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April 8, 2009

Mr. Jonathon Goldman
Director of Public Works
City of Sausalito
420 Lito Street
Sausalito, CA 94965

Subject: Sanitary Sewer Fee Study – Draft Report

Dear Mr. Goldman:

In accordance with our Service Contract for a Wastewater Rate Study dated April 21, 2008, we are pleased to submit this draft report. The results of this study are intended to provide your City with financial planning recommendations needed for funding your operations while maintaining the City's financial health on a sustainable basis.

The recommendations are:

- To achieve cost of service equity, the single-family dwelling charges must be increased by 25 percent, on top of any revenue requirement-based changes. In contrast, multi-family fees must be reduced slightly, and non-residential revenues should be reduced by 9 percent.

- The projected annual capital project expenditures are approximately $1 million per year. It is anticipated that they will deplete the sewer fund within three years, so we recommend that City pursue State Revolving Fund (SRF) loans totaling $3.4 million through fiscal year (FY) 2013-14.

- In addition to increases in capital program, operations and maintenance costs are projected to climb from the current $881,415 to $1.6 million per year by FY 2013-14. To fund these projected costs, the FY 2009-10 sewer fee revenues should be increased by 45 percent.

- In order to comply with loan requirements and maintain adequate cash reserves, we recommend that the City increase sewer revenues by 8 percent annually starting in FY 2011-12, and continuing for three years.

- The effect of the combined revenue and equity adjustments on the 1,250 single-family dwelling parcel bills is to increase the existing bill of $215 per year to $360, effective July 1, 2009. In contrast, the 1,950 multi-family parcels will have relatively minor increases in bills from $167 to $193 per dwelling unit per year.

We have enjoyed working with your staff members and City management on this interesting study, and are grateful for your support and participation. We look forward to presenting these findings and recommendation to your City Council.

Please contact us if you have any questions, or need additional information.

Very truly yours,

Grant E. Hoag, P.E.
Project Manager
Camp, Dresser & McKee

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Glossary

APN	Assessor's Parcel Number
CCTV	Close Circuit Television
CIP	Capital Improvement Program
City	City of Sausalito
COP	Certificate of Participation
DU	Dwelling Unit
DWR	Department of Water Resources
EQPT	Equipment
EXP	Expense
FY	Fiscal Year
GPD (gpd)	Gallon per Day
HCF	Hundred Cubic Feet (748.1 gallons)
I/I	Inflow and Infiltration
L/T	Long Term
Misc	Miscellaneous
NPDES	National Pollution Discharge Elimination System
O&M	Operations and Maintenance
OCLD	Original Cost less Depreciation
OP	Operating
R&R	Rehabilitation and Replacement
RESID	Residential
SMCSD	Sausalito-Marin City Sanitary District
SRF	State Revolving fund
SVC	Service
SWRCB	State Water Resources Control Board
UNK	Unknown
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WEF	Water Environment Federation
WWTP	Wastewater Treatment Plant
YR (yr)	Year

Executive Summary

This summary describes the results of a sanitary sewer fee study for the City of Sausalito. The overall goal of the study is to identify equitable sewer charges for the 3,000 accounts in support of sustainable utility services. The last sewer revenue plan study was prepared in 2003, with rates enacted through 2008.

The City of Sausalito owns and operates sewers conveying wastewater to the Sausalito-Marin City Sanitary District (SMCSD) for treatment and discharge to bay waters. The City sewers are operating under an USEPA Administrative Order due to recent spills. The management of the sewers is regulated by State Water Discharge Requirements mandating pipeline cleaning and repair. A significant expansion in the historical level of sewer maintenance and repair is planned. The updated fees must be compliant with state law, and must be sufficient to fund programs mandated by these new state regulations and with USEPA orders.

Property owners citywide are billed on their parcel tax bills for the sewer system costs. The charges from SMCSD also appear on these bills, but as a separate line item. The current City fees to single-family dwelling parcels of $215 per year have been unchanged for two years. In order to place a fee in the FY 2009-10 property tax rolls, the City must enact updated rates by mid-June for submission to the Assessor's office by mid-July.

ES.1 Customer Cost of Service Equity and Billing Practice Findings

California Article XIII C & D (Proposition 218) requires that sewer utility rates be fair and equitable, and that the rate-based-revenues from each customer class be proportional to the City's cost of service to that class, and that the customers be informed of any changes in their rates. Based on our analysis, the current City practice of fixed residential charges is consistent with state and nationwide standards, and can remain unchanged. Moreover, the practice of billing the charges on the annual County Assessor's Office tax rolls is also consistent with commonly accepted procedures, is administratively convenient, and should be continued.

However, the single-family dwelling parcel charges are currently lower than is equitable, in comparison with the other classes. To achieve cost of service equity, these single-family dwelling charges must be increased by 25 percent, on top of any revenue requirement-based changes. In contrast, multi-family fees must be reduced slightly, and non-residential revenues should be reduced by 9 percent.

ES.2 Financial Plan Findings

The sewer rate study revenue requirement findings were discussed with the City's Sustainability Commission on February 5, 2009. The conclusions included:

- The Department of Public Works has recommended that the O&M expenditures be increased steadily from $880,000 this year (FY 2008-09) to $1.6 million per year in five years (FY 2013-14). In addition, capital asset purchases of $445,000 are

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needed immediately, and project expenditures should be increased from the current $444,000 to $1.1 million per year to reduce the backlog of critical facility rehabilitation projects. Annual capital project expenditures of approximately $1 million per year will deplete the sewer fund within three years, so State Revolving Fund (SRF) loans totaling $3.4 million through FY 2013-14 are recommended.

- Sewer system operating revenues from rates and charges must be sufficient to cover all operating expenses excluding extraordinary rolling stock purchases. In FY 2009-10, the budgeted level of O&M cost requires that sewer fee revenues be increased by 45 percent. As such, we recommend that the City increase sewer system revenues by 45 percent effective July 1, 2009.

- In order to comply with loan requirements and maintain adequate cash reserves, we recommend that the City increase the sewer revenues by 8 percent annually starting in FY 2011-12 and continuing for three years. The sources and application of funds, and resulting cash reserves balances, are illustrated in Figure ES-1 below.

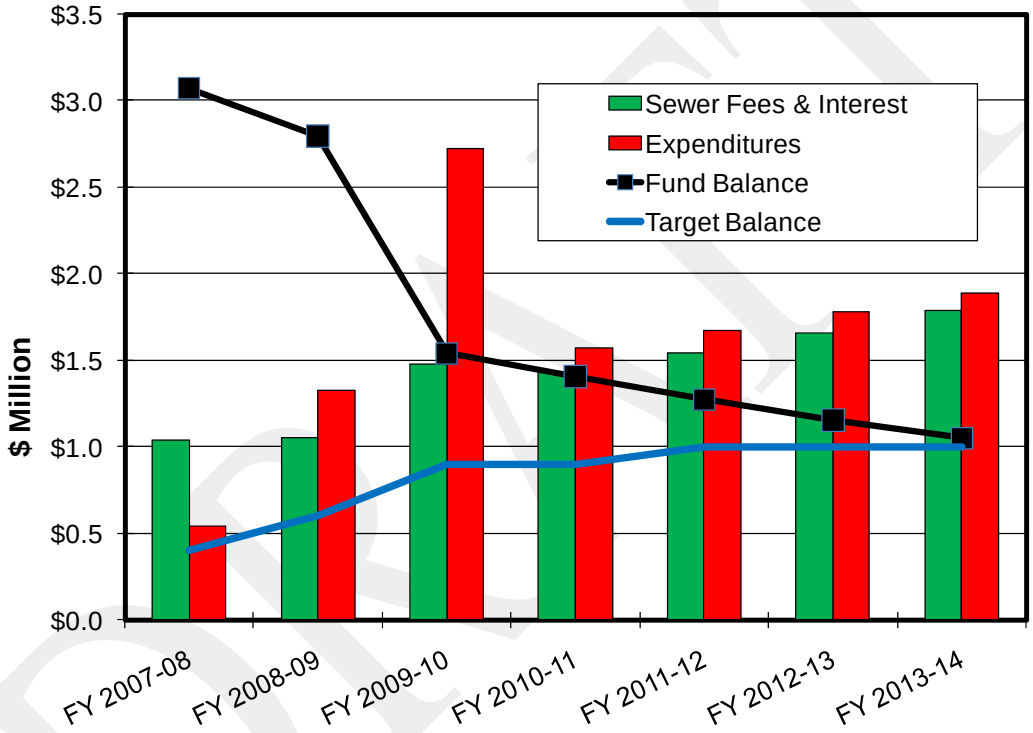

Figure ES-1
Projected Revenues and Expenditures

- The effect on single-family dwelling resident sewer bills of the combined revenue requirements and cost of service adjustments is to increase the existing bill of $215 to $492 within five years, as shown on the following pages in Table ES-1. Multi-family dwelling rates will increase from $167 to $193 next year, and single-family dwelling attached (duplex) parcels will increase from $167 per year to $260. We

have established a phase-in of single-family parcel charges, and recommend that the $215 bill be increased to $360 on July 1, 2009 and to $422 on July 1, 2010.

- Two alternatives to the proposed increase in sewer service revenues were evaluated. Specifically:
  - If the historical 9 percent rate increases were continued, the City would have inadequate revenues (net revenues for debt service) to qualify for the proposed SRF loan, and the sewer enterprise reserve funds would be depleted by 2012. This alternative is not viable.
  - The possibility of spreading the 45 percent increase in revenues over two years was considered. This requires a 22 percent increase for each of the next two years. However, in the first year the net operating revenues would be negative, and in violation of State revenue plan guidelines and the WDRs. Also, there would be insufficient revenues to support a SRF loan until FY 2012-13, delaying critical capital project expenditures. This alternative is not viable. However, we do propose that the single-family parcel charges be phased-in over two years in order to avoid rate shock, so that in FY 2009-10 the residential bills are increased to $360 rather than $391 per year.

ES.3 Commercial Account Sewer Service Rate Structure Findings

The current billing method for commercial wastewater customers consists of a fixed annual customer service fee of $167 per parcel and a variable rate of $2.03 per hundred cubic feet (Ccf) of prior year water demand. We propose that the charges be updated to reflect the utility system capacity allocated to each of the 207 commercial customers, based on their maximum water demands of the most recent five years, rather than the current allocation based on the prior year's actual water use.

ES.4 Proposed Rates and Alternative Commercial Charge

Based on the draft assumptions, findings and conclusions, the proposed rates for the next five years are shown in Table ES-1 on the following page. The proposed rates use the refined non-residential rate structure using historical maximum water usage values for each account to determine the allocated capacity charges.

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Table ES-1
Proposed Rates

Description	No. of Accounts	Current FY 2008-09	Projected FY 2009-10	FY 2010-11	FY 2011-12	FY 2011-12	FY 2012-13
Change in Rate-based Revenues			**45%**	**0%**	**8%**	**8%**	**8%**
Rates for Residential Dischargers ($/year-dwelling unit, with changes for equity)							
Single-family Dwelling	1,258	$215	$360	$422	$422	$456	$492
Single Family Attached	832	$167	$260	$260	$280	$303	$327
Multi-family Residential	1,960	$167	$193	$193	$209	$225	$243
Alt Rates for Non-Residential Discharger (Allocated Capacity based on Historical Five Year Maximum Water Use)							
Commercial ($/yr-parcel)	207	$167	$242	$242	$262	$282	$305
Unit Rate ($/Ccf-annual water use, a)		$2.03	$1.94	$1.94	$2.10	$2.27	$2.45

ES.5 Remaining Steps for Sewer Service Fee Enactment

Parcel can be charged for sewer services only after new fees are enacted by City Council. The enactment of the new multi-year rate structure described above would fulfill this requirement, and City staff and management has prepared a schedule of activities for the process culminating in the enactment of sewer service charges. The schedule milestones and preliminary dates are:

1. The Council must review the proposed rate structure and authorize City Staff to mail a public rate hearing notification of proposed fees to all sewer customers, in compliance with state law (aka Proposition 218), and must make available for the customers their proposed bills;

2. The Council must hold a public hearing on the proposed fees at least 45 days after the notification and, absent significant protest, conduct the first reading of proposed rates;

3. The Council must enact the proposed rates at a following City Council meeting; and

4. The County Assessor's Office must receive a list of sewer service charges to individual parcels, based on the rate structure approved by the City Council.

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Chapter 1
Introduction

The City of Sausalito owns and operates sewers that convey wastewater to the Sausalito Marine-City Sanitary District (SMCSD) for treatment and discharge to bay waters. The City sewers are operating under an USEPA Administrative Order, due to recent regional and local spills. The City's management of its sewers is regulated by State Water Discharge Requirements (WDRs) mandating pipeline cleaning and repair.

