



CITY OF SAUSALITO FY 2024-25 SEWER RATE STUDY

April 25, 2024 - Final Report



This page intentionally left blank for double-sided printing purposes



590 Ygnacio Valley Road, Suite 105
Walnut Creek, California 94596
Telephone: 925/977-6950

Northern California
www.hfh-consultants.com

April 25, 2024

Kevin McGowan
Public Works Director/City Engineer
City of Sausalito
420 Litho Street
Sausalito, CA 94965

Subject: Sewer Rate Study – Final Report

Dear Kevin McGowan:

HF&H is pleased to submit this cost-of-service report to the City of Sausalito. The report summarizes the projected revenue requirements over the next five fiscal years, updates the cost-of-service allocation among customer classes, and provides a detailed schedule of the recommended sewer service charges for collection services for the next five years.

We greatly appreciate your assistance in developing the cost-of-service analysis.

Sincerely,

HF&H CONSULTANTS, LLC

A handwritten signature in blue ink that reads "Rick Simonson".

Rick Simonson, Senior Vice President
Gabe Sasser, Project Manager

This page intentionally left blank for double-sided printing purposes

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY	1
Background	1
Findings and Recommendations.....	1
Implementation	5
II. INTRODUCTION	6
Study Purpose	6
Rate-Making Objectives.....	6
Study Process.....	6
Report Organization	6
III. REVENUE REQUIREMENTS	7
Revenue Requirement Assumptions and Projections.....	7
Operations, Maintenance, and Administrative Expenses	8
Capital.....	8
Debt Service	9
Reserves	10
Operating	10
Capital.....	10
Revenue Increases	10
Debt Service Coverage.....	11
Reserve Fund Balance.....	12
IV. COST-OF-SERVICE ANALYSIS	13
General Approach	13
Customer Classes	13
Cost of Service Analysis.....	13
Cost-of-Service Allocations.....	13
Analytical Procedure	13
Cost Allocation Factors	14
Units of Service	16
Unit Costs of Service	17
V. RATE DESIGN	19
Current Rates	19
Current Fixed Service Rates	19
Current Volumetric Rates	19
Service Charge Design	20
Volumetric Rates Design	21
VI. CUSTOMER IMPACTS.....	22
Neighboring Agency Comparison	23
APPENDIX A. SEWER RATES MODEL.....	25

TABLE OF FIGURES

Figure I-1. Total Annual Projected Revenue Requirements.....	2
Figure I-2. Projected Year-End Fund Balance	2
Figure I-3. Cost of Service Fixed Service Rates by Customer Class.....	3
Figure I-4. Cost-of-Service Volumetric Rates by Customer Class	4
Figure I-5. Annual Proposed Sewer Collection Rates	4
Figure I-6. Proposed Rates	5
Figure III-1. Projection Assumptions.....	7
Figure III-2. Total Annual Projected Revenue Requirements	8
Figure III-3. Projected Capital Improvement Program.....	9
Figure III-4. Current Annual Debt Service	9
Figure III-5. Total Revenue Requirement Projections.....	10
Figure III-6. Rate Increase Calculations.....	11
Figure III-7. City Debt Coverage Ratio Calculations (with rate adjustments).....	11
Figure III-8. Projected Year-End Fund Balance.....	12
Figure IV-1. Cost Allocation.....	15
Figure IV-2. Fixed and Volumetric Allocation Summary	16
Figure IV-3. Residential Flows	16
Figure IV-4. Residential EDUs	17
Figure IV-5. Commercial/Industrial EDUs.....	17
Figure IV-6. Total EDUs and Flow.....	17
Figure IV-7. Cost of Service – Unit Costs	17
Figure IV-8. Cost of Service Revenue Summary.....	18
Figure V-1. Current Fixed Service Rates.....	19
Figure V-2. Current Volumetric Rates.....	20
Figure V-3. Proposed City Customers Annual Fixed Service Rates – FY 2024-25	20
Figure V-4. Current and Proposed Fixed Service Rates.....	21
Figure V-5. Current and Proposed Volumetric Rates	21
Figure VI-1. Comparison of Annual Collection Charge (1/2 Average Wastewater Volume)	22
Figure VI-2. Comparison of Annual Collection Charge (Average Wastewater Volume)	23
Figure VI-3. Comparison of Annual Collection Charge (2x Average Wastewater Volume).....	23
Figure VI-4. Comparison of Annual Sewer Charges for Single-Family Customers.....	24

GLOSSARY

CCF – Hundred cubic feet (see HCF below).

CIP - Capital Improvement Program.

Commercial/Industrial – Refers to commercial and municipal accounts served by the City.

DU – Dwelling Unit, in reference to the number of physical residences served by a residential meter.

Duplex – Refers to all non-single-family residential customers where two dwelling units are served by one water meter.

EDU – Equivalent Dwelling Unit, in reference to the adjusted number of dwelling units, which calculates EDUs based on the ratio of volume of wastewater relative to the annual volume of wastewater of the average Single-Family customer.

Floating Home – City customers living on the San Francisco Bay.

Flow Factor – The ratio of a customer class’s annual wastewater volume relative to the Single-Family customer class. This factor is used to proportionately allocate fixed costs to each customer class.

FY - Fiscal Year.

GPD - Gallons Per Day.

HCF - Hundred cubic feet of metered water; 748 gallons; a cube of water with sides of 4.6 feet.

MGD – Million Gallons per Day

MMWD – Marin Municipal Water District

Multi-Family – Refers to all non-Single-Family residential customers where more than two dwelling units are served by one water meter.

O&M - Operating and Maintenance, in reference to the costs of running facilities.

PAYGo - Pay-As-You-Go, in reference to funding capital improvements from cash rather than from borrowed sources such as bonds or loans.

Residential – Customer class comprised of Single-Family, Single-Family Attached, Duplexes, and Multi-Family homes.

Single-Family – Refers to customers living in single-family detached homes.

Single-Family Attached – Refers to customers living in single-family homes with shared walls, such as a townhome.

SMCSD – Sausalito-Marín City Sanitary District

SWRCB - State Water Resources Control Board

ACKNOWLEDGEMENTS

City Council

Ian Patrick Sobieski, Mayor
Joan Cox, Vice Mayor
Melissa Blaustein, Councilmember
Jill James Hoffman, Councilmember
Janelle Kellman, Councilmember

City Staff

Chris Zapata, City Manager
Kevin McGowan, City Engineer/Director of Public Works
Chad Hess, Director of Finance

Legal Counsel

Sergio Rudin, Esq.

V.W. Housen & Associates

Vivian Housen, Principal

HF&H Consultants, LLC

Rick Simonson, Senior Vice President
Gabe Sasser, PE, Project Manager
Alex Santos, Senior Associate

LIMITATIONS

This document was prepared solely for the City of Sausalito in accordance with the contract between the City and HF&H and is not intended for use by any other party for any other purpose.

In preparing this study, we relied on information from the City, which we consider accurate and reliable. Our analysis is based on the best available information at the time of the study.

Rounding differences caused by stored values in electronic models may exist.

This document represents our understanding of relevant laws, regulations, and court decisions but should not be relied upon as legal advice. Questions concerning the interpretation of legal authorities referenced in this document should be referred to a qualified attorney.



SEWER RATE STUDY

This page intentionally left blank for double-sided printing purposes

I. EXECUTIVE SUMMARY

BACKGROUND

Residents within the City of Sausalito receive sewer service from two entities. The City provides wastewater collection service and the Sausalito-Marin City Sanitary District (SMCSD) provides wastewater conveyance and treatment service. The City owns and maintains a sewer collection system, spanning 20 miles, that collects wastewater from approximately 3,040 parcels and conveys the effluent to the SMCSD treatment plant for eventual discharge to the San Francisco Bay.

This study documents the process by which the City's sewer collection charges and rates were analyzed to ensure that the charges and rates continue to meet the cost of service. This report describes how the revenue requirement (expenses) is apportioned between customer classes receiving sewer services from the City, the appropriate changes in the respective classes' rates to cover their costs, and the proposed sewer rate designs that are appropriate to ensure that customers continue paying their proportionate share.

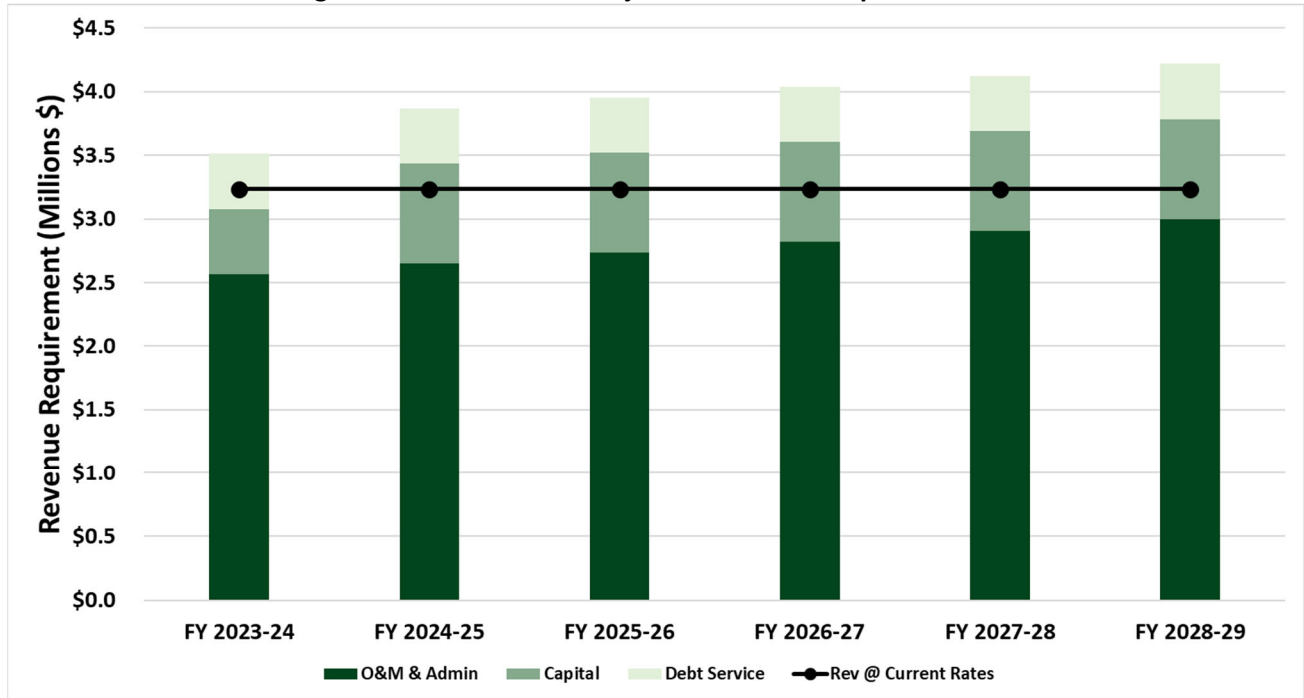
The Executive Summary presents the findings and recommendations in this report.

FINDINGS AND RECOMMENDATIONS

The following discussion summarizes HF&H's findings and recommendations.

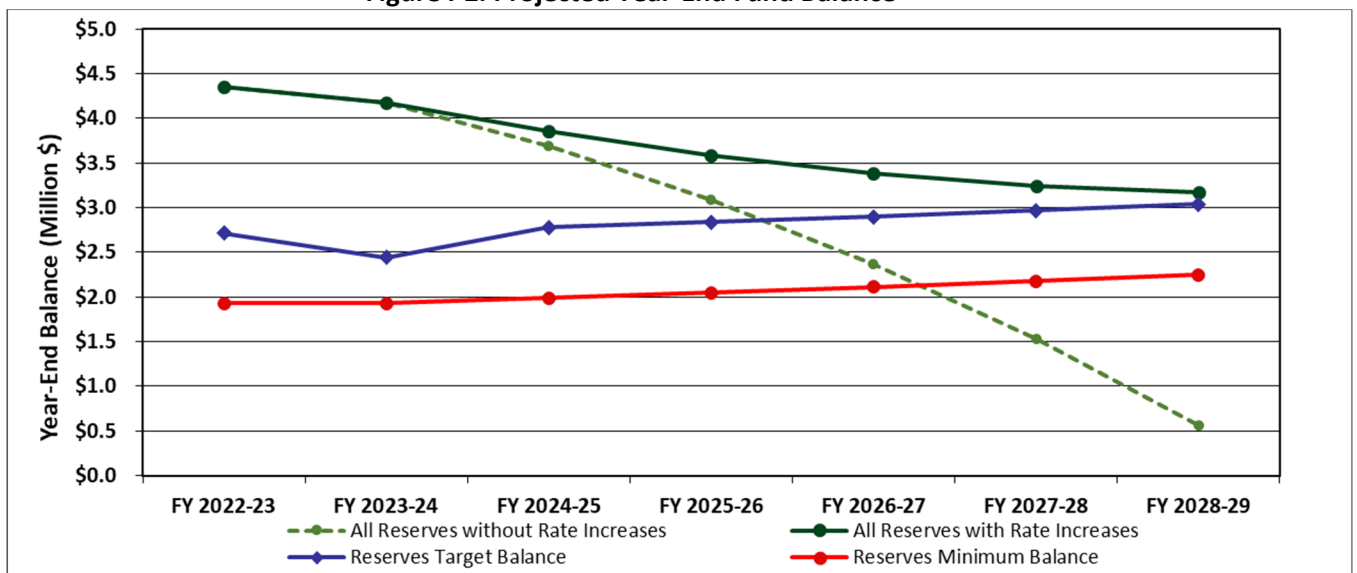
1. **Sewer rate revenue increases are recommended.** Over the next five fiscal years (FYs), FY 2024-25 - FY 2028-29, the City's revenue requirement is primarily driven by increases to capital improvement expenditures. The City's capital improvement plans include an average annual expense of \$786,578 over the five-year projection period, demonstrating the City's priority to continue to invest in its sewer collection system. The project expenditures are directed toward collection pipe replacements and spot repairs. The revenue requirement projections needed to support the City's operation and capital improvement programs for providing collection services are shown in **Figure I-1**. As shown in **Figure I-1**, revenues at current rates are insufficient to cover projected costs. Increases in current rates are warranted.

