



# SAUSALITO-MARIN CITY SANITARY DISTRICT Sewer Service Charge Study

**Final Report**  
**March 21, 2024**



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March 21, 2024

Jeffrey Kingston  
General Manager  
Sausalito-Marín District Sanitary District  
1 East Road  
Sausalito, CA 94965

**Subject: Sewer Service Charge Study – Final Report**

Dear Jeffrey Kingston:

HF&H is pleased to submit this cost-of-service report to the Sausalito-Marín District Sanitary District (District). The report summarizes the projected revenue requirements over the next five fiscal years, updates the cost-of-service allocation among customer classes, updates the annual supplemental charge for sewer collection services provided to unincorporated area customers, and provides a detailed schedule of the recommended sewer service charges for conveyance and treatment services for the next five years.

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

Sincerely,

HF&H CONSULTANTS, LLC



Rick Simonson, Senior Vice President  
Gabe Sasser, Project Manager

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**GLOSSARY**

- C&T** – Conveyance and Treatment.
- CCF** – Hundred cubic feet (see HCF below).
- CERBT** - California Employers’ Retiree Benefit Trust.
- CEPPT** – California Employers’ Pension Prefunding Trust
- CIP** - Capital Improvement Program.
- DU** – Dwelling Unit, in reference to the number of physical residences served by a Floating Home or Multifamily Residential meter.

**EDU** – Equivalent Dwelling Unit, (also referred to as Dwelling Unit Equivalent in reference to the current Nonresidential rate structure which calculates EDUs based on the ratio of volume of water per 200 gallons per day.

**Floating Home** – District customers living on the Bay.

**Flow Factor** – A component of Nonresidential customers sewer bill calculation. Annualized metered water use is converted to gallons per day divided by the standard flow rate of 200 gallons per day per EDU.

**FY** - Fiscal Year.

**GPD** - Gallons Per Day.

**HCF** - Hundred cubic feet of metered water; 748 gallons; a cube of water 4.6 feet on edge.

**MGD** – Million Gallons per Day

**MMWD** – Marin Municipal Water District

**Multifamily** – Refers to all non-single family residential customers for the purposes of performing the cost-of-service analysis. This includes multi-unit complexes, townhomes, and condominiums.

**Nonresidential** – Refers to commercial and municipal accounts served by the District.

**NPS** – National Park Service

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

**OPEB** – Other Post Employment Benefits

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

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

**Strength Factor** – Used in the calculation of Nonresidential sewer bills to distinguish differences in wastewater strength. There are three strength levels: 1.00 for low strength, 1.70 for medium strength, or 2.40 for high strength customers.

**TCSD** – Tamalpais Community Services District.

**Volume 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 volumetric costs to each customer class.

## ACKNOWLEDGEMENTS

### Board of Directors

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## **LIMITATIONS**

This document was prepared solely for the Sausalito-Marin City Sanitary District in accordance with the contract between the District 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 District, 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 SERVICE CHARGE STUDY**

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# I. EXECUTIVE SUMMARY

## BACKGROUND

The District provides wastewater conveyance and treatment service to the City of Sausalito and the unincorporated areas within the District's boundaries including Marin City and the floating homes. This service is also provided on a contract basis to Tamalpais Community Services District (TCSD) which includes Muir Woods National Monument and to the National Park Service (NPS) which includes Forts Baker, Barry and Cronkite, Marin Mammal Center and Cavallo Point Resort.

In addition, the District is responsible for the sewer collection system for the unincorporated areas within the District's boundaries including Marin City and floating homes. The City of Sausalito, TCSD and NPS own and maintain their respective sewer systems, each with its own collection charges.

On behalf of all ratepayers, the District operates and maintains a wastewater treatment plant fully designed to treat wastewater under: Primary (I), Secondary (II) and Tertiary (III) treatment levels up to 1.8 million-gallon per day (MGD) of dry weather flow. During wet weather flow, the plant is designed to hydraulically handle up to 12 MGD, capable of treating up to 9 MGD of full secondary treatment and up to 6 MGD of tertiary treatment. The conveyance system consists of 11 sewage pumps stations, and approximately 11 miles of pipeline. The District owns, operates, and maintains 7 of the 11 pump stations. The remaining four pump stations are owned by the City of Sausalito, but are operated and maintained by the District on a contract basis.

This study documents the process by which the District's sewer rates were analyzed to ensure that 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 District, 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.

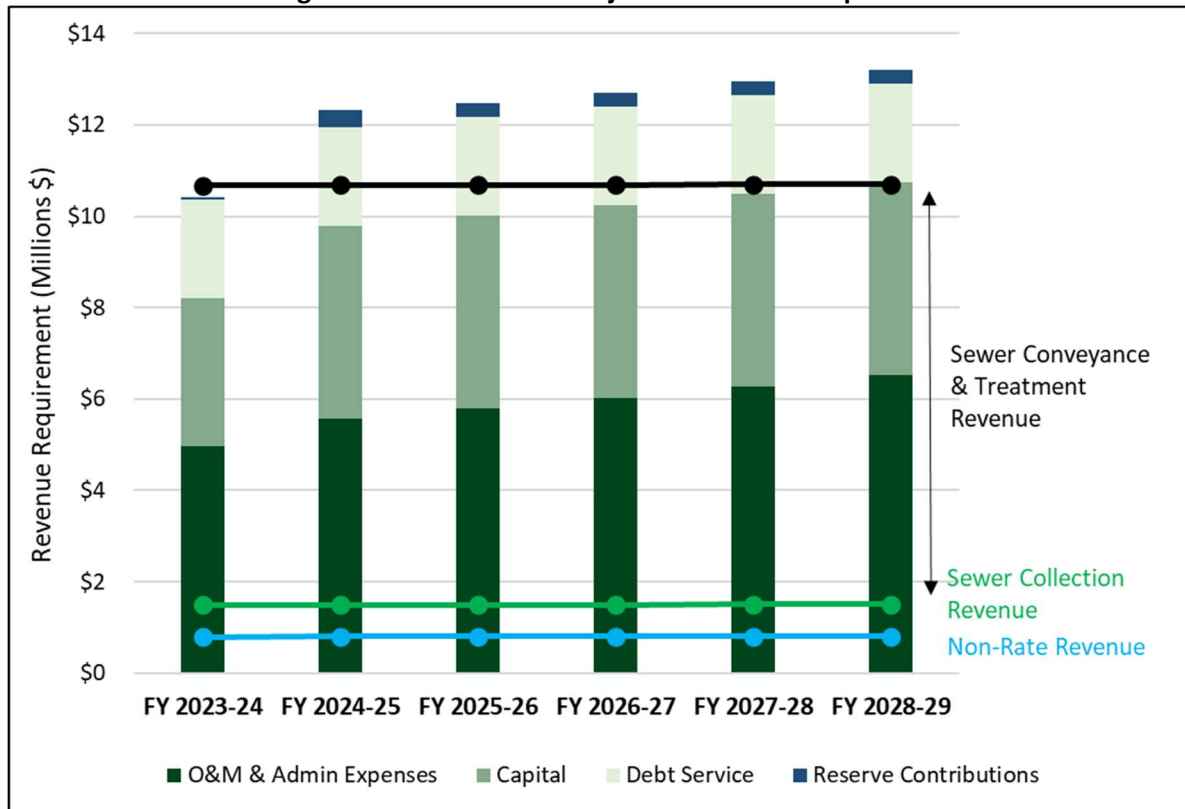
## FINDINGS AND RECOMMENDATIONS

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

### Revenue Requirements

1. **Sewer rate revenue increases are recommended.** The revenue requirement projections needed to support the District's operation and capital improvement programs for providing wastewater conveyance, treatment, and 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. Over the next five fiscal years (FYs), FY 2024-25 through FY 2028-29, the District's revenue requirement is primarily driven by increases to capital improvement expenditures. The District's capital improvement plans include an average annual expense of \$4.2 million over the five-year projection period, demonstrating the District's priority to continue to invest in its sewer system. The majority of project expenditures are for treatment plant improvements.

Figure I-1. Total Annual Projected Revenue Requirements



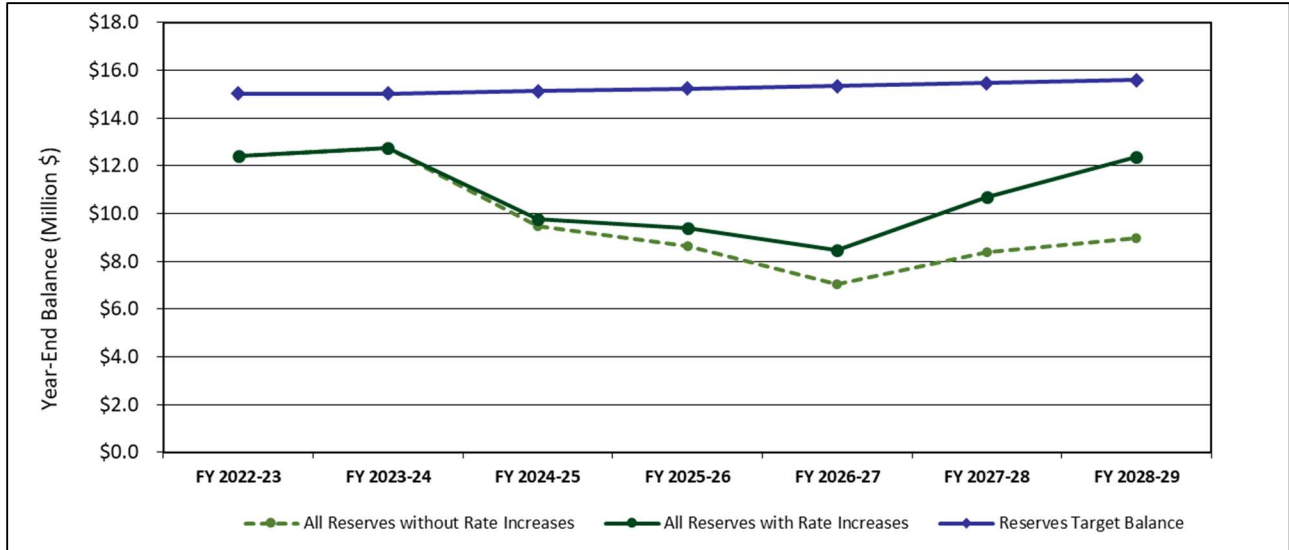
2. **The District plans to fund annual contributions to address unfunded liabilities through rate revenues.** The District has recently identified two new obligations and proposes to create two new reserve funds, to better track and meet these obligations. The first of the new reserves serves to fill in the funding gaps from the existing California Employers’ Retiree Benefit Trust (CERBT) Trust for the District’s Medical Other Post Employment Benefit (OPEB) liability. The District has a total liability of \$3,546,453 and a CERBT Trust balance of \$2,311,163. The remaining liability of \$1,235,290 will be funded through annual contributions of \$125,000 from rate revenues until the liability is fully addressed. At this rate of contribution, the District will continue to fund the remaining liability beyond FY 2028-29.