1.1 Rate Study Objectives

In developing fees for the City, five municipal utility financial planning objectives are the basis of the proposed fees. The five objectives are:

- **Revenue Sufficiency.** Rate-based revenues effective in funding the costs of services.
- **Practical.** Easy and feasible for the City to implement and administer.
- **Equitable.** Fair in apportioning the costs of service among the different customer classes.
- **Acceptable to the Community.** Understandable and designed to foster public acceptance.
- **Compliant with Applicable Regulations.** Meets the calculation requirements of the state, the Orders and Decrees from regulatory agencies, and all applicable City and State laws.

The first objective requires that user charges be designed such that the revenues will produce the cash required to fund the utility by including all costs required to provide sustainable services, to meeting new debt service requirements and to maintain adequate cash reserves. The second objective requires that the new rates do not create an administrative burden for the City staff to calculate. The third objective requires that the user charges result in each customer paying that portion of the revenue requirements (the City's costs) for which they are responsible. The fourth objective requires that the utility customers can easily understand the user charges. The fifth objective requires that applicable laws, regulations, orders and court case findings be correctly applied to the proposed user charge structure.

1.2 Development of Wastewater Utility Rates

In order to calculate appropriate rate-based revenues to support the utility, a rate setting process was undertaken. The rate setting process used in this study is illustrated in Figure 1-1, and described below.

The six steps comprising this process are:

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1. **Calculate annual revenue requirements**. To recover annual rate-based revenue requirements, the costs associated with the system must be projected. The cash flow-based revenue requirements include O&M expenses, non-operating expenditures, capital costs funded with rate-based revenue proceeds and other non-operating revenues, development of reserves for facility replacement projects, and debt service on existing and future loans to fund capital improvements.

2. **Develop user characteristics**. In order to recover costs from users commensurate with their wastewater discharges and system loads, the type of system customers and their estimated sewage discharges must be developed.

3. **Allocate costs to functional cost categories**. In order to recover costs equitably from the various customer classes in compliance with state law, wastewater utility costs must be allocated to functional cost categories. These functional categories are based on the user discharge characteristics and include pipeline and treatment plant capacities to accept sewage flows and strengths, and customer service accounts.

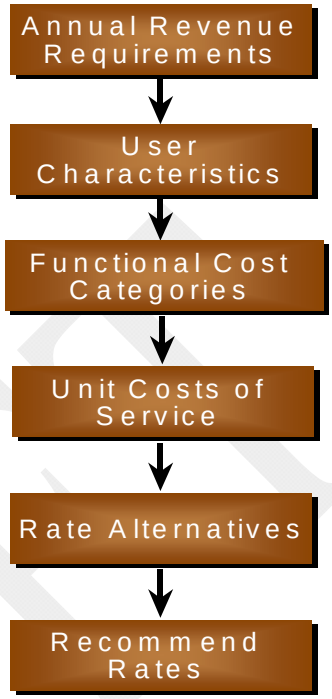

Figure 1
Rate Setting Process

4. **Estimate unit costs of service**. The costs allocated to the various functional cost categories are divided by the appropriate units in order to calculate the unit costs of service.

5. **Identify wastewater rate alternatives**. The unit costs of service and the user characteristics are combined to develop wastewater service rate structure alternatives based on billable characteristics of customer types and sewage strengths, sewage flows and allocated capacities based on water usage factors, and customer service.

6. **Establish recommended rates**. Based on professional judgment, discussions with City staff, and presentations to the City Council, the fee structure is updated and schedule of future rates enacted.

Each of these steps is described in the following chapters.

1.3 Study Assumptions

The assumptions used for development of this study resulted from discussions with City staff, application of current financial indices, future replacement project funding

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needs, and general wastewater utility financial standards. The financial projections used for development of the rate model rely on these assumptions, which are tabulated in several tables. Inflationary escalations, interest earnings and State Revolving Fund loan terms are provided in Table 1-1.

Table 1-1
Assumptions

Description	Value
Annual Inflation in Expenses	4.0%
Reserves Interest Earnings	3.0%
SRF Loan Terms	
Debt Term (years)	25
Cost of Issuance	0%
Bond Reserve (years of debt)	0
Municipal bond Debt Rate	3%
Bond Market Project Financing (not used)	
Debt Term (years)	30
Cost of Issuance	2%
Bond Reserve (years of debt)	1
Municipal bond Debt Rate	5%

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Chapter 2
Revenue Requirements

This chapter presents the development of the annual revenue requirements to be recovered from updated wastewater service charges. Each year the wastewater rate-based revenues will equal the net uses of funds plus changes to the total cash reserves. These uses of funds equal the O&M and, non-operating expenses capital costs and debt service payments, less revenues from interest income, tax proceeds, and reserve drawdown.

The projected O&M, fund transfers, and capital project cost assumptions used in the development of the annual revenue requirements are presented in this chapter. The figures providing project and O&M expenditures, project financing, and cash flow statements for the wastewater utility are provided throughout the chapter, while the tables are provided at the end.

2.1 Financial Assumptions

The assumptions used for development of the rate model resulted from discussions with City staff, application of current financial indices, and general wastewater utility financial standards. The financial calculations used for development of the rate model rely on these assumptions. For example, general inflationary escalations on costs are set at 4 percent per year, including salaries, benefit and other O&M expenses. Moreover, interest earnings on reserve funds are set at 3 percent.

2.2 Development of Revenue Requirements

The annual revenue requirements are projected for a five year study period of FY 2009-10 through FY 2013-14. The assumptions used to project capital and O&M expenses, debt service payments, and the funding levels for the reserves, are summarized in the following tables. These cashflows result in the rate-based

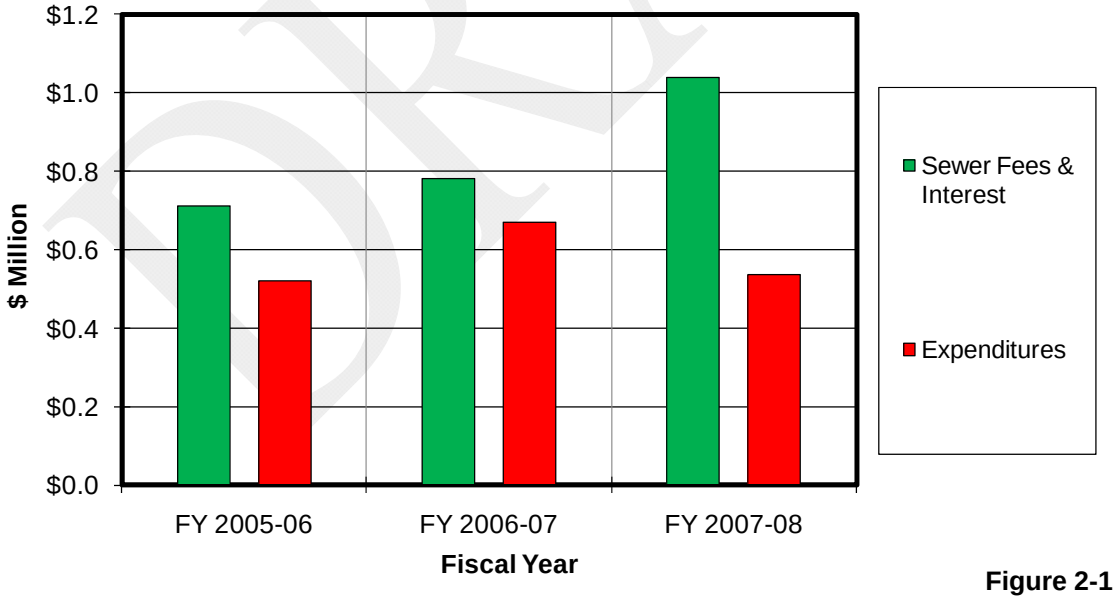

Figure 2-1
Historical Revenues & Expenditures

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revenues needed for each year of the projection period.

Table 2-1, provided at the end of this chapter, lists the historical cashflow for FY 2005-06 through the current budget year FY 2008-09, and the proposed operating budget for FY 2009-10. It is divided into operating and non-operating revenues and expenses. Figure 2-1, on the previous page shows the historical revenues and expenditures. Rate-based revenues were $958,444 in FY 2008-09. Interest income has dropped with declining interest rates to an approximate budgeted level of $90,000. Table 2-2 shows the current and projected O&M expenditures. As shown, the current year O&M expenditures of $881,415 are projected to increase to $1.6 million by FY 2013-14. Figures 2-2 and 2-3, on the following pages show the projected expenditures in FY 2010-11 and in FY 2013-14.

2.3 Rate-Based Revenues Validation

In order to develop accurate rate-based revenues, it is critical to validate the customer billing characteristics. This is done by confirming that the current unit rates time the billable customer account and discharge levels equals the budgeted revenues.

Table 2-3 details the current customer accounts by class. The rate-based revenues total $958,444 for FY 2008-09. As shown, this is based on 1,369 single-family dwellings each paying $215 per year and 1,398 single-family attached and multi-family dwelling units each paying $167 per year. The total residential revenues are $761,267 annually. There are 207 commercial/industrial water parcels paying a class total of $197,177 per year. The billing rates for these parcels include a fixed service charge of $167 per parcel plus a variable charge based on the excess metered water use at each parcel.

Property owners citywide are billed on their parcel tax bills for the sewer system costs. The charges from SMCSD also appear on these bills, but as a separate line item. The current City fee of $215 per year for single-family dwelling parcels has been unchanged for two years.

2.4 Capital Improvement Programs

In this section, the annual capital-related expenditures and the source of funding for these projects are identified. A major element of the City's proposed expenditures is the Capital Improvement Program (CIP). Current capital expenditures are listed in Table 2-4, along with project funding from a series of SRF loans.

Projects identified this year total $505,000, but actual expenditures are projected to be less at $444,000. The identified costs in the Capital Improvement Program (CIP) are $7.6 million, including $4.4 million in expenditures that will remain unfunded by the end of FY 2013-14. For financial planning purposes, we have assumed uniform annual expenditures of only $940,000, based on the expected capacity of the City staff for contract management and project inspection. The actual timing and duration of projects may fluctuate.

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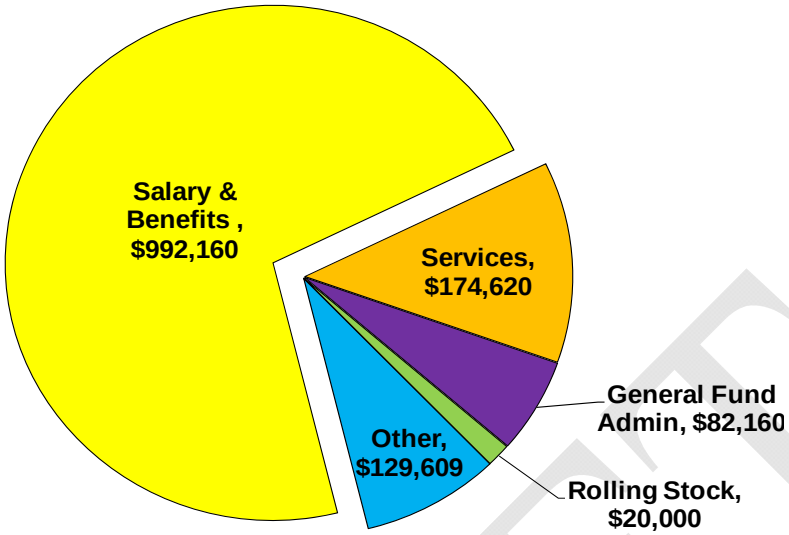

Figure 2-2
FY 2010-11 Sewer O&M Expenditures

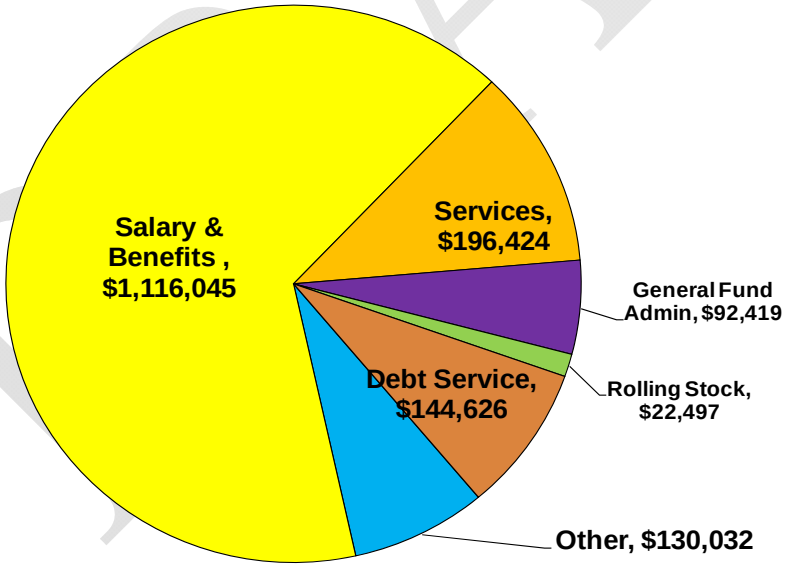

Figure 2-3
FY 2013-14 Sewer O&M Expenditures

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A State Revolving Fund (SRF) loan of $3.4 million starting in FY 2010-11 has been incorporated into the analysis, resulting in annual debt service obligations of $196,000 by the end of FY 2011-12. Normal capital financing policy consistent with SRF loan policies typically requires that the City cash finance on a pay-as-you-go basis 20 percent of the annual capital expenditures. As such, annual pay-as-you-go cash funding of projects is $188,000 per year.