Figure I-1. Total Annual Projected Revenue Requirements



2. To minimize rate impacts to customers, the City will balance using reserves with increasing sewer rates. With 5% annual increases to the collection rate revenues, the overall level of reserves will continue to stay above the City’s recommended minimum balance, meeting its nine-month operating expenses target. Under this plan of proposed increases, the City will be drawing on their reserves to cover capital projects and to reduce rate increases over the planning period. Refer to Figure I-2 for the fund balance projection with the recommended revenue increases. The fund balance projection draws down from its current position at the end of FY 2022-23 through the five-year planning period, as indicated by the solid green line in the graph below.

Figure I-2. Projected Year-End Fund Balance



Note: City’s Reserve Target is a proposed policy, recommended by HF&H which includes nine months of O&M expenses and one-year of average annual capital expenditures funded on a cash basis.

- 3. Cost-of-Service Analysis of Fixed Service Rates and Volumetric Rates.** The current fixed service rates and volumetric rates reflect differences in wastewater flow by customer class at the time the last rate study was conducted in 2019. This cost-of-service analysis, of the FY 2024-25 revenue requirement, indicates adjustments are required to realign sewer collection rates to reflect the proportional benefits each customer class receives based on current wastewater flows. The revised rates reflect the current differences in wastewater flow by customer class, based on updated winter water use employed for setting charges on the FY 2023-24 tax roll. The changes in rates reflect the increase in sewer flows for Single-Family Attached, Duplexes, and Commercial/Industrial customers relative to Single-Family sewer flows. Multi-Family customer sewer flow volumes remain relatively unchanged.

Current rates are structured to recover 88% of the overall revenue through fixed service rates and 12% of the overall revenue through volumetric rates, based on the 2019 study. The cost of service analysis determined the rate structure should be adjusted to recover 79% of revenues through fixed service rates and 21% of revenues through volumetric rates. This adjustment increased the uniform volumetric rate assessed to all customers. In turn, the reduced proportion of revenues received from fixed service rates had mixed impacts to the various customer classes as the fixed service rates were adjusted per equivalent dwelling unit to reflect differences in wastewater flow per customer class.

Refer to **Figure I-3** and **Figure I-4**. The dwelling units (DUs) used to calculate the fixed service rate are multiplied by a volume factor to generate the rate per equivalent dwelling unit (EDU). All customers are charged the same rate for flow as the chemical composition of the wastewater of one customer class compared to another does not affect collection system variable costs. Therefore, a uniform volumetric rate is appropriate.

Figure I-3. Cost of Service Fixed Service Rates by Customer Class

Net Rev Req: \$2,682,020	Customer	Volume		Fixed Cost			
	Class	DUs	Factor	EDUs	% of EDUs	Allocation	\$/EDU
a		b	c	d=b*a	e	f=e*a	g=f/b
	Single-Family	1,222	100%	1,222	29%	\$779,113	\$637.57
	Single-Family Attached	905	65%	593	14%	\$377,878	\$417.54
	Duplexes	1,045	59%	620	15%	\$395,349	\$378.32
	Multi-Family	1,022	49%	499	12%	\$317,920	\$311.08
	Commercial/Industrial	1,273	100%	1,273	30%	\$811,759	\$637.57
		5,467		4,207	100%	\$2,682,020	

Note: Rounding differences caused by stored values in electronic models may exist.

Figure I-4. Cost-of-Service Volumetric Rates by Customer Class

Net Rev Req: \$712,970	Customer	Volumetric Cost			
	Class	% of Flow	Allocation	Flow	\$/HCF
a		b	c=b*a	d	e=c/d
	Single-Family	29%	\$207,114	74,652	\$2.77
	Single-Family Attached	14%	\$100,453	36,207	\$2.77
	Duplexes	15%	\$105,097	37,881	\$2.77
	Multi-Family	12%	\$84,514	30,462	\$2.77
	Commercial/Industrial	30%	\$215,792	77,780	\$2.77
		100%	\$712,970	256,982	

Note: Rounding differences caused by stored values in electronic models may exist.

- Sewer rate adjustments reflect the cost of service and proposed revenue increases.** To cover the increase to the City’s revenue requirements (seen in **Figure I-1**), the summary of proposed rates is shown in **Figure I-5**. The rates are grouped by fixed and variable rates, and customer class.

Figure I-5. Annual Proposed Sewer Collection Rates

Customer Class		Current Rates		Proposed City Fixed Service Rates			
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Single-Family	Annual Charge	\$730.27	\$637.57	\$669.45	\$702.92	\$738.07	\$774.97
	Annual \$ Change		(\$92.70)	\$31.88	\$33.47	\$35.15	\$36.90
	Monthly \$ Change		(\$7.72)	\$2.66	\$2.79	\$2.93	\$3.08
Single-Family Attached	Annual Charge	\$396.84	\$417.54	\$438.42	\$460.34	\$483.36	\$507.53
	Annual \$ Change		\$20.70	\$20.88	\$21.92	\$23.02	\$24.17
	Monthly \$ Change		\$1.73	\$1.74	\$1.83	\$1.92	\$2.01
Duplexes	Annual Charge	\$396.89	\$378.32	\$397.24	\$417.10	\$437.96	\$459.86
	Annual \$ Change		(\$18.57)	\$18.92	\$19.86	\$20.86	\$21.90
	Monthly \$ Change		(\$1.55)	\$1.58	\$1.66	\$1.74	\$1.83
Multi-Family	Annual Charge	\$351.44	\$311.08	\$326.63	\$342.96	\$360.11	\$378.12
	Annual \$ Change		(\$40.36)	\$15.55	\$16.33	\$17.15	\$18.01
	Monthly \$ Change		(\$3.36)	\$1.30	\$1.36	\$1.43	\$1.50
Commercial/Industrial	Annual Charge	\$657.08	\$637.57	\$669.45	\$702.92	\$738.07	\$774.97
	Annual \$ Change		(\$19.51)	\$31.88	\$33.47	\$35.15	\$36.90
	Monthly \$ Change		(\$1.63)	\$2.66	\$2.79	\$2.93	\$3.08
Customer Class		Current Rates		Proposed City Volumetric Rates			
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Single-Family	Annual Charge	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
	% Increase		118%	5%	5%	5%	5%
Single-Family Attached	Annual Charge	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
	% Increase		118%	5%	5%	5%	5%
Duplexes	Annual Charge	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
	% Increase		118%	5%	5%	5%	5%
Multi-Family	Annual Charge	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
	% Increase		118%	5%	5%	5%	5%
Commercial/Industrial	Annual Charge	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
	% Increase		118%	5%	5%	5%	5%

Note: For Single-Family, Single-Family Attached, Duplexes, and Multifamily accounts, one dwelling unit is equal to one EDU. For Commercial/Industrial, one EDU = 61 HCF (hundred cubic feet) per year or 125 gallons per day. Nonresidential fixed service charges are the ratio of annualized water use divided by 61 HCF and charges can exceed one EDU.

IMPLEMENTATION

This report presents the rates proposed for adoption by the City, as shown in **Figure I-6**. The proposed rate plan should maintain adequate reserves for cash flow, capital spending, and emergency purposes. Actual revenue and expenses may differ from the projections included in the five-year financial model. Annually, during the budgeting process, the City should confirm the need for the next incremental rate adjustment. Following the Proposition 218 rate setting process, the City would have the option to implement a lower rate increase in subsequent years if financial conditions warrant doing so. The summary for the final rates can be seen in **Figure I-6**.

Figure I-6. Proposed Rates

Customer Class	Current Rates		Proposed City Collection Rates			
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Fixed Rates (\$/Year)						
Single-Family (per DU)	\$730.27	\$637.57	\$669.45	\$702.92	\$738.07	\$774.97
Single-Family Attached (per DU)	\$396.84	\$417.54	\$438.42	\$460.34	\$483.36	\$507.53
Duplexes (per DU)	\$396.89	\$378.32	\$397.24	\$417.10	\$437.96	\$459.86
Multi-Family (per DU)	\$351.44	\$311.08	\$326.63	\$342.96	\$360.11	\$378.12
Commercial/Industrial (per EDU)	\$657.08	\$637.57	\$669.45	\$702.92	\$738.07	\$774.97
Volumetric Rates (\$/HCF)						
Single-Family	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
Single-Family Attached	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
Duplexes	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
Multi-Family	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
Commercial/Industrial	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37

Note: For Single-Family, a dwelling unit is equal to one EDU. For Single-Family Attached, Duplexes, and Multi-Family, a dwelling unit is adjusted based on their respective flow compared to Single Family. For Commercial/Industrial, one EDU = 61 HCF (hundred cubic feet) per year or 125 gallons per day. Commercial/Industrial fixed service charges are the ratio of annualized water use divided by the average flow of a Single-Family parcel and charges can exceed one EDU. For Single-Family Attached, Duplexes, and Multi-Family, a dwelling unit is adjusted based on their respective flow compared to Single-Family. This ratio was approximately 58 HCF in FY 2023-24 and has been adjusted to 61 HCF, as discussed in Section IV of the report. Rounding differences caused by stored values in electronic models may exist.

II. INTRODUCTION

STUDY PURPOSE

The purpose of this study is to conduct a cost-of-service analysis that will determine rates that generate sufficient revenue to recover the cost of providing the City’s sewer collection service. Toward that end, the cost-of-service analysis determines how much revenue should be generated by each component of the rate structure so that rate payers within each customer class are charged for their proportionate share of the cost of providing service on a parcel basis. The cost-of-service analysis is tailored specifically to the City’s customer classes and the rate structures that are appropriate for each class.

RATE-MAKING OBJECTIVES

The City’s current rate-making objectives include the following:

- Support revenue sufficiency and financial stability to fund the projected capital and O&M costs of the City.
- Reflect the proportional impact to the cost of service.
- Meet the City’s operations and capital funds reserve targets.
- Reflect equity of costs in proportion to the level of service in the calculation of rates.
- Provide for efficient administration and execution of utility billing.
- Minimize “rate shock” overall and to any specific customer class.
- Provide clear understandable rates to the customers.
- Ensure rates comply with Proposition 218 and applicable State codes.

STUDY PROCESS

In 2023, the City requested HF&H Consultants (HF&H) to perform a cost-of-service study to set sewer collection rates for FY 2024-25 through FY 2028-29.

The primary goal of this study is to ensure that rates continue to reflect the current cost of providing sewer service. A comprehensive rate study comprises three steps: 1) revenue requirement projections; 2) cost-of-service analysis; and 3) rate design. Revenue requirement projections identify how much revenue is needed from rates. The cost-of-service analysis determines how much of the revenue should be paid by each customer class. The final step, rate design, establishes the structure of the rates for each customer class.

The cost-of-service analysis was conducted following industry practices promulgated by the Water Environment Federation Manual of Practice No. 27, Financing and Charges for Wastewater Systems, 2004. At the outset of the analysis, the types of customer classes were reviewed, as were the types of rate structures that are appropriate to the City’s customer class.

REPORT ORGANIZATION

The report is divided into the following sections Revenue Requirements, Cost-of-Service Analysis, Rate Design, and Customer Bill Impacts. A Glossary of technical terms and acronyms is provided following the Table of Contents.

III. REVENUE REQUIREMENTS

The revenue requirements analysis starts by determining the FY 2024-25 revenue requirements based on the budgeted O&M and capital expenditures for FY 2023-24. Revenue requirements for each fiscal year are then projected over the study period. Revenue increases needed to cover the projected revenue requirements are then determined.