The second of the two new reserves serves to fill the funding gaps from the existing California Employers’ Pension Prefunding Trust (CEPPT) balance for the Pension Unfunded Accrued Liability (UAL). The District has a total liability of \$1,905,197 and a CERBT Trust balance of \$1,242,011. The remaining liability of \$663,186 will be funded through annual contributions of \$125,000 from rate revenues until the liability is fully addressed. At this rate of contribution, the District will continue to fund the remaining liability beyond FY 2028-29.

3. **To minimize rate impacts to customers, the District will balance using reserves with increasing sewer rates.** With 2% annual increases to the conveyance and treatment revenues, the overall level of reserves will continue to stay above the District’s minimum balance, meeting its six-month operating expenses target. Under this plan of proposed increases, the District will be drawing on their reserves to cover capital projects and to reduce rate increases over the first three years. After FY 2026-27, the revenues from recommended increases will allow the District to re-build reserves so that the fund balance projects to be more than \$12 million by FY 2028-29. Refer to

**Figure I-2** for the fund balance projection with the recommended revenue increases. The fund balance projection dips from its current position at the end of FY 2022-23 before the inflection point in FY 2026-27, after which it begins increasing, as indicated by the solid green line in the graph below.

**Figure I-2. Projected Year-End Fund Balance**



Note: District’s Reserve Target is a proposed policy, recommended by District staff, which includes the Medical OPEB liability and Pension UAL.

- Sewer conveyance and treatment rates are recommended for realignment to the cost of service.** Rates reflect current differences in wastewater flow by customer class. The cost-of-service analysis of the FY 2024-25 revenue requirement indicates adjustments are required to realign sewer conveyance and treatment rates to reflect the proportional benefits each customer class receives. The revised rates reflect the current differences in wastewater flow by customer class, based on updated winter water use for the most recent three-year period. Refer to **Figure I-3**. Column (b) of the figure identifies the volume of wastewater flow for each customer class relative to Single Family customers.

**Figure I-3. Cost of Service Conveyance and Treatment Rates by Customer Class**

							Ratio
		Volume		Base	Volumetric	Total	to SFR
Base EDUs	Factor	EDUs	EDUs				
<i>Cost Allocation Factors</i>				<b>71.96%</b>	<b>28.04%</b>		
<i>Conveyance and Treatment Revenue Requirement</i>				\$ 6,740,993	\$ 2,626,702	\$ 9,367,695	
<i>EDUs</i>				9,875	7,503		
<i>\$/EDU</i>				\$683	\$350		
<u>Residential</u>	(a)	(b)	(c) = (a)*(b)			<u>\$/EDU</u>	
Single family	3,183	1.00	3,183	\$683	\$350	\$1,033	1.00
Multifamily	4,572	0.55	2,504	\$683	\$192	\$874	0.85
Floating Homes	398	0.24	94	\$683	\$83	\$765	0.74
Total Residential	8,153		5,781				
Nonresidential	1,720	1.00	1,720	\$683	\$350	\$1,033	1.00
Growth	2	1.00	2	\$683	\$350	\$1,033	1.00
Total	9,875		7,503				

SFR denotes Single family customers.

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

- Supplemental sewer collection charge increases are recommended.** The current sewer collection charge will need to increase over the five-year planning period as the District anticipates significant capital expenses, totaling \$6.8 million during the five-year planning period. The capital project costs portion of the revenue requirement specific to this charge was calculated assuming the capital projects will be “debt funded” using the Districts reserves. This methodology is recommended to reduce rate volatility. The revised rates reflect the cost of collection service and the difference in wastewater flows among customer classes. Refer to **Figure I-4** for the schedule of proposed supplemental collection charges per equivalent dwelling unit (EDU).

**Figure I-4. Summary of Annual Supplemental Sewer Collection Charges (\$/EDU)**

Unincorporated Sewer Collection	Current Rate	Ratio to SFR	Ratio				
			FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Single Family (per EDU)	\$387	1.00	\$446	\$453	\$460	\$467	\$474
Multifamily (per DU)	\$341	0.85	\$378	\$384	\$389	\$395	\$401
Floating Homes (per DU)	\$290	0.74	\$331	\$336	\$341	\$346	\$351
Nonresidential (per EDU)	\$387	1.00	\$446	\$453	\$460	\$467	\$474

Note: For Single Family, Multifamily, and Floating Home accounts, one dwelling unit is equal to one EDU. For Nonresidential, one EDU = 200 gallons per day (GPD) of annualized water use based on one winter and one summer water bill. Nonresidential charges are the ratio of annualized water use divided by 200 GPD and charges can exceed one EDU.

- Sewer rate adjustments reflect the cost of service and proposed revenue increases.** To cover the increase to the District’s revenue requirements (seen in **Figure I-1**), the summary of proposed

rates is shown in **Figure I-5**. The charges are grouped by service area and customer class, to illustrate the additional sewer collection charge associated with the unincorporated customers.

**Figure I-5. Annual Proposed Sewer Charges**

Customer Class	Current Rates	FY 2024-25		FY 2025-26		FY 2026-27		FY 2027-28		FY 2028-29	
		\$/EDU	Change	\$/EDU	Change	\$/EDU	Change	\$/EDU	Change	\$/EDU	Change
<b>Sewer Conveyance and Treatment</b>											
Single Family/Nonresidential (per EDU)	\$999	<b>\$1,033</b>	3.4%	<b>\$1,053</b>	2.0%	<b>\$1,074</b>	2.0%	<b>\$1,096</b>	2.0%	<b>\$1,117</b>	2.0%
Multifamily (per DU)	\$875	<b>\$874</b>	-0.1%	<b>\$892</b>	2.0%	<b>\$910</b>	2.0%	<b>\$928</b>	2.0%	<b>\$947</b>	2.0%
Floating Homes (per DU)	\$753	<b>\$765</b>	1.6%	<b>\$781</b>	2.0%	<b>\$797</b>	2.0%	<b>\$813</b>	2.0%	<b>\$829</b>	2.0%
<b>Sewer Conveyance and Treatment + Collection</b>											
Single Family/Nonresidential (per EDU)	\$1,386	<b>\$1,479</b>	6.7%	<b>\$1,506</b>	1.8%	<b>\$1,534</b>	1.9%	<b>\$1,563</b>	1.9%	<b>\$1,591</b>	1.9%
Multifamily (per DU)	\$1,216	<b>\$1,252</b>	3.0%	<b>\$1,276</b>	1.9%	<b>\$1,299</b>	1.8%	<b>\$1,323</b>	1.9%	<b>\$1,348</b>	1.9%
Floating Homes (per DU)	\$1,043	<b>\$1,096</b>	5.1%	<b>\$1,117</b>	1.9%	<b>\$1,138</b>	1.8%	<b>\$1,159</b>	1.8%	<b>\$1,180</b>	1.8%

Note: For Single Family, Multifamily, and Floating Home accounts, one dwelling unit is equal to one EDU. For Nonresidential, one EDU = 200 gallons per day (GPD) of annualized water use based on one winter and one summer water bill. Nonresidential charges are the ratio of annualized water use divided by 200 GPD and charges can exceed one EDU.

## IMPLEMENTATION

This report presents the rates proposed for adoption by the District, 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 District should confirm the need for the next incremental rate adjustment. The District has the option to implement a lower rate increase, if the financial forecast supports it, without going through the Proposition 218 notification process. The summary for the final rates can be seen in **Figure I-6** for both schedules of charges: 1) sewer conveyance and treatment and 2) supplemental sewer collection. Unincorporated customers pay both charges and the combined rates are provided for reference below.

**Figure I-6. Proposed Rates**

Annual Rate (\$/EDU)	Current Rates	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
<b>Sewer Conveyance and Treatment</b>						
Single Family/Nonresidential (per EDU)	\$999	\$1,033	\$1,053	\$1,074	\$1,096	\$1,117
Multifamily (per DU)	\$875	\$874	\$892	\$910	\$928	\$947
Floating Homes (per DU)	\$753	\$765	\$781	\$797	\$813	\$829
<b>Supplemental Sewer Collection</b>						
Single Family/Nonresidential (per EDU)	\$387	\$446	\$453	\$460	\$467	\$474
Multifamily (per DU)	\$341	\$378	\$384	\$389	\$395	\$401
Floating Homes (per DU)	\$290	\$331	\$336	\$341	\$346	\$351
<b>Unincorporated Collection, Conveyance, and Treatment</b>						
Single Family/Nonresidential (per EDU)	\$1,386	\$1,479	\$1,506	\$1,534	\$1,563	\$1,591
Multifamily (per DU)	\$1,216	\$1,252	\$1,276	\$1,299	\$1,323	\$1,348
Floating Homes (per DU)	\$1,043	\$1,096	\$1,117	\$1,138	\$1,159	\$1,180

Note: For Single Family, Multifamily, and Floating Home accounts, one dwelling unit is equal to one EDU. For Nonresidential, one EDU = 200 gallons per day (GPD) of annualized water use based on one winter and one summer water bill. Nonresidential charges are the ratio of annualized water use divided by 200 GPD and charges can exceed one EDU. Note: 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 District's sewer 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 District's customer classes and the rate structures that are appropriate for each class.