2.5 Projected Revenue Requirements

The sewer utility is a self-supporting enterprise, operating in perpetuity. The financial plan for the utility is based on funding and maintaining a reliable delivery of wastewater services that meets all regulatory requirements. This section documents the annual rate-based revenues required for the operations, capital-related costs and other expenses. California's publicly owned municipal utilities are regulated through their point discharge permits by the State Water Resources Control Board (SWRCB). These regulations require that all utilities sustain operating expenses (excluding depreciation) from rate-based revenues before the inclusion interest earnings and other miscellaneous revenues. Operating costs, unlike capital expenses, cannot be supported by bond or grant proceeds.

This analysis is illustrated in the flowchart provided in Figure 2-4. The flowchart illustrates the modeling process used to combine the annual revenues, expenditures and fund balances in a multi-year cash flow evaluation. As shown, each year should result in net cash available for projects or for the utility's reserves

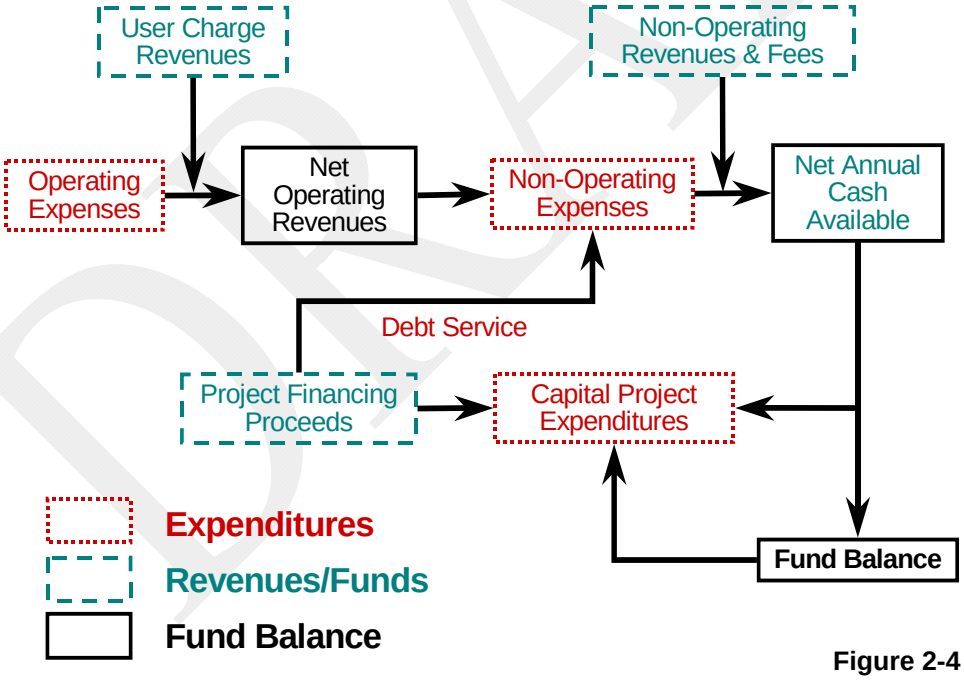

Figure 2-4
Cashflow Modeling Process

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These annual expenditures and current revenues are combined to develop an annualized cashflow representing the City's sources and uses of funds. O&M expenditures have increased steadily from $881,415 this year (FY 2008-09) to $1.6 million per year in five years (FY 2013-14). In addition, capital asset purchases of $445,000 are needed immediately, and project expenditures should be increased from the current $444,000 to $1.1 million per year to reduce the backlog of critical facility rehabilitation projects.

2.6 Recommended Rate-Based Revenue Adjustments

This section develops the annual rate-based revenue requirements needed to operate the utility on a sustainable financial basis.

We have developed three alternative financial plan proformas (tables). Each proforma projects the sources and applications of funds to identify the net revenues available for cash reserves, debt service coverage ratios, and annual changes in rates. All proformas use the same projected operating expenditures, and a five year $4.7 million CIP. However, they differ in the timing and level of rate increases. All proformas are based on the City's receipt of a $3.4 million State Revolving Fund (SRF) loan, which has lower interest rates and issuance costs than revenue bonds, and requires a low 1.10 coverage ratio. Moreover, with the Federal Stimulus Package infrastructure funds flowing through SRF programs nationwide, it is likely that SRF loans will become even more attractive in the next year.

An essential financial requirement for any utility is that net operating revenues are positive. In our analysis of sources and applications of funds to determine net operating revenues, we have excluded non-cash depreciation and a one-time operating expense of $400,000 for utility equipment and machinery. Based on these adjustments, a rate-based revenue increase of 45 percent is required effective July 1, 2009 for FY 2009-10.

The base case proforma, as shown in Table 2-5, does not require a rate increase in the year following the 45 percent adjustment, but subsequently requires additional rate increases of 8 percent in each fiscal years ending 2012, 2013 and 2014. Table 2-6 presents a proforma with more uniform rate increases: In the first two fiscal years ending in 2010 and 2011 we have used two 23 percent increases. The benefit of spreading out the 45 percent rate increase is the reduction in rate shock with a single rate increase, but disadvantage is that in neither year is positive net operating revenues achieved. Without positive net revenues, the sewer enterprise will not be able to receive a SRF loan or issue a revenue bond, so this alternative is not viable. Moreover, based on the cost of service equity findings developed in the following section, significant adjustments in the rate structure is required for compliance with Proposition 218 equity. In the following sections we identify the option of spreading out the increases to single-family parcels while maintaining adequate loan coverage ratios.

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The final proforma alternative is shown in Table 2-7. This non-viable alternative demonstrates the impact of continuing the rate increases of the past five years. As shown, net operating revenues are negative in all projected years and all cash reserves are depleted in 2013. These cash flows support neither operations nor capital requirements.

In conclusion, the City needs to increase utility charges by 69 percent over the next five years to continue reliable operations, comply with debt service covenants, fund future rehabilitation projects to maintain system integrity and provide for full regulatory compliance. Figure 2-5 shows the projected revenues, expenditures and reserves resulting from the increase in revenues for next five years.

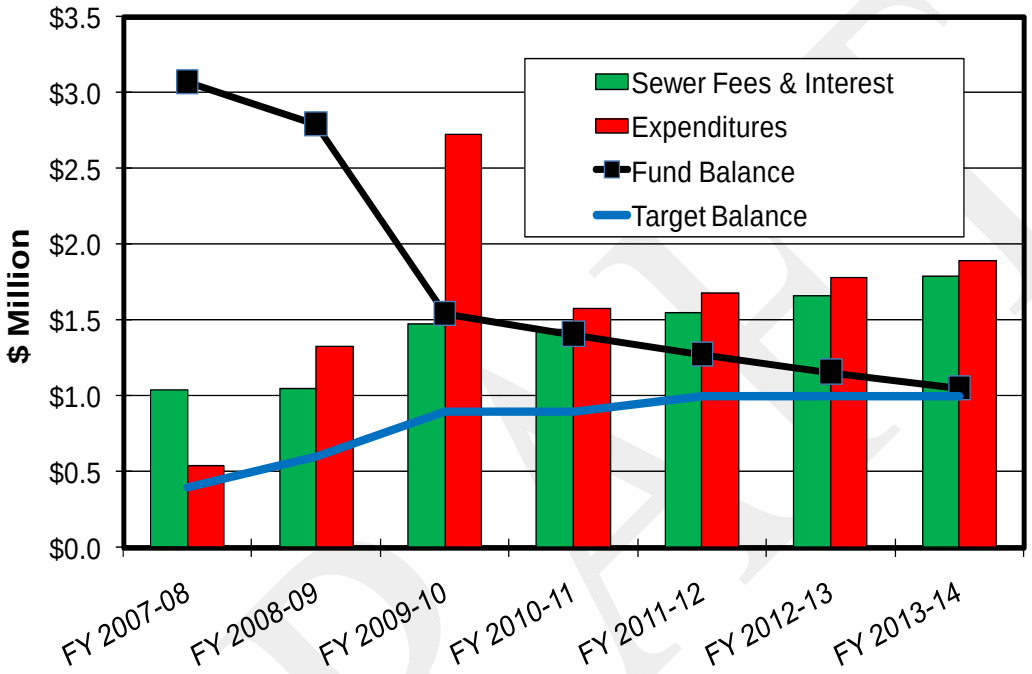

Figure 2-5
Projected Revenues & Expenditures

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Table 2-1

Historical and Budgeted Sewer Enterprise Fund 110 Revenues and Expenditures

Description	Historical (c)			Current Budget	Proposed Budget (f)
	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10
Operating Revenues					
Sewer Service Fees	$706,819	$755,545	$951,956	$958,444	
Miscellaneous Revenue	$150	$269	$67,885	$1,000	
Total Operating Revenues	$706,969	$755,814	$1,019,841	$959,444	
Sewer Utility Operating Expenses					
Salary and Benefits (a)	$350,323	$394,055	$370,916	$426,407	$954,000
Services Including Professional Svcs	$97,940	$90,348	$81,910	$252,903	$167,904
Repairs, Maintenance & Expenses (b)	$70,939	$186,599	$84,617	$123,105	$111,152
Total Operating Expenses	$519,202	$671,002	$537,443	$802,415	$1,233,056
Net Operating Revenue	187,767	84,812	482,398	157,029	
Non-Operating Revenue (Expense)					
Admin Charge - General Fund (d)	($79,000)	($79,000)	($79,000)	($79,000)	($79,000)
Interest on Investment	$82,305	$105,650	$97,227	$90,000	
Total Non-Op Revenues (Exp.)	3,305	26,650	18,227	11,000	
Adjusted Net Income (Loss)	191,072	111,462	500,625	168,029	
Existing Sewer Service Fees					
Single-family Residential Parcels ($/year-dwelling unit)		$200	$215	$215	
Comm., Duplex & Apt Dwelling Units ($/yr-dwelling unit)		$156	$167	$167	
Excess Comm. ($/Ccf of water use over 73.5 Ccf/year)		$1.89	$2.03	$2.03	

a. Salary and Benefits data for FY 2005-06, FY 2006-07 are from the Sewer Fund Budget for 2008-2010 document provided by City staff on September 17, 2008. Salaries and Benefit data for projected years FY 2008-09 and FY 2009-10 are as per the Sewer Fund documents for FY 2009 and for FY 2010 provided by City staff on January 30, 2008. Public Works salary allocated to the Sewer Utility equals 8.5 FTEs.

b. Expenses also include utilities for water, sewer, electricity and the telephone, but vehicles is transferred to capital.

c. FY 2007-08 historical values are from the draft CAFR for the Sewer enterprise dated 10/8/08.

d. Admin Charge include support from Administration, Personnel, Finance, City Council, Payroll, Accounts Payable, Project Accounting etc.

e. The proposed budget for FY 09-10 was modified by City Staff on 1/30/09. In the Proposed Budget for years starting FY 2010-11, the Machinery and Equipment charges will be $15,000 per year and vehicle expenditures will be $60,000 per year.

Table 2-2
Current and Projected O&M Costs

	Historical			Current	Proposed	Projected			
Description	**FY 2005-06**	**FY 2006-07**	**FY 2007-08**	**FY 2008-09**	**FY 2009-10**	**FY 2010-11**	**FY 2011-12**	**FY 2012-13**	**FY 2013-14**
Salary and Benefits	$350,323	$394,055	$370,916	$426,407	$954,000	$992,160	$1,031,846	$1,073,120	$1,116,045
Other Expenses	$70,939	$186,599	$84,617	$123,105	$111,152	$115,598	$120,221	$125,030	$130,032
Professional and Technical Services	$97,940	$90,348	$81,910	$252,903	$167,904	$174,620	$181,605	$188,869	$196,424
Admin Charge - General Fund	$79,000	$79,000	$79,000	$79,000	$79,000	$82,160	$85,446	$88,864	$92,419
Machinery, Eqpt & Vehicles (a)					$445,000	$20,000	$20,800	$21,632	$22,497
Total	$598,202	$750,002	$616,443	$881,415	$1,757,056	$1,384,538	$1,439,919	$1,497,516	$1,557,417

a. In FY 2009-10: One (1) Honda WT40 4x4-in Gas Powered Trash Pump, One (1) Multiquip 6x6-in MQ600TD80-TLRB Diesel Powered Trash Pump, Two (2) Baldor TS400T Tier 3 diesel powered towable 365KVA generators, flow monitoring equipment. In the years starting FY 2010-11, the additional Machinery, Equipment and vehicle expenditures will be $20,000 per year.