REVENUE REQUIREMENT ASSUMPTIONS AND PROJECTIONS

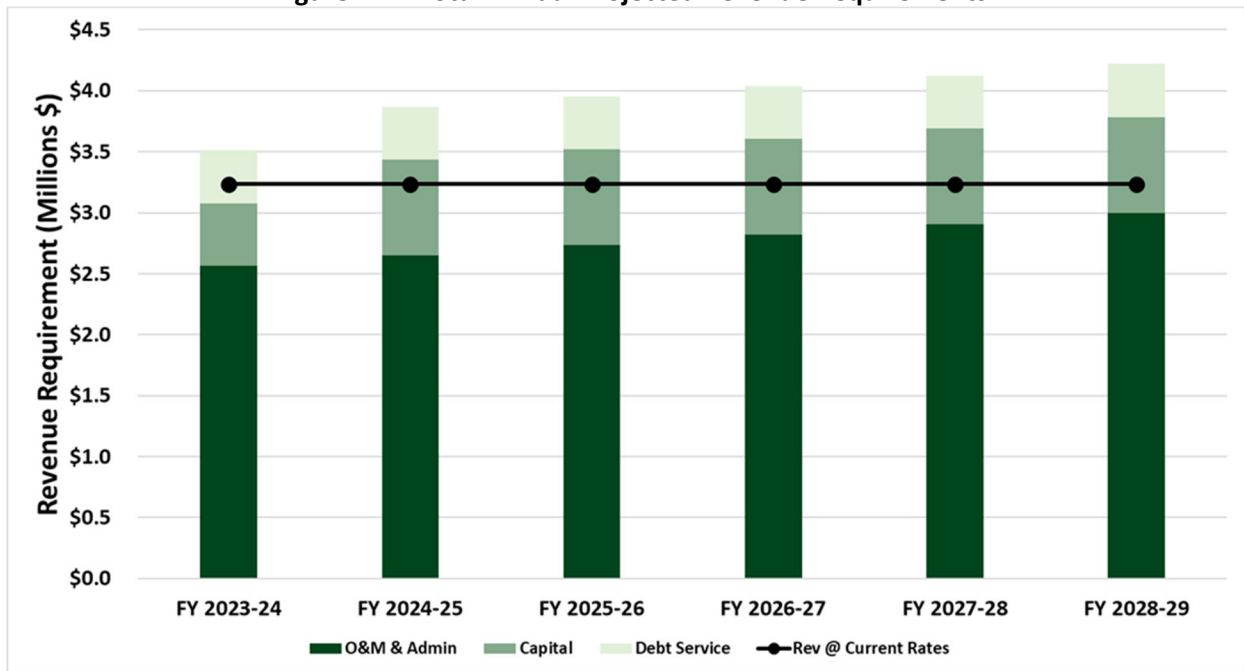
Expense projections combined with contributions to reserves become the revenue requirements. The City’s operating and capital budgets were relied on for FY 2024-25 expenses in the first-year revenue requirement. The assumptions shown in **Figure III-1** were used to project revenue requirements through FY 2028-29.

Figure III-1. Projection Assumptions

Inflation Assumptions	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Interest on Reserve Balances	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
General Inflation	Budget	3.00%	3.00%	3.00%	3.00%	3.00%
OPEB reserve transfer	Budget	4.12%	4.12%	4.12%	4.12%	4.12%
Construction Cost Inflation	Budget	3.91%	3.91%	3.91%	3.91%	3.91%
Single Family Growth (EDUs)	0	0	0	0	0	0
Fuel & Utilities	Budget	4.80%	4.80%	4.50%	4.25%	4.00%
Salaries & Benefits	Budget	5.00%	5.00%	5.00%	5.00%	5.00%
Composite O&M	Budget	3.18%	3.18%	3.15%	3.13%	3.10%

The application of these projections to O&M and capital expenses are summarized graphically in **Figure III-2** and are described below in more detail.

Figure III-2. Total Annual Projected Revenue Requirements



Operations, Maintenance, and Administrative Expenses

This expense category covers salaries, benefits, and other operational and maintenance (O&M) costs unrelated to personnel, such as electricity, fuel, and non-capital materials and equipment. The FY 2023-24 City budget served as the basis for the analysis. For the projection period, inflationary percentages, shown in **Figure III-1**, were applied to the budgeted values for calculating projections for FY 2024-25 through FY 2028-29. The cost trend is driven primarily by cost of living adjustments set in labor agreements and the overall inflationary environment.

Capital

To assess the health of its collection system, the City completed a Closed Circuit Television (CCTV) survey of all sewer mains in 2019. This process allowed the City to produce a prioritized list of repairs and replacements to address the pipelines based on the severity of deficiencies. Through this continued program, the City seeks to reduce the risk of pipeline failure, to reduce inflow and infiltration caused by water seeping into cracked pipelines, and to extend the service life of its system.

For the rate study, the City identified \$5 million in necessary repairs over a five-year period. The repairs and replacements identified would address risks of pipe visibility in the soil, hinge fractures, and inflow and infiltration. Further, anticipated pipe repairs have been prioritized by defect severity and grouped spatially to reduce risk while remaining cost effective.

The estimated annual costs of the capital improvement projects from FY 2024-25 to FY 2028-29 are between \$727,000 and \$848,000. However, rates are not set to match these annual variations, as doing so would result in rate volatility, with rates rising faster in one year compared to another. Instead, rates are based on multi-year averages. As a result, the City plans to spend an average of \$786,578 per year on collection system capital projects over the five-year period.

The City maintains a capital improvement program for replacement and rehabilitation of its system, which is funded through rates on a pay-as-you go (PAYGo) basis. The costs summarized in **Figure III-3** include a 3.91% annual inflation factor, based on the historical annual growth rate in the construction cost index published by Engineering News Record.

Figure III-3. Projected Capital Improvement Program

Cash-funded (PAYGo) Projects	Projected				
	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
City Budgeted Capital Improvements	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000
Accumulated Construction Cost Index	3.91%	7.98%	12.20%	16.59%	21.15%
Inflation Adjusted Subtotal	\$727,388	\$755,848	\$785,421	\$816,151	\$848,083

Debt Service

The City has an outstanding sewer revenue bond with annual debt service of approximately \$360,000 and a State Water Resources Control Board (SWRCB) loan with an annual debt service of \$73,128. Both bonds have been identified in **Figure III-4**. The sewer revenue bond proceeds were used to finance the acquisition and construction of sewer improvements and facilities. The SWRCB loan was directed at funding the Spinnaker/Humboldt Street Sewer and Anchor Pump Station Rehabilitation Projects. Over the next five years, the City debt service level will remain relatively constant at approximately \$433,000 per year. No new debt issuances are anticipated over the next five years. The obligations for the SWRCB loan and the sewer bonds are scheduled to mature in 2032 and 2044, respectively.

Figure III-4. Current Annual Debt Service

Current Debt	Projected					
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
<u>2011 SWRCB Loan (matures 2032)</u>						
Principle	\$56,573	\$58,044	\$59,553	\$61,101	\$62,690	\$64,320
Interest	\$16,555	\$15,084	\$13,575	\$12,026	\$10,438	\$8,808
Total Payment	\$73,128	\$73,128	\$73,128	\$73,128	\$73,128	\$73,128
<u>2015 Sewer Bonds (matures 2044)</u>						
Principle	\$180,000	\$185,000	\$190,000	\$195,000	\$200,000	\$210,000
Interest	\$180,331	\$174,931	\$169,381	\$163,681	\$157,831	\$151,831
Total Payment	\$360,331	\$359,931	\$359,381	\$358,681	\$357,831	\$361,831
Total Debt & Loan Repayment	\$433,459	\$433,059	\$432,509	\$431,809	\$430,959	\$434,959

The major expenses described above that comprise the revenue requirements are shown in **Figure III-5**. O&M and administration expenses is the largest individual cost among the cost categories. Current rate revenues of \$3.2 million are insufficient to meet projected expenses. The City faces a growing deficit over the five-year period if revenues remain at current levels and capital improvement projects are completed as proposed.

Figure III-5. Total Revenue Requirement Projections

Total Sewer System Expenses	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
O&M & Admin	\$2,567,309	\$2,648,828	\$2,733,009	\$2,819,118	\$2,907,278	\$2,997,488
Capital	\$510,000	\$786,578	\$786,578	\$786,578	\$786,578	\$786,578
Debt Service	\$433,459	\$433,059	\$432,509	\$431,809	\$430,959	\$434,959
Total Revenue Requirement	\$3,510,768	\$3,868,465	\$3,952,096	\$4,037,505	\$4,124,815	\$4,219,025
		10.2%	2.2%	2.2%	2.2%	2.3%

Source: Data from City's FY 2023-24 Budget.

RESERVES

Rates need to generate enough revenue to cover unfunded annual operating and capital expenses. However, rates are not set to exactly match cash expenditures because the timing of cash expenditures can fluctuate. If rates were set to exactly match expenditures, rates would also fluctuate. To avoid increasing and decreasing rates from year to year, reserves are used to cover the difference so that rate increases are smooth and gradual.

Reserves are required to stabilize rates and to provide for contingencies. Reserves can be drawn on in years when the City experiences above average costs and augmented during years when costs are below average. The City has separate reserves, allowing it to set separate target balances for each purpose. The following provides a description of the separate reserve funds and the recommended target balances.

Operating

It is recommended that the City maintain a minimum nine months of operating and maintenance expenses. This level of reserves addresses the lag between collection and transfer of sewer service charge payments received from the County tax assessor to the City, which occurs twice per year. In addition, these reserves address the bond covenant reserve, which requires \$362,250 for the payment of debt service associated with the 2015 sewer revenue bond. Based on these criteria, the target reserve amount grows from \$1.93 million to \$2.25 million during the five-year period.

Capital

The Capital reserve provides liquidity to fund construction for major capital projects in the City's capital program. The Capital reserve minimum depends on the current capital program from the City, it is currently set to cover the average annual capital expense over the term of their capital improvement schedule. It is recommended that the City maintain a target reserve equal to the average, annual cash-funded, capital project expenditures over the five-year planning period. The current sewer collection capital improvement projects average \$786,578 per year.

REVENUE INCREASES

Rates are set to generate sufficient revenue to cover annual expenses. In addition, rates are set to maintain adequate reserves. **Figure III-6** summarizes the projected revenue from current rates, annual revenue requirements, annual variances, and the rate increases necessary to cover the City's costs.

Figure III-6. Rate Increase Calculations

	Projected				
	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Revenue from Current Rates	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323
Revenue Requirement	(\$3,868,465)	(\$3,952,096)	(\$4,037,505)	(\$4,124,815)	(\$4,219,025)
Non-Operating Revenue	\$15,149	\$15,149	\$15,149	\$15,149	\$15,149
Transfer from/(to) Reserves	\$458,327	\$0	\$0	\$0	\$0
Net Revenue Requirement	(\$3,394,990)	(\$3,936,947)	(\$4,022,356)	(\$4,109,666)	(\$4,203,876)
Revenue Surplus/(Shortfall)	(\$161,666)	(\$703,624)	(\$789,033)	(\$876,343)	(\$970,552)
Proposed Revenue Increase	5.0%	5.0%	5.0%	5.0%	5.0%
Revenue at Proposed Rates	\$3,394,990	\$3,564,739	\$3,742,976	\$3,930,125	\$4,126,631
Revenue Surplus/(Shortfall)	\$0	(\$372,208)	(\$279,380)	(\$179,541)	(\$77,245)

Rate increases account for rate revenue and future revenue requirements. As shown in **Figure III-6**, the City’s reserves have been used to keep the revenue increases low (i.e., there are projected revenue shortfalls in FY 2025-26 through FY 2028-29 after accounting for the revenue increases, which will be covered by reserves). The revenue requirement (shown in greater detail in **Figure III-5**) increases in general inflation and capital expenditures. The proposed revenue increases serve to decrease the projected shortfalls facing the City.

The rates are derived in **Section V**. With these rate increases, the City balance the use of reserves while increasing revenue to pay for its annual O&M and capital expenses, as further discussed below.

DEBT SERVICE COVERAGE

Figure III-7 shows the debt service coverage provided by the revenue increases in **Figure III-6**. The City is required to maintain a minimum coverage ratio of 1.10. A higher ratio provides a greater margin of safety to bondholders and enhances the credit rating on bonds. Moreover, a higher credit rating benefits ratepayers by reducing the cost of future borrowing, if needed.

