57 high pressure sodium fixtures in the Tenderloin with Light Emitting Diode (LED) street lights, and have begun expanding the program to some 18,600 existing street lights citywide.

- In June 2010, the City and County of San Francisco became the municipal green power provider for the new 93-acre Hunters Point development that will feature 1,600 new residential units and 300,000 square feet of commercial and retail space at the former Hunters Point Naval Shipyard.

- Approved the final design for the Sunset Reservoir Solar Project began construction of the largest municipal solar installation in California. The system became operational by December 2010.

## Awards

- Power Enterprise staff were named winners of San Francisco's first annual Blue and Green Awards in the categories of Energy Efficiency Champion and Lifetime Achievement for their leadership in the areas of sustainability and climate planning.



General Manager Ed Harrington congratulates Danielle Dowers, one of the staff, recognized for her achievement



Solar panels installation at Pier 96



## Environmental Spotlight



One of the green energy initiatives offered by the SFPUC is GoSolarSF, an incentive program for San Francisco residents and businesses to install solar panels on their buildings. Since 2008 when the program began, participation has quadrupled.

Program Status:

- \$10 million total budgeted to date
- 1,177 applications
- \$9.8 million awarded to date
- \$6.7 million paid to date for completed installations
- 4.34 megawatt installed or committed
- 40 green jobs created



# WHAT WE DO

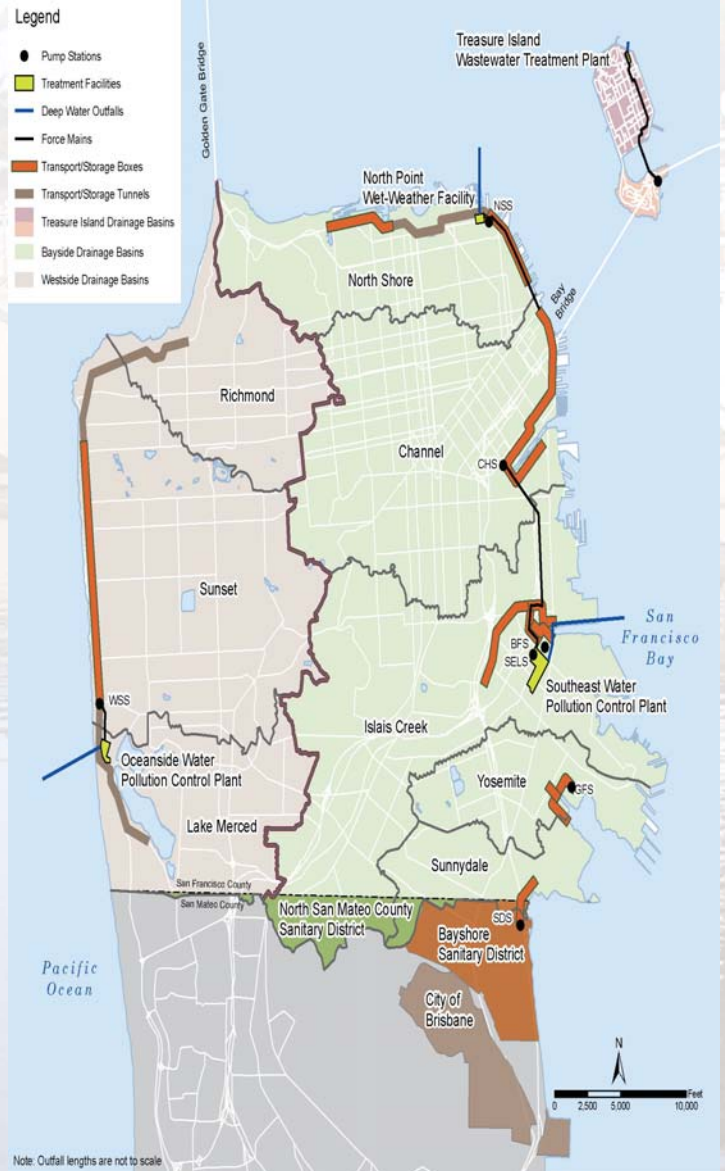
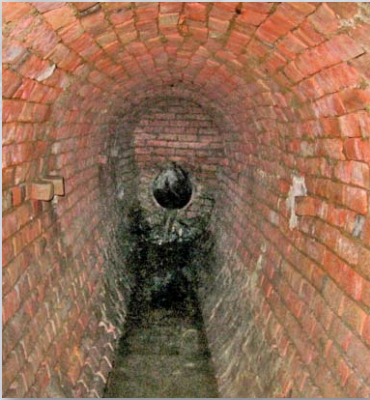
## WASTEWATER ENTERPRISE

The SFPUC operates and maintains 993 miles of combined sewers, which collect sanitary sewage from homes and businesses and street runoff; combined sewage storage facilities; and three treatment plants that treat both sanitary sewage and stormwater to help reduce pollution in the San Francisco Bay and Pacific Ocean.

### Sewer System Improvement Program (SSIP)

The SFPUC is currently developing a Sewer System Improvement Program to meet all the challenges so that we can build a more sustainable system to meet future demands. A series of Commission Public Workshops were held in FY 2009-10 and in August 2010. The SFPUC adopted level of service goals to move forward with SSIP implementation.

Last year, \$240 million in wastewater revenue bonds were sold to improve sewer infrastructure. These bonds fund capital improvement projects directed at increasing seismic and system reliability, reducing neighborhood flooding, and enhancing odor control at facilities such as the 50-year old Southeast Wastewater Treatment Plant.



### Quick Facts

- 100% sewer services provided to SF customers
- 993 miles of combined sewer system
- 3 24-hour treatment plants; 1 wet weather facility
- 27 Pump Stations
- 4 Lift Stations
- 23,000 Catch Basins/Storm drains
- 82 million gallons of sewage treated on a dry-weather day
- 500 million gallons of combined sewage on a rainy day
- 80,000 tons of biosolids annually



Southeast Wastewater Treatment Plant

## Major Accomplishments in Fiscal Year 2009-10

- ◆ After one year of meetings, the Southeast Digester Task Force, an advisory group comprised of neighborhood and business leaders, provided in June 2010 a final work document that encompasses their recommendations for the replacement of the seismically-unreliable Southeast Treatment Plant digesters under the Sewer System Improvement Program.
- ◆ The Rainwater Harvesting Program, a popular rain barrel subsidy pilot program began in 2008, sold 38 cisterns for the first time and 192 rain barrels. This created capacity for 21,000 gallons of rainwater storage.



Oceanside Wastewater Treatment Plant

### Awards

- ◆ The Oceanside Water Pollution Control Plant was awarded the National Association of Clean Water Agencies (NACWA) Platinum Award for 14 straight years of full compliance of all National Pollutant Discharge Elimination System requirements.
- ◆ In addition, both the Southeast Water Pollution Control Plant and the Treasure Island Water Pollution Control Plan were awarded the NACWA Gold Award for full permit compliance.



Vicente St. sewer construction project



## Environmental Spotlight



SFGreasecycle is a citywide project that collects used cooking oil and converts it to biofuel for biodiesel vehicles. We are turning one of our biggest problems for our sewer system and local business—grease clogged drains and sewers—into a free, value-added service for restaurants and an alternative energy source for the City.

Project status:

- 911 restaurants signed up for grease collection
- 124,302 gallons of used cooking oil collected in FY 2009-10
- 465,568 gallons collected since the program began in 2007
- 1250 gallons collected at 2009 holiday drop-off events

# SUSTAINABILITY

The SFPUC is implementing a comprehensive Sustainability Plan and Program. The Sustainability Plan was published in December 2008 and is available at [www.sfwater.org/sustainability](http://www.sfwater.org/sustainability).

The SFPUC defines “Sustainability” as its commitment to implementing a triple bottom-line framework – the organizational economic, social and environmental performance - through which it will responsibly manage the resources under its care, protect public health, and balance its social and environmental responsibilities to the citizens and community, while providing cost-effective services to its ratepayers.

The Sustainability Plan is a system for evaluating the SFPUC’s department-wide performance. It activates an integrated, systematic and long-term approach to sustainability, whereby SFPUC can track and monitor performance and take needed actions to improve strategic management and decision-making.

The Plan includes a baseline assessment that scores the SFPUC’s performance across six categories most material to delivery of effective service, including:

-  Environment and Natural resources
-  Workplace
-  Customers
-  Governance & Management
-  Community
-  Infrastructure & Assets



In FY 2010-11, the SFPUC will complete the integration of the Sustainability Plan with other strategic evaluation efforts, begin to bear the sustainability performance indicators and resume implementation of our reporting protocol.

## Three Examples of SFPUC’s Sustainability Performance Indicators Being Implemented:

% of total water supplied by alternative sources to retail customers

% of energy supplied from emissions-free and renewable sources

Average residential water, wastewater and power bill as % of median income in SF



# FINANCIAL PERFORMANCE

The SFPUC is committed to managing critical infrastructure upgrades while keeping your rates affordable.

The tables below show average monthly bills as of December 2010.

## AVERAGE MONTHLY BILL COMPARISON

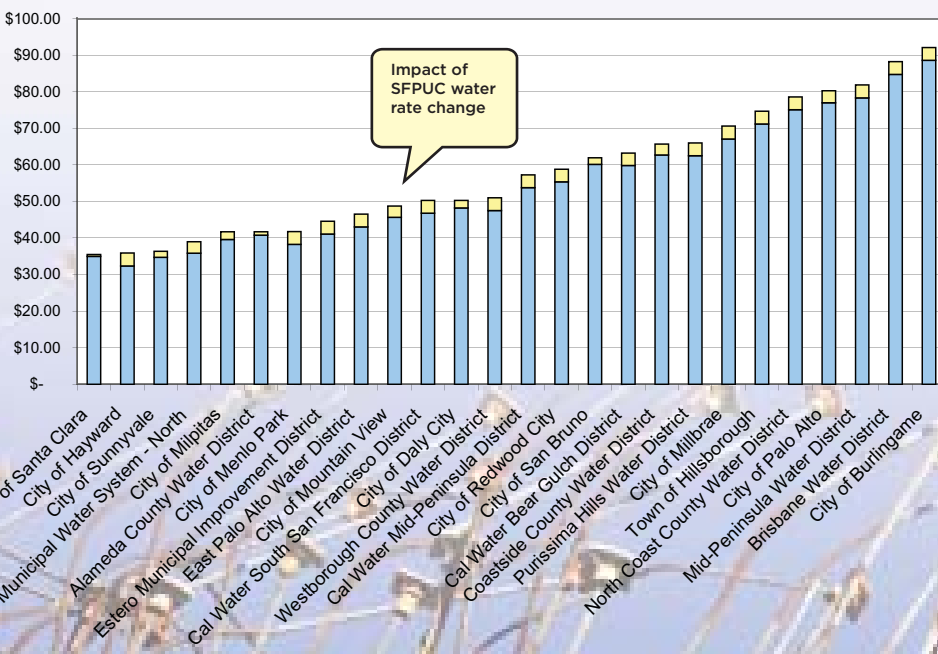
	Average Monthly Bill
Electric & Natural Gas, PG&E Residential	\$ 123.23
Phone, Mobile/Cellular, Nation Plan 1350 (AT&T)	99.99
Cable TV Digital Starter Package, Comcast	61.99
<b>Sewer, SFPUC Single Family Residential</b>	<b>51.12</b>
Cable Internet, Comcast	44.95
<b>Water, SFPUC Single Family Residential</b>	<b>31.95</b>
SF Garbage Collection (residential/once per week)	27.55
Phone, Landline Basic Residential, AT&T Choice Basic	23.00

In the public sector, governments issue bonds to pay for long-term capital improvements. With rates at generational lows, we have secured actual fixed rates between 2.5% and 4.8% for revenue bonds issued over the past year, saving our ratepayers more than \$400 million over the next 30 years.

Our strong financial performance, prudent fiscal management, transparent reporting and bond issuance process have resulted in high investment-grade credit ratings from both Moody's Investor Services and Standard and Poor's for both our Water and Wastewater enterprises. The Power is expected to be rated in 2011.

## AVERAGE RATES

Fiscal Year 2010 Monthly Bill Assuming 14 Ccf usage  
Estimated Impact of the 15.2% SFPUC Wholesale Rate Change



CREDIT RATINGS		
	MOODY'S	STANDARD & POOR'S
Water	Aa2	AA-
Wastewater	Aa3	AA-
Power	Not Rated	Not Rated

AVERAGE BORROWING RATE	
Water	4.48%
Wastewater	3.81%
Power	N/A

# FINANCIAL PERFORMANCE

The SFPUC has three enterprise funds that support operations, facilities maintenance, and capital needs of the Water, Wastewater, and Power enterprises. The Power Enterprise is a component of Hetch Hetchy Water and Power.

This Annual Report is intended to provide the ratepayers, citizens, customers, investors, and other interested parties with a financial overview of the SFPUC's financial condition for the year ended June 30, 2010. The financial facts, figures, tables and graphs included in this report have been taken from the audited financial statements in the SFPUC's Fiscal Year 2009-10 Comprehensive Annual Financial Report (CAFR), using the full accrual basis of accounting, through this report is not intended to comply with GAAP as note disclosures have been excluded from this report. Our CAFR, which provides complete financial information and disclosures in conformance with generally accepted accounting principles (GAAP), with complete description of significant accounting policies. Both the CAFR and this report are on the SFPUC website at [www.sfwater.org/Finance](http://www.sfwater.org/Finance). As you review this report, please feel free to share any questions or comments with us. Financial information can also be obtained from the Finance Department at 1155 Market Street, 5th Floor, San Francisco, CA 94103.

## Statement of Net Assets

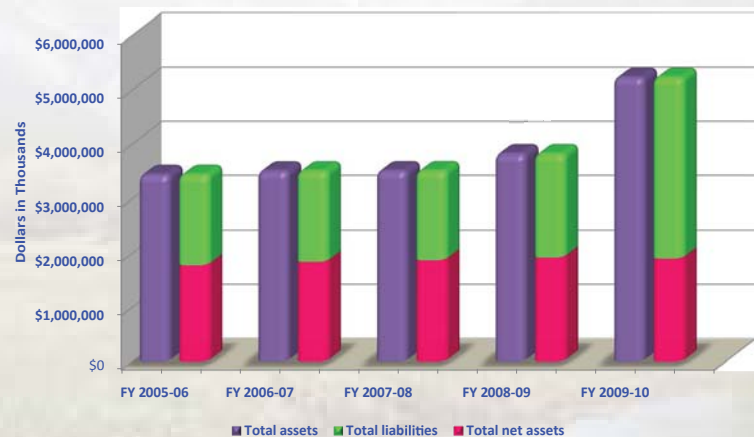
The Statement of Net Assets summarizes resources balanced against debt and other liabilities as of June 30, using the full accrual basis of accounting. Full accrual accounting records revenues when earned and liabilities when incurred, regardless of the timing of cash flows. There are three components in the statement of net assets: (1) Assets, items owned or controlled, represent resources used to provide future public services, or to pay liabilities incurred for services provided in prior periods; (2) Liabilities, which are debts owed and represent claims against assets and are listed in order of liquidity, either current or long-term; and (3) Net Assets, the residual interest in the items owned or controlled after deducting debts. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position is improving or deteriorating.

The SFPUC's Statement of Net Assets reflects a strong and healthy financial condition as of June 30, 2010. The assets exceeded the SFPUC's liabilities by \$1.9 billion (net assets), 83% of that difference is represented by investments in capital assets, net of related debt. While total assets increased from last fiscal year by \$1.4 billion in restricted bond proceeds and capital assets, liabilities increased from debt issuances to fund the capital projects.

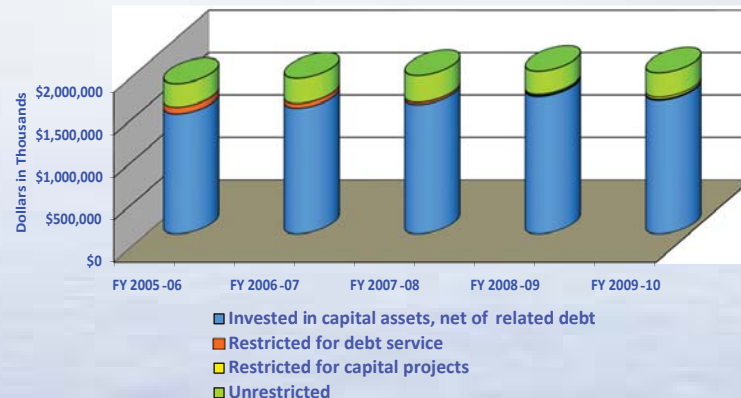
## Department-Wide Business-Type Activities Comparative Net Assets (Dollars in Thousands)

	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10
Current assets	\$ 923,247	791,556	595,007	624,517	1,656,708
Capital assets, net	2,490,654	2,688,545	2,888,231	3,169,822	3,547,735
<b>Total assets</b>	<b>3,413,901</b>	<b>3,480,101</b>	<b>3,483,238</b>	<b>3,794,339</b>	<b>5,204,443</b>
Current liabilities	162,451	232,075	243,189	547,658	259,831
Non-current liabilities	1,479,956	1,414,357	1,373,647	1,329,400	3,047,222
<b>Total liabilities</b>	<b>1,642,407</b>	<b>1,646,432</b>	<b>1,616,836</b>	<b>1,877,058</b>	<b>3,307,053</b>
<b>Net assets:</b>					
Invested in capital assets, net of related debt	1,412,368	1,480,929	1,524,069	1,617,849	1,572,805
Restricted for debt service	80,732	57,303	28,750	13,301	13,550
Restricted for capital projects	—	—	214	15,864	26,669
Unrestricted	278,394	295,437	313,369	270,267	284,366
<b>Total net assets</b>	<b>\$ 1,771,494</b>	<b>1,833,669</b>	<b>1,866,402</b>	<b>1,917,281</b>	<b>1,897,390</b>

## Assets and Liabilities



## Net Assets by Component



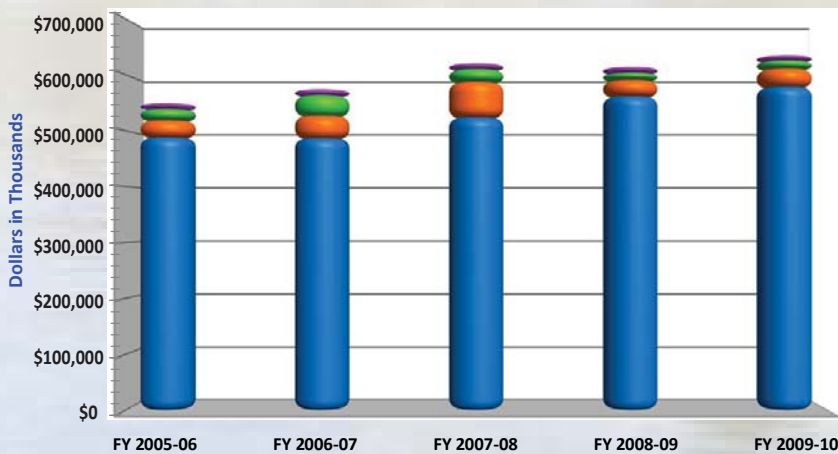
# FINANCIAL PERFORMANCE

The Statement of Revenues, Expenses, and Changes in Net Assets shows that the SFPUC continues to maintain strong financial health. Our net assets have trended up over the last five years, increasing from \$1.8 billion to \$1.9 billion. This trend reflects strong financial performance in areas that fund capital improvements, and that the SFPUC has effectively controlled its operating costs to not exceed revenues, with the exception of fiscal year 2009-10 which saw less revenue growth than expected due to water consumption.

## Comparative Statements of Revenues, Expenses, and Changes in Net Assets For the Fiscal Years Ending 2006 - 2010 (Dollars in Thousands)

Revenues:	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10
Charges for services	488,511	487,140	524,259	562,024	579,077
Interest and investment income	20,614	36,774	22,975	13,240	14,617
Rents and concessions	8,997	10,144	9,870	9,645	8,829
All other revenues	30,235	39,867	63,353	28,969	32,327
<b>Total revenues</b>	<b>548,357</b>	<b>573,925</b>	<b>620,457</b>	<b>613,878</b>	<b>634,850</b>
<b>Expenses:</b>					
Personnel services	155,749	174,981	203,791	212,479	215,695
Depreciation expense	89,806	91,497	95,737	99,784	105,950
Interest expense	46,397	51,680	47,217	44,524	63,885
Contractual services	25,875	29,684	27,237	35,545	32,189
Materials, supplies & other expenses	177,520	163,908	213,742	170,667	237,022
<b>Total expenses</b>	<b>495,347</b>	<b>511,750</b>	<b>587,724</b>	<b>562,999</b>	<b>654,741</b>
Changes in net assets	53,010	62,175	32,733	50,879	(19,891)
Net assets at beginning of year	1,718,484	1,771,494	1,833,669	1,866,402	1,917,281
<b>Net assets at end of year</b>	<b>1,771,494</b>	<b>1,833,669</b>	<b>1,866,402</b>	<b>1,917,281</b>	<b>1,897,390</b>

Revenues by Category



Expenses by Category



■ Charges for services   
 ■ All other revenues   
 ■ Interest and investment income   
 ■ Rents and concessions

■ Personnel services   
 ■ Depreciation expense   
 ■ Interest expense   
 ■ Contractual services   
 ■ Materials, supplies & other expenses

# NEW SUSTAINABLE HEADQUARTERS

The SFPUC is moving toward a green and sustainable future while building its new headquarters and administration building at 525 Golden Gate Avenue. With funding secured and necessary approvals in place, the expected LEED Platinum-certified building will be completed in Spring 2012. The building will save ratepayers money over the long term and sets a great example for sustainable and green building development across the nation.

## ENVIRONMENTAL FEATURES:

- ◆ Demand of 33% less energy from the grid compared to a typical office building
- ◆ Optimization of regional and recycled materials throughout the building
- ◆ Harvesting natural light with light shelves to minimize use of artificial lighting
- ◆ Utilization of highly efficient cooling and heating systems, including natural ventilation for enhanced indoor air quality
- ◆ Generation of renewable energy with solar panels and wind turbines to produce 7% or more of the building's energy needs
- ◆ Fully integrated building systems for greater energy efficiencies and lower maintenance
- ◆ First office building in the nation with onsite treatment of gray and black water
- ◆ Reclaiming water for 100% demand of low-flow toilets and urinals—reducing daily water use from 12 gallons to 1 gallon per day per person
- ◆ Ability to utilize excess reclaimed water for future eco-neighborhood (Civic Center)
- ◆ Harvesting of rainwater for irrigation

## RENT VS OWN:

The new SFPUC headquarters building at 525 Golden Gate Avenue, is designed to be cost-neutral for ratepayers over the next 30 years. This means the debt service (i.e., the mortgage) on the building is projected to be equal or less than rental payments, had the SFPUC continued to rent.

Building ownership affords several benefits, including protection against San Francisco's unpredictable rental market. Once the fixed-rate debt is repaid in 30 years, the building will be a valuable SFPUC asset, and will yield savings to future generation of ratepayers.



# COMMUNITY INVOLVEMENT

During the past year, the SFPUC has participated and organized various community outreach events to keep the public informed of our important programs and services. As a way of giving back to the community, we have organized annual holiday food and toy drives for low-income families, raised money for youth to attend summer programs and volunteered for numerous charity events. Watch for SFPUC staff at your next community event.

## ENGAGING



Earth Day



Cinco De Mayo



Big Blue Bucket

## EDUCATIONAL



Energy Fair



Wastewater Treatment Plant Tour



School Event

## GIVEBACK



Combined Charities Kickoff



Blood Drive



Coastal Cleanup

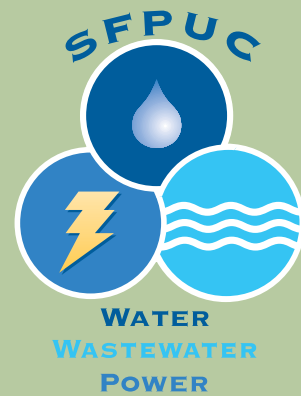


Join the online conversation at [sfwater.org](http://sfwater.org)



[www.sfwater.org/engage](http://www.sfwater.org/engage)

To report water, sewer or power related problems, please call 311.





# CITY AND COUNTY OF SAN FRANCISCO PUBLIC UTILITIES COMMISSION



ADOPTED BUDGET 2010-11 & 2011-12



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**San Francisco Public Utilities Commission  
California**

For the Fiscal Year Beginning

**July 1, 2009**

President

Executive Director



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# GENERAL MANAGER'S TRANSMITTAL LETTER



Dear Customers, Stakeholders and Commissioners,

On behalf of the San Francisco Public Utilities Commissioners, I am pleased to present the San Francisco Public Utilities Commission (SFPUC) approved budget, covering FY 2010-11 and FY 2011-12. This budget funds the SFPUC's three essential service utilities: Water, Wastewater, and Power.

This budget supports the on-going mission of the SFPUC to provide its customers with high quality, efficient and reliable water, wastewater, and power services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to the SFPUC's care. The budget is aligned with the SFPUC's long-term strategic goals and objectives, as outlined in the SFPUC Long-Term Strategic and the Sustainability Action Plan (Action Plan), and includes objectives and measures to attain the following goals:

- Provide High Quality Services;
- Promote a Green and Sustainable City;
- Expand Outreach and Communications; and
- Invest in People and Communities.

In preparation of this budget, the SFPUC Management Team integrated the Long-Term Strategic Plan and the Sustainability Plan to develop the FY 2010-11 Action Plan. Each Strategic Plan goal has an outcome, action, measurement, responsible lead, budget funding, and completion date. We have developed our comprehensive Action Plan to help ensure achievement of key strategic and sustainability goals.

The SFPUC budget request for FY 2010-11 is 11.2 percent higher than the FY 2009-10 approved budget. The increase is primarily due to growth in debt service and reserves for the Water and Wastewater Enterprises. This is consistent with and as planned and funded through the Water and Wastewater five-year rate plan adopted in 2009 by the San Francisco Public Utilities Commission.

The budget ensures that the Enterprises will also:

- Maintain high investment grade credit ratings to be able to access low-cost borrowing to fund two significant capital programs, the Water System Improvement Program (WSIP) and the Wastewater Capital Improvement Program (CIP), which includes the multi-billion dollar Sewer System Improvement Program (SSIP). The SSIP will also rely on a high credit rating to finance this program over the next 20 to 30 years.
- Provide sufficient capacity to bridge cash flow needs related to lower water consumption as a consequence of successful conservation efforts, the economy, and the weather.
- Maintain a contingency reserve to protect our ratepayers from emergency rate increases due to unforeseen revenue shortfalls.
- Provide additional debt service payment capacity when planned and needed through rate increases to critical capital programs.
- Fund major improvements to existing Hetch Hetchy power generation and transmission infrastructure.

The FY 2011-12 Budget shows a 13.9 percent increase to \$867.7 million.

This budget ensures funding for our operating programs, and purposefully supports the Action Plan outcomes to ensure the appropriate application of talent and tools to reach our goals. Our

near-term focus continues to be on the progress of the Water System Improvement Program, the Capital Improvement Program for Wastewater to address flood control, rehabilitation and replacement of sewers, and the initiation of projects for the Sewer System Improvement Program. Additionally, we have five other key initiatives.

## 1) Protect Our Power Customers by Increasing Availability and Delivery of Renewable Power

The SFPUC generates approximately 20 percent of San Francisco's energy needs through renewable resources like solar power and hydropower that produce zero greenhouse gas emissions. The Hetch Hetchy Water and Power system delivers an average of 1.7 billion kilowatt hours of 100 percent clean, greenhouse gas-free electricity annually to the City and County of San Francisco, the Modesto and Turlock Irrigation Districts, and tenants of the San Francisco International Airport and the Port of San Francisco.

Energy efficiency investments are an important component of an electric utility's portfolio. Energy efficiency reduces facility operating costs and electric bills for customers, improves system functionality, and reduces the environmental impact of energy use. The budget includes \$5.9 million in FY 2010-11, and \$6.9 million in FY 2011-12, for energy efficiency programs targeting the Civic Center District, the City's General Fund departments and the Port of San Francisco. This budget also includes \$10.1 million in FY 2010-11, \$22.1 million in FY 2011-12, to start the conversion of SFPUC's 17,600 owned and maintained cobra-head streetlights from High Pressure Sodium Vapor (HPSV) to Light Emitting Diode (LED) technologies and installation of a smart lighting controls system.

Over the next ten years, the SFPUC's Power Enterprise is planning to invest \$90.4 million in renewable power, including \$11.2 million in FY 2010-11, and \$9.2 million in FY 2011-12. This budget provides significant resources for the Power Enterprise to focus on numerous renewable energy initiatives including:

- Construction of small-scale solar and wind power for municipal customers within San Francisco, \$3 million;
- Studies and preliminary engineering for commercial-scale wind power on public lands within San Francisco, \$3.2 million;
- GoSolarSF incentive grants to residents, businesses and non-profits to reduce solar energy installation costs, \$5 million; and
- Administration and implementation of CleanPowerSF, a Community Choice Aggregation (CCA) Program, which allows cities and counties to pool their citizens' purchasing power to buy electricity, \$5 million.

CleanPowerSF is particularly innovative because it will enhance local control, create competition for the Pacific Gas and Electric (PG&E) Company, and provide San Franciscans with an alternative energy supply. CleanPowerSF's goal is to be 51 percent renewable in ten years.

In addition to these investments in renewable power and conservation, the budget includes \$25.8 million to fund major improvements to the power generation and transmission system portion of Hetch Hetchy. Investment in all facilities including powerhouses, switchyards and the transmission/distribution system will occur.

## 2) Sustainability Demands: We Manage, Recover and Reuse Our Valuable Resources

Part of our sustainability mission is to manage our resources with the future generations in mind. The SFPUC understands that water reuse and conservation are not enough. The Water and Wastewater Enterprises are implementing energy efficiency projects at their facilities and water conservation and reuse across the customer base. At the same time, the Water and Wastewater Enterprises are purposefully searching for and implementing resource recovery and reuse options for products that were once considered to be waste and disposable.

## Recycled Water Projects

Two projects to provide recycled water for two San Francisco Municipal golf courses are funded in this budget. The Harding Park golf course is an internationally known venue for the President's Cup in 2009 and the FedEx Championship in 2010. It was voted one of the best places to play by Golf Digest in 2008-09 with a 4.5 star rating. Our goal is to maintain and improve upon this reputation with a sustainable and reliable source of irrigation water while preserving the underlying groundwater for municipal supplies. The second project is Sharp Park, a charming nine-hole course on the shores of the Pacific Ocean. Reliable irrigation will ensure that this course continues to be a viable recreational resource.

## Water Conservation and Gray Water Use

The SFPUC has been implementing conservation activities for almost 20 years. Over that time, water use per person in San Francisco has gone from a peak of over 160 gallons per person per day to current levels of just under 88.9 gallons per person per day for residential, commercial and industrial, and municipal customers combined. Today, residential customers use only 52 gallons per person per day, compared to the California residential average of 155 gallons per person per day.

While the SFPUC has made great strides in getting our customers to conserve water, further opportunities can be tapped. In response, the SFPUC's conservation program expenditures have significantly increased over the past three years, including a 60 percent increase in the number of rebates for toilets, washers and other fixtures processed in the last three years. The FY 2010-11 Budget funds \$18.7 million over the next two years to increase water savings including educating customers and coordinating conservation programs. The Water Enterprise is also committed to promoting the safe use of gray water systems by providing home installation kits and training.

The SFPUC's water conservation program is on track to ensure the SFPUC meets the goals of the Phased WSIP Variant to satisfy demands of ten million gallons a day (mgd) by 2018 through a combination of conservation, groundwater, and recycled water. Additionally, a recently passed State law requires urban water agencies to reduce State-wide per capita water consumption by 20 percent by 2020. Here as well, the SFPUC is on track to meet this new requirement.

## Biofuel/Alternative Energy Program

The Biofuel/Alternative Energy Program will determine the feasibility and cost effectiveness of generating bio-energy (e.g. biofuel or cogenerated power) as a byproduct of processing the fats, oils and grease (FOG) and/or food waste collected throughout the City. FOG has traditionally caused clogging and malfunction in both wastewater collection system and treatment processes. Developing a reliable and cost-effective alternative to dumping FOG, for residents, restaurants, and other commercial establishments, will support the Wastewater Enterprise operations, environmental protection, and compliance objectives.

## 3) Asset Management and Upgraded Maintenance Management Is Essential to Our Mission

The SFPUC is engaged in a long-term effort to improve the management of its capital assets. This effort is aimed at identifying and evaluating capital, repair and replacement (R&R), and maintenance needs. The plan includes development of asset management objectives, standards, policies and procedures. It focuses on continuous assessment of work processes to identify improvement opportunities, develop recommendations, and improve asset performance. The FY 2010-11 Budget contains \$1.5 million for a sewer condition assessment program to ensure that large-scale sewer replacement is strategically targeted to ensure that critical health and safety needs are met. The sewer condition assessment project will provide 150 miles (annually) of closed circuit television video of the sewer system in order to determine if the sewers are safe or near failure.

The current average age of the collection system is over 70 years. The SSIP calls for increasing sewer replacements from the current rate of 4.5 miles per year to 15 miles per year by 2013. This budget also contains \$31.1 million for replacement of sewers in FY 2010-11, along with another \$32.7 million in FY 2011-12.

In FY 2010-11 the upgrade of the maintenance management system, Maximo 7.1.6, will be completed. This system is essential to standardize asset management and lifecycle planning across all three SFPUC utilities.

## 4) Reduce Contracting Costs to SFPUC and Our Private Sector Partners

With an estimated five years remaining and nearly \$2 billion of remaining construction projects to contract for WSIP and the initiation of a multi-year, multi-billion dollar SSIP, implementation of a state-of-the-art web-based procurement and invoicing system is good business. The SFPUC's automated water meter program and our online customer payments have been financial and customer service successes. In this budget year, the Infrastructure and Business Service Bureaus will jointly complete two pilot systems: one for online payment of contractor invoices, and the other an electronic web-based bidding and proposals submittal system. These pilots will provide real-world experience and data to support appropriate scale-up for the procurement and payment systems. With full-scale implementation, we anticipate time savings for our staff to process and manage procurements and invoices. We anticipate that there will be a significant reduction in paper used, managed and stored, which carries with it a reduction of greenhouse gases (less paper production, storage, and transportation). Our private sector partners anticipate the benefits of reduced cost of printing bids and proposals and the prospect of easier and quicker payment of their invoices.

## 5) Planning for Tomorrow and Developing Staff

All of the SFPUC's long-term strategic goals depend on a highly qualified and performing staff. Recruitment competition around the Bay Area and California demands that we invest in our existing staff. Additionally, by 2015, some 870 full-time staff persons will be eligible for retirement, so effective development, recruitment, and deliberate succession planning and knowledge management are critical. The Action Plan calls for an SFPUC-wide staff development program for technical, managerial, health and safety training for our 2,300 employees. A Chief Learning Officer is included in the budget funding for consulting services to develop curricula and curricula tracks linked to individual development plans for successful performance. Implementation of this program will begin in FY 2011-12 with an anticipated investment of \$450,000.

## What's New: The SFPUC's Two-Year Budget

In 2009, San Francisco voters approved Proposition A, which requires the City and County of San Francisco and its departments to adopt a two-year budget by FY 2012-13. The SFPUC is one of four City departments that were early implementers in FY 2010-11, developing and adopting a two-year budget for FY 2010-11 and FY 2011-12. While we already have both years' budgets adopted by the Board of Supervisors, the SFPUC Enterprises have the opportunity to review them annually to determine if adjustments for the second year are needed. The SFPUC Budget Summary, the Enterprise-level Budget Summary sections, and the high-level SFPUC Bureaus and Infrastructure Budget Summary sections of this document, reflect both the FY 2010-11 and FY 2011-12 Adopted Budgets. The second year budget is generally flat, except for planned changes to debt services and reserves, and similar to that of the prior year. Key changes for the second-year budget are summarized in each Enterprise section of this document.

## Water Enterprise

Water Enterprise is responsible for collecting, treating and distributing 234 million gallons of water per day to 2.4 million people, including retail customers in the City and 27 wholesale customers located in San Mateo, Santa Clara, and Alameda Counties. Retail customers include residential,

commercial, industrial and governmental users. The Water Enterprise operates and maintains 230 miles of pipelines in the regional system and 1,235 miles in San Francisco; 60 miles of tunnels in the regional system, five regional pump stations and 22 in the City, 29 dams and reservoirs, nine water tanks, and three water treatment plants that serve both the regional and City systems.

## Improved Infrastructure to Ensure High Quality Service

The number one strategic goal for the SFPUC is to provide high quality service, but the age of our water infrastructure requires investment to achieve this goal. Increased reliability is the highest priority for the Water Enterprise and rebuilding and retrofitting the Hetch Hetchy Water System remains the highest priority capital project for the SFPUC at this time.

### *Water System Improvement Program (WSIP)*

The Water Enterprise is in the middle of a \$4.6 billion dollar, multi-year program to upgrade its Regional and Local Water Systems, known as the Water System Improvement Program (WSIP). The WSIP delivers capital improvements that enhance the Enterprise's ability to provide reliable, affordable, high quality drinking water to our 27 wholesale customers and regional retail customers in Alameda, Santa Clara and San Mateo Counties, and to 800,000 retail customers in San Francisco, in an environmentally sustainable manner. The program is structured to cost-effectively meet water quality requirements, improve seismic and delivery reliability, and meet water supply objectives through 2030.

In April 2010, the City and County of San Francisco Board of Supervisors approved an appropriation of \$1,647.25 million to fund completion of the WSIP. The program is on track for completion in FY 2015-16.

We made significant progress in FY 2009-10: five projects completed environmental review and six projects received approved and certified environmental documents. Ten additional projects completed design phase and 11 construction contracts totaling \$678 million were awarded. As of July 1, 2010, many projects within San Francisco are already completed, and across the Bay Area, regional projects valuing \$1.4 billion were completed or under construction. The focus of the WSIP is now on construction; the planning phase is 98 percent complete, the environmental review phase is 81 percent complete, design is 90 percent complete, and construction is 15 percent complete.

The total estimated cost for the WSIP is \$4.6 billion, and includes \$4.1 billion for capital projects and the balance, \$471.7 million, for net financing costs. WSIP has provided significant employment opportunities within the San Francisco Bay Area. Through July 2010, the regional program provided 1,036,049 hours of employment to 2,949 craft workers in 15 trades. Additional details regarding the WSIP are available in the WSIP Annual Reports as well as the Quarterly Updates, published on the SFPUC's website at [www.sfwater.org](http://www.sfwater.org).

### *Automated Water Meter Program*

Infrastructure improvement is not limited only to the water supply and delivery system, but also includes the information management systems. Consequently, a major focus for the Water Enterprise over the last few years has been implementation of the Customer Information System (CIS), which provides more current billing, revenue collection, and usage information, allowing customers to respond to water conservation requests; and an Advanced Meter Infrastructure (AMI).

The SFPUC has started implementation of the AMI Project to retrofit or replace all of the SFPUC's 180,000 existing visual-read water meters with advanced digital water meters, with an estimated completion date of April 2012. The AMI provides automated meter reading, timely leak detection, hourly customer water usage information, and increases in meter accuracy and revenues. The details, timeliness, and ease of the information provided by the AMI will enable the Water



Enterprise to fully understand the demand and usage of water. The budget includes \$5.4 million in FY 2010-11 for the completion of the program.

## Wastewater Enterprise

The Wastewater Enterprise collects, transports, treats, and discharges sanitary and stormwater runoff flows generated within the City and on Treasure and Yerba Buena Islands in order to protect public health and the water environment of the San Francisco Bay and the Pacific Ocean. This involves operating, cleaning and maintaining 993 miles of City sewers, a majority of which are combined sewers that collect a combination of sanitary sewage and stormwater runoff, 56 sewage pump stations and six stormwater pump stations, four wastewater treatment plants that provide liquid and solids treatment, five deep water outfalls, and 36 overflow structures for combined sewage discharges around the shoreline of the City and 50 stormwater outfalls around Treasure and Yerba Buena Islands. The average dry weather effluent discharge to the San Francisco Bay and Pacific Ocean is 84 million gallons a day (mgd); peak wet weather effluent from the treatment plants alone is 465 mgd. The Wastewater Enterprise serves approximately 150,000 residential accounts, which discharge to the sewers about 19.0 million ccf of sanitary flow per year; and approximately 22,000 non-residential accounts, which discharge about 9.2 million ccf of sanitary flow to the sewers per year. The Enterprise also responds when there are sewer related emergencies.

### Initiating the Sewer System Improvement Program (SSIP)

The wastewater system has been developed over 110 years, and although there was significant investment from the mid 1970's through the mid 1990's to comply with the Clean Water Act, many of the existing facilities were not improved or upgraded and are in need of major improvement. San Francisco's sewer system is well operated, but the collection system, the three in-City Treatment Plants, and the solids handling system at the Southeast Treatment Plant, Treasure Island Treatment Plant, and many of the major force mains and interceptors, are very old and failing; facilities need to be rebuilt. The Sewer System Improvement Program (SSIP) planning and design will continue in FY 2010-11 with a 20- to 30-year, multi-billion dollar program to improve and rehabilitate the system consistent with agreed-upon levels of service and consistent with the strategic plan goal of providing high quality services and promoting a green and sustainable city.

Wastewater has budgeted \$60.7 million for the SSIP since its inception in August 2004 through FY 2009-10. The budget is \$19.6 million in FY 2010-11 and \$47.3 million in FY 2011-12. In March 2010, a supplemental appropriation in the amount of \$135.2 million was approved for the Wastewater Enterprise. This supplemental appropriation, along with the FY 2010-11 Budget, provided funding for capital projects to initiate the SSIP and continue the Interim Capital Program in FY 2010-11. The total cost of the SSIP is projected to be \$6.0 billion.

### Low Impact Design for Sustainable Stormwater Management

As part of the stormwater management program, low impact design (LID) projects will be developed to store or divert stormwater for beneficial use and to avoid entry into the sewer collection system where the stormwater mixes with sewage. The LID Program will enhance local neighborhoods by reducing the pavement and replacing it with green and planted curbs, green streets and other planted areas at corners. This "green infrastructure" has been shown in other cities, like Portland, Oregon, to reduce localized flooding, and improve the operating efficiency of the combined sewer system by detaining or removing stormwater from the collection sewers. Ancillary benefits from LID projects include: reduction of energy use as a result of reduced pumping of stormwater runoff, potable water conservation, natural habitat restoration, and improved community aesthetics. For this reason, development of appropriate and extensive LID projects is a cornerstone of the SSIP and many projects will be planned, designed and financed through this program as it progresses.

Planning and design of LID projects are also currently being pursued with Department of Recreation and Parks, the San Francisco Unified School District and other public and

private entities to divert, store and/or use stormwater on site. In some cases, future feasible projects may be public/private partnerships (pavement removal, swale installation etc.).

## Hetch Hetchy Water and Power

Hetch Hetchy Water and Power (HHWP) operates the collection and conveyance of approximately 85 percent of our total water supply, and the generation and transmission of electricity from that source. Approximately 65 percent of the electricity generated by HHWP is used by the City's municipal customers. The balance of electricity generated is sold to other publicly-owned utilities, such as the Turlock and Modesto Irrigation Districts, or into the grid in the event of surplus generation capacity. HHWP includes a system of reservoirs, hydroelectric power plants, aqueducts, pipelines, and transmission lines, carrying water and power from the Sierra Nevada to customers in the City and parts of the surrounding San Francisco Bay Area.

To deliver low-cost, reliable electricity to its customers, Hetchy Power relies on power generation at the Hetch Hetchy hydroelectric powerhouses, solar generation, and third-party purchases. In accordance with the requirements of City policies and directives relating to renewable energy and goals to reduce greenhouse gases, Hetchy Power is continuously researching, developing, and implementing new electricity generation resources to provide clean, local generation where it is consumed, and ensuring reliable power services. In FY 2010-11, Hetchy Power will expand its Energy Efficiency Program for General Fund departments (\$5.9 million) and the Streetlighting Repair, Replacement and Improvement Program (\$8.0 million) to improve electrical system functionality, and reduce the environmental impact of energy use. The GoSolarSF program and major investments in wind and solar power are part of the FY 2010-11 Budget, funded at \$5.0 million. The FY 2011-12 budget funds an additional \$5.0 million for the GoSolarSF program.

### Investment to Address Aging Infrastructure & New Regulations

The HHWP facilities include three impoundment reservoirs, three regulating reservoirs, four powerhouses, two switchyards, three substations, 167 miles of pipeline and tunnels, almost 100 miles of paved road, and over 160 miles of transmission lines, watershed land and right-of-way property.

HHWP facilities are in the fourth year of a 20-year rehabilitation program, with many facilities suffering from deferred maintenance. HHWP recently completed the Power Asset Master Plan, which prioritized and recommended a plan of action for rehabilitation of the power system to minimize risk to HHWP power revenues, regulatory fines, and safety. One-hundred percent of all Power assets are completed; the majority of all Water assets are expected to be completed by 2011.

In addition to deferred maintenance, HHWP is also addressing new regulatory requirements established by the North American Electric Reliability Corporation (NERC) and the Western Electricity Coordinating Council. HHWP is currently registered as a Generator Operator and Generator Owner and is in the process of developing and documenting maintenance, operations, testing and reporting procedures to meet the NERC Reliability Standards for the Bulk Electric System Function. Late in 2010, HHWP will be registering as a Transmission Operator and Owner.

Funding for the rehabilitation of Hetchy Power infrastructure is \$25.8 million in FY 2010-11 and \$12.7 million in FY 2011-12. Funding for Hetchy Water infrastructure is \$5.9 million in FY 2010-11 and \$12.5 million in FY 2011-12.

# Budget Overview

Table 1. FY 2010-11 and FY 2011-12 SFPUC Budget Overview (Uses of Funds)

\$ Millions						FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2011-12 vs. FY 2010-11 Adopted Budget	
	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	Amount	%	Amount	%
<b>USES OF FUNDS</b>									
<b>Water Enterprise</b>									
Operations and Maintenance	141.8	154.7	160.0	159.5	161.8	4.7	3.0%	2.3	1.5%
Debt Service	70.1	70.2	70.2	116.4	196.4	46.2	65.7%	80.0	68.8%
General Reserve	-	0.5	-	1.1	4.5	0.6	100.0%	3.4	328.1%
<i>Subtotal</i>	<b>211.9</b>	<b>225.4</b>	<b>230.2</b>	<b>276.9</b>	<b>362.7</b>	<b>51.3</b>	<b>22.8%</b>	<b>85.8</b>	<b>31.0%</b>
Capital Projects	61.0	47.1	47.1	47.3	43.5	0.3	0.6%	(3.8)	-8.0%
<b>Water Subtotal</b>	<b>272.9</b>	<b>272.5</b>	<b>277.3</b>	<b>324.2</b>	<b>406.2</b>	<b>51.7</b>	<b>19.0%</b>	<b>82.0</b>	<b>25.3%</b>
<b>Wastewater Enterprise</b>									
Operations and Maintenance	123.3	125.9	130.0	132.3	133.7	6.5	5.1%	1.3	1.0%
Debt Service	66.8	66.8	66.8	61.4	56.1	(5.4)	-8.2%	(5.3)	-8.6%
General Reserve	-	12.3	-	20.9	22.1	8.6	69.3%	1.2	5.7%
<i>Subtotal</i>	<b>190.1</b>	<b>205.0</b>	<b>196.8</b>	<b>214.6</b>	<b>211.8</b>	<b>9.6</b>	<b>4.7%</b>	<b>(2.8)</b>	<b>-1.3%</b>
Capital Projects	44.6	24.3	24.3	23.9	38.9	(0.4)	-1.7%	15.1	63.1%
<b>Wastewater Subtotal</b>	<b>234.7</b>	<b>229.3</b>	<b>221.1</b>	<b>238.5</b>	<b>250.7</b>	<b>9.2</b>	<b>4.0%</b>	<b>12.2</b>	<b>5.1%</b>
<b>Hetch Hetchy Water and Power</b>									
<b>Hetchy Power</b>									
Operations and Maintenance	41.7	57.6	39.1	58.5	60.3	0.9	1.5%	1.8	3.1%
Natural Gas & Steam Pass-Through	14.4	15.8	11.5	13.1	13.3	(2.7)	-17.3%	0.3	2.1%
Debt Service	0.4	0.4	0.4	1.5	2.0	1.1	266.8%	0.5	32.0%
General Reserve	3.4	-	-	-	-	-	-	-	-
Reclassification of Power Only & Joint Operating Costs	22.0	19.4	30.0	20.0	22.4	0.6	3.1%	2.4	12.0%
<i>Subtotal</i>	<b>81.9</b>	<b>93.2</b>	<b>81.0</b>	<b>93.0</b>	<b>98.0</b>	<b>(0.2)</b>	<b>-0.2%</b>	<b>5.0</b>	<b>5.3%</b>
Capital Projects	26.5	31.9	31.9	37.5	48.2	5.6	17.6%	10.7	28.5%
Reclassification of Power Only & Joint Operating Costs	8.7	21.3	21.3	30.3	22.0	9.0	42.3%	(8.3)	-27.4%
<b>Hetchy Power Subtotal</b>	<b>117.1</b>	<b>146.4</b>	<b>134.2</b>	<b>160.8</b>	<b>168.2</b>	<b>14.4</b>	<b>9.9%</b>	<b>7.4</b>	<b>4.6%</b>
<b>Hetchy Water</b>									
Operations and Maintenance	39.2	44.1	51.9	46.7	48.7	2.5	5.7%	2.0	4.3%
Reclassification of Power Only & Joint Operating Costs	(22.0)	(19.4)	(30.1)	(20.0)	(22.4)	(0.6)	3.1%	(2.4)	12.0%
<i>Subtotal</i>	<b>17.2</b>	<b>24.7</b>	<b>21.8</b>	<b>26.7</b>	<b>26.3</b>	<b>1.9</b>	<b>7.7%</b>	<b>(0.4)</b>	<b>-1.5%</b>
Capital Projects	9.5	33.0	33.0	41.6	38.2	8.6	26.1%	(3.4)	-8.2%
Reclassification of Power Only & Joint Operating Costs	(8.7)	(21.3)	(21.3)	(30.3)	(22.0)	(9.0)	42.3%	8.3	-27.4%
<b>Hetchy Water Subtotal</b>	<b>18.0</b>	<b>36.4</b>	<b>33.5</b>	<b>38.0</b>	<b>42.5</b>	<b>1.5</b>	<b>4.1%</b>	<b>4.5</b>	<b>11.9%</b>
<b>Hetch Hetchy Water and Power</b>									
Operations and Maintenance	80.9	101.7	91.0	105.1	108.9	3.4	3.3%	3.8	3.6%
Natural Gas & Steam Pass-Through	14.4	15.8	11.5	13.1	13.3	(2.7)	-17.2%	0.3	2.1%
Debt Service	0.4	0.4	0.4	1.5	2.0	1.1	266.8%	0.5	32.0%
General Reserve	3.4	-	-	-	-	-	-	-	-
<i>Subtotal</i>	<b>99.1</b>	<b>117.9</b>	<b>102.9</b>	<b>119.7</b>	<b>124.3</b>	<b>1.8</b>	<b>1.5%</b>	<b>4.6</b>	<b>3.8%</b>
Capital Projects	36.0	64.9	64.9	79.1	86.4	14.2	21.9%	7.3	9.2%
<b>Hetch Hetchy Total</b>	<b>135.1</b>	<b>182.8</b>	<b>167.8</b>	<b>198.8</b>	<b>210.7</b>	<b>16.0</b>	<b>8.8%</b>	<b>11.9</b>	<b>5.7%</b>
<b>Bureaus*</b>									
General Manager, Bus Svcs, External Affairs	60.8	65.1	63.1	70.5	63.2	5.4	8.3%	(7.2)	-10.3%
<b>Recovery to Enterprises</b>	<b>(60.8)</b>	<b>(65.1)</b>	<b>(63.1)</b>	<b>(70.5)</b>	<b>(63.2)</b>	<b>(5.4)</b>	<b>8.3%</b>	<b>7.2</b>	<b>-10.3%</b>
<b>Infrastructure**</b>									
<b>Recovery to Capital Projects</b>	<b>(29.6)</b>	<b>(64.2)</b>	<b>(32.1)</b>	<b>(62.5)</b>	<b>(72.1)</b>	<b>(1.6)</b>	<b>2.5%</b>	<b>(9.5)</b>	<b>15.2%</b>
<b>TOTAL SFPUC</b>	<b>642.7</b>	<b>684.6</b>	<b>666.2</b>	<b>761.5</b>	<b>867.7</b>	<b>76.9</b>	<b>11.2%</b>	<b>106.1</b>	<b>13.9%</b>

\* The SFPUC Bureaus' budget is funded through an overhead support allocation model that recovers costs of services to the benefitting Enterprises.

\*\* The Infrastructure budget is funded through SFPUC capital projects.

## Operating Budget for FY 2010-11

The SFPUC operating programs include regular operating costs, maintenance of utility facilities and lands, as well as support services (including management, business services, planning and regulatory compliance, and communication), debt service, and lease costs for each of the Enterprises. The operating budget is financed by both wholesale and retail rates, service charges, and other non-operating revenues, including rents and interest earnings. The total operating budget for the SFPUC is \$396.9 million for FY 2010-11, comprised of operations and maintenance for each of the Enterprises.

### *Water Enterprise*

The Water Enterprise's FY 2010-11 operating budget at \$159.5 million funds the operation and maintenance of the SFPUC water system. Compared to the \$154.7 million approved for FY 2009-10, the budget increased by \$4.7 million. The net increase reflects funding for water conservation, services of other City departments, and benefits.

### *Wastewater Enterprise*

The Wastewater Enterprise FY 2010-11 operating budget totals \$132.3 million and funds the operations and maintenance of the SFPUC's sewer system. Compared to the FY 2009-10 approved budget of \$125.9 million, the FY 2010-11 budget increased by \$6.5 million. The net increase reflects funding for services of other City departments and general reserves.

### *Hetch Hetchy Water and Power (including the Power Enterprise)*

Hetch Hetchy Water and Power's FY 2010-11 operating budget totals \$105.1 million and funds the operations and maintenance of the SFPUC's upcountry water and power systems, including all Power Enterprise activities. \$78.5 million is allocated to the Power Enterprise for all power activities and their share of joint costs. \$26.7 million is allocated to Hetchy Water for water activities and their share of the joint costs. Compared to the FY 2009-10 approved budget of \$101.7 million, which includes \$24.7 million for Hetchy Water and \$77.0 million for Hetchy Power, the FY 2010-11 Budget increased by \$3.4 million. The net increase reflects funding for new and on-going regulatory and compliance programs, and new personnel to address deferred maintenance.

## Capital Budget for FY 2010-11

The SFPUC capital programs are intended to reconstruct, replace, expand, repair, or improve facilities that are under the SFPUC's jurisdiction. The annual capital budgets are coordinated with the Ten-Year Capital Plan and the Ten-Year Financial Plan. The issuance of revenue bonds, other forms of indebtedness, and the execution of governmental loans are provided for under the San Francisco City Charter to finance the SFPUC's capital programs. The repayment of this indebtedness is provided for under the annual rates and revenues of the particular Enterprise that incurs the debt, and benefits from the underlying capital improvements.

### *Water Enterprise*

The major capital investment for the Water Enterprise is the WSIP, the \$4.6 billion dollar, multi-year capital program to rebuild the water system. The program will enhance the SFPUC's ability to provide reliable, affordable, high-quality water to our 2.4 million customers through environmentally sustainable means. The FY 2010-11 annual budget includes another \$47.3 million: \$13.2 million in regional

projects (storage, watershed, and rights-of-way, treatment facilities and conveyance); \$23.8 million for local projects (conveyance and distribution, security and Treasure Island improvements); \$9.2 million for programmatic projects; and \$1.2 million for financing costs. The City and County of San Francisco Board of Supervisors approved an appropriation of \$1,647.25 million for FY 2010-11 through FY 2015-16 to complete the WSIP, bringing the total WSIP appropriation to the \$4.6 billion program level. Year over year, the annual capital budget is up \$0.3 million, or 0.6 percent.

### *Wastewater Enterprise*

The Wastewater Enterprise's Capital Improvement Program (CIP) for FY 2010-11 is \$23.9 million and includes \$21.6 million for Wastewater capital projects and \$2.3 million for programmatic projects. The FY 2010-11 CIP is funded by Wastewater Enterprise revenues and revenue bonds. The projects are included in the SFPUC's Ten-Year Capital Plan which is part of the City and County of San Francisco's Ten-Year Capital Plan approved by the Board of Supervisors annually.

The FY 2010-11 Wastewater Enterprise annual CIP is \$0.4 million less than the FY 2009-10 approved CIP. In March 2010, a supplemental appropriation in the amount of \$135.2 million was approved for the Wastewater Enterprise. This supplemental appropriation, along with the FY 2010-11 Budget, provided funding for capital projects in FY 2010-11 of the Ten-Year Capital Plan.

### *Hetch Hetchy Water and Power*

The Hetch Hetchy Water and Power Capital Improvement Program (CIP) for FY 2010-11 is \$79.1 million and includes: \$33.7 million for Hetchy Power; \$41.6 million for Hetchy Water, of which \$30.3 million in power and joint-related projects is allocated to Hetchy Power; and \$3.8 million for programmatic projects. The FY 2010-11 CIP is funded by \$65.9 million in Hetch Hetchy Water and Power revenue, a \$7.1 million issuance of Water Enterprise debt for projects considered Water or joint Hetchy/Water assets and \$6.0 million in Clean Renewable Energy Bonds (CREBs). The projects are included in the SFPUC's Ten-Year Capital Plan which is part of the City and County of San Francisco's Ten-Year Capital Plan approved by the Board of Supervisors annually.

The FY 2010-11 annual CIP is approximately \$14.2 million, or 21.9 percent more than the FY 2009-10 approved CIP. This is primarily a result of the increase in the Hetchy Power Streetlight Repair project to fund the conversion of SFPUC's 17,600 owned and maintained street lights to LED and an increase to fund Hetchy Water's Power Infrastructure repair and replacement project.

## Retail Rates – Water and Wastewater

Pursuant to the City and County of San Francisco Charter section 8B.125, an independent rate study is performed at least once every five years. A rate study was undertaken in the Spring of 2009 to examine the future revenue requirements and costs of service of both the Water and Wastewater Enterprises and was used to set the retail rates through FY 2013-14. Based on this study, the Commission adopted a five-year rate proposal in 2009 that includes increases sufficient to meet project costs and debt coverage requirements. The average rate increases are shown below:

Table 2. Approved Retail Water Rate Adjustments

Water	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Average Annual Adjustment	15.0%	12.5%	12.5%	6.5%

Table 3. Approved Wastewater Rate Adjustments

Wastewater	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Average Annual Adjustment	7.0%	5.0%	5.0%	5.0%

### Wholesale Rates – Water

In the Spring of 2009, the SFPUC successfully negotiated a new Water Supply Agreement (WSA) with our Wholesale Water Customers. The new contract took effect on July 1, 2009 and changes the rate basis by which the wholesale rates and revenues are determined from a “utility basis” to a “cash basis,” resulting in the repayment of cost-of-capital over the life of the debt funding those assets rather than the life of the asset. The Commission adopted the FY 2009-10 wholesale rates under the new contract in May 2009. For FY 2010-11, the wholesale water rate was increased by 15.2 percent, effective July 1, 2010. Wholesale rates are reset annually as mandated in the 25-year Water Supply Agreement to recover costs in a timely manner.

Table 4. Wholesale Water Rate Adjustments

Water	Approved	Projected		
	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Average Annual Adjustment	15.2%	10.2%	29.2%	5.3%

## Conclusion

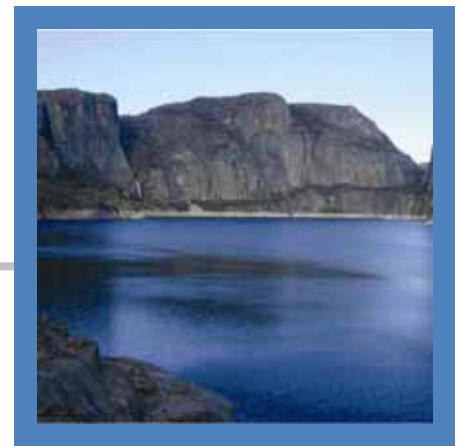
The SFPUC continues to invest in programs, projects and people to support its long-term capability to provide high quality, efficient, and reliable water, wastewater, and power services. Our direction and mandate is to be more sustainable in our programs and to focus on renewable energy, energy efficiency, and resource recovery and reuse. The SFPUC is on track to complete the WSIP program in FY 2015-16. The initial planning and design phases of the new SSIP will begin over the next two-year budget period, and both Hetchy Power and Hetchy Water continue to invest in rehabilitation of existing facilities, development of alternative energy and energy efficiency. The SFPUC capital programs will provide enhancements and new facilities that will improve the efficiency of our day-to-day operations and our ability to provide high quality services at the same time as fostering environmental, economic, and social sustainability for San Francisco and the San Francisco Bay Region.

I want to thank the SFPUC Commission and staff who have worked to develop and guide the FY 2010-11 and FY 2011-12 two-year budgets to well serve our customers and stakeholders. Respectfully submitted,



Ed Harrington  
General Manager

# NAVIGATING THE SFPUC BUDGET



The City and County of San Francisco's Public Utilities Commission's (SFPUC) FY 2010-11 and FY 2011-12 Budget Document is organized into the following sections:

**The General Manager's Transmittal Letter:** This section provides an overview of the SFPUC's proposed budget and includes priorities and an overview for the FY 2010-11 and FY 2011-12 budget years.

**Introduction:** This provides information on the Mission and Organizational Structure of the SFPUC, and includes the SFPUC Organizational Chart and both the Long-Term Action Plan and Financial Plans.

**Financial Authority and Policies:** This section provides a calendar of the budget cycle, information on the budget process, along with the SFPUC's financial authority and policies.

**Budget Summary:** This section provides an overview of the SFPUC's adopted budget.

- **Budget Appropriation by Fund:** This provides a description of the three Enterprise Funds.
- **Budget Sources and Uses:** This provides high-level summary of the SFPUC adopted budget with budget tables and descriptions by Sources and Uses categories. The budget tables contain: FY 2008-09 Actuals; the FY 2009-10 Adopted Budget; FY 2009-10 Pre-Audit Actuals; and the FY 2010-11 and FY 2011-12 Adopted Budgets. The variance columns measure the dollar and percentage difference between the FY 2010-11 and FY 2009-10 Adopted Budgets, as well as the FY 2010-11 and FY 2011-12 Adopted Budgets. The descriptions provide explanations for changes from FY 2010-11 to FY 2009-10, and changes from FY 2011-12 to FY 2010-11, for Adopted Budgets for Sources and Uses categories.
- **Fund Balance:** This provides a summary by Enterprise and the SFPUC overall, of beginning and ending fund balances.
- **Operating Budget Impact of Capital Expenditures:** This provides an explanation of the capital expenditure impact on the operating budget.
- **Authorized and Funded Full-Time Equivalents (FTE):** This provides a summary by Enterprise, Bureau, and Infrastructure, as well as the SFPUC overall full-time equivalent positions.

**Enterprise, Bureau, and Infrastructure Sections:** These sections provide budgetary and operational information for each of the SFPUC's Enterprises – Water, Wastewater, Power; the Bureaus – The Office of the General Manager, Business Services, and External Affairs; and Infrastructure.

- **Budget Sources and Uses:** This provides the same information as the SFPUC Budget Summary Section on Budget Sources and Uses, at the Enterprise, Bureau, and Infrastructure level.
- **Approved Rates:** This provides Water and Wastewater Enterprise rates, and includes descriptions and justifications of Sources of Revenues and Expenditures for the five-year forecast period.
- **Annual Capital Improvement Plan (CIP):** This provides descriptions and budgetary information on major projects in each of the Enterprises' Annual CIPs for FY 2010-11 and FY 2011-12. These projects are included in the Ten-Year Capital Plan.

- **Ten-Year Capital Plan:** This provides an outline of the long-term capital needs of the organization over the next ten years.
- **Ten-Year Financial Plan:** This provides a ten-year financial summary (FY 2010-11 to FY 2019-20) for each Enterprise, and describes projected sources and uses, resulting fund balances and key financial reserve ratios.
- **Departmental Section:** This provides operational and financial information on each of the Enterprises and Bureaus, including an organizational chart; objectives as they relate to the SFPUC's priorities overall; and Enterprise divisional information.
  - **Divisions:** This explains the roles and responsibilities of the Divisions, along with divisional budget summaries. The budget summaries include FY 2008-09 Actuals; the FY 2009-10 Adopted Budget; FY 2009-10 Pre-Audit Actuals; and the FY 2010-11 Adopted Budget. The FY 2011-12 Adopted Budget is not included because this was the first year of a two-year budget process and the change from FY 2010-11 is relatively flat. The variance column measures the dollar and percentage difference between the FY 2010-11 and the FY 2009-10 Adopted Budgets. The descriptions provide explanations for changes from FY 2010-11 to FY 2009-10 Adopted Budgets for Sources and Uses categories with variances greater than ten percent.
- **Glossary of Terms:** This section provides explanations and definitions to assist the reader in understanding the Budget Document.

The following provides a brief explanation of the categories of FY 2010-11 and FY 2011-12 Budget Sources and Uses of Funds:

## Sources of Funds:

### Sale of Water

Revenues from sales of water to retail customers in San Francisco and wholesale areas. The wholesale customers are served under the terms of a long-term Water Supply Agreement (WSA).

### Sewer Service Charges

Revenues from both San Francisco and neighboring special districts, including Bayshore Sanitary District, the City of Brisbane, and portions of the North San Mateo County Sanitation District, for sewer service charges to retail customers.

### Sale of Electricity

Revenues from power sales to City departments for municipal use, wholesale customers, and other retail customers.

### Sale of Gas and Steam

Revenues from gas and steam provided to City departments by Hetchy Power.

### Fund Balance

Amount used to balance annual sources and uses. It is budgeted when uses exceed sources. Conversely, a general reserve is budgeted in the event that sources exceed current year uses to keep the budget in balance.

### Other Non-Operating Revenues

Revenues from other income, including rent, permit fees, sale of property, custom work, and reimbursements.

### Proceeds from Debt

Refers to what is received through the issuance of bonds, loans, or other borrowings.



## Uses of Funds:

### Debt Service

Principal and interest payments on revenue bonds, State Revolving Fund loans used to finance system improvements, repayments on loans, and financing costs related to Clean Renewable Energy Bonds (CREBs).

### Capital Projects

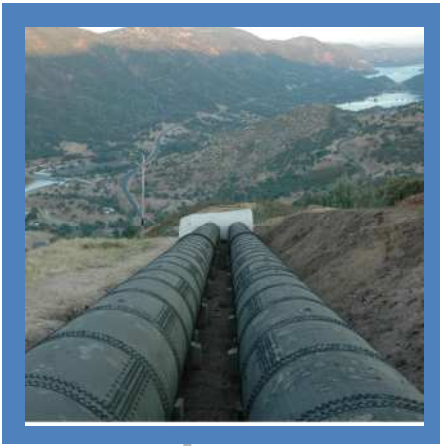
Infrastructure projects that include: minor construction projects, major maintenance and rehabilitation projects, planning studies, and preliminary engineering analysis for major capital improvements; major maintenance and routine additions, and major improvements to sewers, pumping stations, and treatment plants.

### General Reserve

Amount budgeted to balance the budget when budgeted sources exceed budgeted uses. Conversely, fund balance is budgeted when uses exceed sources. Uses of these funds must be approved by the Mayor and Board of Supervisors (BOS).

**Operations and Maintenance** (O&M costs) include the following:

- **Personnel**  
Labor for SFPUC's full-time and temporary employees, and related benefits.
- **Overhead**  
The SFPUC's share of City-wide overhead, or the County-wide Cost Allocation Plan (COWCAP).
- **Non-Personnel Services**  
Services such as maintenance of equipment and facilities, travel, training, memberships, professional services, rent, and other expenses that support maintenance for the operation of the Enterprises.
- **Materials and Supplies**  
Includes equipment maintenance supplies, safety, fuel, office supplies, and other miscellaneous materials and supplies for the maintenance and operation of the Enterprises.
- **Equipment**  
Equipment that has a value greater than \$5,000, and a useful life of three years or more, such as vehicles, machinery, and other heavy equipment.
- **Services of Other Departments**  
Services performed for the SFPUC by other City departments.
- **Operating Transfers Out**  
On-going operating payments between Enterprise funds or other City departments.



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The following provides a list of the charts and tables used in the FY 2010-11 Budget Document. Totals for these charts and tables throughout the document may not sum up due to rounding.

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## INTRODUCTION

The San Francisco Public Utilities Commission (SFPUC) is an Enterprise Department of the City and County of San Francisco (CCSF). The SFPUC provides essential service utilities: Water (both regional and local), Wastewater (local collection, treatment and disposal), and Power. The Commission supplies water to 2.4 million people in San Francisco and the

San Francisco Bay Area. One-third of the water is supplied directly to retail customers primarily in San Francisco (including residential, industrial and commercial customers), and the remaining two-thirds is supplied to wholesale customers through a long-term Water Supply Agreement (WSA). Wastewater services are provided within the City and County of San Francisco (as well as to three neighboring districts, including the San Mateo Sanitation District, Bayshore Sanitary District, and the City of Brisbane). Power is supplied primarily to San Francisco City departments and their tenants, as well as the Turlock and Modesto Irrigation Districts.

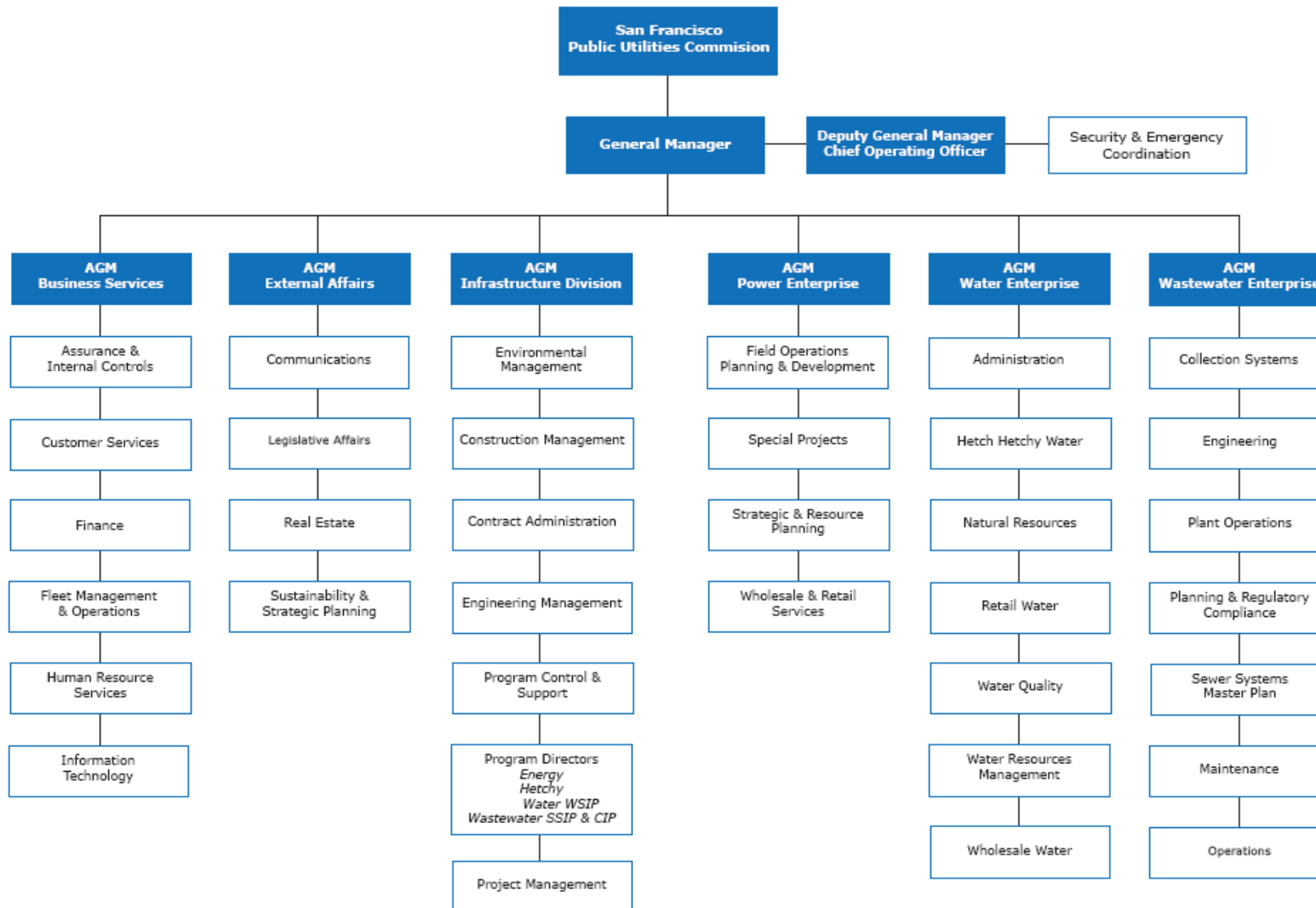
### Mission, Vision, and Values

The mission of the SFPUC is to provide our customers with high quality, efficient and reliable water, power and wastewater services in a manner that values environmental and community interests and sustains the resources entrusted to the SFPUC's care.

The SFPUC is a sustainable utility leader, recognized for superior results in service, value, environmental stewardship and innovation. The SFPUC's values include the following:

- **Communication:** Listen and communicate honestly and openly.
- **Equal Opportunity:** Provide opportunities to all staff to contribute and reach their potential. To achieve this, the SFPUC must be a learning organization.
- **Excellence:** Strive for personal and professional excellence, and recognize exemplary performance as the Commission seeks continuous improvement.
- **Service:** Focus on customer needs and satisfaction.
- **Inclusiveness:** Provide access and transparency to stakeholders and community members.
- **Respect:** Understand and appreciate the inherent value of the SFPUC staff, customers and community.
- **Safety:** Take the health and safety of the SFPUC's employees, customers and communities seriously.
- **Stewardship:** Be accountable for and responsibly manage and conserve the human, financial and environmental resources entrusted to the SFPUC's care.
- **Teamwork:** Support a cooperative work environment; the SFPUC team is strengthened by the diversity and contributions of its members.
- **Trust:** Act with honesty, integrity and fairness.

# SFPUC Organization Chart





## Structure

The SFPUC is comprised of three Enterprises, Infrastructure, and the Bureaus. The three Enterprises are the Water Enterprise, Wastewater Enterprise, and the Power Enterprise, which is the largest component of the Hetch Hetchy Water and Power Fund. The Bureaus provide critical support services and oversight to the Enterprises and Infrastructure, and are comprised of the Office of the General Manager, Business Services, and External Affairs, along with Infrastructure. Business Services includes seven Bureaus: Business Services Administration, Assurance and Internal Controls, Customer Services, Financial Services, Fleet Management, Human Resources, and Information Technology Services. External Affairs includes three Bureaus: Communications, Governmental Affairs, and Real Estate Services.

## SFPUC Strategic Plan

The SFPUC developed the "SFPUC Strategic Plan," which was created as a result of extensive goal setting and planning sessions. The Strategic Plan is a performance matrix designed to be used among senior managers to chart progress on four key goals:

- Provide High Quality Services;
- Promote a Green and Sustainable City;
- Expand Outreach and Communications; and
- Invest in People and Communities.

In FY 2009-10, the Long-Term Strategic Plan and Sustainability Plan were blended to create the Long-Term Action Plan. Each of the four goals of the Strategic Plan has actions associated with the goal and measures for determining the level of implementation and performance of the actions. The Action Plan is still considered a long-term plan because not all of the actions can be accomplished in one year. The following table summarizes the Long-Term Action Plan.

# SFPUC Long-Term Action Plan

## Goal: Provide High Quality Services

Strategies	Action
Ensure compliance with regulatory requirements	<ul style="list-style-type: none"> <li>▪ Comply with California Department of Public Health permits</li> <li>▪ Comply with State Regional Water Quality Control Board permits</li> <li>▪ Comply with electric regulatory compliance requirements</li> <li>▪ Comply with all wastewater permits</li> </ul>
Implement Water Supply Agreement	<ul style="list-style-type: none"> <li>▪ Develop interim supply allocations for wholesale customers</li> <li>▪ Develop Water Quality Notification Plan</li> <li>▪ Prepare report on state of regional water system</li> <li>▪ Develop Environmental Enhancement Surcharge</li> </ul>
Build Water System Improvement Program (WSIP) on schedule, within budget and within scope	<ul style="list-style-type: none"> <li>▪ Plan, design, construction, bid and award, close-out, and completion of regional and local projects</li> <li>▪ Coordinate and secure City agency approvals for WSIP projects</li> </ul>
Develop Sewer System Improvement Program (SSIP)	<ul style="list-style-type: none"> <li>▪ Develop the Sewer System Improvement Program (SSIP)</li> </ul>
Optimize resources to meet customer power needs	<ul style="list-style-type: none"> <li>▪ Increase delivery of renewable power purchased and/or owned</li> <li>▪ Complete preliminary studies for new renewable technologies including ocean wave, geothermal, qualifying small hydro and inline hydro</li> <li>▪ Continue to improve baseline metering technology and Meter Data Management functionality</li> <li>▪ Determine alternative methods for obtaining electric transmission, distribution, and banking services provided under Interconnection Agreement with PG&amp;E</li> <li>▪ Update Electric Resource Plan, identifying resource portfolio options for meeting customer and citywide demands given financial resources, including stakeholder input</li> <li>▪ Complete Power Business Plan</li> </ul>
Support base reuse	<ul style="list-style-type: none"> <li>▪ Create development agreements for Hunter's Point Shipyard and Candlestick covering wastewater, water and power services</li> <li>▪ Create development agreements for Treasure Island covering wastewater, water and power services</li> </ul>

**Goal: Provide High Quality Services (Continued)**

Strategies	Action
Develop partnerships	<ul style="list-style-type: none"> <li>▪ Improve partnerships with Modesto and Turlock Irrigation Districts and others for water and power supply and transmission development and other issues</li> <li>▪ Develop new partnerships, maintain existing partnerships and expand services with local contractors</li> <li>▪ Further develop partnerships with Sunol Valley interests to address WSIP implementation and other SFPUC activities</li> <li>▪ Enhance partnerships with City departments and agencies</li> <li>▪ Implementation of SFPUC-wide grant program</li> </ul>
Maintain and improve capital facilities	<ul style="list-style-type: none"> <li>▪ Identify and maintain streetlight portfolio</li> <li>▪ Provide adequate facilities for staff - Construction of 525 Golden Gate headquarters</li> <li>▪ Provide adequate facilities for staff - Plan for updating all facilities</li> <li>▪ Develop and implement an Enterprise-wide asset management control program that results in a complete Ten-Year Capital Improvement Plan including identification of planned projects with associated scopes, schedules, and budgets (identifying all available funding sources and shortfalls)</li> <li>▪ Increase the mileage of Sewer assessment, prioritize sewer replacement – SSIP - and begin the increase of sewer replacement collections system</li> </ul>
Implement Sustainability Plan and Program	<ul style="list-style-type: none"> <li>▪ Integrate and consolidate SFPUC Sustainability Plan and GM's Action Plan</li> <li>▪ Begin implementation of the program resulting from integration and consolidation of the Plans</li> </ul>
Keep abreast of technological innovations	<ul style="list-style-type: none"> <li>▪ Implement San Francisco Online Invoicing System (SOLIS)</li> <li>▪ Design and procure an electronic web-based bidding system (E-bidding/E-proposal)</li> <li>▪ Implement Supervisory Control and Data Acquisition (SCADA) system consistently across agency</li> <li>▪ Implement IT Strategic Plan</li> <li>▪ Implement and standardize the upgraded Maximo as the SFPUC's Asset Management Control System for all three Enterprises</li> <li>▪ Implement Automated Water Meter Program</li> </ul>
Improve emergency response	<ul style="list-style-type: none"> <li>▪ All emergency responders complete appropriate Federal Emergency Management Agency (FEMA) training</li> <li>▪ Develop a Security Master Plan and update Emergency Response and Recovery Plan</li> <li>▪ Develop and implement IT disaster recovery plan aligned with the IT Strategic Plan</li> </ul>
Streamline business practices	<ul style="list-style-type: none"> <li>▪ Identify and implement best practices, performance review, and audit findings</li> </ul>

**Goal: Promote a Green and Sustainable City**

Strategies	Action
Diversify and conserve water	<ul style="list-style-type: none"> <li>▪ Implement recycled water projects</li> <li>▪ Promote gray water use</li> <li>▪ Increase water use efficiency</li> <li>▪ Develop water conservation financial plan (Green Finance SF)</li> </ul>
Become a leader in environmental stewardship	<ul style="list-style-type: none"> <li>▪ Report on Watershed Environmental Improvement Plan implementation</li> <li>▪ Develop Alameda Watershed Habitat Conservation Plan</li> <li>▪ Develop SFPUC Land Management Policy</li> <li>▪ Work with the Bay Area Regional partners to build the Biosolids to Energy Facility</li> </ul>
Increase energy efficiency and conservation	<ul style="list-style-type: none"> <li>▪ Install light-emitting diode (LED) streetlights</li> <li>▪ Promote and implement GoSolarSF Program</li> <li>▪ Complete construction of 17 Energy Efficiency Block Grant projects</li> <li>▪ Implement Energy Efficiency Programs for Civic Center District, General Fund customers, Port and SFO. Conduct demand reduction audits</li> <li>▪ Procure and install automated electric meters</li> </ul>
Reduce inflows to the sewer system	<ul style="list-style-type: none"> <li>▪ Reduce storm water inflow through low-impact design (LID) projects</li> <li>▪ Reduce pollutant inflow through grease recycling</li> <li>▪ Reduce pollutant inflow through construction erosion control</li> </ul>
Reduce and mitigate greenhouse gas emissions	<ul style="list-style-type: none"> <li>▪ Work with the Treasure Island project team to design and implement innovative strategies that strive for zero greenhouse gas emissions</li> <li>▪ Support City Administrator efforts to encourage electric vehicle deployment</li> </ul>
Provide residents and businesses choice for power supply	<ul style="list-style-type: none"> <li>▪ Implement Community Choice Aggregation (CCA) Program</li> <li>▪ Complete negotiations and implement new electricity supply and delivery agreement with City of Riverbank</li> <li>▪ Identify preferred method for providing electric service to San Francisco International Airport (SFO) (existing agreement terminates July 2013)</li> <li>▪ Complete cost of service and rate design study to inform/support new customer base</li> <li>▪ Accurately communicate electricity services offering to customers</li> </ul>
Support and draft relevant legislative initiatives	<ul style="list-style-type: none"> <li>▪ Track all local, State, and Federal legislation that may impact sustainability or operations of the SFPUC or City and County of San Francisco. Take positions as appropriate.</li> </ul>

**Goal: Promote a Green and Sustainable City (Continued)**

Strategies	Action
Coordinate SFPUC Green initiatives	<ul style="list-style-type: none"> <li>▪ Identify opportunities for green demonstration projects with City departments</li> <li>▪ Develop incentives for City departments to reduce and conserve</li> </ul>
Reduce SFPUC in-house environmental impacts	<ul style="list-style-type: none"> <li>▪ Develop, implement and communicate plans to reduce SFPUC in-house environmental impacts</li> <li>▪ Support design review for 525 Golden Gate headquarters</li> <li>▪ Work with California Independent Systems Operator (ISO) and others on electric resource plan</li> </ul>
Close Potrero Power Plant	<ul style="list-style-type: none"> <li>▪ Work with Cal ISO and others on electric resource plan</li> </ul>

**Goal: Engage the Public**

Strategies	Action
Improve communication among Commission, staff and public	<ul style="list-style-type: none"> <li>▪ Distribute electronic and print copies of the new popular annual report to public</li> <li>▪ Develop internal communication standards and style guide</li> <li>▪ Distribute new popular annual report to employees</li> </ul>
Expand outreach efforts	<ul style="list-style-type: none"> <li>▪ Continue in-City and regional outreach efforts to support construction projects, programs and sustainability goals</li> </ul>
Engage stakeholder groups	<ul style="list-style-type: none"> <li>▪ Continue support and staffing of Citizens Advisory Committee and subcommittees, Rate Fairness Board, Revenue Bond Oversight Committee, Clean Energy Stewards, Residential Users Appeals Board, and WSIP Small Firm Advisory Committee</li> </ul>
Implement social media tools	<ul style="list-style-type: none"> <li>▪ Expand social media interaction with stakeholders with interactive contests and activities</li> </ul>
Launch new website	<ul style="list-style-type: none"> <li>▪ Develop new homepage and user-friendly information and improved content management</li> </ul>

**Goal: Invest in People and Communities**

Strategies	Action
Expand internal communications	<ul style="list-style-type: none"> <li>▪ Electronic and print distribution of customer Currents newsletter to employees</li> <li>▪ Electronic and print distribution of new popular annual report to employees</li> </ul>
Recruit and retain highly qualified people	<ul style="list-style-type: none"> <li>▪ Design 2010 survey to measure effectiveness of Department/ Enterprise/Division based action plans, including succession planning and retiree management</li> </ul>
Ensure employees have clear expectations for performance	<ul style="list-style-type: none"> <li>▪ Ensure managers complete appraisals as required</li> </ul>

**Goal: Invest in People and Communities (Continued)**

Strategies	Action
Minimize impacts of utility services on disadvantaged communities	<ul style="list-style-type: none"> <li>▪ Implement Environmental Justice Principles</li> </ul>
Create opportunities for community involvement and benefits	<ul style="list-style-type: none"> <li>▪ Expand community engagement in SFPUC community benefits</li> <li>▪ Establish an Memorandum of Understanding (MOU) agreement with the Office of Economic and Workforce Development</li> <li>▪ Track number of community jobs created and regularly publicize information</li> <li>▪ Increase involvement with San Francisco Unified School District</li> </ul>

## Ten-Year Financial Plan

The SFPUC prepares a Ten-Year Financial Plan as part of the budget deliberations process as required by the City and County of San Francisco Charter Section 8B.123. The Plan includes a ten-year financial summary (FY 2010-11 through FY 2019-20) for each Enterprise, describing projected sources and uses, resulting fund balances and key financial ratios. Projected costs and revenues are estimates and subject to variations inherent in all such projections. Consequently, the estimates should not be viewed as precise predictions but rather as indications of expected trends given expenditure, revenue, and financing assumptions. These assumptions are based on current Board of Supervisors (BOS) and Commission policies, goals, and objectives representing management's best estimates at the time.

Although each Enterprise has its own Ten-Year Financial Plan, there are similarities; these are:

- Sources reflect approved rate increases, where applicable, or are otherwise projected based on projected demand and revenue requirements to ensure indenture covenants are maintained;
- Operations and Maintenance, Repair and Replacement projects are financed from rates and service charges unless otherwise noted;
- Debt Service is financed from annual rates and service charges;
- Capital programs exceeding the cash-funded levels budgeted are generally financed by debt including: revenue bonds, commercial paper, State Revolving Fund Loans, and lease financing; in some cases Federal or State grants may finance capital projects;
- A minimum revenue bond coverage ratio of 1.25 times on an indenture basis (which includes available fund balances) and 1.00 times on a current operations basis (which excludes available fund balance) will be maintained.

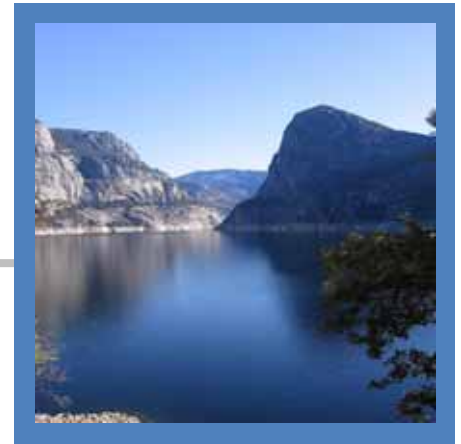
The Financial Plan largely assumes debt financing of capital needs over the next ten-year period for the Water and Wastewater Enterprises. The Water System Improvement Program (WSIP) requires approximately \$4.6 billion in net financing for the program, authorized by the voters under Propositions A and E in November 2002. The Sewer System Improvement Program (SSIP) also will require significant debt financing and is presently authorized under Proposition E.

The SFPUC Ten-Year Financial Plan assumes a financing strategy that utilizes short-term financing via the existing Commercial Paper (CP) program to calibrate financing needs with project spending. Long-term (30-year) 5.0% fixed rate debt issuance is assumed to periodically refund the CP program for both the Water and Wastewater Enterprises. The CP program facilitates short-term financing, typically at lower interest rates than longer term debt, which minimizes costs for ratepayers. The authorized CP program for the Water and Wastewater Enterprises are \$500 million and \$150 million respectively.

The Power Enterprise presently is not rated, though limited Clean Renewable Energy Bonds (CREBs) and Qualified Energy Conservation Bonds (QECBs), as well as other forms of tax credit debt instruments are available. For FY 2010-11, the Power Enterprise expects to issue \$6.6 million of CREBs and \$8.3 million of QECBs, the former providing funds for solar and micro-hydro projects, and the latter providing funds for energy conservation demonstration projects.

The Ten-Year Financial Plans are included in their respective Enterprise.

# FINANCIAL POLICIES



## CALENDAR AND BUDGET PROCESS

The budget cycle for the July 1 fiscal year budget begins in October and ends in July. Voters passed Proposition A in November of 2009, which amended the City Charter to require the City to transition to a two-year budget cycle by FY 2012-13. The SFPUC is one of four early-implementation departments that adopted a two-year budget for FY 2010-11 and FY 2011-12. The two-year budget is prepared, reviewed, enacted by the Board of Supervisors (BOS), signed by the Mayor, and implemented by departments and adjusted as necessary, pursuant to the same process as the annual budgets, described below. The SFPUC's new two-year budget is comprised of two, single-year spending plans.

### Participants

- The public is invited to all public meetings, notified in advance to ensure stakeholder awareness of any budget items.
- The SFPUC Commissioners hold Budget Committee meetings, which are publicly noticed, held during business hours, and allow for public comment on the budget as presented by staff. The Commission reviews and discusses the budget during publicly noticed Commission meetings.
- The Capital Planning Committee (CPC) provides recommendations to the Mayor's Office on City-wide priorities for capital and the level of investment needed to meet the priorities they identify.
- The Mayor prepares and submits a balanced budget to the Board of Supervisors on an annual basis.
- The Board of Supervisors is the City's legislative body and is responsible for amending and approving the Mayor's proposed budget. The Board's Budget and Legislative Analyst also participates in reviews of the City spending and financial projections.
- The Controller is the City's Chief Financial Officer and ensures the accuracy of the final budget.

### Calendar and Process

Beginning in October and concluding in July, the annually recurring budget cycle can be divided into three major stages.

- **Budget Preparation:** budget development and submission to the SFPUC Commission.
- **Approval:** budget review and enactment by the SFPUC, Mayor, and Board of Supervisors.
- **Implementation:** department execution and budget adjustments.

### Preparation

The budget process begins in October. At this time, the SFPUC Finance staff begins budget training for departments to assist them in planning and preparing their budgets, and the capital program is updated.

**Two categories of budgets are prepared:**



- **SFPUC Enterprise and Bureau Operating Budgets:** Enterprise departments generate non-discretionary revenue primarily from charges for services that are used to support operations and revenue-funded capital.
- **Capital Budgets:** the annual capital budget requests and ten-year capital plan proposals are submitted to the Capital Planning Committee (CPC) for review and inclusion in the City's annual Ten-Year Capital Plan. The annual Capital Budget is brought before the Mayor and Board of Supervisors for approval.

Beginning in October, SFPUC Enterprises prepare their budget requests. From November to December, the Assistant General Managers (AGM), the Deputy General Manager, and the General Manager review the capital budget and department operating budget proposals. In December and early January, the General Manager's proposed budget is consolidated and submitted to the SFPUC Commission for deliberations in January and February. From January to February, the Commission holds public hearings to review the operating and capital budget requests, ten-year capital plan, and ten-year financial plan. By mid-February, the budget requests are submitted to the Controller's Office. The Controller consolidates, verifies, and refines all the information that departments have submitted. In the first week of March, the Controller submits departments' proposed budget requests to the Mayor's Office of Public Policy and Finance for review.

From February through May, the Mayor and the Mayor's staff meet with community groups to provide budget updates and to hear concerns and requests for funding to improve public services. Total budget requests must be in balance with estimated total revenues. The Controller ensures that the finalized budget is balanced, accurate, and based on reasonable assumptions.

## Approval

Upon receiving the Mayor's proposed SFPUC budgets, the Budget and Finance Committee of the Board of Supervisors holds public hearings during the months of May and June to review departmental requests and solicit public input. The Budget and Finance Committee makes recommendations to the full Board for budget approval along with their proposed changes. If the budget review lapses into the new fiscal year a continuing resolution adopting the Interim Budget, which is usually the Mayor's proposed budget with some limitations, is passed by the Board and serves as the operating budget until the budget is finalized in late July. The Mayor typically signs the budget ordinance into law by the end of July.

The Budget and Finance Committee works closely with the Board of Supervisors Budget Analyst, who develops recommendations on departmental budgets. The SFPUC discusses the recommendations with the Budget Analyst, centered on proposed expenses and comparisons with prior year spending. Based on these discussions, the Board's Budget Analyst forwards a report with recommended reductions. The Budget and Finance Committee reviews the Budget Analyst's recommended expenditure cuts, along with the SFPUC and public input, before making final budget recommendations to the full Board of Supervisors. The Budget Committee votes to approve the amended budget and forwards it to the full Board by mid-July.

**Original Budget Amendments:** The City Charter requires that the Board of Supervisors vote on the budget twice between July 15 and August 1. The first reading occurs the first Tuesday after July 15, and amendments may be proposed. They are added to the budget if they are passed by a simple majority. Amendments may be proposed by any member of the Board of Supervisors and can reflect further public input and/or Board policy priorities. The Board votes on the amended budget during the second reading and if the budget is passed, it will be sent to the Mayor for final signature. If other amendments are proposed during the second reading, there is another second reading a week later. The Board of Supervisors must pass a final budget before the August 1 deadline.

The Mayor has ten days to approve the final budget, referred to as the Annual Appropriation Ordinance (AAO). The Mayor may sign the budget as approved by the Board, making it effective immediately. The Mayor may also veto any portion of the budget, whereupon it returns to the Board of Supervisors. The Board has ten days to override any or all of the Mayor's vetoes with a two-thirds majority vote. In this case,

upon the Board vote, the budget is immediately enacted, thus completing the budget process for the fiscal year. Should the Mayor opt not to sign the budget within the ten-day period, the budget is automatically enacted but without the Mayor's signature of approval. Once the AAO is passed, it supersedes the Interim Budget.

## Implementation

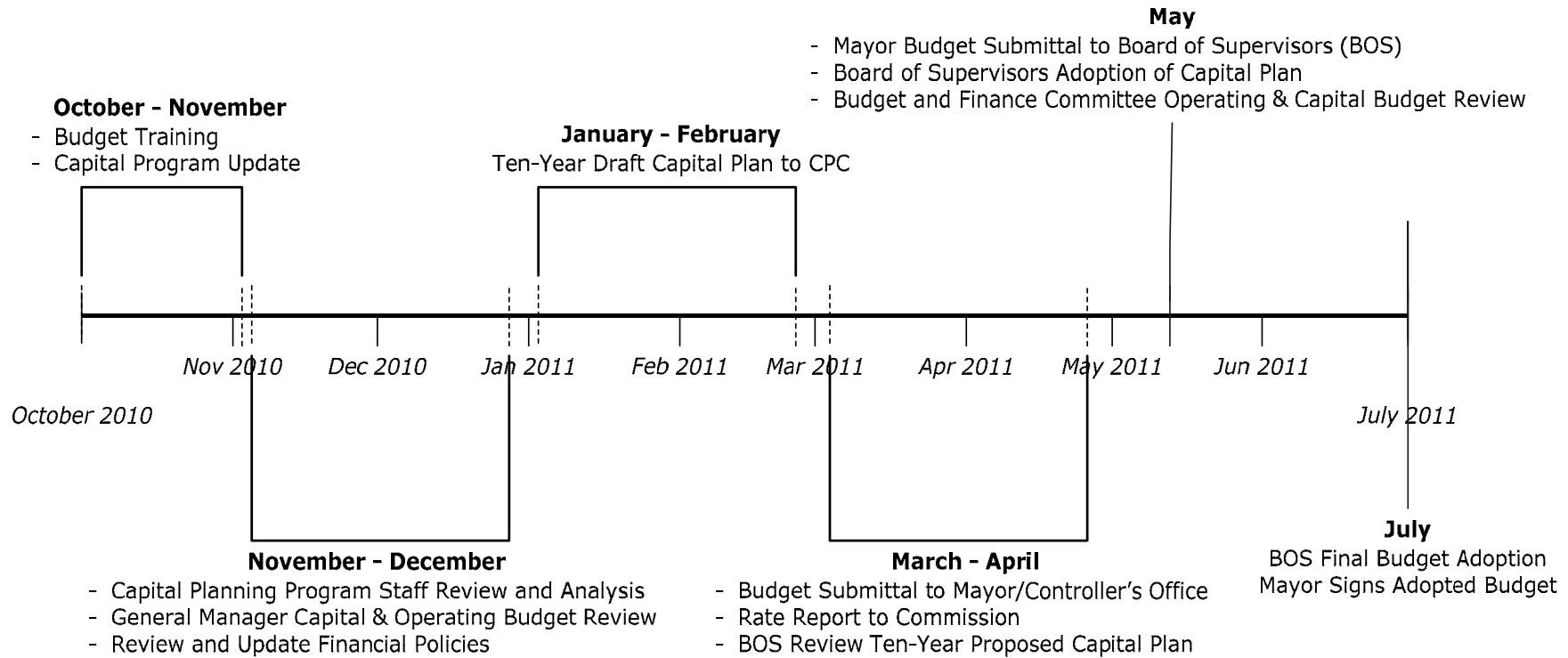
The budget is implemented and executed by SFPUC staff as originally adopted by the Mayor and the Board of Supervisors, at the start of the fiscal year.

**Supplemental Budget Adjustments:** Budget adjustments during the fiscal year can be made through supplemental appropriation requests, when a department has inadequate revenue for the remainder of the fiscal year or when additional appropriation is needed for capital project funding, grants appropriation legislation or when a third party awards funding to a department. Both adjustment requests require Board of Supervisors approval before going to the Mayor for final signature. The Commission must approve any budget adjustments in advance of it being presented to the Board of Supervisors. The public is informed and has the opportunity to engage in the budget amendment process through the SFPUC Commission agenda and public meetings, and the Board of Supervisors agenda and public meetings.

## Budget Activity by Month

Date	Activity
October to November	<ul style="list-style-type: none"> <li>▪ As-needed budget training for departments to assist them in preparing the Budget.</li> <li>▪ Update of Capital Program.</li> </ul>
November to December	<ul style="list-style-type: none"> <li>▪ Capital Planning Program (CPP) staff review and analysis.</li> <li>▪ Operating and Capital Budget Requests due to Financial Services, including proposed re-organization.</li> <li>▪ Review and update financial policies.</li> <li>▪ General Manager Capital Budget review.</li> <li>▪ Departmental Budget Reviews with Financial Services.</li> <li>▪ General Manager Operating Budget review.</li> <li>▪ Ten-Year Financial Plan Updates.</li> </ul>
January to February	<ul style="list-style-type: none"> <li>▪ Commission Budget workshops, deliberations, and proposed budget and plan adoptions.</li> <li>▪ Capital Planning Committee (CPC) reviews Ten-Year Draft Capital Plan.</li> <li>▪ Ten-Year Draft Capital Plan to CPC.</li> <li>▪ Ten-Year Financial Plan, with the first five years submitted to the Controller, Mayor, and Board of Supervisors.</li> </ul>
March to April	<ul style="list-style-type: none"> <li>▪ Budget Submittal to Mayor/Controller's Office.</li> <li>▪ CPC Submits Ten-Year Proposed Capital Plan to Board of Supervisors.</li> <li>▪ Board of Supervisors reviews Ten-Year Proposed Capital Plan.</li> </ul>
May to June	<ul style="list-style-type: none"> <li>▪ Rate Report to Commission.</li> <li>▪ Mayor's Budget Submittal to Board of Supervisors (Enterprise Funds).</li> <li>▪ Board adoption of Ten-Year Capital Plan.</li> <li>▪ Board adoption of Five-Year Financial Plan.</li> <li>▪ Budget and Finance Committee Operating and Capital Budgets Review and Action.</li> </ul>
July	<ul style="list-style-type: none"> <li>▪ Final Budget adoption by Board of Supervisors.</li> <li>▪ Mayor signs Adopted Budget.</li> </ul>

# SUMMARY TIMELINE OF BUDGET CALENDAR



## BUDGETING BASIS

The City historically adopted annual budgets for all government funds on a budget basis relying on a current financial resources measurement focus and a modified accrual basis of accounting. Since the passage of Proposition A (2009), the SFPUC and other City departments are changing to a two-year budget with single-year spending plans that will be reviewed and updated annually. The modified accrual method is a basis of accounting used with a current financial resources measurement focus. It modifies the accrual basis of accounting in two significant ways: first, revenues are not recognized until they are measurable and available; and second, expenditures are recognized in the period in which the SFPUC normally liquidates the related liability rather than when the liability is first incurred, if earlier. Under the modified accrual basis of accounting method, Actuals in the Tables located throughout this Budget Book include spending authorized by carryforward appropriation; these are funds carried forward from the prior fiscal year to be expended in the subsequent fiscal year. Examples typically include capital project funds and certain debt service funds that adopt project-length budgets. The budget of the City is a detailed operating plan that identifies estimated costs and results in relation to estimated revenues. The budget includes (1) the programs, projects, services, and activities to be provided during the fiscal year; (2) the estimated resources (inflows) available for appropriation; and (3) the estimated charges to appropriations. The budget represents a process through which policy decisions are deliberated, implemented, and controlled. The City Charter prohibits expending funds for which there is no legal appropriation.

## ACCOUNTING BASIS

The accounts of the SFPUC Enterprises are organized on the basis of a proprietary fund type, specifically an enterprise fund. The activities of the Enterprises are accounted for with a separate set of self-balancing accounts that comprise the Enterprises' assets, liabilities, net assets, revenues, and expenses. Enterprise funds account for activities (i) that are financed with debt that is secured solely by a pledge of the net revenues from fees and charges of the activity; or (ii) that are required by laws or regulations that the activity's costs of providing services, including capital costs (such as depreciation or debt service), be recovered with fees and charges, rather than with taxes or similar revenues; or (iii) that the pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs (such as depreciation or debt service).

The financial activities of the Enterprises and the year-end audited financial statements are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities associated with its operations are included on the statement of net assets; revenues are recorded when earned, and expenses recorded when liabilities are incurred.

The SFPUC Enterprises do not apply Financial Accounting Standards Board (FASB) statements and interpretations issued after November 30, 1989. The Enterprises apply all applicable Governmental Accounting Standards Board (GASB) pronouncements, as well as statements and interpretations of the FASB, Accounting Principles Board Opinions, and Accounting Research Bulletins of the Committee on Accounting Procedures issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.

## FINANCIAL AUTHORITY AND POLICIES

### General

The City and County of San Francisco is a Charter City under the California Constitution, and as a result, the Charter is the guiding document for financial authority and policies for City departments. The SFPUC is the department of the City responsible for the maintenance, operation and development of three utility enterprises: the Water Enterprise, the Wastewater Enterprise and the Power Enterprise (a consolidated unit of

Hetch Hetchy Water and Power). Each of the SFPUC's Enterprise's funds are operated and managed as a separate financial entity and separate enterprise funds are maintained.

Below are specific sections of the Charter which pertain to the requirements and parameters of activities in which the SFPUC engages, including the development, content, and approvals of budgets, rates, debt, contracts and Capital Investment Plans (CIP).

## Financial Authority

### *PUBLIC UTILITIES COMMISSION. (SF CHARTER SEC. 8B.121.)*

- (a) Notwithstanding Charter section 4.112, the Public Utilities Commission shall have exclusive charge of the construction, management, supervision, maintenance, extension, expansion, operation, use and control of all water, clean water and energy supplies and utilities of the City as well as the real, personal and financial assets that are under the Commission's jurisdiction or assigned to the Commission under Section 4.132.
- (b) The Public Utilities Commission may enter into Joint Powers Agreements with other public entities in furtherance of the responsibilities of the Commission.
- (c) Except to the extent otherwise provided in this Article, the Public Utilities Commission shall be subject to the provisions of Charter sections 4.100 et seq. generally applicable to boards and commissions of the City and County.
- (d) The General Manager shall have the authority to organize and reorganize the department. The General Manager shall adopt rules and regulations governing all matters within the jurisdiction of the department subject to section 4.102 as applicable.
- (e) Ownership or control of any public utility or any part thereof under the jurisdiction of the Public Utilities Commission may not be transferred or conveyed absent approval by the Public Utilities Commission and approval by a vote of the electors of the City at the election next ensuing not less than 90 days after the adoption of such ordinance, which shall not go into effect until ratified by a majority of the voters voting thereon. Voter approval shall not be required for sales or transfers of real property declared surplus to the needs of any utility by the Public Utilities Commission or to leases or permits for the use of utility real property approved by the Public Utilities Commission.

(Added November 2002)

### *GOALS AND OBJECTIVES RELATED TO WATER AND CLEAN WATER [WASTEWATER]. (SF CHARTER SEC. 8B.122.)*

- (a) The Commission shall develop, periodically update and implement programs to achieve goals and objectives consistent with the following:
  - (1) Provide water and clean water services to San Francisco and water service to its wholesale customers while maintaining stewardship of the system by the City;
  - (2) Establish equitable rates sufficient to meet and maintain operation, maintenance and financial health of the system;
  - (3) Provide reliable water and clean water services and optimize the systems' ability to withstand disasters;
  - (4) Protect and manage lands and natural resources used by the Commission to provide utility services consistent with applicable laws in an environmentally sustainable manner. Operate hydroelectric generation facilities in a manner that causes no reasonably anticipated adverse impacts on water service and habitat;

- (5) Develop and implement priority programs to increase and to monitor water conservation and efficiency system-wide;
- (6) Utilize state-of-the-art innovative technologies where feasible and beneficial;
- (7) Develop and implement a comprehensive set of environmental justice guidelines for use in connection with its operations and projects in the City;
- (8) Create opportunities for meaningful community participation in development and implementation of the Commission's policies and programs; and
- (9) Improve drinking water quality with a goal of exceeding applicable drinking water standards if feasible.

(Added November 2002)

## Financial Policies

### *MISSION-DRIVEN BUDGET. (SF CHARTER SEC. 9.114.)*

Each departmental budget shall describe each proposed activity of that department and the cost of that activity. In addition, each department shall provide the Mayor and the Board of Supervisors with the following details regarding its budget:

- (a) The overall mission and goals of the department;
- (b) The specific programs and activities conducted by the department to accomplish its mission and goals;
- (c) The customer(s) or client(s) served by the department;
- (d) The service outcome desired by the customer(s) or client(s) of the department's programs and activities;
- (e) Strategic plans that guide each program or activity;
- (f) Productivity goals that measure progress toward strategic plans;
- (g) The total cost of carrying out each program or activity; and
- (h) The extent to which the department achieved, exceeded or failed to meet its missions, goals, productivity objectives, service objectives, strategic plans and spending constraints identified in subsections (1) through (6) during the prior year.

Departmental budget estimates shall be prepared in such form as the Controller, after consulting with the Mayor, directs in writing.

### *PLANNING AND REPORTING. (SF CHARTER SEC. 8B.123.)*

- (a) Planning and Reporting

The Public Utilities Commission shall annually hold public hearings to review, update and adopt:

- (1) A Long-Term Capital Improvement Program, covering projects during the next 10-year period; including cost estimates and schedules.
- (2) A Long-Range Financial Plan, for a 10-year period, including estimates of operation and maintenance expenses, repair and replacement costs, debt costs and rate increase requirements.
- (3) A Long-Term Strategic Plan, setting forth strategic goals and objectives and establishing performance standards as appropriate.

The Capital Improvement Program and Long-Range Financial Plan shall serve as a basis and supporting documentation for the Commission's capital budget, the issuance of revenue bonds, other forms of indebtedness and execution of governmental loans under this Charter.

(b) Citizens' Advisory Committee

The Board of Supervisors, in consultation with the General Manager of the Public Utilities Commission, shall establish by ordinance a Citizens' Advisory Committee to provide recommendations to the General Manager of the Public Utilities Commission, the Public Utilities Commission and the Board of Supervisors.

(Added November 2002)

*WATER AND CLEAN WATER [WASTEWATER] REVENUE BONDS. (SF CHARTER SEC. 8B.124.)*

Notwithstanding, and in addition to, the authority granted under Charter Section 9.107, the Public Utilities Commission is hereby authorized to issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities or combinations of water and clean water facilities under the jurisdiction of the Public Utilities Commission.

Any legislation authorizing the issuance of revenue bonds (except for refunding bonds) under this section shall be subject to the referendum requirements of Section 14.102 of this Charter. The ordinance authorizing the issuance of such revenue bonds shall not become effective until 30 days after its adoption.

Notwithstanding any other provision of this Charter or of any ordinance of the City and County, the Board of Supervisors may take any and all actions necessary to authorize, issue and repay such bonds, including, but not limited to, modifying schedules of rates and charges to provide for the payment and retirement of such bonds, subject to the following conditions:

- (a) Certification by an independent engineer retained by the Public Utilities Commission that:
  - (1) The projects to be financed by the bonds, including the prioritization, cost estimates and scheduling, meet utility standards; and
  - (2) That estimated net revenue after payment of operating and maintenance expenses will be sufficient to meet debt service coverage and other indenture or resolution requirements, including debt service on the bonds to be issued, and estimated repair and replacement costs.
- (b) Certification by the San Francisco Planning Department that facilities under the jurisdiction of the Public Utilities Commission funded with such bonds will comply with applicable requirements of the California Environmental Quality Act.

Except as expressly provided in this Charter, all revenue bonds may be issued and sold in accordance with state law or any procedure provided for by ordinance of the Board of Supervisors.

(Added November 2002)

*RATES. (SF CHARTER SEC. 8B.125.)*

Notwithstanding Charter sections 2.109, 3.100 and 4.102 or any ordinance (including, without limitation, Administrative Code Appendix 39), the Public Utilities Commission shall set rates, fees and other charges in connection with providing the utility services under its jurisdiction, subject to rejection--within 30 days of submission--by resolution of the Board of Supervisors. If the Board of Supervisors fails to act within 30 days the rates shall become effective without further action.

In setting retail rates, fees and charges the Commission shall:

- (a) Establish rates, fees and charges at levels sufficient to improve or maintain financial condition and bond ratings at or above levels equivalent to highly rated utilities of each enterprise under its jurisdiction, meet requirements and covenants under all bond resolutions and indentures, (including, without limitation, increases necessary to pay for the retail water customers' share of the debt service on bonds and operating expenses of any state financing authority such as the Regional Water System Financing Authority), and provide sufficient resources for the continued financial health (including appropriate reserves), operation, maintenance and repair of each enterprise, consistent with good utility practice;
  - (1) Retain an independent rate consultant to conduct rate and cost of service studies for each utility at least every five years;
  - (2) Set retail rates, fees and charges based on the cost of service;
  - (3) Conduct all studies mandated by applicable state and federal law to consider implementing connection fees for water and clean water facilities servicing new development;
  - (4) Conduct studies of rate-based conservation incentives and/or lifeline rates and similar rate structures to provide assistance to low income users, and take the results of such studies into account when establishing rates, fees and charges, in accordance with applicable state and federal laws;
  - (5) Adopt annually a rolling 5-year forecast of rates, fees and other charges; and
  - (6) Establish a Rate Fairness Board consisting of seven members: the City Administrator or his or her designee; the Controller or his or her designee; the Director of the Mayor's Office of Public Finance or his or her designee; two residential City retail customers, consisting of one appointed by the Mayor and one by the Board of Supervisors; and two City retail business customers, consisting of a large business customer appointed by the Mayor and a small business customer appointed by the Board of Supervisors.

The Rate Fairness Board may:

- i. Review the five-year rate forecast;
- ii. Hold one or more public hearings on annual rate recommendations before the Public Utilities Commission adopts rates;
- iii. Provide a report and recommendations to the Public Utilities Commission on the rate proposal; and
- iv. In connection with periodic rate studies, submit to the Public Utilities Commission rate policy recommendations for the Commission's consideration, including recommendations to reallocate costs among various retail utility customer classifications, subject to any outstanding bond requirements.

These provisions shall be effective January 3, 2003 for the setting of retail rates, fees and charges related to the clean water system. If the voters approve bonds for the Public Utilities Commission's Capital Improvement Program at the November 5, 2002 election then the provisions of this section shall take effect on July 2, 2006 for the setting of retail rates, fees and charges related to the water system. If the voters do not approve such bonds then this section will take effect on January 3, 2003.

(Added November 2002)

*CONTRACTING AND PURCHASING. (SF CHARTER SEC. 8B.127.)*

Notwithstanding Charter Section 9.118 or any ordinance, the Public Utilities Commission shall have the sole authority to enter into agreements for the purchase of water; the sale



of water to wholesale customers; and agreements necessary to implement Joint Powers Agreements with any wholesale water customer.

In order to promote labor stability and to ensure the Capital Improvement Program is completed expeditiously and efficiently, the Public Utilities Commission is authorized, to the extent legally appropriate, to enter into project labor agreements, with appropriate Building Construction and Trades Councils, covering significant capital projects.

## DEBT POLICIES<sup>1</sup>

### *REVENUE BONDS. (SF CHARTER SEC. 9.107.)*

The Board of Supervisors is hereby authorized to provide for the issuance of revenue bonds. Revenue bonds shall be issued only with the assent of a majority of the voters upon any proposition for the issuance of revenue bonds, except that no voter approval shall be required with respect to revenue bonds:

- (a) Approved by three-fourths of all the Board of Supervisors if the bonds are to finance buildings, fixtures or equipment which are deemed necessary by the Board of Supervisors to comply with an order of a duly constituted state or federal authority having jurisdiction over the subject matter;
  - (1) Approved by the Board of Supervisors prior to January 1, 1977;
  - (2) Approved by the Board of Supervisors if the bonds are to establish a fund for the purpose of financing or refinancing for acquisition, construction or rehabilitation of housing in the City and County;
  - (3) Authorized and issued by the Port Commission for any Port-related purpose and secured solely by Port revenues, or authorized and issued for any Airport-related purpose and secured solely by Airport revenues;
  - (4) Issued for the proposes of assisting private parties and not-for-profit entities in the financing and refinancing of the acquisition, construction, reconstruction or equipping of any improvement for industrial, manufacturing, research and development, commercial and energy uses or other facilities and activities incidental thereto, provided the bonds are not secured or payable from any monies of the City and County or its commissions.
  - (5) Issued for the purpose of the reconstruction or replacement of existing water facilities or electric power facilities or combinations of water and electric power facilities under the jurisdiction of the Public Utilities Commission, when authorized by resolution adopted by a three-fourths affirmative vote of all members of the Board of Supervisors.
  - (6) Approved and authorized by the Board of Supervisors and secured solely by an assessment imposed by the City.
  - (7) Issued to finance or refinance the acquisition, construction, installation, equipping, improvement or rehabilitation of equipment or facilities for renewable energy and energy conservation.

Except as expressly provided in this Charter, all revenue bonds may be issued and sold in accordance with state law or any procedure provided for by ordinance.

(Amended November 2001)

### *REFUNDING BONDS. (SF CHARTER SEC. 9.109. )*

The Board of Supervisors is hereby authorized to provide for the issuance of bonds of the City and County for the purpose of refunding any general obligation or revenue bonds of the City and County then outstanding. No voter approval shall be required for the

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<sup>1</sup> See Appendix D for further information on SFPUC Debt and Derivatives Policies, and Disclosure Requirements.

authorization, issuance and sale of refunding bonds, which are expected to result in net debt service savings to the City and County on a present value basis, calculated as provided by ordinance.

*WATER AND CLEAN WATER REVENUE BONDS. (SF CHARTER SEC. 8B.124.)*

Notwithstanding, and in addition to, the authority granted under Charter Section 9.107, the Public Utilities Commission is hereby authorized to issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities or combinations of water and clean water facilities under the jurisdiction of the Public Utilities Commission.

Any legislation authorizing the issuance of revenue bonds (except for refunding bonds) under this section shall be subject to the referendum requirements of Section 14.102 of this Charter. The ordinance authorizing the issuance of such revenue bonds shall not become effective until 30 days after its adoption.

Notwithstanding any other provision of this Charter or of any ordinance of the City and County, the Board of Supervisors may take any and all actions necessary to authorize, issue and repay such bonds, including, but not limited to, modifying schedules of rates and charges to provide for the payment and retirement of such bonds, subject to the following conditions:

- (a) Certification by an independent engineer retained by the Public Utilities Commission that:
  - (1) the projects to be financed by the bonds, including the prioritization, cost estimates and scheduling, meet utility standards; and
  - (2) that estimated net revenue after payment of operating and maintenance expenses will be sufficient to meet debt service coverage and other indenture or resolution requirements, including debt service on the bonds to be issued, and estimated repair and replacement costs.
- (b) Certification by the San Francisco Planning Department that facilities under the jurisdiction of the Public Utilities Commission funded with such bonds will comply with applicable requirements of the California Environmental Quality Act.

Except as expressly provided in this Charter, all revenue bonds may be issued and sold in accordance with state law or any procedure provided for by ordinance of the Board of Supervisors.

(Added November 2002)

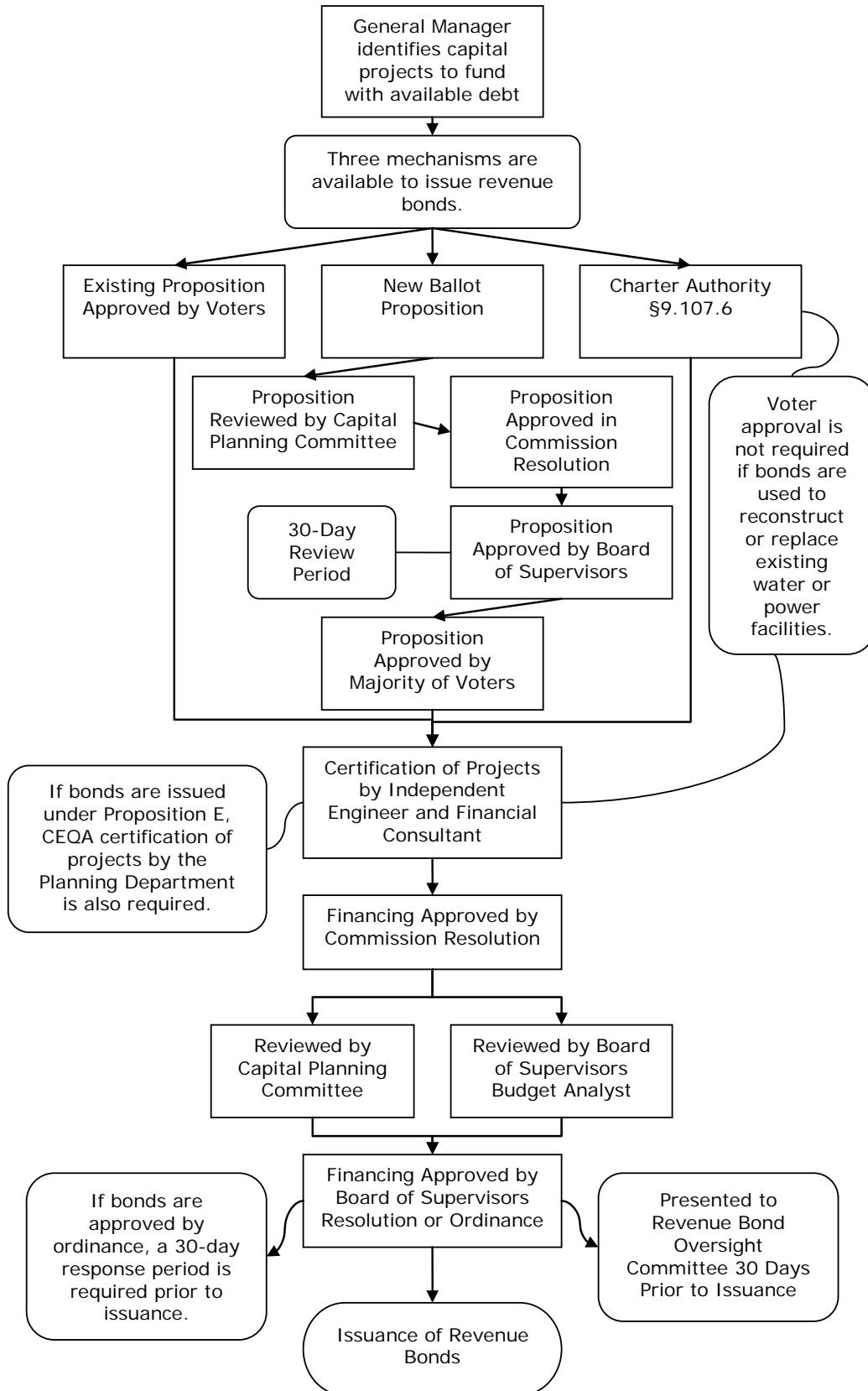
Note: Proposition A, approved by voters in November 2002, authorizes the SFPUC, subject to Board of Supervisors approval, to issue up to \$1.628 billion in revenue bonds or other forms of indebtedness to finance the acquisition and construction of improvements in the City's water system.

*Debt Policy and Indenture Requirements.*

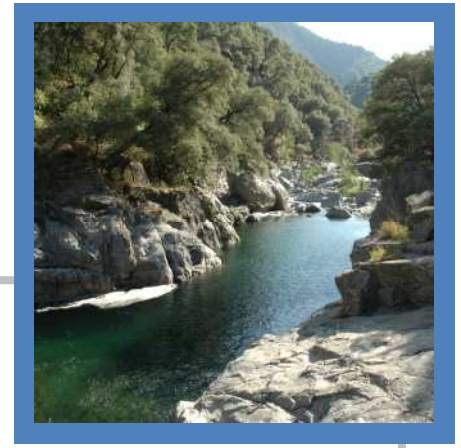
- (a) Current SFPUC financing documents require that net revenues plus unappropriated fund balance equal 1.25 times annual debt services. On a current basis, without fund balance, the requirement is that the revenues equal a minimum of 1.00 times annual debt service. From time to time, utility user rates may have to be increased to comply with financing document covenants.
- (b) To issue additional bonds, SFPUC financing documents require an independent certification that debt coverage of 1.25 will be maintained for three years after issuance of additional bonds.

The Commission and Board of Supervisors must approve any additional indebtedness.

Chart 1. Debt Approval Process



# BUDGET SUMMARY



## Funds Subject to Appropriation

The SFPUC has three Enterprise funds: the Water Enterprise Fund, the Wastewater Fund, and the Hetch Hetchy Water and Power Fund (the Power Enterprise is the largest component). These funds support the operations, facilities maintenance, and capital needs of the entities. The SFPUC also includes the Bureaus and Infrastructure, which provide support and oversight services to the Enterprises. The Bureaus' budgets are funded through an allocation model that recovers costs of services to the Enterprises. Infrastructure's budget is funded through various capital projects.

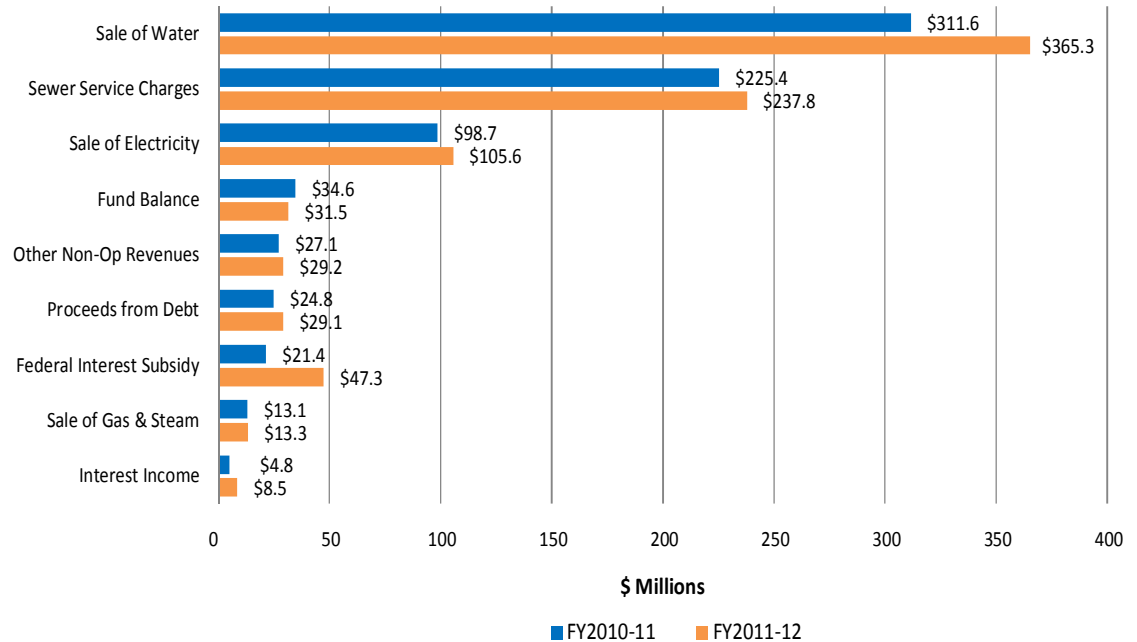
**The Water Enterprise Fund** accounts for the activities of SFPUC's Water Enterprise. The Enterprise is engaged in the distribution of water to the City and certain wholesale areas. The Enterprise collects, transmits, treats, and distributes high-quality drinking water to a total population of approximately 2.4 million people, including retail customers in the City and wholesale customers located in San Mateo, Santa Clara, and Alameda Counties. Approximately two-thirds of the water delivered by the Enterprise is to wholesale customers. Retail customers include residential, commercial, industrial, and governmental uses, and the Enterprise recovers costs of service through user fees. Wholesale customers include cities, water districts, one private utility, and one nonprofit university. Services to these customers are provided pursuant to the newly negotiated Water Supply Agreement (WSA), commencing on July 1, 2009, which establishes the basis for determining cost recovery and rates for associated wholesale water service.

**The Wastewater Enterprise Fund** accounts for the activities of the Wastewater Enterprise. The Wastewater Enterprise was created after San Francisco voters approved a proposition in 1976 authorizing the city to issue \$240.0 million in bonds for the purpose of acquiring, constructing, improving, and financing improvements to the City's municipal sewage treatment and disposal system. The Enterprise collects, transports, treats, and discharges sanitary and stormwater flows generated within the City for the protection of public health and environmental safety. In addition, the Enterprise serves on a contractual basis with certain municipal customers located outside the City limits, including the North San Mateo County Sanitation District, Bayshore Sanitary District, and the City of Brisbane. The Enterprise recovers cost of service through user fees based on the volume and strength of sanitary flow. The Enterprise serves approximately 150,000 residential accounts (representing approximately 350,000 dwelling units), which discharge about 19 million ccf of sanitary flow per year (measured in hundreds of cubic feet, or ccf) and approximately 22,000 nonresidential accounts, which discharge about 9.2 million ccf of sanitary flow per year.

**The Hetch Hetchy Water and Power Fund** accounts for the activities of Hetch Hetchy Water and Power. Services include the collection and distribution of approximately 85.0 percent of the City's water supply and in the generation and transmission of electricity. Approximately 65.0 percent of the electricity generated by the Enterprise is used by the City's municipal customers (including the San Francisco International Airport, San Francisco Municipal Transportation Agency, Recreation and Parks Department, the Port of San Francisco, San Francisco General Hospital, City Hall streetlights, the Moscone Center, and the SFPUC Water and Wastewater Enterprises). The majority of the balance of electricity is sold to other utility districts, such as the Turlock and Modesto Irrigation Districts. The Enterprise includes a system of reservoirs, hydroelectric power plants, aqueducts, pipelines, and transmission lines, carrying water and power more than 170 miles from Sierra Nevada to customers in the City and portions of the surrounding San Francisco Bay Area. There are different categories of Sources and Uses of Funds within the Enterprises, Bureaus, and Infrastructure funds. A list and descriptions of these sources and uses are located in the "Navigating the SFPUC Budget" section.

## Sources of Funds

Chart 2. FY 2010-11 and FY 2011-12 SFPUC Sources of Funds, \$761.5 Million and \$867.7 Million



### Summary

Estimated revenues from Sale of Water, Sewer Service Charges, Sale of Electricity, Fund Balance, Other Non-Operating Revenues, Federal Interest Subsidy, Sale of Gas and Steam, Proceeds from Debt, and Interest Income are budgeted at \$761.5 million in FY 2010-11 and \$867.7 million in FY 2011-12. In FY 2010-11, this is a \$76.9 million, or 11.2 percent increase from FY 2009-10. The increase is due to increases in Sale of Water, Federal Interest Subsidy, Proceeds from Debt, Sale of Electricity, Other Non-Operating Income, and Fund Balance, offset by decreases in Sale of Gas and Steam and Interest Income. In FY 2011-12 the increase from the previous fiscal year is \$106.2 million or 13.9 percent. The increase reflects a \$53.7 million increase in the revenue from Sale of Water, a \$12.4 million increase in the sewer service charge revenue and a \$7.0 million increase in the Sale of Electricity. These increases are consistent with the approved rates. The other categories all have an increase, but these are relatively flat except Interest Income which almost doubles from \$4.8 million to \$8.5 million as a result of growth increases in revenues and Federal Interest Subsidy which increased by 120.8 percent. Chart 2 shows the breakdown of the FY 2010-11 and FY 2011-12 Sources of Funds by revenue categories and Table 5 shows budgeted Sources of Funds for FY 2009-10, FY 2010-11 and FY 2011-12 and Actual Sources of Funds for FY 2008-09 and FY 2009-10; and Table 7 shows FY 2010-11 Sources of Funds by Enterprise.

### Sale of Water

FY 2010-11 Water Sales revenues are budgeted at \$311.6 million, a \$29.4 million, or 10.4 percent, increase from the FY 2009-10 budget. Water Enterprise revenues from water sales are budgeted at \$310.1 million, less water costs of \$29.7 million to Hetch Hetchy Water and Power. The increase in water sales in the Water Enterprise is based on consumption and retail rates adopted by the SFPUC Commission in May 2009, including rates for single-family and multiple-family residential and non-residential customers and for wholesale rate payers on April 2010. Hetch Hetchy Water and Power water sales revenues are budgeted at \$31.2 million of which \$29.7 million is from the Water

Enterprise and \$1.5 million is from Lawrence Livermore Lab and Groveland. The increase is based on an analysis of historical operations and capital improvements, escalated at three percent. In FY 2011-12, the Sale of Water again increases are consistent with the approved rates and increased consumption; this increase is \$53.7 million, a 17.2 percent increase.

### Sewer Service Charges

In FY 2010-11 Sewer Service Charges are budgeted in the Wastewater Enterprise at \$225.4 million, a \$0.6 million, or 0.3 percent, decrease from the FY 2009-10 budget and are based on the FY 2010-11 sewer service retail rates adopted by the SFPUC Commission in May 2009, including rates for single-family and multiple-family residential and non-residential customers. The decrease assumes lower water consumption due to water conservation and the economic recession. In FY 2011-12, the revenue from Sewer Service Charges increases by \$12.4 million, a 5.5 percent increase reflecting rate increase and increase water consumption.

### Sale of Electricity

In FY 2010-11 Sale of Electricity is budgeted at \$98.7 million in Hetch Hetchy Water and Power, a \$9.1 million or a 10.1 percent increase from FY 2009-10. The \$9.1 million increase in revenues is comprised of \$5.3 million from City departments, mainly the San Francisco International Airport, \$2.6 million from retail power customers, resulting from the settlement agreement between the City and County of San Francisco and Pacific Gas & Electric Company (PG&E) and \$1.2 million from wholesale power customers. In FY 2011-12, the Sale of Electricity revenues are budgeted to increase by \$7.0 million, a 7.1 percent increase.

### Fund Balance

In FY 2010-11 Fund Balance is budgeted at \$34.6 million, a \$1.2 million or a 3.5 percent increase from the prior year's budget, and is based on the estimated difference between total sources and total uses. The net increase reflects an increase in the use of Fund Balance by Hetch Hetchy Water and Power to support the FY 2010-11 capital projects funding. In FY 2011-12, Fund Balance is relatively flat with a decrease of \$3.1 million across the three Enterprises.

### Other Non-Operating Revenues

In FY 2010-11 Other Non-Operating Revenue is budgeted at \$27.1 million, a \$2.0 million or 8.0 percent increase from the FY 2009-10 budget. The budget includes \$19.5 million in the Water Enterprise, \$6.2 million in Hetch Hetchy Water and Power and \$1.4 million in the Wastewater Enterprise. The budget includes \$12.8 million from property rentals in the Water Enterprise and \$3.0 million from electric and gas receipts in Hetch Hetchy Water and Power. The net increase reflects an increase in property rentals in the Water Enterprise and reductions in miscellaneous revenues in Hetch Hetchy Water and Power and the Wastewater Enterprise. In FY 2011-12, there is a slight increase of \$2.1 million, 7.7 percent in non-operating revenues from various sources.

### Proceeds from Debt

In FY 2010-11 Proceeds from Debt is budgeted at \$24.8 million, an \$18.3 million or a 282.3 percent increase from the prior year's FY 2009-10 budget and is based on an analysis of projected capital improvement costs for transmission reliability, including seismic improvements and other upgrades to assure the transmission of water, and purchase of property related to Wastewater's capital improvement. The Water Enterprise is allocating \$13.1 million from debt proceeds to Hetch Hetchy Water for water-related capital projects. The increase funds property purchase for the Wastewater Capital Improvement Program (CIP) and support of Hetch Hetchy's capital improvements. In FY 2011-12, the Proceeds from Debt increases again by \$4.3 million, a 17.1 percent increase.

## Federal Interest Subsidy

In FY 2010-11 Federal Interest Subsidy related to Build America Bond (BABs) Financing is budgeted at \$21.4 million and reflects a new revenue source for the Water Enterprise. Under the American Recovery and Reinvestment Act (ARRA), the Treasury Department provides a direct subsidy equal to 35.0 percent of the interest payable for bonds issued as Build America Bonds. In FY 2011-12, the SFPUC will again take advantage of this new revenue source; the budget calls for \$47.3 million in Federal Interest Subsidy, a \$25.9 million, or 120.9 percent, increase from FY 2010-11.

## Sale of Gas and Steam

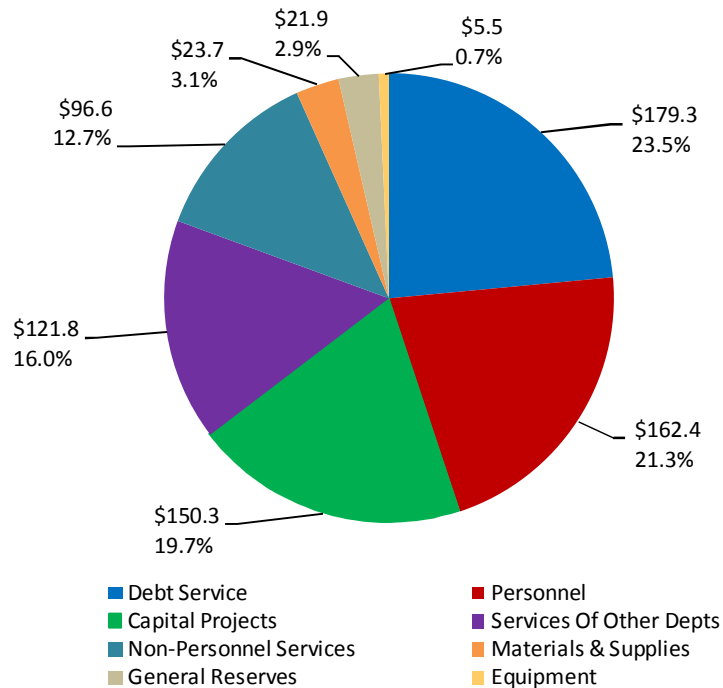
In FY 2010-11 Sale of Gas and Steam is budgeted at \$13.1 million in Hetch Hetchy Power, a \$2.7 million or 17.2 percent reduction from the FY 2009-10 budget. The budget includes \$12.1 million for natural gas and \$1.0 million for steam, and is based on PG&E and California Department of General Services (DGS) retail rates and historical usage. Hetch Hetchy Power is responsible for billing City departments, and the revenues generated from gas and steam are a pass-through and do not impact the Hetch Hetchy Water and Power Funds balance availability. Costs are off-set by an equal amount of increases. In FY 2011-12, the revenue budgeted is relatively flat with an increase of \$2.0 million which is under 1.9 percent.

## Interest Income

In FY 2010-11 Interest Income is budgeted at \$4.8 million, a \$1.2 million, or 20.0 percent, decrease from the FY 2009-10 budget, and it is based on interest rates in the County Investment Pool. The budget includes \$1.7 million in the Water Enterprise, \$1.2 million in the Wastewater Enterprise, and \$1.9 million in Hetch Hetchy Water and Power. The decrease is based on continued low interest rates and lower projected cash balance. In FY 2011-12 the revenue from Interest Income is projected to increase to \$8.5 million. This is \$3.6 million, or 74.7 percent, more than in FY 2010-11 reflecting a high cash balance in the investment pool.

## Uses of Funds

Chart 3. FY 2010-11 SFPUC Uses of Funds, \$761.5 Million  
Uses by Category and Percent of Total Budget



### Summary

Total Uses of Funds for FY 2010-11 are \$761.5 million. This is a \$76.9 million, or 11.2 percent, increase from FY 2009-10. The increase is in Debt Service, General Reserves, Services of Other Departments and Personnel offset by decreases in Non-Personnel Services and Operating Transfers Out. Chart 3 shows the breakdown of the FY 2010-11 Uses of Funds by expenditure category. Table 5 shows the FY 2009-10, FY 2010-11 and FY 2011-12 Budgets, FY 2008-09 Actual and FY 2009-10 Pre-Audit Actual, and the budget variance between FY 2010-11 and FY 2009-10 and FY 2011-12 and FY 2010-11; Chart 5 and Table 7 show FY 2010-11 Uses of Funds by Enterprise; and Table 6 shows Uses of Funds by Enterprise and Division.

### Debt Service

Debt Service is budgeted at \$179.3 million, a \$41.8 million, or 30.4 percent, increase from the FY 2009-10 budget. This budget is based on principal and interest payments on revenue bonds to finance the Water System Improvement Program (WSIP), the Wastewater Capital Improvement Program, Clean Renewable Energy Bonds (CREB) and Qualified Energy Conservation Bonds (QECBs) to fund solar photovoltaic (PV) projects and conservation aspects of the SFPUC's new headquarters at 525 Golden Gate Avenue. The increase reflects actual scheduled payments for FY 2010-11.

### Personnel

Personnel is budgeted at \$162.4 million, a \$3.3 million, or 2.0 percent, increase from the FY 2009-10 budget. This budget funds labor and related benefits for SFPUC's employees. The budget includes \$115.2 million for salaries and \$47.2 million for fringe benefits. The net change in salaries includes increases to fund new positions to support: power systems



operations and facility maintenance, energy data systems, water conservation enhancements, and the conversion of nine project-funded positions to operating and reductions related to "labor givebacks", approximately 4.6 percent of wage reductions with a commensurate amount of annual furlough days off. The increase in mandatory fringe benefits reflects adjustments to salaries, and increases to retirement and health benefit rates.

## Capital Projects

The Capital Projects budget is \$150.3 million, a \$14.1 million or, 10.3 percent, increase from the FY 2009-10 budget. This budget is based on the SFPUC's Ten-Year Capital Plan by Enterprise, part of the City's Ten-Year Capital Plan approved by the Board of Supervisors annually. The approved Ten-Year Capital Plan is discussed in each of the respective Enterprises' Ten-Year Capital Plan sections. The increase funds increases in Hetch Hetchy Water and Power for streetlight conversion to Light Emitting Diode (LED) and improvements to Hetchy Power's infrastructure.

## Services of Other Departments

Services of Other Departments is budgeted at \$121.8 million, a \$8.2 million, or 7.3 percent, increase from the FY 2009-10 budget. This budget is based on services provided to the SFPUC by other City departments. The increase reflects service level requested by the Enterprises.

## Non-Personnel Services

Non-Personnel Services is budgeted at \$96.6 million, a \$1.8 million or 1.8 percent net reduction from the FY 2009-10 budget. This budget funds services required for the Enterprises. The budget also includes funds for the purchase of natural gas and steam to other City departments which is a pass-through and no impact on Hetchy expenditures. The net reduction is due to increases to fund regional biosolids reuse disposal planning, Tuolumne River studies, Health, Safety and Emergency Preparedness, services from the National Park Service, the Water Conservation Program and decreases for the purchase of natural gas and steam and for purchase of power.

## Materials and Supplies

The Materials and Supplies budget is \$23.7 million, a \$0.8 million, or 3.6 percent, increase from the FY 2009-10 budget. This budget funds materials and supplies for the maintenance and operations of the Enterprises. The increase reflects costs associated with chemicals needed to meet regulatory requirements as well as parts needed to support the power systems operations and maintenance of facilities.

## General Reserves

The General Reserves budget is \$21.9 million, a \$9.6 million or 77.9 percent increase from the FY 2009-10 budget. The General Reserve is used to balance budgeted sources and uses, when budgeted revenues exceed budgeted expenditures. Use of these funds must be approved by the Mayor and Board of Supervisors (BOS). The increase adjusts the sources of funds available to the Wastewater Enterprise by \$8.6 million and the Water Enterprise by \$1.0 million.

## Equipment

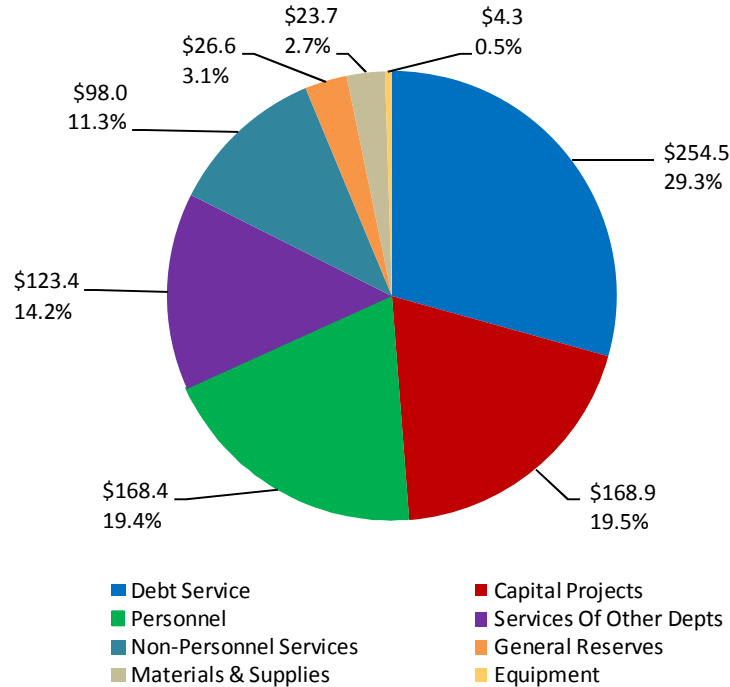
Equipment is budgeted at \$5.5 million, a \$1.3 million or 31.8 percent increase over the FY 2009-10 budget. Equipment is defined as a unit having a value greater than \$5,000 and a useful life of three years or more, such as vehicles, machinery and heavy equipment. The increase reflects FY 2010-11 equipment requirements for the Enterprises related to sewer condition assessment and the Water Enterprise's vehicle replacement program.

## Operating Transfers Out

The Operating Transfers Out budget for FY 2010-11 is eliminated. The FY 2009-10 budget includes one-time funding for the Auxiliary Water Supply System (AWSS) inventory purchase from the San Francisco Fire Department.

Chart 4. FY 2011-12 SFPUC Uses of Funds, \$867.7 Million

Uses by Category and Percent of Total Budget



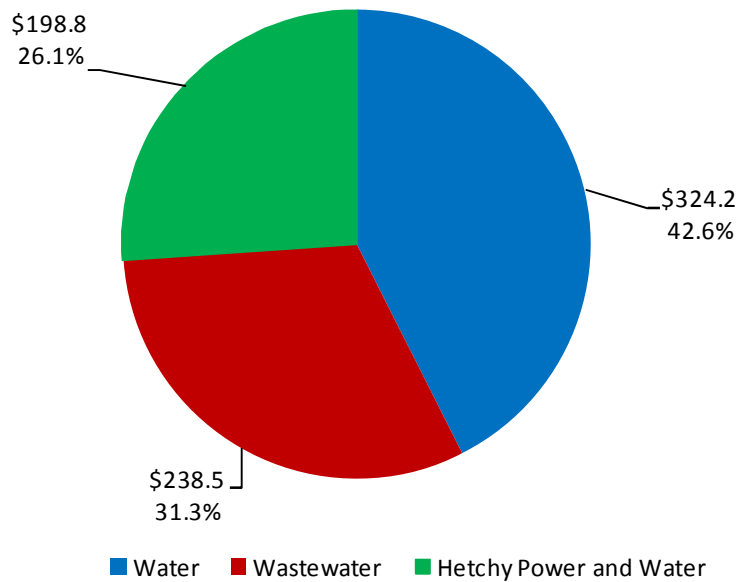
## Summary

Total Uses of Funds for FY 2011-12 are \$867.7 million. This is a \$106.2 million, or 13.9 percent, increase from FY 2010-11. The increase is in Debt Service is the \$75.2 million, or 41.9 percent, reflecting the move from planning and design to construction on the WSIP and the beginning of the SSIP. Capital Projects at \$168.9 million represents a 12.4 percent increase from FY 2010-11 with the addition of \$18.6 million. Personnel is budgeted at \$168.4, reflecting a \$6.0 million, or 3.7 percent, increase from FY 2010-11. Services to Other Departments, budgeted at \$123.4 million is relatively flat from FY 2010-11 with a \$1.6 million, or 1.3 percent, increase. Non-Personnel Services is budgeted at \$98.0 which is a relatively flat increase of \$1.4 million, 1.5 percent more than in FY 2010-11. General Reserves, a small part of the budget, increases to \$26.6 million, a \$4.6 million, or 21.1 percent, increase. Equipment decreases by \$1.3 million to the budgeted amount of \$4.3 million. Materials and Supplies is flat, \$23.7 million the same budget as in FY 2010-11. Chart 4 shows the breakdown of the FY 2011-12 Uses of Funds by expenditure category. Table 5 shows the FY 2009-10, FY 2010-11 and FY 2011-12 Budgets, FY 2008-09 Actuals and FY 2009-10 Pre-audit Actuals; and the budget variance between FY 2010-11 and FY 2009-10 and FY 2011-12 and FY 2010-11. Chart 6 show FY 2011-12 Uses of Funds by Enterprise.

Table 5. SFPUC Sources and Uses of Funds

\$ Millions						FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2011-12 vs. FY 2010-11 Adopted Budget	
	FY 2008-09	FY 2009-10	FY 2009-10	FY 2010-11	FY 2011-12	Amount	%	Amount	%
	Actual	Adopted Budget	Pre-Audit Actual	Adopted Budget	Adopted Budget				
<b>SOURCES OF FUNDS</b>									
Sale of Water	236.7	282.2	275.8	311.6	365.3	29.4	10.4%	53.7	17.2%
Sewer Service Charges	203.3	226.0	207.6	225.4	237.8	(0.6)	-0.3%	12.4	5.5%
Sale of Electricity	90.7	89.6	93.8	98.7	105.6	9.1	10.1%	7.0	7.1%
Sale of Natural Gas & Steam	14.4	15.8	11.5	13.1	13.3	(2.7)	-17.2%	0.2	1.9%
Fund Balance	39.1	33.4	40.0	34.6	31.5	1.2	3.5%	(3.1)	-8.9%
Other Non-Op Revenues	26.5	25.1	23.5	27.1	29.2	2.0	8.0%	2.1	7.7%
Proceeds from Debt	23.8	6.5	6.5	24.8	29.1	18.3	282.3%	4.3	17.1%
Federal Interest Subsidy	-	-	-	21.4	47.3	21.4	100.0%	25.9	120.8%
Interest Income	8.3	6.0	7.5	4.8	8.5	(1.2)	-20.0%	3.6	74.7%
<b>Total Sources of Funds</b>	<b>642.7</b>	<b>684.6</b>	<b>666.2</b>	<b>761.5</b>	<b>867.7</b>	<b>76.9</b>	<b>11.2%</b>	<b>106.2</b>	<b>13.9%</b>
<b>USES OF FUNDS</b>									
Debt Service	137.4	137.5	137.5	179.3	254.5	41.8	30.4%	75.2	41.9%
Equipment	4.6	4.2	9.5	5.5	4.3	1.3	31.8%	(1.3)	-22.6%
General Reserves	3.4	12.3	-	21.9	26.6	9.6	77.9%	4.6	21.1%
Materials & Supplies	22.5	22.9	24.7	23.7	23.7	0.8	3.6%	-	-
Non-Personnel Services	73.1	98.4	89.8	96.6	98.0	(1.8)	-1.8%	1.4	1.5%
Operating Transfers Out	0.2	0.5	0.2	-	-	(0.5)	-100.0%	-	-
Overhead	5.7	-	0.0	-	-	-	0.0%	-	-
Personnel	144.7	159.2	153.9	162.4	168.4	3.3	2.0%	6.0	3.7%
Services Of Other Depts	109.6	113.5	114.4	121.8	123.4	8.2	7.3%	1.6	1.3%
<b>Subtotal Expenditures</b>	<b>501.1</b>	<b>548.4</b>	<b>530.0</b>	<b>611.3</b>	<b>698.8</b>	<b>62.8</b>	<b>51.3%</b>	<b>87.6</b>	<b>14.3%</b>
Capital Projects	141.6	136.2	136.2	150.3	168.9	14.1	10.3%	18.6	12.4%
<b>Total Uses of Funds</b>	<b>642.7</b>	<b>684.6</b>	<b>666.2</b>	<b>761.5</b>	<b>867.7</b>	<b>76.9</b>	<b>11.2%</b>	<b>106.2</b>	<b>13.9%</b>

Chart 5. FY 2010-11 SFPUC Budget by Enterprise, \$761.5 Million



In FY 2010-11 the Water Enterprise budget is 42.6 percent of the entire SFPUC Budget. The entire SFPUC grows from \$761.5 million in FY 2010-11 to \$867.7 million in FY 2011-12. All three Enterprise budgets grow; the Water Enterprise grows more, in proportion to the two other Enterprises, in FY 2011-12 comprising 46.8 percent of the total SFPUC Budget.

Chart 6. FY 2011-12 SFPUC Budget by Enterprise, \$867.7 Million

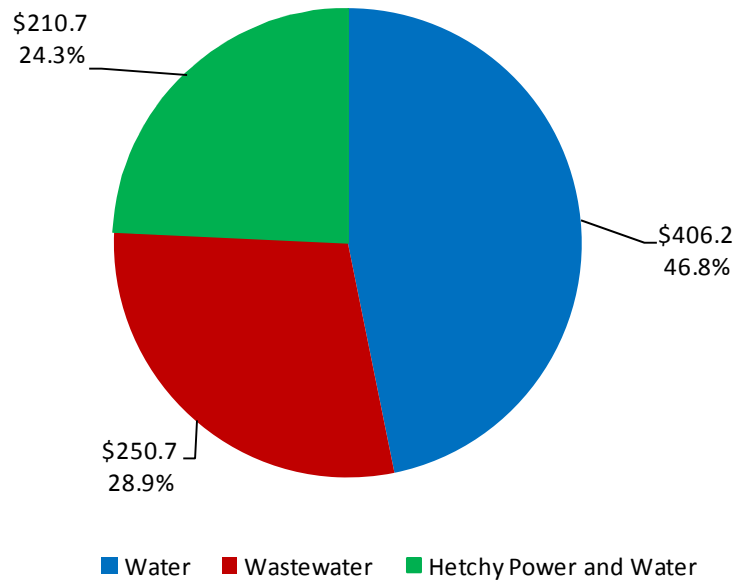


Table 6. SFPUC Uses of Funds by Enterprise and Division

Divisions	\$ Millions				FY 2010-11 vs. FY 2009-10 Adopted Budget	
	FY 2008-09	FY 2009-10	FY 2009-10	FY 2010-11	Amount	%
	Actual	Adopted Budget	Pre-Audit Actual	Adopted Budget		
Administration	121.1	123.0	123.0	165.0	42.0	34.2%
City Distribution	30.9	34.8	36.6	38.0	3.2	9.2%
Water Quality	12.1	13.7	14.9	13.5	(0.2)	-1.6%
Water Supply & Treatment	36.3	37.7	39.7	41.8	4.1	10.9%
Natural Resources	7.8	9.2	9.3	9.7	0.5	5.5%
Water Resources	3.6	6.5	6.4	8.9	2.4	36.4%
Operating Transfers Out*	0.2	0.5	0.2	-	(0.5)	0.0%
Capital Projects	61.0	47.1	47.1	47.3	0.2	0.3%
<b>Water Total</b>	<b>\$ 272.9</b>	<b>\$ 272.5</b>	<b>\$ 277.3</b>	<b>\$ 324.2</b>	<b>\$ 51.7</b>	<b>19.0%</b>
Administration	96.9	96.0	95.8	93.4	(2.5)	-2.7%
Maintenance	22.5	23.0	22.1	22.5	(0.5)	-2.1%
Operations	32.6	34.4	35.2	34.6	0.1	0.4%
Environmental Engineering	4.0	2.9	4.5	3.0	0.0	1.1%
Planning & Regulation	3.2	2.5	4.7	6.0	3.5	138.1%
Collection Systems	27.5	29.5	30.2	30.4	0.9	2.9%
Wastewater Labs	3.3	4.4	4.3	4.0	(0.4)	-9.3%
General Reserve	-	12.3	-	20.9	8.6	69.3%
Capital Projects	44.6	24.3	24.3	23.9	(0.4)	-1.7%
<b>Wastewater Total</b>	<b>\$ 234.7</b>	<b>\$ 229.3</b>	<b>\$ 221.1</b>	<b>\$ 238.5</b>	<b>\$ 9.2</b>	<b>4.0%</b>
Power Administration	14.7	9.8	8.9	9.4	(0.4)	-3.8%
Energy Services	26.6	44.8	27.3	42.5	(2.3)	-5.1%
Long Range Planning	2.5	1.0	1.2	2.4	1.4	148.2%
Light, Heat and Power	16.1	18.2	13.5	18.7	0.5	3.0%
Project Operations	39.2	44.1	51.8	46.6	2.5	5.8%
Capital Projects	36.0	64.9	64.9	79.1	14.2	21.8%
<b>Hetch Hetchy Water and Power Total</b>	<b>\$ 135.1</b>	<b>\$ 182.8</b>	<b>\$ 167.8</b>	<b>\$ 198.8</b>	<b>\$ 16.0</b>	<b>8.8%</b>
<b>SFPUC Total</b>	<b>\$ 642.8</b>	<b>\$ 684.6</b>	<b>\$ 666.3</b>	<b>\$ 761.5</b>	<b>\$ 76.9</b>	<b>11.2%</b>

\*Budgeted at the Enterprise level.

The growth of the SFPUC Budget from FY 2009-10 to FY 2010-11 is shown in this table; the Water Enterprise grew by \$51.7 million, 19.0 percent, with a \$42.0 million increase in Administration (debt service) and a combined increase in City Distribution and Water Supply and Treatment and Water Resources of \$9.5 million. Hetch Hetchy Water and Power Enterprise grew by \$16.0 million, or an 8.8 percent, with the largest increase in the Capital Project of \$14.2 million. Both the Energy Services and the Power Administration saw decreases in the budgets from FY 2009-10 to FY 2010-11. The Wastewater Enterprise also grew by \$9.2 million, a 4.0 percent increase over the FY 2009-10 budget. The General Reserve increased by \$8.6 million, or 69.3 percent, and Planning and Regulation increased by \$3.5 million a 138.1 percent increase from the FY 2009-10 budget.

Table 7. FY 2010-11 SFPUC Sources and Uses of Funds by Enterprise

\$ Millions	Hetch Hetchy			Total
	Water	Wastewater	Water & Power	
<b>Sources of Funds</b>				
Sale of Water	280.4	-	31.2	311.6
Federal Interest Subsidy	21.4	-	-	21.4
Sewer Service Charges	-	225.4	-	225.4
Sale of Electricity	-	-	98.7	98.7
Sale of Gas & Steam	-	-	13.1	13.1
Fund Balance	-	-	34.6	34.6
Other Non-Op Revenues	19.5	1.4	6.2	27.1
Proceeds from Debt	1.2	10.5	13.1	24.8
Interest Income	1.7	1.2	1.9	4.8
<b>Total Sources of Funds</b>	<b>324.2</b>	<b>238.5</b>	<b>198.8</b>	<b>761.5</b>
<b>Uses of Funds</b>				
Personnel	75.4	55.6	31.4	162.4
Non-Personnel Services	18.0	11.4	67.2	96.6
Materials & Supplies	12.0	9.2	2.5	23.7
Equipment	2.2	1.7	1.6	5.5
Debt Service	116.4	61.4	1.5	179.3
Services Of Other Depts	51.8	54.4	15.5	121.7
General Reserves	1.1	20.9	-	22.0
<b>Sub-total Expenditures</b>	<b>276.9</b>	<b>214.6</b>	<b>119.7</b>	<b>611.2</b>
Capital Projects	47.3	23.9	79.1	150.3
<b>Total Uses of Funds</b>	<b>324.2</b>	<b>238.5</b>	<b>198.8</b>	<b>761.5</b>

Table 8. FY 2011-12 SFPUC Sources and Uses of Funds by Enterprise

\$ Millions	Hetch Hetchy			Total
	Water	Wastewater	Water & Power	
<b>Sources of Funds</b>				
Sale of Water	333.1		32.1	365.2
Federal Interest Subsidy	47.3			47.3
Sewer Service Charges		237.8		237.8
Sale of Electricity			105.6	105.6
Sale of Natural Gas & Steam			13.3	13.3
Fund Balance			31.5	31.5
Other Non-Op Revenues	20.1	1.4	7.8	29.4
Proceeds from Debt	2.3	8.8	18.0	29.1
Interest Income	3.4	2.7	2.4	8.5
<b>Total Sources of Funds</b>	<b>406.2</b>	<b>250.7</b>	<b>210.7</b>	<b>867.7</b>
<b>Uses of Funds</b>				
Personnel	77.5	57.3	33.5	168.3
Non-Personnel Services	17.7	11.1	69.2	98.0
Materials & Supplies	12.0	9.2	2.6	23.8
Equipment	1.6	1.2	1.5	4.3
Debt Service	196.4	56.1	2.0	254.5
Services Of Other Depts	53.0	54.8	15.5	123.3
General Reserves	4.5	22.1		26.6
<b>Sub-total Expenditures</b>	<b>362.7</b>	<b>211.8</b>	<b>124.3</b>	<b>698.9</b>
Capital Projects	43.5	38.9	86.4	168.8
<b>Total Uses of Funds</b>	<b>406.2</b>	<b>250.7</b>	<b>210.7</b>	<b>867.7</b>

Table 7 and Table 8 provide an Enterprise by Enterprise breakdown of Sources and Uses of Funds for FY 2010-11 and FY 2011-12. Debt Service, reflecting the Capital Programs for the Water and Wastewater Enterprises are the largest uses of funds. In both Enterprises, the Personnel and Services of Other Department are the next largest Uses of Funds. For the Hetch Hetchy budget, Non-Personnel Services is the largest Uses of the Funds for which the major Source of funds is the Sale of Electricity.

## Fund Balance

The City and County of San Francisco and the SFPUC are legally required to balance their budgets each year. The San Francisco City Charter requires that proposed budgets be balanced such that the proposed expenditures of each fund does not exceed the estimated revenues and available Fund Balance of that Enterprise. Table 9 and Table 10 show changes to fund balance for FY 2010-11 and FY 2011-12.

Table 9. FY 2010-11 SFPUC Beginning and Ending Fund Balance

\$ Millions	FY 2010-11			
	All Funds	Water	Wastewater	Hetch Hetchy Water & Power
Beginning Year Balance, July 1, 2010	183.0	56.6	23.9	102.5
<b>Sources</b>				-
Water Sales	311.6	280.4	-	31.2
Federal Interest Subsidy	21.4	21.4	-	-
Sewer Service Sales	225.4	-	225.4	-
Sale of Electricity	98.7	-	-	98.7
Natural Gas and Steam	13.1	-	-	13.1
Proceeds from Debt	24.8	1.2	10.5	13.1
Fund Balance	34.6	-	-	34.6
Interest Income	4.8	1.7	1.2	1.9
Other Non-Operating Revenues	27.1	19.5	1.4	6.2
<b>Total Sources</b>	<b>761.5</b>	<b>324.2</b>	<b>238.5</b>	<b>198.8</b>
<b>Uses</b>				
Operations and Maintenance	396.8	159.4	132.3	105.1
Natural Gas & Steam	13.1			13.1
Debt Service	179.3	116.4	61.4	1.5
General Reserve	22.0	1.1	20.9	
Capital Projects	150.3	47.3	23.9	79.1
<b>Total Uses</b>	<b>761.5</b>	<b>324.2</b>	<b>238.5</b>	<b>198.8</b>
Net Revenues	-	-	-	-
Planned Unspent General Reserve	22.0	1.1	20.9	0
<b>Ending Fund Balance, June 30, 2011</b>	<b>205.0</b>	<b>57.7</b>	<b>44.8</b>	<b>102.5</b>



Table 10. FY 2011-12 SFPUC Beginning and Ending Fund Balance

\$ Millions	FY 2011-12			
	All Funds	Water	Wastewater	Hetch Hetchy Water & Power
Beginning Year Balance, July 1, 2011	205.0	57.7	44.8	102.5
<b>Sources</b>				
Water Sales	365.3	333.2	-	32.1
Federal Interest Subsidy	47.3	47.3	-	-
Sewer Service Sales	237.8	-	237.8	-
Sale of Electricity	105.6	-	-	105.6
Natural Gas and Steam	13.3	-	-	13.3
Proceeds from Debt	29.1	2.3	8.8	18
Fund Balance	31.5			31.5
Interest Income	8.5	3.4	2.7	2.4
Other Non-Operating Revenues	29.3	20.1	1.4	7.8
<b>Total Sources</b>	<b>867.7</b>	<b>406.2</b>	<b>250.7</b>	<b>210.7</b>
<b>Uses</b>				
Operations and Maintenance	404.5	161.8	133.7	109
Natural Gas & Steam	13.3	-	-	13.3
Debt Service	254.5	196.4	56.1	2.0
General Reserve	26.6	4.5	22.1	0.0
Capital Projects	168.8	43.5	38.9	86.4
<b>Total Uses</b>	<b>867.7</b>	<b>406.2</b>	<b>250.7</b>	<b>210.7</b>
Net Revenues	-	-	-	-
Planned Unspent General Reserve	26.6	4.5	22.1	-
<b>Ending Fund Balance, June 30, 2012</b>	<b>231.6</b>	<b>62.2</b>	<b>66.9</b>	<b>102.5</b>

## Operating Budget Impact of Capital Expenditures

The SFPUC has implemented a major capital improvement program for the water system and will be implementing a sewer program over the next several years. The impact of these programs on future operating budgets is currently assumed to be included within a three percent operating expense growth assumption. As the SFPUC brings new capital assets on-line as a result of this program, the impact on future operating budgets will be further refined.

## Authorized and Funded Full-Time Equivalents (FTE)

Table 11 – SFPUC Authorized and Funded Full-Time Equivalents (FTE)

	FY 2008-09 Adopted Budget	FY 2009-10 Adopted Budget	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10	FY 2011-12 Adopted Budget	FY 2011-12 vs. FY 2010-11
Permanent Positions	1,550.46	1,516.79	1,546.10	29.31	1,553.28	7.18
Temporary Positions	29.73	32.61	37.75	5.14	36.26	(1.49)
<b>Subtotal Operating Budget-Funded</b>	<b>1,580.19</b>	<b>1,549.40</b>	<b>1,583.85</b>	<b>34.45</b>	<b>1,589.54</b>	<b>5.69</b>
Project-Funded	188.50	204.89	216.67	11.78	222.27	5.60
<b>Subtotal</b>	<b>1,768.69</b>	<b>1,754.29</b>	<b>1,800.52</b>	<b>46.23</b>	<b>1,811.81</b>	<b>11.29</b>
Infrastructure Permanent Positions	412.81	400.00	384.77	(15.23)	385.00	0.23
<b>Total SFPUC</b>	<b>2,181.50</b>	<b>2,154.29</b>	<b>2,185.29</b>	<b>31.00</b>	<b>2,196.81</b>	<b>11.52</b>

Chart 7. – SFPUC Operating and Project FTE Trend

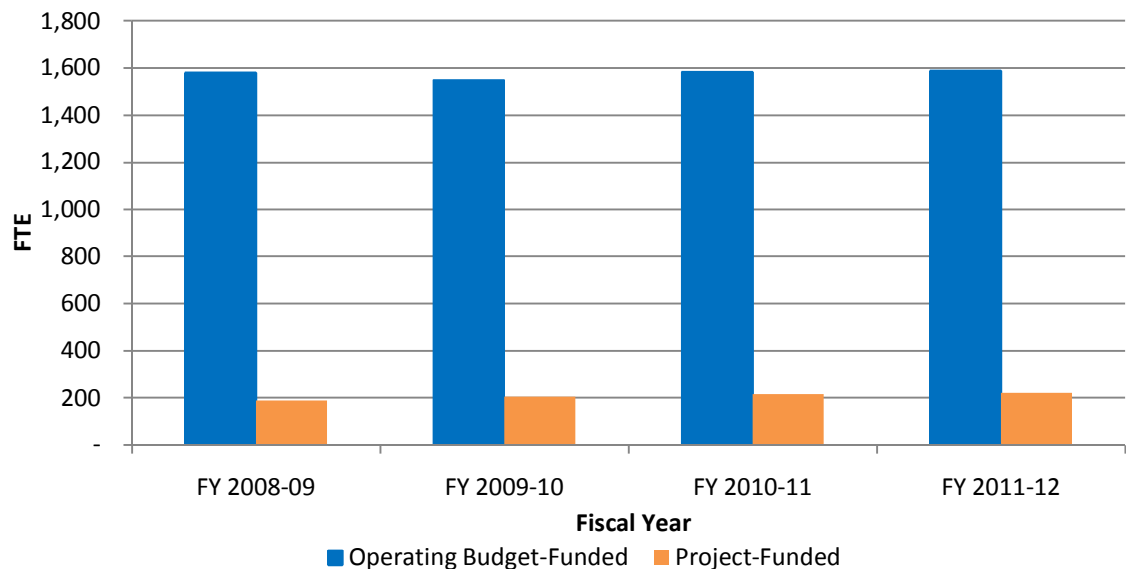
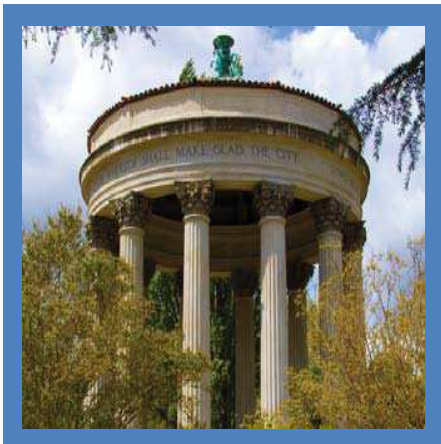


Table 11. SFPUC Authorized and Funded Full-Time Equivalents (FTE) above provides a breakdown of positions by category.

The total full-time equivalent (FTE) permanent, project-funded and temporary positions (including attrition savings to adjust for an expected position vacancy rate during the fiscal year) for FY 2010-11 is 1,800.52 FTE, an increase of 46.23 FTEs from FY 2009-10, as shown in the Table above. FY 2010-11 permanent positions increased by 29.31, from 1,516.79 FTE in FY 2009-10 to 1,546.10 FTE in FY 2010-11. Temporary Positions increased by 5.14 FTE, from 32.61 FTE in FY 2009-10 to 37.75 FTE in FY 2010-11. Project-funded positions increased 11.78 FTE from 204.89 FTE in FY 2009-10 to 216.67 FTE in FY 2010-11. Infrastructure permanent positions are not included in the total, because Infrastructure's personnel is all funded through capital projects.

The FY 2011-12 budget shows an increase of 11.52 permanent, temporary and project funded FTEs. The Infrastructure positions are essentially flat with a 0.23 FTE increase. The total FTE in FY 2011-12 will be 2,196.81 less than a 1.0 percent increase of FTE from FY 2010-11. Chart 7 graphically shows how unchanging the FTE budget has been for the SFPUC since FY 2008-09.



## WATER ENTERPRISE

### Mission, Roles, and Responsibilities

The Water Enterprise of the San Francisco Public Utilities Commission operates as an effective, reliable supplier of water and hydroelectric power while managing resources in a sustainable manner.

Some 2.4 million people in the Bay Area rely on water supplied by the Water Enterprise to meet their daily water needs, making the SFPUC the third largest municipal water agency in California. From the Hetch Hetchy Reservoir, situated in a designated wilderness area inside Yosemite National Park, a 167 mile-long system of reservoirs, tunnels, pipelines, and treatment plants, the Water Enterprise delivers water to San Francisco and 27 wholesale water agencies in San Mateo, Alameda, and Santa Clara Counties. This system is most unique in at least two respects: the water delivered from high in the Sierra mountains is among the cleanest drinking water supplies in the nation; and the physical system for delivering this water to the Bay Area is almost entirely gravity fed, requiring nearly no fossil fuel consumption.

The SFPUC's regional water supply system draws approximately 85 percent of its water from the Upper Tuolumne River watershed. The remaining water supply is drawn from local surface waters in the Alameda Creek and Peninsula watersheds. This Regional Water system consists of over 280 miles of pipelines, sixty miles of tunnels, eleven reservoirs, five pump stations and two water treatment plants.

In addition, the Water Enterprise manages generation of clean affordable hydroelectric power at O'Shaughnessy Dam which meets almost all of the City and County of San Francisco's annual municipal needs. While the Hetch Hetchy system operates under a "water first" policy, the average 1.6 billion kilowatt hours of electricity generated at Hetch Hetchy provides the City a green alternative than other energy sources that might contribute to climate change or global warming.

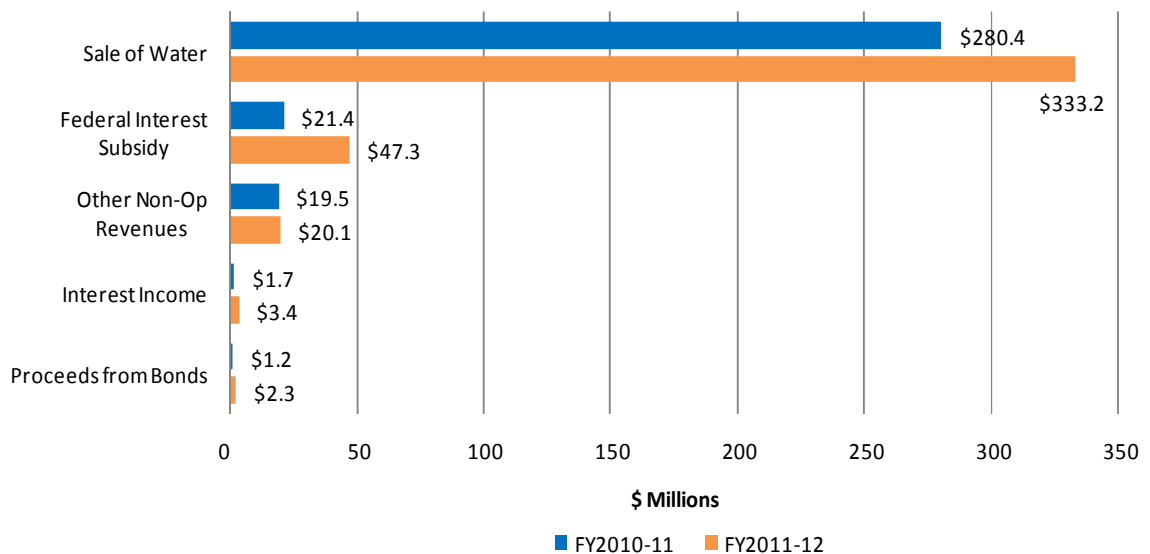
### Map of Regional Water System



# Budget Summary

## Sources of Funds

Chart W1. FY 2010-11 and FY 2011-12 Water Enterprise Sources of Funds, \$324.2 Million and \$406.2 Million



## Summary

As noted in Chart W1 and Table W1, total Enterprise estimated revenues are projected to be \$324.2 million for FY 2010-11 and \$406.2 million for FY 2011-12. The FY 2010-11 net increase of \$51.7 million or 19.0 percent increase from the prior year reflects the rate increase for water and Federal Interest Subsidy receipts related to Build America Bonds outstanding. Chart W1 shows a breakdown of the FY 2010-11 and FY 2011-12 Sources of Funds by revenue category; and Table W1 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actuals and FY 2009-10 pre-audit actuals, and the budget variance between FY 2010-11 and FY 2009-10 as well as the variance between FY 2011-12 and FY 2010-11.

## Sale of Water

Revenues from water sales are budgeted at \$310.1 million less \$29.7 million of water transfers to Hetch Hetchy Water and Power. Consequently, net water sales revenues in FY 2010-11 are budgeted at \$280.4 million (86.5 percent of total sources) and for FY 2011-12 at \$333.2 million, reflecting rates adopted by the SFPUC Commission in May 2009 for retail customer classes, including single-family and multiple-family residential and non-residential customers, plus projected wholesale customer revenues.

## Federal Interest Subsidy

Under the American Recovery and Reinvestment Act (ARRA), the FY 2010-11 budget for Federal Interest Subsidy receipts is \$21.4 million. FY 2011-12 is \$47.3 million in receipts. The U.S. Treasury Department provides a direct subsidy equal to 35 percent of the interest payable for bonds issued as Build America Bonds. A portion of the Water Enterprise outstanding bonds qualify under this subsidy program.

## Other Non-Operating Revenues

Non-operating revenues total \$19.5 million (6.0 percent of total sources), including \$12.8 million from property rentals; \$2.0 million from water service installation; \$3.7 million from miscellaneous revenues, including custom work, reimbursements, permit fees, and \$1.0 million from various services to other City departments. The \$3.6 million increase from the prior year is primarily due to the increase in property rental and miscellaneous revenues. The FY 2011-12 budget is \$20.1 million; the \$0.6 million increase from FY 2010-11 reflects an assumption of nearly flat revenues and gradual economic recovery.

## Interest Income

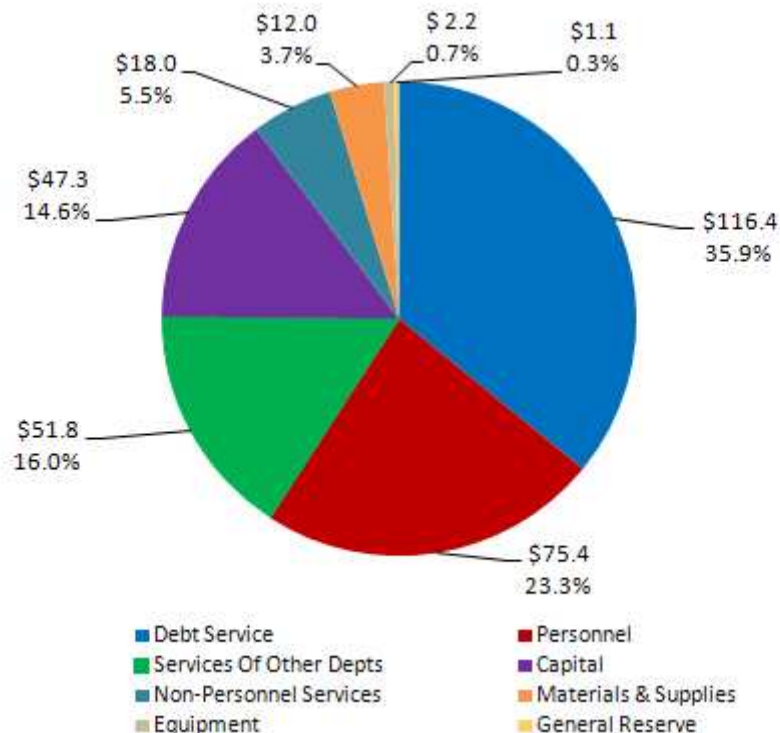
Revenues from interest income for FY 2010-11 are budgeted at \$1.7 million and are based on interest rates earned on deposits managed by the City Treasurer. Due to continued low interest rates and lower projected cash balances, revenues are anticipated to be \$0.2 million less than the prior year budgeted amount. The FY 2011-12 budget is \$3.4 million reflecting an increase in cash balances due to higher water revenues and slightly higher interest earnings.

## Proceeds from Debt

Proceeds from Debt for FY 2010-11 are budgeted at \$1.2 million and in FY 2011-12 at \$2.3 million. This source is related to water revenue bonds supporting Water-related capital projects.

## Uses of Funds

Chart W2. FY 2010-11 Water Enterprise Uses of Funds, \$324.2 Million



## Summary

Enterprise estimated uses total \$324.2 million (see Chart W2 and Table W1). This is a \$51.7 million or 19.0 percent increase from the prior year. The net increase is almost entirely due to the increase in debt service. Chart W2 shows a breakdown of the FY 2011-12 Uses of Funds by expenditure category; and Table W1 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actuals and FY 2009-10 pre-audit actuals, and the budget variance between FY 2010-11 and FY 2009-10 as well as FY 2010-11 and FY 2011-12.

## Personnel

Personnel is budgeted at \$75.4 million and comprised of \$53.5 million for salaries and \$21.9 million for fringe benefits. The net increase of \$0.3 million or 0.4 percent from FY 2009-10 budget results from two new positions, reassignments from other divisions, savings from "labor givebacks" in accordance with the various labor agreements less partially off-setting increases in retirement and health benefit costs.

## Non-Personnel Services

Non-Personnel Services are budgeted at \$18.0 million, a \$0.6 million or 3.5 percent increase from the FY 2009-10 approved budget. The net increase is mainly to support the Enterprise's Water Conservation Program.

## Debt Service and Lease Payments

Debt service is budgeted at \$116.4 million and is based on principal and interest payments on revenue bonds to finance the Water System Improvement Program (WSIP). The budget increased \$46.2 million or 65.7 percent from FY 2009-10 to reflect scheduled payments.

## Material and Supplies

Materials and supplies are budgeted at \$12.0 million and are based on projected spending levels. An increase of \$0.3 million or 3.0 percent reflects a slight increase in supplies, including water supply treatment costs.

## Services of Other Departments

Services of Other Departments are budgeted at \$51.8 million, an increase of \$2.8 million or 5.8 percent over the FY 2009-10 approved budget. The Services of Other Departments budget is based on services for work performed by other City departments and reflects an increase to Water's share of the projected costs.

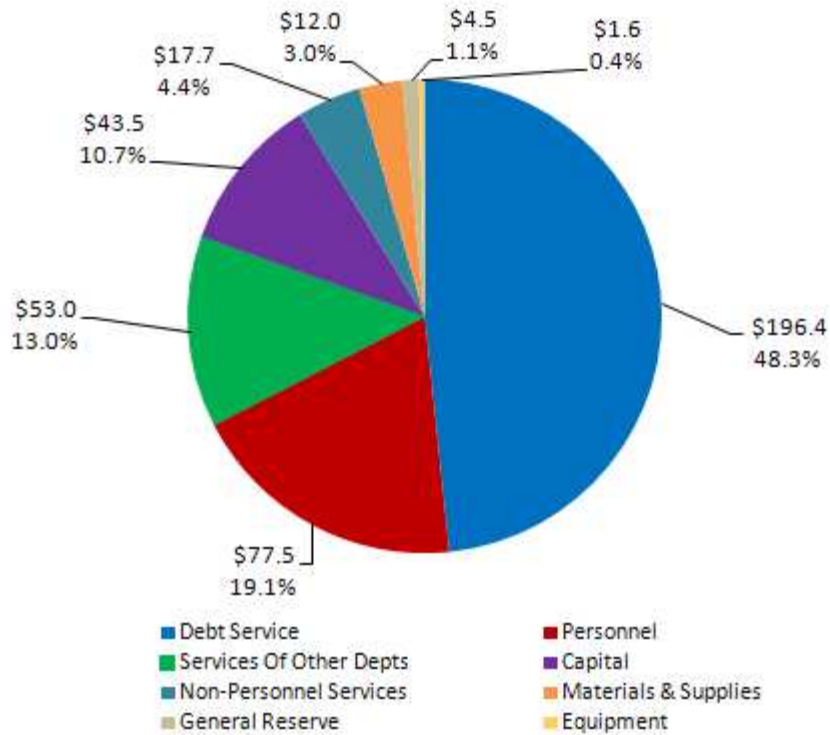
## Equipment

Equipment is budgeted at \$2.2 million, an increase of \$0.6 million or 32.9 percent from the FY 2009-10 budget. The increase reflects FY 2010-11 vehicle replacement program. The SFPUC has a fleet management policy to replace vehicles if they are at 10 years and/or have reached 100,000 miles.

## Capital Projects

Capital spending is budgeted at \$47.3 million for FY 2010-11, a \$0.3 million or 0.6 percent increase from the FY 2009-10 amount of \$47.1 million. The capital projects budget includes \$23.8 million for local projects including water main replacements and Treasure Island, \$13.1 million for regional capital projects, \$9.2 million for facilities maintenance and programmatic projects, and \$1.2 million for financing costs.

Chart W3. FY 2011-12 Water Enterprise Uses of Funds, \$406.2 Million



### Summary

Enterprise estimated FY 2011-12 uses total \$406.2 million (see Chart W3 and Table W1). This is a \$82.1 million increase from the prior year of which \$80 million is due to planned Debt Service associated with the \$4.6 billion Water System Improvement Program, scheduled for completion in December 2015. Chart W3 shows a breakdown of the FY 2011-12 Uses of Funds by expenditure category; and Table W1 shows the FY 2010-11 and FY 2011-12 budget variances.

Table W1. Water Enterprise Sources and Uses of Funds (\$ Million)

\$ Million	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2011-12 vs. FY 2010-11 Adopted Budget	
						Amount	%	Amount	%
<b>SOURCES OF FUNDS</b>									
Sale of Water	235.2	280.9	274.4	310.1	363.8	29.3	10.4%	53.7	17.3%
Less Water Costs to Hetchy	(23.0)	(29.7)	(29.7)	(29.7)	(30.6)	-	-	(0.9)	3.2%
Fund Balance	34.6	3.5	12.7	-	-	(3.5)	-100.0%	-	-
Federal Interest Subsidy	-	-	-	21.4	47.3	21.4	-	25.9	121.3%
Other Non-Op Revenues	22.2	15.9	15.1	19.5	20.1	3.6	22.3%	0.6	2.8%
Interest Income	3.9	1.9	4.8	1.7	3.4	(0.2)	-11.8%	1.7	98.4%
Proceeds from Bonds	-	-	-	1.2	2.3	1.2	-	1.1	90.6%
<b>Total Sources of Funds</b>	<b>272.9</b>	<b>272.5</b>	<b>277.3</b>	<b>324.2</b>	<b>406.2</b>	<b>51.7</b>	<b>19.0%</b>	<b>82.0</b>	<b>25.3%</b>
<b>USES OF FUNDS</b>									
Personnel	67.2	75.0	71.9	75.4	77.5	0.3	0.4%	2.2	2.9%
Overhead	2.6	-	-	-	-	-	-	-	-
Non-Personnel Services	12.7	17.3	21.8	18.0	17.7	0.6	3.5%	(0.3)	-1.5%
Materials & Supplies	11.7	11.7	12.7	12.0	12.0	0.3	3.0%	-	-
Equipment	1.8	1.7	4.2	2.2	1.6	0.6	32.9%	(0.7)	-29.6%
Debt Service	70.1	70.2	70.2	116.4	196.4	46.2	65.7%	80.0	68.8%
Services Of Other Depts	45.6	49.0	49.2	51.8	53.0	2.8	5.8%	1.2	2.2%
Operating Transfers Out	0.2	0.5	0.2	-	-	(0.5)	-100.0%	-	-
General Reserves	-	-	-	1.1	4.5	1.1	-	3.4	328.1%
Capital Projects	61.0	47.1	47.1	47.3	43.5	0.3	0.6%	(3.8)	-8.0%
<b>Total Uses of Funds</b>	<b>272.9</b>	<b>272.5</b>	<b>277.3</b>	<b>324.2</b>	<b>406.2</b>	<b>51.7</b>	<b>19.0%</b>	<b>82.0</b>	<b>25.3%</b>

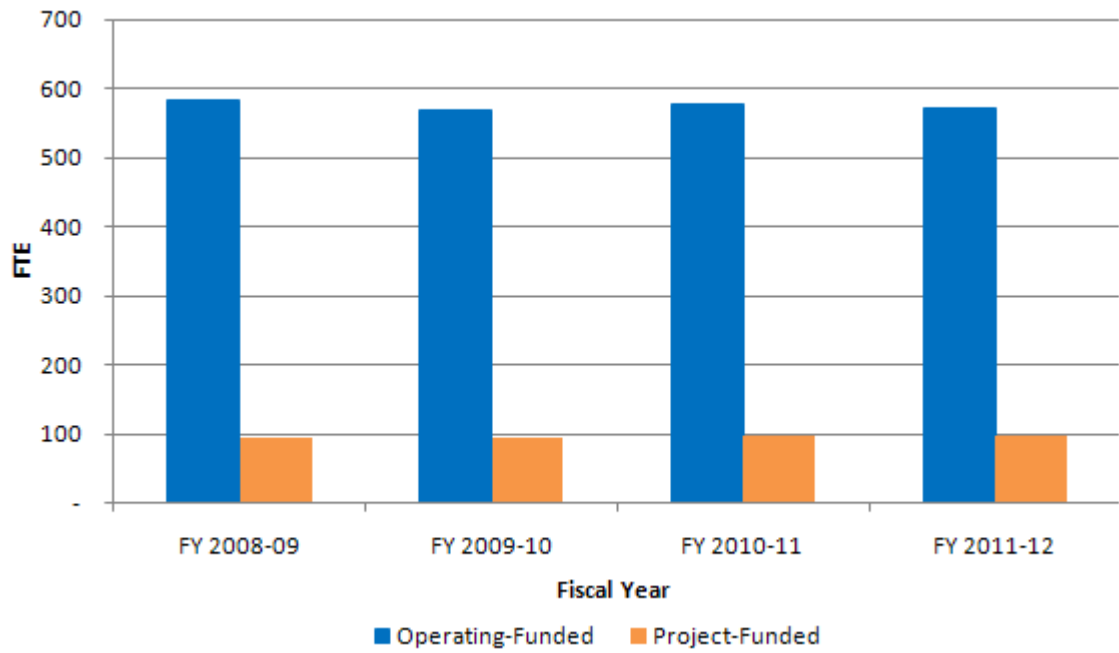
Table W2. Water Enterprise Authorized and Funded Full-Time Equivalents (FTEs)

	FY 2008-09 Adopted Budget	FY 2009-10 Adopted Budget	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10	FY 2011-12 Adopted Budget	FY 2011-12 vs. FY 2010-11
Permanent Positions	573.86	558.89	567.03	8.14	561.25	(5.78)
Temporary Positions	8.63	10.51	11.23	0.72	11.23	-
<b>Subtotal Operating-Funded</b>	<b>582.49</b>	<b>569.40</b>	<b>578.26</b>	<b>8.86</b>	<b>572.48</b>	<b>(5.78)</b>
Project-Funded Positions	95.00	95.00	98.00	3.00	98.00	-
<b>Total Positions</b>	<b>677.49</b>	<b>664.40</b>	<b>676.26</b>	<b>11.86</b>	<b>670.48</b>	<b>(5.78)</b>

As noted in Table W2 above, the total full-time (FTE) operating budget, capital project funded, and temporary positions (including attrition savings for an expected position vacancy rate during the fiscal year) for FY 2010-11 is 676.26 FTE's, an increase of 11.86 FTE's from FY 2009-10. The net change reflects two new positions (funded at nine months) to support the Water Conservation Program, three position conversions, seven operating reassignments, mainly from the Bureaus and various adjustments to attrition savings. The decrease in permanent FTE position in operations reflects an adjustment to attrition. Chart W4 shows the operating budget and project-funded positions four-year trend.



Chart W4. Water Enterprise Operating and Project FTE Trend



# Five-Year Approved Rates

## Rates and Charges:

### *San Francisco City Charter Rate Requirements*

The City Charter (Sections 8B.125) establishes a number of goals and objectives for the setting of retail water rates. A summary of the major goals and objectives includes:

- Provide sufficient revenues for the operation, maintenance and repair of the Enterprise consistent with good utility practice;
- Provide sufficient revenues to improve or maintain financial condition and bond ratings at or above levels equivalent to highly-rated utilities of each Enterprise;
- Meet requirements and covenants under all bond indentures;
- Set rates based on costs of service;
- Investigate and develop capacity fees for new development;
- Investigate and develop rate-based conservation incentives; and
- Investigate and develop affordability programs for low-income customers.

### *Rate Objectives*

A number of other rate objectives have been considered in developing rates. These objectives, together with the San Francisco Charter requirements and other legal considerations, provide a basis for evaluating rate alternatives and selecting a preferred rate structure. The objectives include:

**Conservation.** The rate structure should encourage customers to conserve water and to use water and sewer services in an environmentally sustainable manner.

**Simplicity.** The rate structure should be easy to communicate to customers, and customers should be able to use their knowledge of the rate structure to reliably predict the amount of their water and sewer bill.

**Stability.** The rate structure should provide a reliable revenue stream such that small changes in residential use patterns should not lead to large changes in revenues. Rate adjustments should be minimized year-to-year to avoid large changes.

**Fairness.** The rate structure should ensure that all customer classes pay their fair share of costs. Cost of service is a basis for evaluating fairness.

### *Monthly Service Charges*

SFPUC rates include a monthly service charge applicable to all retail classes of service. The monthly service charge has two components, a fixed and a variable or volume-based charge. Certain costs such as meter reading and customer billing are equal for all customers and are included in the monthly service charge as fixed cost per account. Other costs such as meter maintenance and replacement are a function of meter size. While also fixed in type, these costs are included in the monthly service charge and are higher for larger metered accounts. Other costs are highly correlated to volume usage and are a part of the variable cost portion of the bill.

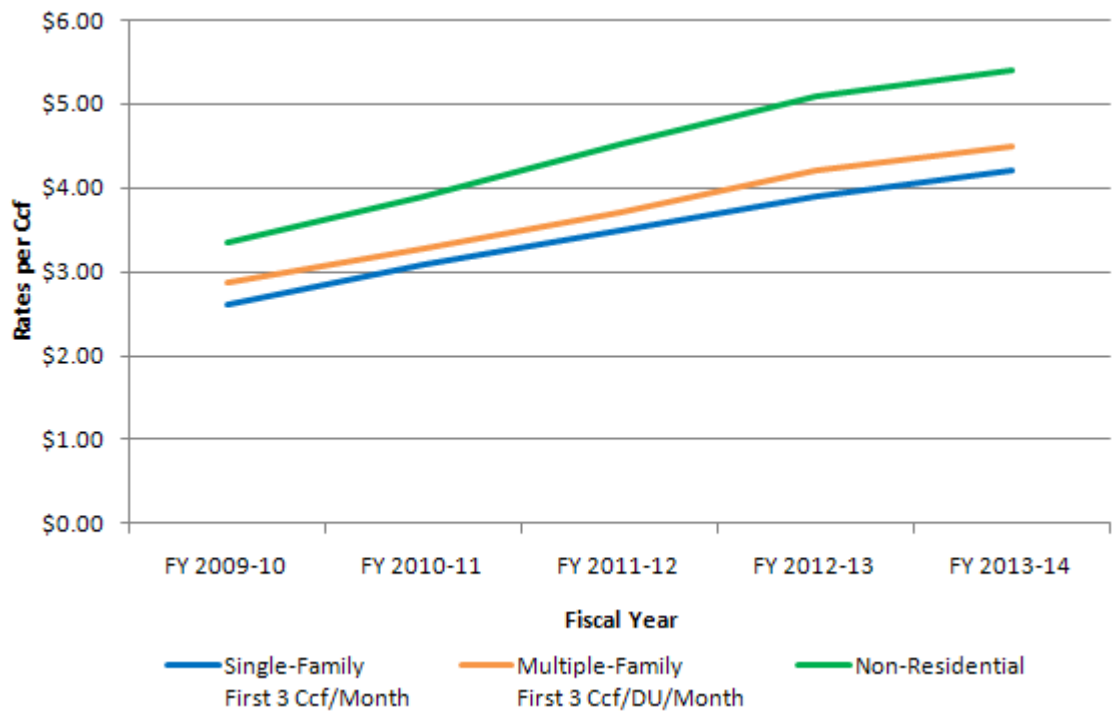
## Adopted Retail Water Rates

Table W3 below reflects water rates per ccf units (where 1 ccf or 100 cubic feet equals 748 gallons of water) approved by the Commission through FY 2013-14.

Table W3. Summary of Approved Retail Water Rates

	Previous Rate		Approved Rates		
	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
<b>Monthly Service Charge:</b>					
5/8 in	\$5.40	\$6.20	\$7.00	\$7.90	\$8.40
3/4 in	\$6.60	\$7.60	\$8.60	\$9.70	\$10.30
1 in	\$8.70	\$10.00	\$11.30	\$12.70	\$13.50
1-1/2 in	\$14.10	\$16.20	\$18.20	\$20.50	\$21.80
2 in	\$20.70	\$23.80	\$26.80	\$30.20	\$32.20
3 in	\$36.00	\$41.40	\$46.40	\$52.40	\$55.80
4 in	\$57.70	\$66.40	\$74.70	\$84.00	\$89.50
6 in	\$112.20	\$129.00	\$145.10	\$163.20	\$173.80
8 in	\$177.70	\$204.40	\$230.00	\$258.80	\$275.60
10 in	\$254.00	\$292.10	\$328.60	\$369.70	\$393.70
12 in	\$472.00	\$542.80	\$610.70	\$687.00	\$731.70
16 in	\$821.00	\$944.20	\$1,062.20	\$1,195.00	\$1,272.70
<b>Single-Family</b>					
First 3 Ccf/Month	\$2.61	\$3.09	\$3.50	\$3.90	\$4.20
All Additional	\$3.48	\$4.12	\$4.60	\$5.20	\$5.50
<b>Multiple-Family</b>					
First 3 Ccf/DU/Month	\$2.87	\$3.28	\$3.70	\$4.20	\$4.50
All Additional	\$3.82	\$4.37	\$4.90	\$5.50	\$5.90
<b>Non-Residential</b>	\$3.35	\$3.89	\$4.52	\$5.10	\$5.40

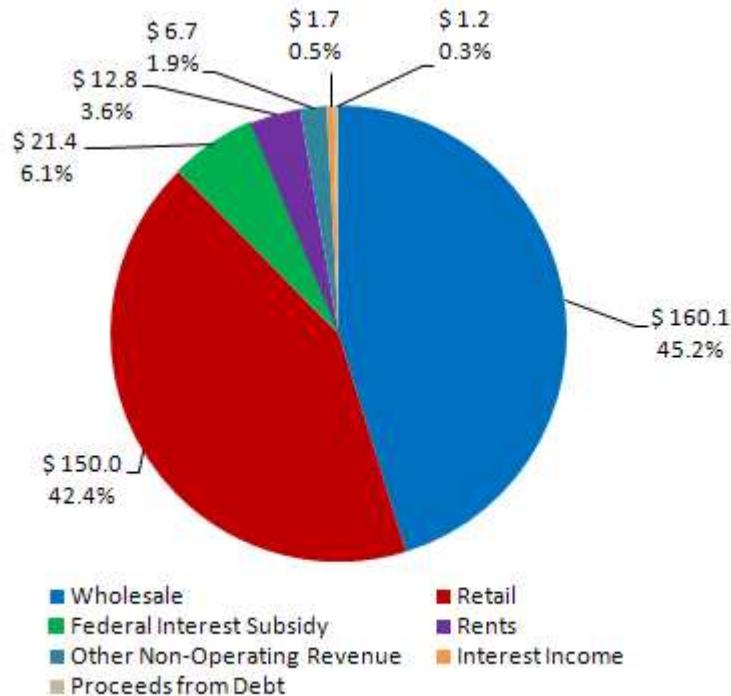
Chart W5. Approved Retail Water Rate Trends



## Revenue Sources

The Water Enterprise receives revenues from sales of water to retail customers in San Francisco and suburban areas and to wholesale customers under the terms of a long-term Water Supply Agreement. Interest income earned on the investment of available cash balances and other miscellaneous activities are additional sources of revenue. Chart W6 illustrates the proportion of revenues received from each source.