### RATE-MAKING OBJECTIVES

The District'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 District.
- Reflect the proportional impact to the cost of service.
- Meet the District'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 District requested HF&H Consultants (HF&H) to perform a cost-of-service study to set sewer 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 come from conveyance & treatment charges and collection charges. This step also confirms the proportionate amount to be paid by each customer class. The final step, rate design, establishes the structure of the charges 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

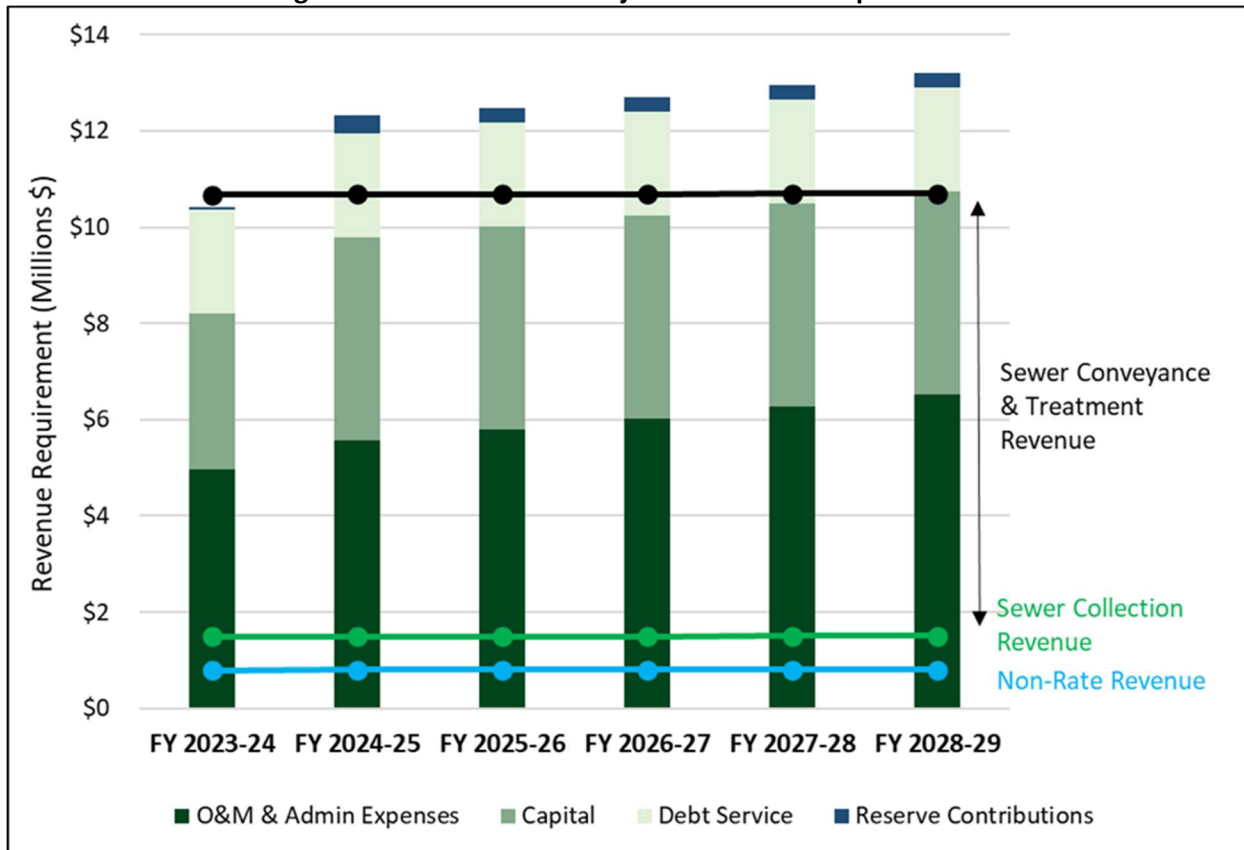
Expense projections combined with contributions to reserves become the revenue requirements. The District’s operating and capital budgets were relied on for FY 2024-25 expenses in the first-year revenue requirement. The assumptions shown in **Figure III-1** were used to project revenue requirements through 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	3.50%	2.00%	2.00%	2.00%	2.00%	2.00%
General Inflation	Budget	3.00%	3.00%	3.00%	3.00%	3.00%
Construction Cost Inflation	Budget	3.91%	3.91%	3.91%	3.91%	3.91%
Fuel & Utilities	Budget	4.80%	4.80%	4.50%	4.25%	4.00%
Chemicals	Budget	5.00%	5.00%	5.00%	5.00%	5.00%
Salaries & Benefits	Budget	5.00%	5.00%	5.00%	5.00%	5.00%
Composite O&M	Budget	4.16%	4.18%	4.17%	4.16%	4.16%
Growth in EDUs	Budget	2	2	2	2	2

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 District 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. These costs include providing service for conveyance, treatment, and collection of wastewater, which will factor into how rates are calculated to recover the proportionate costs of these two separate services.

### Capital

The District 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 project 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.

The estimated annual costs of the capital improvement projects from FY 2024-25 to FY 2028-29 fluctuate between \$1.8 and \$7.2 million. However, rates are not set to match these annual variations, as doing so would result in rate volatility, with rates rising one year and falling the next. Instead, rates are based on multi-year averages. As a result, the District plans to spend an average of \$2.85 million per year on conveyance and treatment-related capital projects and \$1.36 million per year on collection system capital projects over the five-year period.

**Figure III-3. Projected Capital Improvement Program**

Capital Improvements	Budgeted		Projected			
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Subtotal, Treatment	\$2,440,000	\$4,450,000	\$2,150,000	\$750,000	\$900,000	\$1,000,000
Subtotal, Conveyance	\$800,000	\$2,100,000	\$0	\$0	\$700,000	\$1,000,000
Subtotal, Treatment & Conveyance	\$3,240,000	\$6,550,000	\$2,150,000	\$750,000	\$1,600,000	\$2,000,000
Accumulated Construction Cost Inflation		3.91%	7.98%	12.20%	16.59%	21.15%
Inflation Adj. Subtotal, Treatment & Conveyance	\$3,240,000	\$6,806,273	\$2,321,532	\$841,522	\$1,865,487	\$2,423,095
				Annual Average:		\$2,851,582
Subtotal, Collection	\$0	\$400,000	\$2,050,000	\$3,750,000	\$0	\$0
Accumulated Construction Cost Inflation		3.91%	7.98%	12.20%	16.59%	21.15%
Inflation Adj. Subtotal, Collection	\$0	\$415,650	\$2,213,554	\$4,207,610	\$0	\$0
				Annual Average:		\$1,367,363
Inflation Adj. Total CIP	\$3,240,000	\$7,221,924	\$4,535,085	\$5,049,132	\$1,865,487	\$2,423,095
				Annual Average:		\$4,218,945

### Debt Service

The District has one outstanding bond obligation with annual debt service of approximately \$2.1 million, identified in **Figure III-4**. The bond was issued primarily to finance capital improvements to the District’s wastewater treatment plant and other capital improvements to the District’s facilities. This includes needed upgrades and rehabilitation of the district’s infrastructure to address new discharge regulations, eliminate peak wet weather overflows, and to improve treatment plant performance and reliability. Over the next five years, the District debt service level will remain relatively constant at \$2.1 million per year. No new debt issuances are anticipated over the next five years. The obligation is scheduled to mature in 2042.

**Figure III-4. Current Annual Debt Service**

Current Debt	Budgeted		Projected			
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
<u>2017 Revenue Bond (matures 2042)</u>						
Principle	\$1,025,000	\$1,065,000	\$1,105,000	\$1,150,000	\$1,195,000	\$1,245,000
Interest	\$1,133,000	\$1,092,000	\$1,049,400	\$1,005,200	\$959,200	\$911,400
<b>Total Payment</b>	<b>\$2,158,000</b>	<b>\$2,157,000</b>	<b>\$2,154,400</b>	<b>\$2,155,200</b>	<b>\$2,154,200</b>	<b>\$2,156,400</b>

### Reserve Contributions

Apart from meeting annual expenses, rates must also generate revenue to maintain sufficient operations and capital reserves. The District’s reserve balance is divided into Operations, Capital, Repair & Replacement, Disaster Recovery, Self-Insurance Deductible, Medical. By categorizing the reserves, it is possible to set target balances for each reserve, which are discussed in the next section. During the five-year period the Districts reserve contributions also include annual contributions to the Medical OPEB, Pension UAL, and Repair and Replacement reserves. Also, the District will be transferring \$50,812 in the

FY 2024-25 operating surplus to the Operating Reserve. These additional reserve targets are proposed and subject to Board of Directors approval.

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 \$9.8 million are insufficient to meet projected expenses. The District faces a growing deficit over the five-year period.

**Figure III-5. Total Revenue Requirement Projections**

Total Sewer System Expenses	Budgeted	Projected				
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
O&M & Admin Expenses	\$4,961,892	\$5,168,480	\$5,384,457	\$5,608,953	\$5,842,484	\$6,085,383
Capital	\$3,240,000	\$4,218,945	\$4,218,945	\$4,218,945	\$4,218,945	\$4,218,945
Debt Service	\$2,158,000	\$2,157,000	\$2,154,400	\$2,155,200	\$2,154,200	\$2,156,400
Reserve Contributions	\$55,800	\$390,146	\$320,000	\$305,000	\$305,000	\$305,000
<b>Total Revenue Requirement</b>	<b>\$10,415,692</b>	<b>\$11,934,570</b>	<b>\$12,077,801</b>	<b>\$12,288,098</b>	<b>\$12,520,629</b>	<b>\$12,765,728</b>
<i>Annual Increase</i>		<i>14.6%</i>	<i>1.2%</i>	<i>1.7%</i>	<i>1.9%</i>	<i>2.0%</i>

Source: Data from District’s FY 2023-24 Budget. O&M and Admin line item includes O&M collection costs, detailed in Section IV. Capital line items includes Capital collection costs, from Figure III-3.

## 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 District experiences above average costs and augmented during years when costs are below average. The District 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, including the proposed Medical OPEB, and Pension UAL amounts.

### Operating

The District has an existing policy to maintain a minimum two months of annual operation and maintenance expenses, with a target reserve of six months of expenses. Based on this criterion, the target reserve amount grows from \$2.48 million to \$3.04 million during the five-year period.

### Capital

The Capital reserve provides liquidity to fund construction for major capital projects in the District’s capital program. The Capital reserve minimum depends on the current capital program from the District, it is currently set to cover the average annual capital expense over the term of their capital improvement schedule. The target is set to 1.5 times the average annual capital expense. The current conveyance & treatment capital improvement projects average \$2.85 million a year, yielding a target reserve of \$4.27 million.

## Repair & Replacement

The Repair & Replacement reserves provide capital for the renewal and replacement of equipment. The target balance is set to \$220,00, which reflects two times the average annual renewal replacement costs.

## Disaster Recovery

The Operations and Capital reserves are sufficient to provide working capital on an ongoing basis, but do not provide for any unforeseen contingencies such as an emergency. In the event of an emergency, the District cannot suddenly raise rates to generate additional funds due to state law requirements for such rate increases. Moreover, the District bills annually on the tax rolls. Therefore, the District has set a target for the Disaster Recovery reserve equal to the average annual cash-funded capital project expenditures, \$2.5 million.

## Self-Insurance

The District maintains a reserve of \$100,000 to fund the deductibles of the various insurance policies it carries.