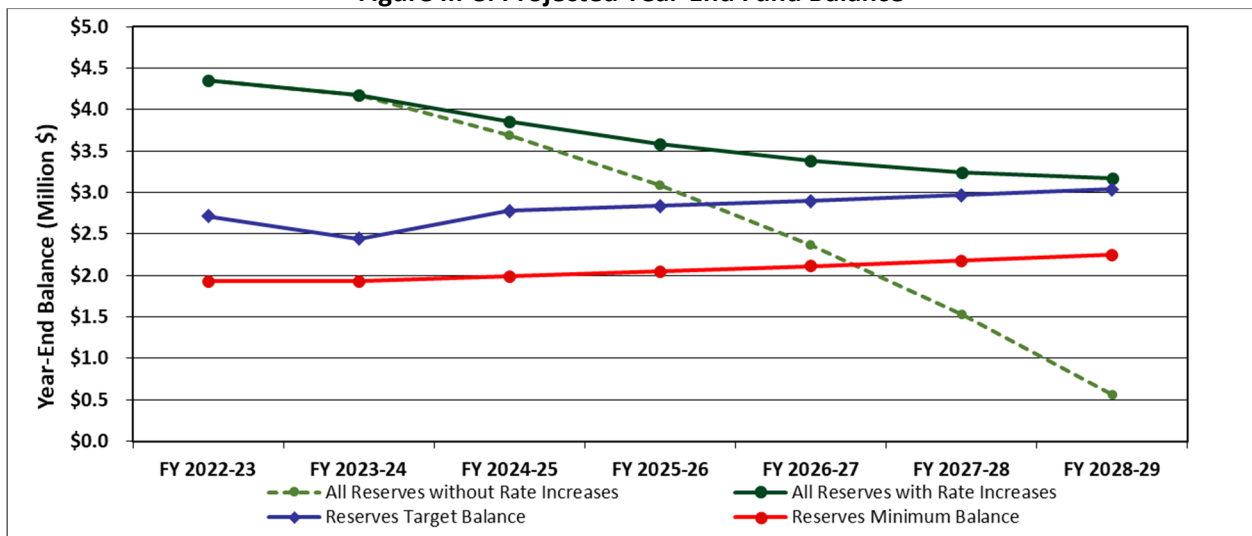
Figure III-7. City Debt Coverage Ratio Calculations (with rate adjustments)

Debt Service Coverage	Projected					
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Revenue Sources						
Sewer Service Charges	\$3,233,323	\$3,394,990	\$3,564,739	\$3,742,976	\$3,930,125	\$4,126,631
Sewer Lateral Inspect/Certif	\$15,149	\$15,149	\$15,149	\$15,149	\$15,149	\$15,149
	\$3,248,472	\$3,410,139	\$3,579,888	\$3,758,125	\$3,945,274	\$4,141,780
Operating Expenses	(\$2,567,309)	(\$2,648,828)	(\$2,733,009)	(\$2,819,118)	(\$2,907,278)	(\$2,997,488)
Net Revenue	\$681,163	\$761,310	\$846,879	\$939,007	\$1,037,996	\$1,144,292
Debt Service	\$433,459	\$433,059	\$432,509	\$431,809	\$430,959	\$434,959
Debt Coverage Ratio	1.57	1.76	1.96	2.17	2.41	2.63

RESERVE FUND BALANCE

Figure III-8 shows the annual fluctuations (solid green line) in the combined reserve fund balance that are caused by the differences between the revenue requirement and revenue from rates with the rate increases; the dashed green line is the projected, combined reserve fund balance without rate increases. The revenue increases in Figure III-6 were derived to balance increasing rates while maintaining a level of reserves that continues to stay above the combined balance of the City’s minimum approved amount for each reserve. Under this plan, the City will draw down their reserves to cover capital projects and to reduce rate increases. Conversely, without revenue increases, the FY 2022-23 year-end fund balance of \$4.35 million is projected to drop to less than \$600,000 by end of FY 2028-29 (see dashed green line in Figure III-8). The recommended rate increases are balanced with the use of reserves. Reserves help offset the increased costs projected, reducing the potential for larger increases to be borne by ratepayers.

Figure III-8. Projected Year-End Fund Balance



IV. COST-OF-SERVICE ANALYSIS

GENERAL APPROACH

The revenue requirement analysis establishes how much revenue is required from rates. The next step in the analysis is determining the cost of service. Cost-of-service analysis is used to derive rates that proportionally allocate the cost of service. This is achieved by allocating the revenue requirements to the components of the rate structure.

A cost-of-service analysis determines how much each customer and customer class should pay based on its respective share of service-related expenses and flow. The volume of wastewater discharged influences the design of the collection system. The cost-of-service analysis allocates expenses to cost components on the basis of operating considerations or design capacity. Therefore, a larger proportion of expenses associated with wastewater flow on the sewer system are allocated to customers who place a greater burden on the system.

CUSTOMER CLASSES

The cost-of-service analysis distributes the revenue requirements among customer classes in proportion to their service requirements. There is no industry standard that specifies which customer classes should be used. The law allows utilities to exercise discretion in determining the appropriate customer classes provided the rates yield charges that are proportional to the cost of providing service for each category. As a result, the allocation of costs needs to be tailored to the customer classes.

The City currently has multiple customer classes: Single-Family, Single-Family Attached, Duplexes, Multi-Family, and Commercial/Industrial. Note, while the City has residents who live in floating homes on the water, these customers sewer collection and sewer treatment services are provided exclusively by SMCSO.

These classes were last reviewed as part of the previous cost-of-service study in 2019. No revisions to the existing number and delineation of customer classes are recommended as part of this study.

COST OF SERVICE ANALYSIS

Cost-of-Service Allocations

A cost-of-service analysis is a process of determining how much services cost. To provide sewer service, infrastructure must be constructed, operated, and maintained, which must be paid for from cash or debt. The type and size of infrastructure depends on how much service customers require. Sewer systems are designed to provide sufficient capacity to meet customer demands for service wherever, whenever, and for as long as demanded.

The FY 2024-25 revenue requirement for collection system costs was summarized by function for cost recovery.

Analytical Procedure

The cost-of-service analysis needs to determine the portion of costs that will be allocated to customers in proportion to flow and use of the system. Not all costs are proportionate to flow; in fact, the majority of costs are independent of flow. Certain operating costs, such as personnel costs, would be incurred

regardless of how much flow was produced by customers. There are also debt service payments for two forms of issuance to finance capital projects. These annual payments do not fluctuate based on a customer's use of the system and must be paid until each loan reaches full maturity. The combination of these fixed operating and debt service costs are referred to as the "fixed cost component."

Other costs fluctuate based on variations in flow among customer classes. Such variable operating costs include electricity, oil, and gasoline for the pumping plants. Water and sewer costs incurred by the sewer enterprise also vary based on the proportion of variable and fixed revenue to be recovered through each respective rate structure imposed by the utility. All capital costs provide funding for pipe replacement and spot repairs of existing collection lines. As such, these capital costs are dependent on flow. Additional peak capacity must be provided for customers that discharge more and for overall peak wet weather capacity that is associated with the capacity that is provided for customer flows. The combination of these flow-related operating and capital costs is referred to as the "volumetric cost component."

The cost-of-service analysis employed in this report for purposes of calculating rates separates the revenue requirements into the fixed and volumetric cost components. The fixed cost component represents the common costs for collection of wastewater. These costs are independent of wastewater flow. The volumetric cost component apportions the flow-driven costs among the customer classes in proportion to their respective flows. The sum of the fixed and volumetric cost components determines each customer class's proportionate share of the cost of service.

Cost Allocation Factors

Separate cost allocation factors were developed to allocate operating and capital costs to the fixed and volumetric cost components. The cost allocation factors were derived as shown in **Figures IV-1** and **Figure IV-2**. For purposes of deriving the cost allocation factors, the FY 2024-25 projections were used, which are representative of future years. In total, 79% of the City's cost of providing service is fixed; in other words, the City would incur all these costs regardless of the amount of wastewater flow.

Figure IV-1. Cost Allocation

Revenue Requirement Allocation Factors	FY 2024-25	Fixed		Volumetric	
		%	\$	%	\$
O&M and Admin Expenses					
Salaries & Benefits	\$1,060,452	100%	\$1,060,452	0%	\$0
Insurance, Admin, Prof. Services	\$929,085	100%	\$929,085	0%	\$0
Vehicles & Supplies	\$128,712	100%	\$128,712	0%	\$0
Professional and Technical Services	\$499,550	100%	\$499,550	0%	\$0
Oil and Gasoline	\$13,161	0%	\$0	100%	\$13,161
Utilities - Sewer	\$7,210	88%	\$6,345	12%	\$865
Utilities - Water	\$5,459	37%	\$2,042	63%	\$3,417
Utilities - Electricity	\$5,199	0%	\$0	100%	\$5,199
Debt Service					
2011 SWRCB Loan	\$73,128	100%	\$73,128	0%	\$0
2015 Sewer Bond	\$359,931	100%	\$359,931	0%	\$0
Non-Operating & Other Revenue					
Sewer Lateral Inspect/Certif	(\$15,149)	100%	(\$15,149)	0%	\$0
Transfers					
Capital Projects	\$786,578	0%	\$0	100%	\$786,578
Operating Reserve Transfers	(\$458,327)	79%	(\$362,075)	21%	(\$96,252)
Total Net Revenue Requirement	\$3,394,990		\$2,682,020		\$712,970
			79%		21%

For purposes of deriving the capital cost allocation factors, the five-year capital improvement plan was used (FY 2024-25 through FY 2028-29). In this case, the capital improvement plan reflects the average cost over the five-year period, which is more representative than using the just one year's projected capital expenditures.

The revenue increase of 5% proposed in Section III, along with the completion of the capital improvement projects identified, would yield a difference between gross revenues and gross expenses of \$458,327 in FY 2024-25. This difference would require the use of the City's existing reserves. The use of existing operating reserves was apportioned among the fixed and volumetric cost components using a composite allocation. The allocation accounts for the use of reserves reducing both the fixed and variable rates customers would be required to pay under the proposed rate structure.

Figure IV-2 summarizes the cost allocation, indicating that 79% of the revenue requirement is the fixed component and 21% is the volumetric component. These percentages are applied to the FY 2024-25 net revenue requirement to determine the respective fixed and volumetric cost components of the City's sewer collection rates.

Figure IV-2. Fixed and Volumetric Allocation Summary

Revenue Requirement	Fixed	Volumetric	Total
FY 2024-25 O&M and Admin Expenses	\$2,626,185	\$22,643	\$2,648,828
Debt Service	\$433,059	\$0	\$433,059
Non-Operating & Other Revenue	(\$15,149)	\$0	(\$15,149)
Capital Projects	\$0	\$786,578	\$786,578
Transfers	(\$362,075)	(\$96,252)	(\$458,327)
	\$2,682,020	\$712,970	\$3,394,990
<i>Cost Allocation Factors</i>	79%	21%	100%

Units of Service

The functionalized costs in **Figure IV-2** are divided by the units of service to determine the unit costs. The units of service are EDUs and volumetric wastewater flow for recovery of the fixed and volumetric costs, respectively.

The fixed service rate is determined by dividing the fixed cost component by the total EDUs for all customers. For Single-Family, Single-Family Attached, Duplexes, & Multi-Family (Residential) customers, one EDU is the flow per DU compared to the flow per Single-Family DU. For Commercial/Industrial customers, the number of EDUs is the annual flow divided by the Single-Family standard flow rate. This residential annual flow rate is determined in **Figure IV-3**.

Using FY 2022-23 water use data provided by Marin Municipal Water District (MMWD), the annual sewer flows were calculated for each residential customer class. The annual flows represent the annualized winter water use recorded for these four Residential customer classes. In this figure, the Single-Family volume per dwelling unit, 61.09 hundred cubic feet (CCF), is derived. The flow factors calculate the ratio of the average flow per dwelling unit relative to the average flow per dwelling unit of a Single-Family parcel. This means that Single-Family Attached average flow is 65% of Single-Family equivalent, Duplexes' average flow is 59% of Single-Family equivalent, and Multi-Family average flow is 49% of Single-Family equivalent. The Single-Family customer class is assigned a flow factor of 1.0, or 100%.

Figure IV-3. Residential Flows

Residential Customer Class	Annual Flow (CCF)	Dwelling Units (DUs)	Flow/DU (CCF per DU)	Flow Factor
Single-Family	74,652	1,222	61.09	100%
Single-Family Attached	36,207	905	40.01	65%
Duplexes	37,881	1,045	36.25	59%
Multi-Family	30,462	1,022	29.81	49%

Using the flow factors based on the wastewater flow, **Figure IV-4** shows how the residential DUs were adjusted to EDUs for the purpose of developing the fixed service rates, which aligns with the City's current rate structure. The EDUs calculated per parcel correlate directly with the flow factors determined. Therefore, Single-Family Attached parcels are assessed 0.65 EDU, Duplex parcels are assessed 0.59 EDU per dwelling unit served by the parcel, and Multi-Family parcels are assessed 0.49 EDU per dwelling unit served by the parcel.

Figure IV-4. Residential EDUs

Residential Customer Class	Dwelling Units (DUs)	Flow Factor	EDUs
Single-Family	1,222	100%	1,222
Single-Family Attached	905	65%	593
Duplexes	1,045	59%	620
Multi-Family	1,022	49%	499

For Commercial/Industrial customers, the annual flow was divided by the flow per EDU, or the flow per Single-Family dwelling unit, to find the resulting Commercial/Industrial EDUs.

Figure IV-5. Commercial/Industrial EDUs

Non-Residential Customer Class	Annual Flow (CCF)	Flow per EDU	EDUs
Commercial/Industrial	77,780	61.09	1,273

A summary of DUs, EDUs, and flow is shown in **Figure IV-6**. Including all customer classes, the City serves 4,207 EDUs with an annual wastewater flow of 256,982 CCF.