Chart W6. FY 2010-11 Water Enterprise Sources of Revenues, \$354.0 Million  
(Before adjusting for Water cost transfers to Hetch Hetchy)



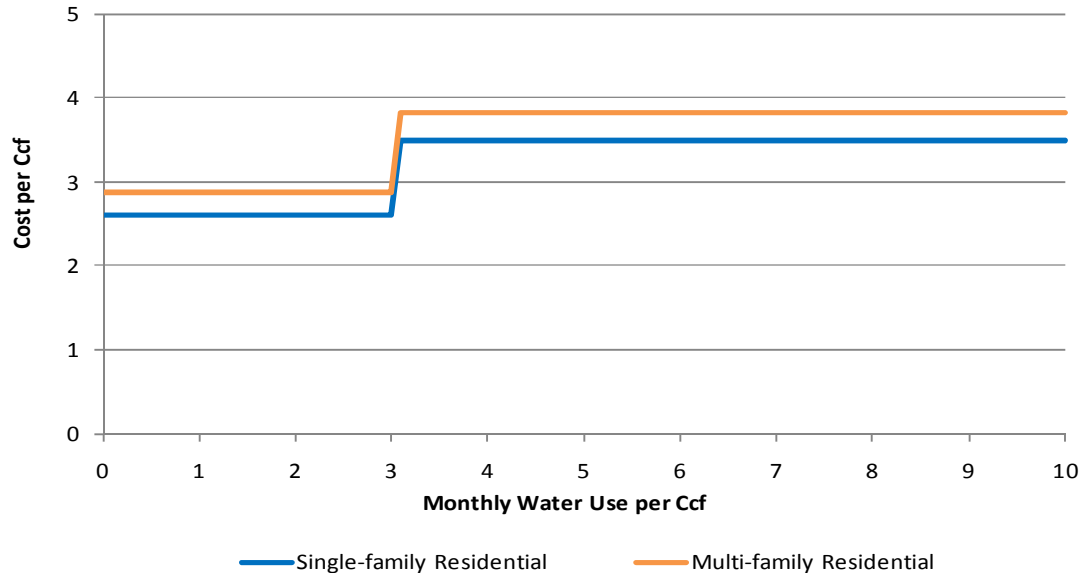
### Retail Water Sales

In FY 2010-11, retail water sales are budgeted at \$150.0 million, an increase of \$29.1 million over FY 2009-10 actuals. There are eight rate schedules applicable to retail water sales in San Francisco. Schedule W-1A is applicable to water sales to single-family residential customers. The rate consists of a monthly service charge based on meter size and a two-step commodity charge (see Chart W7). The first step or tier is applicable to the first 3 Ccf of use per month or 6 Ccf bimonthly. The second step or tier is applicable to all additional use. Schedule W-1B is applicable to multiple-family residential customers and consists of a monthly service charge based on meter size and a two-step commodity charge. Schedule W-1C is applicable to commercial, industrial, and other general uses. It includes a monthly service charge based on meter size and a uniform commodity charge. Schedule W-2 is applicable to private fire protection. Schedule W-3A is applicable to public uses and the charges for this rate are identical to Schedule W-1C. Schedule W-3B is an interruptible rate applicable to public buildings, parks and other uses that can be interrupted during water shortages and other emergencies. Schedule W-4 is applicable

Rates within San Francisco	
W-1A	Single-Family Residential
W-1B	Multiple-Family Residential
W-1C	Commercial/Industrial
W-2	Private Fire Service
W-3A	Municipal Uses
W-3B	Interruptible Municipal Use
W-4	Docks and Shipping Supply
W-5	Builders and Contractors
Rates outside San Francisco	
W-21A	Single-Family Residential
W-21C	Commercial/Industrial
W-22	Private Fire Service
W-24	Non-Potable Water
W-31	Multiple Family Residential, Commercial and Industrial
W-33	Municipal Uses
W-34	Interruptible Municipal Use

to shipping service where water is not provided through a regular service connection. Schedule W-5 is applicable to builders and contractors who receive service from a fire hydrant or other un-metered sources. There are an additional seven rates applicable to retail water sales outside San Francisco. One special use rate is available to customers who provide all facilities necessary to take non-potable water directly from storage reservoirs.

Chart W7. FY 2010-11 Water Enterprise Two-Tier Residential Rate Structure



*City Retail Rates*

Most customers are billed under schedules W-1A Single-Family, W-1B Multi-Family or W-1C Commercial/Industrial. The schedules include monthly service charges based on meter size and commodity charges applicable to all water use. For FY 2010-11, the monthly service charges range from \$6.20 per month for a five-eighths inch diameter meter to \$944.20 per month for a 16-inch diameter meter. As noted in Chart W7, single-family residential customers pay \$3.09 per Ccf for the first 3 Ccf monthly or 6 Ccf bimonthly and \$4.12 for all additional water use. Approximately 40% of single-family residential use is billed in the first tier with the remaining 60% of use billed in the second tier.

Multiple-family residential customers pay \$3.28 per Ccf for the first 3 Ccf monthly or 6 Ccf bimonthly and \$4.37 per Ccf for all additional water use. The block feature for multiple-family customers calculates the usage allowance in the first tier by the number of dwelling units. For example, a multiple-family account with 5 dwelling units would be billed at the first tier rate for first 15 Ccf of month use (3 Ccf/Dwelling Unit x 5 Dwelling Units) or 30 Ccf of bimonthly use. Approximately two-thirds of multiple-family residential use would be billed in the first tier and remaining one-third of use in the second tier.

Although single-family and multiple-family residential customers have similar usage characteristics, the differences in the use falling in each tier requires that each class have its own rate in order to recover each class’s proportionate share of costs. This is consistent with Proposition 218 passed by voters in 1996 where property-related fees and charges may not exceed the cost required to provide the property-related service. Both rates provide a conservation incentive by increasing the customer’s bill with increasing water use. Both are simple to understand and provide revenue stability. Both promote affordability by charging a lower rate for the first 3 Ccf of use.

Non-residential customers pay a uniform volumetric rate of \$3.89 per Ccf. Because of the different usage characteristics exhibited by non-residential customers, particularly with respect to the quantity of water used, the SFPUC does not consider a tiered rate structure to be helpful in meeting conservation pricing goals noted in the Charter. The alternative of developing customized rates for individual customers or small classes of customers is not feasible at this time. Such an option can be revisited in the future following installation of the new Automated Water Meters.

In addition to the general use rates, there are rates applicable to private fire service, Schedule W-2, to public uses (Schedules W-3A Uninterruptible and W-3B Interruptible) to docks and shipping (Schedule W-4) and to builders and contractors (Schedule W-5). Each of these schedules has monthly service charges that differ from those shown on Schedule W-1C, but all water is billed at the Schedule W-1C rate of \$3.89 per Ccf.

**Suburban Retail Rates** - There are four rate schedules applicable to suburban retail water service. Schedule W-21 is a general use rate applicable to residential use. Schedule W-31 is applicable to commercial, industrial and other general uses. Schedule W-22 is applicable to private fire protection. Schedule W-23 is applicable to public uses except resale. Schedule W-24 is applicable to non-potable water service. Suburban areas covered by retail water services include Alameda, Santa Clara and San Mateo counties.

### *Wholesale Water Sales*

The Water Enterprise also provides wholesale water service to 27 wholesale customers, which consist of 24 municipalities and water districts, one private utility, one private non-profit university and one mutual water association. Wholesale customers are located in Alameda, Santa Clara and San Mateo counties. Total budgeted wholesale revenues in FY 2010-11 are \$160.1 million, \$38.6 million above FY 2009-10 pre-audit actuals.

The SFPUC and the wholesale customers implemented a new 25-year Water Supply Agreement (WSA) effective July 1, 2009 that changed the cost basis by which the wholesale rate is determined from a "utility basis" to a "cash basis". Wholesale customers now pay a proportionate share of regional system operating expenses, debt service on bonds sold to finance regional improvements, and other regional system improvements funded from current revenues, along with the repayment of previously constructed capital assets that were not otherwise fully depreciated.

The existing wholesale rate structure consists of a monthly service charge based on meter size and type and a uniform volume charge, see Table W4. The volume charge portion of the wholesale rate represents over 95% of total wholesale revenues received by the Water Enterprise. Consequently, estimating water sales is a key component in the rate setting process. Projected sales based on historical averages and demand studies have been used for calculating revenues under existing rates, allocating costs, and determining the required rate adjustment percentage. For FY 2010-11, there will be no change in the monthly service charges applicable to wholesale water sale; however, the volume charge increased 15.2% from \$1.65/Ccf to \$1.90/Ccf. The WSA requires the rate be calculated and set annually and include a "true-up" between prior-year revenues and expenses.

Table W4. FY 2010-11 Summary of Approved Wholesale Water Rates

Disc/Compound Meters		Approved Rates		
		Crest Meters	Magnetic Meters	Turbine Meters
<b>Monthly Service Charge:</b>				
5/8 in	\$11.0			
3/4 in	\$18.0			
1 in	\$30.0			
1-1/2 in	\$43.0			
2 in	\$79.0			
3 in	\$158.0			
4 in	\$318.0	\$353.0		\$577.0
6 in	\$476.0	\$685.0		\$1,256.0
8 in	\$635.0	\$1,335.0	\$2,265.0	\$1,875.0
10 in	\$793.0	\$1,732.0		\$3,391.0
12 in	\$953.0	\$1,840.0	\$5,159.0	
16 in	\$1,270.0	\$5,628.0		\$7,215.0
18 in		\$6,133.0		
20 in		\$6,349.0		
Ccf	\$1.90			

### *Interest Income*

The Water Enterprise earns interest income from the investment of available funds. Interest income on unrestricted cash assets may be used to meet any purpose of the Enterprise, whereas earnings associated with restricted assets come with spending restrictions. Interest income earned from the investment of monies in restricted funds such as bond reserves may only be used for the purpose of that fund and are not available to meet day-to-day operating expenses. In the FY 2010-11 budget, it is anticipated that investment income earned from unrestricted funds will be \$1.7 million. This projection is based on an estimated yield on investments made by the City Treasurer and projected cash balances.

### *Rents and Other Income*

The Water Enterprise derives additional income from rents and permit fees for secondary uses of its watershed lands and pipeline rights-of-way. The Water Enterprise has entered into long-term leases that allow portions of its Alameda and Peninsula watersheds to be used for golf courses and for land adjacent to our Sunol Headquarters to be mined for gravel. Typical uses of pipeline rights-of-way are parking and landscaping for adjoining properties. The income from these uses is projected to be \$12.8 million annually and represents about 3.6 percent of annual revenues.

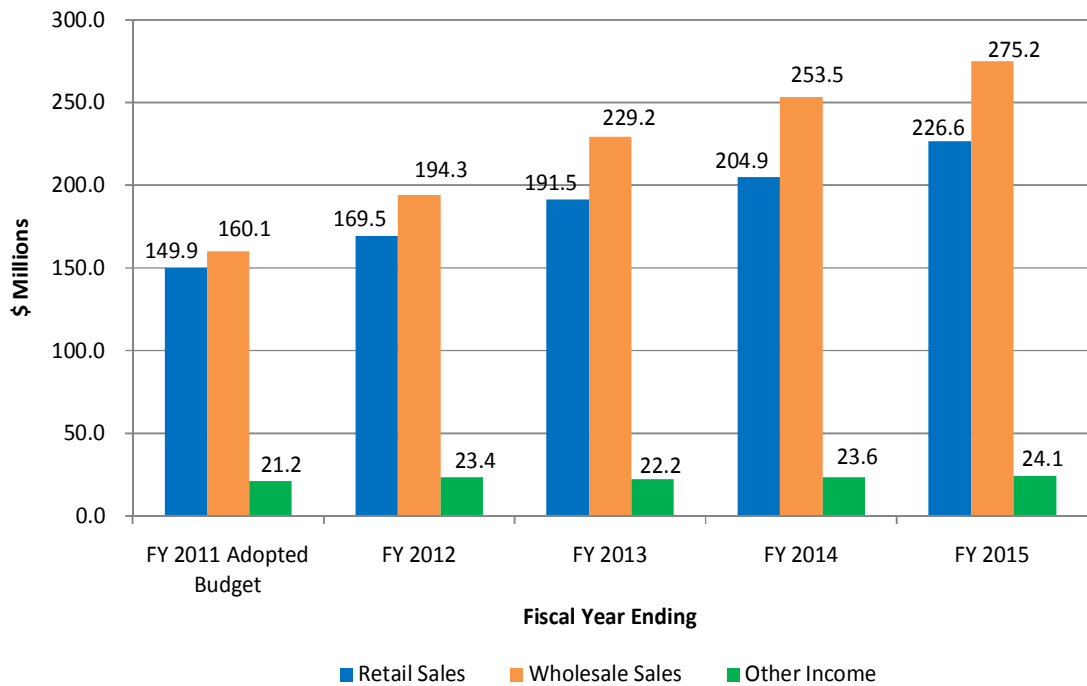
The Water Enterprise receives other income from custom work, reimbursements for service installations and meter relocations done at the customer's request, miscellaneous service charges and other fees.

### *Total Sources*

Estimates of revenues under existing rates are based on an analysis of the number of customers and the corresponding water volumes used by those customers. Chart W8 shows projected revenues with the approved rate increases through FY 2013-14.



Chart W8. Water Enterprise Revenues by Source (\$ Millions)



### Miscellaneous Fees and Charges

In addition to rates for water service, the Water Enterprise also imposes a variety of fees and charges related to the provision of water service (see Table W5). These fees and charges include new account fees, late payment penalties, service and meter relocation charges and so forth. The cost for each service has been reviewed and adjustments to miscellaneous fees and charges have been made in FY 2010-11. Table W5 provides a summary of miscellaneous service fees and charges.

Table W5. FY 2010-11 Miscellaneous Service Fees

Service Fee	Current Charge as of 7/1/10
Late Payment Penalty	\$3.08 plus ½% of outstanding balance
Return Check Charge	\$79.01
New Account Charge	\$32.84
48 Hour Notice	\$33.86
Service Shut-off	\$33.86
Service Turn-on	\$33.86
Lock Charge	\$13.34
Lien Fee	Set by Administrative Code

The Water Enterprise also charges for service and meter relocations and for changes in meter size made at the customer's request. The customer is billed for a service and meter relocation or a meter change at the greater of actual cost or the average of costs incurred by the Water Enterprise performing similar service requests in the first nine months of the previous fiscal year. The costs included are labor, materials, paving and other costs.

Customers who violate water use restrictions may, after one written warning and in accordance with applicable laws, have their service limited by the installation of a flow restrictor on their service line. If a flow restrictor is installed, the customer will be billed

for its installation as well as its removal, when warranted. The Water Enterprise currently charges \$205.00 for installation or removal of a flow restriction on a 5/8 and 1-inch service lines and \$295.00 on a 1 1/2 to 2-inch service line. The charge for service lines three inches and larger is based on actual cost.

### *Capacity Charges*

The SFPUC imposes a capacity charge on any retail customer requesting a new connection to the water distribution system, or requiring additional capacity as a result of any addition, improvement, modification or change in use of an existing connection to the water distribution system. The capacity charge, as of July 1, 2010, was \$1,095 per equivalent 5/8 inch meter. The capacity charge is adjusted on July 1 of each year by the annual change in the 20 City Average Construction Cost Index published by ENR Magazine. Capacity charge revenues are dependant upon economic growth and development and are used to support repair and replacement projects when funds are available.

### Expenditures

The Water Enterprise's annual operating budget includes operation and maintenance costs, debt service on revenue bonds used to finance capital improvements, and repair and replacement costs funded from current revenues.

### *Operation and Maintenance Expenses*

Operation and maintenance (O&M) expenses include personnel costs, material and supplies, power and energy, and services of the other City Departments including SFPUC Bureaus. The cost of operating the water system in FY 2010-11 is projected to be \$189.1 million. The operation and maintenance expense forecast shown in this report does not include any incremental costs associated with WSIP projects above the standard three percent estimated annual increase. In addition, the forecast assumes there will be no changes in regulations or operating procedures that could impact operating expenses.

### *Debt Service & Lease Payments*

Debt service includes principal and interest payments on revenue bonds used to finance system improvements, as well as lease financing costs, if and when applicable for projects such as the new 525 Golden Gate Headquarters. As of September 2010, the Water Enterprise had eleven outstanding bond issues, as listed in Table W6.

Table W6. Outstanding Water Enterprise – All Revenue Bond & Lease Financing (\$000)

Series	Original Par	Outstanding Par as of 7-1-10
1991 A	\$70,145	\$7,100
2001 A	\$140,000	\$60,235
2002 A	\$164,000	\$112,690
2002 B Refunding	\$85,260	\$45,050
2006 A	\$507,815	\$488,555
2006 B Refunding	\$110,065	\$101,100
2006 C Refunding	\$48,730	\$41,185
2009 A	\$412,000	\$412,000
2009 B	\$412,000	\$412,000
2010 AB	\$474,665	\$474,665
2010 C	\$14,040	\$14,040
2010 D New Money *	\$71,360	\$71,360
2010 D Refunding *	\$31,365	\$31,365
2010 E New Money *	\$344,200	\$344,200
525 Golden Gate COPs **	\$119,716	\$119,716
<b>Total Outstanding</b>		<b>\$2,735,261</b>

\* In July, another \$446,925 was issued under the authority of Proposition E.

\*\* Amount shown represents the Water Enterprises share of debt.

In November 2002, San Francisco voters authorized the SFPUC to issue up to \$1.628 billion of water revenue bonds to fund the Water System Improvement Program (WSIP) under Proposition A. At the same time, voters granted the SFPUC the authority to finance capital improvements through revenue bonds or other financing methods consistent with the powers of other major public utilities in California under Proposition E. Three series of water revenue bonds have been issued to date against the Proposition A authorization: \$507.8 million 2006 Series A; \$412.0 million 2009 Series A; and \$412.0 million 2009 Series B. As of June 30, 2010, the Board of Supervisors had authorized the issuance of up to \$3,048,031,000 in water revenue bonds under Proposition E, with \$474.7 million 2010 Series 2010 AB issued against this authorization. In July 2010, another \$446,925,000 was issued under the authority of Proposition E. Annual debt service payments, net of capitalized interest expense and Build America Bonds Subsidies, are expected to increase from \$94.9 million in FY 2010-11 to \$262.5 million in FY 2014-15, along with an assumption of three years of capitalized interest cost, adjusted for placed-in-service dates as necessary, during capital project construction.

Future debt service cost projections assume the issuance of new debt to fund WSIP projects through project construction and completion. Table W7 sets forth the previously issued debt for the WSIP and a projected debt financing schedule for the WSIP for FY 2010-11 through FY 2012-13, based on the WSIP June 2009 Approved Budget. The Water Enterprise issued \$1.75 billion from FY 2002-03 to FY 2009-10, for WSIP and expects to issue \$1.4 billion of water revenue bonds in FY 2010-11, \$961.4 million in FY 2011-12 and \$487.0 million in FY 2012-13. In addition, during FY 2009-10 and FY 2010-11, \$56.95 million in water revenue bonds were issued for the Advanced Metering Infrastructure (AMI) project and \$45.41 million were issued to refund a portion of the 2001A and 2002A Bonds, achieving net present value savings of \$3.6 million or 8%. The repayment of principal and interest on these future debt issues has been incorporated into the Commission's approved rates through FY 2013-14.

Table W7. Projected Bond Issuance Schedule for WSIP

Total Bond Issuance (\$ Thousands)	
Fiscal Year	
2002-03 - 2008-09	\$ 507,815 <sup>(1)</sup>
2009-10	1,241,720 <sup>(2)</sup>
2010-11	1,387,245 <sup>(3)(4)</sup>
2011-12	961,430 <sup>(4)</sup>
2012-13	487,346 <sup>(4)</sup>
<b>Total:</b>	<b>\$ 4,585,556</b>

(1) Of the amount originally issued, \$488,555,000 aggregate principal amount currently remains outstanding as of July 1, 2010.

(2) Amount shown includes 2009 Series A Bonds, 2009 Series B Bonds and 2010 Sub-Series B Bonds.

(3) Only that portion of the 2010 Series DE Bonds attributable to WSIP is included in the amount shown are estimates.

(4) The timing and amount of future debt issuances may vary depending on the need to fund construction.

### Revenue-Funded Capital

Revenue-funded capital expenditures may include minor construction projects, major maintenance and rehabilitation projects, planning studies, and preliminary engineering analysis for major capital improvements. In recent years, the Water Enterprise has budgeted approximately \$30 million a year for these types of projects. The projected funding averages \$48.5 million per year over the next ten years.

### Summary of Projected Expenses

Chart W9. Water Enterprise Projected Operating Expenses (\$ Millions)

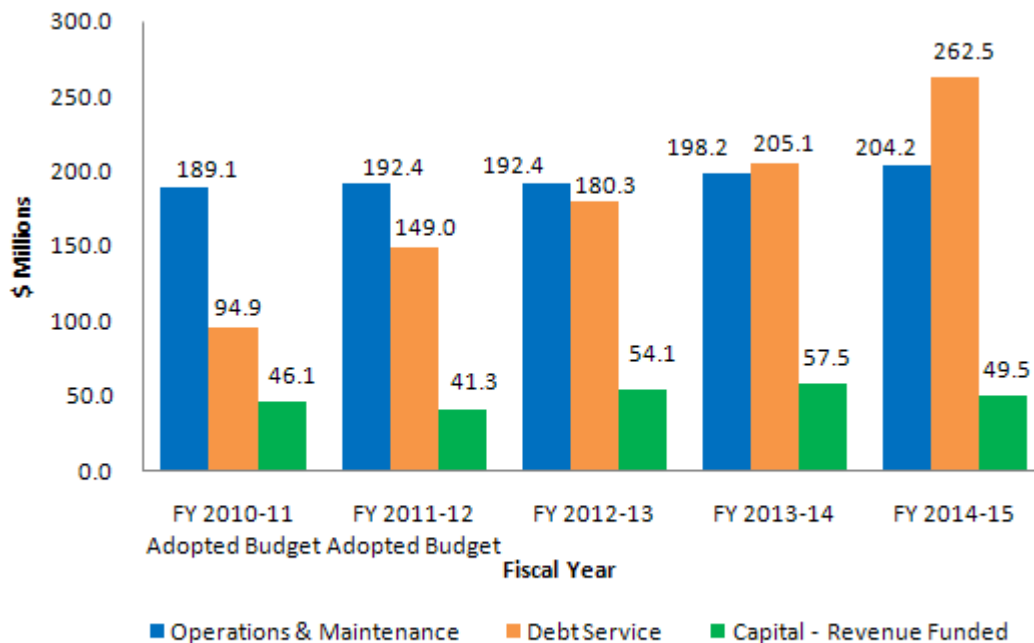


Chart W8 shows projected Enterprise expenses for FY 2010-11 through FY 2013-14. Operation and maintenance expense is projected to remain flat through FY 2012-13 with subsequent years' forecast to increase at an annual rate of three percent, i.e. estimated inflation.

## Revenue Requirement

The annual expenditures for operation and maintenance, debt service and revenue-funded capital make up the Water Enterprise's revenue requirement. However, to determine the revenue requirement for rate purposes, the income derived from interest, rents and other miscellaneous sources are deducted from the total revenue requirement. Also, operating surpluses from prior years can be included in the calculation of net revenue requirement. The net revenue requirement represents the amount to be recovered through water sales revenues.

To develop the projected retail cost responsibility, the projected suburban revenue requirement and other operating and non-operating revenues are deducted from total expenditures. The wholesale revenue requirement represents the wholesale water customers' proportionate share of operation and maintenance expense, debt service, and annual appropriations for revenue-funded capital improvements. The wholesale revenue requirement has been calculated based on projected expenditures and in accordance with the adopted Water Supply Agreement. Finally, the application of available fund balance, if any, is deducted from the retail revenue requirement. The available fund balance, if adequate, can be used to offset any funding shortfall assigned to retail customers in lieu of raising rates.

## FY 2010-11 Water Enterprise Annual Capital

The Water Enterprise of the San Francisco Public Utilities Commission is responsible for the distribution of high quality water to San Francisco Customers. The Enterprise operates and maintains the following facilities:

- 24 Pipelines
- 27 Pump Stations
- 29 Dams and Reservoirs
- 9 Tanks
- 11 Tunnels
- 28 Valve Lots
- 2 Water Treatment Plants
- 3 Yards
- 30 Chemical Stations

The Water Enterprise's Capital Improvement Program (CIP) for FY 2010-11 is \$47.3 million and includes \$13.1 million for Regional Water Projects, \$23.8 million for Local Water Projects, \$9.2 million for Programmatic Projects and \$1.2 million for financing costs. The FY 2010-11 CIP is funded by Water Enterprise revenues. The capital projects are included in the SFPUC's Ten-Year Capital Plan which is part of the City and County of San Francisco's Ten-Year Capital Plan approved by the Board of Supervisors annually.

The FY 2010-11 Water Enterprise CIP is approximately the same as the FY 2009-10 approved CIP. The FY 2010-11 budget also includes the reallocation of \$0.9 million in prior-year CIP project appropriations to fund projects in the FY 2010-11 CIP.

Major projects in the Water Enterprise FY 2010-11 CIP include:

- \$12.8 million for Local Water Conveyance and Distribution projects including replacement of existing water distribution mains with ductile iron pipes and the construct/replace/retrofit of 12-inch or larger water feeder or transmission mains in San Francisco and adding new, or renewing existing, water services.
- \$5.8 million for renewal and replacement of Regional Water Conveyance and Transmission Systems. These upgrades are needed to ensure adopted levels of service are maintained, including reduction of unplanned outages, emergency response, satisfaction of drinking water quality and environmental criteria, and performance after seismic events.

- \$5.4 million for the Water Enterprise's Advanced Meter Infrastructure Project to fund the replacement of existing meters with an Automated Water Meter Reading System that will largely eliminate meter reading field visits, improve customers' access to usage information, detect tampering, theft and leaks, and enhance flow profiling.
- \$3.6 million for Regional Water Facilities Maintenance for the replacement of equipment and small assets not otherwise covered in the operating budget, pipeline inspections, and minor repairs and corrosion control protection projects.
- \$3.2 million for Regional Water Treatment Facility projects including upgrades of chemical dosage, flow monitoring, valve and pump replacement, chemical handling upgrades, power upgrades, seismic improvements, and upgrades to control systems.

## FY 2011-12

The Water Enterprise FY 2011-12 Capital Budget includes \$19.4 million for Regional Water projects including upgrades to the Sunol and Millbrae Yards, \$11.1 million, improvements to the Sunol and Harry Tracy Treatment Plants, \$2.2 million and \$3.6 million for Regional Water facilities maintenance projects.

The Local Water budget includes \$8.4 million for water main replacements and \$6.5 million for repairs to the water pumps, reservoirs and water lines on Treasure Island.

Table W8 below shows the Water Enterprise's CIP for FY 2009-10, FY 2010-11 and FY 2011-12 by major programs.

Table W8. Water Enterprise CIP by Major Program

\$	FY 2009-10 Adopted Budget	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget
<b>Program/Project</b>			
<b>Regional Costs</b>			
Storage	850,000	0	0
Watershed/Right of Way Management	4,650,000	500,000	2,500,000
Treatment Facilities	1,000,000	3,200,000	2,200,000
Water Conveyance/Distribution	4,500,000	5,850,000	11,100,000
Facilities Maintenance	3,700,000	3,600,000	3,600,000
<b>Regional Total</b>	<b>14,700,000</b>	<b>13,150,000</b>	<b>19,400,000</b>
<b>Local Costs</b>			
Water Conveyance /Distribution System	22,347,520	12,800,865	8,401,307
Meter Replacement	0	5,400,000	0
Pacifica Recycled Water Project	0	5,124,000	0
Security/Miscellaneous	500,000	0	0
Treasure Island	3,800,000	500,000	6,525,000
<b>Local Total</b>	<b>26,647,520</b>	<b>23,824,865</b>	<b>14,926,307</b>
Programmatic Projects	5,750,926	9,204,207	6,934,000
Financing Costs	0	1,165,806	2,286,694
<b>Water Enterprise Total</b>	<b>47,098,446</b>	<b>47,344,878</b>	<b>43,547,001</b>
<b>Sources</b>			
<b>Water Enterprise Revenue</b>	<b>47,098,446</b>	<b>47,344,878</b>	<b>43,547,001</b>

Table W9. Water Enterprise Supplemental Appropriation by Major Program

\$	FY 2010-11 Approved Supplemental Appropriation	FY 2011-12 Approved Supplemental Appropriation
<b>Program/Project</b>		
<b>Costs</b>		
Water System Improvement Program	1,448,149,337	0
Water Conveyance /Distribution System	10,441,133	15,770,693
Subtotal Capital Projects	1,458,590,470	15,770,693
<b>Financing Costs</b>	200,754,755	2,577,064
<b>Water Total Supplemental</b>	<b>1,659,345,225</b>	<b>18,347,757</b>
<b>Revenues</b>		
Revenue Bond Funds	1,658,504,342	17,180,459
Capacity Fees	840,883	1,167,298
<b>Total</b>	<b>1,659,345,225</b>	<b>18,347,757</b>

In April 2010, the Board of Supervisors approved a \$1.659 billion supplemental appropriation to fully fund WSIP through its completion \$1.448 billion, to partially fund the FY 2010–11 Local Water Main Replacement Project budget \$10.4 million, and associated bond financing costs, \$200.8 million. Also included in the supplemental appropriation was funding in FY 2011-12 for the local water distribution main replacement project \$15.8 million, and \$2.6 million for financing costs.



# Water Enterprise Ten-Year Capital Plan

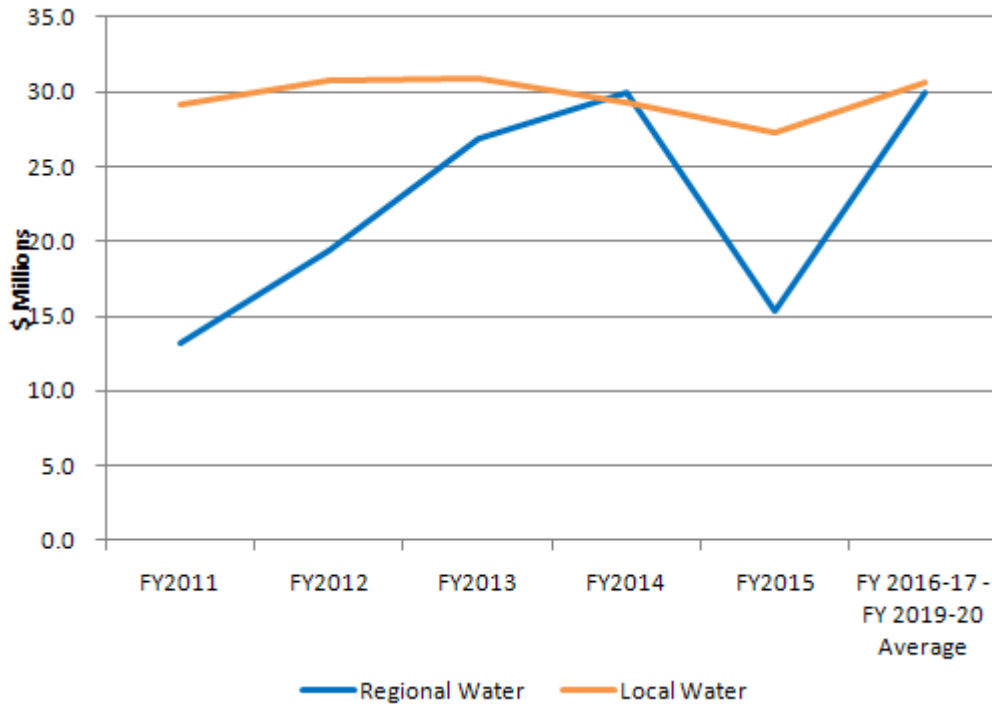
Adopted Capital Project costs for the Water Enterprise total nearly \$2.0 billion over the next ten years, including the remaining portion of the Water System Improvement Program (WSIP). These investments, divided between regional and local needs, are shown on Table W10. Identified capital needs will be financed with a combination of existing water revenue bonds and additional revenues. Project timelines may be adjusted to match available funding. The table also shows the estimated number of jobs per year that this ten-year program will create.

Table W10. Water Enterprise Ten-Year Capital Plan (\$ Thousands)

SFPUUC: Water Enterprise - (\$ thousands)							
Program/Project	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2016 - FY 2020	PLAN TOTAL
<b>Regional Costs</b>							
Water System Improvement Program	1,448,149	0	0	0	0	0	1,448,149
Storage	750	5,000	1,000	5,000	5,000	200	16,950
Watershed/Right of Way Management	1,000	3,000	2,500	1,500	500	2,500	11,000
Treatment Facilities	4,400	3,400	2,400	2,400	3,900	11,000	27,500
Water Conveyance	2,000	2,000	2,000	2,000	2,900	135,800	146,700
Operation Facilities Upgrades	5,000	6,000	19,000	19,000	3,000	0	52,000
<b>Regional Total</b>	<b>1,461,299</b>	<b>19,400</b>	<b>26,900</b>	<b>29,900</b>	<b>15,300</b>	<b>149,500</b>	<b>1,702,299</b>
<b>Local Costs</b>							
Water Conveyance /Distribution System	23,242	24,172	25,138	26,144	27,189	153,157	279,042
Water Meter System Enhancement	5,400	0	0	0	0	0	5,400
Treasure Island	500	6,525	5,775	2,200	0	0	15,000
<b>Local Total</b>	<b>29,142</b>	<b>30,697</b>	<b>30,913</b>	<b>28,344</b>	<b>27,189</b>	<b>153,157</b>	<b>299,442</b>
<b>Total Local &amp; Regional</b>	<b>1,490,441</b>	<b>50,097</b>	<b>57,813</b>	<b>58,244</b>	<b>42,489</b>	<b>302,657</b>	<b>2,001,741</b>
<b>Revenues</b>							
Water Revenue Bonds	1,457,750	15,771	21,770	20,399	2,752	71,491	1,589,933
Water Revenue	32,692	34,326	36,043	37,845	39,737	231,166	411,808
<b>TOTAL</b>	<b>1,490,441</b>	<b>50,097</b>	<b>57,813</b>	<b>58,244</b>	<b>42,489</b>	<b>302,657</b>	<b>2,001,741</b>
<i>Total San Francisco Jobs/Year</i>	<i>10,731</i>	<i>361</i>	<i>416</i>	<i>419</i>	<i>306</i>	<i>2,179</i>	<i>14,413</i>
<b>Surplus/(Shortfall)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
To be funded with debt, additional revenues, and/or deferring expenditures.							

Table W10 and Chart W10 shows that regional spending (excluding WSIP) will grow over the next several years from \$13.0 million in FY 2010-11 to an average of nearly \$30.0 million per fiscal year in the final five years of the ten-year plan. Local Water improvement costs over the same period average \$30.0 million per year.

Chart W10. Water Enterprise Ten-Year Capital Plan Trend



With the Water System Improvement Program moving into construction, the SFPUC's Water Enterprise uses the annual updates to the ten-year Capital Plan to ensure the appropriate projects and investments are in place (outside of WSIP) to ensure adopted levels of service are maintained. The ten-year Capital Plan is updated using the latest information from condition assessments (performance and remaining useful life of existing assets), master plan updates, review of levels of service objectives, and financial data (revenue requirement, project expenditures and cash flow). In parallel to the capital planning effort, the Water Enterprise also expects to complete the conversion to a new Computerized Maintenance Management System by October 2010 that will be used to accurately house an inventory of the Water Enterprise's assets, condition assessment data, and maintenance requirements.

## Renewal and Replacement

The ten-year renewal and replacement (R&R) program is estimated to be \$548.2 million and is funded by Enterprise revenue and water revenue bonds. The proposed R&R program includes investments to keep the water systems operational with the goal of reaching a state of good repair. Annual funding for the Water Enterprise's Renewal and Replacement (R&R) Program totals approximately \$54 million.

**Local Water Conveyance & Distribution, \$279.0 million.** This program is for the systematic replacement of existing water distribution mains (8-inch or smaller) over time with ductile iron pipes, along with the construct/replace/retrofit of 12-inch or larger water feeder or transmission mains in San Francisco. Main replacement/retrofits priority is based on several factors such as break history, age and soil conditions with the goal of replacing pipes older than 100 years in the system going from an average of 5 miles in FY 2009-10 to 12 miles in FY 2014-15. Also included is the on-going program to renew old, galvanized, plastic, and lead water services.

**Regional Water Renewal & Replacement/Water Conveyance Facilities, \$146.7 million.** This will provide funding for new, expanded, or upgraded facilities, ground and watershed infrastructure. Projects include pipeline inspections and repairs, pipeline replacement, corrosion control program and pump station upgrades. These upgrades are

needed to assure that adopted levels of service are maintained including reduction of planned outages, emergency response, and performance after seismic events.

**Operation Facilities Upgrades, \$52.0 million.** This consists of major upgrades to the Millbrae and Sunol Yards which are required to maintain operations and maintenance efficiencies. Projects at Millbrae include replacement of several temporary buildings and buildings that are beyond their useful life, a new maintenance shop, equipment storage building, and internal improvements to the main administration building. Projects at the Sunol Yard include replacement structures for the maintenance shops and equipment storage, new fueling center and administration building.

**Regional Water Treatment Facilities, \$27.5 million.** This consists of major upgrades to treatment facilities to achieve a higher level of performance. Projects include chemical dosage upgrades, flow monitoring, valve and pump replacement, chemical handling upgrades, power upgrades, systems to control discharges, process control equipment to meet more stringent drinking water regulations, and seismic improvements. These upgrades are needed to ensure adopted levels of service are maintained including drinking water quality and environmental criteria.

**Storage, \$17.0 million.** This consists of seismic upgrades to existing dams (including instrumentation and geotechnical studies) to comply with recommendations from the State Division of Safety of Dams. Upgrades include geotechnical work and installation of monitoring systems, modifications to spillways and outlet structures

**Treasure Island, \$15.0 million.** The SFPUC has been providing utility operations and maintenance services to the Treasure Island potable water system. Costs over the ten-year period include a new water pump station in Oakland, repairing two reservoirs, a new 12 inch water line from Oakland to Treasure Island, and a new chlorine station. These projects proved secondary source of potable water and increase water storage capacity on Treasure Island.

**Regional Water Watersheds/Right of Way Management, \$11.0 million.** The purpose of this program is to support capital projects that improve or protect the water quality and ecological resources that affect or are affected by the operation of the SFPUC water supply system within the Bay Area counties. Projects may include the repair, replacement, maintenance, construction of roads, fences, or trails that meet these purposes. Funding includes the planned replacement of three bridges on Alameda Creek to reduced environmental impacts associated with maintenance and allow year round watershed.

## Capital Program

The ten-year plan proposes over \$1.4 billion in additions to R&R and other investments discussed previously. Some of these key projects are listed below.

**Automated Meter Reading System - \$5.4 million.** The SFPUC is developing an Automated Water Meter Reading (AMI) System that will largely eliminate meter reading field visits, improve customers' access to usage information, detect tampering, theft and leaks, and enhance flow profiling. Last year's plan included \$40.5 million for this project. The total estimated cost of this project is \$64.1 million. (\$18.2 million was previously appropriated). Funding in the plan will be used for automating the large meters in the system. In June of 2010, the SFPUC sold revenue bonds in the amount of \$56.9 million to finance the cost of implementing AMI.

**Water System Improvement Program (WSIP) \$1.4 billion.** The Water System Improvement Program (WSIP) is the SFPUC's \$4.6 billion dollar, multi-year capital program to rebuild its water system (see Table W10). The program will enhance the SFPUC's ability to provide reliable, affordable, high-quality water to its 2.4 million customers through environmentally sustainable means. The program cost totals \$4.11 billion, excluding projected financing costs of \$471.7 million. In April 2010, the Board of Supervisors approved a \$1.647 billion supplemental appropriation to fully fund WSIP through its completion.

WSIP objectives include the following:

1. Deliver system improvements to provide high quality water that reliably meets current and foreseeable local, state, and federal requirements;
2. Reduce the water system's seismic vulnerability;
3. Increase system reliability for water delivery by improving redundancy needed to accommodate planned outages for maintenance and unplanned outages resulting from facility failure;
4. Provide near-term improvement of water supply/drought protection;
5. Set forth long-term water supply/drought management options for technical evaluation, cost analysis, and environmental review;
6. Enhance sustainability through improvements that optimize protection of the natural and human environments; and
7. Provide improvements resulting in a cost-effective fully operational water system.

The Commission provided direction on specific level-of-service goals for water quality, seismic reliability, delivery reliability, and water supply. The scope of the projects comprising the WSIP were developed using these goals. The program's proposed local and regional projects are shown in the following tables.

Table W11. WSIP Commission Approved Budget and Projected Costs

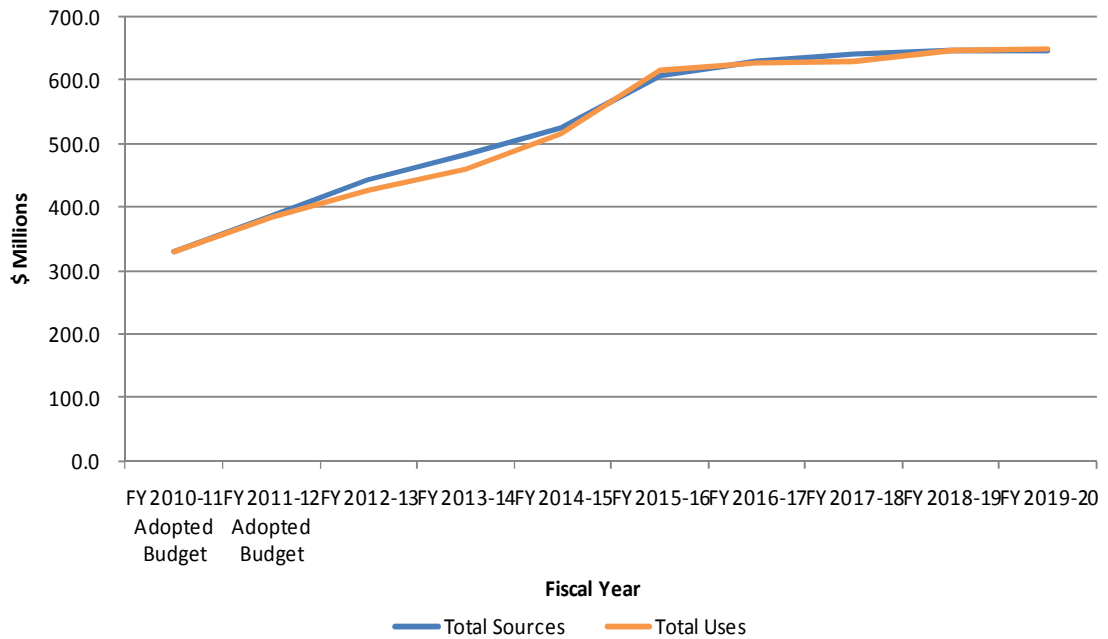
\$ Millions			
Project Category	December 2005 Approved Budget	December 2007 Approved Budget	July 2009 Approved Budget
San Joaquin Regional Projects	\$ 559.34	\$ 486.20	\$ 430.05
Sunol Valley Regional Projects	870.91	957.77	1,053.99
Bay Division Regional Projects	749.73	796.17	785.11
Peninsula Regional Projects	700.53	712.37	894.78
San Francisco Regional Projects	164.86	138.23	160.33
San Francisco Local Projects	383.20	383.20	368.74
Water Supply Projects *	280.64	265.01	231.09
System-Wide Projects	81.35	190.76	189.76
Net Financing Costs	552.42	462.42	471.70
<b>Program Total</b>	<b>\$ 4,342.98</b>	<b>\$ 4,392.13</b>	<b>\$ 4,585.55</b>

# Ten-Year Financial Plan

Table W12. Water Enterprise Ten-Year Financial Plan (\$ Millions)

Description (\$ Millions)	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
	Adopted Budget	Adopted Budget								
<b>Beginning Operating Fund Balance</b>	40.1	41.3	45.8	61.9	83.0	92.6	86.4	88.6	98.8	97.8
<b>Sources</b>										
Retail Sales - Base Rates	134.4	150.7	170.2	192.4	206.0	227.7	251.7	278.3	285.5	287.0
Retail Sales - Rate Increases	15.5	18.7	21.3	12.5	20.6	22.8	25.2	5.8	0.0	0.0
Wholesale Sales	160.1	194.3	229.2	253.5	275.2	332.7	327.2	330.2	335.1	333.3
Interest Income	1.7	3.4	4.2	5.6	6.0	6.6	6.8	7.0	7.0	7.0
Other Miscellaneous Income	19.5	20.1	18.0	18.0	18.1	18.2	18.3	18.4	18.5	18.6
<b>Total Sources</b>	<b>331.3</b>	<b>387.2</b>	<b>442.9</b>	<b>482.0</b>	<b>525.9</b>	<b>607.9</b>	<b>629.1</b>	<b>639.7</b>	<b>646.1</b>	<b>645.8</b>
<b>Uses</b>										
Operations & Maintenance	189.1	192.4	192.4	198.2	204.2	210.3	216.6	223.1	229.8	236.7
Debt Service *	94.9	149.0	180.3	205.1	262.5	362.1	359.5	356.2	365.0	372.0
Capital - Revenue Funded	46.1	41.3	54.1	57.5	49.5	41.8	50.8	50.3	52.3	41.1
<b>Total Uses</b>	<b>330.1</b>	<b>382.7</b>	<b>426.8</b>	<b>460.9</b>	<b>516.2</b>	<b>614.2</b>	<b>626.9</b>	<b>629.5</b>	<b>647.1</b>	<b>649.8</b>
<b>Net Revenues</b>	<b>1.1</b>	<b>4.5</b>	<b>16.1</b>	<b>21.1</b>	<b>9.6</b>	<b>(6.3)</b>	<b>2.3</b>	<b>10.2</b>	<b>(1.0)</b>	<b>(4.0)</b>
<b>Ending Fund Balance</b>	<b>41.3</b>	<b>45.8</b>	<b>61.9</b>	<b>83.0</b>	<b>92.6</b>	<b>86.4</b>	<b>88.6</b>	<b>98.8</b>	<b>97.8</b>	<b>93.8</b>
<b>Revenue Requirement - Retail</b>	<b>15.0%</b>	<b>12.5%</b>	<b>12.5%</b>	<b>6.5%</b>	<b>10.0%</b>	<b>10.0%</b>	<b>10.0%</b>	<b>2.1%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Revenue Requirement - Wholesale</b>	<b>15.2%</b>	<b>10.2%</b>	<b>29.2%</b>	<b>5.3%</b>	<b>12.6%</b>	<b>20.4%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.7%</b>	<b>0.0%</b>
<b>Fund Balance as % of Revenue</b>	<b>12.5%</b>	<b>11.8%</b>	<b>14.0%</b>	<b>17.2%</b>	<b>17.6%</b>	<b>14.2%</b>	<b>14.1%</b>	<b>15.4%</b>	<b>15.1%</b>	<b>14.5%</b>
<b>Fund Balance as % of Expense</b>	<b>12.5%</b>	<b>12.0%</b>	<b>14.5%</b>	<b>18.0%</b>	<b>17.9%</b>	<b>14.1%</b>	<b>14.1%</b>	<b>15.7%</b>	<b>15.1%</b>	<b>14.4%</b>
<b>Fund Balance as % of Operating Expense</b>	<b>21.8%</b>	<b>23.8%</b>	<b>32.2%</b>	<b>41.9%</b>	<b>45.4%</b>	<b>41.1%</b>	<b>40.9%</b>	<b>44.3%</b>	<b>42.6%</b>	<b>39.6%</b>
<b>Debt Service Coverage (Indenture)</b>	<b>1.92</b>	<b>1.58</b>	<b>1.64</b>	<b>1.69</b>	<b>1.54</b>	<b>1.35</b>	<b>1.39</b>	<b>1.42</b>	<b>1.41</b>	<b>1.36</b>
<b>Debt Service Coverage (Current)</b>	<b>1.50</b>	<b>1.31</b>	<b>1.39</b>	<b>1.38</b>	<b>1.23</b>	<b>1.10</b>	<b>1.15</b>	<b>1.17</b>	<b>1.14</b>	<b>1.10</b>
<b>* Net of Federal Interest Subsidy</b>										

Chart W11. Water Enterprise Ten-Year Financial Plan Trend



As shown in Table W12 and Chart W11, the SFPUC has developed a Water Enterprise ten-year Financial Plan as required by City and County of San Francisco Charter Section 8B.123. The Plan includes a ten-year financial summary (FY 2010-11 through FY 2019-20) describing projected sources and uses, resulting fund balances and associated financial reserve ratios. Projected costs and revenues are estimates and subject to variations inherent in all such projections. Consequently, the estimates should not be viewed as precise predictions but rather as indications of expected trends, given certain expenditure, receipt, and financing assumptions. These assumptions are based on current Board policies, goals, and objectives representing management’s best estimates at this time.

## Rates and Charges

Approved average retail water rate changes will increase revenues from water sales by 15.0 percent, 12.5 percent, 12.5 percent and 6.5 percent from FY 2010-11 through FY 2013-14. Projected average annual retail water rate changes are 10.0 percent in FY 2014-15 through 2016-17 and then flatten to zero during the final three years of the 10-year forecast period. Wholesale water rates are managed through a 25-year Water Supply Agreement (WSA), with FY 2010-11 rates increasing 15.2 percent, peaking with a 29.2 percent increase in FY 2012-13 then trend to zero the final four years of the period. These rate changes are necessary to continue funding vital capital improvements largely comprised of the Water System Improvement Program (WSIP) along with providing additional resources to the annual Repair and Replacement program.

## Sources of Funds

The Water Enterprise provides water to its 2.4 million people in San Francisco, Santa Clara, Alameda and San Mateo counties. Water Enterprise customers are grouped into retail and wholesale service categories. The retail customer category is further divided into in-city and suburban customers. Customers within each sub-category are then

grouped into revenue classes based on their service characteristics. The wholesale customer category consists of only one revenue class – wholesale resale with long-term contract. Total sources are projected to grow from \$331.3 million in FY 2010-11 to \$645.8 million by FY 2019-20.

- Retail water sales are projected to increase from \$150.0 million in FY 2010-11, to \$287.0 million over the ten-year period. This increase assumes a 0.53 percent growth in annual consumption (i.e. historical population growth) most of which is offset with conservation and other water saving measures.
- Wholesale customers' water sales, representing about half of the Enterprise revenues and two-thirds of water deliveries, are forecast to increase revenues from \$160.1 million in FY 2010-11, to \$333.3 million over the period. This increase assumes a 0.83 percent annual growth in consumption (i.e. historical growth for the wholesale service area).
- Other income includes interest income on fund balances along with rents and other income. These revenues are assumed average approximately at \$25.0 million over the ten years and are mainly derived from interest earnings on fund balances, rents and permit fees for secondary uses of its watershed lands and pipeline rights-of-way.

## Uses of Funds

In the absence of more specific forecast data, the Plan includes a general 3.0 percent annual growth assumption for operations and maintenance costs and a 5.0 percent annual escalation in revenue-funded capital costs.

The annual operating budget includes operation and maintenance costs, debt service on revenue bonds used to finance capital improvements, and repair and replacement costs funded from current revenues. While operations and maintenance costs are currently the largest component of the Water Enterprise's expenses (65 percent), by FY 2019-20 their proportion to total expense will drop to 36 percent and debt service costs will be the largest (57.0 percent). Total expenditures are increasing from \$330.1 million to \$649.8 million by FY 2019-20.

- Operations and Maintenance costs include salaries and fringe benefits, material and supplies, power and energy, and services of the other City Departments including SFPUC Bureaus. The cost of operating the water system in FY 2010-11 is projected to be \$189.1 million; increasing to \$236.7 million by FY 2019-20. As projects in the WSIP are completed and placed into service, there could be additional operation and maintenance expenses associated with the new facilities. The operation and maintenance expense forecast shown in this report does not include any incremental costs associated with WSIP projects other than the 3.0 percent annual growth assumption. In addition, the forecast assumes there will be no changes in regulations or operating procedures that could impact operating expenses.
- Debt Service costs include principal and interest payments on revenue bonds used to finance system improvements. Future debt service cost projections assume the issuance of new debt to fund WSIP projects. The plan reflects debt service costs increasing from \$94.9 million in FY 2010-11 (net of Federal subsidy) to \$372.0 million by FY 2019-20. The bond issuance schedule is based on the September 2010 WSIP spending plan. However, the actual timing and size of bond sales may vary depending on construction timing.
- Revenue-Funded Capital Project spending is expected to average \$48.5 million annually over the next 10 years. Projects include minor construction projects, major maintenance and rehabilitation projects, planning studies, and preliminary engineering analysis for major capital improvements.

## *Debt Financing of Capital Needs*

The Plan largely assumes debt financing of capital needs over the next ten-year period. The WSIP will require approximately \$4.6 billion in total financing for the program, authorized by the voters under Propositions A and E in November 2002.

The Plan assumes a financing strategy that utilizes short-term financing via the existing Commercial Paper (CP) program to calibrate financing needs with project spending. Long-term (30-year) 5.0 percent fixed rate debt issuance is assumed to periodically refund the CP program. The CP program facilitates short-term financing typically at lower interest rates than longer term debt, which minimizes costs. The authorized CP program for the Water Enterprise is \$500.0 million. As of June 30, 2010, the Enterprise has no commercial paper notes outstanding but in August of 2010 the Enterprise sold \$25 million in taxable notes to fund WSIP projects. \$1.242 billion in bonds were issued in support of the WSIP during FY 2009-10, with an additional \$415.6 million issued in July of 2010. The SFPUC expects to issue approximately \$400 million in additional bonds each quarter during the next year to finance WSIP.

## Financial Ratios

It is the financial objective of the SFPUC to maintain a minimum revenue bond coverage ratio of 1.25 times on an indenture basis and 1.00 times on a current operations basis, which does not include fund balance. Over the ten-year period, the indenture coverage ranges from 1.92 to 1.35 times coverage. During those years with lower projected coverage, additional rate increases will be considered as necessary. On a current basis, the coverage ratio ranges from 1.50 to 1.10 times coverage, above the 1.00 minimum threshold.

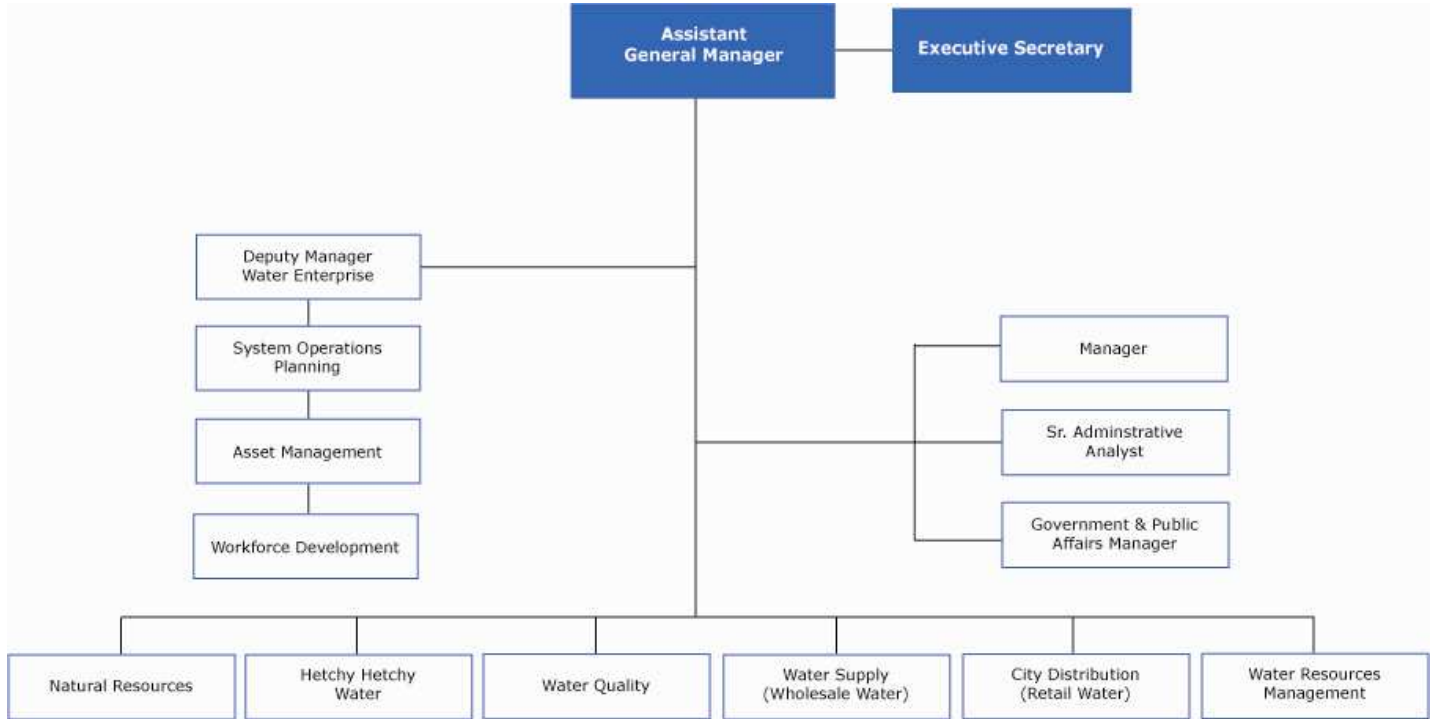
## Fund Balances and Reserves

As the Ten-Year Financial Plan indicates, the Water Enterprise ending fund balance will increase from \$40.1 million in FY 2010-11 to \$93.8 million in FY 2019-20. This growth is largely attributed to rate increases over the period in support of debt service coverage for new WSIP-related debt that will be issued over the next two years. As a proportion of operating expense, fund balance is increasing from approximately 22 percent (2.6 months of expense) in FY 2010-11 to 40 percent (4.8 months of expense) by FY 2019-20.



# Departmental Section

















## Water Enterprise Organization Chart



# FY 2010-11 Water Enterprise Objectives

The Chart W12 below shows the direct connection between the FY 2010-11 Water Enterprise objectives and performance measures, and the both the SFPUC Action Plan goals and the FY 2010-11 budget. The chart illustrates that the Enterprise objectives and performance measures as essential operations to achieve the SFPUC Action Plan goals. The chart also illustrates that the Enterprise budget provides for resources to support the achievement of performance measures and objectives.

Chart W12: Water Enterprise Objectives

Water Enterprise FY 2010-11  Objectives and Measures	Action Plan Goals				Water Enterprise Budget		
	Provide High Quality Services	Foster a Green City	Improve Communication	Invest in People	O&M	Local Capital	Regional Capital
<b>Deliver High Quality Drinking Water</b> and comply with CA Department of Public Health and CA Regional Water Quality Control Board permits							
<b>Maintain and Improve Customer Service</b> <ul style="list-style-type: none"> <li>&lt; 1.1/1,000 customer accounts of unplanned disruptions that are &gt; 4hrs</li> <li>&lt;1/1,000 customer accounts of unplanned disruptions in that are &gt; 12 hour</li> </ul>					 	 	
<b>Maintain infrastructure to keep water system in a state of good repair and operation</b> <ul style="list-style-type: none"> <li>replacement of 122,000 commercial and residential water meters in San Francisco,</li> <li>Replace 6 miles of water mains in San Francisco</li> <li>Calibrate 35 percent of wholesale water meter</li> <li>Exercise 33 percent of transmission line valves</li> </ul>					  	 	

## Divisions

The Water Enterprise is comprised of the following Divisions: Water Administration, City Distribution Division (CDD), Water Quality, Water Supply and Treatment, Natural Resources, and Water Resources.

Chart W13 and Table W13 show the breakdown on the uses of funds by Division.

Chart W13. FY 2010-11 Water Enterprise Uses of Funds by Division, \$324.2 Million

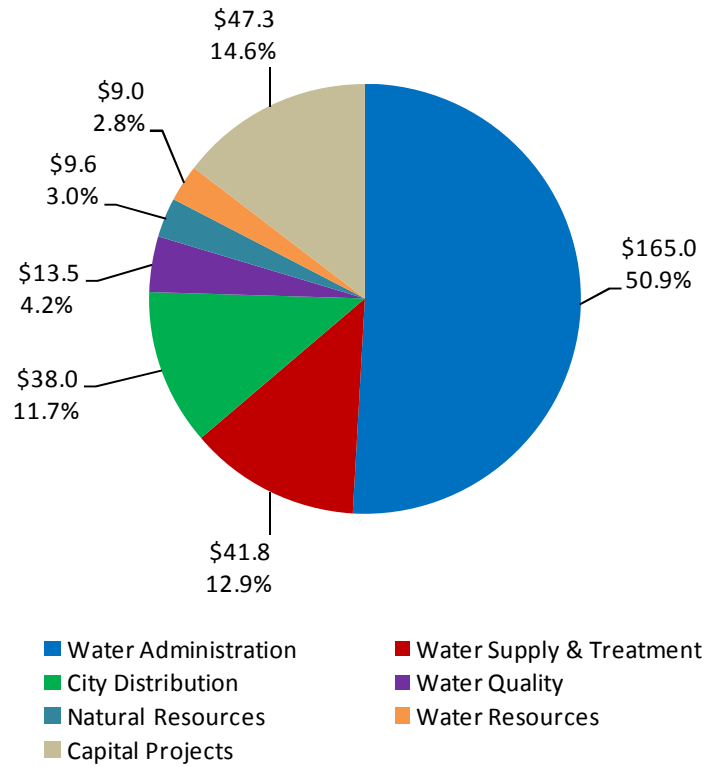


Table W13. Water Enterprise Uses of Funds by Division

Divisions	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Administration	121,065,269	122,965,381	123,044,131	165,008,234	42,042,853	34.2%
City Distribution	30,856,500	34,807,265	36,617,979	37,961,864	3,154,599	9.1%
Water Quality	12,083,488	13,715,904	14,935,517	13,522,707	(193,197)	-1.4%
Water Supply & Treatment	36,328,889	37,704,441	39,678,307	41,761,948	4,057,507	10.8%
Natural Resources	7,764,084	9,192,208	9,342,870	9,625,210	433,002	4.7%
Water Resources	3,615,714	6,523,029	6,411,544	8,952,740	2,429,711	37.2%
Operating Transfers Out*	200,000	500,000	214,000	-	(500,000)	-100.0%
Capital Projects	60,998,200	47,098,446	47,098,446	47,344,878	246,432	0.5%
<b>Water Total</b>	<b>272,912,144</b>	<b>272,506,674</b>	<b>277,342,794</b>	<b>324,177,581</b>	<b>51,670,907</b>	<b>19.0%</b>

### Water Administration

The Administrative Division provides administrative support to Enterprise operations. The budget consists of expenses associated with the administration of the Water Enterprise and other general expenses. Water Administration is primarily focused on the Office of the Assistant General Manager (AGM) for Water. The AGM's office contains the services of SFPU's support bureaus (i.e. Services of Other Departments), travel, training and memberships and other enterprise-wide expenses.

Administration also includes financial functions including preparation of the annual budgets, spending plans, tracking and monitoring of enterprise expenditures, report preparation and distribution, contract administration, accounts payable, and payroll.

Table W14 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual and the budget variance between FY 2009-10 and FY 2010-11.

### Budget Summary

Table W14. Water Administration Budget Summary

Departmental Units	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	994,679	1,263,428	1,094,074	1,466,107	202,679	16.04%
Overhead	2,569,102	-	-	-	-	-
Non-Personnel Services	3,098,288	2,365,499	3,684,190	2,329,253	(36,246)	-1.53%
Materials & Supplies	73,559	51,602	59,786	43,602	(8,000)	-15.5%
Equipment	0	68,211	68,211	0	(68,211)	-100.0%
Debt Service	70,128,183	70,210,654	70,210,654	116,368,523	46,157,869	65.7%
Services Of Other Departments	44,201,458	49,005,987	47,927,216	43,750,702	(5,255,285)	-10.7%
General Reserve	0	0	0	1,050,047	1,050,047	-
<b>Water Total</b>	<b>121,065,269</b>	<b>122,965,381</b>	<b>123,044,131</b>	<b>165,008,234</b>	<b>42,042,853</b>	<b>34.2%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** - Reflects cost increases in retirement and health service costs.
- **Materials and Supplies** - Reflects decrease in miscellaneous supplies budget based on projected spending levels.
- **Equipment** - Reflects decrease in miscellaneous supplies budget based on projected spending levels.

- **Debt Service** - Reflects the increase in principal and interest on outstanding Water Enterprise bonds.
- **Services of Other Departments** - The net change reflects the reallocation of the Power work order to City Distribution and Water Supply and Treatment Divisions.

*City Distribution Division (CDD)*

The City Distribution Division (CDD) distributes high quality treated water to San Francisco customers. On average, approximately 80 million gallons of water a day to nearly 0.8 million people in San Francisco are delivered. CDD maintains the water distribution system within the City, which consists of 13 reservoirs, 20 pumping stations, a network of approximately 1,300 miles of pipeline and 12,000 water valves.

Table W15 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual and the budget variance between FY 2009-10 and FY 2010-11.

Budget Summary

Table W15. City Distribution Division (CDD) Budget Summary

Departmental Units	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	24,107,929	27,556,286	26,486,442	27,806,807	250,521	0.9%
Non-Personnel Services	2,660,033	3,397,103	4,741,202	3,388,827	(8,276)	-0.2%
Materials & Supplies	2,489,010	2,515,227	2,477,285	2,515,227	0	0.0%
Equipment	724,399	708,590	2,210,061	1,077,781	369,191	52.1%
Services Of Other Departments	875,129	630,059	702,989	3,173,222	2,543,163	403.6%
<b>Water Total</b>	<b>30,856,500</b>	<b>34,807,265</b>	<b>36,617,979</b>	<b>37,961,864</b>	<b>3,154,599</b>	<b>9.1%</b>

Reasons for Changes, FY 2009-10 to FY 2010-11

- **Equipment** - The change reflects the first year of a two-year vehicle replacement program.
- **Services of Other Departments** - The change reflects the reallocation of a portion of the Power work order from the Administration Division.

## Water Quality Division (WQD)

The mission of the Water Quality Division (WQD) is to ensure that the SFPUC complies with all current and future water quality regulations and customer expectations through: sample collection; field and laboratory analyses; process engineering; applied research; inspections; quality control/assurance programs; regulatory liaison and reporting; and on-site support to source/treatment/distribution operations. In addition, the WQD's mission includes analysis of discharges (into the sewer system, Bay and Ocean) and treatment performance samples, assessing environmental impacts, recommending/overseeing any necessary mitigation, and responding to and resolving customer inquiries about the quality of drinking and receiving waters.

Table W16 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actuals and FY 2009-10 pre-audit actuals and the budget variances between FY 2009-10 and FY 2010-11.

### Budget Summary

Table W16. Water Quality Division (WQD) Budget Summary

Departmental Units	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	9,615,295	9,731,675	9,611,675	9,830,624	98,949	1.0%
Non-Personnel Services	1,474,723	3,130,915	4,427,218	2,405,840	(725,075)	-23.2%
Materials & Supplies	761,015	778,001	822,227	833,324	55,323	7.1%
Equipment	219,782	72,737	66,993	452,825	380,088	522.6%
Services Of Other Departments	12,673	2,576	7,404	94	(2,482)	-96.4%
<b>Water Total</b>	<b>12,083,488</b>	<b>13,715,904</b>	<b>14,935,517</b>	<b>13,522,707</b>	<b>(193,197)</b>	<b>-1.4%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Non-Personnel Services** – Reflects the elimination of a one-time funding to replace the Laboratory Information Management System (LIMS) to support laboratories services.
- **Equipment** - The change reflects the first year of a two-year vehicle replacement program.
- **Services of Other Departments** - Reflects a decrease in work orders based on projected spending levels.

## Water Supply & Treatment Division (WS&T)

The Water Supply & Treatment Division manages the SFPUC's Regional Water System and delivers high-quality water to residents in the City and County of San Francisco as well as to wholesale customers in Santa Clara, Alameda, and San Mateo counties with supplies derived from watersheds in Yosemite National Park (Hetch Hetchy), Alameda County, and the Peninsula. WSTD operates and maintains three major water treatment plants, 260 miles of pipelines and associated rights-of-way, and five Bay Area reservoirs.

Table W17 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual and the budget variance between FY 2009-10 and FY 2010-11.

### Budget Summary

Table W17. Water Supply and Treatment Division Budget Summary

Departmental Units	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	24,449,431	25,563,891	25,555,891	25,438,622	(125,269)	-0.5%
Non-Personnel Services	3,046,467	3,415,678	3,591,498	3,316,319	(99,359)	-2.9%
Materials & Supplies	7,838,298	7,752,202	8,785,557	8,046,474	294,272	3.8%
Equipment	776,524	713,670	1,564,399	467,625	(246,045)	-34.5%
Services Of Other Departments	218,169	259,000	180,962	4,492,908	4,233,908	1634.7%
<b>Water Total</b>	<b>36,328,889</b>	<b>37,704,441</b>	<b>39,678,307</b>	<b>41,761,948</b>	<b>4,057,507</b>	<b>10.8%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Equipment** - Reflects a reduction in equipment to fund other objects of expenditure within the Division.
- **Services of Other Departments** - The change reflects a portion of the Power work order from the Administration Division.

## Natural Resources Division

The Natural Resources Division is responsible for monitoring, protecting and restoring those lands and ecological resources under the management of the SFPUC. Natural Resources is responsible for management of the significant resources within the Tuolumne River, Alameda Creek and Peninsula watersheds, and also reflects the high priority the SFPUC gives to its role as the steward of these natural resources for current and future generations.

Table W18 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual and the budget variance between FY 2009-10 and FY 2010-11.

### Budget Summary

Table W18. Natural Resources Division Budget Summary

Departmental Units	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	6,089,596	7,128,798	6,401,737	7,498,010	369,212	5.2%
Non-Personnel Services	1,024,328	1,332,553	2,030,727	1,316,606	(15,947)	-1.2%
Materials & Supplies	390,426	418,348	425,302	402,460	(15,888)	-3.8%
Equipment	111,306	127,855	270,020	223,869	96,014	75.1%
Services Of Other Departments	148,428	184,654	215,084	184,265	(389)	-0.2%
<b>Water Total</b>	<b>7,764,084</b>	<b>9,192,208</b>	<b>9,342,870</b>	<b>9,625,210</b>	<b>433,002</b>	<b>4.7%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Equipment** - Reflects increases to fund FY 2010-11 equipment needs.



## Water Resources Division

The Water Resources Division conducts water supply planning studies to identify new water supplies from groundwater, recycled water, conservation, desalination, groundwater dewatering and wetlands. Additionally, services include development of master plans for water supplies for implementation on a local and regional level. The Water Resources Division coordinates with bureaus and divisions within the SFPUC, other City departments, Bay Area Water Supply and Conservation Agency (BAWSCA), and SFPUC member agencies in the development of these water supply planning studies and projects.

Table W19 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual and the budget variance between FY 2009-10 and FY 2010-11.

### Budget Summary

Table W19. Water Resources Division Budget Summary

Departmental Units	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	1,900,516	2,764,449	2,764,449	3,334,285	569,836	20.6%
Non-Personnel Services	1,367,880	3,477,629	3,316,143	5,202,629	1,725,000	49.6%
Materials & Supplies	189,168	116,951	127,252	156,951	40,000	34.2%
Equipment	0	0	25,000	24,875	24,875	-
Services Of Other Departments	158,150	164,000	178,700	234,000	70,000	42.7%
<b>Water Total</b>	<b>3,615,714</b>	<b>6,523,029</b>	<b>6,411,544</b>	<b>8,952,740</b>	<b>2,429,711</b>	<b>37.2%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** – Reflects two new positions and four position reassignments from the Bureaus to support the Water Conservation program.
- **Non-Personnel Services** – Reflects an increase in the rebate program related to the Water Conservation Program.
- **Materials and Supplies** - Reflects an increase in miscellaneous supplies budget based on projected spending levels.
- **Services of Other Departments** – Reflects an increase in work orders based on projected spending levels.



## WASTEWATER ENTERPRISE

### Mission, Roles, and Responsibilities

Wastewater Enterprise is committed to its mission of safely and cost-effectively managing San Francisco's sewage, stormwater, and biosolids to protect public health and the environment.

The primary responsibility of the Wastewater Enterprise is to protect the public health and the surrounding bay and ocean receiving waters by collecting and treating storm and sanitary flows generated in the service area. This includes 993 miles of combined storm and sanitary collection system pipes, sewer mains, transport/storage boxes, other storage structures and tunnels. San Francisco is the only coastal city in California with a combined sewer system that collects both wastewater and stormwater in the same network of pipes and provides treatment to remove harmful pollutants before discharge into the San Francisco Bay and Pacific Ocean.

Wastewater implements a Water Pollution Prevention Program that works to keep pollutants from entering the City's sewer system and street storm drains. The program includes an industrial/commercial Pretreatment Program, which monitors individual businesses that have been issued permits to discharge wastewater into the City's sewer system, as well as outreach, education and best management practices program for residents, business and governments.

The Water Pollution Control Division operates and maintains the City's four water pollution control plants, 27 sewage pump stations in San Francisco and 29 on Treasure Island; 6 stormwater pump stations; 993 miles of combined sewer, storage and tunnels, 36 combined sewage discharge outfalls, 50 stormwater outfalls on Treasure and Yerba Buena Islands and four effluent outfalls.

A major focus of the Wastewater Enterprise is the development of the Sewer System Improvement Program (SSIP), a long-term capital plan that provides strategies and policies for the future. The City's last sewer system master plan was developed in 1974 to upgrade the system to meet regulatory requirements which occurred between 1977 and 1997.

Today, San Francisco's sewer system is well operated, but aging infrastructure, funding constraints, deferred maintenance, and a vision for a more sustainable system highlight the need for the significant planned Capital Improvement Program, including a comprehensive sewer system improvement program.

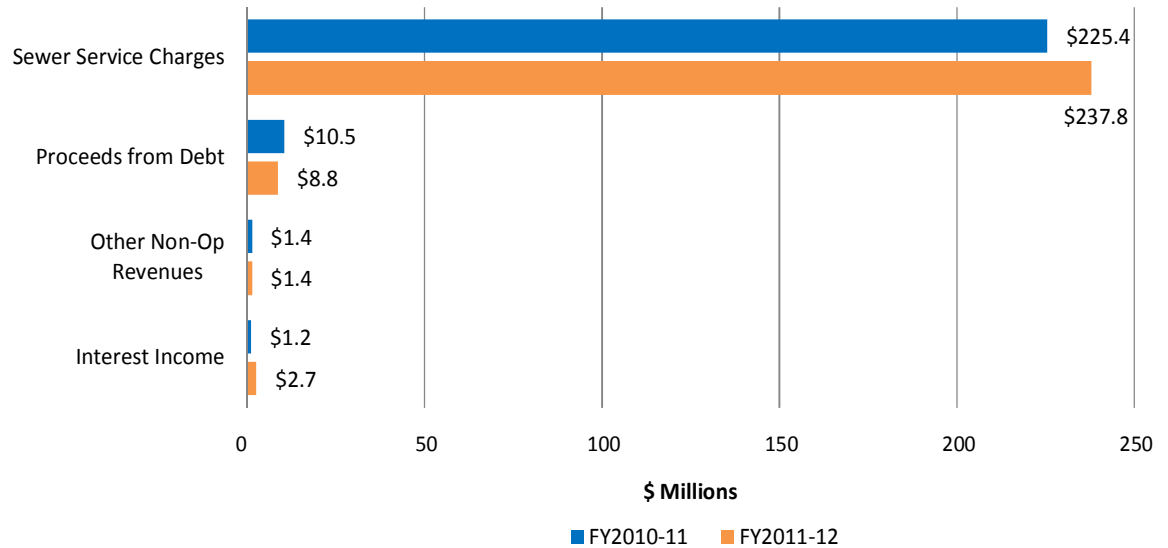
The San Francisco Sewer System Improvement Program is Commission-endorsed goals are to:

- Provide a compliant, reliable, resilient, and flexible system that can respond to catastrophic events;
- Minimize flooding;
- Provide benefits to impacted communities;
- Modify the system to adapt to climate change; and
- Achieve economic and environmental sustainability.

# Budget Summary

## Sources of Funds

Chart C1. FY 2010-11 and FY 2011-12 Wastewater Enterprise Sources of Funds, \$238.5 Million and \$250.7 Million



### Summary

Estimated revenues for FY 2010-11 from Sewer Service Charges, Other Non-Operating Revenues, and Interest Income are projected at \$238.5 million, \$9.2 million, or 4 percent, more than the prior year. The net increase from FY 2009-10 revenues is due to the addition of \$10.5 million for Proceeds from Debt and a reduction of \$1.3 million for Sewer Service Charges, Other Non-Operating revenue and Interest Income. Estimated revenues for FY 2011-12 are projected at \$250.7 million. The \$12.2 million increase includes \$12.4 million for Sewer Service Charges and \$1.5 million from Interest Income and is offset by a \$1.7 million reduction in Proceeds from Debt. Chart C1 shows a breakdown of the FY 2010-11 and FY 2011-12 Sources of Funds by revenue category; and Table C1 shows the FY 2009-10 FY 2010-11 and FY 2011-12 budgets, FY 2008-09 actuals and FY 2009-10 pre-audit actuals, and budget variances between FY 2010-11 and FY 2009-10, and budget variances between FY 2011-12 and FY 2010-11.

### Sewer Service Charges

Sewer Service Charges are budgeted at \$225.4 million based on FY 2010-11 and \$237.8 for FY 2011-12 for sewer service rates were adopted by the SFPUC Commission in May 2009, including rates for single-family and multiple-family residential and non-residential customers. The \$0.6 million decrease from prior year assumes lower water consumption primarily due to water conservation, economic recession and wet-weather. FY 2011-12 shows an increase consistent with the approved rates. See the Wastewater Enterprise Approved Rates Section for more detail.

### Proceeds from Debt

Proceeds from Debt totals \$10.5 million in FY 2010-11 and include \$7.5 million for purchase of property related to Wastewater’s Capital Improvement Program and \$3.0 million of Federal debt service interest subsidy. In FY 2011-12 the amount drops to \$8.8 million due to a reduction in purchase of property.

### Other Non-Operating Revenues

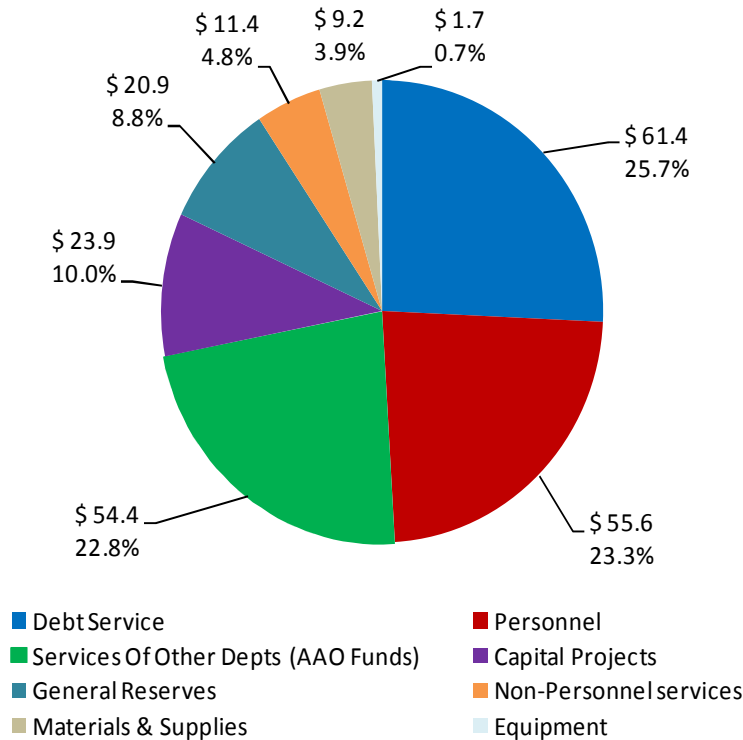
Non-Operating Revenues for both FY 2010-11 and FY 2011-12 total \$1.4 million and includes the following: \$0.4 million from property rental, \$0.8 million from utilities from Treasure Island (TI) tenants from sewer services and \$0.2 million from miscellaneous services provided to other City departments. The \$0.3 million decrease from FY 2009-10 is primarily due to the elimination of miscellaneous revenues.

### Interest Income

Revenue from Interest Income for FY 2010-11 totals \$1.2 million and is based on interest rates on the County Investment Pool. Due to continued low interest rates and lower projected cash balance, revenues are projected to be \$0.4 million less than the \$1.6 million budgeted in the prior year. In FY 2011-12 the interest income is projected to be \$2.7 million reflecting an increase in the sewer service charges.

## USES OF FUNDS

Chart C2. FY 2010-11 Wastewater Enterprise Uses of Funds, \$238.5 Million



### Summary

The FY 2010-11 Uses of Funds include \$61.4 million for Debt Service, \$55.6 million for Personnel, \$54.4 million for Services of Other Departments, \$23.9 million for Capital Projects, \$20.9 million for General Reserve, and \$22.3 million for Non-Personnel Services, Materials and Supplies, and Equipment. The net increase from the FY 2009-10 budget totals \$9.2 million and reflects an \$8.6 million increase for General Reserves, a \$4.6 million increase in Services of Other City Departments, a \$1.4 million increase in capital and operating costs, and a \$5.4 million reduction in Debt Service. Chart C2 shows a breakdown of the FY 2010-11 Uses of Funds by expenditure category; and Table C1 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actuals and FY 2009-10 pre-audit actuals, and the budget variance between FY 2010-11 and FY 2009-10.

### *Debt Service*

Debt Service is budgeted at \$61.4 million and is based on principal and interest payments on revenue bonds and State Revolving Fund loans used to finance the Wastewater Capital Program. The reduction of \$5.4 million reflects lower interest and principal FY 2010-11 payment as planned.

### *Personnel*

Personnel is budgeted at \$55.6 million and includes \$39.6 million for salaries and \$16.0 million for fringe benefits. Salaries are budgeted at \$39.6 million and are based on various labor agreements. The net decrease of \$1.5 million from the FY 2009-10 budget results from "labor givebacks" and other salaries adjustments in accordance with the various labor agreements.

Mandatory fringe benefits are budgeted at \$16.0 million, with some costs determined by salary expense as with pension and social security and others determined by headcount as with health care costs. The net increase of \$1.8 million from the FY 2009-10 budget reflects adjustments to salaries, retirement and health benefit rates.

### *Services of Other Departments*

Services of Other Departments are budgeted at \$54.4 million and are based on the projected costs of services provided by other City departments to the Wastewater Enterprise. The \$4.6 million increase from the prior year budget reflects an increase in services provided by SFPUC Bureaus and Department of Public Works for sewer repair services.

### *Capital Projects*

Capital Project spending is budgeted at \$23.9 million and is based on the SFPUC's Ten-Year Capital Plan, which is part of the City and County of San Francisco's Ten-Year Capital Plan approved by the Board of Supervisors annually. The approved Ten-Year Capital Plan is discussed in the Wastewater Enterprise Ten-Year Capital Plan Section. Wastewater's FY 2010-11 capital project budget is \$0.4 million less than approved for FY 2009-10. In March 2010, a supplemental appropriation in the amount of \$135.2 million was approved for the Wastewater Enterprise. This supplemental appropriation, along with the FY 2010-11 budget, provided funding for capital projects in FY 2010-11 and FY 2011-12 of the 10-Year Capital Plan.

### *General Reserve*

The General Reserve is budgeted at \$20.9 million and is based on budget sources and uses of funds and is budgeted only when revenues exceed budgeted expenses. The \$8.6 million increase from the FY 2009-10 budget reflects an increase in the sources of funds available to the Enterprise compared to the prior year.

### *Non-Personnel Services*

Non-Personnel Services are budgeted at \$11.4 million and based on projected spending levels for various services provided to the Enterprise. The increase of \$0.5 million from the FY 2009-10 budget supports increases for biosolids hauling and disposal services.

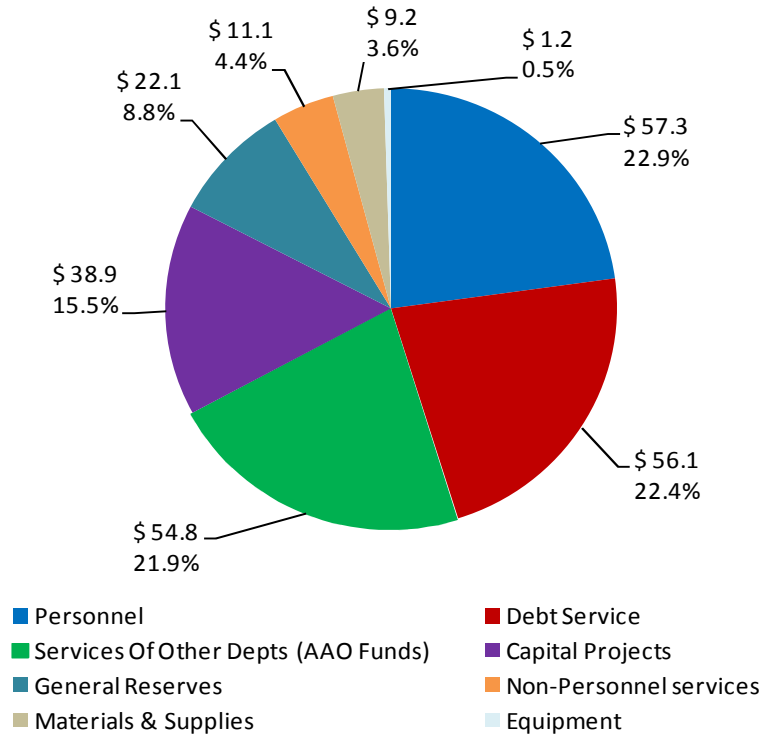
### *Materials and Supplies*

Materials and Supplies are budgeted at \$9.2 million and based on projected costs and usage for materials and supplies. The increase of \$0.3 million from the FY 2009-10 budget reflects increased cost for chemical treatment supplies.

## Equipment

Equipment is budgeted at \$1.7 million and based on equipment required to maintain and support the Enterprise's facilities and activities. The increase of \$0.7 million from the FY 2009-10 budget supports equipment related to sewer condition assessment.

Chart C3. FY 2011-12 Wastewater Enterprise Uses of Funds, \$250.7 Million



The FY 2011-12 uses of funds include \$56.1 million for Debt Service, \$57.3 million for Personnel, \$54.8 million for Services of Other Departments, \$38.9 million for Capital Projects, \$22.1 million for General Reserve, and \$21.5 million for Non-Personnel Services, Materials and Supplies, and Equipment. Increases from the FY 2010-11 budget are found in the Capital Projects at \$15.1 million, Personnel at \$1.7 million, the General Reserve at \$1.2 million, and Services of Other Departments at \$0.4 million. This is offset by decreases in Debts Service \$5.3 million and Non-Personnel Services, Materials and Supplies and Equipment at \$0.8 million. The net increase from the FY 2010-11 budget totals \$12.2 million. Chart C3 shows a breakdown of the FY 211-12 Uses of Funds by expenditure category; and Table C1 shows the budget variance between FY 2011-12 and FY 2010-11.

Table C1. Wastewater Enterprise Sources and Uses of Funds

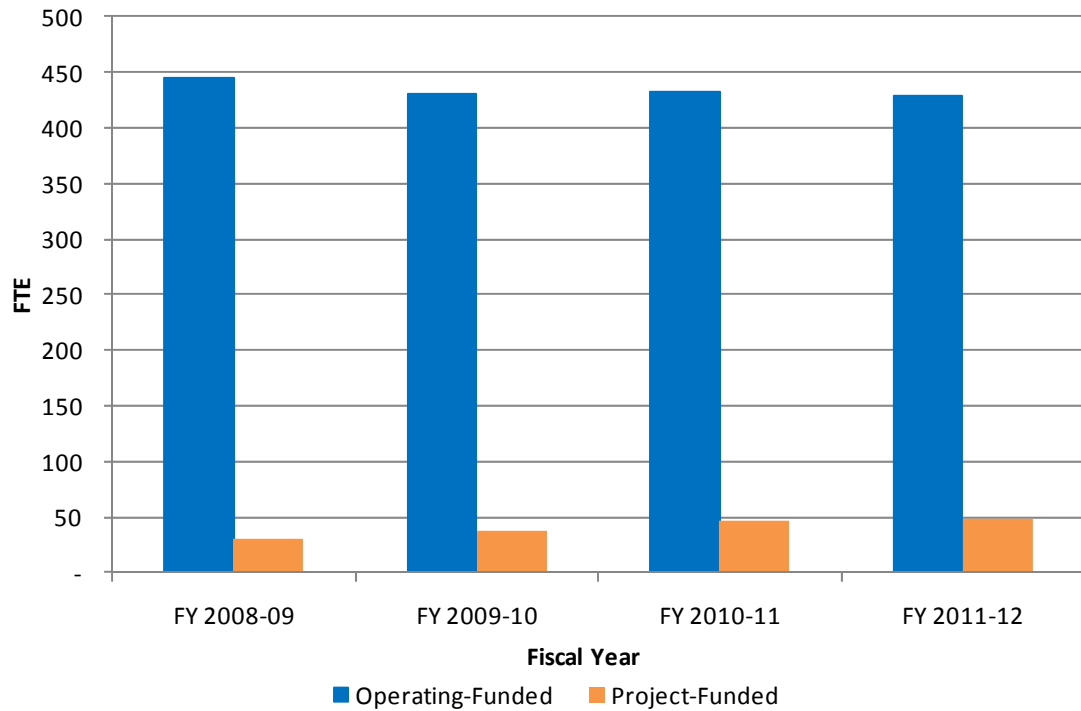
\$ Million						FY 2010-11 vs. FY 2009-10		FY 2011-12 vs. FY 2010-11	
	FY 2008-09	FY 2009-10	FY 2009-10	FY 2010-11	FY 2011-12	Adopted Budget		Adopted Budget	
	Actual	Adopted Budget	Pre-Audit Actual	Adopted Budget	Adopted Budget	Amount	%	Amount	%
<b>SOURCES OF FUNDS</b>									
Sewer Service Charges	203.3	226.0	207.6	225.4	237.8	(0.6)	-0.3%	12.4	5.5%
Fund Balance	4.5	-	10.5	-	-	-	0.0%	-	0.0%
Other Non-Op Revenues	2.4	1.7	2.0	1.4	1.4	(0.3)	-19.0%	-	0.0%
Proceeds from Debt	23.8	-	-	10.5	8.8	10.5	100.0%	(1.7)	-16.4%
Interest Income	0.7	1.6	1.0	1.2	2.7	(0.4)	-23.5%	1.5	121.6%
<b>Total Sources of Funds</b>	<b>234.7</b>	<b>229.3</b>	<b>221.1</b>	<b>238.5</b>	<b>250.7</b>	<b>9.2</b>	<b>4.0%</b>	<b>12.2</b>	<b>5.1%</b>
<b>USES OF FUNDS</b>									
Personnel	51.0	55.3	54.4	55.6	57.3	0.3	0.6%	1.7	3.0%
Overhead	2.3	-	-	-	-	-	0.0%	-	0.0%
Non-Personnel Services	12.0	10.9	12.6	11.4	11.1	0.5	4.2%	(0.3)	-2.4%
Materials & Supplies	8.8	8.9	9.4	9.2	9.2	0.3	3.9%	(0.0)	-0.3%
Equipment	0.7	1.0	2.8	1.7	1.2	0.7	68.9%	(0.5)	-28.5%
Debt Service	66.8	66.8	66.8	61.4	56.1	(5.4)	-8.2%	(5.3)	-8.6%
Services Of Other Depts	48.5	49.8	50.8	54.4	54.8	4.6	9.3%	0.4	0.8%
General Reserves	-	12.3	-	20.9	22.1	8.6	69.3%	1.2	5.7%
Capital Projects	44.6	24.3	24.3	23.9	38.9	(0.4)	-1.7%	15.1	63.1%
<b>Total Uses of Funds</b>	<b>234.7</b>	<b>229.3</b>	<b>221.1</b>	<b>238.5</b>	<b>250.7</b>	<b>9.2</b>	<b>4.0%</b>	<b>12.2</b>	<b>5.1%</b>

## Authorized and Funded Full-Time Equivalents (FTE)

Table C2. Wastewater Enterprise Authorized and Funded Full-Time Equivalents (FTE)

	FY 2008-09	FY 2009-10	FY 2010-11	FY 2010-11 vs.	FY 2011-12	FY 2011-12 vs.
	Adopted Budget	Adopted Budget	Adopted Budget	FY 2009-10	Adopted Budget	FY 2010-11
Permanent Positions	441.94	423.93	426.01	2.08	422.48	(3.53)
Temporary Positions	3.40	6.65	7.30	0.65	7.30	-
<b>Subtotal Operating Budget-Funded</b>	<b>445.34</b>	<b>430.58</b>	<b>433.31</b>	<b>2.73</b>	<b>429.78</b>	<b>(3.53)</b>
Project-Funded Positions	30.50	37.58	46.20	8.62	49.27	3.07
<b>Total Positions</b>	<b>475.84</b>	<b>468.16</b>	<b>479.51</b>	<b>11.35</b>	<b>479.05</b>	<b>(0.46)</b>

Chart C4. Wastewater Enterprise Operating and Project FTE Trend



As noted in Table C2 above, the total full-time (FTE) operating budget, capital project funded, and temporary positions (including attrition savings for an expected position vacancy rate during the fiscal year) for FY 2010-11 is 479.51 FTEs, an increase of 11.35 FTEs from FY 2009-10. The net change reflects an increase of 10 new off-budget positions (funded at nine months) to support the sewer condition assessment and the Light Emitting Diode (LED) program, the reassignment of one position from Chief Administrative Office Administration, Facilities Maintenance, the annualization of partially funded FY 2009-10 operating and project-funded positions, and adjustments to attrition savings. The FTE increase in FY 2011-12 is minor for both operating and project funded positions, reflecting a flat program from FY 2010 through 2012. Chart C4 shows the operating and project positions four-year trend.



# Approved Rates

## Rates and Charges

### *San Francisco City Charter Requirements*

In addition to Federal and State guidelines, the City Charter (Sections 8B.125) establishes a number of goals and objectives for the setting of retail sewer rates. A summary of the major goals and objectives appears below:

- Provide sufficient revenues for the operation, maintenance and repair of the Enterprise consistent with good utility practice;
- Provide sufficient revenues to improve or maintain financial condition and bond ratings at or above levels equivalent to highly-rated utilities of each enterprise;
- Meet requirements and covenants under all bond indentures;
- Set rates based on cost of service;
- Investigate and develop capacity fees for new development;
- Investigate and develop rate-based conservation incentives; and
- Investigate and develop affordability programs for low-income customers.

### *Rate Objectives*

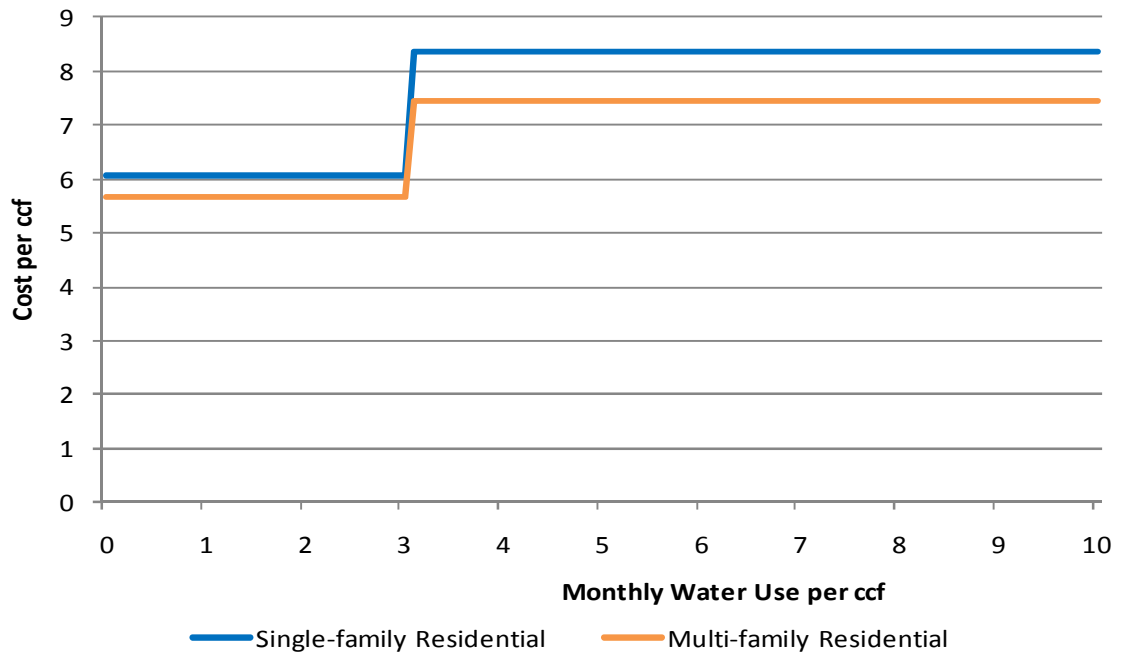
Sewer rates generate revenue from individual customers to meet the cost of serving each customer class. The SFPUC has identified a series of objectives to be reflected in its rate structure. Those objectives include:

- **Conservation.** The residential rate structure should encourage customers to conserve water and to use water and sewer services in a responsible manner that promotes environmental stewardship.
- **Simplicity.** The residential rate structure should be easy to communicate to customers, and customers should be able to use their knowledge of the rate structure to reliably predict the amount of their water and sewer bill.
- **Stability.** The residential rate structure should provide a reliable revenue stream to the Wastewater Enterprise, and a small change in residential use patterns should not lead to large changes in revenues.
- **Fairness.** The residential rate structure should ensure that all customers pay their fair share of costs. Cost of service serves as a basis for evaluating the equity.

### Residential Rate Structure

Single-family residential customers and multi-family Wastewater customers are separated into separate classes, allowing rates to be designed to reflect the particular usage characteristic of each group of residential customers. Single-family residential customers have a smaller percentage of their total usage in the first tier compared to multiple-family customers (47 percent vs. 63 percent). Separate classes ensure each customer group pays their fair share of costs. Chart C5 shows the cost for single-family residential and multi-family residential.

Chart C5. Wastewater Enterprise Two-Tier Residential Rate Structure



### Non-Residential Rate Structure

Non-residential customers pay rates based on the unit costs of volume, oil and grease (O/G), total suspended solids (TSS), and chemical oxygen demand (COD). The later three components are means of measuring the pollutant loading of a customer's discharge. Pollutant loadings are identified through individual sampling of significant dischargers or based on a standard strength for dischargers engaged in the same or similar business activity.

Table C3 shows unit costs for the approved rates through FY 2013-14 as well as an illustrative rate based on domestic strength sewage.

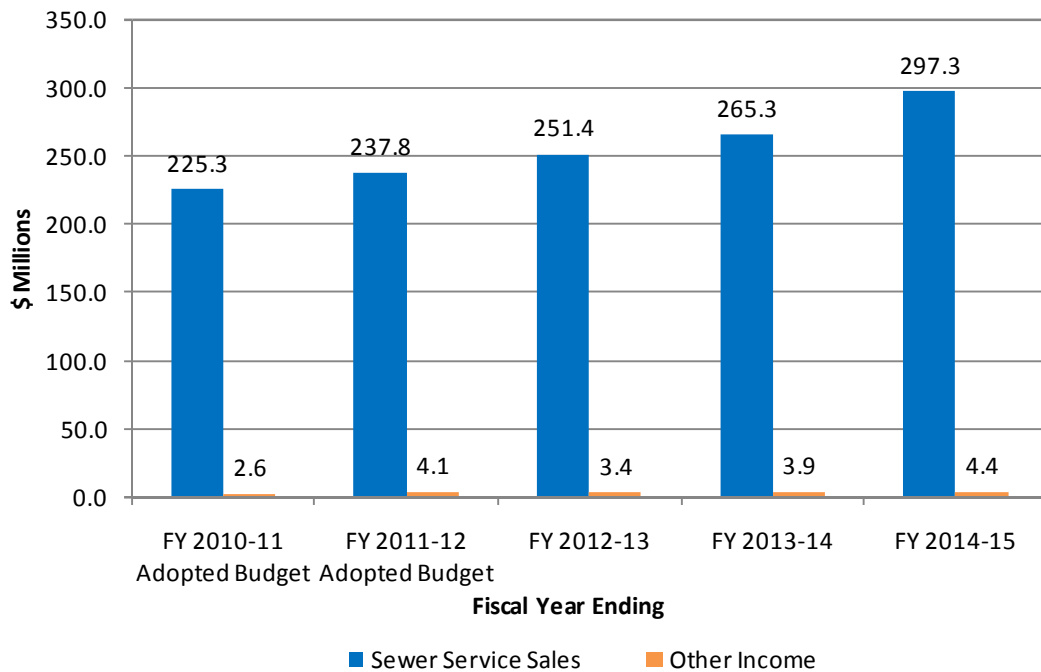
Table C3. Summary of Approved Wastewater Rates

	Previous	Approved Rates			
	Rate - FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
<b>Single-Family Residential</b>					
First 3 Ccf/Mo	\$6.05	\$6.91	\$7.18	\$7.52	\$7.90
Next 2 Ccf/Mo					
All Additional	\$8.35	\$9.21	\$9.55	\$10.03	\$10.53
<b>Multiple-Family Residential</b>					
First 3 Ccf/DU/Mo	\$5.66	\$6.51	\$7.49	\$7.86	\$8.25
Next 2 Ccf/Mo					
All Additional	\$7.45	\$8.88	\$9.99	\$10.49	\$11.01
<b>Non-Residential</b>					
Volume per CCF	\$6.55	\$6.55	\$6.55	\$6.55	\$6.62
COD per lb.	\$0.22	\$0.22	\$0.22	\$0.22	\$0.22
SS per lb.	\$0.88	\$0.88	\$0.88	\$0.88	\$0.89
O/G per lb.	\$1.10	\$1.10	\$1.10	\$1.10	\$1.11
Normal Strength	\$9.60/Ccf	\$9.60/Ccf	\$9.60/Ccf	\$9.60/Ccf	\$9.70/Ccf

## Revenue Sources

As an Enterprise department, the Wastewater Enterprise is required to generate sufficient revenues to fund its annual budget and to comply with the conditions of Federal grants, State loans, and bond covenants. The Enterprise derives its revenues from sewer service charges, interest income, and other non-operating income. Sewer service charges produce the vast majority of total revenues received. The following paragraphs describe revenues in greater detail.

Chart C6. Wastewater Enterprise Revenues by Source



### Sewer Service Charges

Prior to 1977, the City funded sewer service costs principally from property taxes supplemented by a flat fee per connection. Since 1977, the sewer service charge has been the Wastewater Enterprise's primary source of revenue to fund operations. As a recipient of Federal and State grants and a borrower under the State Revolving Fund loan program as well as Proposition 218, the City is required to adopt sewer service charges based on each customer class's proportional use of the sewerage system and to establish a dedicated source of revenues to pay for operating the system. Total sewer service sales for FY 2010-11 are budgeted at \$225.3 million, \$18.2 million above prior year actuals. FY 2011-12 are projected to increase to \$237.8 million primarily due to an already adopted rate increase effective July 1, 2011. Chart C6 shows budgeted revenues by category.

### Residential

The sewer service charge applicable to residential service is an inclining block rate structure. The first block is applied to the first three units of monthly discharge per dwelling unit. All remaining units are billed at a higher rate. For multiple-family residential accounts, the billable use in each block is calculated by multiplying the allowed use by the number of dwelling units. An account with ten dwelling units, for example, would be allowed 30 discharge units in the first block. If the customer is billed on a bi-monthly basis, the use allowed in each block is doubled. There is no adjustment for vacant units in multi-family dwellings.

### *Non-Residential*

For non-residential customers, the sewer service charge is calculated based on the volume wastewater discharged and the pounds of pollutants contained in that discharge. The charges for customers with sampled discharges are billed on the basis of their specific waste characteristics. Other customers are billed on the basis of the standard waste characteristics for their respective business activity. A customer or business activity which discharges high strength wastes is charged a higher rate than a customer or business activity which discharges wastes similar to residential customers. In addition to the costs shared with residential customers, all non-residential customers are responsible for the costs of the Wastewater Enterprise's pretreatment program. The pretreatment program monitors customers with high strength wastes to ensure prohibited substances are not discharged to the sewerage system. Residential customers do not bear any cost responsibility for the pretreatment program.

### *Interest Income*

The Wastewater Enterprise earns interest income from the investment of available funds primarily by the City Treasurer and fiscal agents for debt bond proceeds. The interest income earned from the investment of non-restricted funds is included in the operating budget. Interest income earned from the investment of monies in restricted funds such as bond funds may only be used for the purpose of the fund and are not available to meet day-to-day operating expenses. Based on the current yield on investments made by the City Treasurer and projected cash balances, it is anticipated that investment income earned by unrestricted funds in FY 2010-11 will be \$1.2 million and in FY 2011-12 will be \$ 2.7 million.

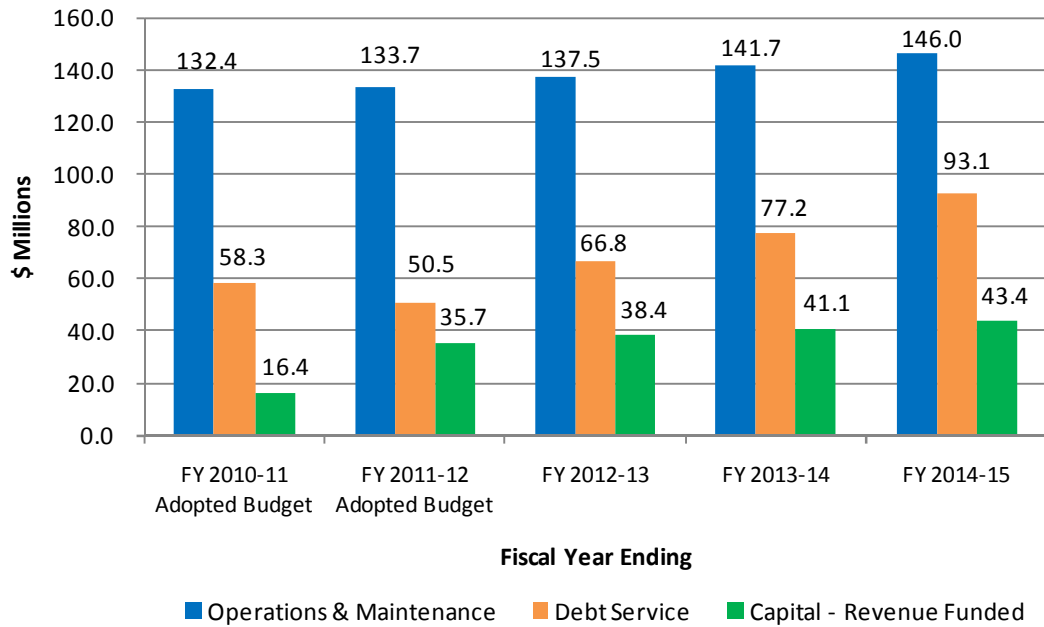
### *Non-Operating Revenues*

Non-Operating Revenues total \$1.4 million and includes the following: \$0.4 million from property rental, \$0.8 million from utilities from Treasure Island (TI) tenants for sewer services and \$0.2 from miscellaneous services provided to other City departments.

## Summary of Projected Expenses

Chart C7 shows projected operating expenses from FY 2010-11 to FY 2014-15. Operations and maintenance expenses are projected to remain flat through FY 2012-13 with subsequent years' forecast to increase at an annual rate of three percent.

Chart C7. Wastewater Enterprise Projected Operating Expenses



## Revenue-Funded Capital

A 1986 Board of Supervisors resolution set the minimum repair and replacement (R&R) expenditure at \$5.0 million and requires the expenditure to increase at least five percent annually until the amount of the annual contribution reaches \$20.0 million. The total capital project contribution in FY 2010-11 is \$23.9 million, with \$7.5 million of this amount funded by bond proceeds resulting in a net \$16.4 million revenue-funded R&R program. Additional R&R capital project spending of approximately \$30.0 million per year is included in the 10-Year Capital Plan to accelerate the replacement of aging sewers. A multi-year bond-funded supplemental of \$348.0 million was also approved by the Board of Supervisors in April, 2010.

## Debt Service and Lease Payments

Debt service includes principal and interest payments on revenue bonds and State Revolving Fund loans used to finance system improvements, as well as lease payments due for the Wastewater Enterprise's share of the 525 Golden Gate Headquarters building Certificates of Participation (COPs). In addition to increases in the debt service payments on existing debt, the Wastewater Enterprise has developed a \$150.0 million commercial paper program to fund the Interim Capital Improvement Program (Interim CIP) projects to address flooding and odor control problems. During FY 2009-10, the Wastewater Enterprise had as much as \$137.5 million outstanding in commercial paper notes. However, such notes were refunded with the proceeds of the 2010 Series A & B Wastewater revenue bonds and as of June 30, 2010, the Enterprise has no commercial paper outstanding.

Table C4. Outstanding Wastewater Enterprise – Revenue Bond & Lease Financing

<b>Series</b>	<b>Original Par (\$ Thousands)</b>	<b>Outstanding as of 6-30-10 (\$000)</b>
Various SRF Loans	239,783	61,140
Revenue Bonds 2003 A	396,270	112,690
Revenue Bonds 2010 A	47,050	47,050
Revenue Bonds 2010 B	192,515	192,515
525 Golden Gate COPs *	31,690	31,690
<b>Total Outstanding</b>		<b>445,085</b>

\* Amount shown represents the Wastewater Enterprise's share of indebtedness.

In FY 2009-10, the Wastewater Enterprise issued \$47.1 million revenue bonds, 2010 Series A bonds and \$192.5 million revenue bonds, 2010 Series B (Federally Taxable – Build America Bonds – Direct Payment) bonds as shown in Table C4. Proceeds from the Series A bonds were used to refund outstanding commercial paper and pay financing costs while proceeds from the Series B bonds were used to refund commercial paper, provide monies for capital projects and to pay financing costs.

The Enterprise anticipates issuing approximately \$145.0 million in revenue bonds FY 2010-11 to finance additional capital infrastructure needs.

## Operations and Maintenance Expenses

The Operations and maintenance budget for FY 2010-11 is \$132.4 million and is forecasted to increase by an estimated 3 percent annual rate during the forecast period. The FY 2011-12 is forecasted at \$133.7 million.

## Revenue Requirement

The annual expenditures for operations and maintenance, debt service, and repair and replacement make up the revenue requirement of the Wastewater Enterprise. The income derived from interest and non-operating income is subtracted from the annual revenue requirement to determine the net revenue requirement to be met from sewer service charges. Rates have been approved through FY 2013-14, with the next rate-setting cycle to begin with an independent rate study in the Fall of 2013 as required at least every five years by the City Charter.

## Wastewater Enterprise Annual Capital Plan

The Wastewater Enterprise is responsible for the operations, maintenance, capital improvements and repair/replacement of the following wastewater facilities and assets.

- 4 Water Pollution Control Plants including: Southeast Water Pollution Control Plant, Oceanside, Water Pollution Control Plant, North Point Wet-Weather Facility, and Treasure Island Water Pollution Control Plant (WPCP)
- 27 Pump Stations in San Francisco and 29 on Treasure Island
- 8 Transport/Storage Facilities with 195 MG capacity for combined sewage
- 3 Bay/Ocean Outfalls off of San Francisco
- 1 Outfall off of Treasure Island
- 36 Combined Sewer Discharge Structure
- 50 Stormwater outfalls on Treasure and Yerba Buena Islands
- 993 miles of Sewers
- Southeast Community Facility

Wastewater and stormwater flows are treated by three main treatment facilities and the Treasure Island facility with a combined wet and dry-weather capacity of 575 MGD (577 including TI). These facilities are:

- **North Point Wet-Weather Facility:** The North Point Facility has been in operation since 1951. The facility provides primary-level treatment of wet-weather combined sewage collected in the north part of the City during rainstorms. The facility has a treatment capacity of 150 million gallons a day. Treated wastewater is discharged 900 feet into the San Francisco Bay. Every year, the North Point Facility treats about 1.3 billion gallons of wastewater, or 32.0 percent, of wet-weather flows.
- **Southeast Water Pollution Control Plant:** The Southeast Treatment Plant was built in 1952 and has been expanded several times since. The plant treats an average dry-weather flow of approximately about 67 million gallons a day and can treat up to 250 million gallons a day when it rains. Treated wastewater is discharged out a 900-foot-long pipe into the San Francisco Bay. The Southeast Plant treats wastewater from the east side of San Francisco, which equals about 80 percent of the City's total dry-weather wastewater flow, and 54 percent of wet-weather wastewater flow.
- **Oceanside Water Pollution Control Plant:** Completed in 1993, the Oceanside Plant is the City's newest treatment facility. The Oceanside Plant treats an average dry-weather flow of about 17 million gallons a day and has a total capacity of 65 million gallons during wet-weather. It treats wastewater from the west side of the City. Treated wastewater is discharged from the plant 4.5 miles to the Pacific Ocean through the Southwest Ocean Outfall. In 2004, Oceanside Plant was awarded the U.S. Environmental Protection Agency's "Plant of the Year" Award over similar-sized treatment plants around the nation.
- **Treasure Island Treatment Plant:** The City and County of San Francisco Public Utilities Commission (SFPUC) under a 1997 Cooperative Agreement between the US Navy agreed to operate and maintain the utility systems at Treasure Island, including the Plant, while the Navy retains ownership of all the utility systems. The



Treasure Island Treatment Plant treats 20 percent of dry-weather and 14 percent of wet-weather flows.

The Plant provides secondary treatment of domestic wastewater from facilities on Treasure Island and Yerba Buena Island; serves a population of approximately 2,400 and has a design capacity of 2.0 MGD. There are no industrial or commercial facilities in the service area. Daily influent flows measured between December 2005 and June 2009 ranged between 0.35 and 0.50 MGD. The higher flows occurred during wet-weather and were caused by inflow and infiltration to the collection system.

The Wastewater Enterprise's Capital Improvement Program (CIP) for FY 2010-11 is \$23.9 million and includes \$21.6 million for Wastewater Capital Projects and \$2.3 million for Programmatic Projects. For FY 2011-12 the total is \$38.9 million, including \$1.9 million for programmatic projects. The FY 2010-11 CIP is funded by Wastewater Enterprise revenue and revenue bonds. The projects are included in the SFPUC's Ten-Year Capital Plan which is part of the City and County of San Francisco's Ten-Year Capital Plan approved by the Board of Supervisors annually.

The FY 2010-11 Wastewater Enterprise annual CIP is \$0.4 million less than the FY 2009-10 approved CIP. In April 2010, a supplemental appropriation in the amount of \$135.2 million was approved for the Wastewater Enterprise to augment the annual CIP. This supplemental appropriation, along with the FY 2010-11 budget, provided funding for capital projects in FY 2011 of the 10-Year Capital Plan.

**Major projects in the FY 2010-11 CIP include:**

- \$7.0 million for Collection System repair and replacement projects including planned/emergency projects to repair/replace structurally inadequate sewers.
- \$7.0 million for Treatment Facilities repair and replacement projects: including planned/emergency projects to repair/replace sewage treatment plant facilities, pumping facilities and other sewage facilities.
- \$7.5 million for the purchase of property related to the capital program development.

## FY 2011-12 Budget

The Wastewater Enterprises FY 2011-12 Capital Budget is \$37.0 million and includes upgrades at the enterprises treatment facilities to increase reliability and efficiency of wastewater facilities and comply with regulatory requirements, \$10.5 million, improvements to the Collection System including projects to increase hydraulic capacity of the sewer collection system and for renewal and replacement of structurally inadequate sewers, \$23.3 million, and property purchase, \$3.2 million.

Table C5 shows the Wastewater Enterprises CIP for FY 2009-10, FY 2010-11 and FY 2011-12 by major programs.

Table C5. Wastewater Enterprise CIP by Major Program

\$	FY 2009-10 Adopted Budget	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget
<b>Program/Project</b>			
Treatment Facilities	6,424,000	7,033,590	10,470,000
Sewer/Collection System	13,000,000	7,033,590	23,307,450
Treasure Island	2,135,000	0	0
Property Purchase	0	7,500,000	3,250,000
<b>Capital Project Total</b>	<b>21,559,000</b>	<b>21,567,180</b>	<b>37,027,450</b>
Programmatic Projects	2,708,680	2,291,652	1,882,395
<b>Wastewater Total</b>	<b>24,267,680</b>	<b>23,858,832</b>	<b>38,909,845</b>
<b>Sources</b>			
Revenue Bonds	0	7,500,000	3,250,000
Wastewater Revenue	24,267,680	16,358,832	35,659,845
<b>Revenues Total</b>	<b>24,267,680</b>	<b>23,858,832</b>	<b>38,909,845</b>

In April 2010, the Board of Supervisors approved a supplemental appropriation to fund Wastewater FY 2010-11 and FY2011-12 capital program. \$158.0 million was appropriated to fund the FY 2010-11 Capital Program and related financing costs, \$22.8 million. The supplemental appropriation funding is show in Table C6 below.

### Major projects for FY 2010-11 supplemental include:

- \$19.7 million for SSIP planning including funding for the Low Impact Design, Biofuel/Alternative Energy and Outfall Inspection projects
- \$2.7 million for odor control projects at the Southeast Plant
- \$43.0 million for improvements to the Wastewater Treatment Facilities
- \$8.0 million for improvements to the Channel and Mariposa Pump Stations
- \$58.9 million for collection system improvements to maintain the existing capacity of the sewage system, renewal and replacement of structurally inadequate sewers and increase the hydraulic capacity of the sewer system that will reduce the frequency and severity of flooding during heavy rains
- \$3.0 million for repairs to treatment facilities and pumps on Treasure Island
- \$22.8 million for financing costs.

## FY 2011-12 Supplemental Appropriation

The Wastewater Enterprise FY 2011-12 Capital Project supplemental appropriation approved is \$190.0 million and it includes \$21.5 million for SSIP Program Planning with \$5.0 million for the Low Impact Design Project and \$3.2 million for the Biofuel/Alternative Energy Program, \$55.7 million for Treatment Facilities Projects with \$26 million allocated to the SSIP Biosolids/Digester Project and \$70.1 million for Collection System Improvements.

Table C6. Wastewater Enterprise Supplemental Appropriation by Major Program

\$	FY 2010-11 Approved Supplemental Appropriation	FY 2011-12 Approved Supplemental Appropriation
<b>Program/Project</b>		
Wastewater SSIP Planning	\$ 19,685,000	\$ 21,510,000
Odor Control	2,650,000	6,000,000
Treatment Facilities	43,016,410	55,711,275
Pump Stations	8,000,000	0
Sewer/Collection System	58,856,409	70,061,275
Treasure Island	3,000,000	3,000,000
<b>Subtotal Capital Program</b>	<b>135,207,819</b>	<b>156,282,550</b>
Financing Costs	22,777,951	33,795,734
<b>Wastewater Total Supplemental</b>	<b>157,985,770</b>	<b>190,078,284</b>
<b>Sources</b>		
Revenue Bonds	139,883,951	187,872,284
Capacity Fees	18,101,819	2,206,000
<b>Revenues Total</b>	<b>157,985,770</b>	<b>190,078,284</b>

# Wastewater Enterprise Ten-Year Capital Plan

Table C7. Wastewater Enterprise Ten-Year Capital Plan

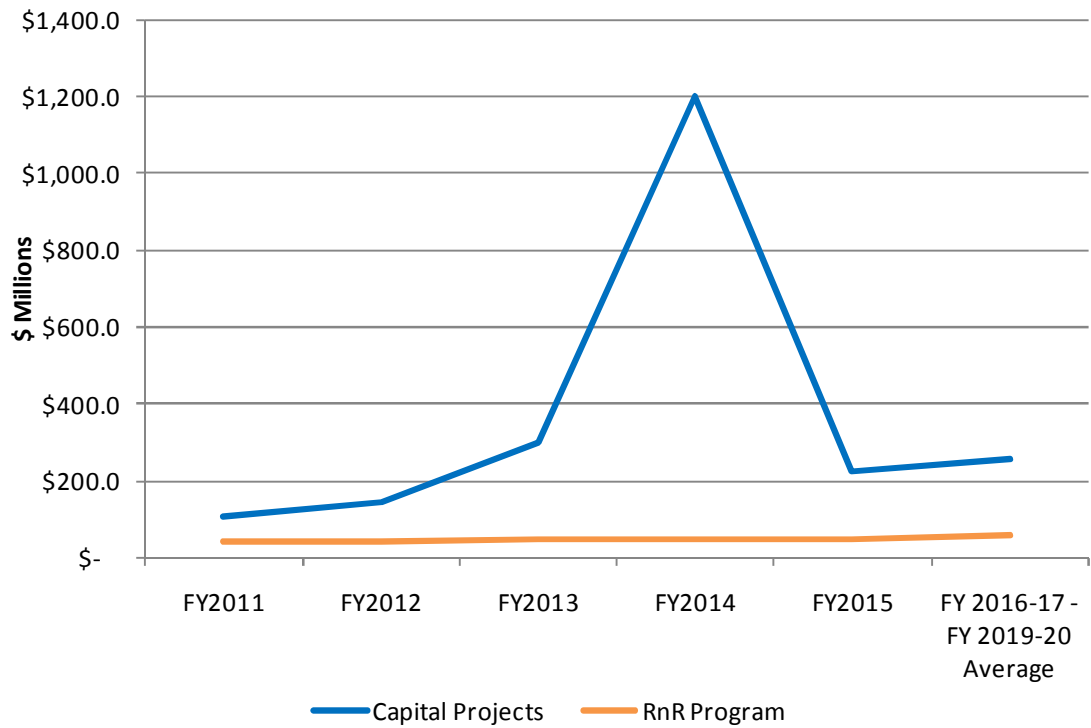
SFPUC: Wastewater Enterprise - (\$ thousands)							
Program/Project	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2016-2020	PLAN TOTAL
<b>Costs</b>							
Sewer System Improvement Program - Planning	19,685	21,510	9,274	25,047	5,355	9,730	90,601
Odor Control	2,650	6,000	1,741	1,741	4,522	75,464	92,118
Treatment Facilities	50,050	72,600	43,663	1,134,330	135,366	579,007	2,015,016
Pump Stations	8,000	0	725	725	1,450	44,225	55,125
Sewer/Collection System	65,890	86,950	289,939	80,721	122,191	779,322	1,425,012
Treasure Island	3,000	3,000	1,565	3,130	5,560	77,500	93,755
<b>TOTAL</b>	<b>149,275</b>	<b>190,060</b>	<b>346,907</b>	<b>1,245,694</b>	<b>274,444</b>	<b>1,565,248</b>	<b>3,771,628</b>
<b>Revenues</b>							
State Grants	20,000	10,000	10,000	0	0	0	40,000
Wastewater Revenue Bonds - Interim CIP/Other	37,607	40,715	1,991	10,003	11,800	129,969	232,085
Wastewater Revenue Bonds - Master Plan	59,499	103,362	295,673	1,194,675	218,602	1,196,011	3,067,822
Wastewater Revenue	14,067	33,777	35,466	37,240	39,102	226,864	386,516
Other - Capacity Fee	18,102	2,206	3,776	3,776	4,941	12,404	45,206
<b>TOTAL</b>	<b>149,275</b>	<b>190,060</b>	<b>346,907</b>	<b>1,245,694</b>	<b>274,444</b>	<b>1,565,248</b>	<b>3,771,628</b>
Total Estimated Jobs per Year	1,075	1,368	2,498	8,969	1,976	11,270	27,156
<b>Surplus/(Shortfall)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

To be funded with debt, additional revenues, and/or deferring expenditures.

The Ten-Year Capital Plan (Table C7 and Chart C8) shows total project costs for the Wastewater Enterprise of \$3.77 billion. Capital investments during the ten-year period are in the following areas:

- Treatment Facilities, \$2,015.0 million;
- Sewer Collection System, \$1,425.0 million;
- Treasure Island, \$93.8 million;
- Odor Control, \$92.1 million;
- Sewer System Improvement Program Planning \$90.6 million;
- Pump Stations, \$55.1 million.

Chart C8 Wastewater Enterprise Ten-Year Capital Plan Trend



Within the categories listed above, the Ten-Year Capital Plan includes the Renewal and Replacement Program (R&R) which is largely revenue financed, the Interim Capital Improvement Program, Sewer System Improvement Program and improvements to Treasure Island which are debt financed.

*Renewal and Replacement Program: \$520.6 million*

The recommended renewal investment is estimated to cost \$41.4 million in FY 2010-11 and increase to \$64.2 million by FY 2019-20. The Wastewater renewal program includes two major categories: sewer replacements and treatment facilities.

**Sewer Replacements - \$391.9 million** - Historically, the Enterprise has been replacing approximately four miles of sewers each year at an annual cost of about \$12 million. The estimated annual cost for sewer replacement beginning in FY 2010-11 is approximately \$31.1 million. The goal is to accelerate the current 200-year replacement rate until the sewers are replaced once every 100 years. This project helps mitigate future years operating costs by timely maintenance of the Wastewater Collection System.

**Treatment Plants - \$128.7 million** - The treatment plant renewal program includes projects to keep the Wastewater systems operational with the goal of reaching a state of good repair. Projects include planned renewals and replacements at treatment plants and pumping facilities. The estimated annual cost for the treatment plant renewal program beginning in FY 2010-11 is approximately \$10.2 million. This amount increases to \$15.9 million in FY 2019-20.

*Capital Program: \$3,251 million*

In addition to the R&R discussed above, the 10-Year Capital Plan includes \$3.25 billion for capital improvements to the sewer system. The scope of the capital investments includes three categories of projects: (1) Various CIP Projects totaling \$162.3 million; (2) The SSIP totaling an estimated \$2,994.9 million; and (3) Sewer redevelopment of Treasure Island and Yerba Buena Islands for \$93.8 million.

**Wastewater Capital Improvement Program: \$162.3 million.** The Plan includes \$162.3 million in improvements to Wastewater facilities during the next two fiscal years for projects that will become part of the Wastewater Interim Capital Improvement Program. The Interim CIP provides funding for projects that address the most critical needs of aging wastewater system, improving the capacity of sewer mains, upgrading treatment facilities and reducing wastewater odors. Projects included in the plan are listed in Table C8. Water Enterprise CIP Projects.

Table C8. – Wastewater Enterprise CIP Projects

Projects	(\$ Millions)
Odor Control Improvements	8.7
Solid Handling Improvements	4.7
Major Electrical and Mech. Equipment Replacement	20.0
Security/Emergency Response Improvement	12.3
Solids Handling and Coating Improvements	23.9
Facilities Reliability Improvements	8.0
Biofuel/Alternative Energy	7.0
Mariposa Pump Station Improvements	3.0
Channel Pump Station Force Main Replacement	5.0
Oceanside Dilution Study	0.5
Sunnydale Auxiliary Sewer Improvements Phase 2	7.0
Sewer Hydraulic Improvements	10.0
Cesar Chavez Sewer Improvements Phase 2	11.7
Richmond Drainage Improvements Phase 2	9.3
Aging Sewer Replacements	28.0
Vactor Waste Staging Area	2.7
Sewer Staff Facility Improvements	0.5
<b>Total</b>	<b>162.3</b>

**Sewer System Improvement Program (SSIP): \$2,994.9 million.** SSIP evaluates the current treatment and collection system and provides a long-term strategy for wastewater and stormwater management. The Master Plan represents a comprehensive planning effort that (1) outlines a long-term strategy for San Francisco's wastewater and stormwater management; (2) addresses specific system deficiencies, aging infrastructure and future operational and repair/replacement needs; and (3) provides a roadmap for a future capital improvement program (CIP) ensuring reliable service meeting all regulatory requirements. A 20 to 30 Year Sewer System Improvement Program (SSIP) is proposed, a portion of which is addressed in this 10-Year Plan.

**The 10-Year Capital Plan as adopted anticipates nearly \$3.0 billion in investments from the SSIP, focusing on projects in the following categories:**

- SSIP Planning: \$90.6 million - Includes condition assessment, field studies, facility inspections, alternative evaluation, public outreach/education and planning for the Sewer System Improvement Program.
- Odor Control: \$83.4 million - Projects to minimize and/or mitigate the odors that can emanate from treatment plants and sewer collection system.
- Treatment Facilities: \$1,809.4 million - Projects include the Bayside Biosolids (Digester) Project which funds the planning, design and construction of a new digester and solids facility to be located in the southeast area of San Francisco. Improvements at the Southeast, Oceanside and North Point Treatment Plants and associated outfalls will also be addressed.
- Pump Stations: \$47.1 million - Projects provide necessary improvements and equipment replacement at the various pump stations in the collection system to ensure operational reliability and odor control.
- Sewer/Collection System: \$964.4 million - The projects in this category provide necessary improvements and equipment replacement at the various pump stations in the collection system to ensure operational reliability and odor control.

**Sewer Redevelopment of Treasure and Yerba Buena Islands: \$93.8 million.** On October 1, 1997, concurrent with the operational closure of Treasure Island Naval Station, the City entered into a Cooperative Agreement with the U.S. Navy in which the City agreed to take responsibility for caretaker services on Treasure Island and Yerba Buena Island. As a result of this agreement, the SFPUC provides utility operations and maintenance services for the wastewater and storm water systems.

Costs for the Wastewater Enterprise over the ten-year period total \$93.8M and include replacing pumps in 5 storm lift stations throughout Treasure Island, repair of several sections of the sanitary sewer force main at Treasure Island and Yerba Buena Island that are misaligned and collapsed. This project also provides for the replacement of pumps and upgrading the electrical and control panels at various Pump Stations. Also included is the retrofit and replacement of the Wastewater Treatment Plant. In the interim, this project consists of replacing several major and ancillary equipment within the wastewater treatment plant at Treasure Island prior to complete failure. Once City ownership is established, a new wastewater facility will be designed and constructed.

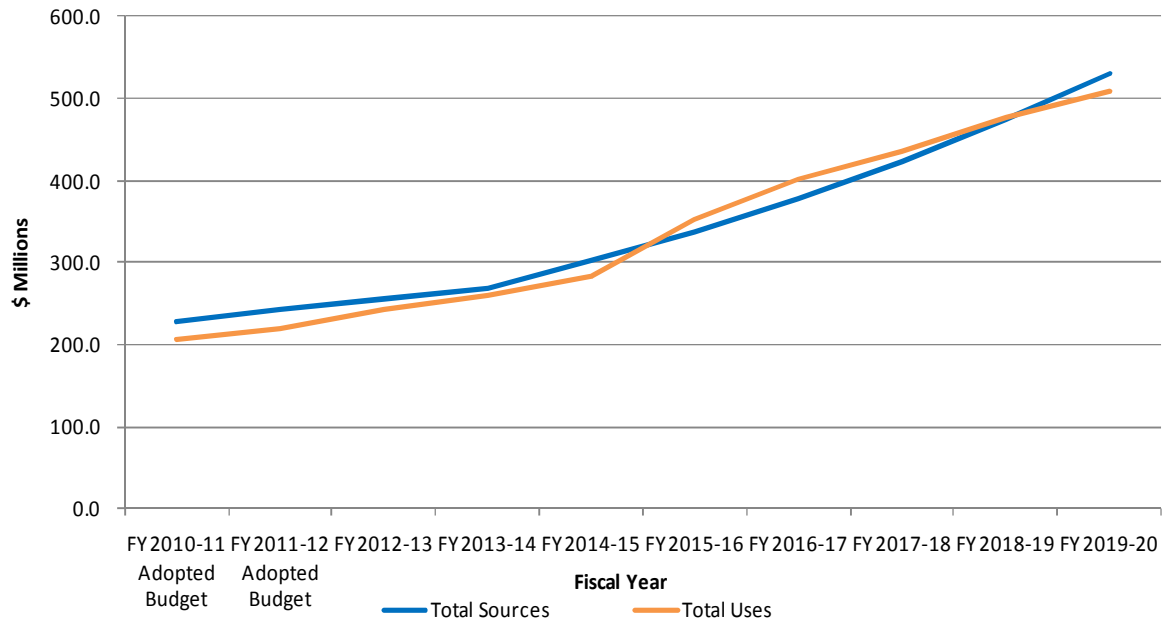
# Ten-Year Financial Plan

Table C9. – Wastewater Enterprise Ten-Year Financial Plan (\$ Millions)

Description (\$ Millions)	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
	Adopted Budget	Adopted Budget								
<b>Beginning Operating Fund Balance</b>	16.6	37.5	59.5	71.6	80.8	100.0	86.0	62.5	48.9	46.5
<b>Sources</b>										
Sewer Service Sales - Base Rates	209.5	226.5	239.5	252.7	266.6	298.8	334.8	375.2	420.4	471.1
Sewer Service Sales - Rate Increases	15.8	11.3	12.0	12.6	30.7	34.4	38.5	43.1	48.4	54.2
Interest Income on Fund Balances	1.2	2.7	3.0	3.4	4.0	4.0	4.0	4.1	4.4	5.1
Other Miscellaneous Income	1.4	1.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
<b>Total Sources</b>	<b>227.9</b>	<b>241.9</b>	<b>254.8</b>	<b>269.2</b>	<b>301.7</b>	<b>337.6</b>	<b>377.7</b>	<b>422.9</b>	<b>473.6</b>	<b>530.9</b>
<b>Uses</b>										
Operations & Maintenance	132.4	133.7	137.5	141.7	146.0	150.4	155.0	161.1	167.7	176.8
Debt Service *	58.3	50.5	66.8	77.2	93.1	155.4	197.8	224.1	254.6	275.8
Capital - Revenue Funded	16.4	35.7	38.4	41.1	43.4	45.9	48.4	51.2	53.7	56.1
<b>Total Uses</b>	<b>207.1</b>	<b>219.8</b>	<b>242.7</b>	<b>260.0</b>	<b>282.5</b>	<b>351.7</b>	<b>401.2</b>	<b>436.5</b>	<b>476.0</b>	<b>508.7</b>
<b>Net Revenues</b>	<b>20.8</b>	<b>22.1</b>	<b>12.1</b>	<b>9.2</b>	<b>19.2</b>	<b>(14.1)</b>	<b>(23.4)</b>	<b>(13.6)</b>	<b>(2.4)</b>	<b>22.2</b>
<b>Ending Fund Balance</b>	<b>37.5</b>	<b>59.5</b>	<b>71.6</b>	<b>80.8</b>	<b>100.0</b>	<b>86.0</b>	<b>62.5</b>	<b>48.9</b>	<b>46.5</b>	<b>68.7</b>
<b>Revenue Requirement Impact</b>	<b>7.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>11.5%</b>	<b>11.5%</b>	<b>11.5%</b>	<b>11.5%</b>	<b>11.5%</b>	<b>11.5%</b>
<b>Fund Balance as % of Revenue</b>	<b>16.3%</b>	<b>24.5%</b>	<b>27.9%</b>	<b>29.8%</b>	<b>33.0%</b>	<b>25.3%</b>	<b>16.5%</b>	<b>11.5%</b>	<b>9.8%</b>	<b>12.9%</b>
<b>Fund Balance as % of Expense</b>	<b>18.1%</b>	<b>27.1%</b>	<b>29.5%</b>	<b>31.1%</b>	<b>35.4%</b>	<b>24.4%</b>	<b>15.6%</b>	<b>11.2%</b>	<b>9.8%</b>	<b>13.5%</b>
<b>Fund Balance as % of Operating Expense</b>	<b>28.3%</b>	<b>44.5%</b>	<b>52.1%</b>	<b>57.0%</b>	<b>68.5%</b>	<b>57.1%</b>	<b>40.4%</b>	<b>30.3%</b>	<b>27.7%</b>	<b>38.9%</b>
<b>Debt Service Coverage (Indenture)</b>	<b>1.92</b>	<b>2.88</b>	<b>2.65</b>	<b>2.58</b>	<b>2.54</b>	<b>1.85</b>	<b>1.56</b>	<b>1.45</b>	<b>1.39</b>	<b>1.45</b>
<b>Debt Service Coverage (Current)</b>	<b>1.64</b>	<b>2.14</b>	<b>1.76</b>	<b>1.65</b>	<b>1.67</b>	<b>1.20</b>	<b>1.13</b>	<b>1.17</b>	<b>1.20</b>	<b>1.28</b>
* Net of Federal Interest Subsidy										



Chart C9. – Wastewater Enterprise Ten-Year Financial Plan Trend



The SFPUC’s Ten-Year Financial Plan, as required by City and County of San Francisco Charter Section 8B.123, includes a Wastewater Enterprise ten-year financial summary (FY 2010-11 through FY 2019-20) describing projected sources and uses, resulting fund balances and associated financial reserve ratios. Projected costs and revenues are estimates and subject to variations inherent in all such projections. Consequently, the estimates should not be viewed as precise predictions but rather as indications of expected trends, given certain expenditure, receipt, and financing assumptions. These assumptions are based on current Board policies, goals, and objectives representing management’s best estimates at this time.

### Rates and Charges

Sewer service charges are forecasted to increase Wastewater Enterprise revenues received for wastewater collection and treatment by an average of 7.0 percent in FY 2010-11, 5.0 percent each year from FY 2011-12 through FY 2013-14, and 11.5 percent annually during the final six years of the 10-year period. These rate changes are needed to fund the Wastewater Capital Improvement Program to address neighborhood flooding and treatment plant improvements. The larger increases at the end of the period are related to debt service costs associated with implementation of an estimated to \$6.0 billion Sewer System Improvement Program (SSIP), over the next 20-30 years including construction cost inflation, which is currently in the project development phase.

### Sources of Funds

The Wastewater Enterprise serves a population of approximately 840,000 within San Francisco and adjacent communities. Customers are grouped into two classes - residential and non-residential. Grouping customers with the same or similar wastewater characteristics into classes allows the Enterprise to allocate cost responsibility to each class based on their respective volumes and strengths (i.e. wastewater characteristics). Within each class, subgroups have been established to facilitate rate analysis and rate administration. Total sources excluding bond proceeds are expected to increase from \$227.9 million to \$530.9 million over the ten-year period.

- Sewer Service charges are projected to increase from \$225.3 million in FY 2010-11 to \$525.3 million by FY 2019-20. The City has adopted sewer service charges

through FY 2013-14, based on each customer class's proportional use of the sewerage system and to establish a dedicated source of revenues to pay for operating the system.

- Other income is projected to average \$3.8 million annually over the ten-year period. This includes interest income on cash balances and other miscellaneous sources, including rental income.

## Uses of Funds

The Financial Plan includes payments of 3.0 percent annual growth for operations and maintenance costs and 5.0 percent annual escalation in revenue-funded capital costs.

The annual operating budget includes operation and maintenance costs, repair and replacement costs for existing equipment and facilities, and debt service on bonds and loans used to finance capital improvements. Operations and maintenance costs are currently the largest expense component (64 percent of total) and will decrease to one-third of total expense over the next ten years as debt service costs increase. Total expenditures are forecast to more than double from \$207.1 million to \$508.7 million, over the period.

- Operations and Maintenance costs include personnel costs, material and supplies, treatment chemicals, power and energy, sludge disposal, and services of other City departments (including the SFPUC Bureaus). The FY 2010-11 budget to operate the water pollution control system is \$132.4 million, increasing to \$176.8 million by FY 2019-20. The majority of these costs are fixed in nature and associated with running a 24/7 operation.
- Debt Service includes principal and interest payments on revenue bonds and State Revolving Fund loans used to finance system improvements and are projected to increase from \$58.3 million to \$275.8 million over the ten-year period. The increase towards the end of the forecast period is resulting from estimated debt service expense associated with the early years of the estimated \$6.0 billion SSIP, currently in project development.
- Revenue-Funded Capital Projects, otherwise known as Repair and Replacement (R&R), is used to fund major maintenance and routine additions and improvements to sewers, pumping stations, and treatment plants. As a recipient of State and Federal grants under the Clean Water Act, the Enterprise is required to include annual funding for repairs and replacement as a part of its annual revenue requirement. A 1986 Board of Supervisors resolution set the minimum R&R expenditure at \$5.0 million and requires the expenditure to increase at least 5.0 percent annually until the amount of the annual contribution reaches \$20.0 million. The annual contribution is expected to reach \$23.9 million in FY 2010-11. Along with the \$30.0 million reserve to accelerate the replacement of aging sewers, the R&R will reach \$56.1 million by FY 2019-20.

## Debt Financing of Capital Needs

The Ten-Year Capital Plan largely assumes debt financing of capital needs over the next ten-year period. The SSIP will require significant debt financing as authorized under Proposition E (2002).

The SFPUC Plan assumes a financing strategy that utilizes short-term financing via the existing Commercial Paper (CP) program to calibrate financing needs with project spending. Long-term (30-year) 5 percent fixed rate debt issuance is assumed to periodically refund the CP program. The CP program facilitates short-term financing, typically at lower interest rates than longer term debt, which minimizes costs. The authorized CP program for the enterprise is \$150.0 million.

## Financial Ratios

It is the financial objective of the SFPUC to maintain a minimum revenue bond coverage ratio of 1.25 times on an indenture basis and 1.00 times on a current operations basis, the latter does not include available fund balances. Over the ten-year period, the Wastewater

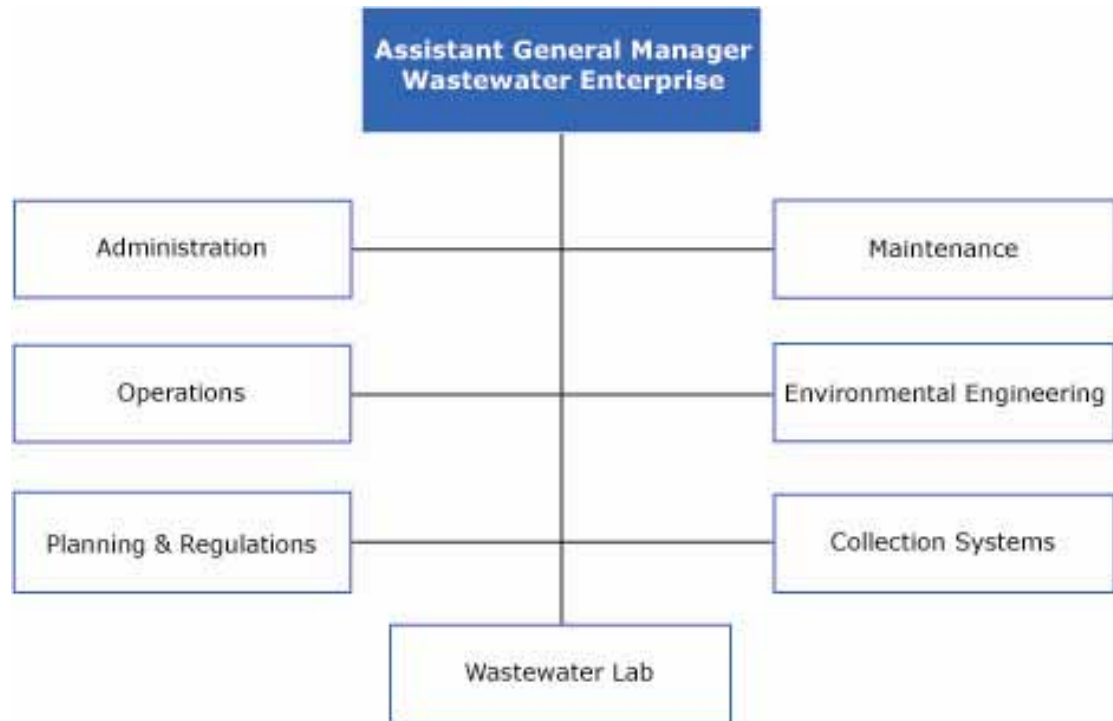
Enterprise indenture coverage ranges from 2.88 to 1.39 times coverage. On a current basis, the coverage ratio is projected to extend the 1.00 minimum threshold with a range from 2.14 to 1.13 times coverage.

## Fund Balances and Reserves

Ending fund balance is projected to grow in the Wastewater Enterprise from \$16.6 million to \$100.0 million in FY 2015-16, then decreasing to \$46.5 million by FY 2019-20. This mid-range increase is necessary for the ramping up of debt service coverage purposes, and is funded by rate increases. The new debt service during the period is related to funding the enterprise's Capital Plan, including the annual CIP, as well as the SSIP. As a proportion of operating expenses, fund balance increases from approximately 28.3 percent (3.4 months of expense) in FY 2010-11 to 68.5 percent (8.2 months of expense) by FY 2014-15, before falling back to 38.9 percent in FY 2019-20 (4.5 months of expense).

## Departmental Section

### Wastewater Enterprise Organization Chart



## FY 2010-11 Wastewater Enterprise Objectives

The Chart C10 below shows the direct connection between the FY 2010-11 Wastewater Enterprise objectives and performance measures, and both the SFPUC Action Plan goals and the FY 2010-11 budget. The chart illustrates that the Enterprise objectives and performance measures as essential operations to achieve the SFPUC Action Plan goals. The chart also illustrates that the Enterprise budget provides for resources to support the achievement of performance measures and objectives.

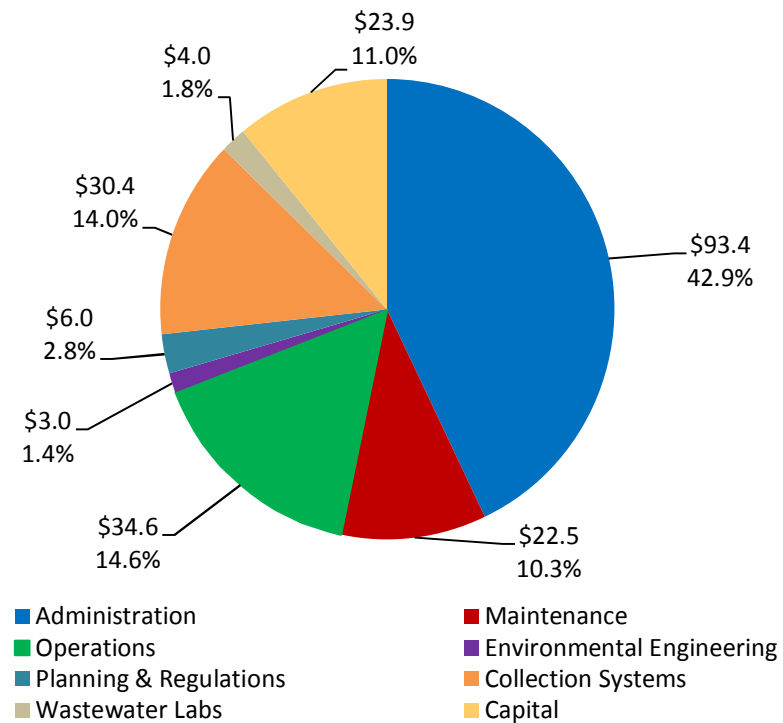
Chart C10. Wastewater Enterprise Objectives

Wastewater Enterprise FY 2010-11  Objectives and Measures	Action Plan Goals				Wastewater Enterprise Budget	
	Provide High Quality Services	Foster a Green City	Improve Communication	Invest in People	O & M	Capital
<b>Collect Wastewater in an Efficient and Effective Fashion</b> <ul style="list-style-type: none"> <li>Inspect and Clean 8,000 catch basins</li> <li>Inspect 660,000 linear feet of sewers</li> <li>Control mercury amalgam from 10 dental offices</li> <li>1200 Fats, Oil and Grease inspections in sewers</li> </ul>	💧				💧 💧 💧 💧	
<b>Operate the Treatment Plants Efficiently and Effectively</b> <ul style="list-style-type: none"> <li>Comply with all wastewater NPDES permit</li> <li>Consume no more than 1,900 kilowatt hours of electricity per million gallons treated</li> <li>25% solids in dewatered (post-centrifuge) cake</li> </ul>	💧	💧			💧 💧 💧	
<b>Maintain Wastewater System in Good Repair</b> <ul style="list-style-type: none"> <li>85% of maintenance work is planned</li> <li>40% of maintenance jobs completed within 10% of staff hours estimated</li> <li>80% of preventative maintenance is completed</li> </ul>	💧				💧 💧 💧	
<b>Foster Constructive Relationships with Neighborhoods and Contribute to the Community</b> <ul style="list-style-type: none"> <li>6 or less confirmed plant odors complaints</li> <li>Respond in person to 100% of sewer complaints within 8 hours</li> </ul>			💧	💧	💧 💧	

## Divisions

The Wastewater Enterprise is comprised of the following seven Divisions: Wastewater Administration, Maintenance, Operations, Environmental Engineering, Planning and Regulations, Collection Systems, and Wastewater Laboratory. Chart C11 shows the FY 2010-11 budgets by Wastewater Divisions.

Chart C11. FY 2010-11 Wastewater Enterprise Uses of Funds by Division, \$238.5 Million (\$ Millions)



## Table C10. Wastewater Enterprise Uses of Funds by Division

Table C10 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual, and the budget variance between FY 2010-11 and FY 2009-10 for all Wastewater Divisions.

\$ Million	FY 2010-11 vs. FY 2008-09 Adopted Budget					
	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	Amount	%
Administration	96.9	96.0	95.8	93.4	(2.5)	-2.7%
Maintenance	22.5	23.0	22.1	22.5	(0.5)	-2.1%
Operations	32.6	34.4	35.2	34.5	0.1	0.3%
Environmental Engineering	4.0	2.9	4.5	3.0	0.0	1.1%
Planning & Regulation	3.2	2.5	4.7	6.0	3.5	138.1%
Collection Systems	27.5	29.5	30.2	30.4	0.9	2.9%
Wastewater Labs	3.3	4.4	4.3	4.0	(0.4)	-9.3%
General Reserve	-	12.3	-	20.9		69.3%
Capital Projects	44.6	24.3	24.3	23.9	(0.4)	-1.7%
<b>Wastewater Total</b>	<b>234.7</b>	<b>229.3</b>	<b>221.1</b>	<b>238.5</b>	<b>0.6</b>	<b>4.0%</b>

## Administration

The Wastewater Administration Division is responsible for providing direction to the Wastewater operating divisions. The Division also supports all the administrative functions for the Enterprise including budgets, procurement, contracting and personnel matters. The Administration Division is committed to maintaining and supporting a diverse work group and offering opportunity for advancement within the organization. Table C11 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual, and the budget variance between FY 2010-11 and FY 2009-10.

## Budget Summary

Table C11. Wastewater Administration Budget Summary

\$	FY 2010-11 vs FY 2009-10 Adopted Budget					
	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	Amount	%
Personnel	4,169,563	4,736,859	4,273,414	4,146,214	(590,645)	-12.5%
Overhead	2,257,911	-	-	-	-	0.0%
Non-Personnel Services	1,269,374	1,682,780	2,194,537	1,541,918	(140,862)	-8.4%
Materials & Supplies	267,314	405,061	227,405	389,891	(15,170)	-3.7%
Debt Service	66,832,323	66,834,098	66,834,098	61,386,219	(5,447,879)	-8.2%
Services Of Other Depts	22,108,591	22,305,288	22,251,218	25,956,298	3,651,010	16.4%
<b>Total</b>	<b>96,905,076</b>	<b>95,964,086</b>	<b>95,780,672</b>	<b>93,420,540</b>	<b>(2,543,546)</b>	<b>-2.7%</b>

## Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** - Reflects the reassignment of 3 positions and the reallocation of premium pay funds to other Wastewater divisions. The net change in mandatory fringe benefits reflects adjustments to salaries, and increases for health and retirement rates.
- **Services of Other Departments** - Reflects an increase in services of the SFPUC Bureaus.
- **General Reserves** - Reflect an increase in the Enterprise's sources of funds available to the Enterprise.

## Maintenance

The Maintenance Division is responsible for repairs and improvements to Wastewater's process equipment and facilities that support the treatment and conveyance/pumping functions so that permit standards can be met efficiently and economically.

Conveyance and pumping requires operating and maintaining a network of 27 pump stations in San Francisco and 35 pump stations on Treasure Island designed to move combined sewage/runoff flows to treatment plants, and storage transports (conveyance/pumping). During wet-weather, pumping facilities transport up to 465 MGD. The system consists of approximately 700 pumps.

Treatment and conveyance maintenance activities focus on preventative maintenance, repairs and overhaul work.

Table C12 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual, and the budget variance between FY 2010-11 and FY 2009-10.

### Budget Summary

Table C12. Maintenance Budget Summary

Expenditure Category	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs FY 2009-10 Adopted Budget	
					Amount	%
Personnel	14,963,498	15,812,459	14,658,243	14,992,135	(820,324)	-5.2%
Non-Personnel Services	1,280,449	927,806	843,695	947,806	20,000	2.2%
Materials & Supplies	2,851,904	2,498,787	2,546,001	2,590,634	91,847	3.7%
Equipment	165,877	173,549	371,016	394,681	221,132	127.4%
Services Of Other Depts	3,225,370	3,545,465	3,697,218	3,544,661	(804)	0.0%
<b>Total</b>	<b>22,487,098</b>	<b>22,958,066</b>	<b>22,116,173</b>	<b>22,469,917</b>	<b>(488,149)</b>	<b>-2.1%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Equipment** - The increase reflects equipment needs to support the maintenance of facilities and structures for FY 2010-11.

## Operations

The Operations Division is responsible for the 24-hour day operation of the Wastewater Enterprise's treatment facilities, and pump stations. The Operations Division's primary mission is to protect public health and the environment by treating an average daily flow of 85 million gallons of wastewater, equal to 33.5 billion gallons of flow a year. The Operations Division treats all flows while meeting all the regulatory standards and discharge requirements.

Wastewater treatment is performed at four different locations: Southeast Treatment Plant, Treasure Island, Oceanside Plant, and North Point Facility. Wastewater treatment includes pre-treatment, primary treatment, secondary treatment, disinfection, solids treatment, and odor control. The Southeast Treatment Plant treats 80% of dry-weather wastewater flow or 85 MGD and can process up to 250 MGD during the rainy season. Oceanside treats a dry-weather flow up to 21 MGD with a total capacity of 65 MGD. Treasure Island treats less than 1MGD with a peak capacity of 2 MGD. North Point Facility provides primary-level treatment of wastewater collected in the north part of the City during storms with a treatment capacity of 150 MGD. Treatments plants and pump stations operate on a 365-day/24-hour basis.

Table C13 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual, and the budget variance between FY 2010-11 and FY 2009-10.

## Budget Summary

Table C13. Operations Budget Summary

Expenditure Category	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs FY 2009-10 Adopted Budget	
					Amount	%
Personnel	15,324,440	17,343,295	16,926,339	15,782,431	(1,560,864)	-9.0%
Non-Personnel Services	4,230,425	3,619,654	4,071,942	4,254,893	635,239	17.5%
Materials & Supplies	4,732,645	4,886,266	5,676,830	5,191,058	304,792	6.2%
Equipment	196,194	38,905	109,112	10,890	(28,015)	-72.0%
Services Of Other Depts	8,160,988	8,548,612	8,449,515	9,327,539	778,927	9.1%
<b>Total</b>	<b>32,644,692</b>	<b>34,436,732</b>	<b>35,233,738</b>	<b>34,566,811</b>	<b>130,079</b>	<b>0.3%</b>

## Reasons for Changes, FY 2009-10 to FY 2010-11

- **Non-Personnel Services** - Reflect projected costs for hauling and disposal of biosolids and grit.
- **Equipment** - The reduction is reallocated to cover needs in other areas of expenditure.



## Environmental Engineering

The Environmental Engineering Division is responsible for providing engineering services to the Wastewater Enterprise in four core service areas: process support, maintenance, design, and planning of large projects and master planning. These services allow Wastewater to maintain and improve the efficiency and reliability of wastewater collection and treatment in a way that ensures the public's safety and welfare.

- Process support services include process design, design review, construction liaison, research and testing, process performance review and troubleshooting and regulatory supports services.
- Maintenance support services include vibration monitoring, procurement specifications and equipment failure troubleshooting.
- Design support services include design and contract preparation for small to medium size projects, updating as-built records when changes are made and other drafting, documentation and technical services.
- Planning support services include the development and implementation of the Sewer System Improvement Program (SSIP) that addresses Wastewater's aging infrastructure, system deficiencies, operational efficiency, predicted regulatory changes and community and neighborhood impacts. The SSIP is a planning document that identifies capital projects, programs, policies and operational strategies that will support the vision to 2030 for the San Francisco's wastewater system.

Table C14. shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual, and the budget variance between FY 2010-11 and FY 2009-10.

### Budget Summary

Table C14. Environmental Engineering Budget Summary

Expenditure Category	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs FY 2009-10 Adopted Budget	
					Amount	%
Personnel	3,973,910	2,850,375	4,463,371	2,881,370	30,995	1.1%
Non-Personnel Services	20,136	38,340	23,178	38,340	-	0.0%
Materials & Supplies	52,465	37,422	58,026	37,422	-	0.0%
<b>Total</b>	<b>4,046,511</b>	<b>2,926,137</b>	<b>4,544,575</b>	<b>2,957,132</b>	<b>30,995</b>	<b>1.1%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

There were no major changes to the budget.

## Planning and Regulation

The Division is responsible for environmental and sustainability planning, regulatory compliance, biosolids resources, and policy development. The Division is responsible for developing and implementing the Asset Management Program, Urban Watershed management, and Workforce Development. The areas of responsibility are divided as follows.

- The Regulatory Compliance group is responsible for providing information and support regarding environmental impacts, occupational health and safety risks, and biosolids impacts for all Wastewater's activities.
- The Asset Management group is responsible for developing, implementing and managing Wastewater's in a manner consistent with industry best practices in asset management to achieve consistent regulatory compliance, defensible risk management, and cost-effective delivery of services to its customers.
- The Urban Watershed Management group is responsible for developing, implementing and managing Stormwater policy, protocols and projects. In addition, the group performs project review and enforcement in the cities separate storm and sanitary areas to ensure developments have adequate stormwater control measures necessary for compliance with our regulatory permit requirements.
- The Workforce Development group is responsible for recruiting, developing and retaining a motivated, diverse, highly qualified, and supported workforce to ensure effective services today and in the future.

Table C15 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual, and the budget variance between FY 2010-11 and FY 2009-10.

### Budget Summary

Table C15. Planning and Regulation Budget Summary

Expenditure Category	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs FY 2009-10 Adopted Budget	
					Amount	%
Personnel	1,439,937	961,248	1,906,075	4,200,741	3,239,493	337.0%
Non-Personnel Services	1,455,817	1,111,160	1,675,613	1,379,472	268,312	24.1%
Materials & Supplies	63	10,000	9,659	10,000	-	0.0%
Services Of Other Depts	313,111	440,000	1,121,491	415,000	(25,000)	-5.7%
<b>Total</b>	<b>3,208,928</b>	<b>2,522,408</b>	<b>4,712,838</b>	<b>6,005,213</b>	<b>3,482,805</b>	<b>138.1%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** - Reflects the transfer of 33 positions from Administration, Maintenance, Operations, and Sewer Operations Divisions to reflect the proper functions performed by these employees. The net change in mandatory fringe benefits reflects adjustments to salaries, health and retirement rates.
- **Non-Personnel Services** - Primarily due to increases to professional services to support Integrated Watershed & Low Impact Development.

## Collection Systems

Collection System Division is responsible for collecting and transporting 85 million gallons per day of wastewater to treatment plants supporting one million residents, business and visitors. Sewage reaches the treatment plants through a conveyance system that starts with business or residential side sewer connections to local sewers in the streets.

Proper operation and regular maintenance of the sewer system is conducted by Sewer Operations' preventive maintenance program. Preventive maintenance occurs annually during dry-weather. The program includes inspections and maintenance of major sewers to ensure that lines are free of debris, thus minimizing their potential to clog. In addition to the pipelines, the collection system contains 19,500 catch basins and 25,000 manholes. Activities within this program include cleaning, inspection and repair of sewers, responding to public service requests, control of odors in the sewers system as well as hydraulic analysis and modeling. To ensure regulatory compliance in the system as a whole, both Pretreatment and Pollution prevention ("P2") programs are employed, focusing on contaminant reduction activities for residential, commercial, and industrial dischargers. The major P2 programs include: Street Sweeping, Fats, Oils & Grease (FOG), Mercury Reduction Program, Pesticides/Integrated Pest Management (IPM), and Storm Water P2 Program/Construction Runoff Control.

Table C16 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual, and the budget variance between FY 2010-11 and FY 2009-10.

### Budget Summary

Table C16. Collection Systems Budget Summary

Expenditure Category	FY 2008-09	FY 2009-10	FY 2009-10	FY 2010-11	FY 2010-11 vs FY 2009-10 Adopted Budget	
	Actual	Adopted Budget	Pre-Audit Actual	Adopted Budget	Amount	%
Personnel	8,217,415	10,170,204	9,055,916	10,210,468	40,264	0.4%
Non-Personnel Services	3,564,665	2,948,001	3,128,358	3,075,681	127,680	4.3%
Materials & Supplies	708,594	777,881	667,529	752,881	(25,000)	-3.2%
Equipment	276,612	660,482	2,056,391	1,163,228	502,746	76.1%
Services Of Other Depts	14,683,802	14,957,273	15,245,077	15,175,387	218,114	1.5%
<b>Total</b>	<b>27,451,088</b>	<b>29,513,841</b>	<b>30,153,271</b>	<b>30,377,645</b>	<b>863,804</b>	<b>2.9%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Equipment** - Reflects an increase for equipment to support sewer condition assessment activities which helps to prioritize which sections of the system are replaced justifies the Enterprises move from a 200-year replacement cycle to a 100-year cycle.

## Wastewater Laboratory

The Wastewater Laboratory Division, a network of full services State-certified laboratories, is responsible for real-time process control monitoring, regulatory compliance testing, and special project analytical applications. In addition, the Division provides technical consulting on the interpretation of analytical data for Wastewater staff, regulatory compliance report generation for SFPUC, National Pollution Discharge Elimination System (NPDES) permits, and interfacing with regulatory enforcement agencies concerning analytical data issues. Staff operates from three laboratory facilities located at the Southeast, Oceanside and Treasure Island Water Pollution Control Plants.

Table C17 shows the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actual and FY 2009-10 pre-audit actual, and the budget variance between FY 2010-11 and FY 2009-10.

### Budget Summary

Table C17. Wastewater Laboratory Budget Summary

Expenditure Category	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs FY 2009-10 Adopted Budget	
					Amount	%
Personnel	2,900,258	3,408,283	3,126,647	3,453,589	45,306	1.3%
Non-Personnel Services	148,594	597,824	647,818	143,497	(454,327)	-76.0%
Materials & Supplies	207,500	247,050	253,028	235,273	(11,777)	-4.8%
Equipment	90,862	153,498	313,043	165,275	11,777	7.7%
<b>Total</b>	<b>3,347,214</b>	<b>4,406,655</b>	<b>4,340,536</b>	<b>3,997,634</b>	<b>(409,021)</b>	<b>-9.3%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Non-Personnel Services** - Reflects the elimination of one-time funding for the Laboratory Information Management System that supports laboratory services.



## HETCH HETCHY WATER AND POWER

Hetch Hetchy Water and Power (HHWP) provides reliable, high quality water and electric energy to the City and County of San Francisco and other customers, protects watershed resources in cooperation with Federal agencies, operates and maintains facilities to a high standard of safety and reliability, and maximizes revenue opportunities within approved levels of risk.

Eighty-five percent of San Francisco's drinking water starts out as snow falling on more than 650 square miles of watershed land in Yosemite National Park and the Stanislaus National Forest. As the snow melts it collects in Hetch Hetchy's three storage reservoirs. Water flows by gravity through 170 miles of pipelines and tunnels, it turns the turbines in four hydroelectric powerhouses, generating approximately 1.6 billion kilowatt hours of electricity. Over 170 miles of transmission and distribution lines move the electricity from the powerhouses upcountry to the San Francisco Bay Area. The power is used for City and County of San Francisco offices and services, including the San Francisco Municipal Transit Agency and the San Francisco International Airport and its tenants. Surplus power is sold to the Modesto and Turlock Irrigation Districts and other public agencies.

Hetch Hetchy Water and Power is comprised of two component parts: 1) The Power Enterprise which is wholly contained within the Hetch Hetchy fund; and 2) The Water Enterprise's upcountry operations and water system.

### Hetchy Water

#### Mission, Roles, and Responsibilities

Hetchy Water endeavors to operate as an effective, reliable water and power supplier, while managing resources in an environmentally responsible manner. Hetchy Water is responsible for the operation, maintenance and improvement of water and power facilities to a high standard of safety and reliability while meeting regulatory requirements. Hetchy Water distributes high quality water to SFPUC customers while optimizing the resulting generation of clean hydropower as that water is transported through the system. Hetchy Water maintains land and properties consistent with public health and neighborhood concerns and also promotes diversity and the health, safety and professional development of its employees.

### Hetchy Power

#### Mission, Roles and Responsibilities

The core business of Hetchy Power is to provide adequate and reliable supplies of electric power to meet the electricity needs of the City and County of San Francisco's customers and to satisfy the municipal loads and agricultural pumping demands of the Modesto and Turlock Irrigation Districts consistent with prescribed contractual obligations and Federal law.

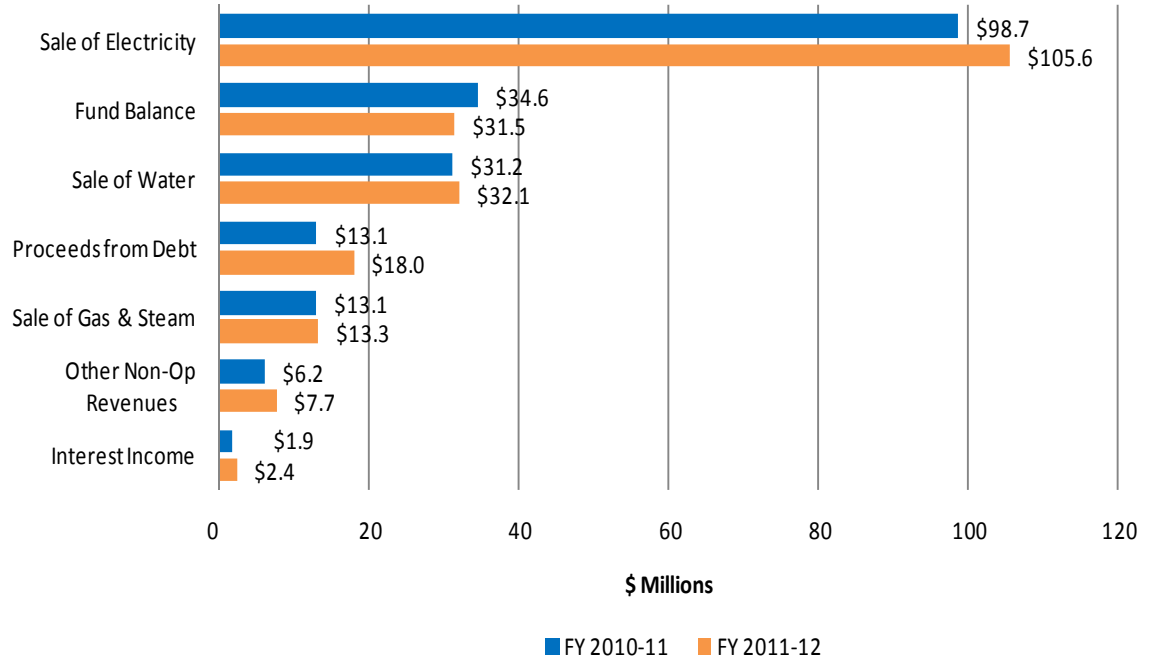
Hetchy Power's portfolio consists of hydroelectric generation, small on-site solar and third party purchases. Consistent with its commitment to the development of cleaner and greener power, and to address environmental concerns and community objectives, Hetchy Power continues to evaluate and expand its existing resource base to include additional renewables, distributed generation, demand management, and energy efficiency programs.

As part of its mission and core functions, Hetchy Power provides reliable energy services at reasonable cost to customers, with attention to environmental effects and community concern.

# Budget Summary

## Sources of Funds

Chart H1. FY 2010-11 and FY 2011-12 Hetch Hetchy Water and Power Sources of Funds, \$198.8 Million and \$210.7 Million



## *Summary*

Estimated revenues from Sale of Electricity for FY 2010-11 is \$98.7 million and for FY 2011-12 is \$105.6 million. The estimated Fund Balance for FY 2010-11 is \$34.6 million and for FY 2011-12 is \$31.5 million; Sale of Water in FY 2010-11 at \$31.2 million and for FY 2011-12 at \$32.1 million, Proceeds from Debt for FY 2010-11 at \$13.1 million and in FY 2011-12 at \$18.0; Sale of Natural Gas and Steam for FY 2010-11 at \$13.1 million and in FY 2011-12 at \$13.3, and Other Non-Operating Revenues are estimated for FY 2010-11 at \$8.1 million and in FY 2011-12 at \$10.1 million. The net change from the FY 2009-10 budget reflects an increase in Sale of Electricity, Use of Fund Balance and Proceeds from Debt. Changes from FY 2010-11 to FY 2011-12 are found in larger debt service due to greater investment in major repair and replacement of infrastructure and in increased sale of electricity. The two budgets are generally flat with a 5.7 percent increase across the Sources of Funds. Chart H1 shows a breakdown of the FY 2010-11 and FY 2011-12 sources of funds by revenue categories. Table H1 shows the FY 2009-10 FY 2010-11 and FY 2011-12 budgets, FY 2008-09 actuals, FY 2009-10 pre-audit actuals and the variance between the FY 2010-11 and FY 2009-10 budgets as well as the variance between the FY 2010-11 and FY 2011-12 budgets.

## *Sale of Electricity*

Sale of Electricity is budgeted at \$98.7 million which is \$9.1 million more than the amount budgeted for FY 2009-10. The increase is due to an increase in projected revenues of \$5.3 million mainly from the City's Enterprise departments, \$2.6 million from retail customers and \$1.2 million from wholesale customers.

- \$65.1 million is estimated from municipal customers and is based on General Fund or Enterprise rates and projected power usage adjusted for off-line facilities and new facilities where service is coming on-line as well as energy efficiency measures. The Enterprise rate is based on PG&E tariff approved by the California Public Utilities Commission (CPUC). The net increase of \$5.3 million from the FY 2009-10 budget reflects an adjustment to power rates and consumption for the Enterprise municipal customers.
- \$17.2 million is estimated from retail customers including customers from the Retail Electric Settlement Account, San Francisco Housing Authority, San Francisco Parking Garages, San Francisco Port tenants, San Francisco Unified School District, Community College, California Academy of Sciences, and other miscellaneous customers. Projected revenues are based on Enterprise and rates specified in miscellaneous contracts and projected electric usage, adjusted for off-line facilities and new facilities where service is coming on-line as well as energy efficiency measures. The \$2.6 million increase from the FY 2009-10 budget reflects projected changes in rates and consumption.
- \$16.4 million is estimated from wholesale customers, Modesto Irrigation District (MID), Turlock Irrigation District (TID), and the Western Systems Power Pool (WSPP). Estimated revenues from MID and TID are based on rates and loads specified in the Amended and Restated Long-Term Agreements between San Francisco and MID and TID. WSPP revenue estimates are based on Hetchy's available excess power and projected market rates. The \$1.2 million increase from the FY 2009-10 budget is due to projected market prices.

Revenues from the Sale of Electricity in FY 2011-12 is estimated to increase by 7.0 percent for a total of \$105.6 million. The increase is due to increases in power market rates and consumption.

### *Fund Balance*

Fund Balance totaling \$34.6 million is appropriated to support Hetch Hetchy Water and Power's operating and capital improvement needs for FY 2010-11. The \$4.7 million increase from FY 2009-10 budget supports increases in Hetchy's capital improvement funding. In FY 2011-12 Use of Fund Balance decreases to \$31.5 million reflecting an increase in sale of electricity.

### *Sale of Water*

Sale of Water is budgeted at \$31.2 million. The estimated revenues include \$29.7 million from the Sale of Water to the Water Enterprise (shown as an off-set in the W1 Table) and are based on an analysis of prior year actual operating and capital expenditures. The budget remains constant. The balance of \$1.5 million is from water sales to Lawrence Livermore Labs and Groveland based on applicable rates and projected consumption. The \$0.2 million increase from FY 2009-10 is mainly due to a planned and already adopted rate increase. The minor increase in sale of water in FY 2011-12, estimated at \$ 32.1 million also reflects the rate increase.

### *Proceeds from Debt*

Proceeds from Debt, budgeted at \$13.1 million, are based on an analysis of projected capital improvement costs for transmission reliability, including seismic improvements and other upgrades to assure the transmission of water. The FY 2010-11 budget includes \$7.1 million from proceeds from Clean Renewable Energy Bonds (CREBs) and \$6.0 million allocated from the Water Enterprise to Hetchy Water for water-related capital projects. The net increase of \$6.6 million from FY 2009-10 is due to \$7.1 million revenues from CREBs and an off-set of \$0.5 million from a reduction in the Water Enterprise's cost allocation. In FY 2011-12 the proceeds from debt are planned to increase to \$18.0 million to continue the seismic improvements and upgrades to the transmission system.

### *Sale of Gas and Steam*

Sale of Gas and Steam is budgeted at \$13.1 million, and is based on Pacific Gas & Electric (PG&E) and Department of General Services (DGS) retail rates and historical usage. Hetchy Power is responsible for processing and billing City departments for natural gas and steam. The revenue generated from gas and steam is a pass-through and has no impact ultimately on Hetchy's fund balance. The budget includes \$12.1 million for gas and \$1.0 million for steam. The \$2.7 million reduction from FY 2009-10 budget is due to adjustments for commodity rates and projected consumption. In FY 2011-12 the estimated revenue is flat, the increase to \$13.3 million reflects projected increases in rates and consumption.

### *Other Non-Operating Revenues*

Other Non-Operating Revenues total \$6.2 million and include: \$3.0 million from electric and gas receipts from Treasure Island tenants based on PG&E rates and projected usage; \$1.8 million from rents, PG&E rebates, claim settlements and other miscellaneous income; \$1.1 million from Treasure Island Development Authority (TIDA) primarily for utility services for TIDA managed facilities based on PG&E rates and historical analysis of usage; and \$0.3 million from the San Francisco International Airport tenants and Water Enterprise for miscellaneous services provided by Hetch Hetchy based on projected costs of labor and materials for services to be provided. The reduction of \$1.2 million from the FY 2009-10 budget is due to the elimination of FY 2009-10 income from the Transbay Cable project. In FY 2011-12 the total increases by \$1.5 million to \$7.7 million reflecting additional revenues for TIDA.

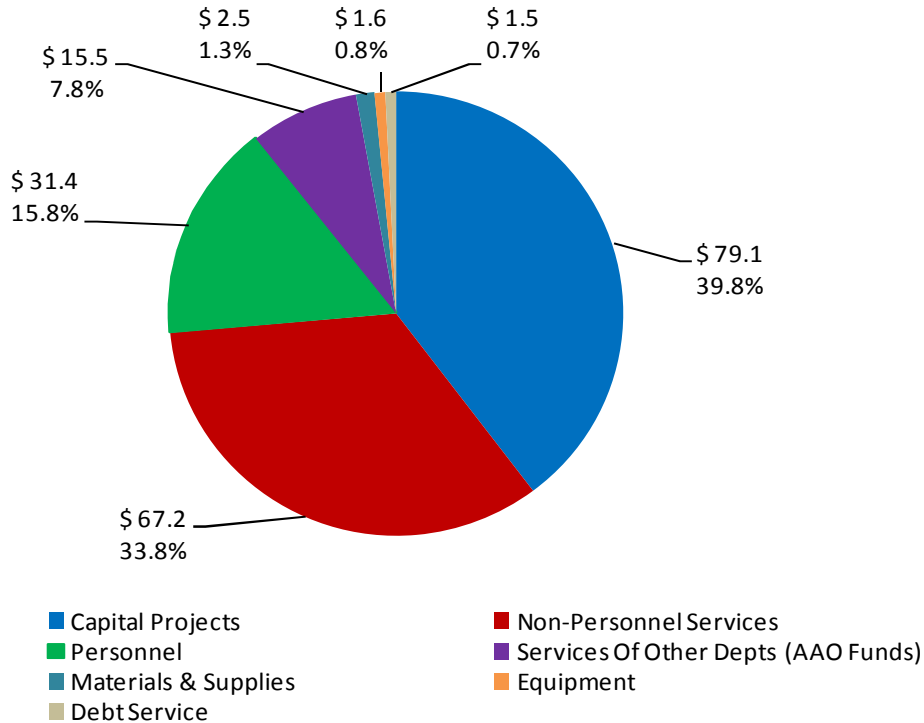
### *Interest Income*

Revenues from Interest Income total \$1.9 million and are based on interest rates on cash balance. Due to confirmed low interest rates and lower cash balances, revenues are projected to be \$0.7 million less than FY 2009-10 budgeted amount. In FY 2011-12, Interest Income increases to \$2.4 million reflecting the greater amount of Enterprise funds in the investment pool.



## Uses of Funds

Chart H2. FY 2010-11 Hetch Hetchy Water and Power Uses of Funds, \$198.8 Million



### Summary

The FY 2010-11 Uses of Funds include \$79.1 million for Capital Projects, \$67.2 million for Non-Personnel Services, \$31.4 million for Personnel and \$21.1 million for Services of Other Departments, Materials and Supplies, Equipment, and Debt Service. Major changes from the FY 2009-10 budget include a \$14.2 million increase in Capital Projects. Chart H2 provides a breakdown of the FY 2010-11 Uses of Funds by expenditure categories; and Table H1 shows budgeted Uses of Funds for FY 2009-10 and FY 2010-11 and actual expenditures for FY 2008-09 and FY 2009-10 by categories. Table H2 shows Uses of Funds for FY 2009-10 and FY 2010-11 and actual expenditures for FY 2008-09 and FY 2009-10 by Division.

### Capital Projects

Capital Projects are budgeted at \$79.1 million and are based on SFPUC's Ten-Year Capital Plan, which is part of the City's Ten-Year Capital Plan approved by the Board of Supervisors annually. The approved Ten-Year Capital Plan is discussed in Hetch Hetchy Ten-Year Capital Plan Section. The FY 2010-11 Hetch Hetchy Water and Power capital project budget is \$14.2 million more than the approved FY 2009-10 capital project budget due to an increase in the Hetchy Power Streetlight Repair project to fund the conversion of 17,600 SFPUC owned and maintained streetlights to Light Emitting Diode (LED) and an increase to fund Hetchy's Power Infrastructure repair and replacement projects.

### Non-Personnel Services

This category is budgeted at \$67.2 million and is based on projected spending levels for various services provided to Hetch Hetchy Water and Power. The net reduction of \$2.9 million, or 4.1 percent, compared to the FY 2009-10 budget reflects a \$2.7 million

reduction for lower costs associated with natural gas and steam for City departments, which is a pass-through and a reduction of \$1.8 million for projected power purchases. The reductions are offset by a \$1.6 million increase to fund new and on-going programs: Tuolumne River studies, Health Safety and Emergency Preparedness and watershed services from the National Park Service.

### *Personnel*

Personnel is budgeted at \$31.4 million, including \$22.3 million for salaries and \$9.1 million for fringe benefits. Salaries are based on various labor agreements. The net increase of \$1.1 million over the FY 2009-10 approved salaries budget reflects increases for partially-funded FY 2009-10 positions, position substitutions, the deletion of one position and position reassignment between Hetch Hetchy and other SFPUC Enterprises. Eight new positions were added for work related to power systems operations and facility maintenance and energy data systems. Nine positions were converted from project-funded positions to operating positions. These positions support the core operating functions.

Mandatory fringe benefits are budgeted at \$9.1 million and are based on the cost of budgeted salaries, labor agreements and legally required increases such as social security. The net increase of \$1.4 million over the FY 2009-10 budget reflects adjustment to salaries, health and retirement employer contribution rates.

### *Services of Other Departments*

Services of Other Departments are budgeted at \$15.5 million and based on the projected costs of services provided by other City departments to Hetch Hetchy. The increase of \$0.8 million over the FY 2009-10 budget primarily reflects an increase to Hetch Hetchy's share of Bureau costs.

### *Materials and Supplies*

Materials and Supplies are budgeted at \$2.5 million and based on projected cost and usage for materials and supplies. The \$0.1 million increase from the FY 2009-10 budget reflects costs associated with power systems operations and maintenance of facilities.

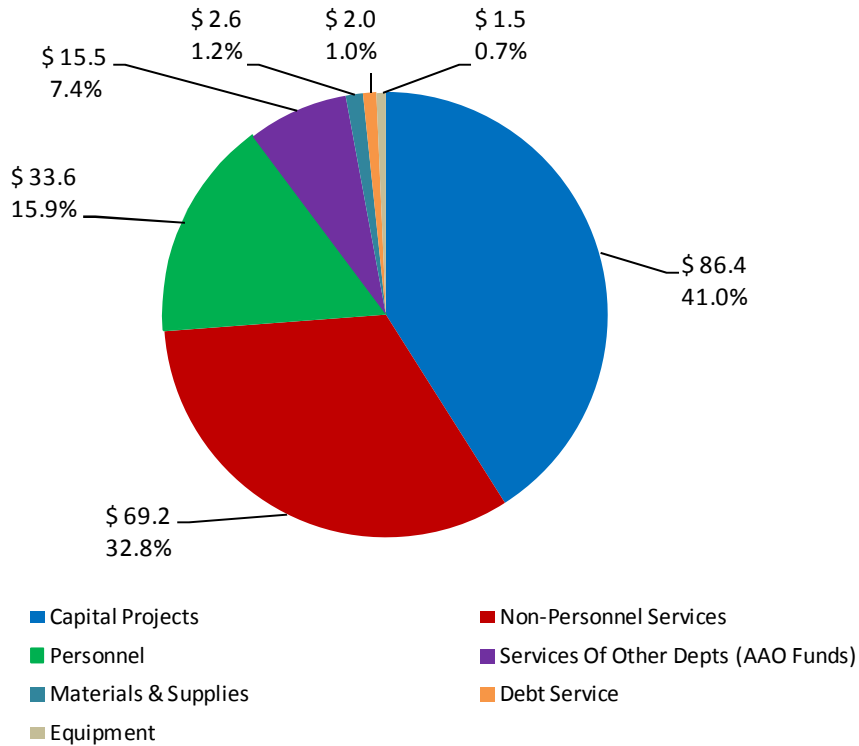
### *Equipment*

The equipment budget is \$1.6 million and is based on equipment which is necessary to efficiently and effectively operate and maintain the overall system consisting of dams, reservoirs, water and power transmission lines and power generation facilities. The \$0.2 million increase reflects projected costs for replacement vehicles to travel to the various facilities throughout the project.

### *Debt Service*

The budget for Debt Service totals \$1.5 million and is based on principal and interest on the Clean Renewable Energy Bonds (CREBs) and Qualified Energy Conservation Bonds (QECCBs). The increase of \$1.1 million from the FY 2010-11 budget fully funds the annual payment of the CREBs and QECCBs issued to fund three solar photovoltaic (PV) projects as well as energy conservation aspects of the SFPUC's new headquarters building located at 525 Golden Gate Avenue in San Francisco.

Chart H3. FY 2011-12 Hetch Hetchy Water and Power Uses of Funds, \$210.7 Million



### Summary

The FY 2011-12 Uses of Funds includes \$86.4 million for capital projects, \$69.2 million for Non-Personnel Services, \$33.6 million for Personnel and \$21.6 million for Services of Other Departments, Materials and Supplies, Equipment, and Debt Service. Major changes from the FY 2010-11 budget include a \$7.3 million increase in Capital Projects. Chart H3 provides a breakdown of the FY 2011-12 Uses of Funds by expenditure categories; and Table H1 shows budgeted Uses of Funds for FY 2009-10, FY 2010-11 and FY 2011-12 and actual expenditures for FY 2008-09 and FY 2009-10 by categories. Table H2 shows Uses of Funds for FY 2009-10 and FY 2010-11 and actual expenditures for FY 2008-09 and FY 2009-10 by Division.

Table H1. Hetch Hetchy Water and Power Sources and Uses of Funds (\$ Million)

\$ Millions	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2011-12 vs. FY 2010-11 Adopted Budget	
						Amount	%	Amount	%
<b>SOURCES OF FUNDS</b>									
Sale of Water	24.5	31.0	31.1	31.2	32.1	0.2	0.5%	0.9	2.9%
Sale of Electricity	90.7	89.6	93.8	98.7	105.6	9.1	10.1%	7.0	7.1%
Sale of Natural Gas & Steam (Pass-through)	14.4	15.8	11.5	13.1	13.3	(2.7)	-17.2%	0.3	2.1%
Fund Balance	-	29.9	16.8	34.6	31.5	4.7	15.6%	(3.1)	-8.9%
Other Non-Op Revenues	1.8	7.4	6.4	6.2	7.8	(1.2)	-15.8%	1.5	24.1%
Proceeds from Debt	-	6.5	6.5	13.1	18.0	6.6	102.1%	4.9	37.0%
Interest Income	3.7	2.6	1.7	1.9	2.4	(0.7)	-25.4%	0.5	27.1%
<b>Total Sources of Funds</b>	<b>135.1</b>	<b>182.8</b>	<b>167.8</b>	<b>198.8</b>	<b>210.7</b>	<b>16.0</b>	<b>8.8%</b>	<b>11.9</b>	<b>5.7%</b>
<b>USES OF FUNDS</b>									
Personnel	26.6	28.9	27.6	31.4	33.6	2.5	8.9%	2.2	6.9%
Overhead	0.9	-	-	-	-	-	0.0%	-	0.0%
Non-Personnel Services	48.4	70.1	55.4	67.2	69.2	(2.9)	-4.1%	1.9	2.9%
Materials & Supplies	1.9	2.4	2.6	2.5	2.6	0.1	5.7%	0.0	1.6%
Equipment	2.0	1.4	2.4	1.6	1.5	0.2	7.5%	(0.1)	-6.1%
Debt Service	0.4	0.4	0.4	1.5	2.0	1.1	266.8%	0.5	32.0%
Services Of Other Depts	15.5	14.7	14.5	15.5	15.5	0.8	5.0%	0.1	0.3%
General Reserve	3.4	-	-	-	-	-	0.0%	-	0.0%
Capital Projects	36.0	64.9	64.9	79.1	86.4	14.2	21.8%	7.3	9.3%
<b>Total Uses of Funds</b>	<b>135.1</b>	<b>182.8</b>	<b>167.8</b>	<b>198.8</b>	<b>210.7</b>	<b>16.0</b>	<b>8.8%</b>	<b>11.9</b>	<b>5.7%</b>

Table H2. Hetch Hetchy Water and Power Uses of Funds by Section

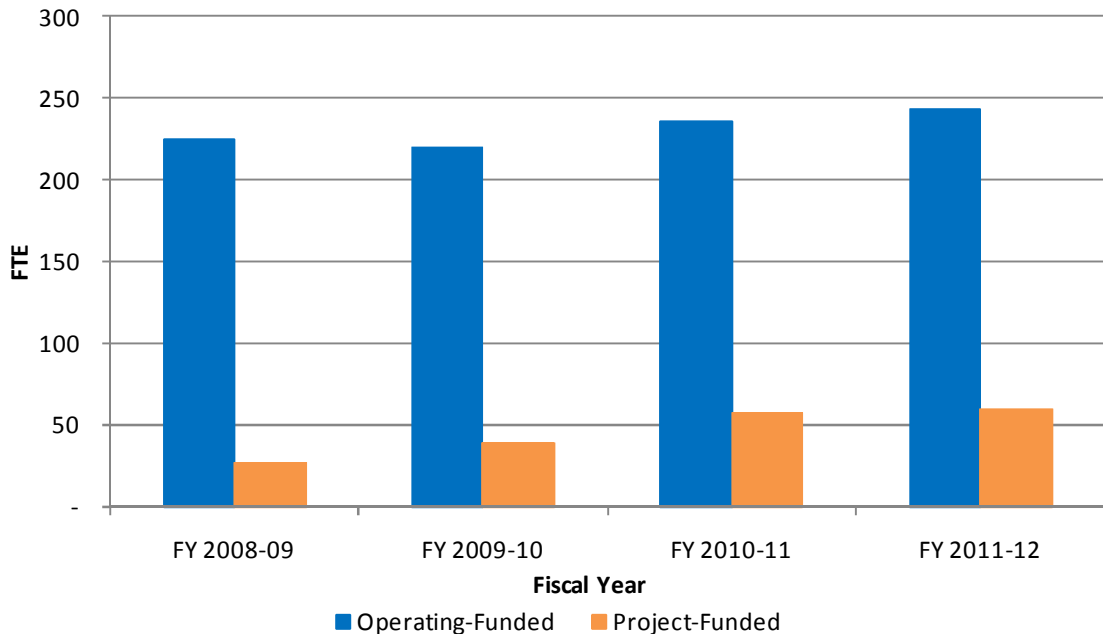
\$ Millions	FY 2008-09 Pre-Audit Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
<b>Departmental Sections</b>						
Power Administration	14.7	9.8	8.9	9.4	(0.4)	-3.8%
Energy Services	26.6	44.8	27.3	42.5	(2.3)	-5.1%
Long Range Planning	2.5	1.0	1.2	2.4	1.4	148.2%
Light, Heat and Power	16.1	18.2	13.5	18.7	0.6	3.0%
Project Operations	39.2	44.1	51.8	46.6	2.5	5.8%
Capital Projects	36.0	64.9	64.9	79.1	14.2	21.8%
<b>Hetch Hetchy Total</b>	<b>135.1</b>	<b>182.8</b>	<b>167.8</b>	<b>198.8</b>	<b>16.0</b>	<b>8.8%</b>

## Authorized and Funded Full-Time Equivalent (FTE)

Table H3. Hetch Hetchy Water and Power Authorized and Funded Full-Time Equivalent (FTE)

	FY 2008-09 Adopted Budget	FY 2009-10 Adopted Budget	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10	FY 2011-12 Adopted Budget	FY 2011-12 vs. FY 2010-11
Permanent Positions	216.41	211.88	226.72	14.84	233.87	7.15
Temporary Positions	8.08	8.41	8.77	0.36	8.77	-
<b>Subtotal Operating Budget-Funded</b>	<b>224.49</b>	<b>220.29</b>	<b>235.49</b>	<b>15.20</b>	<b>242.64</b>	<b>7.15</b>
Project-Funded Positions	26.69	38.24	57.47	19.23	60.00	2.53
<b>Total Positions</b>	<b>251.18</b>	<b>258.53</b>	<b>292.96</b>	<b>34.43</b>	<b>302.64</b>	<b>9.68</b>

Chart H4. Hetch Hetchy Water and Power Operating and Project FTE Trend



As noted in Table H3 and Chart H4 above, the total authorized and funded full-time equivalent (FTE) operating budget, project-funded, and temporary positions (including attrition savings for an expected position vacancy rate during the fiscal year) for FY 2010-11 is 292.96 FTEs, an increase of 34.43 FTEs from FY 2009-10. The FTE total for FY 2011-12 is 302.64 an increase from FY 2010-11 of 9.68 FTEs. The net change in the FTE count from FY 2009-10 to FY 2010-11 reflects the conversion of nine operating funded positions from project-funded positions, position annualization of partially funded FY 2009-10 positions, the deletion of one position, and the addition of nineteen new positions (funded for nine months). The new positions include eight operating budget-funded positions and eleven project-funded positions to support the following programs: power systems operations and facility maintenance, energy data systems, redevelopment projects, renewable generation, Light Emitting Diode (LED) conversion projects, and North American Electric Reliability Corporation/Western Electricity Coordinating Council (NERC/WECC). In FY 2011-12 the trend of slight increase in the operating positions increases as does the project-funded positions reflecting the continued capital program.

## FY 2010-11 Hetch Hetchy Water and Power Annual Capital Plan

Table H4. shows the CIP for FY 2009-10, FY 2010-11 and FY 2011-12 by major programs.

Table H4. Hetch Hetchy Water and Power CIP by Major Program

\$	FY 2009-10 Adopted Budget	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget
<b>Program/Project</b>			
<b>Hetchy Power</b>			
Streetlight	384,554	10,105,000	22,110,000
Transmission/Distribution	1,000,000	2,000,000	2,000,000
Generation	8,501,303	11,200,000	9,200,000
Energy Efficiency	10,895,720	5,912,000	6,894,500
Treasure Island	2,700,000	1,000,000	2,900,000
Purchase of City Property	5,000,000	0	
Trans Bay Cable Project	0	3,500,000	1,500,000
Reclassification - Power Only, Joint Projects	21,300,000	30,300,000	22,000,000
<b>Hetchy Power Total</b>	<b>49,781,577</b>	<b>64,017,000</b>	<b>66,604,500</b>
<b>Hetchy Water</b>			
Communications/Security/Miscellaneous	4,000,000	6,500,000	5,500,000
Reservoirs/Dams	2,000,000	0	0
Water Transmission	6,000,000	5,250,000	12,500,000
Power Infrastructure	17,200,000	25,760,000	12,740,000
Reclassification - Power Only, Joint Projects	(21,300,000)	(30,300,000)	(22,000,000)
Buildings/Roads/Right-of-Way	3,666,351	3,500,000	7,500,000
Camp Mather Project	0	600,000	0
<b>Hetchy Water Total</b>	<b>11,566,351</b>	<b>11,310,000</b>	<b>16,240,000</b>
Programmatic Projects	3,552,819	3,736,977	3,554,819
<b>Uses Total</b>	<b>64,900,747</b>	<b>79,063,977</b>	<b>86,399,319</b>
<b>Sources</b>			
Clean Renewal Energy Bonds	0	6,000,000	4,000,000
Revenue Bonds/Joint Water Assets	6,500,000	7,137,500	14,000,000
Revenue - Funded	58,400,747	65,926,477	68,399,319
<b>Sources Total</b>	<b>64,900,747</b>	<b>79,063,977</b>	<b>86,399,319</b>

The Hetch Hetchy Water and Power Capital Improvement Program (CIP) for FY 2010-11 is \$79.1 million and includes: \$64.0 million for Hetchy Power and joint related projects, \$11.3 million for Hetchy Water and joint related projects and \$3.7 million for Programmatic Projects. The FY 2010-11 CIP is funded by \$65.9 million in Hetch Hetchy Water and Power Revenue, a \$7.1 million issuance of Water Enterprise debt for projects

considered Water or joint Hetchy/Water assets and \$6.0 million in Clean Renewable Energy Bonds. The projects are included in the SFPUC's Ten-Year Capital Plan which is part of the City and County of San Francisco's Ten-Year Capital Plan approved by the Board of Supervisors annually.