Table 2-3

Sewer Service Customer Loads, Unit Rate and Revenues

Use Code	User Code Description	No. of Billable Parcels (c)	Flat Fee per Parcel ($ per year, c)	No. of Living Units (a)	Flat Fee per Living Unit ($/DU, c)	Other Charged (CCF/Yr, b)	Rate per Other Charged ($/CCF, b)	FY 2008-09 Sewer Service Revenue
11	Single Family Residential	1,258		1,369	**$215**			$294,335
14	Single Family Attached	832		836	**$167**			$139,612
21	Multi-family Residential	676		1,960	**$167**			$327,320
41	Industrial	56	$167			31,466	$2.03	$73,228
51	Commercial	144	$167			47,718	$2.03	$120,915
61	Improved Property	7	$167			919	$2.03	$3,035
Total		**2,973**		**4,165**		**80,103**		**$958,444**

a. DU (Living unit) data is the best available information but is not reliable.

b. Commercial, Industrial and Institutional customers pay $2.03 per CCF for metered water use in excess of 73.5 CCF per year only. Excess water usage data shown herein for non-residential customers is from CY 2006 data.

c. The billable parcel and dwelling counts are from FY 2007/08. The FY 2007-08 unit rates billed on the FY 2008-09 County Assessor Rolls.

Table 2-4
Amended Capital Improvement Program with SRF Loan Funding

Project Description	Historical FY 2007-08	Current FY 2008-09	Proposed FY 2009-10	Projected FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Rolling Stock							
Sewer Flusher Truck & Vehicles	$234,285	$210,000					
EPA Administrative Order (b)							
Total Maximum Daily Load (TMDL) Planning and Engineering		$45,000					
Wet Weather Conveyance Support (SMCSD)		$150,000					
EPA Order Response		$100,000					
Prioritized Projects for Local Collection System: $7.6 million (c)							
1a: Gate 5 Road			$900,000				
1b: Spinnaker & Anchor PS			$565,000				
1c: Prospect Avenue			$160,000				
2a: Bridgeway Waterfront			$690,000				
2b: Alexander Ave/ Bridgeway			$985,000				
3a: Hurricane Gulch			$975,000				
Projects Deferred Past FY 2013-14							
3b: Toyon Lane to Woodward			$570,000				
3c and 3d: 517 Nevada, MLK, Bridgeway No.			$940,000				
3e and 3f: Napa, Bee Park, Spencer Ct.			$1,520,000				
Future: Whiskey Springs PS			$335,000				
Identified Project Costs (current 2008 dollars)	$234,285	$505,000	$7,640,000	$0	$0	$0	$0
Project Backlog	$234,285	$295,000	$6,995,000	$6,055,000	$5,115,000	$4,175,000	$3,235,000
Projected Project Expenditure Rate							
Project Spending/Encumb (2008 dollars)	Escalation (%/Yr)	$444,285	$940,000	$940,000	$940,000	$940,000	$940,000
Expenditures in then-current costs	3%	$444,285	$968,200	$997,246	$1,027,163	$1,057,978	$1,089,718
Projects Expenditures							
Cash-based Pay as you go project expenditures (20% Min)		**$444,285**	**$968,200**	**$188,000**	**$188,000**	**$188,000**	**$188,000**
Projects funded from SRF Loan Proceeds				$809,246	$839,163	$869,978	$901,718
Total Project Expenditures		$444,285	$968,200	$997,246	$1,027,163	$1,057,978	$1,089,718
Construction Fund Using SRF Loan							
Beginning Fund Balance				$0	$0	$0	$0
State Revolving Fund (SRF) Loan Proceeds				**$809,246**	**$839,163**	**$869,978**	**$901,718**
Less Projects funded from Construction Fund Bond Proceeds				-$809,246	-$839,163	-$869,978	-$901,718
Interest Earnings on Unspent Balance				$0	$0	$0	$0
Ending Fund Balance				$0	$0	$0	$0
SRF Debt Service (starting one year after bond proceeds received)					**$46,473**	**$94,665**	**$144,626**

a. Source: City of Sausalito Sewer Fund Budget 2007, Capital Improvement Projects Pg 122
b. Source: Additional Sewer Fund Capital Budget 2008-2010, City of Sausalito.
c Source: Priority Sewer Project Estimate of Probable Conceptual Costs received 12/10/08
d. The anticipated future rehabilitation project cost is based on a portion of the annual sewer system depreciation in replacement dollars.
e. One (1) Honda WT40 4x4-in Gas Powered Trash Pump, One (1) Multiquip 6x6-in MQ600TD80-TLRB Diesel Powered Trash Pump, Two (2) Baldor TS400T Tier 3 diesel powered towable 365KVA generators, flow monitoring equipment. In future years the expenditures and transfers for future rolling stock funding are $20,000 per year. plus an additional $10,000 for other assets.

Table 2-5
Projected Rate-based Revenue Requirements with State Revolving Loan

Description	Historical FY 2007-08	Current FY 2008-09	Proposed FY 2009-10	Projected FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Increases to Sewer Service Charges			**45%**	**0%**	**8%**	**8%**	**8%**
Operating Revenue (Expense)							
Sewer Service Charges	$951,956	$958,444	$1,389,744	$1,389,744	$1,500,923	$1,620,997	$1,750,677
Miscellaneous Revenue	$67,885	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Less Utility Operating Expenses	(616,443)	(881,415)	(1,757,056)	(1,384,538)	(1,439,919)	(1,497,516)	(1,557,417)
Net Operating Revenue	403,398	78,029	(366,312)	6,206	62,004	124,481	194,260
Net Operating Revenue Excd Extraordinary Rolling Stock Purchases			78,688				
Non-Operating Revenue (Expense)							
Interest Earnings on Investment (a)	97,227	90,000	83,850	46,330	42,266	38,360	34,765
Debt Service on Construction Fund Bonds				0	(46,473)	(94,665)	(144,626)
Less Project Expenditures funded from Cash		(444,285)	(968,200)	(188,000)	(188,000)	(188,000)	(188,000)
Net Increase (Decrease) in Cash	$500,625	($276,256)	($1,250,662)	($135,464)	($130,203)	($119,823)	($103,600)
Beginning Cash (b)		$3,071,256	$2,795,000	$1,544,338	$1,408,875	$1,278,672	$1,158,849
Ending Cash	$3,071,256	$2,795,000	$1,544,338	$1,408,875	$1,278,672	$1,158,849	$1,055,249
Target Reserves (8 Months O&M)	$400,000	$600,000	$900,000	$900,000	$1,000,000	$1,000,000	$1,000,000
SRF Loan Coverage Requirement (1.10 minimum)					2.24	1.72	1.58
Projected Sewer Service Fees Under Existing Rate Structure		$215	$312	$312	$337	$364	$393

a. Interest earnings for projected years is the prior year ending cash times the interest earnings rate.
b. The FY 2007-08 CAFR ending balance for the sewer utility was $2.8 million.

Table 2-6
Projected Rate-based Revenue Requirements with SRF Loan & Uniform Rate Increases

Description	Historical FY 2007-08	Current FY 2008-09	Proposed FY 2009-10	Projected FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Increases to Sewer Service Charges			23%	23%	8%	8%	8%
Operating Revenue (Expense)							
Sewer Service Charges	$951,956	$958,444	$1,178,886	$1,450,030	$1,566,032	$1,691,315	$1,826,620
Miscellaneous Revenue	$67,885	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Less Utility Expenses	(616,443)	(881,415)	(1,757,056)	(1,384,538)	(1,439,919)	(1,497,516)	(1,557,417)
Net Operating Revenue	403,398	78,029	(577,169)	66,492	127,113	194,799	270,204
Net Operating Revenue Excd Extraordinary Rolling Stock Purchases			(132,169)				
Non-Operating Revenue (Expense)							
Interest Earnings on Investment (a)	97,227	90,000	83,850	40,004	37,559	35,465	33,893
Debt Service on Construction Fund Bonds				0	(46,473)	(94,665)	(144,626)
Less Project Expenditures funded from Cash		(444,285)	(968,200)	(188,000)	(188,000)	(188,000)	(188,000)
Net Increase (Decrease) in Cash	$500,625	($276,256)	($1,461,519)	($81,503)	($69,801)	($52,400)	($28,529)
Beginning Cash (b)		$3,071,256	$2,795,000	$1,333,481	$1,251,977	$1,182,177	$1,129,776
Ending Cash	$3,071,256	$2,795,000	$1,333,481	$1,251,977	$1,182,177	$1,129,776	$1,101,248
Target Reserves (8 Months O&M)	$400,000	$600,000	$900,000	$900,000	$1,000,000	$1,000,000	$1,000,000
SRF Loan Coverage Requirement (1.10 minimum)					3.54	2.43	2.10
Projected Sewer Service Fees Under Existing Rate Structure		$215	$264	$325	$351	$379	$409

a. Interest earnings for projected years is the prior year ending cash times the interest earnings rate.
b. The FY 2007-08 CAFR ending balance for the sewer utility was $2.8 million.

Table 2-7
Projected Rate-based Revenue Requirements with SRF Loan & Historical Rate Increases

Description	Historical FY 2007-08	Current FY 2008-09	Proposed FY 2009-10	Projected FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Increases to Sewer Service Charges (c)			9%	9%	9%	9%	9%
Operating Revenue (Expense)							
Sewer Service Charges	$951,956	$958,444	$1,044,704	$1,138,727	$1,241,213	$1,352,922	$1,474,685
Miscellaneous Revenue	$67,885	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Less Utility Expenses	(616,443)	(881,415)	(1,757,056)	(1,384,538)	(1,439,919)	(1,497,516)	(1,557,417)
Net Operating Revenue	403,398	78,029	(711,351)	(244,810)	(197,706)	(143,594)	(81,732)
Non-Operating Revenue (Expense)							
Interest Earnings on Investment (a)	97,227	90,000	83,850	35,979	24,074	11,831	(602)
Debt Service on Construction Fund Bonds				0	(46,473)	(94,665)	(144,626)
Less Project Expenditures funded from Cash		(444,285)	(968,200)	(188,000)	(188,000)	(188,000)	(188,000)
Net Increase (Decrease) in Cash	$500,625	($276,256)	($1,595,701)	($396,831)	($408,106)	($414,428)	($414,959)
Beginning Cash (b)		$3,071,256	$2,795,000	$1,199,299	$802,467	$394,362	($20,066)
Ending Cash	$3,071,256	$2,795,000	$1,199,299	$802,467	$394,362	($20,066)	($435,025)
Target Reserves (8 Months O&M)	$400,000	$600,000	$900,000	$900,000	$1,000,000	$1,000,000	$1,000,000
SRF Loan Coverage Requirement (1.10 minimum)					(3.74)	(1.39)	(0.57)
Projected Sewer Service Fees Under Existing Rate Structure		$215	$234	$255	$278	$303	$330

a. Interest earnings for projected years is the prior year ending cash times the interest earnings rate.
b. The FY 2007-08 CAFR ending balance for the sewer utility was $2.8 million.
c. The Single-family user class rate in FY 2003-04 was $152 per year, climbing to $215 in FY 2007-08, which equals a 9 percent average increase per year.

Chapter 3
Costs of Service and Customer Loads

This chapter presents customer discharge characteristics, develops equitable costs of service and identifies the equity of the customer bills. The purpose of a cost of service analysis is to determine the wastewater system costs incurred to serve each of the customer classes in compliance with state law. To recover the costs of providing the wastewater services based on cost of service principles, the utility costs are first allocated into expenditure categories. Next, the customer burdens on the system are identified, so that their wastewater loading characteristics can be cross-referenced with the expenditure categories. This results in an allocation of the costs to each customer class. These equitably based allocations are compared with the revenues derived from each user to validate the fee structure and to determine any area for improvement.

There are three utility cost categories used in this analysis. They are:

- Customer Service Accounts
- Sewer Laterals
- Maximum Annual Wastewater Flows (Capacity Requirements)

Both the customer characteristics and the wastewater utility costs are characterized into these two groups.