Figure IV-6. Total EDUs and Flow

Customer Classes	Dwelling Units (DUs)	Flow Factor	EDUs	Annual Flow (CCF)
Single-Family	1,222	100%	1,222	74,652
Single-Family Attached	905	65%	593	36,207
Duplexes	1,045	59%	620	37,881
Multi-Family	1,022	49%	499	30,462
Commercial/Industrial	1,273	100%	1,273	77,780
Total	5,467		4,207	256,982

Note: Commercial/Industrial DUs have been set equal to Commercial/Industrial EDUs to reflect a 100% flow factor assumed, to align with Singel-Family parcels.

Unit Costs of Service

Figure IV-7 summarizes the derivation of the unit costs associated with the Fixed Service Rates and the Volumetric Rates. These unit costs are the costs of providing the units of service to all customer classes without exception, thereby ensuring that all customers pay their share in proportion to their respective units of service. The cost of service has been calculated using the net revenue requirement for FY 2024-25.

Figure IV-7. Cost of Service – Unit Costs

	Fixed	Volumetric
Allocated Functional Costs	\$2,682,020	\$712,970
Units of Service	4,207 EDUs	256,982 CCF
Unit Costs	\$637.57	\$2.77
	per EDU	per CCF

Note: Rounding differences caused by stored values in electronic models may exist.

The City’s net revenue requirement of \$3,394,990 (FY 2024-25) is used to allocate fixed and volumetric costs. The fixed share of costs, \$2,682,020, divided by 4,207 EDUs yields a fixed component of \$637.57 per EDU. The fixed component will adjust with the flow factor for each respective customer class and will yield each customer class’s annual share of fixed cost component. The remaining volumetric share of costs, \$712,970, divided by the annual wastewater flow of 256,982 CCF, results in a volumetric rate of \$2.77 per CCF for all customer classes.

Figure IV-8 demonstrates the movement of the overall revenue from the fixed service rates revenue to the volumetric rates revenue to align with the cost of service. The exercise performed indicates the proportion of fixed service rates revenue will decrease from 90% to 79% of total rate revenues, while volumetric rates revenue will increase from 10% to 21% of total rate revenues.

Rates need to be designed to generate each class’s share of the revenue requirement. The next section provides the recommended modifications to the Fixed Service Rates and Volumetric Rates needed to meet the cost of service.

Figure IV-8. Cost of Service Revenue Summary

Components of Rate Structure	Revenues at		Cost of Service		Difference	
	Current Rates FY 2023-24		Proposed Rates FY 2024-25		COS Minus Current	
Single-Family						
Fixed Rates Revenue	\$892,390	90%	\$779,113	79%	(\$113,276)	-12.7%
Volumetric Rates Revenue	\$94,808	10%	\$207,114	21%	\$112,306	118.5%
Subtotal	\$987,198	100%	\$986,228	100%	(\$970)	-0.1%
Single-Family Attached						
Fixed Rates Revenue	\$359,140	89%	\$377,878	79%	\$18,738	5.2%
Volumetric Rates Revenue	\$45,983	11%	\$100,453	21%	\$54,470	118.5%
Subtotal	\$405,123	100%	\$478,331	100%	\$73,208	18.1%
Duplexes						
Fixed Rates Revenue	\$414,750	90%	\$395,349	79%	(\$19,401)	-4.7%
Volumetric Rates Revenue	\$48,109	10%	\$105,097	21%	\$56,988	118.5%
Subtotal	\$462,859	100%	\$500,446	100%	\$37,587	8.1%
Multi-Family						
Fixed Rates Revenue	\$359,172	90%	\$317,920	79%	(\$41,252)	-11.5%
Volumetric Rates Revenue	\$38,687	10%	\$84,514	21%	\$45,827	118.5%
Subtotal	\$397,858	100%	\$402,434	100%	\$4,575	1.1%
Commercial/Industrial						
Fixed Rates Revenue	\$881,504	90%	\$811,759	79%	(\$69,745)	-7.9%
Volumetric Rates Revenue	\$98,781	10%	\$215,792	21%	\$117,012	118.5%
Subtotal	\$980,285	100%	\$1,027,552	100%	\$47,267	4.8%
Total Fixed Rates Revenue	\$2,906,956	90%	\$2,682,020	79%	(\$224,936)	-8%
Total Volumetric Charge Revenue	\$326,367	10%	\$712,970	21%	\$386,603	118.5%
Total Revenue	\$3,233,323	100%	\$3,394,990	100%	\$161,666	5%

V. RATE DESIGN

The City has historically charged customers the combination of a fixed component and a variable volumetric component based on the product of calculated sewer flow. As previously discussed, this is a common practice that is prevalent throughout the wastewater industry. This chapter explains the derivation of the Fixed Service Rates and Volumetric Rates that reflect the projected cost of service.

CURRENT RATES

The City’s current wastewater rate structure is composed of two components: Fixed Service Rates and Volumetric Rates.

Current Fixed Service Rates

The City provides collection services to five customer classes: Single-Family, Single-Family Attached, Duplexes, Multifamily, and Commercial/Industrial. All customers pay the sum of a fixed component and a volumetric component. The fixed component is different for all four residential customer classes. The Fixed Service Rates assessed to Single-Family and Commercial/Industrial customers is the same. However, Commercial/Industrial customers may be charged more than one EDU depending on the recorded water flow relative to the Single-Family average annual flow. The difference in rates reflects the different flow factors and differences in average wastewater contribution by customer class. **Figure V-1** shows the current Fixed Service Rates for all customer classes.

Figure V-1. Current Fixed Service Rates

Customer Class	Current Rates
	FY 2023-24
Fixed Rates (\$/Year/EDU)	
Single-Family	\$730.27
Single-Family Attached	\$396.84
Duplexes	\$396.89
Multi-Family	\$351.44
Commercial/Industrial	\$657.08

The current rates are recommended for adjustment to align with the cost of service to account for revised patterns of wastewater discharge among the customer classes.

Current Volumetric Rates

Residential customers are billed based on annualized, bi-monthly winter water use multiplied by the volumetric rate. For Commercial/Industrial customers, total annual water use is used multiplied by the volumetric rate. Water is measured in “units” of CCF of metered water use, whereby one unit or CCF equals 748 gallons. Volumetric Rates are charged to all customer classes. **Figure V-2** below illustrates the current volumetric rate.

The current rates are recommended for adjustment to align with the cost of service, which identified more volume-based costs. However, recommended rates are proposed to maintain the uniform volumetric rate between customer classes.

Figure V-2. Current Volumetric Rates

Customer Class	Current Rates
	FY 2023-24
Volumetric Rates (\$/HCF)	
Single-Family	\$1.27
Single-Family Attached	\$1.27
Duplexes	\$1.27
Multi-Family	\$1.27
Commercial/Industrial	\$1.27

SERVICE CHARGE DESIGN

The annual Fixed Service Rates for City customers, in **Figure V-3** below, are calculated using the unit cost determined in **Figure IV-7**. The rate is adjusted in proportion to the flow factor for each respective customer class. These flow factors were determined in **Figure IV-6** to reflect current patterns of wastewater discharge.

Figure V-3. Proposed City Customers Annual Fixed Service Rates – FY 2024-25

Customer Class	\$/EDU	Flow Factor	COS \$/EDU
	a	b	c=a*b
Single-Family	\$637.57	100%	\$637.57
Single-Family Attached	\$637.57	65%	\$417.54
Duplexes	\$637.57	59%	\$378.32
Multi-Family	\$637.57	49%	\$311.08
Commercial/Industrial	\$637.57	100%	\$637.57

With the proposed rates, all Fixed Service Rates billed to City customers would see a decrease, except Single-Family Attached which will experience an increase. The decrease in rates reflects the decreased proportion of rate revenues to be recovered through the Fixed Service Rates, as determined by the cost-of-service analysis, and as was calculated in **Figure IV-2**. **Figure V-4** shows the proposed five-year schedule of Fixed Service Rates. Under the proposed rates, Single-Family customers would be assessed \$637.57 per dwelling unit in FY 2024-25. Meanwhile, Single-Family attached, Duplexes, and Multi-Family customers would be assessed \$417.54, \$378.32, and \$311.08 per dwelling unit served by the parcel, respectively. Commercial/Industrial customers would be assessed \$637.57 per EDU, or per 61 CCF of meter water use. Therefore, Commercial/Industrial customers could be charged more than one EDU. Proposed Fixed Service Rates would be increased uniformly by 5% each fiscal year beginning FY 2025-26.

Figure V-4. Current and Proposed Fixed Service Rates

Customer Class	Current Rates		Proposed City Collection Rates			
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Fixed Rates (\$/Year)						
Single-Family (per DU)	\$730.27	\$637.57	\$669.45	\$702.92	\$738.07	\$774.97
Single-Family Attached (per DU)	\$396.84	\$417.54	\$438.42	\$460.34	\$483.36	\$507.53
Duplexes (per DU)	\$396.89	\$378.32	\$397.24	\$417.10	\$437.96	\$459.86
Multi-Family (per DU)	\$351.44	\$311.08	\$326.63	\$342.96	\$360.11	\$378.12
Commercial/Industrial (per EDU)	\$657.08	\$637.57	\$669.45	\$702.92	\$738.07	\$774.97

VOLUMETRIC RATES DESIGN

The Volumetric Rates were determined via the unit cost exercise in **Figure IV-7**. The unit cost of service does not vary by customer class. Therefore, the unit cost determined in the previous section is the proposed FY 2024-25 Volumetric Rates to be assessed to all customers, as shown in **Figure V-5**. The proposed rates for FY 2025-26 through FY 2028-29 reflect 5.0% annual increases. Volumetric Rates are increasing to align with the cost of service, which identified a greater proportionate share of volumetric costs in comparison to the City’s current rates.

Figure V-5. Current and Proposed Volumetric Rates

Customer Class	Current Rates		Proposed City Collection Rates			
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Volumetric Rates (\$/HCF)						
Single-Family	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
Single-Family Attached	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
Duplexes	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
Multi-Family	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37
Commercial/Industrial	\$1.27	\$2.77	\$2.91	\$3.06	\$3.21	\$3.37

Customer bills are subject to the customer class assigned for recovery of the fixed service rate, the number of EDUs associated with a parcel, and the total billed wastewater volume. Therefore, bills vary among customers within a customer class and individual bills by parcel fluctuate annually according to the previous year’s water use. Section VI provides additional context of how customers overall bills could change under the proposed rates.

VI. CUSTOMER IMPACTS

The residents of Sausalito receive two sewer bills, one from the City and one from SMCSO. These charges cover two entirely different services. The City is responsible for properly collecting and containing wastewater within the City of Sausalito limits. Sausalito residents pay a collection charge to the City for this service. SMCSO is responsible for the large pumps, pipelines, and controls that convey wastewater to the treatment plant, safely treat and disinfect it, and discharge it to the Bay through an outfall.

Figure VI-1 through Figure VI-3 provide a range of possible sewer collection charges per dwelling unit per customer class. The ranges reflect how billed wastewater volumes influence sewer collection bills at the proposed rates. Figure VI-1 shows the summary of the City’s collection charge based on half the average annual wastewater volume per dwelling unit. At this level of water use, the charge for Single-Family and Multi-Family dwelling units would decrease from the collection bill at current rates. In contrast, Single-Family Attached, Duplexes, and Commercial/Industrial customer bills would increase. A Single-Family customer can expect to pay \$722.18 in the first year in collection charges and \$877.91 in FY 2028-29, given 31 CCF of billed wastewater volumes per year.

Figure VI-1. Comparison of Annual Collection Charge (1/2 Average Wastewater Volume)

Customer Class	Rate Scenario	Current Rates	Charges with Proposed City Collection Rates				
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Single-Family 31 CCF / DU	Annual Charge	\$769.06	\$722.18	\$758.34	\$796.39	\$836.12	\$877.91
	Annual \$ Change		(\$46.88)	\$36.16	\$38.05	\$39.73	\$41.79
	Monthly \$ Change		(\$3.91)	\$3.01	\$3.17	\$3.31	\$3.48
Single-Family Attached 20 CCF / DU	Annual Charge	\$422.24	\$472.95	\$496.63	\$521.55	\$547.57	\$574.94
	Annual \$ Change		\$50.71	\$23.68	\$24.92	\$26.02	\$27.37
	Monthly \$ Change		\$4.23	\$1.97	\$2.08	\$2.17	\$2.28
Duplexes 18 CCF / DU	Annual Charge	\$419.91	\$428.53	\$449.98	\$472.56	\$496.14	\$520.94
	Annual \$ Change		\$8.62	\$21.46	\$22.58	\$23.58	\$24.80
	Monthly \$ Change		\$0.72	\$1.79	\$1.88	\$1.96	\$2.07
Multi-Family 15 CCF / DU	Annual Charge	\$370.37	\$352.36	\$370.00	\$388.56	\$407.95	\$428.34
	Annual \$ Change		(\$18.01)	\$17.64	\$18.57	\$19.39	\$20.39
	Monthly \$ Change		(\$1.50)	\$1.47	\$1.55	\$1.62	\$1.70
Commercial/Industrial 138 CCF / DU	Annual Charge	\$832.84	\$1,020.92	\$1,072.18	\$1,126.41	\$1,182.32	\$1,241.36
	Annual \$ Change		\$188.08	\$51.26	\$54.23	\$55.91	\$59.04
	Monthly \$ Change		\$15.67	\$4.27	\$4.52	\$4.66	\$4.92

Assuming average billed wastewater volumes per dwelling unit in each customer class, Figure VI-2 shows that Single-Family will see a marginal reduction in their bill while Duplexes and Multi-Family collection bills will see a slight increase. Single-Family Attached and Commercial/Industrial customers will see the largest increases. A Single-Family customer with average water use will pay \$806.79 the first year of increases and \$980.84 in FY 2028-29.