The FY 2010-11 CIP is approximately \$14.2 million, 22.0 percent more than the FY 2009-10 approved CIP. This is a result of the increase in the Hetchy Power Streetlight Repair project to fund the conversion of the SFPUC's 17,600 owned and maintained street lights to LED and an increase to fund Hetchy's Power Infrastructure repair and replacement project.

Projects in the FY 2010-11 CIP include:

## Hetchy Power

- \$6.2 million for Renewable/Generation projects such as small renewable (solar PV, solar thermal, wind, geothermal, fuel cells), small hydro (in-line turbines, turbines in existing pipelines, incremental hydro) and ocean generation (tidal energy, wave energy, offshore-wind).
- \$5.0 million for the Sustainable Energy Account to fund the GoSolarSF incentive program that promotes the installation of solar power systems in San Francisco by offering one-time incentive payments to reduce project costs.
- \$10.1 million for Streetlights to fund the conversion of SFPUC's 17,600 owned and maintained cobra-head street lights from High Pressure Sodium Vapor (HPSV) to Light Emitting Diode (LED) technologies and installation of a smart lighting controls system.
- \$25.8 million to fund major improvements to the power generation and transmission system portion of the Hetch Hetchy Project. This will fund a number of power related projects including work at all facilities including powerhouses, switchyards and transmission/distribution system.
- \$5.5 million for Transmission Distribution Projects including \$3.5 for the Trans Bay Cable project.
- \$5.9 million for Energy Efficiency Project including \$4.2 million for General Fund Departments, \$1.4 million for the Civic Center Sustainability District and 0.3 million for Enterprise Departments.
- \$4.5 million funds major improvements on joint asset located up-country (55.0 percent).
- \$1.0 million for improvements to the power infrastructure on Treasure Island.

## Hetchy Water

- \$5.2 million for Water Infrastructure projects to fund major improvements and maintenance activities involved with the water supply and delivery portion of the Hetch Hetchy Project.
- \$5.5 million to fund major improvements and maintenance activities involved with the support infrastructure required for the operation and maintenance of both the water delivery and the power generation/transmission system portions of the Hetch Hetchy Project. For costs associated with joint asset projects, the SFPUC allocates 55 percent of the costs to Hetchy Power and 45 percent to Hetchy Water.
- 0.6 million for repairs at Camp Mather

The Hetch Hetchy FY 2011-12 Capital Budget includes \$44.6 million for Hetchy Power to fund the continued conversion of the SFPUC's 17,000 streetlights to Light Emitting Diode (LED), \$2.0 million for investments in renewable generation projects and \$6.9 million for energy efficiency projects for General Fund and Enterprise departments.

The Hetchy Water FY 2011-12 Budget is \$38.3 million and includes funding for improvements to the water transmission system, reservoirs and dams, \$12.5 million, Power Infrastructure projects including the rehabilitation of transmission/distribution

systems and switchyards, \$12.8 and \$13.0 million for rehabilitation of support infrastructure (buildings/roads/right-of-way) and communication systems throughout the Hetchy system.

## Hetch Hetchy Water and Power Ten-Year Capital Plan

The SFPUC is required to develop a ten-year capital plan. Reliability and delivery of high quality water and renewable sources of power are the most critical objectives of the Hetch Hetchy Water and Power, therefore understanding the long-term capital needs of the system and determining how to finance these capital needs is essential. Table H5 shows the Hetch Hetchy Water and Power Ten-Year Capital Plan by program/project. The table also shows the three different sources of revenue that are expected to finance the CIP over these 10 years and the anticipated number of jobs created by this program.

Table H5. Hetch Hetchy Water and Power Ten-Year Capital Plan (\$ Millions)

SFPUC: Hetch Hetchy Water and Power							
\$ Thousands							
Program/Project	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16 to FY 2019-20	PLAN TOTAL
<b>Costs</b>							
<b>Hetchy Power</b>							
Streetlight	10,105	22,110	1,504	1,509	1,244	29,628	66,100
Transmission/Distribution	2,000	2,000	2,190	2,815	1,910	0	10,915
Renewable/Generation	11,200	9,200	9,500	9,500	9,500	41,500	90,400
Energy Efficiency	5,912	6,895	5,645	5,095	3,645	17,413	44,603
Treasure Island	1,000	2,900	10,450	9,850	3,775	3,500	31,475
Reclassification - Power Only, Joint Projects	30,300	22,000	45,000	62,400	67,700	198,500	425,900
<b>Hetchy Power Total</b>	<b>60,517</b>	<b>65,105</b>	<b>74,289</b>	<b>91,169</b>	<b>87,774</b>	<b>290,541</b>	<b>669,393</b>
<b>Hetchy Water</b>							
Communications/Security/Miscellaneous	6,500	5,500	2,500	1,500	500	3,000	19,500
Reservoirs/Dams	0	500	2,000	2,000	2,000	37,500	44,000
Water Transmission	5,250	12,000	26,500	27,000	28,000	210,000	308,750
Power Infrastructure	25,760	12,740	24,675	41,558	43,096	73,400	221,229
Reclassification - Power Only, Joint Projects	(30,300)	(22,000)	(45,000)	(62,400)	(67,700)	(198,500)	(425,900)
Facilities/Roads/Right-of-Way	3,500	7,500	14,500	19,500	22,500	28,500	96,000
<b>Hetchy Water Total</b>	<b>10,710</b>	<b>16,240</b>	<b>25,175</b>	<b>29,158</b>	<b>28,396</b>	<b>153,900</b>	<b>263,579</b>
<b>TOTAL Uses</b>	<b>71,227</b>	<b>81,345</b>	<b>99,464</b>	<b>120,327</b>	<b>116,170</b>	<b>444,441</b>	<b>932,972</b>
<b>Sources</b>							
Clean Renewable Energy Bonds	6,000	4,000	4,000	4,000	4,000	20,000	42,000
Revenue Bonds/Joint Water Assets	7,137	14,000	25,150	29,100	28,525	148,875	252,787
Revenue Funded	58,090	63,345	28,500	28,500	28,500	142,500	349,435
<b>TOTAL Sources</b>	<b>71,227</b>	<b>81,345</b>	<b>57,650</b>	<b>61,600</b>	<b>61,025</b>	<b>311,375</b>	<b>644,222</b>
<i>Total San Francisco Jobs/Year</i>	<i>513</i>	<i>586</i>	<i>415</i>	<i>444</i>	<i>439</i>	<i>2,242</i>	<i>4,638</i>
<b>Shortfall</b>	<b>0</b>	<b>0</b>	<b>(41,814)</b>	<b>(58,727)</b>	<b>(55,145)</b>	<b>(133,066)</b>	<b>(288,750)</b>
To be funded with debt, additional revenues, and/or deferring expenditures							

There are two sections to the Ten-Year Capital Plan (Table H5 and Chart H5); these are:

1. The Hetchy Water Capital and Renewal and Replacement programs are financed by a combination of Water revenue bonds and operating revenues;

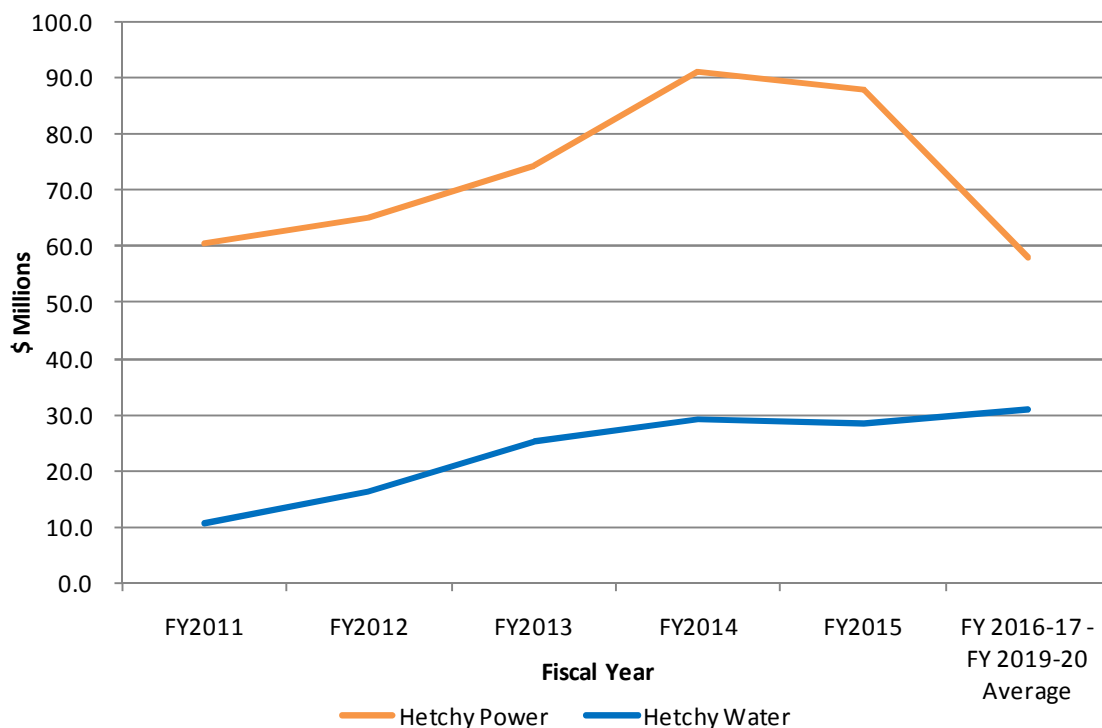
The Hetchy Water Renewal and Replacement budget includes Power Infrastructure and joint Water (45%)/Power (55%) projects that are located upcountry and managed by Hetchy Water.

2. The Hetchy Power Capital Program which undertakes projects both within San Francisco and in the watershed and are financed by operating revenues and tax-credit



bonds at this time. Hetchy Power includes the renewable energy and efficiency projects critical to attain greenhouse gas reductions and begin climate change mitigation.

Chart H5. Hetch Hetchy Water and Power Ten-Year Capital Plan Trend



### *Hetchy Water Renewal and Replacement Program*

The Hetch Hetchy renewal and replacement program is comprised entirely of the projected costs of \$263.9 million for Hetch Hetchy Water. These proposed costs will be financed with a combination of revenue bonds and additional revenues. If revenues are not available, projects will be deferred.

- Power Infrastructure, \$221.2 million** - The plan proposes \$221.2 million in investments to repair and replace the Hetch Hetchy power system’s excitors, governors, oil circuit breakers, transformers, transmitters, and distribution system. Projects will include the installation of continuous variable transmission and high voltage circuit breakers for the Early Intake Switchyard, the Moccasin Powerhouse Generator Rewind, Kirkwood Powerhouse Unit 2 Rewind, Holm Powerhouse Generator Circuit Breaker install, and Step-Up Transformers for the Kirkwood Powerhouse and Moccasin Powerhouse.
- Communications and Security Renewals \$19.5 million** – Investments for Communications and Security are needed over the next ten years to assist in operating the Joint Water and Power System. The capital plan includes developing a new microwave communication system by the end of 2011. It also includes installing a multi-fiber communication link from Moccasin to the Powerhouses and Switchyard at Intake as a backup communication system to microwave. Due to the critical communication needs at these remote powerhouses, and to meet WECC/NERC requirements and system reliability, this redundant communication link is part of the ten-year plan.
- Reservoirs/Dams, \$44.0 million** – Capital projects include improvements at Priest to address turbidity issues, rehabilitation of the Moccasin Reservoir to address water quality, safety and security issues and improvements to the Cherry Reservoir’s pumps and valves to mitigate system failure.

- **Water Transmission, \$308.7 million** – Capital projects include work on the San Joaquin Pipelines rehabilitation, Mountain Tunnel Rehabilitation, Kirkwood Penstock repairs due to slippage and design of a modified drainage system, Holm and Moccasin Reservoir condition assessments, rehabilitation of the O’Shaughnessy Outlet Works to provide for the full use of the spillway (drum gate structure), Coast Range Tunnel assessment, reline and coat Holm Penstock to increase generation efficiency, rehabilitation at Canyon Tunnel Hetch Hetchy Adit plus inspection of the tunnel and rock/sand trap, Moccasin Penstock rehab and repair, and ongoing water system assessments of remaining HHWP facilities.
- **Reclassification – Power Infrastructure, Joint Water/Power Projects - (\$425.9 million)** - The Hetchy Water Capital budget includes the reallocation of Power Infrastructure, \$221.2 million, and the Power Enterprise’s share of Joint Water/Power projects, \$204.7 million to the Hetchy Power Capital Budget. These projects are located upcountry and managed by Hetchy Water.
- **Buildings/Roads/Rights-of-Way, \$96.0 million** - This is a multi-year project to fund renewals and replacements to support the infrastructure required for the operation and maintenance of both the water delivery and power generation/transmission system portion of the Hetch Hetchy Project. The capital plan includes:

The design of new roads as well as ongoing road and bridge repairs on the project.

The design, upgrade and construction of existing and new support structures and facilities on the project including major structural renovations and upgrades, lead paint abatement, re-roofing, interior remodels, and upgrading and remodeling craft work areas and shops. These upgrades will allow Hetchy to meet California Building Code (CBC) requirements, address issues relating to safety and the Americans with Disabilities Act (ADA), energy efficiency, infrastructure, parking, Leadership in Energy and Environmental Design, and regulatory issues.

### *Hetchy Power Capital Program*

The capital program is comprised entirely of \$669.4 million in projected costs for Hetchy Power.

- **Streetlighting, \$66.1 million** - Hetchy Power provides power to the 42,000 streetlights in San Francisco. It maintains 22,000 streetlights owned by the City, and coordinates and funds the maintenance of approximately 20,000 streetlights owned by Pacific Gas & Electric (PG&E).

Hetchy Power is in the process of performing an assessment of the existing streetlight system, particularly City-owned facilities over 60 years old, and preparing a retrofit/replacement program that will include specific recommendations, strategies for capital recovery, and an implementation schedule. The plan also includes \$16 million to start the conversion of the SFPUC’s 17,600 owned and maintained cobra-head street lights from High Pressure Sodium Vapor (HPSV) to Light Emitting Diode (LED) technologies & installation of a smart lighting controls system.

- **Transmission and Distribution \$10.9 million** - Transmission and distribution (T&D) projects are defined as 12 kV service voltages and higher. These projects address the SFPUC’s ability to assess and develop City-owned transmission and distribution assets as well as evaluate its reliance on assets owned by a third-party. T&D projects support the SFPUC’s responsibility to provide long-term electric reliability options and services for the City. Estimated to cost \$10.9 million over the next ten years, these projects include the following:
  - A condition assessment of existing third-party T&D systems and ultimate construction, estimated to cost \$4.5 million.
  - Construction and ownership of new T&D systems where power can be taken at a higher (or primary service) voltage and then stepped down to a lower (or secondary service) voltage, estimated to cost \$3.5 million.

- A small portion of the T&D projects are renewal and replacement, totaling \$3.4 million.
- **Generation/Renewable Power, \$90.4 million** - To deliver electricity as a commodity to its customers, Hetchy Power relies on its power generated from the Hetch Hetchy hydroelectric powerhouses, on-site solar photovoltaic generation, and third-party purchases. In accordance with the requirements of City policies and directives relating to renewable energy and goals to reduce greenhouse gases, the Hetchy Power is continuously researching, developing and implementing new electricity generation resources to provide clean, local generation where it is needed and ensuring reliable power services. Costs over the next ten years are projected at \$90.4 million. This includes both renewable energy projects and strengthening local electric reliability. Design-build solar PV projects underway include San Francisco Municipal Transportation Agency Ways and Structures, San Francisco Municipal Transportation Agency Ways and Structures Woods Coach, Chinatown Public Health, City Hall (part of the sustainable energy district), and Davies Symphony Hall. Wind projects are being planned at Twin Peaks and Crissy Field. Additional rooftop solar PV projects are being planned for SFPUC facilities such as the Millbrae Yard, San Francisco International Airport terminal rooftops and parking facilities, Moscone West, Moscone Ice Skating Rink, Alvarado School, among others.
  - **Ocean Generation Project:** In accordance with expressed policy by the Mayor and Board of Supervisors, the Hetchy Power is considering an Ocean Generation Project to generate renewable energy for use in municipal facilities. The scale of this project is a key determinant of future capital requirements, and is dependent upon sufficient net revenues. This project is estimated to cost \$4.4 million over the next ten years.
  - **Solar Energy Power Purchase Agreements:** The SFPUC is examining a number of ways to increase the generation of renewable power. The additional larger amounts of renewable energy may be needed to meet Renewable Portfolio Standards (RPS) for public power, possible RPS standards for municipal loads (if State legislation is enacted for this requirement) and possible renewable needs for Community Choice Aggregation. Hetchy Power has entered into a Power Purchase Agreement and a corresponding lease for the deployment of solar energy at Sunset Reservoir. The project is expected to be in operation by 3rd quarter of FY 2010-11. Other sites are also being examined for larger scale development of solar energy at SFPUC-owned land at Tesla and Sunol. The model for development is straight power purchase agreements, where Hetchy Power agrees to purchase power and the developer designs, permits, installs, owns and operates the system, thereby minimizing the Hetchy Power's upfront capital costs. Ownership of the facility could transfer to the City after the developer recovers its costs and earns a reasonable rate of return.
- **Energy Efficiency, \$44.6 million** - The plan proposes \$44.6 million in energy efficiency investments over the next ten years. An important component of an electric utility's resource portfolio, energy efficiency investments reduce facility operating costs and electric bills for customers, improve system functionality, and reduce the environmental impact of energy use. Since FY 2002-03, the Energy Efficiency program has achieved 30 million kWh/year, 11 MW peak power reductions, and 241,000 therms/year savings (not including San Francisco International Airport savings discussed below).

In FY 2008-09, the Energy Efficiency program completed 26 energy efficiency projects, saving an estimated 3,035,000 kWh/year (446 kW peak demand); completed projects at the SFPUC Northpoint Wet-Weather Facility, Southeast and Oceanside Water Pollution Control Plants; conducted 36 energy efficiency audits; completed energy efficiency lighting projects at the Hall of Justice, Broadway Tunnel, several police and fire stations, and 18 Port facilities; initiated mechanical system retrofit projects at seven Port facilities and the new Port Tenant Energy Efficiency Services program; and supported San Francisco International Airport staff in implementing

energy efficiency projects with estimated annual savings of 2.9 million kWh/year and 376,000 therms/year.

Energy savings goals for the current fiscal year are 3 million kWh/year, 50,000 therms/year, and 500 kW peak demand reductions.

- **Treasure Island, \$31.5 million** - The Cooperative Agreement discussed in the Water Enterprise's Renewal Program also requires the SFPUC to provide utility operations and maintenance services at Treasure and Yerba Buena Islands for the electrical and natural gas utility systems. The SFPUC has developed a work plan for creating a public power utility on each of the islands. The electric redevelopment projects included the replacement of a submarine cable from Oakland to Treasure Island, a new underground 12-kV Distribution System at Treasure Island, Yerba Buena Island, and in Oakland, as well as a new 115-kV substation in Oakland.
- **Reclassification – Power Infrastructure, Joint Water/Power Projects - \$425.9 million** - The Hetchy Power Capital budget includes the reallocation of Power Infrastructure, \$221.2 million, and the Power Enterprise's share of Joint Water/Power projects, \$204.7 million from the Hetchy Water Capital Budget. The projects are located upcountry and managed by Hetchy Water.

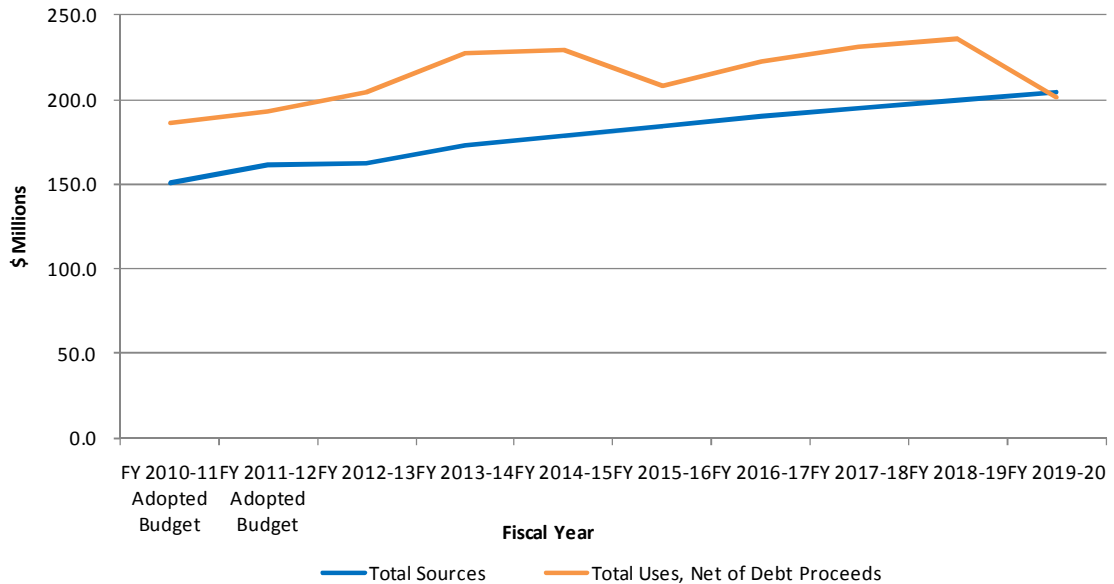
## Ten-Year Financial Plan

All SFPUC Enterprises develop a Ten-Year Financial Plan as well as a Ten-Year Capital Plan. As noted in Table H6, however, the Hetch Hetchy fund has projected capital requirements that outpace currently available funding sources, including current power revenues and use related funding as well as limited power financings through (CREBs and QECBs). To bridge this gap, the SFPUC is securing a Power Enterprise credit rating, as well as developing the required proforma and rate structure for policy makers to consider support associated with debt service requirements. The San Francisco Charter requires that all budgets must be balanced, so even though the Long-Range Financial Plan shows artificial shortfall, a combination of both sources and uses adjustments will ultimately occur to bring budget into balance.

Table H6. Hetch Hetchy Water and Power Ten-Year Financial Plan (\$ Millions)

Description (\$ Millions)	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
	Adopted Budget	Adopted Budget								
<b>Beginning Operating Fund Balance</b>	95.4	60.6	29.1	(12.3)	(66.8)	(118.0)	(141.9)	(173.9)	(209.8)	(246.5)
<b>Sources</b>										
Power Sales - SF City Departments	65.0	71.2	71.7	78.9	80.9	83.0	85.1	87.3	89.6	91.9
Power Sales - Direct & Retail	17.2	18.4	21.3	23.2	25.3	27.3	29.4	30.1	30.8	31.5
Power Sales - Districts & WSPP	16.4	16.0	16.4	16.9	17.4	18.6	19.0	19.4	19.9	20.4
Water Sales - Upcountry	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Water Assesment Fee (Transfer In)	29.7	30.6	31.6	32.5	33.5	34.5	35.5	36.6	37.7	38.8
Natural Gas & Steam	13.1	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
Interest Income	1.9	2.4	1.4	1.0	1.0	1.0	1.1	1.1	1.1	1.1
Other Misc Income	6.3	7.7	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
<b>Total Sources</b>	<b>151.1</b>	<b>161.2</b>	<b>162.7</b>	<b>172.8</b>	<b>178.4</b>	<b>184.7</b>	<b>190.5</b>	<b>194.9</b>	<b>199.4</b>	<b>204.1</b>
<b>Uses</b>										
Operations & Maintenance	118.4	122.3	127.7	133.4	138.9	147.3	152.7	156.8	161.0	165.4
Debt Service	1.5	2.0	1.7	2.0	2.3	2.6	2.9	3.2	3.5	3.8
Subtotal	119.9	124.3	129.4	135.4	141.2	149.9	155.6	160.0	164.5	169.2
<b>Net Revenues Before Capital</b>	<b>31.2</b>	<b>36.9</b>	<b>33.3</b>	<b>37.5</b>	<b>37.2</b>	<b>34.8</b>	<b>34.8</b>	<b>34.9</b>	<b>34.9</b>	<b>34.9</b>
Capital and Programmatic Projects	79.1	86.4	103.8	125.1	120.9	88.2	101.6	111.0	107.2	60.8
Less: Proceeds from Debt	(13.1)	(18.0)	(29.2)	(33.1)	(32.5)	(29.6)	(34.7)	(40.1)	(35.6)	(28.8)
<b>Total Uses, Net of Debt Proceeds</b>	<b>185.9</b>	<b>192.7</b>	<b>204.1</b>	<b>227.4</b>	<b>229.6</b>	<b>208.5</b>	<b>222.5</b>	<b>230.9</b>	<b>236.1</b>	<b>201.3</b>
<b>Net Revenues After Capital</b>	<b>(34.8)</b>	<b>(31.5)</b>	<b>(41.4)</b>	<b>(54.5)</b>	<b>(51.2)</b>	<b>(23.8)</b>	<b>(32.0)</b>	<b>(36.0)</b>	<b>(36.6)</b>	<b>2.8</b>
<b>Ending Fund Balance</b>	<b>60.6</b>	<b>29.1</b>	<b>(12.3)</b>	<b>(66.8)</b>	<b>(118.0)</b>	<b>(141.9)</b>	<b>(173.9)</b>	<b>(209.8)</b>	<b>(246.5)</b>	<b>(243.6)</b>
<b>Fund Balance as % of Revenue</b>	<b>40.1%</b>	<b>18.0%</b>	<b>-7.6%</b>	<b>-38.7%</b>	<b>-66.2%</b>	<b>-76.8%</b>	<b>-91.3%</b>	<b>-107.7%</b>	<b>-123.6%</b>	<b>-119.4%</b>
<b>Fund Balance as % of Expense</b>	<b>32.6%</b>	<b>15.1%</b>	<b>-6.0%</b>	<b>-29.4%</b>	<b>-51.4%</b>	<b>-68.0%</b>	<b>-78.1%</b>	<b>-90.9%</b>	<b>-104.4%</b>	<b>-121.1%</b>
<b>Fund Balance as % of Operating Expense</b>	<b>51.2%</b>	<b>23.8%</b>	<b>-9.6%</b>	<b>-50.1%</b>	<b>-85.0%</b>	<b>-96.3%</b>	<b>-113.8%</b>	<b>-133.8%</b>	<b>-153.1%</b>	<b>-147.3%</b>
<b>Debt Service Coverage (Indenture)</b>	<b>82.80</b>	<b>48.75</b>	<b>38.21</b>	<b>13.71</b>	<b>-11.96</b>	<b>-31.15</b>	<b>-36.00</b>	<b>-42.48</b>	<b>-48.98</b>	<b>-54.62</b>
<b>Debt Service Coverage (Current)</b>	<b>21.15</b>	<b>19.07</b>	<b>20.86</b>	<b>19.93</b>	<b>17.29</b>	<b>14.44</b>	<b>13.04</b>	<b>11.90</b>	<b>10.96</b>	<b>10.17</b>

Chart H6. Hetch Hetchy Water and Power Ten-Year Financial Plan Trend



The SFPUC’s Ten-Year Financial Plan as required by City and County of San Francisco Charter Section 8B.123, includes a ten-year financial summary (FY 2010-11 through FY 2019-20), describing projected sources and uses, resulting fund balances and associated financial reserve ratios. Projected costs and revenues are estimates and subject to variations inherent in all such projections. Consequently, the estimates should not be viewed as precise predictions but rather as indications of expected trends, given certain expenditure, receipt, and financing assumptions. These assumptions are based on current Board of Supervisor’s policies, goals, and objectives representing management’s best estimates at this time.

## Rates and Charges

Hetch Hetchy Water and Power charges for services relating to the storage and delivery of water, including the provision of providing electric supply to contractual and municipal customers. Transfers from the Water Enterprise are forecast to increase as associated operating and capital costs increase at their respective 3.0 percent and 5.0 percent annual rates. For municipal power services, customers generally pay negotiated rates based on the projected PG&E equivalent rate of Enterprise departments based on customer class. Hetch Hetchy Power completed a revenue requirement analysis in 2009 and will complete a formal retail rate setting process during FY 2010-11 to support new retail electric customers coming online over the next few years in the redevelopment areas, mainly Hunters Point and Treasure Island.

## Sources of Funds

Hetch Hetchy Water and Power operates the Hetch Hetchy Reservoir, the main source of water for the Hetch Hetchy system and is responsible for generating, transmitting and distributing electricity to City and County of San Francisco Power Enterprise customers. The Enterprise operates and maintains power transmission and generation facilities, buys and sells electric power, provides energy conservation and renewable resource solutions to City departments and maintains 22,000 City-owned streetlights as well as providing the power and required funding for the 20,000 streetlights operated by PG&E. Total sources are forecast to increase from \$151.1 million in FY 2010-11 to \$204.1 million by FY 2019-20.

- Power Sales receipts are projected to increase from \$98.6 million in FY 2010-11 to \$143.8 million by FY 2019-20. Over the period, about two-thirds of power sales will be made to City departments for municipal use; 15.0 percent to the Modesto and Turlock Irrigation Districts as wholesale customers; and the remaining, about 20.0 percent, to other customers.
- Water-Related Sales will increase from \$31.2 million to \$40.3 million over the ten years, representing services related to Water Enterprise fees and sales upcountry.
- Other income including natural gas and steam, reimbursements and interest income, is forecast to average \$20.0 million annually over the period.

## Uses of Funds

The Plan includes a 3.0 percent annual growth assumption for operations and maintenance costs and a 5.0 percent annual escalation in revenue-funded capital costs.

The annual operating budget includes operation and maintenance costs, repair and replacement costs for existing equipment and facilities, and loans used to finance capital improvements. Operations and maintenance costs are approximately two-thirds of the Hetch Hetchy Water and Power's expenditures with revenue-funded capital the remaining one-third. Over the period, total expenditures average \$210.8 million per year with annual variations mainly from changes in capital funding requirements.

- Operations and Maintenance costs include labor salaries and fringe benefits, material and supplies, watershed management costs, power purchases, and services of other City departments (including the SFPUC Bureaus). The FY 2010-11 budget to operate the enterprise is \$118.4 million, increasing to \$165.4 million by FY 2019-20. Costs are expected to increase an estimated 3.0 percent per year over the period.
- Debt Service costs include repayment on loans and financing for Clean Renewable Energy Bonds and are increasing from \$0.4 million to \$3.8 million over the ten years. Hetch Hetchy Water and Power is developing a financial plan which will allow for future bond-financing to fund its capital needs including Qualified Energy Conservation Bonds.
- Revenue-funded Capital Projects include major maintenance and rebuilding projects associated with the upcountry water and power infrastructure. This includes projects associated with the Hetch Hetchy Reservoir and watershed, as well as the nearby power generating and distribution facilities. Project needs have been identified averaging \$75.0 million annually, however, as the long-range plan indicates current rates can only fund approximately half of this need. The cumulative effect of ongoing negative net revenues indicates a depleted fund balance in FY 2012-13.

## Financing of Capital Needs

The Hetchy Water and Power Ten-Year Financial Plan assumes both revenue and bond financing of its capital needs. Of the \$79.1 million capital program in FY 2010-11, \$6.0 million are renewable energy projects funded by CREBs and \$7.1 million are water-related projects and funded by Water Enterprise revenue bonds. The remaining \$66 million (83 percent) is revenue-funded. A larger proportion of debt financing of capital needs will be reflected in future revisions to this long-range plan.

## Fund Balances and Reserves

In FY 2010-11, fund balance as a proportion of operating expense is approximately 51 percent (6.1 months of expense). However, fund balance is projected to be depleted by the end of FY 2012-13, as a result of anticipated revenue-funding the Hetch Hetchy Water and Power capital needs. Capital financing options are currently being developed to fund the Power Enterprise capital needs over the longer term.

## Hetch Hetchy Water and Power, Pro-forma Allocation

Table H7, Chart H7 and Chart H8 shows the allocation of Hetch Hetchy Water and Power Sources and Uses of Funds based on water and power service delivery by the respective Divisions, Hetchy Water and Hetchy Power. FY 2010-11 sources and uses is \$198.8 million of which \$160.8 million, or 80.9 percent, is allocated to Hetchy Power and \$38.0 million, or 19.1 percent, is allocated to Hetchy Water. Uses of funds show operating costs of \$20.0 million and capital costs of \$30.3 million being allocated from Hetchy Water to Hetchy Power.



Table H7. FY 2010-11 Hetch Hetchy Water and Power Sources and Uses of Funds by Division (\$ Million)

\$ Millions	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2011-12 vs. FY 2010-11 Adopted Budget	
						Amount	%	Amount	%
<b>SOURCES OF FUNDS</b>									
<b>Hetchy Power</b>									
Interest Income	2.9	2.0	1.3	1.5	1.8	(0.5)	-23.8%	0.3	19.7%
Proceeds from Debt	-		6.5	6.0	4.0	6.0	100.0%	(2.0)	-33.3%
Other Revenues	1.8	7.1	6.4	5.9	7.8	(1.2)	-16.3%	1.9	31.2%
Sale of Natural Gas & Steam (Pass-through)	14.4	15.9	11.5	13.1	13.3	(2.8)	0.0%	0.2	0.0%
Use of Fund Balance	7.3	31.8	14.7	35.6	35.7	3.8	11.9%	0.1	0.4%
Sale of Water	-		-	-	-	-	0.0%	-	0.0%
Sale of Electricity	90.7	89.6	93.8	98.7	105.6	9.1	10.1%	6.9	7.0%
<b>Subtotal Hetchy Power</b>	<b>117.1</b>	<b>146.4</b>	<b>134.2</b>	<b>160.8</b>	<b>168.2</b>	<b>14.4</b>	<b>9.8%</b>	<b>7.4</b>	<b>4.6%</b>
<b>Hetchy Water</b>									
Interest Income	0.8	0.5	0.4	0.4	0.6	(0.1)	-24.3%	0.2	52.2%
Proceeds from Debt		6.5		7.1	14.0	0.6	8.8%	6.9	96.1%
Other Revenues		0.3		0.3	(0.0)	(0.0)	-8.0%	(0.3)	-100.0%
Sale of Natural Gas & Steam				-	-	-	0.0%	-	0.0%
Use of Fund Balance	(7.3)	(1.9)	2.1	(1.0)	(4.2)	0.9	-48.4%	(3.2)	328.2%
Sale of Water	24.5	31.1	31.1	31.2	32.1	0.1	0.4%	0.9	2.8%
Sale of Electricity				-	-	-	0.0%	-	0.0%
<b>Subtotal Hetchy Water</b>	<b>18.0</b>	<b>36.4</b>	<b>33.5</b>	<b>38.0</b>	<b>42.5</b>	<b>1.5</b>	<b>4.1%</b>	<b>4.5</b>	<b>11.9%</b>
<b>Hetch Hetchy Water and Power</b>									
Interest Income	3.7	2.5	1.7	1.9	2.4	(0.6)	-23.9%	0.5	26.2%
Proceeds from Debt	-	6.5	6.5	13.1	18.0	6.6	101.7%	4.9	37.0%
Other Revenues	1.8	7.4	6.4	6.2	7.8	(1.2)	-16.0%	1.6	25.4%
Sale of Natural Gas & Steam	14.4	15.9	11.5	13.1	13.3	(2.8)	0.0%	0.2	0.0%
Use of Fund Balance	-	29.9	16.8	34.6	31.5	4.7	15.7%	(3.1)	-8.9%
Sale of Water	24.5	31.1	31.1	31.2	32.1	0.1	0.4%	0.9	2.8%
Sale of Electricity	90.7	89.6	93.8	98.7	105.6	9.1	10.1%	6.9	7.0%
<b>Hetch Hetchy Total Sources</b>	<b>135.1</b>	<b>182.8</b>	<b>167.8</b>	<b>198.8</b>	<b>210.7</b>	<b>16.0</b>	<b>8.8%</b>	<b>11.8</b>	<b>5.9%</b>
<b>USES OF FUNDS</b>									
<b>Hetchy Power</b>									
Operations and Maintenance	41.7	57.6	39.1	58.5	60.3	0.9	1.5%	1.8	3.1%
Natural Gas & Steam Pass-Through	14.4	15.8	11.5	13.1	13.3	(2.7)	-17.3%	0.3	2.1%
Debt Service	0.4	0.4	0.4	1.5	2.0	1.1	266.8%	0.5	32.0%
General Reserve	3.4	-	-	-	-	-	-	-	-
Reclassification of Power Only & Joint Operating Costs	22.0	19.4	30.0	20.0	22.4	0.6	3.1%	2.4	12.0%
<b>Subtotal</b>	<b>81.9</b>	<b>93.2</b>	<b>81.0</b>	<b>93.0</b>	<b>98.0</b>	<b>(0.2)</b>	<b>-0.2%</b>	<b>5.0</b>	<b>5.3%</b>
Capital Projects	26.5	31.9	31.9	37.5	48.2	5.6	17.6%	10.7	28.5%
Reclassification of Power Only & Joint Operating Costs	8.7	21.3	21.3	30.3	22.0	9.0	42.3%	(8.3)	-27.4%
<b>Hetchy Power Subtotal</b>	<b>117.1</b>	<b>146.4</b>	<b>134.2</b>	<b>160.8</b>	<b>168.2</b>	<b>14.4</b>	<b>9.9%</b>	<b>7.4</b>	<b>4.6%</b>
<b>Hetchy Water</b>									
Operations and Maintenance	39.2	44.1	51.9	46.7	48.7	2.5	5.7%	2.0	4.3%
Reclassification of Power Only & Joint Operating Costs	(22.0)	(19.4)	(30.1)	(20.0)	(22.4)	(0.6)	3.1%	(2.4)	12.0%
<b>Subtotal</b>	<b>17.2</b>	<b>24.7</b>	<b>21.8</b>	<b>26.7</b>	<b>26.3</b>	<b>1.9</b>	<b>7.7%</b>	<b>(0.4)</b>	<b>-1.5%</b>
Capital Projects	9.5	33.0	33.0	41.6	38.2	8.6	26.1%	(3.4)	-8.2%
Reclassification of Power Only & Joint Operating Costs	(8.7)	(21.3)	(21.3)	(30.3)	(22.0)	(9.0)	42.3%	8.3	-27.4%
<b>Hetchy Water Subtotal</b>	<b>18.0</b>	<b>36.4</b>	<b>33.5</b>	<b>38.0</b>	<b>42.5</b>	<b>1.5</b>	<b>4.1%</b>	<b>4.5</b>	<b>11.9%</b>
<b>Hetch Hetchy Water and Power</b>									
Operations and Maintenance	80.9	101.7	91.0	105.1	108.9	3.4	3.3%	3.8	3.6%
Natural Gas & Steam Pass-Through	14.4	15.8	11.5	13.1	13.3	(2.7)	-17.2%	0.3	2.1%
Debt Service	0.4	0.4	0.4	1.5	2.0	1.1	266.8%	0.5	32.0%
General Reserve	3.4	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>99.1</b>	<b>117.9</b>	<b>102.9</b>	<b>119.7</b>	<b>124.3</b>	<b>1.8</b>	<b>1.5%</b>	<b>4.6</b>	<b>3.8%</b>
Capital Projects	36.0	64.9	64.9	79.1	86.4	14.2	21.9%	7.3	9.2%
<b>Hetch Hetchy Total Uses</b>	<b>135.1</b>	<b>182.8</b>	<b>167.8</b>	<b>198.8</b>	<b>210.7</b>	<b>16.0</b>	<b>8.8%</b>	<b>11.8</b>	<b>5.9%</b>

Chart H7. FY 2010-11 Hetch Hetchy Water and Power Sources of Funds by Division (\$ Million)

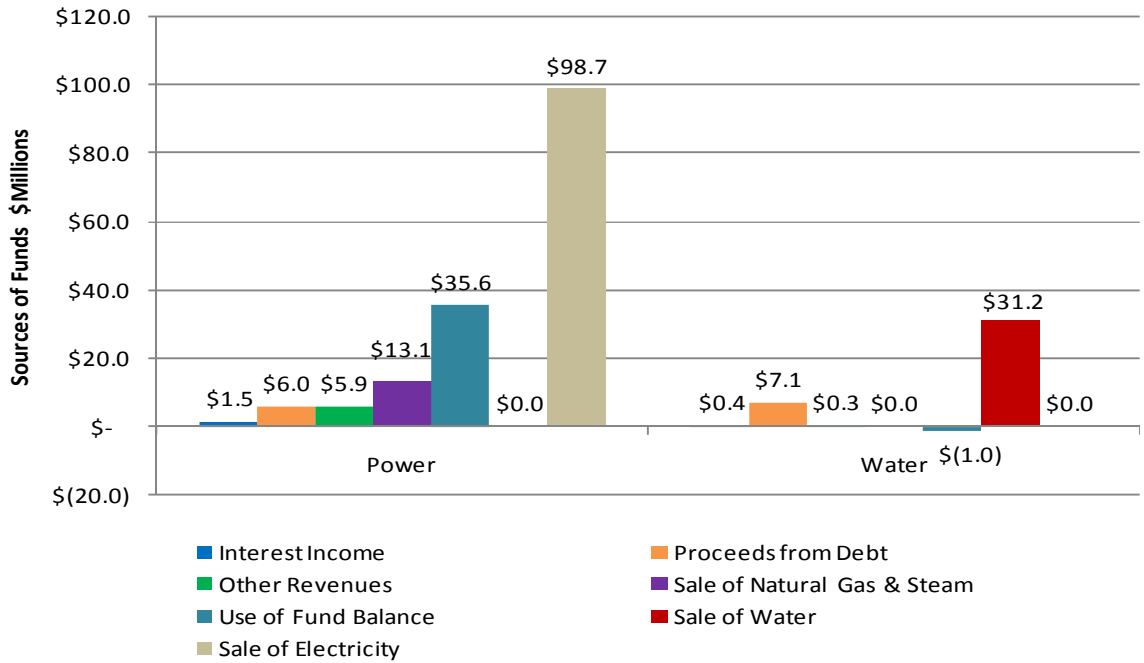


Chart H8. FY 2010-11 Hetch Hetchy Water and Power Uses of Funds by Category (\$ Million)

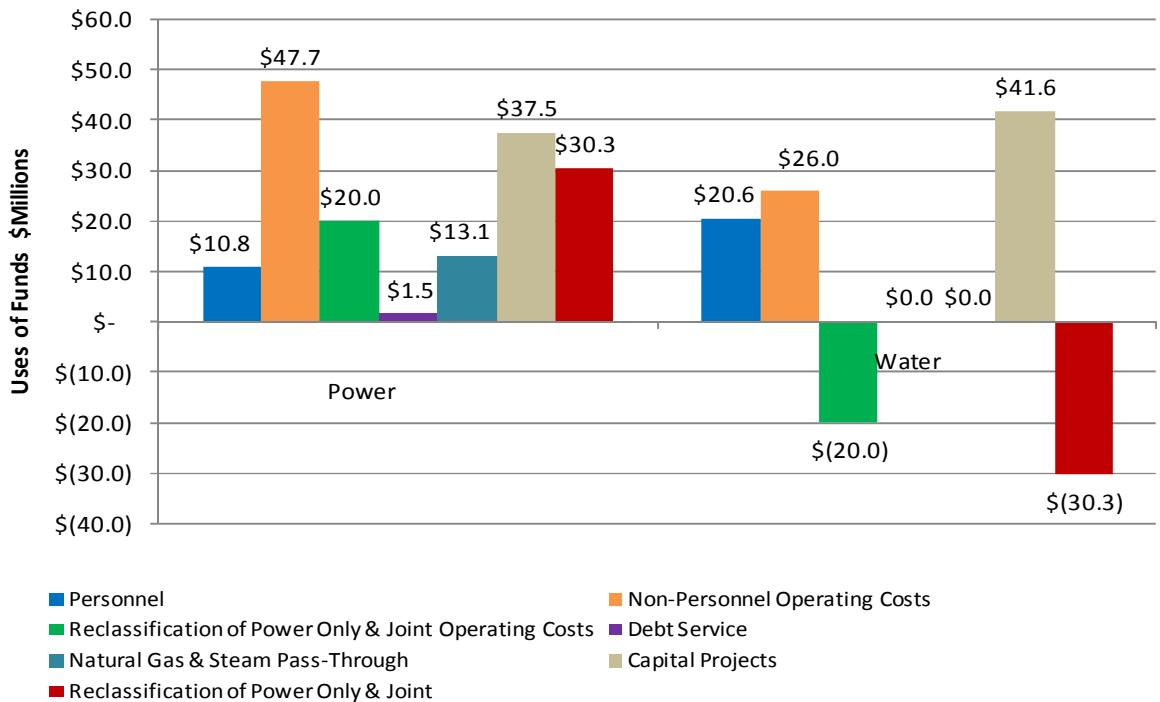


Chart H9 and Chart H10. below show the allocation of the Hetch Hetchy Water and Power total budget by uses and sources of funds by Division, and category for FY 2011-12 budget.

Chart H9. FY 2011-12 Hetch Hetchy Water and Power Sources of Funds by Category (\$ Million)

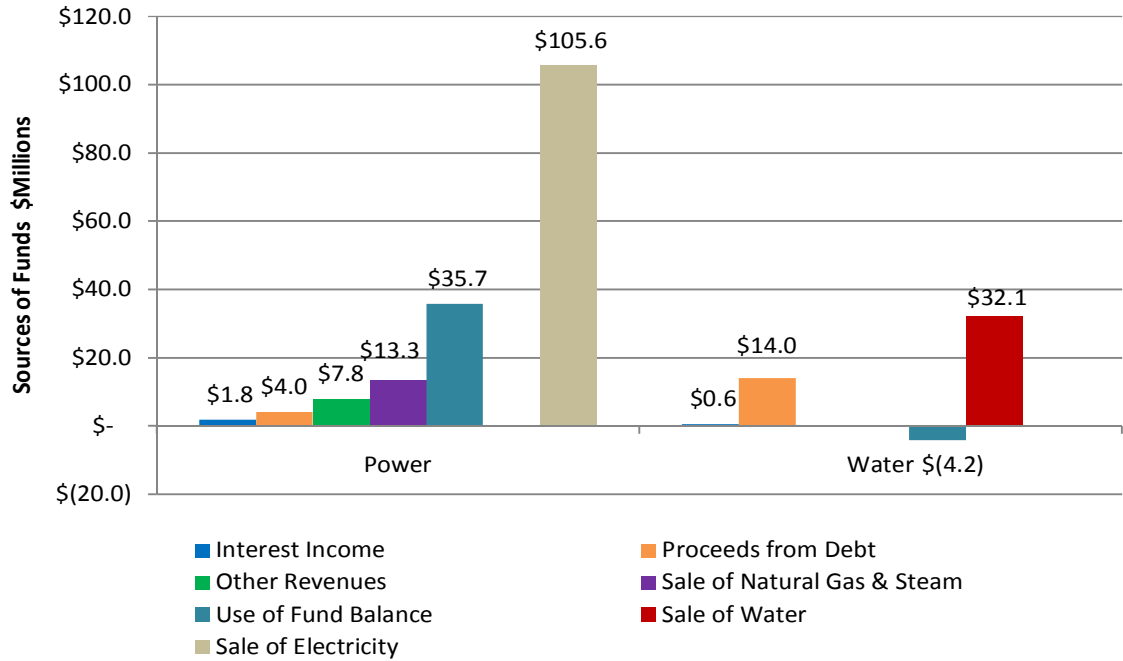
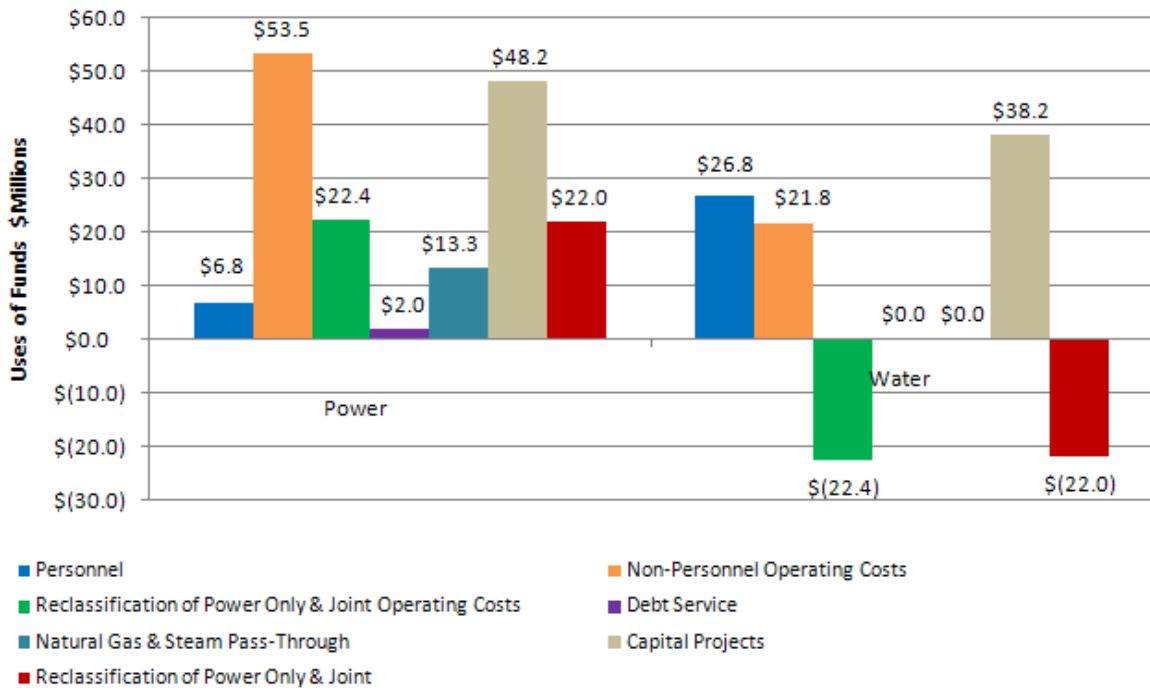
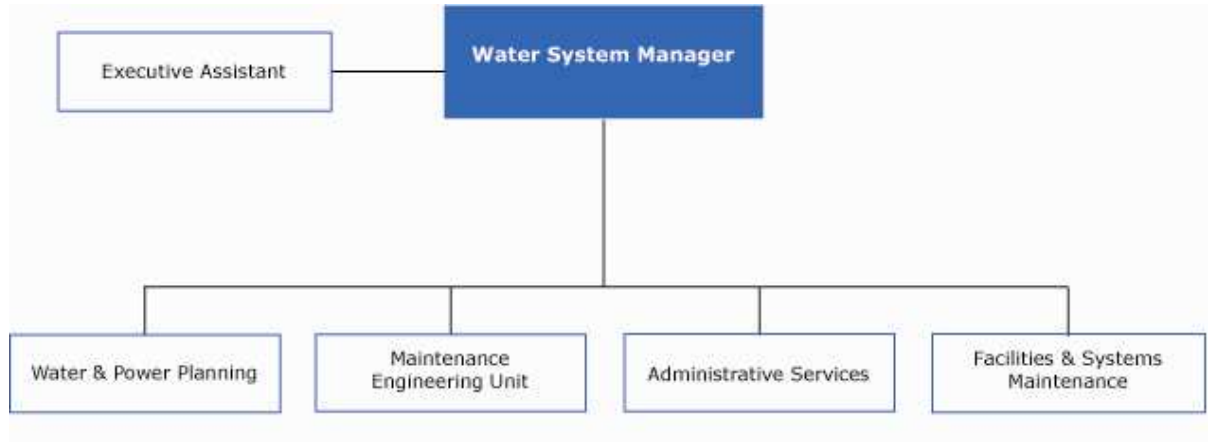


Chart H10. FY 2011-12 Hetch Hetchy Water and Power Uses of Funds by Category (\$ Million)



# HETCH HETCHY WATER

## Hetch Hetchy Water Organization Chart



## FY 2010-11 Hetchy Water Objectives

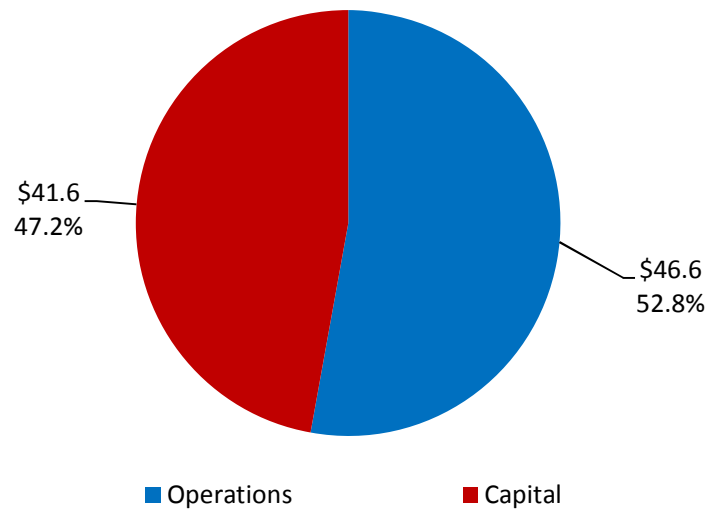
Chart H11 below shows the direct connection between the FY 2010-11 Hetchy Water objectives and performance measures, and both the SFPUC Action Plan goals and the FY 2010-11 budget. As illustrated below, the chart also illustrates that the Enterprise budget provides for resources to support the achievement of performance measures and objectives in addition to the Capital Budget for conveyance facilities upgrades.

Chart H11. Hetchy Water Objectives

HH Water Enterprise FY 2010-11  Objectives and Measures	Action Plan Goals				Water Enterprise Budget	
	Provide High Quality Services	Foster a Green City	Improve Communication	Invest in People	O & M	Regional Capital
<b>Maintain infrastructure to keep water system in a state of good repair and operation</b> <ul style="list-style-type: none"> <li>Inspect 8 miles of conveyance facilities in the Hetch Hetchy System</li> <li>Improve the ratio of scheduled vs unscheduled maintenance so that it does not exceed 1:1</li> <li>60% of all maintenance is for City Distribution and Telsa system is scheduled</li> </ul>	💧				💧 💧	💧

Hetch Hetchy Water has only two uses of funds; Operations which is described below and Capital project which are describe above under the CIP program.

Chart H12 FY 2010-11 Hetchy Water Uses of Funds, \$88.2 Million



## Hetchy Water Operations

Hetchy Water Operations is responsible for operating the Hetch Hetchy Reservoir, the main source of water for the Hetch Hetchy system. Hetchy Water is also responsible for the operation, maintenance, and improvements of smaller dams and reservoirs, water transmission systems, power generation facilities and power transmission assets, including transmission lines to the Newark substation. Chart H3 shows Hetchy Water's allocation for Uses of Funds by capital projects and operations. Table H8 provides the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actuals, FY 2009-10 pre-audit actuals and the variance between the FY 2010-11 and FY 2009-10 budgets.

### Budget Summary

Table H8. Hetchy Water Operations Budget Summary

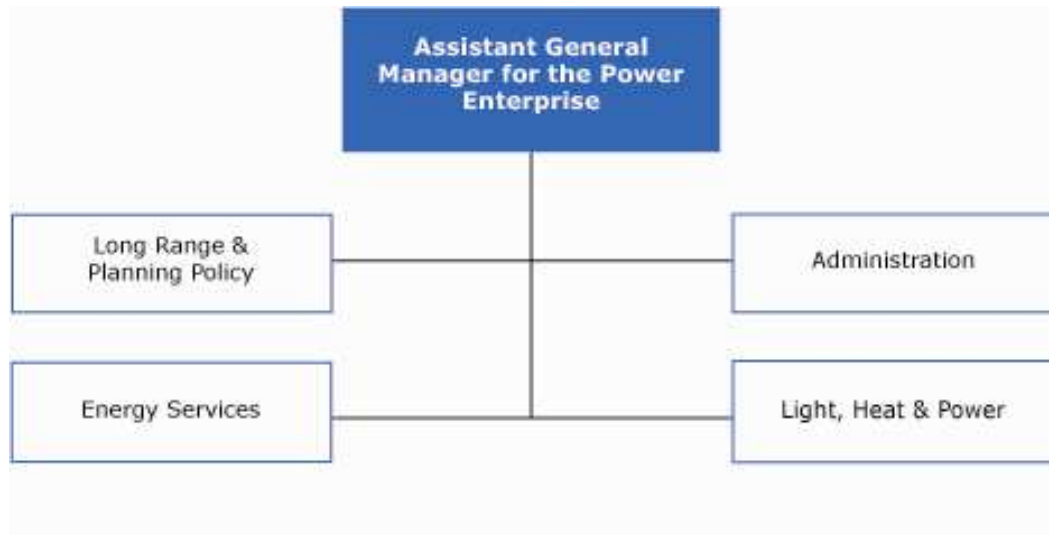
	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs FY 2009-10 Adopted Budget	
					Amount	%
Personnel	17,862,988	19,851,648	18,965,948	20,610,941	759,293	3.8%
Overhead	478,289	-	-	-	-	0.0%
Non-Personnel Services	11,474,375	13,394,529	20,897,107	14,934,324	1,539,795	11.5%
Materials & Supplies	1,497,502	1,828,013	1,824,862	2,016,396	188,383	10.3%
Equipment	725,369	1,298,065	2,218,794	1,289,658	(8,407)	-0.6%
Services Of Other Depts	7,124,108	7,718,012	7,934,504	7,776,048	58,036	0.8%
<b>Total</b>	<b>39,162,631</b>	<b>44,090,267</b>	<b>51,841,215</b>	<b>46,627,367</b>	<b>2,537,100</b>	<b>5.8%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Non Personnel Services** - Reflects an increase to professional services to fund various Tuolumne River studies, legal fees related to Federal Energy Regulatory Commission (FERC) relicensing, and Bay-Delta proceedings and increases to fund projected service costs provided by the National Park Service and other governmental agencies.
- **City Grants Programs** - Funds water conservation grants and rebates for eligible retail customers.
- **Materials & Supplies** - Reflects costs of materials required to maintain the infrastructure and system components.

# HETCH HETCHY POWER

## Hetchy Power Organization Chart





## FY 2010-11 Hetchy Power Objectives

Chart H13 below shows the direct connection between the FY 2010-11 Hetchy Power objectives and performance measures, and both the SFPUC Action Plan goals and the FY 2010-11 budget. The chart also illustrates that the Enterprise budget (operating and capital) provides for resources to support the achievement of performance measures and objectives.

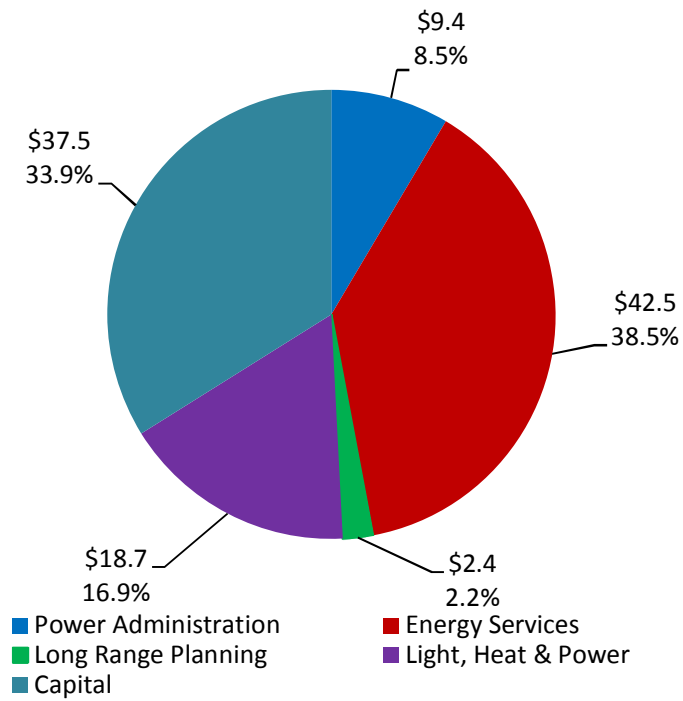
Chart H13. Hetchy Power Objectives

HH Power Enterprise FY 2010-11  Objectives and Measures	Action Plan Goals				HH Power Enterprise Budget	
	Provide High Quality Services	Foster a Green City	Improve Communication	Invest in People	O & M	Capital
<b>Manage the City's Power Supply Effectively and Efficiently</b> <ul style="list-style-type: none"> <li>Municipal Power load falls between 90%-110% of forecast load measured in megawatt hrs</li> </ul>						
<b>Promote Energy Conservation</b> <ul style="list-style-type: none"> <li>Reduce total number of kilowatt hours by 8.7 million</li> <li>Reduce total number of peak kilowatt hours by 1,400</li> </ul>						
<b>Develop and Implement Renewal Energy Projects</b> <ul style="list-style-type: none"> <li>Increase total kilowatt hours of renewal capacity and energy by 5,414 (non Hetch Hetchy)</li> </ul>						
<b>Maintain the City's Power Assets in a state of Good Repair</b> <ul style="list-style-type: none"> <li>100% of customer-funded projects (work orders for other depts) performed within cost estimate</li> <li>85% of maintenance work on Hetch Hetchy high voltage equipment performed per manufacturer-recommended intervals</li> </ul>						
<b>Respond to Streetlight and Pole Needs</b> <ul style="list-style-type: none"> <li>80% of streetlight malfunctions repaired within 2 business days</li> <li>45% of pole knockdown/replacements (w/concrete foundations) completed within 231 business days</li> <li>61% of pole knockdowns/replacements (without concrete foundations) completed within 3 business days</li> </ul>						
<b>Manage Utilities on Yerba Buena Island/TI effectively and efficiently</b> <ul style="list-style-type: none"> <li>Respond to 100% of service requests within 48 hours</li> <li>Provide 100% of technical and engineering services for operations and design activities on schedule</li> </ul>						
<b>Generate Power to Help Meet the Needs of the City and County of San Francisco</b> <ul style="list-style-type: none"> <li>Generate 1,600 gigawatt hours</li> </ul>						

## SECTIONS

Hetchy Power has four sections, Administration, Energy Services, Long Range Planning, and Light, Heat and Power. Chart H14 shows the Uses of Funds by Section. The uses of the funds are for these four sections and Capital. The description of the sections are below and the description of the Capital is in the CIP section above.

Chart H14. FY 2010-11 Hetchy Power Uses of Funds by Section,  
\$110.5 Million (\$ Millions)



## Administration

Power Administration assists Hetchy Power operations managers with planning for market place and regulatory changes; forecasts load; establishes and renegotiates contractual relationships with power suppliers and customers; assesses new business opportunities; and assesses the needs of Hetchy Power to ensure it performs as a reliable provider, compliant with legal and regulatory requirements.

Table H9 provides the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actuals, FY 2009-10 pre-audit actuals and the variance between the FY 2010-11 and FY 2009-10 budgets.

### Budget Summary

Table H9. Hetchy Power Administration Budget Summary

	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs FY 2009-10 Adopted Budget	
					Amount	%
Personnel	1,625,810	2,051,173	1,972,123	3,442,460	1,391,287	67.8%
Overhead	424,134	-	14,119	-	-	0.0%
Non-Personnel Services	656,429	729,244	657,235	905,892	176,648	24.2%
Materials & Supplies	40,455	32,000	34,639	94,792	62,792	196.2%
Debt Service	421,667	421,668	421,667	-	(421,668)	-100.0%
General Reserve	3,400,000	-	-	-	-	0.0%
Services Of Other Depts (AAO Funds)	8,150,741	6,580,958	5,838,218	5,000,684	(1,580,274)	-24.0%
<b>Total</b>	<b>14,719,236</b>	<b>9,815,043</b>	<b>8,938,001</b>	<b>9,443,828</b>	<b>(371,215)</b>	<b>-3.8%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** - The reassignment of four operating and 11 project-funded positions, from the Energy Service Section to reflect actual functions; conversion of four project-funding positions to operating; and three new project-funded positions to support redevelopment projects. The change to mandatory fringe benefits reflects adjustments to salaries, health and retirement rates. The Administration Section's mandatory fringe benefits budget centralizes funding for payments of retiree health subsidies for all Hetchy Power sections.
- **Non-Personnel Services** - Reflect increased costs for new office space rental, membership fees, and miscellaneous services.
- **Materials and Supplies** - Reflect a reallocation of funds from the other Hetchy Power Sections to centralize management of office/data funds.
- **Debt Service** - Reflects a reallocation of funds to the Long Range Planning Section.
- **Services of Other Departments** - Reflect a reallocation of funds for services of the City Attorney to the Energy Services Section.

## Energy Services

Energy Services consists of seven service areas: Retail Service, Power Purchasing and Scheduling, Regulatory Affairs, Community Choice Aggregation (CCA), Power Transmission and Distribution Field Service, Retail Interconnections, and Redevelopment Projects.

Table H10 provides the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actuals, FY 2009-10 pre-audit actuals and the variance between the FY 2010-11 and FY 2009-10 budgets.

### Budget Summary

Table H10. Energy Services Budget Summary

	FY 2010-11 vs FY 2009-10 Adopted Budget					
	FY 2008-09	FY 2009-10	FY 2009-10	FY 2010-11		
	Actual	Adopted Budget	Pre-Audit Actual	Adopted Budget	Amount	%
Personnel	5,145,971	5,612,572	5,810,736	3,874,027	(1,738,545)	-31.0%
Non-Personnel Services	19,623,960	38,514,172	20,009,557	36,359,741	(2,154,431)	-5.6%
Materials & Supplies	395,513	178,299	678,413	2,500	(175,799)	-98.6%
Equipment	1,288,825	151,357	215,818	-	(151,357)	-100.0%
Services Of Other Depts	134,693	363,004	632,097	2,306,656	1,943,652	535.4%
<b>Total</b>	<b>26,588,962</b>	<b>44,819,404</b>	<b>27,346,621</b>	<b>42,542,924</b>	<b>(2,276,480)</b>	<b>-5.1%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** - Reassigns 37 (19 operating - and 18 project-funded) positions to other Hetchy Power Sections to reflect the proper functions performed by these employees. In addition, salaries increased in this Section due to the conversion of four project-funded positions to operating and to add one new position to support energy data systems.
- **Non-Personnel Services** - Reflect a reduction for power purchases resulting from power prices and load obligations being reduced, and reductions for transmission and Scheduling Coordinator Services based on projected FY 2010-11 costs.
- **Materials and Supplies** - Reflect a reallocation of maintenance supplies funding to the Light, Heat and Power Section.
- **Equipment** - Reflects a reallocation of funds to the Light, Heat and Power Section.
- **Services of Other Departments** - Reflect an increase reallocated from the Administration Section for management of services of the City Attorney and a reallocation of funds to the Light, Heat and Power Section.

## Long-Range Planning and Policy

The Long-Range Planning Policy Section is responsible for: planning, developing and managing a wide range of municipal renewable and advanced energy programs; providing energy efficiency services to municipal customers; participating in and supporting other City efforts in analysis and preliminary design of transmission and distribution projects such as Newark to San Francisco Transmission, Civic Center and Bernal Heights Distribution.

Table H11 provides the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actuals, FY 2009-10 pre-audit actuals and the variance between the FY 2010-11 and FY 2009-10 budgets.

### Budget Summary

Table H11. Long-Range Planning and Policy Budget Summary

					FY 2010-11 vs FY 2009-10 Adopted Budget	
	FY 2008-09	FY 2009-10	FY 2009-10	FY 2010-11	Amount	%
	Actual	Adopted Budget	Pre-Audit Actual	Adopted Budget		
Personnel	1,567,849	573,293	302,929	653,135	79,842	13.9%
Non-Personnel Services	884,388	321,735	852,103	155,685	(166,050)	-51.6%
Materials & Supplies	32,711	31,901	42,136	20,000	(11,901)	-37.3%
Debt Service	-	-	-	1,546,668	1,546,668	100.0%
Services Of Other Depts (AAO Funds)	65,042	50,472	50,472	50,472	-	0.0%
<b>Total</b>	<b>2,549,990</b>	<b>977,401</b>	<b>1,247,640</b>	<b>2,425,960</b>	<b>1,448,559</b>	<b>148.2%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** - Reflect miscellaneous salaries adjustments. One new project-funded position was added to support the Renewable Generation Program. The change in mandatory fringe benefits reflects adjustments to salaries and retirement rates.
- **Non-Personnel Services** - Reflect a reduction in the professional service budget based on projected spending levels.
- **Materials and Supplies** - Reflect a reallocation of funds to the Hetchy Power Administration Section to centralize management of office/data funds.
- **Debt Service** - Reflect principal and interest payments on the Clean Renewable Energy Bonds (CREBs) issued to fund solar photovoltaic (PV) projects at seven City-owned locations. In FY 2009-10 debt service was budgeted in the Administration Section at \$0.4 million.

## Light, Heat and Power

The Light, Heat and Power Section is responsible for managing all activities related to the administration, development, operation, maintenance, analysis and modifications to the streetlight infrastructure owned and operated by the SFPUC. The Section provides technical analyses and services for lighting levels on public corridors, provides technical specifications and direction to private developments, the Redevelopment Agency and City projects involving new or modified streetlighting systems. This section also provides analysis and review of existing conditions and makes assessments and recommendations for improvements.

There are some 42,000 streetlights located within the City with approximately 22,000 owned by the City and maintained by the SFPUC Streetlighting Section. The balance is owned by PG&E and managed under California Public Utilities Commission (CPUC) tariffs. Hetchy Power provides the energy to all 42,000 (City-and PG&E-owned) streetlights. SFPUC also funds operations and maintenance includes maintaining the systems in good working condition and responding to customer complaints as well as responding to outages or damage to the system.

Table H12 provides the FY 2009-10 and FY 2010-11 budgets, FY 2008-09 actuals, FY 2009-10 pre-audit actuals and the variance between the FY 2010-11 and FY 2009-10 budgets.

### Budget Summary

Table H12. Light, Heat and Power Budget Summary

					FY 2010-11 vs FY 2009-10 Adopted Budget	
	FY 2008-09 Actual	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	Amount	%
Personnel	347,571	738,457	548,790	2,838,328	2,099,871	284.4%
Non-Personnel Services*	15,778,084	17,149,079	12,970,128	14,887,727	(2,261,352)	-13.2%
Materials & Supplies	-	278,955	-	402,252	123,297	44.2%
Equipment	-	-	-	267,769	267,769	100.0%
Services Of Other Depts (AAO	40	-	-	319,153	319,153	100.0%
	<b>16,125,695</b>	<b>18,166,491</b>	<b>13,518,918</b>	<b>18,715,229</b>	<b>548,738</b>	<b>3.0%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** - Includes the reassignment of 20 (14 operating budget- and six project-funded) positions from the Energy Services Section to reflect the proper functions performed by these employees and the conversion of one project-funding position to operating. Three new off-budget positions were added to support the Light Emitting Diode (LED) Conversion Project and three partially-funded FY 2009-10 project-funded positions were annualized. The net change in mandatory fringe benefits reflects adjustments to salaries and retirement rates.
- **Non-Personnel Services** - Hetchy Power is responsible for purchasing and billing all City departments for gas and steam. The change primarily reflects a reduction in gas rates.
- **Materials and Supplies** - Reflect a reallocation of maintenance supplies funding from the Energy Services Section resulting from management of the streetlight maintenance function.
- **Equipment** - Due to a reallocation from the Energy Services Section for equipment funding related to streetlight maintenance.

- **Services of Other Departments** - Funds for various services of City departments are reallocated from Energy Services Section to Light, Heat and Power, to reflect management of the streetlight maintenance function.



## SFPUC BUREAUS

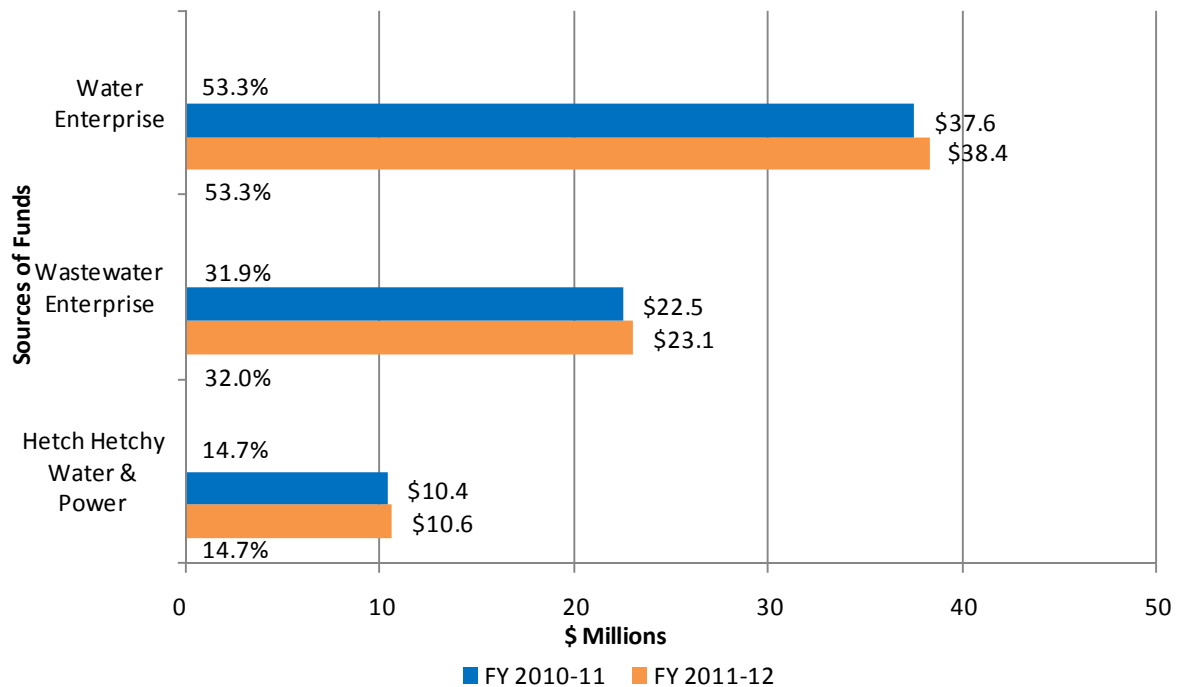
### Mission, Roles, and Responsibilities

The SFPUC Bureaus provide support services to all three Enterprises, and include the Office of the General Manager, Business Services, and External Affairs. The Office of the General Manager (GM) includes two divisions: the General Manager's Office and the Emergency Response and Security Division. Business Services includes seven Bureaus: Financial Services, Customer Services, Information Technology Services (ITS), Human Resources, Assurance and Internal Controls (AIC), Fleet Management, and Business Services Administration. External Affairs includes Communications, Governmental Affairs, and Real Estate Services. The Bureaus' budgets are funded through an allocation model that recovers costs of services to the three Enterprises.

## Budget Summary

### Sources of Funds

Chart S1. FY 2010-11 and FY 2011-12 Bureaus Sources of Funds, \$70.5 Million and \$72.1 Million, respectively



### FY 2010-11

The FY 2010-11 Bureaus budget of \$70.5 million is funded through the Water Enterprise by \$37.6 million, or 53.3 percent; through the Wastewater Enterprise by \$22.5 million, or 31.9 percent; and by Hetch Hetchy Water and Power by \$10.4 million, or 14.7 percent. This allocation of costs to the Enterprises includes consideration of employee full-time equivalent (FTE) employment, salary surveys, and direct services provided to the Enterprises.

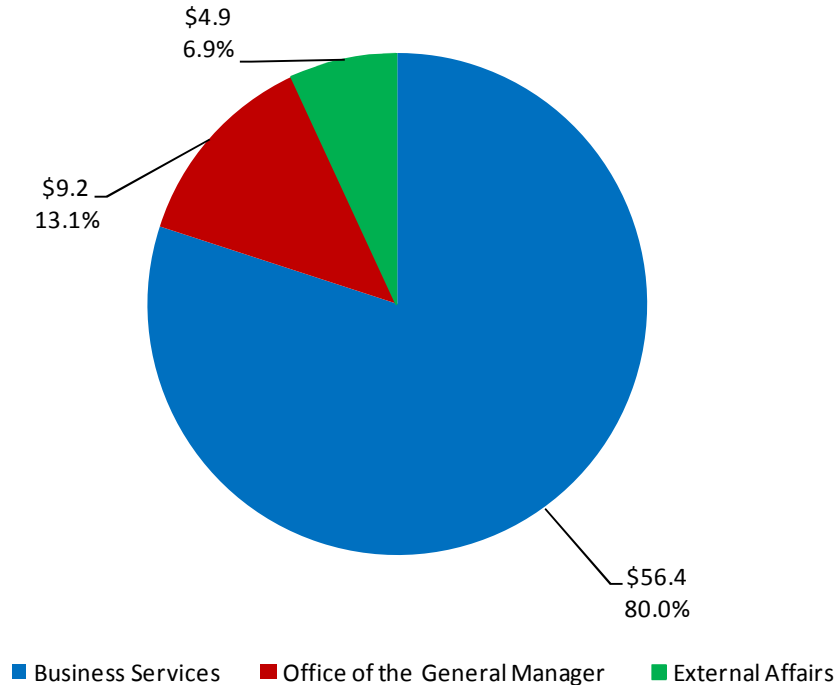


### FY 2011-12

The FY 2011-12 Bureaus budget of \$72.1 million is funded through the Water Enterprise by \$38.4 million, or 53.3 percent; through the Wastewater Enterprise by \$23.1 million, or 32.0 percent; and by Hetch Hetchy Water and Power by \$10.6 million, or 14.7 percent. This allocation of costs to the Enterprises is based on the same allocation model as that for FY 2010-11.

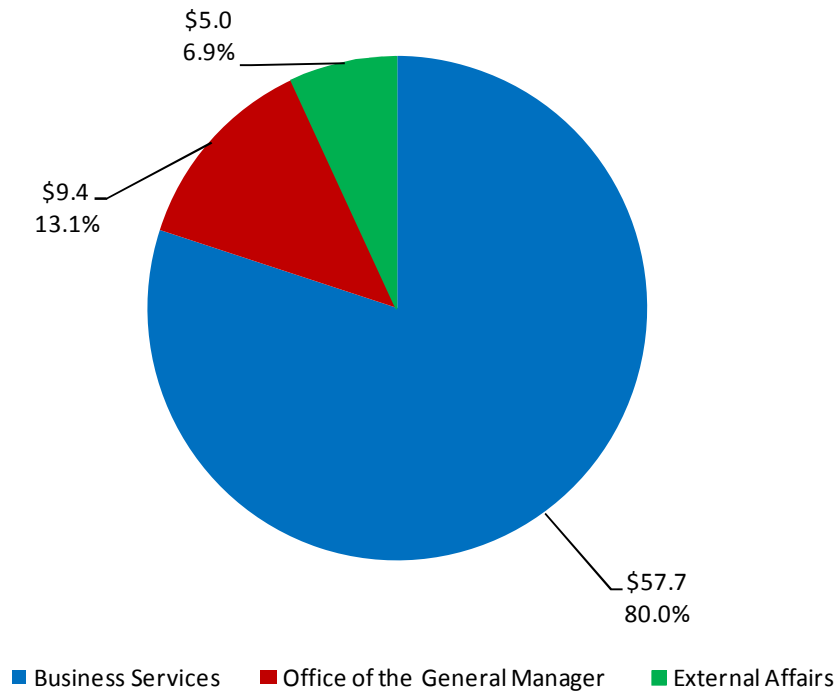
### Uses of Funds

Chart S2. FY 2010-11 Bureaus Uses of Funds, \$70.5 Million



Total Uses of Funds in FY 2010-11 for the Bureaus is \$70.5 million. This is a \$5.4 million, or 8.3 percent, increase from the prior year (see Table S1). The General Manager's budget is \$9.2 million, or 13.1 percent of the total, and a 15.4 percent increase from FY 2010-11. The Business Services budget is \$56.4 million, or 80.0 percent of the total, and an 8.7 percent increase from the prior year. The External Affairs budget is \$4.9 million, or 6.9 percent of the total, and a 6.6 percent decrease from FY 2010-11. Chart S2 illustrates the breakdown between the Bureaus. The following sections go into further detail about the Bureaus. Tables G1, B1, and E1 provide the budgets and variances between the FY 2010-11 and FY 2009-10 Budgets for the Office of the General Manager, Business Services, and External Affairs, respectively.

Chart S3. FY 2011-12 Bureaus Uses of Funds, \$72.1 Million



Total Uses of Funds in FY 2011-12 for the Bureaus is \$72.1 million. This is a \$1.6 million, or 2.3 percent, increase from the prior year (see Table S1). The General Manager's budget is \$9.4 million, or 13.1 percent of the total, and a 2.5 percent increase from FY 2010-11. The Business Services budget is \$57.7 million, or 80.0 percent of the total, and a 2.3 percent increase from the FY 2010-11. The External Affairs budget is \$5.0 million, or 6.9 percent of the total, and a 1.7 percent increase from the prior year. Chart S3 illustrates the breakdown between the Bureaus. Tables G1, B1, and E1 provide the budgets and variances between the FY 2011-12 and FY 2010-11 Budgets for the Office of the General Manager, Business Services, and External Affairs, respectively.

Table S1. Bureaus Budget Summary

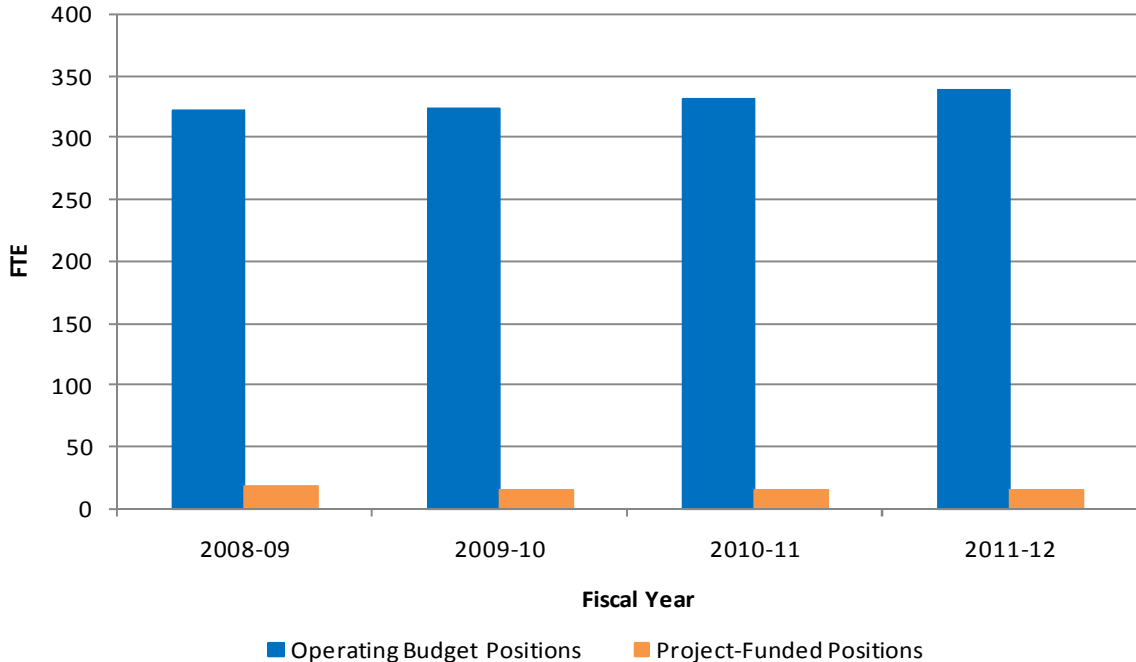
Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2011-12 vs. FY 2010-11 Adopted Budget	
						Amount	%	Amount	%
Personnel	37,724,034	41,187,148	39,158,314	42,938,147	45,353,163	1,750,999	4.3%	2,415,016	5.6%
Overhead	-	1,776,859	1,776,859	3,891,114	3,891,114	2,114,255	119.0%	-	0.0%
Non-Personnel Services	10,121,453	9,950,021	10,348,639	11,299,801	10,677,522	1,349,780	13.6%	(622,279)	-5.5%
Materials & Supplies	1,554,752	1,918,639	1,842,998	1,932,737	1,879,436	14,098	0.7%	(53,301)	-2.8%
Equipment	1,444,922	1,409,980	1,832,922	1,573,980	1,445,269	164,000	11.6%	(128,711)	-8.2%
Services of Other Depts	9,988,250	8,841,271	8,120,495	8,817,706	8,807,137	(23,565)	-0.3%	(10,569)	-0.1%
<b>Totals</b>	<b>60,833,411</b>	<b>65,083,918</b>	<b>63,080,227</b>	<b>70,453,485</b>	<b>72,053,641</b>	<b>5,369,567</b>	<b>8.3%</b>	<b>1,600,156</b>	<b>2.3%</b>

## Authorized and Funded Full-Time Equivalents

Table S2. Bureaus Authorized and Funded Full-Time Equivalents (FTE)

Position Type	FY 2008-09 Adopted Budget	FY 2009-10 Adopted Budget	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	FY 2010-11 vs. FY 2011-12 vs	
					FY 2009-10 Adopted Budget	FY 2010-11 Adopted Budget
Permanent Positions	318.25	322.09	326.34	335.68	4.25	9.34
Temporary Positions	4.22	1.64	4.90	3.41	3.26	(1.49)
<b>Subtotal Operating-Funded</b>	<b>322.47</b>	<b>323.73</b>	<b>331.24</b>	<b>339.09</b>	<b>7.51</b>	<b>7.85</b>
Project-Funded Positions	18.00	15.00	15.00	15.00	-	-
<b>Total Positions</b>	<b>340.47</b>	<b>338.73</b>	<b>346.24</b>	<b>354.09</b>	<b>7.51</b>	<b>7.85</b>

Chart S4. Bureaus Operating and Project FTE Trend



As noted above in Table S2, the SFPUC Bureaus full-time equivalent (FTE) operating budget, project-funded, and temporary positions (including attrition savings to adjust for an expected position vacancy rate during the fiscal year) for FY 2010-11 is 346.24 FTE, a 7.51 FTE increase from FY 2009-10. Chart S4 illustrates the trend of the number of operating and project-funded FTEs from FY 2008-09 to FY 2011-12. FY 2010-11 permanent positions increased by 4.25 FTE, from 322.09 in FY 2009-10 to 326.34 FTE in FY 2010-11. The net position increase includes: the reassignment of five positions from the Water Enterprise and Infrastructure to support the Office of the General Manager’s Emergency Response and Security division, and to support the Office of the General Manager with utility infrastructure negotiations and development and redevelopment projects; and four new positions to provide additional accounting oversight. The increases are offset by increases in attrition savings, and reassignments to other Enterprises to reflect where these positions presently work and report.

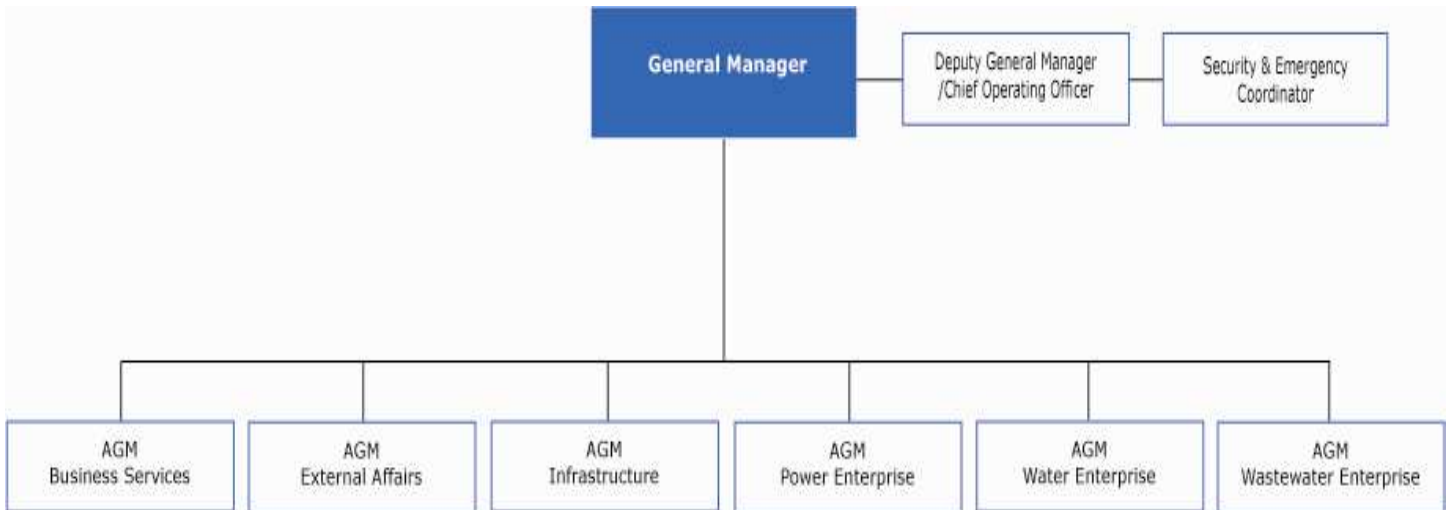
The number of temporary positions from FY 2009-10 to FY 2010-11 increased by 3.26 FTE, from 1.64 FTE in FY 2009-10 to 4.90 FTE in FY 2010-11. The increase funds a new summer internship program in Business Services, including summer interns to assist in the areas of finance, information technology and human resource services. Project-funded positions remained the same from FY 2009-10 to FY 2010-11. Table S2 provides a breakdown of positions by position type.

Also as noted in Table S2 above, the SFPUC Bureaus full-time equivalent (FTE) operating budget, project-funded, and temporary positions (including attrition savings to adjust for an expected position vacancy rate during the fiscal year ) for FY 2011-12 is 354.09 FTE, a 7.85 FTE increase from FY 2010-11. FY 2011-12 permanent positions increased by 9.34 FTE, from 326.34 in FY 2010-11 to 335.68 FTE in FY 2010-11. The net position increase includes the annualization of FY 2010-11 new positions and 11 new FY 2011-12 positions, funded for the standard nine months for new positions. The new positions include: three positions to continue to provide accounting oversight to keep up with increased financial activity; one new position to assist the SFPUC in meeting disaster recovery and risk management in the water system; five positions to provide human resources support in preparation for the expected increase in future retirements; one position to support fleet software applications; and one position to provide additional internal controls and advisory oversight services.

The number of temporary positions from FY 2010-11 to FY 2011-12 decreased by 1.49 FTE, from 4.90 FTE to 3.41 FTE. The decrease reflects the elimination of FY 2010-11 funding for the summer internship program, discussed above.

## Office of the General Manager

### Organizational Chart

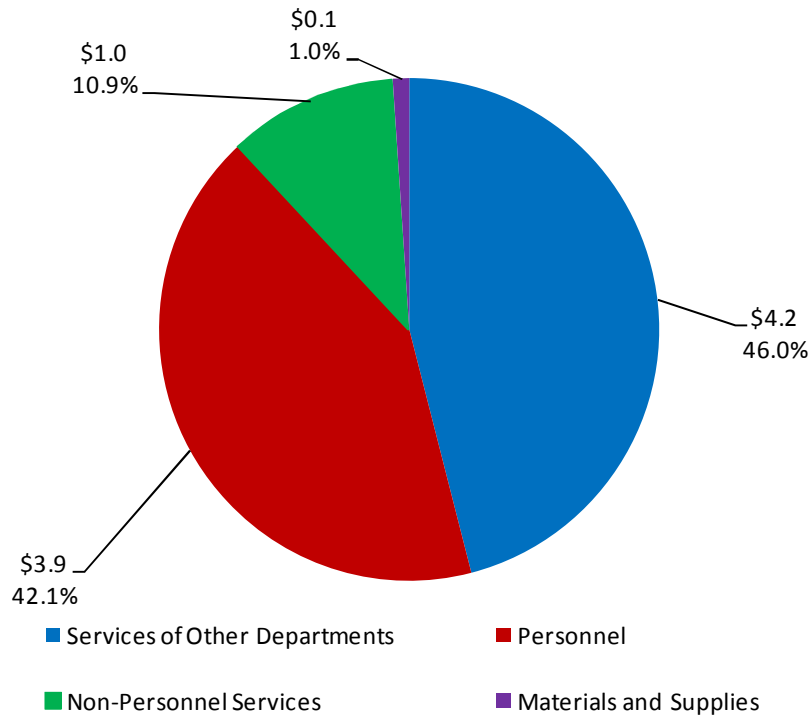


### Mission, Roles, and Responsibilities

The General Manager of the SFPUC oversees the regional utility that delivers reliable, high quality drinking water to more than 2.4 million Bay Area customers, collects and treats wastewater and stormwater for the City and County of San Francisco (CCSF) and provides hydroelectric and other renewable power resources for San Francisco municipal customers. The Office of the General Manager supports the General Manager in his key oversight function.

## Uses of Funds

Chart G1. FY 2010-11 Office of the General Manager Uses of Funds, \$9.2 Million



### *Summary*

The FY 2010-11 Office of the General Manager budget is \$9.2 million, a \$1.2 million, or 15.4 percent, increase from the prior year. Major changes from the prior year's budget include a 44.2 percent increase in Personnel and a 39.8 percent increase in Non-Personnel Services. Chart G1 provides a breakdown by category of the FY 2010-11 Budget. Table G1 provides a summary of the budget and variances between the FY 2010-11 and FY 2009-10 Budgets. The following describes FY 2010-11 budget category variances that are greater than ten percent.

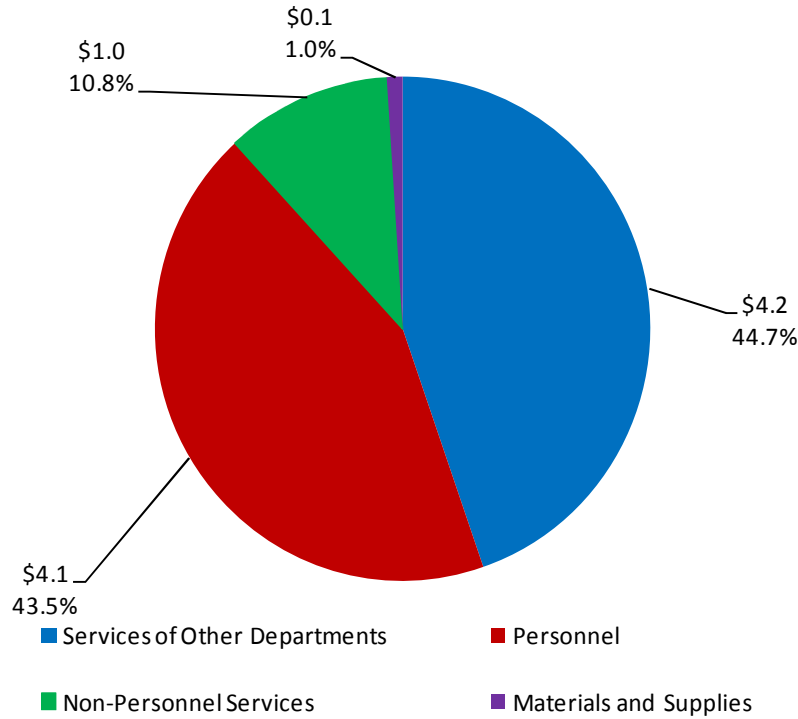
### *Personnel*

Personnel is budgeted at \$3.9 million, a 44.2 percent increase from the prior year. This budget funds labor for the Office of the General Manager's full-time employees, and related benefits. The increase reflects the reassignment of positions to support the GM's Office of Emergency Response and Security, and to assist the GM with utility infrastructure negotiations and development and redevelopment projects.

### *Non-Personnel Services*

Non-Personnel Services is budgeted at \$1.0 million, a \$0.3 million, or 39.8 percent, increase from the prior year. This budget funds services for the Office of the General Manager including travel, training, memberships, entertainment and promotion expenses, equipment maintenance, professional services, and rent for the General Manager's share of office space. The increase reflects new professional services funding for the SFPUC's consolidated Emergency Response Plan.

Chart G2. FY 2011-12 Office of the General Manager Uses of Funds, \$9.4 Million



*Summary*

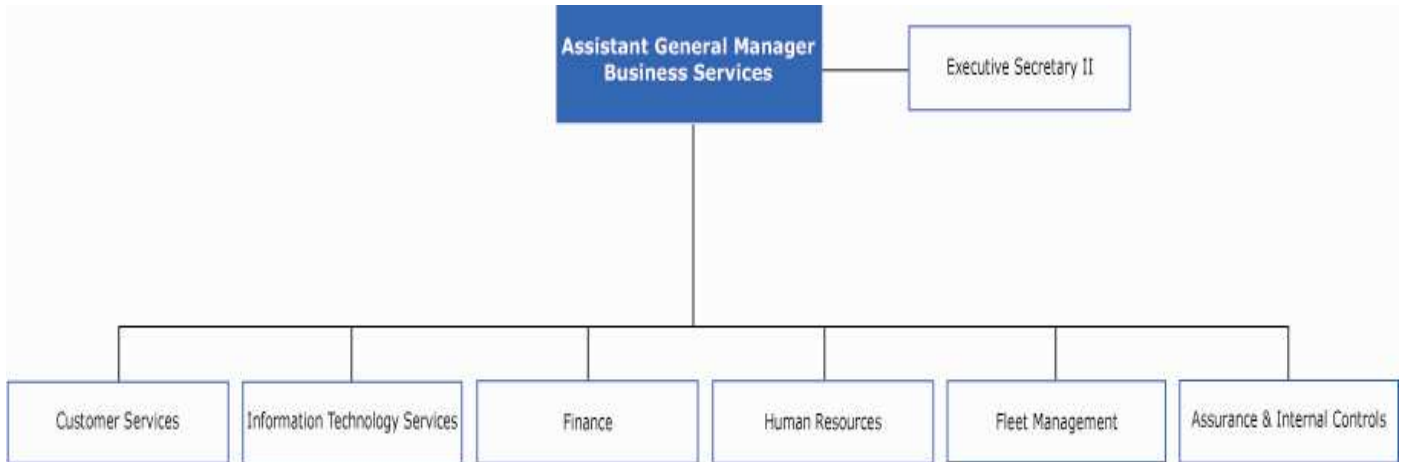
The FY 2011-12 Office of the General Manager budget is \$9.4 million, a \$0.2 million, or 2.5 percent, increase from FY 2010-11. The FY 2011-12 Budget was adopted along with the prior year's budget, and was the first time the SFPUC, along with four other City departments, had implemented a two-year budget cycle; the change from FY 2010-11 is relatively flat. Chart G2 provides a breakdown by category of the FY 2011-12 Budget. Table G1 provides a summary of the budget and variances between the FY 2011-12 and FY 2010-11 Budgets.

Table G1. Office of the General Manager Budget Summary

Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2011-12 vs. FY 2010-11 Adopted Budget	
						Amount	%	Amount	%
Personnel	2,962,477	2,682,864	2,887,709	3,868,175	4,099,996	1,185,311	44.2%	231,821	6.0%
Non-Personnel Services	659,844	716,935	644,447	1,002,108	1,014,883	285,173	39.8%	12,775	1.3%
Materials & Supplies	58,622	96,301	62,167	96,301	96,301	-	0.0%	-	0.0%
Services of Other Depts	3,502,022	4,474,721	3,618,439	4,229,450	4,218,881	(245,271)	-5.5%	(10,569)	-0.2%
<b>Totals</b>	<b>7,182,965</b>	<b>7,970,821</b>	<b>7,212,762</b>	<b>9,196,034</b>	<b>9,430,061</b>	<b>1,225,213</b>	<b>15.4%</b>	<b>234,027</b>	<b>2.5%</b>

# BUSINESS SERVICES

## Organizational Chart



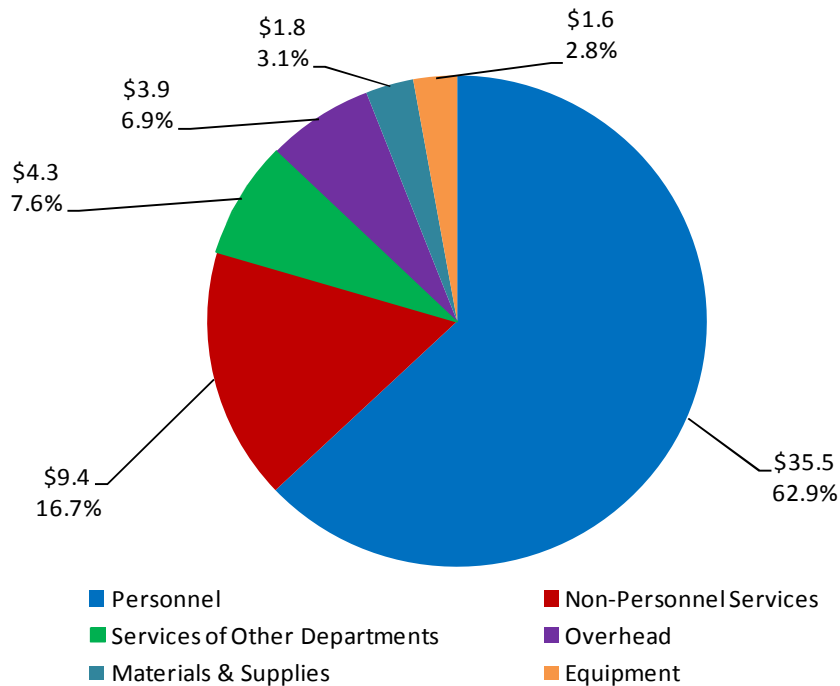
### Mission, Roles, and Responsibilities

SFPUC Business Services is comprised of seven key support functions: Customer Services, Information Technology Services, Financial Services, Human Resources, Fleet Management, Assurance and Internal Controls (AIC), and Business Services Administration. Oversight of Business Services is budgeted under Administration, including rental costs for the entire Business Services Bureaus, comprised of approximate 300 full-time equivalent (FTE) positions. The Bureaus work jointly in various business services activities to support the SFPUC's mission to provide its customers with high quality, efficient, and reliable water, power, and wastewater services.



## Uses of Funds

Chart B1. FY 2010-11 Business Services Uses of Funds, \$56.4 Million



### Summary

The FY 2010-11 Business Services budget is \$56.4 million, a \$4.5 million, or 8.7 percent, increase from the prior year. Major changes from the FY 2009-10 Budget include a 119.0 percent increase of City-wide overhead for the SFPUC budget, a 17.2 percent increase in Non-Personnel Services, and an 11.6 percent increase in Equipment. Chart B1 provides a breakdown by category of the FY 2010-11 Budget. Table B1 provides a summary of the budget and variances between the FY 2010-11 and FY 2009-10 Budgets. The following describes FY 2010-11 Budget category variances that are greater than ten percent.

### Overhead

The Overhead budget is \$3.9 million, a 119.0 percent increase from the prior year. This budget funds the SFPUC's share of City-wide overhead, that is, the County-wide Cost Allocation Plan (COWCAP). The increase is based on the Controller's Office calculations of City-wide costs and is based on the SFPUC's allocated beneficial use of services and facilities provided by General Fund agencies.

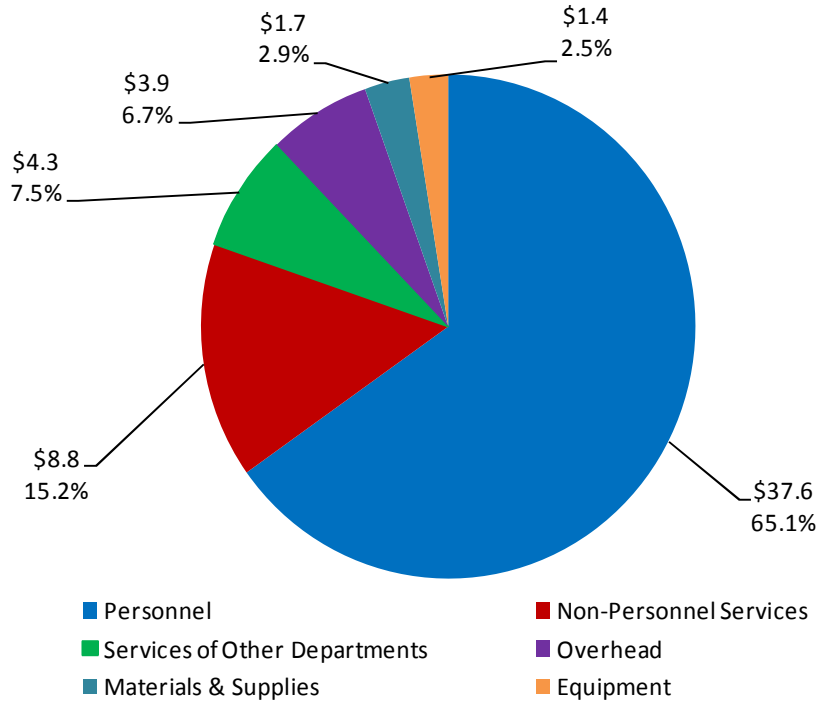
### Non-Personnel Services

Non-Personnel Services is budgeted at \$9.4 million, a \$1.4 million, or 17.2 percent, increase from the prior year. This budget funds services for Business Services including equipment and facilities maintenance, travel, training, memberships, entertainment and promotion expenses, professional services, and rent for Business Services' share of office space. The increase reflects an increase in rent for all Business Services units, as stipulated in the lease agreement; implementation and maintenance of the new Enterprise Data Historian software application, which establishes a single, central, integrated retrieval-efficient database for the Supervisory Control and Data Acquisition (SCADA) system, to facilitate data-to-knowledge reporting on single-user interfaces; and new and updated software to enhance services of the Finance and Human Resources functions.

### Equipment

Equipment is budgeted at \$1.6 million, a \$0.2 million, or 11.6 percent, increase from the prior year. This budget funds various equipment, including vehicles and software, that have a value greater than \$5,000, and a useful life of at least three years. The increase primarily reflects additional equipment in Information Technology Services (ITS) and Customer Services. The ITS equipment budget increase includes funding for video conferencing equipment, and servers and networking equipment for the new Enterprise Data Historian database (refer to above Non-Personnel Services); and the increase in Customer Services funds payment processing equipment to replace the existing, outdated one.

Chart B2. FY 2011-12 Business Services Uses of Funds, \$57.7 Million



### Summary

The FY 2011-12 Business Services budget is \$57.7 million, a \$1.3 million, or 2.3 percent, increase from the prior year. The FY 2011-12 Budget was adopted along with the FY 2010-11 Budget, and was the first time the SFPUC, along with four other City departments, had implemented a two-year budget cycle; the change from FY 2010-11 is relatively flat. Chart B2 provides a breakdown by category of the FY 2011-12 Budget. Table B1 provides a summary of the budget and variances between the FY 2011-12 and FY 2010-11 Budgets.

Table B1. Business Services Budget Summary

Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2011-12 vs. FY 2010-11 Adopted Budget	
						Amount	%	Amount	%
Personnel	30,749,850	34,833,647	32,296,249	35,456,670	37,555,836	623,023	1.8%	2,099,166	5.9%
Overhead	-	1,776,859	1,776,859	3,891,114	3,891,114	2,114,255	119.0%	-	0.0%
Non-Personnel Services	8,576,597	8,023,348	8,444,465	9,403,375	8,768,113	1,380,027	17.2%	(635,262)	-6.8%
Materials & Supplies	1,461,429	1,754,562	1,746,340	1,750,436	1,697,135	(4,126)	-0.2%	(53,301)	-3.0%
Equipment	1,444,922	1,409,980	1,816,607	1,573,980	1,445,269	164,000	11.6%	(128,711)	-8.2%
Services of Other Depts	6,349,146	4,096,290	4,404,091	4,308,843	4,308,843	212,553	5.2%	-	0.0%
<b>Totals</b>	<b>48,581,944</b>	<b>51,894,686</b>	<b>50,484,611</b>	<b>56,384,418</b>	<b>57,666,310</b>	<b>4,489,732</b>	<b>8.7%</b>	<b>1,281,892</b>	<b>2.3%</b>

### Bureaus – Business Services

Chart B3. FY 2010-11 Business Services Budget by Bureau, \$56.4 Million

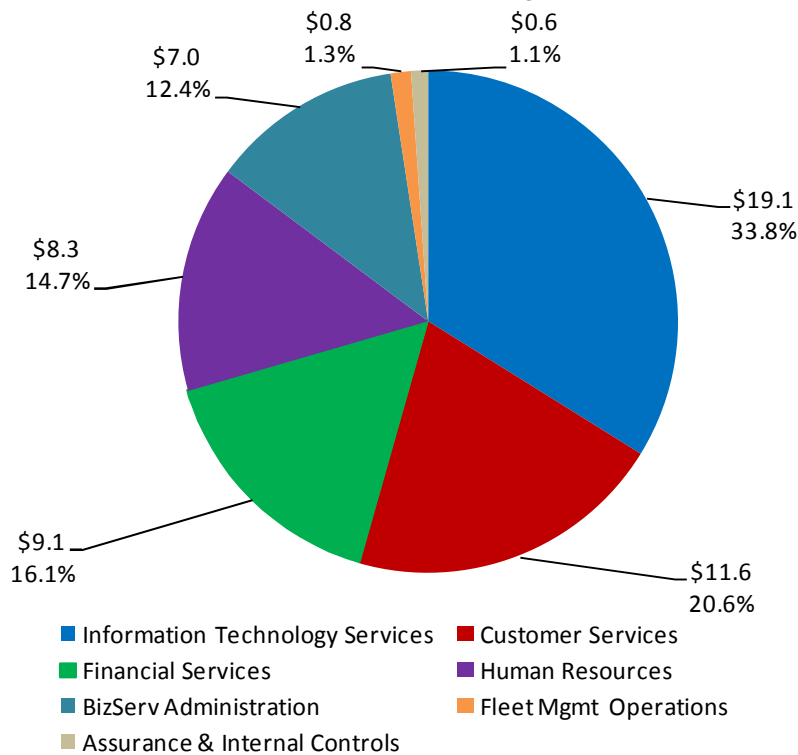


Chart B3 provides a breakdown of the FY 2010-11 Business Services budget by Bureau. The ITS budget is \$19.1 million, or 33.8 percent of the total. The Customer Services budget is \$11.6 million, or 20.6 percent of the total. The Financial Services budget is \$9.1 million, or 16.1 percent of the total. The Human Resources budget is \$8.3 million, or 14.7 percent of the total. The Business Services Administration budget is \$7.0 million, or 12.4 percent of the total. The Fleet Management budget is \$0.8 million, or 1.3 percent of the total. The Assurance and Internal Controls budget is \$0.6 million, or 1.1 percent of the total.

## Business Services Administration

Business Services Administration provides overall administrative services to and oversight of the other six Bureaus within Business Services, along with general support to the three Enterprises.

Table B2 provides the FY 2009-10 and FY 2010-11 Budgets, FY 2008-09 Actuals, FY 2009-10 Pre-Audit Actuals, and the variance between the FY 2010-11 and FY 2009-10 Budgets.

### Budget Summary

Table B2. Business Services Administration Budget Summary

Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	528,815	734,774	750,292	329,835	(404,939)	-55.1%
Overhead	-	1,776,859	1,776,859	3,891,114	2,114,255	119.0%
Non-Personnel Services	2,626,266	2,488,094	2,654,059	2,687,422	199,328	8.0%
Materials & Supplies	29	9,000	4,136	9,000	-	0.0%
Services of Other Depts	66,661	63,617	68,269	67,868	4,251	6.7%
<b>Totals</b>	<b>3,221,771</b>	<b>5,072,344</b>	<b>5,253,615</b>	<b>6,985,239</b>	<b>1,912,895</b>	<b>37.7%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** – Reflects the transfer of two positions to the separately budgeted Assurance and Internal Controls division, which was previously consolidated with Business Service Administration; and the transfer of one position to Financial Services based on the duties of this position.
- **Overhead** – Reflects an increase based on the CCSF's Controller's Office calculations of the City's cost allocation plan, based on the SFPUC's use of services and facilities provided by the General Fund agencies.

## Financial Services

Financial Services supports the SFPUC Enterprises and Bureaus, ensuring financial stewardship and oversight for ratepayer assets. Services provided include accounting operations, asset management, audit oversight, reconciliation and financial reporting, budget management, debt management, purchasing support, and rates administration. Accurately communicating the financial position of the SFPUC to rate payers, City departments, rating agencies, investors and other stakeholders is the central mission of the Finance division.

Table B3 provides the FY 2009-10 and FY 2010-11 Budgets, FY 2008-09 Actuals, FY 2009-10 Pre-Audit Actuals, and the variance between the FY 2010-11 and FY 2009-10 Budgets.

## Budget Summary

Table B3. Financial Services Budget Summary

Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	5,702,526	6,712,852	6,218,055	7,021,302	308,450	4.6%
Non-Personnel Services	1,120,335	842,103	611,921	997,103	155,000	18.4%
Materials & Supplies	44,757	86,000	98,125	68,000	(18,000)	-20.9%
Services of Other Depts	1,019,390	925,601	987,510	991,844	66,243	7.2%
<b>Totals</b>	<b>7,887,008</b>	<b>8,566,556</b>	<b>7,915,611</b>	<b>9,078,249</b>	<b>511,693</b>	<b>6.0%</b>

## Reasons for Changes, FY 2009-10 to FY 2010-11

- **Non-Personnel Services** - Reflects an increase in funding for software for grants applications.
- **Materials and Supplies** – Reflects the removal of one-time funding for materials and supplies for FY 2009-10 new positions, offset by an increase in funding for materials and supplies for FY 2010-11 new positions.

## Information Technology Services (ITS)

Information Technology Services (ITS) provides high quality, proficient and reliable information technology (IT) services to all SFPUC Enterprises and Bureaus.

ITS's primary roles and responsibilities are to:

- Efficiently and reliably operate, support and maintain large SFPUC-wide systems such as Payroll, Utility Billing, Document Management, Geographic Information Systems (GIS), and e-mail.
- Install, support, maintain, and expand mission-critical SCADA systems for Water and Power System Operations.
- Design, develop, and implement IT systems throughout SFPUC.
- Maintain the SFPUC network infrastructure and its 2,000-plus connected PCs at all SFPUC offices, facilities and construction sites.
- Provide standard platforms and support services for personal computers, mobile devices, local area networks, wide area networks and wireless networks.
- Provide advice and counsel to SFPUC Enterprises and Bureaus on the use and development of specialized systems involving information technology.

Table B4 provides the FY 2009-10 and FY 2010-11 Budgets, FY 2008-09 Actuals, FY 2009-10 Pre-Audit Actuals, and the variance between the FY 2010-11 and FY 2009-10 Budgets.

### Budget Summary

Table B4. ITS Budget Summary

Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	9,502,214	10,259,288	9,341,649	10,597,425	338,137	3.3%
Non-Personnel Services	4,091,475	3,649,225	4,084,611	4,534,717	885,492	24.3%
Materials & Supplies	1,135,063	1,317,000	1,359,092	1,265,000	(52,000)	-3.9%
Equipment	1,345,147	1,343,444	1,761,726	1,471,910	128,466	9.6%
Services of Other Depts	1,679,692	1,312,482	1,558,751	1,198,934	(113,548)	-8.7%
<b>Totals</b>	<b>17,753,591</b>	<b>17,881,439</b>	<b>18,105,829</b>	<b>19,067,986</b>	<b>1,186,547</b>	<b>6.6%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Non-Personnel Services** – Reflects an increase to fund the implementation and maintenance of the new Enterprise Historian database for the Supervisory Control and Data Acquisition (SCADA) system, to establish a single, central, integrated retrieval-efficient database that facilitates data-to-knowledge reporting on single-user interfaces.

## Human Resources

Human Resources recruits, compensates, supports and retains a diverse and highly qualified workforce, and serves the SFPUC Enterprises and Bureaus in an efficient, responsive, and professional manner. The promotion of health, safety, workforce planning, and professional development for all SFPUC employees is critical to the SFPUC mission and Human Resources' functions.

Operations include: recruitment; testing and selection of new staff; processing new hires, providing orientation for new hires; workforce development; training; personnel administration and records maintenance; payroll administration; employee relation; occupational health and safety; and workers' compensation.

Table B5 provides the FY 2009-10 and FY 2010-11 Budgets, FY 2008-09 Actuals, FY 2009-10 Pre-Audit Actuals, and the variance between the FY 2010-11 and FY 2009-10 Budgets.

## Budget Summary

Table B5. Human Resource Budget Summary

Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	5,549,841	6,041,679	5,813,348	6,222,292	180,613	3.0%
Non-Personnel Services	482,437	676,797	651,457	784,305	107,508	15.9%
Materials & Supplies	59,801	98,178	97,376	147,591	49,413	50.3%
Equipment	24,191	-	-	-	-	0.0%
Services of Other Depts	2,573,556	813,793	726,815	1,107,307	293,514	36.1%
<b>Totals</b>	<b>8,689,826</b>	<b>7,630,447</b>	<b>7,288,996</b>	<b>8,261,495</b>	<b>631,048</b>	<b>8.3%</b>

## Reasons for Changes, FY 2009-10 to FY 2010-11

- **Non-Personnel Services** – Reflects primarily an increase to fund an upgrade of software for the Learning Management System, a software application that administers, documents, and tracks the SFPUC's staff development program, including training and e-learning programs.
- **Materials and Supplies** – Reflects primarily an increase to fund a comprehensive Automated External Defibrillator (AED) and Emergency Oxygen Program for the SFPUC.
- **Services of Other Departments** – Reflects an increase in the SFPUC's share of the City and County of San Francisco's (CCSF) Project e-Merge, a system that provides improved human resources to CCSF employees through the implementation of Oracle's PeopleSoft Human Capital Management 9.0 system; and an increase in the number of participants in the City Hall Program, a year-long, post-college, pre-graduate leadership program that gives participants local government work experience and trainings on factors that influence local policy.

## Customer Services

Customer Services strives to deliver extraordinary value to SFPUC customers by providing customer satisfaction, with highly committed staff providing operational efficiencies and effectiveness.

The Customer Services Bureau is responsible for the billing and collection of utility services and is the primary point of contact for water and wastewater customers. The Bureau maintains over 170,000 water and wastewater service accounts, 2,000 municipal and retail electric services and about 500 land leases accounts totaling to about \$500 million in annual revenue. It is also responsible for meter reading and field investigations, and responding to over 174,000 customers' inquiries, complaints, and requests for related services annually.

To fulfill its responsibilities, Customer Services has 111 full-time equivalent (FTE) positions, with an annual operating budget of \$11.6 million in FY 2010-11. Customer Services is comprised of five sections:

- Business Administration
- Customer Accounts Center
- Customer Contact Center
- Retail Electric Services
- Field Services

While each section has its own unique functions, they are all dependent on one or more of the other sections in order to effectively fulfill their respective roles.

Table B6 provides the FY 2009-10 and FY 2010-11 Budgets, FY 2008-09 Actuals, FY 2009-10 Pre-Audit Actuals, and the variance between the FY 2010-11 and FY 2009-10 Budgets.

## Budget Summary

Table B6. Customer Services Budget Summary

Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	9,237,939	10,709,160	9,851,469	10,320,439	(388,721)	-3.6%
Non-Personnel Services	214,305	304,192	392,899	317,865	13,673	4.5%
Materials & Supplies	165,930	204,052	176,203	210,370	6,318	3.1%
Equipment	29,685	13,369	-	47,000	33,631	251.6%
Services of Other Depts	799,269	768,565	877,925	731,023	(37,542)	-4.9%
<b>Totals</b>	<b>10,447,128</b>	<b>11,999,338</b>	<b>11,298,496</b>	<b>11,626,697</b>	<b>(372,641)</b>	<b>-3.1%</b>

## Reasons for Changes, FY 2009-10 to FY 2010-11

- **Equipment** – Reflects an increase to fund the replacement of Payment Processing Equipment. The existing one has been in place for over ten years, and the vendor is phasing out this old model and will not provide hardware or software maintenance for it.



## Fleet Management

Fleet Management provides transportation and commute-related services, and is responsible for the establishment, implementation, and maintenance of policies and procedures governing SFPUC-owned mobile equipment. Transportation-related services provided include vehicle pools, repair facilities, vehicle inspection, employee parking, commercial car rentals, vehicle acquisition and disposition, and automotive management problems. Fleet's budget was created in FY 2009-10.

Table B7 provides the FY 2009-10 and FY 2010-11 Budgets, FY 2008-09 Actuals, FY 2009-10 Pre-Audit Actuals, and the variance between the FY 2010-11 and FY 2009-10 Budgets.

## Budget Summary

Table B7. Fleet Management Budget Summary

Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	228,515	375,894	321,438	382,302	6,408	1.7%
Non-Personnel Services	41,779	62,937	49,519	62,937	-	0.0%
Materials & Supplies	55,849	40,332	11,409	40,332	-	0.0%
Equipment	45,898	53,167	54,881	55,070	1,903	3.6%
Services of Other Depts	210,579	212,232	184,819	211,867	(365)	-0.2%
<b>Totals</b>	<b>582,620</b>	<b>744,562</b>	<b>622,066</b>	<b>752,508</b>	<b>7,946</b>	<b>1.1%</b>

## Reasons for Changes, FY 2009-10 to FY 2010-11

There are no significant changes from FY 2009-10 to FY 2010-11 for the Fleet Management Operations budget.

## Assurance and Internal Controls (AIC)

Assurance and Internal Controls (AIC) provides and facilitates quality assurance oversight, risk management, internal controls, policies and procedures review and business process improvement programs for operational and financial transactions/processes, with the objective to minimize process inefficiencies and control deficiencies to mitigate financial risks.

The AIC Bureau provides a supportive and advisory role to all business divisions SFPUC-wide. It manages the following four main areas related to governance, risk and compliance:

- Internal Controls
- Risk Management
- Internal Audit
- Business Process Improvement

Table B8 provides FY 2010-11 Budget and the variance between the FY 2010-11 and FY 2009-10 Budgets.

## Budget Summary

Table B8. Assurance and Internal Controls Budget Summary

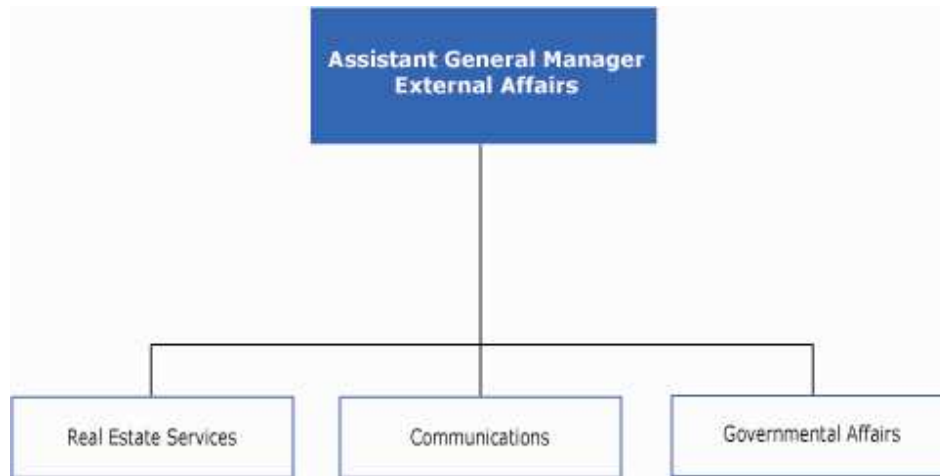
Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	-	-	-	583,075	583,075	100.0%
Non-Personnel Services	-	-	-	19,026	19,026	100.0%
Materials & Supplies	-	-	-	10,143	10,143	100.0%
<b>Totals</b>	-	-	-	<b>612,244</b>	<b>612,244</b>	<b>100.0%</b>

## Reasons for Changes, FY 2009-10 to FY 2010-11

- **Personnel** – Reflects the reassignment of four positions to the separately budgeted AIC Bureau, and increased funding for temporary salaries for support and analysis.
- **Non-Personnel Services** – Reflects the transfer of funds from Business Services Administration to the separately budgeted AIC Bureau.
- **Materials and Supplies** – Reflects the transfer of funds from Business Services to AIC to fund various office supplies; and an increase to fund basic materials and supplies for reassigned staff.

## EXTERNAL AFFAIRS

### Organizational Chart

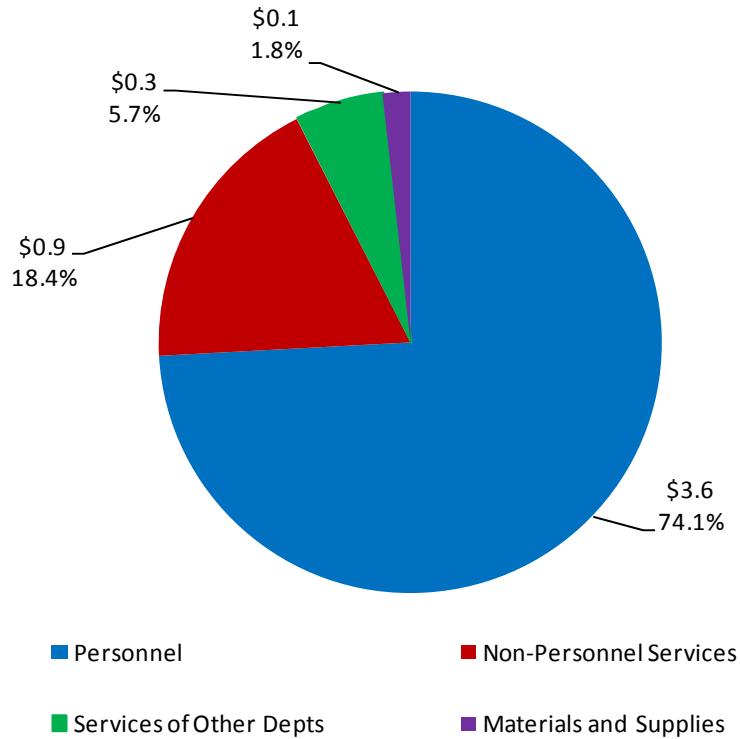


### Mission, Roles, and Responsibilities

SFPUC External Affairs is comprised of three Bureaus: Governmental Affairs, Communications, and Real Estate Services. The Bureaus track and coordinate legislation, perform public outreach and media relations, educate and communicate, and manage real estate. These activities support the SFPUC's mission to provide its customers with high quality, efficient, and reliable water, power, and wastewater services.

## Uses of Funds

Chart E1. FY 2010-11 External Affairs Uses of Funds, \$4.9 Million



### Summary

The FY 2010-11 External Affairs budget is \$4.9 million, a \$0.3 million, or 6.6 percent, decrease from the prior year. Major changes from the prior year's budget include a 26.1 percent decrease in Non-Personnel Services and a 26.9 percent increase in Materials and Supplies. Chart E1 provides a breakdown by category of the FY 2010-11 Budget. Table E1 provides a summary of the budget that includes variances between the FY 2010-11 and FY 2009-10 Budgets. The following describes FY 2010-11 Budget category variances that are greater than ten percent.

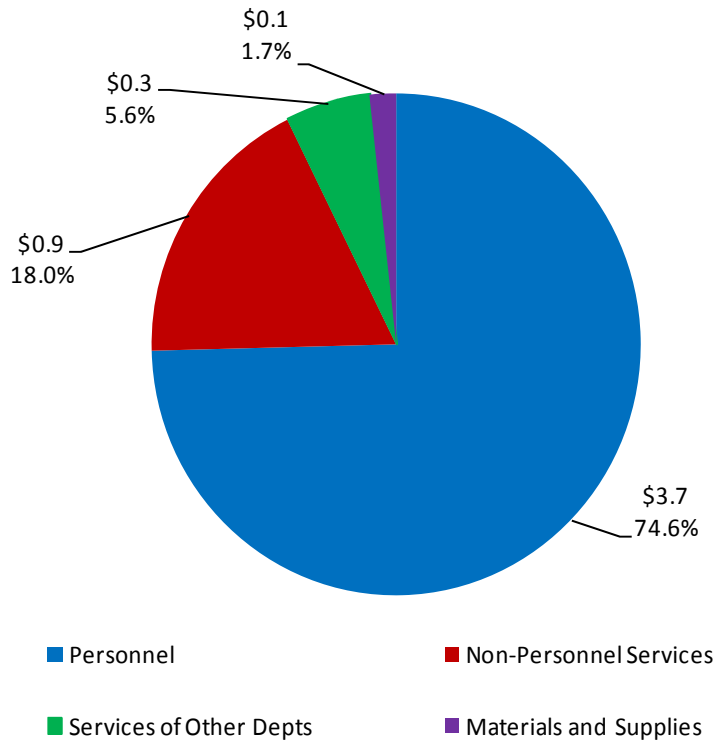
### Non-Personnel Services

Non-Personnel Services is budgeted at \$0.9 million, a \$0.3 million, or 26.1 percent, decrease from the FY 2009-10 Budget. This budget funds services for External Affairs including travel, training, memberships, entertainment and promotion expenses, equipment maintenance, professional services, and rent for Real Estate Services' share of office space. The decrease from the FY 2009-10 Budget reflects the elimination of one-time funding for the SFPUC Sustainability Plan and Program.

### Materials and Supplies

Materials and Supplies is budgeted at \$0.1 million, a 26.9 percent increase from the prior year's budget. This budget funds materials and supplies, including equipment maintenance supplies, safety supplies, food, fuel, and office supplies. This budget was increased based on expenditure patterns in prior fiscal years and FY 2010-11 projected needs.

Chart E2. FY 2011-12 External Affairs Uses of Funds, \$5.0 Million



*Summary*

The FY 2011-12 External Affairs budget is \$5.0 million, a \$0.1 million, or 1.7 percent increase from the prior year. The FY 2011-12 Budget was adopted along with the FY 2010-11 Budget, and was the first time the SFPUC, along with four other City departments, had implemented a two-year budget cycle. The change from FY 2010-11 is relatively flat. Chart E2 provides a breakdown by category of the FY 2011-12 Budget. Table E1 provides a summary of the budget that includes variances between the FY 2011-12 and FY 2010-11 Budgets.

Table E1. External Affairs Budget Summary

Expenditure Category	\$					FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2010-11 vs. FY 2011-12 Adopted Budget	
	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	Amount	%	Amount	%
Personnel	4,011,707	3,670,637	3,974,356	3,613,302	3,697,331	(57,335)	-1.6%	84,029	2.3%
Non-Personnel Services	885,012	1,209,738	1,259,727	894,318	894,526	(315,420)	-26.1%	208	0.0%
Materials & Supplies	34,701	67,776	34,491	86,000	86,000	18,224	26.9%	-	0.0%
Equipment	-	-	16,315	-	-	-	0.0%	-	0.0%
Services of Other Depts	137,082	270,260	97,965	279,413	279,413	9,153	3.4%	-	0.0%
<b>Totals</b>	<b>5,068,502</b>	<b>5,218,411</b>	<b>5,382,854</b>	<b>4,873,033</b>	<b>4,957,270</b>	<b>(345,378)</b>	<b>-6.6%</b>	<b>84,237</b>	<b>1.7%</b>

Bureaus – External Affairs

Chart E3. FY 2010-11 External Affairs Budget by Bureau, \$4.9 Million

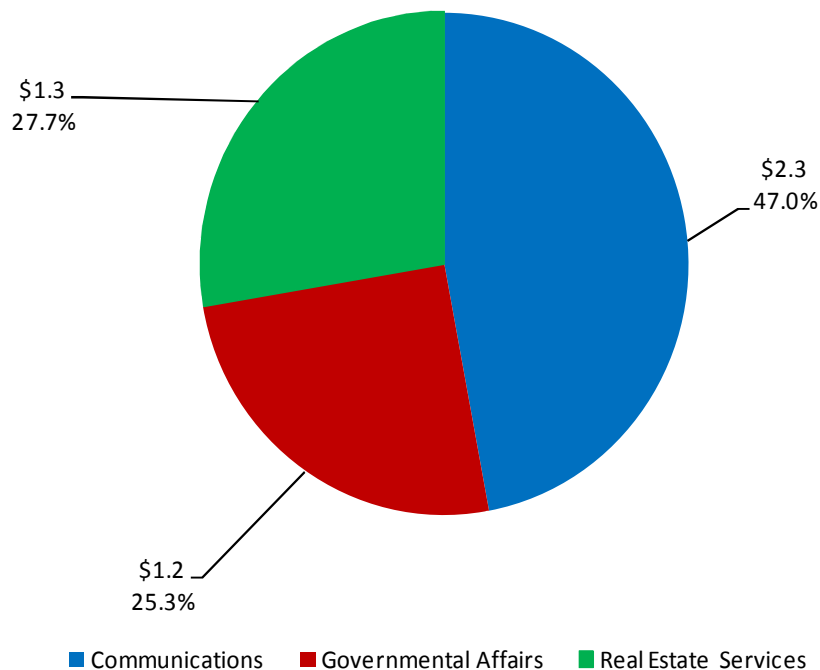


Chart E3 provides a breakdown of the FY 2010-11 External Affairs budget by Bureau. The Communications budget is \$2.3 million, or 47.0 percent of the total. The Governmental Affairs budget is \$1.2 million, or 25.3 percent of the total. The Real Estate Services budget is \$1.3 million, or 27.7 percent of the total.

## Communications

Communications oversees the SFPUC's communications, education, media and outreach functions; provides a full range of communication services to all of the Enterprises and Bureaus of SFPUC and oversees SFPUC publications; develops community understanding and support for Water, Power and Wastewater Enterprise projects; coordinates community outreach for capital improvement projects, hosts special community and media events, develops background collateral materials for SFPUC projects and programs, handles press and media inquiries, conducts surveys, and serves as the content manager for www.sfwater.org, the SFPUC website; and promotes diversity and the health, safety, and professional development of its employees.

Table E2 provides the FY 2009-10 and FY 2010-11 Budgets, FY 2008-09 Actuals, FY 2009-10 Pre-Audit Actuals, and the variance between the FY 2010-11 and FY 2009-10 Budgets.

### Budget Summary

Table E2. Communications Budget Summary

Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	2,080,515	1,935,680	2,098,814	1,965,138	29,458	1.5%
Non-Personnel Services	202,114	243,315	253,108	228,315	(15,000)	-6.2%
Materials & Supplies	22,556	30,000	23,980	45,000	15,000	50.0%
Equipment	-	-	16,315	-	-	0.0%
Services of Other Depts	46,628	59,255	17,537	54,143	(5,112)	-8.6%
<b>Totals</b>	<b>2,351,813</b>	<b>2,268,250</b>	<b>2,409,754</b>	<b>2,292,596</b>	<b>24,346</b>	<b>1.1%</b>

### Reasons for Changes, FY 2009-10 to FY 2010-11

- **Materials and Supplies** – Reflects the increase in funding basic office supplies, minor furnishings, computer equipment, and refreshments provided at community meetings, based on prior year expenditures.

## Governmental Affairs

Governmental Affairs oversees the SFPUC's legislative affairs and strategic planning functions; manages the SFPUC's relationship with key stakeholders; provides a full range of legislative services to the Enterprises and Bureaus of the SFPUC; directs SFPUC activities associated with local, regional, State and Federal government; secures approvals and community support for all Water, Power and Wastewater Enterprise projects; plans for the continued service of reliable, high quality water to San Francisco and its customers, and for the continued collection, treatment, and discharge and reuse of wastewater for San Francisco in compliance with current and anticipated laws and regulations; and promotes diversity and the health, safety, and professional development of its employees. To carry out these services for the SFPUC, Governmental Affairs:

- Identifies and develops policy issues.
- Provides testimony and representation in legislative forums.
- Acts as an on-going advocate for policy and legislation as it is developed.
- Serves as compliance monitors to maintain the SFPUC's credibility.
- Educates governmental and legislative staff, elected official, students and the public through tours and briefings.

Table E3 provides the FY 2009-10 and FY 2010-11 Budgets, FY 2008-09 Actuals, FY 2009-10 Pre-Audit Actuals, and the variance between the FY 2010-11 and FY 2009-10 Budgets.

## Budget Summary

Table E3. Governmental Affairs Budget Summary

Expenditure Category					FY 2010-11 vs. FY 2009-10 Adopted Budget	
	FY 2008-09	FY 2009-10	FY 2009-10	FY 2010-11	Amount	%
	Actuals	Adopted Budget	Pre-Audit Actual	Adopted Budget		
Personnel	1,061,126	755,937	1,058,072	769,151	13,214	1.7%
Non-Personnel Services	459,906	739,503	781,585	439,503	(300,000)	-40.6%
Materials & Supplies	4,685	20,000	1,498	20,000	-	0.0%
Services of Other Depts	-	2,117	-	1,935	(182)	-8.6%
<b>Totals</b>	<b>1,525,717</b>	<b>1,517,557</b>	<b>1,841,155</b>	<b>1,230,589</b>	<b>(286,968)</b>	<b>-18.9%</b>

## Reasons for Changes, FY 2009-10 to FY 2010-11

- **Non-Personnel Services** – Reflects the elimination of one-time funding for the SFPUC Sustainability Plan and Program.



## Real Estate Services

Real Estate Services oversees the SFPUC's real estate holdings and facilities management; is responsible for the management of all SFPUC lands; and promotes diversity and the health, safety and professional development of its employees.

The roles and responsibilities of Real Estate Services are to:

- Manage the SFPUC's commercial interest in lands and properties owned and occupied by SFPUC Divisions and Bureaus.
- Negotiate and manage permits and leases.
- Work with the SFPUC to develop commercially valuable uses of SFPUC properties consistent with its utility need.
- Conduct surplus land sales.
- Recommend policies and implement procedures relating to the use, rental, management, purchase, and disposal of such property.

Table E4 provides the FY 2009-10 and FY 2010-11 Budgets, FY 2008-09 Actuals, FY 2009-10 Pre-Audit Actuals, and the variance between the FY 2010-11 and FY 2009-10 Budgets.

## Budget Summary

Table E4. Real Estate Services Budget Summary

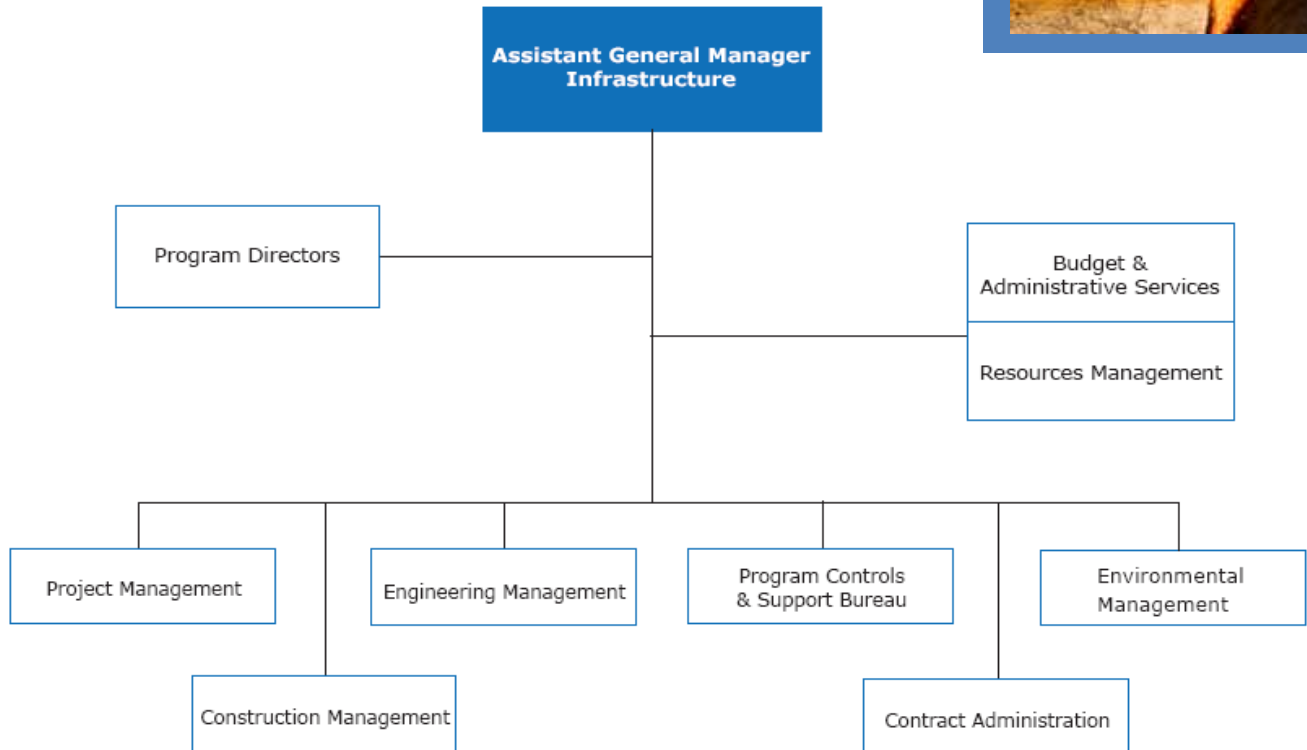
Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget	
					Amount	%
Personnel	870,066	979,020	817,469	879,013	(100,007)	-10.2%
Non-Personnel Services	222,991	226,920	225,033	226,500	(420)	-0.2%
Materials & Supplies	7,461	17,776	9,013	21,000	3,224	18.1%
Services of Other Depts	90,454	208,888	80,428	223,335	14,447	6.9%
<b>Totals</b>	<b>1,190,972</b>	<b>1,432,604</b>	<b>1,131,943</b>	<b>1,349,848</b>	<b>(82,756)</b>	<b>-5.8%</b>

## Reasons for Changes, FY 2009-10 to FY 2010-11

- **Materials and Supplies** – Reflects an increase based on expenditure patterns in prior fiscal years and FY 2010-11 projected needs.

# INFRASTRUCTURE

## Organizational Chart



## Mission, Roles, and Responsibilities

Infrastructure manages the planning, design and construction of the capital programs of SFPUC, as well as the repair and replacement of the Water, Wastewater and Power Enterprise facilities. The mission of Infrastructure is to provide high quality and cost-effective services in an environmentally sensitive manner, while at the same time meeting or exceeding customer and stakeholder expectations.

The responsibilities of Infrastructure include the implementation of the \$4.6 billion Water System Improvement Program (WSIP), which will result in the repair, replacement and seismic upgrade of the Hetch Hetchy Water System, which directly serves 2.4 million residential, commercial and industrial customers in the San Francisco Bay Area.

Infrastructure also oversees the Sewer System Improvement Program (SSIP), which is under development and anticipated to reflect an estimated \$6.0 billion in needed improvements over the next 20 to 30 years, including the development of a bayside biosolids center. Coordination of Hetch Hetchy capital projects is also underway.

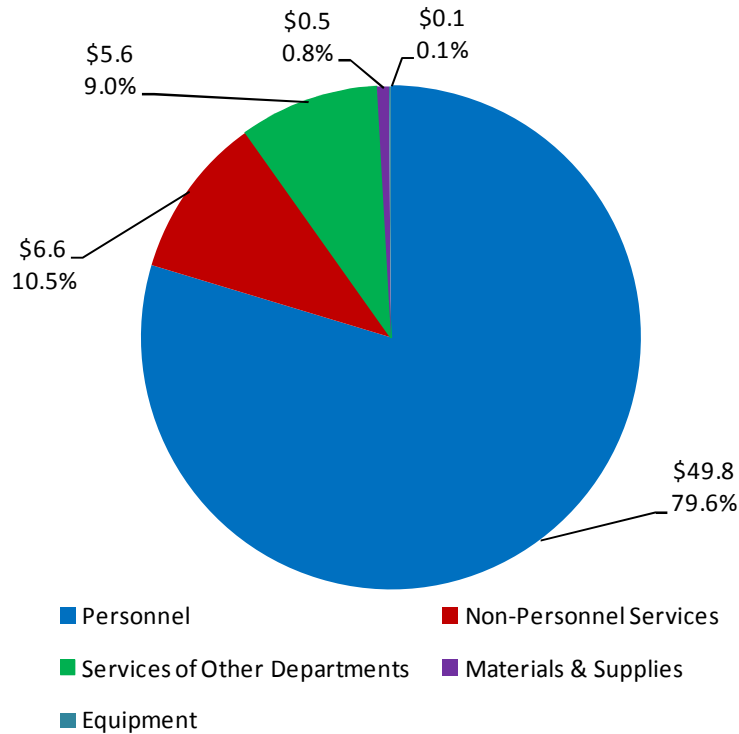
Finally, Infrastructure implements the capital programs and projects which are necessary to provide a safe, adequate and reliable electrical power supply to San Francisco Government facilities and operations. Infrastructure is led by the Assistant General Manager (AGM) of Infrastructure, whose office consists of a Contracting Initiatives Manager, a Capital Resources Strategic Planner, a new SFPUC Headquarters Project Director, and a Manager of WSIP

Expediting and Assistant to the AGM for Infrastructure. Infrastructure is supported by five divisions, three groups, and two Programs whose managers report directly to the Assistant General Manager of Infrastructure.

## Budget Summary

### Uses of Funds

Chart I1. FY 2010-11 Infrastructure Uses of Funds, \$62.5 Million



### *Summary*

The Infrastructure budget is funded by various capital projects. The FY 2010-11 Infrastructure budget is \$62.5 million, a \$1.6 million, or 2.5 percent, decrease from the prior year. Major changes from the prior year's budget include a 9.9 percent decrease in Non-Personnel Services, a 15.0 percent increase in Materials and Supplies, a 31.2 percent decrease in Equipment, and a 12.6 percent increase in Services of Other Departments. Chart I1 provides a breakdown by category of the FY 2010-11 Budget. Table I1 provides a summary of the budget that includes variances between the FY 2010-11 and FY 2009-10 Budgets. The following describes FY 2010-11 budget category variances that are equal to or greater than ten percent.

### *Non-Personnel Services*

Non-Personnel Services is budgeted at \$6.6 million, a \$0.7 million, or 9.9 percent, decrease from the prior year. This budget funds services for Infrastructure including equipment and facilities maintenance, travel, training, memberships, entertainment and promotion expenses, professional services, and rent for Infrastructure's share of office space. The decrease primarily reflects the elimination of FY 2009-10 one-time funding for the start-up costs for the

Contractors Help Center, which offers services and programs to assist small contractors and suppliers to obtain more work, primarily with the SFPUC and other CCSF departments.

*Materials and Supplies*

Materials and Supplies is budgeted at \$0.5 million, a \$0.07 million, or 15.0 percent, increase from the prior year. This budget funds materials and supplies, including general construction supplies, equipment maintenance supplies, safety supplies, food, fuel, and data processing and office supplies. The increase reflects a transfer of funds from Non-Personnel Services to this budget category for the procurement of additional computers and laptops for construction management team members who are mobilizing to various construction sites.

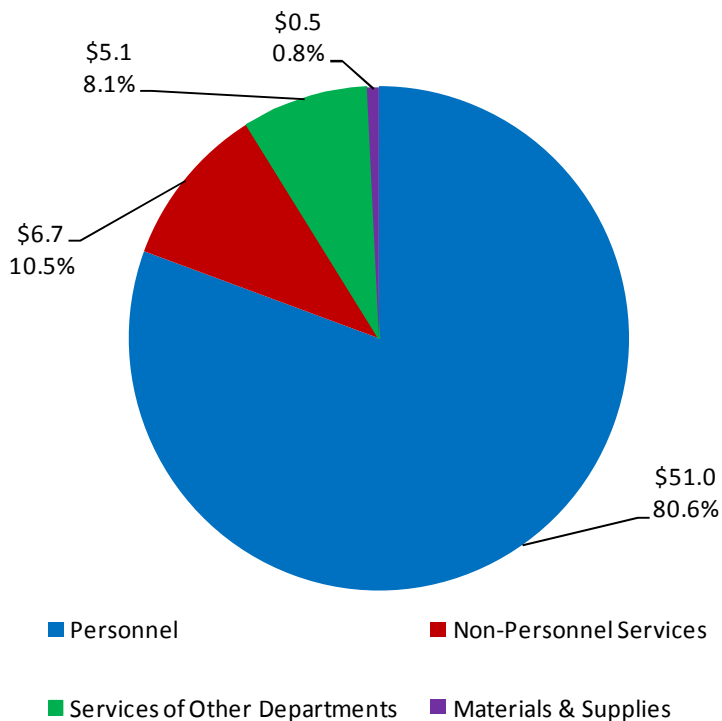
*Equipment*

Equipment is budgeted at \$0.07 million, a \$0.03 million, or 31.2 percent, decrease from the prior year. This budget funds four replacement vehicles utilized by Construction Management staff working on non-WSIP construction projects. The decrease reflects the reduced need for replacement vehicles in FY 2010-11.

*Services of Other Departments*

Services of Other Departments is budgeted at \$5.6 million, a \$0.6 million, or 12.6 percent, increase from the prior year. This budget funds services provided to Infrastructure by other City departments. The increase reflects additional support of Workforce Development’s CityBuild Academy, which supports construction employment.

Chart I2. FY 2011-12 Infrastructure Uses of Funds, \$63.2 Million



*Summary*

The FY 2011-12 Infrastructure budget is \$63.2 million, a \$0.7 million, or 1.1 percent, increase from the prior year. The FY 2011-12 Budget was adopted along with the FY 2010-11 Budget, and was the first time the SFPUC, along with four other City departments, had implemented a two-year budget cycle; the change from FY 2010-11 is relatively flat. Chart I2 provides a breakdown by category of the FY 2011-12 Budget. Table I1 provides a summary of the budget that includes variances between the FY 2011-12 and FY 2010-11 Budgets.

Table I1. Infrastructure Budget Summary

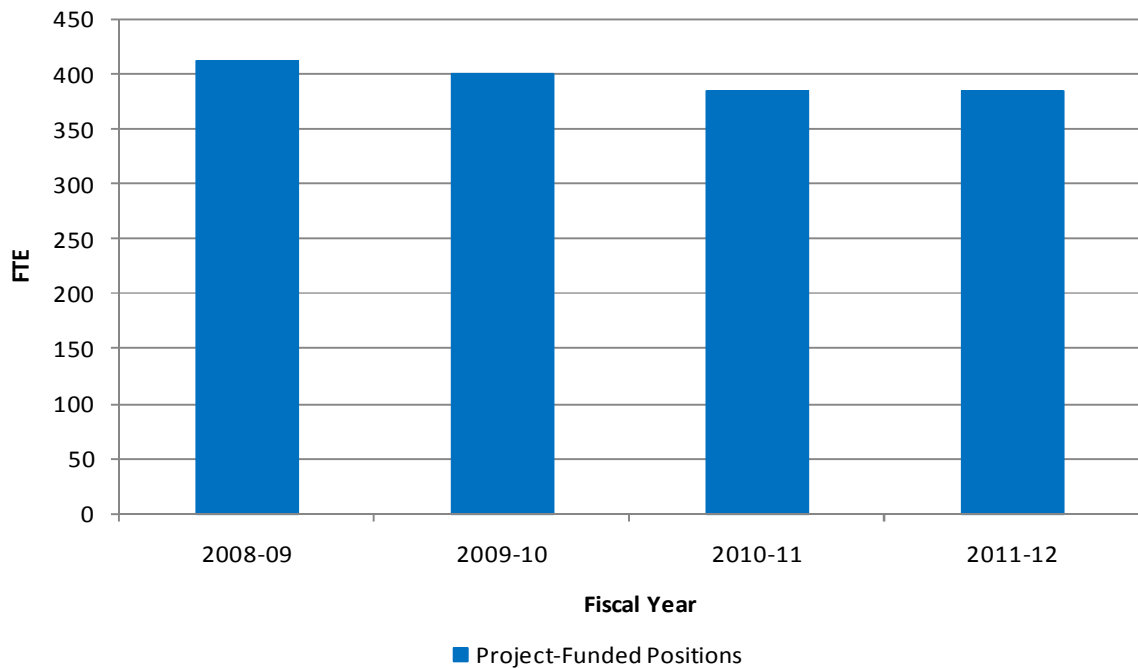
Expenditure Category	FY 2008-09 Actuals	FY 2009-10 Adopted Budget	FY 2009-10 Pre-Audit Actual	FY 2010-11 Adopted Budget	FY 2011-12 Adopted Budget	FY 2010-11 vs. FY 2009-10 Adopted Budget		FY 2011-12 vs. FY 2010-11 Adopted Budget	
						Amount	%	Amount	%
Personnel	20,160,544	51,373,431	19,460,856	49,813,010	50,958,071	(1,560,421)	-3.0%	1,145,061	2.3%
Non-Personnel Services	5,313,194	7,283,614	7,042,948	6,561,571	6,664,461	(722,043)	-9.9%	102,890	1.6%
Materials & Supplies	443,217	434,437	608,904	499,437	494,437	65,000	15.0%	(5,000)	-1.0%
Equipment	(23,702)	101,996	92,026	70,127	-	(31,869)	-31.2%	(70,127)	-100.0%
Services of Other Depts	3,771,581	4,975,059	4,899,932	5,599,874	5,099,874	624,815	12.6%	(500,000)	-8.9%
<b>Totals</b>	<b>29,664,834</b>	<b>64,168,537</b>	<b>32,104,666</b>	<b>62,544,019</b>	<b>63,216,843</b>	<b>(1,624,518)</b>	<b>-2.5%</b>	<b>672,824</b>	<b>1.1%</b>

## Authorized and Funded Full-Time Equivalents (FTE)

Table I2. Infrastructure Authorized and Funded Full-Time Equivalents (FTE)

Position Type	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2010-11 vs	FY 2011-12 vs
	Adopted Budget	Adopted Budget	Adopted Budget	Adopted Budget	FY 2009-10 Adopted Budget	FY 2010-11 Adopted Budget
Permanent Positions	412.81	400.00	384.77	385.00	(15.23)	0.23
Temporary Positions	5.40	5.40	5.55	5.55	0.15	-
<b>Total Positions</b>	<b>418.21</b>	<b>405.40</b>	<b>390.32</b>	<b>390.55</b>	<b>(15.08)</b>	<b>0.23</b>

Chart I3. Infrastructure Authorized Position Trend



Infrastructure's authorized full-time equivalent (FTE) positions are funded through various capital projects, and the budget does not include attrition savings. As Table I2 above shows, the total positions for FY 2010-11 are 390.32 FTE, a 15.08 FTE decrease from FY 2009-10. Chart I3 illustrates the trend of the number of FTEs from FY 2008-09 to FY 2011-12. The variance from FY 2009-10 to FY 2010-11 primarily reflects the reassignment of fourteen positions – nine positions to the Business Services, four positions to the Water Enterprise, and one position to Hetchy Power – to reflect where these positions presently work and report; and the deletion of two positions. The position reassignments and deletions are offset by one new position to manage the Contractors Help Center for capital projects. The FY 2011-12 Budget remained relatively flat from the prior year; the 0.23 FTE increase reflects the annualization of one new FY 2010-11 position.

# Appendix A

## Performance Data/Performance Measures

Hetch Hetchy Power	2007-08 Actual	2008-09 Actual	2009-10Target	2009-10 Actual	2010-11 Target
<b>Manage the City's power supply effectively and efficiently</b>					
Actual municipal power load falls within 90% to 110% of forecast load (megawatt hours)	842,347	836,060	880,492	830,543	856,914
Number of days per month the balance of Deferred Delivery Account (DDA) accounts exceeds 110,000 megawatt hours	0	0	0	0	0
<b>Promote energy conservation</b>					
Total number of kilowatt hours reduced	2,339,000	3,035,387	5,500,000	5,822,965	8,700,000
Total number of peak kilowatts reduced	87	528	1,350	1,309	1,400
<b>Develop and implement renewable energy projects</b>					
Increase in kilowatts per year of renewable capacity and energy (non-Hetch Hetchy generated)	845	0	0	0	5,414
<b>Maintain the City's power assets in a state of good repair</b>					
Percent of customer-funded projects (work orders for other departments) performed within cost estimates	83%	50%	85%	100%	100%
Percent of maintenance work on Hetch Hetchy high voltage equipment performed within manufacturer-recommended intervals	75%	0%	75%	75%	85%
<b>Respond to streetlight and pole needs promptly</b>					
Percent of SFPUC streetlight malfunctions (as reported by customers) repaired within two business days	70%	65%	70%	71%	80%
Percent of SFPUC pole knockdown/replacements (with concrete foundation repairs) completed within twenty-one business days	39%	85%	44%	92%	45%
Percent of SFPUC pole knockdown/replacements (without concrete foundation repairs) completed within three business days	19%	65%	55%	50%	61%
<b>Manage utilities on Yerba Buena Island / Treasure Island effectively and efficiently</b>					
Percent of Treasure Island / Yerba Buena Island service (electric, natural gas) requests responded to within 48 hours	100%	100%	100%	100%	100%
Percent of technical and engineering services for TIDA operation activities provided on schedule	100%	100%	100%	100%	100%
Percent of technical and engineering services for TIDA design activities provided on schedule	100%	100%	100%	100%	100%
<b>Generate power to help meet the needs of the City and County of San Francisco</b>					
Power generated to meet San Francisco's needs, in gigawatt hours (annual target set assuming average annual hydrology)	2,046	1,527	1,600	1,448	1,600

Water Enterprise	2007-08 Actual	2008-09 Actual	2009-10 Target	2009-10 Actual	2010-11 Target
<b>Deliver high quality drinking water to our customers</b>					
California Department of Public Health (DPH) violations in the Regional Water System	0	0	0 n/a	n/a	
California Department of Health and Safety (DHS) violations in the Local Water System	0	0	0 n/a	n/a	
Number of unplanned service interruptions to wholesale customers and to the retail service area (San Francisco)	0	0	0 n/a	n/a	
<b>Maintain and improve customer service</b>					
Percent of customer inquiries or complaints responded to within 2 business hours of initial contact	100%	100%	100%	100%	100%
Unplanned disruptions of less than 4 hours in San Francisco (per 1,000 customer accounts)	1.06	0.63	1.1	0.45	1.1
Unplanned disruptions of greater than 12 hours in San Francisco (per 1,000 customer accounts)	0.02	0.01	0.01	0.00	0.01
<b>Maintain infrastructure to keep water system in a state of good repair and operation</b>					
Percent of wholesale water meters calibrated	67%	33%	50%	45%	35%
Percent of transmission line valves exercised	13%	32%	33%	41%	33%
Number of residential and commercial water meters replaced in San Francisco	3,561	1,115	500	1,243	122,000
Miles of water main replaced in San Francisco	6.0	8.1	6.0	5.3	6.0
Miles of water conveyance facilities inspected in the Hetch Hetchy system (Hetch Hetchy to Tesla Portal)	47	16	16	10	8
Percent of maintenance that is scheduled rather than unscheduled in the Hetch Hetchy system	52%	48%	45%	47%	50%
Percent of maintenance that is scheduled rather than unscheduled in the Regional system (Tesla to CDD)	66%	56%	54%	94%	60%



Wastewater Enterprise	2007-08 Actual	2008-09 Actual	2009-10 Target	2009-10 Actual	2010-11 Target
<b>Collect wastewater in an efficient and effective fashion</b>					
Number of catch basins inspected and cleaned	7,009	8,062	7,500	9,313	8,000
Linear feet of main collection system sewer lines inspected	399,565	587,928	528,000	695,399	660,000
Number of dental office inspections performed (to control source of mercury discharge)	130	6	25	25	10
Number of Fats, Oils, & Grease (FOG) inspections (to reduce sewer blockages and control odor problems)	862	767	840	913	1200
<b>Operate the treatment plants efficiently and effectively</b>					
Major National Pollution Discharge Elimination System (NPDES) Permit violations per year	0	2	2	2	2
Kilowatt-hours of electric power consumed per million gallons treated (includes plants & pump stations)	1,981	2,065	1,800	2,005	1,900
Percent of solids in dewatered (post-centrifuge) cake	23%	24%	23%	25%	25%
<b>Maintain the wastewater system in a state of good repair</b>					
Percent maintenance work done that is planned vs unplanned	64%	84%	80%	87%	85%
Percent of scheduled maintenance jobs completed within 10% of initial estimate for staff hours required	29%	38%	40%	45%	40%
Percent of preventive maintenance (PM) tasks completed	38%	77%	80%	78%	80%
<b>Foster Constructive Relationships with Neighborhoods and Contribute to the Community</b>					
Number of confirmed treatment plant odor complaints made by the public	12	9	6	5	6
Percent of sewer complaints responded to in person within 8 hours	100%	100%	100%	100%	100%

# Appendix B – City and County of San Francisco Economy and General Information

This Appendix provides general economic and demographic information about the City and County of San Francisco (the “City”) and the Bay Area (defined below). The various reports, documents, websites and other information referred to herein are not incorporated herein by such references.

## Area and Economy

The corporate limits of the City encompass over 93 square miles, of which approximately 49 square miles are land, with the balance consisting of tidelands and a portion of the San Francisco Bay (the “Bay”). The City is located on a peninsula bounded by the Pacific Ocean to the west, the Bay to the east, the entrance to the Bay and the Golden Gate Bridge to the north and San Mateo County to the south. The City is the economic center of the nine counties contiguous to the Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma Counties (the “Bay Area”). The economy of the Bay Area includes a wide range of industries, supplying local needs as well as the needs of national and international markets. Major business sectors in the Bay Area include retail and entertainment, conventions and tourism, service businesses, banking, professional and financial services, corporate headquarters, international and wholesale trade, multimedia and advertising, biotechnology, and higher education.

## Population and Income

The City had a population estimated at 815,358 as of FY 2008-09. The table below reflects the population and per capita personal income of the City, as estimated by the U.S. Census bureau and the Bureau of Economic Analysis (BEA).

CITY AND COUNTY OF SAN FRANCISCO		
Population and Income 2005-2009		
Year	Population <sup>1</sup>	Per Capita Personal Income <sup>2</sup>
2005	777,614	63,138
2006	786,367	68,584
2007	799,185	71,844
2008	808,976	72,712
2009	815,358	70,644 <sup>3</sup>

<sup>1</sup> Source: Population Division, U.S. Census Bureau, 2005 to 2008. US Census Bureau State & County QuickFacts, 2009.

<sup>2</sup> Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce. Updated on April 22, 2010; information is updated with newly available data.

<sup>3</sup> Per capita personal income for 2009 was estimated by dividing the estimated total personal income for 2009 by the reported and estimated population in 2009. (Personal income was estimated by assuming that its percentage of state personal income in 2009 remained at the 2008 level of 3.66 percent.) Information is updated from last year's CAFR with newly available data.

## Conventions and Tourism

According to the San Francisco Convention & Visitors Bureau (the “Convention & Visitors Bureau”), a non-profit membership organization, during the calendar year 2009 approximately 415.4 million people (125,407 average per day) visited the City, generating approximately \$7.8 billion for local businesses. Visitors in San Francisco spent on average \$21.5 million on an average day. Also, as reported by PKF Consulting, hotel occupancy rates in the City averaged 75.5% for calendar year 2009, a decrease of 3.4% from the previous year. Average daily room rates in the City during 2009 decreased about 15.8%: from \$160 compared to the prior year's average of \$190. During calendar 2008, only 28.9% of all out-of-town visitors stayed in City hotels, but the Convention & Visitors Bureau estimates that such visitors generated 62.3% of total spending by out-of-town visitors. An estimated 40% of City visitors were on vacation, 35% were convention and trade show attendees, 22% were

individual business travelers and the remaining 3% were en route elsewhere. In 2009, the City was ranked fifth in market share for international visitors to the U.S., behind New York, Miami, Los Angeles, and Orlando. The City was ranked ahead of Las Vegas, Washington, D.C., and Honolulu. The following table illustrates hotel occupancy and related spending from calendar years 2004 through 2008, as reported by the San Francisco Convention and Visitors Bureau.

San Francisco Overnight Hotel Guests			
Calendar Year	Annual Average Hotel Occupancy	Visitors Staying in Hotels or Motels (\$ Thousands)	Estimated Hotel Visitor Spending (\$ Thousands)
2004	73.4%	4,200	4,070,000
2005	75.7%	4,490	4,530,000
2006	76.4%	4,500	4,780,000
2007	79.0%	4,590	5,060,000
2008	78.9%	4,740	5,310,000

Source: San Francisco Convention & Visitors Bureau.

According to the Convention & Visitors Bureau, as of June 1, 2007, convention business was almost at full capacity at the Moscone Convention Center and was at strong levels at individual hotels providing self-contained convention services. Due to an expansion to the Moscone Convention facilities completed spring 2003, the Moscone Convention Center offers over 700,000 square feet of exhibit space covering more than 20 acres on three adjacent blocks. Data for full years after 2007 are not available from the Convention & Visitors Bureau at this time. However, it is likely based on other tourist and visitor trends, that the more recent convention hotel occupancy trend is negative.

## Employment

The City benefits from a highly skilled, educated and professional labor force. Key industries include tourism, real estate, banking and finance, retailing, apparel design and manufacturing. Emerging industries include multimedia and bioscience. See the Table below for more information on the top employment sectors in the City and County of San Francisco (CCSF). According to the California Employment Development Department, the unemployment rate for the City was 9.7% for August 2010 compared with an unadjusted unemployment rate of 12.4% for the State. See the tables below for more information on the civilian labor of employment and unemployment in the CCSF; and employment by industry from 2004-2008.

CITY AND COUNTY OF SAN FRANCISCO Civilian Labor Force, Employment, and Unemployment <sup>1</sup> August 2009 and August 2010 <sup>2</sup>					
Year	Area	Labor Force	Employment	Unemployment	Unemployment Rate
Aug-10	San Francisco	456,900	412,600	44,400	9.7%
	State	18,229,500	15,968,000	2,261,500	12.4%
Aug-09	San Francisco	462,200	417,000	45,200	9.8%
	State	18,219,600	16,039,500	2,180,200	12.0%

<sup>1</sup> The Unemployment Rate and Labor Force data are based upon "place of residence" – where people live, regardless of where they work. Individuals who have more than one job are counted only once. Civilian Labor Force is the sum of civilian employment and civilian unemployment. Civilian Employment includes all individuals who worked during the week including the 12th of the month. Civilian Unemployment includes those individuals who were not working but were able, available, and actively looking for work. Unemployment Rate is the number of unemployed divided by the labor force then multiplied by 100.

<sup>2</sup> Data not seasonally adjusted.

Source: California Employment Development Department (EDD), Labor Market Information Division.3

**CITY AND COUNTY OF SAN FRANCISCO**  
**Estimated Average Annual Employment by Sector, 2004-2008**

	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Professional and Business Services	100,400	105,000	110,800	120,900	125,100
Government	83,900	86,200	88,100	89,900	91,100
Leisure and Hospitality	70,700	72,100	73,800	76,400	78,600
Trade, Transportation and Utilities	70,000	69,600	69,100	68,800	67,900
Financial Activities	57,300	57,300	57,800	58,600	57,700
Educational and Health Service	54,400	55,100	56,000	57,400	58,100
Other Services	21,100	21,300	21,400	21,900	22,300
Information	19,100	17,300	18,300	19,700	19,100
Manufacturing	12,300	11,400	11,200	10,600	10,800
<b>Total</b>	<b>489,200</b>	<b>495,300</b>	<b>506,500</b>	<b>524,200</b>	<b>530,700</b>

Source: California Employment Development Department (EDD), Labor Market Information Division.

The table below lists the ten largest employers in the City as of December 2009.

**CITY AND COUNTY OF SAN FRANCISCO**  
**Largest Employers in San Francisco, 2009**

<b>Employer</b>	<b>Number of Employees in SF</b>	<b>Nature of Business</b>
City & County of San Francisco	26,554	City Government
University of California, San Francisco	24,759	Education
Wells Fargo Bank	9,214	Financial Services
California Pacific Medical Center	6,800	Health Care
Kaiser Permanente	5,629	Health Care
State of California	5,555	State Government
U.S. Postal Service	4,697	Postal Service
PG&E Corp.	4,394	Utility
Gap Inc.	3,804	Specialty Retailer
Charles Schwab & Co. Inc.	3,000	Financial Services
City College of San Francisco	3,000	Education

Source: San Francisco Business Times Book of Lists 2010 (2009 data), ranked by number of employees, and the San Francisco Center for Economic Development (SFCED)

## Taxable Sales

The following table provides information on taxable sales for the City for calendar years 2004 through 2008. Total retail sales decreased in 2008 by approximately \$0.2 billion compared to 2007. Data for full years after 2008 are not available from the California State Board of Equalization at this time.

CITY AND COUNTY OF SAN FRANCISCO					
Taxable Sales – Calendar Year 2004-2008 (\$ Thousands)					
	2004	2005	2006	2007	2008 <sup>1</sup>
Apparel	\$ 826,686	\$ 880,718	\$ 941,299	\$ 1,028,602	\$ 1,228,156
General Merchandise	1,143,657	1,199,308	1,280,908	1,349,158	1,169,571
Specialty Stores <sup>2</sup>	2,084,323	2,212,530	2,322,789	1,528,826	1,279,921
Food Stores	419,286	439,472	454,970	480,587	501,880
Eating/Drinking	2,067,418	2,237,384	2,367,548	2,589,892	2,749,584
Home Furnishings and Appliances	527,519	575,985	598,279	608,766	616,325
Building Materials	353,002	397,218	428,795	459,332	411,392
Automotive <sup>3</sup>	850,984	956,031	1,031,786	1,068,661	1,033,216
Other Retail Stores <sup>2</sup>	141,906	151,142	162,146	892,748	814,591
<b>Retail Stores Total</b>	<b>\$ 8,414,781</b>	<b>\$ 9,049,788</b>	<b>\$ 9,588,520</b>	<b>\$10,006,572</b>	<b>\$ 9,804,636</b>
Bus. & Personal Svcs	\$ 937,411	\$ 939,108	\$ 999,112	\$ 1,001,472	\$ 1,014,379
All Other Outlets	2,855,315	3,037,078	3,304,556	3,606,692	4,018,674
<b>Total All Outlets</b>	<b>\$12,207,507</b>	<b>\$13,025,974</b>	<b>\$13,892,188</b>	<b>\$14,614,736</b>	<b>\$14,837,689</b>

<sup>1</sup> Most recent annual data available.

<sup>2</sup> For 2007 and 2008, the California State Board of Equalization data combined Specialty Stores and All Other Retail Stores under one category. This data is separated in these years for the purposes of this Table

<sup>3</sup> Service Stations is a new category in 2007 and 2008 and is categorized under Automotive in those years.

Source: California State Board of Equalization - Taxable Sales in California (Sales & Use Tax) Annual Reports

Because two-thirds of SFPUC's water is sold to customers outside of San Francisco, key highlights from those counties where most of the wholesale water customers reside are also included.

## San Mateo County, Alameda County and Santa Clara County Economy and General Information

The information in this section provides economic and demographic information concerning the Counties of San Mateo, Alameda and Santa Clara. The following economic and demographic information about the Counties of San Mateo, Alameda and Santa Clara has been collected from the Counties or, as noted, third party sources. The historical economic and demographic data set forth in section is current as of the dates indicated. Data as of 2009 relates to the current downturn in the economy; but the majority of such data relate to periods prior to the downturn. The inclusion in this section of historical data relating to periods prior the economic downturn should not be regarded as a representation by the SFPUC with respect to current or future levels of economic activity, economic performance or demographic changes.

### *County of San Mateo and General Information*

#### General

The County of San Mateo ("San Mateo County") was established on April 19, 1856. Located on the San Francisco Peninsula, coastal mountains run north and south through San Mateo County, dividing the lightly-populated western part from the heavily-populated eastern corridor between San Francisco and Santa Clara/Silicon Valley. San Mateo County covers 446 square miles and contains 20 incorporated cities and the San Francisco International Airport. As of January 1, 2009, the estimated population was 745,654.

## Population

The following table shows population data for San Mateo County, its six largest cities, and the State of California (the "State"), reported as of January 1 for each of the five calendar years set forth below. San Mateo County's population increased by approximately 3.6% during the five year period.

COUNTY OF SAN MATEO Six Largest Cities and State of California, 2005-2009 <sup>1</sup>					
	2005	2006	2007	2008	2009
San Mateo County	719,844	722,683	727,719	736,494	745,654
<b>Six Largest Cities:</b>					
Daly City	104,194	104,560	105,256	105,883	107,083
San Mateo	93,883	94,170	94,798	95,431	96,529
Redwood City	75,723	75,971	76,454	76,991	77,796
So. San Francisco	61,444	61,729	62,143	63,512	65,000
San Bruno	41,301	41,451	41,828	43,286	43,798
Pacifica	38,542	38,679	38,956	39,473	39,984
State of California	36,676,931	37,087,005	37,463,609	37,871,509	38,255,508

<sup>1</sup> As of January 1 for the year shown.

Source: State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 Benchmark. Sacramento, California, May 2010.

## Employment

The table set forth below shows annual averages of the estimated number of wage and salary workers by industry for calendar year 2004 through 2008.

COUNTY OF SAN MATEO Estimated Average Annual Employment by Sector, 2004-2008					
	2004	2005	2006	2007	2008
Total Farm	2,200	1,900	1,900	2,000	1,900
Total Nonfarm	325,300	325,600	332,200	338,000	336,900
Manufacturing	29,100	28,700	29,900	30,800	29,700
Trade, Transportation & Utilities	75,600	74,800	75,000	75,300	74,700
Information	21,100	20,500	18,500	17,400	18,600
Financial Activities	20,800	21,200	21,700	21,500	20,400
Professional & Business Services	57,000	59,500	61,300	63,400	65,200
Education & Health Services	30,200	30,200	31,400	32,100	32,600
Leisure & Hospitality Services	30,700	31,400	33,500	34,900	34,200
Other <sup>1</sup>	28,700	27,200	28,700	30,500	29,700
Government	32,100	32,100	32,200	32,100	31,800
<b>Total All Industries</b>	<b>325,300</b>	<b>325,600</b>	<b>332,200</b>	<b>338,000</b>	<b>336,900</b>

Source: California Employment Development Department (EDD), Labor Market Information Division.

The table below lists 25 major employers in San Mateo County, as reported by the California Employment Development Department.

SAN MATEO COUNTY Major Employers		
Employer Name	Location	Industry
<b>5,000 – 9,999 Employees</b>		
Oracle	Redwood City	Computer Software-Manufacturers
US Interior Department	Menlo Park	Federal Government-Conservation Departments
<b>1,000 – 4,999 Employees</b>		
Applied Biosystems	Foster City	Physicians & Surgeons Equipment & Supplies-Manufacturers
Electronic Arts, Inc.	Redwood City	Game Designers (Manufacturers)
Franklin Resources	San Mateo	Investment Management
Franklin Templeton Group	San Mateo	Investment Management
Franklin Trust Company	San Mateo	Mutual Funds
Genentech, Inc.	So. San Francisco	Drug Millers (Manufacturers)
Guckenheimer	Redwood City	Food Service-Management
Health Science Library	Daly City	Services NEC
Kaiser Foundation Medical Group	So. San Francisco	Physicians & Surgeons
Kaiser Permanente Medical Center	Redwood City	Hospitals
Mills Peninsula Health Services	Burlingame	Schools-Universities & Colleges Academic
San Mateo County Mental Health	San Mateo	County Government-Social/Human Resources
San Mateo Medical Center	San Mateo	Crisis Intervention Service
Sing Shot Media LLC	Redwood City	Advertising NEC
Stanford Linear Accelerator	Menlo Park	Research-Service
Visa International Service Association	Foster City	Credit Card-Merchang Services
Visa USA, Inc.	Foster City	Credit Card & Other Credit Plans
<b>500-999 Employees</b>		
Bay Meadows Racecourse	San Mateo	Horse Racing
Burlingame Millbrae Yellow Cab	Burlingame	Taxicabs & Transportation Service
Rudolph & Sletten, Inc.	Redwood City	Building Contractors
San Mateo County Human Services	Belmont	County Government-Social/Human Resources
San Mateo County Sheriff's Office	Redwood City	Police Departments
San Mateo County Transit	San Carlos	Transit Lines

Source: State of California, Employment Development Department (EDD), Labor Market Information Division; EDD extracted this information from the America's Labor Market Information (ALMIS) Employer Database, 2010 2<sup>nd</sup> Edition.

The following table shows unemployment rates for San Mateo County, the State and the United States. During each of the years set forth in the table, the unemployment rate in San Mateo County has been lower than the unemployment rate in the State and in the United States.

**COUNTY OF SAN MATEO**  
Unemployment Rates, 1999-2009

Year	County of San Mateo	California	United States
1999	2.0%	5.3%	4.2%
2000	2.9%	4.9%	4.0%
2001	3.8%	5.4%	4.7%
2002	5.7%	6.7%	5.8%
2003	5.8%	6.8%	6.0%
2004	4.9%	6.2%	5.5%
2005	4.3%	5.4%	5.1%
2006	3.7%	4.9%	4.6%
2007	3.8%	5.3%	4.6%
2008	4.8%	7.2%	5.8%
2009	8.6%	11.4%	9.3%

Source: State of California, Employment Development Department, Labor Market Information Division and US Department of Labor, Bureau of Labor Statistics.

### Taxable Transactions

The table set forth below shows taxable transactions by type of business for the calendar years 2004 through 2008.

**COUNTY OF SAN MATEO**  
Taxable Sales – Calendar Year 2004-2008 (\$ Thousands)

Type of Business	2004	2005	2006	2007	2008
Apparel Stores	\$337,738	\$365,474	\$398,192	\$425,086	\$472,321
General Merchandise Stores	1,226,528	1,247,946	1,313,029	1,363,715	1,287,235
Specialty Stores <sup>2</sup>	1,129,654	1,217,982	1,249,966	907,197	724,092
Food Stores	401,438	408,881	411,438	430,879	436,383
Eating and Drinking Places	1,019,966	1,111,150	1,158,608	1,245,105	1,279,611
Home Furnishings and Appliances	510,736	515,133	512,423	535,371	541,919
Building Materials	915,860	929,948	908,205	846,050	762,664
Automotive <sup>3</sup>	2,356,664	2,485,052	2,544,725	2,588,069	2,293,563
Other Retail Stores <sup>2</sup>	190,351	213,553	226,557	657,509	623,940
<b>Total Retail Outlets</b>	<b>8,088,935</b>	<b>8,495,119</b>	<b>8,723,143</b>	<b>8,998,981</b>	<b>8,421,728</b>
Business and Personal Services	480,851	614,539	677,986	632,367	614,557
All Other Outlets	3,238,288	3,341,692	3,499,262	3,694,958	4,101,629
<b>Total All Outlets</b>	<b>\$11,808,074</b>	<b>\$12,451,350</b>	<b>\$12,900,391</b>	<b>\$13,326,306</b>	<b>\$13,137,913</b>

<sup>1</sup> Most recent annual data available.

<sup>2</sup> For 2007 and 2008, the California State Board of Equalization data combined Specialty Stores and All Other Retail Stores under one category. This data is separated in these years for the purposes of this Table.

<sup>3</sup> Service Stations is a new category in 2007 and 2008 and is categorized under Automotive in those years.

Source: California State Board of Equalization - Taxable Sales in California (Sales & Use Tax) Annual Reports,

Effective Buying Income (EBI) is defined as money income less personal income tax and non-tax payments, such as fines, fees or penalties. The table below summarizes median household EBI for San Mateo County, the State and the United States for the calendar years 2005 through 2009 which is the most current calendar year information available.



COUNTY OF SAN MATEO Median Household Effective Buying Income, 2005-2009			
Year	County of San Mateo	California	United States
2005	\$50,703	\$43,915	\$39,324
2006	60,284	44,681	40,529
2007	62,749	46,275	41,255
2008	65,262	48,203	41,792
2009	67,466	48,952	42,303

Source: "Survey of Buying Power", Sales and Marketing Management Magazine for year 2005; Trade Dimensions International, Inc. – Demographics USA for years 2006 through 2008; surveyofbuyingpower.com. Sales & Marketing Management, n.d. Web 25 June 2010 for year 2009. via: Burlingame Financing Authority, Storm Drainage Revenue Bonds, Series 2010

## County of Alameda General Information

### General

Alameda County ("Alameda County") is located on the east side of the San Francisco Bay and extends from the Cities of Berkeley and Albany in the north to the City of Fremont in the south. It is the seventh most populous county in the State, with most of its population concentrated in a highly urbanized area between the San Francisco Bay and the East Bay Hills.

The northern part of Alameda County has direct access to San Francisco Bay and the City of San Francisco. It is highly diversified with residential areas as well as traditional heavy industry, the University of California at Berkeley, the Port of Oakland, and sophisticated manufacturing, computer services and biotechnology firms. The middle of Alameda County is also highly developed, including older established residential and industrial areas. The southwestern corner of Alameda County has seen strong growth in residential development and manufacturing. Many high-tech firms have moved from neighboring Silicon Valley in Santa Clara County into this area. The southeastern corner of Alameda County has seen the most development in recent years due to land availability. Agriculture and the rural characteristics of this area are disappearing as the area maintains its position as the fastest growing residential, commercial and industrial part of Alameda County.

### Population

The following table summarizes population figures for Alameda County.

COUNTY OF ALAMEDA Population 1980, 1990, 2000, 2006-2010	
Year	Population
1980	1,105,379
1990	1,279,182
2000	1,443,939
2006	1,506,214
2007	1,519,250
2008	1,538,054
2009	1,557,749
2010	1,574,857

Source: The 1980 and 1990 data are U.S. Census figures. The figures for the years 2000 and 2005 through 2009 are from the State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 Benchmark. Sacramento, California, May 2010.

## Employment

The following table summarizes historical employment and unemployment in the Oakland Metropolitan Statistical Area ("MSA"), which is comprised of both Alameda and Contra Costa Counties.

OAKLAND Metropolitan Statistical Area (MSA) Civilian Labor Force, Employment and Unemployment Annual Averages					
	2005	2006	2007	2008	2009
Employment	1,183,800	1,197,500	1,207,900	1,208,500	1,153,000
Unemployment	62,700	54,700	59,200	79,200	135,600
<b>Total Civilian Labor Force</b>	<b>1,246,500</b>	<b>1,252,200</b>	<b>1,267,100</b>	<b>1,287,700</b>	<b>1,288,600</b>
Unemployment Rate	5.0%	4.4%	4.7%	6.2%	10.5%

<sup>1</sup> The Unemployment Rate and Labor Force data are based upon "place of residence" – where people live, regardless of where they work. Individuals who have more than one job are counted only once. Civilian Labor Force is the sum of civilian employment and civilian unemployment. Civilian Employment includes all individuals who worked during the week including the 12th of the month. Civilian Unemployment includes those individuals who were not working but were able, available, and actively looking for work. Unemployment Rate is the number of unemployed divided by the labor force then multiplied by 100.

<sup>2</sup> Data not seasonally adjusted.

Source: California Employment Development Department (EDD), Labor Market Information Division

The following table summarizes the historical numbers of workers in the Oakland Metropolitan Statistical Area, which is comprised of both Alameda and Contra Costa Counties, by industry.

OAKLAND MSA Estimated Average Annual Employment by Sector, 2004-2008					
	2005	2006	2007	2008	2009
Agricultural	1,600	1,500	1,500	1,400	1,500
Natural Resources and Mining	1,100	1,200	1,200	1,200	1,200
Construction	72,800	73,300	71,700	64,900	53,500
Manufacturing	95,600	95,800	94,400	93,100	82,500
Trade, Transportation and Utilities	195,000	197,100	199,300	193,000	178,900
Information	30,700	30,100	29,000	27,800	25,200
Financial Activities	69,500	67,700	62,400	57,200	52,500
Professional and Business Services	150,600	154,900	158,000	162,200	148,500
Educational and Health Services	118,500	121,800	124,200	128,700	130,000
Leisure and Hospitality	83,000	85,600	88,000	89,100	85,200
Other Services	35,600	35,900	36,200	36,100	34,300
Government	180,000	182,000	183,900	177,200	174,600
<b>Total All Industries</b>	<b>1,034,000</b>	<b>1,046,900</b>	<b>1,049,800</b>	<b>1,031,900</b>	<b>967,900</b>

Source: California Employment Development Department (EDD), Labor Market Information Division.

## Major Employers

The following table lists 25 major employers in Alameda County.

ALAMEDA COUNTY Major Employers		
Employer Name	Location	Industry
<i>More than 10,000 Employees</i>		
Oracle	Pleasanton	Computer Software-Manufacturers
University of California-Berkeley	Berkeley	Schools-Universities & Colleges Academic
Western Digital Corp	Fremont	Computer Storage Devices (Manufacturers)
<i>5,000 - 9,999 Employees</i>		
Lawrence Berkeley National Lab	Berkeley	Physicians & Surgeons
Lawrence Livermore National Lab	Berkeley	Laboratories-Testing
<i>1,000 - 4,999 Employees</i>		
Alameda County Law Enforcement	Oakland	Sheriff
Alameda County Sheriff Department	Pleasanton	Sheriff
Alta Bates Medical Center, Inc.	Berkeley	Hospitals
Bayer Corporation	Berkeley	Drug Millers (Manufacturers)
Berkeley Coin & Stamp	Berkeley	Coin Dealers Supplies & Etc.
Children's Hospital & Research	Oakland	Hospitals
Clorox Company	Oakland	Specialty Cleaning/Sanitation (Manufacturers)
Clorox Company	Pleasanton	Specialty Cleaning/Sanitation (Manufacturers)
Cooper Vision, Inc.	Pleasanton	Contact Lenses-Manufacturers
East Bay Water	Oakland	Municipal Water
EMC Corporation	Pleasanton	Computer Storage Devices (Manufacturers)
Fairmont Hospital	San Leandro	Hospitals
Kaiser Permanente Hospital	Hayward	Hospitals
Kaiser Permanente Medical Center	Oakland	Hospitals
New United Motor Mfg, Inc.	Fremont	Automobile & Truck Brokers
Residential & Student Services Program	Berkeley	Giftwares-Manufacturers
Transportation Department-California	Oakland	State Government-Transportation Programs
US Berkeley Extension	Berkeley	Schools-Universities & Colleges Academic
Washington Hospital Healthcare	Fremont	Hospitals
Waste Management, Inc.	Oakland	County Government-Environmental Programs

Source: State of California, Employment Development Department (EDD), Labor Market Information Division; EDD extracted this information from the America's Labor Market Information (ALMIS) Employer Database, 2010 2<sup>nd</sup> Edition.

## County of Santa Clara Economy and General Information

### General

The County of Santa Clara ("Santa Clara County") lies immediately south of San Francisco Bay and is the sixth most populous county in the State. It encompasses an area of approximately 1,316 square miles. Named after Mission Santa Clara, which was established in 1777, and named for Saint Clara of Assisi, Italy, Santa Clara County was incorporated in 1850 as one of the original 28 counties of the State and operates under a home rule charter adopted by Santa Clara County voters in 1950 and amended in 1976 (the "Santa Clara County Charter").

The southern portion of Santa Clara County has retained the agricultural base which once existed throughout the area and has two cities, separated by roughly twenty

miles. The northern portion of Santa Clara County is densely populated, extensively urbanized and heavily industrialized. It contains 15 cities, the largest of which is the City of San Jose, the third largest city in the State and the county seat. The uppermost northwestern portion of Santa Clara County, with its concentration of high-technology, electronics-oriented industry, is popularly referred to as the "Silicon Valley." Large employers include Cisco Systems, Inc., Hewlett-Packard, Intel, National Semiconductor, Lockheed Martin Space Systems and IBM.

**Recent Annual Population Changes.** All of the cities in Santa Clara County reported population increases over the period 2000 to 2009, with Gilroy posting the largest population growth (24.2 percent). The number of residents living in the unincorporated areas of Santa Clara County decreased by 6.0 percent within the same period. From 2000 to 2009, Santa Clara County's population rose by approximately 11.4 percent. Approximately 5.0 percent of Santa Clara County's residents live in unincorporated areas, but the number has steadily decreased over time as the population continues to migrate toward the cities. Milpitas had the largest percentage increase in population from 2008 to 2009, with a 2.5 percent gain. Palo Alto and San Jose followed closely with 2.2 percent each. By the year 2020, it is predicted that Santa Clara County's population will grow to approximately 2.0 million residents. The following table provides a historical summary of population in Santa Clara County and its incorporated cities as of January 1 of calendar years 2005 through 2009.

<b>SANTA CLARA COUNTY</b>					
<b>Population, 2005-2009</b>					
	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Campbell	38,276	38,378	39,515	39,978	40,415
Cupertino	53,012	53,549	54,584	55,045	55,838
Gilroy	47,489	48,479	49,345	50,933	51,505
Los Altos	27,513	27,584	27,941	28,165	28,457
Los Altos Hills	8,420	8,475	8,556	8,799	8,890
Los Gatos	28,872	28,965	29,236	30,161	30,495
Milpitas	64,771	65,223	66,191	69,115	70,812
Monte Sereno	3,493	3,510	3,544	3,564	3,619
Morgan Hill	36,292	37,061	38,193	39,042	39,813
Mountain View	71,770	71,934	72,829	73,598	74,758
Palo Alto	61,451	62,096	62,245	63,080	64,480
San Jose	941,435	952,897	967,964	985,047	1,006,846
Santa Clara	108,717	110,682	113,575	114,988	117,237
Saratoga	30,740	30,811	31,217	31,451	31,679
Sunnyvale	132,601	133,435	134,921	136,915	138,819
<b>Incorporated</b>	<b>1,654,852</b>	<b>1,673,079</b>	<b>1,699,856</b>	<b>1,729,881</b>	<b>1,763,663</b>
Balance Of County	97,844	98,212	97,767	99,096	93,853
<b>County Total</b>	<b>1,752,696</b>	<b>1,771,291</b>	<b>1,797,623</b>	<b>1,828,977</b>	<b>1,857,516</b>

As of January 1 for the years shown.

Source: State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 Benchmark. Sacramento, California, May 2010.

## Employment and Industry

Santa Clara County is home to a highly skilled and diverse work force, a situation that has traditionally translated into lower countywide average unemployment rates when compared to State and national average unemployment rates. However, in 2002 and 2003, Santa Clara County's unemployment rate rose sharply as a result of the retraction in the communications and high technology industries that dominate Santa Clara County's employment base. In 2003 alone, annual average employment figures showed a drop in jobs within Santa Clara County of approximately 36,500 in comparison to 2002. In 2003 Santa Clara County's unemployment rate was reported to have reached an average of 8.3 percent, 1.5 percent higher than that of the State's. These estimates are based solely on unemployment benefit claims, which excludes those who have chosen other options as an alternative to unemployment (such as early retirement or relocation) or have exhausted unemployment benefits. Cycles of business growth and retraction are customary in Santa Clara County, particularly in the high-tech industry.

According to the California Employment Development Department, the 2009 annual average of the labor force in Santa Clara County was an estimated 877,800 compared to 874,100 in 2008. From 2008 to 2009, unemployment in Santa Clara County rose from 6.0 percent (52,100 unemployed) to 11.0 percent (96,400 unemployed), primarily due to the economic recession. The unemployment rate in Santa Clara County as of December 2009 was higher than the nationwide unemployment rate of 9.3 percent and slightly lower than the State unemployment rate of 11.4 percent during the same period.

In August 2010, the Employment Development Department reported preliminary numbers showing that there were an estimated 884,300 people in the labor force in Santa Clara County, with 785,800 employed and 98,500 unemployed. The unemployment rate in Santa Clara County in August 2010 was 11.1 percent, which is higher than the nationwide unemployment rate of 9.6 percent, and lower than the State unemployment rate of 12.4 percent during the same period.

Within Santa Clara County, development of high technology and high technology jobs have been enhanced by the presence of Stanford University, Santa Clara University, San Jose State University, other institutions of higher education, research and development facilities such as SRI International, the Stanford Linear Accelerator Center, and Ames Research Center (NASA). In addition, the Rincon de los Esteros Redevelopment Area in northern San Jose has been the site of industrial/research and development submarkets in Silicon Valley.

The following table lists wage and salary employment in Santa Clara County by industry from 2004 to 2008.

Santa Clara County Civilian Labor Force and Annual Employment by Sector, 2004-2008					
Industry Employment	2004	2005	2006	2007	2008
Civilian Labor Force	824,900	817,000	826,300	848,500	874,100
Civilian Employment	771,700	773,200	789,300	808,900	822,000
Civilian Unemployment	53,200	43,700	37,000	39,600	52,100
Civilian Unemployment Rate	6.4%	5.3%	4.5%	4.7%	6.0%
<hr/>					
Total, Wage and Salary	853,000	860,100	879,800	900,300	904,700
Total Farm	4,100	3,800	3,800	3,900	3,800
Total Nonfarm	848,900	856,300	876,000	896,500	900,900
Goods Producing					
Natural Resources & Mining	100	200	300	300	300
Construction	41,500	42,700	44,900	45,500	42,700
Manufacturing	171,800	168,000	160,600	163,800	165,600
<b>Subtotal Goods Producing</b>	<b>213,400</b>	<b>210,900</b>	<b>205,800</b>	<b>209,600</b>	<b>208,600</b>
Service Providing					
Trade, Transportation and Utilities					
Utilities	128,300	130,300	134,500	137,300	136,200
Information	32,500	35,200	37,400	39,500	41,600
Financial Activities	35,100	36,000	36,700	36,800	34,400
Professional and Business Services					
Services	158,000	159,100	170,300	176,600	177,000
Education and Health Services	94,400	96,100	99,700	102,500	106,800
Leisure and Hospitality	69,400	71,400	73,700	75,300	76,800
Other	24,600	24,200	24,300	24,600	24,800
Government	93,200	92,900	93,600	94,300	94,800
<b>Subtotal Service Providing</b>	<b>635,500</b>	<b>645,200</b>	<b>670,200</b>	<b>686,900</b>	<b>692,400</b>

The unemployment rate is calculated using unrounded data. Data may not add due to rounding.

Source: California Employment Development Department (EDD), Labor Market Information Division

## Major Employers

Santa Clara County is home to numerous high technology and computer software and hardware manufacturing companies, which, together with public sector employers, continue to top the list of the largest employers in Santa Clara County. The County

ranks as the number one public sector employer, with all departments collectively employing over 15,000 workers. The City of San Jose alone has over 7,000 full-time employees. Although there have been hiring freezes and cut-backs that have impacted public-sector organizations, such organizations typically tend to remain more stable in a volatile job market.

The table below lists 25 major employers in Santa Clara County, as reported by the California Employment Development.

SANTA CLARA COUNTY Major Employers		
Employer Name	Location	Industry
<b>More than 10,000 Employees</b>		
Cisco Systems, Inc.	San Jose	Computer Peripherals (Manufacturers)
<b>5,000 – 9,999 Employees</b>		
Applied Materials, Inc.	Santa Clara	Semiconductor Devices (Manufacturers)
Avago Technologies, Ltd.	San Jose	Exporters
Flextronics International	Milpitas	Solar Energy Equipment-Manufacturers
Fujitsu IT Holdings, Inc.	Sunnyvale	Computers-Wholesale
Intel Corporation	Santa Clara	Semiconductor Devices (Manufacturers)
Oracle	Cupertino	Computer Software (Manufacturers)
<b>1,000 – 4,999 Employees</b>		
AAA-Affordable Tutoring	Santa Clara	Tutoring
Adobe Systems, Inc	San Jose	Publishers-Computer Software (Manufacturers)
Advanced Micro Devices, Inc.	Sunnyvale	Semiconductors & Related Devices (Manufacturers)
Apple, Inc.	Cupertino	Computers-Electronics-Manufacturers
California's Great America	Santa Clara	Marketing Programs & Services
Christopher Ranch LLC	Gilroy	Garlic (Manufactures)
E4E, Inc.	Santa Clara	Venture Capital Companies
El Camino Hospital	Mountain View	Hospitals
Fujitsu Ltd.	Sunnyvale	Venture Capital Companies
Goldsmith Seeds, Inc.	Gilroy	Florists-Retail
Hewlett-Packard	Cupertino	Computers/Electronics – Manufacturers
HP Pavilion at San Jose	San Jose	Stadiums Arenas & Athletic Fields
Kaiser Permanente Medical Center	San Jose	Hospitals
Microsoft Corp	Mountain View	Computer Software (Manufacturers)
National Semiconductor Corp.	Santa Clara	Semiconductor Devices (Manufacturers)
Net App, Inc.	Sunnyvale	Semiconductor Devices (Manufacturers)
Santa Teresa Community Hospital	San Jose	Hospitals
VA Medical Center-Palo Alto	Palo Alto	Hospitals

Source: State of California, Employment Development Department (EDD), Labor Market Information Division; EDD extracted this information from the America's Labor Market Information (ALMIS) Employer Database, 2010 2<sup>nd</sup> Edition.