## Medical OPEB

The District has recently identified two new obligations and proposes to create two new reserve funds, to better track and meet pension obligations. The first of the new reserves serves to fill in the funding gaps from the existing CERBT Trust. The District has a total Medical OPEB liability of \$3,546,453 and a CERBT Trust balance of \$2,311,163. The remaining liability of \$1,235,290 will be funded through annual contributions of \$125,000 from rate revenues until the liability is fully addressed. At this rate of contribution, the District will continue to fund the remaining liability beyond FY 2028-29.

## Pension

The second of the two new reserves serves to fill the funding gaps from the existing CEPPT Trust balance is a Pension UAL. The District has a total Pension UAL of \$1,905,197 and a CERBT Trust balance of \$1,242,011. The remaining liability of \$663,186 will be funded through annual contributions of \$125,000 from rate revenues until the liability is fully addressed. At this rate of contribution, the District will continue to fund the remaining liability beyond FY 2028-29.

## REVENUES

As shown in **Figure III-2**, the District has three categories of revenues: 1) Sewer conveyance and treatment charge revenue, 2) Supplemental sewer collection service charge revenue, and 3) Non-operating revenue. In total, these revenues equate to \$10,682,288 for FY 2024-25, before accounting for any proposed rate adjustment.

## Sewer Conveyance and Treatment Charge Revenue

The District assesses conveyance and treatment charges to all customers for the costs of maintaining the conveyance and treatment systems associated with sewer service. Revenues from current rates, and accounting for projected account growth, are \$9,188,263 in FY 2024-25, before accounting for any proposed rate adjustment.

## Supplemental Sewer Collection Service Charge Revenue

In addition to providing treatment services, the District maintains the sewer collection system for customers in the unincorporated areas of its service area. As such, these customers pay a supplemental charge, in addition to cost of treatment, for the costs associated with the operations, maintenance, repair, and improvements to the collection system in these areas. Costs associated with sewer collection are expected to increase based on increased O&M costs, as well as capital improvements beginning FY 2024-25 and continuing through FY 2028-29. Additional detail is included in Section IV of the report. Revenues from the current supplemental sewer collection service charge rates are \$696,875.

The portion of revenue at current rates attributable to O&M is \$397,829. Since this figure overlaps with the total O&M and Administrative expenses associated with conveyance and treatment services, this portion of revenue serves to reduce the overall conveyance and treatment charge revenue subject to recovering the O&M costs of conveyance and treatment service. This is why this portion of revenue is subtracted from the overall revenue requirement in **Figure III-6**. This will be re-visited in discussing the revenue increases below.

## Non-Operating Revenue Sources

This revenue category mainly includes the revenue from the ad valorem taxes received from Marin County. During this rate study period, the ad valorem taxes are conservatively assumed to remain flat. This revenue category also accounts for revenues generated from the Sausalito Pump Station. Collectively, revenues from these sources are assumed to be \$797,351 for FY 2024-25.

## CONVEYANCE AND TREATMENT CHARGE REVENUE INCREASES

Rates are set to generate sufficient revenue to cover annual expenses, while ensuring maintenance of adequate reserves. The revenue from rates does not need to match each year's revenue requirement. Annual fluctuations in revenue requirements are typically uneven because they are harder to control, whereas it is desirable to have smooth annual increases in rates. The annual differences cause the fund balance to fluctuate from year to year. **Figure III-6** shows the projected revenue requirements along with the projected conveyance and treatment rate revenue increases. Sections IV and V discuss the proposed increases to the District's supplemental collection service charge.

Revenue increases were derived to cover the District's conveyance and treatment costs and 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 District's costs.

**Figure III-6. Sewer Conveyance and Treatment Revenue Increases**

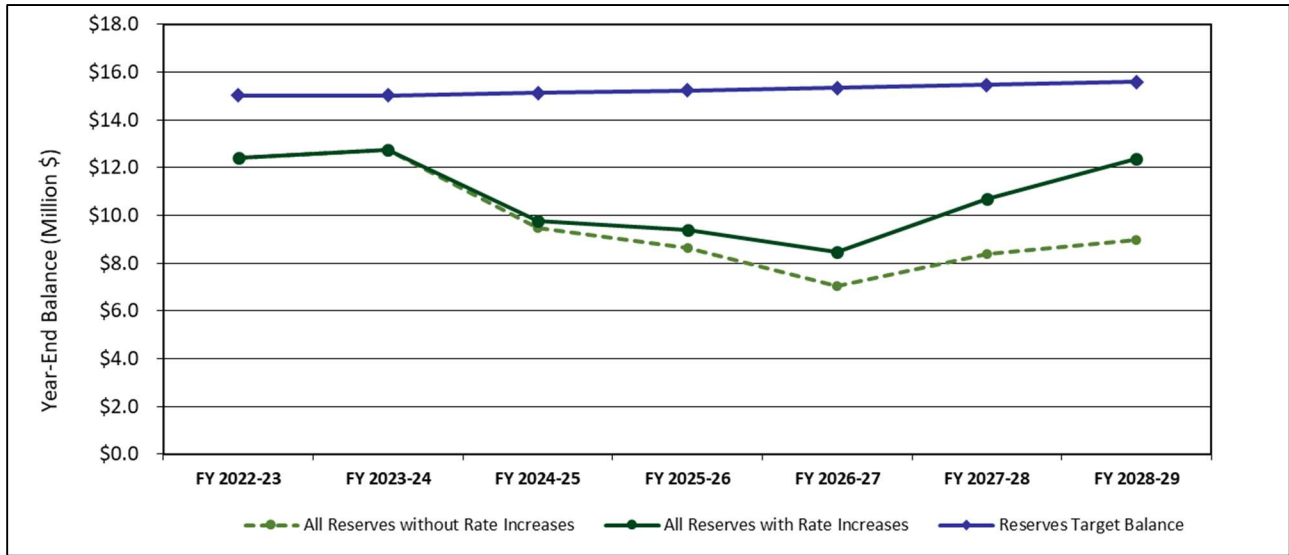
Sewer Conveyance and Treatment Revenues	Projected				
	FY 2024-25	FY 2024-25	FY 2024-25	FY 2024-25	FY 2024-25
Rev. Proj's from Current Rates (including growth)	\$9,188,263	\$9,190,261	\$9,192,259	\$9,194,257	\$9,196,255
Revenue Requirement	\$10,177,062	\$10,390,438	\$10,615,735	\$10,848,266	\$11,093,365
Non-Operating Revenue	(\$797,351)	(\$799,639)	(\$801,973)	(\$804,354)	(\$806,782)
Supplemental Sewer O&M Collection Revenue	(\$397,829)	(\$409,764)	(\$422,056)	(\$434,718)	(\$447,760)
Reserve Contributions	\$390,146	\$320,000	\$305,000	\$305,000	\$305,000
Net Revenue Requirement	\$9,372,028	\$9,501,036	\$9,696,705	\$9,914,194	\$10,143,823
Revenue Surplus/(Shortfall)	(\$183,765)	(\$310,775)	(\$504,446)	(\$719,937)	(\$947,568)
Proposed Revenue Increase	2%	2%	2%	2%	2%
Revenue at Proposed Rates	\$9,372,028	\$9,561,547	\$9,754,899	\$9,952,159	\$10,153,408
<b>Revenues Surplus/(Shortfall)</b>	<b>\$0</b>	<b>\$60,511</b>	<b>\$58,193</b>	<b>\$37,966</b>	<b>\$9,586</b>

Note: Revenue Requirement reflects only expenses to be recovered by the sewer conveyance and treatment charge revenues. Supplemental sewer O&M collection revenue calculated in Section IV.

## RESERVE FUND BALANCE

Figure III-7 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 District's minimum approved amount for each reserve. Initially, the District will be drawing on their reserves to cover capital projects and to reduce rate increases. However, after FY 2026-27, the revenues from recommended increases will allow the District to rebuild reserves so that the combined fund balance projects to be more than \$12 million by FY 2028-29. This threshold of reserves is less than the reserve target balance (blue line), which includes all current reserve targets in addition to the Medical OPEB and Pension UAL liabilities. Conversely, without revenue increases, the FY 2022-23 year-end fund balance of \$12.4 million is projected to drop to less than \$9 million by end of FY 2028-29 (see dashed green line in Figure III-7). 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-7. Projected Year-End Fund Balance



Note: District’s Reserve Target is a proposed policy, recommended by District staff, which includes the Medical OPEB liability and Pension UAL.

## IV. COST-OF-SERVICE ANALYSIS

### GENERAL APPROACH

A cost-of-service analysis determines the cost of providing service to each customer class. 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.

The District currently has four customer classes: Single Family, Multifamily, Floating Homes, and Nonresidential. The cost of service depends on the characteristics of the rate design, which defines the services charged to each class of customers. For residential customers, Single Family, Multifamily and Floating Home EDUs are factored in proportion to the differences in flow based on average flow per EDU for each class. Rates for Nonresidential EDUs are equal to Single Family rates and EDUs are factored based on both flow and strength.

The District charges conveyance and treatment (C&T) charges, as well as a supplemental collection charges. The C&T charge is applicable to all customers in conducting the cost-of-service analysis. However, the supplemental collection charge is applicable only to customers living in the unincorporated areas served by the District, including Marin City and Floating Homes customers. As a result, the cost-of-service analysis was divided into two separate processes to derive 1) the costs associated with conveyance and treatment services and 2) the costs for supplemental collection services, discussed in further detail below.

### C&T COST OF SERVICE ANALYSIS

#### C&T 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 the conveyance and treatment system costs was summarized by function and these functional costs were allocated between the base and volumetric components. The FY 2024-25 revenue requirement for collection system costs was summarized by function for cost recovery.

#### C&T Analytical Procedure

The cost-of-service analysis needs to determine the portion of costs that will be allocated to customers in proportion to flow. Not all costs are proportionate to flow; in fact, the majority of costs are independent of flow. Certain operating costs, such as personnel costs, which are a significant portion of the District's costs, would be incurred regardless of how much flow was produced by customers. There are also capital costs that provide capacity for average customer flows with no allowance for peak flows or inflow and infiltration. These are essentially equivalent capital costs per EDU that do not recognize differences in flows among classes or for peak flows. The combination of these fixed operating and capital costs are referred to as the "base cost component."

Other costs fluctuate based on variations in flow among customer classes and for peak capacity. Such variable operating costs include power for pumping and for chemicals and solids disposal at the treatment plant. The capital costs that are dependent on flow are related to the additional peak capacity that must be provided for customers that discharge more and for overall peak wet weather capacity that is attendant 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 base and volumetric cost components. The base cost component represents the common costs for conveyance and treatment of wastewater. The volumetric cost component apportions the costs associated with above average flows among the customer classes in proportion to their respective flows. The sum of the base and volumetric cost components determines each class’s charge per EDU.