Figure VI-2. Comparison of Annual Collection Charge (Average Wastewater Volume)

Customer Class		Charges with Proposed City Collection Rates					
		Current Rates	Charges with Proposed City Collection Rates				
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Single-Family 61 CCF / DU	Annual Charge	\$807.85	\$806.79	\$847.22	\$889.86	\$934.17	\$980.84
	Annual \$ Change		(\$1.06)	\$40.43	\$42.63	\$44.31	\$46.67
	Monthly \$ Change		(\$0.09)	\$3.37	\$3.55	\$3.69	\$3.89
Single-Family Attached 40 CCF / DU	Annual Charge	\$447.65	\$528.36	\$554.84	\$582.76	\$611.78	\$642.36
	Annual \$ Change		\$80.71	\$26.48	\$27.92	\$29.02	\$30.57
	Monthly \$ Change		\$6.73	\$2.21	\$2.33	\$2.42	\$2.55
Duplexes 36 CCF / DU	Annual Charge	\$442.93	\$478.73	\$502.73	\$528.02	\$554.32	\$582.02
	Annual \$ Change		\$35.80	\$23.99	\$25.30	\$26.30	\$27.70
	Monthly \$ Change		\$2.98	\$2.00	\$2.11	\$2.19	\$2.31
Multi-Family 30 CCF / DU	Annual Charge	\$389.29	\$393.64	\$413.37	\$434.17	\$455.79	\$478.57
	Annual \$ Change		\$4.35	\$19.72	\$20.80	\$21.62	\$22.78
	Monthly \$ Change		\$0.36	\$1.64	\$1.73	\$1.80	\$1.90
Commercial/Industrial 277 CCF / DU	Annual Charge	\$1,008.60	\$1,404.28	\$1,474.91	\$1,549.90	\$1,626.57	\$1,707.75
	Annual \$ Change		\$395.68	\$70.63	\$74.99	\$76.67	\$81.19
	Monthly \$ Change		\$32.97	\$5.89	\$6.25	\$6.39	\$6.77

Assuming high wastewater volumes per dwelling unit per customer class, **Figure VI-3** demonstrates an increase to all customer classes. A Single-Family customer with high wastewater volumes (double the average volume) will pay \$976.01 the first year of increases and \$1,186.72 in FY 2028-29.

Figure VI-3. Comparison of Annual Collection Charge (2x Average Wastewater Volume)

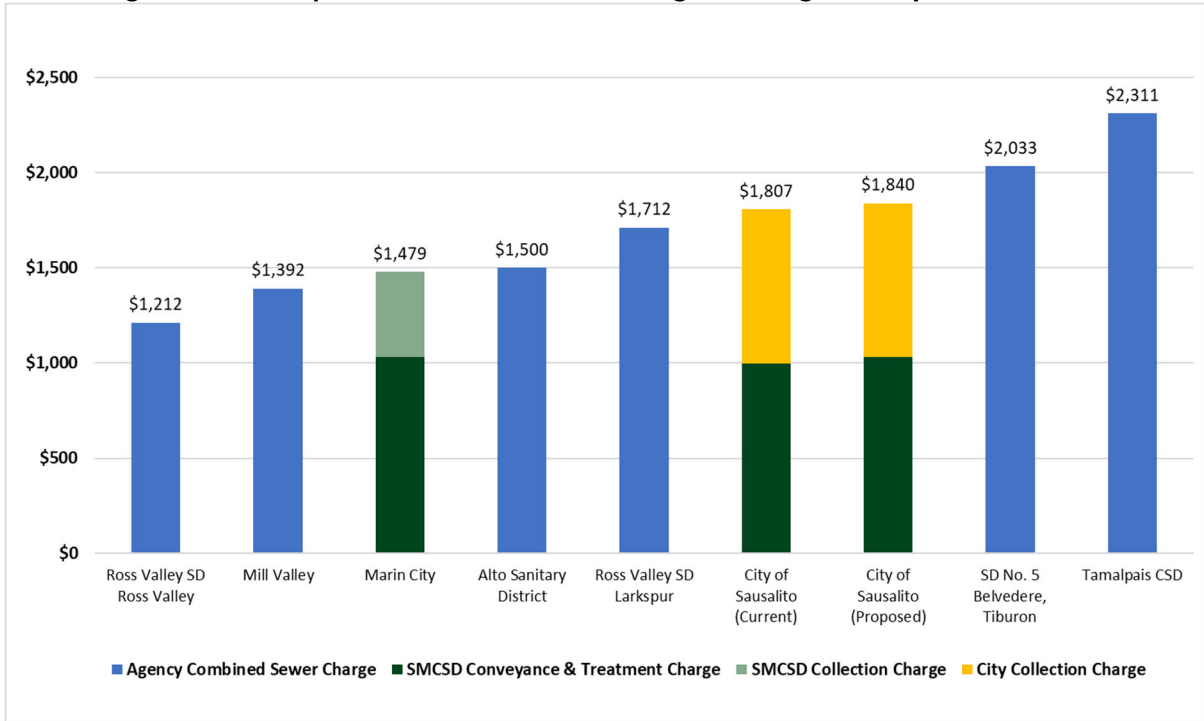
Customer Class		Charges with Proposed City Collection Rates					
		Current Rates	Charges with Proposed City Collection Rates				
Rate Scenario		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Single-Family 122 CCF / DU	Annual Charge	\$885.44	\$976.01	\$1,024.99	\$1,076.79	\$1,130.27	\$1,186.72
	Annual \$ Change		\$90.57	\$48.99	\$51.80	\$53.48	\$56.45
	Monthly \$ Change		\$7.55	\$4.08	\$4.32	\$4.46	\$4.70
Single-Family Attached 80 CCF / DU	Annual Charge	\$498.46	\$639.18	\$671.27	\$705.19	\$740.21	\$777.18
	Annual \$ Change		\$140.72	\$32.08	\$33.92	\$35.02	\$36.97
	Monthly \$ Change		\$11.73	\$2.67	\$2.83	\$2.92	\$3.08
Duplexes 73 CCF / DU	Annual Charge	\$488.96	\$579.14	\$608.21	\$638.95	\$670.68	\$704.18
	Annual \$ Change		\$90.18	\$29.07	\$30.73	\$31.73	\$33.50
	Monthly \$ Change		\$7.51	\$2.42	\$2.56	\$2.64	\$2.79
Multi-Family 60 CCF / DU	Annual Charge	\$427.15	\$476.21	\$500.10	\$525.37	\$551.47	\$579.01
	Annual \$ Change		\$49.06	\$23.90	\$25.27	\$26.09	\$27.55
	Monthly \$ Change		\$4.09	\$1.99	\$2.11	\$2.17	\$2.30
Commercial/Industrial 554 CCF / DU	Annual Charge	\$1,360.13	\$2,170.99	\$2,280.37	\$2,396.87	\$2,515.06	\$2,640.53
	Annual \$ Change		\$810.86	\$109.38	\$116.51	\$118.19	\$125.47
	Monthly \$ Change		\$67.57	\$9.12	\$9.71	\$9.85	\$10.46

NEIGHBORING AGENCY COMPARISON

Figure VI-4 illustrates the overall sewer charges Sausalito customers would pay compared to neighboring agencies. The comparison accounts for both the proposed collection rates assessed by Sausalito, as well as the conveyance and treatment rate assessed by SMCSO. In FY 2024-25, the overall sewer bill for Single-Family accounts in Sausalito is shown as the City's collection charge (\$806.79) plus the proposed conveyance & treatment charge to be assessed by SMCSO (\$1,033.00). SMCSO is currently conducting a rate study and has issued a Proposition 218 notice to inform ratepayers of SMCSO's intent to increase

rates. For this comparison, all flow-based charges assume annual usage of 61 CCF. This assumption is based on average annualized winter water use for Single-Family customers in Sausalito. At the assumed level of winter water use, Sausalito residents would see a 1.8% increase in the combined sewer charges paid to the City and SMCSD. Further, increases to the charges assessed would not change the position of Sausalito residents relative to other Single-Family customers in nearby agencies.

Figure VI-4. Comparison of Annual Sewer Charges for Single-Family Customers



Note: All rates shown reflect approved or proposed FY 2024-25 rates, except for Ross Valley Sanitary District (SD).

APPENDIX A. SEWER RATES MODEL

This page intentionally left blank for double-sided printing purposes.

	A	B	C	D	E	F	G	H																																								
1	City of Sausalito																																															
2	Sewer Rate Study																																															
3	1A. Summary																																															
4																																																
5	Budgeted		Proposed																																													
6	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29																																										
7	Annual Revenue Increases																																															
8	Revenue Increase (Collection)		5.0%	5.0%	5.0%	5.0%	5.0%	To Table 3A																																								
9	Cumulative Revenue Increase		5.0%	10.3%	15.8%	21.6%	27.6%																																									
10																																																
11	Debt Coverage Ratio (min. 1.2)	1.57	1.76	1.96	2.17	2.41	2.63	From Table 6																																								
12	Annual PAYGo Capital Spending	\$510,000	\$786,578	\$786,578	\$786,578	\$786,578	\$786,578	From Table 5																																								
13																																																
14	<table border="1"> <caption>Year-End Balance (Million \$)</caption> <thead> <tr> <th>Fiscal Year</th> <th>All Reserves without Rate Increases</th> <th>All Reserves with Rate Increases</th> <th>Reserves Target Balance</th> <th>Reserves Minimum Balance</th> </tr> </thead> <tbody> <tr> <td>FY 2022-23</td> <td>\$4.3</td> <td>\$4.3</td> <td>\$2.7</td> <td>\$1.9</td> </tr> <tr> <td>FY 2023-24</td> <td>\$4.1</td> <td>\$4.1</td> <td>\$2.4</td> <td>\$1.9</td> </tr> <tr> <td>FY 2024-25</td> <td>\$3.7</td> <td>\$3.8</td> <td>\$2.7</td> <td>\$2.0</td> </tr> <tr> <td>FY 2025-26</td> <td>\$3.0</td> <td>\$3.5</td> <td>\$2.8</td> <td>\$2.0</td> </tr> <tr> <td>FY 2026-27</td> <td>\$2.3</td> <td>\$3.3</td> <td>\$2.9</td> <td>\$2.1</td> </tr> <tr> <td>FY 2027-28</td> <td>\$1.5</td> <td>\$3.2</td> <td>\$2.9</td> <td>\$2.1</td> </tr> <tr> <td>FY 2028-29</td> <td>\$0.5</td> <td>\$3.1</td> <td>\$3.0</td> <td>\$2.2</td> </tr> </tbody> </table>								Fiscal Year	All Reserves without Rate Increases	All Reserves with Rate Increases	Reserves Target Balance	Reserves Minimum Balance	FY 2022-23	\$4.3	\$4.3	\$2.7	\$1.9	FY 2023-24	\$4.1	\$4.1	\$2.4	\$1.9	FY 2024-25	\$3.7	\$3.8	\$2.7	\$2.0	FY 2025-26	\$3.0	\$3.5	\$2.8	\$2.0	FY 2026-27	\$2.3	\$3.3	\$2.9	\$2.1	FY 2027-28	\$1.5	\$3.2	\$2.9	\$2.1	FY 2028-29	\$0.5	\$3.1	\$3.0	\$2.2
Fiscal Year									All Reserves without Rate Increases	All Reserves with Rate Increases	Reserves Target Balance	Reserves Minimum Balance																																				
FY 2022-23									\$4.3	\$4.3	\$2.7	\$1.9																																				
FY 2023-24									\$4.1	\$4.1	\$2.4	\$1.9																																				
FY 2024-25									\$3.7	\$3.8	\$2.7	\$2.0																																				
FY 2025-26									\$3.0	\$3.5	\$2.8	\$2.0																																				
FY 2026-27									\$2.3	\$3.3	\$2.9	\$2.1																																				
FY 2027-28									\$1.5	\$3.2	\$2.9	\$2.1																																				
FY 2028-29									\$0.5	\$3.1	\$3.0	\$2.2																																				
15																																																
16																																																
17																																																
18																																																
19																																																
20																																																
21																																																
22																																																
23																																																
24																																																
25																																																
26																																																
27																																																
28																																																
29																																																
30																																																
31																																																
32																																																
33																																																
52																																																