## Income

Owing to the presence of relatively high-wage skilled jobs and wealthy residents, Santa Clara County historically achieves high rankings relative to the rest of the State on a variety of income measurements. The per capita personal income in Santa Clara County decreased slightly from \$59,365 in 2007 to \$58,531 in 2008, which is higher than the national level of \$44,038 and the estimated State level of \$40,673<sup>1</sup>.

<sup>1</sup> Source: Santa Clara County MSA, Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce, updated April 2010. Source: US and California, Regional Economic Information System, Bureau of Economic Analysis, US Department of Commerce, updated September 20, 2010.

## Appendix C – Pro-Forma Statement of Operations

### Water Enterprise

SAN FRANCISCO WATER ENTERPRISE		
Statements of Revenues, Expenses, and Changes in Net Assets		
Year ended June 30, 2010 and 2009		
(\$ Thousands)		
	Pre-Audit 2010	Audited 2009
<b>Operating revenues:</b>		
Charges for services	\$ 248,369	\$ 247,664
Rents and concessions	8,584	9,399
Capacity fees	610	625
Other revenues	7,655	8,093
<b>Total operating revenues</b>	<b>265,218</b>	<b>265,781</b>
<b>Operating expenses:</b>		
Personal services	109,709	106,869
Contractual services	13,087	13,619
Materials and supplies	12,748	12,671
Depreciation	52,571	49,100
Services provided by other departments	47,574	40,103
Bad debt expense	-	92
General and administrative	5,816	2,982
Other	17,895	22,879
<b>Total operating expenses</b>	<b>259,400</b>	<b>248,315</b>
<b>Operating income</b>	<b>5,818</b>	<b>17,466</b>
<b>Non-operating revenues (expenses):</b>		
Federal and State grants	1,506	1,784
Interest and investment income	9,823	7,088
Interest expense	(47,272)	(28,847)
Net gain from sale of assets	(178)	2,587
Net gain from sale of assets	-	-
Other non-operating revenues	4,523	2,831
Other non-operating expenses	(1,773)	(799)
<b>Net non-operating expenses</b>	<b>(33,371)</b>	<b>(15,356)</b>
<b>Income before transfers</b>	<b>(27,555)</b>	<b>2,110</b>
Transfers from the City and County of San Francisco	-	-
Transfers to the City and County of San Francisco	(493)	(1,143)
<b>Changes in net assets</b>	<b>(28,048)</b>	<b>967</b>
Net assets at beginning of year	462,300	461,333
<b>Net assets at end of period</b>	<b>\$ 434,252</b>	<b>\$ 462,300</b>

## Wastewater Enterprise

SAN FRANCISCO WASTEWATER ENTERPRISE		
Statements of Revenues, Expenses, and Changes in Net Assets		
Years ended June 30, 2010 and 2009		
(\$ Thousands)		
	Pre-Audit 2010	Audited 2009
<b>Operating revenues:</b>		
Charges for services	\$ 202,363	199,332
Other revenues	7,480	9,322
<b>Total operating revenues</b>	<b>209,843</b>	<b>208,654</b>
<b>Operating expenses:</b>		
Personal services+B12:B44	70,992	69,141
Contractual services	12,018	13,828
Materials and supplies	9,819	5,754
Depreciation	40,748	38,815
Services provided by other departments	32,305	31,634
Bad debt expense	-	576
General and administrative	1,751	2,302
Other	17,061	7,250
<b>Total operating expenses</b>	<b>184,694</b>	<b>169,300</b>
<b>Operating income</b>	<b>25,149</b>	<b>39,354</b>
<b>Non-operating revenues (expenses):</b>		
State/other grants.	-	-
Federal and State grants	185	224
Interest and investment income	2,056	1,992
Interest expense	(15,891)	(15,677)
Other, net	4,052	798
<b>Total non-operating expenses</b>	<b>(9,598)</b>	<b>(12,663)</b>
<b>Income (loss) before transfers</b>	<b>15,551</b>	<b>26,691</b>
Transfers from the City and County of San Francisco	-	-
Transfers to the City and County of San Francisco	-	-
<b>Changes in net assets</b>	<b>15,551</b>	<b>26,691</b>
Net assets at beginning of year	1,010,604	983,913
<b>Net assets at end of year</b>	<b>\$ 1,026,155</b>	<b>1,010,604</b>



# Hetch Hetchy Water and Power

**HETCH HETCHY WATER AND POWER ENTERPRISE**  
**Statements of Revenues, Expenses, and Changes in Net Assets**  
**Years ended June 30, 2010 and 2009**  
**(\$ Thousands)**

	Pre-Audit 2010	Audited 2009
<b>Operating revenues:</b>		
Charges for services	\$ 127,295	\$ 115,028
Rents and concessions	245	246
Settlement proceeds	-	-
Total operating revenues	127,540	115,274
<b>Operating expenses:</b>		
Personal services	36,524	36,469
Contractual services	7,084	8,098
Purchased power and related costs	17,726	18,466
Materials and supplies	2,510	2,243
Depreciation	12,631	11,869
Services provided by other departments	5,011	4,477
General and administrative	19,633	7,347
Other	25,710	7,259
Total operating expenses	126,829	96,228
Operating income	711	19,046
<b>Nonoperating revenues (expenses):</b>		
Federal grants	197	-
State grants	-	-
Interest and investment income	2,739	4,160
Other nonoperating revenues	6,298	2,705
Interest expense	(722)	(7)
Other nonoperating expenses	(5,321)	(2,382)
Net nonoperating revenues	3,191	4,476
Net income before transfers	3,902	23,522
<b>Special item:</b>		
Impairment Loss	-	-
Income before transfers	3,902	23,522
Transfers in/(out)	(1,400)	(301)
Changes in net assets	2,502	23,221
Net assets at beginning of year	444,377	421,156
Net assets at end of year	\$ 446,879	\$ 444,377

# APPENDIX D - Debt Management Policies and Procedures (Approved February 2010)

## I. Scope and Application

The San Francisco Public Utilities Commission (SFPUC or Commission) has established these Debt Management Policies and Procedures for debt financings associated with the Water, Wastewater and Power Enterprises.<sup>1</sup> These policies are intended to enable the SFPUC to effectively manage its debt issuance and debt management practices. To the extent that any of the policies contained herein conflict with the terms and conditions of the existing or subsequently adopted SFPUC legal requirements or agreements, such legal requirements or agreements will control. These policies and procedures will be reviewed regularly, and revised or amended, as appropriate or desirable, with Commission approval.

These policies will be on file with the Commission, SFPUC's Finance Department (Financial Planning Group) and posted on the website of the SFPUC ([www.sfwater.org](http://www.sfwater.org)) with copies delivered to the Office of Public Finance (OPF), the City Treasurer, the City Controller, and the Clerk of the Board of Supervisors (BOS).

## II. SFPUC's Debt Management Mission

SFPUC's debt management mission is to serve, within the financial objectives and parameters established by the Commission, the capital financing needs of the respective enterprises in a cost effective, risk-appropriate and flexible manner, through the implementation of sound financial decision-making and the use of prudent financing tools.

## III. Debt Management Objectives

- a. Finance capital projects of SFPUC's enterprises in a timely and cost-effective manner.
- b. Manage debt effectively within Commission objectives and parameters.
- c. Achieve and maintain the highest practicable credit ratings to minimize total borrowing costs of SFPUC debt.
- d. Retain financial flexibility.
- e. Maintain compliance with all relevant laws, reporting, and disclosure requirements.

## IV. Types and Purposes of Debt

The SFPUC may issue debt to finance the acquisition and/or construction of capital improvements, unless otherwise decreed by court order or adjudicated settlement. Debt financings are not to be used to fund SFPUC operating costs.

- a. SFPUC revenue bonds are secured by a pledge that the rates of the applicable enterprise will generate net revenues sufficient to pay the principal of and interest on indebtedness.
- b. The SFPUC may issue the following types of taxable or tax-exempt debt:
  - i. Fixed rate bonds - long-term securities with serial and term maturities. Interest rates are determined when the bonds are sold and are fixed to maturity.
  - ii. Variable rate bonds - long-term securities that bear interest at variable rates adjusted at agreed upon intervals, such as daily, weekly or monthly. The holder of the variable rate security may be allowed to "put" the security to the SFPUC or to a liquidity provider retained by the SFPUC.
  - iii. Commercial paper - short-term (1-270 days) security with fixed interest rates. Customarily, commercial paper is secured by a junior pledge of net revenues, a letter of credit, or a liquidity facility. Commercial paper is

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<sup>1</sup> The policies are the same for each enterprise, unless otherwise noted.

designed to provide flexible, low-cost financing for capital projects and will be ultimately refunded with the issuance of long-term indebtedness.

- iv. Refunding bonds - issued to realize debt service savings, or for other debt restructuring purposes. Absent significant non-economic factors, the Commission's policy is that refunding transactions should produce aggregate net debt service savings of at least 3% of the par value of the refunded bonds, calculated using the refunding issue's true interest cost (TIC) as the discount rate.
- v. State Revolving Fund Loan program –
  - 1. Managed by the California Water Resources Control Board, SRF loans provide alternative capital financing for certain facilities of the Wastewater Enterprise. The lien status will be determined at the time such loans are considered.
  - 2. Managed by the California Department of Public Health, SRF loans provide alternative capital financing for certain facilities of the Water Enterprise. The lien status will be determined at the time such loans are considered.
- vi. Clean Renewable Energy Bonds (CREBs) – no- or low-interest bonds administered by the Federal government to finance renewable energy projects. CREBs are part of the 2009 American Reinvestment and Recovery Act (ARRA) legislation designed to stimulate state and local government capital project construction and improvements.
- vii. Build America Bonds (BABs) – also part of the 2009 ARRA, this program allows state and local governments to issue taxable bonds for capital projects and to receive a new direct federal subsidy payment for a portion of their borrowing costs.
- viii. Capital Lease Financing – equipment or facility lease financing as allowed by the Charter and Administration code.

## V. Debt Financing Authorization

### a. Charter

- i. Section 8B.124 Revenue Bonds (Proposition E, approved by voters November 2002): Authorizes the SFPUC to issue revenue bonds or other forms of indebtedness for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities when authorized by ordinance approved by a two-thirds vote of the BOS.
  - 1. Bonds issued against Prop E require the certification of a Qualified Independent Consultant that estimated net revenues of the applicable enterprise will sufficiently meet debt service coverage and other Indenture requirements, as well as certification from an Independent Engineer that the projects to be financed by the bonds meet utility standards.
- ii. Section 9.107 Revenue Bonds (Proposition A, approved by voters November 2002): Authorizes the SFPUC, subject to BOS approval, to issue up to \$1.628 billion in revenue bonds or other forms of indebtedness to finance the acquisition and construction of improvements to the City's water system.
- iii. Section 9.107(8) Revenue Bonds (Proposition H, approved by voters November 2001): Authorizes the issuance of revenue bonds to finance or refinance the acquisition, construction, installation, equipping, improvement or rehabilitation of equipment or facilities for renewable energy and energy conservation.
- iv. Section 9.109 Refunding Bonds: Authorizes the issuance of refunding bonds that achieve aggregate net debt service savings on a present value basis without voter approval. Refunding bonds must be approved by the BOS.

- b. Commercial Paper Authorization
  - i. Wastewater Enterprise \$150 million program:
    - 1. Voter authorized under Proposition E (Charter Sec. 8B.124, approved by voters November 2002)
    - 2. BOS authorized by SFPUC Resolution No. 06-0164 and Ordinance Nos. 266-06/270-06.
  - ii. Water Enterprise \$500 million program
    - 1. \$250 million voter authorized under Proposition A (Sec. 9.107, approved by voters November 2002)
    - 2. \$250 million voter authorized under Proposition E (Charter Sec. 8B.124, approved by voters November 2002)
    - 3. Authorization to issue up to \$150 million (SFPUC Resolution No. 99-084 and BOS Ordinance No. 451-99)
    - 4. Authorization to increase water CP issuance from \$150 million to \$250 million (SFPUC Resolution No. 00-0234 and BOS Ordinance No. 953-00)
    - 5. Authorization to increase water CP issuance from \$250 million to \$500 million (SFPUC Resolution Nos. 08-0202/09-0175 and BOS Ordinance No. 311-08)
- c. San Francisco Administrative Code
  - i. Article V of Chapter 43 of Part I enacted by Ordinance No. 203-98 adopted on June 8, 1998 by the BOS and amended in December 2006 establishes a procedure for the SFPUC to issue commercial paper.
  - ii. Appendix 54 Revenue Bonds (Proposition B, approved by voters November 2001): Authorizes the issuing, subject to BOS approval, of up to \$100 million in revenue bonds or other forms of indebtedness to finance solar energy, energy conservation, or renewable energy facilities and equipment.

#### VI. Debt Financing Approval Process

- a. Voter Authorization and Ballot Procedure – SFPUC may, pursuant to Charter Section 9.107, seek voter approval for revenue bond issuance. Prior to placing any measure on the ballot, the SFPUC must submit the item to the Capital Planning Committee (CPC) for its review. Legislation requesting the submission of a proposal for the issuance of revenue bonds to the voters of the City must be submitted in the form of a resolution by the SFPUC at a regularly scheduled BOS meeting in sufficient time prior to the due date to the Department of Elections to account for a 30-day review period at the BOS and BOS Finance Committee meetings.
- b. Commission approval in the form of a resolution is required for all SFPUC debt financings.
  - i. Capital Planning Committee (CPC) – Pursuant to the City’s Administrative Code, Section 3.2, the CPC must review and submit a recommendation to the BOS on all proposed new long-term financing transactions for capital improvements.
- c. Any financing-related item submitted to the BOS must first be reviewed and analyzed by the Budget Analyst who prepares a report and recommendation for the BOS.
- d. BOS approval in the form of a resolution or ordinance is required for SFPUC financings, as follows:
  - i. If pursuant to voter-approved debt (e.g., Proposition A, Proposition B), a resolution passed by a majority of the BOS is required.
  - ii. If pursuant to Charter Section 8B.124 (Proposition E), an ordinance passed by two-thirds vote of the BOS is required and is subject to referendum

requirements of Charter Section 14.102. The ordinance does not become effective until 30 days after its adoption.

- e. Certification pursuant to administrative code section 8B.124, as follows:
  - i. Certification by an independent engineer retained by the SFPUC that:
    - 1. the projects to be funded by the bonds, including the prioritization, cost estimates and scheduling, meet utility standards; and
    - 2. that estimated net revenue after payment of operating and maintenance expenses will be sufficient to meet debt service coverage and other indenture or resolution requirements, including debt service on the bonds to be issued, and estimated repair and replacement costs.
  - ii. Certification by the San Francisco Planning Department that facilitates under the jurisdiction of the Public Utilities Commission funded with such bonds will comply with applicable requirements of the California Environmental Quality Act.
- f. Revenue Bond Oversight Committee review of anticipated bond sales at least 30 days in advance of the issuance of the proposed financing transaction, including details with respect to amount, timing, and purpose of the issuance. (Sec. 5A.30-36, Proposition P, approved by voters, November 2002)

#### VII. Debt Limitations

- a. The Commission has adopted financial policies and/or is subject to legal agreements and requirements that effectively limit the amount of debt that can be issued. These include:
  - i. Debt service coverage requirement: for senior lien bonds, net revenues equal to at least 125% of annual debt service.
  - ii. Fund Balance Reserve Policy: establishes minimum levels of fund balance reserves from an operations perspective. (See separate policy document)
  - iii. Rate policy: predictable and financially prudent rate increase policy.
- b. Additional Bonds Test—(Sec. 8B.124) SFPUC legal documents require an independent certification that debt coverage of 1.25 will be maintained for 3 years after issuance of additional bonds.

#### VIII. Method of Sale

- a. General
  - i. Marketing – Bond sales shall be advertised, and the Preliminary Official Statement be distributed, as broadly as possible and receive a rating from at least one nationally recognized rating agency, with two ratings preferred. The financial advisors and/or the underwriters, if applicable, for each transaction shall undertake to market the bonds to prospective bidders and investors as appropriate or relevant.
  - ii. Amendments – Terms of the bonds shall be subject to amendment as late as practicable in the issuance process.
- b. Competitive – New money and refunding fixed-rate revenue bonds should be issued by competitive sale unless (i) there is significant deterioration in the SFPUC's overall credit rating or outlook, (ii) there are market issues specific to a transaction that are outside of the SFPUC's credit profile such as market volatility, threat of war or changes in taxation or sector risks, or (iii) other factors which mitigate make the use of the competitive sale process less attractive or likely to ensure a successful sale with the lowest total borrowing costs. The SFPUC may take bids in person, by facsimile or by electronic means, which is the preferred approach.
  - i. Cancellation – Bond sales shall be subject to cancellation at any time prior to the time bids are to be received.
  - ii. Award – The bonds shall be awarded to the bidder whose conforming bid represents the lowest true interest cost (TIC) to the SFPUC. The SFPUC's

financial advisor will confirm the calculation of the TIC before any bonds are awarded. The SFPUC's bond counsel will confirm that the bids conform to the requirements of the Notice of Sale. The SFPUC may then restructure the bonds in accordance with the Official Notice of Sale. The General Manager or his/her designee shall award the sale of SFPUC bonds.

iii. Rejection - The SFPUC shall reserve the unfettered right to reject all bids or waive bid irregularities.

c. Negotiated Sale – Bonds, including fixed rate bonds, variable rate demand notes, auction rate securities, commercial paper, etc. may be issued by negotiated sale, at the discretion of the General Manager, if deemed necessary for a successful offering. The SFPUC may retain more than one dealer or remarketing agent for each issuance of variable rate indebtedness. The SFPUC shall reserve the right to replace a dealer or remarketing agent with notice at any time for any reason in its sole discretion.

#### IX. Debt Structuring Policies

a. Standard terms – The following terms will apply to the SFPUC's transactions, as appropriate. Individual terms may change as dictated by the marketplace and/or by the unique characteristics of a given transaction.

##### i. Fixed Rate Revenue Bonds

1. Term	Up to 40 years per issue
2. Maximum interest rate	Not to exceed 12%
3. Maximum premium or discount	Case by case as recommended by SFPUC's financial advisor(s)
4. Payment dates	Water: November 1 for annual principal and semi-annual interest; May 1 for semi-annual interest  Wastewater: October 1 for annual principal and semi-annual interest; April 1 for semi-annual interest  The first payment may be extended beyond the first November or October after the bond sale if it is advantageous  Power: December 15 for annual CREBs payments
5. Call provisions	Shortest possible optional call consistent with optimal pricing; no more than 30 days notice  Make Whole Call: Permitted if market conditions required to ensure lowest total borrowing costs
6. Structure of debt	Level debt service unless an alternative structure is advantageous – principal payments may be serial and/or term bonds
7. Reserve funds	The lesser of what is required pursuant to indenture requirements or permitted by current tax law; surety may also be used
8. Capitalized interest	Up to three years or such other amount as may be legally

	permissible and advantageous
9. Good faith deposit	1% of par amount which may be satisfied by cash, surety or equivalent
10. Other, Federal, and State	Unique structures as appropriate such as federal subsidies or stimulus funding, as in the case of Build America Bonds
ii. Variable Rate Obligations – The SFPUC may elect to issue variable rate obligations, including variable rate demand obligations, auction rate securities and commercial paper.	
1. Purpose	Lower net borrowing costs; match assets and liabilities; diversify debt portfolio
2. Portfolio allocation	No more than 25% of each enterprise's outstanding debt shall be variable rate
3. Term	Up to 40 years per issue, except commercial paper which has a maximum maturity of 270 days
4. Maximum interest rate	12%
5. Monitoring	SFPUC will monitor all variable rate bonds on a regular basis and shall determine, from time to time, whether to change modes, alter hedging strategies and/or replace a dealer or remarketing agent
6. Budgeting	SFPUC will recommend an annual budget of debt service on any variable rate obligations at 1.5 times the rolling 3-year average of the Bond Market Association index, or other appropriate index over a similar time frame.
7. Remarketing inventory obligation	SFPUC may require that remarketing or dealer agreements contain a provision requiring that the dealer or agent, in the event of a failed remarketing, inventory the securities, at prevailing interest rates, for up to 30 days.
8. Call/Conversion provision	On any date without penalty; no more than 10 days notice.
9. Liquidity	A liquidity facility or letter of credit will be obtained for all variable rate obligations as market conditions may require; Liquidity or letter of credit providers will maintain the highest short-term ratings and long-term ratings of at least "AA".
10. Mode	Variable rate obligations, with the exception of commercial paper, may be issued as "multi-modal".

X. Derivatives Policy – See Appendix A

XI. Permitted Investments

All investments of bond proceeds shall be limited to the City's Investment Policy approved periodically by the County Treasurer Oversight Committee, unless otherwise required and approved apart from any debt authorization for the Commission.

Investment of bond proceeds that are held by the Trustee must be limited to those permitted in the financing documents or agreements.

Investment agreements which may be entered into from time to time. In general, uncollateralized investment agreements shall be executed with counterparties rated at least "AA". Collateral may be required upon a downgrade below "AA".

Repurchase agreements or forward delivery agreements shall be executed with counterparties rated at least "AA" with downgrade provisions requiring assignment or collateral upon a rating downgrade below the "A" level.

Investment agreements shall have the following general limitations:

- |                          |                                                                                                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Purpose               | <ul style="list-style-type: none"><li>▪ Preserve principal</li><li>▪ Maximize interest earnings thereby reducing net borrowing costs</li><li>▪ Match assets and liabilities</li></ul> |
| 2. Counterparty          | Minimum rating of AA from at least one major credit rating agency                                                                                                                     |
| 3. Mandatory termination | Limited to credit-related events and non-payment.                                                                                                                                     |
| 4. Cure provisions       | Timelines on SFPUC's obligations to cure must be adequate to accommodate City process.                                                                                                |
| 5. Priority of payment   | Termination payments shall be subordinate to related debt payments                                                                                                                    |
| 6. Procurement           | Award based on best bid as defined in bid form                                                                                                                                        |

XII. Professional Assistance

- a. Financial Advisors – SFPUC shall utilize the services of independent financial advisors in connection with financing-related issues. The financial advisors shall be selected via a competitive Request For Proposals (RFP) process or via Citywide approved pool, and the services to be provided shall be documented by contract. Compensation shall be capped.
- b. City Attorney's Office – SFPUC shall utilize the services of the City Attorney's Office when appropriate for legal support on financing-related matters to ensure all City and Charter requirements are fully met.
- c. Bond Counsel – SFPUC, with the City Attorney's Office recommendation, shall select bond counsel for each transaction. Bond counsel shall be responsible for developing the legal documents required for each transaction.
- d. Disclosure Counsel – SFPUC shall utilize the services of a disclosure counsel for each transaction, with the City Attorney's Office's recommendation. Disclosure counsel shall be responsible for assisting the SFPUC to prepare the Preliminary and Final Official Statements.
- e. Dealers, Auction Agents and Remarketing Agents – Such firms shall be selected on a competitive RFP basis and performance will be monitored regularly. SFPUC shall retain the right to replace any such firm with due notice at any time.
- f. Trustees – Trustee shall be selected on a competitive RFP basis and have a combined capital and surplus of at least \$50 million and be subject to supervision or examination by relevant Federal or State regulatory bodies.



- g. Letter of credit or liquidity providers – Selected via competitive RFP and subject to negotiations of its terms.
- h. Investment agreement counterparties – Selected from pool approved by the Office of Public Finance, if one exists. If no pool exists, selected on the basis of a competitive bid process, with bidders subject to approval by the City’s Human Rights Commission (HRC).
- i. Other professional assistance may be secured as necessary or desirable.

XIII. Ongoing Debt Administration

- a. Continuing Disclosure – In connection with financings, the SFPUC will provide timely information to the marketplace, as required by law.
  - i. Ongoing disclosure requirements established per continuing disclosure certificates and other financing documents and agreements shall be promptly met. See Appendix B for further disclosure requirements and reporting.
  - ii. Annual Disclosure Report – SFPUC covenants to provide its annual disclosure report no later than 270 days following the end of the fiscal year. However, SFPUC shall use its best efforts to issue the Annual Disclosure Report as soon as practical following the issuance of the City’s annual Comprehensive Annual Financial Report (CAFR). The SFPUC will use its best efforts to issue the Annual Disclosure Report electronically, to post it on its web site ([www.sfwater.org](http://www.sfwater.org)) and the Electronic Municipal Market Access (EMMA) web site of the Municipal Securities Rulemaking Board (MSRB), at the Main Library and on file with the Commission, the Office of Public Finance, the City Treasurer, the City Controller, and the Clerk of the Board of Supervisors. The report shall include CUSIPs, trustee and issuer contacts, and all other information as required pursuant to continuing disclosure certificates.
  - iii. Material Event – The SFPUC will issue a material event notice in accordance with the provisions of SEC Rule 15c2-12. Prior to the issuance of any material event notice, the SFPUC will convene a meeting of the Commission, the Office of Public Finance, the City Treasurer, the City Controller, the City Attorney and outside professionals as appropriate, to discuss the materiality of the event and the process for equal, timely and appropriate disclosure to the public and investment community.
  - iv. Official Statements – Official statements shall contain a summary of the continuing disclosure obligations, which may exceed obligations enumerated in SEC Rule 15c2-12.
- b. Arbitrage Rebate Compliance – The SFPUC shall calculate arbitrage annually in each year that the related construction fund (or equivalent) has had an outstanding balance. Thereafter, the SFPUC shall calculate arbitrage on the fifth anniversary of the bond issuance in accordance with IRS recommended practices. Any arbitrage liabilities will be reflected in the SFPUC financial statements.
- c. Credit Ratings – SFPUC’s policy is to secure underlying ratings on all newly issued obligations from at least one nationally recognized rating agency, though two is preferred.
  - i. Annual Meetings – The SFPUC will meet (or formally communicate) with credit rating agencies then rating any outstanding obligations at least annually unless such meeting is deemed unnecessary by the rating agencies.
  - ii. Reporting – The SFPUC will promptly make available to rating agency the following documents:
    - 1. Annual Audited Financial Statements
    - 2. Adopted budgets (Annual or Bi-annual)
    - 3. Other relevant documents

- iii. Citywide Ratings Notification – Any changes in ratings will be promptly noticed to the Commission, the Mayor, the Office of Public Finance, the Mayor’s Budget Director and Press Secretary, the City Controller, City Treasurer, President of the Board of Supervisors, Chair of the Finance Committee of the Board of Supervisors, as relevant.
- d. Public Utilities Revenue Bond Oversight Committee (RBOC) - Pursuant to the City’s Administrative Code Chapter 5A (Proposition P, passed by voters in November 2002), the RBOC provides oversight to ensure that the proceeds from revenue bonds authorized by the BOS and/or the voters after November 2002 are expended in accordance with the authorizing bond resolution and applicable law.

The RBOC reports at least annually to the Mayor, the BOS and the Commission regarding the SFPUC’s expenditure of revenue bond proceeds. Such reports are filed with the Commission, the Clerk of the BOS and the Main Library.

If, after conducting all appropriate reviews and independent audit of actual expenditures of revenue bond proceeds, the RBOC, after consultation with the City Attorney, determines that proceeds are being or have been expended for purposes not authorized by the authorizing bond resolution or otherwise amount to an illegal expenditure of such proceeds, the RBOC may, by majority vote of all its members, prohibit the further issuance or sale of authorized revenue bonds which have yet to be issued or sold. Any such determination by the RBOC may be appealed to the BOS within 30 days of the RBOC’s decision. The BOS may overturn the decision of the RBOC by resolution approved by two-thirds vote of all its members. The SFPUC will provide notice to the RBOC at least 30 days in advance of the issuance of a proposed financing transaction, including details with respect to the amount, timing and purpose of the issuance.

To the extent permitted by law, one-twentieth of one percent of revenue bond proceeds may fund the costs of the RBOC, except that costs associated with clerical, technical and administrative assistance in furtherance of its purposes and any compensation due the members are to be paid by the BOS. These amounts are subject to the applicable IRS rules associated with issuance of tax-exempt debt and generally must be spent within three years of issuance.

#### Derivatives Policy

- I. Derivatives (including swaps, swaptions, caps, floors and collars) – Purpose and Objectives
  - a. To achieve significant savings as compared to a product available in the bond market.
  - b. To prudently hedge risk in the context of a particular financing or the overall asset/liability management of the SFPUC’s balance sheets for its respective enterprises.
  - c. To ensure flexibility in meeting overall financing objectives.
  - d. To generate increased net investment return.
- II. Derivative Approval Process
  - a. Commission approval - The Commission, prior to SFPUC entering into a derivative product, shall approve the transaction. If a proposed derivative product meets the objectives of the SFPUC as described herein, SFPUC shall provide to the Commission for their review and approval, an analysis and evaluation of the proposal including all risk factors indicated below.
    - i. Risk/benefit analysis – Identification and evaluation of proposed benefit and potential risks and any mitigations thereto. Such potential risks shall include:
      - 1. Counterparty Credit Risk – Risk of credit-worthiness of the counterparty. Mitigation is to include provisions in the documents that protect SFPUC from exposure to adverse changes in counterparty’s credit standing.
      - 2. Market or interest rate risk – Risk of exposure to fluctuations in interest rates.

3. Tax law risk – Risk of rate adjustments, extraordinary payments, termination or other adverse consequences in the event of a future change in federal income tax policy.
  4. Termination risk – Risk of termination by the counterparty in an adverse market (other than at the option of the SFPUC). Mitigation is the maintenance of sufficient liquidity to cover this exposure.
  5. “Put” risk – Risk of a future financing that is dependent upon third party participation. Mitigation is to obtain commitment that can be or have been secured for such participation.
  6. Legal authority risk – Risk of removal of any party’s legal authority to participate in the transaction.
  7. Ratings Risk – Risk that the transaction could impact the SFPUC’s current credit ratings or its desired future ratings and that the transaction could conflict with rating agency recommended practices today or in the future.
  8. Basis Risk – Risk that the payments that SFPUC would make or receive would not match the payments that it seeks to hedge because of changes in relationships between floating rates.
  9. Tax-exemption of SFPUC Debt Risk – Risk that the transaction is not in compliance with all federal tax law requirements with respect to the SFPUC’s outstanding tax-exempt bonds.
  10. Volatility Risk – The change of the mark-to-market value of a transaction resulting from a change in implied volatility.
  11. Accounting Risk – Risk that the transaction is not compatible with internal accounting procedures and reporting practices. Related risk is the impact on SFPUC’s rate covenant calculation or compliance.
  12. Administrative Risk – Risk of counterparty’s or SFPUC’s failure to administer and monitor transactions consistent with the policies herein.
  13. Subsequent Business Conditions – Risk of dependence on the continuation or realization of specific industry or business conditions.
    - ii. Savings Analysis – Independent analysis of potential savings from proposed transaction.
    - iii. Rate Exposure – Fixed versus variable rate and swap exposure on a project and for a counterparty before and after proposed transaction.
    - iv. Market Net Termination Exposure – Termination exposure on a per transaction and per counterparty basis for all existing and proposed transactions.
    - v. Notional Value – Total notional value of derivative products before and after proposed transaction.
- b. Board of Supervisors Approval – When required, Board of Supervisors approval may be required.
- III. Inappropriate Use of Derivative Products – SFPUC shall never enter into a derivative transaction for the following purposes or if certain conditions exist.
- a. For speculative purposes, including potential trading gains.
  - b. To achieve extraordinary leverage.
  - c. If liquidity is insufficient to protect against early termination.
  - d. Insufficient price “transparency” wherein SFPUC is unable to reasonably value the instrument.

- IV. Methods of Soliciting and Procuring Derivatives – Regardless of the method of procurement, the SFPUC shall obtain an independent finding that the terms and conditions of any derivative product entered into reflect a fair market value as of the date of its execution.
- a. Competitive – SFPUC would pre-qualify prospective bidders and reserve the right to select one or more bidders for the transaction in addition to the winning bidder if deemed in SFPUC’s best interest.
  - b. Negotiated – SFPUC may determine that negotiating a transaction is in its best interest if:
    - i. Due to size or complexity of the transaction, a negotiated process would result in the most favorable pricing or terms in which case an independent financial advisor would be assigned to assist in the process.
    - ii. Doing so will advance SFPUC’s interests by encouraging and rewarding innovation and/or the substantial commitment of time and resources by a counterparty.
- V. Counterparty Requirements
- a. Minimum rating – At least one Aa3 or AA- from two rating agencies.
  - b. Minimum capitalization – \$250 million or credit enhancement in one of the following forms:
    - i. Contingent credit support or enhancement.
    - ii. Collateral held by a 3<sup>rd</sup> party trustee and marked to market monthly.
    - iii. Ratings downgrade triggers.
  - c. Demonstrated record –
    - i. Successful track record and reputation for executing and performing derivative transactions.
    - ii. Creating and implementing innovative ideas in the derivative market.
- VI. Standard Terms for Swaps and Derivatives
- a. Term – Consistent with the purpose for which the derivative product is used while taking into account the call dates for the related debt or obligation. In no event shall the term extend beyond the existing debt (or other obligation being hedged).
  - b. Events of default – An event of default by the counterparty shall lead to SFPUC having the option to terminate the agreement with the termination payment being calculated on the side of the bid-offered spread most beneficial to SFPUC. Events of default of a counterparty include:
    - i. Failure to make payment when due.
    - ii. Material breach of representations and warranties.
    - iii. Failure to comply with downgrade provisions.
    - iv. Failure to comply with any other provision of the agreement after a specified notice period.
  - c. Termination provisions
    - i. Optional – All derivative transactions shall contain provisions granting the SFPUC the right to optionally terminate an agreement at any time over the term of the agreement.
    - ii. Mandatory – A termination payment to or from the SFPUC may be required in the event of termination of an agreement ONLY in the case of credit-related and non-payment events. Prior to entering into an agreement or making any such termination payment, as appropriate, SFPUC shall evaluate whether it would be financially advantageous for the SFPUC to enter into a replacement transaction as a means of offsetting any such termination payment or obtaining insurance to

guarantee performance of the counterparty. Any termination payment due from the SFPUC shall be made from available SFPUC monies.

- iii. Available liquidity - SFPUC shall consider the extent of the SFPUC's exposure to termination payment liability in connection with each transaction, and the availability of sufficient liquidity to make any such payments that may become due.
- iv. Cure provisions - Timelines on SFPUC's obligations to cure must provide for adequate time to affect the cure.
- v. Payment - Payments may be structured on a monthly, quarterly, semi-annual or annual basis.
- vi. Security – The agreement shall identify the security attributable to the derivative.
- vii. Collateral -
  - 1. Required - The SFPUC shall require collateral or other credit enhancement to be posted by each counterparty if the credit rating of the counterparty or its guarantor falls below the "AA" category by two of the three nationally recognized rating agencies (Moody's, Standard & Poor's and Fitch).
  - 2. Value –
    - a. The amount of collateral posted shall be equal to the positive termination value of the agreement to the SFPUC.
    - b. SFPUC will determine reasonable threshold limits for the initial deposit and for increments of collateral posted thereafter.
  - 3. Features of Collateral –
    - a. Cash, U.S. Treasury securities and U.S. Agency securities. The market value of the collateral shall be determined on at least a monthly basis.
    - b. Deposited with a custodian, acting as agent for the SFPUC, or as mutually agreed upon between the SFPUC and the counterparty.
    - c. The SFPUC shall determine on a case-by-case basis whether other forms of collateral are more beneficial to the SFPUC.

VII. Monitoring and Reporting - SFPUC shall report to the Commission at least annually and as requested

- a. Agreements –
  - i. A summary of each swap agreement, including but not limited to: the type of swap; the rates and dollar amounts paid by the SFPUC and received by the SFPUC; the rate and amounts that were required to be paid and received; and current market value.
  - ii. Highlights of all material changes to the agreements or new agreements since the last report.
  - iii. Sensitivity analysis with net impact to the SFPUC of a 25 basis point movement (up or down) in the appropriate swap index or curve.
  - iv. Actual collateral posting by each counterparty, if any, under each agreement and in total by that counterparty.
  - v. Information concerning any default by a counterparty under a swap agreement with the SFPUC, and the results of the default, including but not limited to the financial impact to the SFPUC, if any.
  - vi. A summary of any agreements that were terminated.

- vii. A summary of key terms of outstanding agreements, including notional amounts, interest rates, maturity and method of procurement.
  - viii. Values of early termination, shortening or lengthening the term to certain benchmarks, sale or purchase of options.
  - ix. Discussion of other risks associated with each transaction.
- b. Counterparties –
- i. Full name, description and credit ratings of each counterparty and credit enhancer insuring payments, if any.
  - ii. For each counterparty, the SFPUC shall provide the total notional amount position, the average life of each agreement, the available capacity to enter into a transaction, and the remaining term of each agreement.
  - iii. Listing of any credit enhancement, liquidity facility or reserves and accounting of all costs and expenses associated with the credit enhancement, liquidity facility or reserves.
  - iv. Aggregate marked to market value for each counterparty and relative exposure compared to other counterparties.
  - v. Calculation of SFPUC's net termination exposure for each counterparty.
- c. Future transactions - A summary of any planned transactions and the projected impact of such transactions on the SFPUC.

#### VIII. Payments

- a. Budgeting - Termination payment risk shall be determined annually and offset by a hedge or reserve to a predetermined limit.
- b. Priority of payment –
  - i. Swap payments - no greater than parity with obligation being hedged
  - ii. Termination payments – If economically feasible, subordinate to related debt payments
- c. Swap counterparty termination exposure limit –
  - i. AAA Counterparties: \$40 million maximum collateralized net termination exposure; \$40 million maximum uncollateralized net termination exposure; \$40 million maximum total net termination exposure
  - ii. AA Counterparties: \$40 million maximum collateralized net termination exposure; \$10 million maximum uncollateralized net termination exposure; \$40 million maximum total net termination exposure
  - iii. Disclosure and documentation –
    - 1. Disclosure - Derivatives will be disclosed in the related Official Statement, if relevant, and in the SFPUC's annual financial statements in accordance with generally accepted accounting principles and in the Annual Disclosure Report.
    - 2. Documentation – Each transaction must utilize International Swaps and Derivative Association approved documents.

## Summary of Disclosure & Information Dissemination Requirements – December 2009

ISSUE	SOURCE	OBLIGATION	RECIPIENT	DUE
<ul style="list-style-type: none"> <li>All Water Bonds</li> <li>All Wastewater Bonds</li> </ul>	<ul style="list-style-type: none"> <li>Indenture</li> <li>Section 6.07</li> <li>Section 6.08</li> </ul>	<ul style="list-style-type: none"> <li>Audited Financials</li> <li>No Default Certificate</li> <li>Annual Budget</li> </ul>	Trustee Bondholder	<ul style="list-style-type: none"> <li>Water November 30</li> <li>Wastewater January 30</li> </ul>
<ul style="list-style-type: none"> <li>All Water Bonds</li> <li>All Wastewater Bonds</li> </ul>	Continuing Disclosure Certificates	Annual Disclosure Report <i>Include for Water:</i> <ul style="list-style-type: none"> <li>audited financials</li> <li>outstanding debt</li> <li>water sales</li> <li>rate increases</li> <li>historical financials/coverage</li> </ul> <i>Include for Wastewater:</i> <ul style="list-style-type: none"> <li>audited financials</li> <li>outstanding debt</li> <li>sewer rates</li> <li>sewer accounts by type</li> <li>historical financials/coverage</li> </ul>	EMMA, SFPUC Financial Management, CCSF Senior Managers	March 31
<ul style="list-style-type: none"> <li>All Water Bonds</li> <li>All Wastewater Bonds</li> <li>Water CP</li> </ul>	Moody's Credit Report	Annual financial and statistical information for Water and Wastewater	Moody's Rating Analyst	Annually
<ul style="list-style-type: none"> <li>All Water Bonds</li> <li>All Wastewater Bonds</li> <li>Water CP</li> </ul>	Standard & Poor's Credit Report	Annual audits and budgets and quarterly progress reports on projects for Water and Wastewater	S&P Rating Services	Annually
<ul style="list-style-type: none"> <li>Water 2009A</li> <li>Water 2009B</li> </ul>	Continuing Disclosure Certificates	Annual Disclosure Report: <ul style="list-style-type: none"> <li>Audited financials</li> <li>Water sales</li> <li>WSIP budget and spending summary</li> <li>Status of WSIP projects</li> <li>Rate increases</li> <li>Obligations payable from revenues</li> <li>Historical financials/coverage</li> </ul>	EMMA, SFPUC Financial Management, CCSF Senior Managers	March 31
<ul style="list-style-type: none"> <li>Water 2006A</li> <li>Water 2006B</li> </ul>	Indenture Section 5.03	WSIP Quarterly Report	Trustee	September 30
<ul style="list-style-type: none"> <li>Water 2006B</li> <li>Water 2006C</li> </ul>	Financial Guaranty Agreement(s) Section 2.06 (a)-(c)	<ul style="list-style-type: none"> <li>Quarterly financials (if available)</li> <li>Audited financials</li> <li>Compliance Certificate</li> </ul>	Syncora Guarantee, fka XL Capital (Surety)	<ul style="list-style-type: none"> <li>w/in 90 days</li> <li>w/in 180 days</li> <li>Annually</li> </ul>
<ul style="list-style-type: none"> <li>Water 2002A</li> <li>Water 2002B</li> <li>Wastewater 2003</li> </ul>	Indenture Section 15.10 and 16.10 Indenture Section 2.10	Audited Financials	National Public Finance Guarantee Corporation, fka MBIA (Insurance)	Annually
<ul style="list-style-type: none"> <li>Water 2002A</li> <li>Water 2002B</li> </ul>	Financial Guaranty Agreement(s) Section 2.06(a)-(d)	<ul style="list-style-type: none"> <li>Quarterly financials (if available)</li> <li>Audited financials</li> <li>Compliance Certificate</li> </ul>	National Public Finance Guarantee Corporation, fka MBIA (Surety)	<ul style="list-style-type: none"> <li>w/in 90 days</li> <li>w/in 180 days</li> <li>Annually</li> </ul>
Water 2001 Bonds	<ul style="list-style-type: none"> <li>Indenture</li> <li>Section 17.10</li> <li>Section 17.13</li> </ul>	<ul style="list-style-type: none"> <li>Audited financials</li> <li>A&amp;B Expenditure Report</li> </ul>	<ul style="list-style-type: none"> <li>Assured Guaranty Municipal Corp, fka FSA</li> <li>Trustee</li> </ul>	<ul style="list-style-type: none"> <li>Annually</li> <li>November 1</li> </ul>
State Water Resources Control Board 2002 Bond	Per agreement between Bill Berry and SWRCB	Historical financials for Wastewater	SWRCB	December 31
Water Commercial Paper	Letter of Credit Agreement Section 5.02	<ul style="list-style-type: none"> <li>Audited Financials</li> <li>No Default Certificate</li> <li>Annual Budget</li> </ul>	Bank of America	<ul style="list-style-type: none"> <li>December 31</li> <li>December 31</li> <li>45 days from adoption</li> </ul>
Water Commercial Paper	Dealer Agreement Section 8	<ul style="list-style-type: none"> <li>Annual Disclosure Report for Water</li> <li>Water Bond Final OS</li> </ul>	Dealers	<ul style="list-style-type: none"> <li>March 31</li> <li>w/in 30 days</li> </ul>
Wastewater Commercial Paper	Letter of Credit Agreement Section 5.02	<ul style="list-style-type: none"> <li>Audited Financials</li> <li>No Default Certificate</li> <li>Annual Budget</li> </ul>	BNP Paribas	<ul style="list-style-type: none"> <li>December 31</li> <li>December 31</li> <li>45 days from adoption</li> </ul>
Wastewater Commercial Paper	Dealer Agreement Section 8	<ul style="list-style-type: none"> <li>Annual Disclosure Report for Wastewater</li> <li>Wastewater Bond Final OS</li> </ul>	Dealers	<ul style="list-style-type: none"> <li>March 31</li> <li>w/in 30 days</li> </ul>

# Glossary of Terms

## *Accrual Basis of Accounting*

A method of accounting in which all assets and liabilities associated with its operations are included on the statement of net assets; revenues are recorded when earned, and expenses recorded when liabilities are incurred.

## *Advanced Meter Infrastructure (AMI)*

A system that collects, measures, and analyzes energy usage; includes hardware, software, communications, customer associated systems and meter data management software.

## *American Recovery and Reinvestment Act (ARRA)*

An act of Congress that instituted a variety of stimulus programs.

## *Annual Appropriation Ordinance (AAO)*

Upon approval, this document is the legal authority for the City to spend funds during the fiscal year. It contains information on the sources and uses of selected City funds detailed by department and by program. Additional schedules summarize selected City revenues and expenditures by service area, department and fund.

## *Annualization*

New positions for the fiscal year are budgeted at 0.77 FTE, to adjust for the amount of time the employee is actually on the payroll in the fiscal year, since the recruitment process takes approximately three months. New positions are annualized in the following fiscal year at 0.23 FTE, to reflect on-going salary costs for a full year.

## *Assistant General Manager (AGM)*

Supports the General Manager of the SFPUC as the head of the major SFPUC sections: Business Services, External Affairs, Infrastructure, Power Enterprise, Water Enterprise, and the Wastewater Enterprise.

## *Assurance and Internal Controls (AIC)*

A Bureau in Business Services Administration. AIC provides and facilitates quality assurance oversight, risk management, internal controls, policies and procedures review and business process improvement programs for operational and financial transactions/processes, with the objective to minimize process inefficiencies and control deficiencies to mitigate financial risks.

## *Attrition Savings*

Attrition Savings is the anticipated amount of salaries that will not be expended due to normal attrition.

## *Automated External Defibrillator (AED)*

A small, portable device that assesses a person's heart rhythm and if necessary, it administers an electric shock to restore a normal rhythm in victims of sudden cardiac arrest.

## *Auxiliary Water Supply System (AWSS)*

The Auxiliary Water Supply System (AWSS) is a system of mains and 1,889 high-pressure fire hydrants, independent of the domestic water supply built solely for the purpose of firefighting. The system is supplied with fresh water, by gravity, from a reservoir and two tanks located at high elevation in the City. The transition of AWSS to the SFPUC would be implemented in a phased approach over a period of time and would include the high and low pressure distribution systems, one reservoir, two tanks, and two pump stations.



### *Balanced Budget*

The Constitution of the State of California requires all cities to adopt a balanced budget wherein revenues must match expenditures.

### *Bay Area Water Supply and Conservation Agency (BAWSCA)*

BAWSCA represents the interests of 27 suburban wholesale that purchase water wholesale from the San Francisco regional water system. These entities provide water to 1.7 million people, businesses and community organizations in Alameda, Santa Clara and San Mateo counties.

### *Board of Supervisors (BOS)*

The Board of Supervisors is the legislative branch of the City and County of San Francisco. The Board consists of 11 members. Each member is elected on a non-partisan basis from a district where he or she lives. The Board is responsible for amending and approving the SFPUC's proposed budget. The Board's Budget Analyst also participates in reviews of city spending and financial projections.

### *Budget and Finance Committee*

The Budget and Finance Committee of the Board of Supervisors is referred appropriation ordinances, and measures concerning bond issues, taxes, fees and other revenue measures, redevelopment, and real estate. The Committee is also referred the annual appropriation and annual salary ordinances, and holds a public hearing on the Mayor's budget instructions to City departments for each annual City budget after the instructions are released.

### *Build America Bonds (BAB)*

A tax credit or direct payment subsidy bond for municipal capital projects.

### *California Independent Systems Operator (ISO)*

The California ISO is a non-profit public benefit corporation charged with operating the majority of California's high-voltage wholesale power grid.

### *California Public Utilities Commission (CPUC)*

An administrative agency that exercises both legislative and judicial powers. The major duties of the CPUC are to regulate privately owned utilities, securing adequate service to the public at rates that are just and reasonable both to customers and shareholders of the utilities. The CPUC also provides electricity and natural gas forecasting, and analysis and planning of energy supply and resources.

### *Capital Improvement Program (CIP)*

The Capital Improvement Program is supported by the Ten-Year Capital Improvement Program and Ten-Year Financial Plan (LRFP). The SFPUC's CIP includes projects for renewal and replacement (R&R) to the three Enterprises' various facilities, and also includes upgrades to improve water efficiency, power infrastructure, and sewage treatment facilities. The issuance of revenue bonds, other forms of indebtedness, and the execution of governmental loans are provided for under the San Francisco City Charter to finance the SFPUC's capital programs. The repayment of this indebtedness is provided for under the annual rates and revenues of the particular Enterprise that incurs the debt, categorized as debt service in the budget.

### *Capital Planning Committee (CPC)*

The legislation creating the Ten-Year Capital Plan created the Capital Planning Committee (CPC). This body is chaired by the City Administrator and consists of the President of the Board of Supervisors, the Mayor's Finance Director, the Controller, the City Planning Director, the Director of Public Works, the Airport Director, the Executive Director of the Municipal Transportation Agency, the General Manager of the Public Utilities System, the General Manager of the Recreation and Parks Department, and the Executive Director of the Port of San Francisco. Through a series of meetings, the Capital Planning Committee

reviews proposals, staff recommendations, and documents toward the development of a City-wide capital plan and annual capital budget. Furthermore, the Committee establishes prioritization and assessment criteria to assist the City Administrator and staff in developing the capital plan.

### *Capital Planning Program (CPP)*

The Capital Planning Program is responsible for the development and implementation of the City and County of San Francisco's ten-year capital plan and its annual capital budget. The program reviews and analyzes infrastructure needs and facility conditions, evaluates capital project requests, reports on existing capital projects, and establishes financing strategies to meet the City's long- and short-term capital needs. The mission of the Capital Planning Program is to develop and implement a sustainable plan for the long-term safety, accessibility and modernization of San Francisco's public infrastructure and facilities.

### *Capital Projects*

Capital projects must result in the addition of new capital assets and/or improvements to existing assets. Capital projects may include associated costs of acquisition or construction of new assets and/or expenditures for activities that enhance the function, improve the performance and/or extend the service lives of existing assets. In general, capital projects must meet one of the following requirements: new construction, including additions to an existing facility or facilities (or other assets) and with a useful life of at least 5 years; or renewal and replacement includes replacement, major rehabilitation and betterments that enhance the function, improves the performance or extends the service lives of existing facilities (or other assets).

### *Carryforwards*

Outstanding budget commitments at the end of the fiscal year, funded out of the operating budget, that are authorized to be carried over and expended during the following fiscal year.

### *Ccf*

Ccf is the billing unit for water and wastewater bills, where 1 Ccf=748 gallons. The average single family residence uses 7 Ccf per month, or 5,236 gallons. This, by way of comparison, is about 57 gallons per person per day versus the California State-wide average of 155 gallons per day.

### *Certificate of Participation (COP)*

An instrument evidencing a pro rata share in a specific pledged revenue stream, usually lease payments by the issuer that are subject to annual appropriation. The certificate generally entitles the holder to receive a share, or participation, in the lease payments from a particular project. The lease payments are passed through the lessor to the certificate holders. The lessor typically assigns the lease and lease payments to a trustee, which then distributes the lease payments to the certificate holders.

### *Chemical Oxygen Demand (COD)*

One of the determinants of wastewater rates for nonresidential customers.

### *City and County of San Francisco (CCSF)*

The City and County of which the SFPUC is an Enterprise Department, governed by the Mayor and Board of Supervisors.

### *City Distribution Division (CDD)*

The City Distribution Division is a division of the Water Enterprise. It distributes high quality treated water to San Francisco customers. The Division maintains the water distribution system within the City, which consists of 13 reservoirs, 20 pumping stations, a network of approximately 1,300 miles of pipeline and 12,000 water valves.

### *Clean Renewable Energy Bond (CREB)*

Bonds used to fund the solar photovoltaic projects included in the Hetch Hetchy Water and Power budget as debt service. CREBs are a form of tax credit bond in which interest on the bonds is paid in the form of Federal tax credits by the United States government in lieu of interest paid by the issuer. Created under the Energy Tax Incentives Act of 2005, CREBS can be used, among other entities, by local governments, to finance certain renewable energy and clean coal facilities.

### *Commercial Paper (CP)*

Used as a financing strategy that utilizes short-term financing to calibrate financing needs with project spending. The CP program facilitates short-term financing typically at lower interest rates than longer term debt, which minimizes costs.

### *Community Choice Aggregation (CCA)*

As defined by Assembly Bill 117, CCA permits any city, county or city and county to aggregate the electric loads of residents, businesses and municipal facilities to facilitate the purchase and sale of electrical energy.

### *County-Wide Cost Allocation Plan (COWCAP)*

The County-Wide Cost Allocation Plan is developed annually by the Controller's Office and calculates the overhead rate charged to each department for its share of City-wide overhead costs, such as payroll, accounting, and operations.

### *Customer Information System (CIS)*

The CIS replacement project replaced the mainframe customer billing system with state-of-the-art web-based software for which skilled support professionals are readily available. Implementation of more fully featured customer care software that is integrated with other SFPUC systems and enables features such as mobile computing, automated meter reading, and web self service.

### *Debt Service*

Principal and interest payments on revenue bonds, State Revolving Fund loans used to finance system improvements, repayments on loans, and financing for Clean Renewable Energy Bonds.

### *Department of General Services (DGS)*

DGS serves as business manager for the State of California. DGS provides a variety of services to State agencies through innovative procurement and acquisition solutions, creative real estate management and design, state-of-the-art telecommunications, environmentally friendly transportation, and funding for the construction of safe schools.

### *Department of Technology (DT)*

A City and County of San Francisco City department that provides proactive leadership in the use of technology and information solutions to improve the City's operations and service delivery.

### *Enterprise Fund*

Enterprise funds account for financial operations that are operated in a manner similar to private businesses. Enterprise costs of providing goods or services to the general public are recovered primarily through user charges.

### *Equipment*

Equipment that has a value greater than \$5,000, and a useful life of three years or more, such as vehicles and software, or other heavy equipment.

### *Fats, Oils, and Grease (FOG)*

The SFPUC Water Pollution Prevention Program has materials that can assist businesses in properly managing their fats, oils and grease wastes; FOG can be a major problem for San Francisco's sewers and for the Bay and Ocean that surround San Francisco, because when not disposed of properly, FOG forms thick layers inside sewers and constricts flow.

### *Federal Emergency Management Agency (FEMA)*

FEMA is the federal agency that builds and supports the nation's emergency management system.

### *Financial Accounting Standards Board (FASB)*

The FASB is the designated organization in the private sector for establishing standards of financial accounting. Those standards govern the preparation of financial statements. They are officially recognized as authoritative by the Securities and Exchange Commission (SEC) (Financial Reporting Release No. 1, Section 101, and reaffirmed in its April 2003 Policy Statement) and the American Institute of Certified Public Accountants (AICPA) (Rule 203, Rules of Professional Conduct, as amended May 1973 and May 1979).

### *Fiscal Year (FY)*

The twelve-month budget cycle. San Francisco's fiscal year is from July 1st to June 30th.

### *Full-Time Equivalent (FTE)*

One or more employees who cumulatively work 40 hours per week.

### *Fund Balance*

Amount used to balance annual revenue and expenditure amounts. It is budgeted when expenditures exceed revenues.

### *General Fund*

The General Fund is a source of discretionary spending and funds many of the basic municipal services in the City and County of San Francisco such as public safety, health and human services and public works. Primary revenue sources include local taxes such as property, sales, payroll and other taxes.

### *General Reserves*

Amount budgeted to balance annual revenue and expenditure amounts. Budgeted when revenues exceed expenditures.

### *Geographic Information System (GIS)*

One of the SFPUC-wide systems, GIS integrates, stores, analyzes, and displays geographic information for informing decision making.

### *GoSolar Incentive Program*

The Go-Solar Program was developed by the San Francisco Solar Task Force to encourage the installation of photovoltaic systems on residents and businesses within the City. The GoSolarSF solar incentive program was approved by the San Francisco Public Utilities Commission in January 2008. The Board of Supervisors passed ordinances establishing a long-term Solar Energy Incentive Program and a Solar Energy Incentive Pilot Program in June 2008. The program was launched on July 1, 2008.

### *Governmental Accounting Standards Board (GASB)*

The Governmental Accounting Standards Board (GASB) is the independent organization that establishes and improves standards of accounting and financial reporting for U.S. State and local governments.

### *High Pressure Sodium Vapor (HPSV)*

An old street light technology. It is a high intensity discharge type of lamp that burns out after two to three years. It produces light by passing electricity through gas, causing the gas to glow. Mercury vapor lamps, metal halide lamps, and high-pressure sodium are examples of lamps using this technology.

### *Information Technology Services (ITS)*

A Bureau in Business Services, ITS provides high quality, proficient and reliable information technology services to all SFPUC Enterprises and Bureaus.

### *Interim Capital Improvement Program (Interim CIP)*

The SFPUC launched the Wastewater Enterprise Interim Capital Improvement Program (Interim CIP) to address the immediate needs of San Francisco's wastewater system. These special projects are aimed at reducing flood risk, reducing wastewater odors, and improving treatment facilities. Interim CIP projects are funded through your wastewater service charges.

### *Kilovolt (kV)*

A measure of the potential energy of a unit charge at a given point in a circuit relative to a reference point.

### *Laboratory Information Management System (LIMS)*

A software system used by Water and Wastewater Laboratories to meet their laboratory needs.

### *Light-Emitting Diode (LED)*

The new solid state lighting technology which offers better lighting performance and energy efficiency. Light is emitted from clusters of diodes, which direct light. The fixture lasts for 15 years.

### *Low-Impact Design (LID)*

A green stormwater management technology that can help mitigate the effects of urbanization on stormwater. This technology and design mimics natural watershed processes by replicating pre-existing hydrologic site conditions. LID directs runoff to natural vegetated systems, such as landscaped planters, swales and gardens that reduce, filter or slow stormwater runoff. Strategic placement of this system can help mitigate the impacts of impervious surfaces and in some cases increase the level of service provided by the traditional sewer pipes.

### *Materials and Supplies*

A part of the operating budget that includes maintenance, safety, fuel, office supplies, and other miscellaneous materials and supplies for the maintenance and operations of an Enterprise.

### *Maximo*

Asset management software that provides information on Enterprise assets.

### *Memorandum of Understanding (MOU)*

A binding agreement between two parties.

### *Million Gallons per Day (MGD)*

Unit of measurement for gas or liquid flow rates.

### *Modesto Irrigation District (MID)*

One of four irrigation districts in California; its electric service area includes Modesto, Salida, Empire, Waterford, Mountain House and parts of LaGrange, Riverbank, Ripon, Escalon and Oakdale.

### *Modified Accrual Basis of Accounting*

A basis of accounting used with a current financial resources measurement focus. It modifies the accrual basis of accounting in two significant ways: first, revenues are not recognized until they are measurable and available; and second, expenditures are recognized in the period in which the SFPUC normally liquidates the related liability rather than when the liability is first incurred, if earlier.

### *National Pollutant Discharge Elimination System (NPDES)*

A permit program, authorized by the Clean Water Act, that controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

### *Non-Personnel Services*

Services including maintenance of equipment and facilities, travel, training, memberships, professional services, rent, and other expenses that support maintenance for the operation of an Enterprise.

### *Non-Residential Sewer Service Charges*

For non-residential customers, the sewer service charge is calculated based on the volume wastewater discharged and the pounds of pollutants contained in that discharge. The charges for customers with sampled discharges are billed on the basis of their specific waste characteristics. Other customers are billed on the basis of the standard waste characteristics for their respective business activity. In addition to the costs shared with residential customers, all non-residential customers are responsible for the costs of the Wastewater Enterprise's pretreatment program.

### *North American Electric Reliability Corporation (NERC)*

The electric reliability organization (ERO) certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk-power system. NERC develops and enforces reliability standards; assesses adequacy annually via a 10-year forecast, and summer and winter forecasts; monitors the bulk power system; and educates, trains and certifies industry personnel.

### *Office of the General Manager (GM)*

Supports the General Manager in his key oversight functions, which are to oversee the regional utility that delivers reliable, high quality drinking water to more than 2.4 million Bay Area customers; that collects and treats wastewater and stormwater for the CCSF; and that provides hydroelectric and other renewable power resources for the San Francisco municipal customers.

### *Oils and Grease (O/G)*

One of the determinants of wastewater rates for nonresidential customers.

### *Operating Transfers Out*

On-going operating payments between Enterprise funds.

### *Operations and Maintenance (O&M)*

Includes budgets for Personnel, Overhead (or COWCAP), Non-Personnel Services, Materials and Supplies, Equipment, Services of Other Departments, and Operating Transfers Out.

### *Other Non-Operating Revenues*

Revenues from other income, including rent, permit fees, sale of property, custom work, and reimbursements.

### *Pacific Gas & Electric (PG&E)*

Incorporated in California in 1905, is a natural gas and electric utilities company, with a service area from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east. It is based in San Francisco.

### *Personnel*

Labor for SFPUC's full-time, temporary, and projected-funded employees, and related benefits.

### *Photovoltaic (PV) Projects/Systems*

Projects that involve the conversion of solar energy into electricity. Design-build photovoltaic projects underway in Hetch Hetchy Power include Ways and Structures, Woods Coach, Chinatown Public Health Center, City Hall (part of the Sustainable Energy District), and Davies Symphony Hall.

### *Pretreatment and Pollution Prevention (P2)*

Programs to ensure regulatory compliance in wastewater collection systems; they focus on contaminant reduction activities for residential, commercial, and industrial dischargers. The major P2 programs include: Street Sweeping, Fats, Oils & Grease (FOG), Mercury Reduction Program, Pesticides/Integrated Pest Management (IPM), and Storm Water P2 Program/Construction Runoff Control.

### *Proceeds from Debt*

Refers to what is received through the issuance of bonds, loans, or other borrowings.

### *Proposition A (2002)*

Approved by voters in November 2002, authorizes the SFPUC, subject to Board of Supervisors approval, to issue up to \$1.628 billion in revenue bonds or other forms of indebtedness to finance the acquisition and construction of improvements to the City's water system.

### *Proposition A (2009)*

Approved in November 2009, this Proposition amended the City Charter to require the City to transition to a two-year budget cycle by FY 2012-13. The SFPUC is one of four early implementation departments that adopted a two-year budget for FY 2010-11 and FY 2011-12.

### *Proposition E*

Approved by voters in November 2002, authorizes the SFPUC to issue revenue bonds or other forms of indebtedness for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors.

### *Qualified Energy Conservation Bonds (QECCB)*

A tax credit bond specifically targeting energy conservation and green programs.

### *Renewable Portfolio Standards (RPS)*

A State policy that requires electricity providers to obtain a minimum percentage of their power from renewable energy resources by a certain date.

### *Residential Sewer Service Charges*

Includes single-family residential and multiple-family residential customers, allowing rates to be designed to reflect the particular usage characteristic of each group of residential customers. The sewer service charge applicable to residential service is an inclining block rate structure. The first block is applied to first three units of monthly discharge per dwelling unit. All remaining units are billed at a higher rate. For multiple family

residential accounts, the billable use in each block is calculated by multiplying the allowed use by the number of dwelling units.

### *Retail Water Sales*

Consists of rate schedules that include City and Suburban Retail rates. City Retail Rates include general rates - single-family residential, multiple-family residential, and commercial (industrial). These rates consist of a monthly service charge based on meter size and a two-step commodity charge for single- and multiple-family residential customers, and meter size and a uniform commodity charge for commercial (industrial) customers. Suburban retail rates include rate schedules for use outside of San Francisco.

### *Revenue-Funded Capital Project/Renewal & Replacement (R&R)*

Projects in the Enterprises, including both minor and major construction projects, maintenance and rehabilitation projects, planning studies, and preliminary engineering analysis for major capital improvements.

### *Sale of Electricity*

Revenues from power sales to City departments for municipal use, wholesale customers, and other retail customers.

### *Sale of Gas and Steam*

Revenues from gas and steam provided to City departments by Hetch Hetchy Power. These revenues are a pass-through and have no impact on Hetchy Hetchy's fund balance levels.

### *Sale of Water*

The budget category for revenues from sales of water to retail customers in San Francisco and suburban areas and to wholesale customers under the terms of a long-term Water Supply Agreement (WSA).

### *San Francisco International Airport (SFO)*

SFO is San Francisco's international airport, serving domestic and international passengers.

### *San Francisco Online Invoicing System (SOLIS)*

A robust automated system that will speed up invoice processing for SFPUC contractors and vendors. Paying 500 invoices per month within 21 days, SOLIS has the potential to be used for additional construction programs, and has the capacity to be shared with other interested City departments as a City-wide tool.

### *San Francisco Public Utilities Commission (SFPUC)*

An Enterprise Department of the City and County of San Francisco. The SFPUC provides regional water, local water, wastewater (collection, treatment, and disposal), and power.

### *Services of Other Departments*

Services performed for the SFPUC by other City departments.

### *Sewer Service Charges*

The budget category for residential and non-residential sewer service charges to the SFPUC's customers.

### *Sewer System Improvement Program (SSIP)*

A major focus of the Wastewater Enterprise, the SSIP is a long-term capital plan that provides strategies and policies for the future. The San Francisco Sewer System Improvement Program objectives are to: develop a long-term vision and strategy for the management of the City's wastewater and stormwater; provide a detailed capital planning roadmap for improvements needed; estimate the funds to implement these



improvements; address specific challenges facing the system; and maximize system reliability and flexibility.

### *SFPUC Commission*

The five Commissioners of the San Francisco Public Utilities Commission are appointed by the Mayor and serve 4-year terms. The Commission is responsible for determining such matters as the rates and charges for services, approval of contract, and organizational policy.

### *Supervisory Control and Data Acquisition (SCADA)*

A system that collects data from various sensors at a factory, plant or in other remote locations and then sends this data to a central computer which then manages and controls the data.

### *Ten-Year Capital Improvement Program (CIP)*

The City and County of San Francisco requires, through the City's Administrative Code, the annual creation of a Ten-Year Capital Plan for City-owned facilities and infrastructure. Under the authority of the City Administrator, the Capital Planning Program prepares the plan and presents it to the Capital Planning Committee (CPC) for their review. The CPC completes its review of the capital plan by March 1 and presents it to the Board of Supervisors (BOS). The BOS must adopt the capital plan by May 1.

### *Ten-Year Financial Plan*

The Ten-Year Financial Plan is a planning document as required by the City and County of San Francisco, that includes a ten-year financial summary for each Enterprise, describing projected sources and uses, resulting fund balances and associated financial reserve ratios.

### *Total Suspended Solids (TSS)*

A water quality measurement that serves as one of the determinants of wastewater rates for nonresidential customers.

### *Treasure Island (TI)*

The Water Enterprise, Wastewater Enterprise, and Hetch Hetchy Water and Power operate and maintain the water, wastewater, and power distribution systems, and the associated revenues, on Treasure Island, on behalf of the Treasure Island Development Authority (TIDA) and in accordance with a water supply and quality permit issued by the California Department of Health Services, and the National Pollutant Discharge Elimination System (NPDES) permit issued by the California Regional Water Quality Control Board.

### *Treasure Island Development Authority (TIDA)*

The Treasure Island Development Authority (TIDA) is a non-profit, public benefit agency dedicated to the economic redevelopment of former Naval Station Treasure Island. The Authority is vested with the powers of a California Redevelopment Agency as well as the rights to administer Tidelands Trust property. TIDA also performs and administers vital municipal services for the residential and daytime population during the interim reuse of the former military base.

### *Turlock Irrigation District (TID)*

One of four irrigation districts in California that provides irrigation water as well as electric retail energy directly to homes, farms and businesses.

### *Water Quality Division (WQD)*

The Water Quality Division is a division of the Water Enterprise. The mission of the Water Quality Division is to ensure that the SFPUC complies with all current and future water quality regulations and customer expectations through sampling and laboratory analyses, process engineering, applied research, inspections, field service oversight, regulatory reporting and support to treatment plant operations.

### *Water Supply Agreement (WSA)*

The City and County of San Francisco and the 27 suburban wholesale customers that purchase water from San Francisco on a wholesale basis and distribute it to residents, businesses, and thousands of community organizations in Alameda, Santa Clara and San Mateo Counties. The WSA was approved in April 2009 and has a term of 25 years. The Agreement changes the cost basis by which the wholesale rate is determined from a "utility cost basis" to a "cash basis". Beginning in FY 2009-10, wholesale customers will pay a proportionate share of regional system operating expenses, debt service on bonds sold to finance regional improvements, and other regional system improvements funded from current revenues. The WSA requires the rate be calculated and set annually and include a "true-up" between prior year revenues expenses.

### *Water Supply & Treatment (WS&T)*

A division of the Water Enterprise, WS&T maintains watershed lands and reservoirs, water treatment procedures and facilities, and water transmission facilities.

### *Water System Improvement Program (WSIP)*

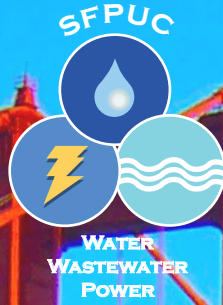
The SFPUC, together with its 27 wholesale customers, launched a \$4.6 billion Water System Improvement Program (WSIP) to repair, replace, and seismically upgrade the San Francisco Regional Water System's aging facilities. Built in the early to mid-1900s, many parts of the San Francisco Regional Water System, often referred to as the Hetch Hetchy System, are nearing the end of their working life, with crucial portions crossing over or near to three of the nation's most active earthquake faults. The WSIP will reinforce vulnerable portions of the system to withstand an earthquake and enhance water treatment processes to ensure a reliable supply of water for SFPUC customers.

### *Western Systems Power Pool (WSPP)*

An agreement and an organization that creates power trading opportunities and allows WSPP members to manage power delivery and price risk.

### *Wholesale Water Sales*

The Water Enterprise provides wholesale water service to 27 wholesale customers, which consist of 24 municipalities and water districts, one private utility, one private non-profit university and one mutual water association. Wholesale customers are located in Alameda, Santa Clara and San Mateo counties. The SFPUC and the wholesale customers have negotiated a new Water Supply Agreement (WSA) that changes the cost basis by which the wholesale rate is determined from a "utility basis" to a "cash basis". Beginning in FY 2009-10, wholesale customers will pay a proportionate share of regional system operating expenses, debt service on bonds sold to finance regional improvements, and other regional system improvements funded from current revenues.



# CITY AND COUNTY OF SAN FRANCISCO PUBLIC UTILITIES COMMISSION



## COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE YEAR ENDED JUNE 30, 2010




# The San Francisco Public Utilities Commission

An Enterprise Department of the  
City and County of  
San Francisco, California

Comprehensive Annual Financial Report  
For the Fiscal Year Ended June 30, 2010



Prepared by SFPUC Financial Services



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Todd L. Rydstrom,  
Assistant General Manager &  
Chief Financial Officer

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## The San Francisco Public Utilities Commission

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The San Francisco Public Utilities Commission  
A Department of the City and County of San Francisco, California

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

The San Francisco Public Utilities  
Commission, City and County  
of San Francisco, California

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
June 30, 2009

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



President

Executive Director



## GENERAL MANAGER'S TRANSMITTAL LETTER

December 21, 2010

Dear Customers, Stakeholders and Commissioners,

We are pleased to present the San Francisco Public Utilities Commission's (SFPUC) Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2010. SFPUC staff remains committed to reach and maintain the highest possible standards in financial reporting now and in the future.



**GAVIN NEWSOM**  
MAYOR

**FRANCESCA VIETOR**  
VICE PRESIDENT

**ANSON B. MORAN**  
COMMISSIONER

**ANN MOLLER CAEN**  
COMMISSIONER

**ART TORRES**  
COMMISSIONER

**ED HARRINGTON**  
GENERAL MANAGER

This report was prepared by the SFPUC Finance in conformance with the principles and standards for financial reporting set forth by the Governmental Accounting Standards Board (GASB) and generally accepted accounting principles (GAAP). Recommended guidelines by the Government Finance Officers Association (GFOA) of the United States and Canada were also followed.

The SFPUC's management is responsible for both the accuracy of the data presented and the completeness and fairness of its presentation, including all disclosures. The existing comprehensive structure on internal controls in the City and SFPUC provides reasonable assurance that the financial statements are free of any material misstatements. We believe the report presented is accurate in all material respects, that it is presented in a manner designed to fairly set forth the financial position and the results of operations of the SFPUC, and that the included disclosures enable the reader to gain the maximum understanding of the SFPUC's financial activities.

The SFPUC's financial statements have been audited by KPMG LLP, a registered public accounting firm. The goal of the independent audit was to provide reasonable assurance that the financial statements of the SFPUC for the fiscal year ended June 30, 2010 are fairly presented in conformity with GAAP, and are free of material misstatement. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting principles used and significant estimates made by management; and evaluating the overall financial statement presentation. The independent auditor rendered an unqualified "clean" opinion on the SFPUC's financial statements for the fiscal year ended June 30, 2010. The independent auditors' report is presented as the first component of the financial section of this report.

Management's Discussion and Analysis (MD&A) is presented after the independent auditors' report, and provides a narrative introduction, overview, and analysis to accompany the basic financial statements. This letter of transmittal is designed to complement MD&A and should be read in conjunction with it.

# The Reporting Entity - Profile of the San Francisco Public Utilities Commission

## Organization and Business

The San Francisco Public Utilities Commission (SFPUC) is a department of the City and County of San Francisco (the City or CCSF), and is responsible for the facilities maintenance, operations, and development of three utility enterprises: Water, Wastewater, and Power which is a component of Hetch Hetchy Water and Power. Hetch Hetchy Water and Power is a stand-alone enterprise comprised of the Power Enterprise and a portion of the Water Enterprise's operations, specifically the upcountry water supply and transmission service.

The SFPUC provides three distinct utility services: Water (both wholesale and retail), Wastewater (local collection, treatment and disposal), and Power. SFPUC supplies water to nearly 2.5 million people in San Francisco and the San Francisco Bay Area. One-third of the water is supplied directly to retail customers primarily in San Francisco (including residential, industrial and commercial customers), and the remaining two-thirds is supplied to wholesale customers through a contractual agreement. Wastewater services are provided within the City of San Francisco, as well as to three neighboring districts, including the San Mateo Sanitation District, Bayshore Sanitary District, and the City of Brisbane. Power is primarily supplied to municipal customers and their tenants within the City and County of San Francisco.

The SFPUC structure also includes the Bureaus and Infrastructure, which provide support and oversight services to the enterprises. The Bureaus' budgets are funded through an allocation that recovers costs of services from the enterprises. Infrastructure's budget is funded through various capital projects.

**The Water Enterprise** accounts for the activities of SFPUC's water utility operations and is engaged in the distribution of water to the City and certain suburban areas. Approximately 67% of the water delivered is to wholesale customers, which include cities, water districts, one private utility, and one non-profit university. Retail customers include residential, commercial, industrial, and governmental users, and the enterprise recovers costs of service through user fees. Service to wholesale customers is provided pursuant to the 25-year Water Supply Agreement which establishes the basis for determining the costs of wholesale service.

**The Wastewater Enterprise** accounts for the activities of the SFPUC's wastewater treatment utility operations. The Wastewater Enterprise collects, transmits, treats, and discharges sanitary and stormwater runoff flows generated within the City and on Treasure and Yerba Buena Islands for the protection of public health and environmental safety of the San Francisco Bay and the Pacific Ocean. In addition, the Wastewater Enterprise serves on a contractual basis certain municipal customers located outside of the City limits, including the North San Mateo County Sanitation District No. 3 (Daly City), Bayshore Sanitary District, and the City of Brisbane. The Wastewater Enterprise recovers costs of service through user fees based on the volume and strength of sanitary flow. The average dry weather effluent discharge to the San Francisco Bay and Pacific Ocean is 84 million gallons a day (mgd); peak wet weather effluent from the treatment plants alone is 465 mgd. The Wastewater Enterprise serves approximately 150,000 residential accounts and 22,000 non-residential accounts, as well as responds to sewer-related emergencies.

**The Hetch Hetchy Water and Power Enterprise** accounts for the activities of SFPUC's upcountry water and all power utility operations, and operates the Hetch Hetchy Project that provides both electricity generation and upcountry water service. Hetch Hetchy Water and Power provides reliable, high-quality water and electric energy to the City and other customers, protects watershed resources in cooperation with Federal agencies, operates and maintains facilities to a high standard of safety and reliability, and maximizes revenue opportunities within approved levels of risk.

The Hetch Hetchy Water and Power Enterprise is comprised of two funds: 1) Hetch Hetchy Water, representing upcountry water system operations; and 2) Hetch Hetchy Power, representing all SFPUC power utility operations. A number of the facilities are joint assets and used for both water transmission and power

generation, benefitting both Hetch Hetchy Water and Hetch Hetchy Power. Both operating and capital costs that jointly benefit both funds are allocated 45% to Hetch Hetchy Water and 55% to Hetch Hetchy Power, as has historically been done by the SFPUC. Eighty-five percent of San Francisco's drinking water starts out as snow falling on more than 650 square miles of watershed land in Yosemite National Park and the Stanislaus National Forest. As the snow melts, it collects in Hetch Hetchy's three storage reservoirs. Water flows by gravity through 150 miles of pipelines and tunnels and it turns the turbines in four hydroelectric powerhouses, generating approximately 1.6 billion kilowatt hours of electricity.

Approximately 65% of the electricity generated by Hetch Hetchy Power is used to provide electric service to the City's municipal customers. Surplus power is sold to Central Valley irrigation districts (Turlock and Modesto) and other public agencies, or into the grid in the event of surplus generation capacity.

### ***Hetch Hetchy Water***

Hetch Hetchy Water is responsible for the operation, maintenance and improvement of its water and power facilities to a high standard of safety and reliability while meeting regulatory requirements. Hetch Hetchy Water distributes high-quality water to SFPUC customers while optimizing generation from the hydropower facilities.

### ***Hetch Hetchy Power***

The core business of Hetch Hetchy Power is to provide adequate and reliable supplies of electric power to meet the electricity needs of the City's customers and to satisfy the municipal loads and agricultural pumping demands of the Modesto and Turlock Irrigation Districts consistent with prescribed contractual obligations and Federal law. Hetch Hetchy Power's portfolio consists of hydroelectric generation, solar generation and third-party purchases.

## **SFPUC Strategic Plan**

The SFPUC Management Team integrated the Long-Term Strategic Plan and the Sustainability Plan to develop the FY 2010-11 Action Plan. The Strategic Plan serves as key guidance in planning day-to-day operational deployments as well as project implementations. Each Strategic Plan goal has an outcome, action, measurement, responsible lead, budget funding, and completion date. We have developed our comprehensive Action Plan to help ensure achievement of key strategic and sustainability goals. The San Francisco Charter requires the SFPUC to create, update, and adopt a Strategic Plan, which is a performance matrix including objectives and measures designed to be used among senior managers to chart progress on the following four key goals:

- Provide High Quality Services;
- Promote a Green and Sustainable City;
- Expand Outreach and Communications; and
- Invest in People and Communities.

## **San Francisco's Economy**

The City is the economic center of the nine counties contiguous to the Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma Counties (the "Bay Area"). The economy of the Bay Area includes a wide range of industries, supplying local needs as well as the needs of national and international markets. Major business sectors in the Bay Area include retail and entertainment, conventions and tourism, service businesses, banking, professional and financial services, corporate headquarters, international and wholesale trade, multimedia and advertising, biotechnology, and higher education.

According to the City's Economic Barometer in June 2010, recovery in San Francisco has been uneven and inconsistent. Despite continuing strength in airport traffic, the recovery in the hotel sector has been uneven.

On a seasonally-adjusted basis, there has been essentially no change in occupancy or average daily rates since last fall. Our indicators of retail traffic, parking garage use and Saturday BART visitors to Powell Street, show continuing weakness and are still at or near their low points of the recession. Like the job market, San Francisco housing prices have been on the upswing for most of the year, but May brought a sharp reversal, and June only a limited rise. While average sales price is a highly imperfect measure of trends in the market, the two months have ended a positive trend.

### **Employment:**

San Francisco has and benefits from a highly skilled, educated and professional labor force. Key industries include tourism, real estate, banking and finance, retailing, apparel design and manufacturing. Emerging industries include multimedia and bioscience. According to the California Employment Development Department, the unemployment rate in San Francisco was 9.6% in June 2010, unchanged from the previous June. While this marks an improvement over the double-digit unemployment seen earlier in 2010, and San Francisco is still strong relative to the rest of the State, the stubbornly high rate reflects the weak, unsustainable job recovery to date.

## **SFPUC Major Accomplishments, Financial Foundation, and Initiatives**

The adopted FY 2010-11 budget supports the mission of the SFPUC to provide its customers with high quality, efficient and reliable water, wastewater, and power services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to the SFPUC's care. The budget aligns with achieving the SFPUC's long-term strategic goals and objectives, ensures funding for our operating programs, and purposefully supports the Strategic Plan outcomes to ensure the appropriate application of talent and tools to reach our goals. Our near-term focus continues to be on the progress of the Water System Improvement Program (WSIP), the Capital Improvement Program for Wastewater to address flood control, rehabilitation and replacement of sewers, and the initiation of projects for the Sewer System Improvement Program (SSIP). Additionally, we have five other key initiatives as follows:

### ***1) Protect Our Power Customers by Increasing Availability and Delivery of Renewable Power***

The SFPUC generates approximately 20 percent of San Francisco's energy needs through renewable resources like solar power and hydropower that produce zero greenhouse gas emissions. The Hetch Hetchy Water and Power system delivers an average of 1.7 billion kilowatt hours of 100 percent clean, greenhouse gas-free electricity annually to the City and County of San Francisco, the Modesto and Turlock Irrigation Districts, and tenants of the San Francisco International Airport and the Port of San Francisco.

Energy efficiency investments are an important component of an electric utility's portfolio. Energy efficiency reduces facility operating costs and electric bills for customers, improves system functionality, and reduces the environmental impact of energy use. The budgets include \$5.9 million in FY 2010-11, and \$6.9 million in FY 2011-12, for energy efficiency programs targeting the Civic Center District, the City's General Fund departments and the Port of San Francisco. The budgets also include \$10.1 million in FY 2010-11 and \$22.1 million in FY 2011-12, to start the conversion of SFPUC's 17,600 owned and maintained cobra-head street lights from High Pressure Sodium Vapor (HPSV) to Light Emitting Diode (LED) technologies and installation of a smart lighting controls system.

Over the next ten years, the SFPUC's Power Enterprise is planning to invest \$90.4 million in renewable power, including \$11.2 million in FY 2010-11, and \$9.2 million in FY 2011-12. The budget provides significant resources for the Power Enterprise to focus on numerous renewable energy initiatives including:

- Construction of small-scale solar and wind power for municipal customers within San Francisco, \$3 million;



- Studies and preliminary engineering for commercial-scale wind power on public lands within San Francisco, \$3.2 million;
- GoSolarSF incentive grants to residents, businesses and non-profits to reduce solar energy installation costs, \$5 million; and
- Administration and implementation of CleanPowerSF, a Community Choice Aggregation (CCA) Program, which allows cities and counties to pool their citizens' purchasing power to buy electricity, \$5 million.

In addition to these investments in renewable power and conservation, the budget includes \$25.8 million to fund major improvements to the power generation and transmission system portion of Hetch Hetchy. Investment in all facilities including powerhouses, switchyards and the transmission/distribution system will occur.

### ***B) Sustainability Demands: We Manage, Recover and Reuse Our Valuable Resources***

Part of our sustainability mission is to manage our resources with the future generations in mind. The SFPUC understands that water reuse and conservation are not enough. The Water and Wastewater Enterprises are implementing energy efficiency projects at their facilities and water conservation and reuse across the customer base. At the same time, the Water and Wastewater Enterprises are purposefully searching for and implementing resource recovery and reuse options for products that were once considered to be waste and disposable.

#### **Recycled Water Projects**

Two projects to provide recycled water for the two San Francisco municipal golf courses are funded in the FY 2010-11 budget. The Harding Park golf course is an internationally known venue for the President's Cup in 2009 and the FedEx Championship in 2010. It was voted one of the best places to play by Golf Digest in 2008-09 with a 4.5 star rating. Our goal is to maintain and improve upon this reputation with a sustainable and reliable source of irrigation water while preserving the underlying groundwater for municipal supplies. The second project is Sharp Park, a charming nine-hole course on the shores of the Pacific Ocean. Reliable irrigation will ensure that this course continues to be a viable recreational resource.

#### **Water Conservation and Gray Water Use**

The SFPUC has been implementing conservation activities for almost 20 years. Over that time, water use per person in San Francisco has gone from a peak of over 160 gallons per person per day to current levels of just under 88.9 gallons per person per day for residential, commercial and industrial, and municipal customers combined. Today, residential customers use only 52 gallons per person per day, compared to the California residential average of 155 gallons per person per day.

While the SFPUC has made great strides in getting our customers to conserve water, further opportunities can be tapped. In response, the SFPUC's conservation program expenditures have significantly increased over the past three years, including a 60 percent increase in the number of rebates for toilets, washers and other fixtures processed in the last three years. The FY 2010-11 budget funds \$18.7 million over the next two years to increase water savings including educating customers and coordinating conservation programs. The Water Enterprise is also committed to promoting the safe use of gray water systems by providing home installation kits and training.

The SFPUC's water conservation program is on track to ensure the SFPUC meets the goals of the Phased WSIP Variant to satisfy demands of ten million gallons a day (mgd) by 2018 through a combination of conservation, groundwater, and recycled water. Additionally, a recently passed State law requires urban water agencies to reduce State-wide per capita water consumption by 20 percent by 2020. Here as well, the SFPUC is on track to meet this new requirement.

### **Biofuel/Alternative Energy Program**

The Biofuel/Alternative Energy Program will determine the feasibility and cost effectiveness of generating bio-energy (e.g. biofuel or cogenerated power) as a byproduct of processing the fats, oils and grease (FOG) and/or food waste collected throughout the City. FOG has traditionally caused clogging and malfunction in both wastewater collection system and treatment processes. Developing a reliable and cost-effective alternative to dumping FOG, for residents, restaurants, and other commercial establishments, will support the Wastewater Enterprise operations, environmental protection, and compliance objectives.

### ***2) Asset Management and Upgraded Maintenance Management Is Essential to Our Mission***

The SFPUC is engaged in a long-term effort to improve the management of its capital assets. This effort is aimed at identifying and evaluating capital, repair and replacement (R&R), and maintenance needs. The plan includes development of asset management objectives, standards, policies and procedures. It focuses on continuous assessment of work processes to identify improvement opportunities, develop recommendations, and improve asset performance. The FY 2010-11 budget contains \$1.5 million for a sewer condition assessment program to ensure that large-scale sewer replacement is strategically targeted to ensure that critical health and safety needs are met. The sewer condition assessment project will provide 150 miles annually of closed circuit television video of the sewer system in order to determine if the sewers are safe or near failure.

The current average age of the collection system is over 70 years. The SSIP calls for increasing sewer replacements from the current rate of 4.5 miles per year to 15 miles per year by 2013. The budget contains \$31.1 million for replacement of sewers in FY 2010-11, along with another \$32.7 million in FY 2011-12. In FY 2010-11, the upgrade of the Maximo maintenance management system will be completed. This system is essential to standardize asset management and lifecycle planning across all three SFPUC utilities.

### ***3) Reduce Contracting Costs to SFPUC and Our Private Sector Partners***

With an estimated five years remaining and nearly \$2 billion of remaining construction projects to contract for WSIP and the initiation of a multi-year, multi-billion dollar SSIP, implementation of a state-of-the-art web-based procurement and invoicing system is good business. The SFPUC's automated water meter program and our online customer payments have been financial and customer service successes. In FY 2010-11, the Infrastructure and Business Service Bureaus will jointly complete two pilot systems: one for online payment of contractor invoices, and the other an electronic web-based bidding and proposals submittal system. These pilots will provide real-world experience and data to support appropriate scale-up for the procurement and payment systems. With full-scale implementation, we anticipate time savings for our staff to process and manage procurements and invoices. We anticipate that there will be a significant reduction in paper used, managed and stored, which carries with it a reduction of greenhouse gases (less paper production, storage, and transportation). Our private sector partners anticipate the benefits of reduced cost of printing bids and proposals and the prospect of easier and quicker payment of their invoices.

### ***4) Planning for Tomorrow and Developing Staff***

All of the SFPUC's long-term strategic goals depend on highly qualified and performing staff. Recruitment competition around the Bay Area and California demands that we invest in our existing staff. Additionally, by 2015, some 870 full-time staff persons will be eligible for retirement, so effective development, recruitment, and deliberate succession planning and knowledge management are critical. The Strategic Plan calls for an SFPUC-wide staff development program for technical, managerial, health and safety training for our 2,300 employees. A Chief Learning Officer is included in the budget funding for consulting services to develop curricula and curricula tracks linked to individual development plans for successful performance. Implementation of this program will begin in FY 2011-12 with an anticipated investment of \$450,000.

## Water Enterprise

The Water Enterprise operates and maintains 230 miles of pipelines in the regional system and 1,235 miles in San Francisco; 60 miles of tunnels in the regional system, five regional pump stations and 22 in the City, 29 dams and reservoirs, nine water tanks, and three water treatment plants that serve both the regional and City systems.

### ***Improved Infrastructure to Ensure High Quality Service***

The SFPUC is focused on providing customers the highest level of service by prioritizing proactive investments in our water infrastructure. Currently, the Water Enterprise is implementing a number of major capital improvements to improve system performance, and ensure seismic and system reliability.

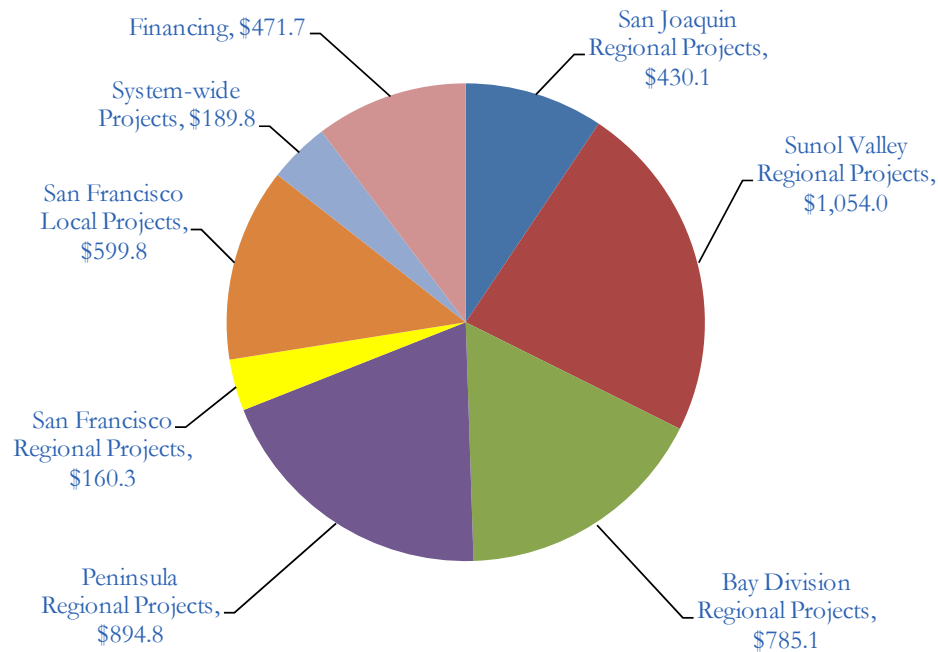
### ***Water System Improvement Program (WSIP)***

The Water Enterprise is in the middle of a \$4.6 billion dollar, multi-year program to upgrade its Regional and Local Water Systems, known as the Water System Improvement Program (WSIP). The WSIP delivers capital improvements that enhance the enterprise's ability to provide reliable, affordable, high quality drinking water to our 27 wholesale customers and regional retail customers in Alameda, Santa Clara and San Mateo Counties, and to 800,000 retail customers in San Francisco, in an environmentally sustainable manner. The program is structured to cost-effectively meet water quality requirements, improve seismic and delivery reliability, and meet water supply objectives through 2030.

In April 2010, the City and County of San Francisco Board of Supervisors approved the final appropriation of \$1,647.25 million to fund completion of the WSIP. The program is on track for completion in FY 2015-16.

Significant progress made in FY 2009-10: five projects completed environmental review and six projects received approved and certified environmental documents. Ten additional projects completed design phase and 11 construction contracts totaling \$678 million were awarded. As of July 1, 2010, many projects within San Francisco are already completed, and across the Bay Area, regional projects valuing \$1.4 billion are completed or under construction. The focus of the WSIP is now on construction; the planning phase is 98 percent complete, the environmental review phase is 81 percent complete, design is 90 percent complete, and construction is 15 percent complete.

## WSIP Budget as of June 2009 (in millions)



### WSIP Budget and Spending Summary as of November 1, 2010 (in millions)

	Approved Budget (June 2009)	Expended /Encumbered	Unencumbered Balance Remaining
Regional Projects	\$ 3,514	1,776	1,738
Local Projects	600	321	279
Financing Costs	472	301	171
<b>Total</b>	<b>\$ 4,586</b>	<b>2,398</b>	<b>2,188</b>

The total estimated cost for the WSIP is \$4.6 billion, including \$4.1 billion for capital projects and \$471.7 million for net financing costs. WSIP has provided significant employment opportunities within the San Francisco Bay Area. Through July 2010, the regional program provided 1,036,049 hours of employment to 2,949 craft workers in 15 trades. Additional details regarding the WSIP are available in the WSIP Annual Reports as well as the quarterly updates, published on the SFPUC's website at [www.sfwater.org](http://www.sfwater.org).

#### ***Automated Water Meter Program***

Infrastructure improvement is not limited only to the water supply and delivery system, but also includes the information management systems. Consequently, a major focus for the Water Enterprise over the last few years has been implementation of the Customer Information System (CIS), which provides more current billing, revenue collection, and usage information, allowing customers to respond to water conservation requests; and a new Automated Water Meter Program.

In 2010, the SFPUC initiated a pilot program to test the upgrade of existing old, visual-read customer water meters with automated water meters. The program has a goal of retrofitting or replacing the

SFPUC's 180,000 meters by April 2012. The new meters allow for remote meter readings, timely leak detection, hourly customer water usage information, and increases in meter accuracy and revenues. The details, timeliness, and ease of the information provided by the meters will enable the Water Enterprise to fully understand the demand and usage of water. The FY 2010-11 budget includes \$5.4 million for the completion of the program.

## **Wastewater Enterprise**

This enterprise operates, cleans, and maintains 993 miles of City sewers, a majority of which are combined sewers that collect a combination of sanitary sewage and stormwater runoff, 56 sewage pump stations and six stormwater pump stations, four wastewater treatment plants that provide liquid and solids treatment, five deep water outfalls, and 36 overflow structures for combined sewage discharges around the shoreline of the City and 50 stormwater outfalls around Treasure and Yerba Buena Islands.

### **Initiating the Sewer System Improvement Program (SSIP)**

The wastewater system has been developed over 110 years, and although there was significant investment from the mid 1970's through the mid 1990's to comply with the Clean Water Act, many of the existing facilities were not upgraded and are in need of major improvement. San Francisco's sewer system is well operated, but the collection system, the three in-City Treatment Plants, the solids handling system at the Southeast Treatment Plant, Treasure Island Treatment Plant, as well as many of the major force mains and interceptors, are old and failing; and facilities need to be rebuilt. The Sewer System Improvement Program (SSIP) planning and design will continue in the next fiscal year with a 20 to 30 year, multi-billion dollar program to improve and rehabilitate the system consistent with agreed-upon levels of service and consistent with the strategic plan goal of providing high quality services and promoting a green and sustainable city.

The Wastewater Enterprise has budgeted \$60.7 million for the SSIP since its inception in August 2004 through FY 2009-10. The budget is \$19.6 million in FY 2010-11 and \$47.3 million in FY 2011-12. In March 2010, a supplemental appropriation in the amount of \$135.2 million was approved for the Wastewater Enterprise. This supplemental appropriation, along with the FY 2010-11 budget, provided funding for capital projects to initiate the SSIP and continue over the next 20 to 30 years the Interim Capital Program in FY 2010-11. The total cost of the SSIP is projected to be between \$4 to \$6 billion.

### **Low Impact Design for Sustainable Stormwater Management**

As part of the stormwater management program, low impact design (LID) projects will be developed to store or divert stormwater for beneficial use and to avoid entry into the sewer collection system where the stormwater mixes with sewage. The LID Program will enhance local neighborhoods by reducing the pavement and replacing it with green and planted curbs, green streets and other planted areas at corners. This "green infrastructure" has been shown in other cities, like Portland, Oregon, to reduce localized flooding, and improve the operating efficiency of the combined sewer system by detaining or removing stormwater from the collection sewers. Ancillary benefits from LID projects include: reduction of energy use as a result of reduced pumping of stormwater runoff, potable water conservation, natural habitat restoration, and improved community aesthetics. For this reason, development of appropriate and extensive LID projects is a cornerstone of the SSIP and many projects will be planned, designed and financed through this program as it progresses.

Planning and design of LID projects are also currently being pursued with Department of Recreation and Parks, the San Francisco Unified School District and other public and private entities to divert, store and/or use stormwater on site. In some cases, future feasible projects may be public/private partnerships.

## **Hetch Hetchy Water and Power Enterprise (HHWP)**

To deliver low-cost, reliable electricity to its customers, Hetch Hetchy Power relies on power generation at the Hetch Hetchy hydroelectric powerhouses, solar generation, and third-party purchases. In accordance with the requirements of City policies and directives relating to renewable energy and goals to reduce greenhouse gases, Hetch Hetchy Power is continuously researching, developing, and implementing new electricity generation resources to provide clean, local generation where it is consumed, and ensuring reliable power services. In FY 2010-11, Hetch Hetchy Power will expand its Energy Efficiency Program for General Fund departments (\$5.9 million) and the Street Lighting Repair, Replacement and Improvement Program (\$8.0 million) to improve electrical system functionality, and reduce the environmental impact of energy use. The GoSolarSF program and major investments in wind and solar power are part of the FY 2010-11 budget, funded at \$5.0 million. The FY 2011-12 budget funds an additional \$5.0 million for the GoSolarSF program.

### **Investment to Address Aging Infrastructure & New Regulations**

The HHWP facilities include three impoundment reservoirs, three regulating reservoirs, four powerhouses, two switchyards, three substations, 167 miles of pipeline and tunnels, almost 100 miles of paved road, and over 160 miles of transmission lines, watershed land and right-of-way property. HHWP facilities are in the fourth year of a 20-year rehabilitation program, with many facilities suffering from deferred maintenance. HHWP recently completed the Power Asset Master Plan, which prioritized and recommended a plan of action for rehabilitation of the power system to minimize risk to Hetch Hetchy power revenues, regulatory fines, and safety. One-hundred percent of all Power assets are completed; the majority of all Water assets are expected to be completed by 2011.

In addition to deferred maintenance, HHWP is also addressing new regulatory requirements established by the North American Electric Reliability Corporation (NERC) and the Western Electricity Coordinating Council. HHWP is currently registered as a Generator Operator and Generator Owner and is in the process of developing and documenting maintenance, operations, testing and reporting procedures to meet the NERC Reliability Standards for the Bulk Electric System Function. Late in 2010, HHWP will be registering as a Transmission Operator and Owner. Funding for the rehabilitation of Hetch Hetchy Power infrastructure is \$25.8 million in FY 2010-11 and \$12.7 million in FY 2011-12. Funding for Hetch Hetchy Water infrastructure is \$5.9 million in FY 2010-11 and \$12.5 million in FY 2011-12.

## **San Francisco's Budgetary Process**

The City adopts annual budgets for all government funds on a budget basis using a current financial resources measurement focus and a modified accrual basis of accounting. For enterprise departments including the SFPUC, two-year budgets are required effective July 1, 2010. Typically capital project funds and certain debt service funds adopt project-length budgets. The budget of the City is the City's single largest policy document and is a detailed operating plan that identifies estimated costs and results in relation to estimated revenues. The budget includes (1) the programs, projects, services, and activities to be provided during the fiscal year; (2) the estimated resources (inflows) available for appropriation; and (3) the estimated charges to appropriations. The budget represents a process through which policy decisions are deliberated, implemented and controlled. The City Charter prohibits expending funds for which there is no legal appropriation.

### ***What's New: The SFPUC's Two-Year Budget***

In 2009, San Francisco voters approved Proposition A, which requires the City and County of San Francisco and its departments to adopt a two-year budget by FY 2012-13. The SFPUC is one of four City departments that were early implementers in FY 2010-11, developing and adopting a two-year budget for FY 2010-11 and FY 2011-12. While we already have both years' budgets adopted by the Board of Supervisors, the SFPUC

enterprises have the opportunity to review them annually to determine if adjustments for the second year are needed.

## **Next Year's Budgets**

This budget supports the on-going mission of the SFPUC to provide its customers with high quality, efficient and reliable water, wastewater, and power services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to the SFPUC's care. The budget is aligned with the SFPUC's long-term strategic goals and objectives, as outlined in the SFPUC Long-Term Strategic and the Sustainability Plan.

The SFPUC operating programs include the regular operating costs and maintenance of utility facilities and lands and support services, (including management, business services, planning and regulatory compliance, and communication) debt service and lease costs for each of the individual enterprises. The operating budget is financed by both wholesale and retail rates, service charges, and other non-operating revenues, including rents and interest earnings. The SFPUC budget for FY 2010-11 is 11.2 percent higher than the FY 2009-10 approved budget. The increase is primarily due to growth in debt service and reserves for the Water and Wastewater Enterprises. This is consistent with and as planned and funded through the Water and Wastewater five-year rate plan adopted in 2009 by the San Francisco Public Utilities Commission.

The SFPUC capital programs are intended to reconstruct, replace, expand, repair, or improve facilities that are under the SFPUC's jurisdiction. The annual capital budgets are supported by the multi-year Capital Improvement Programs (CIP) and Long-Term Financial Plan (LTFP). The issuance of revenue bonds, other forms of indebtedness, and the execution of governmental loans are provided for under the San Francisco City Charter to finance the SFPUC's capital programs. The repayment of this indebtedness is provided for under the annual rates and revenues of the particular enterprise that incurs the debt, categorized as debt service in the budgets.

The budget ensures that the enterprises will also:

- Maintain high investment grade credit ratings to be able to access low-cost borrowing to fund two significant capital programs, the Water System Improvement Program (WSIP) and the Wastewater Capital Improvement Program (CIP), which includes the multi-billion dollar Sewer System Improvement Program (SSIP). The SSIP will also rely on a high credit rating to finance this program over the next 20 to 30 years.
- Provide sufficient capacity to bridge cash flow needs related to lower water consumption as a consequence of successful conservation efforts, the economy, and the weather.
- Maintain a contingency reserve to protect our ratepayers from emergency rate increases due to unforeseen revenue shortfalls.
- Provide additional debt service payment capacity when planned and needed through rate increases to critical capital programs.
- Fund major improvements to existing Hetch Hetchy power generation and transmission infrastructure.

## **Operating Budget for FY 2010-11**

Total operating budget for the SFPUC is \$396.9 million for FY 2010-11, comprised of operations and maintenance for each of the enterprises.

### **Water Enterprise**

The Water Enterprise's operating budget at \$159.5 million funds the operations and maintenance of the SFPUC water system. Compared to the \$154.7 million approved for FY 2009-10, the

budget increased by \$4.7 million. The net increase reflects funding for water conservation, services of other City departments, and benefits.

### **Wastewater Enterprise**

The Wastewater Enterprise's operating budget totals \$132.3 million and funds the operations and maintenance of the SFPUC's sewer system. Compared to the FY 2009-10 approved budget of \$125.9 million, the FY 2010-11 budget increased by \$6.5 million. The net increase reflects funding for services of other City departments and general reserves.

### **Hetch Hetchy Water and Power Enterprise**

Hetch Hetchy Water and Power's operating budget totals \$105.1 million and funds the operations and maintenance of the SFPUC's upcountry water and power systems, including all Power activities. \$78.5 million is allocated to Hetch Hetchy Power for all power activities and their share of joint costs; \$26.7 million is allocated to Hetch Hetchy Water for water activities and their share of the joint costs. Compared to the FY 2009-10 approved budget of \$101.7 million, which includes \$24.7 million for Hetch Hetchy Water and \$77.0 million for Hetch Hetchy Power, the FY 2010-11 budget increased by \$3.4 million. The net increase reflects funding for new and on-going regulatory and compliance programs, and new personnel to address deferred maintenance.

## **Capital Budget for FY 2010-11**

The repayment of this indebtedness is provided for under the annual rates and revenues of the particular enterprise that incurs the debt, and benefits from the underlying capital improvements.

### **Water Enterprise**

The major capital investment for the Water Enterprise is the WSIP, the \$4.6 billion dollar, multi-year capital program to rebuild the water system. The program will enhance the SFPUC's ability to provide reliable, affordable, high-quality water to our nearly 2.5 million customers through environmentally sustainable means. The FY 2010-11 annual budget includes another \$47.3 million: \$13.2 million in regional projects (storage, watershed, and rights-of-way, treatment facilities and conveyance); \$23.8 million for local projects (conveyance and distribution, security and Treasure Island improvements); \$9.2 million for programmatic projects; and \$1.2 million for financing costs. The City and County of San Francisco Board of Supervisors approved the final appropriation of \$1,647.25 million for FY 2010-11 through FY 2015-16 to complete the WSIP, bringing the total WSIP appropriation to the \$4.6 billion program level. Year over year, the annual capital budget is up \$0.3 million, or 0.6 percent.

### **Wastewater Enterprise**

The Wastewater Enterprise's Capital Improvement Program (CIP) for FY 2010-11 is \$23.9 million and includes \$21.6 million for Wastewater capital projects and \$2.3 million for programmatic projects. The FY 2010-11 CIP is funded by Wastewater Enterprise revenues and revenue bonds. The projects are included in the SFPUC's Ten-Year Capital Plan which is part of the City's Ten-Year Capital Plan approved by the Board of Supervisors annually.

The FY 2010-11 Wastewater Enterprise annual CIP is \$0.4 million less than the FY 2009-10 approved CIP. In March 2010, a supplemental appropriation in the amount of \$135.2 million was approved for the Wastewater Enterprise. This supplemental appropriation, along with the FY 2010-11 budget, provided funding for capital projects in FY 2010-11 of the Ten-Year Capital Plan.



### **Hetch Hetchy Water and Power Enterprise**

The Hetch Hetchy Water and Power Capital Improvement Program (CIP) for FY 2010-11 is \$79.1 million and includes: \$33.7 million for Hetch Hetchy Power; \$41.6 million for Hetch Hetchy Water, of which \$30.3 million in power and joint-related projects is allocated to Hetch Hetchy Power; and \$3.8 million for programmatic projects. The FY 2010-11 CIP is funded by \$65.9 million in Hetch Hetchy Water and Power revenue, a \$7.1 million issuance of Water Enterprise debt for projects considered Water or joint Hetchy/Water assets and \$6.0 million in Clean Renewable Energy Bonds (CREBs). The projects are included in the SFPUC's Ten-Year Capital Plan which is part of the City and County of San Francisco's Ten-Year Capital Plan approved by the Board of Supervisors annually.

The FY 2010-11 annual CIP is approximately \$14.2 million, or 21.9 percent more than the FY 2009-10 approved CIP. This is primarily a result of the increase in the Hetch Hetchy Power Street Light Repair project to fund the conversion of SFPUC's 17,600 owned and maintained street lights to LED and an increase to fund Hetch Hetchy Water's Power Infrastructure repair and replacement project.

## SFPUC Budget Overview - FY 2010-11 and FY 2011-12 (Uses of Funds)

\$ Millions	FY 2008-09	FY 2009-10	FY 2009-10	FY 2010-11	FY 2011-12	FY 2009-10		FY 2010-11		
	Actual	Adopted Budget	Actual	Adopted Budget	Adopted Budget	Amount	%	Amount	%	
<b>USES OF FUNDS</b>										
<b>Water Enterprise</b>										
Operations and Maintenance	141.8	154.7	146.0	159.5	161.8	4.7	3.0%	2.3	1.5%	
Debt Service	70.1	70.2	70.2	116.4	196.4	46.2	65.7%	80.0	68.8%	
General Reserve	-	0.5	-	1.1	4.5	0.6	100.0%	3.4	328.1%	
<b>Subtotal</b>	<b>211.9</b>	<b>225.4</b>	<b>216.2</b>	<b>276.9</b>	<b>362.7</b>	<b>51.3</b>	<b>22.8%</b>	<b>85.8</b>	<b>31.0%</b>	
Capital Projects	61.0	47.1	47.1	47.3	43.5	0.3	0.6%	(3.8)	-8.0%	
<b>Water Subtotal</b>	<b>272.9</b>	<b>272.5</b>	<b>263.3</b>	<b>324.2</b>	<b>406.2</b>	<b>51.7</b>	<b>19.0%</b>	<b>82.0</b>	<b>25.3%</b>	
<b>Wastewater Enterprise</b>										
Operations and Maintenance	123.3	125.9	123.7	132.3	133.7	6.5	5.1%	1.3	1.0%	
Debt Service	66.8	66.8	66.8	61.4	56.1	(5.4)	-8.2%	(5.3)	-8.6%	
General Reserve	-	12.3	-	20.9	22.1	8.6	69.3%	1.2	5.7%	
<b>Subtotal</b>	<b>190.1</b>	<b>205.0</b>	<b>190.5</b>	<b>214.6</b>	<b>211.8</b>	<b>9.6</b>	<b>4.7%</b>	<b>(2.8)</b>	<b>-1.3%</b>	
Capital Projects	44.6	24.3	24.3	23.9	38.9	(0.4)	-1.7%	15.1	63.1%	
<b>Wastewater Subtotal</b>	<b>234.7</b>	<b>229.3</b>	<b>214.8</b>	<b>238.5</b>	<b>250.7</b>	<b>9.2</b>	<b>4.0%</b>	<b>12.2</b>	<b>5.1%</b>	
<b>Hetch Hetchy Water and Power</b>										
<b>Hetchy Power</b>										
Operations and Maintenance	41.7	57.6	36.1	58.5	60.3	0.9	1.5%	1.8	3.1%	
Natural Gas & Steam Pass-Through	14.4	15.8	11.5	13.1	13.3	(2.7)	-17.3%	0.3	2.1%	
Debt Service	0.4	0.4	0.4	1.5	2.0	1.1	266.8%	0.5	32.0%	
General Reserve	3.4	-	-	-	-	-	-	-	-	
Reclassification of Power Only & Joint Operating Costs	22.0	19.4	29.2	20.0	22.4	0.6	3.1%	2.4	12.0%	
<b>Subtotal</b>	<b>81.9</b>	<b>93.2</b>	<b>77.2</b>	<b>93.0</b>	<b>98.0</b>	<b>(0.2)</b>	<b>-0.2%</b>	<b>5.0</b>	<b>5.3%</b>	
Capital Projects	26.5	31.9	31.9	37.5	48.2	5.6	17.6%	10.7	28.5%	
Reclassification of Power Only & Joint Operating Costs	8.7	21.3	21.3	30.3	22.0	9.0	42.3%	(8.3)	-27.4%	
<b>Hetchy Power Subtotal</b>	<b>117.1</b>	<b>146.4</b>	<b>130.4</b>	<b>160.8</b>	<b>168.2</b>	<b>14.4</b>	<b>9.9%</b>	<b>7.4</b>	<b>4.6%</b>	
<b>Hetchy Water</b>										
Operations and Maintenance	39.2	44.1	49.8	46.7	48.7	2.5	5.7%	2.0	4.3%	
Reclassification of Power Only & Joint Operating Costs	(22.0)	(19.4)	(29.2)	(20.0)	(22.4)	(0.6)	3.1%	(2.4)	12.0%	
<b>Subtotal</b>	<b>17.2</b>	<b>24.7</b>	<b>20.6</b>	<b>26.7</b>	<b>26.3</b>	<b>1.9</b>	<b>7.7%</b>	<b>(0.4)</b>	<b>-1.5%</b>	
Capital Projects	9.5	33.0	33.0	41.6	38.2	8.6	26.1%	(3.4)	-8.2%	
Reclassification of Power Only & Joint Operating Costs	(8.7)	(21.3)	(21.3)	(30.3)	(22.0)	(9.0)	42.3%	8.3	-27.4%	
<b>Hetchy Water Subtotal</b>	<b>18.0</b>	<b>36.4</b>	<b>32.3</b>	<b>38.0</b>	<b>42.5</b>	<b>1.5</b>	<b>4.1%</b>	<b>4.5</b>	<b>11.9%</b>	
<b>Hetch Hetchy Water and Power</b>										
Operations and Maintenance	80.9	101.7	86.0	105.1	108.9	3.4	3.3%	3.8	3.6%	
Natural Gas & Steam Pass-Through	14.4	15.8	11.5	13.1	13.3	(2.7)	-17.2%	0.3	2.1%	
Debt Service	0.4	0.4	0.4	1.5	2.0	1.1	266.8%	0.5	32.0%	
General Reserve	3.4	-	-	-	-	-	-	-	-	
<b>Subtotal</b>	<b>99.1</b>	<b>117.9</b>	<b>97.9</b>	<b>119.7</b>	<b>124.3</b>	<b>1.8</b>	<b>1.5%</b>	<b>4.6</b>	<b>3.8%</b>	
Capital Projects	36.0	64.9	64.9	79.1	86.4	14.2	21.9%	7.3	9.2%	
<b>Hetch Hetchy Total</b>	<b>135.1</b>	<b>182.8</b>	<b>162.8</b>	<b>198.8</b>	<b>210.7</b>	<b>16.0</b>	<b>8.8%</b>	<b>11.9</b>	<b>5.7%</b>	
<b>Bureaus*</b>										
General Mgr., Bus Svcs, External Affairs	60.8	65.1	60.6	70.5	63.2	5.4	8.3%	(7.2)	-10.3%	
<b>Recovery to Enterprises</b>	<b>(60.8)</b>	<b>(65.1)</b>	<b>(60.6)</b>	<b>(70.5)</b>	<b>(63.2)</b>	<b>(5.4)</b>	<b>8.3%</b>	<b>7.2</b>	<b>-10.3%</b>	
<b>Infrastructure**</b>										
<b>Recovery to Capital Projects</b>	<b>(29.6)</b>	<b>(64.2)</b>	<b>(29.1)</b>	<b>(62.5)</b>	<b>(72.1)</b>	<b>1.6</b>	<b>-2.5%</b>	<b>(9.5)</b>	<b>15.2%</b>	
<b>TOTAL SFPUC</b>	<b>642.7</b>	<b>684.6</b>	<b>640.8</b>	<b>761.5</b>	<b>867.7</b>	<b>76.9</b>	<b>11.2%</b>	<b>106.2</b>	<b>13.9%</b>	

\* The SFPUC Bureaus' budget is funded through an allocation model that recovers costs of services to the Enterprises.

\*\* The Infrastructure budget is funded through SFPUC capital projects.

## Rates

### Retail Rates – Water and Wastewater

Pursuant to the City and County of San Francisco Charter section 8B.125, an independent rate study is performed at least once every five years. A rate study was undertaken in the Spring of 2009 to examine the future revenue requirements and costs of service of both the Water and Wastewater Enterprises and was used to set the retail rates through FY 2013-14. Based on this study, the Commission adopted a five-year rate proposal in 2009 that includes increases sufficient to meet project costs and debt coverage requirements. The average rate increases are shown below.

#### Historical and Projected Water Rate Increases:

- Retail rate increases approved through FY 2013-14
- Wholesale water rate set annually, 15.2% FY 2010-11 increase approved April 2010
- Future wholesale rate increases based on Water Supply Agreement and wholesale customer portion of costs
- Ten-Year Financial Plan approved by Commission February 2010, projections updated quarterly



EFFECTIVE DATE OF INCREASE	RETAIL RATE INCREASE
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FY 2010-11	15.0%
FY 2011-12	12.5%
FY 2012-13	12.5%
FY 2013-14	6.5%

#### Approved Wastewater Rate Adjustments

Wastewater	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Average Annual Adjustment	7.0%	5.0%	5.0%	5.0%

#### Wholesale Water Rates

In the Spring of 2009, the SFPUC successfully negotiated a new Water Supply Agreement (WSA) with our wholesale water customers. The new contract took effect on July 1, 2009 and changes the rate basis by

which the wholesale rates and revenues are determined from a “utility basis” to a “cash basis,” resulting in the repayment of cost-of-capital over the life of the debt funding those assets rather than the life of the asset. The Commission adopted the FY 2009-10 wholesale rates under the new contract in May 2009. For FY 2010-11, the wholesale water rate was increased by 15.2 percent, effective July 1, 2010. Wholesale rates are reset annually as mandated in the 25-year Water Supply Agreement to recover costs in a timely manner.

### Wholesale Water Rate Adjustments

Water	Approved FY 2010-11	Projected FY 2011-12	Projected FY 2012-13	Projected FY 2013-14
Average Annual Adjustment	15.2%	10.2%	29.2%	5.3%

### Hetch Hetchy Water

Assessment fees to the Water Enterprise are projected to increase to \$29.7 million as reflected in the FY 2010-11 adopted budget. Other upcountry retail rates are increasing 15% effective July 1, 2010 as adopted by the Commission as part of the five-year retail rates plan in May 2009.

### Hetch Hetchy Power

Hetch Hetchy Power’s electric revenue requirement model was completed in September 2009. The electric retail rate setting process will occur in FY 2010-11 in conjunction with an independent rate study as required by City Charter. In FY 2009-10, Hetch Hetchy Power charges the general fund City departments 3.75 cents per kilowatt hour (kWh) and other City enterprise departments are charged at a rate comparable to PG&E rates for similar services. For fiscal year 2009-10, wholesale service customers, such as Modesto Irrigation District (MID) and Turlock Irrigation District (TID), are charged at rates pursuant to terms of power supply contracts mainly based on our power cost production. The MID and TID class one rates were \$0.02472 kWh and \$0.02193 kWh, respectively. MID/TID rates get trued up every year based on actuals. Under an existing development agreement, Hetch Hetchy Power will construct, own and operate the electric distribution infrastructure required to provide retail electric service to residential and commercial customers in Parcel “A” of the former Hunter’s Point Shipyard. To date, Hetch Hetchy Power has prepared service standards, developed system plans and specifications, acquired materials and equipment, and initiated construction of primary distribution facilities.

## Financial Policies

The SFPUC has adopted a financial policy which states the purpose and source for each of its designated reserves within its major funds of operating, construction, debt service, and trust. These guidelines enable restricting funds for future infrastructure needs; replacement of aging facilities; bond reserves; and various operating reserves to mitigate unexpected occurrences. These reserves are critical to the SFPUC’s financial strength and high bond ratings.

## Accounting Systems, Policies, and Internal Controls

In developing and maintaining the accounting systems, consideration is given by the administration as to the adequacy of internal controls. Internal controls are designed to provide reasonable, but not absolute, assurance as to the safeguarding of assets against loss from unauthorized use or disposition; the reliability of financial records for preparing financial statements in conformity with generally accepted accounting principles; and maintaining accountability for assets. For the fiscal year ended June 30, 2010, the Auditor noted no matters involving internal control over financial reporting and its operation that would be considered a material weakness.

The Finance Department is responsible for providing the financial services for the utility enterprises, including support for financial accounting and reporting, accounts payable, billing and collection of water, wastewater,

and power charges, and other revenues. The SFPUC's financial statements and records are maintained on an enterprise basis using full accrual to ensure the timely matching of revenues against the costs of providing services. Revenues and expenses are recorded on the accrual basis in the period in which the revenue is earned and the expenses are incurred.

The SFPUC management is responsible for establishing and maintaining a system of internal controls designed to safeguard the enterprises' assets from loss, theft, or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in accordance with generally accepted accounting principles. The internal control is designed to provide reasonable assurances that these objectives are met.

## **Certificate of Achievement Award**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the SFPUC for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2009. This was the first year that the SFPUC has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized CAFR. The CAFR must satisfy both Generally Accepted Accounting Principles (GAAP) and applicable legal requirements.

## **Conclusion**

In FY 2009-10, the SFPUC continues to invest in programs, projects and people to support its long-term capability to provide high-quality, efficient, and reliable water, wastewater, and power services. Our direction and mandate is to be more sustainable in our programs and to focus on renewable energy, energy efficiency, and resource recovery and reuse, while continuously improving our delivery of services and developing more efficient procedures. The SFPUC is on track to complete the WSIP program in FY 2015-16. The initial planning and design phases of the new SSIP will begin over the next two-year budget period, and both Hetch Hetchy Power and Hetch Hetchy Water continue to invest in rehabilitation of existing facilities, development of alternative energy and energy efficiency. The SFPUC capital programs will provide enhancements and new facilities that will improve the efficiency of our day-to-day operations and our ability to provide high quality services at the same time as fostering environmental, economic, and social sustainability for San Francisco and the San Francisco Bay Region.

I would like to express my appreciation to the entire SFPUC Finance Team whose professionalism, dedication, and efficiency are responsible for the preparation of this report. I would also like to thank KPMG LLP for their invaluable professional efforts into the CAFR. Finally, I want to thank the Mayor, the Board of Supervisors and the San Francisco Public Utilities Commission for their continued interest and support towards achieving excellence in financial management and planning for our utilities, customers, and stakeholders.

Respectfully submitted,



Ed Harrington  
General Manager



## Mission, Vision, and Values

The mission of the San Francisco Public Utilities Commission is to provide our customers with high-quality, efficient and reliable water, power and wastewater services in a manner that values environmental and community interests and sustains the resources entrusted to the SFPUC's care. The SFPUC is a sustainable utility leader, recognized for superior results in service, value, environmental stewardship and innovation.

The SFPUC's values include the following:

- **Communication:** Listen and communicate honestly and openly.
- **Equal Opportunity:** Provide opportunities to all staff to contribute and reach their potential. To achieve this, the SFPUC must be a learning organization.
- **Excellence:** Strive for personal and professional excellence, and recognize exemplary performance as the Commission seeks continuous improvement.
- **Service:** Focus on customer needs and satisfaction.
- **Inclusiveness:** Provide access and transparency to stakeholders and community members.
- **Respect:** Understand and appreciate the inherent value of the SFPUC staff, customers and community.
- **Safety:** Take the health and safety of the SFPUC's employees, customers and communities seriously.
- **Stewardship:** Be accountable for and responsibly manage and conserve the human, financial and environmental resources entrusted to the SFPUC's care.
- **Teamwork:** Support a cooperative work environment; the SFPUC team is strengthened by the diversity and contributions of its members.
- **Trust:** Act with honesty, integrity and fairness.

### Fiscal Year 2009-10

#### San Francisco Mayor and Public Utilities Commission Members

GAVIN NEWSOM  
MAYOR

F.X. CROWLEY  
PRESIDENT

FRANCESCA VIETOR  
VICE PRESIDENT

ANN MOLLER CAEN  
COMMISSIONER

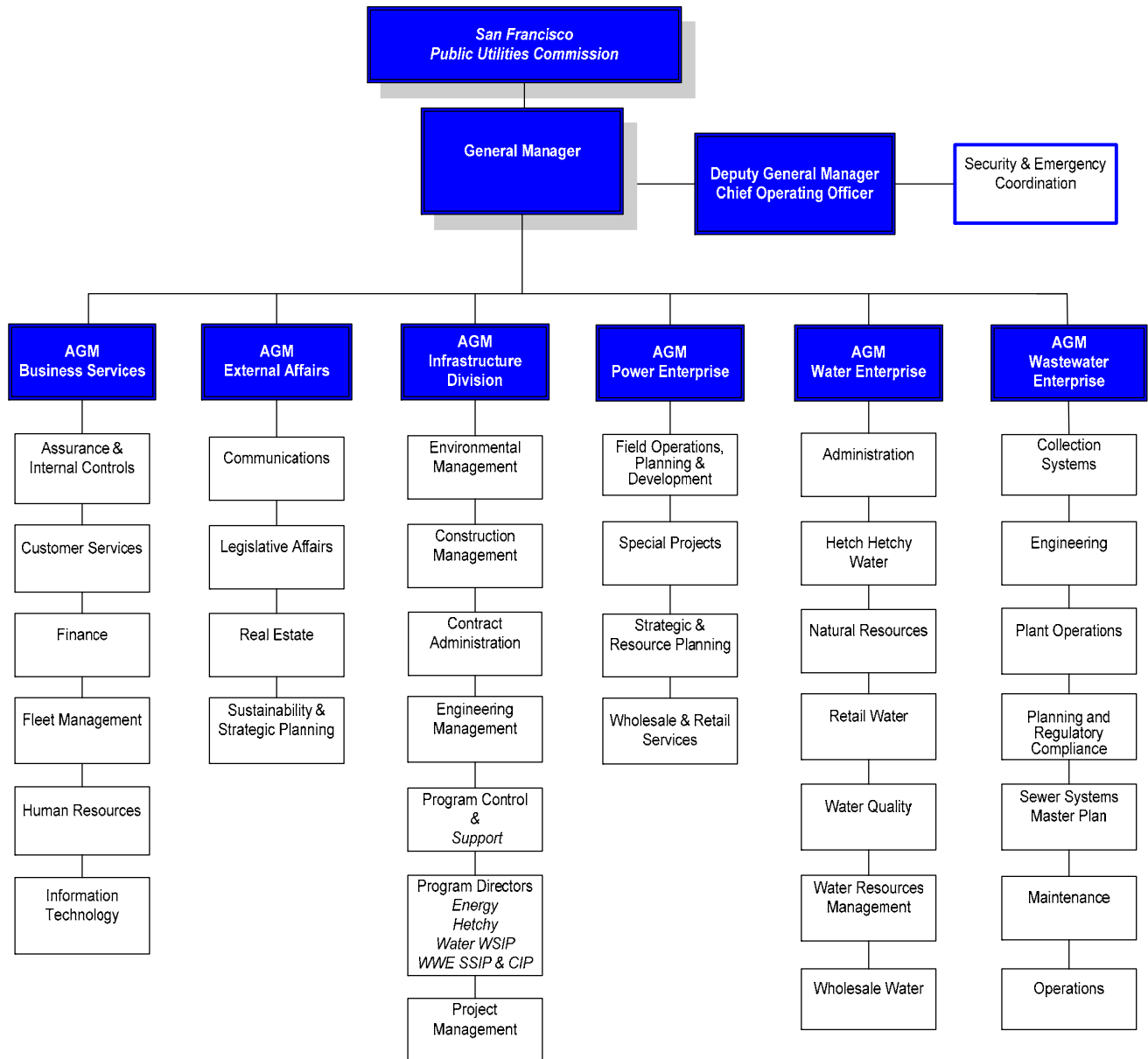
JULIET ELLIS  
COMMISSIONER

ANSON B. MORAN  
COMMISSIONER

## Structure

The SFPUC is comprised of three utility enterprises, Infrastructure, and the Bureaus. The three Enterprises are the Water Enterprise, Wastewater Enterprise, and Hetch Hetchy Water and Power Enterprise, of which Hetch Hetchy Power is the largest component. The Bureaus provide critical support services and oversight to the enterprises, and are comprised of the Office of the General Manager, Business Services, and External Affairs, along with Infrastructure. Business Services includes seven Bureaus: Business Services Administration, Assurance and Internal Controls, Customer Services, Finance, Fleet Management, Human Resources, and Information Technology Services. External Affairs includes three Bureaus: Communications, Governmental Affairs, and Real Estate Services.

## SFPUC Organization Chart



## Long-Term Strategic Plan

### Goal: Provide High Quality Services

Strategies	Action
Ensure compliance with regulatory requirements	<ul style="list-style-type: none"> <li>▪ Comply with California Department of Public Health permits</li> <li>▪ Comply with State Regional Water Quality Control Board permits</li> <li>▪ Comply with electric regulatory compliance requirements</li> <li>▪ Comply with all wastewater permits</li> </ul>
Implement Water Supply Agreement	<ul style="list-style-type: none"> <li>▪ Develop interim supply allocations for wholesale customers</li> <li>▪ Develop Water Quality Notification Plan</li> <li>▪ Prepare report on state of regional water system</li> <li>▪ Develop Environmental Enhancement Surcharge</li> </ul>
Build Water System Improvement Program (WSIP) on schedule, within budget and within scope	<ul style="list-style-type: none"> <li>▪ Plan, design, construction, bid and award, close-out, and completion of regional and local projects</li> <li>▪ Coordinate and secure City agency approvals for WSIP projects</li> </ul>
Develop Sewer System Improvement Program (SSIP)	<ul style="list-style-type: none"> <li>▪ Develop the Sewer System Improvement Program (SSIP)</li> </ul>
Optimize resources to meet customer power needs	<ul style="list-style-type: none"> <li>▪ Increase delivery of renewable power purchased and/or owned</li> <li>▪ Complete preliminary studies for new renewable technologies including ocean wave, geothermal, qualifying small hydro and inline hydro</li> <li>▪ Continue to improve baseline metering technology and Meter Data Management functionality</li> <li>▪ Determine alternative methods for obtaining electric transmission, distribution, and banking services provided under Interconnection Agreement with PG&amp;E</li> <li>▪ Update Electric Resource Plan, identifying resource portfolio options for meeting customer and citywide demands given financial resources, including stakeholder input</li> <li>▪ Complete Power Business Plan</li> </ul>
Support base reuse	<ul style="list-style-type: none"> <li>▪ Create development agreements for Hunter's Point Shipyard and Candlestick covering wastewater, water and power services</li> <li>▪ Create development agreements for Treasure Island covering wastewater, water and power services</li> </ul>



**Goal: Provide High Quality Services (Continued)**

Strategies	Action
Develop partnerships	<ul style="list-style-type: none"> <li>▪ Improve partnerships with Modesto and Turlock Irrigation Districts and others for water and power supply and transmission development and other issues</li> <li>▪ Develop new partnerships, maintain existing partnerships and expand services with local contractors</li> <li>▪ Further develop partnerships with Sunol Valley interests to address WSIP implementation and other SFPUC activities</li> <li>▪ Enhance partnerships with City departments and agencies</li> <li>▪ Implementation of SFPUC-wide grant program</li> </ul>
Maintain and improve capital facilities	<ul style="list-style-type: none"> <li>▪ Identify and maintain street light portfolio</li> <li>▪ Provide adequate facilities for staff - Construction of 525 Golden Gate headquarters</li> <li>▪ Provide adequate facilities for staff - Plan for updating all facilities</li> <li>▪ Develop and implement an Enterprise-wide asset management control program that results in a complete Ten-Year Capital Improvement Plan including identification of planned projects with associated scopes, schedules, and budgets (identifying all available funding sources and shortfalls)</li> <li>▪ Increase the mileage of sewer assessment, prioritize sewer replacement (SSIP) and begin the increase of sewer replacement collections system</li> </ul>
Implement Sustainability Plan and Program	<ul style="list-style-type: none"> <li>▪ Integrate and consolidate SFPUC Sustainability Plan and General Manager's Action Plan</li> <li>▪ Begin implementation of the program resulting from integration and consolidation of the Plans</li> </ul>
Keep abreast of technological innovations	<ul style="list-style-type: none"> <li>▪ Implement San Francisco Online Invoicing System (SOLIS)</li> <li>▪ Design and procure an electronic web-based bidding system (E-bidding/E-proposal)</li> <li>▪ Implement Supervisory Control and Data Acquisition (SCADA) system consistently across agency</li> <li>▪ Implement IT Strategic Plan</li> <li>▪ Implement and standardize the upgraded Maximo as the SFPUC's Asset Management Control System for all three Enterprises</li> <li>▪ Implement Automated Water Meter Program</li> </ul>
Improve emergency response	<ul style="list-style-type: none"> <li>▪ All emergency responders complete appropriate Federal Emergency Management Agency (FEMA) training</li> <li>▪ Develop a Security Master Plan and update Emergency Response and Recovery Plan</li> <li>▪ Develop and implement IT disaster recovery plan aligned with the IT Strategic Plan</li> </ul>
Streamline business practices	<ul style="list-style-type: none"> <li>▪ Identify and implement best practices, performance review, and audit findings</li> </ul>

**Goal: Promote a Green and Sustainable City**

Strategies	Action
Diversify and conserve water	<ul style="list-style-type: none"> <li>▪ Implement recycled water projects</li> <li>▪ Promote gray water use</li> <li>▪ Increase water use efficiency</li> <li>▪ Develop water conservation financial plan (Green Finance SF)</li> </ul>
Become a leader in environmental stewardship	<ul style="list-style-type: none"> <li>▪ Report on Watershed Environmental Improvement Plan implementation</li> <li>▪ Develop Alameda Watershed Habitat Conservation Plan</li> <li>▪ Develop SFPUC Land Management Policy</li> <li>▪ Work with the Bay Area Regional partners to build the Biosolids to Energy Facility</li> </ul>
Increase energy efficiency and conservation	<ul style="list-style-type: none"> <li>▪ Install light-emitting diode (LED) street lights</li> <li>▪ Promote and implement GoSolarSF Program</li> <li>▪ Complete construction of 17 Energy Efficiency Block Grant projects</li> <li>▪ Implement Energy Efficiency Programs for Civic Center District, General Fund customers, Port and SFO. Conduct demand reduction audits</li> <li>▪ Procure and install automated electric meters</li> </ul>
Reduce inflows to the sewer system	<ul style="list-style-type: none"> <li>▪ Reduce storm water inflow through low-impact design (LID) projects</li> <li>▪ Reduce pollutant inflow through grease recycling</li> <li>▪ Reduce pollutant inflow through construction erosion control</li> </ul>
Reduce and mitigate greenhouse gas emissions	<ul style="list-style-type: none"> <li>▪ Work with the Treasure Island project team to design and implement innovative strategies that strive for zero greenhouse gas emissions</li> <li>▪ Support City Administrator efforts to encourage electric vehicle deployment</li> </ul>
Provide residents and businesses choice for power supply	<ul style="list-style-type: none"> <li>▪ Implement Community Choice Aggregation (CCA) Program</li> <li>▪ Complete negotiations and implement new electricity supply and delivery agreement with City of Riverbank</li> <li>▪ Identify preferred method for providing electric service to San Francisco International Airport (SFO) (existing agreement terminates July 2013)</li> <li>▪ Complete cost of service and rate design study to inform/support new customer base</li> <li>▪ Accurately communicate electricity services offering to customers</li> </ul>
Support and draft relevant legislative initiatives	<ul style="list-style-type: none"> <li>▪ Track all local, State, and Federal legislation that may impact sustainability or operations of the SFPUC or City and County of San Francisco. Take positions as appropriate</li> </ul>

**Goal: Promote a Green and Sustainable City (Continued)**

Strategies	Action
Coordinate SFPUC Green initiatives	<ul style="list-style-type: none"> <li>Identify opportunities for green demonstration projects with City departments</li> <li>Develop incentives for City departments to reduce and conserve</li> </ul>
Reduce SFPUC in-house environmental impacts	<ul style="list-style-type: none"> <li>Develop, implement and communicate plans to reduce SFPUC in-house environmental impacts</li> <li>Support design review for 525 Golden Gate headquarters</li> <li>Work with California Independent Systems Operator (ISO) and others on electric resource plan</li> </ul>
Close Potrero Power Plant	<ul style="list-style-type: none"> <li>Work with California ISO and others on electric resource plan</li> </ul>

**Goal: Engage the Public**

Strategies	Action
Improve communication among Commission, staff and public	<ul style="list-style-type: none"> <li>Distribute electronic and print copies of the new popular annual report to public</li> <li>Develop internal communication standards and style guide</li> <li>Distribute new popular annual report to employees</li> </ul>
Expand outreach efforts	<ul style="list-style-type: none"> <li>Continue in-City and regional outreach efforts to support construction projects, programs and sustainability goals</li> </ul>
Engage stakeholder groups	<ul style="list-style-type: none"> <li>Continue support and staffing of Citizens Advisory Committee and subcommittees, Rate Fairness Board, Revenue Bond Oversight Committee, Clean Energy Stewards, Residential Users Appeals Board, and WSIP Small Firm Advisory Committee</li> </ul>
Implement social media tools	<ul style="list-style-type: none"> <li>Expand social media interaction with stakeholders with interactive contests and activities</li> </ul>
Launch new website	<ul style="list-style-type: none"> <li>Develop new homepage and user-friendly information and improved content management</li> </ul>

**Goal: Invest in People and Communities**

Strategies	Action
Expand internal communications	<ul style="list-style-type: none"> <li>Electronic and print distribution of customer Currents newsletter to employees</li> <li>Electronic and print distribution of new popular annual report to employees</li> </ul>
Recruit and retain highly qualified people	<ul style="list-style-type: none"> <li>Design 2010 survey to measure effectiveness of Department/Enterprise/Division based action plans, including succession planning and retiree management</li> </ul>
Ensure employees have clear expectations for performance	<ul style="list-style-type: none"> <li>Ensure managers complete appraisals as required</li> </ul>

**Goal: Invest in People and Communities (Continued)**

Strategies	Action
Minimize impacts of utility services on disadvantaged communities	<ul style="list-style-type: none"> <li>▪ Implement Environmental Justice Principles</li> </ul>
Create opportunities for community involvement and benefits	<ul style="list-style-type: none"> <li>▪ Expand community engagement in SFPUC community benefits</li> <li>▪ Establish an Memorandum of Understanding (MOU) agreement with the Office of Economic and Workforce Development</li> <li>▪ Track number of community jobs created and regularly publicize information</li> <li>▪ Increase involvement with San Francisco Unified School District</li> </ul>

**Ten-Year Financial Plan**

The SFPUC prepares a Ten-Year Financial Plan as part of the budget deliberations process as required by the City and County of San Francisco Charter Section 8B.123. The Plan includes a ten-year financial summary (FY 2010-11 through FY 2019-20) for each Enterprise, describing projected sources and uses, resulting fund balances and key financial ratios. Projected costs and revenues are estimates and subject to variations inherent in all such projections. Consequently, the estimates should not be viewed as precise predictions but rather as indications of expected trends given expenditure, revenue, and financing assumptions. These assumptions are based on current Board of Supervisors (BOS) and Commission policies, goals, and objectives representing management’s best estimates at the time.

Although each enterprise has its own Ten-Year Financial Plan, there are similarities; these are:

- Sources reflect approved rate increases, where applicable, or are otherwise projected based on projected service demands and revenue requirements to ensure indenture covenants are maintained;
- Operations and Maintenance, Repair and Replacement projects are financed from rates and service charges unless otherwise noted;
- Debt Service is financed from annual rates and service charges;
- Capital programs exceeding the cash-funded levels budgeted are generally financed by debt including: revenue bonds, commercial paper, State Revolving Fund Loans, and lease financing; in some cases Federal or State grants may finance capital projects;
- A minimum revenue bond coverage ratio of 1.25 times on an indenture basis (which includes available fund balances) and 1.00 times on a current operations basis (which excludes available fund balance) will be maintained.

The Financial Plan largely assumes debt financing of capital needs over the next ten-year period for the Water and Wastewater Enterprises. The Water System Improvement Program (WSIP) requires approximately \$4.6 billion in net financing for the program, authorized by the voters under Propositions A and E in November 2002. The Sewer System Improvement Program (SSIP) also will require significant debt financing and is presently authorized under Proposition E.

The SFPUC Ten-Year Financial Plan assumes a financing strategy that utilizes short-term financing via the existing Commercial Paper (CP) program to calibrate financing needs with project spending. Long-term (30-year) 5.0% fixed rate debt issuance is assumed to periodically refund the CP program for both the Water and Wastewater Enterprises. The CP program facilitates short-term financing, typically at lower interest rates than

longer term debt, which minimizes costs for ratepayers. The authorized CP program for the Water and Wastewater Enterprises are \$500 million and \$150 million respectively.

The Power Enterprise presently is not rated, though limited Clean Renewable Energy Bonds (CREBs) and Qualified Energy Conservation Bonds (QECBs), as well as other forms of tax credit debt instruments are available. For FY 2010-11, the Power Enterprise expects to issue \$6.6 million of CREBs and \$8.3 million of QECBs, the former providing funds for solar and micro-hydro projects, and the latter providing funds for energy conservation demonstration projects.

## **Financial Authority and Policies**

### **General**

The City and County of San Francisco is a Charter City under the California Constitution, and as a result, the Charter is the guiding document for financial authority and policies for City departments. The SFPUC is the department of the City responsible for the maintenance, operation and development of three utility enterprises: the Water Enterprise, the Wastewater Enterprise and the Power Enterprise (an unit of Hetch Hetchy Water and Power). Each of the SFPUC's enterprise funds is operated and managed as a separate financial entity and separate enterprise funds are maintained.

Below are specific sections of the Charter which pertain to the requirements and parameters of activities in which the SFPUC engages, including the development, content, and approvals of budgets, rates, debt, contracts and Capital Investment Plans (CIP).

### **Financial Authority**

#### *PUBLIC UTILITIES COMMISSION. (SF CHARTER SEC. 8B.121.)*

- (a) Notwithstanding Charter section 4.112, the Public Utilities Commission shall have exclusive charge of the construction, management, supervision, maintenance, extension, expansion, operation, use and control of all water, clean water and energy supplies and utilities of the City as well as the real, personal and financial assets that are under the Commission's jurisdiction or assigned to the Commission under Section 4.132.
- (b) The Public Utilities Commission may enter into Joint Powers Agreements with other public entities in furtherance of the responsibilities of the Commission.
- (c) Except to the extent otherwise provided in this Article, the Public Utilities Commission shall be subject to the provisions of Charter sections 4.100 et seq. generally applicable to boards and commissions of the City and County.
- (d) The General Manager shall have the authority to organize and reorganize the department. The General Manager shall adopt rules and regulations governing all matters within the jurisdiction of the department subject to section 4.102 as applicable.
- (e) Ownership or control of any public utility or any part thereof under the jurisdiction of the Public Utilities Commission may not be transferred or conveyed absent approval by the Public Utilities Commission and approval by a vote of the electors of the City at the election next ensuing not less than 90 days after the adoption of such ordinance, which shall not go into effect until ratified by a majority of the voters voting thereon. Voter approval shall not be required for sales or transfers of real property declared surplus to the needs of any utility by the Public Utilities Commission or to leases or permits for the use of utility real property approved by the Public Utilities Commission.

(Added November 2002)

***GOALS AND OBJECTIVES RELATED TO WATER AND CLEAN WATER [WASTEWATER].  
(SF CHARTER SEC. 8B.122.)***

- (a) The Commission shall develop, periodically update and implement programs to achieve goals and objectives consistent with the following:
- (1) Provide water and clean water services to San Francisco and water service to its wholesale customers while maintaining stewardship of the system by the City;
  - (2) Establish equitable rates sufficient to meet and maintain operation, maintenance and financial health of the system;
  - (3) Provide reliable water and clean water services and optimize the systems' ability to withstand disasters;
  - (4) Protect and manage lands and natural resources used by the Commission to provide utility services consistent with applicable laws in an environmentally sustainable manner. Operate hydroelectric generation facilities in a manner that causes no reasonably anticipated adverse impacts on water service and habitat;
  - (5) Develop and implement priority programs to increase and to monitor water conservation and efficiency system-wide;
  - (6) Utilize state-of-the-art innovative technologies where feasible and beneficial;
  - (7) Develop and implement a comprehensive set of environmental justice guidelines for use in connection with its operations and projects in the City;
  - (8) Create opportunities for meaningful community participation in development and implementation of the Commission's policies and programs; and
  - (9) Improve drinking water quality with a goal of exceeding applicable drinking water standards if feasible.

(Added November 2002)

**Financial Policies**

***MISSION-DRIVEN BUDGET. (SF CHARTER SEC. 9.114.)***

Each departmental budget shall describe each proposed activity of that department and the cost of that activity. In addition, each department shall provide the Mayor and the Board of Supervisors with the following details regarding its budget:

- (a) The overall mission and goals of the department;
- (b) The specific programs and activities conducted by the department to accomplish its mission and goals;
- (c) The customer(s) or client(s) served by the department;
- (d) The service outcome desired by the customer(s) or client(s) of the department's programs and activities;
- (e) Strategic plans that guide each program or activity;
- (f) Productivity goals that measure progress toward strategic plans;
- (g) The total cost of carrying out each program or activity; and
- (h) The extent to which the department achieved, exceeded or failed to meet its missions, goals, productivity objectives, service objectives, strategic plans and spending constraints identified in subsections (1) through (6) during the prior year.

Departmental budget estimates shall be prepared in such form as the Controller, after consulting with the Mayor, directs in writing.

*PLANNING AND REPORTING. (SF CHARTER SEC. 8B.123.)*

- (a) Planning and Reporting  
The Public Utilities Commission shall annually hold public hearings to review, update and adopt:
  - (1) A Long-Term Capital Improvement Program, covering projects during the next 10-year period; including cost estimates and schedules.
  - (2) A Long-Range Financial Plan, for a 10-year period, including estimates of operation and maintenance expenses, repair and replacement costs, debt costs and rate increase requirements.
  - (3) A Long-Term Strategic Plan, setting forth strategic goals and objectives and establishing performance standards as appropriate.The Capital Improvement Program and Long-Range Financial Plan shall serve as a basis and supporting documentation for the Commission's capital budget, the issuance of revenue bonds, other forms of indebtedness and execution of governmental loans under this Charter.
- (b) Citizens' Advisory Committee  
The Board of Supervisors, in consultation with the General Manager of the Public Utilities Commission, shall establish by ordinance a Citizens' Advisory Committee to provide recommendations to the General Manager of the Public Utilities Commission, the Public Utilities Commission and the Board of Supervisors.

(Added November 2002)

*WATER AND CLEAN WATER [WASTEWATER] REVENUE BONDS. (SF CHARTER SEC. 8B.124.)*

Notwithstanding, and in addition to, the authority granted under Charter Section 9.107, the Public Utilities Commission is hereby authorized to issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities or combinations of water and clean water facilities under the jurisdiction of the Public Utilities Commission.

Any legislation authorizing the issuance of revenue bonds (except for refunding bonds) under this section shall be subject to the referendum requirements of Section 14.102 of this Charter. The ordinance authorizing the issuance of such revenue bonds shall not become effective until 30 days after its adoption.

Notwithstanding any other provision of this Charter or of any ordinance of the City and County, the Board of Supervisors may take any and all actions necessary to authorize, issue and repay such bonds, including, but not limited to, modifying schedules of rates and charges to provide for the payment and retirement of such bonds, subject to the following conditions:

- (a) Certification by an independent engineer retained by the Public Utilities Commission that:
  - (1) The projects to be financed by the bonds, including the prioritization, cost estimates and scheduling, meet utility standards; and
  - (2) That estimated net revenue after payment of operating and maintenance expenses will be sufficient to meet debt service coverage and other indenture or resolution requirements, including debt service on the bonds to be issued, and estimated repair and replacement costs.
- (b) Certification by the San Francisco Planning Department that facilities under the jurisdiction of the Public Utilities Commission funded with such bonds will comply with applicable requirements of the California Environmental Quality Act.

Except as expressly provided in this Charter, all revenue bonds may be issued and sold in accordance with state law or any procedure provided for by ordinance of the Board of Supervisors.

(Added November 2002)

***RATES. (SF CHARTER SEC. 8B.125.)***

Notwithstanding Charter sections 2.109, 3.100 and 4.102 or any ordinance (including, without limitation, Administrative Code Appendix 39), the Public Utilities Commission shall set rates, fees and other charges in connection with providing the utility services under its jurisdiction, subject to rejection--within 30 days of submission--by resolution of the Board of Supervisors. If the Board of Supervisors fails to act within 30 days the rates shall become effective without further action.

In setting retail rates, fees and charges the Commission shall:

- (a) Establish rates, fees and charges at levels sufficient to improve or maintain financial condition and bond ratings at or above levels equivalent to highly rated utilities of each enterprise under its jurisdiction, meet requirements and covenants under all bond resolutions and indentures, (including, without limitation, increases necessary to pay for the retail water customers' share of the debt service on bonds and operating expenses of any state financing authority such as the Regional Water System Financing Authority), and provide sufficient resources for the continued financial health (including appropriate reserves), operation, maintenance and repair of each enterprise, consistent with good utility practice;
  - (1) Retain an independent rate consultant to conduct rate and cost of service studies for each utility at least every five years;
  - (2) Set retail rates, fees and charges based on the cost of service;
  - (3) Conduct all studies mandated by applicable state and federal laws to consider implementing connection fees for water and clean water facilities servicing new development;
  - (4) Conduct studies of rate-based conservation incentives and/or lifeline rates and similar rate structures to provide assistance to low income users, and take the results of such studies into account when establishing rates, fees and charges, in accordance with applicable state and federal laws;
  - (5) Adopt annually a rolling 5-year forecast of rates, fees and other charges; and
  - (6) Establish a Rate Fairness Board consisting of seven members: the City Administrator or his or her designee; the Controller or his or her designee; the Director of the Mayor's Office of Public Finance or his or her designee; two residential City retail customers, consisting of one appointed by the Mayor and one by the Board of Supervisors; and two City retail business customers, consisting of a large business customer appointed by the Mayor and a small business customer appointed by the Board of Supervisors.

The Rate Fairness Board may:

- i. Review the five-year rate forecast;
- ii. Hold one or more public hearings on annual rate recommendations before the Public Utilities Commission adopts rates;
- iii. Provide a report and recommendations to the Public Utilities Commission on the rate proposal; and
- iv. In connection with periodic rate studies, submit to the Public Utilities Commission rate policy recommendations for the Commission's consideration, including recommendations to reallocate costs among various retail utility customer classifications, subject to any outstanding bond requirements.

These provisions shall be effective January 3, 2003 for the setting of retail rates, fees and charges related to the clean water system. If the voters approve bonds for the Public Utilities Commission's Capital Improvement



Program at the November 5, 2002 election then the provisions of this section shall take effect on July 2, 2006 for the setting of retail rates, fees and charges related to the water system. If the voters do not approve such bonds then this section will take effect on January 3, 2003.

(Added November 2002)

### *CONTRACTING AND PURCHASING. (SF CHARTER SEC. 8B.127.)*

Notwithstanding Charter Section 9.118 or any ordinance, the Public Utilities Commission shall have the sole authority to enter into agreements for the purchase of water; the sale of water to wholesale customers; and agreements necessary to implement Joint Powers Agreements with any wholesale water customer.

In order to promote labor stability and to ensure the Capital Improvement Program is completed expeditiously and efficiently, the Public Utilities Commission is authorized, to the extent legally appropriate, to enter into project labor agreements, with appropriate Building Construction and Trades Councils, covering significant capital projects.

### *FUND BALANCE RESERVE POLICY. (ADOPTED IN 2010 DURING BUDGET PROCESS)*

The SFPUC will prudently manage operations in a manner that achieves and maintains high investment grade credit ratings, provides sufficient capacity to bridge shortfalls in cash flow and covers unanticipated expenditures, while at the same time reducing susceptibility to emergency rate increases due to revenue shortfalls and considering ratepayer impact and fairness. Consistent with this policy and the San Francisco Charter, the SFPUC will adopt budgets and establish rates that provide for adequate ratepayer protection in the form of unreserved, undesignated fund balance reserves for each utility operating fund under the Commission's jurisdiction.

Specifically, for the time period covered in the SFPUC's Charter-mandated, 10-Year Financial Plan, operating and capital plans, budgets and rates will be projected and proposed for adoption such that all bond indenture requirements are met or exceeded and that Operating Fund Balance Reserves, by the end of the 10-Year Financial Plan, meet one or more of the following:

- Total at least 15% annual revenues,
- Total at least 15% of annual expenditures,
- Result in Debt Service Coverage, on an Indenture Basis including fund balance reserves available to pay debt service, of at least 1.25 times.

In the event the fund balance reserves become greater than 25% of operating revenues or operating expenditures or exceed 2.00 times annual debt service coverage at the end of any fiscal year, the excess will be first considered for investment in:

- Rate stabilization reserves or the reduction of customer rates,
- One-time uses, which do not increase recurring operating costs, including the prefunding or coverage of debt service, and/or
- The establishment of or increase in, drought, emergency, litigation and rainy day reserve funds.

To timely track SFPUC progress in meeting the Operating Fund Balance Reserve Policy objectives of the Commission, SFPUC Finance staff will present the measures outlined above as part of the Quarterly Budget Status Report to the Commission. The Operating Fund Balance Reserve Policy measures will also be reported as part of the annual update to the SFPUC's Charter-mandated, 10-Year Financial Plan.

## Debt Policies

### *REVENUE BONDS. (SF CHARTER SEC. 9.107.)*

The Board of Supervisors is hereby authorized to provide for the issuance of revenue bonds. Revenue bonds shall be issued only with the assent of a majority of the voters upon any proposition for the issuance of revenue bonds, except that no voter approval shall be required with respect to revenue bonds:

- (a) Approved by three-fourths of all the Board of Supervisors if the bonds are to finance buildings, fixtures or equipment which are deemed necessary by the Board of Supervisors to comply with an order of a duly constituted state or federal authority having jurisdiction over the subject matter;
  - (1) Approved by the Board of Supervisors prior to January 1, 1977;
  - (2) Approved by the Board of Supervisors if the bonds are to establish a fund for the purpose of financing or refinancing for acquisition, construction or rehabilitation of housing in the City and County;
  - (3) Authorized and issued by the Port Commission for any Port-related purpose and secured solely by Port revenues, or authorized and issued for any Airport-related purpose and secured solely by Airport revenues;
  - (4) Issued for the purposes of assisting private parties and not-for-profit entities in the financing and refinancing of the acquisition, construction, reconstruction or equipping of any improvement for industrial, manufacturing, research and development, commercial and energy uses or other facilities and activities incidental thereto, provided the bonds are not secured or payable from any monies of the City and County or its commissions.
  - (5) Issued for the purpose of the reconstruction or replacement of existing water facilities or electric power facilities or combinations of water and electric power facilities under the jurisdiction of the Public Utilities Commission, when authorized by resolution adopted by a three-fourths affirmative vote of all members of the Board of Supervisors.
  - (6) Approved and authorized by the Board of Supervisors and secured solely by an assessment imposed by the City.
  - (7) Issued to finance or refinance the acquisition, construction, installation, equipping, improvement or rehabilitation of equipment or facilities for renewable energy and energy conservation.

Except as expressly provided in this Charter, all revenue bonds may be issued and sold in accordance with state law or any procedure provided for by ordinance.

(Amended November 2001)

### *REFUNDING BONDS. (SF CHARTER SEC. 9.109. )*

The Board of Supervisors is hereby authorized to provide for the issuance of bonds of the City and County for the purpose of refunding any general obligation or revenue bonds of the City and County then outstanding. No voter approval shall be required for the authorization, issuance and sale of refunding bonds, which are expected to result in net debt service savings to the City and County on a present value basis, calculated as provided by ordinance.

## *WATER AND CLEAN WATER REVENUE BONDS.(SF CHARTER SEC. 8B.124.)*

Notwithstanding, and in addition to, the authority granted under Charter Section 9.107, the Public Utilities Commission is hereby authorized to issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities or combinations of water and clean water facilities under the jurisdiction of the Public Utilities Commission.

Any legislation authorizing the issuance of revenue bonds (except for refunding bonds) under this section shall be subject to the referendum requirements of Section 14.102 of this Charter. The ordinance authorizing the issuance of such revenue bonds shall not become effective until 30 days after its adoption.

Notwithstanding any other provision of this Charter or of any ordinance of the City and County, the Board of Supervisors may take any and all actions necessary to authorize, issue and repay such bonds, including, but not limited to, modifying schedules of rates and charges to provide for the payment and retirement of such bonds, subject to the following conditions:

- (a) Certification by an independent engineer retained by the Public Utilities Commission that:
  - (1) The projects to be financed by the bonds, including the prioritization, cost estimates and scheduling, meet utility standards; and
  - (2) That estimated net revenue after payment of operating and maintenance expenses will be sufficient to meet debt service coverage and other indenture or resolution requirements, including debt service on the bonds to be issued, and estimated repair and replacement costs.
  
- (b) Certification by the San Francisco Planning Department that facilities under the jurisdiction of the Public Utilities Commission funded with such bonds will comply with applicable requirements of the California Environmental Quality Act.

Except as expressly provided in this Charter, all revenue bonds may be issued and sold in accordance with state law or any procedure provided for by ordinance of the Board of Supervisors.

(Added November 2002)

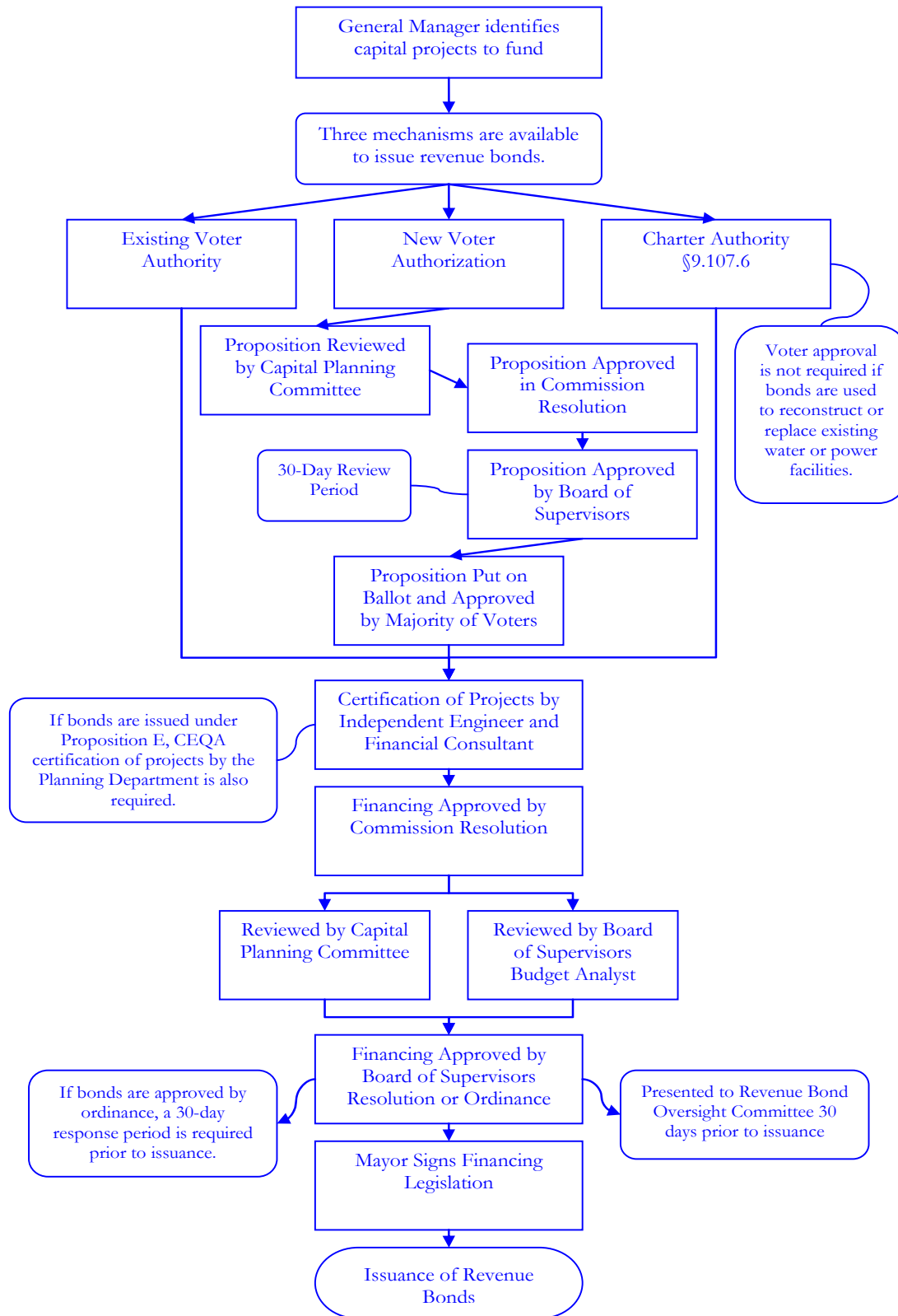
Note: Proposition A, approved by voters in November 2002, authorizes the SFPUC, subject to Board of Supervisors approval, to issue up to \$1.628 billion in revenue bonds or other forms of indebtedness to finance the acquisition and construction of improvements in the City's water system.

### **Indenture Requirements**

- Current SFPUC financing documents require that net revenues plus unappropriated fund balance equal 1.25 times annual debt services. On a current basis, without fund balance, the requirement is that the revenues equal a minimum of 1.00 times annual debt service. From time to time, utility user rates may have to be increased to comply with financing document covenants.
- To issue additional bonds, SFPUC financing documents require an independent certification that debt coverage of 1.25 will be maintained for three years after issuance of additional bonds.

The Commission and Board of Supervisors must approve any additional indebtedness.

## Debt Approval Process





## **Financial Section**

Independent Auditors' Report

Management's Discussion and Analysis

Basic Financial Statements

Report on Internal Control over Financial Reporting

Supplementary Information

**The San Francisco Public Utilities Commission**  
**A Department of the City and County of San Francisco, California**

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**KPMG LLP**  
Suite 1400  
55 Second Street  
San Francisco, CA 94105

## **Independent Auditors' Report**

The Honorable Mayor and Board of Supervisors  
City and County of San Francisco

We have audited the accompanying financial statements of the business-type activities and each major fund of the San Francisco Public Utilities Commission (SFPUC), a department of the City and County of San Francisco, California, (the City), as of and for the year ended June 30, 2010, which collectively comprise the SFPUC's basic financial statements as listed in the table of contents. We have also audited the accompanying financial statements of the business type activities of the SFPUC and two of the major funds (Water and Wastewater) for the year ended June 30, 2009. These financial statements are the responsibility of the SFPUC's management. Our responsibility is to express opinions on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the SFPUC's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinions.

As discussed in note 1, the financial statements of SFPUC are intended to present the financial position, and the changes in financial position and cash flows of only that portion of the City that is attributable to the transactions of the SFPUC. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2010 and 2009, the changes in its financial position, or, where applicable, the cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

In our opinion, the 2010 financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and each major fund of the San Francisco Public Utilities Commission, as of June 30, 2010, and the respective changes in financial position, and where applicable, cash flows thereof for the year then ended in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the 2009 financial statements referred to above present fairly, in all material respects, the respective financial position of the of the business type activities of the SFPUC and two of the major funds (Water and Wastewater) for the year ended June 30, 2009 and the respective changes in financial position, and where applicable, cash flows thereof for the year then ended in conformity with U.S generally accepted accounting principles.



The accompanying financial statements presenting Hetch Hetchy Water and Hetch Hetchy Power as of and for the year ended June 30, 2009 and the 2009 management's discussion and analysis as of and for the year ended June 30, 2009, were not audited by us, and accordingly we do not express and opinion on them.

In accordance with *Government Auditing Standards*, we have also issued our report dated December 21, 2010, on our consideration of the SFPUC's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

The management's discussion and analysis on pages 35 through 76 is not a required part of the basic financial statements but is supplementary information required by U.S. generally accepted accounting principles. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the SFPUC's basic financial statements. The introductory section and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements. The supplementary information included on pages 141 through 143 has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole. The introductory section and statistical section have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

KPMG LLP

December 21, 2010



# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Management's Discussion and Analysis

June 30, 2010 and 2009

(Dollars in thousands, unless otherwise stated)

This section presents management's analysis of the San Francisco Public Utilities Commission's (SFPUC or the Commission) financial condition and activities as of and for the years ended June 30, 2010 and 2009. Management's Discussion and Analysis (MDA) is intended to serve as an introduction to SFPUC's financial statements. This information should be read in conjunction with the audited financial statements that follow this section. All amounts, unless otherwise noted, are expressed in thousands of dollars.

The information in this MDA is presented under the following headings:

- Organization and Business
- Overview of the Financial Statements
- Financial Analysis
- Capital Assets and Debt Administration
- Next Year's Rates
- Request for Information

## Organization and Business

The San Francisco Public Utilities Commission (SFPUC or the Commission) is a department of the City and County of San Francisco (the City) that is responsible for the maintenance, operation, and development of three utility enterprises, Water, Wastewater, and Hetch Hetchy Water and Power (Hetch Hetchy).

### Water Enterprise

As the third largest municipal water agency in California, the Water Enterprise collects, transmits, treats, and distributes high-quality drinking water to a total population of nearly 2.5 million people, including retail customers in the City and 27 wholesale customers located in San Mateo, Santa Clara, and Alameda Counties. The Enterprise delivered approximately 80,273 million gallons in the year ended June 30, 2010. Approximately two-thirds of the water delivered by the Enterprise is to wholesale customers. Retail customers are primarily San Francisco consumers and include residential, commercial, industrial, and governmental users. The Enterprise recovers costs of service through user fees. Wholesale customers include cities, water districts, one private utility, and one non-profit university. Service to these customers is provided pursuant to the new 25-year Water Supply Agreement (WSA) which establishes the basis for determining the costs of wholesale service. The former contract expired June 30, 2009 and the new WSA commenced on July 1, 2009.

### Wastewater Enterprise

Wastewater collects, transmits, treats, and discharges sanitary and storm water flows generated within the City for the protection of public health and environmental safety of the surrounding bay and ocean receiving waters. This includes 993 miles of combined storm and sanitary collection system pipes, sewer mains, transport/storage boxes, other storage structures and tunnels. San Francisco is the only coastal city in California with a combined sewer system that collects both wastewater and storm water in the same network of pipes and provides treatment to remove harmful pollutants before discharging into the San Francisco Bay and Pacific Ocean. In addition, on a

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Management's Discussion and Analysis

June 30, 2010 and 2009

(Dollars in thousands, unless otherwise stated)

contractual basis, certain municipal customers located outside of the City limits are served, including the North San Mateo County Sanitation District No. 3, Bayshore Sanitary District, and the City of Brisbane. Costs of service are recovered through user fees based on the volume and strength of sanitary flow. Approximately 150,000 residential accounts are served, which discharge about 18.5 million units of sanitary flow per year (measured in hundreds of cubic feet, or ccf) and approximately 22,000 non-residential accounts, which discharge about 8.6 million units of sanitary flow per year.

### **Hetch Hetchy Water**

Hetch Hetchy Water endeavors to operate as an effective, reliable water and power supplier, while managing resources in an environmentally sound manner. Hetch Hetchy Water is responsible for the operation, maintenance and improvement of its water and power facilities to a high standard of safety and reliability while meeting regulatory requirements. Hetch Hetchy Water distributes high quality water to SFPUC customers while optimizing generation from the hydropower facilities. It maintains lands and properties consistent with public health and neighborhood concerns.

### **Hetch Hetchy Power**

The core business of Hetch Hetchy Power, as a municipal agency, is to provide adequate and reliable supplies of electric power to meet the electricity needs of the City's customers and to satisfy the municipal loads and agricultural pumping demands of the Modesto and Turlock Irrigation districts consistent with prescribed contractual obligations and Federal law.

Hetch Hetchy Power's portfolio consists of hydroelectric generation, small on-site solar and third-party purchases. Consistent with its commitment to the development of cleaner and greener power, and to address environmental concerns and community objectives, Hetch Hetchy Power continues to evaluate and expand its existing resource base to include additional renewables, distributed generation, demand management and energy efficiency programs.

As part of its mission and core functions, Hetch Hetchy Power aims to provide reliable energy services at reasonable cost to customers, with attention to environmental effects and community concerns.

## **Overview of the Financial Statements**

The Department's financial statements include:

*Statements of Net Assets* present information on the Department's assets and liabilities as of year-end, with the difference between the two reported as net assets. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the Department is improving or deteriorating.

While the *Statements of Net Assets* provide information about the nature and amount of resources and obligations at year-end, the *Statements of Revenues, Expenses, and Changes in Net Assets* present the results of the Department's operations over the course of the fiscal year and information as to how the net assets changed during the year. These statements can be used as an indicator of the extent to which the Department has successfully recovered its costs through user fees and other charges. All changes in net assets are reported during the period in which the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Management's Discussion and Analysis

June 30, 2010 and 2009

(Dollars in thousands, unless otherwise stated)

expenses are reported in these statements from some items that will result in cash flows in future fiscal periods, such as delayed collection of operating revenues and the expenses of employee earned but unused vacation leave.

The *Statements of Cash Flows* present changes in cash and cash equivalents resulting from operational, capital, non-capital, and investing activities. These statements summarize the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt and exclude non-cash accounting measures of depreciation or amortization of assets.

The *Notes to Basic Financial Statements* provide information that is essential to a full understanding of the financial statements that is not displayed on the face of the financial statements.

## **Fund Financial Statements**

The Department has four enterprise funds: Water, Wastewater, Hetch Hetchy Water, and Hetch Hetchy Power.

## **Financial Analysis**

### ***Financial Highlights for Fiscal Year 2010***

#### **Department-wide Business-Type Activities**

- Total assets exceeded total liabilities by \$1,897,390.
- Net assets decreased by \$19,891 or 1.0% during the fiscal year.
- Capital assets, net of accumulated depreciation, increased by \$377,913 or 11.9 % to \$3,547,735.
- During the fiscal year, charges for services, excluding interest and investment income, rental income, other operating and non-operating revenues, increased by \$17,053 or 3.0% to \$579,077.
- Operating expenses, which exclude interest expense and other non-operating expenses, increased by \$68,026 or 13.2% to \$581,869.

#### **Water**

- Total assets of the Enterprise exceeded total liabilities by \$415,684.
- Net assets decreased by \$46,616 or 10.1% during the fiscal year.
- Capital assets, net of accumulated depreciation, increased by \$363,093 or 24.2% to \$1,864,353.
- During the fiscal year, charges for services, excluding interest and investment income, rental income, other operating and non-operating revenues, increased by \$705 or 0.3% to \$248,369.
- Operating expenses, excluding interest expense and other non-operating expenses, increased by \$29,655 or 11.9% to \$277,970.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Management's Discussion and Analysis

June 30, 2010 and 2009

(Dollars in thousands, unless otherwise stated)

### **Wastewater**

- Total assets of the Enterprise exceeded total liabilities by \$1,025,336.
- Net assets increased by \$14,732 or 1.5% during the fiscal year.
- Capital assets, net of accumulated depreciation, increased by \$2,689 or 0.2% to \$1,397,612.
- Operating revenues, excluding interest and investment income and other non-operating revenues, increased by \$1,189 or 0.6% to \$209,843.
- Operating expenses, excluding interest and non-operating expenses, increased by \$16,212 or 9.6% to \$185,512.

### **Hetch Hetchy Water**

- Total assets of Hetch Hetchy Water exceeded total liabilities by \$113,149. Net assets decreased by \$138 or 0.1% during the fiscal year. Capital assets, net of accumulated depreciation, increased by \$3,328 or 4.0% to \$86,634.
- Charges for services representing water sales, which excludes interest and investment income, rental income and other non-operating revenues, increased by \$6,641 or 27.1 % to \$31,109. Operating expenses decreased by \$434 or 1.3% to \$32,053 mainly due to a decrease of \$3,432 in non-capitalized project expenses, offset by increases of \$2,030 in taxes, licenses, permits and other general and administrative expenses, \$574 in contractual services, \$153 in depreciation, \$140 in personal services, and \$101 in materials and supplies and services provided by other departments.

### **Hetch Hetchy Power**

- Total assets of Hetch Hetchy Power exceeded total liabilities by \$343,221. Net assets increased by \$12,131 or 3.7% during the fiscal year. Capital assets, net of accumulated depreciation, increased by \$8,803 or 4.6% to \$199,136.
- Charges for services representing electricity sales, which excludes interest and investment income, rental income and other non-operating revenues, increased by \$6,676 or 7.4% to \$97,236 mainly due to higher electricity generation and sales. Operating expenses, which exclude other non-operating expenses, increased by \$22,593 or 35.4% to \$86,334, largely due to higher non-capitalized project expenses, capital project write-offs, and a one-time \$10,194 of combustion turbine asset write-off as a result of settlement.

### ***Financial Highlights for Fiscal Year 2009***

#### **Department-wide Business-Type Activities**

- Total assets exceeded total liabilities by \$1,917,281.
- Net assets increased by \$50,879 or 2.7% during the fiscal year.

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Management's Discussion and Analysis

June 30, 2010 and 2009

(Dollars in thousands, unless otherwise stated)

- Capital assets, net of accumulated depreciation, increased by \$281,591 or 9.7 % to \$3,169,822.
- During the fiscal year, charges for services, excluding interest and investment income, rental income, other operating and non-operating revenues, increased by \$37,765 or 7.2% to \$562,024.
- Operating expenses, which exclude interest expense and other non-operating expenses, increased by \$16,110 or 3.2% to \$513,843.

#### **Water**

- Total assets exceeded total liabilities by \$462,300.
- Net assets increased by \$967 or 0.2% during the fiscal year.
- Capital assets, net of accumulated depreciation, increased by \$233,266 or 18.4 % to \$1,501,260.
- During the fiscal year, charges for services, excluding interest and investment income, rental income, other operating and non-operating revenues, increased by \$30,845 or 14.2% to \$247,664.
- Operating expenses, which exclude interest expense and other non-operating expenses, increased by \$25,263 or 11.3% to \$248,315.

#### **Wastewater**

- Total assets exceeded total liabilities by \$1,010,604.
- Net assets increased by \$26,691 or 2.7% during the fiscal year.
- Capital assets, net of accumulated depreciation, increased by \$34,062 or 2.5% to \$1,394,923.
- Operating revenues, excluding interest and investment income and other non-operating revenues, increased by \$6,105 or 3.0% to \$208,654.
- Operating expenses, excluding interest and non-operating expenses, increased by \$4,055 or 2.5% to \$169,300.

#### **Hetch Hetchy Water**

- Total assets of Hetch Hetchy Water exceeded total liabilities by \$113,287. Net assets decreased by \$7,042 or 5.9% during the fiscal year. Capital assets, net of accumulated depreciation, decreased by \$9,168 or 9.9% to \$83,306.
- Charges for services representing water sales, excluding interest and investment income, rental income and other non-operating revenues, increased by \$2,086 or 9.3% to \$24,468. Operating expenses increased by \$5,874 or 22.1% to \$32,487.

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Management's Discussion and Analysis

June 30, 2010 and 2009

(Dollars in thousands, unless otherwise stated)

### **Hetch Hetchy Power**

- Total assets of Hetch Hetchy Power exceeded total liabilities by \$331,090. Net assets increased by \$30,263 or 10.1% during the fiscal year. Capital assets, net of accumulated depreciation, increased by \$23,431 or 14.0% to \$190,333.
- Charges for services representing electricity sales, excluding interest and investment income, rental income and other non-operating revenues, decreased by \$6,688 or 6.9% to \$90,560 mainly due to decrease in electricity sales. Operating expenses, excluding other non-operating expenses, decreased by \$19,082 or 23.0% to \$63,741, largely due to decrease in purchased power and related costs.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Management's Discussion and Analysis

June 30, 2010 and 2009

(Dollars in thousands, unless otherwise stated)

## ***Financial Position***

**Table 1**  
**Business-Type Activities**  
**Comparative Condensed Net Assets**

June 30, 2010, 2009, and 2008

	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2010 - 2009 change</u>	<u>2009 - 2008 change</u>
Current and other assets	\$ 1,656,708	624,517	595,007	1,032,191	29,510
Capital assets, net of accumulated depreciation	3,547,735	3,169,822	2,888,231	377,913	281,591
Total assets	<u>5,204,443</u>	<u>3,794,339</u>	<u>3,483,238</u>	<u>1,410,104</u>	<u>311,101</u>
Revenue and capital appreciation bonds	2,757,367	1,234,752	1,289,263	1,522,615	(54,511)
State revolving fund loans	61,140	75,339	89,383	(14,199)	(14,044)
Certificates of participation	171,562	—	—	171,562	—
Commercial paper	—	329,600	50,000	(329,600)	279,600
Other liabilities	316,984	237,367	188,190	79,617	49,177
Total liabilities	<u>3,307,053</u>	<u>1,877,058</u>	<u>1,616,836</u>	<u>1,429,995</u>	<u>260,222</u>
Net assets:					
Invested in capital assets, net of related debt	1,572,805	1,617,849	1,524,069	(45,044)	93,780
Restricted for debt service	13,550	13,301	28,750	249	(15,449)
Restricted for capital projects	26,669	15,864	214	10,805	15,650
Unrestricted	284,366	270,267	313,369	14,099	(43,102)
Total net assets	<u>\$ 1,897,390</u>	<u>1,917,281</u>	<u>1,866,402</u>	<u>(19,891)</u>	<u>50,879</u>

## ***Department-wide Business-Type Activities***

A detailed discussion follows for each proprietary fund.

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Management's Discussion and Analysis

June 30, 2010 and 2009

(Dollars in thousands, unless otherwise stated)

**Table 1A**  
**Proprietary Fund - Water**  
**Comparative Condensed Net Assets**  
 June 30, 2010, 2009, and 2008

	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2010 – 2009</u> <u>change</u>	<u>2009 – 2008</u> <u>change</u>
Current and other assets	\$ 1,136,966	269,975	259,432	866,991	10,543
Capital assets, net of accumulated depreciation	1,864,353	1,501,260	1,267,994	363,093	233,266
Total assets	<u>3,001,319</u>	<u>1,771,235</u>	<u>1,527,426</u>	<u>1,230,084</u>	<u>243,809</u>
Revenue and capital appreciation bonds	2,249,179	936,506	961,790	1,312,673	(25,284)
Certificates of participation	122,496	—	—	122,496	—
Commercial paper	—	229,600	—	(229,600)	229,600
Other liabilities	213,960	142,829	104,303	71,131	38,526
Total liabilities	<u>2,585,635</u>	<u>1,308,935</u>	<u>1,066,093</u>	<u>1,276,700</u>	<u>242,842</u>
Net assets:					
Invested in capital assets, net of related debt	319,581	372,421	324,091	(52,840)	48,330
Restricted for debt service	12,073	11,941	27,434	132	(15,493)
Restricted for capital projects	3,868	841	214	3,027	627
Unrestricted	80,162	77,097	109,594	3,065	(32,497)
Total net assets	<u>\$ 415,684</u>	<u>462,300</u>	<u>461,333</u>	<u>(46,616)</u>	<u>967</u>

### ***Water Net Assets, Fiscal Year 2010***

For the year ended June 30, 2010, the Enterprise's assets exceeded liabilities by \$415,684, representing a decrease of \$46,616 or 10.1% from the prior year (see Table 1A). The decline in net assets was the result of an additional \$1,230,084 in total assets offset by a \$1,276,700 increase in total liabilities. Investment in capital assets, net of related debt, decreased from prior year's \$372,421 to \$319,581 or 14.2% due to the depreciation and repayment of debt.

Current and other assets primarily comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and inventory. This also includes a receivable which represents cumulative amounts due from the wholesale customers to match revenues with the Enterprise's costs of providing service (the "Balancing Account") in accordance with the provisions set forth in the Water Supply Agreement effective July 1, 2009. Balances due are recovered in future year rates.

During the fiscal year 2010, current and other assets increased by \$866,991 or 321.1%, as a result of \$853,084 increase in restricted cash and investments, and restricted interest receivable from planned bond issuances during the year. The bond issuance costs increased by \$10,537. Unrestricted cash with City Treasury was used to pay down



# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Management's Discussion and Analysis

June 30, 2010 and 2009

(Dollars in thousands, unless otherwise stated)

current contractual obligations and other liabilities, thereby resulting in a \$17,455 decline in unrestricted cash balance. Inventories decreased by \$58, and total receivables increased by \$20,830, primarily resulting from \$10,157 net increase in unrestricted interest receivable, due from other funds and advances for the SFPUC headquarters building, \$3,491 increase in receivables for charges for services mainly from City retail ratepayers, net of the current year provision for uncollectible accounts, in part as a result of an average rate adjustment of 15% that went into effect at the beginning of the fiscal year, \$661 receivable increase in due from other governmental agencies from the High Efficiency Toilet Grant, and increase of \$6,521 in receivable from the wholesale customers consistent with the new Water Supply Agreement terms. Wholesale customers are billed based on the estimated costs of service and usage, which are adjusted to actual costs and usage at year end. As of June 30, 2010, the ending balance was \$34,092 owed to the Enterprise. Refer to Note 10, Wholesale Balancing Account, for additional details.

Total liabilities increased by \$1,276,700 or 97.5% primarily due to the issuance of \$1,435,169 in revenue bonds and certificates of participation offset by principal payments, \$34,004 in payables from restricted assets from the Water System Improvement Program and the 525 Golden Gate Avenue Headquarters Project, and \$8,651 in interest payable from new bonds issued, offset by a refunding of \$229,600 in commercial paper through the issuance of new bonds. Other factors contributing to the increase in total liabilities are \$20,099 in damage and claims liability due to updated liability reserve estimates related to pending Federal and State cases regarding breach of contract claims by Mitchell Engineering (see Subsequent Events, note 15(d)), \$14,631 in other post-employment benefits obligation based on actuarial estimates, \$878 in accrued payroll and other liabilities, \$373 in accrued vacation and sick leave due to the wellness program, and \$288 in arbitrage rebate payable due to higher yield, offset by decreases of \$4,617 in accounts payable of operating funds, as project spending this year was more funded with restricted bond funds than with operating funds in comparison to prior fiscal year, \$2,653 in pollution remediation obligation due to liability reduction in the Baylands Peninsula Sportsman Club project as a result of completion of remediation process, and \$523 in workers' compensation.

### ***Water Net Assets, Fiscal Year 2009***

For the year ended June 30, 2009, the Enterprise's assets exceeded liabilities by \$462,300, representing an increase of \$967 or 0.2% from the prior year (see Table 1A). The growth in net assets is the result of an additional \$243,809 in total assets offset by a \$242,842 increase in total liabilities. Investment in capital assets, net of related debts, represents the largest portion of the Enterprise's net assets (\$372,421 or 80.6%). The increase of \$48,330 represents the excess of capital asset book values over debt-financed construction and acquisition costs. Unrestricted net assets declined \$32,497 due to higher planned expenses than revenue growth.

Current and other assets is primarily comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and inventory. This section also includes a receivable which represents cumulative amounts due from the Suburban Purchasers to match revenues with the Enterprise's costs of providing service (the "Balancing Account") in accordance with the provisions set forth in the Master Water Sales Agreement which expired on June 30, 2009.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Management's Discussion and Analysis

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(Dollars in thousands, unless otherwise stated)

During the fiscal year 2009, current and other assets increased by \$10,543 or 4.1%, as a result of an \$11,107 increase in current assets, a \$234 decrease in restricted cash and investments due to declining interest rates and lower cash balances and a \$330 decrease in bond issuance costs. Current assets increased mainly due to the increase in accounts receivable from the wholesale customers under the Suburban Water Rate Agreement. Wholesale customers are billed based on the estimated costs of service and usage, which are adjusted to actual costs and usage at year end. The estimates billed for fiscal year 2008 and 2009 were less than actual, resulting in \$13,701 additional due at June 30, 2009. There was also an increase of \$4,608 in receivable balances for charges for services mainly from City retail ratepayers, net of the current year provision for uncollectible accounts, as a result of an average rate adjustment of 15% that went into effect at the beginning of the fiscal year. Part of the receivable increase was \$205 in receivables resulting from an established memorandum of understanding between the Enterprise and the San Francisco Zoological Society for water consumption at its park facility. The increase of \$278 due from other governmental agencies was attributable to an increase in grants receivable. In addition, there was a net increase in other current assets including interest, due from other funds, advances, and inventory of \$247. Cash balances, however, declined by \$7,727 due to a decrease in interest rates and related earnings, and increases in operating expenses.

Total liabilities increased by \$242,842 or 22.8% primarily due to the issuance of \$229,600 in commercial paper. Excluding the change in commercial paper, other current liabilities increased by \$19,956 due to increases in accounts payable of \$6,384 related to large capital projects such as the 525 Golden Gate Avenue Headquarters Project of \$2,600, the SCADA System of \$950, the Noe Valley Trans Line of \$589, and the Ripley Control Distribution Division of \$419. In addition, current liabilities increased by \$13,281 in restricted assets, largely related to increases in payables for the Water System Improvement Program. Long-term liabilities decreased by \$6,714 due to scheduled principal payments on revenue bonds outstanding of \$26,369, decreases in damage and claims liability of \$1,117 and pollution remediation obligation of \$120 related to payment of pollution remediation costs, offset by increases in the liability for other post-employment benefits (OPEB) of \$15,919, arbitrage rebate payable of \$4,265, workers' compensation of \$443, and accrued vacation and sick leave of \$265.

Restricted cash and investments with and outside City Treasury declined by \$234 at the end of the fiscal year 2009, due primarily to declining interest rates and lower cash balances held by City Treasury. Additionally, unrestricted cash with City Treasury was used to pay down current contractual obligations and other liabilities, thereby resulting in \$7,727 decline in unrestricted cash balance.

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Management's Discussion and Analysis

June 30, 2010 and 2009

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**Table 1B**  
**Proprietary Fund - Wastewater**  
**Comparative Condensed Net Assets**  
 June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010-2009 change</b>	<b>2009-2008 change</b>
Current and other assets	\$ 287,272	139,783	134,739	147,489	5,044
Capital assets, net of accumulated depreciation	1,397,612	1,394,923	1,360,861	2,689	34,062
Total assets	1,684,884	1,534,706	1,495,600	150,178	39,106
Revenue bonds	502,878	292,529	327,473	210,349	(34,944)
State revolving fund loans	61,140	75,339	89,101	(14,199)	(13,762)
Certificates of participation	32,390	—	—	32,390	—
Commercial paper	—	100,000	50,000	(100,000)	50,000
Other liabilities	63,140	56,234	45,113	6,906	11,121
Total liabilities	659,548	524,102	511,687	135,446	12,415
Net assets:					
Invested in capital assets, net of related debt	970,526	971,789	940,602	(1,263)	31,187
Restricted for debt service	1,477	1,360	1,316	117	44
Restricted for capital projects	22,801	15,023	—	7,778	15,023
Unrestricted	30,532	22,432	41,995	8,100	(19,563)
Total net assets	\$ 1,025,336	1,010,604	983,913	14,732	26,691

### ***Wastewater Net Assets, Fiscal Year 2010***

For the year ended June 30, 2010, the Enterprise's total net assets increased by \$14,732 or 1.5% as a result of increases of \$8,100 in unrestricted net assets, \$7,778 in restricted for capital projects and \$117 in restricted for debt service, offset by a decrease of \$1,263 in invested in capital assets, net of related debt (see Table 1B).

Current and other assets increased by \$147,489 or 105.5%. The increases included \$131,779 in restricted assets of cash and investments from bond issuance, \$13,018 in unrestricted cash and investments, \$2,670 in bond issuance costs as a result of new bonds issued, and \$589 in charges for services receivable. The increases were offset by decreases of \$340 in inventory, \$138 in interest receivables, and \$89 in restricted interest and miscellaneous receivables.

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Capital assets, net of accumulated depreciation, increased by \$2,689 or 0.2%, reflecting an increase in construction activities. The largest portion of the Enterprise's net assets (\$970,526 or 94.7%) represents invested in capital assets, net of related debt.

Total liabilities increased by \$135,446 or 25.8% during the year. The increase in liabilities was mainly due to new debt issuances of \$7,197 in 2009C certificates of participation (COPs), \$24,458 in 2009D COPs, \$47,050 in 2010A revenue bonds, \$192,515 in 2010B revenue bonds, and \$7,996 in bond premiums. These increases were offset by repayments of \$37,130 in revenue bonds, \$14,199 in State revolving fund loans, and \$100,000 in commercial paper. Other increases in liabilities were: \$5,787 in interfund payable to Water Enterprise for the 525 Golden Gate headquarters project, \$4,665 in other post-employment benefits obligation, \$1,727 in amortization of refunding loss, \$958 in deferred revenue and lien payable, \$749 in estimated claims due primarily to increase liability projection in one pending case and subsequent update from actuarial estimates, \$497 in interest payable, \$258 in payroll and accrued vacation and sick leave, and \$256 in interfund payable to Hetch Hetchy Water and Power. These increases were offset by decreases of \$3,979 in accounts payable, \$2,018 in restricted liabilities related to bond-funded capital projects, \$1,074 in amortization of premium, and \$267 in workers' compensation.

#### ***Wastewater Net Assets, Fiscal Year 2009***

For the year ended June 30, 2009, the Enterprise's total net assets increased by \$26,691 or 2.7% as a result of increases of \$31,187 in invested in capital assets, net of related debt, \$15,023 in restricted for capital projects, and \$44 in restricted for debt service, offset by a decrease of \$19,563 in unrestricted net assets (see Table 1B).

Current and other assets increased by \$5,044 or 3.7%. The increases include \$3,586 addition to inventory, \$8,642 in restricted assets – cash and investments and \$409 in receivables primarily from the San Francisco Zoological Society. The increases were offset by decreases of \$205 in miscellaneous receivables and \$7,388 in cash and investments as a result of reduction in accounts payable outstanding balance from prior year.

Capital assets, net of accumulated depreciation, increased by \$34,062 or 2.5%, reflecting an increase in construction activities. The largest portion of the Enterprise's net assets (\$971,789 or 96.2%) represents invested in capital assets, net of related debt.

Total liabilities increased by \$12,415 or 2.4% during the year. The increase in liabilities was due to \$50,000 in commercial paper issuance, increases in interfund payable to Hetch Hetchy Water and Power of \$556, refund payable to Bayshore Sanitary District of \$407, pollution remediation obligation of \$375, accounts payable and payroll related liabilities of \$3,459, damage and claims liability of \$1,316, and other post-employment benefits obligation of \$5,729. These increases were offset by repayments of revenue bonds of \$35,665 and State revolving fund loans of \$13,762.

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**Table 1C - A**  
**Proprietary Fund - Hetch Hetchy Water**  
**Comparative Condensed Net Assets**  
 June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
Current and other assets	\$ 34,512	36,530	32,270	(2,018)	4,260
Capital assets, net of accumulated depreciation	86,634	83,306	92,474	3,328	(9,168)
Total assets	121,146	119,836	124,744	1,310	(4,908)
Current liabilities	4,696	4,155	2,853	541	1,302
Long-term liabilities	3,301	2,394	1,562	907	832
Total liabilities	7,997	6,549	4,415	1,448	2,134
Net assets:					
Invested in capital assets, net of related debt	86,634	83,306	92,474	3,328	(9,168)
Unrestricted	26,515	29,981	27,855	(3,466)	2,126
Total net assets	\$ 113,149	113,287	120,329	(138)	(7,042)

**Table 1C - B**  
**Proprietary Fund - Hetch Hetchy Power**  
**Comparative Condensed Net Assets**  
 June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
Current and other assets	\$ 197,958	178,229	168,566	19,729	9,663
Capital assets, net of accumulated depreciation	199,136	190,333	166,902	8,803	23,431
Total assets	397,094	368,562	335,468	28,532	33,094
Current liabilities	23,279	18,726	19,356	4,553	(630)
Long-term liabilities	30,594	18,746	15,285	11,848	3,461
Total liabilities	53,873	37,472	34,641	16,401	2,831
Net assets:					
Invested in capital assets, net of related debt	196,064	190,333	166,902	5,731	23,431
Unrestricted	147,157	140,757	133,925	6,400	6,832
Total net assets	\$ 343,221	331,090	300,827	12,131	30,263

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#### ***Hetch Hetchy Water Net Assets, Fiscal Year 2010***

Hetch Hetchy Water's net assets decreased by \$138 or 0.1% resulting from an increase in total assets of \$1,310 and an increase in total liabilities of \$1,448 (see Table 1C-A). Contributing to the increase in total assets was increases of \$3,328 of capital assets and \$169 in charges for services receivables and inventories, offset by decreases of \$1,737 in unrestricted cash and investment, and \$450 in interest receivables and other receivables resulting from decrease in investment earnings. The increase in total liabilities was mainly due to the increase of \$851 in other post-employment benefits obligation based on actuarial estimates, \$378 in accounts payable related to various project activities, \$112 in payroll related liabilities mainly attributable to higher required contribution to retirement and health care costs, and \$107 in damage and claim liability. Hetch Hetchy Water's investment in capital assets, net of related debt, was \$86,634 or 76.6% of the total net assets.

#### ***Hetch Hetchy Power Net Assets, Fiscal Year 2010***

Hetch Hetchy Power's net assets increased by \$12,131 or 3.7% due to an increase of \$28,532 in total assets, partially offset by an increase of \$16,401 in total liabilities (see Table 1C-B). Hetch Hetchy Power's total asset increases were primarily due to increases of \$8,803 in capital assets, \$5,487 in unrestricted cash and investments, \$12,626 in restricted cash and investments related to the issuance of the COPs for the new 525 Golden Gate Avenue Headquarters Project, \$4,733 in receivables and other assets. These increases were offset by decreases of \$1,701 in interest receivables due to lower investment earnings, \$828 in deferred charges and \$588 in due from other City departments and governments. Increases in Hetch Hetchy Power's total liabilities were due to the issuance of \$16,676 in COPs, increase in accounts payable and liabilities of \$2,297, other post-employment benefits obligation of \$1,822 based on actuarial estimates, and an interfund payable due to the Water Enterprise of \$4,560 for the 525 Golden Gate Avenue Headquarters Project costs incurred through fiscal year-end. These increases were offset by decreases in damage claim liabilities of \$8,547 due primarily to settlement of two lawsuits filed by the United States of America on behalf of the U.S. Forest Service related to fires that resulted due to proximity of power lines, and revenue bonds of \$407. Hetch Hetchy Power's investment in capital assets, net of related debt, was \$196,064 or 57.1% of the total net assets.

#### ***Hetch Hetchy Water Net Assets, Fiscal Year 2009***

Hetch Hetchy Water's net assets decreased by \$7,042 or 5.9% resulting from a decrease in total assets of \$4,908 and an increase in total liabilities of \$2,134 (See Table 1C-A). Contributing to the decrease in total assets was a decrease of \$9,168 in investment in capital assets, net of related debt and increase of \$2,126 in unrestricted net assets. Current assets increased by \$4,260 or 13.2% mainly due to increases in unrestricted cash of \$4,213 resulting from net cash provided by operating activities. Total liabilities increased by \$2,134 or 48.3% largely due to increase of \$1,189 in accounts and vouchers payable related to operating spending activities, \$811 in other post-employment benefits obligation based on actuarial study where the annual required contribution exceeded the contribution made, \$194 in accrued payroll, vacation and sick leave, as well as workers' compensation, offset by a decrease of \$60 in deposits, advances and other liabilities due to the allocation of gas settlement proceeds to City departments.

#### ***Hetch Hetchy Power Net Assets, Fiscal Year 2009***

Total net assets increased by \$30,263 or 10.1% during the year (see Table 1C-B). Contributing to this net increase was an addition of \$33,094 in total assets offset by an increase in total liabilities of \$2,831. Current assets increased by

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\$3,224 or 2.1% mainly due to increases in accounts receivable of \$1,732 or 18.8%, primarily related to sales to the Modesto Irrigation District, deferred charges and other assets of \$1,358 or 64.1% due to increased energy banked with PG&E at fiscal year-end, \$215 or 195.5% in current portion due from other governmental agencies (Wastewater Enterprise and the Port of San Francisco for lighting retrofit and other energy conservation projects), unrestricted cash of \$52 from net cash provided by operating activities, and other current assets of \$1, offset by a decrease in current loan receivable of \$134 or 100%. Non-current assets increased by \$29,870 or 16.3% mainly due to increased capital assets of \$23,431, restricted cash by \$6,091 of proceeds from Clean Renewable Energy Bonds (CREBs) issued in November 2008, \$496 in interfund receivable from other governmental agencies, and \$40 of bond issuance costs. These increases are offset by a \$188 decrease in loan receivable due to repayments received and the expiration of the memorandum of understanding between Hetch Hetchy and the San Francisco Housing Authority.