### **C&T Cost Allocation Factors**

Separate cost allocation factors were developed to allocate operating and capital costs to the base and volumetric cost components. The derivation of the cost allocation factors is described in the next section.

The cost allocation factors were derived as shown in **Figures IV-1** and **IV-2**. For purposes of deriving the O&M cost allocation factors, the FY 2024-25 projections were used, which are representative of future years. 91% of the District’s O&M cost is fixed; in other words, the District would incur virtually all of these costs regardless of the amount of wastewater flow.

**Figure IV-1. O&M and Administration Allocation Factors**

O&M and Administrative Expenses	FY 2024-25	Base		Volumetric	
		%	\$	%	\$
<u>Salaries and Benefits</u>					
Salaries	\$2,279,216	100%	\$2,279,216	0%	\$0
Payroll Taxes	\$158,271	100%	158,271	0%	0
Retirement	\$265,130	100%	265,130	0%	0
Employee Benefits	\$329,869	100%	329,869	0%	0
Workers Comp	\$51,079	100%	51,079	0%	0
<u>Operations</u>					
Chemicals	418,544	20%	83,709	80%	334,835
Fuel	23,958	100%	23,958	0%	0
Permits & Fees	135,217	100%	135,217	0%	0
Waste Disposal	109,902	20%	21,980	80%	87,922
Vehicle & Equip Maint	15,382	100%	15,382	0%	0
Safety	34,002	20%	6,800	80%	27,201
Materials & Supplies	102,089	100%	102,089	0%	0
Monitoring & Testing	74,970	100%	74,970	0%	0
Utilities	414,254	100%	414,254	0%	0
City of Sausalito M&R-Billable	18,126	20%	3,625	80%	14,501
Unincorp. Collection M&R	79,047	100%	79,047	0%	0
Conveyence & Treatment M&R	231,186	100%	231,186	0%	0
<u>General &amp; Administrative</u>					
Professional Development	20,822	100%	20,822	0%	0
Professional Services	256,281	100%	256,281	0%	0
Insurance	98,747	100%	98,747	0%	0
Administrative	52,387	100%	52,387	0%	0
<b>Total O&amp;M and Admin Expenses</b>	<b>\$5,168,480</b>		<b>\$4,704,021</b>		<b>\$464,459</b>
<b>% of Total</b>	<b>100%</b>		<b>91%</b>		<b>9%</b>

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 future capital projects, which is more representative than using the just one year’s projected capital expenditures.

**Figure IV-2. Capital Cost Allocation Factors**

Capital Projects	5-Yr Total	Base		Volumetric	
		%	\$	%	\$
<b>Treatment Plant Improvements</b>					
Shop/Operator/Equipment Facilities Study/Pre-Design	\$1,650,000	100%	\$1,650,000	0%	\$0
Biosolids Handling (Long Term)	1,750,000	20%	350,000	80%	1,400,000
Primary Clarifier and Headworks Gates Rehab Project	4,000,000	100%	4,000,000	0%	0
Primary Digester Heating System Replacement	200,000	100%	200,000	0%	0
Plant Electric Upgrades	500,000	100%	500,000	0%	0
Primary Digester Cleaning and Upgrade Project	1,150,000	20%	230,000	80%	920,000
<b>Conveyance System</b>					
TCS D Recept Flow Meter	100,000	20%	20,000	80%	80,000
Beach Force Main Rehabilitation	2,000,000	20%	400,000	80%	1,600,000
Main St. to Alexander Ave Force Main Inspection	250,000	20%	50,000	80%	200,000
Locust St. Force Main Inspection	250,000	20%	50,000	80%	200,000
Princess St. Pump Station Study	1,200,000	20%	240,000	80%	960,000
<b>Unincorporated Collection System</b>					
Marin City Pump Station Rehab. & FM Inspection (Design)	400,000	20%	80,000	80%	320,000
Marin City Pump Station Rehab. & FM Inspection (Construction)	3,500,000	20%	700,000	80%	2,800,000
Marin City Sewer Collection System Rehab, Phase II (Design)	300,000	20%	60,000	80%	240,000
Marin City Sewer Collection System Rehab, Phase II (Construction)	2,000,000	20%	400,000	80%	1,600,000
<b>Total Capital Expenses (5-yr period)</b>	<b>\$19,250,000</b>		<b>\$8,930,000</b>		<b>\$10,320,000</b>
<b>Average Annual Capital</b>	<b>\$3,850,000</b>		<b>\$1,786,000</b>		<b>\$2,064,000</b>
	<b>% of Total</b>	<b>100%</b>	<b>46%</b>		<b>54%</b>

By contrast with the District’s O&M costs, the District’s planned infrastructure costs are dependent on providing capacity for peak flow. The facilities are sized to provide significant additional capacity for above-average customer flows and inflow & infiltration.

Figure IV-3 shows the combination of O&M and capital cost allocations, indicating that 71.96% of the revenue requirement is the base component and 28.04% is the volumetric component. These percentages are applied to the FY 2024-25 net revenue requirement to determine the respective base and volumetric cost components of the residential and non-residential rates. Because these factors include costs for both collection and conveyance and treatment services, the factors are applicable to both sets of charges.

**Figure IV-3. Base and Volumetric Allocation Factors**

Revenue Requirement	Base	Volumetric	Total
FY 2024-25 Operating & Admin. Expenses	\$ 4,704,021	\$464,459	\$5,168,480
Average Annual Capital Expenses	\$ 1,786,000	\$2,064,000	\$3,850,000
Grand Total	\$6,490,021	\$2,528,459	\$9,018,480
<b>% of Total</b>	<b>71.96%</b>	<b>28.04%</b>	<b>100%</b>

**Base and Volumetric EDUs**

The base charge is determined by dividing the base cost component by the total base EDUs for residential and non-residential customers. For residential customers, each dwelling unit is considered to be one EDU.

For non-residential customers, the number of EDUs depends on how the flow rate for each non-residential customer compares with the Single Family standard flow rate of 200 gpd per EDU. More information is included in Section V on the design of current rates and how charges are calculated.

The volumetric charge is based on the winter water use for the most recent three-year period. The residential flow data is shown in **Figure IV-4**, which represents all residential customers whose flow is treated at the District’s wastewater treatment plant, including the TCSD. The flow data was provided by Marin Municipal Water District (MMWD).

**Figure IV-4. Residential Flows**

Customer Classes	3-Year			Return Rate (%)	Annual Total (GPD) - Adjusted	FY22-23		
	3-Year Average Total (HCF)	Average Annualized Total (HCF)	MMWD Annual Total (GPD)			EDUs Reported to County	GPD per EDU	Volume Factor
	Residential (1 winter bill)							
Single Family	37,242	223,452	457,955	100%	457,955	3,183	144	1.00
Multifamily	29,298	175,788	360,270	100%	360,270	4,572	79	0.55
Floating Homes	1,100	6,600	13,526	100%	13,526	398	34	0.24
Subtotal - Residential	67,640	405,840	831,752		831,752	8,153		

The volumetric charge is determined by dividing the volumetric cost component by the total volumetric EDUs. The resulting unit cost represents the cost associated with above-average flow and capacity. This cost is then proportioned among the residential classes based on the average flow per class. For non-residential customers, the cost is proportioned based on each account’s EDUs, which accounts for flow volumes and wastewater strength relative to a single-family customer.

The average flow per residential class is shown in **Figure IV-4**. Single Family, Multifamily, and Floating Home flows per EDU were determined to be 144, 79, and 34 GPD, respectively, which means that Multifamily flow is 55% of Single Family flow, and a Floating Home’s flow is 24% of Single Family flow. The Single Family customer class is assigned a volume factor of 1.0. The Multifamily residential class was factored down to 55% of a Single Family EDU for use in apportioning the volumetric-related costs, and Floating Home EDUs were factored down to 24% of a Single Family EDU.

Using the factors based on the wastewater flow, **Figure IV-5** shows how the Multifamily and Floating Home dwelling units were adjusted to Volumetric EDUs for the purpose of developing volumetric charges.

**Figure IV-5. Residential Volumetric EDUs**

Customer Class	Dwelling Units	Volume Factor	Volumetric EDUs
Residential	(a)	(b)	(c) = (a)*(b)
Single family	3,183	1.00	3,183
Multifamily	4,572	0.55	2,504
Floating Homes	398	0.24	94
Total Residential	8,153		5,781

## COST OF SERVICE – SEWER CONVEYANCE AND TREATMENT

Figure IV-6 below summarizes the derivation of the sewer conveyance and treatment rates, by customer class. The cost of service is being calculated using the net revenue requirement for FY2024-25.

Figure IV-6. Cost of Service Rates by Customer Class

							Ratio to SFR
Volume		EDUs	Base	Volumetric	Total		
Base EDUs	Factor						
<i>Cost Allocation Factors</i>			<b>71.96%</b>	<b>28.04%</b>			
<i>Conveyance and Treatment Revenue Requirement</i>			\$6,740,993	\$2,626,702	\$9,367,695		
<i>EDUs</i>			9,875	7,503			
<i>\$/EDU</i>			\$683	\$350			
<u>Residential</u>	(a)	(b)	(c) = (a)*(b)		<u>\$/EDU</u>		
Single family	3,183	1.00	3,183	\$683	\$350	\$1,033	1.00
Multifamily	4,572	0.55	2,504	\$683	\$192	\$874	0.85
Floating Homes	398	0.24	94	\$683	\$83	\$765	0.74
Total Residential	8,153		5,781				
Nonresidential	1,720	1.00	1,720	\$683	\$350	\$1,033	1.00
Growth	2	1.00	2	\$683	\$350	\$1,033	1.00
Total	9,875		7,503				

SFR denotes Single family customers.

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

The District’s net revenue requirement of \$9,367,695 (FY 2024-25) is used to allocate base and volumetric costs. With ~72%, or \$6,740,993, allocated to base costs and divided by the base EDU units. This base charge component is common to all customer classes, or \$683 per year. That leaves the remaining 28%, or \$2,626,702, to be divided by the volumetric EDUs resulting in a volumetric component charge of \$350 per EDU. The result is then adjusted using the unit cost of service factor for each residential class based on their average flows per EDU.

The combined total for Single Family is \$1,033 per EDU. Note that the \$874 for Multifamily is 85% of the Single Family charge and the Floating Homes are \$765 per EDU, or 74% of the Single Family charge. Even though the Multifamily volume factor is 55% of Single Family flow, ~72% of the costs (Base costs) are not related to differences in flow or the need for peak capacity.