	A	B	C	D	E	F	G	H	I
1	City of Sausalito								
2	Sewer Rate Study								
3	1B. Assumptions								
4									
5	Inflation Assumptions		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Notes
6	a. Interest on Reserve Balances		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	City estimate
7	b. General Inflation	Budget	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	City estimate
8	c. OPEB reserve transfer	Budget	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%	City estimate
9	d. Construction Cost Inflation	Budget	3.91%	3.91%	3.91%	3.91%	3.91%	3.91%	ENR SF CCI - 10-year CAGR as of June 2023
10	e. Incorporated Single Family Growth (EDUs)	0	0	0	0	0	0	0	No growth anticipated
11	f. Fuel & Utilities	-	4.80%	4.80%	4.50%	4.25%	4.00%	4.00%	BLS CPI-Fuel Index
12	g. Salaries & Benefits		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	City estimate
13	h. Composite O&M	Budget	3.18%	3.18%	3.15%	3.13%	3.10%	3.10%	annual change in City's O&M expenses

	A	B	C	D	E	F	G	H	I
1	City of Sausalito								
2	Sewer Rate Study								
3	2. Revenue Requirements								
4									
5		Escalation							
6		Factor							
7		Table 1b	Budgeted	Projected					
8	Fund Expenditures		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Notes
9									Fund 110 is Sewer Fund
10	Salaries & Wages	b	\$670,090	\$690,193	\$710,898	\$732,225	\$754,192	\$776,818	
11	Professional Services	b	\$450,000	\$463,500	\$477,405	\$491,727	\$506,479	\$521,673	
12	Insurance - Liability	b	\$275,000	\$283,250	\$291,748	\$300,500	\$309,515	\$318,800	
13	Repair of Sewer Infrastructure	f	\$250,000	\$262,000	\$274,576	\$286,932	\$299,127	\$311,092	
14	Admin Charge - General Fund	b	\$225,000	\$231,750	\$238,703	\$245,864	\$253,239	\$260,837	
15	Cafeteria Plan	b	\$120,648	\$124,267	\$127,995	\$131,835	\$135,790	\$139,864	
16	PERS ER UAAL Miscellaneous	b	\$117,226	\$120,743	\$124,365	\$128,096	\$131,939	\$135,897	
17	Repair & Maint Vehicles	b	\$76,000	\$78,280	\$80,628	\$83,047	\$85,539	\$88,105	
18	PERS Employer Contrib	b	\$70,411	\$72,523	\$74,699	\$76,940	\$79,248	\$81,626	
19	Urgent Repairs	b	\$50,000	\$51,500	\$53,045	\$54,636	\$56,275	\$57,964	
20	Technical Services	b	\$35,000	\$36,050	\$37,132	\$38,245	\$39,393	\$40,575	
21	Workers' Compensation	b	\$20,150	\$20,755	\$21,377	\$22,018	\$22,679	\$23,359	
22	Riverwatch Settlement Insp.	b	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510	\$23,185	
23	Machinery & Equipment	b	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510	\$23,185	
24	Dues & Subscription	b	\$17,000	\$17,510	\$18,035	\$18,576	\$19,134	\$19,708	
25	Overtime	b	\$16,533	\$17,029	\$17,540	\$18,066	\$18,608	\$19,166	
26	Supplies - General	b	\$16,000	\$16,480	\$16,974	\$17,484	\$18,008	\$18,548	
27	Sewer Management Prog.	b	\$15,000	\$15,450	\$15,914	\$16,391	\$16,883	\$17,389	
28	Oil and Gasoline	b	\$12,778	\$13,161	\$13,556	\$13,963	\$14,382	\$14,813	
29	Permits	b	\$10,000	\$10,300	\$10,609	\$10,927	\$11,255	\$11,593	
30	Medicare	b	\$9,956	\$10,255	\$10,562	\$10,879	\$11,206	\$11,542	
31	Auto Allowance	b	\$7,200	\$7,416	\$7,638	\$7,868	\$8,104	\$8,347	
32	Utilities - Sewer	b	\$7,000	\$7,210	\$7,426	\$7,649	\$7,879	\$8,115	
33	City Paid Def Comp.	b	\$6,815	\$7,019	\$7,230	\$7,447	\$7,670	\$7,900	
34	Utilities - Water	b	\$5,300	\$5,459	\$5,623	\$5,791	\$5,965	\$6,144	
35	Cleaning Services	b	\$5,272	\$5,430	\$5,593	\$5,761	\$5,934	\$6,112	
36	Utilities - Electricity	b	\$5,048	\$5,199	\$5,355	\$5,516	\$5,682	\$5,852	
37	Repair Machinery & Equip	b	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796	
38	Retiree Health	b	\$4,551	\$4,688	\$4,828	\$4,973	\$5,122	\$5,276	
39	Uniforms	b	\$4,213	\$4,339	\$4,470	\$4,604	\$4,742	\$4,884	
40	Training and Workshops	b	\$4,000	\$4,120	\$4,244	\$4,371	\$4,502	\$4,637	
41	MERA Operating Costs	b	\$3,801	\$3,915	\$4,032	\$4,153	\$4,278	\$4,406	
42	Computer Equipment	b	\$3,500	\$3,605	\$3,713	\$3,825	\$3,939	\$4,057	
43	Utilities - Telephone	b	\$3,267	\$3,365	\$3,466	\$3,570	\$3,677	\$3,787	
44	Rental Mach and Equip	b	\$2,000	\$2,060	\$2,122	\$2,185	\$2,251	\$2,319	
45	Riverwatch Settlement Repairs	b	\$1,000	\$1,030	\$1,061	\$1,093	\$1,126	\$1,159	
46	Safety Supplies	b	\$1,000	\$1,030	\$1,061	\$1,093	\$1,126	\$1,159	
47	Utilities - Solid Waste	b	\$800	\$824	\$849	\$874	\$900	\$927	
48	Office Supplies	b	\$750	\$773	\$796	\$820	\$844	\$869	
49	Subtotal		\$2,567,309	\$2,648,828	\$2,733,009	\$2,819,118	\$2,907,278	\$2,997,488	
50	Annual increase			3.2%	3.2%	3.2%	3.1%	3.1%	
51									
52	Debt Service								

	A	B	C	D	E	F	G	H	I
1	City of Sausalito								
2	Sewer Rate Study								
3	2. Revenue Requirements								
4									
5		Escalation							
6		Factor							
7		Table 1b							
			Budgeted	Projected					
			FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Notes
53	2011 SWRCB Loan		\$69,000	\$73,128	\$73,128	\$73,128	\$73,128	\$73,128	
54	2015 Sewer Bond		\$365,763	\$359,931	\$359,381	\$358,681	\$357,831	\$361,831	
55		Subtotal	\$434,763	\$433,059	\$432,509	\$431,809	\$430,959	\$434,959	
56									
57	Non-Operating & Other Revenue								
58	Sewer Lateral Inspect/Certif		(\$15,149)	(\$15,149)	(\$15,149)	(\$15,149)	(\$15,149)	(\$15,149)	
59		Subtotal	(\$15,149)	(\$15,149)	(\$15,149)	(\$15,149)	(\$15,149)	(\$15,149)	
60	needs update								
61	Transfers								
62	To/(From) Capital Reserve		\$510,000	\$786,578	\$786,578	\$786,578	\$786,578	\$786,578	From Table 4
63	To/(From) Operating Reserve		\$0	(\$458,327)	\$0	\$0	\$0	\$0	From Table 4
64	To/(From) OPEB		\$0	\$0	\$0	\$0	\$0	\$0	From Table 4
65		Subtotal	\$510,000	\$328,251	\$786,578	\$786,578	\$786,578	\$786,578	
66									
67	Net Revenue Requirement		\$3,496,923	\$3,394,990	\$3,936,947	\$4,022,356	\$4,109,666	\$4,203,876	
68		Annual increase		-2.9%	16.0%	2.2%	2.2%	2.3%	
69		Cumulative increase		-2.9%	12.6%	15.0%	17.5%	20.2%	
70									
71	FY 2023-24 Budget Figures from Adopted Budget FY 2023/24								
72									
73									
74									

	A	B	C	D	E	F	G	H
1	City of Sausalito							
2	Sewer Rate Study							
3	3A. Revenue Increases							
4								
5		Budget	Projected					
6		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Notes
7								
8	Sewer Charges							
9	Prop Tax Bill - Sewer Charge	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	From Table 3B; includes City and Direct Bill customers
10	Revenue at Current Rates	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	
11	Net Revenue Requirement	\$3,496,923	\$3,394,990	\$3,936,947	\$4,022,356	\$4,109,666	\$4,203,876	From Table 2; To Below
12	Surplus/(Deficit) before Rate Increase	(\$263,600)	(\$161,666)	(\$703,624)	(\$789,033)	(\$876,343)	(\$970,552)	
13								
14								
15	Rate Revenue Analysis							
16	Annual Increase in Rate		5.0%	5.0%	5.0%	5.0%	5.0%	From Summary & Assumptions
17								
18	Revenue at Current Rates (incl. growth)	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	\$3,233,323	From Above
19	Revenue From Rate Increases Effective:							
20	July 1, 2024		\$161,666	\$161,666	\$161,666	\$161,666	\$161,666	
21	July 1, 2025			\$169,749	\$169,749	\$169,749	\$169,749	
22	July 1, 2026				\$178,237	\$178,237	\$178,237	
23	July 1, 2027					\$187,149	\$187,149	
24	July 1, 2028						\$196,506	
25	Subtotal, Transport and Treatment Revenue Increase	\$0	\$161,666	\$331,416	\$509,653	\$696,801	\$893,308	
26								
27	Total Rate Revenue (after rate adjs)	\$3,233,323	\$3,394,990	\$3,564,739	\$3,742,976	\$3,930,125	\$4,126,631	Existing + Increase
28								
29	Total Revenue at Proposed Rates	\$3,233,323	\$3,394,990	\$3,564,739	\$3,742,976	\$3,930,125	\$4,126,631	
30	Net Revenue Requirement	\$3,496,923	\$3,394,990	\$3,936,947	\$4,022,356	\$4,109,666	\$4,203,876	From Above
31	Surplus/(Deficit) after Rate Increase	(\$263,600)	\$0	(\$372,208)	(\$279,380)	(\$179,541)	(\$77,245)	To Table 4

	A	B	C	D	E	F	G	H
1	City of Sausalito							
2	Sewer Rate Study							
3	3B. Revenue at Current Rates							
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15	<i>Sewer Charge</i>							
16	<i>Property Tax, Direct Bill, and City Owned Direct Bill Customers (All)</i>							
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								

Sewer Charge Revenue		Notes
Source	Total	
Property Tax	\$3,082,135	
Direct Bill	\$28,950	
City Owned	\$122,239	
Total	\$3,233,323	To Table 3A

	Count	Fixed Total	Vol Total	Total Charges	Total HCF	Total Dwelling Units
Single-Family	1236	\$892,390	\$94,808	\$987,198	74,652	1,222
Single-Family Attached	906	\$359,140	\$45,983	\$405,123	36,207	905
Duplexes	690	\$414,750	\$48,109	\$462,859	37,881	1,045
Multi-Family Residential	340	\$359,172	\$38,687	\$397,858	30,462	1,022
Subtotal, Residential				\$2,253,038	179,202	4,194
Commercial/Industrial	281	\$881,504	\$98,781	\$980,285	77,780	1,342
Subtotal, Non-Residential				\$980,285	77,780	1,342
		\$2,906,956	\$326,367			
			Total	\$3,233,323	256,982	5,536
		89.91%	10.09%			