Total liabilities increased by \$2,831 or 8.2% primarily due to increases of \$5,717 in CREBs issued in November 2008, of which \$422 relates to the short-term principal obligation, other post-employment benefits obligation of \$2,265 based on actuarial study where the annual required contribution exceeded the contribution made, \$938 or 8.7% in accounts payable due to higher expenditures compared to prior year, and other liabilities of accrued payroll, vacation and sick leave, and workers compensation increased by \$728 or 17.7%. These increases are offset by decreases in damage and claim liability of \$4,990 or 32.6%, due to settlement of two lawsuits filed by the U.S. Forest Service related to fires in proximity to Hetch Hetchy power lines, \$1,545 or 69.6% in deposits, advances and other liabilities mainly due to the allocation of gas settlement proceeds to City departments, and \$282 or 100% in loans payable as the California Energy Commission's loans were retired during the fiscal year.

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### *Results of Operations*

**Table 2**  
**Business-Type Activities**  
**Comparative Condensed Activities**

Years ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
<b>Revenues:</b>					
Charges for services	\$ 579,077	562,024	524,259	17,053	37,765
Rents and concessions	8,829	9,645	9,870	(816)	(225)
Other operating revenues	15,745	18,040	22,491	(2,295)	(4,451)
Interest and investment income	14,617	13,240	22,975	1,377	(9,735)
Other non-operating revenues	16,582	10,929	40,862	5,653	(29,933)
<b>Total revenues</b>	<b>634,850</b>	<b>613,878</b>	<b>620,457</b>	<b>20,972</b>	<b>(6,579)</b>
<b>Expenses:</b>					
Operating expenses	581,869	513,843	497,733	68,026	16,110
Interest expense	63,885	44,524	47,217	19,361	(2,693)
Non-operating expenses	7,094	3,188	1,100	3,906	2,088
<b>Total expenses</b>	<b>652,848</b>	<b>561,555</b>	<b>546,050</b>	<b>91,293</b>	<b>15,505</b>
Income (loss) before special item	(17,998)	52,323	74,407	(70,321)	(22,084)
<b>Special item:</b>					
Impairment loss	—	—	(41,224)	—	41,224
Income (loss) before transfers	(17,998)	52,323	33,183	(70,321)	19,140
Transfers to City and County of San Francisco	(1,893)	(1,444)	(450)	(449)	(994)
Changes in net assets	(19,891)	50,879	32,733	(70,770)	18,146
Net assets at beginning of year	1,917,281	1,866,402	1,833,669	50,879	32,733
Net assets at end of year	\$ 1,897,390	1,917,281	1,866,402	(19,891)	50,879



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## ***Department-wide Business-Type Activities***

A detailed discussion follows for each proprietary fund.

**Table 2A**  
**Proprietary Fund - Water**  
**Comparative Condensed Activities**  
Years ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
Revenues:					
Charges for services	\$ 248,369	247,664	216,819	705	30,845
Rents and concessions	8,584	9,399	9,645	(815)	(246)
Other operating revenues	8,265	8,718	7,752	(453)	966
Interest and investment income	9,823	7,088	12,456	2,735	(5,368)
Other non-operating revenues	5,851	7,202	29,681	(1,351)	(22,479)
Total revenues	<u>280,892</u>	<u>280,071</u>	<u>276,353</u>	<u>821</u>	<u>3,718</u>
Expenses:					
Operating expenses	277,970	248,315	223,052	29,655	25,263
Interest expense	47,272	28,847	29,750	18,425	(903)
Non-operating expenses	1,773	799	792	974	7
Total expenses	<u>327,015</u>	<u>277,961</u>	<u>253,594</u>	<u>49,054</u>	<u>24,367</u>
Income (loss) before transfers	(46,123)	2,110	22,759	(48,233)	(20,649)
Transfers to City and County of San Francisco	(493)	(1,143)	—	650	(1,143)
Changes in net assets	(46,616)	967	22,759	(47,583)	(21,792)
Net assets at beginning of year	<u>462,300</u>	<u>461,333</u>	<u>438,574</u>	<u>967</u>	<u>22,759</u>
Net assets at end of year	<u>\$ 415,684</u>	<u>462,300</u>	<u>461,333</u>	<u>(46,616)</u>	<u>967</u>

## ***Water Results of Operations, Fiscal Year 2010***

The Enterprise's total revenues for the year of \$280,892 represented an increase of \$821 or 0.3% compared to the prior year (see Table 2A). Charges for services increased by \$705 or 0.3%, interest and investment income increased by \$2,735, offset by decreases of \$1,351 in other non-operating revenues, \$815 in rents and concessions, and \$453 in other operating revenues.

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Revenues from the sale of water to retail customers increased \$3,463 or 3.2% largely attributable to an average 15% increase in retail rates less partially offsetting reduction in consumption, in part due to successful conservation campaign, the economy and weather patterns. There was also a wholesale rate increase of 15.7% that was partially offset by a reduction of 8.9% in consumption due to conservation and economic downturn. The wholesale rates are adopted annually to recover costs. Additionally, sales to suburban non-resale customers decreased by \$1,460, while water sales to municipal customers increased by \$274 based on consumption. The Balancing Account due from wholesale customers increased \$6,521 from the prior year, based on the difference between revenues billed and costs of service. Interest and investment income increased by \$2,735 or 38.6% as a result of higher cash balance from the issuance of new revenue bonds and certificates of participation. Other non-operating revenues decreased by \$1,351 or 18.8% primarily due to the \$2,544 gain in the prior year from the sale of surplus land.

The Enterprise's total expenses increased by \$49,054 or 17.6% to \$327,015 over prior year (see Table 2A), due to increases of \$29,655 in operating expenses, \$18,425 in interest expense, and \$974 in non-operating expenses primarily attributable to the Water Conservation Rebate Program. Increases in operating expenses were due to increases of \$23,026 in judgments & claims including \$6,736 paid in fiscal year 2010 and \$20,099 of accrual based on updated liability reserve estimates including the pending Federal and State cases regarding breach of contract claims, \$7,471 in services provided by other departments related to Hetch Hetchy water assessment fees and increased billed work orders from City Attorney's Office, \$3,471 in depreciation for additional capital assets, \$1,309 in personal services due to decreases of \$385 in salaries and \$1,694 in retirement and health care costs due to higher required contributions, and \$77 in materials and supplies for various maintenance projects. Increase in interest expense was mainly attributable to an increase of \$1,312,415 in revenue bonds. These increases were offset by decreases of \$4,984 in other operating expenses, \$532 in contractual services from building and structure maintenance, and \$92 in bad debt expense resulting from reclassification of bad debt as a direct write-off of charges for services. Decreases in other operating expenses were mainly due to decreases in non-capitalized project expenses and capital project write-offs and decrease in indirect cost allocation paid to the General Fund (see note 13).

#### ***Water Results of Operations, Fiscal Year 2009***

The Enterprise's total revenues for the year of \$280,071 represented an increase of \$3,718 or 1.3% compared to the prior year (see Table 2A). Charges for services increased by \$30,845 or 14.2%, other operating revenue increased by \$966, offset by decreases of \$22,479 in non-operating revenues, \$5,368 in interest and investment income, and \$246 in rents and concessions.

Revenues from the sale of water to retail customers increased \$14,564 or 15.6% largely attributable to an average 15.0% increase in retail rates and a slight increase in consumption. Revenues from the sale of water to wholesale or related customers increased by \$15,905 or 13.7%, as revenue collection for wholesale customers increased to \$131,831 from \$115,926 over the prior year. Water sales to suburban non-resale customers increased by \$385, and water sales to municipal customers decreased by \$9. The Balancing Account due from suburban customers increased \$13,701 from the prior year, based on the difference between revenues billed and costs of service. Interest and investment income decreased by \$5,368 or 43.1% as a result of lower average daily cash balances and lower interest rates. Other non-operating revenue decreased by \$22,479 or 92.5% primarily due to the receipt of \$24,335 from the sale of surplus land in the prior year.

The Enterprise's total expenses increased by \$24,367 or 9.6% to \$277,961 over prior year (see Table 2A), due to increases of \$25,263 in operating expenses, \$7 in non-operating expenses and decrease of \$903 in interest expense.

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The change in operating expenses was mainly due to an increase of \$13,727 in other operating expenses such as non-capitalized projects expenses, capital project write-offs, indirect cost reimbursement to the City's general fund, and environmental remediation. Other increases were due to \$5,405 in services provided by other departments related to Hetch Hetchy water assessment fees and fees paid to the City Attorney, \$4,636 in personal services, due to an increase in work hours in fiscal year 2009 which resulted in a \$2,500 increase in salaries and an increase in health care costs of \$1,400 in fiscal year 2009 compared to fiscal year 2008, \$3,142 in depreciation, \$2,327 in contractual services, \$1,165 in materials and supplies, and \$88 in bad debt expense, offset by a decrease of \$5,227 in general and administrative expenses mainly due to lower judgment and claims. The change in non-operating expenses represents larger investments in various community based organizations (CBOs) of \$299 in support of local water conservation and sustainability programs and interest expense from amortized refunding losses relating to the early retirement of bonds issued in 2002 and 2006.

**Table 2B**  
**Proprietary Fund - Wastewater**  
**Comparative Condensed Activities**  
 Years ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010-2009 change</b>	<b>2009-2008 change</b>
<b>Revenues:</b>					
Charges for services	\$ 202,363	199,332	187,810	3,031	11,522
Other operating revenues	7,480	9,322	14,739	(1,842)	(5,417)
Interest and investment income	2,056	1,992	4,099	64	(2,107)
Other non-operating revenues	4,236	1,022	885	3,214	137
Total revenues	<u>216,135</u>	<u>211,668</u>	<u>207,533</u>	<u>4,467</u>	<u>4,135</u>
<b>Expenses:</b>					
Operating expenses	185,512	169,300	165,245	16,212	4,055
Interest expense	15,891	15,677	17,467	214	(1,790)
Non-operating expenses	—	—	158	—	(158)
Total expenses	<u>201,403</u>	<u>184,977</u>	<u>182,870</u>	<u>16,426</u>	<u>2,107</u>
Changes in net assets	14,732	26,691	24,663	(11,959)	2,028
Net assets at beginning of year	<u>1,010,604</u>	<u>983,913</u>	<u>959,250</u>	<u>26,691</u>	<u>24,663</u>
Net assets at end of year	<u>\$ 1,025,336</u>	<u>1,010,604</u>	<u>983,913</u>	<u>14,732</u>	<u>26,691</u>

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### ***Wastewater Results of Operations, Fiscal Year 2010***

The Enterprise's total revenues of \$216,135 for the year increased by \$4,467 or 2.1% over the prior year primarily due to a rate increase partially offset by reduction in usage due to conservation, the economy and weather patterns. Sanitary flow of 27,010 ccf (100 cubic feet) for the year decreased by 816 ccf or 2.9%. Charges for services increased by \$3,031 or 1.5% as a result of an average rate increase of 7.0% effective July 1, 2009. Other operating revenues decreased by \$1,842 or 19.8% due to reduction of \$1,401 in capacity fees revenue and \$441 reduction in charges to other City departments. Interest and investment income increased by \$64 or 3.2% due to higher cash balances. Other non-operating revenues increased by \$3,214 or 314.5% mainly due to receipt of Federal interest subsidy for COPs 2009 Series D, Biofuel revenue, and an amortization adjustment related to capital assets.

Total expenses increased by \$16,426 or 8.9% due to increase of \$16,212 in operating expenses and \$214 in interest. The increase in operating expenses is attributable to increases of: \$9,811 in other operating expense related to various non-capitalized project expenses and capital project write-offs, \$4,134 in materials and supplies, especially in chemicals used in various processes for proper wastewater treatment and city-wide odor control process, \$1,933 in depreciation expense, \$1,851 in personal services, mainly related to retirement costs, \$671 in services provided by other City departments, primarily related to facilities maintenance and risk management, and \$198 in general and administrative expenses. The increases were partially offset by decreases of \$1,810 in contractual services for engineering and inspection services, and \$576 in bad debt expense related to uncollectible revenues.

During fiscal year 2010, revenues exceeded expenses by \$14,732. While net assets did increase, this change in net assets was less than the prior year's increase in net assets by \$11,959 or 44.8%.

### ***Wastewater Results of Operations, Fiscal Year 2009***

The Enterprise's total revenues of \$211,668 for the year increased by \$4,135 or 2.0% over the prior year primarily due to a rate increase partially offset by reduction in usage. Sanitary flow of 27,826 ccf (100 cubic feet) for the year decreased by 531 ccf or 1.9%. Charges for services increased by \$11,522 or 6.1% due to a rate increase of 9.0% effective July 1, 2008. Other operating revenues decreased by \$5,417 or 36.8% due to reduction of \$4,858 in capacity fees revenue related to lower building permits, and \$559 reduction in charges to other City departments. Interest and investment income decreased by \$2,107 or 51.4% due to lower cash balances and interest rates. Other non-operating revenues increased by \$137 or 15.5%.

Total expenses increased by \$2,107 or 1.2% due to increase of \$4,055 in operating expenses, offset by decreases of \$1,790 in interest and \$158 in non-operating expenses. The increase in operating expenses is attributable to: increases of \$5,613 in services provided by other City departments, \$1,855 in contractual services, \$583 in general and administrative expenses which include growth in actuarially determined claim liability, \$576 in bad debt expense, and \$57 in depreciation expense. Services provided by the City's Department of Public Works increased \$3,317 for sewer repair, street cleaning, and engineering services. Contractual services increased due to a new sewer pipeline project and other ongoing repair and replacement projects. These increases were offset by decreases in materials and supplies of \$3,785, primarily due to an inventory adjustment of \$3,586, \$602 in other operating expenses, and \$242 in personal services.

Net assets increased by \$26,691 to \$1,010,604 due to revenue growth of \$4,135 offset by increase in expenses of \$2,107.

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**Table 2C - A**  
**Proprietary Fund - Hetch Hetchy Water**  
**Comparative Condensed Activities**  
 Years ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 - 2009 change</b>	<b>2009 - 2008 change</b>
Revenues:					
Charges for services	\$ 31,109	24,468	22,382	6,641	2,086
Rents and concessions	110	111	101	(1)	10
Interest and investment income	657	874	1,220	(217)	(346)
Other non-operating revenues	39	16	205	23	(189)
Total revenues	<u>31,915</u>	<u>25,469</u>	<u>23,908</u>	<u>6,446</u>	<u>1,561</u>
Expenses:					
Operating expenses	32,053	32,487	26,613	(434)	5,874
Total expenses	<u>32,053</u>	<u>32,487</u>	<u>26,613</u>	<u>(434)</u>	<u>5,874</u>
Income (loss) before transfers	(138)	(7,018)	(2,705)	6,880	(4,313)
Transfers to City and County of San Francisco	—	(24)	—	24	(24)
Changes in net assets	(138)	(7,042)	(2,705)	6,904	(4,337)
Net assets at beginning of year	<u>113,287</u>	<u>120,329</u>	<u>123,034</u>	<u>(7,042)</u>	<u>(2,705)</u>
Net assets at end of year	<u>\$ 113,149</u>	<u>113,287</u>	<u>120,329</u>	<u>(138)</u>	<u>(7,042)</u>

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**Table 2C - B**  
**Proprietary Fund - Hetch Hetchy Power**  
**Comparative Condensed Activities**  
 Years ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
Revenues:					
Charges for services	\$ 97,236	90,560	97,248	6,676	(6,688)
Rents and concessions	135	135	124	—	11
Interest and investment income	2,081	3,286	5,200	(1,205)	(1,914)
Other non-operating revenues	6,456	2,689	10,091	3,767	(7,402)
Total revenues	<u>105,908</u>	<u>96,670</u>	<u>112,663</u>	<u>9,238</u>	<u>(15,993)</u>
Expenses:					
Operating expenses	86,334	63,741	82,823	22,593	(19,082)
Other non-operating expenses	6,043	2,389	150	3,654	2,239
Total expenses	<u>92,377</u>	<u>66,130</u>	<u>82,973</u>	<u>26,247</u>	<u>(16,843)</u>
Net income before transfers and special item	13,531	30,540	29,690	(17,009)	850
Special item:					
Impairment loss	—	—	(41,224)	—	41,224
Income (loss) before transfers	13,531	30,540	(11,534)	(17,009)	42,074
Transfers to City and County of San Francisco	(1,400)	(277)	(450)	(1,123)	173
Changes in net assets	12,131	30,263	(11,984)	(18,132)	42,247
Net assets at beginning of year	<u>331,090</u>	<u>300,827</u>	<u>312,811</u>	<u>30,263</u>	<u>(11,984)</u>
Net assets at end of year	<u>\$ 343,221</u>	<u>331,090</u>	<u>300,827</u>	<u>12,131</u>	<u>30,263</u>

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### ***Hetch Hetchy Water Results of Operations, Fiscal Year 2010***

Hetch Hetchy Water's revenues were \$31,915, an increase of \$6,446 or 25.3% over the prior year, explained by higher water assessment fees from the San Francisco Water Enterprise, primarily to recover upcountry costs of water operations, and other water customers. Total expenses decreased by \$434 mainly due to the decrease of \$3,432 in non-capitalized project expenses, offset by increases of \$882 in taxes, licenses, and permits from payments related to watershed protection and the Don Pedro licenses; \$1,124 in judgment and claim expenses, \$24 in general and administrative expenses; \$574 in contractual services for building maintenance services, \$153 in depreciation resulting from increased depreciable capital assets, \$140 in personal services due to increased payroll and payroll-related costs, and \$93 in materials and supplies of building and construction and equipment maintenance, and safety supplies; and \$8 services provided by City department for increased billed work efforts from the City Attorney's Office.

### ***Hetch Hetchy Power Results of Operations, Fiscal Year 2010***

Hetch Hetchy Power's total revenues were \$105,908, an increase of \$9,238 or 9.6% over the prior year. The majority of this revenue increase resulted from electricity sales of \$5,154 and third-party sales to other municipalities and governmental agencies under Western System Power Pool (WSPP) agreements. Additionally, Hetch Hetchy Power has revenue increases from Treasure Island Development Authority (TIDA) and City departments totaling \$472 due to increase in power usage. Other non-operating revenues increased by \$3,767 or 140.1%, which is due primarily to the \$2,895 increase in settlement with the State Department of Water Resources (DWR) related to the Combustion Turbine project. This is offset by a \$968 decrease in PG&E settlements and a \$4 decrease in other miscellaneous items. There was a decrease in interest and investment income of \$1,205. Hetch Hetchy Power's total expenses increased by \$26,247 or 39.7%, mainly due to increases in general liability payments of \$1,815, write-off of development costs related to the Combustion Turbine project of \$10,194 related to the settlement with DWR mentioned previously, \$11,687 non-capitalizable in construction related activities, and \$2,939 of solar incentive program expenses. The increases were offset by decreases in contractual services.

### ***Hetch Hetchy Water Results of Operations, Fiscal Year 2009***

Hetch Hetchy Water's total revenues were \$25,469, an increase of \$1,561 or 6.5% over the prior year. Total expenses were \$32,487, an increase of \$5,874 or 22.1% over the prior year. Revenues from charges for services increased by \$2,086 or 9.3%, attributable to water assessment fees to the San Francisco Water Enterprise primarily and other water customers, an increase of \$10 in rents and concessions revenues, offset by decreases of \$346 in interest and investment income mainly due to lower interest rates, and \$189 in other non-operating revenues including Federal grants.

Hetch Hetchy Water's total expenses increased by \$5,874 as explained by increases of \$3,237 of non-capitalized project expense, \$1,522 in personal services due to increased payroll and payroll-related costs, \$357 in contractual services, \$235 of services provided by City departments and overhead charges, \$40 in depreciation, \$512 in general administrative expense, and offset by a decrease of \$29 in materials and supplies.

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### ***Hetch Hetchy Power Results of Operations, Fiscal Year 2009***

Hetch Hetchy Power's total revenues were \$96,670, a decrease of \$15,993 or 14.2% over the prior year. Revenues from charges for services decreased by \$6,688 or 6.9%, attributable to a decrease in electricity sales of \$6,648 to Modesto Irrigation District, Turlock Irrigation District, and third-party sales to other Municipalities and Governmental Agencies under Western System Power Pool agreements.

Hetch Hetchy Power's total expenses decreased by \$16,843 or 20.3%, primarily due to a decrease of \$12,557 in estimated liability claims, purchased power from the Western System Power Pool of \$10,082, resulting in lower transmission costs from PG&E, and materials and supplies of \$20. These decreases are offset by increases in professional and specialized services of \$3,258, personal services of \$2,772 due to higher other post-employment benefit obligation actuarial estimates, depreciation expense of \$808, services provided by other departments of \$542, rents and lease services of \$511. Non-operating expenses increased by \$2,239 mainly due to the implementation of the new San Francisco Go-Solar incentive program, where rebate payments of \$2,232 were made in fiscal year 2009. Overall, these changes resulted in an increase in net assets of \$30,263.

### **Capital Assets and Debt Administration**

**Table 3**  
**Business-Type Activities**  
**Capital Assets, Net of Depreciation**

Years ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
Facilities, improvements, machinery, and equipment	\$ 2,563,648	2,461,385	2,333,409	102,263	127,976
Intangible assets	39,240	—	—	39,240	—
Land and rights-of-way	43,582	44,849	44,267	(1,267)	582
Construction work in progress	901,265	663,588	510,555	237,677	153,033
Total	<u>\$ 3,547,735</u>	<u>3,169,822</u>	<u>2,888,231</u>	<u>377,913</u>	<u>281,591</u>

### ***Department-wide Business-Type Activities***

A detailed discussion follows for each proprietary fund.



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**Table 3A**  
**Proprietary Fund - Water**  
**Capital Assets, Net of Depreciation**  
 Years ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
Facilities, improvements, machinery, and equipment	\$ 1,054,627	935,581	827,045	119,046	108,536
Intangible assets	4,652	—	—	4,652	—
Land and rights-of-way	17,707	18,386	17,886	(679)	500
Construction work in progress	787,367	547,293	423,063	240,074	124,230
<b>Total</b>	<b>\$ 1,864,353</b>	<b>1,501,260</b>	<b>1,267,994</b>	<b>363,093</b>	<b>233,266</b>

## ***Water Capital Assets, Fiscal Year 2010***

The Enterprise has net capital assets of \$1,864,353 invested in a broad range of utility capital assets as of June 30, 2010 (see Table 3A). The investment in capital assets includes land, facilities, improvements, water treatment plants, aqueducts, water transmission, distribution mains, water storage facilities, pump stations, water reclamation facilities, machinery and equipment. The Enterprise's net revenue and long-term debt are used to finance capital investments. Capital assets, net of depreciation, increased from prior year as a result of increases of \$240,074 or 43.9% in construction work in progress, \$123,698 or 13.2% in structures, buildings, equipment and intangible assets, and a decrease of \$679 in land and rights-of-way due to reclassification to intangible assets in fiscal year 2010. The increase in capital assets is consistent with the Enterprise's implementation of the ten-year capital plan, including the WSIP. As of June 30, 2010, the Enterprise has invested \$28,195 in development costs for the headquarters at 525 Golden Gate Avenue. The Enterprise adopted GASB Statement 51, *Accounting and Financial Reporting for Intangible Assets*, in fiscal year 2010. Intangible assets were separated as a major category in the fiscal year ended June 30, 2010.

### ***Water System Improvement Program (WSIP)***

The Enterprise is in the middle of a multi-billion dollar, multi-year program to upgrade its Regional and Local Water Systems, known as the Water System Improvement Program (WSIP). The WSIP will deliver capital improvements that enhance the Enterprise's ability to provide reliable, affordable, high quality drinking water to its twenty-seven wholesale customers and regional retail customers in Alameda, Santa Clara and San Mateo Counties, and to 800,000 retail customers in the City and County of San Francisco, in an environmentally sustainable manner. The program is structured to cost-effectively meet water quality requirements, improve seismic and delivery reliability, and meet water supply objectives for the year 2030.

The program is on target to achieve an overall completion date of December 2015. The transition of the WSIP's larger regional projects to the construction phase started in early 2009. As of June 30, 2010, there are 2 regional projects in Planning Phase, 7 in Design Phase, 3 in Bid & Award Phase, 14 in Construction phase, 5 in Close-Out phase, 10 regional projects are completed, and 5 regional projects in multiple phases. The total estimated cost for the WSIP is \$4.6 billion, including \$4.1 billion for capital projects and \$0.5 billion for net financing costs.

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To date, the entire amount is fully appropriated for the WSIP, of which approximately \$1.1 billion has been expended through fiscal year ending June 30, 2010. To help meet this funding need, additional bonds sales are planned. Additional details regarding the WSIP are available in the Annual Reports published on the Enterprise's web site at [www.sfwater.org](http://www.sfwater.org).

### ***525 Golden Gate Avenue Headquarters Building***

As of June 30, 2010, the Enterprise has incurred its 73% share or \$28,195 in development costs for the project. The building is intended to consolidate divisions of the San Francisco Public Utilities Commission that are currently renting space at multiple locations in the Civic Center. Demolition of the existing site was completed in June 2009. Construction started in January 2010 with an expected completion date of February 2012, followed by an expected occupancy date of April 2012.

### ***Advanced Meter Infrastructure System (AMI)***

Over the next three years, the SFPUC will be in the process of implementing the Advanced Meter Infrastructure System (AMI), which will largely eliminate manual meter reading field visits, improve customers' access to hourly usage information, facilitate the timely detection of tampering, theft, and leaks, while enhancing usage or flow-tracking. The estimated total capital cost of this project is \$64.1 million, with Phase 1 implementation including 57,000 meter replacements throughout fiscal year 2011, and Phase 2 implementation replacing 123,000 meters with a projected completion date of February 2012.

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Major additions to construction work in progress during the year ended June 30, 2010 include:

Tesla Treatment Facility	\$	58,641
New Crystal Springs Bypass Tunnel		40,551
Bay Division Pipeline (BDPL) Reliability Upgrade - Pipeline		35,054
Irvington Tunnel Alternatives - Alameda Siphon No. 4		21,356
University Mound Reservoir - Upgrade (North Basin)		20,404
San Andreas No. 3 Pipeline Installation		16,695
Lake Merced Pump Station Upgrade		14,580
Bay Division Pipeline (BDPL) Reliability Upgrade - Tunnel		14,316
Harry Tracy Water Treatment Plant Long Term Improvements		14,111
Baden and San Pedro Valve Lot		13,537
Calaveras Dam Replacement		10,628
San Joaquin Pipeline System		10,585
Irvington Tunnel Alternatives - New Irvington Tunnel		9,072
Bay Division Pipeline (BDPL) No. 3 & 4 Cross Connection		8,533
Crystal Springs/San Andreas Transmission Upgrade		7,364
Rehabilitation of Existing San Joaquin Pipelines		7,256
Harry Tracy Water Treatment Plant Short Term Improvement - Phase 3		7,074
525 Golden Gate Avenue Headquarters Building		6,745
Mclaren Park Pump Station Upgrade		6,541
Sunol Valley Water Treatment Plant Expansion & Treated Water Reservoir		5,763
North University Mound System Upgrade		5,027
Other project additions individually below \$5,000		<u>83,432</u>
	\$	<u><u>417,265</u></u>

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Major facilities, improvements, intangible assets, machinery, and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2010 include:

Tesla Treatment Facility - Steel Pipes	\$	19,731
Stanford Heights Reservoir - Building/Reservoir		18,872
Harry Tracy Water Treatment Plant - Filters		12,273
Alemaný Pump Station Upgrade - Electrical System		10,113
Harry Tracy Water Treatment Plant - Genset		9,893
Harry Tracy Water Treatment Plant - Flocculation Basins		8,153
Alemaný Pump Station Upgrade - Mechanical System		7,737
Alemaný Pump Station Upgrade - Building		7,631
North University Mound System Upgrade - Pipeline		6,976
Other items individually below \$5,000		<u>74,450</u>
	\$	<u>175,829</u>

### ***Water Capital Assets, Fiscal Year 2009***

The Enterprise had net capital assets of \$1,501,260 invested in a broad range of utility capital assets as of June 30, 2009 (see Table 3A). The investment in capital assets includes land, facilities, improvements, water treatment plants, aqueducts, water transmission, distribution mains, water storage facilities, pump stations, water reclamation facilities, machinery and equipment. This amount includes an increase of \$108,536 or 13.1% over the prior year in structures, buildings and equipment, and an increase of \$124,230 or 29.4% in construction in progress, consistent with the Enterprise's implementation of the ten-year capital plan, including the Water System Improvement Program. The Enterprise's net revenue, commercial paper, and long-term debt are used to finance capital investments. During the fiscal year 2009, as part of a property transfer, the Enterprise has acquired a parcel from BART located in the City of San Bruno, California, with a value of \$500.

As of June 30, 2009, the Enterprise has invested \$12,669 in development costs and \$9,900 in site acquisition for the new headquarters building located at 525 Golden Gate Avenue. The site was acquired by the City from the State of California in 2000, and was transferred to the Enterprise in 2006. The site comprises a 0.5-acre portion of the block bounded by Polk Street, McAllister Street, Golden Gate Avenue and Van Ness Avenue, in the Civic Center district of the City. The Civic Center is home to City, State and Federal government buildings, including City Hall, Civic Center Courthouse, offices of the San Francisco Unified School District, the Philip Burton Federal Building and U.S. Courthouse, the Hiram W. Johnson State Office Building, and City cultural facilities, including the San Francisco Main Public Library, Louise M. Davies Symphony Hall, Bill Graham Civic Auditorium, the War Memorial Opera House and Veterans Building, and the Asian Art Museum of San Francisco.

The principal improvement to the site consists of a new 277,500 square-foot Class A office building containing approximately 257,000 square feet of rentable space across 13 floors plus one basement level. The finished building has been designed to include a 10,000-square-foot child development center, a café, and public art exhibition space. The building design seeks to achieve the Platinum certification standards of the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, the nationally accepted benchmark for the design, construction and operation of high-performance "green" buildings.

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The City has received all environmental approvals necessary for construction of the 525 Golden Gate Avenue Headquarters building, and the design development phase is completed. Demolition of the existing site was completed in June 2009, while site improvement phases such as shoring, underpinning and excavation are currently underway. Construction is expected to start in January 2010 with an expected completion date of February 2012, with an expected occupancy date of April 2012.

Major additions to construction work in progress during the year ended June 30, 2009 include:

Tesla Treatment Facility	\$	22,314
McLaren Park Pump Station Upgrade		19,244
New Crystal Springs Bypass Tunnel		17,512
Local Water Main Replacement Program		16,114
Harry Tracy Water Treatment Plant (HTWTP) Short Term Improvements Phase 3		11,823
San Joaquin Pipeline System		10,916
Stanford Heights Reservoir Rehab/Upgrade		9,738
Standby Power Facility Various Locations		9,032
Calaveras Dam Replacement		8,774
Sunset Reservoir – Upgrade/Rehab North Basin		8,591
HTWTP Long Term Improvements		8,404
Sunol Valley Water Treatment Plant (SVWTP) Expansion/Treated Water Reservoir		8,314
Bay Division Pipeline (BDPL) Reliability Upgrade – Tunnel		8,183
Crystal Springs Pump Station & Crystal Springs – San Andreas Pipeline		8,051
New Irvington Tunnel		7,676
BDPL Reliability – Pipeline Upgrade		6,076
East/West Transmission Main		5,694
Irvington Tunnel Alternatives – Alameda Siphon No. 4		4,979
North University Mound System Update		4,836
525 Golden Gate		4,184
Seismic Upgrade BDPL at Hayward Fault		3,844
Forest Knolls Pump Station Upgrade		3,165
Mount Davidson Pump Station Upgrade		3,106
Rehab Existing San Joaquin Pipelines		3,075
Other project additions individually below \$3,000		<u>69,060</u>
	\$	<u><u>282,705</u></u>

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Major facilities, improvements, machinery and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2009 include:

Sunset Reservoir North Basin Seismic Retrofit Structure	\$ 50,025
East/West Transmission Main	29,754
Water Main Replacement - Bernal/Nebraska	6,647
Other items individually below \$5,000	<u>71,171</u>
	<u>\$ 157,597</u>

**Table 3B**  
**Proprietary Fund - Wastewater**  
**Capital Assets, Net of Depreciation**  
 Years ended June 30, 2010, 2009, and 2008

	2010	2009	2008	2010 – 2009 change	2009 – 2008 change
Facilities, improvements, machinery, and equipment	\$ 1,293,342	1,295,806	1,276,099	(2,464)	19,707
Intangible assets	4,587	—	—	4,587	—
Land and rights-of-way	21,210	21,787	21,787	(577)	—
Construction work in progress	78,473	77,330	62,975	1,143	14,355
	<u>\$ 1,397,612</u>	<u>1,394,923</u>	<u>1,360,861</u>	<u>2,689</u>	<u>34,062</u>

### ***Wastewater Capital Assets, Fiscal Year 2010***

The Enterprise has net capital assets of \$1,397,612 invested in a broad range of utility capital assets as of June 30, 2010 (see Table 3B). This amount represents an increase of \$2,689 or 0.2% over the prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment. The Enterprise adopted GASB Statement 51, *Accounting and Financial Reporting for Intangible Assets*, in fiscal year 2010. Intangible assets were separated as a major category in the fiscal year ended June 30, 2010.

### ***Sewer System Improvement Program***

A major focus of the Enterprise is the development of the Sewer System Improvement Program (SSIP), a long-term capital plan that provides strategies and policies for the future. The City's last sewer system Master Plan was finalized in 1974 and brought the City into compliance with Federal and State laws and reduced the number of combined sewer discharges. It resulted in a 25-year capital improvement and construction program that included the construction of the award-winning Oceanside Treatment Plant, with inclusion of a 4.5-mile ocean outfall, upgrade of the Southeast Treatment Plant to secondary treatment, and the transport/storage boxes around the

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city. Since 2005, the SSIP team has collected and analyzed extensive data, including input from the public, and has used it to develop a recommended program of improvements to address infrastructure challenges facing the wastewater system. These improvements have been incorporated into the Master Plan and the SSIP. The Commission is currently developing service level goals to be associated with the SSIP, and will formally endorse program goals and levels of service by the fall of 2010. It is anticipated that the SSIP will cost \$5.6 to \$6.8 billion over 20 to 30 years to upgrade system reliability for current, as well as the future generations of users.

### ***525 Golden Gate Avenue Headquarters Building***

As of June 30, 2010, the Enterprise has incurred its 15% share or \$5,787 in development costs for the project. The building is intended to consolidate divisions of the San Francisco Public Utilities Commission that are currently renting space at multiple locations in the Civic Center. Demolition of the existing site was completed in June 2009. Construction started in January 2010 with an expected completion in February 2012, followed by an expected occupancy in April 2012.

Major additions to construction work in progress during the year ended June 30, 2010 include:

Channel Pump Station Improvements Phase 2	\$	9,479
525 Golden Gate Avenue Headquarters Building		5,787
Southeast Water Pollution and Odor Control Improvements		2,633
Sewer Spot Replacements		2,339
Wastewater Master Plan		2,569
Other additions individually below \$2,000		<u>27,720</u>
	\$	<u><u>50,527</u></u>

Major facilities, improvements, intangible assets, machinery, and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2010 include:

Oceanside Heating, Ventilation, Air Conditioning Assessment	\$	9,172
Sewer Spot Replacements – T110		4,241
Sewer Spot Replacements No. 21		3,695
Customer Care & Billing System		3,369
Broadway, Pacific Avenues Sewer Replacements		2,612
Jefferson, 7th, Howard Streets Sewer Replacements		2,049
Sewer Spot Replacements – SP17		2,061
Other items individually below \$2,000		<u>12,985</u>
	\$	<u><u>40,184</u></u>

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### ***Wastewater Capital Assets, Fiscal Year 2009***

The Enterprise has net capital assets of \$1,394,923 invested in a broad range of utility capital assets as of June 30, 2009 (see Table 3B). This amount represents an increase of \$34,062 or 2.5% over the prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment.

Major additions to construction work in progress during the year ended June 30, 2009 include:

Oceanside Heating Ventilation, Air Conditioning Assessment	\$	11,994
Channel Pump Station Improvements Phase 2		8,854
Southeast Water Pollution Control Program Digester Cover and Mixing Improvements		5,030
Wastewater Master Plan		2,962
Sewer Spot Replacements No. 21		2,946
Sewer Spot Replacements Job Order Contract 2		2,100
Other additions individually below \$2,000		<u>39,652</u>
	\$	<u><u>73,538</u></u>

Major structures, buildings and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2009 include:

Southeast Water Pollution Control Program Digester Cover and Mixing Improvements	\$	10,571
Oceanside Heating, Ventilation, Air Conditioning Assessment		9,970
North Point Facilities Wet Weather Improvements-Pumps		3,520
Southeast Community Facilities Deck Waterproofing		2,433
Connecticut Street, 43rd and 46th Avenues Sewer Replacements		2,378
Toland, Hudson and Phelps Streets Sewer Improvements		2,353
Southeast Water Pollution Control Program Gas Handling Improvement Phase 2		2,164
Noe Street, Sanchez Street Sewer Replacements		2,114
Southeast Community Facilities Heating, Ventilation, Air Conditioning and Other Renovations		2,051
Other items individually below \$2,000		<u>20,968</u>
	\$	<u><u>58,522</u></u>



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**Table 3C - A**  
**Proprietary Fund - Hetch Hetchy Water**  
**Capital Assets, Net of Depreciation**  
 Year ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
Facilities, improvements, machinery, and equipment	\$ 62,429	71,079	85,248	(8,650)	(14,169)
Land and rights-of-way	3,003	3,008	2,932	(5)	76
Intangible assets	12,860	—	—	12,860	—
Construction work in progress	8,342	9,219	4,294	(877)	4,925
Total	<u>\$ 86,634</u>	<u>83,306</u>	<u>92,474</u>	<u>3,328</u>	<u>(9,168)</u>

**Table 3C - B**  
**Proprietary Fund - Hetch Hetchy Power**  
**Capital Assets, Net of Depreciation**  
 Year ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
Facilities, improvements, machinery, and equipment	\$ 153,250	158,919	145,017	(5,669)	13,902
Land and rights-of-way	1,662	1,668	1,662	(6)	6
Intangible assets	17,141	—	—	17,141	—
Construction work in progress	27,083	29,746	20,223	(2,663)	9,523
Total	<u>\$ 199,136</u>	<u>190,333</u>	<u>166,902</u>	<u>8,803</u>	<u>23,431</u>

### ***Hetch Hetchy Water Capital Assets, Fiscal Year 2010***

Hetch Hetchy Water has net capital assets of \$86,634 invested in a broad range of utility capital assets as of June 30, 2010 (see Table 3C-A). This amount represents an increase of \$3,328 or 4.0%, primarily due to an increase in facilities and equipment. A reclassification of \$12,860 of water rights in intangible assets from facilities, improvements, machinery and equipment was also made.

For the year ended June 30, 2010, Hetch Hetchy Water's major additions to construction work in progress totaled \$7,704 (see Table 3D-1). Major depreciable facilities, improvements, intangible assets, machinery and equipment placed in service totaled \$28,822 (see Table 3D-2).

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## ***Hetch Hetchy Power Capital Assets, Fiscal Year 2010***

Hetch Hetchy Power has net capital assets of \$199,136 invested in power utility capital assets as of June 30, 2010 (see Table 3C-B). This amount represents an increase of \$8,803 or 4.6%, attributable to a reclassification of \$17,141 from facilities, improvements, machinery and equipment to intangible assets and a decrease of \$2,663 in construction in progress.

For the year ended June 30, 2010, Hetch Hetchy Power's major additions to construction work in progress totaled \$25,875 (see Table 3D-1), and major depreciable facilities, improvements, intangible assets, machinery and equipment placed in service totaled \$43,665 (see Table 3D-2).

### ***525 Golden Gate Avenue Headquarters Building***

As of June 30, 2010, the Power Enterprise has incurred its 12% share or \$4,629 in development costs for the project. The building is intended to consolidate divisions of the San Francisco Public Utilities Commission that are currently renting space at multiple locations in the Civic Center. Demolition of the existing site was completed in June 2009. Construction started in January 2010 with an expected completion in February 2012, followed by an expected occupancy in April 2012.

Major additions to construction work in progress during the year ended June 30, 2010 include:

**Table 3D - 1**  
**Hetch Hetchy Water and Hetch Hetchy Power**  
**Major Additions to Construction Work in Progress**  
 Year ended June 30, 2010

	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>
525 Golden Gate Avenue Headquarters Building	\$ —	4,629
Fiber/Communication System Upgrades	1,440	1,761
Kirkwood Powerhouse Project	—	1,436
Penstock Renovations	876	1,071
San Francisco Electrical Reliability Power Project	—	1,426
San Joaquin Pipeline Rehabilitation	2,166	—
Shore Power for Cruise Ships	—	1,340
Switchyard Upgrades	—	1,305
Other project additions below \$1,000	3,222	12,907
	\$ 7,704	25,875

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Major facilities, improvements, intangible assets, machinery, and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2010 include:

**Table 3D - 2**  
**Hetch Hetchy Water and Hetch Hetchy Power**  
**Major Facilities, Improvements, Intangible Assets, Machinery and**  
**Equipment Placed in Service**

Year ended June 30, 2010

	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>
Fiber Optic Cable from Moccasin to Early Intake	\$ 1,558	1,904
Governor at Moccasin Powerhouse Unit 2	—	1,799
Hetchy Microwave Replacement	2,069	2,528
Kirkwood Powerhouse Project	1,412	4,971
Moccasin Roads Rebuilding	544	665
Moscone Center Solar Energy System	—	2,365
Water Rights	20,522	25,082 *
Other project additions below \$1,000	2,717	4,351
	\$ 28,822	43,665

\*Intangible assets reclassification

Major additions to construction work in progress during the year ended June 30, 2009 include:

**Table 3E - 1**  
**Hetch Hetchy Water and Hetch Hetchy Power**  
**Major Additions to Construction Work in Progress**  
**and Equipment Placed in Service**

Year ended June 30, 2009

	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>
Hunters Point Municipal Power	\$ —	1,329
Kirkwood Powerhouse Project	1,141	2,615
Replacement of Microwave Communication Device	450	550
San Joaquin Pipeline Rehabilitation	2,327	—
Street Light Underground Utilities	—	3,173
Other project additions below \$1,000	2,960	9,097
	\$ 6,878	16,764

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Major structures, buildings and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2009 include:

**Table 3E - 2**  
**Hetch Hetchy Water and Hetch Hetchy Power**  
**Major Facilities, Improvements, Machinery**  
**and Equipment Placed in Service**  
 Year ended June 30, 2009

	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>
Moccasin Powerhouse 1 New Governor Unit	\$ —	1,004
Street Lights	—	3,138
Other additions below \$1,000	3,427	4,036
	\$ 3,427	8,178

### ***Debt Administration***

**Table 4**  
**Business-Type Activities**  
**Outstanding Debt, Net of Amortized Costs**  
 June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010 – 2009 change</b>	<b>2009 – 2008 change</b>
Revenue bonds	\$ 2,748,179	1,225,415	1,285,883	1,522,764	(60,468)
Clean Renewable Energy Bonds	5,310	5,717	—	(407)	5,717
Capital appreciation bonds	3,878	3,620	3,380	258	240
Commercial paper	—	329,600	50,000	(329,600)	279,600
Certificates of participation	171,562	—	—	171,562	—
State revolving fund loans	61,140	75,339	89,101	(14,199)	(13,762)
State of California CEC loan	—	—	282	—	(282)
	\$ 2,990,069	1,639,691	1,428,646	1,350,378	211,045

### ***Department-wide Business-Type Activities***

A detailed discussion follows for each proprietary fund.

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**Table 4A**  
**Proprietary Fund - Water**  
**Outstanding Debt, Net of Amortized Costs**  
 June 30, 2010, 2009, and 2008

	2010	2009	2008	2010 – 2009 change	2009 – 2008 change
Revenue bonds	\$ 2,245,301	932,886	958,410	1,312,415	(25,524)
Capital appreciation bonds	3,878	3,620	3,380	258	240
Commercial paper	—	229,600	—	(229,600)	229,600
Certificates of participation	122,496	—	—	122,496	—
Total	<u>\$ 2,371,675</u>	<u>1,166,106</u>	<u>961,790</u>	<u>1,205,569</u>	<u>204,316</u>

### ***Water Debt Administration***

As of June 30, 2010, the Enterprise has \$2,371,675 total debt outstanding, an increase of \$1,205,569 over the prior year, as shown in Table 4A. More detailed information about the Enterprise's debt activity is presented in notes 6, 7, 8 and 9 to the financial statements.

The Enterprise has no commercial paper notes outstanding at June 30, 2010 and \$229,600 in the previous year. Total debt outstanding at June 30, 2010 consisted of \$2,245,301 in fixed-rate long-term revenue bonds, \$3,878 (accrued value) in capital appreciation bonds, and \$122,496 in certificates of participation. The change in total debt outstanding was due to the issuance of new bonds and certificates of participation, refunding of commercial paper, retirement of revenue bond principal, and a change in the accrued value of all capital appreciation bonds, amortization of bond discounts, bond premium, and refunding loss. See notes 7 and 9 for more detail.

As of June 30, 2009, the Enterprise has \$1,166,106 total debt outstanding, an increase of \$204,316 over the prior year (see Table 4A). The Enterprise has commercial paper notes outstanding of \$229,600 at June 30, 2009 and none in the previous year. Total debt outstanding at June 30, 2009 consisted of \$932,886 in fixed-rate long-term revenue bonds and \$3,620 (accrued value) in capital appreciation bonds. The change in total debt outstanding was due to the retirement of revenue bond principal, and a change in the accrued value of all capital appreciation bonds, amortization of bond discounts, bond premium, and refunding loss.

**Credit Ratings and Bond Insurance** – At June 30, 2010, the Enterprise carried underlying ratings of “Aa2” and “AA-” from Moody's and Standard & Poor's (S&P), respectively. At June 30, 2009, the Enterprise carried underlying ratings of “A1” and “AA-” from Moody's and Standard & Poor's (S&P), respectively.

**Debt Service Coverage** – Pursuant to the Amended and Restated Indenture, the Enterprise is required to collect sufficient net revenues each fiscal year, together with any Enterprise funds (except Bond Reserve Funds) which are available for payment of debt service and are not budgeted to be expended, at least equal to 1.25 times annual debt service for said fiscal year. During fiscal years 2010 and 2009, the Enterprise's net revenues, together with fund

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balances available to pay debt service and not budgeted to be expended, were sufficient to meet the rate covenant requirements under the Enterprise's Amended and Restated Indenture.

**Debt Authorization** – Pursuant to the Charter, the Enterprise can incur indebtedness upon two-thirds vote of the Board of Supervisors, as approved by voters in Proposition E in November 2002. As of June 30, 2010, the Board of Supervisors has authorized the issuance of \$3,048,031 in revenue bonds under Prop E with \$474,665 issued to date against this authorization. The Enterprise can also incur indebtedness of up to \$1,628,000 for improvements to the water system pursuant to Proposition A that was approved by the voters in November 2002. As of June 30, 2010, \$1,331,815 of the \$1,628,000 Proposition A authorized bonds was issued. The Enterprise is also authorized to issue up to \$500,000 in commercial paper. As of June 30, 2010, there was no commercial paper outstanding. In August 2010, the Enterprise sold \$25,000 in taxable commercial paper. Under existing Proposition E authority, Series 2010 DE was issued on August 4, 2010 with a par value of \$415,560.

**Cost of Debt Capital** – The Enterprise's outstanding long-term debt has coupon interest rates ranging from 2.0% to 6.0% as of June 30, 2010 and ranged from 2.5% to 7% as of June 30, 2009. The Enterprise's short-term debt has interest rates ranging from 0.3% to 0.5% during fiscal year 2010. In the prior year, the Enterprise's short-term debt has interest rates ranging from 0.3% to 0.8%. More information about the Enterprise's debt activities is presented in notes 6, 7, 8, and 9 to the financial statements.

**Table 4B**  
**Proprietary Fund - Wastewater**  
**Outstanding Debt, Net of Amortized Costs**  
 Years ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010-2009 change</b>	<b>2009-2008 change</b>
Revenue bonds	\$ 502,878	292,529	327,473	210,349	(34,944)
Commercial paper	—	100,000	50,000	(100,000)	50,000
Certificates of participation	32,390	—	—	32,390	—
State revolving fund loans	61,140	75,339	89,101	(14,199)	(13,762)
Total	<b>\$ 596,408</b>	<b>467,868</b>	<b>466,574</b>	<b>128,540</b>	<b>1,294</b>

### ***Wastewater Debt Administration***

As of June 30, 2010 and 2009, the Enterprise's debt from revenue bonds, commercial paper, certificates of participation, and State revolving fund loans outstanding were \$596,408 and \$467,868, respectively, as shown in Table 4B. More detailed information about the Enterprise's debt activity is presented in notes 6 and 7 to the financial statements.

The Enterprise has no commercial paper outstanding at June 30, 2010 and \$100,000 at June 30, 2009. Total debt outstanding at June 30, 2010 consisted of \$502,878 in revenue bonds, \$61,140 in State revolving fund loans, and

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\$32,390 in certificates of participation. The change in total debt outstanding was due to the issuance of new bonds, certificates of participation, refunding of commercial paper, and retirement of revenue bond principal, amortization of bond premium, and refunding loss.

**Credit Ratings and Bond Insurance** – At June 30, 2010, the Enterprise carried underlying ratings of “Aa3” and “AA-” from Moody’s and Standard & Poor’s (S&P), respectively. At June 30, 2009, the Enterprise carried underlying ratings of “A2” and “A+” from Moody’s and Standard & Poor’s (S&P), respectively.

**Debt Service Coverage** – Pursuant to the Indenture, the Enterprise covenants to collect sufficient net revenues each fiscal year, together with any Enterprise funds (except Bond Reserve Funds) that are available for payment of debt service and are not budgeted to be expended, at least equal to 1.25 times annual debt service for said fiscal year. During fiscal years 2010 and 2009, the Enterprise’s net revenues, together with fund balances available to pay debt service and not budgeted to be expended, were sufficient to meet the rate covenant requirements under the Indenture.

**Debt Authorization** – Pursuant to the Charter, the Enterprise can incur indebtedness upon two-thirds vote of the Board of Supervisors. The Enterprise has a \$150,000 authorized commercial paper program, with \$0 and \$100,000 in commercial paper outstanding as of June 30, 2010 and 2009 respectively.

**Cost of Debt Capital** – The interest rates on the Enterprise’s outstanding revenue bonds ranged from 3.0% to 5.8% at June 30, 2010, and ranged from 3.0% to 5.3% as of June 30, 2009, with a blended true interest cost of 3.8% as of June 30, 2010, after factoring in Federal interest subsidy receipts on Build America Bonds, and a true interest cost of 3.9% as of June 30, 2009. The outstanding State revolving fund loans carried interest rates from 2.8% to 3.5% for fiscal years 2010 and 2009, respectively. The 2009 Series C certificates carried interest rates ranging from 2.0% to 5.0%. The 2009 Series D certificates carried interest rates ranging from 6.4% to 6.5%, after adjusting for the Federal interest subsidy, the true interest cost averaged 3.4% to 4.3% for Series C and D, respectively.

**Table 4C**  
**Proprietary Fund - Hetch Hetchy Power**  
**Outstanding Debt, Net of Unamortized Costs**  
 Years ended June 30, 2010, 2009, and 2008

	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2010-2009 change</b>	<b>2009-2008 change</b>
State of California CEC loan	\$ —	—	282	—	(282)
Clean renewable energy bonds	5,310	5,717	—	(407)	5,717
Certificates of participation Series 2009C	4,083	—	—	4,083	—
Certificates of participation Series 2009D (BABs)	12,593	—	—	12,593	—
Total	<u>\$ 21,986</u>	<u>5,717</u>	<u>282</u>	<u>16,269</u>	<u>5,435</u>

### ***Hetch Hetchy Water Debt Administration***

Hetch Hetchy Water did not have any debt outstanding in the fiscal years 2010 and 2009.

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## ***Hetch Hetchy Power Debt Administration***

As of June 30, 2010 and 2009, Hetch Hetchy Power has outstanding debt of \$21,986 and \$5,717, respectively, as shown in Table 4C. The change in total debt outstanding was due to issuance of the certificates of participation (COPs) Series 2009C and 2009D in October 2009 for the construction of the SFPUC headquarters building at 525 Golden Gate Avenue. The total amount of COPs issued was \$167,700 and Hetch Hetchy Power's share was 9.72% or \$16,711, including premium of \$413.

Hetch Hetchy Power issued \$6,325 of CREBs in accordance with the Energy Tax Incentives Act of 2005 to fund solar photovoltaic projects in November 2008. The qualified bonds carry no interest costs and have a term of fifteen years. Annual payments in the amount of \$422 are due on December 15th beginning in 2008.

The California Energy Commission (CEC) loan, issued in November 2002, was retired in April 2009.

Total debt outstanding at June 30, 2010 consisted of \$5,310 in CREBs and \$16,676 in certificates of participation. The change in total debt outstanding was due to the issuance of certificates of participation, retirement of CEC loan, and amortization of bond premium and discount.

More detailed information about capital assets and debt activities is presented in notes 4, 6, and 7 to the financial statements.

## **Rate Setting Process**

Proposition E, as approved by the Voters in November 2002, amended the City Charter by adding the new Article VIII B, entitled "Public Utilities," which changed the Commission's ability to issue new revenue bonds and set retail water rates and wastewater rates. The Commission is required to:

- Establish rates, fees, and charges based on cost of service;
- Retain an independent rate consultant to conduct cost of service studies at least every five years;
- Consider establishing new connection fees;
- Consider conservation incentives and lifeline rates;
- Adopt a rolling five-year forecast annually; and
- Establish a Rate Fairness Board.

## **Water Enterprise**

Wholesale customer rates were set pursuant to the Master Water Sales Contract, through June 30, 2009 when the contract expired. A new agreement was negotiated between the Commission and the Wholesale Customers represented by the Bay Area Water Supply and Conservation Agency (BAWSCA). The term of the new Water Supply Agreement (WSA) began on July 1, 2009 and shall end on June 30, 2034. Two 5-year extension options are also available.

Pursuant to the City and County of San Francisco Charter Section 8B.125, an independent rate study is performed at least once every five years. A rate study was undertaken in fiscal year 2009 to examine the future revenue



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## Management's Discussion and Analysis

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requirements and costs of service of the Enterprise. This resulted in an approved 5-year rate schedule through fiscal year 2014.

### ***Next Year's Rates***

Retail water rate increases of 15.0%, 15.0%, 12.5%, 12.5%, and 6.5% have been approved for fiscal years ending June 30, 2010 through 2014, respectively. Wholesale water rates are adopted annually.

The following table is Water's average rate adjustments since July 1, 2004:

Effective date:	<b>Approved average rate adjustments</b>	
	<u>Retail</u>	<u>Wholesale</u>
July 1, 2004	0.0 %	2.7 %
July 1, 2005	15.0	(9.7) <sup>1</sup>
July 1, 2006	15.0	18.8
July 1, 2007	15.0 <sup>2</sup>	6.3
July 1, 2008	15.0	10.0
July 1, 2009 <sup>3</sup>	15.0	15.7
July 1, 2010	15.0	15.2
July 1, 2011 <sup>4</sup>	12.5	10.2
July 1, 2012 <sup>4</sup>	12.5	29.2
July 1, 2013 <sup>4</sup>	6.5	5.3

<sup>1</sup> Adjustment effective April 1, 2005

<sup>2</sup> Adjustment effective July 14, 2007

<sup>3</sup> July 1, 2009 was the first year of the new twenty-five year agreement

<sup>4</sup> Wholesale rates are adopted annually, pursuant to the 25-year WSA. These are estimates

### **Wastewater Enterprise**

#### ***Next Year's Rates***

Pursuant to the City and County of San Francisco Charter section 8B.125, an independent rate study is performed at least once every five years. A rate study was completed in the Spring of 2009, which included examination of future revenue requirements and costs of service of the Enterprise, and was used to set the Enterprise rates through fiscal year 2014. In May 2009, the Commission adopted a five-year rate proposal that included a 7.0% average increase in wastewater rates effective July 1, 2009 to meet projected costs and coverage requirements, followed by average increases of 7.0%, 5.0%, 5.0%, and 5.0% for fiscal years beginning July 1, 2010, 2011, 2012, and 2013, respectively.

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The following table is a history of Wastewater's approved average rate adjustments since July 1, 2004:

<b>Approved Average Rate Adjustments</b>	
<b>Effective Date</b>	<b>Rate</b>
July 1, 2004	11.0%
July 1, 2005	13.0%
July 1, 2006	13.0%
July 1, 2007*	8.0 %
July 1, 2008	9.0 %
July 1, 2009	7.0 %
July 1, 2010	7.0 %
July 1, 2011	5.0 %
July 1, 2012	5.0 %
July 1, 2013	5.0 %

\* Adjustment effective July 14, 2007

## Hetch Hetchy Water

Assessment fees to the Water Enterprise will increase to \$29.7 million as reflected in the FY 2011 adopted budget. Other upcountry retail rates are increasing 15% effective July 1, 2010 as adopted by the Commission as part of the five-year retail rates plan in May 2009.

## Hetch Hetchy Power

Hetch Hetchy Power's electric revenue requirement model was completed in September 2009. The electric retail rate setting process will occur during fiscal year 2011 in conjunction with an independent rate study as required by City Charter. Currently, Hetch Hetchy Power charges the general fund City departments \$0.0375 per kilowatt hours (kWh) and other City enterprise departments are charged at the PG&E scheduled rates. For fiscal year 2010, the MID and TID class one rates were \$0.02472 kWh and \$0.02193 kWh, respectively. MID/TID rates get trued up every year based on actuals. Under an existing development agreement, Hetch Hetchy will construct, own and operate the electric distribution infrastructure required to provide retail electric service to residential and commercial customers in Parcel "A" of the former Hunter's Point Shipyard. To date, Hetch Hetchy has prepared service standards, developed system plans and specifications, acquired materials and equipment, and initiated construction of primary distribution facilities.

## Request for Information

This report is designed to provide our citizens, customers, investors, and creditors with a general overview of SFPUC's finances and to demonstrate SFPUC's accountability for the money it receives. Questions regarding any of the information provided in this report or requests for additional financial information should be addressed to San Francisco Public Utilities Commission, Chief Financial Officer, 1155 Market Street, 11th Floor, San Francisco, CA 94103.

**THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

Statements of Net Assets

Proprietary Funds

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(In thousands)

	<b>Business-Type Activities - Enterprise Funds</b>									
	<b>Water</b>		<b>Wastewater</b>		<b>Hetch Hetchy Water</b>		<b>Hetch Hetchy Power</b>		<b>SFPUC Total</b>	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
<b>Assets:</b>										
Current assets:										
Cash and investments with City Treasury.....	\$ 113,472	130,927	49,902	36,968	33,986	35,723	139,875	134,388	337,235	338,006
Cash and investments outside City Treasury.....	89	36	89	5	2	2	8	8	188	51
Receivables:										
Charges for services, (net of allowance for doubtful accounts of \$2,021, \$2,860 and \$0* in 2010 and \$1,187, \$1,486, and \$0* in 2009, respectively).....	41,789	38,298	35,288	34,699	364	207	12,734	10,968	90,175	84,172
Wholesale balancing account.....	19,231	—	—	—	—	—	—	—	19,231	—
Due from other funds.....	10,346	197	—	—	—	—	—	—	10,346	197
Due from other governmental agencies, current portion.....	998	337	101	106	—	—	170	—	1,269	443
Due from other City departments, current portion.....	—	—	36	31	—	—	1,113	325	1,149	356
Interest .....	52	321	31	169	25	473	78	1,779	186	2,742
Advances and other receivables.....	1,065	788	—	3	1	3	6,869	4,081	7,935	4,875
Total receivables.....	73,481	39,941	35,456	35,008	390	683	20,964	17,153	130,291	92,785
Deferred charges and other assets.....	—	—	—	—	—	—	2,650	3,478	2,650	3,478
Inventories.....	1,791	1,849	3,246	3,586	134	122	153	139	5,324	5,696
Restricted assets - investments outside City Treasury.....	43,866	—	—	—	—	—	—	—	43,866	—
Total current assets.....	232,699	172,753	88,693	75,567	34,512	36,530	163,650	155,166	519,554	440,016
Non-current assets:										
Wholesale balancing account receivable.....	14,861	27,571	—	—	—	—	—	—	14,861	27,571
Restricted assets - cash and investments with City Treasury.....	620,347	21,726	133,597	61,477	—	—	—	—	753,944	83,203
Restricted assets - cash and investments outside City Treasury.....	251,415	40,974	59,659	—	—	—	18,717	6,091	329,791	47,065
Restricted assets - interest receivable.....	273	117	77	163	—	—	—	—	350	280
Capital assets not being depreciated.....	805,753	565,679	100,836	99,117	11,351	12,227	30,176	31,414	948,116	708,437
Capital assets, net of accumulated depreciation .....	1,058,600	935,581	1,296,776	1,295,806	75,283	71,079	168,960	158,919	2,599,619	2,461,385
Due from other City departments.....	—	—	—	—	—	—	15,386	16,932	15,386	16,932
Bond issuance costs, (net of accumulated amortization of of \$4,408, \$2,697 and \$19** in 2010 and \$3,302, \$2,506, and \$2** in 2009, respectively).....	17,371	6,834	5,246	2,576	—	—	205	40	22,822	9,450
Total non-current assets.....	2,768,620	1,598,482	1,596,191	1,459,139	86,634	83,306	233,444	213,396	4,684,889	3,354,323
Total assets.....	\$ 3,001,319	1,771,235	1,684,884	1,534,706	121,146	119,836	397,094	368,562	5,204,443	3,794,339

\*Hetch Hetchy Water and Hetch Hetchy Power

\*\*Hetch Hetchy Power

See accompanying notes to financial statements

(Continued)

**THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

Statements of Net Assets

Proprietary Funds

June 30, 2010 and 2009

(In thousands)

	<b>Business-Type Activities - Enterprise Funds</b>									
	<b>Water</b>		<b>Wastewater</b>		<b>Hetch Hetchy Water</b>		<b>Hetch Hetchy Power</b>		<b>SFPUC Total</b>	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
<b>Liabilities:</b>										
Current liabilities:										
Accounts payable.....	\$ 10,161	14,778	3,912	7,891	3,528	3,150	13,725	11,703	31,326	37,522
Accrued payroll.....	7,560	6,846	3,775	3,498	595	496	1,479	1,322	13,409	12,162
Accrued vacation and sick leave, current portion.....	6,366	6,071	2,747	2,770	436	396	1,084	1,058	10,633	10,295
Accrued workers' compensation, current portion.....	1,468	1,551	724	774	109	110	271	295	2,572	2,730
Due to other funds.....	24	23	—	—	—	—	4,560	—	4,584	23
Due to other City departments.....	—	—	6,599	556	—	—	—	—	6,599	556
Damage and claim liability, current portion.....	8,719	2,515	2,708	1,861	25	—	734	3,251	12,186	7,627
Deferred revenue, refunds and other liabilities, current portion.....	—	—	1,502	—	—	—	—	—	1,502	—
Deposits, advances, and other liabilities.....	5,066	4,903	—	—	3	3	840	675	5,909	5,581
Bond and loan interest payable.....	16,071	7,420	5,605	5,108	—	—	164	—	21,840	12,528
Pollution remediation obligation, current portion.....	499	3,077	—	—	—	—	—	—	499	3,077
Revenue bonds, current portion.....	27,795	26,605	26,320	37,130	—	—	422	422	54,537	64,157
Commercial paper.....	—	229,600	—	100,000	—	—	—	—	—	329,600
Loans payable, current portion.....	—	—	14,648	14,199	—	—	—	—	14,648	14,199
Current liabilities payable from restricted assets.....	74,607	40,603	4,980	6,998	—	—	—	—	79,587	47,601
Total current liabilities.....	<u>158,336</u>	<u>343,992</u>	<u>73,520</u>	<u>180,785</u>	<u>4,696</u>	<u>4,155</u>	<u>23,279</u>	<u>18,726</u>	<u>259,831</u>	<u>547,658</u>
Long-term liabilities:										
Arbitrage rebate payable.....	4,553	4,265	—	—	—	—	—	—	4,553	4,265
Other post-employment benefits obligation.....	45,598	30,967	16,078	11,413	2,431	1,580	6,041	4,219	70,148	48,179
Accrued vacation and sick leave, less current portion.....	5,461	5,383	2,312	2,308	304	296	755	790	8,832	8,777
Accrued workers' compensation, less current portion.....	6,626	7,066	3,422	3,639	484	518	1,204	1,382	11,736	12,605
Damage and claim liability, less current portion.....	21,021	7,126	8,401	8,499	82	—	1,030	7,060	30,534	22,685
Deferred revenue, refunds and other liabilities.....	—	—	—	544	—	—	—	—	—	544
Revenue bonds, less current portion.....	2,217,506	906,281	476,558	255,399	—	—	4,888	5,295	2,698,952	1,166,975
Loans payable, less current portion.....	—	—	46,492	61,140	—	—	—	—	46,492	61,140
Capital appreciation bonds.....	3,878	3,620	—	—	—	—	—	—	3,878	3,620
Certificates of participation.....	122,496	—	32,390	—	—	—	16,676	—	171,562	—
Pollution remediation obligation, less current portion.....	160	235	375	375	—	—	—	—	535	610
Total long-term liabilities.....	<u>2,427,299</u>	<u>964,943</u>	<u>586,028</u>	<u>343,317</u>	<u>3,301</u>	<u>2,394</u>	<u>30,594</u>	<u>18,746</u>	<u>3,047,222</u>	<u>1,329,400</u>
Total liabilities.....	<u>2,585,635</u>	<u>1,308,935</u>	<u>659,548</u>	<u>524,102</u>	<u>7,997</u>	<u>6,549</u>	<u>53,873</u>	<u>37,472</u>	<u>3,307,053</u>	<u>1,877,058</u>
<b>Net assets:</b>										
Invested in capital assets, net of related debt.....	319,581	372,421	970,526	971,789	86,634	83,306	196,064	190,333	1,572,805	1,617,849
Restricted for debt service.....	12,073	11,941	1,477	1,360	—	—	—	—	13,550	13,301
Restricted for capital projects.....	3,868	841	22,801	15,023	—	—	—	—	26,669	15,864
Unrestricted.....	80,162	77,097	30,532	22,432	26,515	29,981	147,157	140,757	284,366	270,267
Total net assets.....	<u>\$ 415,684</u>	<u>462,300</u>	<u>1,025,336</u>	<u>1,010,604</u>	<u>113,149</u>	<u>113,287</u>	<u>343,221</u>	<u>331,090</u>	<u>1,897,390</u>	<u>1,917,281</u>

See accompanying notes to financial statements

**THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

Statements of Revenues, Expenses, and Changes in Net Assets

Proprietary Funds

June 30, 2010 and 2009

(In thousands)

	<b>Business-Type Activities - Enterprise Funds</b>									
	<b>Water</b>		<b>Wastewater</b>		<b>Hetch Hetchy Water</b>		<b>Hetch Hetchy Power</b>		<b>SFPUC Total</b>	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
Operating revenues:										
Charges for services.....	\$ 248,369	247,664	202,363	199,332	31,109	24,468	97,236	90,560	579,077	562,024
Rents and concessions.....	8,584	9,399	—	—	110	111	135	135	8,829	9,645
Capacity fees.....	610	626	—	—	—	—	—	—	610	626
Other revenues.....	7,655	8,092	7,480	9,322	—	—	—	—	15,135	17,414
Total operating revenues.....	<u>265,218</u>	<u>265,781</u>	<u>209,843</u>	<u>208,654</u>	<u>31,219</u>	<u>24,579</u>	<u>97,371</u>	<u>90,695</u>	<u>603,651</u>	<u>589,709</u>
Operating expenses:										
Personal services.....	108,178	106,869	70,992	69,141	10,770	10,630	25,755	25,839	215,695	212,479
Contractual services.....	13,087	13,619	12,018	13,828	1,457	883	5,627	7,215	32,189	35,545
Transmission/Distribution and other power costs.....	—	—	—	—	—	—	17,398	18,466	17,398	18,466
Purchased power and related costs.....	—	—	—	—	—	—	328	—	328	—
Materials and supplies.....	12,748	12,671	9,888	5,754	970	877	1,540	1,366	25,146	20,668
Depreciation.....	52,571	49,100	40,748	38,815	4,092	3,939	8,539	7,930	105,950	99,784
Bad debt expense.....	—	92	—	576	—	—	—	—	—	668
Services provided by other departments and general and administrative.....	73,491	43,085	34,805	33,936	12,185	10,147	4,018	1,677	124,499	88,845
Other.....	17,895	22,879	17,061	7,250	2,579	6,011	23,129	1,248	60,664	37,388
Total operating expenses.....	<u>277,970</u>	<u>248,315</u>	<u>185,512</u>	<u>169,300</u>	<u>32,053</u>	<u>32,487</u>	<u>86,334</u>	<u>63,741</u>	<u>581,869</u>	<u>513,843</u>
Operating income (loss).....	<u>(12,752)</u>	<u>17,466</u>	<u>24,331</u>	<u>39,354</u>	<u>(834)</u>	<u>(7,908)</u>	<u>11,037</u>	<u>26,954</u>	<u>21,782</u>	<u>75,866</u>
Non-operating revenues (expenses):										
Federal and State grants.....	1,506	1,784	185	224	—	—	197	—	1,888	2,008
Interest and investment income.....	9,823	7,088	2,056	1,992	657	874	2,081	3,286	14,617	13,240
Interest expense.....	(47,272)	(28,847)	(15,891)	(15,677)	—	—	(722)	(7)	(63,885)	(44,531)
Net gain (loss) from sale of land.....	(178)	2,587	—	—	—	—	—	—	(178)	2,587
Other non-operating revenues.....	4,523	2,831	4,051	798	39	16	6,259	2,689	14,872	6,334
Other non-operating expenses.....	(1,773)	(799)	—	—	—	—	(5,321)	(2,382)	(7,094)	(3,181)
Net non-operating revenues (expenses).....	<u>(33,371)</u>	<u>(15,356)</u>	<u>(9,599)</u>	<u>(12,663)</u>	<u>696</u>	<u>890</u>	<u>2,494</u>	<u>3,586</u>	<u>(39,780)</u>	<u>(23,543)</u>
Income (loss) before transfers.....	<u>(46,123)</u>	<u>2,110</u>	<u>14,732</u>	<u>26,691</u>	<u>(138)</u>	<u>(7,018)</u>	<u>13,531</u>	<u>30,540</u>	<u>(17,998)</u>	<u>52,323</u>
Transfers in (out).....	<u>(493)</u>	<u>(1,143)</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>(24)</u>	<u>(1,400)</u>	<u>(277)</u>	<u>(1,893)</u>	<u>(1,444)</u>
Changes in net assets.....	<u>(46,616)</u>	<u>967</u>	<u>14,732</u>	<u>26,691</u>	<u>(138)</u>	<u>(7,042)</u>	<u>12,131</u>	<u>30,263</u>	<u>(19,891)</u>	<u>50,879</u>
Net assets at beginning of year.....	<u>462,300</u>	<u>461,333</u>	<u>1,010,604</u>	<u>983,913</u>	<u>113,287</u>	<u>120,329</u>	<u>331,090</u>	<u>300,827</u>	<u>1,917,281</u>	<u>1,866,402</u>
Net assets at end of year.....	<u>\$ 415,684</u>	<u>462,300</u>	<u>1,025,336</u>	<u>1,010,604</u>	<u>113,149</u>	<u>113,287</u>	<u>343,221</u>	<u>331,090</u>	<u>1,897,390</u>	<u>1,917,281</u>

See accompanying notes to financial statements

**THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

Statements of Cash Flows  
Proprietary Funds  
June 30, 2010 and 2009  
(In thousands)

	<b>Business-Type Activities - Enterprise Funds</b>									
	<b>Water</b>		<b>Wastewater</b>		<b>Hetch Hetchy Water</b>		<b>Hetch Hetchy Power</b>		<b>SFPUC Total</b>	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
Cash flows from operating activities:										
Cash received from customers, including cash deposits.....	\$ 246,684	235,841	209,252	208,067	30,954	24,453	93,599	86,986	580,489	555,347
Cash received from tenants for rent.....	8,584	9,069	—	—	110	111	141	135	8,835	9,315
Cash paid to employees for services.....	(91,035)	(88,027)	(65,615)	(62,702)	(9,625)	(9,472)	(23,583)	(22,850)	(189,858)	(183,051)
Cash paid to suppliers for goods and services.....	(94,430)	(78,888)	(63,910)	(59,424)	(14,414)	(17,003)	(39,087)	(32,592)	(211,841)	(187,907)
Cash paid for judgments and claims.....	(4,787)	(4,126)	(1,508)	(459)	(1,269)	(218)	(7,452)	(1,685)	(15,016)	(6,488)
Cash from miscellaneous revenues.....	—	—	—	—	26	4	239	281	265	285
Net cash provided by operating activities.....	<u>65,016</u>	<u>73,869</u>	<u>78,219</u>	<u>85,482</u>	<u>5,782</u>	<u>(2,125)</u>	<u>23,857</u>	<u>30,275</u>	<u>172,874</u>	<u>187,501</u>
Cash flows from non-capital and related financing activities:										
Cash received from operating grants.....	845	—	190	118	—	—	—	—	1,035	118
Cash received from Federal and State grants.....	—	—	—	—	—	—	27	—	27	—
Cash received from settlements.....	—	—	—	—	2	—	4,653	1,246	4,655	1,246
Cash received from rebates and incentive programs.....	—	—	—	—	—	—	—	—	—	—
Cash received from license fees.....	—	—	—	—	—	—	1,361	1,167	1,361	1,167
Cash paid for rebates and program incentives.....	—	—	—	—	—	—	(5,332)	(2,401)	(5,332)	(2,401)
Transfers In.....	—	—	—	—	—	—	300	—	300	—
Transfers (out).....	(493)	(1,143)	—	—	—	(24)	(1,700)	(277)	(2,193)	(1,444)
Cash received from other non-operating activities.....	—	—	1,648	798	—	—	—	—	1,648	798
Net cash provided by (used in) non-capital financing activities.....	<u>352</u>	<u>(1,143)</u>	<u>1,838</u>	<u>916</u>	<u>2</u>	<u>(24)</u>	<u>(691)</u>	<u>(265)</u>	<u>1,501</u>	<u>(516)</u>
Cash flows from capital and related financing activities:										
Proceeds from sale of capital assets.....	23	2,601	—	—	11	12	15	13	49	2,626
Proceeds from bond issuance, net of discounts and issuance costs.....	1,355,644	—	246,757	—	—	—	—	6,089	1,602,401	6,089
Proceeds from certificates of participation issuance, net of issuance costs..	122,755	—	32,459	—	—	—	16,711	—	171,925	—
Proceeds from commercial paper borrowings.....	—	890,500	663,500	227,500	—	—	—	—	663,500	1,118,000
Principal paid on revenue bonds.....	—	—	(37,130)	(35,665)	—	—	(422)	(422)	(37,552)	(36,087)
Principal paid on long-term debt.....	(41,005)	(25,520)	—	—	—	—	—	(282)	(41,005)	(25,802)
Principal paid on commercial paper.....	(229,600)	(660,900)	(763,500)	(177,500)	—	—	—	—	(993,100)	(838,400)
Principal paid on State revolving fund loans.....	—	—	(14,199)	(13,762)	—	—	—	—	(14,199)	(13,762)
Interest paid on long-term debt.....	(74,131)	(44,065)	(17,807)	(17,390)	—	—	(593)	(7)	(92,531)	(61,462)
Interest paid on commercial paper.....	(337)	(2,104)	(495)	(569)	—	—	—	—	(832)	(2,673)
Issuance costs paid on long-term debt.....	(12,759)	—	(2,861)	—	—	—	(150)	—	(15,770)	—
Interfund loans.....	(10,346)	—	—	—	—	—	—	—	(10,346)	—
Acquisition and construction of capital assets.....	(352,805)	(251,671)	(44,265)	(69,911)	(8,637)	5,520	(24,396)	(32,595)	(430,103)	(348,657)
Capital grants.....	—	1,506	—	—	—	—	—	—	—	1,506
Net cash provided by (used in) capital and related financing activities	<u>757,439</u>	<u>(89,653)</u>	<u>62,459</u>	<u>(87,297)</u>	<u>(8,626)</u>	<u>5,532</u>	<u>(8,835)</u>	<u>(27,204)</u>	<u>802,437</u>	<u>(198,622)</u>
Cash flows from investing activities:										
Interest income received.....	9,936	7,576	2,281	2,153	1,105	830	3,782	3,337	17,104	13,896
Proceeds from sale of Investment activity outside City Treasury.....	252,781	70,388	58,549	—	—	—	4,218	—	315,548	70,388
Purchase of investments outside City Treasury.....	(340,412)	(70,311)	(66,912)	—	—	—	(4,218)	—	(411,542)	(70,311)
Other investing activities.....	2,783	1,533	—	—	—	—	—	—	2,783	1,533
Net cash provided by (used in) investing activities.....	<u>(74,912)</u>	<u>9,186</u>	<u>(6,082)</u>	<u>2,153</u>	<u>1,105</u>	<u>830</u>	<u>3,782</u>	<u>3,337</u>	<u>(76,107)</u>	<u>15,506</u>
Increase (decrease) in cash and cash equivalents.....	747,895	(7,741)	136,434	1,254	(1,737)	4,213	18,113	6,143	900,705	3,869
Cash and cash equivalents:										
Beginning of year.....	152,689	160,430	98,450	97,196	35,725	31,512	140,487	134,344	427,351	423,482
End of year.....	<u>\$ 900,584</u>	<u>152,689</u>	<u>234,884</u>	<u>98,450</u>	<u>33,988</u>	<u>35,725</u>	<u>158,600</u>	<u>140,487</u>	<u>1,328,056</u>	<u>427,351</u>
Reconciliation of cash and cash equivalents to the statement of net assets:										
Cash and investments with City Treasury:										
Unrestricted.....	\$ 113,472	130,927	49,902	36,968	33,986	35,723	139,875	134,388	337,235	338,006
Restricted.....	620,347	21,726	133,597	61,477	—	—	—	—	753,944	83,203
Cash and investments outside City Treasury:										
Unrestricted.....	89	36	89	5	2	2	8	8	188	51
Restricted.....	166,676	—	51,296	—	—	—	18,717	6,091	236,689	6,091
Cash and cash equivalents at end of year on statements of cash flows.....	<u>\$ 900,584</u>	<u>152,689</u>	<u>234,884</u>	<u>98,450</u>	<u>33,988</u>	<u>35,725</u>	<u>158,600</u>	<u>140,487</u>	<u>1,328,056</u>	<u>427,351</u>

See accompanying notes to financial statements

(Continued)

**THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

Statements of Cash Flows  
 Proprietary Funds  
 June 30, 2010 and 2009  
 (In thousands)

	<b>Business-Type Activities - Enterprise Funds</b>									
	<b>Water</b>		<b>Wastewater</b>		<b>Hetch Hetchy Water</b>		<b>Hetch Hetchy Power</b>		<b>SFPUC Total</b>	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
Reconciliation of operating income (loss) to net cash provided by operating activities:										
Operating income (loss).....	\$ (12,752)	17,466	24,331	39,354	(834)	(7,908)	11,037	26,954	21,782	75,866
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:										
Depreciation.....	52,571	49,100	40,748	38,815	4,092	3,939	8,539	7,930	105,950	99,784
Provision for uncollectible accounts.....	834	(252)	1,374	543	—	—	—	—	2,208	291
Write-off of capital assets and other non-cash items.....	7,043	5,207	10,790	2,071	810	—	11,645	349	30,288	7,627
Amortization of bond discount and issuance cost.....	—	—	—	—	—	—	—	10	—	10
Cash from other sources.....	—	—	—	—	26	4	239	281	265	285
Changes in operating assets and liabilities:										
Receivables:										
Charges for services, net.....	(4,325)	(4,356)	(1,963)	(952)	(157)	(19)	(1,766)	(1,732)	(8,211)	(7,059)
Wholesale balancing account receivable.....	(6,521)	(13,701)	—	—	—	—	—	—	(6,521)	(13,701)
Interest and other.....	(277)	(666)	—	—	2	—	(2,788)	(71)	(3,063)	(737)
Loans receivable.....	—	—	—	—	—	—	—	322	—	322
Deferred charges and other assets.....	—	—	—	—	—	—	828	(1,358)	828	(1,358)
Inventories.....	58	23	340	(3,586)	(12)	16	(14)	19	372	(3,528)
Advances.....	—	—	3	(3)	—	—	—	—	3	(3)
Accounts payable.....	(4,617)	6,209	(3,979)	795	785	899	1,993	1,821	(5,818)	9,724
Accrued payroll.....	714	837	277	202	99	85	157	286	1,247	1,410
Accrued other post-employment benefits obligation.....	14,631	15,919	4,665	5,729	851	811	1,822	2,265	21,969	24,724
Accrued vacation and sick leave.....	373	598	(19)	80	48	22	(9)	147	393	847
Accrued workers' compensation.....	(523)	482	(267)	(262)	(35)	22	(202)	136	(1,027)	378
Due to other funds.....	1	23	217	556	—	—	—	—	218	579
Due to (from) other City departments.....	197	53	(5)	(6)	—	—	758	(711)	950	(664)
Damage and claims liability.....	20,099	(1,613)	749	1,316	107	—	(8,547)	(4,990)	12,408	(5,287)
Deposits, advances, other liabilities.....	163	(2,078)	958	455	—	4	165	(1,383)	1,286	(3,002)
Pollution remediation obligation.....	(2,653)	618	—	375	—	—	—	—	(2,653)	993
Total adjustments.....	<u>77,768</u>	<u>56,403</u>	<u>53,888</u>	<u>46,128</u>	<u>6,616</u>	<u>5,783</u>	<u>12,820</u>	<u>3,321</u>	<u>151,092</u>	<u>111,635</u>
Net cash provided by operating activities.....	\$ <u>65,016</u>	<u>73,869</u>	<u>78,219</u>	<u>85,482</u>	<u>5,782</u>	<u>(2,125)</u>	<u>23,857</u>	<u>30,275</u>	<u>172,874</u>	<u>187,501</u>
Non-cash transactions:										
Accrued capital asset costs.....	\$ 74,607	40,603	4,980	6,998	917	1,324	5,009	4,980	85,513	53,905
Land acquired through real property exchange.....	—	500	—	—	—	—	—	—	—	500
Interfund loan.....	—	—	5,787	—	—	—	4,560	—	10,347	—
See accompanying notes to financial statements										

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

## (1) Definition of Reporting Entity

The San Francisco Public Utilities Commission (the Commission), established in 1932, is responsible for providing operational oversight of the public utility enterprises of the City, which include Water, Wastewater, and Hetch Hetchy Water and Power. The Commission is responsible for determining such matters as the rates and charges for services, approval of contracts, and organizational policy.

Until August 1, 2008, the Commission consisted of five members, all appointed by the Mayor. Proposition E, a City and County of San Francisco Charter amendment approved by the voters in the June 3, 2008 election, terminated the terms of all five existing members of the Commission, changed the process for appointing new members, and set qualifications for all members. Under the amended Charter, the Mayor continues to nominate candidates to the Commission, but nominees do not take office until the Board of Supervisors votes to approve their appointments by a majority (at least six members). The amended Charter requires the Commission members meet the following qualifications:

- Seat 1 must have experience in environmental policy and an understanding of environmental justice issues.
- Seat 2 must have experience in ratepayer or consumer advocacy.
- Seat 3 must have experience in project finance.
- Seat 4 must have expertise in water systems, power systems, or public utility management.
- Seat 5 would be an at-large member.

The amended Charter provides for staggered four-year term for members. Initially, the new members for seats 2 and 4 served two years and the new members for seats 1, 3 and 5 served for four years.

The Commission is a department of the City, and as such, the financial operations of the Water Enterprise, Hetch Hetchy Water and Power, and the Wastewater Enterprise are included in the Comprehensive Annual Financial Report of the City as enterprise funds. These financial statements are intended to present the financial position and the changes in financial position and cash flows of only the portion of the City that is attributable to the transactions of the enterprises. They do not purport to, and do not present fairly the financial position of the City as of June 30, 2010, and the changes in financial position, or, where applicable, the cash flows in conformity with U.S. generally accepted accounting principles.

### ***Water Enterprise***

The San Francisco Water Enterprise was established in 1930 under the provisions of the Charter of the City and County of San Francisco. The Enterprise acquired the fully developed, mature water works for San Francisco on March 3, 1930. Since then, the City and County of San Francisco (the City) has operated and maintained the water works as the San Francisco Water Enterprise. The Board of Supervisors of the City has adopted resolutions (the Water Resolutions) providing for the issuance of various water revenue and refunding bond series. The Enterprise, which consists of a system of reservoirs, storage tanks, water treatment plants, pump stations, and pipelines, is engaged in the distribution of water to San Francisco and certain suburban



# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

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areas. In fiscal year 2010, the Enterprise delivered approximately 80,273 million gallons of water to nearly 2.5 million people within San Francisco and certain suburban areas.

### ***Wastewater Enterprise***

The San Francisco Wastewater Enterprise, formerly known as the San Francisco Clean Water Program, was established in 1977 following the transfer of all sewage system related assets and liabilities of the City and County of San Francisco (the City) to the Program.

In 1976, the electorate of the City approved a proposition authorizing the City to issue \$240,000 in revenue bonds pursuant to the Revenue Bond Law of 1941 of the State of California for the purpose of acquiring, constructing, improving, and financing improvements to the City's municipal sewage treatment and disposal system. Since then, the City's Board of Supervisors has adopted resolutions (Wastewater Resolutions) providing for the issuance of various sewer revenue and refunding bond series. The Wastewater Resolutions require the City to keep separate books of records and accounts of the Wastewater Enterprise, which was placed under the jurisdiction of the Commission in 1996.

### ***Hetch Hetchy Water and Power***

Hetch Hetchy was established as a result of the Raker Act of 1913, which granted water and power resources rights-of-way on the Tuolumne River in Yosemite National Park and Stanislaus National Forest to the City. Hetch Hetchy is a stand-alone enterprise comprised of two funds, Hetch Hetchy Power (AKA the Power Enterprise) and Hetch Hetchy Water, a portion of the Water Enterprise's operations, specifically the upcountry water supply and transmission service for the latter. Hetch Hetchy accounts for the activities of the Hetch Hetchy Water and Power and is engaged in the collection and conveyance of approximately 85% of the City's water supply and in the generation and transmission of electricity from that resource.

Approximately 65% of the electricity generated by Hetch Hetchy Power is used to provide electric service to the City's municipal customers (including the San Francisco Municipal Transportation Agency, Recreation and Parks Department, the Port of San Francisco, the San Francisco International Airport and its tenants, San Francisco General Hospital, street lights, Moscone Convention Center, and the Water and Wastewater Enterprises). The balance of electricity is sold to other utility districts, such as the Turlock and Modesto Irrigation Districts. As a result of the 1913 Raker Act, energy produced above the City's Municipal Load is sold first to Modesto and Turlock Irrigation Districts (the Districts) to cover their pumping and municipal load needs and any remaining energy is either sold to other municipalities and/or government agencies (not for resale) or deposited into an energy bank account under the City's agreement with PG&E. Hetch Hetchy consists of a system of reservoirs, hydroelectric power plants, aqueducts, pipelines, and transmission lines. This system carries water and power more than 165 miles from the Sierra Nevada to customers in the City and portions of the surrounding San Francisco Bay Area.

Hetch Hetchy also purchases wholesale electric power from various energy providers that are used in conjunction with owned hydro resources to meet the power requirements of its customers. Operations and business decisions can be greatly influenced by market conditions, State and Federal power matters before the California Public Utilities Commission (CPUC), the California Independent System Operator (CAISO), and the Federal Energy Regulatory Commission (FERC). Therefore, Hetch Hetchy serves as the City's representative at CPUC, CAISO and FERC forums and continues to monitor regulatory proceedings.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

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## (2) Significant Accounting Policies

### (a) *Basis of Accounting and Measurement Focus*

#### **Fund financial statements**

The fund financial statements are reported using the economic resources measurement focus and the accrual basis of accounting.

The accounts of the Water, Wastewater, Hetch Hetchy Water, and Hetch Hetchy Power are organized on the basis of proprietary fund types and are included as enterprise funds of the City and County of San Francisco, California. The activities are accounted for with a separate set of self-balancing accounts that comprise the funds' assets, liabilities, net assets, revenues, and expenses. The funds account for activities (i) that are financed with debt that is secured solely by a pledge of the net revenues from fees and charges of the activity; or (ii) that are required by laws or regulations that the activity's costs of providing services, including capital costs (such as depreciation or debt service), be recovered with fees and charges, rather than with taxes or similar revenues; or (iii) that the pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs (such as depreciation or debt service).

The financial activities of Water, Wastewater, Hetch Hetchy Water, and Hetch Hetchy Power are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities associated with operations are included on the statements of net assets; revenues are recorded when earned, and expenses are recorded when liabilities are incurred. Water and Wastewater's operating revenues are defined as charges to customers, rental income and capacity fees while Hetch Hetchy Water's and Hetch Hetchy Power's operating revenues are defined as charges to customers and rental income. Operating expenses include the costs of delivering services, administrative expenses, and depreciation on capital assets. Revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

The funds do not apply Financial Accounting Standards Board (FASB) statements and interpretations issued after November 30, 1989. The funds apply all applicable Governmental Accounting Standards Board (GASB) pronouncements, as well as statements and interpretations of the FASB, Accounting Principles Board Opinions, and Accounting Research Bulletins of the Committee on Accounting Procedures issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.

### (b) *Cash and Cash Equivalents*

Pooled deposits and investments held with the City Treasury are considered demand deposits and, therefore, cash equivalents for financial reporting. The City also holds non-pooled cash and investments for the enterprises. Non-pooled restricted deposits and investments held outside the City Treasury with maturities of three months or less are also considered to be cash equivalents.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

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**(c) *Investments***

Investments include money market funds, which are carried at cost. All other investments are stated at fair value based on quoted market prices. Changes in fair value are recognized as investment gains or losses.

**(d) *Deferred Charges***

Hetch Hetchy Water and Power's deferred charges consist of costs incurred to generate the power that has been placed in the Municipal Deviation and Deferred Delivery Accounts under the provisions of the interconnection agreement with PG&E (see note 15(a) to the basic financial statements).

**(e) *Inventory***

Inventory consists primarily of construction materials and maintenance supplies, and is valued at historical average cost. Inventory is expensed as it is consumed.

**(f) *Capital Assets***

Capital assets are defined as assets with an initial individual cost of more than \$5 and an estimated useful life in excess of one year. Capital assets include land, facilities and improvements, intangible assets, machinery and equipment, and infrastructure assets. For Water Enterprise, the capital assets are stated at cost. For Wastewater, Hetch Hetchy Water, and Hetch Hetchy Power, capital assets with an original acquisition date prior to July 1, 1977 are recorded in the financial statements at estimated cost, as determined by an independent professional appraisal, or at cost, if known. All subsequent acquisitions have been recorded at cost. Depreciation and amortization are computed using the straight-line method based on the estimated useful lives of the related assets, which range from 3 to 75 years for equipment and 3 to 175 years for buildings, structures, and improvements. No depreciation or amortization is recorded in the year of acquisition, and a full year's depreciation is recorded in the year of disposal.

**(g) *Intangible Assets***

As of July 1, 2009, the enterprise has adopted GASB Statement 51, *Accounting and Financial Reporting for Intangible Assets*. Generally, the enterprise capitalizes intangible assets providing a benefit extending beyond one reporting period, and amortizes the asset over the useful life. Intangible assets with an indefinite useful life are not amortized. The capitalization threshold is \$100. The adoption of this standard has no impact on net assets.

**(h) *Construction in Progress***

The costs of acquisition and construction of major plant and equipment are recorded as construction in progress. Costs of discontinued construction projects are recorded as an expense in the year in which the decision is made to discontinue such projects.

**(i) *Capitalization of Interest***

When applicable, a portion of the interest cost incurred on capital projects is capitalized for assets that require a period of time to construct or to otherwise prepare them for their intended use. Such amounts are amortized over the useful lives of the assets.

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**(j) *Bond Discount, Premium, and Issuance Costs***

Bond discount, premium, and issuance costs are amortized over the term of the related bonds on a method which approximates the effective interest method basis.

**(k) *Accrued Vacation and Sick Leave***

Accrued vacation pay, which may be accumulated up to ten weeks per employee, is charged to expense as earned. Sick leave earned subsequent to December 6, 1978 is non-vesting and may be accumulated up to six months per employee.

**(l) *Workers' Compensation***

The enterprises are self-insured for workers' compensation claims and accrue the estimated cost of those claims, including the estimated cost of incurred but not reported claims.

**(m) *Damage and Claim Liability***

General liability and uninsurable property damage claims are covered through a City-wide self-insurance pool. Commercially uninsurable property includes assets that are underground or provide transmission and distribution. Maintained commercial coverage does not cover claims attributed to loss from earthquake, contamination, pollution remediation efforts and other specific naturally occurring contaminants such as mold. The liability represents an estimate of the cost of all outstanding claims, including adverse loss development, and estimated incurred but not reported claims.

**(n) *Arbitrage Rebate Payable***

Certain bonds are subject to arbitrage rebate requirements in accordance with regulations issued by the U.S. Treasury Department. The requirements generally stipulate that earnings from the investment of the tax-exempt bond proceeds that exceed related interest costs on the bonds must be remitted to the federal government on every fifth anniversary of each bond issue. Water's liability for arbitrage rebate was \$4,553 and \$4,265 at June 30, 2010 and June 30, 2009, respectively. No arbitrage liability is due for Wastewater, Hetch Hetchy Water, and Hetch Hetchy Power for the years ending June 30, 2010 and 2009.

**(o) *Refunding of Debt***

Gains or losses occurring from advance refunding of debt are deferred and amortized into interest expense over the remaining life of the old bonds or the life of the new bonds, whichever is shorter.

**(p) *Income Taxes***

As a government agency, the enterprises are exempt from both federal income taxes and California state franchise taxes.

**(q) *Revenue Recognition***

Charges for water, wastewater and power services are based on usage. Generally, customers are billed on a cyclical basis with large commercial and industrial customers billed monthly, and all other customers'

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bi-monthly. Revenues earned but unbilled are accrued as charges for services receivable on the statements of net assets.

**(r) *Use of Estimates***

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**(s) *Reclassifications***

Certain reclassifications have been made to prior year amounts to conform to current year presentation.

Certain reclassifications, not impacting net assets, have been made to amounts presented in the issued reports of the Water Enterprise and Hetch Hetchy Water and Power.

**(t) *Accounting and Financial Reporting for Pollution Remediation Obligations***

The Enterprises adopted GASB Statement 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, in fiscal year 2009. To provide governments with better accounting guidance and consistency, GASB Statement 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, identifies the circumstances under which a governmental entity would be required to report a liability related to pollution remediation. According to the standard, a government would have to estimate its expected outlays for pollution remediation if it knows a site is polluted and any of the following recognition triggers occur:

- Pollution poses an imminent danger to the public or environment and a government has little or no discretion to avoid fixing the problem;
- A government has violated a pollution prevention-related permit or license;
- A regulator has identified (or evidence indicates it will identify) a government as responsible (or potentially responsible) for cleaning up pollution, or for paying all or some of the cost of the clean up;
- A government is named (or evidence indicates that it will be named) in a lawsuit to compel it to address the pollution; or
- A government begins or legally obligates itself to begin cleanup or post-cleanup activities (limited to amounts the government is legally required to complete).

As a part of ongoing operations, situations may occur requiring the removal of pollution or other hazardous material. These situations typically arise in the process of acquiring an asset, preparing an asset for its intended use, or during the Design Phase of projects under review by the Project Managers. Other times, pollution may arise during the implementation and construction of a major or minor capital project. Examples of pollution may include, but are not limited to: asbestos or lead paint removal; leaking of sewage in underground pipes or neighboring areas; chemical spills; removal and disposal of

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known toxic waste; harmful biological and chemical pollution of water; or contamination of surrounding soils by underground storage tanks (UST).

The Water Enterprise recorded \$659 and \$3,312 in pollution remediation liability as of June 30, 2010 and 2009, respectively. Wastewater recorded \$375 in pollution remediation liability as of June 30, 2010 and 2009 based on estimated contractual costs, as the enterprise has been listed as potentially responsible parties in the clean-up effort of Yosemite Creek due to its role in conveying contaminated flows to the receiving waters through the sewerage system. Yosemite Creek has been identified as having toxic sediments, primarily polychlorinated biphenyls. The U.S. Environmental Protection Agency is moving forward with a clean-up plan for these sediments. Contaminated flows emanating from a local industrial discharger in the drainage areas to Yosemite Creek is the likely responsible source of the contamination. Hetch Hetchy Water and Hetch Hetchy Power reported no pollution remediation obligation costs at June 30, 2010 and 2009.

### (u) ***Effects of New Pronouncements***

#### ***Governmental Accounting Standards Board Statement 51, Accounting and Financial Reporting for Intangible Assets***

As of July 1, 2009, the enterprises have adopted GASB Statement 51, *Accounting and Financial Reporting for Intangible Assets*. GASB Statement 51 provides governmental entities with guidance on how to properly identify, account for and report intangible assets, requiring capitalization of the asset and amortization over its useful life.

Under GASB Statement 51, intangible assets are defined as identifiable, non-financial assets capable of being separated, sold, transferred, or licensed, and include contractual or legal rights. Examples of intangible assets include rights-of-way easements, land use rights, water rights, licenses, and permits. The accounting pronouncement also provides guidance on the capitalization of internally generated intangible assets, such as the development and installation of computer software by or on behalf of the reporting entity.

According to the standard, the enterprises are required to capitalize intangible assets with a useful life extending beyond one reporting period. Effective July 1, 2009, the enterprises have established a capitalization threshold of \$100. GASB Statement 51 also requires amortization of intangible asset over the benefit period, except for certain assets having an indefinite useful life. Assets with an indefinite useful life generally provide a benefit that is not constrained by legal or contractual limitations or any other external factor, and therefore, are not amortized.

As a result of the adoption of GASB Statement 51, the Water Enterprise reclassified \$4,652 in intangible assets as of June 30, 2010, primarily composed of \$3,973 of Customer Care & Billing computer software and \$679 of easements. The Wastewater Enterprise reclassified \$4,587 in intangible assets as of June 30, 2010, primarily composed of \$3,434 of Customer Care & Billing computer software and \$1,153 of easements. Hetch Hetchy Water reclassified \$20,528 and Hetch Hetchy Power \$26,513 of water rights and easements to intangible assets as of June 30, 2010.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

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### (3) Cash, Cash Equivalents and Investments

Cash, cash equivalents and investments with the City Treasury are invested pursuant to investment policy guidelines established by the City Treasurer and are treated as cash equivalents for financial reporting purposes. The objectives of the policy guidelines are, in order of priority, preservation of capital, liquidity, and yield. The policy addresses soundness of financial institutions in which the City will deposit funds, types of investment instruments as permitted by the California Government Code, and the percentage of the portfolio which may be invested in certain instruments with longer terms to maturity. The City Treasurer allocates income from the investment of pooled cash at month end in proportion to the enterprises' average daily cash balances. The primary objectives of the enterprises' investment policy are consistent with the City's policy.

Restricted assets for bond reserves are held by an independent trustee outside the City's investment pool. The assets are held for the purpose of paying future interest and principal on the bonds and for eligible capital project expenditures.

Department-wide cash, cash equivalents and investments are shown on the accompanying statements of net assets as follows:

	2010	2009
Current assets:		
Cash and investments with City Treasury	\$ 337,235	338,006
Cash and investments outside City Treasury	188	51
Restricted cash and investments outside City Treasury	43,866	—
Non-current assets – restricted assets:		
Cash and investments with City Treasury	753,944	83,203
Cash and investments outside City Treasury	329,791	47,065
Total cash, cash equivalents and investments	\$ 1,465,024	468,325

The following table shows the percentage distribution of the City's pooled investments by maturity as of June 30, 2010:

<b>Investment maturities (in months)</b>			
<b>Under 1</b>	<b>1 to less than 6</b>	<b>6 to less than 12</b>	<b>12 to 60</b>
0.0%	2.9%	16.6%	80.5%

The following table shows the percentage distribution of the City's pooled investments by maturity as of June 30, 2009:

<b>Investment maturities (in months)</b>			
<b>Under 1</b>	<b>1 to less than 6</b>	<b>6 to less than 12</b>	<b>12 to 60</b>
9.9%	27.0%	8.8%	54.3%

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### ***Water Enterprise***

The Water Enterprise's restricted assets balances as of June 30, 2010 and 2009 were \$295,281 and \$40,974, respectively, and held all investments in guaranteed investment contracts, Treasury and Government Obligations, and money market mutual funds consisting of Treasury and Government Obligations.

#### **Restricted Cash and Investments outside City Treasury**

<b>Investments</b>	<b>Credit Ratings (S&amp;P/Moody's)</b>	<b>June 30, 2010</b>	
		<b>Maturities</b>	<b>Fair Value</b>
U.S. Treasury Notes	Not applicable	November 1, 2010	\$ 26,763
U.S. Treasury Notes	Not applicable	May 1, 2011	27,648
U.S. Treasury Notes	Not applicable	November 1, 2011	18,225
U.S. Treasury Notes	Not applicable	May 1, 2012	5,036
U.S. Treasury Notes	Not applicable	November 1, 2012	4,448
U.S. Treasury Notes	Not applicable	May 1, 2013	3,489
Guaranteed Investment Contract	AA-/Aa2	March 16, 2013	15,958
U.S. Treasury Bonds & Notes	Not applicable	August 31, 2016	27,038
U.S. Treasury Money Market Funds	Not applicable	< 90 days	45,490
U.S. Treasury Bills	Not applicable	< 90 days	121,186
		Total	<u>\$ 295,281</u>

Funds held by the trustee established under the 2002 amended and restated Indentures agreements are invested in "Permitted Investments," as defined in the agreement, which includes money market funds and investment agreements. The agreement permits investment in money market funds registered under the Federal Investment Company Act of 1940 and whose shares are also registered under the Federal Securities Act of 1933 and having a rating by Standard & Poor's of "AAAm-G," "AAAm" or "AAm" and a rating by Moody's of "Aaa," "Aa1" or "Aa2." Investment agreements must be with a U.S. bank or trust company having a rating by Moody's and S&P of "A" or higher, or are guaranteed by any entity with a rating of "A" or higher, at the time the agreement is entered into.

Additional cash outside of the investment pool includes \$89 at June 30, 2010 and \$36 at June 30, 2009, which is held in a commercial bank in non-interest bearing checking accounts which are covered by Federal Deposit Insurance Corporation (FDIC) depository insurance. These accounts were established as provided by the City's Administrative Code for revolving fund needs.



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### Notes to Basic Financial Statements

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Cash, cash equivalents and investments are shown on the accompanying statements of net assets as follows:

	<b>2010</b>	<b>2009</b>
<b>Current assets:</b>		
Cash and investments with City Treasury	\$ 113,472	130,927
Cash and investments outside City Treasury	89	36
Restricted cash and investments outside City Treasury	43,866	—
<b>Non-current assets:</b>		
Restricted cash and investments with City Treasury	620,347	21,726
Restricted cash and investments outside City Treasury	251,415	40,974
Total cash, cash equivalents and investments	\$ 1,029,189	193,663

### ***Wastewater Enterprise***

The restricted asset for bond reserves is held by an independent trustee outside the City investment pool. The balances as of June 30, 2010 and 2009 were \$59,659 and \$0, respectively. Funds held by the trustee established under the 2003 Indenture are invested in “Permitted Investments” as defined in the Indenture. “Permitted Investments” include money market funds registered under the Federal Investment Company Act of 1940 and whose shares are registered under the Federal Securities Act of 1933 and having a rating by Standard & Poor’s of “AAAm-G,” “AAAm,” or “AAm” and a rating by Moody’s of “Aaa,” “Aa1,” or “Aa2.”

#### **Restricted Cash and Investments Outside City Treasury**

<b>Investments</b>	<b>Credit Ratings (S&amp;P/Moody's)</b>	<b>June 30, 2010</b>	
		<b>Maturities</b>	<b>Fair Value</b>
U.S. Treasury Notes	Non-Applicable	October 1, 2010	\$ 1,515
U.S. Treasury Notes	Non-Applicable	April 1, 2011	2,267
U.S. Treasury Notes	Non-Applicable	October 1, 2011	2,055
U.S. Treasury Notes	Non-Applicable	April 1, 2012	1,576
U.S. Treasury Notes	Non-Applicable	October 1, 2012	428
U.S. Treasury Notes	Non-Applicable	April 1, 2013	393
U.S. Treasury Notes	Non-Applicable	October 1, 2013	129
U.S. Treasury Money Market Fund	Non-Applicable	< 90 days	19,971
U.S. Treasury Bills	Non-Applicable	< 90 days	31,325
Total			\$ 59,659

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Cash, cash equivalents and investments are shown on the accompanying statements of net assets as follows:

	<b>2010</b>	<b>2009</b>
<b>Current assets:</b>		
Cash and investments with City Treasury	\$ 49,902	36,968
Cash and investments outside City Treasury	89	5
<b>Non-current assets:</b>		
Restricted cash and investments with City Treasury	133,597	61,477
Restricted cash and investments outside City Treasury	59,659	—
Total cash, cash equivalents and investments	\$ 243,247	98,450

### ***Hetch Hetchy Water***

Non-pooled cash outside of the investment pool is \$2 and \$2 at June 30, 2010 and 2009, respectively, held at a commercial bank in a non-interest bearing checking account that is covered by depository insurance.

### ***Hetch Hetchy Power***

Non-pooled cash outside of the investment pool is \$18,725 and \$6,099 at June 30, 2010 and 2009, respectively. Balances include CREBs proceeds of \$2,589 deposited into a Federal Deposit Insurance Corporation (FDIC) insured money market fund with a weighted average maturity of 34 days, and \$8 held at a commercial bank in a non-interest bearing checking account that is covered by depository insurance. The account was established as provided by the City's Administrative Code. The credit ratings of the money market funds invested in as of June 30, 2010 and June 30, 2009 were "Aaa" by Moody's and "AAAm" by Standard & Poor's. Proceeds from the certificates of participation in the amount of \$16,128 are held with an outside trustee and are invested in the US Treasury Bills with maturities from July 1, 2010 through September 23, 2010. The credit ratings of the Treasury Bills as of June 30, 2010 were "Aaa" by Moody's and "AAA" by Standard & Poor's.

Cash, cash equivalents and investments as of June 30, 2010 are shown on the accompanying statements of net assets as follows:

	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>
<b>Current and non-current assets:</b>		
Pooled cash and investments with City Treasury	\$ 33,986	139,875
Non-pooled cash and investments outside City Treasury	2	18,725
Total cash, cash equivalents and investments	\$ 33,988	158,600

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Cash, cash equivalents and investments as of June 30, 2009 are shown on the accompanying statements of net assets as follows:

	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>
Current and non-current assets:		
Pooled cash and investments with City Treasury	\$ 35,723	134,388
Non-pooled cash and investments outside City Treasury	2	6,099
Total cash, cash equivalents and investments	\$ 35,725	140,487

### (4) Capital Assets

#### *Department-wide Business-Type Activities*

Capital assets as of June 30, 2010 and 2009 consist of the following:

	<b>Balance June 30, 2009</b>	<b>Increases</b>	<b>Decreases</b>	<b>Balance June 30, 2010</b>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 44,849	—	(1,267)	43,582
Intangible assets	—	3,269	—	3,269
Construction in progress	663,588	501,371	(263,694)	901,265
Total capital assets not being depreciated	708,437	504,640	(264,961)	948,116
Capital assets being depreciated:				
Facilities and improvements	4,024,904	169,468	(47,008)	4,147,364
Intangible assets	—	53,011	—	53,011
Machinery and equipment	259,963	66,683	(3,201)	323,445
Total capital assets being depreciated	4,284,867	289,162	(50,209)	4,523,820
Less accumulated depreciation for:				
Facilities and improvements	(1,662,192)	(94,881)	17,482	(1,739,591)
Machinery and equipment	(161,290)	(11,069)	4,789	(167,570)
Intangible assets	—	(17,040)	—	(17,040)
Total accumulated depreciation	(1,823,482)	(122,990)	22,271	(1,924,201)
Total capital assets being depreciated, net	2,461,385	166,172	(27,938)	2,599,619
Total capital assets, net	\$ 3,169,822	670,812	(292,899)	3,547,735

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	<u>Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance</u>
	<u>June 30, 2008</u>	<u>Increases</u>	<u>Decreases</u>	<u>June 30, 2009</u>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 44,267	582	—	44,849
Construction in progress	510,555	379,885	(226,852)	663,588
Total capital assets not being depreciated	<u>554,822</u>	<u>380,467</u>	<u>(226,852)</u>	<u>708,437</u>
Capital assets being depreciated:				
Facilities and improvements	3,829,596	195,308	—	4,024,904
Machinery and equipment	228,842	32,416	(1,295)	259,963
Total capital assets being depreciated	<u>4,058,438</u>	<u>227,724</u>	<u>(1,295)</u>	<u>4,284,867</u>
Less accumulated depreciation for:				
Facilities and improvements	(1,574,875)	(87,368)	51	(1,662,192)
Machinery and equipment	(150,154)	(12,416)	1,280	(161,290)
Total accumulated depreciation	<u>(1,725,029)</u>	<u>(99,784)</u>	<u>1,331</u>	<u>(1,823,482)</u>
Total capital assets being depreciated, net	<u>2,333,409</u>	<u>127,940</u>	<u>36</u>	<u>2,461,385</u>
Total capital assets, net	<u>\$ 2,888,231</u>	<u>508,407</u>	<u>(226,816)</u>	<u>3,169,822</u>

### ***Water Capital Assets***

Capital assets as of June 30, 2010 and 2009 consist of the following:

	<u>Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance</u>
	<u>June 30, 2009</u>	<u>Increases</u>	<u>Decreases</u>	<u>June 30, 2010</u>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 18,386	—	(679)	17,707
Intangible assets	—	679	—	679
Construction in progress	547,293	417,265	(177,191)	787,367
Total capital assets not being depreciated	<u>565,679</u>	<u>417,944</u>	<u>(177,870)</u>	<u>805,753</u>
Capital assets being depreciated:				
Facilities and improvements	1,426,180	123,062	(667)	1,548,575
Intangible assets	—	3,973	—	3,973
Machinery and equipment	146,788	49,456	(605)	195,639
Total capital assets being depreciated	<u>1,572,968</u>	<u>176,491</u>	<u>(1,272)</u>	<u>1,748,187</u>
Less accumulated depreciation for:				
Facilities and improvements	(537,920)	(46,940)	—	(584,860)
Machinery and equipment	(99,467)	(5,631)	371	(104,727)
Intangible assets	—	—	—	—
Total accumulated depreciation	<u>(637,387)</u>	<u>(52,571)</u>	<u>371</u>	<u>(689,587)</u>
Total capital assets being depreciated, net	<u>935,581</u>	<u>123,920</u>	<u>(901)</u>	<u>1,058,600</u>
Total capital assets, net	<u>\$ 1,501,260</u>	<u>541,864</u>	<u>(178,771)</u>	<u>1,864,353</u>

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

	<b>Balance</b>	<b>Increases</b>	<b>Decreases</b>	<b>Balance</b>
	<b>June 30, 2008</b>	<b>Increases</b>	<b>Decreases</b>	<b>June 30, 2009</b>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 17,886	500	—	18,386
Construction in progress	423,063	282,705	(158,475)	547,293
Total capital assets not being depreciated	440,949	283,205	(158,475)	565,679
Capital assets being depreciated:				
Facilities and improvements	1,287,404	138,776	—	1,426,180
Machinery and equipment	128,758	18,821	(791)	146,788
Total capital assets being depreciated	1,416,162	157,597	(791)	1,572,968
Less accumulated depreciation for:				
Facilities and improvements	(496,886)	(41,085)	51	(537,920)
Machinery and equipment	(92,231)	(8,015)	779	(99,467)
Total accumulated depreciation	(589,117)	(49,100)	830	(637,387)
Total capital assets being depreciated, net	827,045	108,497	39	935,581
Total capital assets, net	\$ 1,267,994	391,702	(158,436)	1,501,260

Capital assets with a useful life of 50 years or greater include buildings and structures, reservoirs, dams, treatment plants, pump stations, certain water mains and pipelines, sewer systems, tunnels, and bridges.

Financial Accounting Standards Board (FASB) Statement 34, *Capitalization of Interest Costs*, requires that interest expense incurred during construction of assets be capitalized. Interest included in the construction in progress and total interest expense incurred during the years ended June 30, 2010 and 2009 are as follows:

	<b>2010</b>	<b>2009</b>
Interest expensed	\$ 47,272	28,847
Interest included in construction in progress	36,131	22,135
	\$ 83,403	50,982

During fiscal years ending in 2010 and 2009, the Enterprise expensed \$7,037 and \$5,207, respectively, related to capitalized design and planning costs on certain projects. The amounts of the write-offs were recognized as other operating expenses in the accompanying statements of revenues, expenses, and changes in net assets.

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

### ***Wastewater Capital Assets***

Capital assets as of June 30, 2010 and 2009 consist of the following:

	<b>Balance June 30, 2009</b>	<b>Increases</b>	<b>Decreases</b>	<b>Balance June 30, 2010</b>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 21,787	—	(577)	21,210
Intangible assets	—	1,153	—	1,153
Construction in progress	77,330	50,527	(49,384)	78,473
Total capital assets not being depreciated	99,117	51,680	(49,961)	100,836
Capital assets being depreciated:				
Facilities and improvements	2,109,382	34,468	(737)	2,143,113
Intangible assets	—	3,434	—	3,434
Machinery and equipment	58,013	2,282	(2,419)	57,876
Total capital assets being depreciated	2,167,395	40,184	(3,156)	2,204,423
Less accumulated depreciation for:				
Facilities and improvements	(843,406)	(37,884)	2,199	(879,091)
Machinery and equipment	(28,183)	(2,864)	2,491	(28,556)
Intangible assets	—	—	—	—
Total accumulated depreciation	(871,589)	(40,748)	4,690	(907,647)
Total capital assets being depreciated, net	1,295,806	(564)	1,534	1,296,776
Total capital assets, net	\$ 1,394,923	51,116	(48,427)	1,397,612
	<b>Balance June 30, 2008</b>	<b>Increases</b>	<b>Decreases</b>	<b>Balance June 30, 2009</b>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 21,787	—	—	21,787
Construction in progress	62,975	73,538	(59,183)	77,330
Total capital assets not being depreciated	84,762	73,538	(59,183)	99,117
Capital assets being depreciated:				
Facilities and improvements	2,057,625	51,757	—	2,109,382
Machinery and equipment	51,583	6,765	(335)	58,013
Total capital assets being depreciated	2,109,208	58,522	(335)	2,167,395
Less accumulated depreciation for:				
Facilities and improvements	(807,038)	(36,368)	—	(843,406)
Machinery and equipment	(26,071)	(2,447)	335	(28,183)
Total accumulated depreciation	(833,109)	(38,815)	335	(871,589)
Total capital assets being depreciated, net	1,276,099	19,707	—	1,295,806
Total capital assets, net	\$ 1,360,861	93,245	(59,183)	1,394,923

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

Capital assets with a useful life of 50 years or greater include buildings and structures, sewers, waste water treatment plants, pump stations, and other pipelines.

Financial Accounting Standards Board (FASB) Statement 34, *Capitalization of Interest Costs*, requires that interest expense incurred during construction of assets be capitalized. Interest included in the construction in progress and total interest expense incurred during the years ended June 30, 2010 and 2009 are as follows:

	<b>2010</b>	<b>2009</b>
Interest expensed	\$ 15,891	15,677
Interest included in construction in progress	3,790	2,644
	<b>\$ 19,681</b>	<b>18,321</b>

During fiscal years ending in 2010 and 2009, the Enterprise expensed \$10,790 and \$2,071, respectively, related to capitalized design and planning costs on certain projects. The amounts of the write-offs were recognized as other operating expenses in the accompanying statements of revenues, expenses, and changes in net assets.

### ***Hetch Hetchy Water Capital Assets***

Capital assets as of June 30, 2010 and 2009 consist of the following:

	<b>Balance June 30, 2009</b>	<b>Increases</b>	<b>Decreases</b>	<b>Balance June 30, 2010</b>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 3,008	—	(5)	3,003
Intangible assets	—	6	—	6
Construction in progress	9,219	7,704	(8,581)	8,342
Total capital assets not being depreciated	12,227	7,710	(8,586)	11,351
Capital assets being depreciated:				
Facilities and improvements	210,300	2,250	(20,522)	192,028
Intangible assets	—	20,522	—	20,522
Machinery and equipment	11,450	6,050	(80)	17,420
Total capital assets being depreciated	221,750	28,822	(20,602)	229,970
Less accumulated depreciation for:				
Facilities and improvements	(143,063)	(3,521)	7,668	(138,916)
Machinery and equipment	(7,608)	(571)	76	(8,103)
Intangible assets	—	(7,668)	—	(7,668)
Total accumulated depreciation	(150,671)	(11,760)	7,744	(154,687)
Total capital assets being depreciated, net	71,079	17,062	(12,858)	75,283
Total capital assets, net	<b>\$ 83,306</b>	<b>24,772</b>	<b>(21,444)</b>	<b>86,634</b>

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

	<b>Balance</b>	<b>Increases</b>	<b>Decreases</b>	<b>Balance</b>
	<b>June 30, 2008</b>	<b>Increases</b>	<b>Decreases</b>	<b>June 30, 2009</b>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 2,932	76	—	3,008
Construction in progress	4,294	6,878	(1,953)	9,219
Total capital assets not being depreciated	7,226	6,954	(1,953)	12,227
Capital assets being depreciated:				
Facilities and improvements	221,587	2,369	(13,656)	210,300
Machinery and equipment	10,468	1,058	(76)	11,450
Total capital assets being depreciated	232,055	3,427	(13,732)	221,750
Less accumulated depreciation for:				
Facilities and improvements	(139,541)	(3,522)	—	(143,063)
Machinery and equipment	(7,266)	(417)	75	(7,608)
Total accumulated depreciation	(146,807)	(3,939)	75	(150,671)
Total capital assets being depreciated, net	85,248	(512)	(13,657)	71,079
Total capital assets, net	\$ 92,474	6,442	(15,610)	83,306

During fiscal years ending in 2010 and 2009, Hetch Hetchy Water expensed \$244 and \$0, respectively, related to capitalized design and planning costs on certain projects. The amounts of the write-offs were recognized as other operating expenses in the accompanying statements of revenues, expenses, and changes in net assets.



## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

### *Hetch Hetchy Power Capital Assets*

Capital assets as of June 30, 2010 and 2009 consist of the following:

	<b>Balance June 30, 2009</b>	<b>Increases</b>	<b>Decreases</b>	<b>Balance June 30, 2010</b>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 1,668	—	(6)	1,662
Intangible assets	—	1,431	—	1,431
Construction in progress	29,746	25,875	(28,538)	27,083
Total capital assets not being depreciated	31,414	27,306	(28,544)	30,176
Capital assets being depreciated:				
Facilities and improvements	279,042	9,688	(25,082)	263,648
Intangible assets	—	25,082	—	25,082
Machinery and equipment	43,712	8,895	(97)	52,510
Total capital assets being depreciated	322,754	43,665	(25,179)	341,240
Less accumulated depreciation for:				
Facilities and improvements	(137,803)	(6,536)	7,615	(136,724)
Machinery and equipment	(26,032)	(2,003)	1,851	(26,184)
Intangible assets	—	(9,372)	—	(9,372)
Total accumulated depreciation	(163,835)	(17,911)	9,466	(172,280)
Total capital assets being depreciated, net	158,919	25,754	(15,713)	168,960
Total capital assets, net	\$ 190,333	53,060	(44,257)	199,136
	<b>Balance June 30, 2008</b>	<b>Increases</b>	<b>Decreases</b>	<b>Balance June 30, 2009</b>
Capital assets not being depreciated:				
Land and rights-of-way	\$ 1,662	6	—	1,668
Construction in progress	20,223	16,764	(7,241)	29,746
Total capital assets not being depreciated	21,885	16,770	(7,241)	31,414
Capital assets being depreciated:				
Facilities and improvements	262,980	2,406	13,656	279,042
Machinery and equipment	38,033	5,772	(93)	43,712
Total capital assets being depreciated	301,013	8,178	13,563	322,754
Less accumulated depreciation for:				
Facilities and improvements	(131,410)	(6,393)	—	(137,803)
Machinery and equipment	(24,586)	(1,537)	91	(26,032)
Total accumulated depreciation	(155,996)	(7,930)	91	(163,835)
Total capital assets being depreciated, net	145,017	248	13,654	158,919
Total capital assets, net	\$ 166,902	17,018	6,413	190,333

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

During fiscal years ending in 2010 and 2009, Hetch Hetchy Power expensed \$1,838 and \$0, respectively, related to capitalized design and planning costs on certain projects. The amounts of the write-offs were recognized as other operating expenses in the accompanying statements of revenues, expenses, and changes in net assets.

### (5) Restricted Assets

#### *Department-wide Restricted Assets*

	<b>2010</b>	<b>2009</b>
Restricted assets – cash and investments with City Treasury	\$ 753,944	83,203
Restricted assets – cash and investments outside City Treasury	373,657	47,065
Restricted assets – cash and investments interest receivable	350	280
Total restricted assets	\$ 1,127,951	130,548

#### *Water Restricted Assets*

Pursuant to the Indentures, all revenues (except amounts on deposit in the rebate fund) are irrevocably pledged to the punctual payment of debt service on the outstanding Revenue and Refunding Bonds. Accordingly, the revenues shall not be used for any other purpose while any Revenue and Refunding Bonds are outstanding, except as expressly permitted by the Indentures. Further, all revenues shall be deposited by the City Treasurer, in special funds designated as the Water Revenue Fund, which must be maintained in the City Treasury. These funds, held at the City Treasury, are recorded in the statements of net assets as cash and investments with the City Treasury. Deposits in the Water Revenue Fund, including earnings thereon, shall be appropriated, transferred, expended, or used for the following purposes pertaining to the financing, maintenance, and operations in accordance with the following priority:

1. The payment of operation and maintenance expenses for such utility and related facilities;
2. The payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the Commission may establish or the Board of Supervisors may require with respect to employees;
3. The payment of principal, interest, reserve, sinking fund, and other mandatory funds created to secure Revenue Bonds issued by Water for the acquisition, construction, or extension of facilities owned, operated, or controlled by Water;
4. The payment of principal and interest on General Obligation Bonds issued by the City for Water's purposes;
5. Reconstruction and replacement as determined by SFPUC or as required by any of Revenue Bond ordinances duly adopted and approved; and

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

6. The acquisition of land, real property, or interest in real property for, and the acquisition, construction, enlargement, and improvement of, new and existing buildings, structures, facilities, equipment, appliances, and other property necessary or convenient to the development or improvement of such utility owned, controlled, or operated by Water; and for any other lawful purpose, including the transfer of surplus funds pursuant to Section 6.407(e) of the City's Charter.

In accordance with the Indenture, the Program maintains certain restricted cash and investment balances in trust. Restricted assets held in trust consist of the following as of June 30, 2010 and 2009:

	<b>2010</b>	<b>2009</b>
Cash and investments with City Treasury:		
Water revenue bond construction fund	\$ 620,347	21,726
Cash and investments outside City Treasury:		
1991 Capital Appreciation Bond	15	15
2001A Water revenue bond fund	2,545	2,611
2002A Water revenue bond fund	3,451	3,363
2002B Water revenue bond fund	4,790	4,647
2006A Water revenue bond fund	25,761	25,564
2006B Water revenue bond fund	2,945	2,869
2006C Water revenue bond fund	1,952	1,905
2009A Water revenue bond fund	38,675	—
2009B Water revenue bond fund	41,190	—
2010ABC Water revenue bond fund	52,771	—
2009C Certificates of participation – 525 Golden Gate	29,291	—
2009D Certificates of participation – 525 Golden Gate	91,895	—
Total cash and investments outside City Treasury	295,281	40,974
Interest receivable:		
Water bond construction fund	273	117
Total restricted assets	\$ 915,901	62,817

Restricted assets listed above as cash and investments with City Treasury are held in subfunds of the Water Revenue Fund.

### ***Wastewater Restricted Assets***

The Master Bond Resolution was discharged upon the issuance of the 2003 Refunding Series A Bonds. Pursuant to the Indenture, which became effective with the issuance of the 2003 Refunding Series A Bonds, all net revenues of the Enterprise (except amounts on deposit in the rebate fund) are irrevocably pledged to the punctual payment of debt service on the Wastewater revenue bonds. Accordingly, the net revenues of the Enterprise shall not be used for any other purpose while any of its revenue bonds are outstanding except as expressly permitted by the Indenture. Further, all net revenues shall be deposited by the City Treasurer, by instruction of the Enterprise, in special funds designated as the Revenue Fund, which must be maintained in the City Treasury. These funds, held at the City Treasury, are recorded in the statements of net assets of the Enterprise as cash and investments with the City Treasury.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

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(Dollars in thousands)

Deposits in the Revenue Fund, including earnings thereon, shall be appropriated, transferred, expended, or used for the following purposes and only in accordance with the following priority:

1. The payment of operation and maintenance costs of the Enterprise;
2. The payment of State loans;
3. The payment of bonds, parity State loans, policy costs, and amounts due as reimbursement under any letter of credit agreement; and
4. Any other lawful purpose of the Enterprise.

In accordance with the Indenture, the Enterprise maintains certain restricted cash and investment balances in trust. Restricted assets held in trust consist of the following as of June 30, 2010 and 2009:

	<u>2010</u>	<u>2009</u>
Restricted assets – cash and investments with City Treasury	\$ 133,597	61,477
Restricted assets – cash and investments outside City Treasury	59,659	—
Restricted assets – cash and investments interest receivable	77	163
Total restricted assets	<u>\$ 193,333</u>	<u>61,640</u>

Restricted cash listed above as cash and investments with the City Treasury are held in subfunds of the Sewer Revenue Fund of the City Treasury.

### ***Hetch Hetchy Power Restricted Assets***

Pursuant to the Master Lease/Purchase Agreement (Agreement), net power revenues of Hetch Hetchy are irrevocably pledged to the punctual payment of debt service on the Clean Renewable Energy Bonds (CREBs). Accordingly, pledged power revenue shall not be used for any other purpose while any of its CREBs are outstanding, except as expressly permitted by the Agreement. Further, all revenues shall be deposited by the City Treasurer, by instruction of Hetch Hetchy, in special funds designated as the Hetch Hetchy Water and Power Revenue Fund (the Power Revenue Fund), which must be maintained in the City Treasury. These funds, held at the City Treasury, are recorded in the statements of net assets of Hetch Hetchy as deposits and investments with the City Treasury.

Deposits in the Power Revenue Fund, including earnings thereon, shall be appropriated, transferred, expended, or used for the following purposes pertaining the financing, maintenance, and operation of Hetch Hetchy in accordance with the following priority:

1. The payment of operation and maintenance expenses for such utility and related facilities;
2. The payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as Hetch Hetchy may establish or the Board of Supervisors may require with respect to employees of Hetch Hetchy;

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

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(Dollars in thousands)

3. The payment of principal, interest, reserve, sinking fund, or other mandatory funds created to secure long-term financing issued by Hetch Hetchy for the acquisition, construction, or extension of facilities owned, operated, or controlled by Hetch Hetchy;
4. Reconstruction and replacement as determined by Hetch Hetchy or as required by any of Hetch Hetchy's financing ordinances duly adopted and approved; and
5. The acquisition of land, real property, or interest in real property for, and the acquisition, construction, enlargement, and improvement of, new and existing buildings, structures, facilities, equipment, appliances, and other property necessary or convenient to the development or improvement of such utility owned, controlled, or operated by Hetch Hetchy; and for any other lawful purpose of Hetch Hetchy, including the transfer of surplus funds pursuant to Section 6.407(e) of the City's Charter.

In accordance with the Agreement, Hetch Hetchy Power maintains certain restricted cash and investment balances in trust. Hetch Hetchy Water and Hetch Hetchy Power have the following restricted assets held in trust as of June 30, 2010, respectively:

	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>
Restricted cash and investments outside City Treasury:		
2008 Clean renewable energy bond fund	\$ —	2,589
Certificates of participation - 525 Golden Gate Headquarters	—	16,128
	\$ —	18,717

Hetch Hetchy Water and Hetch Hetchy Power have the following restricted assets held in trust as of June 30, 2009:

	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>
Restricted cash and investments outside City Treasury		
2008 Clean renewable energy bond fund	\$ —	6,091
	\$ —	6,091

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

### (6) Short-Term Debt

#### *Department-wide Short-Term Debt*

	<b>2010</b>	<b>2009</b>
Balance, beginning of year	\$ 329,600	50,000
Additions	663,500	1,118,000
Reductions (Refunding)	(993,100)	(838,400)
Balance, end of year	\$ —	329,600

#### *Water Short-Term Debt*

The Commission and Board of Supervisors have authorized the issuance of up to \$500,000 in commercial paper. During the fiscal year 2010, \$229,600 in outstanding commercial paper was refunded as a part of the 2009A Series Water revenue bond issuance. The Enterprise has no commercial paper notes outstanding at June 30, 2010 as follows:

	<b>2010</b>	<b>2009</b>
Balance, beginning of year	\$ 229,600	—
Additions	—	890,500
Reductions (Refunding)	(229,600)	(660,900)
Balance, end of year	\$ —	229,600

#### *Wastewater Short-Term Debt*

The Commission and Board of Supervisors have authorized the issuance of up to \$150,000 in commercial paper, under the voter-approved 2002 Proposition E, for the purpose of reconstructing, expanding, repairing or improving the Wastewater Enterprise's facilities. The Wastewater Enterprise has no commercial paper outstanding on June 30, 2010 and has \$100,000 outstanding on June 30, 2009.

	<b>2010</b>	<b>2009</b>
Balance, beginning of year	\$ 100,000	50,000
Additions	663,500	227,500
Reductions (Refunding)	(763,500)	(177,500)
Balance, end of year	\$ —	100,000
Interest rates	0.18% to 0.75%	0.30% to 2.20%

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

### (7) Changes in Long-Term Liabilities

#### *Department-wide Long-Term Liabilities*

Long-term liability activities for the years ended June 30, 2010 and 2009 are as follows:

	<u>July 1, 2009</u>	<u>Additions</u>	<u>Reductions</u>	<u>June 30, 2010</u>	<u>Due within one year</u>
Revenue Bonds:					
Revenue Bonds, 2003 Refunding Series A	\$ 292,660	—	(37,130)	255,530	26,320
2001A revenue bonds	77,580	—	(17,345)	60,235	3,065
2002A revenue bonds	147,520	—	(3,260)	144,260	3,425
2002B revenue refunding bonds	51,425	—	(6,375)	45,050	6,640
2006A revenue bonds	497,060	—	(8,505)	488,555	8,895
2006B revenue refunding bonds	104,245	—	(3,145)	101,100	3,300
2006C revenue refunding bonds	43,560	—	(2,375)	41,185	2,470
2009A revenue bonds	—	412,000	—	412,000	—
2009B revenue refunding bonds	—	412,000	—	412,000	—
2010A revenue bonds	—	103,995	—	103,995	—
2010B revenue bonds	—	610,235	—	610,235	—
2010C revenue refunding bonds	—	14,040	—	14,040	—
Less deferred amounts:					
For issuance premiums	41,289	50,131	(4,758)	86,662	—
For refunding loss	(29,924)	—	3,256	(26,668)	—
Total revenue bonds payable	<u>1,225,415</u>	<u>1,602,401</u>	<u>(79,637)</u>	<u>2,748,179</u>	<u>54,115</u>
Clean Renewable Energy Bonds	5,903	—	(422)	5,481	422
Less bond discount	(186)	—	15	(171)	—
State of California revolving loans	75,339	—	(14,199)	61,140	14,648
1991 capital appreciation bonds	3,620	258	—	3,878	—
2009C certificates of participation (COPs)	—	38,120	—	38,120	—
2009C COPs issuance premiums	—	4,255	(363)	3,892	—
2009D COPs (Build America)	—	129,550	—	129,550	—
Other post-employment benefits obligation	48,179	29,646	(7,677)	70,148	—
Arbitrage rebate payable	4,265	288	—	4,553	—
Accrued vacation and sick leave	19,072	12,785	(12,392)	19,465	10,633
Accrued workers' compensation	15,335	2,427	(3,454)	14,308	2,572
Damage and claim liability	30,312	28,702	(16,294)	42,720	12,186
Deferred revenue	544	1,025	(67)	1,502	1,502
Pollution remediation obligation	3,687	—	(2,653)	1,034	499
Total	<u>\$ 1,431,485</u>	<u>1,849,457</u>	<u>(137,143)</u>	<u>3,143,799</u>	<u>96,577</u>

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

	<u>July 1, 2008</u>	<u>Additions</u>	<u>Reductions</u>	<u>June 30, 2009</u>	<u>Due within one year</u>
Revenue Bonds:					
Revenue Bonds, 2003 Refunding Series A \$	328,325	—	(35,665)	292,660	37,130
2001A revenue bonds	80,410	—	(2,830)	77,580	2,945
2002A revenue bonds	150,620	—	(3,100)	147,520	3,260
2002B revenue refunding bonds	57,580	—	(6,155)	51,425	6,375
2006A revenue bonds	505,230	—	(8,170)	497,060	8,505
2006B revenue refunding bonds	107,230	—	(2,985)	104,245	3,145
2006C revenue refunding bonds	45,840	—	(2,280)	43,560	2,375
Less deferred amounts:					
For issuance premiums	43,318	—	(2,029)	41,289	—
For refunding loss	(32,670)	—	2,746	(29,924)	—
Total revenue bonds payable	1,285,883	—	(60,468)	1,225,415	63,735
Clean Renewable Energy Bonds	—	6,325	(422)	5,903	422
Less bond discount	—	(194)	8	(186)	—
California Energy Commission loan	282	—	(282)	—	—
State of California revolving loans	89,101	—	(13,762)	75,339	14,199
Capital appreciation bonds	3,380	240	—	3,620	—
Other post-employment benefits obligation	23,455	27,591	(2,867)	48,179	—
Arbitrage rebate payable	—	4,265	—	4,265	—
Accrued vacation and sick leave	18,225	13,095	(12,248)	19,072	10,295
Accrued workers' compensation	14,957	3,156	(2,778)	15,335	2,730
Damage and claim liability	35,599	6,006	(11,293)	30,312	7,627
Deferred revenue	89	535	(80)	544	—
Pollution remediation obligation	2,694	2,075	(1,082)	3,687	3,077
Total	\$ 1,473,665	63,094	(105,274)	1,431,485	102,085



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(Dollars in thousands)

### ***Water Long-Term Liabilities***

Long-term liability activities for the years ended June 30, 2010 and 2009 are as follows:

	<b>Coupon interest rate</b>	<b>Final maturity date</b>	<b>July 1, 2009</b>	<b>Additions</b>	<b>Reductions</b>	<b>June 30, 2010</b>	<b>Due within one year</b>
Revenue Bonds:							
2001A revenue bonds	4.0 – 5.0%	2031	\$ 77,580	—	(17,345)	60,235	3,065
2002A revenue bonds	2.5 – 5.0	2032	147,520	—	(3,260)	144,260	3,425
2002B revenue refunding bonds	3.1 – 5.0	2015	51,425	—	(6,375)	45,050	6,640
2006A revenue bonds	4.0 – 5.0	2036	497,060	—	(8,505)	488,555	8,895
2006B revenue refunding bonds	4.0 – 5.0	2026	104,245	—	(3,145)	101,100	3,300
2006C revenue refunding bonds	4.0 – 5.0	2026	43,560	—	(2,375)	41,185	2,470
2009A revenue bonds	4.0 – 5.3	2039	—	412,000	—	412,000	—
2009B revenue refunding bonds	4.0 – 5.0	2039	—	412,000	—	412,000	—
2010A revenue bonds	2.0 – 5.0	2030	—	56,945	—	56,945	—
2010B revenue bonds	4.0 – 6.0	2040	—	417,720	—	417,720	—
2010C revenue refunding bonds	5.0	2015	—	14,040	—	14,040	—
Less deferred amounts:							
For issuance premiums			24,929	42,939	(3,753)	64,115	—
For refunding loss			(13,433)	—	1,529	(11,904)	—
Total revenue bonds payable			932,886	1,355,644	(43,229)	2,245,301	27,795
1991 capital appreciation bonds	0.00	2019	3,620	258	—	3,878	—
2009C certificates of participation (COPs)	2.0 – 5.0	2023	—	27,218	—	27,218	—
Issuance premiums-COPs (2009C)			—	3,038	(259)	2,779	—
2009D certificates of participation	6.36 – 6.49	2042	—	92,499	—	92,499	—
Other post-employment benefits obligation			30,967	19,073	(4,442)	45,598	—
Arbitrage rebate payable			4,265	288	—	4,553	—
Accrued vacation and sick leave			11,454	8,380	(8,007)	11,827	6,366
Accrued workers' compensation			8,617	1,624	(2,147)	8,094	1,468
Damage and claim liability			9,641	26,835	(6,736)	29,740	8,719
Pollution remediation obligation			3,312	—	(2,653)	659	499
Total			\$ 1,004,762	1,534,857	(67,473)	2,472,146	44,847

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

	Coupon interest rate	Final maturity date	July 1, 2008	Additions	Reductions	June 30, 2009	Due within one year
Revenue Bonds:							
2001A revenue bonds	4.0 – 5.0%	2031	\$ 80,410	—	(2,830)	77,580	2,945
2002A revenue bonds	2.5 – 5.0	2032	150,620	—	(3,100)	147,520	3,260
2002B revenue refunding bonds	3.0 – 5.0	2015	57,580	—	(6,155)	51,425	6,375
2006A revenue bonds	4.0 – 5.0	2036	505,230	—	(8,170)	497,060	8,505
2006B revenue refunding bonds	4.0 – 5.0	2026	107,230	—	(2,985)	104,245	3,145
2006C revenue refunding bonds	4.0 – 5.0	2026	45,840	—	(2,280)	43,560	2,375
Less deferred amounts:							
For issuance premiums			25,952	—	(1,023)	24,929	—
For refunding loss			(14,452)	—	1,019	(13,433)	—
Total revenue bonds payable			958,410	—	(25,524)	932,886	26,605
Capital appreciation bonds	0.00	2019	3,380	240	—	3,620	—
Other post-employment benefits obligation			15,048	15,919	—	30,967	—
Arbitrage rebate payable			—	4,265	—	4,265	—
Accrued vacation and sick leave			10,856	8,715	(8,117)	11,454	6,071
Accrued workers' compensation			8,135	2,195	(1,713)	8,617	1,551
Damage and claim liability			11,254	7,946	(9,559)	9,641	2,515
Pollution remediation obligation			2,694	1,700	(1,082)	3,312	3,077
Total			\$ 1,009,777	40,980	(45,995)	1,004,762	39,819

### (a) *Capital Appreciation Bonds*

The capital appreciation bonds mature from November 1, 2018 through November 1, 2019. The bonds were insured by MBIA and carried “Aaa” and “AAA” ratings from Moody’s and Standard & Poor’s (S&P), respectively. In February 2009, the bonds were further reinsured by NPFGC and carried “Baal” and “A” ratings from Moody’s and S&P, respectively. As of June 30, 2010, MBIA was rated “B3” and “BB+” by Moody’s and S&P, respectively, while NPFGC has affirmed ratings of “Baal” and “A” from Moody’s and S&P, respectively. Interest on the capital appreciation bonds is due upon maturity and is recognized as annual interest expense over the life of the bonds using the interest method. The Enterprise has recognized \$3,878 and \$3,620 of unpaid principal and interest on the capital appreciation bonds as of June 30, 2010 and 2009, respectively, and has reported it as capital appreciation bonds in the accompanying statements of net assets.

### (b) *Water Revenue Bonds Series 2001A*

During fiscal year 2002, the Enterprise issued \$140,000 of revenue bonds 2001 Series A. The bonds were insured by FSA and carried “Aaa” and “AAA” ratings from Moody’s and Standard & Poor’s, respectively. As of June 30, 2010, FSA was rated “Aa3” and “AAA” by Moody’s and S&P, respectively. The revenue bonds include current interest serial and term bonds with interest rates varying from 4.0% to 5.0%. The current interest serial bonds mature through November 1, 2021 and the current interest term bonds mature on November 1, 2024, 2027, and 2031. In March 2006, \$45,630 of the 2001A serial and term bonds with maturities of November 2016 to November 2024 were refunded by the 2006 refunding Series B revenue bonds.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

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(Dollars in thousands)

On June 17, 2010, the Enterprise issued \$14,040 of the 2010 Sub-Series C revenue bonds for the purpose of refunding \$14,400 of then-outstanding 2001 Series A revenue bonds. The 2010 bonds bear a coupon rate of 5.0% and mature serially from 2012 to 2015. The refunded Series 2001A bonds carried a coupon rate of 5.0% and also matured between 2012 and 2015. The unamortized issuance costs related to the refunded portion of the Series 2001A bonds were \$126 at the date of the refunding.

A portion of the proceeds on the 2010 Sub-Series C revenue bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated June 1, 2010, to refund and legally defease a portion of the outstanding 2001 Series A bonds. This deposit, together with certain other available moneys was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities-State and Local Government Series (SLGS). The principal and interest on monies held by the escrow agent will be sufficient to redeem the Refunded 2001 Series A bonds on November 1, 2011 by optional redemption on that date.

As of June 30, 2010, the 2001 Series A bonds still outstanding totals \$60,235. Although the refunding resulted in the recognition of a deferred accounting loss of \$1,044, the Enterprise achieved net present value debt service savings of \$919 or 6.4% of the refunded principal.

### **(c) .Water Revenue Bonds Series 2002A**

During fiscal year 2003, the Enterprise issued \$164,000 of revenue bonds 2002 Series A. The bonds were insured by MBIA and carried “Aaa” and “AAA” ratings from Moody’s and Standard & Poor’s, respectively. In February 2009, the bonds were further reinsured by NPFGC and carried “Baal” and “A” ratings from Moody’s and S&P, respectively. As of June 30, 2010, MBIA was rated “B3” and “BB+” by Moody’s and S&P, respectively, while NPFGC carried “Baal” and “A” ratings from Moody’s and S&P, respectively. The revenue bonds include interest and serial and term bonds with interest rates varying from 2.5% to 5.0%. The current interest serial bonds mature through November 1, 2026, and the current interest term bonds mature on November 1, 2025 and 2032.

### **(d) .Water Revenue Refunding Bonds Series 2002B**

During fiscal year 2003, the Enterprise issued 2002 revenue refunding bonds, Series B in the amount of \$85,260 with interest rates ranging from 3.0% to 5.0%. The bonds were insured by MBIA and carried “Aaa” and “AAA” ratings from Moody’s and Standard & Poor’s, respectively. In February 2009, the bonds were further reinsured by NPFGC and carried “Baal” and “A” ratings from Moody’s and S&P, respectively. As of June 30, 2010, MBIA was rated “B3” and “BB+” by Moody’s and S&P, respectively, while NPFGC has affirmed ratings of “Baal” and “A” from Moody’s and S&P, respectively. The current interest serial bonds mature through November 1, 2015.

### **(e) .Water Revenue Bonds Series 2006A**

During fiscal year 2006, the Enterprise issued 2006 revenue bonds, Series A in the amount of \$507,815. The purpose of the bonds is to finance improvements to the City’s water systems pursuant to Proposition A and to retire commercial paper outstanding. The bonds were insured by FSA and carried “Aaa” and “AAA” ratings from Moody’s and Standard & Poor’s, respectively. As of June 30, 2010, FSA was rated “Aa3” and “AAA” by Moody’s and S&P, respectively. The 2006 Series A bonds include current interest and serial and term bonds with interest rates ranging from 4.0% to 5.0%. The current

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

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(Dollars in thousands)

interest serial bonds mature through November 1, 2027 and the current interest term bonds mature on November 1, 2031 and 2033 and 2036.

**(f) *Water Revenue Refunding Bonds Series 2006B***

During fiscal year 2006, the Enterprise issued 2006 revenue refunding bonds, Series B in the amount of \$110,065. The purpose of the bonds is to refund a portion of the 1996A Series A bonds and the 2001 Series A bonds. The bonds were insured by Syncora (formerly XL) and carried “Aaa” and “AAA” ratings from Moody’s and Standard & Poor’s, respectively. As of June 30, 2010, Syncora was rated “Ca” and “NR” by Moody’s and S&P, respectively. The 2006B refunding bonds include serial bonds with interest rates varying from 4.0% to 5.0%. The current interest serial bonds mature through November 1, 2026.

**(g) *Water Revenue Refunding Bonds Series 2006C***

During fiscal year 2007, the Enterprise issued 2006 revenue refunding bonds, Series C in the amount of \$48,730 for the purpose of refunding the remaining portion of the outstanding 1996 Series A bonds maturing on and after November 1, 2007 (the Refunded 1996 Series A Bonds). The bonds were insured by Syncora (formerly XL) and carried “Aaa” and “AAA” ratings from Moody’s and Standard & Poor’s, respectively. As of June 30, 2010, Syncora was rated “Ca” and “NR” by Moody’s and S&P, respectively. The 2006C refunding bonds include serial bonds with interest rates varying from 4.0% to 5.0%. The current interest serial bonds mature through November 1, 2026.

**(h) *Water Revenue Bonds Series 2009A***

During fiscal year 2010, the Enterprise issued its revenue bonds, 2009 Series A in the amount of \$412,000. The purpose of the bonds is to refund \$229,600 of outstanding Proposition A commercial paper notes and to provide \$139,218 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated “AA-” and “A1” from Standard & Poor’s and Moody’s, respectively. The bonds include serial and term bonds with interest rates varying from 4.0% to 5.3%. The bonds mature through November 1, 2039. The 2009 Series A bonds have a true interest cost of 4.8%.

**(i) *Water Revenue Bonds Series 2009B***

During fiscal year 2010, the Enterprise issued its revenue bonds, 2009 Series B in the amount of \$412,000. The purpose of the bonds is to provide \$377,778 in new money for WSIP capital project, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated “AA-” and “A1” from Standard & Poor’s and Moody’s, respectively. The bonds include serial and term bonds with interest rates varying from 4.0% to 5.0%. The bonds mature through November 1, 2039. The 2009 Series B bonds have a true interest cost of 4.5%.

**(j) *Water Revenue Bonds Series 2010ABC***

During fiscal year 2010, the Enterprise issued its revenue bonds, 2010 Series ABC in the combined principal amount of \$488,705. The purpose of the bonds is to refund \$14,400 of outstanding 2001 Series A, revenue bonds, to provide \$58,748 in proceeds for the AMI Project and to provide \$364,757 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

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(Dollars in thousands)

service reserve. The bonds were rated “AA-” and “Aa2” from Standard & Poor’s and Moody’s, respectively. The bonds included serial and term bonds with interest rates varying from 2.0% to 6.0%.

The \$56,945 Sub-Series A bonds were issued as traditional tax-exempt bonds to provide funds for the AMI Project as well as financing costs. The Sub-Series A bonds were issued as serial bonds with coupons ranging from 2.0% to 5.0% and have a final maturity of 2030. The sub-series A bonds have a true interest cost of 3.8%.

The \$417,720 Sub-Series B bonds were issued as Federally Taxable Build America Bonds (Direct Payment) to provide \$364,757 in new money for WSIP capital projects as well as to pay financing costs. The Sub-Series B bonds were issued as serial and term bonds with coupons ranging from 4.0% to 6.0% and have a final maturity of 2040. The Sub-Series B bonds have a true interest cost (net of subsidy) of 3.9%.

The \$14,040 Sub-Series C bonds were issued to advance refund \$14,400 of outstanding revenue bonds, 2001 Series A and to pay financing costs. The Sub-Series C bonds were issued as serial bonds with 5.0% coupons and a final maturity of 2015, and have a true interest cost of 1.6%.

#### **(k) Future Annual Debt Service of Revenue Bonds**

The following table presents the future annual debt service relating to the Revenue and Refunding Bonds outstanding as of June 30, 2010. The interest before subsidy amounts include the interest for the revenue bonds 2001 Series A, 2002 Series A, 2002 Refunding Series B, 2006 Series A, 2006 Refunding Series B and C, 2009 Series A and B, and 2010 Series ABC. The Federal interest subsidy amounts represent 35% of the interest for the revenue bond 2010 Sub-Series B.

	<u>Principal</u>	<u>Interest before subsidy</u>	<u>Federal interest subsidy</u>	<u>Interest net of subsidy</u>
Years ending June 30:				
2011	\$ 27,795	106,244	(7,283)	98,961
2012	44,050	108,029	(8,350)	99,679
2013	45,965	105,884	(8,350)	97,534
2014	48,130	103,561	(8,350)	95,211
2015	50,485	101,078	(8,350)	92,728
2016 – 2020	293,500	464,301	(40,479)	423,822
2021 – 2025	355,275	386,459	(35,518)	350,941
2026 – 2030	428,735	289,123	(28,564)	260,559
2031 – 2035	460,125	173,803	(19,661)	154,142
2036 – 2040	439,030	60,375	(9,092)	51,283
	<u>2,193,090</u>	<u>1,898,857</u>	<u>(173,997)</u>	<u>1,724,860</u>
Less current portion	(27,795)			
Add unamortized bond premium, net of discount and refunding loss	<u>52,211</u>			
Long-term portion as of June 30, 2010	<u>\$ 2,217,506</u>			

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

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As defined in the Indentures, the principal and interest of Water's Revenue and Refunding Bonds are payable from its corresponding revenue, as well as monies deposited in certain funds and accounts pledged thereto (see note 5 to the basic financial statements).

**(l) Proposition A**

On November 5, 2002, the San Francisco voters passed Proposition A, which provides for the issuance of revenue bonds and/or other forms of indebtedness by the Commission in a principal amount not to exceed \$1,628,000 to finance the acquisition and construction of improvements to the City's Water System. As of June 30, 2010, there was no commercial paper outstanding pursuant to this authorization and \$1,331,815 of bonds had been issued in fiscal years 2006 and 2010 against this authorization.

**(m) Proposition E**

On November 5, 2002, the San Francisco voters passed Proposition E, which authorizes the Board of Supervisors' approval of the issuance of revenue bonds and/or other forms of indebtedness by the Commission to finance costs for the Commission's capital programs, including WSIP. As of June 30, 2010, the Board of Supervisors has authorized the issuance of \$3,048,031 in revenue bonds with \$474,665 issued against this authorization. No commercial paper was outstanding pursuant to this authorization as of June 30, 2010.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

### ***Wastewater Long-Term Liabilities***

Long term liability activities for the years ended June 30, 2010 and 2009 are as follows:

	<u>Interest rate</u>	<u>Final maturity date</u>	<u>July 1, 2009</u>	<u>Additions</u>	<u>Reductions</u>	<u>June 30, 2010</u>	<u>Due within one year</u>
Revenue bonds:							
2003 refunding Series A	3.00 to 5.25%	2025	\$ 292,660	—	(37,130)	255,530	26,320
2010A	4.00 to 5.00%	2021	—	47,050	—	47,050	—
2010B (Build America)	4.65 to 5.82%	2040	—	192,515	—	192,515	—
Less deferred amounts:							
For issuance premiums			16,360	7,192	(1,005)	22,547	—
For refunding loss			(16,491)	—	1,727	(14,764)	—
Total revenue bonds payable			292,529	246,757	(36,408)	502,878	26,320
State of California revolving loans	2.80 to 3.50%	2021	75,339	—	(14,199)	61,140	14,648
2009C certificates of participation	2.00 to 5.00%	2023	—	7,197	—	7,197	—
2009C COPs issuance premiums			—	804	(69)	735	—
2009D COPs (Build America)	6.36 to 6.49%	2042	—	24,458	—	24,458	—
Other post-employment benefits obligations			11,413	6,730	(2,065)	16,078	—
Accrued vacation and sick leave			5,078	2,945	(2,964)	5,059	2,747
Accrued workers' compensation			4,413	454	(721)	4,146	724
Damage and claim liability			10,360	1,535	(786)	11,109	2,708
Deferred revenue			544	1,025	(67)	1,502	1,502
Pollution remediation obligation			375	—	—	375	—
Total			<u>\$ 400,051</u>	<u>291,905</u>	<u>(57,279)</u>	<u>634,677</u>	<u>48,649</u>

	<u>Interest rate</u>	<u>Final maturity date</u>	<u>July 1, 2008</u>	<u>Additions</u>	<u>Reductions</u>	<u>June 30, 2009</u>	<u>Due within one year</u>
Revenue bonds:							
2003 refunding Series A	3.00 to 5.25%	2025	\$ 328,325	—	(35,665)	292,660	37,130
Less deferred amounts:							
For issuance premiums			17,366	—	(1,006)	16,360	—
For refunding loss			(18,218)	—	1,727	(16,491)	—
Total revenue bonds payable			327,473	—	(34,944)	292,529	37,130
State of California revolving loans	2.80 to 3.50%	2021	89,101	—	(13,762)	75,339	14,199
Other post-employment benefits obligations			5,684	7,646	(1,917)	11,413	—
Accrued vacation and sick leave			4,998	2,904	(2,824)	5,078	2,770
Accrued workers' compensation			4,675	428	(690)	4,413	774
Damage and claim liability			9,044	1,460	(144)	10,360	1,861
Deferred revenue			89	535	(80)	544	—
Pollution remediation obligation			—	375	—	375	—
Total			<u>\$ 441,064</u>	<u>13,348</u>	<u>(54,361)</u>	<u>400,051</u>	<u>56,734</u>

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The payments of principal and interest amounts on various bonds are secured by the net revenues.

**(a) *Revenue Bonds, 2003 Refunding Series A***

During fiscal year 2003, the Enterprise issued 2003 refunding Series A bonds in the amount of \$396,270 with interest rates ranging from 3.0% to 5.3%. During fiscal year 2005, the Enterprise substituted cash and equivalents held in the Bond Reserve Fund with a bond reserve fund policy of \$34,199, which was the largest reserve requirement pursuant to the Indenture. The surety bond policy was issued by MBIA, which is currently rated “BB+” and “B3” by S&P and Moody’s, respectively as of June 30, 2010. This policy is further reinsured by the National Public Finance Corporation, which is currently rated “Baal” and “A” by Moody’s and S&P, respectively. The cash released by the substitution will be used for improvements to capital projects within the Enterprise in accordance with the Indenture. Bonds mature through October 1, 2025.

**(b) *Revenue Bonds, 2010 Series A***

During fiscal year 2010, the Enterprise issued revenue bonds 2010 Series A in the amount of \$47,050 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used to redeem \$50,000 in outstanding commercial paper notes, fund a cash debt service reserve fund and pay the costs of issuing the bonds. The bonds were rated “Aa3” and “AA-” by Moody’s and Standard & Poor’s, respectively. Bonds mature through October 1, 2021.

**(c) *Revenue Bonds, 2010 Series B***

During fiscal year 2010, the Enterprise issued revenue bonds 2010 Series B (Federally Taxable – Build America Bonds – Direct Payment) in the amount of \$192,515, with interest rates ranging from 4.7% to 5.8%. Proceeds from the bonds were used to redeem \$53,500 in outstanding commercial paper notes, provide funding for capital projects in the amount of \$112,429, fund a cash debt service reserve fund, and pay financing costs for the bonds. The bonds were rated “Aa3” and “AA-” by Moody’s and Standard & Poor’s, respectively. Bonds mature through October 1, 2040.



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**(d) *Future Annual Debt Service of Revenue and Refunding Bonds***

The following table presents the future annual debt service relating to the revenue and refunding bonds outstanding as of June 30, 2010. The interest before subsidy amounts include the interest for the revenue bonds 2003 Refunding Series A, 2010 Series A, and 2010 Series B. The Federal interest subsidy amounts represent 35% of the interest for the revenue bond 2010 Series B.

	<b>Principal</b>	<b>Interest before subsidy</b>	<b>Federal interest subsidy</b>	<b>Interest net of subsidy</b>
Years ending June 30:				
2011	\$ 26,320	22,377	3,044	19,333
2012	22,010	23,920	3,740	20,180
2013	23,095	22,903	3,740	19,163
2014	24,395	21,715	3,740	17,975
2015	25,790	20,429	3,740	16,689
2016 – 2020	109,095	84,678	18,699	65,979
2021 – 2025	90,895	58,038	18,150	39,888
2026 – 2030	46,380	42,710	14,919	27,791
2031 – 2035	51,330	29,604	10,361	19,243
2036 – 2040	61,931	13,311	4,659	8,652
2041	13,854	403	141	262
	495,095	340,088	84,933	255,155
Less:				
Current portion	(26,320)			
Unamortized bond premiums and refunding loss	7,783			
Long-term portion as of June 30, 2010	\$ 476,558			

As defined in the Indenture, the principal and interest of the Enterprise's refunding bonds are payable from its corresponding revenue as well as monies deposited in certain funds and accounts pledged thereto (see note 5 to the basic financial statements).

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

**(e) State Revolving Fund Loans**

The Enterprise has entered into several contracts with the State Water Resources Control Board (SWRCB) under which the Enterprise borrowed up to prescribed maximum amounts to finance the construction of certain facilities. Loans outstanding as of June 30, 2010 and 2009 are summarized as follows:

<b>Project</b>	<b>Date of issuance</b>	<b>Maturity date</b>	<b>Interest rate</b>	<b>Loan amount</b>	<b>June 30</b>	
					<b>Amount outstanding</b>	<b>Amount outstanding</b>
Oceanside	07/25/90	2010	3.4%	\$ 40,000	2,660	5,233
Oceanside	06/13/91	2011	3.5	32,376	2,163	4,255
Oceanside	12/24/93	2013	2.9	14,102	3,525	4,345
Mariposa	01/28/91	2011	3.5	7,624	513	1,009
Mariposa	06/24/92	2012	3.1	1,936	251	371
Lake Merced	01/29/92	2012	3.1	21,114	2,733	4,038
Islais Creek	10/08/92	2012	3.0	5,706	1,078	1,416
Islais Creek	09/07/93	2013	3.1	26,800	6,700	8,251
Islais Creek	06/17/94	2014	2.9	15,105	4,684	5,543
Islais Creek	01/09/96	2016	3.4	21,720	8,813	10,118
Islais Creek	08/04/00	2020	2.9	18,026	11,169	12,020
Rankin Pump	12/23/96	2016	2.8	27,000	11,725	13,222
Rankin Pump	01/23/01	2021	2.9	8,274	5,126	5,518
Total				\$ 239,783	61,140	75,339

The Enterprise is repaying the interest and principal by installments with the final amount due between 15 and 20 years after the first disbursement by SWRCB. Disbursements are made by SWRCB as funds are spent for the projects. The Enterprise is required to comply with applicable Federal and State regulations.

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

The future annual debt service relating to the State Revolving Fund Loans outstanding as of June 30, 2010 is as follows:

	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
Years ending June 30:			
2011	\$ 14,648	1,855	16,503
2012	9,594	1,389	10,983
2013	8,322	1,099	9,421
2014	8,192	848	9,040
2015	5,686	602	6,288
2016 – 2020	12,996	1,145	14,141
2021	1,702	49	1,751
	61,140	6,987	68,127
Less current portion	(14,648)		
Long-term portion as of June 30, 2010	\$ 46,492		

### ***Hetch Hetchy Water Long-Term Liabilities***

Hetch Hetchy Water's long-term liability activities for the years ended June 30, 2010 and 2009 are as follows:

	<b>July 1, 2009</b>	<b>Additions</b>	<b>Reductions</b>	<b>June 30, 2010</b>	<b>Due with in one year</b>
Other post-employment benefits obligation	\$ 1,580	1,187	(336)	2,431	—
Accrued vacation and sick leave	692	460	(412)	740	436
Accrued workers' compensation	628	218	(253)	593	109
Damage and claim liability	—	107	—	107	25
Total	\$ 2,900	1,972	(1,001)	3,871	570

	<b>July 1, 2008</b>	<b>Additions</b>	<b>Reductions</b>	<b>June 30, 2009</b>	<b>Due with in one year</b>
Other post-employment benefits obligation	\$ 742	1,097	(259)	1,580	—
Accrued vacation and sick leave	670	375	(353)	692	396
Accrued workers' compensation	606	191	(169)	628	110
Total	\$ 2,018	1,663	(781)	2,900	506

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

### ***Hetch Hetchy Power Long-Term Liabilities***

Hetch Hetchy Power's long-term liability activities for the years ended June 30, 2010 and 2009 are as follows:

	<b>Coupon Interest Rate</b>	<b>Final Maturity Date</b>	<b>July 1, 2009</b>	<b>Additions</b>	<b>Reductions</b>	<b>June 30, 2010</b>	<b>Due with in one year</b>
Clean Renewable Energy Bonds	0%	2022	\$ 5,903	—	(422)	5,481	422
Less bond discount			(186)	—	15	(171)	—
Certificates of participation Series 2009C	2.00 to 5.00%	2023	—	3,705	—	3,705	—
Add bond premium			—	413	(35)	378	—
Certificates of participation Series 2009D (BABs)	6.36 to 6.49%	2042	—	12,593	—	12,593	—
Total revenue bonds and certificates of participation payable			5,717	16,711	(442)	21,986	422
Other post-employment benefits obligation			4,219	2,656	(834)	6,041	—
Accrued vacation and sick leave			1,848	1,000	(1,009)	1,839	1,084
Accrued workers' compensation			1,677	130	(332)	1,475	271
Damage and claim liability			10,311	225	(8,772)	1,764	734
			<u>\$ 23,772</u>	<u>20,722</u>	<u>(11,389)</u>	<u>33,105</u>	<u>2,511</u>

	<b>Coupon Interest Rate</b>	<b>Final Maturity Date</b>	<b>July 1, 2008</b>	<b>Additions</b>	<b>Reductions</b>	<b>June 30, 2009</b>	<b>Due with in one year</b>
California Energy Commission Loan	0%	2010	\$ 282	—	(282)	—	—
Clean Renewable Energy Bonds	0%	2022	—	6,325	(422)	5,903	422
Less bond discount			—	(194)	8	(186)	—
Total revenue bonds			282	6,131	(696)	5,717	422
Other post-employment benefits obligation			1,981	2,929	(691)	4,219	—
Accrued vacation and sick leave			1,701	1,101	(954)	1,848	1,058
Accrued workers' compensation			1,541	342	(206)	1,677	295
Damage and claim liability			15,301	(3,400)	(1,590)	10,311	3,251
			<u>\$ 20,806</u>	<u>7,103</u>	<u>(4,137)</u>	<u>23,772</u>	<u>5,026</u>

#### ***(a) State of California Energy Commission (CEC) Loan***

In November 2002, Hetch Hetchy Power received a \$971 loan from the California Energy Commission. The loan had a final maturity date of December 22, 2010; however, the loan was retired early in April 2009.

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

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(Dollars in thousands)

**(b) *Clean Renewable Energy Bonds***

Hetch Hetchy Power issued \$6,325 in Clean Renewable Energy Bonds (CREBs) on November 7, 2008 to finance the installation of solar energy equipment on City-owned facilities, including Chinatown Branch Library, Maxine Hall Medical Center, City Distribution Division Warehouse, North Point Wastewater, Chinatown Public Health Center, Municipal Transportation Agency Woods Facility, and Solar Energy Facility. Hetch Hetchy Power has not previously issued debt and has instead up to this point relied on revenue from ratepayers to fund renewable energy projects. CREBs provide the Commission with low-cost access to capital to further its green power objectives.

Hetch Hetchy Power began making principal payments in the amount of \$422 on December 15, 2008 and will continue annual payments for fifteen years until December 15, 2022. Funding for these payments will be guaranteed by net power revenues. Interest payments are not required, since the effective equivalent of interest on the bonds is paid in the form of federal tax credits in lieu of interest paid by the issuer.

The future annual debt service relating to the CREBs outstanding as of June 30, 2010 is as follows:

	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>
Fiscal years ending June 30:		
2011	\$ —	422
2012	—	422
2013	—	422
2014	—	422
2015	—	422
2016-2020	—	2,110
2021-2023	—	1,261
	—	5,481
Less: current portion	—	(422)
Less: unamortized discount	—	(171)
Long-term portion as of June 30, 2010	\$ —	4,888

**(8) Revenue Pledge**

***Water Enterprise Revenue Pledge***

The Enterprise has pledged future revenues to repay various revenue bonds. Proceeds from the revenue bonds provided financing for various capital construction projects, and to refund previously issued bonds. The bonds are payable solely from revenues of the Enterprise and are payable through the year ending 2040.

## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

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(Dollars in thousands)

The original amount of revenue bonds issued, total principal and interest remaining, principal and interest paid during 2010, and applicable revenues for 2010 and 2009 are as follows:

	<b>2010</b>	<b>2009</b>
Bonds issued with revenue pledge	\$ 2,421,205	1,108,500
Principal and interest remaining due at the end of the year	4,091,947	1,549,883
Principal and interest paid during the year	69,621	69,585
Net revenue for the year ended June 30	77,735	82,978
Funds available for revenue bond debt service	138,686	146,622

### ***Wastewater Enterprise Revenue Pledge***

The Enterprise has pledged future revenues to repay various revenue bonds. Proceeds from the revenue bonds provided financing for various capital construction projects, and to refund previously issued bonds. The bonds are payable solely from revenues of the Enterprise and are payable through the year 2041.

The original amount of revenue bonds issued, total principal and interest remaining, principal and interest paid during 2010 and 2009, and applicable revenues for 2010 and 2009 are as follows:

	<b>2010</b>	<b>2009</b>
Bonds issued with revenue pledge	\$ 635,835	396,270
Principal and interest remaining due at the end of the year	835,183	382,837
Principal and interest paid during the year	50,313	50,311
Net revenue for the year ended June 30	63,995	71,130
Funds available for revenue bond debt service	113,267	119,146

### ***Hetch Hetchy Power Revenue Pledge***

Hetch Hetchy Power has pledged future power revenues to repay Clean Renewable Energy Bonds which were issued in fiscal year 2009. Proceeds from the bonds provided financing for various capital construction projects. The bonds are payable solely from net power revenues of Hetch Hetchy Power and are payable through the year ending 2022. The original amount of revenue bonds issued, total principal remaining, principal paid during 2010, and applicable revenues for 2010 are as follows:

	<b>2010</b>	<b>2009</b>
Bonds issued with revenue pledge	\$ 6,325	6,325
Principal and interest remaining due at the end of the year	5,481	5,903
Principal and interest paid during the year	422	422
Net revenue for the year ended June 30	33,898	36,301

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Notes to Basic Financial Statements

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(Dollars in thousands)

## **(9) Certificates of Participation Issued for the 525 Golden Gate Avenue Headquarters Building**

### ***Department-wide***

In October 2009, the City & County of San Francisco issued \$167,670 in certificates of participation to fund the future headquarters building of the San Francisco Public Utilities Commission (SFPUC) at 525 Golden Gate Avenue. The 2009 Series C were issued for \$38,120 and 2009 Series D for \$129,550 as “Build America Bonds” on a taxable basis under the 2009 American Recovery and Reinvestment Act. The 2009 Series C certificates carry interest rates ranging from 2.0% to 5.0% and mature on November 1, 2022. The 2009 Series D certificates carry interest rates ranging from 6.4% to 6.5% and mature on November 1, 2041, after adjusting for the Federal interest subsidy the true interest cost averages 3.4% and 4.3% for Series C & D, respectively.

Under the terms of a Memorandum of Understanding between the City and the SFPUC dated October 1, 2009, the City conveyed the real property to the Trustee under a property lease in exchange for the proceeds of the sale of the certificates. The Trustee has leased the property back to the City for the City’s use under a Project Lease. The City will be obligated under the Project Lease to pay base rental payments and other payments to the Trustee each year during the thirty-two year term of the Project Lease. The Commission will make annual base rental payments to the City for the building equal to annual debt service on the certificates. It is anticipated that these lease costs will be offset with reductions in costs associated with current office rental expense.

Each of the three Enterprises has an ownership interest in the building equal to their projected usage of space as follows: Water (73%), Wastewater (15%) and Power (12%). Similarly, each Enterprise is responsible for a portion of the annual Base Rental Payment based on their ownership percentages less contributed equity. The percentage share of Base Rental Payments for the Enterprises is as follows: Water (71.4%), Wastewater (18.9%), and Power (9.7%).

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

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(Dollars in thousands)

### ***Water Enterprise***

				<b>Certificates of Participation 2009 Series C (tax-exempt)</b>		
				<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Years ending June 30:						
2011	\$	—	1,263	1,263		
2012		—	1,263	1,263		
2013		1,971	1,231	3,202		
2014		2,035	1,164	3,199		
2015		2,106	1,092	3,198		
2016 – 2020		12,188	3,814	16,002		
2021 – 2023		8,918	684	9,602		
			<u>27,218</u>	<u>10,511</u>	<u>37,729</u>	
Less: Current portion		—	—	—		
Add: Unamortized bond premiums		2,779	—	2,779		
Long-term portion as of June 30, 2010	\$	<u>29,997</u>	<u>10,511</u>	<u>40,508</u>		

					<b>Certificates of Participation 2009 Series D (taxable)</b>			
					<u>Principal</u>	<u>Interest before subsidy</u>	<u>Federal interest subsidy</u>	<u>Interest net of subsidy</u>
Years ending June 30:								
2011	\$	—	5,968	(2,089)	3,879			
2012		—	5,968	(2,089)	3,879			
2013		—	5,968	(2,089)	3,879			
2014		—	5,968	(2,089)	3,879			
2015		—	5,968	(2,089)	3,879			
2016 – 2020		—	29,840	(10,444)	19,396			
2021 – 2025		6,669	29,420	(10,297)	19,123			
2026 – 2030		19,285	24,752	(8,663)	16,089			
2031 – 2035		23,737	17,863	(6,252)	11,611			
2036 – 2040		29,271	9,297	(3,254)	6,043			
2041 – 2042		13,537	887	(311)	576			
			<u>92,499</u>	<u>141,899</u>	<u>(49,666)</u>	<u>92,233</u>		
Less current portion		—						
Add unamortized bond premiums		—						
Long-term portion as of June 30, 2010	\$	<u>92,499</u>						



# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

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(Dollars in thousands)

### ***Wastewater Enterprise***

The future annual debt services relating to the certificates of participation 2009 Series C and D outstanding as of June 30, 2010 are as follows:

	<b>Certificates of Participation 2009 Series C (tax-exempt)</b>		
	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Years ending June 30:			
2011	\$ —	334	334
2012	—	334	334
2013	521	326	847
2014	538	308	846
2015	557	289	846
2016 – 2020	3,223	1,008	4,231
2021 – 2023	2,358	181	2,539
	<u>7,197</u>	<u>2,780</u>	<u>9,977</u>
Less: Current portion	—	—	—
Add: Unamortized bond premiums	735	—	735
Long-term portion as of June 30, 2010	<u>\$ 7,932</u>	<u>2,780</u>	<u>10,712</u>

	<b>Certificates of Participation 2009 Series D (taxable)</b>			
	<u>Principal</u>	<u>Interest before subsidy</u>	<u>Federal interest subsidy</u>	<u>Interest net of subsidy</u>
Years ending June 30:				
2011	\$ —	1,578	552	1,026
2012	—	1,578	552	1,026
2013	—	1,578	552	1,026
2014	—	1,578	552	1,026
2015	—	1,578	552	1,026
2016 – 2020	—	7,890	2,762	5,128
2021 – 2025	1,763	7,779	2,723	5,056
2026 – 2030	5,099	6,545	2,291	4,254
2031 – 2035	6,276	4,723	1,653	3,070
2036 – 2040	7,740	2,459	860	1,599
2041 – 2042	3,580	235	82	153
	<u>24,458</u>	<u>37,521</u>	<u>13,131</u>	<u>24,390</u>
Less: Current portion	—			
Add: Unamortized bond premiums	—			
Long-term portion as of June 30, 2010	<u>\$ 24,458</u>			

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

June 30, 2010 and 2009

(Dollars in thousands)

### ***Hetch Hetchy Power***

The future annual debt services relating to the certificates of participation 2009 Series C and D outstanding as of June 30, 2010 are as follows:

<b>Certificates of Participation 2009 Series C (tax-exempt)</b>			
	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
Years ending June 30:			
2011	\$ —	172	172
2012	—	172	172
2013	268	168	436
2014	277	158	435
2015	287	149	436
2016 – 2020	1,659	519	2,178
2021 – 2023	1,214	93	1,307
	3,705	1,431	5,136
Less: Current portion	—	—	—
Add: Unamortized bond premiums	378	—	378
Long-term portion as of June 30, 2010	\$ 4,083	1,431	5,514

<b>Certificates of Participation 2009 Series D (taxable)</b>				
	<b>Principal</b>	<b>Interest before subsidy</b>	<b>Federal interest subsidy</b>	<b>Interest net of subsidy</b>
Years ending June 30:				
2011	\$ —	812	(284)	528
2012	—	812	(284)	528
2013	—	812	(284)	528
2014	—	812	(284)	528
2015	—	812	(284)	528
2016 – 2020	—	4,063	(1,422)	2,641
2021 – 2025	908	4,006	(1,402)	2,604
2026 – 2030	2,625	3,370	(1,180)	2,190
2031 – 2035	3,232	2,432	(852)	1,580
2036 – 2040	3,985	1,266	(443)	823
2041 – 2042	1,843	121	(42)	79
	12,593	19,318	(6,761)	12,557
Less: Current portion	—			
Add: Unamortized bond premiums	—			
Long-term portion as of June 30, 2010	\$ 12,593			

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

## Notes to Basic Financial Statements

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(Dollars in thousands)

### **(10) Wholesale Balancing Account**

During 1984, the Water Enterprise provided water service pursuant to the terms of the 1984 Settlement Agreement and Master Water Sales Contract, which establishes the basis for water rates to be charged to those customers (wholesale customers). The Master Water Sales Contract expired on June 30, 2009. The Commission and the Wholesale Customers approved a new Water Supply Agreement (“WSA”) of a twenty-five year term with two options for five-year extensions. The existing 184 millions of gallons per day (mgd) Supply Assurance continues under the WSA and no increase in the Supply Assurance will be considered before December 31, 2018. During the period from 2009 to 2018, the WSA limits the quantity of water delivered to Retail Customers and Wholesale Customers for the watersheds to 265 mgd. Under the WSA, annual operating expenses including debt service on bonds sold to finance regional system improvements and regional capital projects funded from revenues will be allocated between Retail Customers and Wholesale Customers on the basis of proportionate annual water use. The Wholesale Customers’ share of net book value of existing regional assets as of June 30, 2009 will be recovered on level annual payment over the twenty-five year term of the WSA at an interest rate of 5.1%. The WSA continues much of the rate setting, accounting, and dispute resolution provisions contained in the expired Contract, and has emergency and drought-pricing adjustment provisions.

Pursuant to the terms of the WSA, the City is required to establish water rates applicable to the wholesale customers annually. The wholesale water rates are based on an estimate of the level of revenues necessary to recoup the cost of distributing water to the wholesale customers in accordance with the methodology outlined in Article V of the WSA (the Wholesale Revenue Requirement (WRR), previously known as the Suburban Revenue Requirement). During fiscal years ending in 2010 and 2009, the Wholesale Revenue Requirement, net of adjustments, charged to such suburban customers was \$129,203 and \$131,831, respectively. Such amounts are subject to final review by the wholesale customers, along with a trailing wholesale balancing account compliance audit of the Wholesale Revenue Requirement calculation.

Pursuant to Article VII, Section 7.02 of the WSA, the City is required to re-compute the WRR after the close of each fiscal year based on the actual costs incurred in the delivery of water to the wholesale customers. The difference between the wholesale revenues earned during the year and the “actual” Wholesale Revenue Requirement is recorded in a separate account (the Balancing Account) and represents the cumulative amount that is either owed to the wholesale customers (if the wholesale revenues exceed the Wholesale Revenue Requirement) or owed to the City (if the Wholesale Revenue Requirement exceeds the wholesale revenues paid). In accordance with Article VI of the WSA, the amount recorded in the Balancing Account shall earn interest at a rate equal to the average rate received by the City during the year on the invested pooled funds of the City Treasurer, and shall be taken into consideration in the determination of subsequent wholesale water rates. As of June 30, 2010 and 2009, the Suburban Purchasers owed the Enterprise \$34,092 and \$27,571, respectively, under the terms of the Wholesale Water Rate Agreement. Subsequently, the June 30, 2009 amount was revised to \$21,861, based on the audited final balancing account statement dated August 20, 2010.

### **(11) Other Revenue – Trans Bay Cable Construction and Licensing Fees**

On August 7, 2007, San Francisco Mayor Gavin Newsom and the Board of Supervisors approved and adopted Resolution No. 070315, two non-exclusive licenses to the Trans Bay Cable LLC (the “Licensee”) for the “Trans Bay Cable Project”.

The Trans Bay Cable LLC proposes to install, operate and maintain approximately 53 miles of high voltage direct current (“HVDC”) PLUS transmission cable bundle of approximately 10 inches in diameter running

# THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

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from the City of Pittsburg to the City of San Francisco. Approximately 9.4 miles of the cable are in submerged lands, a small portion of shoreline, and on a portion of a street that are under San Francisco Port Commission jurisdiction (the "License Area").

The first license is a Construction License, San Francisco Port Commission License No. 14324, a non-exclusive license to install a 400 MW high voltage transmission line, with a four (4) year term. The "Licensee" will pay the Port of San Francisco under this license and Hetch Hetchy Power \$3,500 in 36 annual installments of \$97 as the "Renewable Energy, Transmission and Grid Reliability Payment."

The second license is an Operational License, San Francisco Port Commission License No. 14325, a non-exclusive license for operation of the transmission line with twenty-five (25) year term with an option to renew for ten (10) years. The "Licensee" will pay Hetch Hetchy Power in excess of \$20,000 in 10 separate installments of \$2,000 annually with adjustments for inflation, as the "San Francisco Electric Reliability Payment" to implement, advance, promote or enhance policies and projects consistent with City Energy Policies. Once the project is on line, which is currently scheduled in 2010, Hetch Hetchy Power will receive the first installment of \$2,000.

For fiscal years ending June 30, 2010 and 2009, \$1,458 and \$1,069, respectively, of Construction License revenue have been included in revenue related to this project, and are restricted for purposes designated by the San Francisco Board of Supervisors under the agreement.

## (12) Employee Benefits

### (a) *Retirement Plan*

*Plan Description* – The enterprises participate in the City's single employer defined benefit retirement plan (the Plan) which is administered by the San Francisco City and County Employees' Retirement System (the Retirement System). The Plan covers substantially all full-time employees of the enterprises along with other employees of the City. The Plan provides basic service retirement, disability, and death benefits based on specified percentages of final average salary, and provides cost-of-living adjustments after retirement. The Plan also provides pension continuation benefits to qualified survivors. The San Francisco City and County Charter and Administrative Code are the authority which establishes and amends the benefit provisions and employer obligations of the Plan.

*Funding Policy* – Contributions to the basic plan are made by both enterprises and their employees. Employee contributions are mandatory. Employee contribution rates for 2010, 2009 and 2008 varied from 7.5% to 8.0% as a percentage of covered payrolls. Due to certain bargaining agreements, the enterprises contributed from 0.5% to 8.0% of covered payroll on behalf of some employees. In addition, the enterprises are required to contribute for the fiscal years ended June 30, 2010, 2009, and 2008 at an actuarially determined rate as a percentage of covered payroll of 9.5%, 5.0%, and 5.9%, respectively. Water contributed 100% of its required contribution of \$12,283 in 2010, \$6,946 in 2009, and \$7,694 in 2008. Wastewater's required and actual contributions were approximately \$4,233 in 2010, \$2,320 in 2009, and \$2,658 in 2008. Both Hetch Hetchy Water and Hetch Hetchy Power contributed 100% of its required contribution of \$2,417 in 2010, \$1,231 in 2009, and \$1,326 in 2008. Hetch Hetchy Water's share of the contribution for the fiscal year 2010 was \$1,088 or 45% and Hetch Hetchy Power's share of the contribution was \$1,329 or 55%.

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The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for the Plan. That report may be obtained by writing to the San Francisco City and County Employees' Retirement System, 30 Van Ness Avenue, Suite 3000, San Francisco, CA 94102, or by calling (415) 487-7020.

#### **(b) Health Care Benefits**

Health care benefits of the enterprises' employees, retired employees and surviving spouses are financed by beneficiaries and by the City through the City and County of San Francisco Health Service System (the Health Service System). Contributions are determined by a San Francisco Charter provision based on similar contributions made by the 10 most populous counties in California. Water's annual contribution was approximately \$19,347 and \$19,982 in fiscal years 2010 and 2009, respectively. Wastewater's annual contribution was approximately \$7,749 and \$7,382 in fiscal years 2010 and 2009, respectively. Hetch Hetchy Water and Power's annual contribution was approximately \$4,572 and \$3,929 in fiscal years 2010 and 2009, respectively.

Included are \$4,442 and \$5,621 for 2010 and 2009, respectively, to provide post-retirement benefits for Water's retired employees, \$2,065 and \$1,862 for 2010 and 2009, respectively, for Wastewater's retired employees, and \$1,170 and \$921 for 2010 and 2009, respectively, for Hetch Hetchy Water and Power's retired employees, on a pay-as-you-go basis. In addition, the City allocated an additional \$0 and \$155 to Water's, \$0 and \$55 to Wastewater's, and \$0 and \$29 to Hetch Hetchy Water and Power's contribution allocation for post-retirement health benefits in 2010 and 2009, respectively.

The City has determined a City-wide Annual Required Contribution (ARC), interest on net other post-employment benefits other than pensions (OPEB) obligation, ARC adjustment, and OPEB cost based upon an actuarial valuation performed in accordance with GASB 45, by the City's actuaries. The City's allocation of the OPEB related costs to the enterprises for the year ended June 30, 2010 based upon its percentage of City-wide payroll costs is presented below.

The City issues a publicly available financial report that includes the complete note disclosures and Required Supplementary Information (RSI) related to the City's post-retirement health care obligations. The report may be obtained by writing to the City and County of San Francisco, Office of the Controller, 1 Dr. Carlton B. Goodlett Place, Room 316, San Francisco, CA 94102, or by calling (415) 554-7500.

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The following tables show the components of the City's annual OPEB allocations for the years ended June 30, 2010 and 2009, for the amount contributed to the plan, and changes in the City's net OPEB obligation (dollar amount in thousands):

#### ***Department-wide***

	<b>2010</b>				
	<b>Water</b>	<b>Wastewater</b>	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>	<b>Total</b>
Annual required contribution	\$ 18,790	6,630	1,170	2,616	29,206
Interest on net OPEB Obligation	1,312	463	76	188	2,039
Adjustment to ARC	(1,029)	(363)	(59)	(148)	(1,599)
Annual OPEB cost (expense)	19,073	6,730	1,187	2,656	29,646
Contribution made	(4,442)	(2,065)	(336)	(834)	(7,677)
Increase in net OPEB obligation	14,631	4,665	851	1,822	21,969
Net OPEB obligation – beginning of year	30,967	11,413	1,580	4,219	48,179
Net OPEB obligation – end of year	\$ 45,598	16,078	2,431	6,041	70,148

	<b>2009</b>				
	<b>Water</b>	<b>Wastewater</b>	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>	<b>Total</b>
Annual required contribution	\$ 21,522	7,585	1,088	2,905	33,100
Interest on net OPEB Obligation	667	235	34	91	1,027
Adjustment to ARC	(494)	(174)	(25)	(67)	(760)
Annual OPEB cost (expense)	21,695	7,646	1,097	2,929	33,367
Contribution made	(5,776)	(1,917)	(259)	(691)	(8,643)
Increase in net OPEB obligation	15,919	5,729	838	2,238	24,724
Net OPEB obligation – beginning of year	15,048	5,684	742	1,981	23,455
Net OPEB obligation – end of year	\$ 30,967	11,413	1,580	4,219	48,179

#### ***(c) Wellness Incentive Program***

Effective July 1, 2002, the City established a pilot “Wellness Incentive Program” (the Wellness Program) to promote workforce attendance. Under the Wellness Program, any full time employee leaving the employment of the City upon service or disability retirement may receive payment of a portion of accrued sick leave credits at the time of separation.

The amount of this payment shall be equal to 2.5% of accrued sick leave credits at the time of separation times the number of whole years of continuous employment times an employee's salary rate, exclusive of premiums or supplements, at the time of separation. Vested sick leave credits, as set forth under Civil Service Commission Rules, shall not be included in this computation. The Wellness Program has been discontinued, as current bargaining agreements expired on June 30, 2010.

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### **(13) Related Parties**

Various common costs incurred by the Commission are allocated proratably between Water, Hetch Hetchy Water and Hetch Hetchy Power, and the Wastewater Enterprises. The allocations are based on the Commission management's best estimate and may change from year to year depending on the activities incurred by each Enterprise and the information available. The City performs certain administrative services such as maintenance of accounting records and investment of cash for all fund groups within the City. The various funds are charged for these services based on the City's indirect cost allocation plan.

#### ***Water Enterprise***

The Commission allocated \$32,508 and \$32,163 in administrative costs to Water in the years ended June 30, 2010 and 2009, respectively. The overhead allocation paid to the General Fund of the City by the Enterprise was \$1,007 and \$2,574 for the years ended June 30, 2010 and 2009, respectively, and is included in other operating expenses in the accompanying financial statements.

The Water Enterprise purchases water from Hetch Hetchy Water. This amount, totaling \$29,746 and \$23,000 for the years ended June 30, 2010 and 2009, respectively, has been included in the services provided by other departments in the accompanying financial statements. The Water Enterprise also purchases electricity from Hetch Hetchy Power at market rates. This amount, totaling \$6,723 and \$5,504 for the years ended June 30, 2010 and 2009, respectively, has been included in services provided by other departments in the accompanying financial statements.

Since fiscal year 2008, the Water Enterprise has charged all City departments for water with the exception of fire hydrants. In fiscal year 2010, the Enterprise delivered water for fire hydrant purposes totaling \$3, based on metered usage and applicable water rates, and the amount has been excluded from operating revenues in the accompanying financial statements.

A variety of City departments provide services such as engineering, purchasing, legal, data processing, telecommunications, and human resources to the Enterprise and charge amounts designed to recover those departments' costs. These charges, totaling \$11,105 and \$11,599 for the years ended June 30, 2010 and 2009, respectively, have been included in services provided by other departments in the accompanying financial statements.

During the fiscal year ending June 30, 2010, \$493 was transferred to other City departments, including \$385 to the Arts Commission representing payment based on a percentage of construction contracts. As of June 30, 2010, the Enterprise has a receivable in the amount of \$10,346 due from the Wastewater Enterprise and Hetch Hetchy's Power Enterprise for their respective allocable share of costs associated with the construction of the future SFPUC headquarters building located at 525 Golden Gate Avenue.

#### ***Wastewater Enterprise***

For the years ended June 30, 2010 and 2009, the Commission allocated \$17,729 and \$18,884, respectively, in administrative costs to the Wastewater Enterprise, which is included in the financial statements under various expense categories. The overhead allocation paid to the General Fund of the City by the Enterprise is \$514 and \$2,258 for the years ended June 30, 2010 and 2009, respectively, and is included in other operating expenses in the accompanying financial statements.

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## Notes to Basic Financial Statements

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The Enterprise purchases electricity from Hetch Hetchy Power at market rates. This amount, totaling \$8,708 and \$8,613 for the years ended June 30, 2010 and 2009, respectively, has been included in services provided by other departments in the accompanying financial statements. The Enterprise provides sewer services to other City departments at the non-residential rates established by the Commission.

The Water Enterprise, through the Customer Services Department, bills and collects sewer service charges on behalf of the Wastewater Enterprise. The City's Department of Public Works provides certain engineering and other services to the Enterprise and charges amounts designed to recover its costs. These services are primarily related to street cleaning, engineering, building repair, and sewer repair. This amount totaling approximately \$15,314 and \$16,002 for the years ended June 30, 2010 and 2009, respectively, has been included in services provided by other departments in the accompanying financial statements.

A variety of other City departments provide services such as purchasing, legal, data processing, telecommunications, and human resources to the Enterprise and charge amounts designed to recover those departments' costs. These charges totaling approximately \$8,283 and \$7,019 for the years ended June 30, 2010 and 2009, respectively, have been included in services provided by other departments in the accompanying financial statements. As of June 30, 2010, the Enterprise has a payable in the amount of \$5,787 due to the Water Enterprise for its respective allocable share of costs associated with the construction of the future SFPUC headquarters building located at 525 Golden Gate Avenue.

### ***Hetch Hetchy Water***

For the years ended June 30, 2010 and 2009, the Commission allocated \$2,580 and \$2,614, respectively, in administrative costs to Hetch Hetchy Water, which is included in the financial statements under various expense categories, using the periodically reviewed department overhead allocation model. The Water Enterprise purchases water from Hetch Hetchy Water. Included in the operating revenues are the water assessment fees totaling \$29,747 and \$23,000 for the years ended June 30, 2010 and 2009, respectively.

The overhead allocation paid to the General Fund of the City by Hetch Hetchy Water was \$81 and \$215 for the years ended June 30, 2010 and 2009, respectively, and is included in other operating expenses in the accompanying financial statements.

A variety of City departments provide direct services such as engineering, purchasing, legal, data processing, telecommunication, and human resources to Hetch Hetchy Water and charge amounts designed to recover those departments' costs. These charges totaling approximately \$924 and \$916 for the years ended June 30, 2010 and 2009, respectively, have been included in services provided by other departments in the accompanying financial statements.

### ***Hetch Hetchy Power***

For the years ended June 30, 2010 and 2009, the Commission allocated \$6,585 and \$9,467, respectively, in administrative costs to Hetch Hetchy Power, which is included in the financial statements under various expense categories, using the periodically reviewed department overhead allocation model. During 2010 and 2009, Hetch Hetchy Power delivered power and gas without charge to certain City departments, which amounted to \$2,825 and \$3,764, respectively, based on metered usage and what would otherwise be the applicable power rates. These amounts were excluded from operating revenues in the accompanying financial statements.



## THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION

### Notes to Basic Financial Statements

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The overhead allocation paid to the General Fund of the City by Hetch Hetchy Power was \$188 and \$718 for the years ended June 30, 2010 and 2009, respectively, and is included in other operating expenses in the accompanying financial statements.

A variety of City departments provide direct services such as engineering, purchasing, legal, data processing, telecommunication, and human resources to Hetch Hetchy Power and charge amounts designed to recover those departments' costs. These charges totaling approximately \$4,087 and \$3,561 for the years ended June 30, 2010 and 2009, respectively, have been included in services provided by other departments in the accompanying financial statements.

Included in 2010 and 2009 operating revenues are sales of power to departments within the City of \$60,322 and \$61,067, respectively, excluding free power noted above.

The Water Enterprise also purchases electricity from Hetch Hetchy Power. This amount totaled \$6,723 and \$5,504 for the years ended June 30, 2010 and 2009, respectively.

The Wastewater Enterprise purchases electricity from Hetch Hetchy Power. This amount totaled \$8,708 and \$8,613 for the years ended June 30, 2010 and 2009, respectively.

Hetch Hetchy Power facilitates all electric and gas service connections between Pacific Gas and Electric Company (PG&E) and City departments. In this capacity, Hetch Hetchy Power facilitates and coordinates the terms and payment for the service connections that are performed by PG&E. As of June 30, 2010 and 2009, there were no outstanding amounts due from City departments related to this work. In the event Hetch Hetchy Power received money from PG&E after project completion, monies are to be refunded back to the City departments for their respective credits.

Hetch Hetchy Power serves as the City's agency for energy efficiency projects and maintains the Sustainable Energy Account (SEA) (formerly known as the Mayor's Energy Conservation Account (MECA)) fund to sponsor and financially support such projects at various City departments. In this role, Hetch Hetchy Power may secure low-interest financing to supplement funds available in the SEA fund. At June 30, 2010 and 2009, projects completed or underway throughout the City amounted to \$13,900 and \$14,658, respectively, and are recorded as due from other governmental agencies.

Besides funding the SEA projects, in 2010 Hetch Hetchy funded a project for the Treasure Island Development Authority (TIDA) and recorded as due from other governmental agencies. Hetch Hetchy Power and the Moscone Center have renegotiated the memoranda of understanding to extend the payment terms of the receivable, to match the useful life of underlying assets.

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(Dollars in thousands)

The details of these projects are as follows:

	<b>2010</b>	<b>2009</b>
Moscone Center	\$ 10,125	10,700
San Francisco General Hospital	1,411	1,645
San Francisco Department of Public Health	881	1,003
San Francisco Department of Public Works	—	18
Port of San Francisco	671	736
San Francisco International Airport	—	—
Wastewater	812	556
Total SEA related projects	13,900	14,658
Treasure Island Development Authority	2,599	2,599
Total due from other governmental agencies	16,499	17,257
Less current portion	(1,113)	(325)
Long-term portion as of June 30	\$ 15,386	16,932

As of June 30, 2010, the Hetch Hetchy Power has a payable in the amount of \$4,560 due to the Water Enterprise for its allocable share of costs associated with the construction costs of the future SFPUC headquarters building located at 525 Golden Gate Avenue.

### (14) Risk Management

Risk management program encompasses both self-insured and insured coverage. Risk assessments and coverage are coordinated by the City's Office of Risk Management. With certain exceptions, the City and the enterprises' general policy is to first evaluate self-insurance for the risk of loss to which it is exposed. Based on this analysis, mitigating risk through a 'self-retention' mechanism is more economical as it manages risks internally and administers, adjusts, settles, defends, and pays claims from budgeted resources (i.e. pay-as-you-go fund). When economically more viable or when required by debt financing covenants, the enterprises obtain commercial insurance. At least annually, the City actuarially determines general liability and workers' compensation risk exposures. The enterprises do not maintain commercial earthquake coverage, with certain minor exceptions, such as a sub-limit for fire sprinkler leakage due to earthquake under the Property Insurance program.

<b>Primary risks</b>	<b>Typical coverage approach</b>
General Liability	Self-Insure
Property	Purchased Insurance and Self-Insure
Workers' Compensation	Self-Insure through Citywide Pool
<b>Other risks</b>	<b>Typical coverage approach</b>
Surety Bonds	Purchased and Contractually Transferred
Professional Liability	Combination of Self-Insure, Purchased Insurance and Contractual Risk Transfer
Errors & Omissions	Combination of Self-Insure, Purchased Insurance and Contractual Risk Transfer
Builders' Risk	Purchased Insurance and Contractual Risk Transfer
Public Officials Liability	Purchased Insurance

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(Dollars in thousands)

**(a) *Damage and Claim Liability***

Through coordination with the Controller and the City Attorney's Office, the general liability risk exposure is actuarially determined and is addressed through pay-as-you-go funding as part of the budgetary process. Associated costs are also booked as expenses as required under Generally Accepted Accounting Principles (GAAP) for financial statement purposes for both the enterprises' and the City and County of San Francisco's Comprehensive Annual Financial Report (CAFR). The claim expense allocations are determined based on actuarially determined anticipated claim payments and the projected timing of disbursement.