3.1 Water Demands and Sewage Strengths Summary

Table 3-1 provides the metered water usage for each customer class in the City. The table also provided the sewage flows allocated to each customer class. The City parcels are cross-referenced to SMCSD records using the Assessor's Parcel Number (APN) between the account records, as well as a cross-referencing of the customer account name of record. These capacities are based on the maximum historical, annual flows which represent the level of capacity that the City must reserve for handling the potential discharges from each customer class. This table shows the total wastewater discharge among the different user classes based on their water use and water return to sewer ratios. The water demands and water return to sewer ratios are combined to estimate the sewage loads coming from each customer class. As shown, 70 percent of the flow is from residential customers and the remaining 30 percent flow is from non-residential customers. Similarly, the inflow and infiltration is divided among the residential and non-residential user classes.

Table 3-2 tabulates the number of land parcels and the sewer laterals among the residential and non-residential customers. As shown, sewer laterals are estimated at one for every two single family attached and commercial class accounts. There are only 207 non-residential parcels in the City, which is only 7 percent of the total accounts. Similarly, only 5 percent of the sewer laterals can be assigned to the non-residential customer class.

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Table 3-3 calculates the sewer fixed asset replacement costs based on the sewer fixed asset inventory shown in Appendix 1. Based on the total asset original cost and annual depreciation costs, the replacement value for sewer fixed assets in year 2008 dollars is $17.1 million.

3.2 Utility Expense Categories

In this section the utility expenditure categories are defined and the cost associated with each category is estimated. Table 3-4 allocates the FY 2008-09 expenditures for the wastewater utility to different expenditure categories. As shown, the expenditures can be divided among accounts, sewer lateral and the maximum sewage discharge, with 5 percent of the cost allocated to the accounts, 41 percent to the sewer lateral and the remaining 54 percent cost is allocated to the maximum discharge.

3.3 Costs of Service

The results of the mass balance are used in the calculations in this section to develop billing equity findings. Table 3-4 provides a summary of the cost of service loads for each of the user classifications, and the basic billing parameters for customer billing. As shown, 54 percent of the cost of service load is from the residential single family customers. The single-family attached class has 16 percent of the load, while the multi-family class has 27 percent of the load. The non-residential class causes the remaining 19 percent of the City's wastewater utility burden.

California Article XIII (Proposition 218) requires that sewer utility rates be fair and equitable, and that the rate-based-revenues from each customer class be proportional to the City's cost of service to that class.

Table 3-5 is the comparison of current billing versus the cost of service billings. The single-family dwelling parcel charges are currently 25 percent lower than is equitable, in comparison with the other classes. To achieve cost of service equity, the single-family parcel charges must be increased by 25 percent, on top of the revenue requirement-based changes. In contrast, multi-family fees must be reduced by 20 percent and non-residential fees by 9 percent for equity. Note that with the increases in rate-based revenues developed in Chapter 2, the combined result of the changes is an overall increase in unit rates.

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Table 3-1
Water Use Discharge to Sewer Mass Balance

User Class	Water Use (GPD, a)	Water Use Return to Sewer Ratio	Est. Sewer Discharge (GPD)	Sewage Discharge per SFD	Dwelling Units	Discharges to Sewer Ccf/Yr	Discharges to Sewer MGD	Discharges to Sewer Share
Residential	**Per Dwelling Unit (gpd/DU)**		**Per Dwelling Unit (gpd/DU)**					
Single Family	199	70%	139	100%	1,369	93,141	0.19	**29%**
Single Family Attached	119	90%	107	77%	836	43,595	0.09	**14%**
Multi-family Units	103	90%	93	67%	1,960	88,759	0.18	**28%**
Total Residential			111	80%	4,165	225,496	0.46	**70%**
Non-residential	**Total Class (gpd)**		**Total Class**		**Accounts**			
Total Non-residential	216,045	90%	194,441		207	94,881	0.19	**30%**
Subtotal Flows						**320,376**	**0.66**	**100%**

Inflow and Infiltration (I/I)	**Flow into Lateral Connections**		**Flow into Pipe Joints (based on sewage flows)**				
Share of Total I/I (MGD)	10%		15%	75%			
User Class	**No. of Laterals**	**Share of I/I (MGD)**	**Hillsides**	**Bayside**	**I/I (MGD)**	**Total (MGD)**	
Single Family	51%	0.014	41%	29%	0.076	0.089	33%
Single Family Attached	17%	0.005	19%	14%	0.035	0.040	15%
Multi-family Units	27%	0.007	39%	28%	0.072	0.079	29%
Non-residential	5%	0.001	0%	30%	0.060	0.061	23%
Subtotal I/I Flows	100%	0.027	100%	100%	0.243	**0.27**	100%
			Grand Total Sewage Flow at WWTP			**0.93**	

a. Source: Water Usage Data for Dist 7 provided by MMWD (Residential and Non-Residential)
GPD: Gallons per day. MGD: million gallons per day. PPH: Persons per household. Ccf/Yr: Hundred cubic feet per year
Refer to Appendix 3 for calculations of inflow and infiltration.

Table 3-2

FY 2008-09 Customer Accounts Billing Characteristics

User Class	Dwelling Units (DU)	Water Use (Ccf/yr)	Land Parcels		Sewer Laterals	
			Number	Share	Number	Share
Residential						
Single Family Residential	1,369		1,258	**42%**	1,258	51%
Single Family Attached	836		832	**28%**	416	17%
Multi-family Residential	1,960		676	**23%**	676	27%
Residential Subtotal	4,165	na	2,766	**93%**	2,350	95%
Non-residential						
Industrial			56	1.9%	56	2.3%
Commercial			144	4.8%	72	2.9%
Improved Property			7	0.2%	7	0.3%
Non Residential Subtotal		105,423	207	**7.0%**	135	5.4%
Grand Total			**2,973**	**100%**	**2,485**	100%

a. Sewer laterals are estimated at two per single-family attached and commercial accounts.

Table 3-3
Sewer System Fixed Assets

	FY 2007-08 Book Value			2008 Replacement Cost		
Description	**Original Cost**	**Annual Depreciation**	**OCLD**	**Cost**	**Annual Depreciation**	**RCNLD**
Rolling Stock	$332,128	$23,699	$77,568	$484,534	$33,974	$109,441
Sewer Manholes	$1,877,706	$28,888	$890,491	$12,943,334	$199,128	$3,615,764
Sewer Main Pipelines	$505,445	$11,620	$103,320	$3,607,125	$77,816	$456,743
Pump Stations	$6,620,277	$101,850	$3,358,962	$33,846,936	$520,722	$12,842,720
Grand Total Value	$9,335,556	$166,057	$4,430,341	$50,881,928	$831,641	$17,024,668

Refer to Appendix 1 for details.

Table 3-4
Cost of Service Allocation, Customer Loads & Costs

Description	Allocation			Utility L/T Cost of Service
	Account	Sewer Lateral	Maximum Discharge	
Cost Allocations				
O&M (FY 08-09 Budget)	10%	60%	30%	$881,415
Cost of Capital (a)		20%	80%	$831,641
Total Allocation	5%	41%	54%	
Total Allocation	$88,142	$695,177	$929,737	$1,713,056
Customer Classes				**Weighted Shares**
Residential				
Single Family Residential	42%	51%	29%	**38%**
Single Family Attached	28%	17%	14%	**16%**
Multi-family Residential (a)	23%	27%	28%	**27%**
Residential Subtotal	93%	95%	70%	**81%**
Non-residential				
Industrial	1.9%	2.3%		
Commercial	4.8%	2.9%		
Improved Property	0.2%	0.3%		
Non-residential Subtotal	7%	5%	30%	**19%**
Grand Total	100%	100%	100%	**100%**

a. The cost of capital is equivalent to annual depreciation in current dollars.

Table 3-5
Current Billing versus Equitable Charges

Description	FY 2008-09 Charges		Cost of Service		Change in
	Bills	Share	Bills	Allocation	Unit Rates
Residential					
Single Family Residential	$294,335	31%	$368,997	38%	**25%**
Single Family Attached	$139,612	15%	$149,696	16%	**7%**
Multi-family Residential	$327,320	34%	$261,134	27%	**-20%**
Non-residential	$197,177	21%	$178,618	19%	**-9%**
Grand Total	$958,444	100%	$958,444	100%	

COS: Cost of Service

Chapter 4
Rate Alternatives and Conclusions

The purpose of this chapter is to evaluate alternative rate structure and recommend updated fees. The update has been designed to ensure the recovery of adequate rate-based revenues in a fair and equitable manner consistent with City policies.

Wastewater systems are designed to serve differing loads from the various users, such as, low steady flows versus intermittent heavy discharges. To provide rate equity, it is necessary to allocate the costs of mandating these loads in proportion to their burdens on the system. This is accomplished by determining the cost of service for each loading parameter, and multiplying these values by each customer classes' wastewater load, to yield user charges based on the cost of providing service. While much of this calculation was completed in Chapter 3, in this section the unit rates are provided in a rate format useful in actually billing the sewer system customers.

4.1 Cost of Service Based Rates

The current billing method for wastewater services is structured around the concept of a unit charge per dwelling unit (DU). This applies to all residential accounts, whether single family or multi-family. Non-residential customers are charged based on base service charge of $167 per year, plus a variable component using water demands as a proxy for the quantity of wastewater flow. The use of residential dwelling units for sewer service charges is both popular and equitable among nationwide wastewater service providers. Table 4-1 summarizes cost of service based rates. This table shows the unit rates for residential and non-residential customers for FY 2008-09, based on the cost of services finding in previous chapter. It shows that for single-family parcels, an equitable charge of $270 replaces the current $215 per year actual bill.

The following section describes an alternative non-residential fee structures for the City's consideration, in an attempt to increase billing stability, administrative convenience and greater equity.

4.2 Non-Residential Rate Alternatives

Table 4-2 provides rate structure alternatives for the non-residential customer class. There are four different alternatives for City's consideration presented in this table. These alternatives include multi-year water use averaging, different fixed customer charges and different excess use cut offs. All alternatives are based on a combination of fixed capacity-based costs and variable water demand-based rates. The water demand considered in current rate structure is based on the prior year-round water usage. In our evaluation, Alternative 1 is based on the water usage in CY 2007, while Alternative 2 and Alternative 3 consider the average water usage for the last two years. Alterative 4 is capacity-based rate structure derived from the historical maximum usage. The advantage of this alternative is that it incorporates maximum water demand for every account, which better represents the maximum sewage

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discharge as a proxy for the readiness to serve capacity allocated to each account. This attribute is important due to the wide annual variation in sewage discharged.

We propose that the future customer charges be modified to reflect the utility system capacity allocated to each of the 207 non-residential customers, based on their historical maximum water demands from the most recent five years, rather than the current allocation based on the "excess" portion of the prior year's actual water use. Appendix 4 provides sewage strength information useful in categorizing the discharges and customer classifications of the commercial accounts.

Table 4-2 also shows the calculated bills for commercial customers under the current rates and under each alternative rate structures. Note that these changes are based on the current year revenues, and do not include any increase to City revenues with the future year increases in rate-based revenues. In other words, there will be increases in both residential and non-residential bills, even without a change in the rate structure.

4.3 Recommended Rates

Based on the evaluation of described above, it is recommended that the City adopt the updated sewer service charges and Alternative 4 non-residential rate structure shown in Table 4-2. The existing rate structure should be replaced with the cost of service rates for residential parcels. In order to encourage non-residential customers to reduce their loads on the collection system, we recommend that only the most recent five years of water demands be used to calculate the maximum discharges. In this way, customers reducing their discharges will see reductions in charges.

Table 4-3 uses the cost of service based rates and alternative non-residential rates, and the rate-based revenue requirements developed in chapter 2, to identify the projected unit rates. As shown, single-family dwelling rate are projected to increase 82 percent from the current $215 per year to $391 in the next year and to $492 by FY 2013-14.

However, we recommend an alternative that equitably distributes the single-family rate increase over two years. As shown in Table 4-3, the $215 bill will be increased to $360 on July 1, 2009 and to $422 on July 1, 2010 rather than 2011. In this way, total revenues collected from this single-family dwelling class are the same in both alternatives over the phase-in period while the increase does not come solely in one year. The non-residential fixed unit rate will increase 56 percent from current $167 per year to $242 per year in the next year, while the variable rate will decrease 4 percent from current $2.03 per Ccf to $1.94 Ccf in the next year. Overall, non-residential bills will decrease by 9 percent for cost of service equity but increase 45 percent for revenue requirements.

Table 4-4 provides a comparison survey of current and projected single-family dwelling charges with other local communities. As shown, the City's rates remain significantly higher than other utilities, in part due to the lack of economy of scale, and in part due to the progressive capital expenditure plan for facility replacement and renewal.