## COLLECTION COST OF SERVICE ANALYSIS

In addition to providing treatment services, the District maintains the sewer collection system for customers in the unincorporated areas of its service area (e.g., Marin City, floating homes). As such, these customers pay a supplemental charge, in addition to cost of treatment, for the costs associated with the

operations, maintenance, repair, and improvements to the collection system in these areas. Costs associated with sewer collection are expected to increase based on increased O&M costs, as well as capital improvements beginning FY 2024-25 and continuing through FY 2026-27.

Customers within Sausalito and TCSD are not subject to this supplemental charge as the District does not own and/or maintain the sewer collection systems within Sausalito and TCSD.

### Analytical Procedure

Figure IV-7 summarizes the projected annual O&M and capital costs to maintain the unincorporated sewer collection system.

Figure IV-7. Projected Annual Sewer Collection Costs

Collection System Costs	Projected				
	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
<b>Collection System O&amp;M Costs</b>					
Labor & Benefits	\$242,482	\$249,756	\$257,249	\$264,967	\$272,916
Expenses	\$103,456	\$106,560	\$109,756	\$113,049	\$116,441
Overhead	\$51,891	\$53,447	\$55,051	\$56,702	\$58,403
Subtotal - O&M Costs	\$397,829	\$409,764	\$422,056	\$434,718	\$447,760
<b>Collection System Capital Projects</b>	\$415,650	\$2,213,554	\$4,207,610	\$0	\$0
<b>Total Collection System Costs</b>	<b>\$813,479</b>	<b>\$2,623,317</b>	<b>\$4,629,667</b>	<b>\$434,718</b>	<b>\$447,760</b>

The current sewer collection charge for the approximately 2,040 dwelling units within the unincorporated area is \$387 per EDU, and generates approximately \$697,000 per year, which is less than the projected O&M and capital costs over the five-year planning period. Therefore, the current sewer collection charge will need to increase over the five-year planning period. It would not be feasible to increase the collection rates all at once to generate the necessary revenue to fund the O&M and capital projects needed, as shown in Figure IV-7. Therefore, the capital project costs portion of the revenue requirements (to be included in the collection charge) was calculated assuming the capital projects will be “debt funded” using the District’s reserves. This methodology is recommended to reduce rate volatility, and not cause the sewer collection charge to spike in FY 2025-26 and FY 2026-27, only to drop significantly thereafter, as the need for major rehabilitation diminishes. Financing the capital projects will spread the cost of the capital projects over a 25-year period. Figure IV-8 summarizes the annual debt service payments for the use of the District’s reserves to fund the sewer collection system capital projects.

The principal loan of \$6,355,683 accounts for the portion of revenues attributable to the capital portion of the collection system surcharge collected from ratepayers over the last three years. During the previous study, the District structured collection system surcharge rates assuming the construction of capital projects. These projects were deferred, but the District collected revenues without modifying rates. Revenues are currently reflected in the combined reserve fund balance. Therefore, the portion of revenues attributable to paying for collection system capital improvements, \$481,131, has been excluded to account for previous revenues. The annual debt service payments include interest at 3.5% per year (based on the District’s current bond interest rate of 3.5%). It is appropriate to include interest even though the District is not actually procuring a loan, because the sewer collection services are only provided

to a small subset (approximately 20%) of the District’s service area and the reserves are contributed to by the entire service area.

**Figure IV-8. Projected Sewer Collection System Debt Service Payments**

	Collection Capital	Annual Debt Service (25 years @ 3.5%)				
	Project Costs	FY 2024-2025	FY 2025-2026	FY 2026-2027	FY 2027-2028	FY 2029-2030
Collection Capital Costs	\$6,836,814					
(Less) Prior Revenues	(\$481,131)					
<b>Adjusted Capital Costs Total</b>	<b>\$6,355,683</b>	\$385,625	\$385,625	\$385,625	\$385,625	\$385,625

Figure IV-9 summarizes the adjusted annual revenue requirement for the District to provide sewer collection services to the unincorporated areas of the District.

**Figure IV-9. Annual Sewer Collection System Revenue Requirement**

Collection System Costs	Projected				
	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
<b>Collection System O&amp;M Costs</b>					
Labor & Benefits	\$242,482	\$249,756	\$257,249	\$264,967	\$272,916
Expenses	\$103,456	\$106,560	\$109,756	\$113,049	\$116,441
Overhead	\$51,891	\$53,447	\$55,051	\$56,702	\$58,403
Subtotal - O&M Costs	\$397,829	\$409,764	\$422,056	\$434,718	\$447,760
<b>Annual Debt Service - Capital Projects</b>	\$385,625	\$385,625	\$385,625	\$385,625	\$385,625
<b>Total Collection System Costs</b>	<b>\$783,454</b>	<b>\$795,389</b>	<b>\$807,681</b>	<b>\$820,343</b>	<b>\$833,385</b>

## COST OF SERVICE - COLLECTION SERVICES

Figure IV-10 presents the five-year recommended sewer collection rates based on the annual costs above. The sewer collection rate will increase from the current \$387 per year to \$474 per year in FY 2028-29.

**Figure IV-10. Supplemental Charge Five-Year Rate Projections**

Collection System Costs	Current Rate	Projected				
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
<b>Annual Operations and Maintenance Costs</b>						
Labor & Benefits		\$242,482	\$249,756	\$257,249	\$264,967	\$272,916
Expenses		\$103,456	\$106,560	\$109,756	\$113,049	\$116,441
Overhead		\$51,891	\$53,447	\$55,051	\$56,702	\$58,403
Subtotal - O&M Costs		\$397,829	\$409,764	\$422,056	\$434,718	\$447,760
<b>Annual Debt Service - Capital Projects</b>		\$385,625	\$385,625	\$385,625	\$385,625	\$385,625
Total Costs		\$783,454	\$795,389	\$807,681	\$820,343	\$833,385
Total Adjusted EDUs		1,756	1,756	1,756	1,756	1,756
<b>Annual Charge (\$/EDU)</b>	<b>\$387</b>	<b>\$446</b>	<b>\$453</b>	<b>\$460</b>	<b>\$467</b>	<b>\$474</b>

Rates for the sewer collection charge vary by customer class to reflect differences in wastewater flow, by factors which were previously calculated in Figure IV-6. Figure IV-11 calculates the adjusted EDUs

(factoring for flow), which are used to calculate the per EDU rates in **Figure IV-10**. **Figure IV-12** calculates the per dwelling unit rates for Multifamily and Floating Home customers to reflect the differences in average flow compared to Single Family customers and Nonresidential customers.

**Figure IV-11. Equivalent Dwelling Unit Calculation – Sewer Collection Services**

	Dwelling Units/EDUs	Ratio to SFR	Dwelling Units/EDUs
<u>Residential Dwelling Units</u>	(a)	(b)	(c) = (a)*(b)
Single Family	85	1.00	85
Multifamily	1,176	0.85	996
Floating Homes	398	0.74	295
<b>Total Residential</b>	<b>1,659</b>		<b>1,376</b>
Nonresidential EDUs	381	1.00	381
<b>Total</b>	<b>2,040</b>		<b>1,756</b>

Ratios calculated in Figure IV-6.

**Figure IV-12. Summary of Annual Supplemental Sewer Collection Charges**

Unincorporated Sewer Collection	Current Rate	Ratio to SFR	Ratio				
			FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Single Family (per EDU)	\$387	1.00	\$446	\$453	\$460	\$467	\$474
Multifamily (per DU)	\$341	0.85	\$378	\$384	\$389	\$395	\$401
Floating Homes (per DU)	\$290	0.74	\$331	\$336	\$341	\$346	\$351
Nonresidential (per EDU)	\$387	1.00	\$446	\$453	\$460	\$467	\$474

## V. RATE DESIGN

The District's current rate structure charges customers per EDU. An EDU is the basic unit of wastewater utility service and reflects the average concentration and strength of flows from a single dwelling unit, which make up most of the District's customer base.

### RESIDENTIAL CUSTOMER RATE DESIGN

The District provides conveyance and treatment services to three residential customer classes: Single Family, Multifamily, and Floating Homes. All residential customers pay the sum of a base component and a volumetric component. The base component is the same for all three customer classes. The volumetric component differs between the three classes based on demonstrated differences in the average wastewater contribution by each customer class (i.e., flow ratio). The flow ratio reflects a reduced wastewater contribution from Multifamily and Floating Home customers in relationship to Single Family customers.

The residential rate structure will not change during this five-year planning period. However, the current flow ratios (which were established based on actual water demand patterns measured over five years ago) have been reviewed and updated based on more-recent actual water use patterns for each residential customer class (see discussion in Section IV of this report).

### NON-RESIDENTIAL CUSTOMER RATE DESIGN

To calculate the charges for non-residential customers, the District has established a set of strength factors and a standard flow rate per EDU. The strength factor for a commercial customer reflects the pollutant content of their wastewater and the resulting ease or difficulty of treatment. For example, offices are assigned a strength factor of 1.0 because their wastewater strength is considered equal to a single family residence. A deli or market is assigned a strength factor of 1.7 because of its moderate strength characteristics. A restaurant is assigned a strength factor of 2.4 because of its high strength characteristics. A flow factor is established for each non-residential customer as the ratio of its flow based on water use to the standard flow rate of 200 gallons per day per EDU.

Non-residential customers pay per EDU based on a formula that determines each commercial customer's number of EDUs. Each non-residential customer's flow and strength is considered in the determination of their individual sewer bills as shown below:

Non-residential EDUs = Flow factor multiplied times Strength factor

Flow factor = annualized metered water use<sup>1</sup>, converted to gallons per day divided by the standard flow rate of 200 gallons per day per EDU, and

Strength factor = either 1.00 for low strength, 1.70 for medium strength, or 2.40 for high strength customers.

**Non-Residential Charge = (Charge per EDU) x (flow factor) x (strength factor)**

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<sup>1</sup> A non-residential customer's annualized metered water use is estimated by summing the most-recent actual February and August water use, as reported by Marin Municipal Water District, multiplied by 6.

The non-residential rate structure will not change during the five-year planning period.

Figure V-1 summarizes the current charges for customer class and service area.