The changes for damage and claim liabilities for the years ended June 30, 2010 and 2009 are as follows:

***Department-wide***

<b>2010</b>					
	<b>Water</b>	<b>Wastewater</b>	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>	<b>Total</b>
Beginning of year	\$ 9,641	10,360	—	10,311	30,312
Claims and changes in estimates	26,835	1,535	107	225	28,702
Claims paid	(6,736)	(786)	—	(8,772)	(16,294)
End of year	\$ 29,740	11,109	107	1,764	42,720

<b>2009</b>					
	<b>Water</b>	<b>Wastewater</b>	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>	<b>Total</b>
Beginning of year	\$ 11,254	9,044	—	15,301	35,599
Claims and changes in estimates	7,946	1,460	—	(3,400)	6,006
Claims paid	(9,559)	(144)	—	(1,590)	(11,293)
End of year	\$ 9,641	10,360	—	10,311	30,312

**(b) *Property***

The enterprises' property risk management approach varies depending on whether the facility is currently under construction, or if the property is part of revenue generating operations. For new construction projects, the SFPUC has utilized traditional insurance, or other alternative insurance programs. Under the latter approach, the insurance program usually provides coverage for the entire construction project, along with multiple risk coverage, such as for general liability, property damage and workers compensation, for example. When a traditional insurance program is used for property risks, the

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SFPUC requires each contractor to provide its own insurance, while ensuring that the full scope of work be covered with satisfactory levels to limit SFPUC's risk exposure. The majority of purchased insurance program is for either: 1) revenue generating facilities, 2) debt financed facilities, or 3) mandated coverage to meet statutory requirements for bonding of various public officials.

#### (c) *Workers' Compensation*

The City actuarially determines and allocates workers' compensation costs to the enterprises according to a formula based on the following: (i) the dollar amount of claims; (ii) yearly projections of payments based on historical experience; and (iii) the size of the Enterprise's payroll. The administration of workers' compensation claims and payouts are handled by the Workers' Compensation Division of the City's Department of Human Resources. State-wide workers' compensation reforms have resulted in budgetary savings in recent years. The City continues to develop and implement improved programs, such as return-to-work programs, to lower or mitigate the growth of workers' compensation costs. Programs include: accident prevention, investigation and duty modification for injured employees with medical restrictions so return to work can occur as soon as possible.

The changes in the liabilities for workers' compensation for the years ended June 30, 2010 and 2009 are as follows:

#### *Department-wide*

		<b>2010</b>				
		<b>Water</b>	<b>Wastewater</b>	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>	<b>Total</b>
Beginning of year	\$	8,617	4,413	628	1,677	15,335
Claims and changes in estimates		1,624	454	218	130	2,427
Claims paid		(2,147)	(721)	(253)	(332)	(3,454)
End of year	\$	8,094	4,146	593	1,475	14,308
		<b>2009</b>				
		<b>Water</b>	<b>Wastewater</b>	<b>Hetch Hetchy Water</b>	<b>Hetch Hetchy Power</b>	<b>Total</b>
Beginning of year	\$	8,135	4,675	606	1,541	14,957
Claims and changes in estimates		2,195	428	191	342	3,156
Claims paid		(1,713)	(690)	(169)	(206)	(2,778)
End of year	\$	8,617	4,413	628	1,677	15,335

#### (d) *Surety Bonds and Public Official Liability*

Bonds are required in most phases of the public utilities construction contracting process for such phases, as bid, performance, and payment or maintenance. Additionally, bonds may be required in other

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contracts where goods or services are provided to ensure compliance with applicable terms and conditions such as warranty. Additionally, all public officials with financial oversight responsibilities are provided liability coverage through a commercial Public Official Liability policy, including the Commission members, the General Manager and the Chief Financial Officer. The Enterprise also maintains a commercial crime policy in lieu of bonding its employees.

**(e) Professional Liability, Errors and Omissions**

Professional liability policies are either directly purchased insurance on behalf of SFPUC, transferred through contract to the contracted professional, or retained through self-insurance on a case by case basis depending on the size, complexity or scope of construction or professional service contracts. Examples of contracts providing any form of the coverage described are engineers, architects, design professionals and other licensed or certified professional service providers.

**(f) Builders' Risk**

Builder's risk policies of insurance are required to be provided by the contractor on all construction projects for the full value of construction.

### **(15) Commitments and Litigation**

**(a) Commitments**

As of June 30, 2010 and 2009, Water has outstanding commitments with third-parties of \$913,560 and \$303,373, respectively, for various capital projects and other purchase agreements for materials and services. As of June 30, 2010 and 2009, Wastewater has outstanding commitments with third parties of \$27,078 and \$23,879, respectively, for various capital projects and other purchase agreements for materials and services. Hetch Hetchy Water has outstanding commitments with third parties \$5,709 and \$4,767, respectively, and Hetch Hetchy Power has outstanding commitments with third parties \$23,952 and \$17,579, respectively, for various capital projects and other purchase agreements for materials and services.

Additionally, with respect to Hetch Hetchy Water, to meet certain requirements of the Don Pedro Reservoir operating license, the City entered into an agreement with the Districts in which the Districts would be responsible for an increase in water flow releases from the reservoir in exchange for annual payments from the City, which are included in Hetch Hetchy Water's operating expenses. The payment amounts were \$4,646 and \$4,250 in fiscal years 2010 and 2009, respectively. The payments are to be made for the duration of the license, but may be terminated with one year's prior written notice after 2001. The City and the Districts have also agreed to monitor the fisheries in the lower Tuolumne River for the duration of the license. A maximum monitoring expense of \$1,400 is to be shared between the City and the Districts over the term of the license. The City's share of the monitoring costs is 52%, while the Districts are responsible for 48% of the costs.

In April 1988, Hetch Hetchy Power entered into a long-term power sales agreement (the Agreement) with the Districts. In June 2003, Hetch Hetchy Power amended the terms of the Agreement with the Modesto Irrigation District (MID). Under the terms of the amended and restated long-term power sales agreement, which became effective on January 1, 2003, the expiration date was shortened to December 31, 2007. The agreement with MID was renegotiated and became effective January 1, 2008 which

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removed Hetch Hetchy's obligation to provide firm power and eliminated MID's rights to excess energy from the Project. This agreement expires on June 30, 2015. In April 2005, Hetch Hetchy Power amended the terms of the Agreement with Turlock Irrigation District (TID). The settlement agreement between the Commission and TID restates and amends the power sales agreement and terminates Hetch Hetchy Power's obligation to provide firm power at below market costs to TID to the end of the agreements term on June 30, 2015. The Commission will continue to comply with the Raker Act by making Hetch Hetchy generated hydropower available at cost to MID and TID for its agricultural pumping and municipal loads as energy is available. For fiscal years 2010 and 2009, energy sales to the Districts totaled 286,980 MWh or \$7,530 and 258,268 MWh or \$6,450, respectively.

Effective September 2007, the City renegotiated the Interconnection Agreement (agreement) with PG&E to provide transmission and distribution services on PG&E's system where needed to deliver Hetch Hetchy's power to its customers. In addition, agreement provides supplemental power and energy banking and other support services to Hetch Hetchy Power. The agreement provides audit rights to review past billings paid by Hetch Hetchy Power and to retroactively (up to two years) adjust these payments as determined necessary. During fiscal years 2010 and 2009, Hetch Hetchy Power purchased \$12,906 and \$13,264, respectively, of transmission, distribution services, and other support services from PG&E under the terms of the agreement.

The City's Interconnection Agreement with PG&E contains a contractual provision allowing it to bank excess power produced, with a maximum of 110,000 Megawatt hours (MWh). During fiscal year 2010, Hetch Hetchy Power generated 1,453,158 MWh of power, banked (deposited) in the Deferred Delivery Account (DDA) 104,321 MWh and used (withdrew) 115,630 MWh. At June 30, 2010 and 2009, the balance in the bank was 92,854 MWh or \$2,650 and 104,172 MWh or \$2,719, respectively.

Hetch Hetchy Power may purchase or sell energy with different market entities through the Western System Power Pool (WSPP). During fiscal year 2010, Hetch Hetchy Power purchased \$328.2 of power. Sales of excess power, after meeting Hetch Hetchy's obligations, were 298,549 MWh, or \$10,106. During fiscal year 2009, Hetch Hetchy Power did not purchase any power and sales of excess power were 217,792 MWh, or \$6,162.

**(b) *Grants***

Grants that the enterprises receive are subject to audit and final acceptance by the granting agency. Current and prior year costs of such grants are subject to adjustment upon audit.

**(c) *Energy Risk Management***

Hetch Hetchy is exposed to risks that could negatively impact its ability to generate net revenues to fund operating and capital investment activities. Hydroelectric generation facilities in the Sierra Nevada are the primary source of electricity for Hetch Hetchy Power. For this reason, the financial results of Hetch Hetchy Power are sensitive to variability in watershed hydrology and market prices for energy.

**(d) *Litigation***

Various legal actions and claims arise during the normal course of business. The final disposition of those legal actions and claims is not determinable. However, in the opinion of management, the

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outcome of any litigation of these matters will not have a material effect on the financial position or changes in net assets.

### **(16) Subsequent Events**

#### ***Water Enterprise***

##### **(a) *Issuance of Revenue Bonds Series 2010DE***

In July 2010, the Enterprise issued revenue bonds Series DE in the combined principal amount of \$446,925. The Sub-Series D Bonds were issued as traditional tax-exempt bonds, while the Sub-Series E Bonds were issued as Build America Bonds with a Direct Pay Subsidy. The \$102,725 Sub-Series D Bonds provided \$72,243 in new money for WSIP implementation and also provided \$35,080 to advance refund a portion of the SFPUC's Water Revenue Bonds, Series 2002 A Bonds, as well as providing funds for financing costs. The \$344,200 Sub-Series E Bonds provided \$300,446 in new money for WSIP projects, with the balance applied to financing costs. The bonds included serial and term bonds with interest rates varying from 3% to 6%, and mature through November 1, 2040.

##### **(b) *Issuance of Commercial Paper***

In August 2010, the Water Enterprise sold \$25 million in taxable commercial paper with the proceeds used to exclusively fund Regional Projects under WSIP. The Enterprise expects to refinance the commercial paper notes with an intermediate-term debt issuance in the winter of 2010.

##### **(c) *Possible Pollution Remediation Liability at Bay Division Pipeline No. 5***

In August 2010, the Enterprise noted the possible presence of groundwater contamination at the construction site of Bay Division Pipeline #5 as a result of being alerted to the presence of soil contaminants in neighboring properties, not owned by the City, currently undergoing remediation. The potential liability cannot be reasonably estimated under the standards set forth by GASB Statement 49. The extent of the pollution is currently unknown to the Enterprise, pending the results of scientific testing that will not be available for evaluation until fiscal year 2011. Based on the results of the testing, the Enterprise may consider alternative courses of action to complete the project, and may be able to partially offset the costs of any remediation effort through the pursuit of legal claims.

##### **(d) *Transfer of the San Francisco Fire Department's Auxiliary Water Supply System***

In May 2010, the City and County of San Francisco Board of Supervisors and Mayor approved the transfer of costs of operating, maintaining and improving the Auxiliary Water Supply System (AWSS) from the Fire Department to the Enterprise. In June 2010, the voters of the City & County of San Francisco also approved Proposition B which authorizes a general obligation bond to implement improvements for fire, earthquake and emergency response and to ensure a reliable water supply for fires and disasters. The transfer of assets as well as AWSS operations is planned to occur during the next fiscal year.

##### **(e) *Litigation***

In October 2010, a federal jury rejected First Amendment retaliation claims that SFPUC retaliated against Mitchell Engineering for engaging in speech protected by the First Amendment. However, the

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jury found for Mitchell Engineering on the due process claim related to contract termination. Mitchell was awarded \$3.6 million, and will be entitled to attorneys' fees and costs under the federal statute. The SFPUC is appealing the verdict. On a related note, this federal case is separate from the pending state cases between the SFPUC and Mitchell, each of which involves cross-allegations of breach of contract. Estimated costs for both the federal and state cases have been reflected in the financial statements.

## ***Wastewater Enterprise***

### ***Agreement with Bayshore Sanitary District***

On July 23, 2010, the Mayor of the City and County of San Francisco signed ordinance number 184-10 approving the settlement agreement for Bayshore Sanitary District v. CCSF. Pursuant to Section 2 of the agreement, by September 21, 2010 (60 days after the effective date) the Enterprise will execute a refund adjustment of \$407 and the District shall pay the Enterprise the full amount of any and all outstanding, unpaid billings for sewer services in excess of the refund adjustment. On September 7, 2010, the Enterprise received and recorded the settlement check.

## ***Hetch Hetchy Water***

### ***New Memorandum of Agreement between the National Park Service (NPS) and the SFPUC***

In October 2010, the Board of Supervisors approved the resolution to grant a new Memorandum of Agreement between the National Park Service (NPS) and the SFPUC for the NPS to provide watershed management services for the PUC within Yosemite National Park for a five year term retroactive from July 1, 2010 to June 30, 2015. The SFPUC will pay NPS the capped amount of \$27,486 for the watershed management services to be provided by the NPS within Yosemite National Park.

## ***Hetch Hetchy Power***

### ***Implementation Agreement with the Attorney General of the State of California, the California Consumer Power and Conservation Financing Authority, and the California Department of Water Resources (DWR)***

Resolution has been reached on August 6, 2010 to conclude the Implementation Agreement the City entered into in January 2003 with the Attorney General of the State of California, the California Consumer Power and Conservation Financing Authority, and the California Department of Water Resources (DWR). On March 11, 2010, pursuant to section 4.02(a) of the Implementation Agreement, the City sold the four combustion turbines for \$44,000; some of these proceeds were distributed to the Enterprise and DWR accordingly; with the remaining funds placed in a holding escrow account, pending resolution between the City and DWR. Under the terms of the resolution, Hetch Hetchy Power is to be reimbursed \$6,264 of expenses, and has recorded as receivable accordingly. In September, 2010, Hetch Hetchy Power received the State's warrant in the amount of \$2,667 to be applied to the receivable. Remaining receivable amount will be subsequently drawn from escrow accounts. The total settlement amount was approximately \$21,000 to offset expenses, including write-off of assets.





KPMG LLP  
Suite 1400  
55 Second Street  
San Francisco, CA 94105

**Report on Internal Control Over Financial Reporting and on Compliance  
and Other Matters Based on an Audit of Financial Statements  
Performed in Accordance With *Government Auditing Standards***

The Honorable Mayor and Board of Supervisors  
City and County of San Francisco, California:

We have audited the financial statements of the business-type activities and each major fund of the San Francisco Public Utilities Commission, California (SFPUC), a department of the City and County of San Francisco, California, (the City), as of and for the year ended June 30, 2010, and have issued our report thereon dated December 21, 2010. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

**Internal Control over Financial Reporting**

In planning and performing our audit, we considered the SFPUC's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the SFPUC's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the SFPUC's internal control over financial reporting.

A deficiency in internal control over financial reporting exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.



### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the SFPUC's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

This report is intended solely for the information and use of management, the City and County of San Francisco Government Audit and Oversight Committee, the Commission and others within the entity, and is not intended to be and should not be used by anyone other than these specified parties.

**KPMG LLP**

December 21, 2010



## SUPPLEMENTARY INFORMATION

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**THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

Changes in Net Assets  
Proprietary Funds  
June 30, 2010 and 2009  
(In thousands)

	<b>Business-Type Activities - Enterprise Funds</b>									
	<b>Water</b>		<b>Wastewater</b>		<b>Hetch Hetchy Water</b>		<b>Hetch Hetchy Power</b>		<b>SFPUC Total</b>	
	<b>2010-09 Change</b>	<b>2010-09 % Change</b>	<b>2010-09 Change</b>	<b>2010-09 % Change</b>	<b>2010-09 Change</b>	<b>2010-09 % Change</b>	<b>2010-09 Change</b>	<b>2010-09 % Change</b>	<b>2010-09 Change</b>	<b>2010-09 % Change</b>
<b>Assets:</b>										
Current assets:										
Cash and investments with City Treasury.....	\$ (17,455)	(13.3)	12,934	35.0	(1,737)	(4.9)	5,487	4.1	(771)	(0.2)
Cash and investments outside City Treasury.....	53	147.2	84	1,680.0	—	—	—	—	137	268.6
Receivables:										
Charges for services, (net of allowance for doubtful accounts of \$2,021, \$2,860 and \$0* in 2010 and \$1,187, \$1,486, and \$0* in 2009, respectively).....	3,491	9.1	589	1.7	157	75.8	1,766	16.1	6,003	7.1
Wholesale balancing account.....	19,231	100.0	—	—	—	—	—	—	19,231	100.0
Due from other funds.....	10,149	5,151.8	—	—	—	—	—	—	10,149	5,151.8
Due from other governmental agencies, current portion.....	661	196.1	(5)	(4.7)	—	—	170	100.0	826	186.5
Due from other City departments, current portion.....	—	—	5	16.1	—	—	788	242.5	793	222.8
Interest .....	(269)	(83.8)	(138)	(81.7)	(448)	(94.7)	(1,701)	(95.6)	(2,556)	(93.2)
Advances and other receivables.....	277	35.2	(3)	(100.0)	(2)	(66.7)	2,788	68.3	3,060	62.8
Total receivables.....	33,540	84.0	448	1.3	(293)	(42.9)	3,811	22.2	37,506	40.4
Deferred charges and other assets.....	—	—	—	—	—	—	(828)	(23.8)	(828)	(23.8)
Inventories.....	(58)	(3.1)	(340)	(9.5)	12	9.8	14	10.1	(372)	(6.5)
Restricted assets - investments outside City Treasury.....	43,866	100.0	—	—	—	—	—	—	43,866	100.0
Total current assets.....	59,946	34.7	13,126	17.4	(2,018)	(5.5)	8,484	5.5	79,538	18.1
Non-current assets:										
Wholesale balancing account receivable.....	(12,710)	(46.1)	—	—	—	—	—	—	(12,710)	(46.1)
Restricted assets - cash and investments with City Treasury.....	598,621	2,755.3	72,120	117.3	—	—	—	—	670,741	806.2
Restricted assets - cash and investments outside City Treasury.....	210,441	513.6	59,659	100.0	—	—	12,626	207.3	282,726	600.7
Restricted assets - interest receivable.....	156	133.3	(86)	(52.8)	—	—	—	—	70	25.0
Capital assets not being depreciated.....	240,074	42.4	1,719	1.7	(876)	(7.2)	(1,238)	(3.9)	239,679	33.8
Capital assets, net of accumulated depreciation .....	123,019	13.1	970	0.1	4,204	5.9	10,041	6.3	138,234	5.6
Due from other City departments.....	—	—	—	—	—	—	(1,546)	(9.1)	(1,546)	(9.1)
Bond issuance costs, (net of accumulated amortization of of \$4,408, \$2,697 and \$19** in 2010 and \$3,302, \$2,506, and \$2** in 2009, respectively).....	10,537	154.2	2,670	103.6	—	—	165	412.5	13,372	141.5
Total non-current assets.....	1,170,138	73.2	137,052	9.4	3,328	4.0	20,048	9.4	1,330,566	39.7
Total assets.....	\$ 1,230,084	69.4	150,178	9.8	1,310	1.1	28,532	7.7	1,410,104	37.2

\*Hetch Hetchy Water and Hetch Hetchy Power

\*\*Hetch Hetchy Power

See independent auditors' reports

(Continued)

**THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

Changes in Net Assets  
Proprietary Funds  
June 30, 2010 and 2009  
(In thousands)

	<b>Business-Type Activities - Enterprise Funds</b>									
	<b>Water</b>		<b>Wastewater</b>		<b>Hetch Hetchy Water</b>		<b>Hetch Hetchy Power</b>		<b>SFPUC Total</b>	
	<b>2010-09 Change</b>	<b>2010-09 % Change</b>	<b>2010-09 Change</b>	<b>2010-09 % Change</b>	<b>2010-09 Change</b>	<b>2010-09 % Change</b>	<b>2010-09 Change</b>	<b>2010-09 % Change</b>	<b>2010-09 Change</b>	<b>2010-09 % Change</b>
<b>Liabilities:</b>										
Current liabilities:										
Accounts payable.....	\$ (4,617)	(31.2)	(3,979)	(50.4)	378	12.0	2,022	17.3	(6,196)	(16.5)
Accrued payroll.....	714	10.4	277	7.9	99	20.0	157	11.9	1,247	10.3
Accrued vacation and sick leave, current portion.....	295	4.9	(23)	(0.8)	40	10.1	26	2.5	338	3.3
Accrued workers' compensation, current portion.....	(83)	(5.4)	(50)	(6.5)	(1)	(0.9)	(24)	(8.1)	(158)	(5.8)
Due to other funds.....	1	4.3	—	—	—	—	4,560	100.0	4,561	19,830.4
Due to other City departments.....	—	—	6,043	1,086.9	—	—	—	—	6,043	1,086.9
Damage and claim liability, current portion.....	6,204	246.7	847	45.5	25	100.0	(2,517)	(77.4)	4,559	59.8
Deferred revenue, refunds and other liabilities, current portion..	—	—	1,502	100.0	—	—	—	—	1,502	100.0
Deposits, advances, and other liabilities.....	163	3.3	—	—	—	—	165	24.4	328	5.9
Bond and loan interest payable.....	8,651	116.6	497	9.7	—	—	164	100.0	9,312	74.3
Pollution remediation obligation, current portion.....	(2,578)	(83.8)	—	—	—	—	—	—	(2,578)	(83.8)
Revenue bonds, current portion.....	1,190	4.5	(10,810)	(29.1)	—	—	—	—	(9,620)	(15.0)
Commercial paper.....	(229,600)	(100.0)	(100,000)	(100.0)	—	—	—	—	(329,600)	(100.0)
Loans payable, current portion.....	—	—	449	3.2	—	—	—	—	449	3.2
Current liabilities payable from restricted assets.....	34,004	83.7	(2,018)	(28.8)	—	—	—	—	31,986	67.2
<b>Total current liabilities.....</b>	<b>(185,656)</b>	<b>(54.0)</b>	<b>(107,265)</b>	<b>(59.3)</b>	<b>541</b>	<b>13.0</b>	<b>4,553</b>	<b>24.3</b>	<b>(287,827)</b>	<b>(52.6)</b>
Long-term liabilities:										
Arbitrage rebate payable.....	288	6.8	—	—	—	—	—	—	288	6.8
Other post-employment benefits obligation.....	14,631	47.2	4,665	40.9	851	53.9	1,822	43.2	21,969	45.6
Accrued vacation and sick leave, less current portion.....	78	1.4	4	0.2	8	2.7	(35)	(4.4)	55	0.6
Accrued workers' compensation, less current portion.....	(440)	(6.2)	(217)	(6.0)	(34)	(6.6)	(178)	(12.9)	(869)	(6.9)
Damage and claim liability, less current portion.....	13,895	195.0	(98)	(1.2)	82	100.0	(6,030)	(85.4)	7,849	34.6
Deferred revenue, refunds and other liabilities.....	—	—	(544)	(100.0)	—	—	—	—	(544)	(100.0)
Revenue bonds, less current portion.....	1,311,225	144.7	221,159	86.6	—	—	(407)	(7.7)	1,531,977	131.3
Loans payable, less current portion.....	—	—	(14,648)	(24.0)	—	—	—	—	(14,648)	(24.0)
Capital appreciation bonds.....	258	7.1	—	—	—	—	—	—	258	7.1
Certificates of participation.....	122,496	100.0	32,390	100.0	—	—	16,676	100.0	171,562	100.0
Pollution remediation obligation, less current portion.....	(75)	(31.9)	—	—	—	—	—	—	(75)	(12.3)
<b>Total long-term liabilities.....</b>	<b>1,462,356</b>	<b>151.5</b>	<b>242,711</b>	<b>70.7</b>	<b>907</b>	<b>37.9</b>	<b>11,848</b>	<b>63.2</b>	<b>1,717,822</b>	<b>129.2</b>
<b>Total liabilities.....</b>	<b>1,276,700</b>	<b>97.5</b>	<b>135,446</b>	<b>25.8</b>	<b>1,448</b>	<b>22.1</b>	<b>16,401</b>	<b>43.8</b>	<b>1,429,995</b>	<b>76.2</b>
<b>Net assets:</b>										
Invested in capital assets, net of related debt.....	(52,840)	(14.2)	(1,263)	(0.1)	3,328	4.0	5,731	3.0	(45,044)	(2.8)
Restricted for debt service.....	132	1.1	117	8.6	—	—	—	—	249	1.9
Restricted for capital projects.....	3,027	359.9	7,778	51.8	—	—	—	—	10,805	68.1
Unrestricted.....	3,065	4.0	8,100	36.1	(3,466)	(11.6)	6,400	4.5	14,099	5.2
<b>Total net assets.....</b>	<b>\$ (46,616)</b>	<b>(10.1)</b>	<b>14,732</b>	<b>1.5</b>	<b>(138)</b>	<b>(0.1)</b>	<b>12,131</b>	<b>3.7</b>	<b>(19,891)</b>	<b>(1.0)</b>

See independent auditors' reports

**THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

Changes in Revenues, Expenses, and Net Assets

Proprietary Funds

June 30, 2010 and 2009

(In thousands)

**Business-Type Activities - Enterprise Funds**

	<b>Water</b>		<b>Wastewater</b>		<b>Hetch Hetchy Water</b>		<b>Hetch Hetchy Power</b>		<b>SFPUC Total</b>	
	<b>2010-09</b>	<b>2010-09</b>	<b>2010-09</b>	<b>2010-09</b>	<b>2010-09</b>	<b>2010-09</b>	<b>2010-09</b>	<b>2010-09</b>	<b>2010-09</b>	<b>2010-09</b>
	<b>Change</b>	<b>% Change</b>	<b>Change</b>	<b>% Change</b>	<b>Change</b>	<b>% Change</b>	<b>Change</b>	<b>% Change</b>	<b>Change</b>	<b>% Change</b>
Operating revenues:										
Charges for services.....	\$ 705	0.3	3,031	1.5	6,641	27.1	6,676	7.4	17,053	3.0
Rents and concessions.....	(815)	(8.7)	—	—	(1)	(0.9)	—	—	(816)	(8.5)
Capacity fees.....	(16)	(2.6)	—	—	—	—	—	—	(16)	(2.6)
Other revenues.....	(437)	(5.4)	(1,842)	(19.8)	—	—	—	—	(2,279)	(13.1)
Total operating revenues.....	(563)	(0.2)	1,189	0.6	6,640	27.0	6,676	7.4	13,942	2.4
Operating expenses:										
Personal services.....	1,309	1.2	1,851	2.7	140	1.3	(84)	(0.3)	3,216	1.5
Contractual services.....	(532)	(3.9)	(1,810)	(13.1)	574	65.0	(1,588)	(22.0)	(3,356)	(9.4)
Transmission/Distribution and other power costs.....	—	—	—	—	—	—	(1,068)	(5.8)	(1,068)	(5.8)
Purchased power and related costs.....	—	—	—	—	—	—	328	100.0	328	100.0
Materials and supplies.....	77	0.6	4,134	71.8	93	10.6	174	12.7	4,478	21.7
Bad debt expense.....	(92)	(100.0)	(576)	(100.0)	—	—	—	—	(668)	(100.0)
Depreciation.....	3,471	7.1	1,933	5.0	153	3.9	609	7.7	6,166	6.2
Services provided by other departments and general and administrative.....	30,406	70.6	869	2.6	2,038	20.1	—	—	35,654	40.1
Other.....	(4,984)	(21.8)	9,811	135.3	(3,432)	(57.1)	21,881	1,753.3	23,276	62.3
Total operating expenses.....	29,655	11.9	16,212	9.6	(434)	(1.3)	22,593	35.4	68,026	13.2
Operating income (loss).....	(30,218)	(173.0)	(15,023)	(38.2)	7,074	(89.5)	(15,917)	(59.1)	(54,084)	(71.3)
Non-operating revenues (expenses):										
Federal and State grants.....	(278)	(15.6)	(39)	(17.4)	—	—	197	100.0	(120)	(6.0)
Interest and investment income.....	2,735	38.6	64	3.2	(217)	(24.8)	(1,205)	(36.7)	1,377	10.4
Interest expense.....	(18,425)	63.9	(214)	1.4	—	—	(715)	10,214.3	(19,354)	43.5
Net gain (loss) from sale of land.....	(2,765)	(106.9)	—	—	—	—	—	—	(2,765)	(106.9)
Other non-operating revenues.....	1,692	59.8	3,253	407.6	23	143.8	3,570	132.8	8,538	134.8
Other non-operating expenses.....	(974)	121.9	—	—	—	-	(2,939)	123.4	(3,913)	123.0
Net non-operating revenues (expenses).....	(18,015)	117.3	3,064	(24.2)	(194)	(21.8)	(1,092)	(30.5)	(16,237)	69.0
Income (loss) before transfers.....	(48,233)	(2,285.9)	(11,959)	(44.8)	6,880	(98.0)	(17,009)	(55.7)	(70,321)	(134.4)
Transfers in (out).....	650	(56.9)	—	—	24	(100.0)	(1,123)	405.4	(449)	31.1
Changes in net assets.....	(47,583)	(4,920.7)	(11,959)	(44.8)	6,904	(98.0)	(18,132)	(59.9)	(70,770)	(139.1)
Net assets at beginning of year.....	967	0.2	26,691	2.7	(7,042)	(5.9)	30,263	10.1	50,879	2.7
Net assets at end of year.....	\$ (46,616)	(10.1)	14,732	1.5	(138)	(0.1)	12,131	3.7	(19,891)	(1.0)

See independent auditors' reports

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## Statistical Section

### **Financial Trends**

These schedules contain trend information to help understand how SFPUC's financial performance and well-being have changed over time.

### **Revenue Capacity**

These schedules contain information to help the reader assess SFPUC's revenues sources and rate structures.

### **Debt Capacity**

These schedules contain information to help the reader assess the affordability of the SFPUC's current levels of outstanding debt and its ability to issue additional debt in the future.

### **Demographic & Economic Information**

These schedules offer demographic and economic indicators to help the reader understand the environment within which SFPUC's financial activities take place.

### **Operating Information**

These schedules contain service and infrastructure data to enhance the reader's ability to understand how the information in the SFPUC financial report relates to the services it provides and the activities it performs.



## Financial Trends

### **Comparative Highlights of Revenues & Expenses**

#### **Summary of Changes in Net Assets**

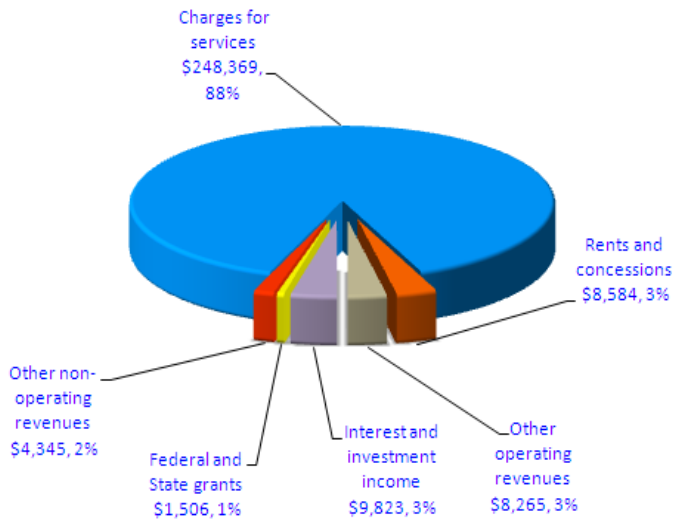
#### **Summary of Net Assets by Component**

#### **Investments in Capital Assets**

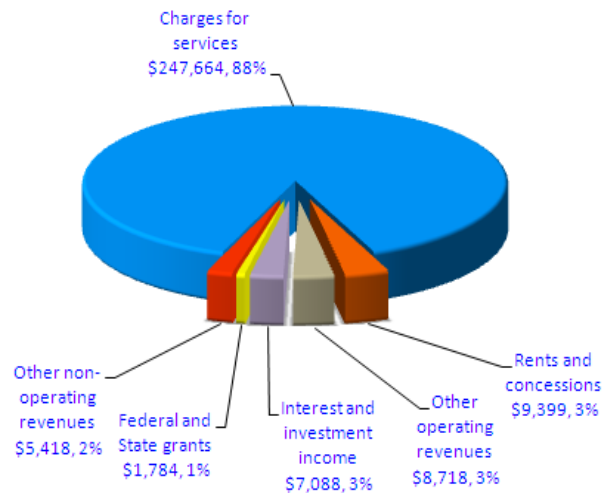
**Financial Trends**  
**Comparative Highlights of Revenues & Expenses**  
**Fiscal Years Ending 2010 and 2009**  
**(Dollars in Thousands)**

**Water**

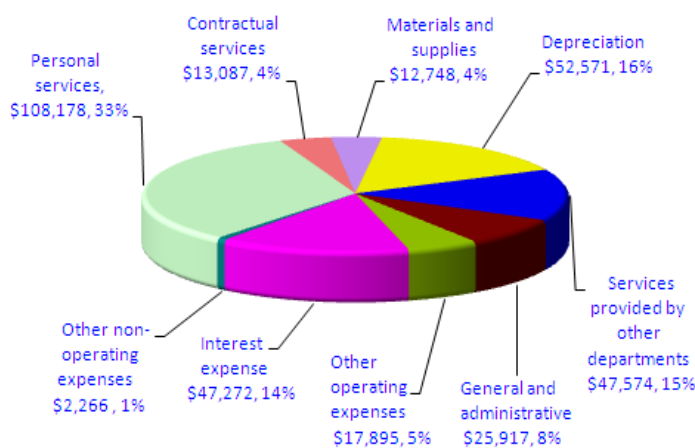
**2010 Revenues - \$ 280,892**



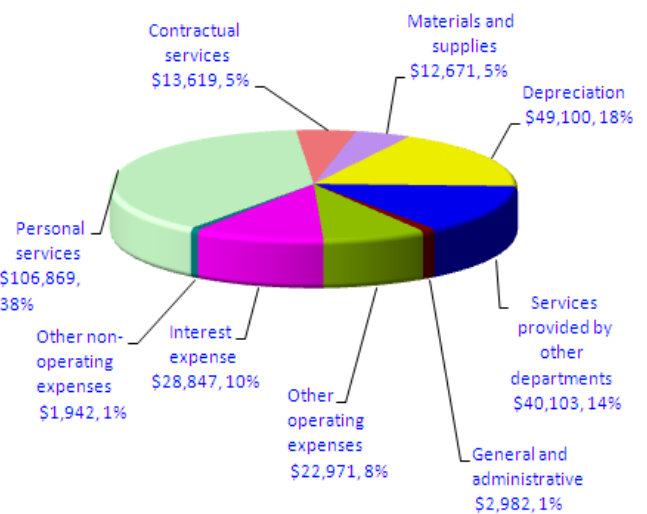
**2009 Revenues - \$ 280,071**



**2010 Expenses - \$ 327,508**



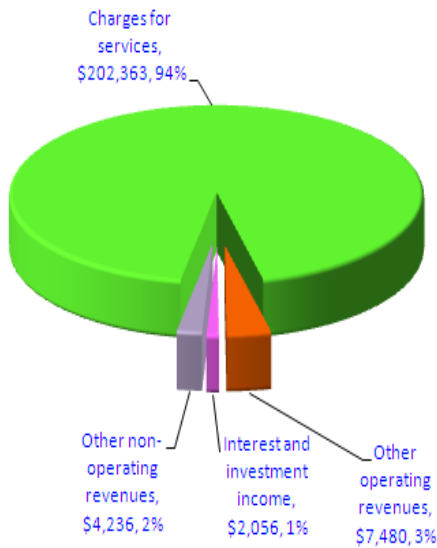
**2009 Expenses - \$ 279,104**



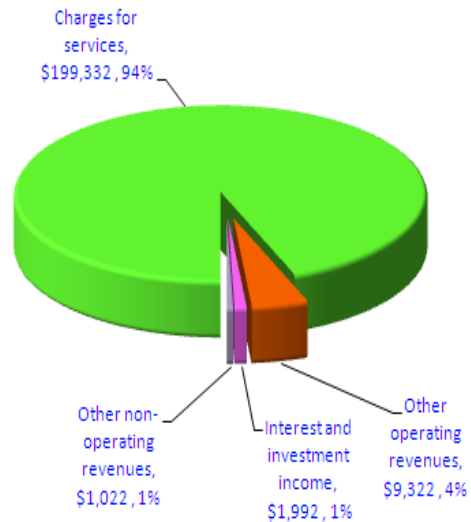
**Financial Trends**  
**Comparative Highlights of Revenues & Expenses**  
**Fiscal Years Ending 2010 and 2009**  
**(Dollars in Thousands)**

**Wastewater**

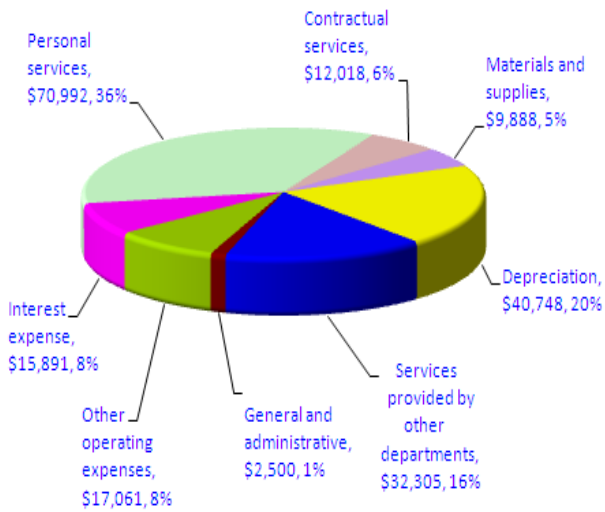
**2010 Revenues - \$ 216,135**



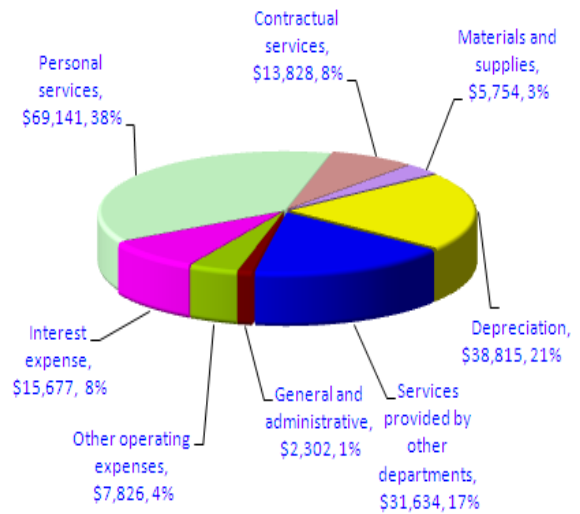
**2009 Revenues - \$ 211,668**



**2010 Expenses - \$ 201,403**



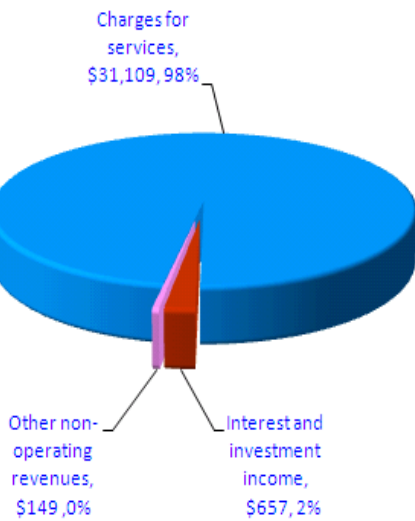
**2009 Expenses - \$ 184,977**



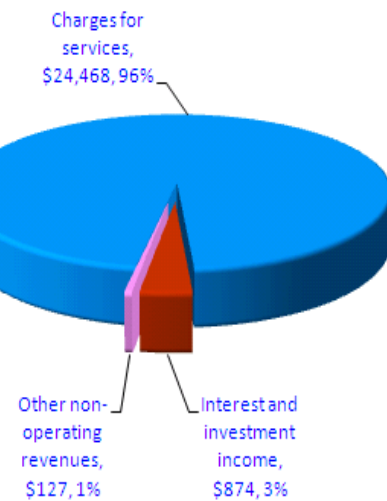
**Financial Trends**  
**Comparative Highlights of Revenues & Expenses**  
**Fiscal Years Ending 2010 and 2009**  
**(Dollars in Thousands)**

**Hetch Hetchy Water**

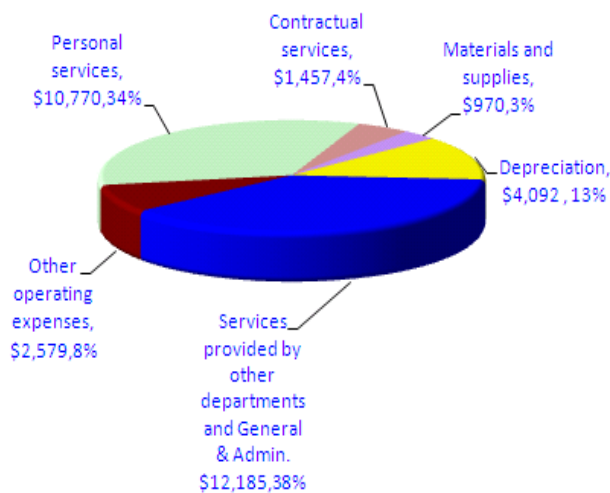
**2010 Revenues - \$ 31,915**



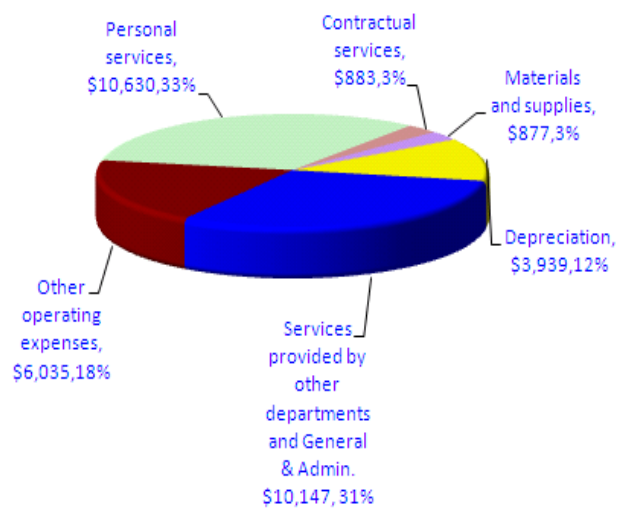
**2009 Revenues - \$ 25,469**



**2010 Expenses - \$ 32,053**



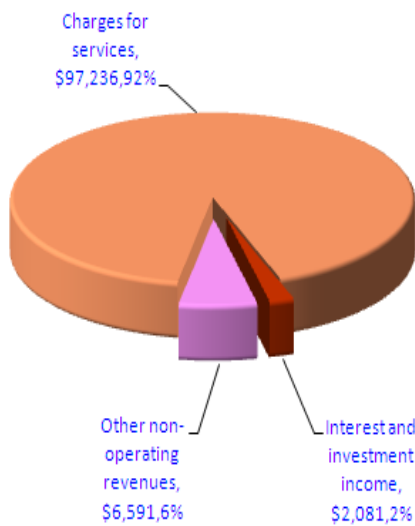
**2009 Expenses - \$ 32,511**



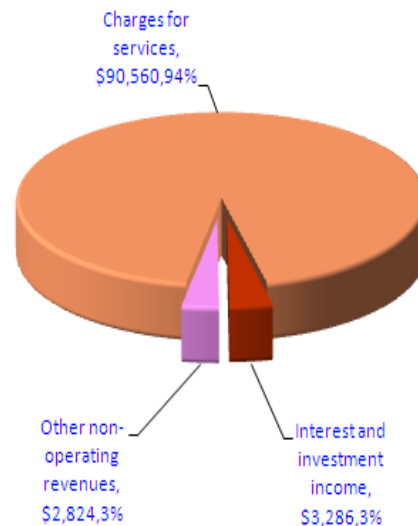
**Financial Trends**  
**Comparative Highlights of Revenues & Expenses**  
**Fiscal Years Ending 2010 and 2009**  
(Dollars in Thousands)

**Hetch Hetchy Power**

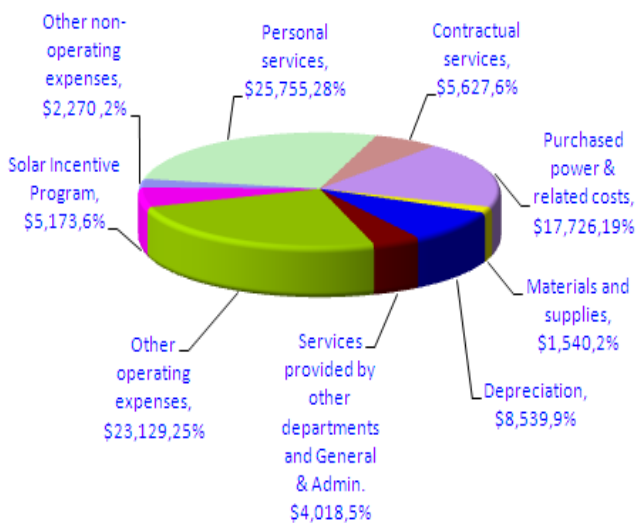
**2010 Revenues - \$ 105,908**



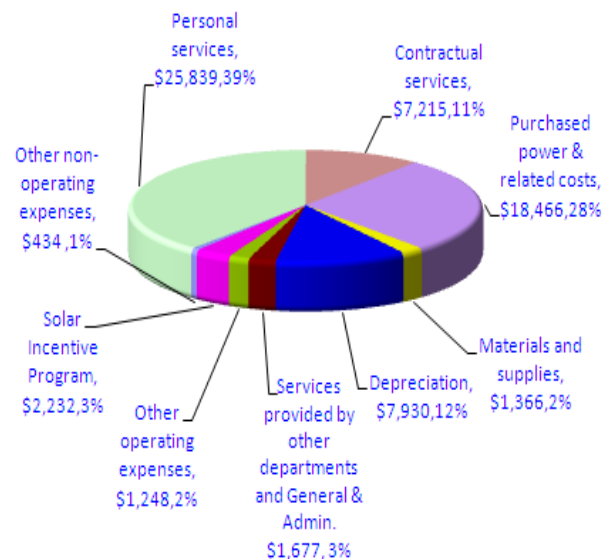
**2009 Revenues - \$ 96,670**



**2010 Expenses - \$ 93,777**



**2009 Expenses - \$ 66,407**

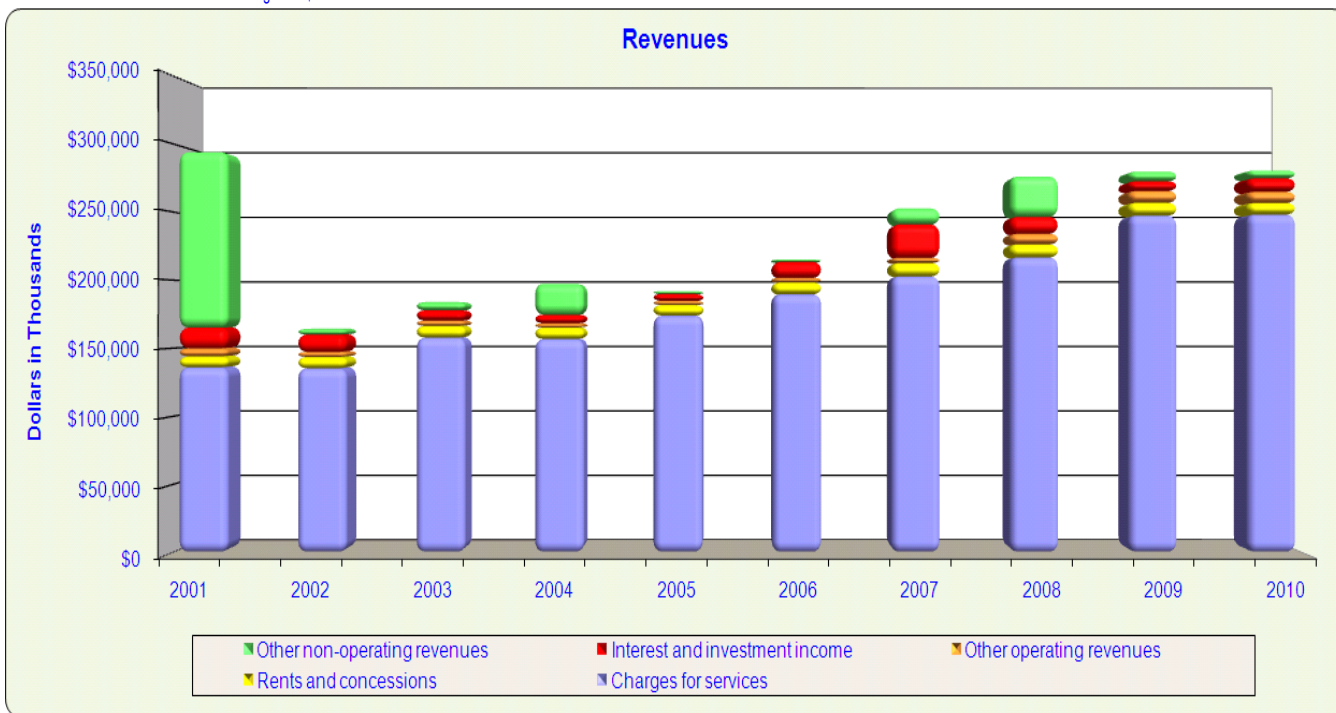


Financial Trends

Summary of Changes in Net Assets - Water  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

Revenues:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Charges for services	\$ 135,779	135,139	157,727	156,660	173,884	189,603	202,787	216,819	247,664	248,369
Rents and concessions	8,077	8,303	8,611	8,451	7,898	8,763	9,929	9,645	9,399	8,584
Other operating revenues	6,061	3,774	3,915	3,149	3,053	3,467	3,815	7,752	8,718	8,265
<b>Subtotal operating revenues</b>	<b>149,917</b>	<b>147,216</b>	<b>170,253</b>	<b>168,260</b>	<b>184,835</b>	<b>201,833</b>	<b>216,531</b>	<b>234,216</b>	<b>265,781</b>	<b>265,218</b>
Interest and investment income	15,169	12,691	7,576	6,268	5,093	11,665	24,547	12,456	7,088	9,823
Other non-operating revenues	129,275 *	4,212	6,133	22,911	2,062	1,741	11,798	29,681	7,202	5,851
<b>Subtotal non-operating revenues</b>	<b>144,444</b>	<b>16,903</b>	<b>13,709</b>	<b>29,179</b>	<b>7,155</b>	<b>13,406</b>	<b>36,345</b>	<b>42,137</b>	<b>14,290</b>	<b>15,674</b>
<b>Total revenues</b>	<b>\$ 294,361</b>	<b>164,119</b>	<b>183,962</b>	<b>197,439</b>	<b>191,990</b>	<b>215,239</b>	<b>252,876</b>	<b>276,353</b>	<b>280,071</b>	<b>280,892</b>

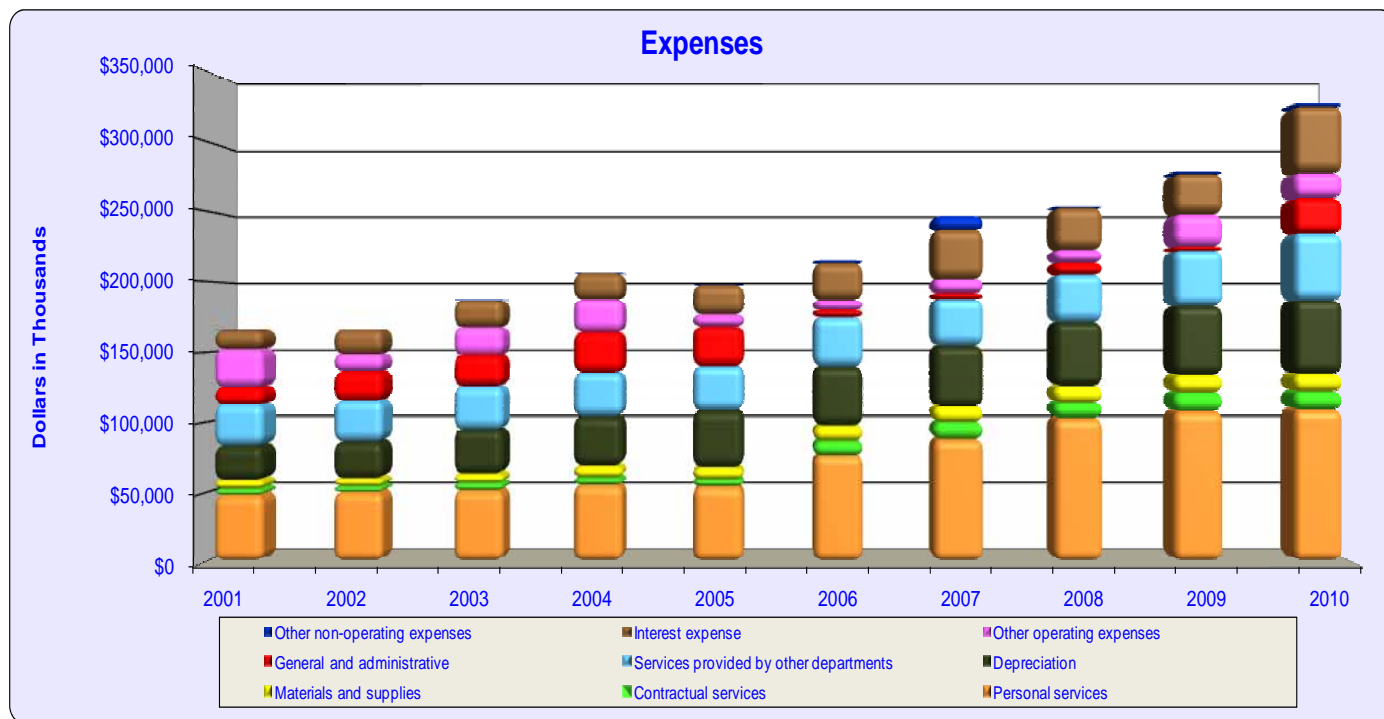
\* Sale of 500 acres land in Pleasanton at a gain of \$126 million



Financial Trends

Summary of Changes in Net Assets - Water  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

Expenses:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Personal services	\$ 47,671	49,676	50,859	54,627	53,683	75,941	87,200	102,233	106,869	108,178
Contractual services	4,237	3,958	5,168	5,438	5,235	10,047	12,437	11,292	13,619	13,087
Materials and supplies	6,470	5,955	6,842	8,124	8,293	11,176	10,661	11,506	12,671	12,748
Depreciation	24,338	25,909	31,430	35,110	40,112	41,877	43,895	45,958	49,100	52,571
Services provided by other departments	29,238	29,307	30,496	31,561	32,146	35,517	33,242	34,698	40,103	47,574
General and administrative	12,154	21,003	22,685	28,863	28,376	5,037	4,523	8,209	2,982	25,917
Other operating expenses	27,937	12,622	20,043	23,655	8,608	7,339	10,540	9,156	22,971	17,895
<b>Subtotal operating expenses</b>	<b>152,045</b>	<b>148,430</b>	<b>167,523</b>	<b>187,378</b>	<b>176,453</b>	<b>186,934</b>	<b>202,498</b>	<b>223,052</b>	<b>248,315</b>	<b>277,970</b>
Interest expense	12,850	16,932	19,056	19,315	21,395	26,650	34,326	29,750	28,847	47,272
Other non-operating expenses	443	470	639	172	549	1,608	10,540	792	1,942	2,266
<b>Subtotal non-operating expenses</b>	<b>13,293</b>	<b>17,402</b>	<b>19,695</b>	<b>19,487</b>	<b>21,944</b>	<b>28,258</b>	<b>44,866</b>	<b>30,542</b>	<b>30,789</b>	<b>49,538</b>
<b>Total expenses</b>	<b>\$ 165,338</b>	<b>165,832</b>	<b>187,218</b>	<b>206,865</b>	<b>198,397</b>	<b>215,192</b>	<b>247,364</b>	<b>253,594</b>	<b>279,104</b>	<b>327,508</b>
<b>Changes in net assets</b>	<b>129,023</b>	<b>(1,713)</b>	<b>(3,256)</b>	<b>(9,426)</b>	<b>(6,407)</b>	<b>47</b>	<b>5,512</b>	<b>22,759</b>	<b>967</b>	<b>(46,616)</b>
Net assets at beginning of year	324,794	453,817	452,104	448,848	439,422	433,015	433,062	438,574	461,333	462,300
<b>Net assets at end of year</b>	<b>\$ 453,817</b>	<b>452,104</b>	<b>448,848</b>	<b>439,422</b>	<b>433,015</b>	<b>433,062</b>	<b>438,574</b>	<b>461,333</b>	<b>462,300</b>	<b>415,684</b>

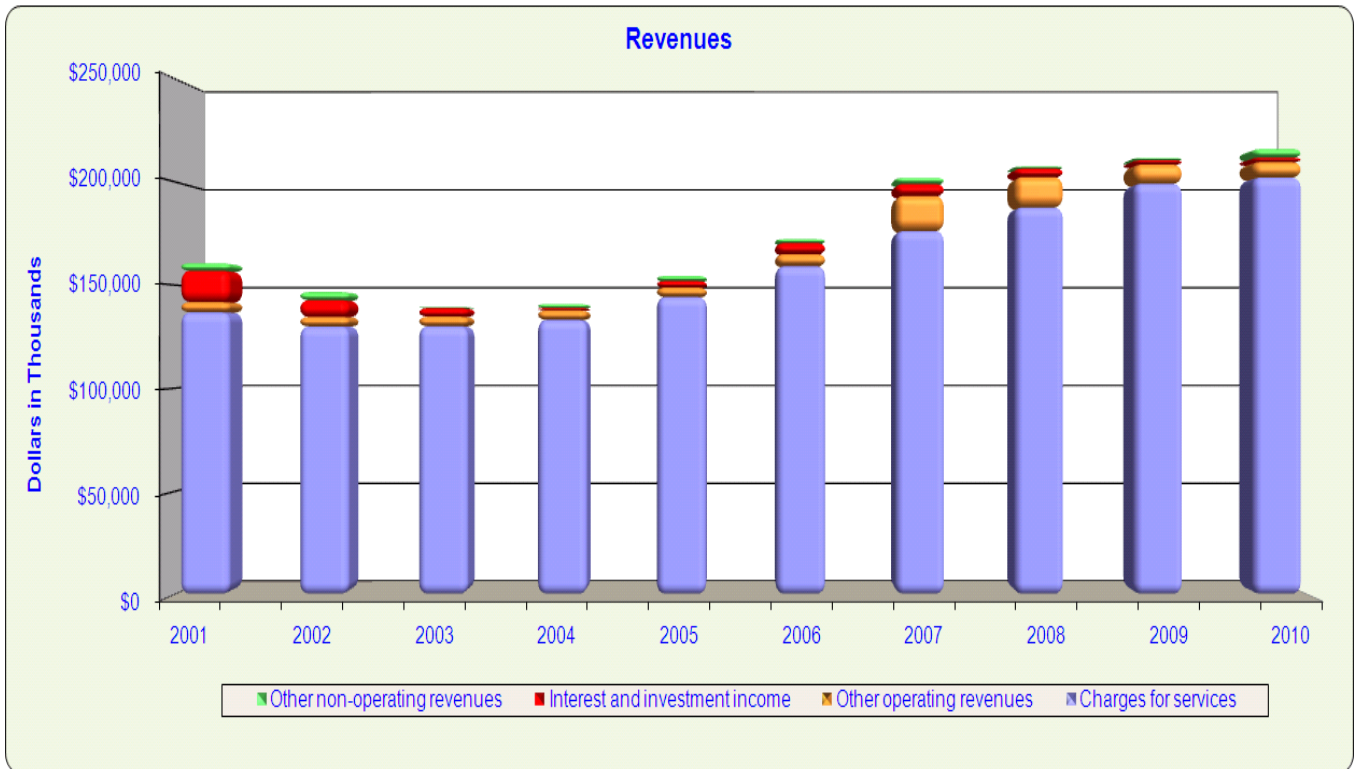




Financial Trends

Summary of Changes in Net Assets - Wastewater  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

Revenues:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Charges for services	\$ 136,821	129,925	130,013	133,160	144,348	159,281	176,344	187,810	199,332	202,363
Other operating revenues	4,949	4,670	4,732	4,646	4,540	5,851	17,067	14,739	9,322	7,480
<b>Subtotal operating revenues</b>	<b>141,770</b>	<b>134,595</b>	<b>134,745</b>	<b>137,806</b>	<b>148,888</b>	<b>165,132</b>	<b>193,411</b>	<b>202,549</b>	<b>208,654</b>	<b>209,843</b>
Interest and investment income	15,275	8,116	4,123	1,036	3,093	5,385	5,749	4,099	1,992	2,056
Other non-operating revenues	3,628	3,982	548	1,974	2,487	1,802	2,986	885	1,022	4,236
<b>Subtotal non-operating revenues</b>	<b>18,903</b>	<b>12,098</b>	<b>4,671</b>	<b>3,010</b>	<b>5,580</b>	<b>7,187</b>	<b>8,735</b>	<b>4,984</b>	<b>3,014</b>	<b>6,292</b>
<b>Total revenues</b>	<b>\$ 160,673</b>	<b>146,693</b>	<b>139,416</b>	<b>140,816</b>	<b>154,468</b>	<b>172,319</b>	<b>202,146</b>	<b>207,533</b>	<b>211,668</b>	<b>216,135</b>

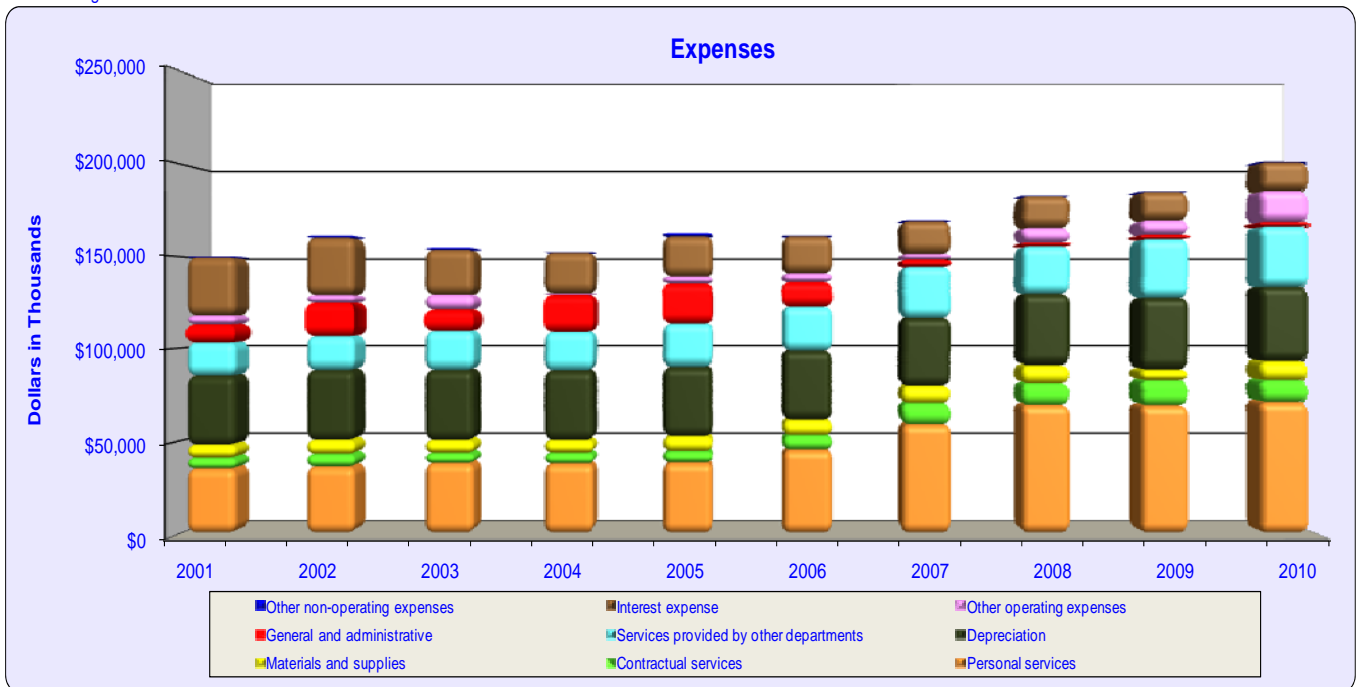


Financial Trends

Summary of Changes in Net Assets - Wastewater  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

Expenses:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Personal services	\$ 34,439	35,588	37,480	37,221	37,782	44,798	58,789	69,383	69,141	70,992
Contractual services	5,924	6,801	5,432	5,802	6,227	7,962	11,536	11,973	13,828	12,018
Materials and supplies	7,140	7,853	7,288	7,142	8,283	8,565	9,526	9,539	5,754	9,888
Depreciation	37,938	38,306	38,369	38,094	37,800	37,228	36,683	38,758	38,815	40,748
Services provided by other departments	17,563	17,867	20,656	20,572	23,234	24,105	28,010	26,021	31,634	32,305
General and administrative	10,020	18,585	11,974	20,294	22,249	13,725	4,143	1,719	2,302	2,500
Other operating expenses	4,816	3,948	7,978	791	3,715	4,571	2,913	7,852	7,826	17,061
<b>Subtotal operating expenses</b>	<b>117,840</b>	<b>128,948</b>	<b>129,177</b>	<b>129,916</b>	<b>139,290</b>	<b>140,954</b>	<b>151,600</b>	<b>165,245</b>	<b>169,300</b>	<b>185,512</b>
Interest expense	31,847	30,948	24,668	22,396	21,360	19,747	17,354	17,467	15,677	15,891
Other non-operating expenses	661	1,138	1,136	267	1,803	308	319	158	0 *	0 *
<b>Subtotal non-operating expenses</b>	<b>32,508</b>	<b>32,086</b>	<b>25,804</b>	<b>22,663</b>	<b>23,163</b>	<b>20,055</b>	<b>17,673</b>	<b>17,625</b>	<b>15,677</b>	<b>15,891</b>
<b>Total expenses</b>	<b>\$ 150,348</b>	<b>161,034</b>	<b>154,981</b>	<b>152,579</b>	<b>162,453</b>	<b>161,009</b>	<b>169,273</b>	<b>182,870</b>	<b>184,977</b>	<b>201,403</b>
<b>Changes in net assets</b>	<b>10,325</b>	<b>(14,341)</b>	<b>(15,565)</b>	<b>(11,763)</b>	<b>(7,985)</b>	<b>11,310</b>	<b>32,873</b>	<b>24,663</b>	<b>26,691</b>	<b>14,732</b>
Net assets at beginning of year	954,396	964,721	950,380	934,815	923,052	915,067	926,377	959,250	983,913	1,010,604
<b>Net assets at end of year</b>	<b>\$ 964,721</b>	<b>950,380</b>	<b>934,815</b>	<b>923,052</b>	<b>915,067</b>	<b>926,377</b>	<b>959,250</b>	<b>983,913</b>	<b>1,010,604</b>	<b>1,025,336</b>

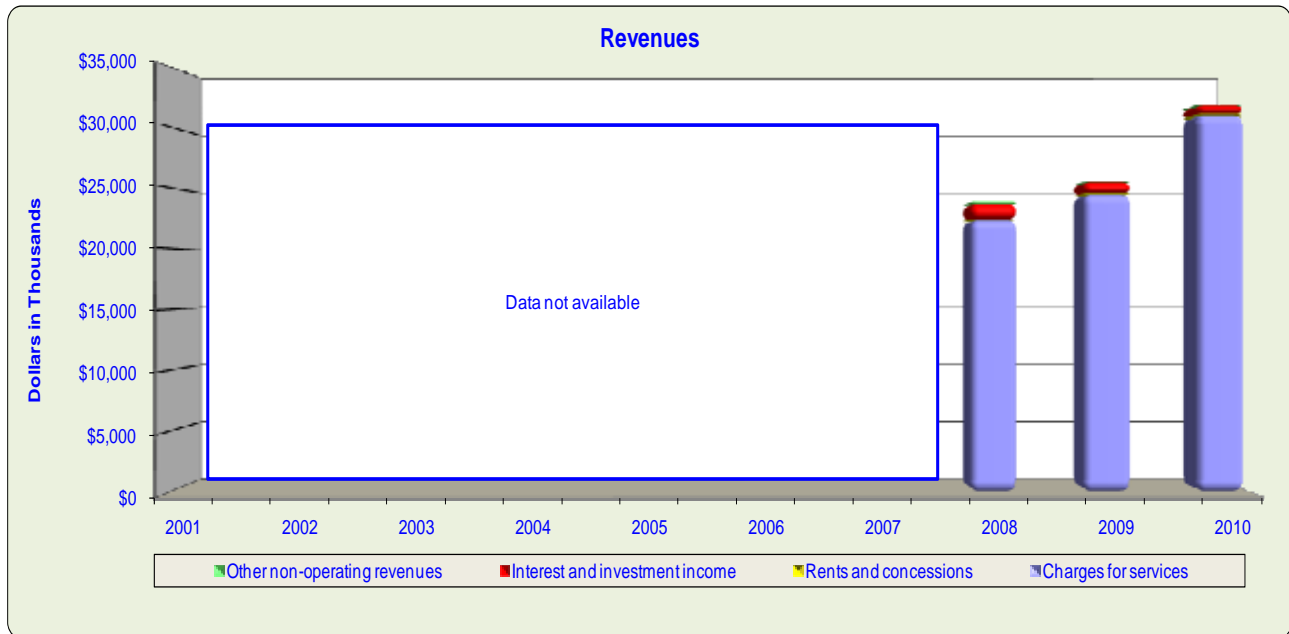
\*No refunding loss and transfers out



Financial Trends

Summary of Changes in Net Assets - Hetch Hetchy Water  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

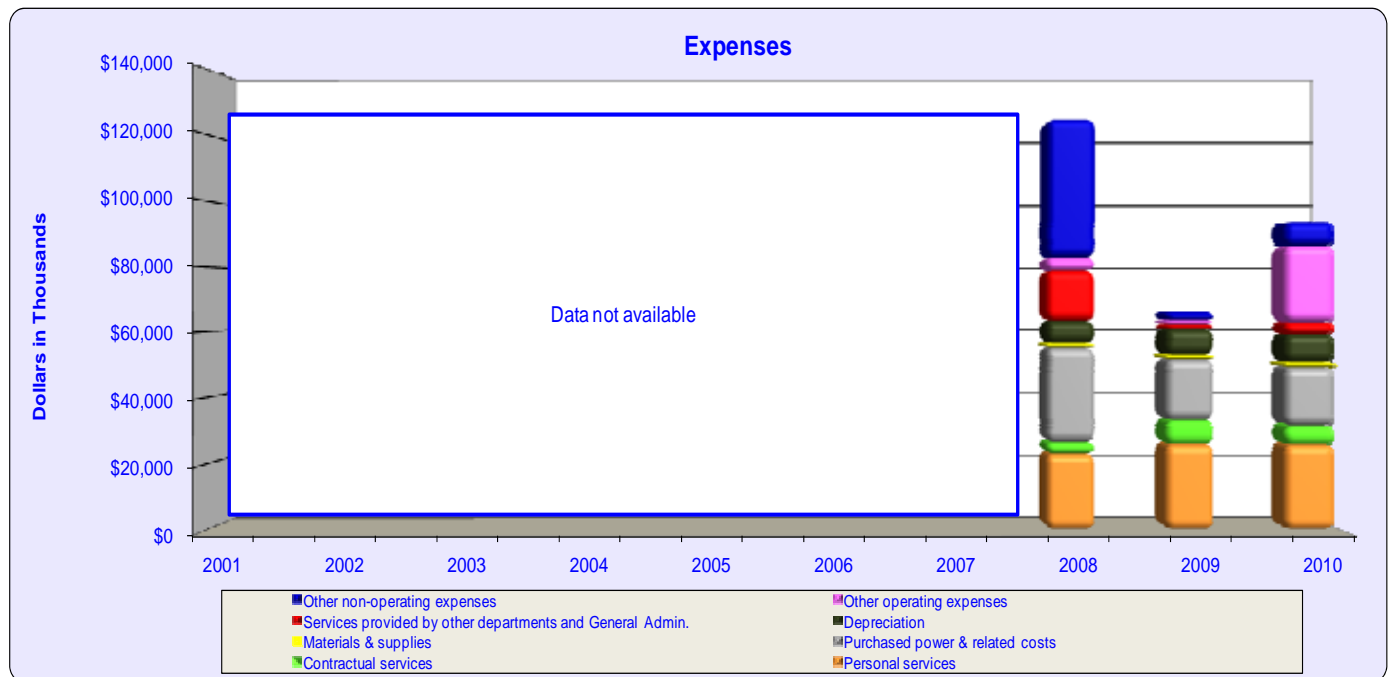
Revenues:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Charges for services	\$							22,382	24,468	31,109
Rents and concessions								101	111	110
<b>Subtotal operating revenues</b>								<b>22,483</b>	<b>24,579</b>	<b>31,219</b>
Interest and investment income	Data not available							1,220	874	657
Other non-operating revenues								205	16	39
<b>Subtotal non-operating revenues</b>								<b>1,425</b>	<b>890</b>	<b>696</b>
<b>Total revenues</b>	<b>\$</b>							<b>23,908</b>	<b>25,469</b>	<b>31,915</b>



Financial Trends

Summary of Changes in Net Assets - Hetch Hetchy Water  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

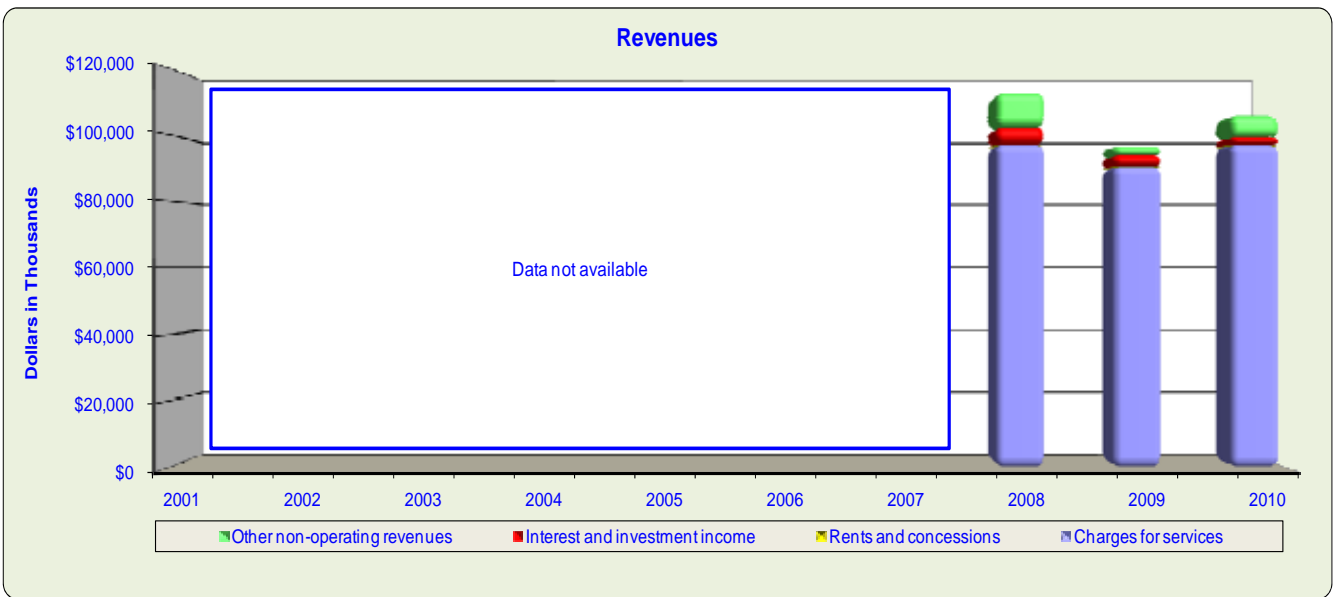
Expenses:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Personal services	Data not available							9,108	10,630	10,770
Contractual services								526	883	1,457
Materials & supplies								906	877	970
Depreciation								3,899	3,939	4,092
Services provided by other departments and General and administrative								9,400	10,147	12,185
Other operating expenses								2,774	6,011	2,579
<b>Subtotal operating expenses</b>								<b>26,613</b>	<b>32,487</b>	<b>32,053</b>
Other non-operating expenses	0	24	0							
<b>Total expenses</b>	<b>\$ 26,613</b>	<b>\$ 32,511</b>	<b>\$ 32,053</b>							
<b>Changes in net assets</b>								<b>(2,705)</b>	<b>(7,042)</b>	<b>(138)</b>
Net assets at beginning of year								123,034	120,329	113,287
<b>Net assets at end of year</b>								<b>120,329</b>	<b>113,287</b>	<b>113,149</b>



Financial Trends

Summary of Changes in Net Assets - Hetch Hetchy Power  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

Revenues:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Charges for services	Data not available							97,248	90,560	97,236
Rents and concessions								124	135	135
<b>Subtotal operating revenues</b>								<b>97,372</b>	<b>90,695</b>	<b>97,371</b>
Interest and investment income								5,200	3,286	2,081
Other non-operating revenues								10,091	2,689	6,456
<b>Subtotal non-operating revenues</b>								<b>15,291</b>	<b>5,975</b>	<b>8,537</b>
<b>Total revenues</b>								<b>112,663</b>	<b>96,670</b>	<b>105,908</b>

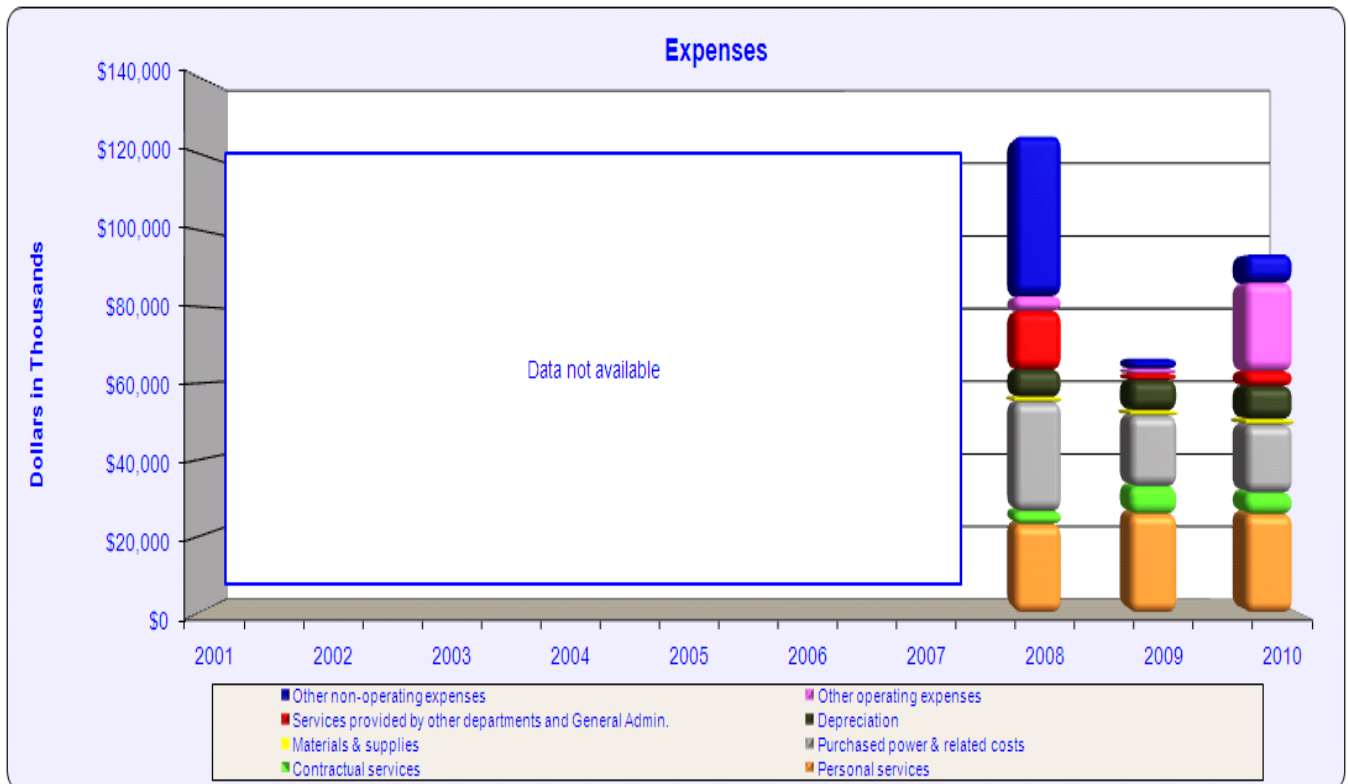


Financial Trends

Summary of Changes in Net Assets - Hetch Hetchy Power  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Expenses:</b>										
Personal services	Data not available							23,067	25,839	25,755
Contractual services	Data not available							3,446	7,215	5,627
Purchased power & related costs	Data not available							28,548	18,466	17,726
Materials & supplies	Data not available							1,385	1,366	1,540
Depreciation	Data not available							7,122	7,930	8,539
Services provided by other departments and General and administrative	Data not available							15,298	1,677	4,018
Other operating expenses	Data not available							3,957	1,248	23,129
<b>Subtotal operating expenses</b>	Data not available							<b>82,823</b>	<b>63,741</b>	<b>86,334</b>
Other non-operating expenses	Data not available							41,824 *	2,666	7,443
<b>Total expenses</b>	Data not available							<b>124,647</b>	<b>66,407</b>	<b>93,777</b>
<b>Changes in net assets</b>	Data not available							<b>(11,984)</b>	<b>30,263</b>	<b>12,131</b>
Net assets at beginning of year	Data not available							312,811	300,827	331,090
<b>Net assets at end of year</b>	Data not available							<b>300,827</b>	<b>331,090</b>	<b>343,221</b>

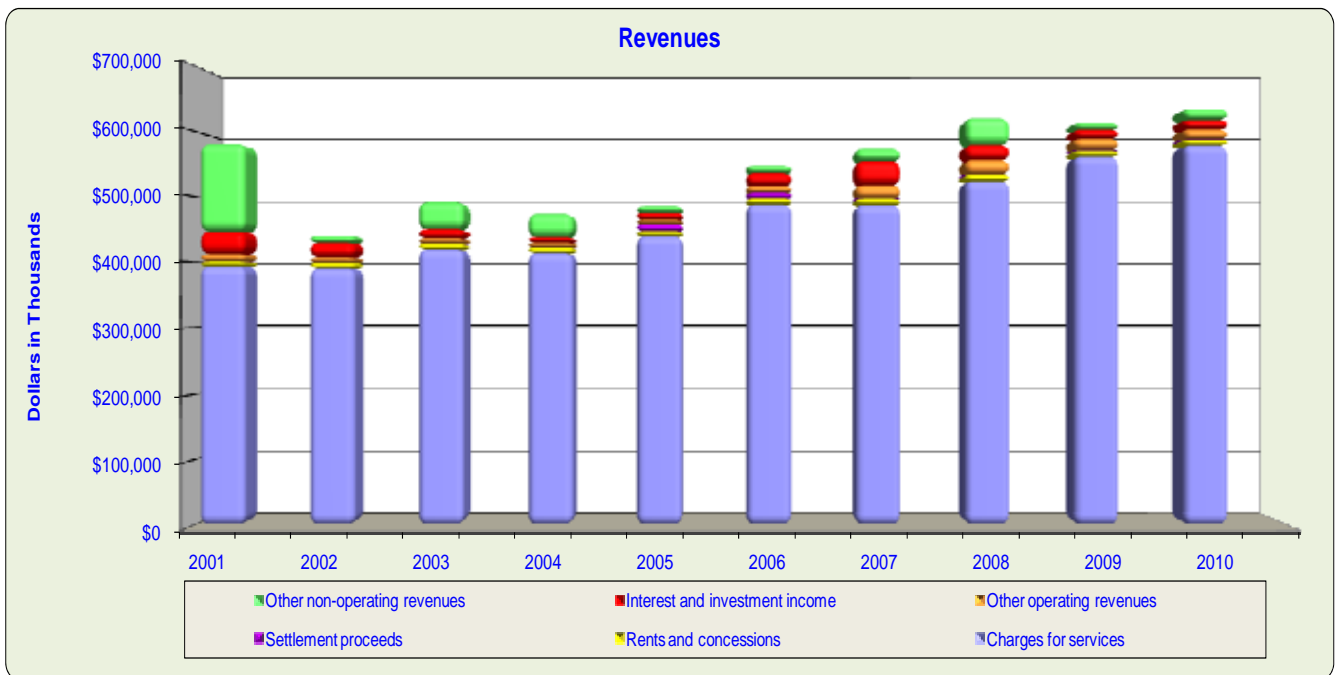
\*Included write-off of \$41,224 related to the combustion turbine project



Financial Trends

Department-wide Summary of Changes in Net Assets  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

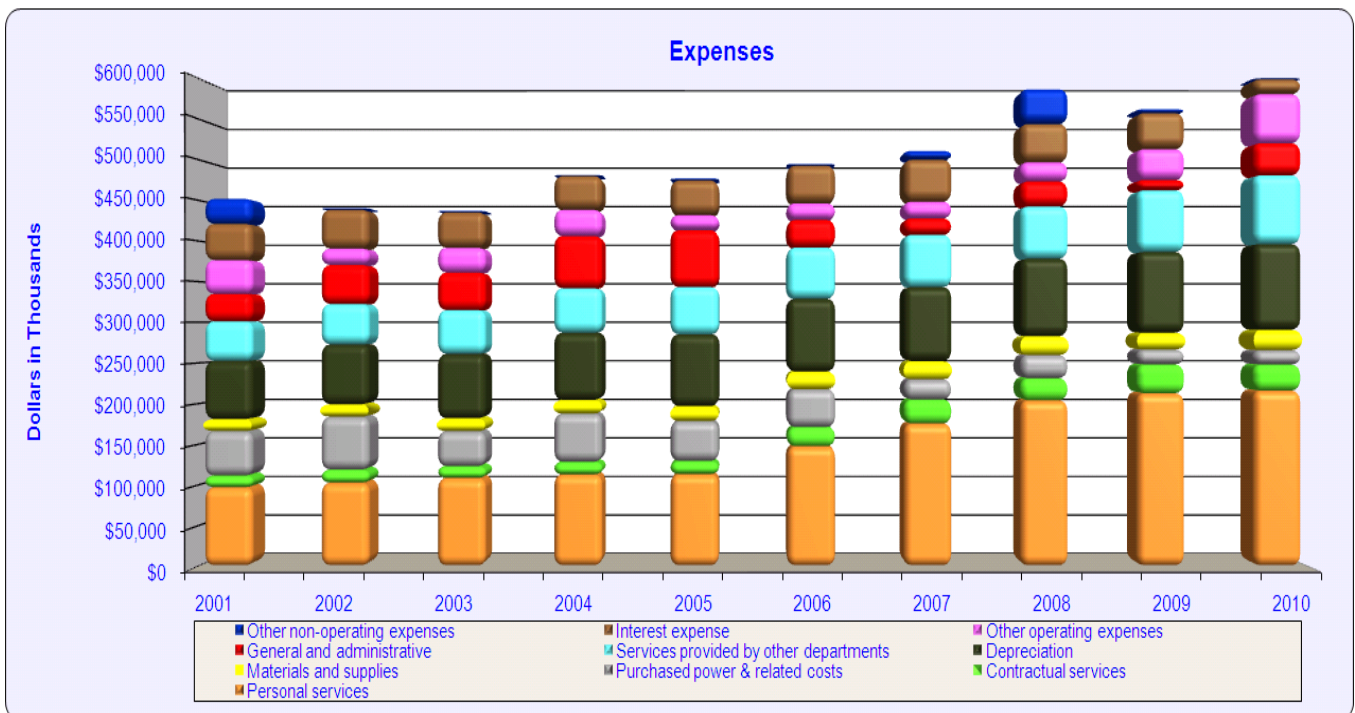
Revenues:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Charges for services	\$ 393,463	390,637	419,703	414,063	439,836	488,511	487,140	524,259	562,024	579,077
Rents and concessions	8,214	8,507	8,838	8,682	8,134	8,997	10,144	9,870	9,645	8,829
Settlement proceeds	0	0	0	0	10,463	9,639	0	0	0	0
Other operating revenues	11,010	8,444	8,647	7,795	7,593	9,318	20,882	22,491	18,040	15,745
<b>Subtotal operating revenues</b>	<b>412,687</b>	<b>407,588</b>	<b>437,188</b>	<b>430,540</b>	<b>466,026</b>	<b>516,465</b>	<b>518,166</b>	<b>556,620</b>	<b>589,709</b>	<b>603,651</b>
Interest and investment income	34,353	22,546	13,064	7,742	9,609	20,614	36,774	22,975	13,240	14,617
Other non-operating revenues	133,415	10,340	41,733	35,519	9,974	11,278	18,985	40,862	10,929	16,582
<b>Subtotal non-operating revenues</b>	<b>167,768</b>	<b>32,886</b>	<b>54,797</b>	<b>43,261</b>	<b>19,583</b>	<b>31,892</b>	<b>55,759</b>	<b>63,837</b>	<b>24,169</b>	<b>31,199</b>
<b>Total revenues</b>	<b>\$ 580,455</b>	<b>440,474</b>	<b>491,985</b>	<b>473,801</b>	<b>485,609</b>	<b>548,357</b>	<b>573,925</b>	<b>620,457</b>	<b>613,878</b>	<b>634,850</b>



Financial Trends

Department-wide Summary of Changes in Net Assets  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

Expenses:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Personal services	\$ 96,353	101,911	107,745	112,065	112,509	146,918	174,981	203,791	212,479	215,695
Contractual services	14,416	16,185	14,672	15,717	16,367	23,775	29,684	27,237	35,545	32,189
Purchased power & related costs	54,903	65,337	43,118	59,556	49,283	46,742	24,892	28,548	18,466	17,726
Materials and supplies	14,903	15,394	16,044	16,801	18,330	21,844	22,526	23,336	20,668	25,146
Depreciation	71,785	73,829	79,371	83,069	88,671	89,806	91,497	95,737	99,784	105,950
Services provided by other departments	48,921	49,946	54,009	54,882	58,479	63,323	64,553	64,420	76,214	84,890
General and administrative	33,885	48,265	46,600	64,521	70,169	34,057	20,353	30,925	12,631	39,609
Other operating expenses	41,719	20,265	30,551	32,312	18,618	20,569	20,632	23,739	38,056	60,664
<b>Subtotal operating expenses</b>	<b>376,885</b>	<b>391,132</b>	<b>392,110</b>	<b>438,923</b>	<b>432,426</b>	<b>447,034</b>	<b>449,118</b>	<b>497,733</b>	<b>513,843</b>	<b>581,869</b>
Interest expense	44,697	47,880	43,724	41,711	42,755	46,397	51,680	47,217	44,531	63,885
Other non-operating expenses	30,954	1,990	1,792	928	2,352	1,916	10,952	42,774	4,625	8,987
<b>Subtotal non-operating expenses</b>	<b>75,651</b>	<b>49,870</b>	<b>45,516</b>	<b>42,639</b>	<b>45,107</b>	<b>48,313</b>	<b>62,632</b>	<b>89,991</b>	<b>49,156</b>	<b>72,872</b>
<b>Total expenses</b>	<b>\$ 452,536</b>	<b>441,002</b>	<b>437,626</b>	<b>481,562</b>	<b>477,533</b>	<b>495,347</b>	<b>511,750</b>	<b>587,724</b>	<b>562,999</b>	<b>654,741</b>
<b>Changes in net assets</b>	<b>127,919</b>	<b>(528)</b>	<b>54,359</b>	<b>(7,761)</b>	<b>8,076</b>	<b>53,010</b>	<b>62,175</b>	<b>32,733</b>	<b>50,879</b>	<b>(19,891)</b>
Net assets at beginning of year	1,536,419	1,664,338	1,663,810	1,718,169	1,710,408	1,718,484	1,771,494	1,833,669	1,866,402	1,917,281
<b>Net assets at end of year</b>	<b>\$ 1,664,338</b>	<b>1,663,810</b>	<b>1,718,169</b>	<b>1,710,408</b>	<b>1,718,484</b>	<b>1,771,494</b>	<b>1,833,669</b>	<b>1,866,402</b>	<b>1,917,281</b>	<b>1,897,390</b>

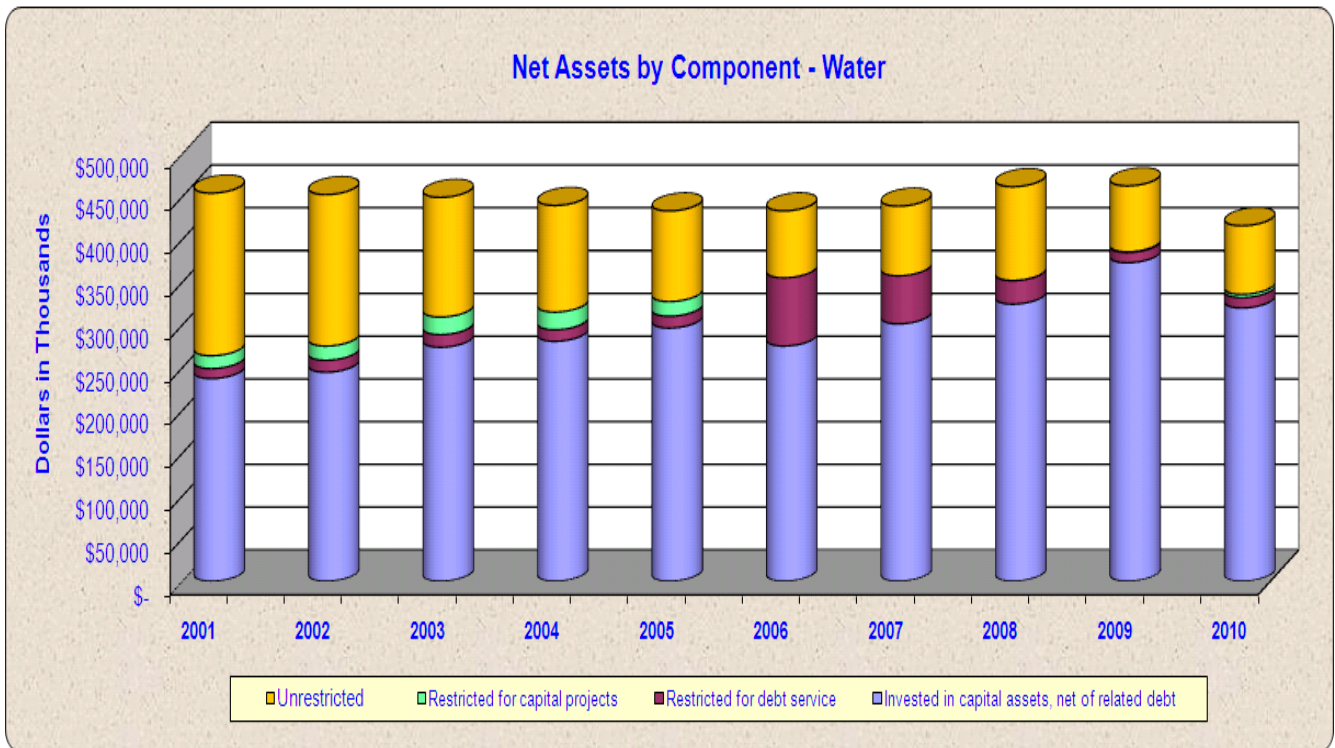




Financial Trends

Summary of Net Assets by Component - Water  
Fiscal Years Ending 2001 - 2010  
(Dollars in Thousands)

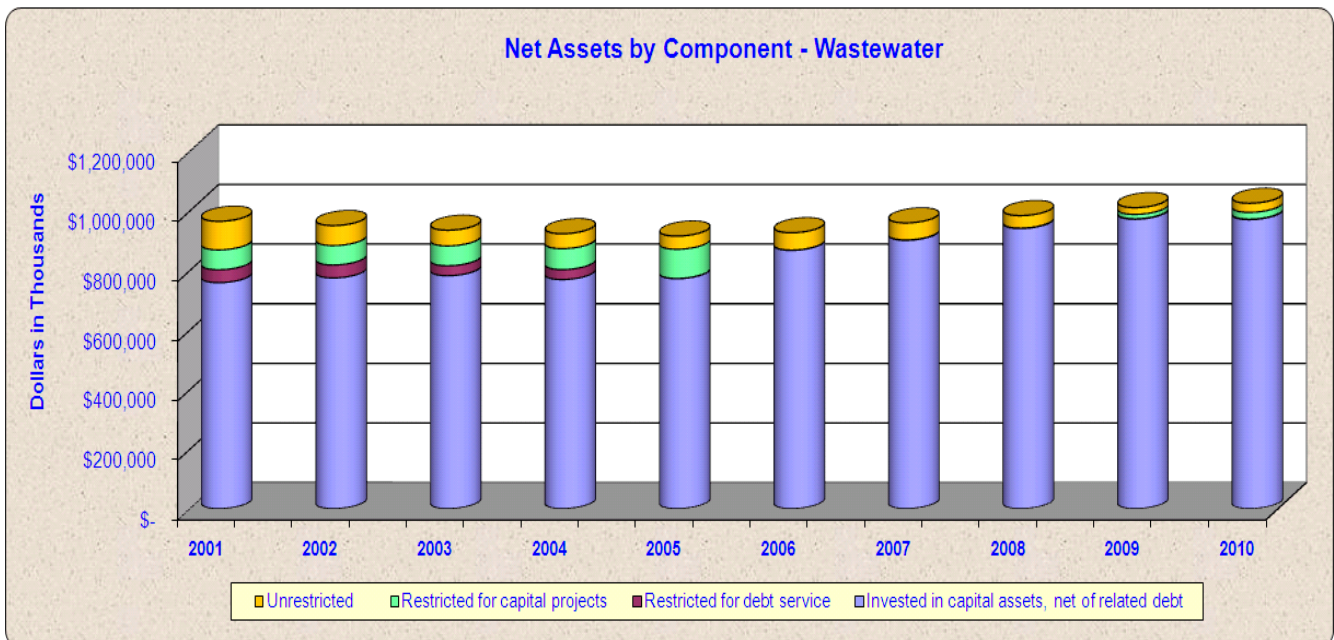
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Invested in capital assets, net of related debt	\$ 237,035	244,416	273,644	280,602	296,107	275,038	300,996	324,091	372,421	319,581
Restricted for debt service	11,623	13,955	14,712	13,459	13,791	79,813	56,196	27,434	11,941	12,073
Restricted for capital projects	15,127	16,684	20,611	20,724	17,149	0	0	214	841	3,868
Unrestricted	190,032	177,049	139,881	124,637	105,968	78,211	81,382	109,594	77,097	80,162
<b>Total net assets</b>	<b>\$ 453,817</b>	<b>452,104</b>	<b>448,848</b>	<b>439,422</b>	<b>433,015</b>	<b>433,062</b>	<b>438,574</b>	<b>461,333</b>	<b>462,300</b>	<b>415,684</b>



Financial Trends

Summary of Net Assets by Component - Wastewater  
 Fiscal Years Ending 2001 - 2010  
 (Dollars in Thousands)

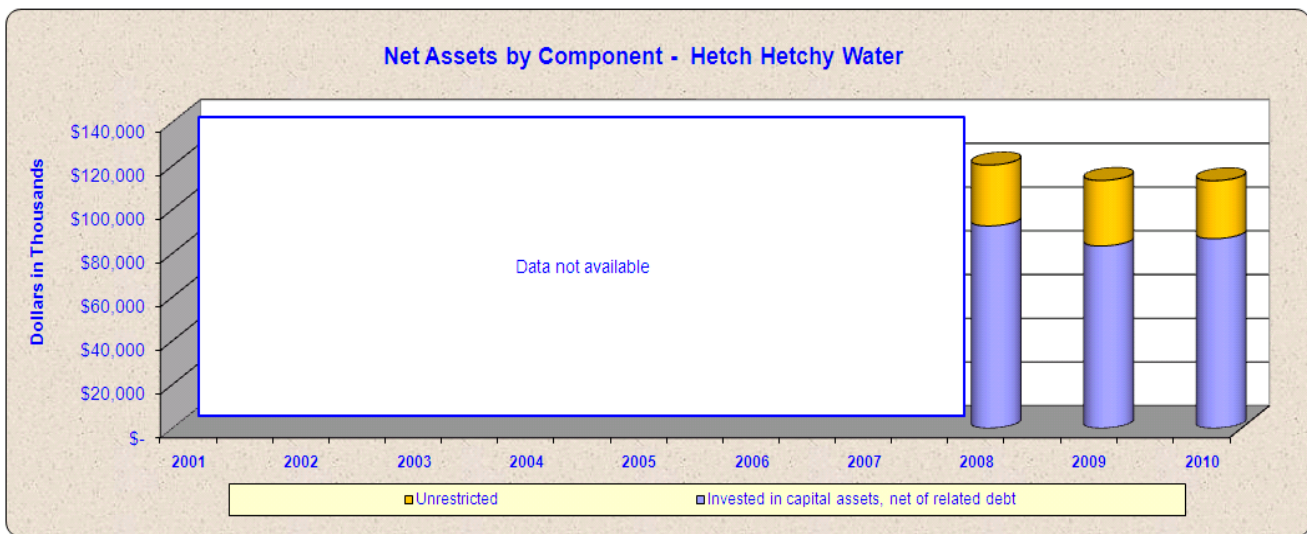
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Invested in capital assets, net of related debt	\$ 758,884	774,794	782,268	769,386	772,188	867,257	901,113	940,602	971,789	970,526
Restricted for debt service	43,295	43,271	33,330	33,244	807	919	1,107	1,316	1,360	1,477
Restricted for capital projects	66,698	65,301	66,679	70,410	98,002	0	0	0	15,023	22,801
Unrestricted	95,844	67,014	52,538	50,012	44,070	58,201	57,030	41,995	22,432	30,532
<b>Total net assets</b>	<b>\$ 964,721</b>	<b>950,380</b>	<b>934,815</b>	<b>923,052</b>	<b>915,067</b>	<b>926,377</b>	<b>959,250</b>	<b>983,913</b>	<b>1,010,604</b>	<b>1,025,336</b>



Financial Trends

Summary of Net Assets by Component - Hetch Hetchy Water  
 Fiscal Years Ending 2001 - 2010  
 (Dollars in thousands)

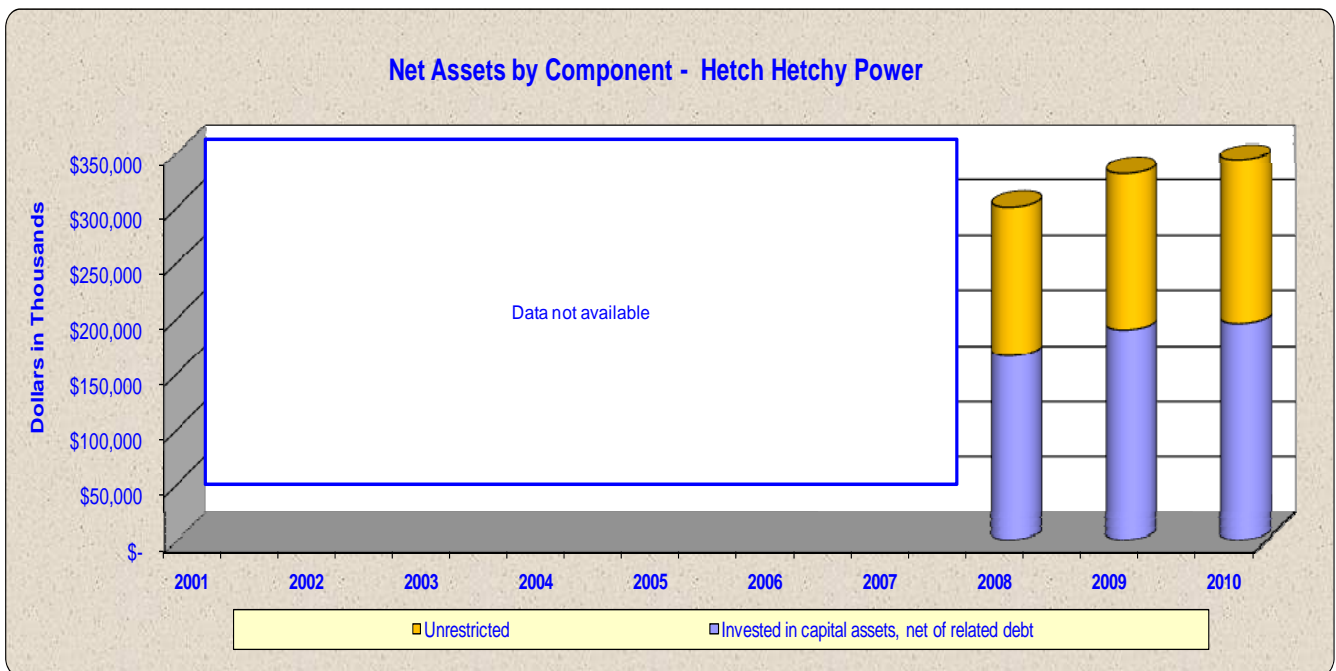
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Invested in capital assets, net of related debt	Data not available							92,474	83,306	86,634
Unrestricted	Data not available							27,855	29,981	26,515
<b>Total net assets</b>	Data not available							<b>120,329</b>	<b>113,287</b>	<b>113,149</b>



Financial Trends

Summary of Net Assets by Component - Hetch Hetchy Power  
 Fiscal Years Ending 2001 - 2010  
 (Dollars in thousands)

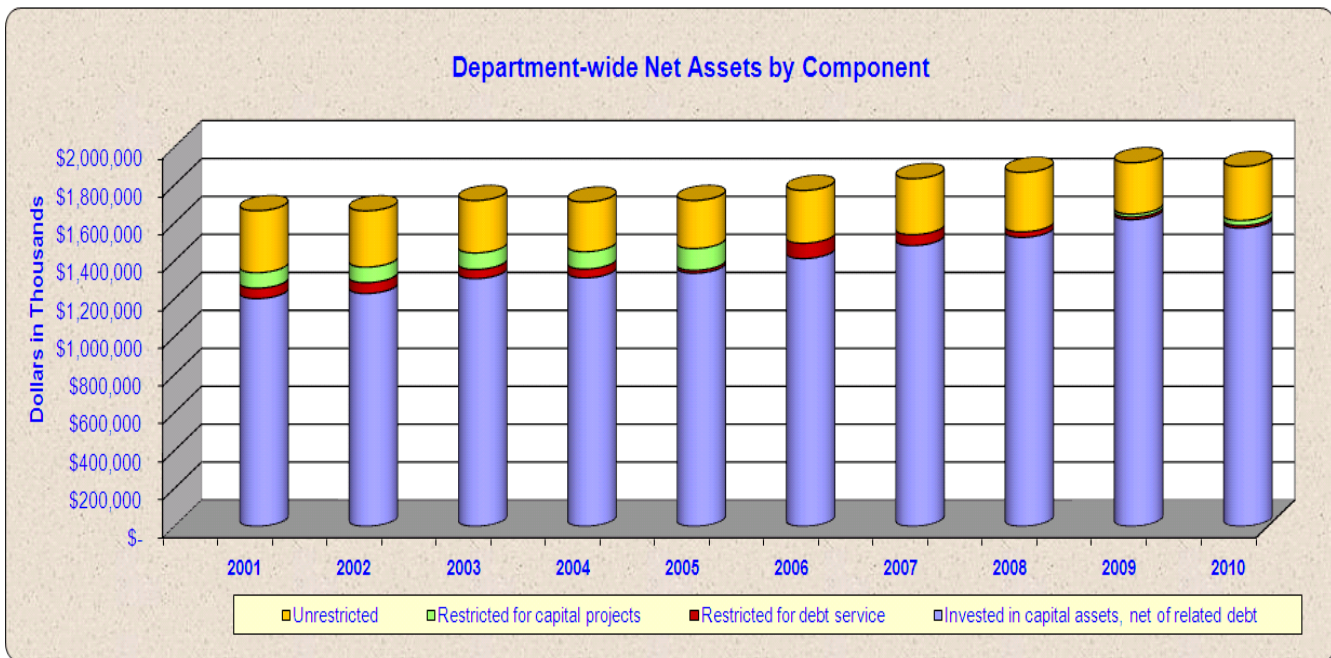
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Invested in capital assets, net of related debt	Data not available							166,902	190,333	196,064
Unrestricted	Data not available							133,925	140,757	147,157
<b>Total net assets</b>	Data not available							<b>300,827</b>	<b>331,090</b>	<b>343,221</b>



Financial Trends

Department-wide Summary of Net Assets by Component  
Fiscal Years Ending 2001 - 2010  
(Dollars in thousands)

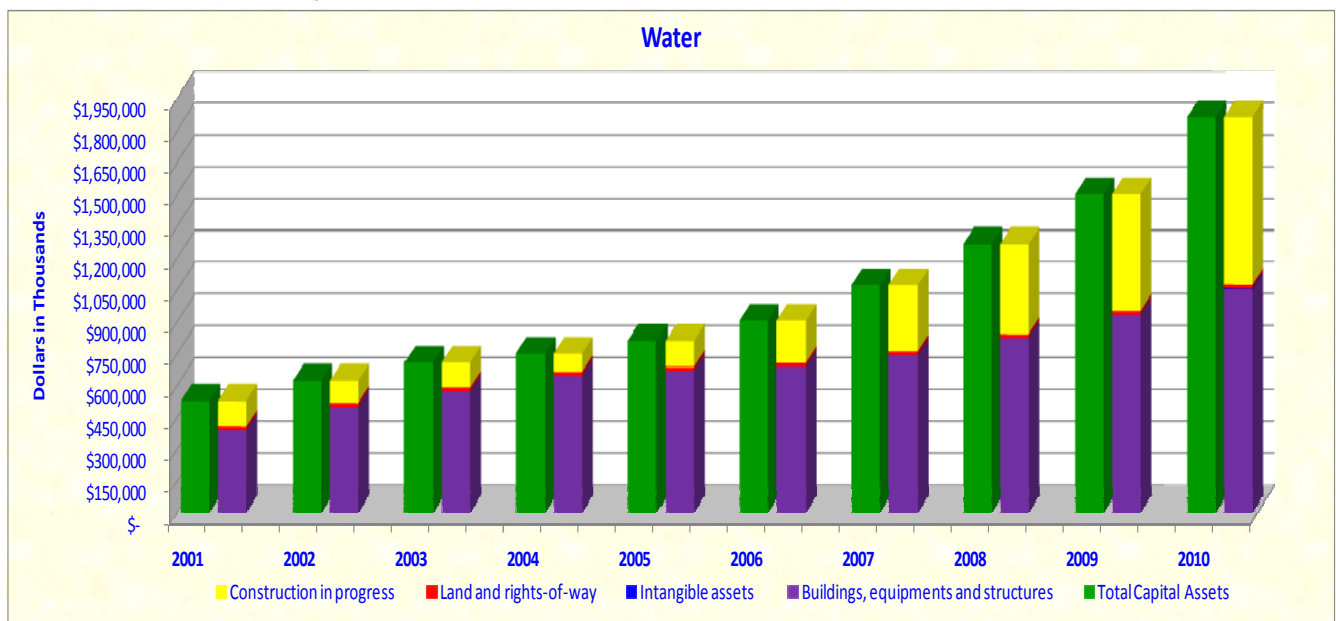
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Invested in capital assets, net of related debt	\$ 1,200,990	1,227,868	1,306,710	1,310,249	1,335,304	1,412,368	1,480,929	1,524,069	1,617,849	1,572,805
Restricted for debt service	54,918	57,226	48,042	46,703	14,598	80,732	57,303	28,750	13,301	13,550
Restricted for capital projects	81,825	81,985	87,290	91,134	115,151	0	0	214	15,864	26,669
Unrestricted	326,605	296,731	276,127	262,322	253,431	278,394	295,437	313,369	270,267	284,366
<b>Total net assets</b>	<b>\$ 1,664,338</b>	<b>1,663,810</b>	<b>1,718,169</b>	<b>1,710,408</b>	<b>1,718,484</b>	<b>1,771,494</b>	<b>1,833,669</b>	<b>1,866,402</b>	<b>1,917,281</b>	<b>1,897,390</b>



**Financial Trends**  
**Investments in Capital Assets - Water**  
**Summary of Intangible Assets, Property, Plant and Equipment**  
**Fiscal Years Ending 2001 - 2010**  
**(Dollars in Thousands)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Buildings, equipments and structures	\$ 719,289	857,767	959,426	1,068,407	1,132,030	1,191,384	1,288,657	1,416,162	1,572,968	1,744,214
Less - Accumulated depreciation	(329,032)	(354,740)	(385,514)	(419,924)	(459,657)	(501,214)	(543,777)	(589,117)	(637,387)	(689,587)
Subtotal	\$ 390,257	503,027	573,912	648,483	672,373	690,170	744,880	827,045	935,581	1,054,627
Intangible assets*	0	0	0	0	0	0	0	0	0	4,652
Land and rights-of-way	17,436	18,083	18,112	17,929	17,929	17,929	18,277	17,886	18,386	17,707
Construction in progress	122,194	103,385	117,313	85,755	121,863	199,655	311,098	423,063	547,293	787,367
<b>Total capital assets, net</b>	<b>\$ 529,887</b>	<b>624,495</b>	<b>709,337</b>	<b>752,167</b>	<b>812,165</b>	<b>907,754</b>	<b>1,074,255</b>	<b>1,267,994</b>	<b>1,501,260</b>	<b>1,864,353</b>

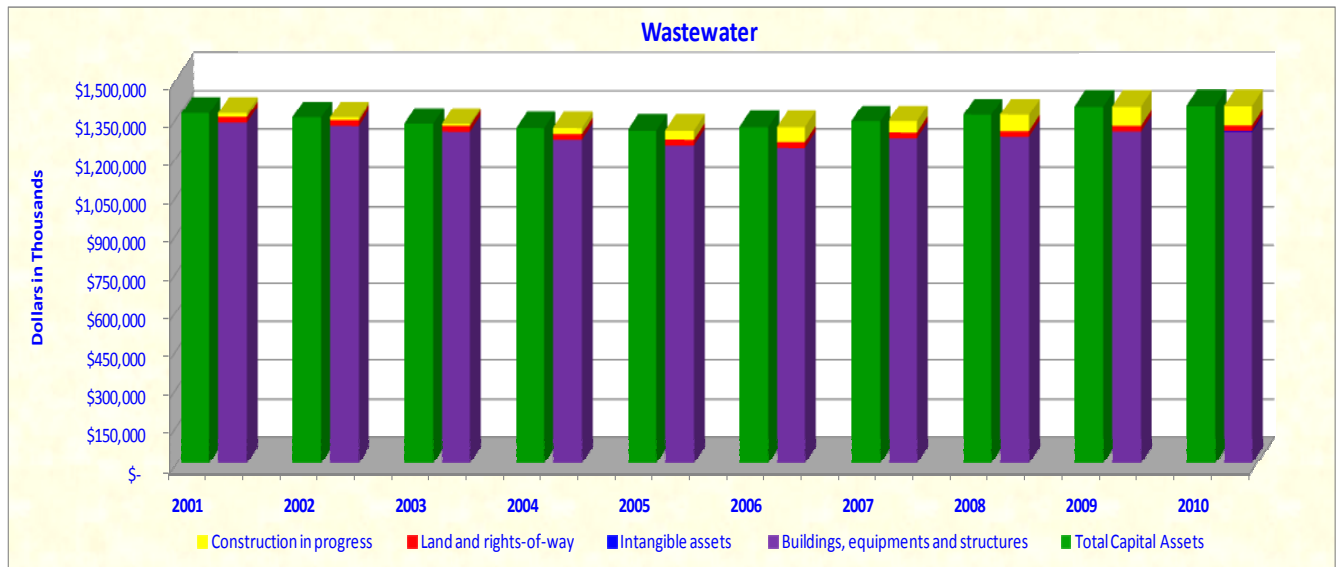
\*Include depreciable and non-depreciable intangible assets



**Financial Trends**  
**Investments in Capital Assets - Wastewater**  
**Summary of Intangible Assets, Property, Plant and Equipment**  
**Fiscal Years Ending 2001 - 2010**  
**(Dollars in Thousands)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Buildings, equipments and structures	\$1,898,117	1,924,006	1,940,274	1,947,718	1,964,122	1,991,941	2,065,166	2,109,208	2,167,395	2,200,989
Less - Accumulated depreciation	(568,373)	(606,679)	(645,009)	(683,103)	(720,903)	(758,078)	(794,720)	(833,109)	(871,589)	(907,647)
Subtotal	\$1,329,744	1,317,327	1,295,265	1,264,615	1,243,219	1,233,863	1,270,446	1,276,099	1,295,806	1,293,342
Intangible assets*	0	0	0	0	0	0	0	0	0	4,587
Land and rights-of-way	22,445	22,445	22,168	22,168	22,168	22,168	22,168	21,787	21,787	21,210
Construction in progress	14,855	10,613	8,524	22,379	33,558	56,796	42,856	62,975	77,330	78,473
<b>Total capital assets, net</b>	<b>\$1,367,044</b>	<b>1,350,385</b>	<b>1,325,957</b>	<b>1,309,162</b>	<b>1,298,945</b>	<b>1,312,827</b>	<b>1,335,470</b>	<b>1,360,861</b>	<b>1,394,923</b>	<b>1,397,612</b>

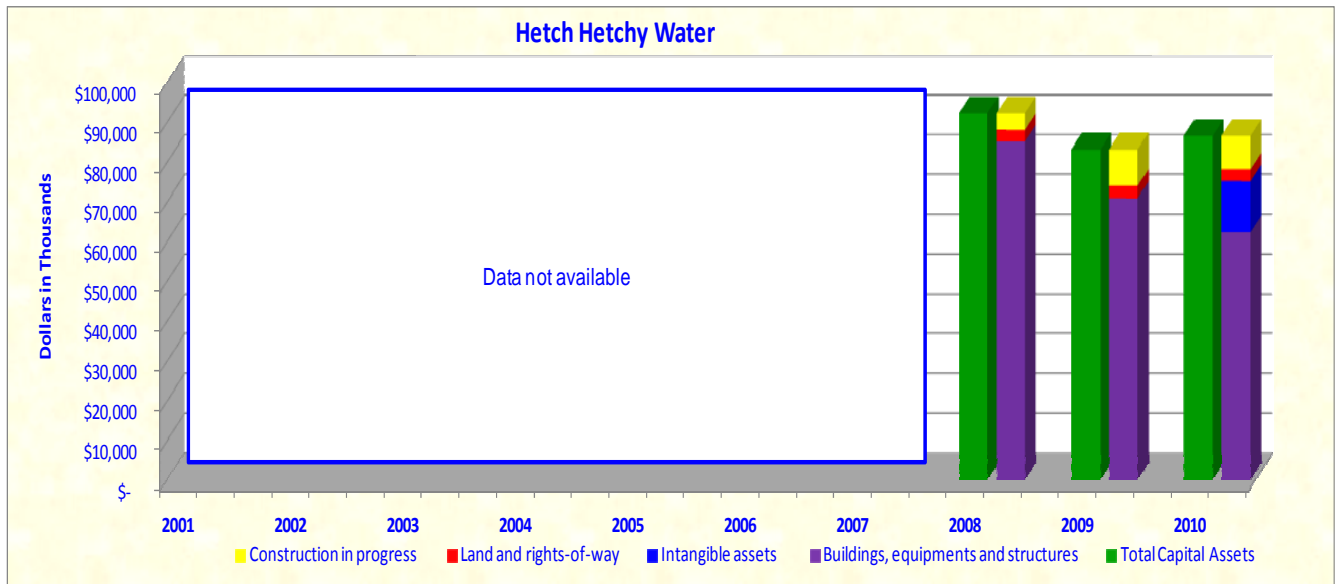
\*Include depreciable and non-depreciable intangible assets



**Financial Trends**  
**Investments in Capital Assets - Hetch Hetchy Water**  
**Summary of Intangible Assets, Property, Plant and Equipment**  
**Fiscal Years Ending 2001 - 2010**  
**(Dollars in Thousands)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Buildings, equipments and structures	Data not available							232,055	221,750	209,448
Less - Accumulated depreciation								(146,807)	(150,671)	(147,019)
Subtotal								\$ 85,248	\$ 71,079	\$ 62,429
Intangible assets*	Data not available							0	0	12,860
Land and rights-of-way								2,932	3,008	3,003
Construction in progress								4,294	9,219	8,342
<b>Total capital assets, net</b>	Data not available							<b>92,474</b>	<b>83,306</b>	<b>86,634</b>

\*Include depreciable and non-depreciable intangible assets

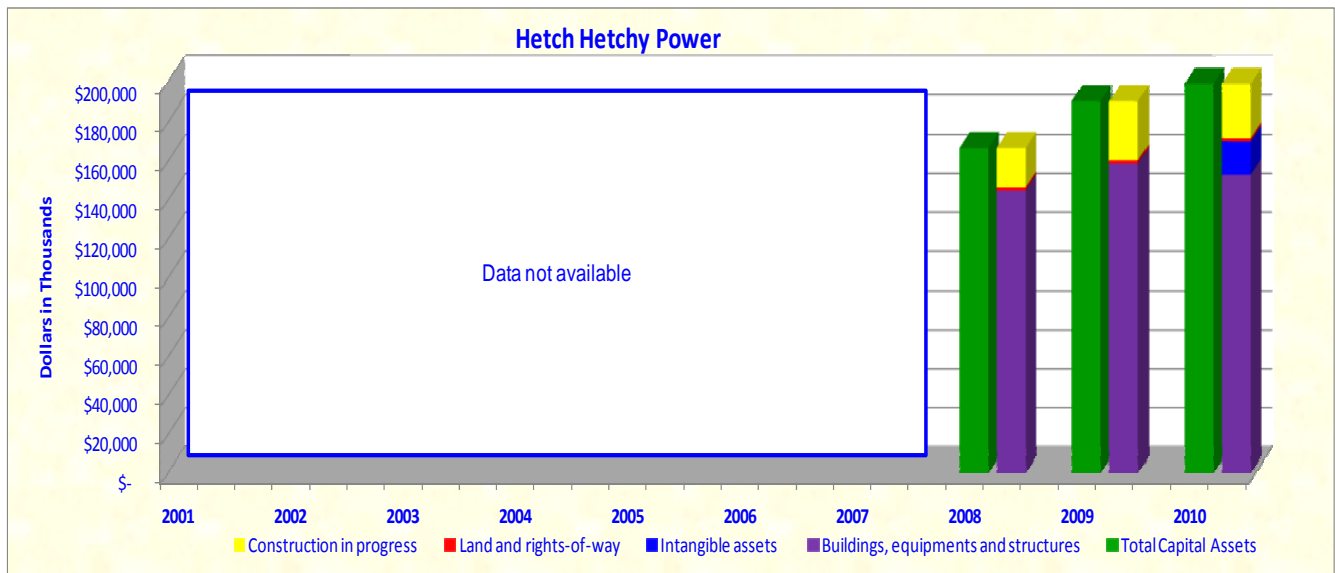




**Financial Trends**  
**Investments in Capital Assets - Hetch Hetchy Power**  
**Summary of Intangible Assets, Property, Plant and Equipment**  
**Fiscal Years Ending 2001 - 2010**  
**(Dollars in Thousands)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010				
Buildings, equipments and structures	Data not available								301,013	322,754	316,158			
Less - Accumulated depreciation									(155,996)	(163,835)	(162,908)			
Subtotal									145,017	158,919	153,250			
Intangible assets*												0	0	17,141
Land and rights-of-way												1,662	1,668	1,662
Construction in progress												20,223	29,746	27,083
<b>Total capital assets, net</b>														<b>166,902</b>

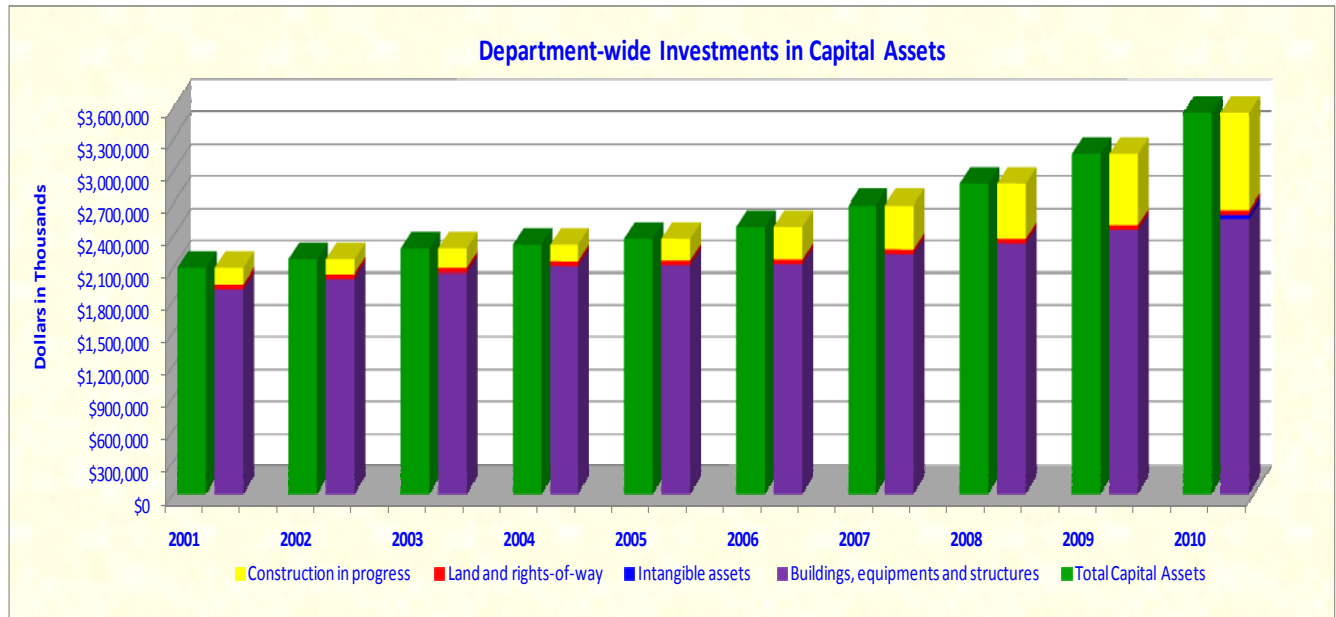
\*Include depreciable and non-depreciable intangible assets



**Financial Trends**  
**Department-wide Investments in Capital Assets**  
**Summary of Intangible Assets, Property, Plant and Equipment**  
**Fiscal Years Ending 2001 - 2010**  
**(Dollars in Thousands)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Buildings, equipments and structures	\$ 3,040,194	3,208,414	3,338,765	3,480,946	3,578,582	3,676,673	3,861,244	4,058,438	4,284,867	4,470,809
Less - Accumulated depreciation	(1,128,494)	(1,202,078)	(1,280,669)	(1,362,899)	(1,451,102)	(1,540,412)	(1,630,438)	(1,725,029)	(1,823,482)	(1,907,161)
Subtotal	\$ 1,911,700	2,006,336	2,058,096	2,118,047	2,127,480	2,136,261	2,230,806	2,333,409	2,461,385	2,563,648
Intangible assets*	0	0	0	0	0	0	0	0	0	39,240
Land and rights-of-way	44,096	44,743	44,495	44,312	44,312	44,312	44,660	44,267	44,849	43,582
Construction in progress	146,206	132,459	183,501	159,231	206,327	310,081	413,079	510,555	663,588	901,265
<b>Total capital assets, net</b>	<b>\$2,102,002</b>	<b>2,183,538</b>	<b>2,286,092</b>	<b>2,321,590</b>	<b>2,378,119</b>	<b>2,490,654</b>	<b>2,688,545</b>	<b>2,888,231</b>	<b>3,169,822</b>	<b>3,547,735</b>

\*Include depreciable and non-depreciable intangible assets





## **Revenue Capacity**

### **Water and Wastewater Historical Average Rate Adjustments**

#### **Water Rates History**

#### **Wastewater Rates History**

#### **Hetch Hetchy Power Electric Rates History**

#### **Net Revenue & Debt Service Coverage**

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**Revenue Capacity  
Historical Average Rate Adjustments  
Increase/(Decrease)**

<b>Water</b>	<b>Year</b>	<b>Retail Rates (%)</b>	<b>Wholesale Rates (%)</b>
	July 1, 2004	0.0	2.7
	July 1, 2005	15.0	(9.7) <sup>1</sup>
	July 1, 2006	15.0	18.8
	July 1, 2007	15.0 <sup>2</sup>	6.3
	July 1, 2008	15.0	10.0
	July 1, 2009 <sup>3</sup>	15.0	15.7
	July 1, 2010	15.0	15.2
	July 1, 2011 <sup>4</sup>	12.5	10.2
	July 1, 2012 <sup>4</sup>	12.5	29.2
	July 1, 2013 <sup>4</sup>	6.5	5.3

<sup>1</sup> Adjustment effective April 1, 2005

<sup>2</sup> Adjustment effective July 14, 2007

<sup>3</sup> July 1, 2009 was the first year of the new twenty-five year wholesale water supply agreement

<sup>4</sup> Wholesale rates are adopted annually, pursuant to the 25-year WSA. These are estimates

<b>Wastewater</b>	<b>Year</b>	<b>Rates (%)</b>
	July 1, 2004	11.0
	July 1, 2005	13.0
	July 1, 2006	13.0
	July 1, 2007*	8.0
	July 1, 2008	9.0
	July 1, 2009	7.0
	July 1, 2010	7.0
	July 1, 2011	5.0
	July 1, 2012	5.0
	July 1, 2013	5.0

\* Adjustment effective July 14, 2007

Source: San Francisco Public Utilities Commission Rate Schedules & Audited Financial Statements

**Revenue Capacity**  
**Water Rate History**  
**(Per Hundred Cubic Feet of Water Consumption)**

Fiscal Years Ending June 30	Retail			Wholesale	
	Service Charge Rate (\$/ccf) <sup>1</sup>	Volume Charge	% Increase /Decrease	Volume Charge	% Increase /Decrease
2001	3.40	1.26	0.0	0.86	4.4
2002	3.70	1.37	8.7	0.88	2.8
2003	4.00	1.49	8.6	0.88	0.0
2004	4.00	1.49	0.0	1.10	25.7
2005	4.00	1.49	0.0	1.13	2.7
2006 <sup>2</sup>	4.60	1.71	15.0	1.02	(9.7)
2007	5.30	1.97	15.0	1.22	18.8

Fiscal Years Ending June 30	Retail				Wholesale	
	Service Charge Rate (\$/ccf) <sup>1</sup>	Volume Charge (0-3 ccf)	Volume Charge (over 3 ccf)	% Increase /Decrease	Volume Charge	% Increase /Decrease
2008	4.60	2.08	2.50	15.0	1.30	6.3
2009	4.70	2.28	2.89	15.0	1.43	10.0
2010	5.40	2.61	3.48	15.0	1.65	15.7

<sup>1</sup> Monthly service charge for 5/8" meter

<sup>2</sup> Adjustment effective April 1, 2005 for Wholesale volume charge

Source: San Francisco Public Utilities Commission Annual Disclosure Reports and San Francisco Public Utilities Commission Rate Schedules

**Revenue Capacity  
Wastewater Rate History  
(Per Hundred Cubic Feet of Water Consumption)**

Fiscal Years Ending June 30	Lifeline Rate <sup>1</sup>		Regular Residential Rate		Non-Residential Rate	
	Rate (\$/ccf)	% Increase	Rate (\$/ccf)	% Increase	Rate (\$/ccf)	% Increase
2001	1.86	0.0	4.83	0.0	5.35	0.0
2002	1.86	0.0	4.83	0.0	5.35	0.0
2003	1.86	0.0	4.83	0.0	5.35	0.0
2004	1.86	0.0	4.83	0.0	5.35	0.0
2005	2.15	15.6	5.37	11.2	5.82	8.8

Fiscal Years Ending June 30	Tier 1: First 3 ccf		Tier 2: 4-5 ccf		Tier 3: 6+ ccf		Non-Residential Rate	
	Rate (\$/ccf)	% Increase	Rate (\$/ccf)	% Increase	Rate (\$/ccf)	% Increase	Rate (\$/ccf)	% Increase
2006	2.54	6.3	6.36	6.6	7.27	21.9	7.31	13.0
2007	2.88	13.4	7.19	13.1	8.22	13.1	8.26	13.0
2008 <sup>2</sup>	3.14	8.0	7.84	8.0	8.96	8.0	8.80	6.5
2009	3.42	9.0	8.55	9.0	9.77	9.0	9.60	9.0

Fiscal Years Ending June 30	Tier 1:	Tier 2: <sup>3</sup>	Non-Residential Rate
	First 3 ccf	4+ ccf	Rate (\$/ccf)
	Rate (\$/ccf)	Rate (\$/ccf)	Rate (\$/ccf)
2010 <sup>4</sup>	6.05	8.35	9.60
2010 <sup>5</sup>	5.66	7.45	9.60

<sup>1</sup> First 300 cubic feet of water consumption per dwelling unit per month are billed at the lifeline rate and all excess use at the regular residential rate

<sup>2</sup> Adjustment effective July 14, 2007

<sup>3</sup> Tier 2 and tier 3 are combined effective July 1, 2009

<sup>4</sup> Single-Family Residential rate effective July 1, 2009

<sup>5</sup> Multiple-Family Residential rate effective July 1, 2009

Source: San Francisco Public Utilities Commission Annual Disclosure Reports and San Francisco Public Utilities Commission Rate Schedules

**Revenue Capacity**  
**Hetch Hetchy Power Electric Rate History**  
**Fiscal Years Ending 2001 to 2010**  
**(Per Kilowatt Hours)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Residential*</b>										
Residential Services	\$ 0.11006	0.14182	0.14182	0.14182	0.13232	0.13660	0.15818	0.16342	0.16474	0.17643
<b>Commercial</b>										
Small General Service	0.12111	0.17668	0.17668	0.17668	0.15670	0.15483	0.16326	0.16716	0.16528	0.17886
Medium General Demand-Metered Service	0.09904	0.15430	0.15430	0.15430	0.14125	0.13707	0.14700	0.14497	0.13764	0.15816
Medium General Demand-Metered TOU** Service	0.08825	0.13972	0.13972	0.13972	0.12608	0.12328	0.12305	0.11855	0.11353	0.13490
<b>Industrial</b>										
Service to Customers with Maximum Demand of 1,000 Kilowatts or More - Secondary Voltage	0.08334	0.13479	0.13479	0.13479	0.12332	0.12036	0.12996	0.12624	0.11475	0.13330
Service to Customers with Maximum Demand of 1,000 Kilowatts or More - Primary Voltage	0.07012	0.12156	0.12156	0.12156	0.10806	0.10412	0.11209	0.10750	0.10460	0.12335
Service to Customers with Maximum Demand of 1,000 Kilowatts or More - Transmission Voltage	0.05132	0.10266	0.10266	0.10266	0.08882	0.08451	0.08996	0.08140	0.08230	0.09762
<b>General Fund City Departments</b>	0.03125	0.03750	0.03750	0.03750	0.03750	0.03750	0.03750	0.03750	0.03750	0.03750
<b>Street Lights</b>	0.12648	0.12648	0.12648	0.12648	0.09979	0.10140	0.11936	0.12537	0.11279	0.12206
<b>Traffic Signals</b>	0.15682	0.15682	0.15682	0.15682	0.12169	0.12913	0.14192	0.14702	0.11942	0.13046

\* Residential rates include master-metered multi-family services (EM) and multi-family services (ES)

\*\* TOU stands for time-of-use

Note: The rates shown for each year are average rates per kWh charged in the month of July, and may change during the year

Source: Rates originated from SFPUC Resolution No. 89-9355



**Revenue Capacity**  
**Water - Net Revenue and Debt Service Coverage**  
**Fiscal Years Ending 2001 - 2010**  
**(Dollars in Thousands)**

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Operating and investment revenue	\$ 165,086	159,907	177,829	174,528	189,928	213,499	241,078	246,885	272,869	275,041
Operating and maintenance expense	152,045	148,430	167,523	187,378	176,453	186,934	202,498	223,052	248,315	277,970
Adjustment to investing activities <sup>(1)</sup>	(372)	(1,506)	3,446	5,709	2,429	(1,272)	(212)	6,971	2,021	2,896
Depreciation and non-cash expenses	47,121	29,683	34,945	57,843	48,552	46,286	52,631	54,295	54,055	60,448
Changes in working capital	(1,738)	24,253	(3,599)	(2,377)	(9,619)	(26,441)	2,814	7,605	2,348	17,320
Net revenue	<u>58,052</u>	<u>63,907</u>	<u>45,098</u>	<u>48,325</u>	<u>54,837</u>	<u>45,138</u>	<u>93,813</u>	<u>92,704</u>	<u>82,978</u>	<u>77,735</u>
Other available funds <sup>(2)</sup>	35,514	176,884	60,082	41,715	92,065	63,888	56,868	65,344	66,779	60,951
Funds available for revenue bond debt service	<u>\$ 93,566</u>	<u>240,791</u>	<u>105,180</u>	<u>90,040</u>	<u>146,902</u>	<u>109,026</u>	<u>150,681</u>	<u>158,048</u>	<u>149,757</u>	<u>138,686</u>
Revenue bond debt service <sup>(3)</sup>	<u>\$ 20,063</u>	<u>25,164</u>	<u>31,634</u>	<u>37,882</u>	<u>37,994</u>	<u>35,374</u>	<u>65,115</u>	<u>64,193</u>	<u>69,585</u>	<u>69,621</u>
<b>Revenue bond debt service coverage</b>	<b><u>4.66</u></b>	<b><u>9.57</u></b>	<b><u>3.32</u></b>	<b><u>2.38</u></b>	<b><u>3.87</u></b>	<b><u>3.08</u></b>	<b><u>2.31</u></b>	<b><u>2.46</u></b>	<b><u>2.15</u></b>	<b><u>1.99</u></b>

<sup>(1)</sup> Adjustment of Investing Activities and Non-operating Revenues to a cash basis

<sup>(2)</sup> As per the Indenture, in addition to current year cash flow, the coverage calculation permits the inclusion of all funds except for Trust and Agency Fund not budgeted to be spent in such 12 months and legally available to pay debt service

<sup>(3)</sup> Excluded capitalized interest

Source: San Francisco Public Utilities Commission Annual Disclosure Reports

**Revenue Capacity**  
**Wastewater - Net Revenue and Debt Service Coverage**  
**Fiscal Years Ending 2001 - 2010**  
**(Dollars in Thousands)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Operating and investment revenue	\$ 157,045	142,711	138,868	138,842	151,981	170,517	199,160	206,648	210,646	211,899
Operating and maintenance expense	117,840	128,948	129,177	129,916	139,290	140,954	151,600	165,245	169,300	185,512
Adjustment to investing activities <sup>(1)</sup>	(2,994)	(1,836)	(1,051)	535	(256)	(361)	(959)	1,297	161	225
Depreciation and non-cash expenses	37,938	38,306	38,977	40,836	39,504	38,643	37,461	40,395	41,429	52,912
Changes in working capital	4,941	10,134	98	4,538	3,192	(3,859)	(2,461)	6,223	4,699	976
State revolving fund loan payments	(18,381)	(20,133)	(20,132)	(20,132)	(20,132)	(20,132)	(20,132)	(16,505)	(16,505)	(16,505)
Net revenue	60,709	40,234	27,583	34,703	34,999	43,854	61,469	72,813	71,130	63,995
Other available funds <sup>(2)</sup>	99,027	71,212	39,334	31,684	14,392	21,497	35,691	34,699	48,016	49,272
Funds available for revenue bond debt service	\$ <u>159,736</u>	<u>111,446</u>	<u>66,917</u>	<u>66,387</u>	<u>49,391</u>	<u>65,351</u>	<u>97,160</u>	<u>107,512</u>	<u>119,146</u>	<u>113,267</u>
Revenue bond debt service	\$ <u>48,059</u>	<u>47,283</u>	<u>36,074</u>	<u>20,233</u>	<u>17,219</u>	<u>17,219</u>	<u>50,163</u>	<u>50,198</u>	<u>50,311</u>	<u>50,313</u>
<b>Revenue bond debt service coverage</b>	<b><u>3.32</u></b>	<b><u>2.36</u></b>	<b><u>1.85</u></b>	<b><u>3.28</u></b>	<b><u>2.87</u></b>	<b><u>3.80</u></b>	<b><u>1.94</u></b>	<b><u>2.14</u></b>	<b><u>2.37</u></b>	<b><u>2.25</u></b>

<sup>(1)</sup> Adjustment of Investing Activities to a cash basis

<sup>(2)</sup> As per the Indenture, in addition to current year cash flow, the coverage calculation permits the inclusion of all funds except for Trust and Agency Fund not budgeted to be spent in such 12 months and legally available to pay debt service

Source: San Francisco Public Utilities Commission Annual Disclosure Reports

**Revenue Capacity**  
**Hetch Hetchy Power - Net Revenue and Debt Service Coverage**  
**Fiscal Years Ending 2001 - 2010**  
**(Dollars in Thousands)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Operating and investment revenue									\$ 96,670	105,711
Operating and maintenance expense									63,741	86,334
Adjustment to investing activities <sup>(1)</sup>									51	1,701
Depreciation and non-cash expenses									8,570	20,423
Changes in working capital									(5,249)	(7,603)
Net revenue									36,301	33,898
Other available funds <sup>(2)</sup>									—	—
Funds available for revenue bond debt service									\$ 36,301	33,898
Revenue bond debt service									\$ 422	422
<b>Revenue bond debt service coverage</b>									<b>86.02</b>	<b>80.33</b>

<sup>(1)</sup> Adjustment of Investing Activities and Non-operating Revenues to a cash basis

<sup>(2)</sup> No Fund Balance assumed available in Debt Service Coverage calculation, as no Indenture provision currently applies

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**Debt Capacity**

**Debt Ratings**

**Summary of Debt Outstanding**

**History of Outstanding Debt by Type**

**Water - Principal and Interest Payments for Debt Issues**

**Wastewater - Principal and Interest Payments for Debt Issues**

**Hetch Hetchy Power - Principal and Interest Payments for Debt Issues**

**Department-wide - Principal and Interest Payments for Debt Issues**

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**Debt Capacity**  
**Debt Ratings**  
**As of June 30, 2010**

<b>Debt by Type</b>	<b>Ratings by</b>	
	<b>Moody's Investors Service</b>	<b>Standard &amp; Poor's</b>
<b>Water</b>		
Revenue bonds	Aa2	AA-
Commercial paper - \$250 million tax-exempt	P-1	A-1+
Commercial paper - \$250 million tax-exempt and taxable	P-1	A-1+
Certificates of participation - 525 Golden Gate Avenue Headquarters Project *	A1	AA-
<b>Wastewater</b>		
Revenue bonds	Aa3	AA-
Commercial paper - \$150 million tax-exempt	P-1	A-1+
Certificates of participation - 525 Golden Gate Avenue Headquarters Project *	A1	AA-
<b>Hetch Hetchy Power</b>		
Certificates of participation - 525 Golden Gate Avenue Headquarters Project *	A1	AA-

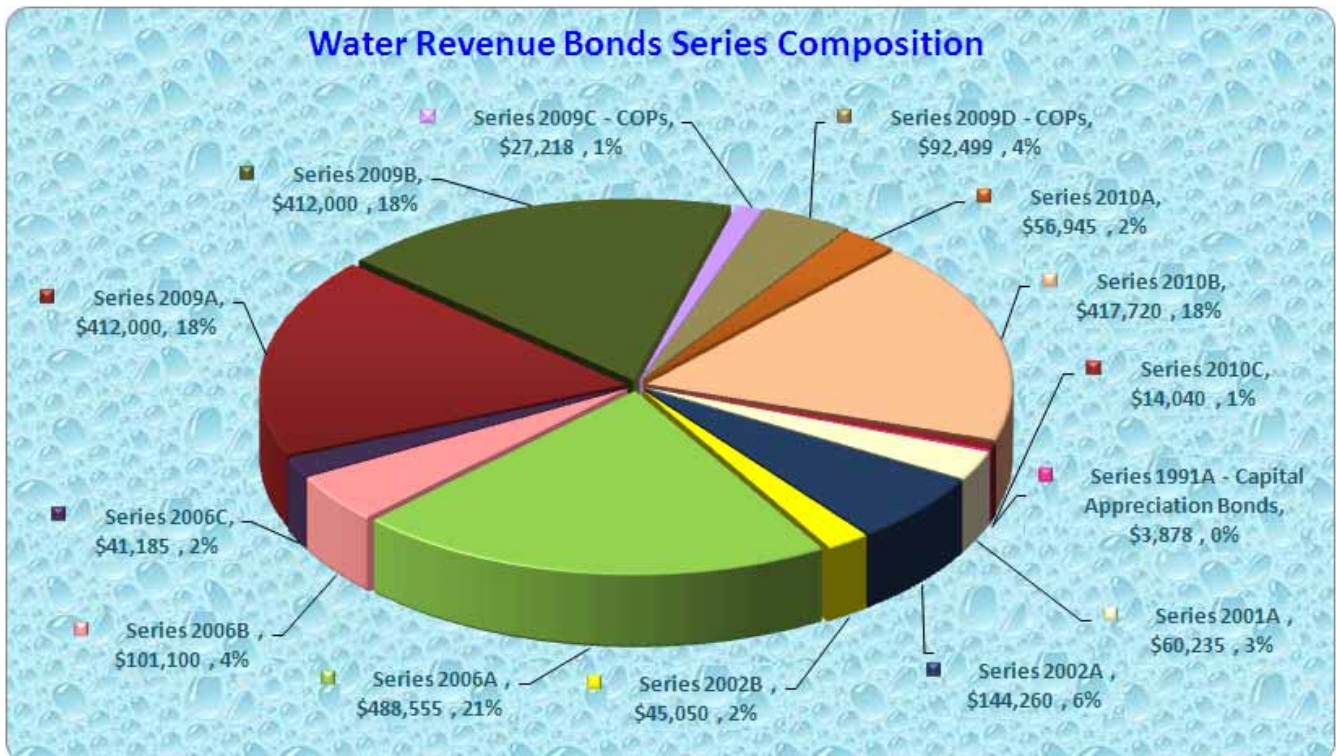
\* Reflected City and County of San Francisco Certificates of Participation (COPs) ratings as of June 30, 2010

Source: Rating agency reports

**Debt Capacity**  
**Water - Summary of Debt Outstanding**  
**As of June 30, 2010**  
**(Dollars in Thousands)**

<b>Revenue bonds</b>	<b>Amount</b>	<b>Use of proceeds</b>
Series 1991A - Capital Appreciation Bonds	\$ 3,878	Repair and Replacement of Water Facilities
Series 2001A	60,235	System Reliability Project and Safe Water Project
Series 2002A	144,260	System Reliability Project and Safe Water Project
Series 2002B	45,050	Refunded 1992 Bonds
Series 2006A	488,555	Water System Improvement Program, Prop A (Nov. 2002)
Series 2006B	101,100	Refunded part of 1996 Bonds and 2001 Bonds
Series 2006C	41,185	Refunded remainder of 1996 Bonds
Series 2009A	412,000	Water System Improvement Program
Series 2009B	412,000	Water System Improvement Program
Series 2009C - Certificates of participation (COPs)*	27,218	525 Golden Gate Headquarters Building
Series 2009D - Certificates of participation (COPs)*	92,499	525 Golden Gate Headquarters Building
Series 2010A	56,945	AMI Project
Series 2010B	417,720	Water System Improvement Program
Series 2010C	14,040	Refunded a portion of 2001A Bonds
<b>Total Water debt outstanding</b>	<b>\$ <u>2,316,685</u></b>	

\* Represents Water Enterprise's share of COPs principal





**Debt Capacity**  
**Summary of Debt Outstanding**  
**As of June 30, 2010**  
**(Dollars in Thousands)**

**Wastewater****Revenue Bonds, Loans and Certificates of Participation****Revenue bonds**

Series 2003A	\$ 255,530	Refunded 1992, 1994, and 1995 Bonds
Series 2010A	47,050	Clean Water Capital Improvement Programs
Series 2010B (Build America Bonds)	192,515	Clean Water and Sewer System Improvement Programs

**State of California revolving loans**

61,140 SRF loans issued from 1990 - 2001

**Certificates of participation (COPs)\***

Series 2009C	7,197	525 Golden Gate Headquarters Building
Series 2009D	24,458	525 Golden Gate Headquarters Building

**Total Wastewater debt outstanding****\$ 587,890**

\*Represents Wastewater Enterprise's share of COPs principal

**Hetch Hetchy Power****Revenue Bonds and Certificates of Participation****Revenue bonds**

Clean Renewable Energy Bond (CREBs)	\$ 5,481	Installation of Solar energy projects on City facilities
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**Certificates of participation (COPs)\***

Series 2009C	3,705	525 Golden Gate Headquarters Building
Series 2009D	12,593	525 Golden Gate Headquarters Building

**Total Hetch Hetchy Power debt outstanding \$ 21,779**

\*Represents Hetch Hetchy Power's share of COPs principal

**Total Department-wide debt outstanding****\$ 2,926,354**

## Debt Capacity

**History of Outstanding Debt by Type (Principal Payments Only)**  
**Fiscal Years Ending June 30, 2001 to 2010**  
(Dollars in Thousands)

**Water**

<u>Fiscal Years Ending</u>	<u>Revenue Bonds</u>	<u>Capital Appreciation Bonds(*)</u>	<u>Certificates of Participation</u>	<u>Commercial Paper</u>	<u>Total</u>	<u>Number of Customer Accounts</u>	<u>Debt per Customer Account</u>
2001	\$ 224,525	\$ 7,518	\$ -	\$ 75,000	\$ 307,043	169,735	\$ 1.81
2002	358,870	5,972	-	90,000	454,842	170,133	2.67
2003	512,435	4,331	-	-	516,766	170,495	3.03
2004	501,025	2,567	-	25,000	528,592	170,961	3.09
2005	486,970	2,749	-	80,000	569,719	171,281	3.33
2006	981,765	2,945	-	-	984,710	171,808	5.73
2007	966,080	3,155	-	-	969,235	172,236	5.63
2008	946,910	3,380	-	-	950,290	172,528	5.51
2009	921,390	3,620	-	229,600	1,154,610	172,911	6.68
2010	2,193,090	3,878	119,717	-	2,316,685	172,708	13.41

(\*) No annual payments for Series 1991A Capital Appreciation Bonds

Source: San Francisco Public Utilities Commission Customer Information and Billing System

**Wastewater**

<u>Fiscal Years Ending</u>	<u>Revenue Bonds</u>	<u>State Loans Payable</u>	<u>Commercial Paper</u>	<u>Certificates of Participation</u>	<u>Total</u>	<u>Number of Customer Accounts</u>	<u>Debt per Customer Account</u>
2001	\$ 469,883	\$ 193,597	\$ -	\$ -	\$ 663,480	161,481	\$ 4.11
2002	418,808	179,591	-	-	598,399	161,602	3.70
2003	396,270	165,125	-	-	561,395	161,797	3.47
2004	396,270	150,196	-	-	546,466	162,027	3.37
2005	396,270	134,783	-	-	531,053	162,184	3.27
2006	396,270	118,869	-	-	515,139	162,496	3.17
2007	362,825	102,438	50,000	-	515,263	162,744	3.17
2008	328,325	89,101	50,000	-	467,426	162,913	2.87
2009	292,660	75,339	100,000	-	467,999	163,116	2.87
2010	495,095	61,140	-	31,655	587,890	162,737	3.61

Note: Number of customer accounts prior to FY 2010 are estimated. Year 2010 and thereafter reflect actuals from the new Customer Information and Billing System

Source: San Francisco Public Utilities Commission Customer Information and Billing System

**Hetch Hetchy Power**

<u>Fiscal Years Ending</u>	<u>Revenue Bonds</u>	<u>Certificates of Participation</u>	<u>Total</u>	<u>Number of Customer Accounts</u>	<u>Debt per Customer Account</u>
2009	\$ 5,903	\$ -	\$ 5,903	2,228	\$ 2.65
2010	5,481	16,298	21,779	2,263	9.62

Source: San Francisco Public Utilities Commission Power Enterprise Scheduling System

Debt Capacity

Water - Principal and Interest Payments for Debt Issues  
(Excludes Commercial Paper)  
(Dollars in Thousands)

Payments Due for FY Ending	Principal Payments														Principal Payments Total
	1991A	2001A	2002A	2002B	2006A	2006B	2006C	2009A	2009B	2009C COPs	2009D COPs	2010A	2010B	2010C	
2011	\$ -	3,065	3,425	6,640	8,895	3,300	2,470	-	-	-	-	-	-	-	27,795
2012	-	3,195	3,605	6,985	9,350	3,465	2,590	6,460	6,610	-	-	1,790	-	-	44,050
2013	-	-	3,785	7,305	9,830	3,645	2,705	6,785	6,950	1,971	-	1,835	-	3,125	47,936
2014	-	-	3,980	7,640	10,335	3,825	2,810	7,130	7,245	2,035	-	1,890	-	3,275	50,165
2015	-	-	4,185	8,035	10,865	4,015	2,925	7,500	7,540	2,106	-	1,970	-	3,450	52,591
2016	-	-	4,400	8,445	11,425	4,215	3,055	7,890	7,890	2,199	-	2,070	-	4,190	55,779
2017	-	-	4,625	-	12,010	8,505	3,190	8,290	8,290	2,313	-	2,175	10,625	-	60,023
2018	-	-	4,865	-	12,625	8,900	3,325	8,715	8,720	2,431	-	2,285	10,905	-	62,771
2019	3,878	-	5,115	-	13,270	6,540	1,375	9,160	9,165	2,556	-	2,405	11,215	-	64,679
2020	-	-	5,375	-	13,955	8,340	2,600	9,635	9,635	2,689	-	2,530	11,555	-	66,314
2021	-	-	5,650	-	14,670	9,895	3,640	10,100	10,130	2,824	-	2,655	11,920	-	71,484
2022	-	-	5,940	-	15,420	7,410	1,565	10,615	10,650	2,970	-	2,795	12,330	-	69,695
2023	-	-	6,245	-	16,210	7,750	1,630	11,165	11,195	3,124	-	2,935	12,780	-	73,034
2024	-	-	6,565	-	17,045	8,090	1,710	11,730	11,770	-	3,267	3,090	13,245	-	76,512
2025	-	-	6,900	-	17,915	8,460	1,785	12,330	12,375	-	3,402	3,245	13,725	-	80,137
2026	-	6,540	7,255	-	18,835	2,325	1,865	12,970	13,010	-	3,545	3,415	14,225	-	83,985
2027	-	6,895	7,630	-	19,775	2,420	1,945	13,635	13,675	-	3,695	3,590	14,765	-	88,025
2028	-	7,270	8,020	-	20,740	-	-	14,330	14,375	-	3,852	3,770	15,355	-	87,712
2029	-	7,670	8,430	-	21,720	-	-	15,070	15,115	-	4,013	3,965	15,965	-	91,948
2030	-	8,085	8,860	-	22,720	-	-	15,840	15,895	-	4,180	4,170	16,600	-	96,350
2031	-	8,525	9,315	-	23,765	-	-	16,675	16,705	-	4,359	4,365	17,260	-	100,969
2032	-	8,990	9,795	-	24,860	-	-	17,575	17,560	-	4,545	-	17,945	-	101,270
2033	-	-	10,295	-	25,970	-	-	18,510	18,460	-	4,737	-	18,660	-	96,632
2034	-	-	-	-	27,100	-	-	19,485	19,425	-	4,941	-	19,405	-	90,356
2035	-	-	-	-	28,350	-	-	20,515	20,440	-	5,155	-	20,175	-	94,635
2036	-	-	-	-	29,725	-	-	21,590	21,515	-	5,373	-	20,980	-	99,183
2037	-	-	-	-	31,175	-	-	22,720	22,615	-	5,605	-	21,810	-	103,925
2038	-	-	-	-	-	-	-	23,915	23,775	-	5,844	-	22,680	-	76,214
2039	-	-	-	-	-	-	-	25,170	24,995	-	6,094	-	23,580	-	79,839
2040	-	-	-	-	-	-	-	26,495	26,275	-	6,355	-	24,520	-	83,645
2041	-	-	-	-	-	-	-	-	-	-	6,626	-	25,495	-	32,121
2042	-	-	-	-	-	-	-	-	-	-	6,911	-	-	-	6,911
<b>Total</b>	<b>\$ 3,878</b>	<b>60,235</b>	<b>144,260</b>	<b>45,050</b>	<b>488,555</b>	<b>101,100</b>	<b>41,185</b>	<b>412,000</b>	<b>412,000</b>	<b>27,218</b>	<b>92,499</b>	<b>56,945</b>	<b>417,720</b>	<b>14,040</b>	<b>2,316,685</b>

**Debt Capacity**  
**Water - Principal and Interest Payments for Debt Issues (Continued)**  
**(Excludes Commercial Paper)**  
**(Dollars in Thousands)**

Payments Due for FY Ending	Interest Payments													Federal Interest Subsidy	Interest Payments Total	Total Principal & Interest Payments
	2001A	2002A	2002B	2006A	2006B	2006C	2009A*	2009B*	2009C* COPs	2009D* COPs	2010A*	2010B*	2010C			
2011	\$ 2,935	6,935	2,013	23,018	4,388	1,775	20,350	20,346	1,263	5,968	2,343	20,808	612	(9,372)	103,382	131,177
2012	2,779	6,795	1,673	22,562	4,219	1,655	20,220	20,181	1,263	5,968	2,668	23,857	702	(10,439)	104,103	148,153
2013	2,699	6,638	1,352	22,082	4,041	1,536	19,956	19,842	1,231	5,968	2,623	23,857	624	(10,439)	102,010	149,946
2014	2,699	6,473	1,015	21,578	3,854	1,426	19,677	19,487	1,164	5,968	2,567	23,857	464	(10,439)	99,790	149,955
2015	2,699	6,309	623	21,047	3,658	1,311	19,385	19,117	1,092	5,968	2,490	23,857	296	(10,439)	97,413	150,004
2016	2,699	6,135	211	20,491	3,452	1,176	19,037	18,732	1,000	5,968	2,389	23,857	105	(10,439)	94,813	150,592
2017	2,699	5,928	-	19,905	3,134	1,036	18,633	18,327	888	5,968	2,282	23,644	-	(10,364)	92,080	152,103
2018	2,699	5,691	-	19,289	2,744	899	18,251	17,902	769	5,968	2,171	23,208	-	(10,212)	89,379	152,150
2019	2,699	5,442	-	18,641	2,435	797	17,894	17,455	644	5,968	2,054	22,735	-	(10,046)	86,718	151,397
2020	2,699	5,179	-	17,961	2,132	711	17,518	16,985	513	5,968	1,930	22,211	-	(9,863)	83,944	150,257
2021	2,699	4,904	-	17,245	1,750	564	17,073	16,490	375	5,968	1,800	21,648	-	(9,665)	80,851	152,335
2022	2,699	4,614	-	16,493	1,382	437	16,555	15,971	231	5,968	1,664	21,019	-	(9,446)	77,587	147,282
2023	2,699	4,309	-	15,702	1,065	365	16,010	15,425	78	5,968	1,521	20,329	-	(9,204)	74,267	147,301
2024	2,699	3,989	-	14,871	733	290	15,438	14,851	-	5,864	1,371	19,613	-	(8,917)	70,802	147,314
2025	2,699	3,653	-	13,997	381	212	14,836	14,309	-	5,652	1,212	18,872	-	(8,583)	67,240	147,377
2026	2,535	3,299	-	13,078	152	130	14,204	13,801	-	5,431	1,046	18,103	-	(8,237)	63,542	147,527
2027	2,199	2,927	-	12,138	52	44	13,539	13,199	-	5,201	871	17,269	-	(7,864)	59,575	147,600
2028	1,845	2,535	-	11,175	-	-	12,840	12,498	-	4,961	687	16,365	-	(7,464)	55,442	143,154
2029	1,472	2,124	-	10,194	-	-	12,105	11,761	-	4,710	493	15,426	-	(7,048)	51,237	143,185
2030	1,078	1,692	-	9,194	-	-	11,332	10,986	-	4,450	289	14,449	-	(6,614)	46,856	143,206
2031	663	1,237	-	8,148	-	-	10,498	10,171	-	4,175	93	13,433	-	(6,163)	42,255	143,224
2032	225	760	-	7,054	-	-	9,599	9,314	-	3,887	-	12,377	-	(5,692)	37,524	138,794
2033	-	257	-	5,943	-	-	8,652	8,414	-	3,586	-	11,279	-	(5,202)	32,929	129,561
2034	-	-	-	4,815	-	-	7,655	7,466	-	3,272	-	10,136	-	(4,693)	28,651	119,007
2035	-	-	-	3,566	-	-	6,630	6,470	-	2,944	-	8,949	-	(4,163)	24,396	119,031
2036	-	-	-	2,187	-	-	5,578	5,421	-	2,603	-	7,714	-	(3,611)	19,892	119,075
2037	-	-	-	740	-	-	4,456	4,317	-	2,247	-	6,430	-	(3,037)	15,153	119,078
2038	-	-	-	-	-	-	3,260	3,158	-	1,875	-	5,096	-	(2,440)	10,949	87,163
2039	-	-	-	-	-	-	2,003	1,939	-	1,488	-	3,708	-	(1,819)	7,319	87,158
2040	-	-	-	-	-	-	679	657	-	1,084	-	2,265	-	(1,172)	3,513	87,158
2041	-	-	-	-	-	-	-	-	-	663	-	764	-	(500)	927	33,048
2042	-	-	-	-	-	-	-	-	-	224	-	-	-	(78)	146	7,058
<b>Total</b>	<b>\$ 50,818</b>	<b>97,825</b>	<b>6,887</b>	<b>373,114</b>	<b>39,572</b>	<b>14,364</b>	<b>393,863</b>	<b>384,992</b>	<b>10,511</b>	<b>141,901</b>	<b>34,564</b>	<b>497,135</b>	<b>2,803</b>	<b>(223,664)</b>	<b>1,824,685</b>	<b>4,141,370</b>

\* A portion of interest due on these bonds is paid from capitalized interest

**Debt Capacity**  
**Wastewater - Principal and Interest Payments for Debt Issues**  
**(Excludes Commercial Paper)**  
**(Dollars in Thousands)**

Payments Due for FY Ending	Principal Payments							Interest Payments							Total Principal & Interest Payments	
	2003A	2009C	2009D	2010A	2010B	State Revolving Fund Loans	Principal Payment Total	State Revolving Fund	2003A	2009C	2009D	2010A	2010B	Federal Interest Subsidy		Interest Payments Total
2011	\$ 26,320	-	-	-	-	14,648	40,968	1,855	11,827	334	1,578	1,853	8,697	(3,596)	22,547	63,515
2012	22,010	-	-	-	-	9,594	31,604	1,389	10,959	334	1,578	2,276	10,685	(4,292)	22,930	54,534
2013	23,095	521	-	-	-	8,322	31,938	1,099	9,941	326	1,578	2,276	10,685	(4,292)	21,614	53,552
2014	24,395	538	-	-	-	8,192	33,125	848	8,754	308	1,578	2,276	10,685	(4,292)	20,158	53,283
2015	25,790	557	-	-	-	5,686	32,033	602	7,467	289	1,578	2,276	10,685	(4,292)	18,606	50,639
2016	27,325	581	-	-	-	4,837	32,743	431	6,073	265	1,578	2,276	10,685	(4,292)	17,017	49,760
2017	11,920	612	-	6,935	-	3,335	22,802	284	5,102	235	1,578	2,103	10,685	(4,292)	15,696	38,498
2018	12,575	643	-	7,295	-	1,562	22,075	189	4,519	203	1,578	1,747	10,685	(4,292)	14,629	36,704
2019	13,315	676	-	7,630	-	1,607	23,228	144	3,839	170	1,578	1,412	10,685	(4,292)	13,537	36,765
2020	14,120	711	-	7,980	-	1,654	24,465	97	3,119	135	1,578	1,060	10,685	(4,293)	12,382	36,847
2021	14,960	747	-	8,390	-	1,702	25,799	49	2,356	99	1,578	651	10,685	(4,293)	11,125	36,924
2022	15,835	785	-	8,820	-	-	25,440	-	1,567	61	1,578	221	10,685	(4,292)	9,820	35,260
2023	15,005	826	-	-	7,280	-	23,111	-	796	21	1,578	-	10,516	(4,233)	8,678	31,789
2024	2,610	-	864	-	7,505	-	10,979	-	359	-	1,551	-	10,169	(4,102)	7,976	18,955
2025	2,745	-	900	-	7,745	-	11,390	-	232	-	1,494	-	9,801	(3,953)	7,574	18,964
2026	3,510	-	937	-	8,000	-	12,447	-	83	-	1,436	-	9,409	(3,796)	7,132	19,579
2027	-	-	977	-	8,270	-	9,247	-	-	-	1,375	-	8,992	(3,628)	6,739	15,986
2028	-	-	1,019	-	8,560	-	9,579	-	-	-	1,312	-	8,550	(3,452)	6,410	15,989
2029	-	-	1,061	-	8,860	-	9,921	-	-	-	1,246	-	8,084	(3,265)	6,064	15,985
2030	-	-	1,105	-	9,180	-	10,285	-	-	-	1,177	-	7,592	(3,069)	5,700	15,985
2031	-	-	1,153	-	9,520	-	10,673	-	-	-	1,104	-	7,073	(2,861)	5,316	15,989
2032	-	-	1,202	-	9,875	-	11,077	-	-	-	1,028	-	6,523	(2,643)	4,908	15,985
2033	-	-	1,253	-	10,250	-	11,503	-	-	-	948	-	5,944	(2,413)	4,479	15,982
2034	-	-	1,306	-	10,640	-	11,946	-	-	-	865	-	5,344	(2,173)	4,036	15,982
2035	-	-	1,363	-	11,045	-	12,408	-	-	-	778	-	4,720	(1,924)	3,575	15,983
2036	-	-	1,421	-	11,470	-	12,891	-	-	-	688	-	4,073	(1,666)	3,095	15,986
2037	-	-	1,482	-	11,910	-	13,392	-	-	-	594	-	3,397	(1,397)	2,594	15,986
2038	-	-	1,545	-	12,365	-	13,910	-	-	-	496	-	2,690	(1,116)	2,070	15,980
2039	-	-	1,611	-	12,845	-	14,456	-	-	-	393	-	1,957	(823)	1,527	15,983
2040	-	-	1,680	-	13,340	-	15,020	-	-	-	287	-	1,195	(517)	964	15,984
2041	-	-	1,752	-	13,855	-	15,607	-	-	-	175	-	403	(202)	377	15,984
2042	-	-	1,828	-	-	-	1,828	-	-	-	59	-	-	(21)	38	1,866
<b>Total</b>	<b>\$ 255,530</b>	<b>7,197</b>	<b>24,459</b>	<b>47,050</b>	<b>192,515</b>	<b>61,139</b>	<b>587,890</b>	<b>6,987</b>	<b>76,994</b>	<b>2,780</b>	<b>37,521</b>	<b>20,427</b>	<b>242,667</b>	<b>(98,064)</b>	<b>289,312</b>	<b>877,202</b>

Debt Capacity

Hetch Hetchy Power - Principal and Interest Payments for Debt Issues  
(Dollars in Thousands)

Payments Due for FY Ending	Principal Payments				Interest Payments				Total Interest Net of Subsidy	Total Principal & Interest Payments
	Clean Renewable Energy Bond Issue (*)	2009C Series COPs	2009D Series COPs	Principal Payment Total	2009C Series	2009D Series Before Subsidy	Federal Interest Subsidy	2009D Series Total		
2011	\$ 422	-	-	422	172	812	(284)	528	700	1,122
2012	422	-	-	422	172	812	(284)	528	700	1,122
2013	422	268	-	690	168	812	(284)	528	696	1,386
2014	422	277	-	699	158	812	(284)	528	686	1,385
2015	422	287	-	709	149	812	(284)	528	677	1,386
2016	422	299	-	721	136	812	(284)	528	664	1,385
2017	422	315	-	737	121	812	(284)	528	649	1,386
2018	422	331	-	753	104	813	(284)	528	632	1,385
2019	422	348	-	770	88	813	(285)	528	616	1,386
2020	422	366	-	788	70	813	(285)	528	598	1,386
2021	421	385	-	806	51	812	(284)	528	579	1,385
2022	420	404	-	824	31	812	(284)	528	559	1,383
2023	420	425	-	845	11	812	(284)	528	539	1,384
2024	-	-	445	445	-	799	(280)	519	519	964
2025	-	-	463	463	-	771	(270)	500	500	963
2026	-	-	483	483	-	740	(259)	481	481	964
2027	-	-	503	503	-	708	(248)	460	460	963
2028	-	-	524	524	-	675	(236)	439	439	963
2029	-	-	546	546	-	642	(225)	417	417	963
2030	-	-	569	569	-	605	(212)	394	394	963
2031	-	-	593	593	-	568	(199)	369	369	962
2032	-	-	619	619	-	529	(185)	344	344	963
2033	-	-	645	645	-	488	(171)	317	317	962
2034	-	-	673	673	-	446	(156)	290	290	963
2035	-	-	702	702	-	401	(141)	261	261	963
2036	-	-	731	731	-	354	(124)	230	230	961
2037	-	-	763	763	-	306	(107)	199	199	962
2038	-	-	796	796	-	255	(89)	166	166	962
2039	-	-	830	830	-	203	(71)	132	132	962
2040	-	-	865	865	-	148	(52)	96	96	961
2041	-	-	902	902	-	91	(32)	59	59	961
2042	-	-	941	941	-	30	(10)	20	20	961
<b>Total</b>	<b>\$ 5,481</b>	<b>3,705</b>	<b>12,593</b>	<b>21,779</b>	<b>1,431</b>	<b>19,318</b>	<b>(6,761)</b>	<b>12,557</b>	<b>13,988</b>	<b>35,767</b>

\* No interest payments are required

**Department-wide Debt Capacity**  
**Principal and Interest Payments for Debt Issues**  
**(Excludes Commercial Paper)**  
**Fiscal Year Ending June 30, 2010**  
**(Dollars in Thousands)**

Payments Due for FY Ending	Water			Wastewater			Hetch Hetchy Power			SFPUC Total		
	Total		Principal & Interest Payments	Total		Principal & Interest Payments	Total		Principal & Interest Payments	Total		Principal & Interest Payments
	Total Principal	Total Interest		Total Principal	Total Interest		Total Principal	Total Interest		Total Principal	Total Interest	
2011	\$ 27,795	103,382	131,177	40,968	22,547	63,515	422	700	1,122	69,185	126,629	195,814
2012	44,050	104,103	148,153	31,604	22,930	54,534	422	700	1,122	76,076	127,733	203,809
2013	47,936	102,010	149,946	31,938	21,614	53,552	690	696	1,386	80,564	124,320	204,884
2014	50,165	99,790	149,955	33,125	20,158	53,283	699	686	1,385	83,989	120,634	204,623
2015	52,591	97,413	150,004	32,033	18,606	50,639	709	677	1,386	85,333	116,696	202,029
2016	55,779	94,813	150,592	32,743	17,017	49,760	721	664	1,385	89,243	112,494	201,737
2017	60,023	92,080	152,103	22,802	15,696	38,498	737	649	1,386	83,562	108,425	191,987
2018	62,771	89,379	152,150	22,075	14,629	36,704	753	632	1,385	85,599	104,640	190,239
2019	64,679	86,718	151,397	23,228	13,537	36,765	770	616	1,386	88,677	100,871	189,548
2020	66,314	83,944	150,258	24,465	12,382	36,847	788	598	1,386	91,567	96,924	188,491
2021	71,484	80,851	152,335	25,799	11,125	36,924	806	579	1,385	98,089	92,555	190,644
2022	69,695	77,587	147,282	25,440	9,820	35,260	824	559	1,383	95,959	87,966	183,925
2023	73,034	74,267	147,301	23,111	8,678	31,789	845	539	1,384	96,990	83,484	180,474
2024	76,512	70,802	147,314	10,979	7,976	18,955	445	519	964	87,936	79,297	167,233
2025	80,137	67,240	147,377	11,390	7,574	18,964	463	500	963	91,990	75,314	167,304
2026	83,985	63,542	147,527	12,447	7,132	19,579	483	481	964	96,915	71,155	168,070
2027	88,025	59,575	147,600	9,247	6,739	15,986	503	460	963	97,775	66,774	164,549
2028	87,712	55,442	143,154	9,579	6,410	15,989	524	439	963	97,815	62,291	160,106
2029	91,948	51,237	143,185	9,921	6,064	15,985	546	417	963	102,415	57,718	160,133
2030	96,350	46,856	143,206	10,285	5,700	15,985	569	394	963	107,204	52,950	160,154
2031	100,969	42,255	143,224	10,673	5,316	15,989	593	369	962	112,235	47,940	160,175
2032	101,270	37,524	138,794	11,077	4,908	15,985	619	344	963	112,966	42,776	155,742
2033	96,632	32,929	129,561	11,503	4,479	15,982	645	317	962	108,780	37,725	146,505
2034	90,356	28,651	119,007	11,946	4,036	15,982	673	290	963	102,975	32,977	135,952
2035	94,635	24,396	119,031	12,408	3,575	15,983	702	261	963	107,745	28,232	135,977
2036	99,183	19,892	119,075	12,891	3,095	15,986	731	230	961	112,805	23,217	136,022
2037	103,925	15,153	119,078	13,392	2,594	15,986	763	199	962	118,080	17,946	136,026
2038	76,214	10,949	87,163	13,910	2,070	15,980	796	166	962	90,920	13,185	104,105
2039	79,839	7,319	87,158	14,456	1,527	15,983	830	132	962	95,125	8,978	104,103
2040	83,645	3,513	87,158	15,020	964	15,984	865	96	961	99,530	4,573	104,103
2041	32,121	927	33,048	15,607	377	15,984	902	59	961	48,630	1,363	49,993
2042	6,911	146	7,057	1,828	38	1,866	941	20	961	9,680	204	9,884
<b>Total</b>	<b>\$ 2,316,685</b>	<b>1,824,685</b>	<b>4,141,370</b>	<b>587,890</b>	<b>289,312</b>	<b>877,202</b>	<b>21,779</b>	<b>13,988</b>	<b>35,767</b>	<b>2,926,354</b>	<b>2,127,985</b>	<b>5,054,339</b>

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## **Demographic & Economic Information**

### **City and County of San Francisco and Other Counties Economy & General Information**

#### **Summary of Accounts by Type of Customer**

##### **Water Accounts and Billings**

##### **Historical Water Sales in Hundred Cubic Feet**

##### **Historical Water Sales in Millions of Gallons per Day**

##### **Historical Water Sales in Millions of Gallons**

##### **Bay Area Water Supply & Conservation Agency Members**

##### **Water Accounts & Billings by Type of Customer**

##### **Wastewater Sewer Accounts and Billings by Type of Customer**

##### **Hetch Hetchy Power Historical Electric Sales in Megawatt Hours**

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## City and County of San Francisco Economy and General Information

The following provides general economic and demographic information about the City and County of San Francisco (the “City”) and the Bay Area (defined below). The various reports, documents, websites and other information referred to herein are not incorporated herein by such references.

### Area and Economy

The corporate limits of the City encompass over 93 square miles, of which approximately 49 square miles are land, with the balance consisting of tidelands and a portion of the San Francisco Bay (the “Bay”). The City is located on a peninsula bounded by the Pacific Ocean to the west, the Bay to the east, the entrance to the Bay and the Golden Gate Bridge to the north and San Mateo County to the south. The City is the economic center of the nine counties contiguous to the Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma Counties (the “Bay Area”). The economy of the Bay Area includes a wide range of industries, supplying local needs as well as the needs of national and international markets. Major business sectors in the Bay Area include retail and entertainment, conventions and tourism, service businesses, banking, professional and financial services, corporate headquarters, international and wholesale trade, multimedia and advertising, biotechnology, and higher education.

### Population and Income

The City had a population estimated at 815,358 as of FY 2008-09. The table below reflects the population and per capita personal income of the City, as estimated by the U.S. Census Bureau and the Bureau of Economic Analysis (BEA).

CITY AND COUNTY OF SAN FRANCISCO		
Population and Income 2005-2009		
Year	Population <sup>1</sup>	Per Capita Personal Income <sup>2</sup>
2005	777,614	63,138
2006	786,367	68,584
2007	799,185	71,844
2008	808,976	72,712
2009	815,358	70,644 <sup>3</sup>

<sup>1</sup> Source: Population Division, U.S. Census Bureau, 2005 to 2008. US Census Bureau State & County QuickFacts, 2009.

<sup>2</sup> Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce. Updated on April 22, 2010; information is updated with newly available data.

<sup>3</sup> Per capita personal income for 2009 was estimated by dividing the estimated total personal income for 2009 by the reported and estimated population in 2009. (Personal income was estimated by assuming that its percentage of state personal income in 2009 remained at the 2008 level of 3.66 percent.) Information is updated from last year's CAFR with newly available data.

### Conventions and Tourism

According to the San Francisco Convention & Visitors Bureau (the “Convention & Visitors Bureau”), a non-profit membership organization, during the calendar year 2009 approximately 415.4 million people (125,407 average per day) visited the City, generating approximately \$7.8 billion for local businesses. Visitors in San Francisco spent on average \$21.5 million on an average day. Also, as reported by PKF Consulting, hotel occupancy rates in the City averaged 75.5% for calendar year 2009, a decrease of 3.4% from the previous year. Average daily room rates in the City during 2009 decreased about 15.8%: from \$160 compared to the prior year's average of \$190. During calendar 2008, only 28.9% of all out-of-town visitors stayed in City hotels, but the Convention & Visitors Bureau estimates that such visitors generated 62.3% of total spending by out-of-town visitors. An estimated 40% of City visitors were on vacation, 35% were convention and trade show attendees, 22% were individual business travelers and the remaining 3% were en route elsewhere. In 2009, the City was ranked fifth in market share for international visitors

to the U.S., behind New York, Miami, Los Angeles, and Orlando. The City was ranked ahead of Las Vegas, Washington, D.C., and Honolulu. The following table illustrates hotel occupancy and related spending from calendar years 2004 through 2008, as reported by the San Francisco Convention and Visitors Bureau.

San Francisco Overnight Hotel Guests			
Calendar Year	Annual Average Hotel Occupancy	Visitors Staying in Hotels or Motels (\$ Thousands)	Estimated Hotel Visitor Spending (\$ Thousands)
2004	73.4%	4,200	4,070,000
2005	75.7%	4,490	4,530,000
2006	76.4%	4,500	4,780,000
2007	79.0%	4,590	5,060,000
2008	78.9%	4,740	5,310,000
2009	75.5%	4,500	4,900,000

Source: San Francisco Convention & Visitors Bureau.

According to the Convention & Visitors Bureau, as of June 1, 2007, convention business was almost at full capacity at the Moscone Convention Center and was at strong levels at individual hotels providing self-contained convention services. Due to an expansion to the Moscone Convention facilities completed spring 2003, the Moscone Convention Center offers over 700,000 square feet of exhibit space covering more than 20 acres on three adjacent blocks. Data for full years after 2007 are not available from the Convention & Visitors Bureau at this time. However, it is likely based on other tourist and visitor trends, that the more recent convention hotel occupancy trend is negative.

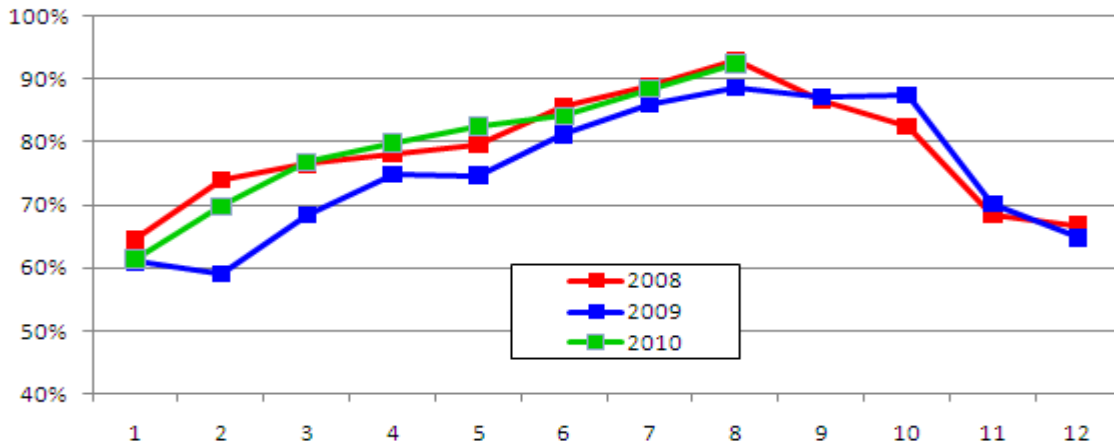
### San Francisco Visitor Industry Statistics

According to the Convention & Visitors Bureau, San Francisco hosted 15.4 million visitors in 2009, including hotel guests, those staying with friends and relatives, those staying in accommodations outside the City but whose primary destination was San Francisco, and regional visitors driving in for the day. These visitors spent \$7.8 billion in local businesses.

This massive injection of visitor dollars directly supports local hotels, restaurants, shops, attractions, and cultural institutions. It also indirectly bolsters practically every segment of the City's economy and has a broad positive influence on government finances - some \$426 million in tax and fee revenue flowed into the City and County of San Francisco in 2009.

# SAN FRANCISCO CITYWIDE HOTEL OCCUPANCY RATE

SAN FRANCISCO CITYWIDE HOTEL OCCUPANCY RATE  
(2008-2010)



San Francisco Hotel Occupancy Rate

	2005	2006	2007	2008	2009	2010
Jan	59.9%	62.1%	59.8%	64.5%	61.0%	61.4%
Feb	67.5%	65.9%	72.1%	73.9%	59.1%	69.8%
Mar	72.6%	75.2%	75.4%	76.5%	68.4%	76.8%
Apr	74.6%	77.6%	77.0%	78.1%	74.9%	79.8%
May	78.3%	76.4%	82.8%	79.6%	74.7%	82.5%
Jun	81.3%	80.6%	82.4%	85.6%	81.2%	84.1%
Jul	84.4%	82.0%	84.9%	88.8%	86.0%	88.4%
Aug	87.2%	82.7%	87.1%	93.0%	88.7%	92.4%
Sep	88.0%	86.5%	87.6%	86.6%	87.2%	
Oct	84.1%	85.7%	86.4%	82.4%	87.5%	
Nov	70.9%	71.8%	76.5%	68.5%	70.1%	
Dec	61.5%	62.3%	64.0%	66.8%	64.8%	
	75.7%	76.4%	79.0%	78.9%	75.5%	79.8%

SOURCE: PKF CONSULTING

## Employment

The City benefits from a highly skilled, educated and professional labor force. Key industries include tourism, real estate, banking and finance, retailing, apparel design and manufacturing. Emerging industries include multimedia and bioscience. See the Table below for more information on the top employment sectors in the City and County of San Francisco (CCSF). According to the California Employment Development Department, the unemployment rate for the City was 9.7% for August 2010 compared with an unadjusted unemployment rate of 12.4% for the State. See the tables below for more information on the civilian labor of employment and unemployment in the CCSF; and employment by industry from 2004-2008.

**CITY AND COUNTY OF SAN FRANCISCO**  
**Civilian Labor Force, Employment, and Unemployment<sup>1</sup>**  
**August 2009 and August 2010<sup>2</sup>**

Year	Area	Labor Force	Employment	Unemployment	Unemployment Rate
Aug-10	San Francisco	456,900	412,600	44,400	9.7%
	State	18,229,500	15,968,000	2,261,500	12.4%
Aug-09	San Francisco	462,200	417,000	45,200	9.8%
	State	18,219,600	16,039,500	2,180,200	12.0%

<sup>1</sup> The Unemployment Rate and Labor Force data are based upon "place of residence" – where people live, regardless of where they work. Individuals who have more than one job are counted only once. Civilian Labor Force is the sum of civilian employment and civilian unemployment. Civilian Employment includes all individuals who worked during the week including the 12th of the month. Civilian Unemployment includes those individuals who were not working but were able, available, and actively looking for work. Unemployment Rate is the number of unemployed divided by the labor force then multiplied by 100.

<sup>2</sup> Data not seasonally adjusted.

Source: California Employment Development Department (EDD), Labor Market Information Division.

**CITY AND COUNTY OF SAN FRANCISCO**  
**Estimated Average Annual Employment by Sector, 2004-2008**

	2004	2005	2006	2007	2008
Professional and Business Services	100,400	105,000	110,800	120,900	125,100
Government	83,900	86,200	88,100	89,900	91,100
Leisure and Hospitality	70,700	72,100	73,800	76,400	78,600
Trade, Transportation and Utilities	70,000	69,600	69,100	68,800	67,900
Financial Activities	57,300	57,300	57,800	58,600	57,700
Educational and Health Service	54,400	55,100	56,000	57,400	58,100
Other Services	21,100	21,300	21,400	21,900	22,300
Information	19,100	17,300	18,300	19,700	19,100
Manufacturing	12,300	11,400	11,200	10,600	10,800
<b>Total</b>	<b>489,200</b>	<b>495,300</b>	<b>506,500</b>	<b>524,200</b>	<b>530,700</b>

Source: California Employment Development Department (EDD), Labor Market Information Division.

The table below lists the ten largest employers in the City as of December 2009.

CITY AND COUNTY OF SAN FRANCISCO Largest Employers in San Francisco, 2009		
Employer	Number of Employees in SF	Nature of Business
City & County of San Francisco	26,554	City Government
University of California, San Francisco	24,759	Education
Wells Fargo Bank	9,214	Financial Services
California Pacific Medical Center	6,800	Health Care
Kaiser Permanente	5,629	Health Care
State of California	5,555	State Government
U.S. Postal Service	4,697	Postal Service
PG&E Corp.	4,394	Utility
Gap Inc.	3,804	Specialty Retailer
Charles Schwab & Co. Inc.	3,000	Financial Services
City College of San Francisco	3,000	Education

Source: San Francisco Business Times Book of Lists 2010 (2009 data), ranked by number of employees, and the San Francisco Center for Economic Development (SFCED)

## Taxable Sales

The following table provides information on taxable sales for the City for calendar years 2004 through 2008. Total retail sales decreased in 2008 by approximately \$0.2 billion compared to 2007. Data for full years after 2008 are not available from the California State Board of Equalization at this time.

CITY AND COUNTY OF SAN FRANCISCO Taxable Sales – Calendar Year 2004-2008 (\$ Thousands)					
	2004	2005	2006	2007	2008 <sup>1</sup>
Apparel	\$ 826,686	\$ 880,718	\$ 941,299	\$ 1,028,602	\$ 1,228,156
General Merchandise	1,143,657	1,199,308	1,280,908	1,349,158	1,169,571
Specialty Stores <sup>2</sup>	2,084,323	2,212,530	2,322,789	1,528,826	1,279,921
Food Stores	419,286	439,472	454,970	480,587	501,880
Eating/Drinking	2,067,418	2,237,384	2,367,548	2,589,892	2,749,584
Home Furnishings and Appliances	527,519	575,985	598,279	608,766	616,325
Building Materials	353,002	397,218	428,795	459,332	411,392
Automotive <sup>3</sup>	850,984	956,031	1,031,786	1,068,661	1,033,216
Other Retail Stores <sup>2</sup>	141,906	151,142	162,146	892,748	814,591
<b>Retail Stores Total</b>	<b>\$ 8,414,781</b>	<b>\$ 9,049,788</b>	<b>\$ 9,588,520</b>	<b>\$10,006,572</b>	<b>\$ 9,804,636</b>
Bus. & Personal Svcs	\$ 937,411	\$ 939,108	\$ 999,112	\$ 1,001,472	\$ 1,014,379
All Other Outlets	2,855,315	3,037,078	3,304,556	3,606,692	4,018,674
<b>Total All Outlets</b>	<b>\$12,207,507</b>	<b>\$13,025,974</b>	<b>\$13,892,188</b>	<b>\$14,614,736</b>	<b>\$14,837,689</b>

<sup>1</sup> Most recent annual data available.

<sup>2</sup> For 2007 and 2008, the California State Board of Equalization data combined Specialty Stores and All Other Retail Stores under one category. This data is separated in these years for the purposes of this Table

<sup>3</sup> Service Stations is a new category in 2007 and 2008 and is categorized under Automotive in those years.

Source: California State Board of Equalization - Taxable Sales in California (Sales & Use Tax) Annual Reports

Because two-thirds of SFPUC’s water is sold to customers outside of San Francisco, key highlights from those counties where most of the wholesale water customers reside are also included.

## San Mateo County, Alameda County and Santa Clara County Economy and General Information

The information in this section provides economic and demographic information concerning the Counties of San Mateo, Alameda and Santa Clara, and has been collected from the Counties or, as noted, third-party sources. The historical economic and demographic data set forth in section is current as of the dates indicated. Data as of 2009 relates to the current downturn in the economy; but the majority of such data relate to periods prior to the downturn. The inclusion in this section of historical data relating to periods prior the economic downturn should not be regarded as a representation by the SFPUC with respect to current or future levels of economic activity, economic performance or demographic changes.

### County of San Mateo and General Information

The County of San Mateo (“San Mateo County”) was established on April 19, 1856. Located on the San Francisco Peninsula, coastal mountains run north and south through San Mateo County, dividing the lightly-populated western part from the heavily-populated eastern corridor between San Francisco and Santa Clara/Silicon Valley. San Mateo County covers 446 square miles and contains 20 incorporated cities and the San Francisco International Airport. As of January 1, 2009, the estimated population was 745,654.

### Population

The following table shows population data for San Mateo County, its six largest cities, and the State of California (the “State”), reported as of January 1 for each of the five calendar years set forth below. San Mateo County’s population increased by approximately 3.6% during the five-year period.

COUNTY OF SAN MATEO Six Largest Cities and State of California, 2005-2009 <sup>1</sup>					
	2005	2006	2007	2008	2009
San Mateo County	719,844	722,683	727,719	736,494	745,654
<b>Six Largest Cities:</b>					
Daly City	104,194	104,560	105,256	105,883	107,083
San Mateo	93,883	94,170	94,798	95,431	96,529
Redwood City	75,723	75,971	76,454	76,991	77,796
So. San Francisco	61,444	61,729	62,143	63,512	65,000
San Bruno	41,301	41,451	41,828	43,286	43,798
Pacifica	38,542	38,679	38,956	39,473	39,984
State of California	36,676,931	37,087,005	37,463,609	37,871,509	38,255,508

<sup>1</sup> As of January 1 for the year shown.

Source: State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 Benchmark. Sacramento, California, May 2010.



## Employment

The table set forth below shows annual averages of the estimated number of wage and salary workers by industry for calendars year 2004 through 2008.

COUNTY OF SAN MATEO					
Estimated Average Annual Employment by Sector, 2004-2008					
	2004	2005	2006	2007	2008
Total Farm	2,200	1,900	1,900	2,000	1,900
Total Nonfarm	325,300	325,600	332,200	338,000	336,900
Manufacturing	29,100	28,700	29,900	30,800	29,700
Trade, Transportation & Utilities	75,600	74,800	75,000	75,300	74,700
Information	21,100	20,500	18,500	17,400	18,600
Financial Activities	20,800	21,200	21,700	21,500	20,400
Professional & Business Services	57,000	59,500	61,300	63,400	65,200
Education & Health Services	30,200	30,200	31,400	32,100	32,600
Leisure & Hospitality Services	30,700	31,400	33,500	34,900	34,200
Other <sup>1</sup>	28,700	27,200	28,700	30,500	29,700
Government	32,100	32,100	32,200	32,100	31,800
<b>Total All Industries</b>	<b>325,300</b>	<b>325,600</b>	<b>332,200</b>	<b>338,000</b>	<b>336,900</b>

Source: California Employment Development Department (EDD), Labor Market Information Division.

The table below lists 25 major employers in San Mateo County, as reported by the California Employment Development Department.

SAN MATEO COUNTY Major Employers		
Employer Name	Location	Industry
<b>5,000 – 9,999 Employees</b>		
Oracle	Redwood City	Computer Software-Manufacturers
US Interior Department	Menlo Park	Federal Government-Conservation Departments
<b>1,000 – 4,999 Employees</b>		
Applied Biosystems	Foster City	Physicians & Surgeons Equipment & Supplies-Manufacturers
Electronic Arts, Inc.	Redwood City	Game Designers (Manufacturers)
Franklin Resources	San Mateo	Investment Management
Franklin Templeton Group	San Mateo	Investment Management
Franklin Trust Company	San Mateo	Mutual Funds
Genentech, Inc.	So. San Francisco	Drug Millers (Manufacturers)
Guckenheimer	Redwood City	Food Service-Management
Health Science Library	Daly City	Services NEC
Kaiser Foundation Medical Group	So. San Francisco	Physicians & Surgeons
Kaiser Permanente Medical Center	Redwood City	Hospitals
Mills Peninsula Health Services	Burlingame	Schools-Universities & Colleges Academic
San Mateo County Mental Health	San Mateo	County Government-Social/Human Resources
San Mateo Medical Center	San Mateo	Crisis Intervention Service
Sing Shot Media LLC	Redwood City	Advertising NEC
Stanford Linear Accelerator	Menlo Park	Research-Service
Visa International Service Association	Foster City	Credit Card-Merchant Services
Visa USA, Inc.	Foster City	Credit Card & Other Credit Plans
<b>500-999 Employees</b>		
Bay Meadows Racecourse	San Mateo	Horse Racing
Burlingame Millbrae Yellow Cab	Burlingame	Taxicabs & Transportation Service
Rudolph & Sletten, Inc.	Redwood City	Building Contractors
San Mateo County Human Services	Belmont	County Government-Social/Human Resources
San Mateo County Sheriff's Office	Redwood City	Police Departments
San Mateo County Transit	San Carlos	Transit Lines

Source: State of California, Employment Development Department (EDD), Labor Market Information Division; EDD extracted this information from the America's Labor Market Information (ALMIS) Employer Database, 2010 2<sup>nd</sup> Edition.

The following table shows unemployment rates for San Mateo County, the State and the United States. During each of the years set forth in the table, the unemployment rate in San Mateo County has been lower than the unemployment rate in the State and in the United States.

COUNTY OF SAN MATEO Unemployment Rates, 1999-2009			
Year	County of San Mateo	California	United States
1999	2.0%	5.3%	4.2%
2000	2.9%	4.9%	4.0%
2001	3.8%	5.4%	4.7%
2002	5.7%	6.7%	5.8%
2003	5.8%	6.8%	6.0%
2004	4.9%	6.2%	5.5%
2005	4.3%	5.4%	5.1%
2006	3.7%	4.9%	4.6%
2007	3.8%	5.3%	4.6%
2008	4.8%	7.2%	5.8%
2009	8.6%	11.4%	9.3%

Source: State of California, Employment Development Department, Labor Market Information Division and US Department of Labor, Bureau of Labor Statistics.

## Taxable Sales

The table set forth below shows taxable sales by type of business for the calendar years 2004 through 2008.