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Table 4-1
FY 2008-09 COS-based Rates with Existing Rate Structure

Description	Total Percent	Total Cost	Customer Units	COS-based Unit Rates	Excess Water Use (CCF/Yr, a)	Fee
Residential			**Dwelling Units**	**$/DU -Year**		
Single Family Residential	38%	$368,997	1,369	$270		
Single Family Attached	16%	$149,696	836	$179		
Multi-family Residential	27%	$261,134	1,960	$133		
			Parcels	**$/Parcel-Year**		**$/Ccf**
Non-residential	19%	$178,618	207	$133	76,808	$1.97
Grand Total	100%	$958,444				

a. The excess water use is based on the average multi-family dwelling unit water use of 103 Hcf/yr.

Table 4-2
Non-Residential Billable Wastewater Rate Alternatives

Description	Actual FY 09 Bills	Equitable Rate Alternatives (FY 2008-09 Revenues)				
		Existing Structure	Alt 1	Alt 2	Alt. 3	Proposed Alt. 4
Water Used for Billing Calculation	**CY 2005**	**CY 2007**	**CY 2007**	**Last 2 Yrs**	**Last 2 Yrs**	**Allocated Capacity**
Water Use for Billing (Hcf/Yr)						
Total Estimated Use (average per year)	88,037	92,441	92,441	92,160	92,160	92,441
Billable (Excess) Water Use	78,907	76,808	67,374	76,336	92,160	107,536
Number of Bills Above Minimum Use	129	108	87	109	203	na
Account Charge ($ per Parcel-Yr)	$167	$133	$270	$167	$30	$167
Non-residential Variable Water-usage Charge						
Charge ($/Hcf-Yr Water Use)	$2.03	$1.97	$1.82	$1.89	$1.87	$1.34
Unbilled Water Use (Hcf/year-acct)	73.5	103	199	103	0	0
Commercial Account Billing Characteristics						
Average Bill	$941	$863	$863	$863	$863	$863
Typical (Median) Bill	$343	$176	$270	$197	$252	$397
Maximum Bill	$16,881	$15,741	$14,563	$15,308	$15,239	$11,169
Revenues (FY 2008-09)	$194,749	$178,618	$178,618	$178,618	$178,618	$178,618
No. of Non-residential Accounts	207	207	207	207	207	207

Non-residential sewer billing alternatives include multi-year water use averaging, different fixed customer charges and different excess use cutoffs. The account charge and unbilled (minimum use) charge should correspond to average water use of residential accounts.

Table 4-3
Proposed Rates

Description	No. of Accounts	Current FY 2008-09	Equitable FY 2008-09	Projected FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Change in Rate-based Revenues				45%	0%	8%	8%	8%
Rates for Residential Dischargers ($/year-dwelling unit)								
Single-family Dwelling	1,258	**$215**	$270	**$391**	$391	$422	$456	$492
		Change:	**25%**	**82%**		same as above		
		Change:	$5 per Month	$15 per Month				
Single Family Attached	832	**$167**	$179	**$260**	$260	$280	$303	$327
	Dwellings	**Change:**	**7%**	**55%**		same as above		
Multi-family Residential	1,960	**$167**	$133	**$193**	$193	$209	$225	$243
		Change:	**-20%**	**16%**		same as above		
Rates for Non-Residential Discharger (Allocated Capacity based on Historic Maximum Water Use)								
Commercial ($/yr-parcel)	207	**$167**	$133	**$242**	$242	$262	$282	$305
			-20%	**56%**				
Unit Rate ($/Ccf, b)		**$2.03**	$1.97	**$1.94**	$1.94	$2.10	$2.27	$2.45
			-3%	**-4%**				
Alternative Single-family Dwelling Rates to Equitably Distribute Increases over Two Years ($/year-dwelling unit)								
Single-family Dwelling	1,258	**$215**		**$360**	$422	$422	$456	$492
		Change:		**68%**	**17%**	0%		
		Change:		$12 per Month	$5 per Month	same as above		

SMCSD treatment charges are in addition to the City rates for sewage collection shown here. All charges are billed on the County assessor's annual tax rolls. Projected FY 2009-10 unit rates are based on the cost of service equity findings. The following year rate increases are set to rate-based revenue requirements.

a. The excess use charge to commercial accounts is based on two year's of average water consumption with a credit of 103 Hcf/year.

b. The Unit Rate ($/Ccf) currently is based on the excess use, but would be replaced under the proposed rate

Table 4-4
Comparison of Local Sewer Service Charges

Agency (Regional Treatment Authority)	Effective Date	Equivalent Monthly Charge for Single-family Dwellings			Equivalent Annual Charge for Single-family Dwellings		
		Treatment	Conveyance	Total	Treatment	Conveyance	Total
Tiberon/Belvedere	Unknown			$95			$1,139
2010 Sausalito (SMCSD)	Jul-10	**$50**	**$33**	**$83**	**$600**	**$391**	**$991**
Marin City (SMCSD)	Jul-10			$69			$827
Current Sausalito (SMCSD)	Aug-08	**$32**	**$18**	**$50**	**$388**	**$215**	**$603**
City of Larkspur	Jul-09			$46			$552
Las Gallinas Valley Sanitary District	Jul-10			$47			$563
Ross Valley (Sanitary District No. 1 of Marin County (CMSA, a)	Jul-08			$40			$480
San Rafael SD (CMSA)	Jul-07			$40			$474
Marin City (SMCSD)	Jul-08			$37			$439
Marin SD #2 (Corte Madera, CMSA)	Jul-08			$36			$436
Mill Valley (SASM)	Aug-07			$25			$297

a. The District receives ~30 percent of its revenues from property tax appropriations.
SMCSD is projected to be increasing its treatment rates from $388 to $600 per single family dwelling in 2010.

Appendices

Appendix 1
Fixed Assets and Rolling Stock Inventory

Description	Year in Service	Service Life (a)	Years in Service	Updated Service Life	Original Cost (OC)	Annual Depreciation	OCLD	ENRCCI	Replacement Cost (RC) RC New	Replacement Cost (RC) Depreciation	RCNLD
Rolling Stock	2008										
International Water Tanker	1991	30	17	30	$40,076	$1,336	$17,366	6,222	$63,463	$2,115	$27,500
GMC Sewer Rodder Truck	1993	15	15	17	$21,395	$1,297	$1,945	6,478	$32,542	$1,972	$2,958
John Deere 310D Backhoe	1996	15	12	15	$33,613	$2,241	$6,723	6,630	$49,952	$3,330	$9,990
GMC 2500 Pickup	1993	10	15	17	$21,395	$1,297	$1,945	6,478	$32,542	$1,972	$2,958
International Dump Truck	1999	10	9	10	$32,171	$3,217	$3,217	6,824	$46,451	$4,645	$4,645
Ford Pickup F250 Camera Truck	1999	10	9	10	$11,304	$1,130	$1,130	6,824	$16,321	$1,632	$1,632
Ford F5000 Sewer Flusher Truck	1994	15	14	15	$95,000	$6,169	$8,636	6,530	$143,344	$9,308	$13,031
Push/Pull Color Sewer Camera	1999	15	9	15	$17,000	$1,133	$6,800	6,824	$24,546	$1,636	$9,818
Self Propelled Color Sewer Camera	2002	10	6	10	$35,000	$3,500	$14,000	7,661	$45,016	$4,502	$18,006
Air Compressor	1997	20	11	20	$850	$43	$383	6,731	$1,244	$62	$560
Tri-Pod	2006	15	2	15	$2,800	$187	$2,427	9,109	$3,029	$202	$2,625
Air Ventilator	2000	20	8	20	$250	$13	$150	7,448	$331	$17	$198
Gas Alert (3)	2003	20	5	20	$4,500	$225	$3,375	7,795	$5,688	$284	$4,266
Digital Color Camera	2005	2	3	3	$100	$30	$9	8,462	$116	$35	$11
Electronic Pipe Locators (2)	2003	40	5	40	$5,000	$125	$4,375	7,795	$6,320	$158	$5,530
Radio Detection Pipe Locator	2007	40	1	40	$3,000	$75	$2,925	9,132	$3,237	$81	$3,156
Metal Detector	2007	20	1	20	$350	$18	$333	9,132	$378	$19	$359
Color Training TV	2005	5	3	5	$575	$115	$230	8,462	$670	$134	$268
Computer System	2004	5	4	5	$7,500	$1,500	$1,500	8,161	$9,055	$1,811	$1,811
Videotape Capture	2005	5	3	5	$250	$50	$100	8,462	$291	$58	$116
Rolling Stock Value	1997		11	14	$332,128	$23,699	$77,568	9,853	$484,534	$33,974	$109,441
Sewer Manholes by Year of Service (Number Built)	2008	65									
195	1950	65	58	65	$374,400	$5,760	$40,320	626	$5,891,841	$90,644	$634,506
199	1965	65	43	65	$497,500	$7,654	$168,385	1,192	$4,112,058	$63,262	$1,391,773
96	1970	65	38	65	$288,000	$4,431	$119,631	1,598	$1,775,760	$27,319	$737,623
49	1980	65	28	65	$210,492	$3,238	$119,819	4,388	$472,648	$7,272	$269,046
11	1981	65	27	65	$34,687	$534	$20,279	4,592	$74,427	$1,145	$43,511
1	1983	65	25	65	$2,450	$38	$1,508	5,123	$4,712	$72	$2,900
6	1986	65	22	65	$25,569	$393	$16,915	5,508	$45,739	$704	$30,258
11	1989	65	19	65	$44,846	$690	$31,737	5,799	$76,197	$1,172	$53,924
7	1998	65	10	65	$115,107	$1,771	$97,398	6,743	$168,197	$2,588	$142,320
7	2004	65	4	65	$113,181	$1,741	$106,216	8,161	$136,645	$2,102	$128,236
5	2006	65	2	65	$35,850	$552	$34,747	9,109	$38,778	$597	$37,585
12	2007	65	1	65	$135,624	$2,087	$133,537	9,132	$146,332	$2,251	$144,081
Manhole Value	1974		34	65	$1,877,706	$28,888	$890,491	9,853	$12,943,334	$199,128	$3,615,764
Pump Station	2008	30									
Anchor Pump Station	1965	30	43	47	$75,000	$1,586	$6,818	1,192	$619,908	$13,106	$56,355
Whiskey Springs Pump Station	1970	30	38	42	$200,000	$4,785	$18,182	1,598	$1,233,166	$29,502	$112,106
Gate 5 Pump Station	1960	30	48	53	$165,000	$3,125	$15,000	1,012	$1,607,097	$30,437	$146,100
Gate 5 Pump Station (2)	1980	30	28	31	$65,445	$2,125	$63,320	4,388	$146,953	$4,771	$142,182
Pump Station Value	1973		35	43	$505,445	$11,620	$103,320	9,853	$3,607,125	$77,816	$456,743
Pipeline by Yr of Svc (Length (ft))	2008	65									
25,407	1950	65	58	65	$371,768	$5,720	$40,037	626	$5,850,422	$90,006	$630,045
42,593	1965	65	43	65	$1,433,978	$22,061	$485,346	1,192	$11,852,463	$182,346	$4,011,603
21,361	1970	65	38	65	$1,068,036	$16,431	$443,646	1,598	$6,585,331	$101,313	$2,735,445
19,868	1975	65	33	65	$1,986,759	$30,566	$978,097	2,807	$6,973,828	$107,290	$3,433,269
1,499	1984	65	24	65	$91,122	$1,402	$57,477	5,049	$177,822	$2,736	$112,165
76	1985	65	23	65	$14,345	$221	$9,269	5,055	$27,961	$430	$18,067
1,319	1988	65	20	65	$125,529	$1,931	$86,905	5,734	$215,702	$3,318	$149,332
1,320	1990	65	18	65	$87,447	$1,345	$63,231	6,056	$142,275	$2,189	$102,876
1,510	1991	65	17	65	$129,171	$1,987	$95,388	6,222	$204,552	$3,147	$151,054
1,056	1992	65	16	65	$46,349	$713	$34,940	6,295	$72,546	$1,116	$54,688
7,230	1993	65	15	65	$722,435	$11,114	$555,719	6,478	$1,098,819	$16,905	$845,246
590	1994	65	14	65	$16,196	$249	$12,708	6,530	$24,438	$376	$19,174
912	1995	65	13	65	$32,404	$499	$25,923	6,558	$48,685	$749	$38,948
1,296	1998	65	10	65	$49,424	$760	$41,820	6,743	$72,219	$1,111	$61,109
449	2001	65	7	65	$59,246	$911	$52,866	7,422	$78,647	$1,210	$70,177
120	2002	65	6	65	$20,000	$308	$18,154	7,661	$25,723	$396	$23,349
835	2006	65	2	65	$194,931	$2,999	$188,933	9,109	$210,852	$3,244	$204,365
800	2007	65	1	65	$171,137	$2,633	$168,504	9,132	$184,649	$2,841	$181,808
Pipeline Value	1976		32	65	$6,620,277	$101,850	$3,358,962	9,853	$33,846,936	$520,722	$12,842,720
Summary	**Average**		**Average**								
Rolling Stock	1997		11	14	$332,128	$23,699	$77,568		$484,534	$33,974	$109,441
Sewer Manholes	1974		34	65	$1,877,706	$28,888	$890,491		$12,943,334	$199,128	$3,615,764
Pump Station	1973		35	43	$505,445	$11,620	$103,320		$3,607,125	$77,816	$456,743
Pipeline	1976		32	65	$6,620,277	$101,850	$3,358,962		$33,846,936	$520,722	$12,842,720
Grand Total					$9,335,556	$166,057	$4,430,341		$50,881,928	$831,641	$17,024,668

ENRCCI: Engineering News Record Construction Cost Index. OCLD: Original Cost Less Depreciation. RCNLD: Replacement Cost New Less Depreciation This index represents inflationary escalations. FY 2007-08 actual depreciation is $141,390 excluding rolling stock per the 10/8/08 Draft CAFR. Source: City of Sausalito, Sanitary Sewer Vehicle and Equipment Inventory.