**Figure V-1. Current Charges**

Annual Rate (\$/EDU)	Current Rates
<b>Sewer Conveyance and Treatment</b>	
Single Family/Nonresidential (per EDU)	\$999
Multifamily (per DU)	\$875
Floating Homes (per DU)	\$753
<b>Supplemental Sewer Collection</b>	
Single Family/Nonresidential (per EDU)	\$387
Multifamily (per DU)	\$341
Floating Homes (per DU)	\$290
<b>Unincorporated Collection, Conveyance, and Treatment</b>	
Single Family/Nonresidential (per EDU)	\$1,386
Multifamily (per DU)	\$1,216
Floating Homes (per DU)	\$1,043

## PROPOSED ANNUAL SEWER RATES

A five-year rate plan was prepared based on the District’s net revenue requirements. The rates included in the five-year plan reflect the cost of service analysis, which establishes the allocation of the revenue requirement among the customer classes based on their relative proportionate shares of base and volumetric cost components. The proposed five-year rate plan is shown in Figure V-2.

**Figure V-2. Proposed Annual Sewer Conveyance and Treatment Rates**

Customer Class	Current Rates	FY 2024-25		FY 2025-26		FY 2026-27		FY 2027-28		FY 2028-29	
		\$/EDU	Change	\$/EDU	Change	\$/EDU	Change	\$/EDU	Change	\$/EDU	Change
<b>Sewer Conveyance and Treatment</b>											
Single Family/Nonresidential (per EDU)	\$999	\$1,033	3.4%	\$1,053	2.0%	\$1,074	2.0%	\$1,096	2.0%	\$1,117	2.0%
Multifamily (per DU)	\$875	\$874	-0.1%	\$892	2.0%	\$910	2.0%	\$928	2.0%	\$947	2.0%
Floating Homes (per DU)	\$753	\$765	1.6%	\$781	2.0%	\$797	2.0%	\$813	2.0%	\$829	2.0%

Note that customers located in the District’s unincorporated service area are subject to an additional sewer collection system charge, as was discussed in Section IV. See Figure V-3 for the proposed five-year schedule of supplemental sewer collection charges.

**Figure V-3. Proposed Annual Supplemental Sewer Collection Charges**

Customer Class	Current Rates	FY 2024-25		FY 2025-26		FY 2026-27		FY 2027-28		FY 2028-29	
		\$/EDU	Change	\$/EDU	Change	\$/EDU	Change	\$/EDU	Change	\$/EDU	Change
<b>Supplemental Collection Charge</b>											
Single Family/Nonresidential (per EDU)	\$387	<b>\$446</b>	15.2%	<b>\$453</b>	1.6%	<b>\$460</b>	1.5%	<b>\$467</b>	1.5%	<b>\$474</b>	1.5%
Multifamily (per DU)	\$341	<b>\$378</b>	10.9%	<b>\$384</b>	1.6%	<b>\$389</b>	1.3%	<b>\$395</b>	1.5%	<b>\$401</b>	1.5%
Floating Homes (per DU)	\$290	<b>\$331</b>	14.1%	<b>\$336</b>	1.5%	<b>\$341</b>	1.5%	<b>\$346</b>	1.5%	<b>\$351</b>	1.4%

**Summary of Recommended Rates**

Figure V-4 repeats the five-year rate projections presented in Figure V-2 for conveyance and treatment services provided to the District’s incorporated service area. This figure also summarizes the total rate per EDU that would be assessed to the District’s customers located in the unincorporated service area, which combines the conveyance and treatment rates (presented in Figure V-2) and sewer collection rates (presented in Figure V-3).

**Figure V-4. Annual Recommended Rates**

Customer Class	Current Rates	FY 2024-25		FY 2025-26		FY 2026-27		FY 2027-28		FY 2028-29	
		\$/EDU	Change	\$/EDU	Change	\$/EDU	Change	\$/EDU	Change	\$/EDU	Change
<b>Sewer Conveyance and Treatment</b>											
Single Family/Nonresidential (per EDU)	\$999	<b>\$1,033</b>	3.4%	<b>\$1,053</b>	2.0%	<b>\$1,074</b>	2.0%	<b>\$1,096</b>	2.0%	<b>\$1,117</b>	2.0%
Multifamily (per DU)	\$875	<b>\$874</b>	-0.1%	<b>\$892</b>	2.0%	<b>\$910</b>	2.0%	<b>\$928</b>	2.0%	<b>\$947</b>	2.0%
Floating Homes (per DU)	\$753	<b>\$765</b>	1.6%	<b>\$781</b>	2.0%	<b>\$797</b>	2.0%	<b>\$813</b>	2.0%	<b>\$829</b>	2.0%
<b>Sewer Conveyance and Treatment + Collection</b>											
Single Family/Nonresidential (per EDU)	\$1,386	<b>\$1,479</b>	6.7%	<b>\$1,506</b>	1.8%	<b>\$1,534</b>	1.9%	<b>\$1,563</b>	1.9%	<b>\$1,591</b>	1.9%
Multifamily (per DU)	\$1,216	<b>\$1,252</b>	3.0%	<b>\$1,276</b>	1.9%	<b>\$1,299</b>	1.8%	<b>\$1,323</b>	1.9%	<b>\$1,348</b>	1.9%
Floating Homes (per DU)	\$1,043	<b>\$1,096</b>	5.1%	<b>\$1,117</b>	1.9%	<b>\$1,138</b>	1.8%	<b>\$1,159</b>	1.8%	<b>\$1,180</b>	1.8%

Note: 2% revenue increase varies by customer class based on FY 2024-25 cost of service analysis. Rounding differences caused by stored values in electronic models may exist.

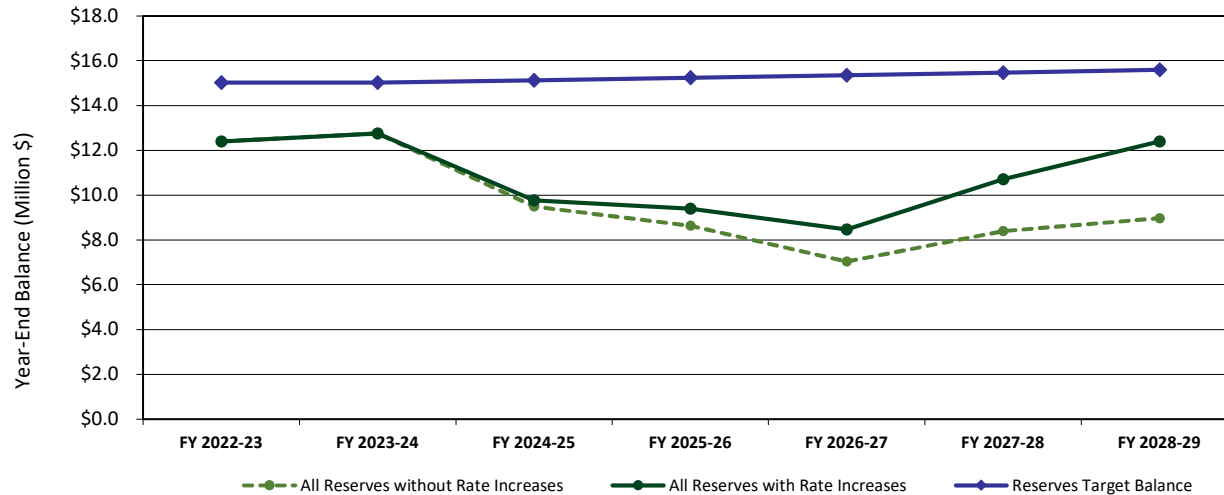
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# **APPENDIX A. SEWER RATES MODEL**

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Sausalito-Marin City Sanitary District  
Wastewater Rate Model  
1A. Summary

	Budgeted	Proposed					
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
<b>Annual Revenue Increases</b>							
<b>Revenue Increase (Conveyance &amp; Treatment)</b>		2.0%	2.0%	2.0%	2.0%	2.0%	To Table 3A
Cumulative Revenue Increase		2.0%	4.0%	6.1%	8.2%	10.4%	
<b>Revenue Increase (Collection)</b>		12.5%	1.6%	1.4%	1.5%	1.5%	
Cumulative Revenue Increase		12.5%	14.3%	15.9%	17.7%	19.4%	
Debt Coverage Ratio	2.42	2.39	2.36	2.34	2.33	2.32	From Table 6
Annual PAYGo Capital Spending	\$6,480,000	\$7,221,924	\$4,535,085	\$5,049,132	\$1,865,487	\$2,423,095	From Table 5



	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
<b>Annual Rate (\$/EDU)</b>						
<b>Sewer Conveyance and Treatment</b>						
		[1]				
Single Family/Commercial (per EDU)	\$999	\$1,033	\$1,053	\$1,074	\$1,096	\$1,117
Multifamily (per DU)	\$875	\$874	\$892	\$910	\$928	\$947
Floating Homes (per DU)	\$753	\$765	\$781	\$797	\$813	\$829
<b>Unincorporated Sewer Collection</b>						
Single Family/Commercial (per EDU)	\$387	\$446	\$453	\$460	\$467	\$474
Multifamily (per DU)	\$341	\$378	\$384	\$389	\$395	\$401
Floating Homes (per DU)	\$290	\$331	\$336	\$341	\$346	\$351
<b>Unincorporated Collection, Conveyance, and Treatment</b>						
Single Family/Commercial (per EDU)	\$1,386	\$1,479	\$1,506	\$1,534	\$1,563	\$1,591
Multifamily (per DU)	\$1,216	\$1,252	\$1,276	\$1,299	\$1,323	\$1,348
Floating Homes (per DU)	\$1,043	\$1,096	\$1,117	\$1,138	\$1,159	\$1,180

[1] 2.0% revenue increase varies by customer class based on FY 2024-25 cost of service analysis.