COUNTY OF SAN MATEO Taxable Sales – Calendar Year 2004-2008 (\$ Thousands)					
Type of Business	2004	2005	2006	2007	2008
Apparel Stores	\$337,738	\$365,474	\$398,192	\$425,086	\$472,321
General Merchandise Stores	1,226,528	1,247,946	1,313,029	1,363,715	1,287,235
Specialty Stores <sup>2</sup>	1,129,654	1,217,982	1,249,966	907,197	724,092
Food Stores	401,438	408,881	411,438	430,879	436,383
Eating and Drinking Places	1,019,966	1,111,150	1,158,608	1,245,105	1,279,611
Home Furnishings and Appliances	510,736	515,133	512,423	535,371	541,919
Building Materials	915,860	929,948	908,205	846,050	762,664
Automotive <sup>3</sup>	2,356,664	2,485,052	2,544,725	2,588,069	2,293,563
Other Retail Stores <sup>2</sup>	190,351	213,553	226,557	657,509	623,940
<b>Total Retail Outlets</b>	<b>8,088,935</b>	<b>8,495,119</b>	<b>8,723,143</b>	<b>8,998,981</b>	<b>8,421,728</b>
Business and Personal Services	480,851	614,539	677,986	632,367	614,557
All Other Outlets	3,238,288	3,341,692	3,499,262	3,694,958	4,101,629
<b>Total All Outlets</b>	<b>\$11,808,074</b>	<b>\$12,451,350</b>	<b>\$12,900,391</b>	<b>\$13,326,306</b>	<b>\$13,137,913</b>

<sup>1</sup> Most recent annual data available.

<sup>2</sup> For 2007 and 2008, the California State Board of Equalization data combined Specialty Stores and All Other Retail Stores under one category. This data is separated in these years for the purposes of this Table.

<sup>3</sup> Service Stations is a new category in 2007 and 2008 and is categorized under Automotive in those years.

Source: California State Board of Equalization - Taxable Sales in California (Sales & Use Tax) Annual Reports.

Effective Buying Income (EBI) is defined as money income less personal income tax and non-tax payments, such as fines, fees or penalties. The table below summarizes median household EBI for San Mateo County, the State and the United States for the calendar years 2005 through 2009 which is the most current calendar year information available.

COUNTY OF SAN MATEO Median Household Effective Buying Income, 2005-2009			
Year	County of San Mateo	California	United States
2005	\$50,703	\$43,915	\$39,324
2006	60,284	44,681	40,529
2007	62,749	46,275	41,255
2008	65,262	48,203	41,792
2009	67,466	48,952	42,303

Source: "Survey of Buying Power", Sales and Marketing Management Magazine for year 2005; Trade Dimensions International, Inc. – Demographics USA for years 2006 through 2008; surveyofbuyingpower.com. Sales & Marketing Management, n.d. Web 25 June 2010 for year 2009. via: Burlingame Financing Authority, Storm Drainage Revenue Bonds, Series 2010.

### *County of Alameda General Information*

Alameda County is located on the east side of the San Francisco Bay and extends from the Cities of Berkeley and Albany in the north to the City of Fremont in the south. It is the seventh most populous county in the State, with most of its population concentrated in a highly urbanized area between the San Francisco Bay and the East Bay Hills.

The northern part of Alameda County has direct access to San Francisco Bay and the City of San Francisco. It is highly diversified with residential areas as well as traditional heavy industry, the University of California at Berkeley, the Port of Oakland, and sophisticated manufacturing, computer services and biotechnology firms. The middle of Alameda County is also highly developed, including older established residential and industrial areas. The southwestern corner of Alameda County has seen strong growth in residential development and manufacturing. Many high-tech firms have moved from neighboring Silicon Valley in Santa Clara County into this area. The southeastern corner of Alameda County has seen the most development in recent years due to land availability. Agriculture and the rural characteristics of this area are disappearing as the area maintains its position as the fastest growing residential, commercial and industrial part of Alameda County.

### **Population**

The following table summarizes population figures for Alameda County.

COUNTY OF ALAMEDA Population 1980, 1990, 2000, 2006-2010	
Year	Population
1980	1,105,379
1990	1,279,182
2000	1,443,939
2006	1,506,214
2007	1,519,250
2008	1,538,054
2009	1,557,749
2010	1,574,857

Source: The 1980 and 1990 data are U.S. Census figures. The figures for the years 2000 and 2005 through 2009 are from the State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 Benchmark. Sacramento, California, May 2010.

## Employment

The following table summarizes historical employment and unemployment in the Oakland Metropolitan Statistical Area (“MSA”), which is comprised of both Alameda and Contra Costa Counties.

OAKLAND Metropolitan Statistical Area (MSA) Civilian Labor Force, Employment and Unemployment Annual Averages					
	2005	2006	2007	2008	2009
Employment	1,183,800	1,197,500	1,207,900	1,208,500	1,153,000
Unemployment	62,700	54,700	59,200	79,200	135,600
<b>Total Civilian Labor Force</b>	<b>1,246,500</b>	<b>1,252,200</b>	<b>1,267,100</b>	<b>1,287,700</b>	<b>1,288,600</b>
Unemployment Rate	5.0%	4.4%	4.7%	6.2%	10.5%

<sup>1</sup> The Unemployment Rate and Labor Force data are based upon "place of residence" – where people live, regardless of where they work. Individuals who have more than one job are counted only once. Civilian Labor Force is the sum of civilian employment and civilian unemployment. Civilian Employment includes all individuals who worked during the week including the 12th of the month. Civilian Unemployment includes those individuals who were not working but were able, available, and actively looking for work. Unemployment Rate is the number of unemployed divided by the labor force then multiplied by 100.

<sup>2</sup> Data not seasonally adjusted.

Source: California Employment Development Department (EDD), Labor Market Information Division.

The following table summarizes the historical numbers of workers in the Oakland Metropolitan Statistical Area, which is comprised of both Alameda and Contra Costa Counties, by industry.

OAKLAND MSA Estimated Average Annual Employment by Sector, 2005-2009					
	2005	2006	2007	2008	2009
Agricultural	1,600	1,500	1,500	1,400	1,500
Natural Resources and Mining	1,100	1,200	1,200	1,200	1,200
Construction	72,800	73,300	71,700	64,900	53,500
Manufacturing	95,600	95,800	94,400	93,100	82,500
Trade, Transportation and Utilities	195,000	197,100	199,300	193,000	178,900
Information	30,700	30,100	29,000	27,800	25,200
Financial Activities	69,500	67,700	62,400	57,200	52,500
Professional and Business Services	150,600	154,900	158,000	162,200	148,500
Educational and Health Services	118,500	121,800	124,200	128,700	130,000
Leisure and Hospitality	83,000	85,600	88,000	89,100	85,200
Other Services	35,600	35,900	36,200	36,100	34,300
Government	180,000	182,000	183,900	177,200	174,600
<b>Total All Industries</b>	<b>1,034,000</b>	<b>1,046,900</b>	<b>1,049,800</b>	<b>1,031,900</b>	<b>967,900</b>

Source: California Employment Development Department (EDD), Labor Market Information Division.

## Major Employers

The following table lists 25 major employers in Alameda County.

ALAMEDA COUNTY Major Employers		
Employer Name	Location	Industry
<i>More than 10,000 Employees</i>		
Oracle	Pleasanton	Computer Software-Manufacturers
University of California-Berkeley	Berkeley	Schools-Universities & Colleges Academic
Western Digital Corp	Fremont	Computer Storage Devices (Manufacturers)
<i>5,000 - 9,999 Employees</i>		
Lawrence Berkeley National Lab	Berkeley	Physicians & Surgeons
Lawrence Livermore National Lab	Berkeley	Laboratories-Testing
<i>1,000 - 4,999 Employees</i>		
Alameda County Law Enforcement	Oakland	Sheriff
Alameda County Sheriff Department	Pleasanton	Sheriff
Alta Bates Medical Center, Inc.	Berkeley	Hospitals
Bayer Corporation	Berkeley	Drug Millers (Manufacturers)
Berkeley Coin & Stamp	Berkeley	Coin Dealers Supplies & Etc.
Children's Hospital & Research	Oakland	Hospitals
Clorox Company	Oakland	Specialty Cleaning/Sanitation (Manufacturers)
Clorox Company	Pleasanton	Specialty Cleaning/Sanitation (Manufacturers)
Cooper Vision, Inc.	Pleasanton	Contact Lenses-Manufacturers
East Bay Water	Oakland	Municipal Water
EMC Corporation	Pleasanton	Computer Storage Devices (Manufacturers)
Fairmont Hospital	San Leandro	Hospitals
Kaiser Permanente Hospital	Hayward	Hospitals
Kaiser Permanente Medical Center	Oakland	Hospitals
New United Motor Mfg, Inc.	Fremont	Automobile & Truck Brokers
Residential & Student Services Program	Berkeley	Giftwares-Manufacturers
Transportation Department-California	Oakland	State Government-Transportation Programs
US Berkeley Extension	Berkeley	Schools-Universities & Colleges Academic
Washington Hospital Healthcare	Fremont	Hospitals
Waste Management, Inc.	Oakland	County Government-Environmental Programs

Source: State of California, Employment Development Department (EDD), Labor Market Information Division; EDD extracted this information from the America's Labor Market Information (ALMIS) Employer Database, 2010 2<sup>nd</sup> Edition.

## County of Santa Clara Economy and General Information

The County of Santa Clara ("Santa Clara County") lies immediately south of San Francisco Bay and is the sixth most populous county in the State. It encompasses an area of approximately 1,316 square miles. Named after Mission Santa Clara, which was established in 1777, and named for Saint Clara of Assisi, Italy, Santa Clara County was incorporated in 1850 as one of the original 28 counties of the State and operates under a home rule charter adopted by Santa Clara County voters in 1950 and amended in 1976 (the "Santa Clara County Charter").

The southern portion of Santa Clara County has retained the agricultural base which once existed throughout the area and has two cities, separated by roughly twenty miles. The northern portion of Santa Clara County is densely populated, extensively urbanized and heavily industrialized. It contains 15 cities, the largest of which is the City of San Jose, the third largest city in the State and the county seat. The uppermost northwestern portion of Santa Clara County, with its concentration of high-technology, electronics-oriented industry, is popularly referred to as the “Silicon Valley.” Large employers include Cisco Systems, Inc., Hewlett-Packard, Intel, National Semiconductor, Lockheed Martin Space Systems and IBM.

## Recent Annual Population Changes

All of the cities in Santa Clara County reported population increases over the period 2000 to 2009, with Gilroy posting the largest population growth (24.2 percent). The number of residents living in the unincorporated areas of Santa Clara County decreased by 6.0 percent within the same period. From 2005 to 2009, Santa Clara County’s population rose by approximately 11.4 percent. Approximately 5.0 percent of Santa Clara County’s residents live in unincorporated areas, but the number has steadily decreased over time as the population continues to migrate toward the cities. Milpitas had the largest percentage increase in population from 2008 to 2009, with a 2.5 percent gain. Palo Alto and San Jose followed closely with 2.2 percent each. By the year 2020, it is predicted that Santa Clara County’s population will grow to approximately 2.0 million residents. The following table provides a historical summary of population in Santa Clara County and its incorporated cities as of January 1 of calendar years 2005 through 2009.

SANTA CLARA COUNTY Population, 2005-2009					
	2005	2006	2007	2008	2009
Campbell	38,276	38,378	39,515	39,978	40,415
Cupertino	53,012	53,549	54,584	55,045	55,838
Gilroy	47,489	48,479	49,345	50,933	51,505
Los Altos	27,513	27,584	27,941	28,165	28,457
Los Altos Hills	8,420	8,475	8,556	8,799	8,890
Los Gatos	28,872	28,965	29,236	30,161	30,495
Milpitas	64,771	65,223	66,191	69,115	70,812
Monte Sereno	3,493	3,510	3,544	3,564	3,619
Morgan Hill	36,292	37,061	38,193	39,042	39,813
Mountain View	71,770	71,934	72,829	73,598	74,758
Palo Alto	61,451	62,096	62,245	63,080	64,480
San Jose	941,435	952,897	967,964	985,047	1,006,846
Santa Clara	108,717	110,682	113,575	114,988	117,237
Saratoga	30,740	30,811	31,217	31,451	31,679
Sunnyvale	132,601	133,435	134,921	136,915	138,819
<b>Incorporated</b>	<b>1,654,852</b>	<b>1,673,079</b>	<b>1,699,856</b>	<b>1,729,881</b>	<b>1,763,663</b>
Balance Of County	97,844	98,212	97,767	99,096	93,853
<b>County Total</b>	<b>1,752,696</b>	<b>1,771,291</b>	<b>1,797,623</b>	<b>1,828,977</b>	<b>1,857,516</b>

As of January 1 for the years shown.

Source: State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 Benchmark. Sacramento, California, May 2010.

## Employment and Industry

Santa Clara County is home to a highly skilled and diverse work force, a situation that has traditionally translated into lower countywide average unemployment rates when compared to State and national average unemployment rates. However, in 2002 and 2003, Santa Clara County’s unemployment rate rose sharply as a result of the retraction in the communications and high technology industries that dominate Santa Clara County’s employment base. In 2003 alone, annual average employment figures showed a drop in jobs within Santa Clara County of approximately 36,500 in comparison to 2002. In 2003 Santa Clara County’s unemployment rate was reported to have reached an average of 8.3 percent, 1.5 percent higher than that of the State’s. These estimates are based solely on unemployment benefit claims, which excludes those who have chosen other options as an alternative to unemployment (such as early

retirement or relocation) or have exhausted unemployment benefits. Cycles of business growth and retraction are customary in Santa Clara County, particularly in the high-tech industry.

According to the California Employment Development Department, the 2009 annual average of the labor force in Santa Clara County was an estimated 877,800 compared to 874,100 in 2008. From 2008 to 2009, unemployment in Santa Clara County rose from 6.0 percent (52,100 unemployed) to 11.0 percent (96,400 unemployed), primarily due to the economic recession. The unemployment rate in Santa Clara County as of December 2009 was higher than the nationwide unemployment rate of 9.3 percent and slightly lower than the State unemployment rate of 11.4 percent during the same period.

In August 2010, the Employment Development Department reported preliminary numbers showing that there were an estimated 884,300 people in the labor force in Santa Clara County, with 785,800 employed and 98,500 unemployed. The unemployment rate in Santa Clara County in August 2010 was 11.1 percent, which is higher than the nationwide unemployment rate of 9.6 percent, and lower than the State unemployment rate of 12.4 percent during the same period.

Within Santa Clara County, development of high technology and high technology jobs have been enhanced by the presence of Stanford University, Santa Clara University, San Jose State University, other institutions of higher education, research and development facilities such as SRI International, the Stanford Linear Accelerator Center, and Ames Research Center (NASA). In addition, the Rincon de los Esteros Redevelopment Area in northern San Jose has been the site of industrial/research and development submarkets in Silicon Valley.

The following table lists wage and salary employment in Santa Clara County by industry from 2004 to 2009.

Santa Clara County						
Civilian Labor Force and Annual Employment by Sector, 2004-2009						
Industry Employment	2004	2005	2006	2007	2008	2009
Civilian Labor Force	824,900	817,000	826,300	848,500	874,100	877,800
Civilian Employment	771,700	773,200	789,300	808,900	822,000	781,400
Civilian Unemployment	53,200	43,700	37,000	39,600	52,100	96,400
Civilian Unemployment Rate	6.4%	5.3%	4.5%	4.7%	6.0%	11.0%
<b>Total, Wage and Salary</b>	<b>853,000</b>	<b>860,100</b>	<b>879,800</b>	<b>900,300</b>	<b>904,700</b>	<b>847,200</b>
Total Farm	4,100	3,800	3,800	3,900	3,700	3,700
Total Nonfarm	848,900	856,300	876,000	896,500	901,500	843,500
<b>Goods Producing</b>						
Natural Resources & Mining	100	200	300	300	300	200
Construction	41,500	42,700	44,900	45,500	42,800	32,900
Manufacturing	171,800	168,000	160,600	163,800	165,200	153,500
<b>Subtotal Goods Producing</b>	<b>213,400</b>	<b>211,000</b>	<b>205,800</b>	<b>209,600</b>	<b>208,200</b>	<b>186,700</b>
<b>Service Providing</b>						
Trade, Transportation and Utilities	128,300	130,300	134,500	137,300	135,300	124,200
Information	32,500	35,200	37,400	39,500	42,200	41,000
Financial Activities	35,100	36,000	36,700	36,800	34,200	31,400
Professional and Business Services	158,000	159,100	170,300	176,600	178,000	161,200
Education and Health Services	94,400	96,100	99,700	102,500	107,200	107,300
Leisure and Hospitality	69,400	71,400	73,700	75,300	76,600	72,900
Other	24,600	24,200	24,300	24,600	25,000	23,900
Government	93,200	92,900	93,600	94,300	94,800	94,800
<b>Subtotal Service Providing</b>	<b>635,500</b>	<b>645,300</b>	<b>670,200</b>	<b>686,900</b>	<b>693,300</b>	<b>656,800</b>

The unemployment rate is calculated using unrounded data. Data may not add due to rounding.

Source: California Employment Development Department (EDD), Labor Market Information Division.



## Major Employers

Santa Clara County is home to numerous high technology and computer software and hardware manufacturing companies, which, together with public sector employers, continue to top the list of the largest employers in Santa Clara County. The County ranks as the number one public sector employer, with all departments collectively employing over 15,000 workers. The City of San Jose alone has over 7,000 full-time employees. Although there have been hiring freezes and cut-backs that have impacted public-sector organizations, such organizations typically tend to remain more stable in a volatile job market.

The table below lists 25 major employers in Santa Clara County, as reported by the California Employment Development.

SANTA CLARA COUNTY Major Employers		
Employer Name	Location	Industry
<i>More than 10,000 Employees</i>		
Cisco Systems, Inc.	San Jose	Computer Peripherals (Manufacturers)
<i>5,000 – 9,999 Employees</i>		
Applied Materials, Inc.	Santa Clara	Semiconductor Devices (Manufacturers)
Avago Technologies, Ltd.	San Jose	Exporters
Flextronics International	Milpitas	Solar Energy Equipment-Manufacturers
Fujitsu IT Holdings, Inc.	Sunnyvale	Computers-Wholesale
Intel Corporation	Santa Clara	Semiconductor Devices (Manufacturers)
Oracle	Cupertino	Computer Software (Manufacturers)
<i>1,000 – 4,999 Employees</i>		
AAA-Affordable Tutoring	Santa Clara	Tutoring
Adobe Systems, Inc.	San Jose	Publishers-Computer Software (Manufacturers)
Advanced Micro Devices, Inc.	Sunnyvale	Semiconductors & Related Devices (Manufacturers)
Apple, Inc.	Cupertino	Computers-Electronics-Manufacturers
California's Great America	Santa Clara	Marketing Programs & Services
Christopher Ranch LLC	Gilroy	Garlic (Manufactures)
E4E, Inc.	Santa Clara	Venture Capital Companies
El Camino Hospital	Mountain View	Hospitals
Fujitsu Ltd.	Sunnyvale	Venture Capital Companies
Goldsmith Seeds, Inc.	Gilroy	Florists-Retail
Hewlett-Packard	Cupertino	Computers/Electronics – Manufacturers
HP Pavilion at San Jose	San Jose	Stadiums Arenas & Athletic Fields
Kaiser Permanente Medical Center	San Jose	Hospitals
Microsoft Corp	Mountain View	Computer Software (Manufacturers)
National Semiconductor Corp.	Santa Clara	Semiconductor Devices (Manufacturers)
Net App, Inc.	Sunnyvale	Semiconductor Devices (Manufacturers)
Santa Teresa Community Hospital	San Jose	Hospitals
VA Medical Center-Palo Alto	Palo Alto	Hospitals

Source: State of California, Employment Development Department (EDD), Labor Market Information Division; EDD extracted this information from the America's Labor Market Information (ALMIS) Employer Database, 2010 2<sup>nd</sup> Edition.

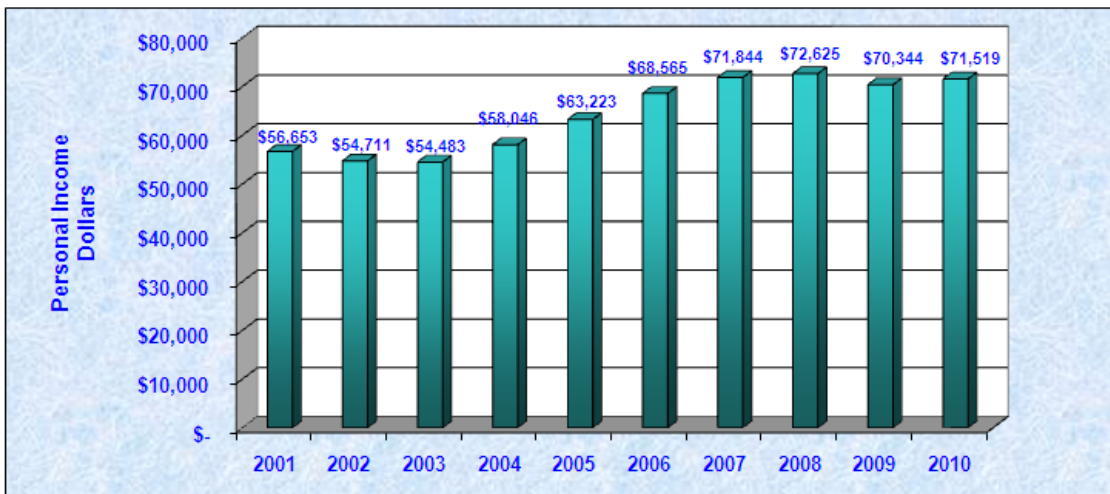
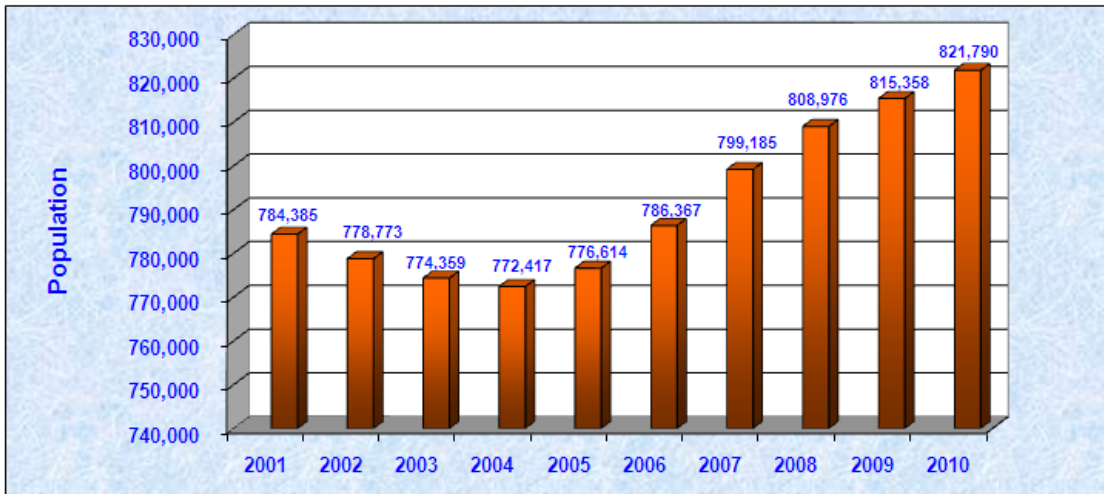
## Income

Owing to the presence of relatively high-wage skilled jobs and wealthy residents, Santa Clara County historically achieves high rankings relative to the rest of the State on a variety of income measurements. The per capita personal income in Santa Clara County decreased slightly from \$59,365 in 2007 to \$58,531 in 2008, which is higher than the national level of \$44,038 and the estimated State level of \$40,673.

Demographic and Economic Information

Population and Income  
Fiscal Years Ending 2001 - 2010

Year	Population <sup>(1)</sup>	Per Capita Personal Income <sup>(2)</sup>
2001	784,385	56,653
2002	778,773	54,711
2003	774,359	54,483
2004	772,417	58,046
2005	776,614	63,223
2006	786,367	68,565
2007	799,185	71,844
2008	808,976	72,625
2009	815,358 <sup>(3)</sup>	70,344 <sup>(4)</sup>
2010	821,790 <sup>(3)</sup>	71,519 <sup>(4)</sup>



Source: Office of the Controller, City and County of San Francisco

- (1) US Census Bureau
- (2) US Bureau of Economic Analysis. Fiscal years 2001 - 2008 is updated from last year's CAFR with newly available data
- (3) Personal income was estimated by assuming that its percentage of state personal income in 2009 and 2010 remained at the 2008 level of 3.6 percent
- (4) Per capita personal income for 2009 and 2010 was estimated by dividing the estimated personal income for 2009 and 2010 by the reported and estimated population in 2009 and 2010, respectively

Demographic & Economic Information

Principal Employers  
Current Year and Eight Years Ago

Employer	Year 2009 <sup>(1)</sup>			Year 2001 <sup>(2)</sup>		
	Employees	Rank	Percentage of Total City Employment	Employees	Rank	Percentage of Total City Employment <sup>(3)</sup>
City and County of San Francisco	26,554	1	5.1 %	29,610	1	6.3 %
University of California, San Francisco	24,759	2	4.7	13,835	2	2.9
Wells Fargo & Co	9,214	3	1.8	6,366	5	1.4
California Pacific Medical Center	6,800	4	1.3	—	-	0.0
Kaiser Permanente	5,629	5	1.1	—	-	0.0
State of California	5,555	6	1.1	11,296	3	2.4
San Francisco Unified School District	5,313	7	1.0	5,579	6	1.2
United States Postal Service	4,697	8	0.9	4,500	10	1.0
PG&E Corporation	4,394	9	0.8	5,000	8	1.1
Gap, Inc.	3,804	10	0.7	—	-	0.0
Charles Schwab & Co. Inc.	—	-	—	9,873	4	2.1
AT&T	—	-	—	5,200	7	1.1
Pacific Bell/SBC Communications	—	-	—	4,600	9	1.0
<b>Total</b>	<b>96,719</b>		<b>18.4 % <sup>(4)</sup></b>	<b>95,859</b>		<b>20.4 % <sup>(4)</sup></b>
<b>Total City Employment</b>			<b>524,300</b>			<b>469,388</b>

(1) The latest data as of calendar year-end 2009 is presented. San Francisco Unified School District employment based on 2008 data

(2) Information is not available for 1999 or 2000

(3) Percentages have been restated based on updated employment information, and as a result, may differ from amounts reported in The Comprehensive Financial Report for the City and County of San Francisco

(4) May not total due to rounding

Source: Total City and County of San Francisco employee count is obtained from the State of California Employee Development Department. All other data is obtained from the San Francisco Business Times Book of Lists

City and County of San Francisco  
Office of the Controller  
Economic Barometer - June 2010



	Most Recent Month/Quarter	Value	Adjusted Recent Change	Year-to-Year Change	Five-Year Position	Trend
<b>Economy-Wide</b>						
San Francisco Unemployment Rate <sup>1</sup>	Jun-10	9.6%	-0.5%	0.0%	<b>Weak</b>	<b>Neutral</b>
Number of Unemployed, San Francisco County <sup>1</sup>	Jun-10	43,800	-1,900	-100	<b>Weak</b>	<b>Neutral</b>
Consumer Price Index (CPI-U), San Francisco MSA <sup>2</sup>	Jun-10	228.1	0.3%	1.1%	<b>Strong</b>	<b>Positive</b>
County Adult Assistance Program (CAAP) Caseload <sup>3</sup>	Jun-10	7,517	1.4%	9.6%	<b>Neutral</b>	<b>Negative</b>
Total Employment, San Francisco MD <sup>1</sup>	Jun-10	923,400	-0.5%	-2.5%	<b>Weak</b>	<b>Negative</b>
Temporary employment, San Francisco MD <sup>1</sup>	Jun-10	14,200	-1.4%	2.2%	<b>Weak</b>	<b>Neutral</b>
<b>Real Estate</b>						
Median Home Sales Price <sup>4</sup>	Jun-10	\$663,500	3.6%	4.5%	<b>Neutral</b>	<b>Neutral</b>
Average 1BR Asking Rent <sup>5</sup>	Jun-10	\$1,895	1.1%	4.0%	<b>Neutral</b>	<b>Positive</b>
<b>Tourism</b>						
Domestic Air Passengers <sup>6</sup>	Jun-10	2,758,396	-0.3%	4.2%	<b>Strong</b>	<b>Positive</b>
International Air Passengers <sup>6</sup>	Jun-10	841,104	1.3%	10.7%	<b>Strong</b>	<b>Positive</b>
Hotel Average Daily Rate <sup>7</sup>	Jun-10	\$153.33	-2.0%	5.4%	<b>Weak</b>	<b>Neutral</b>
Hotel Occupancy Rate <sup>7</sup>	Jun-10	84.1%	-4.1%	3.6%	<b>Strong</b>	<b>Neutral</b>
<b>Retail</b>						
Average Daily Parking Garage Customers <sup>8</sup>	Jun-10	10,008	-0.7%	-10.0%	<b>Weak</b>	<b>Negative</b>
Powell St. BART Average Saturday Exits <sup>9</sup>	Jun-10	21,451	-2.7%	-8.7%	<b>Weak</b>	<b>Negative</b>

Adjusted recent change is a seasonally-adjusted percentage change to the most recent month or period from the prior one.

Temporary employment refers to employment in the "Employment Services" industry.

Year-to-Year change is the percentage change from a given month or quarter to the same one last year.

Five-year position is a relative measure of how strong or weak the indicator is compared to the average over the last five years.

Unemployment and hotel occupancy rate changes are shown as a percentage point difference, not a percentage change.

Parking garages include Union Square, Fifth-Mission, Sutter-Stockton, and Ellis-O'Farrell.

Sources:

[1] – California Employment Development Department. MD refers to the San Francisco Metropolitan Division: San Francisco, Marin, and San Mateo counties.

[2] – Bureau of Labor Statistics

[3] – San Francisco Human Services Agency

[4] – DataQuick

[5] – Craigslist

[6] – San Francisco International Airport

[7] – PKF Consulting

[8] – San Francisco Municipal Transportation Agency

[9] – Bay Area Rapid Transit

For more information contact Ted Egan, Chief Economist at 415-554-5268.

## Economic Barometer Discussion

June's unemployment rate in San Francisco was 9.6% in June 2010, unchanged from the previous June. While this marks an improvement over the double-digit unemployment seen earlier in the year, and San Francisco is still relatively strong relative to the rest of the state, the stubbornly high rate reflects the weak, unsustained job recovery to date. Overall employment growth in the 3-County Metro Division stalled in May and June. After a few months of positive news on the job creation front, June's jobs total for the Metro Division was the lowest since 1995.

What recovery we have seen in San Francisco has been uneven and inconsistent. Despite continuing strength in airport traffic, the recovery in the hotel sector has been uneven. On a seasonally-adjusted basis, there has been essentially no change in occupancy or average daily rates since last fall. Our indicators of retail traffic--parking garage use and Saturday BART visitors to Powell Street, show continuing weakness and are still at or near their low points of the recession.

Like the job market, San Francisco housing prices had been on the upswing for most of the year, but May brought a sharp reversal, and June only a limited rise. While average sales price is a highly imperfect measure of trends in the market, the two months have ended a positive trend. Apartment rents tell a different story; average rents have risen 12% since January and the rise has been continuous. Average rents are still 15% below their peak in September, 2008, however.

**Demographic & Economic Information**  
**Summary of Accounts by Type of Customer**  
**Fiscal Years Ending 2001 to 2010**

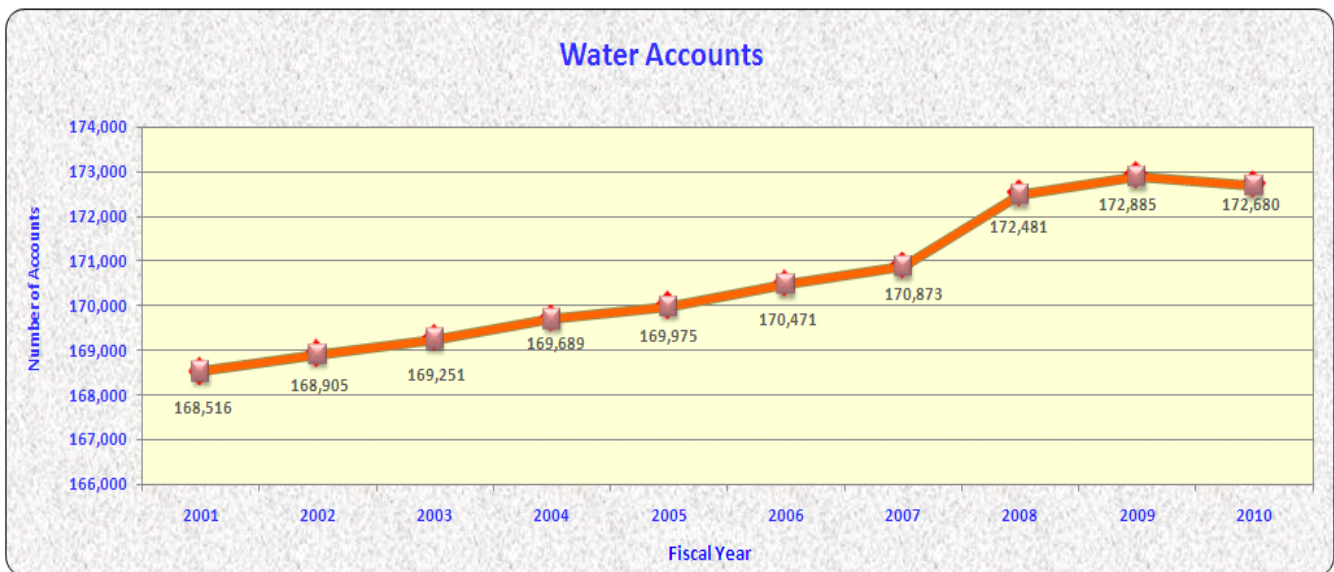
**Water**

Type of water accounts	2001*	2002*	2003*	2004*	2005*	2006*	2007*	2008*	2009*	2010**
<b>Retail - San Francisco</b>										
Commercial	21,293	21,201	21,137	21,148	21,095	21,037	21,009	21,113	20,196	20,152
Docks & ships	1	1	1	1	1	1	1	1	1	1
Industrial	114	113	110	108	105	107	105	103	97	85
Municipal	418	420	422	424	419	423	419	1,732	1,764	1,767
Residential	146,276	146,760	147,167	147,598	147,951	148,496	148,933	149,124	150,423	150,284
<b>Subtotal</b>	<b>168,102</b>	<b>168,495</b>	<b>168,837</b>	<b>169,279</b>	<b>169,571</b>	<b>170,064</b>	<b>170,467</b>	<b>172,073</b>	<b>172,481</b>	<b>172,289</b>
<b>Retail - Other</b>										
Commercial	117	113	115	111	108	108	109	106	104	102
Municipal	0	0	0	0	0	0	0	2	1	1
Other	14	14	14	14	14	14	13	13	13	3
Residential	206	206	208	207	204	206	205	206	205	204
<b>Subtotal</b>	<b>337</b>	<b>333</b>	<b>337</b>	<b>332</b>	<b>326</b>	<b>328</b>	<b>327</b>	<b>327</b>	<b>323</b>	<b>310</b>
<b>Wholesale</b>										
Private utilities	20	20	20	20	20	20	20	20	20	21
Public utilities	57	57	57	58	58	59	59	61	61	60
<b>Subtotal</b>	<b>77</b>	<b>77</b>	<b>77</b>	<b>78</b>	<b>78</b>	<b>79</b>	<b>79</b>	<b>81</b>	<b>81</b>	<b>81</b>
<b>Total accounts</b>	<b>168,516</b>	<b>168,905</b>	<b>169,251</b>	<b>169,689</b>	<b>169,975</b>	<b>170,471</b>	<b>170,873</b>	<b>172,481</b>	<b>172,885</b>	<b>172,680</b>

\*Accounts are reported by revenue class from old Water Sewer System for fiscal years ending 2001 to 2009

\*\*Accounts are reported by service agreement in new Customer Care Billing System effective July 1, 2009 for fiscal year ending 2010

Source: San Francisco Public Utilities Commission Customer Information and Billing System



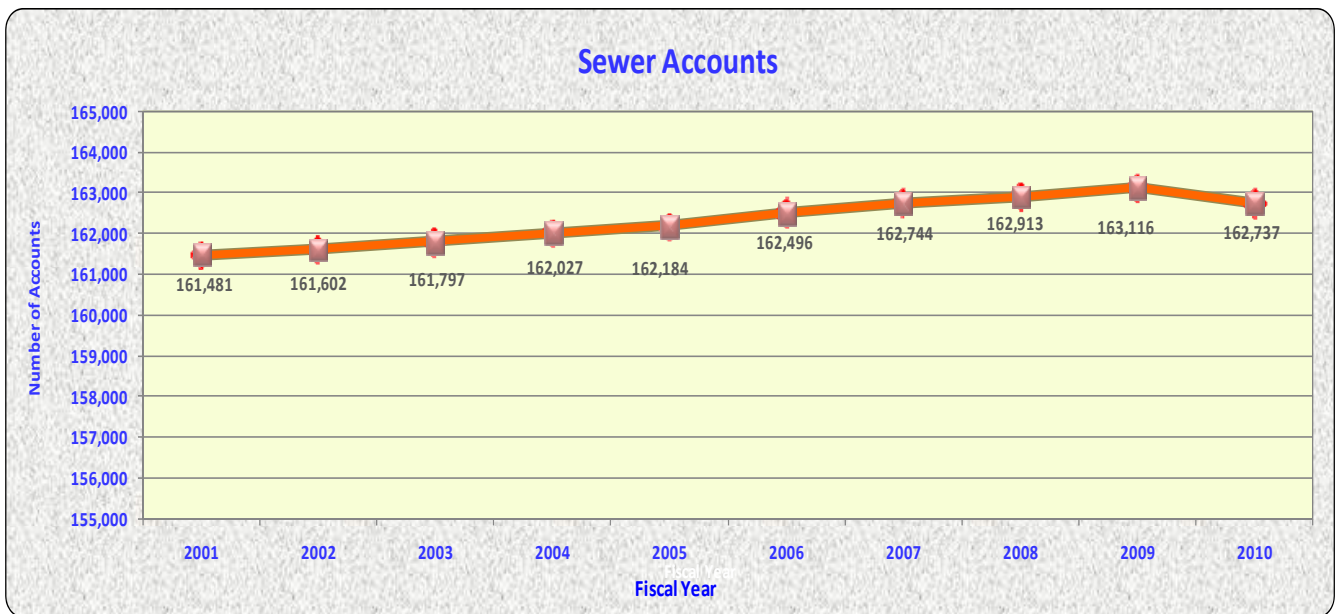
**Demographic & Economic Information**  
**Summary of Accounts by Type of Customer**  
**Fiscal Years Ending 2001 to 2010**

**Wastewater**

Type of sewer accounts	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<i>Retail &amp; resale</i>										
Commercial	17,389	17,167	17,026	16,899	16,774	16,605	16,487	16,526	15,526	15,416
Municipal	806	788	787	797	793	801	801	787	779	717
Residential	143,286	143,647	143,984	144,331	144,617	145,090	145,456	145,600	146,810	146,604
<b>Total accounts</b>	<b>161,481</b>	<b>161,602</b>	<b>161,797</b>	<b>162,027</b>	<b>162,184</b>	<b>162,496</b>	<b>162,744</b>	<b>162,913</b>	<b>163,116</b>	<b>162,737</b>

Note: Number of customer accounts prior to FY 2010 are estimated. Year 2010 and thereafter reflect actuals from the new Customer Information and Billing System

Source: San Francisco Public Utilities Commission Customer Information and Billing System





Demographic & Economic Information  
 Summary of Accounts by Type of Customer  
 Fiscal Years Ending 2001 to 2010

**Hetch Hetchy Water**

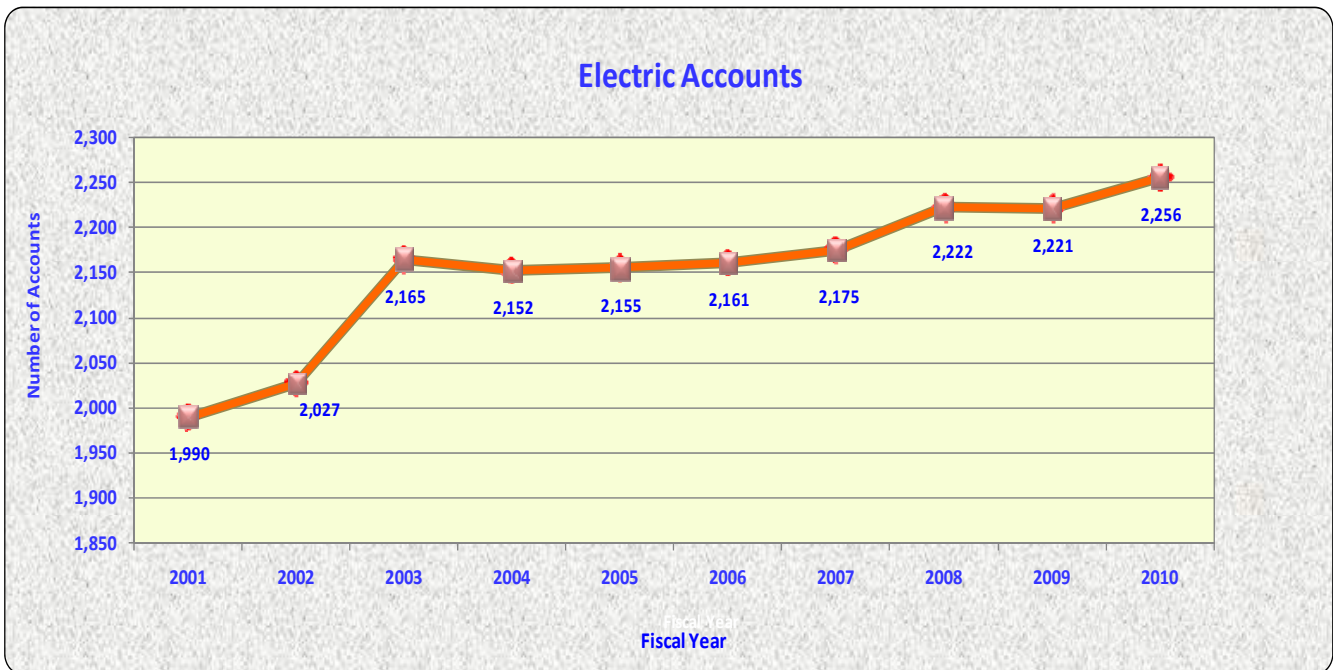
Type of accounts	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Upcountry Water Sales	7	7	7	7	7	7	7	7	7	7

Source: San Francisco Public Utilities Commission's Customer Information and Billing System

**Hetch Hetchy Power**

Electric Meters	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
City Agency	1,302	1,322	1,431	1,415	1,408	1,414	1,439	1,429	1,418	1,429
Non-city Agency	679	666	694	698	705	706	697	755	761	786
Moccasin/Norris	7	37	38	37	40	39	37	36	40	39
Modesto/Turlock Irrigation Districts	2	2	2	2	2	2	2	2	2	2
<b>Total accounts</b>	<b>1,990</b>	<b>2,027</b>	<b>2,165</b>	<b>2,152</b>	<b>2,155</b>	<b>2,161</b>	<b>2,175</b>	<b>2,222</b>	<b>2,221</b>	<b>2,256</b>

Source: San Francisco Public Utilities Power Enterprise's Scheduling System



## Demographic &amp; Economic Information

**Water Accounts and Billings**  
**Fiscal Years Ending 2001 to 2010**  
**(Dollars in Thousands)**

Fiscal Year	Number of Consumer Accounts	Water Consumed (CCF)*	Water Consumed (MG)**	Service Charge Billed (\$)	Water & Miscellaneous Billed (\$)	Total Amount Billed (\$)
2001	168,516	122,852,757	91,894	Data is not available		139,719
2002	168,905	119,982,459	89,747	19,499	124,805	144,304
2003	169,251	118,669,159	88,765	20,862	127,476	148,338
2004	169,689	125,529,139	93,896	21,812	153,122	174,934
2005	169,975	116,953,069	87,481	22,211	142,226	164,437
2006	170,471	115,297,765	86,243	24,362	143,432	167,794
2007	170,873	120,597,170	90,207	26,811	174,905	201,716
2008	172,481	120,755,904	90,325	21,355	198,639	219,994
2009	172,885	115,407,186	86,324	22,135	214,839	236,974
2010	172,680	107,309,006	80,267	21,191	226,806	247,997

\* Hundred cubic feet = 748 gallons

\*\* Millions of gallons

Source: Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Customer Information and Billing System

**Demographic & Economic Information**  
**Historical Water Sales in Hundred Cubic Feet**  
**Fiscal Years Ending 2001 to 2010**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010 % of Total
<b>Retail customers</b>											
Residential	23,299,078	23,166,044	23,102,746	23,428,537	22,509,970	22,533,134	22,204,792	21,248,938	20,991,172	20,226,565	18.8%
Commercial	10,929,830	9,992,460	10,069,094	10,410,951	9,814,755	9,860,593	9,764,866	10,511,527	10,083,410	9,489,684	8.8%
Municipal	1,443,415	1,377,365	1,243,664	1,325,765	1,311,299	1,167,914	1,196,316	2,634,791	2,722,199	2,578,029	2.4%
Wholesale (Suburban Retail)	1,534,349	1,614,074	1,402,784	1,703,269	1,469,498	1,310,599	1,517,791	1,618,012	1,441,357	1,085,101	1.0%
Industrial	294,892	252,984	172,280	139,901	134,861	129,425	108,874	107,494	100,217	83,063	0.1%
Docks & Shipping	23,800	17,234	24,429	40,419	39,820	40,987	22,463	13,902	32,123	16,187	0.0%
<b>Retail water sales</b>	<b>37,525,364</b>	<b>36,420,161</b>	<b>36,014,997</b>	<b>37,048,842</b>	<b>35,280,203</b>	<b>35,042,652</b>	<b>34,815,102</b>	<b>36,134,664</b>	<b>35,370,478</b>	<b>33,478,629</b>	<b>31.2%</b>
<b>Wholesale customers</b>											
California Water Service	17,966,554	17,326,626	17,052,741	18,823,399	16,873,907	16,893,674	18,472,846	18,409,651	17,544,304	15,889,763	14.8%
Hayward Municipal Water	8,959,450	8,592,175	8,631,661	9,587,543	9,030,652	8,761,512	8,901,286	9,434,134	9,256,544	8,418,044	7.8%
City of Palo Alto	6,730,016	6,436,196	6,174,327	6,524,654	5,896,965	5,802,911	6,361,100	6,205,790	5,677,018	5,362,543	5.0%
Alameda County Water	5,733,920	5,853,104	6,074,761	6,023,430	5,270,508	5,192,872	6,667,959	6,294,887	5,528,087	5,274,040	4.9%
City of Sunnyvale	4,785,841	4,858,185	4,327,425	4,816,808	4,276,739	4,580,523	4,575,407	5,133,801	5,200,504	4,838,316	4.5%
City of Redwood City	5,749,916	5,679,249	5,561,922	5,950,319	5,423,431	5,308,460	5,694,374	5,373,572	5,048,309	4,689,257	4.4%
City of Mountain View	5,423,871	5,442,425	5,187,433	5,361,740	5,138,116	4,973,996	5,279,243	5,127,029	4,818,468	4,365,076	4.1%
City of Milpitas	3,444,476	3,404,363	3,290,835	3,476,406	3,255,284	3,195,719	3,378,811	3,393,790	3,353,762	3,065,570	2.9%
Estero Muni Improvement District	2,873,777	2,741,916	2,576,965	2,729,471	2,542,371	2,527,846	2,747,662	2,691,080	2,509,929	2,392,875	2.2%
City of Daly City*	2,215,685	2,348,666	3,078,921	3,193,899	3,385,617	3,003,123	3,016,092	2,192,526	2,168,708	2,471,592	2.3%
All Other Wholesale Customers	21,443,887	20,879,393	20,697,171	21,992,628	20,579,276	20,014,477	20,687,288	20,364,980	18,931,075	17,063,301	15.9%
<b>Wholesale water sales</b>	<b>85,327,393</b>	<b>83,562,298</b>	<b>82,654,162</b>	<b>88,480,297</b>	<b>81,672,866</b>	<b>80,255,113</b>	<b>85,782,068</b>	<b>84,621,240</b>	<b>80,036,708</b>	<b>73,830,377</b>	<b>68.8%</b>
<b>Total water sales</b>	<b>122,852,757</b>	<b>119,982,459</b>	<b>118,669,159</b>	<b>125,529,139</b>	<b>116,953,069</b>	<b>115,297,765</b>	<b>120,597,170</b>	<b>120,755,904</b>	<b>115,407,186</b>	<b>107,309,006</b>	<b>100%</b>
<b>% Change from prior year</b>	<b>0.5%</b>	<b>-2.3%</b>	<b>-1.1%</b>	<b>5.8%</b>	<b>-6.8%</b>	<b>-1.4%</b>	<b>4.6%</b>	<b>0.1%</b>	<b>-4.3%</b>	<b>-7.0%</b>	
<b>Number of accounts</b>	<b>168,516</b>	<b>168,905</b>	<b>169,251</b>	<b>169,689</b>	<b>169,975</b>	<b>170,471</b>	<b>170,873</b>	<b>172,481</b>	<b>172,885</b>	<b>172,680</b>	
<b>Retail</b>	<b>168,439</b>	<b>168,828</b>	<b>169,174</b>	<b>169,611</b>	<b>169,897</b>	<b>170,392</b>	<b>170,794</b>	<b>172,400</b>	<b>172,804</b>	<b>172,599</b>	
<b>Wholesale</b>	<b>77</b>	<b>77</b>	<b>77</b>	<b>78</b>	<b>78</b>	<b>79</b>	<b>79</b>	<b>81</b>	<b>81</b>	<b>81</b>	

\*Include Conjunctive Use Project

Source: Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Customer Information and Billing System

**Demographic & Economic Information**  
**Historical Water Sales in Millions of Gallons per Day**  
**Fiscal Years Ending 2001 to 2010**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	% of Total
<b>2010</b>											
<b>Retail Customers</b>											
Residential	47.7	47.5	47.3	48.0	46.1	46.2	45.5	43.5	43.0	41.5	18.8%
Commercial	22.4	20.5	20.6	21.3	20.1	20.2	20.0	21.5	20.7	19.5	8.8%
Municipal	3.0	2.8	2.5	2.7	2.7	2.4	2.5	5.4	5.6	5.3	2.4%
Wholesale (Suburban Retail)	3.1	3.3	2.9	3.5	3.0	2.7	3.1	3.3	3.0	2.2	1.0%
Industrial	0.6	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1%
Docks & Shipping	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0%
<b>Retail water sales</b>	<b>76.9</b>	<b>74.6</b>	<b>73.8</b>	<b>75.9</b>	<b>72.3</b>	<b>71.8</b>	<b>71.3</b>	<b>74.1</b>	<b>72.5</b>	<b>68.6</b>	<b>31.2%</b>
<b>Wholesale Customers</b>											
California Water Service	36.8	35.5	34.9	38.6	34.6	34.6	37.9	37.7	36.0	32.6	14.8%
Hayward Municipal Water	18.4	17.6	17.7	19.6	18.5	18.0	18.2	19.3	19.0	17.3	7.8%
City of Palo Alto	13.8	13.2	12.7	13.4	12.1	11.9	13.0	12.7	11.6	11.0	5.0%
Alameda County Water	11.8	12.0	12.4	12.3	10.8	10.6	13.7	12.9	11.3	10.8	4.9%
City of Sunnyvale	9.8	10.0	8.9	9.9	8.8	9.4	9.4	10.5	10.7	9.9	4.5%
City of Redwood City	11.8	11.6	11.4	12.2	11.1	10.9	11.7	11.0	10.3	9.6	4.4%
City of Mountain View	11.1	11.2	10.6	11.0	10.5	10.2	10.8	10.5	9.9	9.0	4.1%
City of Milpitas	7.1	7.0	6.7	7.1	6.7	6.5	6.9	7.0	6.9	6.3	2.9%
Estero Muni Improvement District	5.9	5.6	5.3	5.6	5.2	5.2	5.6	5.5	5.1	4.9	2.2%
City of Daly City*	4.5	4.8	6.3	6.5	6.9	6.2	6.2	4.5	4.4	5.1	2.3%
All Other Wholesale Customers	43.9	42.8	42.4	45.1	42.2	41.0	42.4	41.7	38.8	35.0	15.9%
<b>Wholesale water sales</b>	<b>174.9</b>	<b>171.2</b>	<b>169.4</b>	<b>181.3</b>	<b>167.4</b>	<b>164.5</b>	<b>175.8</b>	<b>173.4</b>	<b>164.0</b>	<b>151.3</b>	<b>68.8%</b>
<b>Total water sales</b>	<b>251.8</b>	<b>245.9</b>	<b>243.2</b>	<b>257.2</b>	<b>239.7</b>	<b>236.3</b>	<b>247.1</b>	<b>247.5</b>	<b>236.5</b>	<b>219.9</b>	<b>100%</b>
<b>% Change from prior year</b>	<b>0.5%</b>	<b>-2.3%</b>	<b>-1.1%</b>	<b>5.8%</b>	<b>-6.8%</b>	<b>-1.4%</b>	<b>4.6%</b>	<b>0.1%</b>	<b>-4.3%</b>	<b>-7.0%</b>	
<b>Number of accounts</b>	<b>168,516</b>	<b>168,905</b>	<b>169,251</b>	<b>169,689</b>	<b>169,975</b>	<b>170,471</b>	<b>170,873</b>	<b>172,481</b>	<b>172,885</b>	<b>172,680</b>	
<b>Retail</b>	<b>168,439</b>	<b>168,828</b>	<b>169,174</b>	<b>169,611</b>	<b>169,897</b>	<b>170,392</b>	<b>170,794</b>	<b>172,400</b>	<b>172,804</b>	<b>172,599</b>	
<b>Wholesale</b>	<b>77</b>	<b>77</b>	<b>77</b>	<b>78</b>	<b>78</b>	<b>79</b>	<b>79</b>	<b>81</b>	<b>81</b>	<b>81</b>	

Source: Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Customer Information and Billing System

## Demographic &amp; Economic Information

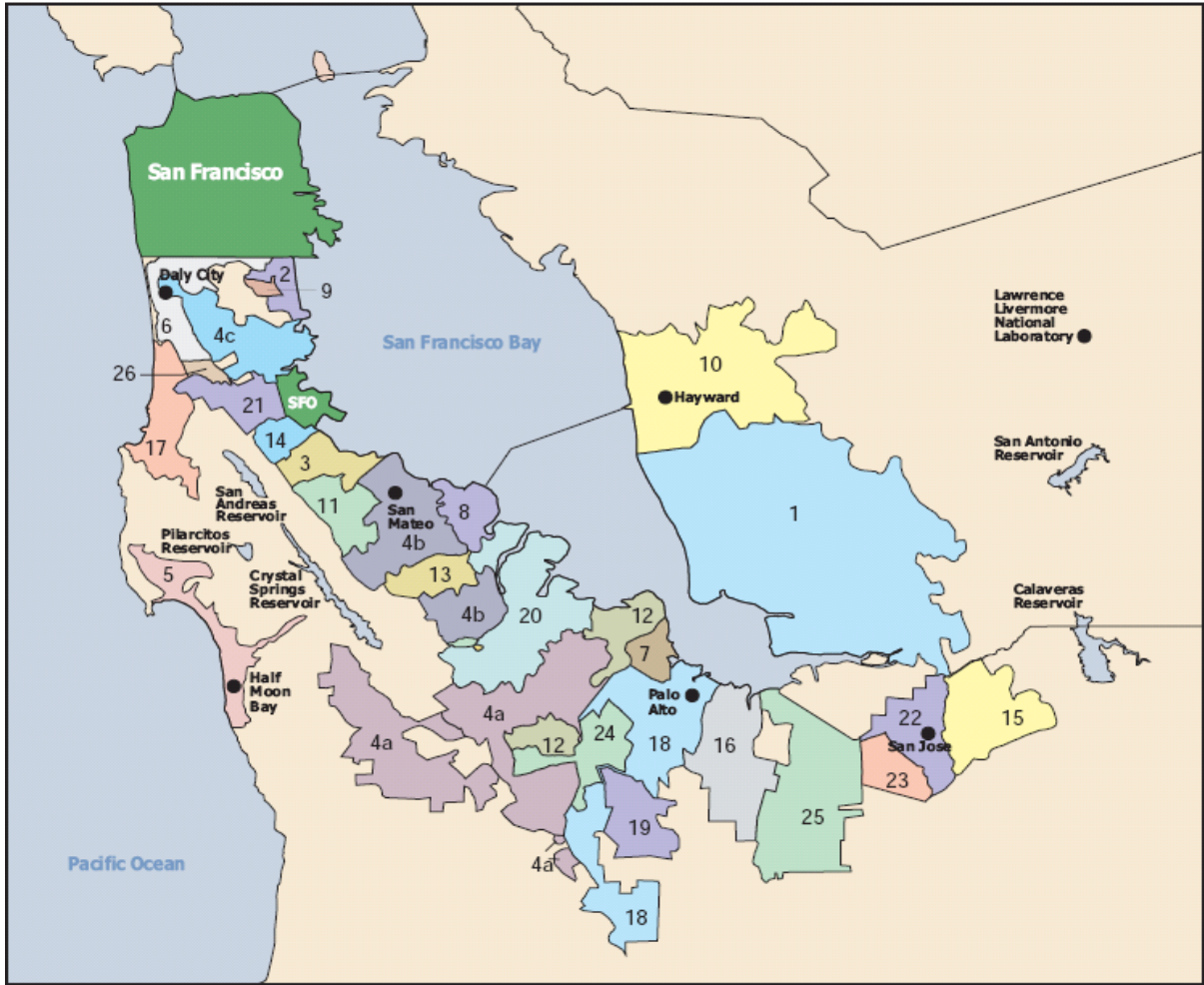
Historical Water Sales in Millions of Gallons  
Fiscal Years Ending 2001 to 2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010 % of Total
<b>Retail Customers</b>											
Residential	17,428	17,328	17,281	17,525	16,837	16,855	16,609	15,894	15,701	15,129	18.8%
Commercial	8,176	7,474	7,532	7,787	7,341	7,376	7,304	7,863	7,542	7,098	8.8%
Municipal	1,080	1,030	930	992	981	874	895	1,971	2,037	1,928	2.4%
Wholesale (Suburban Retail)	1,148	1,207	1,049	1,274	1,099	980	1,135	1,210	1,078	812	1.0%
Industrial	221	189	129	105	101	97	81	80	75	62	0.1%
Docks & Shipping	18	13	18	30	30	31	17	10	24	12	0.0%
<b>Retail water sales</b>	<b>28,069</b>	<b>27,242</b>	<b>26,939</b>	<b>27,713</b>	<b>26,390</b>	<b>26,212</b>	<b>26,042</b>	<b>27,029</b>	<b>26,457</b>	<b>25,041</b>	<b>31.2%</b>
<b>Wholesale Customers</b>											
California Water Service	13,439	12,960	12,755	14,080	12,622	12,636	13,818	13,770	13,123	11,886	14.8%
Hayward Municipal Water	6,702	6,427	6,456	7,171	6,755	6,554	6,658	7,057	6,924	6,297	7.8%
City of Palo Alto	5,034	4,814	4,618	4,880	4,411	4,341	4,758	4,642	4,246	4,011	5.0%
Alameda County Water	4,289	4,378	4,544	4,506	3,942	3,884	4,988	4,709	4,135	3,945	4.9%
City of Sunnyvale	3,580	3,634	3,237	3,603	3,199	3,426	3,422	3,840	3,890	3,619	4.5%
City of Redwood City	4,301	4,248	4,160	4,451	4,057	3,971	4,259	4,019	3,776	3,508	4.4%
City of Mountain View	4,057	4,071	3,880	4,011	3,843	3,721	3,949	3,835	3,604	3,265	4.1%
City of Milpitas	2,576	2,546	2,462	2,600	2,435	2,390	2,527	2,539	2,509	2,293	2.9%
Estero Muni Improvement District	2,150	2,051	1,928	2,042	1,902	1,891	2,055	2,013	1,877	1,790	2.2%
City of Daly City*	1,657	1,757	2,303	2,389	2,532	2,246	2,256	1,640	1,622	1,849	2.3%
All Other Wholesale Customers	16,040	15,618	15,481	16,450	15,393	14,971	15,474	15,233	14,160	12,763	15.9%
<b>Wholesale water sales</b>	<b>63,825</b>	<b>62,505</b>	<b>61,825</b>	<b>66,183</b>	<b>61,091</b>	<b>60,031</b>	<b>64,165</b>	<b>63,297</b>	<b>59,867</b>	<b>55,226</b>	<b>68.8%</b>
<b>Total water sales</b>	<b>91,894</b>	<b>89,747</b>	<b>88,765</b>	<b>93,896</b>	<b>87,481</b>	<b>86,243</b>	<b>90,207</b>	<b>90,325</b>	<b>86,324</b>	<b>80,267</b>	<b>100%</b>
<b>% Change from prior year</b>	<b>0.5%</b>	<b>-2.3%</b>	<b>-1.1%</b>	<b>5.8%</b>	<b>-6.8%</b>	<b>-1.4%</b>	<b>4.6%</b>	<b>0.1%</b>	<b>-4.3%</b>	<b>-7.0%</b>	
<b>Number of accounts</b>	<b>168,516</b>	<b>168,905</b>	<b>169,251</b>	<b>169,689</b>	<b>169,975</b>	<b>170,471</b>	<b>170,873</b>	<b>172,481</b>	<b>172,885</b>	<b>172,680</b>	
<b>Retail</b>	<b>168,439</b>	<b>168,828</b>	<b>169,174</b>	<b>169,611</b>	<b>169,897</b>	<b>170,392</b>	<b>170,794</b>	<b>172,400</b>	<b>172,804</b>	<b>172,599</b>	
<b>Wholesale</b>	<b>77</b>	<b>77</b>	<b>77</b>	<b>78</b>	<b>78</b>	<b>79</b>	<b>79</b>	<b>81</b>	<b>81</b>	<b>81</b>	

\*Include Conjunctive Use Project

Source: Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Customer Information and Billing System

Bay Area Water Supply & Conservation Agency Members



Legend:

- |                                          |                                       |
|------------------------------------------|---------------------------------------|
| 1. Alameda County Water District         | 13. Mid-Peninsula Water District      |
| 2. City of Brisbane                      | 14. City of Millbrae                  |
| 3. City of Burlingame                    | 15. City of Milpitas                  |
| 4a. CWS – Bear Gulch                     | 16. City of Mountain View             |
| 4b. CWS – Mid-Peninsula                  | 17. North Coast County Water District |
| 4c. CWS – South San Francisco            | 18. City of Palo Alto                 |
| 5. Coastside County Water District       | 19. Purissima Hills Water District    |
| 6. City of Daly City                     | 20. City of Redwood City              |
| 7. City of East Palo Alto                | 21. City of San Bruno                 |
| 8. Estero Municipal Improvement District | 22. San Jose Municipal Water System   |
| 9. Guadalupe Valley MID                  | 23. City of Santa Clara               |
| 10. City of Hayward                      | 24. Stanford University               |
| 11. Town of Hillsborough                 | 25. City of Sunnyvale                 |
| 12. City of Menlo Park                   | 26. Westborough Water District        |

Source: Bawsca.org

**Demographic & Economic Information**  
**Water Accounts & Billings by Type of Customer**  
(Dollars in Thousands)

<b>Customer Type</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Builders &amp; Contractor</b>										
Number of accounts	229	203	188	217	201	223	221	226	193	181
Billings	\$ 252	353	299	258	240	298	379	450	440	304
<b>Commercial</b>										
Number of accounts	21,064	20,998	20,949	20,931	20,894	20,814	20,788	20,887	20,003	19,971
Billings	\$ 19,467	19,518	21,354	21,823	20,315	24,093	27,011	31,660	34,889	35,467
<b>Docks &amp; Ships</b>										
Number of accounts	1	1	1	1	1	1	1	1	1	1
Billings	\$ 55	49	68	98	99	102	88	79	81	89
<b>Industrial</b>										
Number of accounts	114	113	110	108	105	107	105	103	97	85
Billings	\$ 431	409	325	278	266	278	298	301	327	310
<b>Municipal Customer</b>										
Number of accounts	418	420	422	424	419	423	419	1,732	1,764	1,767
Billings	\$ 1,184	1,256	1,274	1,272	1,270	1,286	1,352	4,920	5,906	6,410
<b>Multi-Family Residential</b>										
Number of accounts	37,730	38,014	38,216	38,477	38,589	38,760	38,943	38,607	39,664	40,844
Billings	\$ 22,219	23,979	25,969	26,295	25,950	29,995	34,010	35,411	40,515	43,741
<b>Single-Family Residential</b>										
Number of accounts	108,546	108,746	108,951	109,121	109,362	109,736	109,990	110,517	110,759	109,440
Billings	\$ 17,444	18,916	20,728	21,109	20,308	23,085	26,337	26,919	29,656	31,565
<b>Wholesale</b>										
Number of accounts	337	333	337	332	326	328	327	327	323	310
Billings	\$ 2,511	3,436	3,369	3,813	3,543	3,767	4,878	6,095	6,533	5,311
<b>Wholesale - Suburban Resale</b>										
Number of accounts	77	77	77	78	78	79	79	81	81	81
Billings	\$ 76,156	76,388	74,952	99,988	92,446	84,890	107,363	114,159	118,627	124,800
<b>Total</b>										
<b>Number of accounts</b>	<b>168,516</b>	<b>168,905</b>	<b>169,251</b>	<b>169,689</b>	<b>169,975</b>	<b>170,471</b>	<b>170,873</b>	<b>172,481</b>	<b>172,885</b>	<b>172,680</b>
<b>Billings</b>	<b>\$ 139,719</b>	<b>144,304</b>	<b>148,338</b>	<b>174,934</b>	<b>164,437</b>	<b>167,794</b>	<b>201,716</b>	<b>219,994</b>	<b>236,974</b>	<b>247,997</b>

Source: Summary of Annual Water Sales reports, San Francisco Public Utilities Commission Customer Information and Billing System

**Demographic & Economic Information**  
**Wastewater Accounts & Billings by Type of Customer**  
(Dollars in Thousands)

Customer Type	Fiscal Year Ending									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Commercial</b>										
Number of accounts	21,064	20,998	20,949	20,931	20,894	20,814	20,788	20,887	20,003	15,413
Billings	\$ 52,001	47,893	48,225	48,335	51,086	58,685	64,927	73,799	78,377	75,330
<b>Multi-Family Residential</b>										
Number of accounts	37,730	38,014	38,216	38,477	38,589	38,760	38,943	38,607	39,664	36,271
Billings	\$ 45,583	44,970	43,798	44,669	50,392	55,460	60,796	59,682	63,690	70,499
<b>Municipal Customer</b>										
Number of accounts	418	420	422	424	419	423	419	1,732	1,764	731
Billings	\$ 1,276	1,296	1,235	1,433	1,282	1,313	1,621	7,005	7,826	6,784
<b>Single-Family Residential</b>										
Number of accounts	108,546	108,746	108,951	109,121	109,362	109,736	109,990	110,517	110,759	110,324
Billings	\$ 32,979	32,959	32,762	33,735	34,881	37,472	41,196	44,944	48,555	49,103
<b>Wholesale (watershed keepers*)</b>										
Number of accounts	12	12	12	12	12	12	11	11	11	9
Billings	\$ 1	3	3	2	3	2	2	2	2	2
<b>Total</b>										
Number of accounts	161,481	161,602	161,797	162,027	162,184	162,496	162,744	162,913	163,116	162,737
Billings	\$ 131,840	127,121	126,023	128,174	137,644	152,932	168,542	185,432	198,450	201,718

\*Included three special districts: North San Mateo County Sanitation District, Bayshore Sanitary District, and the City of Brisbane

Note: Number of customer accounts prior to FY 2010 are estimated. Year 2010 and thereafter reflect actuals from the new Customer Information and Billing System

Source: San Francisco Public Utilities Commission Customer Information and Billing System

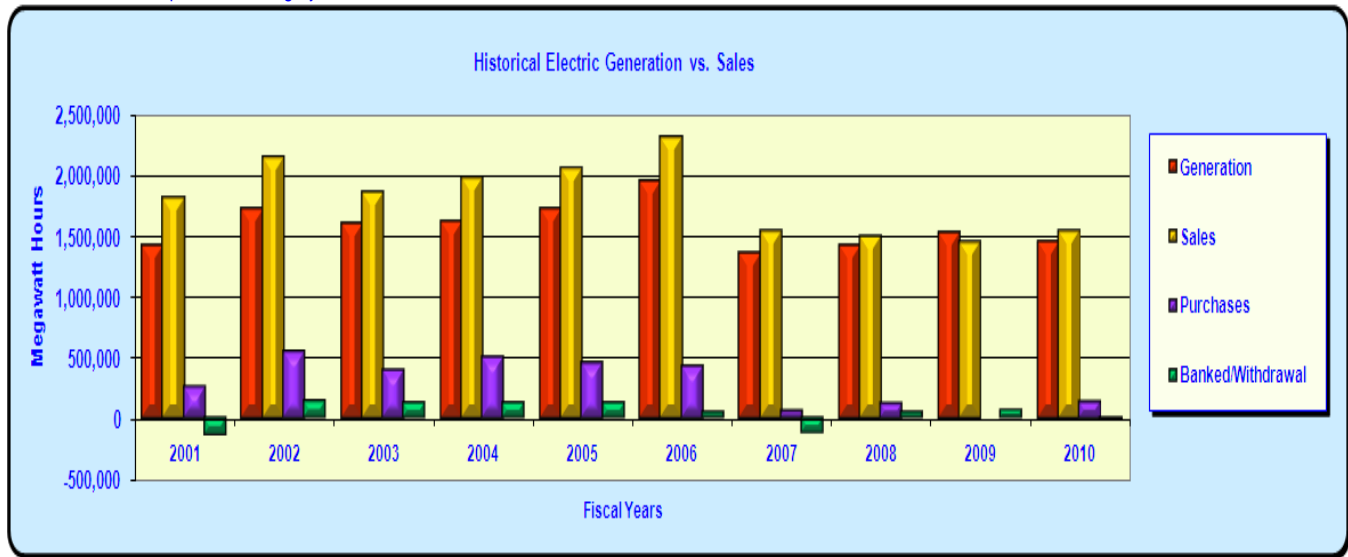


Demographic & Economic Information

Hetch Hetchy Power Historical Electric Sales in Megawatt Hours  
Fiscal Years Ending 2001 to 2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Sales</b>										
Moccasin/Norris	7,981	9,310	9,459	10,011	10,660	11,681	13,211	15,556	15,094	9,578
Modesto/Turlock Irrigation Districts	813,119	871,807	803,593	834,549	965,348	1,004,856	548,459	386,568	258,268	286,908
City paying	844,586	813,872	829,717	851,455	836,677	845,569	858,215	884,580	878,938	864,064
Non-city paying	74,190	73,710	76,085	73,425	84,788	86,326	83,378	79,351	79,231	84,378
Western Systems Power Pool	80,619	370,772	139,029	212,259	158,127	368,045	36,093	125,528	217,792	298,549
<b>Total sales</b>	<b>1,820,494</b>	<b>2,139,471</b>	<b>1,857,883</b>	<b>1,981,699</b>	<b>2,055,600</b>	<b>2,316,477</b>	<b>1,539,357</b>	<b>1,491,584</b>	<b>1,449,323</b>	<b>1,543,477</b>
<b>Purchases</b>										
Western Systems Power Pool	260,655	547,322	389,580	498,926	456,277	420,807	66,200	126,250	0	132,000
<b>Generation</b>	<b>1,423,786</b>	<b>1,729,416</b>	<b>1,597,019</b>	<b>1,611,949</b>	<b>1,728,843</b>	<b>1,947,747</b>	<b>1,353,735</b>	<b>1,414,703</b>	<b>1,522,109</b>	<b>1,447,863</b>
<b>Total purchases/generation</b>	<b>1,684,441</b>	<b>2,276,738</b>	<b>1,986,599</b>	<b>2,110,875</b>	<b>2,185,120</b>	<b>2,368,554</b>	<b>1,419,935</b>	<b>1,540,953</b>	<b>1,522,109</b>	<b>1,579,863</b>
<b>Banked/Withdrawal</b>	<b>(136,054)</b>	<b>137,267</b>	<b>128,716</b>	<b>129,176</b>	<b>128,714</b>	<b>51,109</b>	<b>(120,719)</b>	<b>47,850</b>	<b>68,071</b>	<b>(11,318)</b>
<b>Number of accounts</b>										
Electric	1,990	2,027	2,165	2,152	2,155	2,161	2,175	2,222	2,221	2,256
Natural Gas	334	345	336	340	341	342	344	348	341	346
Steam	12	12	13	12	12	13	13	13	12	11
<b>Total</b>	<b>2,336</b>	<b>2,384</b>	<b>2,514</b>	<b>2,504</b>	<b>2,508</b>	<b>2,516</b>	<b>2,532</b>	<b>2,583</b>	<b>2,574</b>	<b>2,613</b>

Source: Power Enterprise Scheduling System



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## **Operating Information**

**Full-Time Equivalent (FTEs) Employees by Division**

**Operating & Capacity Indicators**

**Major Water Wholesale and Retail Customer Accounts by Revenue**

**Major Sewer Customer Accounts by Revenue**

**Major Electric Retail and Wholesale Customer Accounts by Revenue**

**Performance Measures**

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**Operating Information**  
**Full-time Equivalent (FTEs) Employees by Division**  
**Fiscal Years Ending 2001 to 2010**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Enterprises and Bureaus</b>										
City Distribution Division & Administration	256	252	268	286	279	279	271	272	268	257
Natural Resources	29	31	42	46	42	55	61	66	65	67
Water Quality	98	98	100	104	102	87	86	83	80	78
Water Resources Management	8	5	5	5	5	23	23	23	22	21
Water Supply & Treatment	224	218	226	243	239	248	242	242	235	231
<b>Total Water</b>	<b>615</b>	<b>604</b>	<b>641</b>	<b>684</b>	<b>667</b>	<b>692</b>	<b>683</b>	<b>686</b>	<b>670</b>	<b>654</b>
Administration	38	33	37	41	38	41	41	40	32	14
BERM* & Wastewater Labs	61	59	58	61	62	64	64	66	63	69
Environmental Engineering	48	45	47	56	55	55	58	58	45	43
Maintenance	122	126	136	139	133	136	146	144	138	141
Operations	101	100	113	114	111	120	122	121	141	144
Planning & Regulations	5	5	4	5	5	3	7	8	10	8
Sewer Operations	35	34	35	37	35	35	39	38	39	42
<b>Total Wastewater</b>	<b>410</b>	<b>402</b>	<b>430</b>	<b>453</b>	<b>439</b>	<b>454</b>	<b>477</b>	<b>475</b>	<b>468</b>	<b>461</b>
<b>Hetch Hetchy Water</b>										
Water Project Operations & Engineering	140	139	146	155	151	153	159	169	174	176
<b>Hetch Hetchy Power</b>										
Energy Services	39	47	41	32	32	42	47	61	64	62
Long Range Planning & Light, Heat and Power	8	13	19	24	21	22	19	16	17	26
Power Administration	5	4	5	8	7	6	8	8	6	5
<b>Subtotal</b>	<b>52</b>	<b>64</b>	<b>65</b>	<b>64</b>	<b>60</b>	<b>70</b>	<b>74</b>	<b>85</b>	<b>87</b>	<b>93</b>
<b>Total Hetch Hetchy</b>	<b>192</b>	<b>203</b>	<b>211</b>	<b>219</b>	<b>211</b>	<b>223</b>	<b>233</b>	<b>254</b>	<b>261</b>	<b>269</b>
Business Services & Finance	47	45	46	56	50	54	56	54	56	63
Customer Services	98	95	98	99	95	100	100	107	110	111
Communications		9	10	15	19	21	22	21	21	21
General Manager	14	12	14	18	8	7	8	7	7	8
Governmental Affairs, Real Estate & Others	41	43	38	44	49	32	16	18	17	13
Human Resource Services	49	49	49	53	48	52	50	50	51	51
Information Technology Services	61	63	68	76	71	76	75	80	79	71
Infrastructure	239	238	252	300	310	309	363	411	414	400
<b>Total SFPUC annually budgeted positions</b>	<b>1,766</b>	<b>1,763</b>	<b>1,857</b>	<b>2,017</b>	<b>1,967</b>	<b>2,020</b>	<b>2,083</b>	<b>2,163</b>	<b>2,154</b>	<b>2,122</b>
<b>Annual Salary Ordinance Positions</b>	<b>1,939</b>	<b>1,932</b>	<b>1,976</b>	<b>2,118</b>	<b>2,116</b>	<b>2,122</b>	<b>2,210</b>	<b>2,307</b>	<b>2,307</b>	<b>2,324</b>

\* BERM is acronym for Bureau of Environmental Regulation Management

Note: Funded full-time employee counts include the operating and project funded positions net of the attrition savings

Source: Annual Salary Ordinance

**Operating Information**  
**Operating & Capacity Indicators**  
**Fiscal Years Ending 2001 to 2010**

Water	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Water mains (miles) (excludes Suburban)</b>	1,219	1,220	1,220	1,220	1,223	1,227	1,227	1,227	1,235	1,235
<b>Water main breaks repaired</b>	150	124	114	130	118	101	151	159	92	82
<b>New service installations</b>	629	641	597	557	491	544	533	539	437	478
<b>Meter repairs/replacements</b>	9,217	8,963	6,419	4,175	5,050	4,610	4,945	3,798	1,115	1,243
<b>Responses to fire alarms</b>	63	55	43	33	37	39	43	28	18	13
<b>Water production (millions of gallons)</b>	99,244	94,681	98,112	100,321	89,973	84,315	88,732	90,585	85,556	80,300
<b>Average daily production (millions of gallons daily)</b>	272	259	269	274	247	231	243	248	234	220
<b>Maximum daily production (millions of gallons daily)</b>	390	381	387	394	359	338	352	356	333	326
<b>Water consumption (millions of gallons)</b>	91,894	89,747	88,765	93,896	87,481	86,243	90,207	90,325	86,324	80,267
<b>Average daily consumption (millions of gallons)</b>	251.8	245.9	243.2	257.2	239.7	236.3	247.1	247.4	236.5	219.9
<b>Watershed acreage (acres)</b>										
Alameda	36,895	36,895	36,895	36,895	36,895	36,895	36,895	36,895	36,895	36,895
San Mateo	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000
<b>Total</b>	<b>59,895</b>	<b>59,895</b>	<b>59,895</b>	<b>59,895</b>	<b>59,895</b>	<b>59,895</b>	<b>59,895</b>	<b>59,895</b>	<b>59,895</b>	<b>59,895</b>
<b>Reservoir storage (millions of gallons) (*)</b>										
Calaveras	22,730	13,581	10,920	12,094	13,434	14,054	11,970	12,604	12,242	13,222
Crystal Springs	13,962	15,103	15,522	16,124	15,606	15,232	15,513	13,710	15,932	17,114
Pilarcitos	762	793	788	714	788	736	777	785	726	773
San Andreas	5,615	5,804	5,048	5,855	5,549	5,878	5,843	5,836	5,842	5,625
San Antonio	13,783	15,763	15,172	12,658	12,414	14,789	14,680	15,076	14,990	15,558
<b>Total</b>	<b>56,852</b>	<b>51,044</b>	<b>47,450</b>	<b>47,445</b>	<b>47,791</b>	<b>50,689</b>	<b>48,783</b>	<b>48,011</b>	<b>49,732</b>	<b>52,292</b>
<b>Treatment plant capacity (millions of gallons)</b>										
Harry Tracy	37.8	44.5	43.1	52.0	45.2	40.4	41.2	36.9	26.9	35.5
Sunol Valley	34.9	29.0	28.0	36.7	28.5	29.4	17.6	21.1	23.6	32.2
<b>Total</b>	<b>72.7</b>	<b>73.5</b>	<b>71.1</b>	<b>88.7</b>	<b>73.7</b>	<b>69.8</b>	<b>58.8</b>	<b>58.0</b>	<b>50.5</b>	<b>67.7</b>

(\*) In addition to these regional reservoirs, SFPUC has In-City System Storage Capacity of 411.9 million of gallons

Source: Water Monthly Operating Report, Hetch Hetchy Capital Outlays Summary, and Treatment Plant Influent Flow & Sewer Service Charge Calculation Reports

Operating Information  
Operating & Capacity Indicators  
Fiscal Years Ending 2001 to 2010

Wastewater	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sanitary sewers (miles)	993	993	993	993	993	993	993	993	993	993
Sewer breaks repaired	436	444	411	456	432	394	464	419	540	309
Inspection performed (miles)	45	47	49	51	53	53	56	73	111	127
Sewer replaced (miles)	5.8	4.8	3.5	9.4	5.2	5.4	6.8	6.6	3.2	3.0
Responses to customer calls	9,097	7,867	7,206	8,689	8,507	7,878	6,887	5,195	14,722	13,634
<b>Treatment plant/ facilities average daily flow (millions of gallons daily)</b>										
Oceanside plant	20.6	21.1	20.4	20.2	21.8	22.4	19.8	19.3	19.1	17.4
North Point plant	2.6	3.0	3.0	2.0	4.9	4.5	1.8	2.2	2.8	3.2
Southeast plant	75.3	74.6	70.9	71.4	80.0	79.6	69.4	67.2	67.2	70.4
Yerba Buena & Treasure Island	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4
<b>Total</b>	<b>98.8</b>	<b>99.1</b>	<b>94.8</b>	<b>94.0</b>	<b>107.1</b>	<b>107.0</b>	<b>91.4</b>	<b>89.0</b>	<b>89.5</b>	<b>91.4</b>
<b>Hetch Hetchy Water</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Watershed acreage (square miles)</b>										
Hetch Hetchy	459	459	459	459	459	459	459	459	459	459
Lake Eleanor	79	79	79	79	79	79	79	79	79	79
Lake Lloyd (Cherry)	114	114	114	114	114	114	114	114	114	114
<b>Total</b>	<b>652</b>	<b>652</b>	<b>652</b>	<b>652</b>	<b>652</b>	<b>652</b>	<b>652</b>	<b>652</b>	<b>652</b>	<b>652</b>
<b>Reservoir storage (million of gallons) (*)</b>										
Hetch Hetchy	113,465	117,295	117,231	116,140	117,682	115,437	114,799	116,525	117,424	115,349
Lake Eleanor	8,459	8,429	8,247	8,247	7,459	8,929	8,677	7,489	8,677	8,065
Lake Lloyd (Cherry)	87,478	87,888	89,247	86,790	89,247	88,951	81,305	83,353	87,763	88,248
<b>Total</b>	<b>209,402</b>	<b>213,612</b>	<b>214,725</b>	<b>211,177</b>	<b>214,388</b>	<b>213,317</b>	<b>204,781</b>	<b>207,367</b>	<b>213,864</b>	<b>211,662</b>
<b>Hetch Hetchy Power</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Hydro electric generation (megawatt hours)</b>										
Holm	558,826	717,588	728,447	685,103	726,942	852,411	576,851	563,919	668,119	649,707
Kirkwood	481,221	577,357	496,128	548,504	596,567	667,282	428,901	469,416	473,910	452,770
Moccasin	378,428	429,680	363,794	373,304	397,647	418,814	344,361	377,327	373,345	337,370
Moccasin Low-Head	5,311	4,791	3,638	5,038	6,881	8,272	2,324	2,522	4,106	6,094
<b>Total</b>	<b>1,423,786</b>	<b>1,729,416</b>	<b>1,592,007</b>	<b>1,611,949</b>	<b>1,728,037</b>	<b>1,946,779</b>	<b>1,352,437</b>	<b>1,413,184</b>	<b>1,519,479</b>	<b>1,445,941</b>

(\*) In addition to these regional reservoirs. SFPUC has In-City System Storage Capacity of 411.9 million of gallons

Source: Water Monthly Operating Report, Hetch Hetchy Capital Outlays Summary, and Treatment Plant Influent Flow & Sewer Service Charge Calculation Reports

## Operating Information

**Major Water Wholesale and Retail Customer Accounts by Revenue**  
**Fiscal Years Ending 2001 to 2010**  
(Dollars in Thousands)

<b>Wholesale Customers</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Hayward Muni Water System	7,906	7,770	7,805	10,809	10,222	9,200	11,123	12,528	13,500	14,066
City of Palo Alto	5,995	5,874	5,644	7,442	6,770	6,183	8,391	8,332	8,383	9,049
City of Sunnyvale	4,329	4,488	4,021	5,572	5,010	4,939	5,849	6,898	7,703	8,143
Calif. Water Service Co (S.Mateo)	4,699	4,616	4,526	5,931	5,788	5,633	6,965	7,065	7,494	7,844
Alameda Co Water District	4,589	4,645	4,808	6,082	5,234	4,713	6,793	7,138	7,198	8,032
City of Mountain View	4,824	4,949	4,724	6,104	5,912	5,274	6,641	6,818	7,091	7,290
City of Milpitas	3,064	3,097	3,019	3,996	3,792	3,414	4,257	4,550	4,964	5,150
City of Redwood City	4,043	3,982	3,794	5,318	5,015	4,212	5,715	5,419	4,946	5,300
Estero Municipal Improvement District	2,536	2,478	2,332	3,084	2,889	2,660	3,434	3,580	3,671	3,979
<b>Retail Customers</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
SF International Airport	911	1,194	1,154	1,326	1,305	1,345	1,742	2,123	2,314	2,066
Nasa Shared Services Center (NSSC)	425	691	622	667	631	661	773	996	1,070	667
Parkmerced Investors Properties, LLC	454	519	573	592	489	504	578	748	811	648
Treasure Island <sup>1</sup>	346	374	449	494	401	476	566	710	856	957
University of California San Francisco	245	249	333	174	174	338	396	610	491	469
NRG Energy Center SF <sup>2</sup>	112	42	282	356	357	402	430	373	400	453
SF State University-State of Calif	101	100	115	144	130	148	187	274	298	289
Marriott Hotel	97	94	97	101	123	137	152	192	210	241
Castlewood Country Club	233	354	332	395	349	428	541	695	736	409
Fairmont Hotel & Tower	80	71	84	98	103	122	147	152	165	170
American Linen	84	73	68	65	72	94	106	115	116	109

<sup>1</sup>The numbers reflect gross revenues for after sales

<sup>2</sup>Account number is different in FY2001 & 2002

Source: San Francisco Public Utilities Commission Customer Information and Billing System



## Operating Information

**Major Sewer Customer Accounts by Revenue  
Fiscal Years Ending 2001 to 2010  
(Dollars in Thousands)**

<b>Customer</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Parkmerced Investors Properties, LLC	1,026	1,111	1,130	1,169	1,272	1,350	1,514	1,704	1,715	1,115
University of California San Francisco	854	798	981	561	663	1,034	1,146	1,574	1,270	1,212
NRG Energy Center SF	341	83	483	609	666	738	775	845	852	843
SF State University-State of Calif	315	318	305	374	350	448	577	643	676	864
Marriott Hotel	388	347	330	342	454	498	543	577	596	598
Fairmont Hotel & Tower	316	254	281	329	377	441	522	454	484	425
Hyatt Corporation	321	269	285	287	282	339	392	442	400	418
American Linen	356	272	246	242	348	450	403	353	372	311

Source: San Francisco Public Utilities Commission Customer Information and Billing System

## Operating Information

**Major Electric Retail and Wholesale Customer Accounts by Revenue**  
**Fiscal Years Ending 2001 to 2010**  
**(Dollars in Thousands)**

<b>Retail Customer</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Recreation and Parks Department	1,107	1,340	1,344	1,240	869	1,221	1,308	1,286	1,305	1,213
San Francisco Port	1,139	1,364	1,562	1,386	1,300	1,246	1,258	1,326	1,435	1,264
San Francisco Unified School District	1,246	1,257	1,295	1,251	1,301	1,262	1,309	1,309	1,292	1,340
City-owned Parking Garages	1,136	1,507	1,552	1,615	1,482	1,546	1,548	1,572	1,719	1,770
Department of Public Health	1,651	1,788	1,802	1,728	1,704	1,662	221	630	1,179	1,958
Administrative Services Agency	2,134	2,656	3,495	2,022	1,713	3,876	4,009	4,232	4,233	2,138
San Francisco Housing Authority	2,679	3,394	3,169	2,963	3,048	3,210	3,455	3,473	3,672	3,742
Municipal Transportation Agency	5,262	5,500	4,606	4,562	4,323	4,219	4,275	4,420	4,513	4,470
SFPUC - Water Enterprise	3,802	5,823	6,334	6,199	5,704	5,593	5,758	5,263	5,477	6,513
SFPUC - Wastewater Enterprise	6,160	8,654	9,028	7,773	7,577	7,211	7,254	7,273	7,567	8,080
San Francisco International Airport	23,998	33,807	33,984	33,205	29,635	29,275	29,161	29,853	31,659	32,234
<b>Wholesale Customer</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Modesto Irrigation Districts	16,094	14,874	17,777	18,912	16,973	13,651	8,426	4,378	1,322	2,437
Turlock Irrigation Districts	7,103	7,117	8,424	6,734	8,049	10,876	5,838	6,085	3,717	5,093
Western Systems Power Pool	10,340	8,305	3,910	6,021	7,399	23,383	1,911	9,247	6,162	10,106

Source: Power Enterprise Scheduling System

## Performance Measures

Water Enterprise	FY 2007-08 Actual	FY 2008-09 Actual	FY 2009-10 Target	FY 2009-10 Actual	FY 2010-11 Target
<b>Deliver high quality drinking water to our customers</b>					
California Department of Public Health (DPH) violations in the Regional Water System	0	0	0	n/a	n/a
California Department of Health and Safety (DHS) violations in the Local Water System	0	0	0	n/a	n/a
Number of unplanned service interruptions to wholesale customers and to the retail service area (San Francisco)	0%	0%	0%	n/a	n/a
<b>Maintain and improve customer service</b>					
Percent of customer inquiries or complaints responded to within 2 business hours of initial contact	100%	100%	100%	100%	100%
Unplanned disruptions of less than 4 hours in San Francisco (per 1,000 customer accounts)	1.06	0.63	1.1	0.45	1.1
Unplanned disruptions of greater than 12 hours in San Francisco (per 1,000 customer accounts)	0.02	0.01	0.01	0.00	0.01
<b>Maintain infrastructure to keep water system in a state of good repair and operation</b>					
Percent of wholesale water meters calibrated	67%	33%	50%	45%	35%
Percent of transmission line valves exercised	13%	32%	33%	41%	33%
Number of residential and commercial water meters replaced in San Francisco	3,561	1,115	500	1,243	122,000
Miles of water main replaced in San Francisco	6.0	8.1	6.0	5.3	6.0
Miles of water conveyance facilities inspected in the Hetch Hetchy system (Hetch Hetchy to Tesla Portal)	47	16	16	10	8
Percent of maintenance that is scheduled rather than unscheduled in the Hetch Hetchy system	52%	48%	45%	47%	50%
Percent of maintenance that is scheduled rather than unscheduled in the Regional system (Tesla to CDD)	66%	56%	54%	94%	60%

<b>Wastewater Enterprise</b>	<b>FY 2007-08</b>	<b>FY 2008-09</b>	<b>FY 2009-10</b>	<b>FY2009-10</b>	<b>FY2010-11</b>
	<b>Actual</b>	<b>Actual</b>	<b>Target</b>	<b>Actual</b>	<b>Target</b>
<b>Collect wastewater in an efficient and effective fashion</b>					
Number of catch basins inspected and cleaned	7,009	8,062	7,500	9,313	8,000
Linear feet of main collection system sewer lines inspected	399,565	587,928	528,000	695,399	660,000
Number of dental office inspections performed (to control source of mercury discharge)	130	6	25	25	10
Number of Fats, Oils, & Grease (FOG) inspections (to reduce sewer blockages and control odor problems)	862	767	840	913	1200
<b>Operate the treatment plants efficiently and effectively</b>					
Major National Pollution Discharge Elimination System (NPDES) Permit violations per year	0	2	2	2	2
Kilowatt-hours of electric power consumed per million gallons treated (includes plants & pump stations)	1,981	2,065	1,800	2,005	1,900
Percent of solids in dewatered (post-centrifuge) cake	23%	24%	23%	25%	25%
<b>Maintain the wastewater system in a state of good repair</b>					
Percent maintenance work done that is planned vs unplanned	64%	84%	80%	87%	85%
Percent of scheduled maintenance jobs completed within 10% of initial estimate for staff hours required	29%	38%	40%	45%	40%
Percent of preventive maintenance (PM) tasks completed	38%	77%	80%	78%	80%
<b>Foster Constructive Relationships with Neighborhoods and Contribute to the Community</b>					
Number of confirmed treatment plant odor complaints made by the public	12	9	6	5	6
Percent of sewer complaints responded to in person within 8 hours	100%	100%	100%	100%	100%

Hetch Hetchy Power	FY 2007-08 Actual	FY 2008-09 Actual	FY 2009-10 Target	FY 2009-10 Actual	FY 2010-11 Target
<b>Manage the City's power supply effectively and efficiently</b>					
Actual municipal power load falls within 90% to 110% of forecast load (megawatt hours)	842,347	836,060	880,492	830,543	856,914
<b>Promote energy conservation</b>					
Total number of kilowatt hours reduced					
- Energy Efficiency Projects	2,339,000	3,035,387	5,500,000	5,822,965	5,500,000
- Streetlight Conversion with LED	0	0	0	45,996	3,200,000
Total number of peak kilowatts reduced					
- Energy Efficiency Projects	87	528	1,350	1,309	1,400
- Streetlight Conversion with LED	0	0	0	12	780
<b>Develop and implement renewable energy projects</b>					
Increase in kilowatts of renewable capacity (non-Hetch Hetchy generated)	845	0	0	0	4,970
<b>Maintain the City's power assets in a state of good repair</b>					
Percent of customer-funded projects (work orders for other departments) performed within cost estimates	83%	50%	85%	92%	100%
Percent of maintenance work on Hetch Hetchy high voltage equipment performed within manufacturer-recommended intervals	75%	0%	75%	75%	85%
<b>Respond to streetlight and pole needs promptly</b>					
Percent of SFPUC streetlight malfunctions (as reported by customers) repaired within two business days	70%	65%	70%	66%	80%
Percent of SFPUC pole knockdown/replacements (with concrete foundation repairs) completed within twenty-one business days	39%	85%	44%	64%	45%
<b>Manage utilities on Yerba Buena Island / Treasure Island effectively and efficiently</b>					
Percent of Treasure Island / Yerba Buena Island service (electric, natural gas) requests responded to within 48 hours	100%	100%	100%	100%	100%
Percent of technical and engineering services for TIDA operation activities provided on schedule	100%	100%	100%	100%	100%
Percent of technical and engineering services for TIDA design activities provided on schedule	100%	100%	100%	100%	100%
<b>Generate power to help meet the needs of the City and County of San Francisco</b>					
Power generated to meet San Francisco's needs, in gigawatt hours (annual target set assuming average annual hydrology)	1,426	1,533	1,600	1,453	1,582

## **Glossary of Terms**

### **Accreted Value**

Accreted value is the theoretical price of a bond if market interest rates were to remain at current levels.

### **Accrual Basis of Accounting**

The financial activities of the Water, Wastewater, Hetch Hetchy Water, & Hetch Hetchy Power are accounted for using the accrual basis of accounting. It is a method of accounting in which all assets and liabilities associated with its operations are included on the statement of net assets; revenues are recorded when earned, and expenses recorded when liabilities are incurred. This accounting method recognizes the financial effect of transactions, events, and interfund activities when they occur, regardless of the timing of related cash flows.

### **Advanced Meter Infrastructure (AMI)**

A system that collects, measures, and analyzes energy usage; includes hardware, software, communications, customer associated systems and meter data management software.

### **All-In TIC (AIC)**

Interest costs including costs of issuance.

### **American Recovery and Reinvestment Act (ARRA)**

An act of Congress that instituted a variety of stimulus programs.

### **Annual Appropriation Ordinance (AAO)**

Upon approval, this document is the legal authority for the City to spend funds during the fiscal year. It contains information on the sources and uses of selected City funds detailed by department and by program. Additional schedules summarize selected City revenues and expenditures by service area, department and fund.

### **Annualization**

New positions for the fiscal year are budgeted at 0.77 FTE, to adjust for the amount of time the employee is actually on the payroll in the fiscal year, since the recruitment process takes approximately three months. New positions are annualized in the following fiscal year at 0.23 FTE, to reflect on-going salary costs for a full year.

### **Annual Required Contribution (ARC)**

Term used in connection with defined benefit pension and other post-employment benefit plans to describe the amount an employer must contribute in a given year.

### **Annual Salary Ordinance (ASO)**

The Annual Salary Ordinance (ASO) is produced by the Controller's Budget Office. This document provides the legal authority for the City to hire positions during the fiscal year. The ASO contains full-time equivalent (FTEs) positions by department, program, and fund.

### **Arbitrage**

The reinvestment of the proceeds of tax-exempt securities in materially higher yielding taxable securities.

### **Arbitrage Rebate**

A payment made by an issuer to the Federal government in connection with an issue of tax-exempt bonds. The payment represents the amount, if any, of arbitrage earnings on bond proceeds and certain other related funds, except for earnings that are not required to be rebated under limited exemptions provided under the Internal Revenue Code.

## **Assistant General Manager (AGM)**

Supports the General Manager of the SFPUC as the head of the major SPFUC sections: Business Services, External Affairs, Infrastructure, Power Enterprise, Water Enterprise, and the Wastewater Enterprise.

## **Assurance and Internal Controls (AIC)**

A bureau in Business Services. AIC provides and facilitates quality assurance oversight, risk management, internal controls, policies and procedures review and business process improvement programs for operational and financial transactions/processes, with the objective to minimize process inefficiencies and control deficiencies to mitigate financial risks.

## **Attrition Savings**

Attrition Savings is the anticipated amount of salaries that will not be expanded due to normal attrition.

## **Automated External Defibrillator (AED)**

A small, portable device that assesses a person's heart rhythm and if necessary, it administers an electric shock to restore a normal rhythm in victims of sudden cardiac arrest.

## **Automated Water Meter Reading System**

The SFPUC will implement this System over the next three years, which will collect various water meter data. The System will largely eliminate meter reading field visits, improve customers' access to water usage information, facilitate the timely detection of tampering, theft, and leaks, and enhance usage or flow profiling.

## **Auxiliary Water Supply System (AWSS)**

The Auxiliary Water Supply System (AWSS) is a system of mains and 1,889 High Pressure Fire Hydrants, independent of the domestic water supply built solely for the purpose of firefighting. The system is supplied with fresh water, by gravity, from a reservoir and two tanks located at high elevation in the City. The transition of AWSS to the SFPUC would be implemented in a phased approach over a period of time and would include both the high and low pressure distribution systems, one reservoir, two tanks, and two pump stations.

## **Average Cost**

A costing method by which the value of a pool of assets or expenses is assumed to be equal to the average cost of the assets or expenses in the pool.

## **Average Daily Rate (ADR)**

A statistical unit that is often used in the lodging industry. The number represents the average rental income per occupied room in a given time period. The ADR can be calculated by dividing the room revenue by the number of rooms sold. ADR along with the property's occupancy are the foundations for the property's financial performance. It is one of the commonly used financial indicators in hotel industry to measure how well a hotel performs compared to its competitors and itself (year over year).

## **Bay Area Water Supply and Conservation Agency (BAWSCA)**

BAWSCA represents the interests of 27 suburban wholesale that purchase water wholesale from the San Francisco regional water system. These entities provide water to 1.7 million people, businesses and community organizations in Alameda, Santa Clara and San Mateo counties.

## **Board of Supervisors (BOS)**

The Board of Supervisors is the legislative branch of the City and County of San Francisco. The Board consists of 11 members. Each member is elected on a non-partisan basis from a district where he or she lives. The Board is responsible for amending an approving the SFPUC's proposed budget. The Board's Budget Analyst also participates in reviews of city spending and financial projections.

## **Bond Discount**

A contra liability account that reports the amount of unamortized discount associated with bonds that are outstanding. The discount on bonds payable originates when bonds are issued for less than the bond's face or maturity amount. The debit balance in this account will be amortized to bond interest expense over the life of the bonds and results in more interest expense than interest paid.

## **Bond Issuance Cost**

A long-term asset which includes professional fees and registration fees associated with the issuance of bonds. The amount in the account will be amortized to expense on the income statement over the life of the bonds.

## **Bond Premium**

A liability account with a credit balance associated with bonds payable that were issued at more than the face value or maturity value of the bonds. The premium on bonds payable is amortized to interest expense over the life of the bonds and results in a reduction of interest expense.

## **Budget and Finance Committee**

The Budget and Finance Committee of the Board of Supervisors is referred appropriation ordinances, and measures concerning bond issues, taxes, fees and other revenue measures, redevelopment, and real estate. The Committee is also referred the annual appropriation and annual salary ordinances, and holds a public hearing on the Mayor's budget instructions to City departments for each annual City budget after the instructions are released.

## **Build America Bonds (BABs)**

A taxable bond with associated direct payment subsidy paid by the Federal government for municipal capital projects.

## **California Employment Development Department (EDD)**

EDD was established in 1936 to provide an economic line of defense against the effects of unemployment, assisting not only the individual but also the community. It is one of the largest state departments with service locations throughout the State. EDD offers a wide variety of services to millions of Californians under the Job Service, Unemployment Insurance (UI), State Disability Insurance (SDI), Workforce Investment, and Labor Market Information programs. As California's largest tax collection agency, EDD also handles the audit and collection of payroll taxes and maintains employment records for more than 17 million California workers.

## **California Energy Commission (CEC)**

The California Energy Commission is the State's primary energy policy and planning agency. Created by the Legislature in 1974 and located in Sacramento, the commission has responsibility for activities that include forecasting future energy needs, promoting energy efficiency through appliance and building standards, and supporting renewable energy technologies.

## **California Environmental Quality Act (CEQA)**

A state law passed in 1970 which requires state and local agencies to make decisions with environmental consequences in mind by mandating that they: disclose the potential environmental effects of a proposed project to decision makers and the public; identify methods to minimize those effects to the environment; identify feasible mitigation measures and/or alternatives to the project; and solicit and respond to comments from the public and from other agencies concerned with the project.

## **California Independent Systems Operator (ISO)**

The California ISO is a non-profit public benefit corporation charged with operating the majority of California's high-voltage wholesale power grid.

## **California Public Utilities Commission (CPUC)**

An administrative agency of the State of California that exercises both legislative and judicial powers. The major duties



of the CPUC are to regulate privately-owned utilities, securing adequate service to the public at rates that are just and reasonable both to customers and shareholders of the utilities. The CPUC also provides electricity and natural gas forecasting, and analysis and planning of energy supply and resources.

### **California Regional Water Quality Control Board (CRWQCB)**

CRWQCB consists of nine Regional Boards. Their mission is to develop and enforce water quality objectives and implementation plans that will best protect the state's waters, recognizing local differences in climate, topography, geology and hydrology. Each Regional Board has nine part-time members appointed by the Governor and confirmed by the Senate. Regional Boards develop "basin plans" for their hydrologic areas, issue waste discharge requirements, take enforcement action against violators, and monitor water quality.

### **Capital Assets**

Land, improvements to land, easements, buildings, building improvements, vehicles, machinery, equipment, works of art and historical treasures, infrastructure, and all other tangible or intangible assets that are used in operations and that have initial useful lives extending beyond a single reporting period. Capital assets for Water are stated at cost. Capital assets for Wastewater, Hetch Hetchy Water, and Hetch Hetchy Power with an original acquisition date prior to July 1, 1977 are recorded in the financial statements at estimated cost, as determined by an independent professional appraisal, or at cost, if known. All subsequent acquisitions have been recorded at cost.

### **Capital Improvement Advisory Committee (CIAC)**

The CIAC consists of the Mayor's Finance (or Budget) Director as Chair, President of the Board of Supervisors, City Administrator, City Controller, Director of Public Works, Director of Planning and two individuals chosen by the Chair of the CIAC to serve two-year terms. Pursuant to the City's Administrative Code, Section 3.22, all long-term financing proposed transactions for capital improvements shall be reviewed and approved by the CIAC.

### **Capital Improvement Program (CIP)**

The Capital Improvement Program is supported by the Ten-Year Capital Improvement Program and Ten-Year Financial Plan. The SFPUC's CIP includes projects for repair and replacement (R&R) to the three Enterprises' various facilities, and also includes upgrades to improve water efficiency, power infrastructure, and sewage treatment facilities. The issuance of revenue bonds, other forms of indebtedness, and the execution of governmental loans are provided for under the San Francisco City Charter to finance the SFPUC's capital programs. The repayment of this indebtedness is provided for under the annual rates and revenues of the particular Enterprise that incurs the debt, categorized as debt service in the budget.

### **Capital Planning Committee (CPC)**

The legislation creating the Ten-Year Capital Plan created the Capital Planning Committee (CPC). This body is chaired by the City Administrator and consists of the President of the Board of Supervisors, the Mayor's Finance Director, the Controller, the City Planning Director, the Director of Public Works, the Airport Director, the Executive Director of the Municipal Transportation Agency, the General Manager of the Public Utilities System, the General Manager of the Recreation and Parks Department, and the Executive Director of the Port of San Francisco. Through a series of meetings, the Capital Planning Committee reviews proposals, staff recommendations, and documents toward the development of a City-wide capital plan and annual capital budget. Furthermore, the Committee establishes prioritization and assessment criteria to assist the City Administrator and staff in developing the capital plan.

### **Capital Planning Program (CPP)**

The Capital Planning Program is responsible for the development and implementation of the City and County of San Francisco's ten-year capital plan and its capital budget. The program reviews and analyzes infrastructure needs and facility conditions, evaluates capital project requests, reports on existing capital projects, and establishes financing strategies to meet the City's long- and short-term capital needs. The mission of the Capital Planning Program is to develop and implement a sustainable plan for the long-term safety, accessibility and modernization of San Francisco's public infrastructure and facilities.

## **Capital Projects**

Capital projects must result in the addition of new capital assets and/or improvements to existing assets. Capital projects may include associated costs of acquisition or construction of new assets and/or expenditures for activities that enhance the function, improve the performance and/or extend the service lives of existing assets. In general, capital projects must meet one of the following requirements: new construction, including additions to an existing facility or facilities (or other assets) and with a useful life of at least 5 years; or renewal and replacement includes replacement, major rehabilitation and betterments that enhance the function, improves the performance or extends the service lives of existing facilities (or other assets).

## **Carryforwards**

Outstanding budget commitments at the end of the fiscal year, funded out of the operating budget, that are authorized to be carried over and expended during the following fiscal year.

## **Ccf**

Ccf (100 cubic feet) is the billing unit for water and wastewater bills, where 1 Ccf=748 gallons. The average single family residence in San Francisco uses 7 Ccf per month, or 5,236 gallons. This, by way of comparison, is about 57 gallons per person per day versus the California State-wide average of 155 gallons per day.

## **Certificates of Participation (COPs)**

An instrument evidencing a pro rata share in a specific pledged revenue stream, usually lease payments by the issuer that are subject to annual appropriation. The certificate generally entitles the holder to receive a share, or participation, in the lease payments from a particular project. The lease payments are passed through the lessor to the certificate holders. The lessor typically assigns the lease and lease payments to a trustee, and then distributes the lease payments to the certificate holders.

## **Chemical Oxygen Demand (COD)**

One of the determinants of wastewater rates for non-residential customers.

## **Citizens' Advisory Committee**

Established by Ordinance Number 58-04 to provide recommendations to the San Francisco Public Utilities Commission General Manager, the Commission and the Board of Supervisors regarding the agency's long-term strategic, financial and capital improvement plans.

## **City and County of San Francisco (CCSF)**

The City and County of which the SFPUC is an Enterprise Department, governed by the Mayor and Board of Supervisors.

## **City Distribution Division (CDD)**

The City Distribution Division is a division of the Water Enterprise. It distributes high-quality, treated water to San Francisco customers. The Division maintains the water distribution system within the City, which consists of 13 reservoirs, 20 pumping stations, a network of approximately 1,300 miles of pipeline and 12,000 water valves.

## **Clean Renewable Energy Bonds (CREBs)**

Bonds used to fund the solar photovoltaic projects, included in Hetch Hetchy Power. CREBs are a form of tax credit bond in which interest on the bonds is paid in the form of Federal tax credits by the United States government in lieu of interest paid by the issuer. Created under the Energy Tax Incentives Act of 2005, CREBs can be used, among other entities, by local governments, to finance certain renewable energy and clean coal facilities.

## **Combustion Turbine Project (CT)**

Contracting and financial structure proposed by SFPUC to the Board of Supervisors for the development of four natural gas-fired combustion turbine generating units (each, a "CT unit") owned by the City and County of San

Francisco. The purpose of pursuing the development of the CT units is to improve environmental quality while maintaining electric system reliability. This proposal leverages the City's tax-exempt borrowing capacity and the favorable power purchase agreement with the California Department of Water Resources to allow the project to pay for itself within 18 years of commencing operations under conservative financing assumptions.

### **Commercial Paper (CP)**

Used as a financing strategy that utilizes short-term financing to calibrate financing needs with project spending. The CP program facilitates short-term financing typically at lower interest rates than longer term debt, which minimizes costs.

### **Community Based Organizations (CBOs)**

CBOs are civil society non-profits that operate within a single local community and are essentially a subset of the wider group of nonprofits. They are often run on a voluntary basis and are self funding. CBOs focus on improving the general physical characteristics of a community. Although particular programs may be quite specific, these organizations tend to view their programs not merely as ends in themselves, but rather to see such programs within a broader community perspective.

### **Community Choice Aggregation (CCA)**

As defined by California Assembly Bill 117, CCA permits any city, county or city and county to aggregate the electric loads of residents, businesses and municipal facilities to facilitate the purchase and sale of electrical energy.

### **Competitive Sale**

A method of bond sale by wherein the bonds are advertised for sale. Any broker dealer or dealer bank may bid on the bonds at the designated date and time, and the bonds are awarded to the bidder offering the lowest interest cost. New money and refunding fixed-rate revenue bonds should be issued by competitive sale unless (i) there is significant deterioration in the SFPUC's overall credit rating or outlook, (ii) there are issues specific to a transaction that are outside of the SFPUC's customary credit profile including market issues such as threat of war or changes in taxation or sector risks, (iii) or other factors which militate against the use of the competitive sale process. The bonds shall be awarded to the bidder whose conforming bid represents the lowest true interest cost (TIC) to the SFPUC.

### **Comprehensive Annual Financial Report (CAFR)**

The CAFR is the City's official annual financial report. It consists of three major sections: introductory, financial, and statistical. The introductory section furnishes general information on the City's structure, services, and environment. The financial section contains all basic financial statements and required supplementary information, as well as information on all individual funds and discretely presented component units not reported separately in the basic financial statements. The financial section may also include supplementary information not required by GAAP. The statistical section provides trend data and nonfinancial data useful in interpreting the basic financial statements and is especially important for evaluating economic condition.

### **Construction in Progress (CIP)**

This is a long term asset account that accumulates the cost of acquisition and construction of major plant and equipment. When the project is finished and placed into the service, the cost is removed from this account and is recorded in a plant asset account. Costs of discontinued construction projects are recorded as an expense in the year in which the decision is made to discontinue such projects.

### **County-wide Cost Allocation Plan (COWCAP)**

The County-Wide Cost Allocation Plan is developed annually by the City Controller's Office and calculates the overhead rate charged to each department for its share of City-wide overhead costs, such as payroll, accounting, and centralized operations support services. The SFPUC is responsible for paying for a share of City-wide overhead, calculated as part of the COWCAP.

## **Customer Information System (CIS)**

The CIS replacement project replaced the mainframe customer billing system with state-of-the-art, web-based software for which skilled support professionals are readily available. Implementation of more fully featured customer care software that is integrated with other SFPUC systems and enables features such as mobile computing, automated meter reading, and web self service.

## **Debt Service**

Principal and interest payments on revenue bonds, State Revolving Fund loans used to finance system improvements, repayments on loans, and financings related to Clean Renewable Energy Bonds.

## **Department of General Services (DGS)**

DGS serves as business manager for the State of California. DGS provides a variety of services to State agencies through innovative procurement and acquisition solutions, creative real estate management and design, state-of-the-art telecommunications, environmentally friendly transportation, and funding for the construction of safe schools.

## **Department of Technology (DT)**

A City and County of San Francisco City department that provides proactive leadership in the use of technology and information solutions to improve the City's operations and service delivery.

## **Economic Barometer**

A selective compilation of economic data designed to represent larger trends. Consumer spending, housing starts, and interest rates are barometers used in economic forecasting.

## **Effective Buying Income (EBI)**

Effective Buying Income (EBI) is defined as money income less personal income tax and non-tax payments, such as fines, fees or penalties.

## **Energy Tax Incentives Act of 2005**

The act contains \$14.5 billion in tax cuts to promote domestic energy production and conservation. It also encourages the use of alternative energy sources and provides significant energy infrastructure incentives to ensure development of more robust and reliable power grids.

## **Enterprise Funds**

Enterprise funds account for operations that are financed and operated in a manner similar to private businesses. Enterprise costs of providing goods or services to the general public are recovered primarily through user charges.

## **Equipment**

Equipment that has a value greater than \$5,000, and a useful life of three years or more, such as vehicles and software, or other heavy equipment.

## **Fats, Oils, and Grease (FOG)**

The SFPUC Water Pollution Prevention Program has materials that can assist businesses in properly managing their fats, oils and grease wastes. FOG can be a major problem for San Francisco's sewers and for the bay and ocean that surround San Francisco, because when not disposed of properly, FOG forms thick layers inside sewers and constricts flow.

## **Federal Deposit Insurance Corporation**

An independent agency of the United States government that protects against the loss of insured deposits if an FDIC-insured bank or savings association fails. FDIC preserves and promotes public confidence in the U.S. financial system by insuring deposits in banks and thrift institutions for up to \$250,000 through December 31, 2013.

## **Federal Energy Regulatory Commission (FERC)**

The United States Federal agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects.

## **Federal Investment Company Act of 1940**

This Act regulates the organization of companies, including mutual funds, that engage primarily in investing, reinvesting, and trading in securities, and whose own securities are offered to the investing public. The Act requires these companies to disclose their financial condition and investment policies to investors when stock is initially sold and, subsequently, on a regular basis. However, the act does not permit the SEC to directly supervise the investment decisions or activities of these companies or judge the merits of their investments.

## **Federal Securities Act of 1933**

Often referred to as the "Truth in Securities Act", the Federal Securities Act was enacted by Congress in the aftermath of the stock market crash of 1929 and during the ensuing Great Depression. The Act requires investors to receive financial and other significant information concerning securities being offered for public sale, and prohibit deceit, misrepresentations, and other fraud in the sale of securities.

## **Financial Accounting Standards Board (FASB)**

The FASB is the designated organization in the private sector for establishing standards of financial accounting. Those standards govern the preparation of financial statements. They are officially recognized as authoritative by the Securities and Exchange Commission (SEC) (Financial Reporting Release No. 1, Section 101, and reaffirmed in its April 2003 Policy Statement) and the American Institute of Certified Public Accountants (Rule 203, Rules of Professional Conduct, as amended May 1973 and May 1979).

## **Federal Emergency Management Agency (FEMA)**

FEMA is the federal agency that builds and supports the nation's emergency management system.

## **Financial Accounting Standards Board (FASB) Statement 34**

FASB Statement 34, *Capitalization of Interest Costs*, requires that interest expense incurred during construction of assets be capitalized. The interest on debt used to finance the asset's construction is added to the cost of the project, instead of being expensed on the current period. FASB Statement 34 was amended by FASB Statement 62, which requires offsetting of interest income against interest cost in circumstances involving acquisition of qualifying assets financed with the proceeds of tax-exempt borrowings if those funds are externally restricted to finance acquisition of specified qualifying assets or to service the related debt.

## **Fiscal Year (FY)**

The twelve-month budget cycle. San Francisco's fiscal year is from July 1st to June 30th.

## **Fixed Rate Bonds**

Long-term securities with serial and term maturities. Interest rates are determined when the bonds are sold and are fixed to maturity.

## **Fleet Management Operations (FMO)**

FMO is a bureau in Business Services. FMO provides transportation and commute-related services SFPUC-wide with a focus on the needs of employees. FMO is responsible for the establishment, implementation, and maintenance of policies and procedures governing SFPUC-owned mobile equipment.

## **Flow of Economic Resources Measurement Focus**

The financial activities of the Water, Wastewater and Hetch Hetchy Water & Power are accounted for on a flow of economic resources measurement focus. Under this focus, all assets and liabilities, both current and long-term,

associated with operations are included on the statements of net assets, and depreciation is recorded as a charge to operations. The fund equity represents the net assets (total assets minus total liabilities) available to the fund rather than the fund balance.

### **Full-Time Equivalents (FTEs)**

One or more employees who cumulatively work 40 hours per week.

### **Fund Balance**

Amount used to balance total annual revenue and expenditure amounts. It is budgeted as a source when expenditures exceed revenues. When expenditures are less than total sources, a General Reserve is budgeted, which then closes to fund balance at the end of the fiscal year.

### **General Fund**

The General Fund is a source of discretionary spending and funds many of the basic municipal services in the City and County of San Francisco such as public safety, health and human services and public works. Primary revenue sources include local taxes such as property, sales, payroll and other taxes.

### **Generally Accepted Accounting Principles (GAAP)**

Conventions, rules and procedures that serve as the norm for the fair presentation of financial statements.

### **General Obligation Bonds**

A common type of municipal bond in the United States that is secured by a state or local government's pledge to use legally available resources, including tax revenues, to repay bond holders.

### **General Reserves**

Amount budgeted to balance total annual revenue and expenditure amounts. Budgeted when revenues exceed expenditures. At fiscal year-end, the General Reserves closes to Fund balance.

### **Geographic Information System (GIS)**

One of the SFPUC-wide systems, GIS integrates, stores, analyzes, and displays geographic information for informing decision making.

### **GoSolarSF Incentive Program**

The GoSolarSF Program was developed by the San Francisco Solar Task Force to encourage the installation of photovoltaic systems on residents and businesses within the City. The GoSolarSF solar incentive program was approved by the San Francisco Public Utilities Commission in January 2008. The Board of Supervisors passed ordinances establishing a long-term Solar Energy Incentive Program and a Solar Energy Incentive Pilot Program in June 2008. The program was launched on July 1, 2008.

### **Governmental Accounting Standards Board (GASB)**

The Governmental Accounting Standards Board (GASB) is the independent organization that establishes and improves standards of accounting and financial reporting for U.S. state and local governments.

### **Governmental Accounting Standards Board (GASB) Statement No. 45**

GASB Statement 45, *Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions (OPEB)*, requires state and local governmental employers to account for and report the annual cost of OPEB and the outstanding obligations and commitments related to OPEB in essentially the same manner as they currently do for pensions. The provisions of Statement 45 may be applied prospectively and do not require governments to fund their OPEB plans. An employer may establish its OPEB liability at zero as of the beginning of the initial year of implementation; however, the unfunded actuarial liability is required to be amortized over future periods.

## **Governmental Accounting Standards Board (GASB) Statement No. 49**

GASB Statement 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, provides guidance—and sets standards—for the accounting and reporting of obligations and costs related to pollution remediation. Once an obligating event occurs, governments must estimate the components of expected remediation outlays, and determine whether the outlays are accrued as a liability or capitalized when goods and services are acquired.

## **Government Auditing Standards**

Government Auditing Standards, also referred to as the "Yellow Book," contains standards for audits of government organizations, programs, activities, and functions, and of government assistance received by contractors, nonprofit organizations, and other nongovernment organizations. These standards are to be followed by auditors and audit organizations when required by law, regulation, agreement, contract, or policy. These standards pertain to auditors' professional qualifications, the quality of audit effort, and the characteristics of professional and meaningful audit reports.

## **Government Finance Officers Association (GFOA)**

Association of public finance professionals founded in 1906 as the Municipal Finance Officers Association. The GFOA has played a major role in the development and promotion of GAAP for state and local government since its inception and has sponsored the Certificate of Achievement for Excellence in Financial Reporting Program since 1946. It also publishes *Governmental Accounting, Auditing, and Financial Reporting*, commonly known as the "Blue Book."

## **Grants**

Contributions of cash or other assets from a government or other entity that are used or expended for a specific purpose, activity, or facility. Grants that enterprises receive are subject to audit and final acceptance by the granting agency. Current and prior year costs of such grants are subject to adjustment upon audit.

## **High Pressure Sodium Vapor (HPSV)**

An old street light technology. It is a high intensity discharge type of lamp that burns out after two to three years. It produces light by passing electricity through gas, causing the gas to glow. Mercury vapor lamps, metal halide lamps, and high-pressure sodium are examples of lamps using this technology.

## **Human Resource Services (HRS)**

HRS is a bureau in Business Services. HRS recruits, administers timekeeping and payroll, supports and retains a diverse and highly qualified workforce, serving the SFPUC Enterprises and Bureaus in an efficient, responsive and professional manner.

## **Hydro Electric Generation**

Hydro electricity, a form of renewable energy which is non-polluting, is generated by hydropower, i.e., the production of power through use of the gravitational force of falling or flowing water. Most hydro electric power comes from the potential energy of dammed water driving a water turbine and generator. The quantity of electricity generated is determined by the volume of water flow and the amount of "head" or the difference in height between the source and the water's outflow created by the dam. The greater the flow and head, the more electricity produced. The water rotates the turbines, which drive generators that produce electricity. The electricity is then transmitted to a substation where transformers increase voltage to allow transmission to homes, businesses and factories.

## **Indenture**

Legal document that specifically states the conditions under which a bond has been issued, the rights of the bond holders, and the duties of the issuer.

## **Information Technology Services (ITS)**

A Bureau in Business Services, ITS provides high quality, proficient and reliable information technology services to all SFPUC Enterprises and Bureaus.

### **Interim Capital Improvement Program (Interim CIP)**

The SFPUC launched the Wastewater Enterprise Interim Capital Improvement Program (Interim CIP) to address the immediate needs of San Francisco's wastewater system prior to the adoption of a system-wide Master Plan. These special projects are aimed at reducing flood risk, reducing wastewater odors, and improving treatment facilities. Interim CIP projects are funded through your wastewater service charges.

### **Internal Control**

Plan of organization and all the methods and measures designed to provide reasonable, but not absolute, assurance as to the safeguarding of assets against loss from unauthorized use or disposition; the reliability of financial records for preparing financial statements in conformity with generally accepted accounting principles; and maintaining accountability for assets.

### **Joint Powers Agreement**

A contract between a city, a county, and/or a special district in which the city or county agrees to perform services, cooperate with, or lend its powers to, the special district.

### **Kilovolt (kV)**

A measure of the potential energy of a unit charge at a given point in a circuit relative to a reference point.

### **Laboratory Information Management System (LIMS)**

A software system used by Water and Wastewater Laboratories to meet their laboratory needs.

### **Learning Management System (LMS)**

LMS is a software application for the administration, documentation, tracking, and reporting of training programs, classroom and online events, e-learning programs, and training content.

### **Letter of Credit**

Financial instrument usually issued by a commercial bank or private corporation which provides the primary or secondary security for the bond issue.

### **Light-Emitting Diode (LED)**

The new solid state lighting technology which offers better lighting performance and energy efficiency. Light is emitted from clusters of diodes, which direct light. The fixture lasts for 15 years.

### **Low-Impact Design (LID)**

A green stormwater management technology that can help mitigate the effects of urbanization on stormwater. This technology and design mimics natural watershed processes by replicating pre-existing hydrologic site conditions. LID directs runoff to natural vegetated systems, such as landscaped planters, swales and gardens that reduce, filter or slow stormwater runoff. Strategic placement of this system can help mitigate the impacts of impervious surfaces and in some cases increase the level of service provided by the traditional sewer pipes.

### **Long-Term Financial Plan – See Ten-Year Financial Plan**

### **Management's Discussion and Analysis (MD&A)**

Information provided in the Financial section of the CAFR, presented after the independent auditor's report, and provides a narrative introduction, overview, and analysis to accompany the basic financial statements.

### **Materials and Supplies**

A part of the operating budget that includes maintenance, safety, fuel, office supplies, and other miscellaneous materials and supplies for the maintenance and operations of an Enterprise.



**Maximo**

Asset management software that provides information on Enterprise assets.

**Mayor's Office of Public Finance**

The Mayor's Office of Public Finance is responsible for providing and managing low-cost debt financing of large-scale, long-term capital projects and improvements that produce social and economic benefit to the City and its citizens while balancing market and credit risk with appropriate benefits, mitigations and controls.

**Megawatt Hour (MWh)**

The term "megawatt" is used as a standard measure of electric power plant generating capacity equal to 1,000 kilowatts, or 1 million watts. It is most commonly used for large systems like wind turbines, biomass plants, and coal, natural gas, and nuclear plants. Megawatt hour measures the actual amount of electricity it produces over a certain period of time. One MWh is equal to 1,000 kilowatt hours or 1 million watt hours.

**Memorandum of Understanding (MOU)**

A binding agreement between two parties. CCSF labor agreements are adopted as MOUs.

**Metropolitan Statistical Area (MSA)**

MSA is one or more adjacent counties or county equivalents that have at least one urban core area of at least 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties. MSAs are used for official purposes, but they are not the only estimates of metro area populations available. The City and County of San Francisco belongs to the San Francisco-Oakland-Fremont, CA MSA, which encompasses a large portion of the San Francisco Bay Area. It is made up of two metropolitan divisions: the San Francisco-San Mateo-Redwood City division, and the Oakland-Fremont, Hayward division. Together these cover Alameda, Contra Costa, Marin, San Francisco, and San Mateo counties.

**Million Gallons per Day (MGD)**

Unit of measurement for gas or liquid flow rates. One MGD is equal to 1,121 acre feet per year or 1.55 cubic feet per second.

**Modesto Irrigation District (MID)**

One of four irrigation districts in California. MID's electric service area includes Modesto, Salida, Empire, Waterford, Mountain House and parts of LaGrange, Riverbank, Ripon, Escalon and Oakdale.

**Modified Accrual Basis of Accounting**

A basis of accounting used with a current financial resources measurement focus. It modifies the accrual basis of accounting in two significant ways: first, revenues are not recognized until they are measurable and available; and second, expenditures are recognized in the period in which the SFPUC normally liquidates the related liability rather than when the liability is first incurred, if earlier.

**Moody's Investors Service**

A major independent credit rating agency. Moody's Corporation is the holding company for Moody's Investors Service which performs financial research and analysis on commercial and government entities. The agency researches the financial health of bond issuers, including issuers of municipal bonds, and assigns ratings to the bonds being offered. They append their ratings with an indicator to show a bond's ranking within a category. Moody's uses a numerical indicator. For example, A1 is better than A2 but still not as good as Aa.

**Moscone Convention Center**

The largest convention and exhibition complex in San Francisco, California. It comprises three main halls: two underground halls underneath Yerba Buena Gardens, known as Moscone North and Moscone South, and a three-level Moscone West exhibition hall across 4th Street. It was initially built in 1981 as one single hall, Moscone South,

and named after George Moscone, a former mayor of San Francisco who was assassinated in 1978. Since its completion, the City and the Redevelopment Agency have implemented a number of other projects which enhance the vicinity of the Moscone Center for convention activity.

### **National Pollutant Discharge Elimination System (NPDES)**

A permit program, authorized by the Clean Water Act, that controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

### **Negotiated Sale**

A method of bond sale in which the issuing entity and a selected underwriter negotiate the terms of the issue, as opposed to having multiple underwriting groups competitively bidding on the issue to establish its terms. The SFPUC may retain more than one dealer or remarketing agent for each issuance of variable rate indebtedness. The SFPUC also shall reserve the right to replace a dealer or remarketing agent with notice at any time for any reason in its sole discretion. Variable rate bonds, including variable rate demand notes, auction rate securities, commercial paper, etc. may be issued by negotiated sale.

### **Non-Personnel Services**

Services including maintenance of equipment and facilities, travel, training, memberships, professional services, rent, and other expenses that support maintenance for the operation of an Enterprise.

### **Non-Residential Sewer Service Charges**

For non-residential customers, the sewer service charge is calculated based on the volume wastewater discharged and the pounds of pollutants contained in that discharge (i.e. a strength loading charge). The charges for customers with sampled discharges are billed on the basis of their specific waste characteristics. Other customers are billed on the basis of the standard waste characteristics for their respective business activity. In addition to the costs shared with residential customers, all non-residential customers are responsible for the costs of the Wastewater Enterprise's pre-treatment program.

### **North American Electric Reliability Corporation (NERC)**

The electric reliability organization (ERO) certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk-power system. NERC develops and enforces reliability standards; assesses adequacy annually via a 10-year forecast, and summer and winter forecasts; monitors the bulk power system; and educates, trains and certifies industry personnel.

### **Notes to Basic Financial Statements**

Additional information and details not displayed on the face of the financial statements that are essential to the full understanding of the financial statements.

### **Office of the General Manager**

Supports the General Manager in his key oversight functions, which are to oversee the regional utility that delivers reliable, high quality drinking water to more than 2.4 million Bay Area customers; that collects and treats wastewater and stormwater for the CCSF; and that provides hydroelectric and other renewable power resources for the San Francisco municipal customers.

### **Oils and Grease (O/G)**

One of the strength charge determinants of wastewater rates for non-residential customers.

### **Operating Transfers Out (OTO)**

On-going operating payments between Enterprise funds or other City departments.

## **Operations and Maintenance (O&M)**

Includes budgets for Personnel, Overhead (or COWCAP), Non-Personnel Services, Materials and Supplies, Equipment, Services of Other Departments, and Operating Transfers Out.

## **Other Non-operating Revenues**

Revenues from other income, including rent, permit fees, sale of property, custom work, and reimbursements.

## **Other Post-employment Benefits (OPEB)**

These are post-employment benefits other than pensions. OPEB generally takes the form of health insurance and dental, vision, prescription, or other healthcare benefits provided to eligible retirees, including in some cases their beneficiaries. It may also include some types of life insurance, legal services, and other benefits.

## **Pacific Gas & Electric (PG&E)**

Incorporated in California in 1905, is an investor-owned natural gas and electric utilities company, with a California service area from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east. It is based in San Francisco.

## **Permitted Investments**

The instruments in which moneys held in various funds and accounts may be invested pursuant to the provisions of the bond contract.

## **Personnel Costs**

Labor for SFPUC's full-time, temporary, and project-funded employees, and related benefits.

## **Photovoltaic (PV) Projects/Systems**

Projects that involve the conversion of solar energy into electricity through the use of photovoltaic technologies. Design-build photovoltaic projects underway in the Power Enterprise include Ways and Structures, Woods Coach, Chinatown Public Health Center, City Hall (part of the Sustainable Energy District), and Davies Symphony Hall.

## **PKF Consulting**

A firm headquartered in Atlanta, Georgia which provides advisory services and industry expertise which include real estate valuations; resort and recreation studies; conference center and public assembly studies; asset advisory services; market positioning; financial feasibility studies; litigation support; market research; and tourism and recreational studies.

## **Power Revenue Fund**

Designated funds in which all revenues of Hetch Hetchy Water and Power shall be deposited and maintained in the City Treasury. These funds are recorded in the statements of net assets of Hetch Hetchy Water and Power as deposits and investments with the City Treasury. Deposits, including earnings thereon, shall be appropriated, transferred, expended, or used for the financing, maintenance, and operation of Hetch Hetchy Water and Power. Pursuant to the Master Lease/Purchase Agreement (Agreement), net power revenues of Hetch Hetchy Water and Power are irrevocably pledged to the punctual payment of debt service on the Clean Renewable Energy Bonds (CREBs). Accordingly, net power revenue shall not be used for any other purpose while any of its CREBs are outstanding, except as expressly permitted by the Agreement.

## **Pre-treatment and Pollution Prevention (P2)**

Programs to ensure regulatory compliance in wastewater collection systems. They focus on contaminant reduction activities for residential, commercial, and industrial dischargers. The major P2 programs include: Street Sweeping, Fats, Oils & Grease (FOG), Mercury Reduction Program, Pesticides/Integrated Pest Management (IPM), and Storm Water P2 Program/Construction Runoff Control.

## **Proceeds from Debt**

Refers to what is received through the issuance of bonds, loans, or other borrowings.

## **Proposition A (2002)**

Approved by voters in November 2002, authorizes the SFPUC, subject to Board of Supervisors approval, to issue up to \$1.628 billion in revenue bonds or other forms of indebtedness to finance the acquisition and construction of improvements to the City's water system.

## **Proposition A (2009)**

Approved in November 2009, this Proposition amended the City Charter to require the City to transition to a two-year budget cycle by FY 2012-13. The SFPUC is one of four early implementation departments that adopted a two-year budget for FY 2010-11 and FY 2011-12.

## **Proposition E (2002)**

Approved by voters in November 2002, authorizes the SFPUC to issue revenue bonds or other forms of indebtedness for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors.

## **Proposition E (2008)**

Approved by voters in June 2008, terminated the terms of all five existing members of the Commission who were appointed by the Mayor under the 2002 Charter, changed the process for appointing new members, and set qualifications for all members. Under the amended Charter, the Mayor continues to nominate candidates to the Commission, but nominees do not take office until the Board of Supervisors votes to approve their appointments by a majority (at least six members). The amended Charter provides for staggered four year terms for members.

## **Proprietary Funds**

Funds that focus on the determination of operating income, changes in net assets (or cost recovery), financial position, and cash flows. There are two different types of proprietary funds: enterprise funds and internal service funds.

## **Qualified Energy Conservation Bonds (QECCB)**

A tax credit bond specifically targeting energy conservation and green programs.

## **Raker Act of 1913**

The Paul Raker Act was an act of the United States Congress that permitted building of the O'Shaughnessy Dam and flooding of Hetch Hetchy Valley in Yosemite National Park, California. Hetch Hetchy Water and Power was established as a result of the Raker Act of 1913, which granted water and power resources rights-of-way on the Tuolumne River in Yosemite National Park and Stanislaus National Forest to the City and County of San Francisco (the City). As a result of the 1913 Raker Act, energy produced above the City's Municipal Load is sold first to Modesto and Turlock Irrigation Districts (the Districts) to cover their pumping and municipal load needs and any remaining energy either sold to other Municipalities and/or Government Agencies (not for resale) or deposited into an account under the City's agreement with PG&E.

## **Rate Fairness Board**

Proposition E, approved by San Francisco voters on November 5, 2002, directed the establishment of a Rate Fairness Board to advise the Public Utilities Commission on water and sewer rate matters. The board consists of seven members: the City Administrator or his or her designee; the Controller or his or her designee; the Director of the Mayor's Office of Public Finance or his or her designee; two residential City retail customers, consisting of one appointed by the Mayor and one by the Board of Supervisors; and two City retail business customers, consisting of a large business customer appointed by the Mayor and a small business customer appointed by the Board of

Supervisors. Specific duties for the RFB include: (1) annual review of a five-year rate forecast; (2) hold one or more public hearings on annual rate recommendations before the Public Utilities Commission adopts rates; (3) provide a report and recommendations to the Public Utilities Commission on the rate proposal; and, (4) in connection with periodic rate studies, submit to the Public Utilities Commission rate policy recommendations for the Commission's consideration, including recommendations to reallocate costs among various retail utility customer classifications, subject to any outstanding bond requirements.

### **Refunding Bond**

A type of debt that is issued for the purpose of retiring an outstanding bond. Issuers refund bond issues to realize debt service savings, or for other debt restructuring purposes. Absent significant non-economic factors, PUC's policy is that refunding transactions should produce net debt service savings of at least 3% of the par value of the refunded bonds, calculated using the refunding issue's true interest cost (TIC) as the discount rate.

### **Renewable Portfolio Standards (RPS)**

A State policy that requires electricity providers to obtain a minimum percentage of their power from renewable energy resources by a certain date.

### **Residential Sewer Service Charges**

Includes single-family residential and multiple-family residential customers, allowing rates to be designed to reflect the particular usage characteristic of each group of residential customers. The sewer service charge applicable to residential service is an inclining block rate structure. The first block is applied to first three units of monthly discharge per dwelling unit. All remaining units are billed at a higher rate. For multiple family residential accounts, the billable use in each block is calculated by multiplying the allowed use by the number of dwelling units.

### **Request for Proposal (RFP)**

A solicitation document used when award will be made after negotiation with the offeror. Quotations received must be discussed and confirmed to determine which one offers the best value to the organization before a contract can be awarded. A bidding process is one of the best methods for leveraging a company's negotiating ability and purchasing power with suppliers. The RFP process brings structure to the procurement decision and allows the risks and benefits to be identified clearly upfront.

### **Retail Water Sales**

Consists of rate schedules that include City and Suburban Retail rates. City Retail Rates include general rates - single-family residential, multiple-family residential, and commercial (industrial). These rates consist of a monthly service charge based on meter size and a two-step commodity charge for single and multiple family residential customers, and meter size and a uniform commodity charge for commercial (industrial) customers. Suburban retail rates include rate schedules for use outside of San Francisco.

### **Restricted Assets**

Assets whose use is subject to constraints that are either (a) externally imposed by creditors, grantors, contributors, or laws or regulations of other governments or (b) imposed by law through constitutional provisions or enabling legislation.

### **Revenue Bond**

Bonds issued by governments, authorities, or public benefit corporations that are guaranteed by the revenue flow of the issuing agency. Unlike general obligation bonds, only the revenues specified in the legal contract between the bond holder and bond issuer are required to be used for repayment of the principal and interest of the bonds.

### **Revenue Bond Law of 1941**

The Revenue Bond Law of 1941 is commonly used for the issuance of revenue bonds. It requires approval by a majority of voters for the issuance of revenue bonds.

## **Revenue Bond Oversight Committee (RBOC)**

Pursuant to the City's Administrative Code Chapter 5A (Proposition P, passed by the voters in November 2002), the RBOC provides oversight to ensure that the proceeds from revenue bonds authorized by the BOS and/or the voters after November 2002 are expended in accordance with the authorizing bond resolution and applicable law. If, after conducting all appropriate reviews and independent audit of actual expenditures of revenue bond proceeds, the RBOC, after consultation with the City Attorney, determines that proceeds are being or have been expended for purposes not authorized by the authorizing bond resolution or otherwise amount to an illegal expenditure of such proceeds, the RBOC may, by majority vote of all its members, prohibit the further issuance or sale of authorized revenue bonds which have yet to be issued or sold. Any such determination by the RBOC may be appealed to the BOS within 30 days of the RBOC's decision. The BOS may overturn the decision of the RBOC by resolution approved by two-thirds vote of all its members.

## **Revenue-Funded Capital Projects/Repair & Replacement (R&R)**

Projects in the Enterprises, including both minor and major construction projects, maintenance and rehabilitation projects, planning studies, and preliminary engineering analysis for major capital improvements.

## **Sale of Electricity**

Revenues from power sales to City departments for municipal use, wholesale customers, and other retail customers.

## **Sale of Gas and Steam**

Revenues from gas and steam provided to City departments by Hetch Hetchy Power. These revenues are a pass-through and have no impact on Hetchy Hetchy's fund balance levels.

## **Sale of Water**

The budget category for revenues from sales of water to retail customers in San Francisco and suburban areas and to wholesale customers under the terms of a long-term Water Supply Agreement (WSA).

## **San Francisco Convention & Visitors Bureau**

The bureau is an outgrowth of the San Francisco Convention and Tourist League, a non-profit, local business association founded in 1909 to reclaim the City's position as a world-class destination in the wake of the devastating 1906 earthquake and fire. It is a membership organization headed by a board of directors made up of 45 business leaders from various companies, elected by the membership. Its mission is to enhance the local economy by marketing San Francisco and the Bay Area as the premier destination for conventions, meetings, events and leisure travel.

## **San Francisco Employees' Retirement System (SFERS)**

Originally established as a fund to assist families and orphans of firefighters and police, the Retirement System currently serves more than 53,000 active and retired employees of the City and County of San Francisco and their survivors. SFERS members include employees of the City and County of San Francisco, the San Francisco Unified School District, the San Francisco Community College District, as well as Superior Courts. The Retirement Board is composed of seven members: three elected by the active and retired members of SFERS; three appointed by the Mayor in accordance with §12.100 of the San Francisco City Charter; and one designated by the President of the Board of Supervisors or his/her designee from among the other members of the Board of Supervisors. The board oversees plan administration, pension fund investment, member benefits, and actuarial funding.

## **San Francisco International Airport (SFO)**

SFO is San Francisco's international airport, serving domestic and international passengers.

## **San Francisco Online Invoicing System (SOLIS)**

A robust automated system that will speed up invoice processing for SFPUC contractors and vendors. Paying 500 invoices per month within 21 days, SOLIS has the potential to be used for additional construction programs, and has the capacity to be shared with other interested City departments as a City-wide tool.

## **San Francisco Public Utilities Commission (SFPUC)**

An Enterprise Department of the City and County of San Francisco. The SFPUC provides regional water, local water, wastewater (collection, treatment, and disposal), and power.

### **San Francisco Wastewater Enterprise**

The San Francisco Wastewater Enterprise (Wastewater), formerly known as, the San Francisco Clean Water Program (the Program) was established in 1977 following the transfer of all sewage-system-related assets and liabilities of the City and County of San Francisco (the City) to the Program. In 1976, the electorate of the City approved a proposition authorizing the City to issue \$240,000 in revenue bonds pursuant to the Revenue Bond Law of 1941 of the State of California for the purpose of acquiring, constructing, improving, and financing improvements to the City's municipal sewage treatment and disposal system. Since then, the City's Board of Supervisors has adopted resolutions (Wastewater Resolutions) providing for the issuance of various sewer revenue and refunding bond series. The Wastewater Resolutions require the City to keep separate books of records and accounts of Wastewater.

### **San Francisco Water Enterprise**

The San Francisco Water Enterprise (Water) was established in 1930 under the provisions of the Charter of the City and County of San Francisco. Water acquired the fully developed, mature water works for San Francisco on March 3, 1930. Since then, the City and County of San Francisco (the City) has operated and maintained the water works as Water. The Board of Supervisors of the City has adopted resolutions (the Water Resolutions) providing for the issuance of various water revenue and refunding bond series. Water, which consists of a system of reservoirs, storage tanks, water treatment plants, pump stations, and pipelines, is engaged in the distribution of water to San Francisco and certain suburban areas. In fiscal 2009, Water delivered approximately 86,986 million gallons of water to nearly 2.5 million people within San Francisco and certain suburban areas.

### **Services of Other Departments**

Services performed for the SFPUC by other City departments.

### **Sewer Service Charges**

The budget category for residential and non residential sewer service charges to the SFPUC's customers.

### **Sewer System Improvement Program (SSIP)**

A major focus of the Wastewater Enterprise, the SSIP is a long-term capital plan that provides strategies and policies for the future. The San Francisco Sewer System Improvement Program objectives are to: develop a long-term vision and strategy for the management of the City's wastewater and stormwater; provide a detailed capital planning roadmap for improvements needed; estimate the funds to implement these improvements; address specific challenges facing the system; and maximize system reliability and flexibility.

### **SFPUC Commission**

The five Commissioners of the San Francisco Public Utilities Commission are appointed by the Mayor and confirmed by the Board of Supervisors and serve 4-year terms as mandated by voters through the passage of Proposition E in June 2008. The Commission is responsible for determining such matters as the rates and charges for services, approval of contract, and organizational policy.

### **Solar Power Purchase Agreement (PPA)**

An agreement between the SFPUC and Recurrent Energy in which Recurrent will finance, design, build and operate the solar energy project and provide all the energy generated to the SFPUC for a period of 25 years. The five megawatts generated at the Sunset Reservoir facility will be used to help power other San Francisco public services and buildings, including street lights, San Francisco General Hospital, Muni light rail and city schools.

### **Supervisory Control and Data Acquisition (SCADA)**

A system that collects data from various sensors at a factory, plant or in other remote locations and then sends this data to a central computer which then manages and controls the data.

## **Standard & Poor's (S&P)**

A major independent credit rating agency. S&P, a division of McGraw-Hill that publishes financial research and analysis on stocks and bonds, researches the financial health of each bond issuer, including issuers of municipal bonds, and assigns ratings to the bonds being offered. They append their ratings with an indicator to show a bond's ranking within a category. Standard & Poor's uses a plus or minus indicator. For example, A+ is better than A, and A is better than A-.

## **State Revolving Fund Loan Program (SRF)**

Loan program managed by the State Water Resources Control Board which provides alternative capital financing for certain facilities of the Wastewater Enterprise. Existing loans are deemed to be senior in priority of payment and future loans may be deemed to be on parity with or senior to outstanding revenue bond indebtedness.

## **Statements of Cash Flows**

One of the basic financial statements for proprietary funds that present changes in cash and cash equivalents resulting from operational, capital, non-capital, and investing activities. These statements summarize the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt and exclude non-cash accounting measures of depreciation or amortization of assets.

## **Statements of Net Assets**

Financial statement that presents information on the organization's assets and liabilities as of year-end, with the difference between the two reported as net assets. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the organization is improving or deteriorating.

## **Statements of Revenue, Expenses and Changes in Net Assets**

Financial statement that presents the results of the organization's operations over the course of the fiscal year and information as to how the net assets changed during the year. These statements can be used as an indicator of the extent to which the organization has successfully recovered its costs through user fees and other charges. All changes in net assets are reported during the period in which the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in these statements from some items that will result in cash flows in future fiscal periods, such as delayed collection of operating revenues and the expenses of employee earned but unused vacation leave.

## **Straight-Line Depreciation Method**

A method of computing amortization (depreciation) by dividing the difference between an asset's cost and its expected salvage value by the number of years it is expected to be used. In SFPUC, depreciation and amortization are computed using the straight-line method based on the estimated useful lives of the related assets, which range from 3 to 75 years for equipment and 3 to 175 years for buildings, structures, and improvements. No depreciation or amortization is recorded in the year of acquisition, and a full year's depreciation is recorded in the year of disposal.

## **Suburban Water Rate Agreement**

During 1984, the City entered into a Settlement Agreement and Master Water Sales Contract (the Suburban Water Rate Agreement) with certain suburban customers, which establishes the basis for water rates to be charged to those customers (the Suburban Purchasers). Pursuant to the terms of the Suburban Water Rate Agreement, the City is required to establish water rates applicable to the Suburban Purchasers at the beginning of each fiscal year. The suburban water rates are based on an estimate of the level of revenues necessary to recoup the cost of distributing water to the Suburban Purchasers in accordance with the methodology outlined in Article IV of the Suburban Water Rate Agreement (the Suburban Revenue Requirement).

## **Supervisory Control and Data Acquisition (SCADA)**

A system that collects data from various sensors at a factory, plant or in other remote locations and then sends this data to a central computer which then manages and controls the data.



## **Sustainability Plan**

Consistent with the requirements of San Francisco City Charter, Article VIII B, section 8B.123 (A) (3), the SFPUC has completed a comprehensive Sustainability Plan. The Plan was published in December 2008 and is available on the SFPUC website. Plan creation was the result of a three-year effort undertaken through a collaborative process involving the leadership, staff and stakeholders of the SFPUC. The Plan provides a baseline assessment that scores the SFPUC's performance and sets out specific strategies and initiatives, with targets to begin improving sustainability performance in priority areas. The Plan sets in motion this integrated, systematic and long-term approach to sustainability at the SFPUC, whereby the SFPUC will continue to track and monitor performance, assess results, implement a useful reporting protocol, and take needed actions to improve strategic management and decision-making.

## **Ten-Year Capital Improvement Program (CIP)**

The City and County of San Francisco requires, through the City's Administrative Code, the annual creation of a Ten-Year Capital Plan for City-owned facilities and infrastructure. Under the authority of the City Administrator, the Capital Planning Program prepares the plan and presents it to the Capital Planning Committee (CPC) for their review. The CPC completes its review of the capital plan by March 1 and presents it to the Board of Supervisors (BOS). The BOS must adopt the capital plan by May 1.

## **Ten-Year Financial Plan**

The Ten-Year Financial Plan is a planning document as required by the City and County of San Francisco, that includes a ten-year financial summary for each Enterprise, describing projected sources and uses, resulting fund balances and associated financial reserve ratios.

## **Total Suspended Solids (TSS)**

A water quality measurement that serves as one of the determinants of wastewater rates for non-residential customers.

## **Transbay Cable Project**

An energy transmission infrastructure project approved by San Francisco Mayor Gavin Newsom and the Board of Supervisors on August 7, 2007 that will provide additional energy to the City of San Francisco without having to install a power generation plant. The project consists of approximately 53 miles of high voltage direct current (HVDC) plus transmission cable bundle of approximately 10 inches in diameter running from the City of Pittsburg to the City and County of San Francisco (the "City"). Approximately 9.4 miles of the cable are in submerged lands, a small portion of shoreline, and on a portion of a street that are under Port Commission jurisdiction.

## **Treasure Island (TI)**

The Water Enterprise, Wastewater Enterprise, Hetch Hetchy Water, and Hetch Hetchy Power operate and maintain the water, wastewater, and power distribution systems, and the associated revenues, on Treasure Island, on behalf of the Treasure Island Development Authority (TIDA) and in accordance with a water supply and quality permit issued by the California Department of Health Services, and the National Pollutant Discharge Elimination System (NPDES) permit issued by the California Regional Water Quality Control Board.

## **Treasure Island Development Authority (TIDA)**

The Treasure Island Development Authority (TIDA) is a non-profit, public benefit agency dedicated to the economic redevelopment of former Naval Station Treasure Island. The Authority is vested with the powers of a California Redevelopment Agency as well as the rights to administer Tidelands Trust property. TIDA also performs and administers vital municipal services for the residential and daytime population during the interim reuse of the former military base.

## **True Interest Cost (TIC)**

Interest cost that excludes costs of issuance. The bond market typically quotes the TIC.

## **Turlock Irrigation District (TID)**

One of four irrigation districts in California that provides irrigation water as well as electric retail energy directly to homes, farms and businesses.

## **Unrestricted Net Assets**

The portion of net assets that is neither restricted nor invested in capital assets (net of related debt).

## **Variable Rate Bonds**

Long-term securities that bear interest at variable rates adjusted at agreed upon intervals, such as daily, weekly or monthly. The holder of the variable rate security may be allowed to “put” the security to a liquidity provider retained by the SFPUC.

## **Water Quality Division (WQD)**

The Water Quality Division is a division of the Water Enterprise. The mission of the Water Quality Division is to ensure that the SFPUC complies with all current and future water quality regulations and customer expectations through sampling and laboratory analyses, process engineering, applied research, inspections, field service oversight, regulatory reporting and support to treatment plant operations.

## **Water Saving Hero Campaign**

The Water Saving Hero consists of a partnership of Bay Area water agencies and organizations committed to water conservation. The Campaign highlights steps Bay Area residents can take to conserve water now and for the future.

## **Water Supply Agreement (WSA)**

The City and County of San Francisco and the 27 suburban wholesale customers that purchase water from San Francisco on a wholesale basis and distribute it to residents, businesses, and thousands of community organizations in Alameda, Santa Clara and San Mateo Counties. The WSA was approved in April 2009 and has a term of 25 years. The Agreement changes the cost basis by which the wholesale rate is determined from a “utility cost basis” to a “cash basis”. Beginning in FY 2009-10, wholesale customers will pay a proportionate share of regional system operating expenses, debt service on bonds sold to finance regional improvements, and other regional system improvements funded from current revenues. The WSA requires the rate be calculated and set annually and include a “true-up” between prior year revenues expenses.

## **Water Supply & Treatment (WS&T)**

A division of the Water Enterprise, WS&T maintains watershed lands and reservoirs, water treatment procedures and facilities, and water transmission facilities.

## **Water System Improvement Program (WSIP)**

The SFPUC, together with its 27 wholesale customers, launched a \$4.6 billion Water System Improvement Program (WSIP) to repair, replace, and seismically upgrade the San Francisco Regional Water System’s aging facilities. Built in the early to mid-1900s, many parts of the San Francisco Regional Water System, often referred to as the Hetch Hetchy System, are nearing the end of their working life, with crucial portions crossing over or near to three of the nation’s most active earthquake faults. The WSIP will reinforce vulnerable portions of the system to withstand an earthquake and enhance water treatment processes to ensure a reliable supply of water for SFPUC customers.

## **Wellness Incentive Program**

Established effective July 1, 2002 to promote workforce attendance. Under the program, any full-time employee leaving the employment of the City upon service or disability retirement may receive payment of a portion of accrued sick leave earned but unused at the time of separation.

## **Western Systems Power Pool (WSPP)**

An agreement and an organization that creates power trading opportunities and allows WSPP members to manage power delivery and price risk.

## **Wholesale Water Sales**

The Water Enterprise provides wholesale water service to 27 wholesale customers, which consist of 24 municipalities and water districts, one private utility, one private non-profit university and one mutual water association. Wholesale customers are located in Alameda, Santa Clara and San Mateo counties. The SFPUC and the wholesale customers have negotiated a new Water Supply Agreement (WSA) that changes the cost basis by which the wholesale rate is determined from a “utility cost basis” to a “cash basis”. Beginning in FY 2009-10, wholesale customers will pay a proportionate share of regional system operating expenses, debt service on bonds sold to finance regional improvements, and other regional system improvements funded from current revenues.

## **Workers' Compensation**

A state-mandated benefit for workers injured on the job. Benefits include medical treatment reasonably required to help recover from the effects of the injury, temporary disability payments if an injured worker loses time from work, permanent disability payments if an injured worker has a permanent disability as the result of a work injury, supplemental job displacement vouchers are available if the injured worker cannot return to the job held at the time of injury, and death benefits given to a spouse or dependent upon a work related injury or illness which results in death. San Francisco is self-insured for workers' compensation which means that the City does not pay an insurance company to cover the costs. The cost of workers' compensation claims are charged back to the annual budget of the department where the employee worked at the time of the injury.







**SFPUC Finance Department  
1155 Market Street, 5th Floor  
San Francisco, CA 94103**

# **The San Francisco Public Utilities Commission**

**A Department of the City And County of San Francisco, California**



# **Rate Schedules**

for  
**Water Service and Wastewater Service**

**Effective with Meter Readings  
made on or after July 1, 2009**

**Established by Resolutions  
09-0074, 09-0075, 09-0076, 09-0077  
approved June 5, 2009  
by the  
Public Utilities Commission**

1155 Market Street  
San Francisco, California 94103  
*July 1, 2009*

# Water Rate Schedules

## for Residential and Non-Residential Service

### SCHEDULE W-1A. Single Family Residential Service within the City and County of San Francisco

Applicable to single-family dwelling units served through a separate meter or battery of meters.

**First:** A monthly service charge based on the size of the meter. For two-month billing periods the charge shall be twice the amounts shown.

Meter Size	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
5/8 in	\$5.40	\$6.20	\$7.00	\$7.90	\$8.40
3/4 in	\$6.60	\$7.60	\$8.60	\$9.70	\$10.30
1 in	\$8.70	\$10.00	\$11.30	\$12.70	\$13.50
1-1/2 in	\$14.10	\$16.20	\$18.20	\$20.50	\$21.80
2 in	\$20.70	\$23.80	\$26.80	\$30.20	\$32.20
3 in	\$36.00	\$41.40	\$46.60	\$52.40	\$55.80
4 in	\$57.70	\$66.40	\$74.70	\$84.00	\$89.50
6 in	\$112.20	\$129.00	\$145.10	\$163.20	\$173.80
8 in	\$177.70	\$204.40	\$230.00	\$258.80	\$275.60
10 in	\$254.00	\$292.10	\$328.60	\$369.70	\$393.70
12 in	\$472.00	\$542.80	\$610.70	\$687.00	\$731.70
16 in	\$821.00	\$944.20	\$1,062.20	\$1,195.00	\$1,272.70

**Second:** A charge for all water delivered based on monthly meter readings.

Block	Charge per 100 Cubic Feet				
	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
For the first 300 cubic feet	\$2.61	\$3.09	\$3.50	\$3.90	\$4.20
All additional cubic feet	\$3.48	\$4.12	\$4.60	\$5.20	\$5.50

For accounts with two-month (bi-monthly) readings, the usage allowance in the first block shall be twice the amount shown (600 cu.ft.).



## **SCHEDULE W-1B. Multiple-Family Residential Service uses within the City and County of San Francisco**

Applicable to multiple-family accounts consisting of two or more dwelling units served through a separate meter or battery of meters.

**First:** A monthly service charge based on the size of the meter. For two-month billing periods the charge shall be twice the amounts shown.

Meter Size	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
5/8 in	\$5.40	\$6.20	\$7.00	\$7.90	\$8.40
3/4 in	\$6.60	\$7.60	\$8.60	\$9.70	\$10.30
1 in	\$8.70	\$10.00	\$11.30	\$12.70	\$13.50
1-1/2 in	\$14.10	\$16.20	\$18.20	\$20.50	\$21.80
2 in	\$20.70	\$23.80	\$26.80	\$30.20	\$32.20
3 in	\$36.00	\$41.40	\$46.60	\$52.40	\$55.80
4 in	\$57.70	\$66.40	\$74.70	\$84.00	\$89.50
6 in	\$112.20	\$129.00	\$145.10	\$163.20	\$173.80
8 in	\$177.70	\$204.40	\$230.00	\$258.80	\$275.60
10 in	\$254.00	\$292.10	\$328.60	\$369.70	\$393.70
12 in	\$472.00	\$542.80	\$610.70	\$687.00	\$731.70
16 in	\$821.00	\$944.20	\$1,062.20	\$1,195.00	\$1,272.70

**Second:** A charge for all water delivered based on monthly meter readings.

Block	Charge per 100 Cubic Feet				
	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
For the first 300 cubic feet per dwelling unit	\$2.87	\$3.28	\$3.70	\$4.20	\$4.50
All additional cubic feet	\$3.82	\$4.37	\$4.90	\$5.50	\$5.90

For accounts with two-month (bi-monthly) readings, the usage allowance in the first block shall be twice the amount shown (600 cu.ft.).

## **SCHEDULE W-1C. Commercial, Industrial and General Uses within the City and County of San Francisco**

Applicable to commercial, industrial and other general uses served through a separate meter or battery of meters.

**First:** A monthly service charge based on the size of the meter. For two-month billing periods the charge shall be twice the amounts shown.

Meter Size	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
5/8 in	\$5.40	\$6.20	\$7.00	\$7.90	\$8.40
3/4 in	\$6.60	\$7.60	\$8.60	\$9.70	\$10.30
1 in	\$8.70	\$10.00	\$11.30	\$12.70	\$13.50
1-1/2 in	\$14.10	\$16.20	\$18.20	\$20.50	\$21.80
2 in	\$20.70	\$23.80	\$26.80	\$30.20	\$32.20
3 in	\$36.00	\$41.40	\$46.60	\$52.40	\$55.80
4 in	\$57.70	\$66.40	\$74.70	\$84.00	\$89.50
6 in	\$112.20	\$129.00	\$145.10	\$163.20	\$173.80
8 in	\$177.70	\$204.40	\$230.00	\$258.80	\$275.60
10 in	\$254.00	\$292.10	\$328.60	\$369.70	\$393.70
12 in	\$472.00	\$542.80	\$610.70	\$687.00	\$731.70
16 in	\$821.00	\$944.20	\$1,062.20	\$1,195.00	\$1,272.70

**Second:** A charge for all water delivered based on monthly meter readings.

	Charge per 100 Cubic Feet				
	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
For all cubic feet	\$3.35	\$3.89	\$4.52	\$5.10	\$5.40

**SCHEDULE W-2. Fire Service within the City and County of San Francisco**

Covering only straight fire service, required by the regulation of the San Francisco Fire Department or Underwriters having jurisdiction, installed and maintained according to the rules regulations and specifications of the San Francisco Water Enterprise.

**First:** A monthly service charge based on the size of the service. For two-month billing periods the charge shall be twice the amounts shown.

Conne- tion Size	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
1 in	\$1.20	\$1.40	\$1.60	\$1.80	\$1.90
1-1/2 in	\$1.50	\$1.70	\$2.00	\$2.20	\$2.40
2 in	\$3.10	\$3.60	\$4.10	\$4.70	\$5.00
3 in	\$8.70	\$10.00	\$11.50	\$12.90	\$13.80
4 in	\$18.60	\$21.40	\$24.60	\$27.70	\$29.50
6 in	\$53.90	\$62.00	\$71.30	\$80.20	\$85.40
8 in	\$114.90	\$132.10	\$151.90	\$170.90	\$182.00
10 in	\$206.70	\$237.70	\$273.40	\$307.50	\$327.50
12 in	\$333.70	\$383.80	\$441.40	\$496.50	\$528.80

**Second:** If water is used for any purpose other than extinguishing accidental fires, the W-1C rates for water delivery shall apply.

**SCHEDULE W-3A. Public Uses within the City and County of San Francisco**

For Public Buildings, Parks and Other Metered Service Schedule W-1C

For Street Sprinkling and Flushing: Quantities to be computed from records of tank wagons and billed as one amount: (No service charge to apply) Schedule W-1C

## **SCHEDULE W-3B. Interruptible Public Uses within the City and County of San Francisco**

For Interruptible Service when service can be interrupted for water shortages and other emergencies at the discretion of the Water Enterprise:

**First:** A monthly service charge based on the size of the meter. For two-month billing periods the service charge shall be twice the amount shown:

Meter Size	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
5/8 in	\$5.40	\$6.20	\$7.00	\$7.90	\$8.40
3/4 in	\$6.60	\$7.60	\$8.60	\$9.70	\$10.30
1 in	\$8.70	\$10.00	\$11.30	\$12.70	\$13.50
1-1/2 in	\$14.10	\$16.20	\$18.20	\$20.50	\$21.80
2 in	\$20.70	\$23.80	\$26.80	\$30.20	\$32.20
3 in	\$36.00	\$41.40	\$46.60	\$52.40	\$55.80
4 in	\$57.70	\$66.40	\$74.70	\$84.00	\$89.50
6 in	\$112.20	\$129.00	\$145.10	\$163.20	\$173.80
8 in	\$177.70	\$204.40	\$230.00	\$258.80	\$275.60
10 in	\$254.00	\$292.10	\$328.60	\$369.70	\$393.70
12 in	\$472.00	\$542.80	\$610.70	\$687.00	\$731.70
16 in	\$821.00	\$944.20	\$1,062.20	\$1,195.00	\$1,272.70

**Second:** A charge for all water delivered based on monthly meter readings.

	Charge per 100 Cubic Feet				
	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
For all cubic feet	\$2.09	\$2.41	\$2.71	\$3.05	\$3.25

## **SCHEDULE W-4. Docks and Shipping Supply within the City and County of San Francisco**

For regularly metered service Schedule W-1C

For Special Shipping Service including hose truck and other special services from open docks through common hydrants where delivery is not through a service and meter for which the customer is responsible:

**First:** A service charge:

	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
Per occurrence	\$250.00	\$260.00	\$270.00	\$280.00	\$290.00

**Second:** A charge for all water delivered Schedule W-1C

**Minimum Billing:** In the application of special shipping rates, the minimum bill shall be the service charge plus a charge for 3,300 cubic feet of water.

## **SCHEDULE W-5. Builders and Contractors within the City and County of San Francisco**

Builders and Contractors supply for metered service through fire hydrants and other metered service:

**First:** A meter connection charge \$125.00

**Second:** A Monthly Service Charge based on the size of meter. For bi-monthly billing, the charge shall be twice the amounts shown.

Meter Size	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
1 in	\$15.00	\$17.00	\$20.00	\$23.00	\$24.00
3 in	\$135.00	\$155.00	\$178.00	\$200.00	\$213.00

**Third:** A charge for all water delivered Schedule W-1C

Water consumption shall be reported to the Water Enterprise either monthly or bi-monthly as specified by the Water Enterprise. Any customer who fails to report water consumption as required shall be assessed a non-reporting penalty of \$25.00 per month.

For unmetered service through fire hydrants or other unmetered connections by special arrangement with the San Francisco Water Enterprise:

**First:** A service charge on each billing \$50.00.

**Second:** A charge for water delivered Schedule W-1C

## **SCHEDULE W-21. Single Family Residential Service outside the City and County of San Francisco**

Applicable to single-family dwelling units served through a separate meter or battery of meters: Schedule W-1A

## **SCHEDULE W-22. Fire Service outside the City and County of San Francisco**

Covering only straight fire service, required by the regulation of the local Fire Department or Underwriters having jurisdiction, installed and maintained according to the rules, regulations and specifications of the San Francisco Water Enterprise: Schedule W-2

## **SCHEDULE W-24. Non-Potable Water Service**

Applicable inside and outside the City and County of San Francisco for non-potable water service when the customer furnishes all facilities necessary to convey the non-potable water from the San Francisco Water Enterprise's water supply reservoirs to the customer's point of use.

A Charge for all water supplied based on one month meter readings. A rate determined annually by General Manager of Utilities based on the cost of water excluding treatment in the most recently completed fiscal year. For the fiscal year which begins July 1, 2010, the rate for all deliveries: \$1.16 per 100 cubic feet.

## SCHEDULE W-25. Wholesale Use with Long Term Contract

For service to municipalities, water districts and others who, under long-term contracts, purchase water for resale, in whole or in part, as water:

**First:** A monthly service charge based on the type and size of the meter:

Meter Size	Disc/Compound Meters	Crest Meters	Magnetic Meters	Turbine Meters
5/8 in	\$ 11.00	\$ -	\$ -	\$ -
3/4 in	18.00	-	-	-
1 in	30.00	-	-	-
1 1/2 in	43.00	-	-	-
2 in	79.00	-	-	-
3 in	158.00	-	-	-
4 in	318.00	353.00	-	577.00
6 in	476.00	685.00	-	1,256.00
8 in	635.00	1,335.00	2,265.00	1,875.00
10 in	793.00	1,732.00	-	3,391.00
12 in	953.00	1,840.00	5,159.00	-
16 in	1,270.00	5,628.00	-	7,215.00
18 in	-	6,133.00	-	-
20 in	-	6,349.00	-	-

The service charge for a battery of meters installed on one service in lieu of one meter or for a special type of meter shall be based on the size of single or multiple standard type meters of equivalent capacity.

**Second:** A charge for water delivered based on one-month's meter readings:

\$718.74 per acre-foot or \$1.65 per 100 cu. ft.



## **SCHEDULE W-31. Multiple-family Residential, Commercial, Industrial and General Uses outside the City and County San Francisco**

Applicable to multiple-family residential, commercial, industrial and other general uses served through a separate meter or battery of meters: Schedule W-1C

## **SCHEDULE W-33. Public Uses Excluding Wholesale outside the City and County of San Francisco**

For Public Buildings, Parks and Other Metered Service:  
Schedule W-3A

## **SCHEDULE W-34. Interruptible Public Uses outside the City and County of San Francisco**

For Interruptible Service when service can be interrupted for water shortages and other emergencies at the discretion of the Water Enterprise: Schedule W-3B

## **SCHEDULE W-40. Meter Resizing**

Applicable to all water customers for meter resizing made at the customer's request except when such resizing is required to maintain service pressure or meet flow requirements.

Meter resizing charges shall be established by the Water Enterprise on July first of each calendar year for standard meter sizes (5/8-inch to 2-inch). The charges shall be based on the average cost of similar meter resizing for the period July 1 through March 31 of the preceding fiscal year and shall be adjusted upward or downward by the Enterprise on July 1 of each calendar year to reflect changes in labor, materials, and appurtenant costs.

For meter resizing not covered in the above or when, in the opinion of the Enterprise, any unusual conditions may result in costs more than 15% greater than the scheduled costs, the Enterprise reserves the right to charge the meter resizing on the basis of actual costs.

## **SCHEDULE W-41. Service Installations**

Applicable to all water customers for service installations made at the customer's request.

Connection charges shall be established by the Water Enterprise on July first of each calendar year for the installation of 5/8-inch to 8-inch standard services and fire services. The charges shall be based on the average cost of similar service installations for the period July 1 through March 31 of the preceding fiscal year and shall be adjusted upward or downward by the Enterprise on July 1 of each calendar year to reflect changes in labor, materials, paving and appurtenant costs.

The charge for setting each additional meter on an existing or new service for residential and small commercial use and the charge for resetting a meter on an existing usable service shall be established in the same manner as above.

For installations not covered in the above or when, in the opinion of the Enterprise, any unusual conditions may result in costs more than 15% greater than the scheduled costs, the Enterprise reserves the right to make the installation on the basis of actual costs.

All pipes, valves, fittings, equipment, materials, meters, etc. up to and including the outlet equipment shall remain the property of the Enterprise and no part of the cost will be refunded.

## **SCHEDULE W-42. Meter and Service Relocations**

Applicable to all water customers for meter and service relocations made at the customer's request.

If the Water Enterprise determines the relocation of an active meter and/or service connection is required, is necessary, or desirable because of the operations of the Water Enterprise or because of modifications to a street or right-of-way by a public agency, the relocation will be done without cost to the customer.

If the meter or service to be relocated is not active, the Water Enterprise may elect to sever the service connection and remove the meter without relocating it. The Water Enterprise shall give at least ten days notice prior to severing the connection. The

notice shall be mailed to the property owner at the address shown on the most recent equalized assessment tax roll.

If the customer requests the relocation or removal for any purpose whatsoever and such request is approved by the Water Enterprise, the customer shall pay the greater of the standard charge as described below or the actual cost incurred by the Water Enterprise.

Relocation charges shall be established by the Water Enterprise on July first of each calendar year for the relocation of 1-inch and 2 inch-copper services up to 2 feet. The charge shall be based on the average cost of similar relocations for the period July 1 through March 31 of the preceding fiscal year and shall be adjusted upward or downward by the Enterprise on July 1 of each calendar year to reflect changes in labor, materials, paving and appurtenant costs.

For relocations not covered in the above or when, in the opinion of the Enterprise, any unusual conditions may result in costs more than 15% greater than the scheduled costs, the Enterprise reserves the right to base the charge for the relocation on actual costs.

### **SCHEDULE W-43. Flow Restricting Installations**

Applicable to all water customers.

Violation of any water use restrictions by any customer may, after one written warning and in accordance with all applicable laws and legal restrictions, result in the installation of a flow restrictor device on the customer service line. The charge to install and remove the restricting device shall be as follows:

Meter Size	Installation/Removal Cost
5/8" to 1"	\$205.00
1-1/2" to 2"	\$295.00
3" and larger	Actual Cost*

\*Actual cost shall include material, labor, equipment and overhead charges.

Continued violation of any water use restrictions may result in the discontinuance of water service by the Enterprise and a charge of \$33.00 shall be paid prior to reactivating the service.

**SCHEDULE W-44. Service Fees**

Applicable to all water customers except municipal and suburban resale customers.

**LATE PAYMENT PENALTY**

Any charge or fee not paid within 30 days shall be subject to a late payment penalty equal to one-half of one percent (1/2%) for each 30 days or fraction thereof on the amount owed plus a \$3.00 handling charge.

**RETURN CHECK CHARGE \$77.00**

A return check charge shall be applied to any account whose check payment is returned to us due to insufficient funds, closed accounts or any other valid reason why the customer's bank did not honor the check. This charge will be made for every such occurrence.

**NEW ACCOUNT CHARGE \$32.00**

Any customer establishing a new account for water service shall be assessed a one time fee to cover administrative costs. In addition, such customer may be required to make a refundable security deposit equal to the greater of two months estimated water charges, but in no case should it be less than \$50.00. The deposit is refundable after twelve months of satisfactory payment history or termination of service and settlement of the final bill, whichever occurs first.

**48-HOUR NOTICE \$33.00**

Prior to shutting-off water service for non-payment, the Water Enterprise will post on the customer's premises a 48-hour notice. A charge of \$33.00 will be added to the amount owed to cover this cost.

**SERVICE SHUT-OFF****\$33.00**

A shut-off of water service during normal business hours (eight a.m. to four-thirty p.m. daily except Saturday, Sunday and holidays) will be assessed a service charge of \$33.00. A shut-off or turn-on at times other than normal business hours will be assessed a charge of \$50.00.

**SERVICE TURN-ON****\$33.00**

A service turn-on during normal business hours (eight a.m. to four-thirty p.m. daily except Saturday, Sunday and holidays) will be assessed a service charge of \$33.00. A shut-off or turn-on at times other than normal business hours will be assessed a charge of \$50.00.

**LOCK CHARGE****\$13.00**

Any customer whose service is shut-off for non-payment will also be charged for the cost of a meter lock installed in accordance with the Water Enterprise standard procedures.

**LIEN FEE**

Any account with an outstanding balance of greater than \$50.00 and which is delinquent by more than one billing cycle may be recorded as a lien against the property. Any account recorded as a lien against the property will be assessed a lien fee as provided in the Administrative Code of the City and County of San Francisco.

## **WATER CAPACITY CHARGE**

Any customer requesting a new connection to the water distribution system or requiring addition capacity as a result of any addition, improvement, modification or change in use of an existing connection as determined solely by the General Manager shall pay a capacity charge for the new or additional capacity required to serve the customer. The capacity charge is site specific and may not be sold, traded or conveyed in a manner to another site or customer. The capacity charge does not convey or imply ownership in or of any facilities of the Water System. Effective July 1, 2009 the capacity charge shall be \$1,060 per equivalent 5/8 inch meter. There after, the capacity charge shall be adjusted on July 1<sup>st</sup> of each subsequent year by the annual change in the 20 City Average Construction Cost Index (CCI) published by ENR Magazine.

# Wastewater Rate Schedules for Residential and Non-Residential Service

## SCHEDULE A-1.

This schedule shall apply to Single-Family Residential Users. The rates under this schedule are based upon the typical strengths for Domestic Wastes, as determined by the General Manager. All Single-Family Residential Users shall be charged on the basis of discharge units in accordance with the schedule of rates as follows:

Block	Charge per Discharge Unit				
	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
The first 3 Discharge Units per month	\$6.05	\$6.91	\$7.16	\$7.52	\$7.90
All additional Discharge Units	\$8.35	\$9.21	\$9.55	\$10.03	\$10.53

A discharge unit shall be based on the customer's metered water use multiplied by the customer's flow factor representing the quantity of metered water use returned to sewerage system as wastewater (e.g. a customer using 10 Ccf. of water and having a flow factor of 90% shall be billed for 9 discharge units). For customers whose meters are read on a bi-monthly basis, the allowed use in each block shall be doubled.

## **SCHEDULE A-2.**

This schedule shall apply to Multiple-Family Residential Users. The rates under this schedule are based upon the typical strengths for Domestic Wastes, as determined by the General Manager. All Multiple-Family Residential Users shall be charged on the basis of discharge units in accordance with the schedule of rates as follows:

Block	Charge per Discharge Unit				
	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
The first 3 Discharge Units per Dwelling Unit per month	\$5.66	\$6.51	\$7.49	\$7.86	\$8.25
All additional Discharge units	\$7.45	\$8.68	\$9.99	\$10.49	\$11.01

A discharge unit shall be based on the customer's metered water use multiplied by the customer's flow factor representing the quantity of metered water use returned to the sewerage system as wastewater (e.g. a customer using 10 Ccf. of water and having a flow factor of 95% shall be billed for 9.5 discharge units). The use allowed in each block shall be multiplied by the number of dwelling units to maximum use allowed in the block (e.g. a customer with 5 dwelling units shall be allowed a maximum of 15 discharge units in the first block – 3 Ccf/Dwelling Units per month times 5 Dwelling Units = 15 Ccf/mo). For customers whose meters are read on a bi-monthly basis, the allowed use in each block shall be doubled.



## **SCHEDULE B.**

Users, other than Residential Users charged under Schedule A of this Resolution, shall be charged the cost for each parameter according to the following:

Parameter	Effective 7/1/09	Effective 7/1/10	Effective 7/1/11	Effective 7/1/12	Effective 7/1/13
Volume of wastewater discharged in accordance with the rules and regulations of the Wastewater Enterprise per 100 cubic feet	\$6.5548	\$6.5548	\$6.5548	\$6.5548	\$6.6203
PLUS					
Suspended solids discharged per lb.	\$0.8819	\$0.8819	\$0.8819	\$0.8819	\$0.8907
PLUS					
Oil/Grease discharged per lb.	\$1.1035	\$1.1035	\$1.1035	\$1.1035	\$1.1145
PLUS					
Chemical Oxygen Demand discharged per lb.	\$0.2156	\$0.2156	\$0.2156	\$0.2156	\$0.2178

Those customers whose parameter loadings are not based on periodic sampling shall be charged on the basis of standard parameter loadings established by the General Manager for each SIC code in accordance with applicable state and federal laws and regulations.

## **WASTEWATER CAPACITY CHARGE**

Any customer requesting a new connection to the sewerage system or requiring additional collection or treatment capacity as a result of any addition, improvement, modification or change in use of an existing connection as determined solely by the General Manager shall pay a capacity charge for the new or additional capacity required to serve the customer. The capacity charge is site specific and may not be sold, traded or conveyed in a manner to another site or customer. The capacity charge does not convey or imply ownership in or of any facilities of the

Wastewater System. Effective July 1, 2009, the capacity charge shall be \$3,125 per equivalent dwelling unit. There after, the capacity charge shall be adjusted on July 1<sup>st</sup> of each subsequent year by the annual change in the 20 City Average Construction Cost Index (CCI) published by ENR Magazine.

# San Francisco Public Utilities Commission

Report on Water and Wastewater Rates  
Fiscal Years 2009-10 to 2013-14

April 30, 2009



### Environmental Quality Act Statement

The proposed rate adjustments are for the purpose of funding capital projects necessary to maintain service within the existing service areas, operating expenses including employee wages and fringe benefits, materials and supplies, equipment, financial reserve requirements, and other budgetary requirements of the San Francisco Public Utilities Commission. Therefore, under Section 21090(b)(8) of the State of California Natural Resource Code, environmental review of these proposed rate modifications are not required.

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## Executive Summary

This report presents the San Francisco Public Utilities Commission (SFPUC) staff proposal for water and wastewater rates and charges for fiscal years 2009-10 through 2013-14. It contains analyses of revenues, revenue requirements, rate structures and customer impacts. The rate recommendations contained in this report are based on the FY 2009-10 budget adopted by the Public Utilities Commission on February 10, 2009 and advance the priorities and policy direction reflected therein. It is not anticipated any subsequent changes to the FY 2009-10 budget will materially impact the rate recommendations.

Since 2004, the SFPUC has made significant progress in making seismic improvements and other upgrades to our water and wastewater infrastructures. With the funding provided by recent water rate increases more than a 38 water projects to seismically upgrade reservoirs, replace pipelines, and add new facilities have been completed or are under construction. In the coming years, work will continue on the remaining projects that comprise the Water System Improvement Program (WSIP). The funding provided by recent wastewater rate increases has enabled the SFPUC to continue work on Wastewater's 5-year capital program to address neighborhood flooding and odor issues. To date, 25 projects have been completed, four are in construction, and six more are currently in design.

***The rates recommended for the five fiscal years presented in this report are necessary to continue funding these vital capital improvement programs for the Water and Wastewater Enterprises. For the typical San Francisco single-family customer, the rate recommendations will mean a 9.9% average annual increase in their combined water and sewer bill during the next five years.***

Staff recommendations include the following:

### ***Water Enterprise***

- Adjusting water rates and charges to increase Water Enterprise revenues from water sales by an average of 15.0% in both FY 2009-10 and FY 2010-11, 12.5% in both FY 2011-12 and FY 2012-13 and 6.5% in FY 2013-14;
- Continuing a 2-block rate structure for single-family residential water service to encourage conservation and implementing a similar 2-block structure for multiple-family residential;
- Continuing to use a uniform volume rate for non-residential water service;
- Eliminating the current rate differential between water service inside the City and

outside the City;

- Continuing low income assistance programs, subject to available funding; and
- Supplementing residential affordability programs with targeted conservation program that will provide long-term water cost savings to customers.

### ***Wastewater Enterprise***

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- Adjusting sewer service charges to increase Wastewater Enterprise revenues received for wastewater collection and treatment by an average of 7% in both FY 2009-10 and FY 2010-11 and 5% in FY 2011-12, FY 2012-13 and FY 2013-14;
- Reducing the number of blocks in the residential wastewater rate from 3 to 2 and creating separate rates for single-family and multiple-family residential customers;
- Retaining existing non-residential rate which is sufficient to meet costs through FY 2012-13 and increasing the rate 1% in FY 2013-14;
- Continuing low income assistance programs, subject to available funding; and
- Supplementing residential affordability programs with targeted conservation programs that will provide long-term wastewater cost savings to customers.

## **San Francisco City Charter Requirements**

In addition to federal and state guidelines, the City Charter (Sections 8B.125) establishes a number of goals and objectives for the setting of retail sewer and water rates. A summary of the major goals and objectives appears below:

- Provide sufficient revenues for the operation, maintenance and repair of the enterprise consistent with good utility practice;
- Provide sufficient revenues to improve or maintain financial condition and bond ratings at or above levels equivalent to highly-rated utilities of each enterprise;
- Meet requirements and covenants under all bond indentures;
- Set rates based on cost of service;
- Investigate and develop capacity fees for new development;
- Investigate and develop rate-based conservation incentives; and
- Investigate and develop affordability programs for low-income customers.



## Findings and Recommendations

This year’s rate proposal builds upon the direction provided by the Commission and the Rate Fairness Board in recent years. The inclining block rate structures recommended for single-family and multiple-family residential water and wastewater services will act as rate based conservation incentives. Discount programs will be continued, contingent upon available funding, to make utility service affordable to low-income households.

The tables and chart listed below summarize the proposed rate recommendations.

- Table ES-1 summarizes the proposed rates and charges for water service.
- Table ES-2 summarizes the proposed rates and charges for wastewater service.
- Chart ES-1 shows how much the typical SFPUC single-family residential customer currently pays on a monthly basis for water and sewer. The chart also compares that bill to bills calculated using the rates of other utilities.

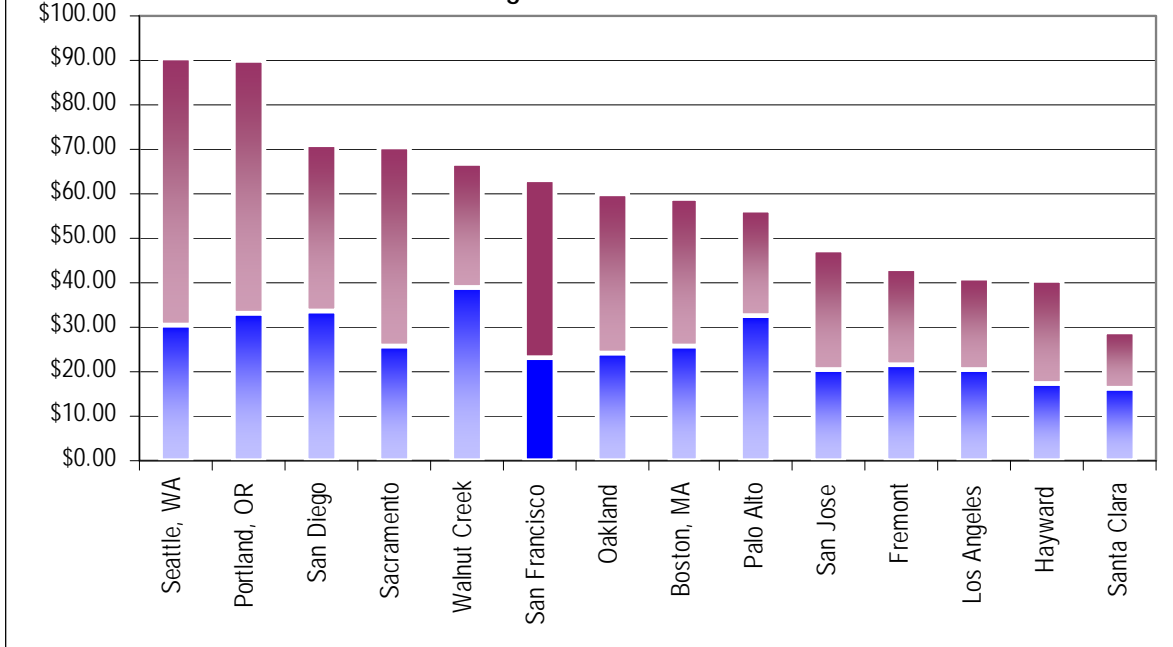
	Current Rate	FY 2010	FY 2011	Proposed FY 2012	FY 2013	FY 2014
<b>Monthly Service Charge:</b>						
5/8 in	\$4.70	\$5.40	\$6.20	\$7.00	\$7.90	\$8.40
3/4 in	\$5.70	\$6.60	\$7.60	\$8.60	\$9.70	\$10.30
1 in	\$7.60	\$8.70	\$10.00	\$11.30	\$12.70	\$13.50
1-1/2 in	\$12.30	\$14.10	\$16.20	\$18.20	\$20.50	\$21.80
2 in	\$18.00	\$20.70	\$23.80	\$26.80	\$30.20	\$32.20
3 in	\$31.30	\$36.00	\$41.40	\$46.40	\$52.40	\$55.80
4 in	\$50.20	\$57.70	\$66.40	\$74.70	\$84.00	\$89.50
6 in	\$97.60	\$112.20	\$129.00	\$145.10	\$163.20	\$173.80
8 in	\$154.50	\$177.70	\$204.40	\$230.00	\$258.80	\$275.60
10 in	\$220.90	\$254.00	\$292.10	\$328.60	\$369.70	\$393.70
12 in	\$410.40	\$472.00	\$542.80	\$610.70	\$687.00	\$731.70
16 in	\$713.80	\$821.00	\$944.20	\$1,062.20	\$1,195.00	\$1,272.70
<b>Single-Family Residential</b>						
First 3 Ccf/Mo	\$2.28	\$2.61	\$3.09	\$3.50	\$3.90	\$4.20
All Additional	\$2.89	\$3.48	\$4.12	\$4.60	\$5.20	\$5.50
<b>Multiple-Family Residential</b>						
First 3 Ccf/DU/Mo	\$2.87	\$2.87	\$3.28	\$3.70	\$4.20	\$4.50
All Additional	\$2.87	\$3.82	\$4.37	\$4.90	\$5.50	\$5.90
Non-Residential	\$2.92	\$3.35	\$3.89	\$4.52	\$5.10	\$5.40
Note: DU = Dwelling Unit						

**Table ES-2  
Summary of Wastewater Recommended Rates**

	Current	Proposed				
	Rate	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Single-Family Residential</b>						
First 3 Ccf/Mo	\$3.42	\$6.05	\$6.91	\$7.18	\$7.52	\$7.90
Next 2 Ccf/Mo	\$8.55					
All Additional	\$9.77	\$8.35	\$9.21	\$9.55	\$10.03	\$10.53
<b>Multiple-Family Residential</b>						
First 3 Ccf/DU/Mo	\$3.42	\$5.66	\$6.51	\$7.49	\$7.86	\$8.25
Next 2 Ccf/Mo	\$8.55					
All Additional	\$9.77	\$7.45	\$8.88	\$9.99	\$10.49	\$11.01
<b>Non-Residential</b>						
Volume per CCF	\$6.5548	\$6.5548	\$6.5548	\$6.5548	\$6.5548	\$6.6203
COD per lb.	\$0.2156	\$0.2156	\$0.2156	\$0.2156	\$0.2156	\$0.2173
SS per lb.	\$0.8819	\$0.8819	\$0.8819	\$0.8819	\$0.8819	\$0.8907
O/G per lb.	\$1.1035	\$1.1035	\$1.1035	\$1.1035	\$1.1035	\$1.1145
Normal Strength per Ccf	\$9.60	\$9.60	\$9.60	\$9.60	\$9.60	\$9.70

Note: DU = Dwelling Unit

**Chart ES-1  
Comparison of San Francisco Monthly Water and Wastewater Charges to Charges of Peer Utilities**



## Introduction

This report presents an analysis of revenues, expenditures, revenue requirements, and rates and charges for water and wastewater services. The revenue requirements for FY 2009-10 are based on the FY 2009-10 budgets adopted by the Public Utilities Commission at its meeting on February 10, 2009. The revenue requirements include operation and maintenance expenses, principal and interest payments on state loans and long-term debt incurred to finance system improvements, revenue funded capital projects, and reserves.

## Background

The Water Enterprise is responsible for the storage, treatment, and distribution of water supplied from the Hetch Hetchy Reservoir and other reservoirs in the San Francisco Bay Area. The Water Enterprise operates and maintains five supply reservoirs, two treatment plants, 233 miles of transmission pipelines, 21 pump stations, 26 distribution reservoirs and tanks, and 1,250 miles of distribution mains.

The Water Enterprise serves approximately 2.5 million people in the San Francisco Bay Area of which 825,000 are in San Francisco. Approximately one-third of the water delivered is sold to 172,000 retail customers in San Francisco and suburban areas. The remainder of the water delivered is sold to 28 wholesale water agencies in Alameda, Santa Clara and San Mateo counties under long-term contracts.

The Wastewater Enterprise is responsible for the operation and maintenance of sewer collection, treatment, and disposal facilities for the City and County of San Francisco. The City has a combined sewer system receiving sanitary sewage from domestic and commercial sources as well as storm water runoff. This wastewater is transported through a collection system that includes approximately 898 miles of sewers ranging in size from eight inches to large, multi-compartment structures with dimensions of up to 45 feet by 25 feet. There are 20 pump stations located throughout the City to pump the wastewater to two treatment plants and one wet-weather facility. Treated wastewater is discharged into the San Francisco Bay or the Pacific Ocean.

In addition to providing sewer service to the City, the Wastewater Enterprise also provides sewer service to three special districts located in northern San Mateo County (Bayshore Sanitary District, the City of Brisbane, and portions of the North San Mateo County Sanitation District). The City has entered into Joint Powers Agreements with all three districts requiring each district to pay its share of sewer system costs.<sup>1</sup>

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<sup>1</sup> Treating discharges from these agencies was a condition for receiving prior federal and state grants and loans.

## Rate Objectives

A number of rate objectives have been considered in developing the recommendations presented in this report. These objectives, together with legal and regulatory considerations, provide a basis for evaluating rate alternatives and selecting a preferred rate structure. The objectives include:

- **Conservation.** The rate structure should encourage customers to conserve water and to use water and sewer services in an environmentally responsible manner.
- **Simplicity.** The rate structure should be easy to communicate to customers, and customers should be able to use their knowledge of the rate structure to reliably predict the amount of their water and sewer bill.
- **Stability.** The rate structure should provide a reliable revenue stream such that small changes in residential use patterns should not lead to large changes in revenues. Rate adjustments should be calibrated to avoid large changes.
- **Fairness.** Rate structures should ensure that all customer classes pay their fair share of costs. Cost of service is a basis for evaluating fairness.

## Financial Policies

The levels and structures of rates and charges to be established and collected are, in part, intended to comply with the terms of bond indentures, state revolving fund loan agreements, and Commission's financial policies.

The bond indentures contain certain covenants that the Commission must meet so long as any revenue bonds issued under the indentures are outstanding. Failure to comply with these covenants could result in default under the indenture and ultimately the loss of access to the public markets for capital financing. Key covenants include:

- The operating covenants require that each enterprise be run and maintained as a separate revenue producing entity. The Commission covenants to:
  - Maintain each system in good repair and working order and to pay operation and maintenance expenses when due;
  - Charge and collect fees for services provided;
  - Keep system facilities and revenues free of liens (other than as contemplated for security for financings);
  - Maintain adequate insurance on facilities;
  - Not sell or otherwise dispose of any essential part of the system;
  - Apply eminent domain or insurance proceeds to either acquire or build replacement facilities or repay debt;
  - Comply with contracts and governmental regulations; and

- Adopt budgets, maintain adequate accounting records and cause annual audits to be performed.
- The rate covenant requires the Commission to establish and collect rates and other charges sufficient to satisfy operational needs and debt service obligations. Specifically, the Commission covenants to collect rates sufficient to generate net revenues (gross revenues less operation and maintenance expense) plus available fund balances that are no less than 1.25 times annual debt service.
- An additional debt covenant requires certain conditions be met prior to the issuance of additional debt, including an independent prospective determination that the rate covenant will be met upon the increase in annual debt service.

In addition to requirements imposed by the bond indenture, the Wastewater Enterprise as a recipient of federal and state grants and a borrower under the State Revolving Fund Program has agreed to budget for repair and replacement and to increase the amount each year by 5% until the amount budgeted equals \$20 million.

The SFPUC follows financial practices for the Water and Wastewater Enterprises that are consistent with the policies adopted by the Commission. Those practices include:

- Debt Service Coverage – rates should be established to achieve coverage on a current revenue basis that equal or exceed 1.25 times annual debt service (excluding State loan repayment obligations);
- Operating Reserve – rates should be established to achieve and maintain a target reserve of 25% of annual operation and maintenance expense;
- Repair and Replacement Funding – rates should be established to include funding for repair and replacement of existing plant and equipment on a pay-as-you-go basis; and
- Rate Increases – regular and calibrated rate increases based on cost of service should be implemented to ensure customer understanding and acceptance.

## Rate History

Since 1978, the Water Enterprise has used a rate structure consisting of a monthly service charge based on meter size and uniform volume charge for retail water sales in San Francisco. Since 1984 for suburban retail rates and since 1989 for wholesale rates, their respective rate structures have consisted of a monthly service charge based on meter size and a uniform volume charge for all water use.

To qualify for state and federal grants as well as the provisions of a voter-approved proposition authorizing the sale of Wastewater Revenue Bonds, the Board of Supervisors approved a schedule of sewer service charges based on flow and discharge characteristics in 1977. The following year, the Board of Supervisors modified the residential rates to add a lifeline rate feature that provided a reduced charge on the first

three units (i.e. 3 Ccf) of water use per dwelling unit per month. In 1997, the Wastewater Enterprise was placed under the jurisdiction of the Public Utilities Commission. With the transfer, the Commission assumed authority for setting wastewater rates. In 2005, the Commission replaced the existing two block rate based on water use with the current residential rate structure consisting of three blocks based the rate on discharge volume rather than water use.

In 1998, San Francisco voters approved an initiative petition, Proposition H, freezing retail water and wastewater rates from January 1, 1998 through July 1, 2006. Proposition H allowed two exceptions to the rate freeze – rates could be raised to pay the debt service on voter approved water and wastewater revenue bonds and to pay the costs of emergencies declared by the Mayor pursuant to the City Charter. Retail water rates were increased in 2001 and 2002 to pay the debt service on \$304 million of bonds authorized by the voters prior to the passage of Proposition H. Retail water rates were also raised in 2005 and 2006 in anticipation of the sale of bonds authorized by the voters in 2002. Proposition E, approved by voters in November 2002, rescinded the rate freeze on retail wastewater rates. Wastewater rates were not raised during the period 1998 to 2003. Proposition E would have also rescinded the rate freeze on retail water rates if a water revenue bond measure (Proposition A) on the same ballot had failed. However, the voters approved the bond measure and the freeze on retail water rates continued until its expiration in 2006. The following table shows average rate adjustments for Water and Wastewater Enterprises since 1997.

**Table I-1**  
Historical Rate Adjustments

Effective Date	Residential Wastewater	Retail Water	Wholesale Water
Jul-97	5.50%	0.00%	0.00%
Jul-98	0.00%	0.00%	(13.00%)
Jul-99	0.00%	0.00%	35.00%
Jul-00	0.00%	0.00%	4.40%
Jul-01	0.00%	8.70%	2.80%
Jul-02	0.00%	8.60%	0.00%
Jul-03	0.00%	0.00%	25.70%
Jul-04	11.00%	0.00%	2.70%
Jul-05	13.00%	15.00%	(9.4%) <sup>1</sup>
Jul-06	13.00%	15.00%	18.80%
Jul-07	8.00%	14.70% <sup>2</sup>	6.31%
Jul-08	9.00%	14.70% <sup>2</sup>	13.84%

<sup>1</sup>Adjustment effective April 1, 2005

<sup>2</sup>Proposed increase was 15%, effective increase was lower because of the elimination of the proposed third tier.