(a) Total service life of the equipments assumed based on the Asset Life and Refurbish schedule. Pump station maintenance work done in 1989 and after is not being considered here.

Appendix 2
Household Occupancy Survey

Residential Class	FY 2008-09 Billed Dwelling Units	Occupied Housing Units per Census	Population	Average Household Occupancy (PPH)
Single Family Residential	1,369	1,655	3,152	1.90
Single Family Attached Residential	836	419	782	1.87
Multi-family Residential (a)	1,960	2,002	3,139	1.57
Total Residential	4,165	4,076	7,073	1.74

Source: US Census data for year 2000 for City of Sausalito

(a) The occupied housing units for Multi-family residential also includes the Mobile homes.
PPH - Person per household

Appendix 3
FY 2007-08 Sewage Discharges

Description		Average WWTP Influent Flow (MGD)	Average TCSD Flow (MGD)	Average Marine City Flow (MGD)	City of Sausalito (MGD) Total to WWTP	Inflow and Infiltration (I/I)	Wastewater Discharge to Sewer
Summertime Flows					100%	21%	79%
Annual Average Flow					100%	29%	71%
2007	July	1.4	0.28	0.20	0.92	0.19	0.73
	August	1.4	0.29	0.19	0.92	0.19	0.73
	September	1.4	0.30	0.19	0.91	0.19	0.72
	October	1.5	0.33	0.20	0.97	0.31	0.66
	November	1.5	0.34	0.20	0.96	0.30	0.66
	December	1.7	0.43	0.25	1.02	0.36	0.66
2008	January	2.4	0.66	0.36	1.38	0.72	0.66
	February	1.9	0.51	0.35	1.04	0.38	0.66
	March	1.4	0.36	0.27	0.77	0.11	0.66
	April	1.3	0.31	0.28	0.71	0.15	0.56
	May	1.4	0.30	0.31	0.79	0.17	0.62
	June	1.4	0.29	0.36	0.75	0.16	0.59
Average Flow		**1.56**	**0.37**	**0.26**	**0.93**	**0.27**	**0.66**

a. Dry season I/I in Sausalito is estimated to be no less than 10 percent. Dry season is from April through September.
b. Sausalito discharges to the sewer are estimated to be constant for all months.

Appendix 4
Non-Residential Parcels and Billing Alternatives

						Water Use Avgs		Full CY Water Use (Hcf/yr)			Unbilled Water Use (Hcf/yr-Acct) Current	Alt 1	Alt 2	Alt. 3	Alt 4
											CY 2007	CY 2007	Last 2 Yrs	Last 2 Yrs	Allocated Capacity
Parcel apn	Wtr Cust. #	Service Addr	Name	City Code	Use Code	Cur Yr	2-yr avg	2007	2006	2005	103	199	103	0	Max Hist Use
6315206	153478	305 GATE 5 R	JOE RAY	7	41	3	154	3	304	66	0	0	51	154	304
6507124	na	753&755 BRID	na	7	51	6	5	6	4	4	0	0	0	5	6
6513214	334797	585 BRIDGEW	ZIMBABWE SCU	7	51	7	8	7	8	10	0	0	0	8	10
6513106	111255	675 BRIDGEW	BIJAN PETRI	7	51	9	12	9	14	27	0	0	0	12	27
6517106	431805	539 BRIDGEW	JUDY EGELSTAI	7	51	10	29	10	47	0	0	0	0	29	47
6505508	414902	325 PINE ST	CATHY STIERHC	7	51	13	13	13	13	19	0	0	0	13	19
6513105	415641	679&681 BRID	JOE HOFFMAN	7	51	13	45	13	77	11	0	0	0	45	77
6316201	431857	4000 BRIDGE\	4000 BRIDGEWA	7	41	17	19	17	20	0	0	0	0	19	20
6505112	423181	212 CALEDON	L & L PROPERTY	7	51	18	24	18	29	39	0	0	0	24	39
6506103	105517	1001 BRIDGE\	BRIDGEWAY TE	7	51	20	15	20	10	13	0	0	0	15	20
6314020	431273	2660 BRIDGE\	MARIN FREEHOI	7	51	20	22	20	24	0	0	0	0	22	24
6507121	na	723 BRIDGEW	na	7	51	21	17	21	13	57	0	0	0	17	57
6513109	na	2 PRINCESS S	na	7	51	21	25	21	28	49	0	0	0	25	49
6513108	111617	669&667 BRID	HANSON GALLE	7	51	24	22	24	20	23	0	0	0	22	24
6505506	120956	42 CALEDONI	BABETTE PINSK	7	51	27	27	27	26	19	0	0	0	27	27
6504104	120079	HUMBOLDT S	SAUSALITO YAC	7	41	1,397	1,273	1,397	1,149	1,158	1,294	1,198	1,170	1,273	1,397
6312002	115215	CAPITAL ST	ARQUES	7	41	1,483	1,645	1,483	1,807	1,817	1,380	1,284	1,542	1,645	1,817
6503401	126505	619 HUMBOLI	MARGARITAVILL	7	51	1,512	1,480	1,512	1,448	1,148	1,409	1,313	1,377	1,480	1,512
6316205	168754	3020-B BRIDG	NAUTILUS OF M	7	41	1,533	1,625	1,533	1,717	2,190	1,430	1,334	1,522	1,625	2,190
6313002	172409	2500 BRIDGE\	MOLLIE STONES	7	41	1,845	1,785	1,845	1,724	1,352	1,742	1,646	1,682	1,785	1,845
6308007	169884	GATE 1 RD	SCHOONMAKER	7	41	2,604	2,624	2,604	2,643	2,528	2,501	2,405	2,521	2,624	2,643
6517213	na	558 BRIDGEW	na	7	51	3,182	3,003	3,182	2,824	2,753	3,079	2,983	2,900	3,003	3,182
6314015	428074	1 HARBOR DF	EQUITY OFFICE	7	51	3,472	3,353	3,472	3,233	2,895	3,369	3,273	3,250	3,353	3,472
6303001	700410	298 HARBOR	CLIPPER YACH	7	41	3,987	3,678	3,987	3,369	5,420	3,884	3,788	3,575	3,678	5,420
6316104	700400	3001 BRIDGE\	BAYSIDE MGMT	7	41	7,232	6,946	7,232	6,659	5,605	7,129	7,033	6,843	6,946	7,232
6506346	na	777 BRIDGEW	na	7	51	8,040	8,127	8,040	8,213	6,366	7,937	7,841	8,024	8,127	8,213
6513212	na	19 PRINCESS	na	7	51	0	8	0	16	0	0	0	0	8	16
6513204	na	625 BRIDGEW	na	7	51	0	0	0	na	0	0	0	0	0	0
6505223	na	201 CALEDON	na	7	51	0	0	0	na	0	0	0	0	0	0
6505423	na	na	na	na	51	0	0	0	na	na	0	0	0	0	0
6408201	404435	300 NAPA ST	GALILEE HARBC	8	41	50	0	0	na	0	0	0	0	0	0
6314028	na	na	na	na	41	39	39	39	na	na	0	0	0	39	39
6313001	na	na	na	na	41	433	433	433	na	674	330	234	330	433	674
6312001	na	na	na	na	41	476	476	476	na	643	373	277	373	476	643
6314026	na	na	na	na	51	1,025	1,025	1,025	na	na	922	826	922	1,025	1,025
6509317	na	na	na	na	51	1,104	1,104	1,104	na	na	1,001	905	1,001	1,104	1,104
6503601	na	na	na	na	41	2,022	2,022	2,022	na	1,533	1,919	1,823	1,919	2,022	2,022
6315106	na	na	na	na	51	4,368	4,368	4,368	na	4,356	4,265	4,169	4,265	4,368	4,368
6524217	na	na	na	na	51	50	50	na	na	77	0	0	0	50	77
6527110	na	na	na	na	51	50	50	na	na	81	0	0	0	50	81
6416201	na	na	na	na	51	50	50	na	na	91	0	0	0	50	91
6513107	na	na	na	na	51	50	50	na	na	92	0	0	0	50	92
6516316	na	na	na	na	51	50	50	na	na	138	0	0	0	50	138
6513101	na	na	na	na	51	50	50	na	na	155	0	0	0	50	155
6517101	na	na	na	na	51	50	50	na	na	188	0	0	0	50	188
6416204	na	na	na	na	51	50	50	na	na	272	0	0	0	50	272
6301012	na	na	na	na	41	50	50	na	na	466	0	0	0	50	466
6301003	na	na	na	na	41	50	50	na	na	na	0	0	0	50	0
6301016	na	na	na	na	41	50	50	na	na	na	0	0	0	50	0
6302001	na	na	na	na	41	50	50	na	na	na	0	0	0	50	0
6303003	na	na	na	na	41	50	50	na	na	na	0	0	0	50	0
6304003	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6311027	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6311028	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6311029	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6311030	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6311031	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6313006	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6314004	na	na	na	na	41	50	50	na	na	na	0	0	0	50	0
6314005	na	na	na	na	41	50	50	na	na	na	0	0	0	50	0
6408101	na	na	na	na	41	50	50	na	na	na	0	0	0	50	0
6408202	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6414105	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6416203	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6416701	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6416726	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6501502	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6503101	na	na	na	na	41	50	50	na	na	na	0	0	0	50	0
6503407	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6503603	na	na	na	na	41	50	50	na	na	na	0	0	0	50	0
6503805	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6505502	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6506101	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6509116	na	na	na	na	61	50	50	na	na	na	0	0	0	50	0
6509316	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6509318	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6513103	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6513104	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6513312	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6523849	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
6526730	na	na	na	na	51	50	50	na	na	na	0	0	0	50	0
					Totals:	92,441	92,160	90,241	80,266	88,037	76,808	67,374	76,336	92,160	107,536

a. This table is created for general information only and there is some data hidden in the table.