	A	B	C	D	E	F	G	H	I
1	City of Sausalito								
2	Sewer Rate Study								
3	4. Reserves								
4									
5		Actual	Budgeted	Projected					
6		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Notes
7	Operating Reserves with increase								
8	Sewer Rate		\$1,280,000	\$1,039,364	\$597,242	\$233,256	\$965,748	\$1,813,726	
9	Operating Surplus/(Deficit)		(\$263,600)	\$0	(\$372,208)	(\$279,380)	(\$179,541)	(\$77,245)	From Table 3
10	Transfers:								
11	(To)/From Revenue Requirements			(\$458,327)					
12	(To)/From Capital Reserve		\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$500,000	
13	Subtotal		\$1,016,400	\$581,038	\$225,034	\$953,876	\$1,786,206	\$2,236,481	
14	Estimated Interest Income		\$22,964	\$16,204	\$8,223	\$11,871	\$27,520	\$40,502	Assumption a.
15	Year-End Balance	\$1,280,000	\$1,039,364	\$597,242	\$233,256	\$965,748	\$1,813,726	\$2,276,983	
16	Target Balance	\$1,930,000	\$1,930,000	\$1,990,000	\$2,050,000	\$2,110,000	\$2,180,000	\$2,250,000	Target
17	% of target			30%	11%	46%	83%	101%	9 mos. Of O&M Expenses
18	Capital Reserve								
19	Beginning Balance		\$3,074,870	\$3,136,367	\$3,258,877	\$3,355,092	\$2,413,363	\$1,421,762	
20	Transfers:								
21	(To)/From Revenue Requirements		\$510,000	\$786,578	\$786,578	\$786,578	\$786,578	\$786,578	To Table 2
22	(To)/From Operating Reserve			\$0	\$0	(\$1,000,000)	(\$1,000,000)	(\$500,000)	From Above
23	Capital Expenditures		(\$510,000)	(\$727,388)	(\$755,848)	(\$785,421)	(\$816,151)	(\$848,083)	From Above
24	Capital outlay		\$0	\$0	\$0	\$0	\$0	\$0	
25	Subtotal		\$3,074,870	\$3,195,557	\$3,289,607	\$2,356,249	\$1,383,790	\$860,256	
26	Estimated Interest Income		\$61,497	\$63,319	\$65,485	\$57,113	\$37,972	\$22,820	Assumption a.
27	Year-End Balance	\$3,074,870	\$3,136,367	\$3,258,877	\$3,355,092	\$2,413,363	\$1,421,762	\$883,077	
28	Target Balance	\$786,578	\$510,000	\$786,578	\$786,578	\$786,578	\$786,578	\$786,578	1.0x CIP
29									
30									
31									
32									
33									
34	Operating Reserves without increase								
35	Beginning Balance		\$1,280,000	\$1,039,364	\$433,959	(\$268,022)	(\$57,055)	\$66,698	From Below
36	Operating Surplus/(Deficit)		(\$263,600)	(\$161,666)	(\$703,624)	(\$789,033)	(\$876,343)	(\$970,552)	From Table 3A
37	Transfers:								
38	(To)/From Revenue Requirements		\$0	(\$458,327)	\$0	\$0	\$0	\$0	
39	(To)/From Capital Reserve		\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$500,000	
40	Subtotal		\$1,016,400	\$419,371	(\$269,665)	(\$57,055)	\$66,603	(\$403,854)	
41	Estimated Interest Income		\$22,964	\$14,587	\$1,643	\$0	\$95	\$0	
42	Year-End Balance	\$1,280,000	\$1,039,364	\$433,959	(\$268,022)	(\$57,055)	\$66,698	(\$403,854)	
43									
44									
45									
46									
47									
48									
49									
50									
51	All Reserves without Rate Increases	\$4,354,870	\$4,175,732	\$3,692,836	\$3,087,070	\$2,356,308	\$1,488,460	\$479,222	
52	All Reserves with Rate Increases	\$4,354,870	\$4,175,732	\$3,856,118	\$3,588,348	\$3,379,110	\$3,235,487	\$3,160,060	
53	Reserves Target Balance	\$2,716,578	\$2,440,000	\$2,776,578	\$2,836,578	\$2,896,578	\$2,966,578	\$3,036,578	
54	Reserves Minimum Balance	\$1,930,000	\$1,930,000	\$1,990,000	\$2,050,000	\$2,110,000	\$2,180,000	\$2,250,000	

	A	B	C	D	E	F	G	H
1	City of Sausalito							
2	Sewer Rate Study							
3	5A. CIP							
4								
5								
6		Budgeted	Projected					
7	Cash-funded (PAYGo) Projects	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
12	City budgeted capital improvements		\$700,000	\$700,000	\$700,000	\$700,000	\$700,000	From Tab 1A; per Ctiy direction
13	Accumulated Construction Cost Index		3.91%	7.98%	12.20%	16.59%	21.15%	
14	Inflation Adjusted Subtotal		\$727,388	\$755,848	\$785,421	\$816,151	\$848,083	To Tab 4

	A	B	C	D	E	F	G	H
1	City of Sausalito							
2	Sewer Rate Study							
3	6. Debt Service							
4								
5								
6		Budgeted	Projected					
7		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
8	Sewer Collection Rate							
9								
10	<u>2011 SWRCB Loan (matures 2032)</u>							
11	Principle	\$56,573	\$58,044	\$59,553	\$61,101	\$62,690	\$64,320	
12	Interest	\$16,555	\$15,084	\$13,575	\$12,026	\$10,438	\$8,808	
13	Total Payment	\$73,128	\$73,128	\$73,128	\$73,128	\$73,128	\$73,128	per debt serv
14								
15	<u>2015 Sewer Bonds (matures 2044)</u>							
16	Principle	\$180,000	\$185,000	\$190,000	\$195,000	\$200,000	\$210,000	
17	Interest	\$180,331	\$174,931	\$169,381	\$163,681	\$157,831	\$151,831	
18	Total Payment	\$360,331	\$359,931	\$359,381	\$358,681	\$357,831	\$361,831	per debt serv
19								
20	Total debt and loan repayment	\$433,459	\$433,059	\$432,509	\$431,809	\$430,959	\$434,959	
21								

	A	B	C	D	E	F	G	H	I
1	City of Sausalito								
2	Sewer Rate Study								
3	7. Units of Service								
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									

Customer Classes	No. of EDUs	Billed Flow CCF	% of Billed Consumption	FY 24/25 Rev Req	Fixed Revenue Requirement	Fixed Charge per EDU	% of SFR Fixed Charge
<i>Net Rev Req 24/25: \$3,394,990</i>							
Single-Family	1,222	74,652	29%	\$986,228	\$779,120	\$637.58	100%
Single-Family Attached	905	36,207	14%	\$478,331	\$377,881	\$417.55	65%
Duplexes	1,045	37,881	15%	\$500,446	\$395,352	\$378.33	59%
Multi-Family Residential	1,022	30,462	12%	\$402,434	\$317,922	\$311.08	49%
Subtotal, Residential	4,194	179,202	70%	\$2,367,438	\$1,870,276		
Commercial/Industrial	1,273	77,780	30%	\$1,027,552	\$811,766	\$637.58	100%
Subtotal, Commercial	1,273	77,780	30%	1,027,552	811,766		
Total	5,467	256,982	100%	\$3,394,990	\$2,682,042		

Customer Classes	Billed Flow CCF	% of Billed Consumption	FY 24/25 Rev Req	Variable Revenue Requirement	Variable Charge per CCF
<i>Net Rev Req 24/25: \$3,394,990</i>					
Residential	179,202	70%	\$2,367,438	\$497,162	\$2.77
Commercial/Industrial	77,780	30%	\$1,027,552	\$215,786	\$2.77
Total	256,982		\$3,394,990	\$712,948	

	A	B	C	D	E	F	G	H	I	J
1	City of Sausalito									
2	Sewer Rate Study									
3	8. Cost of Service Analysis									
4										
5										
6										
7		Operating and Administrative Expenses		FIXED		VOLUMETRIC		NOTES		
8		From Table 2	%	\$	%	\$				
9	Salaries & Wages	\$690,193	100%	\$690,193	0%	\$0				
10	Professional Services	\$463,500	100%	\$463,500	0%	\$0				
11	Insurance - Liability	\$283,250	100%	\$283,250	0%	\$0				
12	Repair of Sewer Infrastructure	\$262,000	100%	\$262,000	0%	\$0				
13	Admin Charge - General Fund	\$231,750	100%	\$231,750	0%	\$0				
14	Cafeteria Plan	\$124,267	100%	\$124,267	0%	\$0				
15	PERS ER UAAL Miscellaneous	\$120,743	100%	\$120,743	0%	\$0				
16	Repair & Maint Vehicles	\$78,280	100%	\$78,280	0%	\$0				
17	PERS Employer Contrib	\$72,523	100%	\$72,523	0%	\$0				
18	Urgent Repairs	\$51,500	100%	\$51,500	0%	\$0				
19	Technical Services	\$36,050	100%	\$36,050	0%	\$0				
20	Workers' Compensation	\$20,755	100%	\$20,755	0%	\$0				
21	Riverwatch Settlement Insp.	\$20,600	100%	\$20,600	0%	\$0				
22	Machinery & Equipment	\$20,600	100%	\$20,600	0%	\$0				
23	Dues & Subscription	\$17,510	100%	\$17,510	0%	\$0				
24	Overtime	\$17,029	100%	\$17,029	0%	\$0				
25	Supplies - General	\$16,480	100%	\$16,480	0%	\$0				
26	Sewer Management Prog.	\$15,450	100%	\$15,450	0%	\$0				
27	Oil and Gasoline	\$13,161	0%	\$0	100%	\$13,161				
28	Permits	\$10,300	100%	\$10,300	0%	\$0				
29	Medicare	\$10,255	100%	\$10,255	0%	\$0				
30	Auto Allowance	\$7,416	100%	\$7,416	0%	\$0				
31	Utilities - Sewer	\$7,210	88%	\$6,345	12%	\$865			Revenue split based on 2019 COS study	
32	City Paid Def Comp.	\$7,019	100%	\$7,019	0%	\$0				
33	Utilities - Water	\$5,459	37%	\$2,042	63%	\$3,417			Based on 2023 BWA MMWD Rate Study	
34	Cleaning Services	\$5,430	100%	\$5,430	0%	\$0				
35	Utilities - Electricity	\$5,199	0%	\$0	100%	\$5,199				
36	Repair Machinery & Equip	\$5,150	100%	\$5,150	0%	\$0				
37	Retiree Health	\$4,688	100%	\$4,688	0%	\$0				
38	Uniforms	\$4,339	100%	\$4,339	0%	\$0				
39	Training and Workshops	\$4,120	100%	\$4,120	0%	\$0				
40	MERA Operating Costs	\$3,915	100%	\$3,915	0%	\$0				
41	Computer Equipment	\$3,605	100%	\$3,605	0%	\$0				
42	Utilities - Telephone	\$3,365	100%	\$3,365	0%	\$0				
43	Rental Mach and Equip	\$2,060	100%	\$2,060	0%	\$0				
44	Riverwatch Settlement Repairs	\$1,030	100%	\$1,030	0%	\$0				
45	Safety Supplies	\$1,030	100%	\$1,030	0%	\$0				
46	Utilities - Solid Waste	\$824	100%	\$824	0%	\$0				
47	Office Supplies	\$773	100%	\$773	0%	\$0				
48	Debt Service									
49	2011 SWRCB Loan	\$73,128	100%	\$73,128	0%	\$0			Spinner/Humboldt St Sewer and Anchor Pump Station Rehab Project	
50	2015 Sewer Bond	\$359,931	100%	\$359,931	0%	\$0			27 Pipeline replacement projects	
51										
52	Non-Operating & Other Revenue									
53	Sewer Lateral Inspect/Certif	(\$15,149)	100%	(\$15,149)	0%	\$0				
54										
55	Transfers									
56	Capital Projects	\$786,578	0%	\$0	100%	\$786,578			All pipe replacement or spot repair projects	
57	Operating Reserve Transfers	(\$458,327)	79%	(\$362,075)	21%	(\$96,252)			Ratio of all other fixed and variable costs from above line items	
58										
59	Total Net Revenue Requirement	\$3,394,990		\$2,682,020		\$712,970				
60				79%		21%				
61										

	A	B	C	D	E	F	G	H	I	J
1	City of Sausalito									
2	Sewer Rate Study									
3	8. Cost of Service Analysis									
62										
63		Flow	DUs	Flow/DU	Flow Factor					
64	Single-Family	74,652	1,222	61.09	100%	Flow for Residential is annualized Feb. water use				
65	Single-Family Attached	36,207	905	40.01	65%	Flow for Comm/Ind is annual water use				
66	Duplexes	37,881	1,045	36.25	59%					
67	Multi-Family	30,462	1,022	29.81	49%					
68	Commercial/Industrial	77,780	1,273	61.09	100%					
69										
70	Method 1 - Current Rate Setting Approach - based on cost allocation of 79% fixed, 21% volumetric									
71	Fixed Charges	DUs	Flow Factor	EDUs	% of EDUs	\$2,682,020	EDUs		\$/EDU	
72	Single-Family	1,222	100%	1,222	29%	\$779,113	1,222		\$637.57	
73	Single-Family Attached	905	65%	593	14%	\$377,878	905		\$417.54	
74	Duplexes	1,045	59%	620	15%	\$395,349	1,045		\$378.32	
75	Multi-Family	1,022	49%	499	12%	\$317,920	1,022		\$311.08	
76	Commercial/Industrial	1,273	100%	1,273	30%	\$811,759	1,273		\$637.57	
77		5,467		4,207	100%	\$2,682,020	5,467			
78										\$637.57 per EDU
79										
80	Volumetric Charges	% of Flow	\$712,970	Flow	\$/HCF					
81	Single-Family	29%	\$207,114	74,652	\$2.77					
82	Single-Family Attached	14%	\$100,453	36,207	\$2.77					
83	Duplexes	15%	\$105,097	37,881	\$2.77					
84	Multi-Family	12%	\$84,514	30,462	\$2.77					
85	Commercial/Industrial	30%	\$215,792	77,780	\$2.77					
86		100%	\$712,970	256,982						
87										
88										
89	Fixed Charges	DUs	EDU Factor	EDUs		\$2,682,020	DU		\$/DU	
90	Single-Family	1,222	100%	1,222	29%	\$779,113	1,222		\$637.57	
91	Single-Family Attached	905	65%	593	14%	\$377,878	905		\$417.54	
92	Duplexes	1,045	59%	620	15%	\$395,349	1,045		\$378.32	
93	Multi-Family	1,022	49%	499	12%	\$317,920	1,022		\$311.08	
94	Commercial/Industrial	1,273	100%	1,273	30%	\$811,759	1,273		\$637.57	
95		5,467		4,207						