During the twelve-year period shown in Table I-1, the Consumer Price Index for San Francisco-Oakland-San Jose increased at an annual rate of 3.2%. During the same period, retail water rates were increased at an equivalent annual rate of 6.2%. Residential wastewater charges were increased at an equivalent annual rate of 4.9%. Water and wastewater rate increases, although largely driven by capital spending requirements, were only slightly more than the general rate of inflation for the regional economy.

## Water Enterprise

### Users and Usage

#### Customer Classes

The Water Enterprise provides water to approximately 2.5 million people in San Francisco, Santa Clara, Alameda and San Mateo counties. Water Enterprise customers are grouped into retail and wholesale service categories. The retail customer category is further divided into city and suburban customers. Customers within each sub-category are then grouped into revenue classes based on their service characteristics. The wholesale customer category consists of only one revenue class – suburban resale with long-term contract. The customer classes (and their subgroups) are described briefly below.

**City Retail Customers** - In FY 2007-08, the Water Enterprise provided retail water service in San Francisco to 172,116 accounts representing a service population of over 825,000 people. The customer classes served include single-family and multiple-family residential, commercial, industrial, municipal, docks and shipping, and builders and contractors. All accounts are metered.

**Suburban Retail Customers** - The Water Enterprise provides retail water service outside San Francisco to a small number of customers in the Town of Sunol and other customers served directly from the Water Enterprise's transmission pipelines. Municipal accounts outside San Francisco include San Francisco International Airport, Sharp Park and the San Francisco's county jail in San Bruno.

**Wholesale Customers** - The Water Enterprise provides wholesale water service to 28 suburban wholesale customers. They, in turn, provide retail water service to approximately 1.7 million people in Alameda, Santa Clara and San Mateo counties. Wholesale water service is provided under the terms of a long term Water Service Agreement.

The SFPUC and wholesale customers are finalizing a new 25-year agreement to replace the current agreement which expires on June 30, 2009.

Table W - 1  
Number of Active Accounts, as of June 30, 2008

Customer Class	Number
City Retail	
Single Family	110,517
Multiple-Family	38,607
Commercial	20,887
Industrial	103
Municipal	1,775
Builders & Contractors	226
Docks & Shipping	1
<b>Subtotal City Retail</b>	<b>172,116</b>
Suburban Retail	331
<b>Retail subtotal</b>	<b>172,447</b>
Suburban Wholesale	81
<b>Total</b>	<b>172,528</b>



## Water Sales

Retail and wholesale water sales vary with changes in number of customers served, economic activity and climatic conditions. After several years of moderate economic growth, the economy slipped into a recession during 2008 with significant job losses and numerous business closures. The housing sector was particularly hard hit experiencing a drop in the number of home sales as well as the prices of existing homes. Economic activity from tourism and conventions remained a bright spot in 2008, but the near term outlook for this industry is negative as businesses and individuals cutback on non-essential travel.

Annual rainfall in the first three years of this period from FY 2004-05 to FY 2009-08 equaled or exceeded normal precipitation. Fiscal years 2004-05 and 2005-06 were both cooler and wetter than normal with rainfall that continued well into May. Fiscal years 2006-07 and 2007-08 were drier than normal years with precipitation equal to about eighty percent (80%) of normal. Because of the below normal precipitation, the SFPUC asked for voluntary conservation. As a result, retail water sales have remained flat in recent years and have overall declined 2.4% for the five-year period. Wholesale water sales show more variation on a year-to-year basis, but water sales for the five-year period have decreased by 4.4%. The following table shows total water sales for the most recent five-year period.

**Table W - 2**  
Historical Water Sales  
Fiscal Years Ended June 30  
(Thousand Ccf)

Customer Class	2004	2005	2006	2007	2008
<b>City Retail</b>					
Single-Family	9,529	8,995	8,884	8,775	8,620
Multiple-Family	13,899	13,515	13,650	13,430	12,628
Subtotal Residential	23,428	22,510	22,534	22,205	21,248
Commercial	10,357	9,779	9,822	9,713	10,448
Industrial	140	135	129	109	107
Municipal - Paying <sup>1</sup>	1,326	1,311	1,168	1,196	2,635
Builders & Contractors	54	36	38	52	63
Docks & Shipping	41	40	41	22	14
Subtotal San Francisco	35,346	33,811	33,732	33,297	34,515
Suburban Retail	1,703	1,469	1,311	1,518	1,618
<b>Total Retail</b>	37,049	35,280	35,043	34,815	36,133
Wholesale	88,480	81,673	80,255	85,782	84,621
<b>Grand Total</b>	125,529	116,953	115,298	120,597	120,754

<sup>1</sup>In July 2007, the Water Enterprise discontinued providing water without charge to City departments

In FY 2007-08, single-family residential accounts used an average of 6.4 Ccf or 4,800 gallons per month. A San Francisco household’s water use of 160 gallons per day is 16% less than the “typical” indoor water use of 191 gallons per day calculated based on U.S. Environmental Protection Agency’s (EPA) indoor water use allowance of 70 gallons per person per day and a household size of 2.73 persons.<sup>2</sup>

San Francisco’s 38,607 multiple-family residential accounts representing 223,339 dwelling units used an average of 4.9 Ccf or 3,700 gallon per month per dwelling unit. The multiple-family household use of 123 gallons per day is 15% less than the “typical” indoor water use of 144 gallons per day calculated based on EPA’s indoor water use allowance and a household size of 2.06 persons.<sup>3</sup>

The non-residential class shows a wide range of usage patterns. However, in total, water use has been relatively steady during the fourteen years since drought restrictions were rescinded in 1993. Plumbing retrofits and other conservation measures implemented during the last drought have been effective in curtailing non-residential water use in succeeding years.

Table W-3 shows the projected water sales for both retail and wholesale customers for the period from FY 2009 to FY 2013-14. Water sales estimates assume normal rainfall and stable economic growth. Retail water sales are expected to equal the average of the last ten years or 37,000 MCcf. Projected retail water sales for the forecast period are consistent with the Interim Supply Limitation adopted by the Commission as part the Programmatic Environment Impact Report (PEIR) for WSIP. Wholesale water sales are projected to show some growth and increase at an annual rate of 0.8% and are also consistent with the Interim Supply Limitation.

**Table W - 3**  
 Projected Water Sales  
 Fiscal Years Ending June 30  
 (Thousand Ccf)

Customer Class	2009	2010	2011	2012	2013	2014
Retail	37,000	37,000	37,000	37,000	37,000	37,000
Wholesale	85,212	85,919	86,632	87,351	88,076	88,808
Total	122,212	122,919	123,632	124,351	125,076	125,808

## Revenues

The revenues available to meet the Water Enterprise’s annual revenue requirement include charges for retail and wholesale water service, rents, interest income earned on invested funds, and other miscellaneous income.

<sup>2</sup> Source: 2002 San Francisco Housing Databook.

<sup>3</sup> Source: 2002 San Francisco Housing Databook.

The Water Enterprise's current schedule of retail rates was adopted by the Commission on June 12, 2007 and became effective with water meter readings made beginning July 1, 2008. The current rate applicable to suburban resale service was effective with meter readings beginning July 1, 2008. Water sales revenues are the primary source of funds used to meet the annual revenue requirement. Each source of revenue is discussed in greater detail below.

## Retail Water Sales

There are eight rate schedules applicable to retail water in San Francisco. Schedule W-1A is applicable to water sales to single-family residential customers. The rate consists of a monthly service charge based on meter size and a two-step commodity charge. The first step or tier is applicable to the first 3 Ccf of use per month or 6 Ccf bimonthly. The second step or tier is applicable to all additional use. Schedule W-1B is applicable to multiple-family residential customers and consists of a monthly service charge based on meter size and a uniform commodity charge. Schedule W-1C is applicable to commercial, industrial, and other general uses. It includes a monthly service charge based on meter size and a uniform commodity charge. Schedule W-2 is applicable to private fire protection. Schedule W-3A is applicable to public uses and the charges for this rate are identical to Schedule W-1C. Schedule W-3B is an interruptible rate applicable to public buildings, parks and other uses that can be interrupted during water shortages and other emergencies. Schedule W-4 is applicable to shipping service where water is not provided through a regular service connection. Schedule W-5 is applicable to builders and contractors who receive service from a fire hydrant or other un-metered sources.

### Rates within San Francisco

- W-1A Single-Family Residential
- W-1B Multiple-Family Residential
- W-1C Commercial/Industrial
- W-2 Private Fire Service
- W-3A Public Uses
- W-3B Interruptible Public Uses
- W-4 Docks and Shipping Supply
- W-5 Builders and Contractors

### Rates outside San Francisco

- W-21A Single-Family Residential
- W-31 Commercial/Industrial
- W-22 Private Fire Service
- W-23 Public Uses
- W-24 Non-Potable Water

**City Retail Sales** - Most customers are billed under schedules W-1A, W-1B or W-1C. In FY 2007-08, water sales under those schedules accounted for 88.0% of retail water sales. The schedules include monthly service charges based on meter size and commodity charges applicable to all water use. For FY 2008-09, the monthly service charges range from \$4.70 per month for a five-eighths inch diameter meter to \$713.80 per month for a 16-inch diameter meter. Single-family residential customers pay \$2.28 per Ccf for the first 3 Ccf monthly or 6 Ccf bimonthly and \$2.89 for all additional water use. Multiple-family residential and non-residential customers pay \$2.87 per Ccf and \$2.92 per Ccf, respectively.

In addition to the general use rates, there are rates applicable to private fire service, Schedule W-2, to public uses (Schedules W-3A and W-3B), to docks and shipping (Schedule W-4) and to builders and contractors (Schedule W-5). Each of these

schedules has monthly service charges that differ from those shown on Schedule W-1C, but all water is billed at the Schedule W-1C rate of \$2.92 per Ccf.

***Suburban Retail Sales*** - There are five rate schedules applicable to suburban retail water service. Schedule W-21 is a general use rate applicable to residential use. Schedule W-31 is applicable to commercial, industrial and other general uses. Schedule W-22 is applicable to private fire protection. Schedule W-23 is applicable to public uses except resale. Schedule W-24 is applicable to non-potable water service.

## **Wholesale Water Sales**

The Water Enterprise provides wholesale water service to 28 wholesale customers, which consist of 25 municipalities and water districts, one private utility, one private non-profit university and one mutual water association. Wholesale customers are located in Alameda, Santa Clara and San Mateo counties.

The suburban resale rate is calculated each year under existing contract terms that requires using a “utility cost basis” for allocating costs. The cost components of this method include a proportionate share of operation and maintenance expenses, and depreciation and return on the assets used to provide water service to wholesale customers. Wholesale customers are charged based on the type and size of meters and the quantity of water delivered. In FY 2008-09, the meter charges range from \$11 per month to \$7,215 per month. In FY 2008-09, the rate for wholesale service is \$1.43 per Ccf.

The existing contract will expire June 30, 2009. The SFPUC and the wholesale customers have negotiated a new Water Supply Agreement that will change the cost basis by which the wholesale rate is determined from a “utility cost basis” to a “cash basis”. Beginning in FY 2009-10, wholesale customers will pay a proportionate share of regional system operating expenses, a proportionate share of the debt service and coverage on bonds sold to finance regional improvements, and a proportionate share of other regional system improvements funded from current revenues. In addition, the wholesale customers will fund a Wholesale Revenue Coverage Reserve based on their share of debt service costs.

## **Interest Income**

The Water Enterprise earns interest income from the investment of funds on deposit with the City Treasurer. This interest income is an additional source of revenue for the Enterprise. Interest income earned from the investment of moneys in restricted funds such as bond reserves may only be used for the purpose of that fund and are not available to meet day-to-day operating expenses. In the FY 2009-10 budget, it is anticipated that investment income earned by unrestricted funds will be \$1.9 million.

This projection is based on an estimated yield on investments made by the City Treasurer and projected cash balances.

### Rents and Other Income

The Water Enterprise derives additional income from rents and permit fees for secondary uses of its watershed lands and pipeline rights-of-way. The Water Enterprise has entered into long-term leases that allow portions of its Alameda and Peninsula watersheds to be used for golf courses and for land adjacent to its Sunol Headquarters to be mined for gravel. Typical uses of pipeline rights-of-way are parking and landscaping for adjoining properties. The income from these uses is projected to \$10 million annually and represents about 4% of annual revenues.

The Water Enterprise receives other income from custom work, reimbursements, miscellaneous service charges and other fees. Other income from all sources is expected to be \$4.5 million each year throughout the forecast period (i.e. FY 2009-10 to FY 2013-14).

### Total Revenues

Estimates of revenues under existing rates are based on an analysis of the number of customers and the corresponding water volumes used by those customers. The following table shows projected revenues at existing rates through FY 2013-14.

**Table W-4**  
Water Enterprise Operating and Non-Operating Revenues  
Under Current Rates<sup>1</sup>  
Fiscal Year Ending June 30  
(\$000)

	2009	2010	2011	2012	2013	2014
Water Service Charges						
Retail	119,652	119,652	119,652	119,652	119,652	119,652
Wholesale	<u>126,473</u>	<u>127,484</u>	<u>128,504</u>	<u>129,532</u>	<u>130,569</u>	<u>131,615</u>
Total Water Service Charges	246,125	247,136	248,156	249,184	250,221	251,267
Interest Income	2,478	1,927	2,465	2,896	3,396	3,611
Rents and Other Misc. Revenues	<u>17,460</u>	<u>17,460</u>	<u>17,460</u>	<u>17,460</u>	<u>17,460</u>	<u>17,460</u>
Total	266,063	266,523	268,081	269,540	271,077	272,378

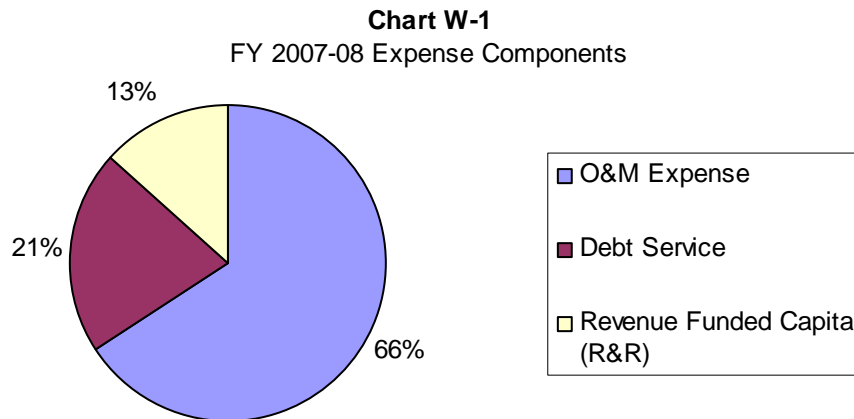
<sup>1</sup>Wholesale revenues calculated on basis of 1984 Settlement Agreement and Master Water Sales Contract

Water revenues under current rates are expected to increase throughout the forecast period from \$267 million in FY 2009-10 to \$272 million in FY 2013-14. The

modest revenue increase is largely attributable to increased water sales to wholesale customers. Interest income will vary with the amount of funds available for investment, but should average slightly over \$2.9 million annually. Rents and other miscellaneous income are expected to be approximately \$17.5 million per year.

### Annual Operating Expenses

The Water Enterprise’s annual operating budget includes operation and maintenance costs, debt service on revenue bonds used to finance capital improvements, and repair and replacement costs funded from current revenues. Each expense component is discussed in greater detail below. As illustrated in the following chart, operations and maintenance costs are by far the largest component of the Water Enterprise’s expenses.



The following table summarizes the Enterprises’ major expense components for the five most recent fiscal years.

**Table W-5**  
Water Enterprise Historical Expenses  
Fiscal Years Ended June 30  
(\$000)

	2004	2005	2006	2007	2008
O&M Expense	126,308	133,662	145,231	149,621	153,626
Debt Service	38,178	38,278	33,919	33,670	48,330
Revenue Funded Capital (R&R)	31,041	31,745	25,286	27,119	31,291
<b>Total Expenses</b>	<b>195,527</b>	<b>203,685</b>	<b>204,436</b>	<b>210,410</b>	<b>233,247</b>

## Operation and Maintenance Expenses

Operation and maintenance expense includes salaries and fringe benefits, material and supplies, power and energy, and services of the other City departments including SFPUC support bureaus. The cost of operating the water system in FY 2009-10 is projected to be \$183.1 million. Total expenditures are projected to increase an average of 3% per year during the forecast period. As projects in the Water System Improvement Project (WSIP) are completed and placed into service, there could be additional operation and maintenance expenses associated with the new facilities. These costs are assumed to be included in the 3% annual increase in expenditures. The forecast also assumes there will be no changes in regulations or operating procedures that could impact operating expenses.

## Debt Service

Debt service includes principal and interest payments on revenue bonds used to finance system improvements. As of June 30, 2008, the Water Enterprise had seven outstanding bond issues, as listed below.

**Table W-6**  
Outstanding Bond Issues  
(\$000)

Series	Original Par	Outstanding as of 6/30/08
1991A	\$70,145	\$3,380 <sup>1</sup>
2001A	\$140,000	\$80,410
2002A	\$164,000	\$150,620
2002B Refunding	\$85,260	\$57,580
2006A	\$507,815	\$505,230
2006B Refunding	\$110,065	\$107,230
2006C Refunding	\$48,730	\$45,840
<b>Total</b>	<b>\$1,126,015</b>	<b>\$950,290</b>

<sup>1</sup>Capital Appreciation Bond with Principal Value of \$7,100,000 at Maturity

In November 2002, San Francisco voters authorized the Public Utilities Commission to issue up to \$1.628 billion of water revenue bonds to fund, in part, the \$4.4 billion Water System Improvement Program. The 2006 Series A Water Revenue Bonds was the first series of bonds issued under this authorization. Annual debt service payments, net of capitalized interest expense, are expected to increase from \$70.2 million in FY 2009-10 to \$255.3 million in FY 2013-14.

Future debt service cost projections assume the issuance of new debt to fund WSIP projects. Under this scenario the Water Enterprise expects to issue \$900 million of

water revenue bonds in FY 2009-10, \$900 million in FY 2010-11, \$900 million in FY 2011-12, \$600 million in FY 2012-13 and \$700 million in 2013-14. The bond issuance schedule is based on the February 2008 WSIP spending plan. However, the actual timing and size of bond sales may differ.

## Revenue Funded Capital

Revenue funded capital expenditures may include minor construction projects, major maintenance and rehabilitation projects, planning studies, and preliminary engineering analysis for major capital improvements. In recent years, the Water Enterprise has budgeted approximately \$30 million for these types of projects. The projected funding for the forecast period is \$40 million beginning in FY 2009-10 and increasing 5% each year thereafter.

## Summary of Projected Expenses

The table below shows projected operating expenses based on the adopted budgets for FY 2008-09 and FY 2009-10. Operation and maintenance expense for FY 2011 and subsequent years is projected to increase at an annual rate of 3%. This projection, however, does not include any increases in operation and maintenance expenses over and above inflation that may be required as a result of new assets added to the water system.

**Table W-7**  
 Projected Operating Expenses  
 Fiscal Years Ending June 30  
 (\$000)

	2009	2010	2011	2012	2013	2014
O&M Expense	169,822	188,114	188,608	194,266	200,094	206,097
Debt Service	70,128	70,211	88,328	141,610	200,255	255,270
Revenue Funded Capital (R&R)	56,973	26,614	47,169	49,249	51,432	53,725
Total Expenses	296,923	284,939	324,105	385,125	451,781	515,092

## Revenue Requirement

The annual expenditures for operation and maintenance, debt service and revenue funded capital make up the Water Enterprise's revenue requirement. However, to determine the revenue requirement for rate purposes, the income derived from interest, rents and other miscellaneous sources are deducted from the total revenue requirement. Also, operating surpluses from prior years can be included in the calculation of net revenue requirement as a one-time source. The net revenue requirement represents the amount to be recovered through water sales revenues.



The revenue and revenue requirement forecasts for the five-year period from FY 2009-10 to FY 2013-14 are shown in the table below. The projected revenues and projected expenses are taken from Table W-4 and Table W-7, respectively.

**Table W-8**  
 Projected Revenues and Expenses  
 Under Current Rates  
 Fiscal Years Ending June 30  
 (\$000)

	2009	2010	2011	2012	2013	2014
Beginning Fund Balance	63,658	32,798	14,382	(41,642)	(157,227)	(337,931)
Revenues under Existing Rates						
Retail	119,652	119,652	119,652	119,652	119,652	119,652
Wholesale	126,473	127,484	128,504	129,532	130,569	131,615
Other Income	19,938	19,387	19,925	20,356	20,856	53,571
Total Revenues	266,063	266,523	268,081	269,540	271,077	304,838
Expenditures						
O&M Expense	169,822	188,114	188,608	194,266	200,094	206,097
Debt Service	70,128	70,211	88,328	141,610	200,255	255,270
Revenue Funded Capital (R&R)	56,973	26,614	47,169	49,249	51,432	53,725
Total Expenditures	296,923	284,939	324,105	385,125	451,781	515,092
Net Revenues	(30,860)	(18,416)	(56,024)	(115,585)	(180,704)	(210,254)
Ending Ending Balance	32,798	14,382	(41,642)	(157,227)	(337,931)	(548,185)

As shown above, revenues based on the Water Enterprise's current rates will be insufficient to meet the annual revenue requirement for all years in the forecast period. The cumulative revenue deficiency over the forecast period based on revenues under existing rates is projected to be \$548 million.

### Retail Revenue Requirement

To develop the projected retail cost responsibility, the projected suburban revenue requirement and other operating and non-operating revenues are deducted from total expenditures. The wholesale revenue requirement represents the wholesale water customers' proportionate share of operation and maintenance expense, debt service, and annual appropriations for revenue-funded capital improvements. The wholesale revenue requirement has been calculated based on projected expenditures and in accordance with the proposed Water Supply Agreement. Finally, the accumulation of available fund balance, if any, is deducted from the retail revenue requirement. The fund balance, if

adequate, can be used to offset any deficit assigned to retail customers in lieu of raising rates.

The following table shows the development of the retail cost responsibility for the forecast period.

**Table W-9**  
Summary of Projected Funding  
Fiscal Years Ending June 30  
(\$000)

	2009	2010	2011	2012	2013	2014
Beginning Balance	63,658	26,887	20,886	4,305	(46,927)	(123,290)
Revenues						
Retail (Current Rates)	119,652	119,652	119,652	119,652	119,652	119,652
Wholesale Revenue Requirement <sup>1</sup>	120,562	139,899	167,947	193,885	234,910	269,554
Other	19,938	19,387	19,925	20,356	20,856	53,571
Total Revenues	260,152	278,938	307,524	333,893	375,418	442,777
Total Expenditures	296,923	284,939	324,105	385,125	451,781	515,092
Ending Balance	26,887	20,886	4,305	(46,927)	(123,290)	(195,605)
Retail Cost Responsibility						
Total Expenditures		284,939	324,105	385,125	451,781	515,092
Less:						
Wholesale Revenue Requirement		139,899	167,947	193,885	234,910	269,554
Other Revenues		19,387	19,925	20,356	20,856	53,571
Net Retail Responsibility		125,653	136,233	170,884	196,015	191,967
Retail Revenues		119,652	119,652	119,652	119,652	119,652
Surplus or (Deficit)		(6,001)	(16,581)	(51,232)	(76,363)	(72,315)

<sup>1</sup>Excludes contribution to Wholesale Revenue Coverage Reserve

In the above table, the deficit reflects the additional revenue required to meet projected costs. The last line of the table indicates current retail revenues are insufficient in each year to meet the projected retail cost responsibility. To meet the projected revenue deficiency, a series of annual increases as shown in Table W-10 is proposed. Two annual increases of 15.0%, followed by two annual increases of 12.5%, followed by a single increase of 6.5% will raise revenues 78% by FY 2013-14. The proposed increases are calibrated to produce slightly more revenues than the cumulative deficiency because additional revenues are required to maintain adequate debt service coverage and operating reserves.

**Table W-10**  
Proposed Retail Rate Adjustments

	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Rate Adjustment	15.0%	15.0%	12.5%	12.5%	6.5%
Cumulative Adjustment	15.0%	32.3%	48.8%	67.4%	78.3%

## Cost of Service

The total revenue requirement to be derived from rates is synonymous with total cost of service. As a basis for the development of equitable rates, those costs are allocated to retail and wholesale classes based on their respective service requirements and in accordance with the provisions of the proposed Water Supply Agreement between the City and its wholesale customers.

## Wholesale Service

Under the proposed Water Supply Agreement, the cost of service for wholesale service will be calculated on same “cash basis” as retail rates. Using the cash basis, the cost of service for wholesale customers will include a pro-rata share of operation and maintenance expense plus a pro-rata share of debt service and appropriations for revenue-funded capital improvements of the Regional Water System. The Regional Water System includes most facilities outside the City and a limited number of facilities within the City (i.e. Sunset, University Mound and Merced Manor reservoirs and the pipelines serving them).

In addition to a pro-rata share of operation and maintenance expense, debt service and revenue-funded capital projects, the wholesale customers will pay a fixed annual charge to reimburse retail customers for net value of their investment in facilities capitalized prior to the July 1, 2009. The SFPUC and the wholesale customers have proposed to allow the wholesale customers to repay the net value of existing facilities as of June 30, 2009 plus construction work in progress (CWIP) in equal annual payments over the 25 years of the proposed Water Supply Agreement at an annual interest rate of 5.13%. The SFPUC and the wholesale customers have also proposed to allow the wholesale customers to reimburse the retail customers for any revenue-funded project expenditures made in FY 2009-10 through FY 2011-12 using funds appropriated, but unspent prior to July 1, 2009 over 10 years beginning in FY 2013-14 at annual interest rate of 4.0%.

Finally, there is a rate device known as the Balancing Account. Any difference between the revenues received and the actual cost of wholesale service is placed in the Balancing Account and used to adjust the following years cost responsibility up or down depending on whether there is a deficit or surplus in the Balancing Account. At the termination of the existing agreement, the amount of the balancing account is projected to

be a credit of \$18 million owed by the wholesale customers to the retail customers. The proposed Water Supply Agreement provides that credit be paid in annual installments of at least \$2 million, but not more than \$5 million. For FY 2009-10, the annual installment is assumed to be \$2 million.

## Retail Service

Retail cost responsibility is determined by deducting the cost responsibility allocated to wholesale service from the total cost to be recovered from charges for water service. The following table summarizes revenues under existing rates and allocated costs to retail and wholesale service.

**Table W-11**  
FY 2009-10 Revenues and Costs Under Existing Rates  
\$000

	Retail	Wholesale	Total
Unappropriated Surplus (7/1) Balancing Account	29,572 -	- -	29,572 -
Revenues			
Water Sales	119,652	127,484	247,136
Rents	10,000	-	10,000
Interest Income	1,927	-	1,927
Other Income	7,460	-	7,460
Total Revenues	<u>139,039</u>	<u>127,484</u>	<u>266,523</u>
Available Funds	168,611	127,484	296,095
Application of Funds			
Operating Expense	103,364	79,750	183,114
Debt Service	52,258	17,953	70,211
Revenue Funded Capital	<u>10,873</u>	<u>16,122</u>	<u>26,995</u>
Subtotal	166,495	113,825	280,320
Pre-2009 Assets Recovery	(27,169)	27,169	-
Prior Agreement Balance Account	(1,997)	1,997	-
Settlement Credit <sup>1</sup>	(21)	21	-
Wholesale Revenue Coverage	-	4,488	4,488
Total Application of Funds	<u>137,308</u>	<u>147,500</u>	<u>284,808</u>
Wholesale Revenue Coverage	-	4,488	4,488
Unappropriated Surplus (6/30)	<u>31,303</u>	<u>(15,528)</u>	<u>15,775</u>

<sup>1</sup>Credit due City in accordance with the 2004 Settlement Agreement

## Rate Recommendation

The SFPUC has identified a series of objectives to be reflected in its rate structure. Those objectives include:

- **Conservation.** The rate structure should encourage customers to conserve water and to use water and sewer services in a responsible manner that promotes environmental stewardship.
- **Simplicity.** The rate structure should be easy to communicate to customers, and customers should be able to use their knowledge of the rate structure to reliably predict the amount of their water and sewer bill.
- **Stability.** The rate structure should provide a reliable revenue stream to the Water Enterprise, and a small change in residential use patterns should not lead to large changes in revenues.
- **Fairness.** The residential rate structure should ensure that all customers pay their fair share of costs. Cost of service is a basis for evaluating fairness.

In developing this year's rate recommendations, the SFPUC considered a number of different rate structures, including:

- **Uniform structure.** Under a uniform rate structure, the price per unit is constant as consumption increases. A uniform rate is easy to communicate and administer but provides only a weak conservation price signal. Large users, in particular, consider this rate structure to be equitable.
- **Lifeline structure.** A lifeline rate structure provides a lower price for "necessary" water and is intended to ensure low-income users are not unduly burdened by high prices. Utilities offering this type of rate typically limit its application to qualifying low-income customers. Rate eligibility requirements based on income do not to comply with California law for municipal water and wastewater utilities under Proposition 218.
- **Inclining block structure.** An inclining block structure encourages conservation by charging a higher price per block as consumption increases. Depending on the number of blocks and the differential between blocks, an inclining block rate structure can provide a strong conservation price signal. Factors such as marginal cost of operations and usage patterns are typically considered in determining the number of blocks and the breakpoints between blocks. Large users, however, may consider this rate structure to be inequitable; whereas small users typically prefer it.

After giving careful consideration to both City Charter rate objectives and features of alternative rate structures, the SFPUC proposes to retain the existing two-tier rate structure for single-family residential customers and implement a two-tiered rate structure for multiple-family residential customers. For single-family residential customers, the first 3 Ccf of monthly use or 6 Ccf of bimonthly use is billed at a rate which is \$0.50/Ccf less than the average volume related cost of \$3.11/Ccf. All additional use is billed at a rate which is \$0.37 more than the average volume related cost. Approximately 42% of single-family residential use is billed in the first tier. The remaining 58% of use is billed in the second tier. The current rate applicable to multiple-family residential customers features a uniform volume charge. The SFPUC proposes replacing the existing rate structure with a two-tiered expanding block rate structure. The breakpoint for the tiers would be the same 3 Ccf monthly or 6 Ccf bimonthly proposed for single-family residential customers. The expanding block feature would increase the usage allowance in the first tier by the number of multiple-family dwelling units. For example, a multiple-family account with 5 dwelling units would be billed at the first tier rate for first 15 Ccf of month use (3 Ccf/Dwelling Unit x 5 Dwelling Units) or 30 Ccf of bimonthly use. Approximately 63% of multiple-family residential use would be billed in the first tier and remaining 37% of use in the second tier. Although single-family and multiple-family residential customers have similar usage characteristics, the differences in the use falling in each tier requires that each class have its own rate in order to recover each class' proportionate share of costs. Both rates provide a conservation incentive by increasing the customer's bill with increasing water use. Both are simple to understand and provide revenue stability. Both promote affordability by charging a lower rate for the first 3 Ccf of use.

No change is being proposed in the rate structures applicable to non-residential customers. The current rate includes a uniform volume applicable to all use. The SFPUC proposes to retain this rate structure. Because of the different usage characteristics exhibited by non-residential customers, particularly with respect to the quantity of water used, the SFPUC does not consider a tiered rate structure to be appropriate. The alternative of developing customized rates for individual customers is not feasible at this time.

## **Retail Rate Recommendation**

The analysis of revenue and revenue requirements indicates that water sales revenue at existing rates together with other revenues of the Water Enterprise will not be adequate to meet all funding requirements in FY 2009-10 through FY 2013-14. Shown in Table W-12 is a comparison of revenues under existing rates to cost of service by customer class. Overall, revenues from retail water sales are projected to be 18.4% less than the costs required to serve retail customers. The required increase shown in Table W-12 for single-family is largely due to the elimination of the third tier in the single-family residential rate included in the SFPUC staff's 2007 recommendations.

Elimination of the third tier without adjusting the first two tiers reduced revenues from sales to single-family residential customers by approximately \$5 million each year.

**Table W-12**  
Comparison of Revenues Under Current Rates to Cost of Service

Rate Class	Revenues Existing Rates	FY 2009-10 Cost of Service	Required Increase
Single-Family Residential	29,243	36,335	24.3%
Multiple Family Residential	38,921	45,034	15.7%
Commercial <sup>1</sup>	36,825	45,216	22.8%
Industrial	443	404	-8.9%
Municipal <sup>2</sup>	7,838	11,180	42.6%
Total	113,271	138,168	22.0%
Private Fire Protection	5,100	2,026	-60.3%
Grand Total	118,371	140,194	18.4%

<sup>1</sup>Includes Builders & Contractors and Docks & Shipping

<sup>2</sup>Includes service provided under a lower interruptible rate

Since the projected revenues from existing rates are insufficient, SFPUC staff recommends raising retail rates by 15% in both FY 2009-10 and FY 2010-11, by 12.5% in both FY 2011-12 and FY 2012-13, and by 6.5% in FY 2013-14. The proposed rate adjustments together revenues from other sources are anticipated to be sufficient to meet the operating and capital requirements of the Water Enterprise.

### Monthly Service Charges

Based on its analysis of costs, SFPUC staff recommends increasing the monthly service charges applicable to all retail classes of service. The monthly service charge has two components. Certain costs such as meter reading and customer billing are the same for all customers regardless of meter size or water use. Other costs such as meter maintenance and replacement are a function of meter size and increase with meter size. These costs are combined to determine the monthly service charge. Because there is a variable component to the costs included, the monthly service increases as meter size increases. However, because the fixed and variable costs included in the monthly service charges are same for all classes of service, the same monthly services charges can be used for residential and non-residential services. The following table shows the proposed monthly services charges for FY 2009-10 through FY 2013-14

**Table W-13**  
Proposed Monthly Service Charges

Meter Size	Current	2009-10	2010-11	2011-12	2012-13	2013-14
5/8	\$4.70	\$5.40	\$6.20	\$7.00	\$7.90	\$8.40
3/4	\$5.70	\$6.60	\$7.60	\$8.60	\$9.70	\$10.30
1	\$7.60	\$8.70	\$10.00	\$11.30	\$12.70	\$13.50
1-1/2	\$12.30	\$14.10	\$16.20	\$18.20	\$20.50	\$21.80
2	\$18.00	\$20.70	\$23.80	\$26.80	\$30.20	\$32.20
3	\$31.30	\$36.00	\$41.40	\$46.60	\$52.40	\$55.80
4	\$50.20	\$57.70	\$66.40	\$74.70	\$84.00	\$89.50
6	\$97.60	\$112.20	\$129.00	\$145.10	\$163.20	\$173.80
8	\$154.50	\$177.70	\$204.40	\$230.00	\$258.80	\$275.60
10	\$220.90	\$254.00	\$292.10	\$328.60	\$369.70	\$393.70
12	\$410.40	\$472.00	\$542.80	\$610.70	\$687.00	\$731.70
16	\$713.80	\$821.00	\$944.20	\$1,062.20	\$1,195.00	\$1,272.70

**Single-Family Residential**

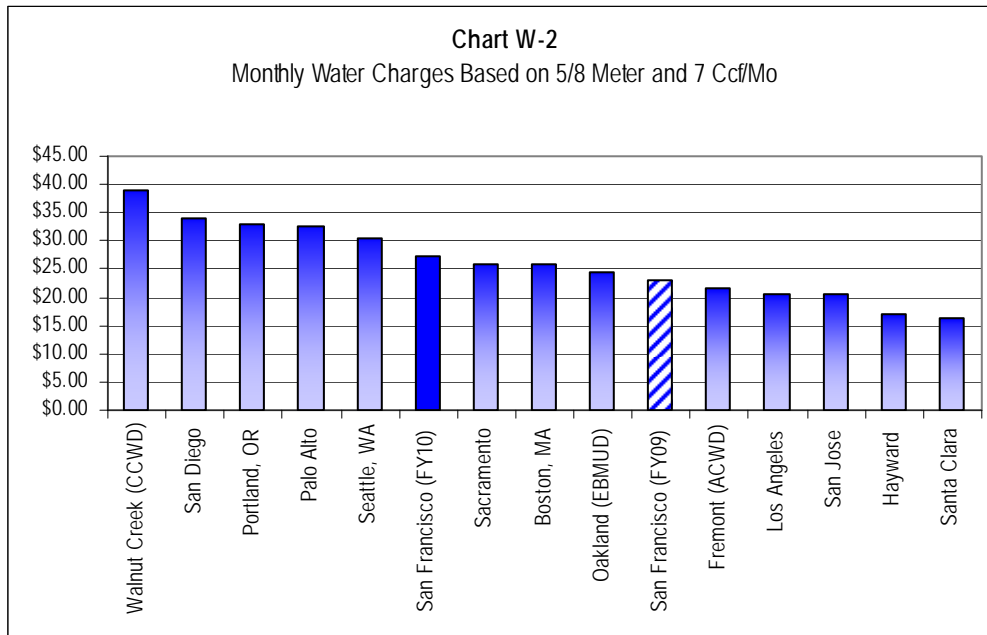
SFPUC staff recommends continuing the two-tiered inclining block rate structure for single-family residential customers. This rate structure will provide a price signal to customers to encourage conservation. Because the current rate does not include a third tier previously recommended by SFPUC staff in 2007, the rate applicable to single-family residential customers must be increased by slightly more than the overall increase being proposed. Shown below are the proposed volumes charges for FY 2009-10 through 2013-14.

**Table W-14**  
Proposed Single-Family Residential Volume Charges

	Current	2009-10	2010-11	2011-12	2012-13	2013-14
First 3 Ccf/Mo	\$2.28	\$2.61	\$3.09	\$3.50	\$3.90	\$4.20
All Additional	\$2.89	\$3.48	\$4.12	\$4.60	\$5.20	\$5.50

Even with the increase the proposed for FY 2009-10, San Francisco's water rate for single-family residential service is remains competitive with existing rates of peer and neighboring utilities, as shown in the Chart W-2. Many of peer and neighboring utilities have announced their intent to raise their water rates in 2009. When compared to other rates to be adopted this year, San Francisco's proposed water rates are expected to remain among the middle to lower third of comparable utilities in the region.





***Multiple-Family Residential***

SFPUC staff recommends changing the rate applicable to multiple-family residential customers from a uniform volume charge to a two-tiered expanding block rate structure based on number of dwelling units. The breakpoint between the first and second tiers is the same that proposed for single-family residential. However, the billable usage allowed in the first tier will be multiplied by the number of dwelling units. This two-part calculation allows expanding block rate structure to accommodate multiple-family developments of varying sizes. The proposed volumes charges for FY 2009-10 through FY 2013-14 are show below. The first tier rate of \$2.87/Ccf for FY 2009-10 is the same as the current uniform volume charge. Only 37% of multiple-family resident use falls in the second tier rate which is 33% higher than the first tier rate. Usage in the second tier is more likely for discretionary uses such landscape irrigation and recreation uses. This rate structure should provide a conservation incentive to multiple-family customers.

**Table W-15**  
Proposed Multiple-Family Residential Volume Charges

	Current	2009-10	2010-11	2011-12	2012-13	2013-14
First 3 Ccf/Mo	\$2.87	\$2.87	\$3.28	\$3.70	\$4.20	\$4.50
All Additional	\$2.87	\$3.82	\$4.37	\$4.90	\$5.50	\$5.90

It should be noted that even before the adoption of conservation rate structures, San Franciscans have shown their willingness to use water in an environmentally

responsible manner. San Franciscans have lower water use compared to other entities in the region and elsewhere. As discussed earlier in this report, the average single-family water use in San Francisco is 16% less than the “typical” use calculated based U.S. Environmental Protection Agency’s (EPA) standard allowance for indoor-water use. Multiple-family water use is 15% less than the amount calculated using EPA’s standard allowance and average San Francisco multiple-family household size.

**Non-Residential**

San Francisco serves a large and diverse non-residential customer class with a variety of usage patterns and a wide range of volumes. As a class, the current rate structure provides an effective price signal to individual customers (i.e. the greater the volume used the higher the customer’s bills). In addition to the regular non-residential rate, SFPUC staff is also recommending the continuing the reduced rate for municipal uses in San Francisco that can be interrupted during a water shortage or other water emergency. Before imposing use restrictions or reductions on other users, municipal users served under this rate will have their service curtailed during a water shortage or other emergency. Because continuous service is not guaranteed under this rate, it is possible to offer interruptible service at a lower rate. Any municipal customer who requests service under the interruptible rate and fails to curtail their water use or requests to be changed to firm service during a water shortage or other water emergency will be billed retroactively for the difference between firm and interruptible service for all months they were billed at the interruptible rate.

**Table W-16**  
Proposed Non-Residential Volume Charges

	Current	2009-10	2010-11	2011-12	2012-13	2013-14
Regular Use	\$2.92	\$3.35	\$3.89	\$4.52	\$5.10	\$5.40
Interruptible Use <sup>1</sup>	\$1.82	\$2.09	\$2.41	\$2.71	\$3.05	\$3.24

<sup>1</sup>Available to Municipal accounts only

**Wholesale Rate Recommendation**

The Water Enterprise delivers water on a wholesale basis to 28 water agencies (“Wholesale Customers”) outside the City and County of San Francisco. In 1984, the City and its Suburban Customers approved a Settlement Agreement and Master Water Sales Contract resolving litigation pending since 1974 and established the method for computing the suburban resale rate. That agreement expires on June 30, 2009. The SFPUC and the Wholesale Customers have negotiated a new agreement to be effective July 1, 2009. The new agreement, adopted by the Commission on April 28, 2009, determines the Wholesale Customers’ share of costs on a cash basis as compared to the utility basis used in the agreement it replaces. Under the new agreement the Wholesale customers will pay a proportionately share of the regional system operation and

maintenance expenses, debt service on regional facilities, and the cost of regional projects funded from current revenues. The new agreement will facilitate the timely recovery of capital costs of the regional system from the Wholesale Customers.

The existing wholesale rate structure consists of a monthly service charge based on meter size and type and a uniform volume charge. The volume charge portion of the wholesale rate represents approximately 95% of total wholesale revenues received by the Water Enterprise. Consequently, estimating water sales is a key component in the rate setting process. Projected sales based on historical averages and demand studies have been used for calculating revenues under existing rates, allocating costs, and determining the required rate adjustment percentage. For FY 2009-10, there will be no change in the monthly service charges; the volume charge, however, will increase 15.7% from \$1.43/Ccf to \$1.66/Ccf. The new agreement requires the wholesale rate to be calculated on an annual basis, so only FY 2009-10 is being proposed at this time.

### Miscellaneous Fees and Charges

In addition to rates for water service, the Water Enterprise also imposes a variety of fees and charges related to the provision of water service. These fees and charges include, for example, new account fees, late payment penalties, and service and meter relocation charges. The cost for each service has been reviewed and adjustments to miscellaneous fees and charges are proposed. The return check charge includes a \$50 returned check processing charge by the Treasurer’s office. Shown below is a summary of miscellaneous service fees and charges.

**Table W-17**  
Existing and Proposed Miscellaneous Service Fees

Service Fee	Current Charge	Proposed Charge
Late Payment Penalty	\$3.00 plus ½% of outstanding balance	\$3.00 plus ½% of outstanding balance
Return Check Charge	\$75.00	\$77.00
New Account Charge	\$25.00	\$32.00
48 Hour Notice	\$30.00	\$33.00
Service Shut-off	\$30.00	\$33.00
Service Turn-on	\$30.00	\$33.00
Lock Charge	\$13.00	\$13.00
Lien Fee	Set by Administrative Code	Set by Administrative Code

The Water Enterprise also charges for service and meter relocations and for changes in meter size made at the customer’s request. The customer is billed for a service and meter relocation or a meter change at the greater of actual cost or the average of costs incurred by the Water Enterprise performing similar service requests in the first nine months of the previous fiscal year. The costs included are labor, materials, paving and other costs.

Customers who violate water use restrictions may after one written warning and in accordance with applicable laws have their service limited by the installation of a flow restrictor on their service line. If a flow restrictor is installed, the customer will be billed for its installation as well as its removal, when warranted. The Water Enterprise currently charges \$155.00 for installation or removal of a flow restriction on a 5/8 and 1-inch service lines and \$220.00 on a 1 ½ to 2-inch service lines. The charge for service lines 3-inch and larger is based on actual cost. These charges have not been increased since 2001 and the charges for 5/8 and 1-inch service lines and 1 ½ and 2-inch service lines are proposed to increase for \$205.00 and \$295.00, respective.

## Capacity Charge

Customers connecting to the Water system receive the benefits of a water supply, treatment, and distribution system that is the result from the investment by existing customers over many years. In 2007, the Commission adopted a Water System Capacity Charge based on existing customers' equity in the existing system. Customers' equity includes the trended original cost less depreciation basis of existing facilities net of related debt, construction-work-in-progress, cash deposits with a fiscal agent, cash balance in the capital project fund, and unrestricted reserves. Customer equity totaled \$647.6 million as of June 30, 2006. After the value of ratepayer's equity in the water system was determined, the value was then converted in to common units. It is a standard industry practice to express a capacity charge as a cost per residential customer or an equivalent dwelling unit (EDU). Most residential customers are served using a 5/8 inch meter and an EDU is a measure of the number of 5/8 inch connections the system is capable of serving. Based on a hydraulic analysis of the Water Enterprise's distribution network, the system is capable of delivering water to serve 657,000 Equivalent Dwelling Units (EDU). Based on ratepayer equity of \$647.6 million and 657,000 EDU, the value of existing customers' investment as of June 30, 2006 was \$986 per EDU.

Using the calculated amount per EDU, a schedule of charges based on a common billing determinant can be developed for other types of customers. In the water industry, the most frequently used billing determinants are meter size, number of fixture units, and square footage by land-use category. Meter size has been selected as the common billing determinant for the Water Enterprise because it reflects the potential maximum demand a customer can impose on the water system and because this method is the easiest to explain to customers. A table of meter ratios based on AWWA-rated meter capacities using a 5/8 inch meter as the base service unit was used to calculate the charge for each meter size.

SFPUC staff recommended capacity charges be adjusted effective July 1 of each fiscal year based on the annual change in the 20 City Average Construction Cost Index (CCI) published by ENR Magazine. Utilizing a cost index will permit the capacity charge to be updated to reflect the current value of customers' equity without the need to make a determination of customer equity each year. The capacity charge was increased

to \$1,017 per EDU effective July 1, 2008 based on the change in CCI from July 2006 to July 2007. The next adjustment will be effective July 1, 2009 and based on the 4.2% change in CCI from July 2007 to July 2008, the capacity charge will be increased to \$1,060 per EDU.

Shown in the following table is the schedule of capacity charges as of July 1, 2009 applied to regular service connections for all new development and any redevelopment resulting in increased water use. The capacity charge amount applicable to individual projects will be determined on the basis of meter size and will be due when either an application for a service connection or a request for change of meter size is made.

**Table W-18**  
Capacity Charges by Meter Size  
Effective July 1, 2009

Meter Size	Ratio	Capacity Charge	Meter Size	Ratio	Capacity Charge
5/8 inch	1	\$1,060	4 inch	25	\$26,486
3/4 inch	1.5	\$1,590	6 inch	50	\$52,972
1 inch	2.5	\$2,648	8 inch	80	\$84,755
1 1/2 inch	5	\$5,298	10 inch	115	\$121,836
2 inch	8	\$8,476	12 inch	215	\$227,780
3 inch	15	\$15,892	16 inch	375	\$397,400

## Wastewater Enterprise

### Users and Usage

#### Customer Classes

The Wastewater Enterprise serves a population of approximately 840,000 within San Francisco and adjacent communities of Brisbane, Bayshore, and Daly City. Customers are grouped into two classes - residential and non-residential. Grouping customers with the same or similar wastewater characteristics into classes allows the Enterprise to allocate cost responsibility to each class based on their respective volumes and strengths (i.e. wastewater characteristics). Within each class, subgroups have been established to facilitate rate analysis and rate administration.

**Residential.** Residential sewage discharge results from human habitation of dwelling units. All residential sewage is assumed to have the same strength (“domestic strength”) and is billed at the same rate.

In FY 2007-08, the Wastewater Enterprise served 149,124 residential accounts representing approximately 360,400 dwelling units. Based on assumed flow factors, residential customers discharged 18,959,161 Ccf of wastewater annually, for an average of 4.4 Ccf per dwelling unit per month.

There are two categories of residential users – residents of single-family homes and residents of multi-family buildings.

- *Single-Family Residential (SFR) customers* live in dwelling units served by individual water meter. Each SFR customer account represents only one dwelling unit. The customer of record, who may be the property owner or a tenant, is responsible for paying the bi-monthly sewer bill.

In FY 2007-08, the Wastewater Enterprise served 110,517 SFR accounts. These accounts discharged a total of 7,275,264 Ccf of wastewater (i.e. discharge units), an average of 5.5 Ccf per dwelling unit per month.

Single-family discharge volume of 137 gallons per day is 27% less than the amount 191 gallons per day calculated using EPA’s standard estimate for indoor-water use of 70 gallons per person per day and San Francisco’s average household size of 2.73 persons.<sup>4</sup>

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<sup>4</sup> Water use as reported in Customer Service MGT740. Household size as reported in 2002 San Francisco Housing Databook.

- *Multi-Family Residential (MFR) customers* live in buildings with multiple dwelling units served by a common water meter or bank of water meters. Typically, the occupants of these dwelling units are tenants. One MFR customer account can represent any number of dwelling units – from a two dwelling unit duplex to an apartment building with more than 100 dwelling units. The customer of record is usually the building owner or a property manager who is responsible for paying the bi-monthly sewer bill. Most multi-family properties include the cost of sewer service in the rent (or in homeowners’ dues for condominium associations). Because individual tenants do not receive a bill, many MFR tenants may not be aware of the cost of sewer service. This payment arrangement makes it difficult to develop low-income assistance programs for MFR residents. Because low-income MFR residents are not billed directly, there is no way to ensure that the savings from discounted sewer rates are passed on to eligible MFR residents.

In FY 2007-08, the Wastewater Enterprise served 38,607 MFR accounts representing 248,675 dwelling units. MFR accounts discharged 11,683,897 Ccf of wastewater or an average of 3.9 discharge units per dwelling unit per month.

Multiple-family discharge volume of 98 gallons per day is 32% less than the amount of 144 gallons per day calculated using EPA’s standard estimate for indoor-water use of 70 gallons per person per day and San Francisco’s average household size of 2.06 persons.<sup>5</sup>

***Non-Residential.*** Non-residential wastewater discharges result from commercial, industrial, governmental, and other business activities. Non-residential customers include office buildings, hotels, restaurants, laundries, wholesale and retail trades, consumer services, manufacturing, and other businesses. These activities result in wastewater discharges that vary both in the volume and strength of wastewater discharged. Non-residential customers are separated into three subgroups – significant dischargers, minor dischargers and other dischargers.

- *Significant Dischargers* are those non-residential customers who meet one or more of the following criteria:
  - Are subject to categorical pretreatment standards;
  - Discharge more than 25,000 gallons per day excluding sanitary, non-contact cooling and boiler blowdown wastewater;
  - Discharge wastewater accounting for 5% or more of dry weather 5-day Biochemical Oxygen Demand (BOD<sub>5</sub>)/Total Suspended Solids (TSS) capacity of the treatment plant(s); or

<sup>5</sup> Water use as reported in Customer Service MGT740. Household size as reported in 2002 San Francisco Housing Databook.

- Discharge wastewater that in the opinion of the General Manager will adversely affect the sewerage system by causing interference, pass-through of pollutants, sludge contamination or endangerment of City workers.

SFPUC samples the wastewater of significant dischargers on a regular basis to assess their discharge characteristics (total suspended solids, chemical oxygen demand, and fats, oil and grease). Significant dischargers are billed at a rate based on the volume of wastewater discharged and their particular wastewater characteristics. In 2008, the Wastewater Enterprise served 3 significant dischargers whose discharges are regulated, in whole or in part, by EPA categorical standards.

- *Minor Dischargers* are industrial customers whose discharges are regulated by standards other than EPA pretreatment standards. Minor dischargers are monitored and the discharges sampled on periodic basis. In 2008, the Wastewater Enterprise served 542 minor dischargers.
- *Other Dischargers* are non-residential dischargers whose discharges are not monitored or sampled. These dischargers are placed into one of approximately 45 different commercial/industrial profiles (“Standard Industry Classification” or SIC), each of which has its discharge characteristics and a specifically calibrated rate. In 2008, the Wastewater Enterprise served approximately 15,000 other dischargers.

In addition to the Wastewater Enterprise’s residential and non-residential customers, the Wastewater Enterprise supplies wholesale sewer service to three special districts. These districts are billed in accordance with the provisions of the Joint Powers Agreements between the respective districts and the City. North San Mateo County Sanitation District is billed using the same rates as the Wastewater Enterprise’s retail customers. Bayshore Sanitary District is billed a fixed charge based on its proportionate share of costs. The City of Brisbane is billed on a volumetric basis reflecting its proportionate share of costs. The rates and charges for Bayshore Sanitary District and the City of Brisbane are adjusted annually.

## Estimated Wastewater Volumes

The amount of sewage an individual customer discharges into the sewer system is estimated by multiplying the customer’s water use (as measured at the water meter) by the customer’s “flow factor”. The flow factor is the estimated percentage of metered water use discharged to the sewerage system as wastewater. Most SFR customers are assigned a flow factor of 90%. Since FY 2004-05, MFR customers have been assigned as default flow factor of 95%. Non-residential customers are assigned a flow factor of 90%. Customers who can demonstrate that a lower percentage of their water use is being



returned to the sewerage system as wastewater can request their flow factor be evaluated for possible reduction.

Between FY 2003-04 and FY 2007-08, the volume of sewage treated by the Wastewater Enterprise has been relatively constant. As shown In Table WW-1, wastewater volumes for residential and non-residential customers decreased 3.4% between FY 2003-04 and FY 2007-08. FY 2004-05 and FY 2005-06 were cooler than normal, and annual precipitation was more than 150% of normal rainfall. FY 2006-07 and FY 2007-08 were both dry years with precipitation about 80% of normal rainfall. In May 2006, the SFPUC asked for voluntary conservation and water sales and discharge volumes did not increase despite the below normal rainfall.

**Table WW-1**  
Historical Wastewater Discharge Volumes  
Fiscal Years Ended June 30  
(MCcf)

Customer Class	2004	2005	2006	2007	2008
Residential	20,575	19,727	19,803	19,725	19,726
Non-Residential	<u>10,006</u>	<u>9,776</u>	<u>9,741</u>	<u>9,763</u>	<u>9,822</u>
Total	30,581	29,503	29,544	29,488	29,548

For this report, volumes are expected to remain constant throughout the forecast period. The following table shows projected volumes.

**Table WW-2**  
Projected Wastewater Discharge Volumes  
Fiscal Year Ending June 30  
(MCcf)

Customer Class	2009	2010	2011	2012	2013	2014
Residential	19,700	19,700	19,700	19,700	19,700	19,700
Non-Residential	<u>9,800</u>	<u>9,800</u>	<u>9,800</u>	<u>9,800</u>	<u>9,800</u>	<u>9,800</u>
Total	29,500	29,500	29,500	29,500	29,500	29,500

## Wastewater Characteristics

Treatment facilities are sized and operating costs incurred based not only on the volume of wastewater to be treated but also on the concentration and quantity of pollutants to be removed. As a means of developing equitable rates, cost responsibility is allocated to customer classes based on their contributed wastewater volumes and characteristics. There are three key measures of wastewater strength:

- **Chemical Oxygen Demand (COD).** As part of the treatment process, microbial organisms consume dissolved oxygen while assimilating or oxidizing the organic

matter present in wastewater. COD measures the quantity of oxygen required for that process.

- **Total Suspended Solids (TSS).** TSS measures the quantity of suspended solids or non-filterable residue in the wastewater.
- **Oil and Grease (O/G).** Recoverable oil and grease (sometimes referred to as Fats, Oils and Grease, or “FOG”) can coat the lining of sewers and, if not removed, obstruct or restrict the hydraulic capacity of the collection system.

Domestic strength sewage has the following characteristics: COD – 684 mg/l, TSS – 279 mg/l, and O/G – 85 mg/l. The standard wastewater strengths have been developed for various SIC codes. Many non-residential customers are assigned SIC codes that are identical or similar to domestic strength sewage.

The cost allocation for the Wastewater Enterprise is based in part by the total amount (or “loadings”) of COD, TSS and O/G in the sewer system. Based on historical data, the anticipated FY 2009-10 aggregate loadings and volumes for customers billed under each rate schedule are shown in the table below.

**Table WW-3**  
FY 2009-10 Projected Wastewater Volumes and Loadings  
(In thousands)

	Discharge Units	O/G lbs	TSS lbs	COD lbs
Residential	19,700	10,441	34,298	84,079
Non-Residential	<u>9,800</u>	<u>5,713</u>	<u>14,763</u>	<u>42,926</u>
Total	29,500	16,154	49,061	127,005

## Revenues

As an enterprise department, the Wastewater Enterprise is required to generate sufficient revenues to fund its annual budget, fund capital projects, and to comply with the conditions of federal grants, state loans, and bond covenants. The enterprise derives its revenues mainly from sewer service charges along with interest income and revenues from rents. Sewer service charges have produced as much as 99% of total revenues received in recent years. Each source of revenue is discussed in greater detail in the following paragraphs.

## Sewer Service Charges

Prior to 1977, the City funded sewer service costs principally from property taxes supplemented by a flat fee per connection. Since 1977, the sewer service charge has been the Wastewater Enterprise's primary source of revenue to fund operations. As a recipient of federal and state grants and a borrower under the State Revolving Fund loan program, the City is required to adopt sewer service charges based on each customer class' proportional use of the sewerage system and to establish a dedicated source of revenues to pay for operating the system.

### Residential

The sewer service charge applicable to residential service is an inclining block rate structure. The first block is applied to first three units of monthly discharge per dwelling unit. The next two units of monthly discharge per dwelling unit are billed at a higher rate. All monthly discharges over five units per dwelling unit are billed at the highest rate. For multiple family residential accounts, the billable use in each block is calculated by multiplying the allowed use by the number of dwelling units. An account with ten dwelling units, for example, would be allowed 30 discharge units in the first block and 20 discharge units in the second block. If the customer is billed on a bimonthly basis, the use allowed in each block is doubled. There is no adjustment for vacant units in multi-family dwellings.

### Non-Residential

For non-residential customers, the sewer service charge is calculated based on the volume wastewater discharged and the pounds of pollutants contained in that discharge. The charges for customers with sampled discharges are billed on the basis of their specific waste characteristics. Other customers are billed on the basis of the standard waste characteristics for their respective business activity. A customer or business activity which discharges high strength wastes is charged a higher rate than a customer or business activity which discharges wastes similar to residential customers. In addition to the costs shared with residential customers, all non-residential customers are responsible for the costs of the Wastewater Enterprise's pretreatment program. The pretreatment program monitors customers with high strength wastes to ensure prohibited substances are not discharged to the sewerage system. The FY 2009-10 cost of the pretreatment program is \$3.9 million. Residential customers do not bear any cost responsibility for the pretreatment program.

## Interest Income

The Wastewater Enterprise earns interest income from the investment of available funds by the City Treasurer. Only the interest income earned from the investment of non-restricted funds is included. Interest income earned from the investment of moneys in

restricted funds such as bond funds may only be used for the purpose of the fund and are not available to meet day-to-day operating expenses. Based on the current yield on investments made by the City Treasurer and projected fund balances, it is anticipated that investment income earned by unrestricted funds in FY 2009-10 will be \$1.6 million.

## Rents

The Wastewater Enterprise operates the Southeast Community Facility that was built to partially offset the adverse impacts to the Bayview-Hunter’s Point community resulting from the expansion of the Southeast Water Pollution Control Plant. Activities conducted at the neighborhood center include college courses, job skills training, child day care, senior day care, and community meetings. The Wastewater Enterprise charges for the use of the facility. The charge is intended to recover the costs of support services provided at the facility. The annual income from rents charged at the Southeast Community Facility and other Enterprise properties is projected to be \$427,000 for FY 2009-10 through FY 2013-14.

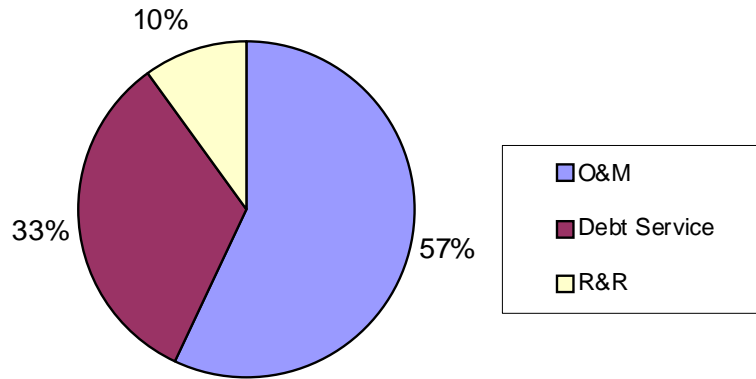
**Table WW-4**  
 Projected Operating and Non-Operating Revenues under Current Rates  
 Fiscal Years Ending June 30  
 (\$000)

	2009	2010	2011	2012	2013	2014
Wastewater Service Charges						
Residential	117,539	117,539	117,539	117,539	117,539	117,539
Non-Residential	92,447	92,447	92,447	92,447	92,447	92,447
Total Charges	209,986	209,986	209,986	209,986	209,986	209,986
Interest Income	915	1,570	2,060	1,670	1,775	1,916
Rents and Other Misc. Revenues	577	427	427	427	427	427
Total	211,478	211,983	212,473	212,083	212,188	212,329

## Annual Operating Expenses

The Wastewater Enterprise’s annual operating budget includes operation and maintenance costs, repair and replacement costs for existing equipment and facilities, and debt service on bonds and loans used to finance capital improvements. Each expense component is discussed in greater detail in the following paragraphs. As illustrated in the chart shown below, operations and maintenance costs are by far the largest component of the Wastewater Enterprise’s expenses.

**Chart WW – 1**  
FY 2007-08 Expense Components



The following table summarizes the Enterprise’s expense components for the five most recent fiscal years.

**Table WW-5**  
Historical Operating Expenses  
Fiscal Years Ended June 30  
(\$000)

	2004	2005	2006	2007	2008
O&M Expense	87,618	96,652	104,466	112,468	115,467
Debt Service	40,216	37,348	37,351	70,259	66,682
Revenue Funded Capital (R&R)	<u>14,494</u>	<u>17,861</u>	<u>16,039</u>	<u>16,707</u>	<u>20,413</u>
Total	142,328	151,861	157,856	199,434	202,562

### Operation and Maintenance Expense

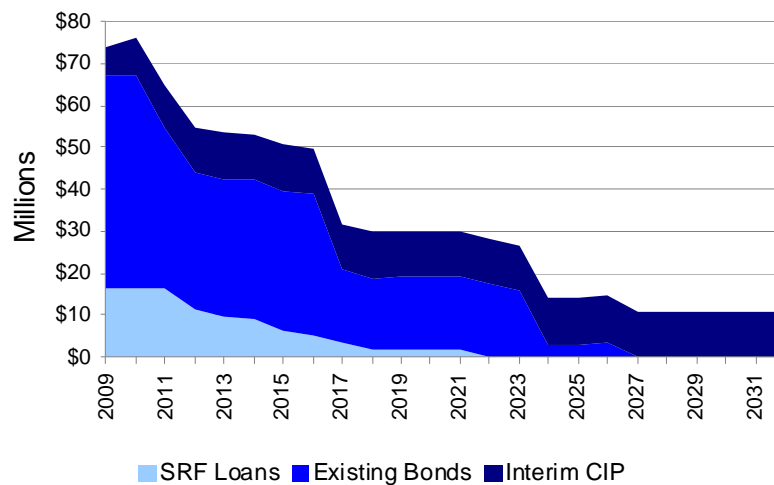
The Wastewater Enterprise operates and maintains two year-round wastewater treatment plants, one wet-weather facility, 20 pump stations, and approximately 898 miles of sewers throughout the City. The principal costs of the collection and treatment system include labor salaries and fringe benefits, material and supplies, treatment chemicals, power and energy, sludge disposal, and services of other City departments (including the SFPUC support bureaus which provide billing, customer service, financial, information technology, and human resource services). The FY 2009-10 budget to operate the water pollution control system is \$127.3 million. Costs are expected to increase 3% per year over the period from FY 2009-10 to FY2013-14. The majority of these costs are independent of the volume of wastewater treated.

## Debt Service

Debt service includes principal and interest payments on revenue bonds and State Revolving Fund loans used to finance system improvements. In addition to increases in the debt service payments on existing debt, the Wastewater Enterprise has developed a \$150 million commercial paper program to fund the Interim Capital Improvement Program (Interim CIP) to address flooding and odor control problems.

The chart on the following page illustrates long-term projected debt service costs for existing bonds and loans. The chart does not include debt service of bonds to be issued to fund construction of the new Wastewater Master Plan (WWMP) projects currently being developed even though some new bonds are likely to be issued during the forecast period. The estimated cost of the new Master Plan is expected to exceed \$3 billion. Those bonds when issued will impact on annual revenue requirements, depending on the timing of major projects. The projected debt service does assume, however, some bond sales during the forecast period to fund studies, environmental reviews, and initial design activities.

**Chart WW – 2**  
Projected Existing Debt Service Only



## Repair and Replacement Expense

The annual contribution to the Repair and Replacement Fund (R&R) is used to fund major maintenance and routine additions and improvements to sewers, pumping stations, and treatment plants. As a recipient of state and federal grants under the Clean Water Act, the Enterprise is required to include annual funding for repairs and replacement as a part of its annual revenue requirement. A 1986 Board of Supervisors resolution set the minimum R&R expenditure at \$5 million and requires the expenditure to increase at least 5% annually until the amount of the annual contribution reaches \$20

million. The annual contribution is expected to be \$20 million in FY 2010-11 and is projected to continue to increase at an annual rate of 5%.

## Projected Operating Expenses

The following table shows projected operating expenses for the forecast period. The amounts shown for FY 2009-10 are the Commission approved budget. Operation and maintenance expenses in subsequent years are projected to increase at an annual rate of 3%. Debt service costs assume debt for the 5 Year CIP is issued during the forecast period. The annual transfer to R&R is expected to increase 5% per year. In addition to escalation of current expense, the projection assumes additional expenses related to the proposed WWMP improvements. Beginning in FY 2011-12, O&M expenses are projected to increase \$18.6 million for operating expenses of new facilities. In the same year the first increment of bonds sold to finance Master Plan improvements will be included in annual operating costs. The Master Plan also includes increasing R&R funding by \$30 million a year to accelerate replacement of aging sewers.

**Table WW-6**  
Projected Operating Expenses  
Fiscal Years Ending June 30  
(\$000)

	2009	2010	2011	2012	2013	2014
O&M Expense						
Base O&M Expense	121,259	127,289	131,108	135,021	139,092	143,265
Incremental O&M for WWMP	-	-	-	18,554	19,139	19,764
Subtotal O&M Expense	121,259	127,289	131,108	153,575	158,231	163,029
Debt Service						
Debt Service on Current Bonds	66,832	66,834	54,668	43,952	42,457	42,189
Debt Service on WWMP Bonds	-	-	-	7,386	19,840	29,422
Subtotal Debt Service	66,832	66,834	54,668	51,338	62,297	71,611
Revenue Funded Capital (R&R)						
Base R&R	15,857	20,624	20,000	21,000	22,050	23,153
Additional R&R	-	-	-	27,957	29,354	30,822
Subtotal Revenue Funded Capital	15,857	20,624	20,000	48,957	51,404	53,975
Total	203,948	214,747	205,776	253,870	271,932	288,615

## Revenue Requirement

The annual expenditures for operation and maintenance, debt service, and repair and replacement make up the revenue requirement of the Wastewater Enterprise. However, the income derived from interest and rents is subtracted from the annual revenue requirement to determine the net revenue requirement to be met from sewer service charges.

The revenue and revenue requirement forecasts for the five-year period from FY 2009-10 to FY 2013-14 are shown in the table below. The amounts shown are those discussed in preceding sections of this report and include projected revenue based on current rate schedules without any rate increases during the forecast period.

**Table WW-7**  
Projected Revenues under Current Rates and Expenses  
Fiscal Years Ending June 30  
(\$000)

	2009	2010	2011	2012	2013	2014
Expenditures						
O&M Expense	121,259	127,289	131,108	153,575	158,231	163,029
Debt Service	66,832	66,834	54,668	51,338	62,297	71,611
Revenue Funded Capital (R&R)	15,857	20,624	20,000	48,957	51,404	53,975
Total Expenditures	203,948	214,747	205,776	253,870	271,932	288,615
Less:						
Interest Income	915	1,570	2,060	1,670	1,775	1,916
Rents	577	427	427	427	427	427
Annual Revenue Requirement	202,456	212,750	203,289	251,773	269,730	286,272
Revenues under Current Rates	209,986	209,986	209,986	209,986	209,986	209,986
Revenue Deficiency	-	(2,764)	-	(41,787)	(59,744)	(76,286)

As shown in Table WW-7, the revenues based on current rates of the Enterprise will be insufficient to meet the revenue requirement in FY 2009-10 and most subsequent years. In addition to funding current operations, revenues must be sufficient to meet debt service coverage and provide adequate reserves to permit the Wastewater Enterprise to respond to normal fluctuations in revenues and expenses as well as respond to emergencies.

The revenue deficiency as a percent of revenues under existing rates is expected to be 1% in FY 2009-10 and increase to 36% in FY 2013-14. The cumulative deficiency over the five-year forecast period is expected to be \$76.3 million. The cumulative deficiency as a percent of annual revenue is 36%. A cumulative 36% deficiency over 5 years equates to an average annual deficiency of 6.4%. Finance staff recommends annual rate increases of 7% in FY 2009-10 and FY 2010-11 followed by annual rate increases of 5% in FY 2011-12 through FY 2013-14. The proposed adjustments will increase revenues of \$210 million under current rates to \$278.2 million in FY 2013-14. These



increases will provide a sufficient funding for operation and maintenance, debt service payments, transfers to R&R and increasing operating reserves to meet the Commission’s target of 25% of operation and maintenance expense. This level of funding will also provide adequate debt service coverage (i.e. greater than 1.25 times) in all years.

**Table WW-8**  
Proposed Rate Adjustments

	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Rate Adjustment	7.0%	7.0%	5.0%	5.0%	5.0%
Cumulative Adjustment	7.0%	14.5%	20.2%	26.2%	32.5%

### Rate Recommendation

Sewer rates generate revenue from individual customers to meet the cost of serving each customer class. As noted in the Revenue Requirements section of this report, the projected operating expenditures to be met from sewer service charges for FY 2009-10 are \$212.8 million increasing to \$286.3 million in FY 2013-14. The projected sewer service charge revenue under existing rates is \$210.0 million in all years. Annual rate increases of 7% in FY 2009-10 and FY 2011 and 5% in FY 2010-11 through FY 2013-14 are required to meet the projected revenue requirements.

The SFPUC has identified a series of objectives to be reflected in its rate structure. Those objectives include:

- **Conservation.** The residential rate structure should encourage customers to conserve water and to use water and sewer services in a responsible manner that promote environmental stewardship.
- **Simplicity.** The residential rate structure should be easy to communicate to customers, and customers should be able to use their knowledge of the rate structure to reliably predict the amount of their water and sewer bill.
- **Stability.** The residential rate structure should provide a reliable revenue stream to the Wastewater Enterprise, and a small change in residential use patterns should not lead to large changes in revenues.
- **Fairness.** The residential rate structure should ensure that all customers pay their fair share of costs. Cost of service serves as a basis for evaluating equity.

In developing this year’s rate recommendations, the SFPUC considered a number of different rate structures, including:

- **Uniform structure.** Under a uniform structure all discharge units are billed at the same price. Uniform rates are easy to communicate but do not particularly encourage conservation. In particular, moving to a uniform structure from the current structure would penalize low volume users.
- **Inclining block structure.** Inclining block structures encourage conservation by charging a higher rate per unit of discharge as the volume of discharge increases. Factors such as marginal cost of operations and usage patterns are typically considered in determining the number of blocks and the breakpoints between blocks.

## Residential Rate Structure

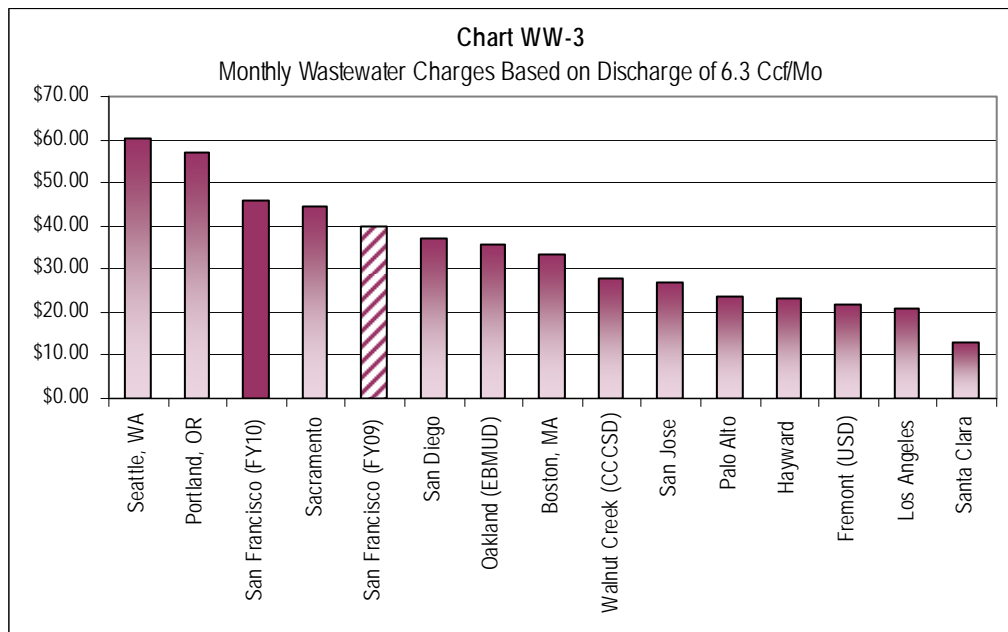
Under the current rates, the first three discharge units are billed at a reduced rate equal to about 35% of the Tier 3 rate. The next two units are charged at 87.5% of the Tier 3 rate. Based on this rate structure, the FY 2008-09 rates are \$3.42/Ccf, \$8.55/Ccf and \$9.77/Ccf for Tiers 1, 2 and 3, respectively. Because the first tier rate is so heavily discounted, the rates in tiers 2 and 3 must be set substantially higher than the average cost of service for the class. Additionally, within the residential class of customers, single-family residential customers have proportionately less of their use in the first tier than multiple-family residential customers, so the burden of meeting the costs has fallen disproportionately on single-family residential customers.

When the third tier was added in 2004, it was believed that a third tier would serve as a conservation incentive and customers would reduce their water use to avoid being billed in the third tier. An analysis of customer use, however, does not indicate any change in customer usage patterns. Usage patterns in FY 2007-08 are approximately the same as those in FY 2003-04. There are several possible explanations as to why the addition of a third tier has not been effective in reducing water use. The first is the rate differential between the second tier and the third tier is not large enough to create a disincentive to use. The second is the size of the second tier at two units is not large enough to permit a significant number of units to move from the third tier into the second tier. The third and possibly the most significant reason is that nearly two-thirds of residential use is by multiple-family households which do not receive a bill and have no incentive to conserve.

The proposed rates include two major changes. First, single-family residential customers and multiple-family customers are separated into separate classes. This mirrors the water rate structures. It also permits rates to be designed to reflect the particular usage characteristic of each group of residential customers. As previously discussed, single-family residential customers have a smaller percentage of their total usage in the first tier compared to multiple-family customers (46.7% to 62.5%). Separate classes ensure each customer group pays on their proportionate share of costs. The second change is elimination of the third tier. Reducing the number of tiers to two simplifies the rate

structure, narrows the rate differential between tiers, and mirrors the two-tier structure for water. Maintaining a tier structure with a reduced first tier continues to reward super conservers and promote affordability, particularly for one and two-person households.

The proposed rates will result in charges for FY 2009-10 that are competitive with the rates charged by other utilities, as illustrated in the chart WW-3 below. The chart shows the amount a residential customer using 6.3 discharge units per month would pay per month under the SFPUC's proposed rates and the rates of other utilities.



### Non-Residential Rate Structure

Non-residential customers pay rates based on the unit costs of volume, oil and grease (O/G), total suspended solids (TSS), and chemical oxygen demand (COD). The later three components are means of measuring the pollutant loading of a customer's discharge. Pollutant loadings are identified through individual sampling of significant dischargers or based on a standard strength for dischargers engaged in the same or similar business activity.

A comparison of revenues under existing rates to the non-residential customers' share of costs indicates existing rates are sufficient to meet those costs and will continue to be sufficient to meet those costs through FY 2012-13. Consequently, no rate adjustment is proposed for FY 2009-10 through FY 2012-13. In FY 2013-14, a nominal adjustment of 1% is proposed. Projected revenues for forecast period are \$92.4 million for the first four years and \$91.3 million for the final year of the projection period.

The table below shows unit costs for the proposed rates for FY 2009-10 through FY 2013-14 as well as an illustrative rate based on domestic strength sewage.

**Table WW – 9**  
Non-Residential Rates (per unit)

	2009-10	2010-11	2011-12	2012-13	2013-14
Volume (per discharge unit)	\$6.5548	\$6.5548	\$6.5548	\$6.5548	\$6.6203
COD (per lb.)	\$0.2156	\$0.2156	\$0.2156	\$0.2156	\$0.2178
TSS (per lb.)	\$0.8819	\$0.8819	\$0.8819	\$0.8819	\$0.8907
O/G (per lb.)	\$1.1035	\$1.1035	\$1.1035	\$1.1035	\$1.1145
Domestic Strength (per Ccf)	\$9.60	\$9.60	\$9.60	\$9.60	\$9.70

### Capacity Charge

New customers connecting to the Wastewater system receive the benefits of a collection and treatment system that is the result of the investment by existing customers over many years. Following the direction from the Commission and with guidance from the Rate Fairness Board, SFPUC staff implemented a capacity fee in FY 2005-06. The amount of the fee is based on existing customers’ net investment in the existing system on a trended original cost less depreciation basis. Customers’ investment in the system consists of the net book value of assets net of related debt, construction work in progress, cash deposited with fiscal agent, cash in the capital project fund, and unrestricted reserves. Customer equity totaled \$1,354.8 million as of June 30, 2006. After the value of customer equity was determined, the next step was to convert it into common units. It is a standard industry practice to express a capacity charge as a cost per residential customer or an equivalent dwelling unit (EDU). Based on the hydraulic capacity of the wastewater system, the current system is capable of serving approximately 466,000 EDU. Based on customer equity and 466,000 EDU, the value of existing customers’ investment as of June 30, 2006 was \$2,907 per EDU.

The capacity charge is adjusted effective July 1 of each fiscal year based on the annual change in the 20 City Average Construction Cost Index (CCI) published by ENR Magazine. Utilizing a cost index permits the capacity charge to be updated to reflect the current value of customers’ equity in years without the need to make a determination of customer equity each year. The capacity charge was increased to \$2,999 per EDU effective July 1, 2008 based on the change in CCI from July 2006 to July 2007. The next adjustment will be effective July 1, 2009 and based on a 4.2% change in CCI from July 2007 to July 2008, the capacity charge will be increased to \$3,124 per EDU.

Currently applicants requesting a new connection or with an existing connection requiring additional capacity are charged on the basis of wastewater strength (characterized as high, medium or low strength) and square footage. Based on empirical data, SFPUC staff has developed ratios to convert the square footage by strength to EDU. Implementation of this methodology has been challenging and can require consideration of uncommon characteristics

and/or situations. SFPUC staff is investigating utilizing equivalent fixture units as an alternative method of determining capacity requirements.

## Low Income Assistance Programs

To make SFPUC services affordable to low-income households, the SFPUC has implemented a number of assistance programs. The Community Assistance Program or CAP, implemented in 2004-05, provides a 35% discount on wastewater service charges to eligible single-family households. The program was expanded in FY 2007-08 to include a 15% discount on the water charges to eligible single-family household. The Low-Income Non-Profit Housing or LINPH discount, implemented in FY 2005-06, provides a 15% discount on wastewater service charges to a small number of multiple-family accounts. The Community House Program, implemented in 1994, provides variable discount on wastewater service charges to Single Room Occupancy (SRO) hotels providing transitional housing to general assistance recipients and homeless individuals. These programs are discussed more fully in the following paragraphs.

Until FY 2007-08, the cost of these programs was funded from ratepayer revenues. Following the 2006 California Supreme Court ruling in the Big Horn case that held, in part, that Proposition 218 applied to publicly owned water and wastewater utility rates, the City Attorney advised that ratepayer funds cannot be used as the revenue source for these assistance programs. In Fiscal Years 2007-08 and 2008-09, the SFPUC received General Fund support for the programs in the amounts of \$1.4 and \$1.6 million, respectively. As of the writing of this report, the Mayor's Office is still finalizing their proposed budget for FY 2009-10. Existing programs are discussed in the following paragraphs for informational purposes only.

**The Community Assistance Program (CAP)** provides a 35% discount on sewer service charges and 15% on water charges to qualifying single-family residential (SFR) customers. The current CAP income eligibility guidelines are set at 200% of the Federal Poverty Guidelines based on total annual household income. The SFPUC began accepting CAP applications in July 2004. As of March 2009, 7,265 customers were enrolled in the program. Based on U.S. census data, the estimated number of eligible households is 23,813. The current participation rate is about twenty-five percent (31%) of eligible households. The average CAP participant who uses 15 Ccf of water per bimonthly billing period and discharges 13.5 Ccf of wastewater receives a discount \$38.37 on their bimonthly bill.

**Low Income Non-Profit Housing (LINPH) Program** was begun in FY 2005-06 to provide rate relief to low-income multi-family residential (MFR) residents in housing owned and operated by non-profit organizations. The LINPH discount provides a 15% discount on sewer service charges and water charges to qualified low-income multi-family housing developments registered with the Mayor's Office of Housing (MOH). The program became effective midway through FY 2005-06. As of March, 2009, there were fifty-four properties enrolled in the program. During FY 2008-09, the average discount per bill was \$691.

**Community House Program (CHP)** provides a discount on water and sewer service charges to boarding houses, motels, and hotels participating in the Mayor’s Community House Program. This program provides transitional housing to homeless individuals and general assistance recipients. Participants enrolled in the program receive a fifty percent (50%) discount based on the percentage of rooms occupied by eligible individuals. For example, a hotel that had 10% of its rooms occupied by eligible individuals during the month would receive a 5% discount on its monthly sewer service charge (i.e. 50% times 10%). During FY 2007-08, fifteen properties participated in the program and received an average monthly discount on water charges was \$80 and on wastewater charges was \$696.

To continue the assistance programs at their present levels, the table below shows the required funding for each program.

**Projected Cost to Maintain Current Assistance Programs  
\$000**

Program	FY 2010	FY 2010	FY 2012	FY 2013	FY 2014
Community Assistance Program (CAP)	1,710	1,858	1,982	2,115	2,228
Low Income Non-Profit Housing Program (LINPH)	198	218	235	253	268
Community Housing Program (CHP)	130	140	148	157	165
Total	2,038	2,216	2,365	2,525	2,661

## Conservation Programs

In addition to continuing the low-income assistance programs, SFPUC staff is developing programs that promote conservation and provide a permanent benefit to both the program participants and the customers of water and wastewater system as a whole. SFPUC staff proposes to work directly with customers to improve the efficient use of water and thus reduce their charges.

The SFPUC currently has a number of conservation programs that provide financial and other assistance to customers replacing existing water fixtures with more efficient ones, locating and fixing plumbing leaks, and reducing outdoor water use. These programs include:

- Residential and commercial toilet rebates – toilet flushing is the largest water use in homes and offices and the SFPUC gives rebates of up to \$125 on tank style toilets and up to \$200 on flushometer valve toilets when replacing of toilets using 3.5 gallons or more per flush;
- Clothes washer rebate – clothes washers are often the second largest water use in many homes and the SFPUC gives rebates from \$150 to \$400 on the purchase approved water efficient washers;
- Water saver program – the SFPUC conducts free onsite inspections for large volume users and provides an analysis of water saving, costs, financial incentives and payback periods for potential water savings;
- Water wise house calls – the SFPUC conducts free onsite inspections for residential customers and provides suggestions for reducing water use;
- Fixture replacements – the SFPUC provides without charge low flow faucet aerators, showerheads, pre-rinse spray vales, nose nozzles and shut-off devices; and
- Tenant kits – the SFPUC offers at a reduced cost a package of water saving fixtures and tips than landlords can distribute to their tenants.

An examination of the customer participation indicates that low-income populations such as those enrolled in CAP are significantly underrepresented in the distribution of SFPUC's rebate programs, which can be due to both the cost of the initial fixture purchase and the expense of hiring a plumber to make the installation. In addition, anecdotal statewide data suggests that lower income households have more persons per household and older, less efficient water fixtures. Similarly, examination of LINPH properties suggests that they also have older, less efficient water fixtures. These characteristics would suggest potentially greater than average conservation savings for these customers.

SFPUC conservation staff is developing additional programs for customers enrolled in the CAP or LINPH programs to improve efficiency and conservation by performing audits, detecting leaks and fixing or replacing inefficient showerheads and



toilets. The property owners and tenants will be encouraged to participate in these programs so they may enjoy continuing financial savings resulting from lower water and wastewater bills.

## Appendix



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**WATER SYSTEM IMPROVEMENT PROGRAM**



2008-09

# Annual Report

*Water System Improvement Program*

*Rebuilding Today  
for a Better Tomorrow*



September 1, 2009



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# **ANNUAL REPORT**

## **WATER SYSTEM IMPROVEMENT PROGRAM**

### **EXECUTIVE SUMMARY**

Pursuant to the reporting requirements of the Wholesale Regional Water System Security and Reliability Act, the San Francisco Public Utilities Commission (SFPUC) submits this report documenting the progress achieved on the Water System Improvement Program (WSIP) during Fiscal Year (FY) 2008-2009. This report only addresses the WSIP regional projects (referred to as the Regional Program). These are the projects that benefit both San Francisco retail customers and suburban wholesale customers. The Wholesale Regional Water System Security and Reliability Act does not require the SFPUC to report on the WSIP local projects (referred to as the Local Program), which primarily benefit San Francisco retail customers.

The WSIP is a multi-billion dollar, multi-year program to upgrade the SFPUC's Regional and Local Water Systems. The program will deliver capital improvements that enhance the SFPUC's ability to provide reliable, affordable, high quality drinking water to its 27 wholesale customers and regional retail customers in Alameda, Santa Clara and San Mateo Counties, and to 800,000 retail customers in the City and County of San Francisco, in an environmentally sustainable manner. The proposed WSIP is structured to cost-effectively meet water quality requirements, improve seismic and delivery reliability goals through the year 2030, and meet water supply objectives until the year 2018.

Significant progress was made on the implementation of the WSIP during FY 2008-2009, especially in the areas of environmental review/permitting, engineering design and construction management. Notable achievements during FY 2008-2009 include:

- The WSIP Programmatic EIR (PEIR) was certified by the San Francisco Planning Commission on October 30, 2008;
- Ten (10) projects completed the environmental phase and seven (7) project-level environmental documents were approved or certified;
- Seven (7) projects completed the design phase;
- Eight (8) construction contracts were awarded;
- Five (5) Construction Management (CM) contracts were awarded;
- One (1) Program Management and one (1) Program CM contracts were awarded;
- The Construction Management Information System (CMIS) was completed and implemented for projects in the construction phase; and
- Two (2) projects completed the construction phase.

Ongoing development of project environmental and design requirements over the past year resulted in the identification of necessary scope and schedule refinements. For a few projects, additional project constraints presented significant challenges to meeting approved scopes, schedules and/or budgets. In addition, the economic recession of late 2008 and 2009 had a dramatic effect on construction bids that the SFPUC received from mid 2008 to the present. Thus, in early 2009, WSIP Senior Management recognized the need to assess the cumulative effects of the scope, schedule and cost refinements to the December 2007 Revised WSIP, and subsequently assessed the need for revisions to allow continued

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delivery of the WSIP in compliance with the Level of Service (LOS) goals established for the program. Revisions of the approved WSIP project scope, schedule and budget baselines, which is referred to as re-baselining, allows the SFPUC to take advantage of the currently favorable bidding climate to off-set some project cost increases, while incorporating latest project requirements, risk mitigation measures and value engineering proposals. It also provides for more realistic project baselines for performance measurements and ensures that adequate funding is available in future supplemental appropriations.

The 2009 re-baselining effort was completed in June 2009 and approved by the SFPUC Commission on July 28, 2009. This resulted in changes to six (6) project scopes and fifteen (15) project schedules which are described in the Wholesale Regional Water System Security and Reliability Act: Notice of Changes Report, June 2009 Revised Water System Improvement Program, dated September 1, 2009. All scope and schedule changes were carefully reviewed to ensure that they are consistent with LOS goals. Overall, the revised completion date of the program is extended 12 months, from December 2014 to December 2015, with all but three (3) projects completing construction prior to 2015.

On July 28, 2009 the Bay Area Water Supply and Conservation Agency (BAWSCA) commented on the proposed changes and included specific recommendations concerning scope, schedule and budget changes. Included in the Commission's Resolution that approved the program changes outlined in the June 2009 Revised WSIP is an endorsement of the BAWSCA recommendations, and a commitment by the SFPUC to address each of these recommendations.

The California Department of Public Health (CDPH) and California Seismic Safety Commission (CSSC) commented in July and August 2008, respectively, on the significance of the previous AB1823: Notice of Changes to WSIP report, submitted March 31, 2008 to the Joint Legislative Audit Committee. SFPUC responded to both agencies with letters dated November 13, 2008. In both letters, SFPUC made specific commitments to follow-up on numerous issues. The SFPUC has completed work on a number of these commitments, while others are in progress.

Other significant accomplishments during this reporting period are described below in the order they are presented in the report:

- Progress continued on the implementation of the WSIP Risk Mitigation Plan. The Plan includes seventy (70) individual mitigation measures with one hundred forty-three (143) discrete actions required. As of June 30, 2009, sixty three (63) of the seventy (70) mitigation measures had been completed or implemented;
- A number of Program Control improvements were made that include establishing more detailed project baselines; providing online "dashboard" access to the Construction Management staff to view respective projects schedules; providing Dashboard Primavera P6 training to the WSIP team; conducting construction scheduling, delay analysis, claim avoidance and cost estimating training; and upgrading the Program Controls Scheduling software from Primavera P3e to P6;
- Nine (9) Quality Assurance (QA) audits were performed on selected projects during the planning and design phases. One hundred thirty-two (132) Quality Control (QC) reviews of project deliverables were conducted at key planning and design

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milestones in accordance with the requirements of the WSIP Quality Management Program;

- Significant efforts were dedicated to the implementation of the WSIP CM Program. The WSIP Construction Contracts Divisions 0 and 1 were revised, and the CMIS was completed, along with business processes and a training program. Five (5) CM Consultant Contracts were awarded and an additional two (2) advertised for proposals. In addition, a Supplier Quality Surveillance (SQS) program for major and critical construction equipment and material was developed and implemented;
- The WSIP PEIR was certified in October 2008. This set the stage for certification and approval of project-specific environmental review documents. Three (3) project Environmental Impact Reports (EIR) were certified, four (4) Initial Study / Mitigated Negative Declarations (IS/MND) were approved and 26 Categorical Exemptions were granted. Environmental Compliance plans and procedures were developed to support the construction management effort and the final configuration of the CMIS. Construction Specifications for environmental requirements and compliance were developed;
- The WSIP Real Estate/Right-of-Way (ROW) Team obtained six (6) Permits-to-Enter on private properties, which are required to support pre-design activities; completed twenty-four (24) acquisition appraisals; and cleared thirty-four (34) additional illegal encroachments from the SFPUC ROW. Three (3) land acquisitions, one (1) lease and two (2) easement exchange agreements were also completed;
- Progress continued on system shutdown planning, to accommodate the construction of WSIP projects. A Shutdown Delivery Team (SDT) continues to review shutdown schedules for WSIP and other SFPUC projects for interrelationships with operational and delivery requirements, and assesses delivery reliability and potential risks from unforeseen events. Contingencies are being developed for unanticipated scenarios, such as construction delays, operational emergencies, water quality events, shutdown staffing deficiencies and other unforeseen events. The matrix of WSIP shutdown schedules is continually reviewed, and the SDT coordinates with all WSIP project teams to reschedule future shutdowns as deemed necessary;
- As in the previous reporting period, a number of System Engineering reviews at the program and project levels were completed to assure continued compliance with the WSIP's LOS goals. Various system hydraulic modeling efforts were undertaken to verify that project designs will meet operational performance criteria. Analyses included hydraulic reviews of Project CUW38001: BDPL Nos. 3 & 4 Crossovers; Project CUW35302: Seismic Upgrade of BDPL Nos. 3 & 4; effluent piping configuration for Project CUW35901: New Irvington Tunnel; improvements to the Alameda East Portal overflow shaft under Project CUW35902: Alameda Siphon #4, Project CUW37403: San Antonio Back-Up Pipeline, and Project CUW 37301: San Joaquin Pipeline System;
- Outreach efforts included support for the certification of the WSIP PEIR and project EIRs, two (2) construction groundbreaking events, and presentations to community groups, agencies and elected officials. The WSIP website was upgraded to provide contractors and the public easier access to program information. More than fifty-five

(55) meetings were held with affected property owners in sixteen (16) cities, and numerous briefings were held with city and county staff in various jurisdictions;

- As projects transitioned from environmental review and design to construction, outreach efforts intensified to proactively educate the public, involve stakeholders and address potential concerns. For example, in the Bay Division Region, multiple Memoranda of Agreement (MOA) were negotiated with five (5) cities, two (2) counties and four (4) school districts. In the Sunol Region, the WSIP project team worked with one hundred (100) homeowners and ranchers to institute an extensive groundwater monitoring program to preserve their source water during construction of Project CUW35901: New Irvington Tunnel, and to provide more reliable water connections after construction; and
- Contractor outreach events continued during the reporting period to encourage general contractors to pre-qualify for the construction of WSIP projects, and to encourage regional small businesses to register in the Small Business Contracting Program. Small business participation in the program has increased to one hundred two (102) certified SFPUC Local Business Enterprise (LBE) firms. During FY2008-2009, eight (8) regional construction contracts totaling \$241 million were awarded under the WSIP Project Labor Agreement (PLA).

A great deal of progress was made on the implementation of individual WISP projects during this reporting period. As of July 1, 2009, all Assembly Bill (AB) 1823 projects had moved beyond the planning phase, with four (4) projects in design, four (4) in bid & award, one (1) in construction and one (1) in close-out. The status of the AB1823 projects as of July 1, 2009 is provided in Table E-1.

**Table E-1: Active Phase of AB 1823 Projects as of July 1, 2009**

<b>Project</b>	<b>Phase</b>
Calaveras Dam Replacement	Design/Env
New Irvington Tunnel	Design/Env
Alameda Siphon # 4	Bid & Award
BDPL Reliability Upgrade – Pipeline	Bid & Award
BDPL Reliability Upgrade – Tunnel	Bid & Award
Seismic Upgrade of BDPL Nos. 3 & 4	Design/Env
BDPL Nos. 3 & 4 Crossover/Isolation Valves	Close-Out
BDPL Nos. 3 & 4 Crossovers	Bid & Award
New Crystal Springs Bypass Tunnel	Construction
Crystal Springs/San Andreas Transmission Upgrade	Design/Env

The program as a whole is in the design and bid & award phases with transition to construction accelerating. At the end of the reporting period, the planning, environmental, design and construction phases of the program were 96.4%, 66.5%, 74.6% and 6.2% complete, respectively. As of July 1, 2009, there are two (2) regional projects in planning, seventeen (17) in design, ten (10) in bid & award, six (6) in construction, two (2) in close-



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out, eight (8) completed and one (1) project not yet initiated. Table E-2 presents a comparison of the number of projects in each phase from 2008 to 2009.

**Table E-2: Status of WSIP Regional Projects**

<b>Phase</b>	<b>No. of Project</b>	
	<b>June 30, 2008</b>	<b>July 1, 2009</b>
Planning	5	2
Design	26	17
Bid & Award	1	10
Construction	5	6
Closeout	5	2
Completed	3	8
Not Initiated	0	1

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### ACRONYMS AND ABBREVIATIONS

AAR	Alternative Analysis Report
AB	Assembly Bill
ACRCD	Alameda County Resource Conservation District
BAWSCA	Bay Area Water Supply and Conservation Agency
BEM	Bureau of Environmental Management
CAR	Change Authorization Request
CBC	California Building Code
CDFG	California Department of Fish and Game
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
CER	Conceptual Engineering Report
CM	Construction Management
CMIS	Construction Management Information System
CSSC	California Seismic Safety Commission
DCR	Design Criteria Report
DSOD	California Division of Safety of Dams
EIR	Environmental Impact Report
ECCMP	Environmental Construction Compliance Management Program
EPA	US Environmental Protection Agency
FY	Fiscal Year
HCP	Habitat Conservation Plan
HTWTP	Harry Tracy Water Treatment Plant
HRP	Habitat Reserve Program
IAPTF	Interagency Permitting Task Force
IS/MND	Initial Study/Mitigated Negative Declaration
JAC	Joint Administration Committee
JTOP	Jobs and Training Opportunities Program
LBE	Local Business Enterprise Program
LOS	Level of Service
LRCP	Labor Relations and Community Programs
MND	Mitigated Negative Declaration
MOA	Memorandum of Agreement

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## WSIP Annual Report – September 1, 2009

### ACRONYMS AND ABBREVIATIONS (continued)

MOU	Memorandum of Understanding
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation
PEIR	Programmatic Environmental Impact Report
PLA	Project Labor Agreement
PCCP	Pre-Stressed Concrete Cylinder Pipe
PPPCM	Program, Project, Pre-Construction Management
QA	Quality Assurance
QC	Quality Control
RFP	Request for Proposal
ROW	Right-of-Way
RPM	Regional Project Manager
RWQCB	Regional Water Quality Control Board
SDT	Shutdown Delivery Team
SFPUC	San Francisco Public Utilities Commission
SHPO	State Historic Preservation Office
SJCOG	San Joaquin Council of Governments
SJPL	San Joaquin Pipeline
SQS	Supplier Quality Surveillance
SSTF	Seismic Safety Task Force
SVWTP	Sunol Valley Water Treatment Plant
TAP	Technical Advisory Panel
TBM	Tunnel Boring Machine
TN	Trend Notice
TNC	The Nature Conservancy
USACE	US Army Corps of Engineers
USFWS	US Fish and Wildlife Service
USGS	United States Geological Survey
VE	Value Engineering
WEIP	Watershed Environmental Improvement Program
WSA	Water Supply Agreement
WSE	Water Systems Engineering
WSIP	Water System Improvement Program

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# **ANNUAL REPORT**

## **WATER SYSTEM IMPROVEMENT PROGRAM**

Pursuant to the reporting requirements of the Wholesale Regional Water System Security and Reliability Act, the SFPUC submits this report documenting the progress achieved on the WSIP during FY 2008-2009. This report only addresses the WSIP regional projects (referred to as the Regional Program). These are the projects that benefit both San Francisco retail customers and suburban wholesale customers. The Wholesale Regional Water System Security and Reliability Act does not require the SFPUC to report on the WSIP local projects (referred to as the Local Program), which primarily benefit San Francisco retail customers.

Section 1 of the report describes major program-level accomplishments whereas Section 2 focuses on project-level accomplishment in the various WSIP regions. Also included in Sections 3 and 4, respectively, are a summary of the formal WSIP-related actions approved by the San Francisco Board of Supervisors and the SFPUC Commission (Commission), and a brief update on the program's financials. The WSIP Regional Projects 4<sup>th</sup> Quarterly Report for FY 2008-2009 (*Q4-FY08/09 WSIP Quarterly Report*) is included as Appendix A. This report provides more detailed information on the progress made on and status of each individual WSIP regional project as of July 1, 2009, and includes the project-level budgets and schedules last approved by the Commission.

The WSIP is a multi-billion dollar, multi-year program to upgrade the SFPUC's Regional and Local Water Systems. The program will deliver capital improvements that enhance the SFPUC's ability to provide reliable, affordable, high quality drinking water to its 27 wholesale customers and regional retail customers in Alameda, Santa Clara and San Mateo Counties, and to 800,000 retail customers in the City and County of San Francisco, in an environmentally sustainable manner. The proposed WSIP is structured to cost-effectively meet water quality requirements, improve seismic and delivery reliability goals for the year 2030, and meet water supply objectives for the year 2018.

### **1.0 PROGRAM ACCOMPLISHMENTS AND STATUS (FY 2008-2009)**

This section describes the program-level accomplishments realized during FY 2008-2009.

#### **1.1 September 1, 2009 Notice of Changes to WSIP**

As part of the WSIP Re-alignment Initiative completed in 2007, individual projects' scopes, schedules and budgets were thoroughly reviewed to assess any potential risks to meeting defined program goals and project-specific objectives. As details to project scopes became more clearly defined during final planning and initiation of design for individual projects, it became apparent that updating the previously defined project scopes would be beneficial for clarity, accountability, change management/control, and monitoring and reporting purposes. The development in 2007 of a comprehensive system shutdown schedule to accommodate the construction of all WSIP projects and the results of a program-wide construction sequencing analysis drove the need for some adjustments to individual project schedules. Environmental compliance and permitting requirements, as well as ROW

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requirements such as land acquisition and removal of encroachments, were clarified for projects, resulting in the additional need for budget and schedule adjustments. A re-baselined program (the December 2007 Revised WSIP) was adopted by the SFPUC Commission on February 20, 2007.

Throughout 2008 and the first half of 2009, significant progress was made on the program, primarily in project design and environmental review, and implementation of the WSIP CM program. The WSIP PEIR was certified by the San Francisco Planning Commission on October 30, 2008. The detailed program control processes implemented for the program, including monthly updating of project performance indices and monitoring of cost and schedule variances, resulted in proactive response to project performance by WSIP Management. For a few projects, refinement of project environmental and design requirements resulted in identification of additional project constraints that presented significant challenges to meeting approved scopes, schedules and/or budgets. In addition, the economic recession of late 2008 and 2009 had a dramatic effect on construction bids that the SFPUC received from early 2009 to the present.

In early 2009, WSIP Senior Management recognized the need to assess the cumulative effects of the scope, schedule and cost refinements on the December 2007 Revised WSIP, and re-baseline the program in order to:

- Incorporate the latest available scope, schedule and cost information, risk mitigation measures and value engineering proposals;
- Incorporate the recent construction bids and the near-term effects of the economic recession into construction cost estimates;
- Provide more realistic project baselines for performance measurements;
- Ensure adequate funding is available in future supplemental appropriations; and
- Ensure compliance with the California Water Code § 73502 (c) (Assembly Bills 1823 and 2437).

In addition, several project names were revised to better reflect their scopes and objectives, and several were re-aligned within the WSIP regions for management and reporting purposes. The 2009 re-baselining effort was completed in June 2009.

On June 26, 2009, the SFPUC notified the Bay Area Wholesale Customers through BAWSCA that the Commission would be considering changes to the WSIP at a public hearing on July 28, 2009. This notification was made to comply with the change notice requirements of the Wholesale Regional Water System Security and Reliability Act. In addition, the Notice of Public Hearing and all supporting documents submitted to BAWSCA were posted on the SFPUC website. On July 28, 2009, following a 30-day review period, the Commission adopted the June 2009 Revised WSIP.

The approval by the SFPUC Commission on July 28, 2009 included a commitment to respond to comments and recommendations made by BAWSCA. The individual commitments are to:

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- Update the system performance analysis with the June 2009 Revised WSIP to confirm that the combination of projects remains consistent with the adopted WSIP objectives and the LOS goals;
  - Present to the SFPUC Commission that additional management actions that the staff is implementing to identify potential schedule delays during the construction phase, and the actions that will be taken to avoid or correct schedule slippages; and confirm that the proposed project construction schedules are not compressed into the final years of the WSIP and, if they are, what steps SFPUC is taking to correct or mitigate potential consequences; and
  - Report to the SFPUC Commission, on a regular basis, a comparison between construction cost estimates and awards, as well as a summary of construction change orders for each project.

Additional information on the program changes adopted by the SFPUC Commission can be found on the SFPUC website under the following headings:

Web Address: [http://sfwater.org/detail.cfm/MC\\_ID/35/MSC\\_ID/397/C\\_ID/4660](http://sfwater.org/detail.cfm/MC_ID/35/MSC_ID/397/C_ID/4660)

- Notice of public Hearing 7/28/09: Proposed Revisions to the WSIP-2
- Notice of public Hearing 7/28/09: Proposed Revisions to the WSIP-1

Pursuant to the requirements of the Wholesale Regional Water System Security and Reliability Act, the SFPUC submitted on September 1, 2009 the report titled *Wholesale Regional Water System Security and Reliability Act Notice of Changes Report June 2009 Revised Water System Improvement Program* to the CSSC and the CDPH documenting the scope and schedule changes approved by the Commission.

Changes in the June 2009 Revised WSIP include seven (7) project name changes; two (2) closed projects; one (1) regional project added; six (6) project scope changes; and seven (7) projects moved (re-aligned) to a different region. The re-alignment of projects resulted in deleting the Water Supply region from the program. Six (6) of these projects were moved to the Local Program.

Project names have been changed as follows:

- Project CUW30101: *Groundwater Project A - Lake Merced Water Levels Restoration to Lake Merced Water Level Restoration;*
- Project CUW30102: *Groundwater Project B - North Westside Basin to San Francisco Groundwater Supply;*
- Project CUW30103: *Groundwater Project C - South Westside Basin to Regional Groundwater Storage and Recovery;*
- Project CUW30201: *Recycled Water Project - San Francisco to San Francisco Westside Recycled Water;*
- Project CUW30204: *Recycled Water Project - Harding Park to Harding Park Recycled Water;*

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- Project CUW35201: *Alameda Creek Fishery Enhancement to Upper Alameda Creek Filter Gallery; and*
  - Project CUW36803: *Relocation of BDPL 1 & 2 to BDPL Reliability Upgrade - Relocation of BDPL Nos. 1 & 2.*

Project CUW30202: Recycled Water Project – Pacifica, and Project CUW39001: SF Bay Area Desalination Plant, have been closed as WSIP projects and will be completed using funds from the SFPUC Water Enterprise Division.

Six (6) regional projects had modifications to scopes. These projects are: Project CUW37301: San Joaquin Pipeline System; Project CUW37302: Rehabilitation of Existing San Joaquin Pipelines; Project CUW37401: Calaveras Dam Replacement; Project CUW37403: San Antonio Back-up Pipeline; Project CUW35302: Seismic Upgrade of BDPL Nos. 3&4; and Project CUW36701: Harry Tracy Water Treatment Plant (HTWTP) Long-Term Improvements. One (1) new project, Project CUW36701: Peninsula Pipelines Seismic Upgrade, was added to the regional program. The scope changes and the scope of the new project were carefully reviewed by the WSIP team and SFPUC Management to assure that projects comply with all LOS goals for the program and that modifications were necessary and beneficial to achieve the project objectives.

Projects moved (re-aligned) from one region to another include:

- Project CUW30101: Lake Merced Water Level Restoration has been moved to the San Francisco Local Program;
- Project CUW30102: San Francisco Groundwater Supply has been moved to the San Francisco Local Program;
- Project CUW30103: Regional Groundwater Storage and Recovery has been moved to the San Francisco Regional Region;
- Project CUW30201: San Francisco Westside Recycled Water has been moved to the San Francisco Local Program;
- Project CUW30202: Recycled Water Project - Pacifica has been moved to the San Francisco Local Program;
- Project CUW30204: Harding Park Recycled Water has been moved to the San Francisco Local Program; and
- Project CUW39001: SF Bay Area Desalination Plant has been moved to the San Francisco Local Program.

Schedule refinements have led to more accurate and realistic project schedules. Four (4) major factors control project schedules: (1) system shutdowns to accommodate construction, (2) environmental review and permitting, (3) acquisition of required land, and (4) sequencing of construction activities.

Ninety-six (96) system shutdowns will be required to complete the construction of WSIP regional projects. Since the shutdown of certain major system components can only be



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completed during low system demands to minimize operational risks, the windows of opportunity for performing these shutdowns is limited. The seasonal limitations on certain system shutdowns and the large number of required shutdowns create a scheduling interdependence among multiple projects. In addition, environmental approvals are required before lands and ROWs can be acquired, and before construction can begin. These interdependencies are the primary cause of schedule revisions as reflected in the June 2009 schedules.

Three (3) projects have been accelerated; thirty (30) projects have unchanged schedules; and twelve (12) projects have been extended. Four (4) projects are being delayed by more than a year: Project CUW37401: Calaveras Dam Replacement, Project CUW37403: San Antonio Backup Pipeline; Project CUW36801: BDPL Reliability Upgrade – Tunnel; and Project CUW 37801: Crystal Spring Pipeline No. 2 Replacement. Overall, the revised completion date of the entire program is extended 12 months, from December 2014 to December 2015.

## **1.2 Follow-Up to March 31, 2008 Notice of Changes to WSIP**

The SFPUC's third change notice report, titled *AB1823: Notice of Changes to Water System Improvement Program*, was submitted to the State of California on March 31, 2008. This report described, in detail, changes to the program since the previously adopted program of November 29, 2005 (described in the March 6, 2006 change notice report). Following issuance of this notice, the CDPH responded with comments and recommendations in a letter to the Chairman of the Joint Legislative Audit Committee and SFPUC General Manager Ed Harrington, dated July 21, 2008. The SFPUC responded to the CDPH with a letter dated November 13, 2008, and made specific commitments to follow-up on numerous issues, including:

- Maintain ability to serve partially treated (disinfected) water from local raw water reservoirs on the Peninsula;
- Perform reviews and implement strategies to ensure seismic reliability in the Sunol Valley;
- Continue to pursue opportunities to accelerate the project schedule for Project CUW35302: Seismic Upgrade of BDPL Nos. 3 & 4; and
- Review and implement alternatives and recommended approach to addressing slope stability issues at the HTWTP including interim seismic response strategies and evaluation of alternative plant sites.

The CSSC also provided comments to the Chairman of the Joint Legislative Audit Committee in their letter of August 1, 2008. The SFPUC responded to the CSSC with a letter dated November 13, 2008, and made specific commitments to follow up on requested issues, including:

- Issue a revised version of the *“General Seismic Design Requirements for Design of New Facilities and Upgrade of Existing Facilities”* that clarifies use of current codes; and

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- Reconvene the Seismic Task Force and direct them to perform independent technical reviews of specific projects as recommended by the CSSC.

The SFPUC has either completed these commitments, or has made significant progress on ongoing commitments. Some of the progress made on these commitments during FY 2008-2009 has been described in the WSIP Quarterly Reports, and is summarized below.

## **Commitments to CDPH:**

### **(1) Emergency Response and Delivery of Partially Treated Water**

*SFPUC Commitment: Fund scope items in some WSIP Peninsula projects to maintain the ability to serve partially treated (disinfected) water from local raw water reservoirs following a major emergency.*

Both the Project CUW37101: Crystal Springs/San Andreas Transmission Upgrade and the Project CUW36701: HTWTP Long-Term Improvements include scope components to provide emergency chlorine feed of raw water following a major emergency. In addition, operational response plans are being updated by the Water Enterprise to address serving partially-treated water, and subsequently restoring potable water service to wholesale and retail customers.

### **(2) Reliability of Facilities in Sunol Valley**

*SFPUC Commitment: Conduct independent technical review for Project CUW35902: Alameda Siphon #4 to assure seismic reliability; investigate potential additional capital and operational response improvements that may increase seismic reliability in the Sunol Valley; create and implement a seismic response strategy for the Sunol Valley, as well as update Operational Response Plans to address response procedures including operation of WSIP facilities following major seismic events.*

A review by seismic design experts was performed for Project CUW35902: Alameda Siphon #4, focusing on the adequacy of the design to withstand a Calaveras design earthquake. In the report Seismic Review of Alameda Siphon #4 Project (URS, March 2009), the review team concluded that an “acceptable standard of care” was applied to the design, and that the “project uses appropriate technology to achieve the WSIP goals.” In addition to this review, an assessment was performed to summarize and review existing and planned facilities and operational response modes in the Sunol Valley to determine whether or not additional reliability might be included in addition to those necessary to meet LOS goals following a design seismic event. Some recommendations from this assessment for improvements to facilities and operations are currently being added to WSIP projects and operational response plans. The draft report was reviewed by BAWSCA, and their input is being integrated into the final report. The final report, Sunol Valley Seismic Reliability Assessment, will be available in Fall 2009.

### **(3) Schedule for Project CUW35302: Seismic Upgrade of BDPL Nos. 3 & 4**

*SFPUC Commitment: Actively investigate and pursue options for schedule acceleration for the completion of this project.*

A number of options were pursued to accelerate this project. Some of the options that have been successfully implemented did not lead to reduction of the overall schedule; however, their implementation significantly reduces the risk of further project delays. These include:

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- Development of a cooperative agreement with Caltrans, resolution of constructability issues with Caltrans, and facilitation of Caltrans' design review to avoid delays during design;
  - Improved coordination of the environmental review process, between the SFPUC's Bureau of Environmental Management (BEM) and the San Francisco Planning Department;
  - Issuance of a separate contract to initiate early production and testing of the seismic response pipeline ball-joint facilities; and
  - Inclusion of project schedule stipulation to install tie-in facilities to the existing BDPL No. 3 between the new valve vaults ahead of other facilities to minimize (if not eliminate) shutdown requirements during construction.

While the actions completed above have not reduced the already compressed project schedule, there have been no schedule delays since the re-baselining in 2008. It is deemed that these actions have reduced the risk of future project delays, and enhance a successful implementation of the project.

#### **(4) HTWTP Seismic Reliability**

*SFPUC Commitment: Present to the Commission alternatives and recommended approach for addressing slope stability issues at the HTWTP; complete additional geotechnical evaluations at the HTWTP site, and for pipelines carrying treated water from the site; investigate feasibility of interim improvements to reduce seismic risks at the HTWTP site until Project CUW36701: HTWTP Long-Term Improvements is constructed; complete a high-level planning study of alternatives to Project CUW36701: HTWTP Long-Term Improvements, including constructing a new plant at a new site.*

WSIP Management provided a presentation to the Commission on January 27, 2009 that included a progress update and summary of findings to date on the slope stability concerns at the site. Geotechnical investigations that were completed during the first and second quarter of FY2008/2009 confirmed the location and the potential displacement from the eastern and western strands of the Serra Fault at the plant site. A risk analysis was completed to better characterize the existing risk of potential failure modes at the plant in the five-year interim period until the long-term improvements are constructed; these risks were found to be within acceptable risk levels as specified in the seismic design criteria adopted for the WSIP. In addition, interim improvements are being designed to help further mitigate these risks until the long-term improvements are completed. A high-level planning study, Alternatives to the Harry Tracy Water Treatment Plant Long-term Improvements Project (SFPUC and CH2MHill, December 2008), was completed to evaluate other potential sites for a new water treatment plant, as well as alternate methods to meet LOS goals for seismic and delivery reliability. Alternatives were compared for schedule impacts, environmental complexity, constructability, property availability, site constraints, operational flexibility, redundancy and cost. It was determined that all other alternatives to the current project would extend the schedule beyond planned WSIP completion, and include significant environmental and property acquisition challenges. In addition, the unknowns associated with an entirely new project add a high level of risk. All alternatives were also significantly higher in cost (\$200-400 million) than the current project.

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## **Commitments to CSSC:**

### **(1) Revision of General Seismic Requirements**

*SFPUC Commitment: Issue an updated version of the General Seismic Design Requirements for Design of New Facilities and Upgrade of Existing Facilities (General Seismic Requirements) by consolidating addenda and rewriting Appendix C Probabilistic Fault Rupture Hazard Analysis to make it easier to understand. Expand and clarify the language requiring the use of current codes to ensure no misunderstanding about the use of CBC 2007.*

The revised version of the *General Seismic Requirements* document (incorporating all addenda and new Appendix C) was published December 22, 2008.

### **(2) Independent Review Panel**

*SFPUC Commitment: Convene an independent panel review process consistent with that suggested by the CSSC. Reconfigure and expand the existing Seismic Safety Task Force (SSTF) retained by the SFPUC, and direct them to perform project reviews suggested by the CSSC.*

The SFPUC has reconvened the SSTF, replacing one (1) member and adding one (1) new member, ensuring that a good mix of expertise is maintained on the task force. The two (2) SFPUC members of the Task Force are now non-voting members, and a CSSC Commissioner is now on the panel. Members on the SSTF now include:

- Dr. Izatt M. Idriss (UC Davis);
- Dr. Thomas D. O'Rourke (Cornell);
- Dr. Norman Abrahamson (UC Berkeley); and
- Dr. Jack P. Moehle (UC Berkeley)
- Mr. John Littrell (appointed by CSSC)
- Brian Sadden (SFPUC – non-voting)
- Luke Cheng (SFPUC – non-voting)

The reconfigured SSTF has reviewed the General Seismic Requirements document, and will be issuing a letter of support in the next several months. The SSTF still needs to perform reviews for the following:

- a) Proposed reduction of redundant seismically reliable pipeline at the BDPL Nos. 3 & 4 Hayward Fault crossing;
- b) Magnitude of design earthquakes for WSIP projects impacted by the Calaveras Fault; and
- c) Size and consistency of design fault displacements at pipeline crossings.

Task orders were issued to the SSTF, and the second meeting of the reconfigured group has been scheduled for September 2009 to discuss the issues listed above.

### **(3) Expert Seismic Review**

*SFPUC Commitment: During the CSSC meeting on October 28, 2008, the SFPUC concurred with the CSSC that two issues warranted evaluations by external*

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*experts/consultants: a) Redundancy of the Alameda Siphon Project and alternative connections between the Sunol Valley Water Treatment Plant and the Irvington Tunnel; b) Faulting and slope stability issues at the HTWTP.*

A draft report titled *Sunol Valley Seismic Reliability Assessment* by CH2M Hill has been completed that addresses alternatives for seismic redundancy and reliability in the Sunol Valley. The final report will be available in Fall 2009.

Two reports were completed for Project CUW36701: HTWTP Long-Term Improvements that address the existing risk for the slope stability issues:

- *HTWTP Interim Improvement Final Report - Supplemental Fault Rupture Hazard Assessment* by William Lettis & Associates, Inc. (March 2009).
- *Draft SFPUC Harry Tracy Water Treatment Plant – Interim Seismic Risk Assessment for Treated Water Reservoirs* by Exponent Failure Analysis Associates (May 2009).

### **1.3 Risk Management**

In early 2007, the WSIP Team directed its Program Consultant, Parsons Water & Infrastructure, Inc. (Parsons), to perform a comprehensive programmatic risk assessment to identify risk factors and exposures that could lead to schedule delays and cost escalation as the WSIP moves forward from planning and design into construction. This analysis of program risks was undertaken as a proactive measure on the basis that prudent program management and planning must periodically include a thorough examination of existing and future conditions which may have measurable effects on the program.

The *Water System Improvement Program Risk Assessment*, published September 10, 2007, provided insight into, and broad quantification of potential risks to, the program. The assessment identified twenty-four (24) individual risks in eleven (11) broad categories. These categories are:

- General Inflation (Cost Escalation);
- PEIR;
- Project-Specific EIRs;
- Contracting Challenges;
- System and Facility Shutdowns during Construction;
- Construction Management Organization;
- Right-of-Way Acquisition;
- Permit Acquisition;
- Project Controls;
- Public Outreach; and
- Program Organization and Management.

The assessment made assumptions regarding the degree to which each risk could affect the schedule and/or the cost of projects affected by the risk, if the risk was not mitigated and

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if it was fully mitigated. The resulting cost impacts were then quantified using a Monte Carlo statistical analysis. The assessment revealed that the risks representing the greatest cost liabilities for the program are: (1) general inflation of material and labor costs, (2) contracting (i.e., ability to attract enough contractors to bid on WSIP projects), and (3) potential delays in the environmental review process.

In response to the findings in the WSIP Risk Assessment, the WSIP Program Director committed to aggressively implement mitigation measures, and called for the formulation of a WSIP Risk Mitigation Action Plan. This plan, developed by the WSIP Team with the assistance of Parsons, provides comprehensive step-by-step actions that the SFPUC is taking to address each of the risks described in the WSIP Risk Assessment. The goals of the Risk Mitigation Action Plan were presented to the Commission in October 2007, and progress made on the implementation of the plan is reported in the WSIP Quarterly Reports.

This WSIP Risk Mitigation Action Plan includes seventy (70) individual mitigation measures. Most of these measures require separate actions that must be achieved to fully implement the objective. There are one hundred forty-three (143) discrete actions identified for the seventy (70) mitigation measures. As of July 1, 2009, sixty three (63) of the seventy (70) mitigation measures had been completed or implemented.

In FY 2008-2009 a WSIP Risk Manager was appointed to manage the risk management program as the program transitions into construction. Going forward, the risk management program will focus more on construction risks. Risk Management Plans for construction are required by the WSIP CM Plan prior to the start of construction for each project. These plans address risks associated with safety, cost, quality, schedule, environmental compliance and operations, including system shutdowns.

#### **1.4 Program Control Initiatives**

During this reporting period, Program Controls continued to implement the improvements that were adopted in FY 2007-2008. In addition, ongoing efforts aimed at improving the WSIP Program Controls system and processes were implemented, and resulted in the following accomplishments:

- Performed a thorough and systematic analysis of program scope, cost and schedule to generate the proposed program changes;
- Established detailed project baselines for monitoring, controlling and reporting purposes;
- Provided online “dashboard” access to CM teams to view respective projects schedule at the program level;
- Provided Dashboard Primavera P6 training to all project teams and WSIP senior management to improve performance monitoring throughout the program;
- Conducted construction scheduling, delay analysis, claim avoidance and cost estimating training aimed at helping engineers and CM Teams to better track projects, monitor progress and proactively address potential problems during construction; and

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- Upgraded the Program Controls Scheduling software from Primavera P3e to P6.1 which allows the WSIP Management Team and individual project teams to have remote access to the program's cost and schedule data via the internet.

Procedures for monthly updating and reporting of project schedules and costs were finalized and implemented. Schedule and cost variance reports are produced each month for WSIP management review, and progress meetings are conducted with regional project teams to discuss schedule and cost variances, and current progress and issues.

Program Controls supported the previously discussed WSIP re-baselining initiative that resulted in the June 2009 Revised WSIP. The adjustments to the program scope, schedule and budget were based on an analysis of monthly forecasting and change management data over the past two quarters, and a program re-alignment review undertaken by the WSIP Senior Management Team in April 2009. The June 2009 Revised WSIP became the basis for updating the Q4 FY2008-2009 Report, published August 20, 2009.

### **1.5 Change Management**

The Project Change Management procedure, which serves as both change control mechanism and traceability tool, was implemented in September 2008. This allows the project teams to document all project changes including scopes, schedules and budgets, and formally secure all required approval during the program execution.

During this reporting period, an automated document approval/management process using Hummingbird and Workflow was activated for all Trend Notice (TN) and Change Authorization Requests (CAR). The Program Controls staff held several Regional Change Management Procedures workshops to facilitate the implementation of the procedure and provide training for entering all TNs and CARs into the Workflow system.

CARs are used for justifying the changes made as part of the re-baselining process and as future reference in determining the specific changes made during the process and why these changes were necessary and justified. The future point of reference (baseline) for tracking and evaluating any future changes will be the June 2009 Revised WSIP adopted by the SFPUC Commission on July 28, 2009.

### **1.6 Quality Management**

During the reporting period, various key procedures were implemented to improve the product quality and accountability of each project. Among these procedures were Project Change Management, Construction Cost Estimate Review, the Project Design procedures, and the CM procedures.

QA audits were performed on selected projects in the planning, design and construction phases, while QC reviews were conducted at key planning and design milestones in accordance with the requirements of the WSIP Quality Management Program.

A total of nine (9) QA audits were performed on regional projects to confirm that these projects are being delivered in accordance with WSIP and SFPUC Infrastructure Division procedures, including the following key procedures: Responsibility Matrix, Project

Development Process, Project Management Plan, Environmental Coordination, and Project Change Management. Deficiencies identified as part of the audits were recorded in Correction Action Reports, which require the implementation of corrective actions. As projects move to the construction phase using the WSIP CM approach, QA audits will be performed with the corresponding CM procedures.

The WSIP Quality Management Program mandates that specific QC reviews be conducted at various planning and design milestones. The five (5) reviews required for all projects are: (1) Technical Peer Review, (2) Cost Estimate Review, (3) Independent Technical Review, (4) Constructability Review, and (5) Steering Committee Review. Three (3) reviews are optional: Technical Advisory Panel (TAP) Review, Value Engineering (VE) Review, and Project Management Review. A summary of the QC reviews conducted during FY 2008-2009 is provided in Table 1.6-1.

Each Project Manager is required to complete a Project Review Checklist that documents all the QC reviews performed at the various planning and design milestones. A WSIP project cannot be advertised for construction unless the WSIP Program Director has reviewed and signed this checklist.

**Table 1.6-1: WSIP QC Reviews Conducted in FY 2008-2009**

Type	AAR	CER	DCR	35%	65%	95%
<b>Required Review</b>						
Technical Peer	3	5	0	4	4	12
Cost Estimate				9		15
Independent Technical				6	9	13
Constructability				5	9	15
Steering Committee	1	4				11
<b>Optional Review</b>						
TAP	0	2	0	0	1	1
Value Engineering		0	0	3		
Project Management	0	0	0	0	0	0

**Notes:** AAR: Alternative Analysis Report  
 CER: Conceptual Engineering Report  
 DCR: Design Criteria Report  
 35%, 65%, and 95%: Design deliverable milestones

An additional Quality Management initiative is the formal approval process for WSIP Construction Contract Bid Documents. At the completion of the Contract Preparation activity and delivery of the complete set of 100% contract documents (drawings and specifications), the Regional Project Manager (RPM) conducts a final top to bottom completeness and general adequacy review before requesting approval for advertisement. The RPM submits a completed WSIP Construction Bid/Contract Documents – Review and Approval Checklist to the WSIP Deputy Directors for their signatures before approval for advertisement can be granted. Completion of this checklist ensures that key project team



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members and other WSIP leads were consulted and involved in the preparation of construction bid/contract documents.

In addition to the technical reviews outlined above, project-specific guidance of TAPs comprised of industry experts and academics, and the programmatic involvement of the WSIP SSTF comprised of nationally recognized seismic experts, contribute to the technical soundness of WSIP projects.

## **1.7 Construction Management**

Significant efforts were dedicated during FY 2008-2009 to develop and implement the WSIP CM Program.

The fundamental elements of the WSIP CM Program consist of:

- WSIP CM Plan (CM organizational structure, staff roles and responsibilities, and CM approach to construction contract management);
- WSIP CM Staffing Plans;
- CM Consultant Contracting Strategy and Plan;
- WSIP Safety Approach;
- WSIP Construction Division 0 and 1 Specifications;
- WSIP CM Consultant RFP/Contracts;
- WSIP CMIS;
- WSIP CM Procedures;
- WSIP Program CM Consultant;
- WSIP Supplier Quality Surveillance Program; and
- WSIP Construction Phase Cost/Schedule Management System.

In the previous year (FY 2007-2008), the WSIP CM Staffing Plans, the CM Consultant Contracting Strategy and Plan, the WSIP Safety Approach, and the WSIP CM Plan were completed. The upgrading of the WSIP Construction Division 0 and 1 Specifications, development of the WSIP CMIS, and development of the WSIP CM Procedures were initiated.

In FY 2008-2009, revisions to the WSIP Construction Contracts Division 0 and 1 Specifications, and the development and configuration of the WSIP CMIS were completed. Pilot testing was completed for the CMIS and implemented by the Project CUW35601New Crystal Springs Bypass Tunnel CM Team. As of July 1, 2009, five (5) project CM teams were utilizing the CMIS.

The CM Consultant Contracting Strategy and Plan was implemented with a number of CM consultant contracts awarded in FY2008-2009 including: the San Joaquin Region CM Consultant, Sunol Valley Region CM Consultant, Bay Division Region CM Consultant, New Crystal Springs Bypass Tunnel CM Consultant, and the BDPL Reliability Upgrade - Tunnel

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CM Consultant. In addition, a project-specific CM Consultant Request for Proposal (RFP) was advertised for Project CUW35901: New Irvington Tunnel and a regional CM Consultant RFP were advertised for the Peninsula Region.

The Program CM Consultant contract was also awarded to provide management oversight support of WSIP construction at the program level to assure that the WSIP CM Program Plan is being properly implemented. The Program CM Consultant developed the details and materials for the WSIP CM Orientation and Training program for all WSIP CM staff, and began preplanning the WSIP Construction Phase Cost/Schedule P6 Management System which will be implemented in the first two quarters of the next fiscal year.

The WSIP CM Procedures, CMIS Business Processes, and a revision of the WSIP CM Plan were completed. Through July 1, 2009, WSIP CMIS training has been provided to the Program CM team and five (5) Project CM teams as they mobilized to construction sites, and a CMIS Help Desk has been implemented. A total of one hundred six (106) CM staff and contractor staff have been trained on CMIS.

During FY2008-2009, a Supplier Quality Surveillance (SQS) program was initiated. The SQS program provides third party quality assurance on construction contractor or SFPUC-procured long lead equipment and materials at their place of fabrication to assure that they meet quality and schedule requirements when delivered on site for installation. SQS Plans are developed as construction contracts are advertised and awarded. As of July 1, 2009, two (2) project SQS Plans have been approved.

## **1.8 Environmental Initiatives**

Environmental work for the WSIP progressed on three fronts: California Environmental Quality Act (CEQA) approvals, permit acquisition from the resource agencies, and environmental construction compliance.

### CEQA Approvals

A significant milestone was reached when the WSIP PEIR was certified by the San Francisco Planning Commission on October 30, 2008. No appeals were filed and there were no legal challenges. This set the stage for certification of several other major EIRs in FY2008-2009 and subsequent years. All of the CEQA reports completed and certified in this reporting period, and subsequent project approvals, are listed below.

### EIRs Certified by Planning Commission

- Project CUW38801: Programmatic EIR (10/30/2008)
- Project CUW38401: Tesla Treatment Facility (12/18/2008)
- Project CUW36401: Lawrence Livermore Water Quality Improvement (12/18/2008)
- [Above two comprise San Joaquin Regional Water Quality Improvement Project]
- Project CUW37901: San Andreas Pipeline No. 3 Installation (4/2/2009)

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### IS/MNDs Approved by Planning Department

- Project CUW39101: Baden and San Pedro Valve Lots Improvements (9/26/2008)
- Project CUW36102: Pulgas Balancing – Discharge Channel Modifications (10/8/2008)
- Project CUW38001: BDPL Nos. 3 & 4 Crossovers (10/31/2008)
- Project CUW36103: Pulgas Balancing – Structural Rehabilitation & Roof Replacement (5/14/2009)

### Projects Approved by SFPUC Commission

- Project CUW35601: New Crystal Springs Bypass Tunnel (7/22/2008)
- Project CUW39101: Baden & San Pedro Valve Lots Improvements (10/14/2008)
- Project CUW38801: Programmatic EIR (10/30/2008)
- Project CUW36102: Pulgas Balancing – Discharge Channel Modifications (11/12/2008)
- Project CUW38001: BDPLs Nos. 3 & 4 Crossovers (12/9/2008)
- Project CUW38401: Tesla Treatment Facility (12/18/2008)
- Project CUW36401: Lawrence Livermore Water Quality Improvement (12/18/2008)
- [Above two comprise San Joaquin Regional Water Quality Improvement Project]
- Project CUW37901: San Andreas Pipeline No. 3 Installation (4/17/2009)
- Project CUW36103: Pulgas Balancing – Structural Rehabilitation and Roof Replacement (6/9/2009)

### WSIP Categorical Exemptions Processed

- Project CUW36302: System Security Upgrades Cat Ex (12/1/2008)
- Other WSIP Project Supporting Cat Ex's: 25 Cat Ex's Processed

### Resource Agency Permitting

Many WSIP projects require permits from federal, state, and local agencies, including but not limited to the US Army Corps of Engineers (USACE), the US Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), the State Historic Preservation Office (SHPO), and the Regional Water Quality Control Board (RWQCB). The SFPUC Interagency Permitting Task Force (IAPTF) continued to meet to expedite WSIP permit approvals. Nineteen (19) permits were received during the reporting period, and an additional twenty (20) permits were submitted.

### Environmental Construction Compliance Management Program (ECCMP)

The SFPUC's Environmental Construction Compliance Manager completed development of eight (8) CM procedures associated with the ECCMP. In general these procedures include templates for project-specific tracking tables for all project environmental requirements (i.e., permits, standard construction measures, and CEQA mitigation measures), protocols for

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conducting environmental inspection and specialty environmental monitoring, protocols for documentation and resolution of environmental non-compliance activities, protocols for processing of minor project modifications, and compliance-reporting protocols including field inspection logs and CEQA Lead Agency reporting.

Several training programs have been developed relating to the ECCMP. Two levels of training have been developed and implemented related to the CM environmental procedures: a general overview for CM, and a more focused detailed review for Regional Environmental Compliance Managers. A baseline template for a 3-hour project team supervisory-level environmental compliance training presentation has been developed and implemented that includes an overview of project specific requirements related to erosion and sediment control, dust control, noise and vibration control, hazardous material management and spill response, fire protection, cultural and paleontological resources, and wildlife.

An Environmental Inspection Manual was also developed for use by the various Regional Environmental Compliance Managers when training Environmental Inspectors prior to construction. This manual is comprised of four (4) modules covering: (1) project and program overview, (2) documentation and reporting, (3) what to watch for, and (4) permit overview. Appendices to the manual include training scenarios for determining compliance levels, sample inspection reports, and permit review worksheets. These training programs and materials will facilitate consistency in the environmental compliance approach across the various WSIP projects.

Four (4) baseline templates were developed for incorporating environmental requirements into the Contract Documents: (1) Section 01062 – Environmental Requirements, (2) Section 02270 – Revegetation, (3) Section 02950 – Landscape Planting, and (4) Section 02810 – Landscape Irrigation.

## **1.9 Real Estate Initiatives**

During FY2008-2009, the SFPUC performed various real estate initiatives as noted below.

### Permits to Enter

During the reporting period, the SFPUC obtained a total of six (6) Permits to Enter. Five (5) Permits were required for Project CUW30103: Regional Groundwater Storage and Recovery (for Phase I and II monitoring wells). One (1) Permit to Enter for construction access was required for Project CUW36501: Cross Connection Controls.

### Appraisals

Twenty four (24) appraisals or detailed appraisal estimates were completed. Three (3) appraisals were completed for Project CUW36801: BDPL Reliability Upgrade – Tunnel, and two (2) appraisals were completed for Project CUW36802: BDPL Reliability Upgrade – Pipeline. Three (3) appraisals were completed for Project CUW38001: BDPL No. 3 & 4 Crossovers, and four (4) appraisals were completed for Project CUW35901: New Irvington Tunnel. Nine (9) appraisals were completed for Project CUW37301: San Joaquin Pipeline

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System. Three (3) detailed appraisal estimates were completed for Project CUW38802: Habitat Reserve Program.

### Land Acquisitions

A number of land acquisitions, required lease and easement exchange agreements were completed or are underway. Seven (7) “first written” offers to purchase land rights have been made and two (2) long term lease negotiations are underway. One (1) acquisition and one (1) required lease for Project CUW38001: BDPL No. 3 & 4 Crossovers were completed. These two parcels allowed the construction of the project to be awarded on schedule.

Three (3) “first written” offers to purchase have been made for Project CUW36801: BDPL Reliability Upgrade – Tunnel. Two required long term leases with USFWS and the California State Lands Commission are also underway for this project. One (1) acquisition for Project CUW35902: Alameda Siphon #4, and one (1) acquisition for Project CUW35601: New Crystal Springs Bypass Tunnel, were completed. Two (2) easement exchange agreements were completed for Project CUW37901: San Andreas Pipeline No. 3 Installation. Three (3) “first written” offers to purchase land rights have been made for Project CUW37301: San Joaquin Pipeline System.

### Encroachment Removals

Encroachment removal efforts continued on Project CUW36802: BDPL Reliability Upgrade – Pipeline. During FY2008-2009 twenty-one (21) encroachments were cleared and most of the encroachments are now in compliance with the SFPUC Encroachment Policy. Two (2) encroachments have concentrated efforts remaining and are expected to be in compliance by the end of 2009. Project CUW37301: San Joaquin Pipeline System has also had a large-scale encroachment removal effort underway, with thirteen (13) encroachments cleared in the past year. This project currently has one (1) encroachment that could affect the schedule. Negotiations are underway with this adjacent property owner, and compliance is expected by the end of 2009.

### Land Surveys and ROW Engineering

The record of survey map for Project CUW35901: New Irvington Tunnel was submitted to Alameda County for recording, and all appraisal maps, legal descriptions have been completed. All appraisal maps for Project CUW36801: BDPL Reliability Upgrade – Tunnel, and legal descriptions, have been completed. All appraisal maps and legal descriptions for Project CUW36802: BDPL Reliability Upgrade – Pipeline have been completed, and all encroachment surveys are completed to date. Staking to delineate the ROW is underway and twelve (12) individual staking surveys were completed. In addition, seventeen (17) appraisal maps and legal descriptions for Project CUW37301: San Joaquin Pipeline System have been completed, and fifteen (15) encroachment surveys were completed. The Record of Survey for the Tesla Portal for Project CUW38401: Tesla Treatment Facility was also completed.

## **1.10 System Engineering and Operations**

During FY 2008-2009, significant progress continued on planning the system shutdowns that will be needed to accommodate the construction of WSIP projects. Additional Systems

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Engineering reviews and hydraulic modeling were also performed to verify compliance with WSIP LOS goals and project-specific operational performance criteria.

### System Shutdown Coordination

The SDT (formerly the Shutdown Coordination Group) continued to assess the impacts and risks of various system component shutdowns on the ability to deliver high quality water to SFPUC customers. The SDT is comprised of the Shutdown Manager from Water Enterprise, the WSIP Shutdown Coordinator, and staff from operations, water quality, engineering, construction, project management, hydraulics/hydrology, and communications groups. The SDT reviews shutdown schedules for WSIP and other SFPUC projects for interrelationships with operational and delivery requirements, and assesses delivery reliability, as well as potential risks from unforeseen events. Each project's planned shutdowns are analyzed within a matrix of all other shutdowns and system operation requirements in order to assess potential risks.

Hydraulic and hydrologic modeling is being performed to review the system's ability to meet demands during construction shutdowns, and to assess the level of risk presented by particular shutdowns. Contingencies are being developed for many potential unanticipated scenarios, such as construction delays, operational emergencies, water quality events, shutdown staffing, and other unforeseen events. The evolving matrix of WSIP shutdown schedules is continually reviewed, and the SDT works with the WSIP project teams to reschedule future shutdowns as deemed necessary.

The SDT conducts monthly planning meetings to review shutdown schedules, develop resource requirements, discuss customer outreach initiatives, review system hydraulics, and evaluate specific project shutdown coordination requirements. Special shutdown coordination meetings, for the Coast Range Tunnel Shutdowns in 2010, were initiated to assist with the development and planning of project shutdowns for Project CUW35902: Alameda Siphon #4, Project CUW38401: Tesla Treatment Facility, and Project CUW37302: Rehabilitation of Existing San Joaquin Pipelines.

A shutdown planning matrix tool is used to track both WSIP and operational shutdowns as they are approved by the SDT. As required by the WSIP Risk Mitigation Action Plan, the WSIP Master Shutdown Schedule is updated monthly and the shutdown business process is updated to include a work-around plan, which is a contingency plan in case a project shutdown needs to be rescheduled among the dozens of other shutdowns. For the construction phase, a detailed shutdown procedure was developed to assist with the shutdown sequencing, implementation, and approval efforts. The standard contract specification for contractor coordination during shutdowns was refined and a contract startup specification was added.

The SDT also reviewed multiple contractor System Outage Requests and SFPUC Operational Change Requests for the Project CUW36602: HTWTP Short-Term Improvements (Coagulation & Flocculation/Remaining Filters) facility shutdowns.

The WSIP Master Shutdown Schedule is shared with BAWSCA so that that the regional customer's impact from shutdowns could be assessed, and to assist with customer notifications. The SDT addresses BAWSCA's inquiries about the shutdowns, develops

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customer notification materials for the regional customers, and informs customers about shutdowns at regional customer meetings.

### Water System Engineering

The Water System Engineering (WSE) Group continued to review WSIP projects throughout development and implementation to assure that LOS objectives and system performance criteria are effectively and efficiently met, and to evaluate effects of changes to the program. The WSE Group evaluates all WSIP projects for their contribution to meeting LOS goals and recommends changes in some project scopes to more efficiently meet LOS within WSIP budget requirements. On an ongoing basis, the WSE Group reviews project objectives outlined in environmental documents, and the project design criteria established for individual projects, to assure ability to meet LOS and system-wide operational performance requirements.

Two (2) high-level analyses were completed to review adequacy of existing planned projects to meet seismic reliability goals. As part of the review of the December 2007 Revised WSIP that was approved by the Commission in February 2008, BAWSCA requested that the CDPH and the CSSC examine and comment on the seismic reliability of facilities in the Sunol Valley, as well as the impact to projects at HTWTP from recent geotechnical findings on slope stability and location of faults. For the HTWTP, a high-level alternatives analysis was completed in December 2008 that evaluated impacts to program costs and schedule for constructing a new water treatment facility at a different location, as well as a few other alternatives to the proposed WSIP projects. For the Sunol Valley, a final draft report was produced in May 2008 that includes a review of the seismic reliability provided by existing projects and operations in the Sunol Valley, as well as discussing potential minor project additions/modifications that could be implemented to increase seismic reliability in this area.

Hydraulic analyses were performed for the following projects to verify adequacy of facility capacities and performance criteria: Project CUW35901: New Irvington Tunnel effluent piping configuration; Project CUW38001: BDPL Nos. 3 & 4 Crossovers; Project CUW35302: Seismic Upgrade of BDPL Nos. 3 & 4; Project CUW35902: Alameda Siphon #4 improvements to the Alameda East Portal overflow shaft; Project CUW37403: San Antonio Backup Pipeline; and Project CUW37301: San Joaquin Pipeline System.

Significant improvements were made to the transmission system hydraulic model, including model calibration and verification against real-time data, and updating customer demands and customer diurnal patterns. The transmission system hydraulic model was upgraded to include new or more refined project features for Project CUW35902: Alameda Siphon #4; Project CUW35901: New Irvington Tunnel; Project CUW35302: Seismic Upgrade of BDPL Nos. 3 & 4; Project CUW36801: BDPL Reliability Upgrade – Tunnel; Project CUW36802: BDPL Reliability Upgrade – Pipeline; and Project CUW37301: San Joaquin Pipeline System.

Methodology was developed by the WSE group to evaluate the feasibility of sequential construction outages using the regional system hydraulic model and hydrologic assumptions in coordination with Water Enterprise staff. The hydraulic model was used to analyze system configurations during required shutdowns proposed for 2009, 2010 and

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2011 to assure that the water system can meet customer demands and other performance requirements during WSIP construction.

### **1.11 Outreach Initiatives**

The Communications Team continued to work closely with the regional teams in preparation of the draft environmental reports that play a significant role in rebuilding the system's infrastructure, and moving communication activities into construction. Beginning with the certification of the first major regional project, Project CUW35601: New Crystal Springs Bypass Tunnel, the Communications Team assisted in activities related to the preparation of six draft environmental reports and four environmental certifications of WSIP projects in addition to the PEIR.

Through October 2008, the Communications Team focused on the certification of the PEIR. Regional Communication Representatives coordinated informational sessions, numerous briefings and government affairs meetings to educate our stakeholders about the 2018 Phased Variance alternative, and to secure the approval of the San Francisco Planning Commission and the SFPUC Commission. Activities to achieve this outcome included a media tour of the Hetch Hetchy system in the Peninsula, East Bay and Sunol Valley; meetings with key County Board of Supervisors and their staff; as well as briefings with regional park agencies in the Peninsula, the East Bay and Santa Clara County.

Additional support and interest for the program was garnered in December when SFPUC hosted a media event with Mayor of San Francisco, Gavin Newsom, labor leaders and state and regional government officials for the official signing of a \$1.9 billion authorization of funds for WSIP construction. To coincide with the funding, a special tour of the Sunol regional projects was provided to State Assembly Majority Leader Albert Torrico and State Senator Ellen Corbett.

With projects moving from planning into construction, the Communications Team coordinated two major groundbreaking events. The Project CUW35601: New Crystal Springs Bypass Tunnel event coincided with the anniversary of the 1906 earthquake. This was in collaboration with the United States Geological Survey (USGS) and the San Mateo Board of Supervisors. In the San Joaquin Region, the Mayor of San Francisco and the President of the San Joaquin Board of Supervisors, along with the representative from the U.S. Environmental Protection Agency (EPA), broke ground for Project: CUW38401 Tesla Treatment Facility. Both events brought significant media attention to WSIP within the regions and around the state.

The Communications Team has begun collaborating with the WSIP CM Team in the first of several orientation trainings for staff and consultant teams managing WSIP projects in construction. This aspect of WSIP will also be the growing focus of WSIP media relations, promoting specific projects and advancing the message that WSIP is constructing multiple multi-million dollar projects in more than six (6) counties concurrently in an efficient and effective method.



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A Program Communications Consultant was directed to audit Communications planning and execution in all regions, and implement new action plans and procedures for WSIP communications in the field.

A key WSIP Communications goal of FY2008-2009 was accomplished with the redesign of the WSIP section of the SFPUC website: <http://sfwater.org/WSIP>. The team launched the new section and a friendly URL to make it easier for contractors and members of the public to access program information. The site also added blogs for neighbors and key stakeholders to follow projects in real time. The Communications team also developed a program brochure to accompany the redesign of the website. The brochure has been distributed widely to stakeholders and other interested parties at town hall meetings, community briefings, schools and regional water agencies.

Throughout the year, staff has been coordinating with our wholesale customers, providing quarterly informational materials for their customers and related collateral pieces on shutdowns and other WSIP developments. These relationships with our wholesale customers will be vital as we engage in communicating about upcoming system shutdowns. Communications has been working closely with Water Enterprise staff to help plan and develop a coordinated outreach strategy for these shutdowns.

As projects transitioned from planning to design and the later stages of environmental review, the potential impacts to nearby communities become more apparent. In response, outreach efforts were intensified to proactively educate the public on the program, involve stakeholders, and address potential concerns that the public may have about WSIP projects. Outreach efforts included public meetings, one-on-one interactions, special briefings, mailings, Website updates, press releases and media events. Overall, WSIP staff facilitated on average of four (4) to six (6) major outreach events a month throughout the regions.

In FY 2008-2009, more than fifty-five (55) meetings were held with affected property owners in sixteen (16) cities, in addition to scores of briefings with respective city and county staff in these jurisdictions. The SFPUC also reached out to the public through the media, which resulted in seven (7) television pieces, and thirteen (13) articles in print. The public outreach database that tracks the affected property owners, businesses, and stakeholders for each project continued to be expanded, and totals more than thirty-two thousand (32,000) entries.

Significant efforts have also been devoted to proactively reaching out to the cities and counties where WSIP construction will take place. The Bay Division Regional Team started negotiations on multiple MOA with five (5) cities, two (2) counties and four (4) school districts. These negotiations involved numerous meetings with the staff and management of these organizations, and extensive discussions with members of the community. In the Sunol Valley Region, the emphasis has been on working with nearly one hundred (100) homeowners and ranchers to institute an extensive groundwater monitoring program to preserve their source water during construction of Project CUW35901: New Irvington Tunnel, and to provide more reliable water connections following construction of the tunnel.

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On the Peninsula and the East Bay, more than two hundred (200) property encroachments have been resolved in anticipation of upcoming construction activities. Using a proactive and individual approach, the Communications Team developed positive and productive relationships with many homeowners and businesses located in proximity to project sites.

Additionally, the Communications Team coordinated extensively with parks and recreational groups on both sides of San Francisco Bay to inform and involve stakeholders who use public natural settings of the potential effects of the WSIP projects. In the San Joaquin Region, staff is working closely with the agricultural community along the alignment of the existing San Joaquin pipelines. Additional events have been planned in this region through farming bureaus and agricultural organizations to reach more stakeholders and determine how to minimize project impacts.

### **1.12 Labor Initiatives**

The SFPUC's Labor Relations and Community Programs (LRCP) Group is responsible for labor relations, including the administration of the WSIP PLA executed in March of 2007, community benefit programs, and construction contractor outreach efforts.

#### Construction Industry Initiatives

The LRCP Group's responsibilities include engaging the labor community and construction industry about the SFPUC LBE program, and the Jobs and Training Opportunities program (JTOP), for the WSIP. During this reporting period, the LRCP Group focused on consolidation of its activities to prepare for peak construction in 2010 through 2013.

#### PLA Administration

All WSIP construction valued at \$5 million or greater is covered by the PLA. During FY 2008-2009, eight (8) regional projects totaling \$241 million in construction value were awarded. The low end of the cumulative engineers' estimates for these projects was \$294 million. The data indicates that the inclusion of the WSIP PLA in the construction program has no discernible impact on bid pricing. Additionally, both union and non-union firms have bid and been awarded work under the WSIP PLA. At the same time, while the WSIP PLA appears to have no negative impact on contractor participation or bid pricing, the core purpose of the Agreement, which is avoidance of work stoppages or other disruptions due to labor disputes through the provision of alternative methods for resolution of disputes, is now well-established.

In the FY 2008-2009 reporting period, the LRCP Group expanded its labor relations services to include informal mediation services, which has resulted in multiple instances of dispute resolution prior to trigger of the arbitration provisions contained in the WSIP PLA. This effort is supported by the Joint Administration Committee (JAC), a standing owner/union committee established by the WSIP PLA to provide guidance and support to all parties for the consistent and clear application of the WSIP PLA.

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## Workplace Safety

The WSIP PLA contains a uniform pre-hire drug testing policy for all craft workers. After an initial start-up period, the program is now well-established, requiring on-site testing prior to clearance for work. The rate of on-site tests that do not meet the standards for clearance to work is under two percent.

During the reporting period, SFPUC issued a request for qualifications to expand the pool of available third party administrators. The Contracts Division is in the process of completing certification of two (2) third party administrators, one of which is a LBE certified by the San Francisco Human Rights Commission.

## Employment and Training Opportunities

Since the inception of the WSIP, and the negotiation of the WSIP PLA, the construction sector in the Bay Area and California generally was robust, resulting in a relative scarcity of available craft labor for the WSIP. This has changed significantly with the overall decline in economy activity in California and nationally. Unemployment in the construction industry is now at an all-time high. As a result, employment opportunities afforded by the WSIP have come into sharp focus, as the WSIP is one of the few construction significant construction programs underway.

The LRCP Group maintains a model for projecting craft employment under the WSIP; the current estimate is approximately 10 million craft hours. During FY 2008-2009, the Regional WSIP program provided 70,000 hours of employment to 302 craft workers in fifteen (15) trades. It should be noted that these figures do not include employment under the WSIP Local Program, which is significantly higher due to the volume of work in construction.

In light of changing labor market conditions, and in response to numerous consultations with contractors, their associations, signatory unions and community-based construction craft worker training programs consensus has developed for the following priorities: (1) retention of unemployed or underemployed crafts persons residing within the Hetch Hetchy water system service territory; (2) skills advancement through the strict adherence to apprenticeship utilization requirements; and (3) promotion of entry-level training and development opportunities. These priorities are applied on a project-by-project basis, and memorialized in project-based employment agreements negotiated and subsequently monitored for compliance by the LRCP Group.

One of the noteworthy initiatives in FY2008-2009 is the promotion of training for tunneling careers. With the start of construction for the first of three (3) tunnel projects under WSIP construction, LRCP staff has negotiated tunnel training provided by the Laborers International Union of North America for fourteen (14) graduates from either San Francisco's CityBuild Academy or Job Train/Project Build, located in Menlo Park. The intention of the parties is to create a pool of disadvantaged residents trained for future tunneling opportunities under the WSIP through these and related efforts.

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### Construction Industry Engagement

As reported previously, the LRCP Group provides outreach services to support the WSIP prequalification program, promote participation of small and locally-based contractors, and provide a continuing stream of communication to the construction industry through the Office of the Ombuds. Combined with related efforts, the pool of available bidders is significantly expanded and is expected to result in competitive pricing of WSIP projects in FY 2009-2010 and beyond.

Small business participation has increased with the number of certified SFPUC LBE residing throughout the Hetch Hetchy water system service territory totaling 102 as of July 1, 2009. Several of these firms have participated in the WSIP, as bidders, and in some instances as part of winning teams who are now executing work in the field. These efforts are supported by the General Manager's Small Firm Advisory Committee, a five (5) member panel of knowledgeable industry, local government and trade union representatives from the service territory.

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## 2.0 PROJECT ACCOMPLISHMENTS AND STATUS (FY 2008-2009)

This section describes the project-level accomplishments realized during FY 2008-2009.

### 2.1 Progress Summary

A great deal of progress has been made on the implementation of the WSIP during the reporting period. As a whole, the program is on schedule with an actual completion of 16.6% compared to the planned 16.7%. The overall schedule performance as measured by the major project phases is presented on Table 2.1-1. Important developments to note at this time are that 96% of the planning, 66% of the environmental, 75% of the design, and 40% of the bid & award, have been completed. All projects except three (3) are anticipated to be completed within the original WSIP time-frame: Project CUW37401: Calaveras Dam Replacement, Project CUW35901: New Irvington Tunnel and Project CUW39501: Peninsula Pipelines Seismic Upgrade (new project).

**Table 2.1-1: WSIP Regional Project Performance**

Phase	June 30, 2008		July 1, 2009	
	% Planned	% Actual	% Planned	% Actual
Project Management	39.5%	39.6%	42.6%	42.8%
Planning	96.4%	95.4%	97.3%	96.4%
Environmental	65.6%	55.4%	70.1%	66.5%
Right-of-Way	23.0%	20.9%	33.4%	30.4%
Design	57.5%	53.9%	75.8%	74.6%
Bid & Award	24.1%	23.5%	39.0%	39.9%
Construction Management	4.6%	5.0%	6.1%	6.1%
Construction	4.1%	4.3%	6.1%	6.2%
Close-Out	10.5%	11.0%	23.4%	21.8%
Program Management	25.6%	25.4%	36.0%	35.9%
<b>Program Cumulative</b>	<b>12.9%</b>	<b>12.6%</b>	<b>16.7%</b>	<b>16.6%</b>

Note: The June 30, 2008 data reflected in the above table was adjusted to exclude performance of projects that moved from the Regional Program to the Local Program in accordance with the June 2009 Revised WSIP.

Additionally the program is rapidly transitioning from the design phase into the construction phase. The status of the WSIP Regional projects is presented in Table 2-1.2. As a comparison, the number of projects within each of the major phases is shown for both June 30, 2008 and July 1, 2009. In 2008, for example twenty six (26) projects were in design and one (1) was in bid & award. In contrast, the 2009 information shows seventeen (17) in design and ten (10) in bid & award.

**Table 2.1-2: Status of WSIP Regional Projects**

Phase	No. of Project	
	June 30, 2008	July 1, 2009
Planning	5	2
Design	26	17
Bid & Award	1	10
Construction	5	6
Closeout	5	2
Completed	3	8
Not Initiated	0	1

During the reporting period, a number of projects transitioned from one phase to another or achieved major milestones. Table 2.1-3 provides a program summary of the major project milestones achieved during FY 2008-2009.

**Table 2.1-3: Summary of FY2008-2009 Major Project Milestones**

Project Milestone	No. of Projects
Planning Phase Completed	4
Environmental Phase Completed	10
Design Phase Completed	7
Construction Contract Advertised	10
Construction Contract Awarded	8
Construction Phase Completion	2

The status of the ten (10) projects specifically identified in AB1823 is summarized in Table 2.1-4. Four (4) projects are in the design phase; four (4) are in the bid & award phase; one (1) is in the construction phase; and one (1) is in the close-out phase. All of projects except for Project CUW37401: Calaveras Dam Replacement and Project CUW35901: New Irvington Tunnel are on schedule.

**Table 2.1-4: Active Phase of AB 1823 Projects as of July 1, 2009**

Project	Phase
Calaveras Dam Replacement	Design/Env
New Irvington Tunnel	Design/Env
Alameda Siphon # 4	Bid & Award
BDPL Reliability Upgrade – Pipeline	Bid & Award
BDPL Reliability Upgrade – Tunnel	Bid & Award
Seismic Upgrade of BDPL Nos. 3 & 4	Design/Env
BDPL Nos. 3 & 4 Crossover/Isolation Valves	Close-Out
BDPL Nos. 3 & 4 Crossovers	Bid & Award
New Crystal Springs Bypass Tunnel	Construction
Crystal Springs/San Andreas Transmission Upgrade	Design/Env

## 2.2 San Joaquin Region

Overall progress for the San Joaquin Region as of July 1, 2009 is 16.7% actual completion versus 17.1% planned completion in accordance with the June 2009 Revised WSIP Baseline. This compares with 8.0% actual completion and 8.1% planned completion on June 30, 2008 relative to the December 2007 Revised WSIP Baseline. Key project milestones achieved during FY 2008-2009 are listed in Table 2.2-1.

**Table 2.2-1: Project Milestones for San Joaquin Region (FY 2008-2009)**

Key Milestone	Projects in San Joaquin Region	
	CUW No.	Name
Environmental Phase Completed	36401	Lawrence Livermore Water Quality Improvement
	38401	Tesla Treatment Facility
Design Phase Completed	36401	Lawrence Livermore Water Quality Improvement
	37302	Rehabilitation of Existing San Joaquin Pipelines (Roselle Crossover Improvements)
Construction Contract Advertised	36401	Lawrence Livermore Water Quality Improvement
	38401	Tesla Treatment Facility
	37302	Rehabilitation of Existing San Joaquin Pipelines (Roselle Crossover Improvements)
Construction Contract Awarded		
	38401	Tesla Treatment Facility

The primary focus of work in the San Joaquin Region has been continuing design of the projects while facilitating their environmental review. Three (3) of the Region's construction contracts were advertised, one (1) was awarded for construction. Procurement contracts for City furnished valves were advertised for two (2) projects and awarded for one (1) project. Design and environmental work continued on two (2) other projects. The scope of Project CUW3730: San Joaquin Pipeline System was changed to include a fourth pipeline segment in the eastern segment of the system, bypassing a reach of pre-stressed concrete cylinder pipe, and providing for greater future system reliability.

More detail on major San Joaquin Region accomplishments and challenges in the various phases of project development is provided below.

### Planning

The majority of planning work for projects in the San Joaquin Region has been completed. However, the planned scope of Project CUW37301: San Joaquin Pipeline System was revisited as work toward major environmental and design completion milestones neared conclusion. In consideration of construction, operation and maintenance problems associated with the large diameter of a single 11-mile reach of a fourth pipeline, the concept of two (2) reaches, 10.3 miles in the western segment and 6.7 miles in the eastern segment, was implemented. This change in scope was approved in the June 2009 Revised WSIP.

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The additional cost for the change has been more than offset by a reduction in the budget for Project CUW37302: Rehabilitation of Existing San Joaquin Pipelines. The revised budget is estimated to support a maintenance program for the existing San Joaquin Pipelines (SJPLs) to meet delivery reliability LOS goals. Additional planning activities continue with respect to the assessment of existing pipeline condition and determination of rehabilitation priorities.

### Environmental

The San Francisco Planning Commission certified the Final EIR for the San Joaquin Regional Water Quality Improvement Projects (Project CUW36401: Lawrence Livermore Water Quality Improvement and Project CUW38401: Tesla Treatment Facility). Progress of the environmental review of Project CUW37301: San Joaquin Pipeline System was accelerated in the second half of the reporting period due to the small number of comments received on the Draft EIR. Work on the IS/MND for Project CUW37302: Rehabilitation of Existing San Joaquin Pipelines was initiated.

### Design

The Design/Build contract for Project CUW38401: Tesla Treatment Facility was awarded in November 2008 and the Contractor has completed 30%, 60% and 90% design submittals, and initiated construction. Design was completed on the Roselle Crossover improvements as part of Project CUW37302: Rehabilitation of Existing San Joaquin Pipelines and procurement contracts for large diameter valves were issued. In addition, the construction contract was advertised and bids were received in June 2009. Design was also completed, and a construction contract subsequently advertised for Project CUW36401: Lawrence Livermore Water Quality Improvement.

Design work continues on Project CUW37301: San Joaquin Pipeline System. The 95% design was completed and procurement contracting for large diameter valves for the proposed Pelican and Emery Crossovers was initiated. The project design completion plan was developed to provide for phased completion and contracting of work in three (3) packages. The project design team remains focused on completion of design, and incorporating the eastern segment of the system while continuing to support the environmental permitting process, ROW acquisition efforts and construction management contracting activities.

### Construction

This reporting period saw initial mobilization, a major public groundbreaking ceremony, mass excavation work and pipeline manifold construction as a dramatic start to construction of Project CUW38401: Tesla Treatment Facility. In addition to overseeing one of the most critical WSIP projects with respect to regulatory compliance, the CM team is implementing and testing the application of the new processes and organization established by the WSIP CM Plan. Construction was 16.6% complete as of July 1, 2009.



## 2.3 Sunol Valley Region

Overall progress for the Sunol Valley Region as of July 1, 2009 is 12.0% actual completion versus 12.3% planned completion in accordance with the June 2009 Revised WSIP Baseline. This compares with 9.3% actual completion and 10.0% planned completion on June 30, 2008 relative to the December 2007 Revised WSIP Baseline. Key project milestones achieved during FY 2008-2009 are listed in Table 2.3-1.

**Table 2.3-1: Project Milestones for Sunol Valley Region (FY 2008-2009)**

Key Milestone	Projects in Sunol Valley Region	
	CUW No.	Name
Right-of-Way Phase Completed	35902	Alameda Siphon #4
	38101	SVWTP Expansion & Treated Water Reservoir
Design Phase Completed	35902	Alameda Siphon #4
	38601	San Antonio Pump Station
Construction Contract Advertised	35902	Alameda Siphon #4
	38601	San Antonio Pump Station
Construction Final Completion	37001	Pipeline Repair & Readiness Improvements

The project formerly known as Project CUW35201: Alameda Creek Fishery Enhancement has been re-named to Project CUW35201: Upper Alameda Creek Filter Gallery.

Four (4) Sunol Valley Region projects continued with design and environmental review in the FY 2008-2009 reporting period, and two (2) were advertised for construction prior to the end of the reporting period. One (1) project continued in the planning phase, and one (1) project continued in construction. One (1) project reached the final construction completion milestone, and was completed in the reporting period under budget.

There is one significant schedule variance: 1) Project CUW35901: New Irvington Tunnel (3 to 6 month variance of various phases) due to the major design change from utilization of a Tunnel Boring Machine (TBM) to a road-header for construction.

The major accomplishments and challenges associated with the projects in the Sunol Valley Region during the reporting period are summarized below.

### Planning

Project CUW35201: Upper Alameda Creek Filter Gallery continued in the planning phase during the reporting period. The decision of the WSIP Steering Committee was to suspend the project after finalizing the Final Alternatives Analysis Report (AAR) in December 2008. The project was re-initiated in April 2009 and the Project Team has developed a revised project work plan to ensure that the selected project alternative will be appropriately

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coordinated with future Sunol Valley restoration plans. The planning work for all other projects in the Sunol Valley Region has been completed.

### Environmental

Several significant milestones occurred in FY 2008-2009. The SFPUC adopted the IS/MND for Project CUW35902: Alameda Siphon #4. The project team has obtained all other environmental permits and approvals required for construction. The public Draft EIR for Project CUW35901: New Irvington Tunnel and Project CUW38101: SVWTP Expansion & Treated Water Reservoir were issued near the end of FY 2008-2009. Several other project teams have issued Administration Draft EIRs for internal review and have submitted draft permit applications to resource agencies during FY 2008-2009.

The most significant challenge that remains is the environmental review of Project CUW37401: Calaveras Dam Replacement. A directive was issued by the SFPUC General Manager in July 2008 to incorporate the effects of SFPUC operations in the Alameda Creek watershed on future restored populations of steelhead, an analysis that was previously planned for completion under the SFPUC's Alameda Watershed Habitat Conservation Plan. The project team is currently in consultation with the National Marine Fisheries Service (NMFS) and the USACE; however, the schedule is still considered somewhat aggressive to address the possible future effects of the project on endangered species. A number of new tasks have been added to the project to address this issue.

### Design

Notable design achievements in FY 2008-2009 include completion of 35% design milestone for Project CUW37403: San Antonio Backup Pipeline; completion of 65% design for Project CUW38101: SVWTP Expansion & Treated Water Reservoir, and for Project CUW35901: New Irvington Tunnel; completion of 95% design for Project CUW37401: Calaveras Dam Replacement; and completion of design for Project CUW35902: Alameda Siphon #4, and for Project CUW38601: San Antonio Pump Station Upgrade. In addition, the California Division of Safety of Dams (DSOD) has provided comments for the design milestones and technical memoranda for Project CUW37401: Calaveras Dam Replacement.

### Construction

The construction of Project CUW35501: Standby Power Facilities – Various Locations, which will be located at various sites, is 93% complete. Final completion of construction of Phase B of Project CUW37001: Pipeline Repair & Readiness Improvements was completed during the reporting period. The construction contract for Project CUW35902: Alameda Siphon #4 was awarded, and the construction contract for Project CUW38601: San Antonio Pump Station was advertised.

## **2.4 Bay Division Region**

Overall progress for the Bay Division Region as of July 1, 2009 is 14.8% actual completion versus 14.6% planned completion in accordance with the June 2009 Revised WSIP Baseline. This compares with 12.7% actual completion and 12.9% planned completion on June 30, 2008 relative to the December 2007 WSIP Baseline. Key project milestones achieved during FY 2008-2009 are listed in Table 2.4-1.

**Table 2.4-1: Project Milestones for Bay Division Region (FY 2008-2009)**

Key Milestone	Projects in Bay Division Region	
	CUW No.	Name
Planning Phase Completed	35302	Seismic Upgrade of BDPL Nos. 3 & 4
	39301	BDPL No.4 Condition Assessment PCCP Sections
Environmental Phase Completed	38001	BDPL Nos. 3 & 4 Crossovers
ROW Phase Completed	38001	SCADA System – Phase II

The planning phase for all projects in the Bay Division Region has been completed. Significant progress was made on the design of all projects within the Bay Division Region.

The major challenge for the region was the completion of environmental reviews for Project CUW36801: BDPL Reliability Upgrade – Tunnel, and Project CUW36802: BDPL Reliability Upgrade – Pipeline. Actions to mitigate the delay were implemented including focused reviews to reduce review time and adding resources to assist the San Francisco Planning Department. These actions did not diminish the quality of the environmental documents as demonstrated by the minimal number of public comments received during the comment period.

The major accomplishments and challenges associated with the projects in the Bay Division Region during the reporting period are summarized below.

### Planning

Planning is 100% complete for all projects in the region.

### Environmental

Progress on the environmental phase continued with several significant milestones achieved in FY 2008 -2009. The Draft EIR was published for Project CUW36801: BDPL Reliability Upgrade – Tunnel, and Project CUW36802: BDPL Reliability Upgrade - Pipeline. Approval for the final EIR is scheduled for July 2009. In addition, the IS/MND was completed and adopted for Project CUW38001: BDPL 3 & 4 Crossovers.

### Design

The design phase of various projects in the Bay Division Region continues to progress as planned with several significant milestones achieved in FY 2008-2009. The 35% design for Project CUW 35302: Seismic Upgrade of BDPL Nos. 3 & 4, and live testing of the fault rupture/concrete box by Cornell University, was completed. The 95% design for Project CUW36801: BDPL Reliability Upgrade – Tunnel, and 99% design for Project CUW36802: BDPL Reliability Upgrade – Pipeline were completed. 100% Phase A security designs

performed under Project CUW36302: System Security Upgrades were completed for eighteen (18) WSIP projects, and 95% Common Platform Design was completed for Project CUW36301: SCADA System - Phase II. In addition, valve and pipe purchase orders as well as the construction contract for Project CUW38001: BDPL 3 & 4 Crossovers were awarded.

### Construction

Construction achievements include close-out and authorization of final payment for Project CUW35301: BDPL Nos. 3 & 4 Crossovers/Isolation Valves (Phase A), and start of construction for Project CUW36301: SCADA System – Phase II at two (2) sites in San Francisco.

## **2.5 Peninsula Region**

Overall progress for the Peninsula Region as of July 1, 2009 is 14.6% actual completion versus 14.8% planned completion in accordance with the June 2009 Revised WSIP Baseline. This compares with 11.0% actual completion and 11.2% planned completion on June 30, 2008 relative to the December 2007 WSIP Baseline. Key project milestones achieved during FY 2008-2009 are listed in Table 2.5-1.

**Table 2.5-1: Project Milestones for Peninsula Region (FY 2008-2009)**

<b>Key Milestone</b>	<b>Projects in Peninsula Region</b>	
	<b>CUW No.</b>	<b>Name</b>
<b>Planning Phase Completed</b>	36105	Pulgas Balancing - –Modifications of the Existing Dechloramination Facility
	36701	HTWTP Long-Term Improvements
<b>Environmental Phase Completed</b>	35601	New Crystal Springs Bypass Tunnel
	36102	Pulgas Balancing – Discharge Channel Modifications
	36103	Pulgas Balancing – Structural Rehabilitation & Roof Replacement
	36501	Cross Connection Controls
	37901	San Andreas Pipeline No. 3 Installation
	39101	Baden and San Pedro Valve Lots Improvements
<b>Design Phase Completed</b>	35601	New Crystal Springs Bypass Tunnel
	36102	Pulgas Balancing – Discharge Channel Modifications
	37901	San Andreas Pipeline No. 3 Installation
	39101	Baden and San Pedro Valve Lots Improvements
<b>Construction Contract Advertised</b>	35601	New Crystal Springs Bypass Tunnel
	36102	Pulgas Balancing – Discharge Channel Modifications

	36103	Pulgas Balancing – Structural Rehabilitation & Roof Replacement
	37901	San Andreas Pipeline No. 3 Installation
	39101	Baden and San Pedro Valve Lots Improvements
<b>Construction Final Completion</b>	36501	Cross Connection Controls

Work activities in the Peninsula Region were primarily focused on completion of design documents and environmental reviews. Major activities also included the development of the construction bid packages and resolution of bidders' questions, resulting in the award of three (3) construction contracts and the imminent award of a fourth.

The major accomplishments and challenges associated with the projects in the Peninsula Region during the reporting period are summarized below.

### Planning

A new project, Project CUW36702: Peninsula Pipelines Seismic Upgrade was approved and added to the Peninsula Region. The project consists of geotechnical investigations to assess reliability of the San Andreas Pipeline No. 2 and San Andreas Pipeline No. 3 from HTWTP to San Pedro Valve Lot; the Sunset Supply Branch Pipeline from HTWTP to Capuchino Valve Lot; and the Sunset Supply Pipeline from Capuchino Valve Lot to San Pedro Valve Lot. The project was initiated due to the recent discovery of potential seismic risk to these pipelines at their crossings of the Serra fault. Based on the outcome of field investigations, the project may include reinforcements at fault crossings and in areas of potential localized liquefaction.

The planning activities on all other Peninsula projects have been completed. The final Conceptual Engineering Report (CER) for Project CUW36105 Pulgas Balancing - Modifications of the Existing Dechloramination Facility was issued, and detailed design work was initiated. Findings from the recently completed geotechnical investigations were incorporated into the final CER for Project CUW36701: HTWTP Long-Term Improvements, thus completing the planning phase. These geotechnical investigations confirmed the potential displacements from the Serra Fault and resulted in a scope change that is addressed in the re-baseline.

### Environmental

Significant progress was accomplished during the year with the completion of the environmental phase on six (6) projects. Final EIRs were certified for Project CUW35601: New Crystal Springs Bypass Tunnel and Project CUW37901: San Andreas Pipeline No. 3 Installation. IS/MNDs for Project CUW36102: Pulgas Balancing - Discharge Channel Modifications, Project CUW36103: Pulgas Balancing - Structural Rehabilitation & Roof Replacement, Project CUW36501: Cross Connection Controls, and Project CUW39101: Baden and San Pedro Valve Lots Improvements, were approved.

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Preparation of EIRs is progressing per plan for the remaining four (4) Peninsula projects: Project CUW35401: Lower Crystal Springs Dam Improvements, Project CUW36701: HTWTP Long-Term Improvements, Project CUW37101: Crystal Springs/San Andreas Transmission System Upgrades, and Project CUW37801: Crystal Springs Pipeline No. 2 Replacement.

### Design

Design activities were completed, and construction contracts were awarded for four (4) projects: Project CUW35601: New Crystal Springs Bypass Tunnel, Project CUW36102: Pulgas Balancing – Discharge Channel Modifications, Project CUW37901: San Andreas Pipeline No. 3 Installation, and Project CUW39101: Baden and San Pedro Valve Lots Improvements. The construction contract for Project CUW36103: Pulgas Balancing – Structural Rehabilitation & Roof Replacement was advertised.

Design has been essentially completed and is awaiting certification of the Final EIRs for Project CUW35401: Lower Crystal Springs Dam Improvements, and Project CUW37801: Crystal Springs Pipeline No. 2 Replacement.

Design activities continued on the remaining projects in the region with completion of 35% design for Project CUW36701: HTWTP Long-Term Improvements, and Project CUW36105: Pulgas Balancing – Modifications of Existing Dechloramination Facilities. In addition, 65% design was completed for Project CUW37101: Crystal Springs/San Andreas Transmission Upgrades.

### Construction

Substantial completion and closeout was achieved for Project CUW36501: Cross Connection Controls. As of July 1, 2009, construction of Project CUW35601: New Crystal Springs Bypass Tunnel was 21% complete, and construction of Project CUW36603: HTWTP Short-Term Improvements Coagulation & Flocculation/Remaining Filters was 65% complete. Construction of Project CUW36102: Pulgas Balancing - Discharge Channel Modifications was 11% complete, and construction of Project CUW39101: Baden and San Pedro Valve Lots Improvements was 3% complete.

## **2.6 San Francisco (Regional) Region**

Overall progress for the San Francisco (Regional) Region as of July 1, 2009 is 48.5% actual completion versus 48.7% planned completion in accordance with the June 2009 Revised WSIP Baseline. This compares with 39.7% actual completion and 37.1% planned completion on June 30, 2008 relative to the December 2007 WSIP Baseline. It should be noted that the San Francisco (Regional) Region was re-organized in the 4<sup>th</sup> Quarter of FY 2008-2009. Key project milestones achieved in the San Francisco (Regional) Region during FY 2008-2009 are listed in Table 2.6-1.

**Table 2.6-1: Project Milestones for San Francisco (Regional) Region (FY 2008-2009)**

Key Milestone	Projects in San Francisco (Regional) Region	
	CUW No.	Name
Design Phase Completed	37201	University Mound Reservoir – North Basin
Construction Contract Advertised	37201	University Mound Reservoir – North Basin
Construction Contract Awarded	37201	University Mound Reservoir – North Basin
Construction Final Completion	35801	Sunset Reservoir – North Basin

The project formerly known as Project CUW30103: Groundwater Project C - South Westside Basin, was moved from the Water Supply Region, and added to this Region and has been re-named to Project CUW30103: Regional Groundwater Storage and Recovery.

Overall progress in this region remains on schedule as planned. Work in the San Francisco (Regional) Region focused on completing the current project phase efforts on the three (3) projects in this region: Project CUW30103: Regional Groundwater Storage and Recovery; Project CUW35801: Sunset Reservoir - North Basin; and Project CUW37201: University Mound Reservoir - North Basin.

The major accomplishments and challenges associated with the projects in the San Francisco (Regional) Region during the reporting period are summarized below.

Planning

The planning phase for all three (3) projects in this region was completed in the previous fiscal year.

Environmental

The environmental phase for the two reservoir projects in this region was completed in the previous fiscal year. Environmental phase activities continued to progress on Project CUW30103: Regional Groundwater Storage and Recovery with the issuance of a Notice of Preparation (NOP) and scoping meetings. Biological field surveys were completed at the proposed well sites.

Design

Design phase activities on Project CUW30103: Regional Groundwater Storage and Recovery continued with the completion of utility surveys, geotechnical studies, and installation of six (6) 750-Foot deep multi-level monitoring wells for the project design phase.

Substantial progress was achieved on Project CUW37201: University Mound Reservoir - North Basin. The 100% design was completed, the contract was advertised, bids were received, and the Commission approved the award of the construction contract during FY 2008-2009.

Construction

Final Completion was achieved for the Phase B (Seismic Upgrade) construction contract of Project CUW35801: Sunset Reservoir - North Basin, and the reservoir was returned to active service.

**2.7 System-Wide Region**

The projects and initiatives in the System-Wide Region benefit the entire program and include the following: Project CUW38801: Programmatic EIR (PEIR); Project CUW38802: Habitat Reserve Program (HRP); and Project CUW39401: Watershed and Environmental Improvement Program (WEIP). The WSIP Program Management budget also encompasses this region.

Overall progress for the System-Wide Region as of July 1, 2009 is 29.0% actual completion versus 30.1% planned completion. This compares with 20.2% actual completion and 21.7% planned completion on June 30, 2008 relative to the previous December 2007 WSIP Baseline. Key project milestones achieved during FY 2008-2009 are listed in Table 2.7-1.

**Table 2.7-1: Project Milestones for System-Wide Region (FY 2007-2008)**

Key Milestone	Projects in System-Wide Region	
	CUW No.	Name
Environmental Phase Completed	38801	Programmatic EIR

The WSIP incorporated the HRP as a way to coordinate and consolidate compensation for habitat impacts that would result from program implementation. During FY 2008-2009, the HRP Project Team completed the Draft Homestead Pond Mitigation and Monitoring Plan (in the Peninsula Watershed), completed compensation for Project CUW38401: Tesla Treatment Facility through payment to the San Joaquin Council of Governments, and completed preliminary design related field work in Alameda and Peninsula Watersheds. The HRP is coordinated with other environmental initiatives, including the SFPUC Water Enterprise Habitat Conservation Plan (HCP) and the WSIP WEIP.

For an update on the PEIR, refer to Section 1.7 (Environmental Initiatives) of this report. The major accomplishments and challenges associated with the HRP and the WEIP during the reporting period are summarized below.

Planning

The planning phase for Project CUW38802: Habitat Reserve Program was completed in FY 2007-2008. The planning phase for Project CUW39401: Watershed and Environmental Improvement Program continued during the reporting period. A MOU with the Alameda



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County Resource Conservation District (ACRCD) was approved by the Commission on December 9, 2008, and the ACRCD began outreach efforts to landowners in the upper Alameda Watershed. The outreach efforts will focus on highlighting conservation and land protection opportunities in the watershed. Discussions continue with The Nature Conservancy (TNC) regarding developing an MOU that outlines how the SFPUC and TNC will work together to protect property in the upper Alameda Watershed. It is anticipated that the MOU with the TNC will be presented to the SFPUC Commission for approval by the end of 2009.

The final report for the Niles Gage Weir Assessment was completed on March 20, 2009. The SFPUC will continue to monitor any movement of the structure. The first bi-annual survey of the Niles Gage Weir was conducted in June 2009.

### Environmental

Environmental surveys were conducted for Project CUW38802: Habitat Reserve Program and preparation for the first administrative Draft EIRs commenced. Permitting for implementation of the HRP commenced with strategic meetings with various resources agencies.

### Design

Field work to collect site specific information for Project CUW38802: Habitat Reserve Program was conducted, and preliminary design of the Alameda and Peninsula Watershed sites were prepared.

### Construction

The construction phase for Project CUW38802: Habitat Reserve Program commenced in FY 2008-2009 with payment to the San Joaquin Council of Governments (SJCOG) to compensate for Project CUW38401: Tesla Treatment Facility impacts.

## **2.8 Water Supply Region**

The re-alignment of all seven (7) projects from the Water Supply Region to the San Francisco Region or the Local Program resulted in the deletion of this Region.

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### 3.0 FORMAL ACTIONS (FY 2008-2009)

The following actions related to the WSIP were taken by the San Francisco Board of Supervisors and the Commission during the reporting period.

#### San Francisco Board of Supervisors

Formal WSIP-related actions taken by the Board of Supervisors include:

- *File# 081453, Ordinance No. 311-08 [Appropriating \$1,923,629,194 of Water Revenue Bond proceeds for the Water System Improvement Program in the Public Utilities Commission]*

Ordinance appropriating \$1,923,629,194 of San Francisco Water Revenue Bond authorized in 2002 to fund construction and financing costs for the WSIP in the SFPUC and placing the entire appropriation on Controller's reserve pending the sale of the bonds following completion of project-related analysis pursuant to CEQA.

- *File# 090108, Ordinance 37-09 [De-appropriating \$11,617,063 of Water System Improvement Program funding at the San Francisco Public Utilities Commission]*

Ordinance de-appropriating \$11,617,063 of WSIP funding based on actions taken by the Budget and Finance Committee on Ordinance number 311-08 at the SFPUC.

- *File# 0811660, Ordinance No. 247-08 [Appropriating \$86,367,000 of Bond revenue and adopting environmental findings for Crystal Springs Bypass Tunnel]*

Ordinance appropriating \$86,367,000 of Proceeds from Sale of Bonds for the WSIP construction of the Project CUW35601: Crystal Springs Bypass Tunnel at the SFPUC, placing the entire appropriation on Controller's reserve pending the proceeds of indebtedness and adopting environmental findings.

- *File# 080957, Resolution No. 368-08 [WSIP Agreement No. CS-913, Bay Tunnel Project Construction Management Services for Bay Tunnel]*

Resolution approving the professional services agreement (CS-913) with Jacobs engineering for an amount not to exceed \$18,000,000 to provide construction management services for the Project CUW36801: BDPL Reliability Upgrade - Tunnel.

- *File# 081266, Resolution No. 490-08 [WSIP Agreement No. CS-914, Bay Division Regional Construction Management Services]*

Resolution approving the professional services agreement (CS-914) with Jacobs engineering for an amount not to exceed \$25,000,000 to provide construction management services for the Bay Division Region.

- *File# 081484, Resolution No. 547-08 [WSIP Agreement No. CS-917, San Joaquin Regional Construction Management Services]*

Resolution approving the professional services agreement (CS-917) with PMA Consultants LLC for an amount not to exceed \$28,000,000 to provide CM services for the San Joaquin Region.

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- *File# 090251, Resolution 142-09 [Approval of the SFPUC Sunol Valley Construction Management Contract]*

Resolution approving the professional services agreement (CS-915R) with CH2MHill for an amount not to exceed \$16,000,000 to provide CM services for the Sunol Valley Region.

- *File# 081151, Resolution No. 437-08 [Easement Deed and findings related to the SFPUC's New Crystal Springs Bypass Tunnel water infrastructure project]*

Resolution adopting findings under the CEQA Guidelines including the adoption of mitigation monitoring and reporting program and statement of overriding considerations related to the Project CUW35601: New Crystal Springs Bypass Tunnel, and authorizing and approving the execution, delivery and acceptance of an Easement Deed from the County of San Mateo granting to the City certain easement rights in real property located beneath and adjacent to portions of Polhemus Road in San Mateo county.

- *File# 081582, Resolution No. 4-09 [Adopting findings - Related to San Francisco Public Utilities Commission Water Treatment Facility and Water Quality Improvements projects in San Joaquin County]*

Resolution adopting findings under the CEQA Guidelines including the adoption of mitigation and reporting program and statement of overriding considerations related to the two projects, the Project CUW38401: Tesla Treatment Facility, and the Project CUW36401: Lawrence Livermore Water Quality Improvements, in the San Joaquin County.

- *File# 081617, Resolution 23-09 [Adopting findings - Related to San Francisco Public Utilities Commission Bay Division Pipelines Crossover Facilities Project in San Mateo and Santa Clara Counties]*

Resolution adopting findings under the CEQA including the adoption of mitigation monitoring and reporting program related to the funding of the Project CUW38001: BDPL Nos. 3 & 4 Crossover at three (3) sites in San Mateo and Santa Clara County, and directing the Clerk of the Board of Supervisors to notify the Controller of this action.

- *File# 081587, Resolution No. 25-09 [Adopting findings - Related to San Francisco Public Utilities Commission Water System Improvement Program (WSIP) Pulgas Balancing - Discharge Channel Modifications Project]*

Resolution adopting findings under the CEQA Guidelines including the adoption of mitigation monitoring and reporting program related to the funding of the Project CUW36102: Pulgas Balancing – Discharge Channel Modification, and directing the Clerk of the Board of Supervisors to notify the Controller of this action.

- *File# 081586; Resolution 26-09 [Adopting findings - Related to San Francisco Public Utilities Commission Water System Improvement Program (WSIP)-funded Baden and San Pedro Valve Lots Improvements Project]*

Resolution adopting findings under the CEQA Guidelines including the adoption of mitigation monitoring and reporting program related to the funding of the Project

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CUW39101: Baden and San Pedro Valve Lots Improvements, and directing the Clerk of the Board of Supervisors to notify the Controller of this action.

- *File# 090281, Resolution 94-09 [Adopting findings - Related to San Francisco Public Utilities Commission Water System Improvement Program (WSIP) Alameda Siphon # 4]*

Resolution adopting findings under CEQA Guidelines, and Francisco Administrative Code Chapter 31, including the adoption of mitigation monitoring and reporting program related to the funding of the Project CUW35902: Alameda Siphon # 4, and directing the Clerk of the Board of Supervisors to notify the Controller of this action.

- *File #090636, Resolution 226-09 [CEQA Findings and Approval of Real Property Agreements for SFPUC Water System Improvement Program San Andreas Pipeline No. 3 Installation Project beginning at the San Pedro Valve Lot (SPVL) in Daly City to Merced Manor Reservoir (MMR) in San Francisco]*

Resolution adopting findings under CEQA including the adoption of mitigation monitoring and reporting program and statement of overriding considerations related to the Project CUW37901: San Andreas Pipeline No. 3 Installation, and authorizing the necessary agreements and deeds with property owners in the Daly City and the City of San Francisco areas.

## **San Francisco Public Utilities Commission**

The following formal actions related to the WSIP were taken by the Commission during the reporting period.

- On October 30, 2008, the Commission authorized a supplemental appropriation in the amount of \$1,923,629,194 to fund the WSIP, including funding for projects of \$1,670,983,056, and related financing costs of \$252,646,138, through June 30, 2010, and also granted an approval to increase the Water Commercial Paper Program from \$250 million to \$500 million.
- On October 30, 2008, the Commission also approved the WSIP PEIR and adopted the Findings pursuant to the CEQA. [Resolution No. 08-0202].

Also during this period, the Commission approved eight (8) Construction Contract Awards, six (6) Professional Services Awards, five (5) CM Professional Services Awards, eleven (11) Amendments to Professional Services, four (4) Construction Close-Outs, and adopted a total of six (6) CEQA approvals, as follows:

### Eight (8) Construction Awards:

- Project CUW38401: Tesla Treatment Facility, DB-116 (Design/Build)
- Project CUW35601: New Crystal Springs Bypass Tunnel, WD-2498
- Project CUW36102: Pulgas Balancing - Discharge Channel Modification, WD-2563
- Project CUW39101: Baden and San Pedro Valve Lot Improvements, WD-2556
- Project CUW38001: BDPL Nos. 3 & 4 Crossovers, WD-2568

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- Project CUW35902: Alameda Siphon # 4, WD-2552
  - Project CUW37201: University Mound Reservoir- North Basin, WD-2539
  - Project CUW37901: San Andreas Pipeline No.3 Installation, WD-2513

Six (6) Professional Services Awards:

- Program Controls for WSIP, CS-939
- Program Construction Management Services Program, CS-963
- Amendment No. 2 Program/Project/Pre-Construction Management Services, CS-765
- As Needed Environmental Services, CS-954
- As Needed Corrosion Control Services, CS-904 A, B, C
- Water Enterprise WSIP Agreements, Assembly of Eminent Individual Industry Experts, Pre-Qualified Advisory Pool; CS-925A - R

Five (5) Construction Management Awards:

- Project CUW36801: BDPL Reliability Upgrade - Tunnel, CM Services, CS-913
- Bay Division Regional CM Services, CS-914
- San Joaquin Regional CM Services, CS-917
- Sunol Valley Regional CM Services, CS915R
- Project CUW35901: New Irvington Tunnel, CM Services, CS-918

Eleven (11) Professional Services Amendments:

- Project CUW36801/02: BDPL Reliability Upgrade, Environmental Analysis Services Amend. No. 2 EAS, CS-754, (Jul 22, 08)
- Project CUW30103: Regional Groundwater Storage and Recovery (Groundwater Conjunctive Use), Conceptual Engineering Services Amend. No. 2, CS-826 (Jul 22, 08)
- Project CUW35901: New Irvington Tunnel, Design Engineering Services, Amend. No. 1, CS-820 (Sep 9, 2008)
- Project CUW30103: Regional Groundwater Storage and Recovery (Groundwater Conjunctive Use), Conceptual Engineering Services Award Amend No. 3, CS-826 (Oct 28, 08)
- Project CUW38101: SVWTP Expansion & Treatment Water Reservoir, , Environmental Analysis Services Amend No. 1 CS-834C4 (Feb 10, 09)
- Project CUW35401: Lower Crystal Springs Dam Improvements, Environmental Analysis Services, Amend No. 1, CS-764 (Mar 10, 09)
- Project CUW37901: San Andreas Pipeline No. 3 Installation, Environmental Analysis Services, Amend No. 1 CS-772A (Jan 13, 09)

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- Project CUW37401: Calaveras Dam Replacement, Environmental Analysis Services, Amend. No. 3, CS-716 (May 12, 09)
  - Project CUW37101: Crystal Springs/San Andreas Transmission Upgrade, Environmental Analysis Services, Amend. No. 1, CS-834C6 (May 26, 08)
  - Project CUW37401: Alameda Siphon #4, Engineering Services, Amend. No. 3, CS-804 (May 26, 08)
  - Project CUW37401: Calaveras Dam Replacement Environmental Services, Environmental Analyses Services Amend. No. 3, CS-732 (Jun 23, 09)

Five (5) Approved Construction Close-Outs:

- Project CUW35701: Adit Leak Repairs, Close-out with Modification WD-2510
- Project CUW35601: Capuchino Valve Lot Improvements, WD-2508
- Project CUW35501: Standby Power Facilities East Bay, Close-Out with Modification, WD-2553
- Project CUW37001: Pipeline Repair and Readiness Improvements, Phase B Pipe Rolling Facility, WD-2530
- Project CUW35301: BDPL Nos. 3 & 4 Crossover/Isolation Valves Close-Out with Modification, WD-2507

Six (6) Adopted IS/MND and EIRs:

- Project CUW35902: Alameda Siphon # 4, Project Approval (MND)
- Project CUW35601: New Crystal Springs Bypass Tunnel Adoption of CEQA Findings, Project Approval (EIR)
- Project CUW39101: Baden and San Pedro Valve Lots Improvements, Project Approval (MND)
- Project CUW36102: Pulgas Balancing - Discharge Channel Modification, Project Approval (MND)
- Project CUW38001: BDPL Nos. 3 & 4 Crossovers, Project Approval (MND)
- Project CUW36103: Pulgas Balancing - Reservoir Structural Rehabilitation & Roof Replacement, Project Approval (MND)

## 4.0 FINANCIAL ASPECTS AND STATUS (FY 2008-2009)

### 4.1 Budget Update

The total estimated cost for the WSIP is \$4.6 billion; this includes \$4.1 billion for capital projects and approximately \$470 million for financing costs. At the end of FY 2008-2009, approximately \$2.9 billion had been appropriated for the WSIP and approximately \$800 had been expended. The SFPUC will require approximately \$1.6 billion in additional appropriation to complete the program by December 2015. A summary of the WSIP budget and appropriations through FY 2008-2009 is provided in Table 4.1-1

**Table 4.1-1: WSIP Budget Summary through FY 2008-2009 (in \$ millions)**

	Estimated Total Project Costs <sup>(1)</sup>	Total Budgeted Appropriations to Date	Expended to Date <sup>(2)</sup>	Encumbered but Unexpended	Appropriated but not yet Encumbered	Future Appropriations <sup>(3)</sup>
Regional Projects	3514	2277	520	263	1494	1237
Local Projects	600	389	218	57	114	211
Financing Costs	472	273	73	0	200	199
<b>Total</b>	<b>4586</b>	<b>2939</b>	<b>811</b>	<b>320</b>	<b>1808</b>	<b>1647</b>

(1) Total project costs reflect the "June 2009 Revised WSIP Approved Budget" which was passed by The Commission on July 28, 2009.

(2) Expenses reflect unaudited totals for FY 2008-2009.

(3) The SFPUC expects future appropriations to occur in the next 12 to 18 months.

### 4.2 Debt Update

The SFPUC issued \$229.6 million in commercial paper in FY 2008-2009 for the WSIP. This amount will be refunded as a part of the August 2009 revenue bond sale. The SFPUC anticipates three (3) additional bond sales in FY 2009-2010, in September, January, and February. Total bond sales in FY 2009-2010: are expected to total approximately \$1.6 billion. Going forward, the SFPUC anticipates selling bonds quarterly over the next two (2) years to meet construction cash flow needs.

### 4.3 Rate Update

The SFPUC has increased its retail water rates on a regular, predictable basis to fund the costs of WSIP. Shown in Table 4.3-1 below are the adopted retail rate increases. Also shown are the rate increases for wholesale customers. Rates charged to the Wholesale Customers were subject to the provisions of the Master Water Sales Contract and are now subject to the new Water Supply Agreement (WSA) with representatives of the Wholesale Customers.

Under the Master Water Sales Contract, the Wholesale Customers did not participate directly in the financing of WSIP costs under the utility method of financing used in the contract, but paid annual depreciation and return over the useful lives of assets

constructed or acquired prior to June 30, 2009. Consequently, the rate increases to these customers has lagged behind the rate increases applicable to City retail customers, who under the utility method had to front all costs of asset construction until the asset is placed in service. The WSA employs the cash method to pay for Regional Water System capital costs incurred (both revenue- and bond-funded) during the 25-year term of the new agreement. Wholesale customers would pay for assets placed in service prior to July 1, 2009 under an agreed-upon 25-year payment schedule at an interest rate of 5.13%. The impact will be faster wholesale revenue growth and rate increases to cover WSIP debt service costs than would have previously occurred under the Master Water Sales Contract.

**Table 4.3-1: Retail and Wholesale Water Rates**

<b>Fiscal Year</b>	<b>Retail Rate Increase</b>	<b>Wholesale Rate Increase</b>
2006	15.0%	0.0%
2007	15.0%	18.8%
2008	15.0%	6.3%
2009	15.0%	9.5%
2010	15.0%	15.7%
2011	15.0%	17.6%
2012	12.5%	17.2%
2013	12.5%	21.1%
2014	6.5%	13.6%



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## **APPENDIX A**

### **SFPUC REGIONAL WATER PROGRAM WSIP FY 2008-2009 Quarterly Report – 4<sup>th</sup> Quarter (Through July 1, 2009)**

Please access the report on the SFPUC website at the following address:  
<http://tinyurl.com/nllh8y>