Appendix 4
Non-Residential Parcels and

				FY 08-09 Act Bills				bill ct over minimum chg					Projected Bills				
													Current	Alt 1	Alt 2	Alt. 3	Alt. 4
Parcel apn	Wtr Cust. #	Service Addr	Name	FY 08-09 Act Bills	Excess Use 2005	Calculated Excess use	FY 08-09 Calc Bills	Curr ent	Alt 1	Alt 2	Alt. 3	actual	CY 2007	CY 2007	Last 2 Yrs	Last 2 Yrs	Allocat Capacity
6315206	153478	305 GATE 5 R	JOE RAY	$635	230	0	$167	0	0	1	1	1	$133	$270	$262	$317	$574
6507124	na	753&755 BRID	na	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$39	$175
6513214	334797	585 BRIDGEW	ZIMBABWE SCU	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$44	$180
6513106	111255	675 BRIDGEW	BIJAN PETRI	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$51	$203
6517106	431805	539 BRIDGEW	JUDY EGELSTAI	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$83	$230
6505508	414902	325 PINE ST	CATHY STIERHC	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$54	$192
6513105	415641	679&681 BRID	JOE HOFFMAN	$174	3	0	$167	0	0	0	1	1	$133	$270	$167	$114	$270
6316201	431857	4000 BRIDGE\	4000 BRIDGEWA	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$64	$194
6505112	423181	212 CALEDON	L & L PROPERTY	$259	45	0	$167	0	0	0	1	1	$133	$270	$167	$74	$219
6506103	105517	1001 BRIDGE\	BRIDGEWAY TE	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$58	$194
6314020	431273	2660 BRIDGE\	MARIN FREEHOI	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$71	$199
6507121	na	723 BRIDGEW	na	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$61	$243
6513109	na	2 PRINCESS S	na	$1,132	475	0	$167	0	0	0	1	1	$133	$270	$167	$76	$233
6513108	111617	669&667 BRID	HANSON GALLE	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$71	$199
6505506	120956	42 CALEDONI	BABETTE PINSK	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$79	$203
6504104	120079	HUMBOLDT S	SAUSALITO YAC	$2,350	1,075	1,085	$2,369	1	1	1	1	1	$2,678	$2,453	$2,375	$2,412	$2,038
6312002	115215	CAPITAL ST	ARQUES	$3,686	1,733	1,744	$3,706	1	1	1	1	1	$2,847	$2,610	$3,077	$3,108	$2,601
6503401	126505	619 HUMBOLI	MARGARITAVILL	$2,957	1,374	1,075	$2,348	1	1	1	1	1	$2,904	$2,663	$2,765	$2,800	$2,192
6316205	168754	3020-B BRIDG	NAUTILUS OF M	$3,503	1,643	2,117	$4,463	1	1	1	1	1	$2,945	$2,701	$3,039	$3,071	$3,101
6313002	172409	2500 BRIDGE\	MOLLIE STONES	$3,518	1,650	1,279	$2,762	1	1	1	1	1	$3,559	$3,270	$3,340	$3,369	$2,638
6308007	169884	GATE 1 RD	SCHOONMAKER	$5,383	2,569	2,455	$5,150	1	1	1	1	1	$5,051	$4,654	$4,923	$4,940	$3,707
6517213	na	558 BRIDGEW	na	$5,751	2,750	2,680	$5,606	1	1	1	1	1	$6,188	$5,707	$5,639	$5,650	$4,429
6314015	428074	1 HARBOR DF	EQUITY OFFICE	$6,581	3,159	2,822	$5,895	1	1	1	1	1	$6,758	$6,236	$6,299	$6,304	$4,818
6303001	700410	298 HARBOR	CLIPPER YACH	$6,857	3,295	5,347	$11,020	1	1	1	1	1	$7,771	$7,175	$6,913	$6,913	$7,427
6316104	700400	3001 BRIDGE\	BAYSIDE MGMT	$13,536	6,585	5,532	$11,396	1	1	1	1	1	$14,152	$13,090	$13,079	$13,028	$9,855
6506346	na	777 BRIDGEW	na	$16,881	8,233	6,293	$12,941	1	1	1	1	1	$15,741	$14,563	$15,308	$15,239	$11,169
6513212	na	19 PRINCESS	na	$167	0	0	$167	0	0	0	1	0	$133	$270	$167	$45	$188
6513204	na	625 BRIDGEW	na	$167	0		$167	0	0	0	0	0	$133	$270	$167	$30	$167
6505223	na	201 CALEDON	na	$167	0		$167	0	0	0	0	0	$133	$270	$167	$30	$167
6505423	na	na	na	$167	0		$167	0	0	0	0	0	$133	$270	$167	$30	$167
6408201	404435	300 NAPA ST	GALILEE HARBC	$167	0		$167	0	0	0	0	0	$133	$270	$167	$30	$167
6314028	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$103	$219
6313001	na	na	na	$1,607	709	601	$1,386	1	1	1	1	1	$782	$696	$790	$840	$1,070
6312001	na	na	na	$1,102	460	570	$1,323	1	1	1	1	1	$866	$774	$871	$921	$1,028
6314026	na	na	na	$167	0		$167	1	1	1	1	0	$1,946	$1,775	$1,907	$1,948	$1,540
6509317	na	na	na	$167	0		$167	1	1	1	1	0	$2,101	$1,919	$2,056	$2,096	$1,646
6503601	na	na	na	$3,643	1,712	1,460	$3,130	1	1	1	1	1	$3,907	$3,593	$3,788	$3,814	$2,876
6315106	na	na	na	$9,110	4,405	4,283	$8,860	1	1	1	1	1	$8,520	$7,869	$8,215	$8,205	$6,018
6524217	na	na	na	$174	3	4	$174	0	0	0	1	1	$133	$270	$167	$123	$270
6527110	na	na	na	$182	7	8	$182	0	0	0	1	1	$133	$270	$167	$123	$276
6416201	na	na	na	$203	17	18	$203	0	0	0	1	1	$133	$270	$167	$123	$289
6513107	na	na	na	$205	18	19	$205	0	0	0	1	1	$133	$270	$167	$123	$290
6516316	na	na	na	$298	64	65	$298	0	0	0	1	1	$133	$270	$167	$123	$352
6513101	na	na	na	$332	81	82	$332	0	0	0	1	1	$133	$270	$167	$123	$375
6517101	na	na	na	$399	114	115	$399	0	0	0	1	1	$133	$270	$167	$123	$419
6416204	na	na	na	$570	198	199	$570	0	0	0	1	1	$133	$270	$167	$123	$531
6301012	na	na	na	$964	392	393	$964	0	0	0	1	1	$133	$270	$167	$123	$791
6301003	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6301016	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6302001	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6303003	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6304003	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6311027	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6311028	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6311029	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6311030	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6311031	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6313006	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6314004	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6314005	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6408101	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6408202	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6414105	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6416203	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6416701	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6416726	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6501502	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6503101	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6503407	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6503603	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6503805	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6505502	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6506101	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6509116	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6509316	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6509318	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6513103	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6513104	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6513312	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6523849	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
6526730	na	na	na	$167	0		$167	0	0	0	1	0	$133	$270	$167	$123	$167
					80,103	78,907	$194,749	108	87	109	203	129	$178,618	$178,618	$178,618	$178,618	$178,618

a. This table is created for general information only and there

Appendix 5
FY 2009-10 Fund 110 Update for Sewer Rate Study

Account No. & Title	Original Amount	Original Quantity, brief description and justification	Updated Amount	Updated Quantity, brief description and justification
Salaries & Benefits				
Salaries 1000-110	$335,871	4.1 FTEs: 1.0 Sewer System Coord, 0.5 DPW Foreman, 0.1 DPW Supervisor, 1.5 MWII, 0.5 CEII, 0.5 City Engr	$696,000	Increase staffing to 8.5 FTEs by adding 3 FTEs at the MWIII salary range (or higher) and creating a Sewer Maintenance Worker Job Classification to include additional training and certification requirements, and adding 0.5 Director of Public Works, 0.5 FTE Admin Aide, and 0.4 Equipment Mechanic -- amount is simply previously projected annual escalated by ratio of 8.5/4.1
Auto Allowance 1000-140	$1,500	50% Auto Allowance for City Engineer	$3,000	50% Auto Allowance for City Engineer and Dir Pub Wks
Cafeteria Plan 2000-215	$53,427	Health plan coverage - Kaiser or Blue Cross, Dental coverage, Term Life insurance, and Long Term Disability insurance, all benefits.	$111,000	See salaries above
Medicare Tax 2000-221	$4,870	Employees hired after April 1986 pay 1.45% of pay with Employer matching at same rate	$10,000	See salaries above
PERS Employer Contrib. 2000-230	$39,969	Public Employees Retirement System (PERS) for Misc. employees - 100% cost paid by city	$83,000	See salaries above
State Unemployment 2000-251	$3,359	State Unemployment calculated as 1% of Salaries	$7,000	See salaries above
Workers Comp 2000-260	$21,312	Direct charge to sewer fund for workers compensation based on percent of cost	$44,000	See salaries above
Total Salaries & Benefits	**$460,308**		**$954,000**	
Professional Services				
Professional Services 3000-320	$252,903		$100,000	Overspent FY08-09, expect high regulatory compliance costs over next 5 years (annual)
Sewer Management Prog. 300-321	$15,000		$15,000	
Technical Services 3000-340	$51,000		$10,000	Add laboratory analytical costs for increased regulatory compliance (annual)
Total Professional Services	**$318,903**		**$125,000**	
Operations				
Utilities - Electricity 4000-410	$4,120	Utilities Electricity	$4,120	
Utilities - Telephone 4000-412	$500	Communications (SCADA) between Pump Stations/SMCSD and dedicated phones and cell charges for Sewer System response)	$1,000	Add alarms and status to existing and add Sausalito to recipients (annual utility cost only)
Utilities - Water 4000-413	$1,150	Water usage for the City's Sanitary Sewer Pump Stations	$1,150	
Utilities - Sewer 4000-414	~~$11,000~~	~~Sewer rate paid to the SMCSD for City Buildings~~		Delete per CDM comment 5 and City affirmation
Utilities - Solid Waste 4000-415	$0	Waste transportation and disposal costs for wastes Bay Cities cannot handle	$10,000	Preliminary estimate based on DenBeste services currently in procurement (annual) (note new Object Code)
Cleaning Services 4000-420	$2,000	Cleaning Services	$10,000	Restoration services for SSO into commercial and residential structures - add estimate for outside services in the event of SSO reaching waters of the State
Repairs & Maint. Buildings 4000-430	$1,000	Repairs to building space occupied by Sewer Staff	$1,000	
Repair Vehicles & Equip 4000-432	$5,000	Repairs to Sanitary Sewer Vehicles & Equipment	$5,000	
Repair Sewer Infrastructure 4000-435	$34,000	Repairs to Sanitary Sewer Pump Stations pipes, pumps, etc	$34,000	
Rental Machinery & Equip. 4000-442	$1,000	Misc. rental of Sanitary Sewer equipment as needed	$1,000	
Rental Machinery & Equip. 4000-442	~~$1,000~~	~~Misc. rental of Sanitary Sewer equipment as needed~~		Redundant
MERA charges 4710	$0	MERA charges	$4,032	Calculated as 25% of total Public Works charges from FY08-09 budget (p 81)
Private Lateral Program	$0	Funding for joint private lateral inspection and repair program with SMCSD and TCSD	$20,000	Annual contribution to ongoing program that complies with EPA Order and River Watch settlement
Total Operations	**$60,770**		**$91,302**	

Account No. & Title	Original Amount	Original Quantity, brief description and justification	Updated Amount	Updated Quantity, brief description and justification
Other Services				
Insurance - Liability 5000-520	$20,254	Liability Insurance	$20,254	
Advertising 5000-541	$1,000		$1,000	
Printing - External Serv. 5000-551	$1,000	Printing of forms, envelopes and letter head. Printing and copying of map and plans	$1,000	
Permits 5000-561	$8,650	Hazard Waste Generator Permit (State), 50% Marin Map, USA USA Membership, CMOM-CWEA (related) memberships	$8,650	
Conferences 5000-581	$2,000	CMOM Program, Hazardous Waste Cross-Connection and safety seminars, meetings, and conferences	$5,000	
Training & Workshops 5000-582	$4,750	Renewal of AutoCAD, Arcview, and PDF certifications and accreditations	$7,000	Additional training to maintain certification of wastewater collection professionals
Total Other Services	**$37,654**		**$42,904**	
Total Supplies				
Supplies-General 6000-610	$15,000	Tools, hardware, sewer rods, augers, jet hoses, nozzles. sanitary safety gloves, etc.	$15,000	
Supplies -- Office 6000-611	$2,000		$2,000	
Oil and Gasoline 6000-621	$2,500	Oil and Gas for Vehicles and equipment.	$2,500	
Uniforms 6000-622	$200	Uniforms for employees.	$200	
Books 6000-640	$150	Code books and manuals	$150	
Computer Printer & Sup. 6000-650	.	Printer cartridges, ribbons, fluids		
Total Supplies	**$19,850**		**$19,850**	
Property, Plant, & Equipment				
Machinery & Equipment 7000-740			$405,000	One (1) Honda WT40 4x4-in Gas Powered Trash Pump, One (1) Multiquip 6x6-in MQ600TD80-TLRB Diesel Powered Trash Pump, Two (2) Baldor TS400T Tier 3 diesel powered towable 365KVA generators, a $30K allowance for flow monitoring equipment. In future years use a $20K annual allowance for CCTV software and digital conversions.
Vehicles 7000-750			$25,000	Accelerate accrual for replacement of rodding machine within next 5 years (conceptual estimate)(annual)
Computer Equipment 7000-760	$4,350		$15,000	Additional instrumentation for SCADA at pump stations, permanent flow monitoring and related hardware (conceptual estimate only one-time expense)
Total Property, Plant, & Equipment	**$4,350**		**$445,000**	
Transfer Out: Administration Support General Fund 9100-101	**$79,000**	Support from Administration, Personnel, Finance, City Council, Payroll, Accounts Payable, Project Accounting, etc.	**$79,000**	
Total Expenditures	**$980,835**	Total of Salaries & Benefits, Professional Services, Operations, Other Services, Supplies, Property, Plant, & Equipment, and Transfers out.	**$1,757,056**	

Summary	Original Amount	Updated Amount
Salaries & Benefits	$460,308	$954,000
Professional Services	$318,903	$125,000
Operations	$60,770	$91,302
Other Services	$37,654	$42,904
Supplies	$19,850	$19,850
Property, Plant, & Equipment	$4,350	$445,000
Transfer Out: Administration Support	$79,000	$79,000
Grand Total	**$980,835**	**$1,757,056**