Sausalito-Marín City Sanitary District  
Wastewater Rate Model  
1B. Assumptions

Inflation Assumptions	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Notes
a. Interest on Reserve Balances	3.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2yr avg LAIF rate (2022-2023)
b. General Inflation	Budget	3.00%	3.00%	3.00%	3.00%	3.00%	District estimate
c. Construction Cost Inflation	Budget	3.91%	3.91%	3.91%	3.91%	3.91%	ENR SF CCI - 10-year CAGR as of June 2023
d. Fuel & Utilities	-	4.80%	4.80%	4.50%	4.25%	4.00%	CPI-U Fuel, 5-year CAGR
e. Chemicals	Budget	5.00%	5.00%	5.00%	5.00%	5.00%	
f. Salaries & Benefits		5.00%	5.00%	5.00%	5.00%	5.00%	
g. Composite O&M	Budget	4.16%	4.18%	4.17%	4.16%	4.16%	
h. Incorporated Single Family Growth (EDUs)	0	2	2	2	2	2	annual change in District's O&M expenses

Sausalito-Marin City Sanitary District  
Wastewater Rate Model  
2. Revenue Requirements

	Escalation Factor Table 1b	Budgeted	Projected					Notes
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
<b>Sewer Conveyance and Treatment Rate</b>								
<u>Salaries and Benefits</u>								
Salary	f	\$2,170,682	\$2,279,216	\$2,393,177	\$2,512,836	\$2,638,478	\$2,770,401	
Payroll Taxes	f	\$150,734	\$158,271	\$166,184	\$174,493	\$183,218	\$192,379	
Retirement	f	\$252,505	\$265,130	\$278,387	\$292,306	\$306,921	\$322,267	
Employee Benefits	f	\$314,161	\$329,869	\$346,363	\$363,681	\$381,865	\$400,958	
Workers Comp	f	\$48,647	\$51,079	\$53,633	\$56,315	\$59,131	\$62,087	
Subtotal		\$2,936,729	\$3,083,565	\$3,237,744	\$3,399,631	\$3,569,612	\$3,748,093	
<u>Operations</u>								
Chemicals	e	\$399,374	\$418,544	\$438,634	\$458,373	\$477,853	\$496,968	
Fuel	d	\$23,056	\$23,958	\$24,895	\$25,870	\$26,882	\$27,933	
Permits & Fees	b	\$132,566	\$135,217	\$137,922	\$140,680	\$143,494	\$146,364	
Waste Disposal	b	\$107,747	\$109,902	\$112,100	\$114,342	\$116,629	\$118,961	
Vehicle & Equip Maint	b	\$15,080	\$15,382	\$15,689	\$16,003	\$16,323	\$16,650	
Safety	b	\$33,335	\$34,002	\$34,682	\$35,375	\$36,083	\$36,805	
Materials & Supplies	b	\$100,087	\$102,089	\$104,131	\$106,213	\$108,337	\$110,504	
Monitoring & Testing	b	\$73,500	\$74,970	\$76,469	\$77,999	\$79,559	\$81,150	
Utilities	d	\$398,656	\$414,254	\$430,462	\$447,304	\$464,805	\$482,991	
City of Sausalito M&R-Billable	b	\$17,771	\$18,126	\$18,489	\$18,859	\$19,236	\$19,621	
Unincorp. Collection M&R	b	\$77,497	\$79,047	\$80,628	\$82,240	\$83,885	\$85,563	
Conveyance & Treatment M&R	b	\$226,653	\$231,186	\$235,810	\$240,526	\$245,336	\$250,243	
Subtotal		\$1,605,322	\$1,656,676	\$1,709,910	\$1,763,783	\$1,818,422	\$1,873,752	
<u>General &amp; Administrative</u>								
Professional Development	b	\$20,414	\$20,822	\$21,239	\$21,664	\$22,097	\$22,539	
Professional Services	b	\$251,256	\$256,281	\$261,407	\$266,635	\$271,968	\$277,407	
Insurance	b	\$96,811	\$98,747	\$100,722	\$102,737	\$104,791	\$106,887	
Administrative	b	\$51,360	\$52,387	\$53,435	\$54,504	\$55,594	\$56,706	
Subtotal		\$419,841	\$428,238	\$436,803	\$445,539	\$454,449	\$463,538	
<b>Subtotal Ops &amp; Admin</b>		<b>\$4,961,892</b>	<b>\$5,168,480</b>	<b>\$5,384,457</b>	<b>\$5,608,953</b>	<b>\$5,842,484</b>	<b>\$6,085,383</b>	
<i>Annual increase</i>			4.2%	4.2%	4.2%	4.2%	4.2%	
<u>Debt Service</u>								
2017 Revenue Bonds		\$2,158,000	\$2,157,000	\$2,154,400	\$2,155,200	\$2,154,200	\$2,156,400	From Table 6
Subtotal		\$2,158,000	\$2,157,000	\$2,154,400	\$2,155,200	\$2,154,200	\$2,156,400	
<i>Annual increase</i>			0.0%	-0.1%	0.0%	0.0%	0.1%	
<u>Non-Operating &amp; Other Revenue</u>								
Sausalito Pump Station	b	(\$112,177)	(\$114,421)	(\$116,709)	(\$119,043)	(\$121,424)	(\$123,852)	
Unincorporated Sewer O&M Collection Revenue	b	(\$340,237)	(\$397,829)	(\$409,764)	(\$422,056)	(\$434,718)	(\$447,760)	From Table 8A
Tax Allocation	b	(\$675,000)	(\$675,000)	(\$675,000)	(\$675,000)	(\$675,000)	(\$675,000)	
Miscellaneous Fees	b	(\$7,930)	(\$7,930)	(\$7,930)	(\$7,930)	(\$7,930)	(\$7,930)	
Subtotal		(\$1,135,344)	(\$1,195,179)	(\$1,209,403)	(\$1,224,030)	(\$1,239,072)	(\$1,254,542)	
<u>Transfers</u>								
To/(From) Capital Reserve		\$3,240,000	\$2,851,582	\$2,851,582	\$2,851,582	\$2,851,582	\$2,851,582	From Table 4
To/(From) Operating Reserve		\$0	\$50,812	\$0	\$0	\$0	\$0	From Table 4
To/(From) R/R Reserve		\$55,800	\$85,000	\$70,000	\$55,000	\$55,000	\$55,000	From Table 4
To/(From) Self-Insurance, Deductible Reserve		\$0	\$0	\$0	\$0	\$0	\$0	From Table 4
To/(From) Medical OPEB UAL		\$0	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	From Table 4
To/(From) Pension UAL		\$0	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	From Table 4
Subtotal		\$3,295,800	\$3,237,394	\$3,171,582	\$3,156,582	\$3,156,582	\$3,156,582	
<b>Net Revenue Requirement</b>		<b>\$9,280,348</b>	<b>\$9,367,695</b>	<b>\$9,501,036</b>	<b>\$9,696,705</b>	<b>\$9,914,194</b>	<b>\$10,143,823</b>	
<i>Annual increase</i>			0.9%	1.4%	2.1%	2.2%	2.3%	
<i>Cumulative increase</i>			0.9%	2.4%	4.5%	6.8%	9.3%	
<b>Net Revenue Requirement excluding Collection Revenue</b>		<b>\$9,620,585</b>	<b>\$9,765,523</b>	<b>\$9,910,800</b>	<b>\$10,118,762</b>	<b>\$10,348,912</b>	<b>\$10,591,582</b>	To Table 3A
<i>Annual increase</i>			1.5%	1.5%	2.1%	2.3%	2.3%	
<i>Cumulative increase</i>			1.5%	3.0%	5.2%	7.6%	10.1%	

FY 2023-24 Budget Figures from Adopted Budget FY 2023/24

Sausalito-Marin City Sanitary District  
Wastewater Rate Model  
3A. Revenue Increases

	Budget		Projected				Notes
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
<b>Sewer Conveyance and Treatment Rate</b>							
Conveyance and Treatment Charges - Existing	\$9,186,265	\$9,186,265	\$9,186,265	\$9,186,265	\$9,186,265	\$9,186,265	From Table 3B
Conveyance and Treatment Charges - Growth	\$0	\$1,998	\$3,996	\$5,994	\$7,992	\$9,990	From Table 3B
	\$9,186,265	\$9,188,263	\$9,190,261	\$9,192,259	\$9,194,257	\$9,196,255	
<b>Collection Rate</b>							
Collection Charges - Existing	\$696,675	\$696,675	\$696,675	\$696,675	\$696,675	\$696,675	From Table 3B
Collection Charges - Growth <i>No known growth in any category</i>							From Table 3B
	\$696,675	\$696,675	\$696,675	\$696,675	\$696,675	\$696,675	
Revenue at Current Rates	\$9,882,940	\$9,884,938	\$9,886,936	\$9,888,934	\$9,890,932	\$9,892,930	
Net Revenue Requirement	\$9,620,585	\$9,765,523	\$9,910,800	\$10,118,762	\$10,348,912	\$10,591,582	From Table 3A; to below
<b>Surplus/(Deficit) before Rate Increase</b>	<b>\$262,355</b>	<b>\$119,415</b>	<b>(\$23,864)</b>	<b>(\$229,828)</b>	<b>(\$457,980)</b>	<b>(\$698,653)</b>	

**Rate Revenue Analysis**

Annual Increase in Conveyance and Treatment Rate		2.0%	2.0%	2.0%	2.0%	2.0%	From Table 1A
Revenue at Current Rates (incl. growth)	\$9,186,265	\$9,188,263	\$9,190,261	\$9,192,259	\$9,194,257	\$9,196,255	From Above
Revenue From Rate Increases Effective:							
July 1, 2024		\$183,765	\$183,805	\$183,845	\$183,885	\$183,925	
July 1, 2025			\$187,481	\$187,522	\$187,563	\$187,604	
July 1, 2026				\$191,273	\$191,314	\$191,356	
July 1, 2027					\$195,140	\$195,183	
July 1, 2028						\$199,086	
Subtotal, Conveyance and Treatment Revenue Increase	\$0	\$183,765	\$371,287	\$562,640	\$757,902	\$957,154	
<b>Total Rate Revenue (after rate adjs)</b>	<b>\$9,186,265</b>	<b>\$9,372,028</b>	<b>\$9,561,547</b>	<b>\$9,754,899</b>	<b>\$9,952,159</b>	<b>\$10,153,408</b>	Existing + Increase

Annual Increase in Collection Rate		12.5%	1.6%	1.4%	1.5%	1.5%	From Table 8A
Revenue at Current Rates (incl. growth)	\$696,675	\$696,675	\$696,675	\$696,675	\$696,675	\$696,675	From Above
Revenue From Rate Increases Effective:							
July 1, 2024		\$86,779	\$86,779	\$86,779	\$86,779	\$86,779	
July 1, 2025			\$12,832	\$12,832	\$12,832	\$12,832	
July 1, 2026				\$11,130	\$11,130	\$11,130	
July 1, 2027					\$12,306	\$12,306	
July 1, 2028						\$12,306	
Subtotal, Conveyance and Treatment Revenue Increase	\$0	\$86,779	\$99,611	\$110,741	\$123,047	\$135,353	
<b>Total Rate Revenue (after rate adjs)</b>	<b>\$696,675</b>	<b>\$783,454</b>	<b>\$796,286</b>	<b>\$807,416</b>	<b>\$819,722</b>	<b>\$832,028</b>	Existing + Increase

Total Conveyance and Treatment Revenue at Proposed Rates	\$9,186,265	\$9,372,028	\$9,561,547	\$9,754,899	\$9,952,159	\$10,153,408	
Total Collection Revenue at Proposed Rates	\$696,675	\$783,454	\$796,286	\$807,416	\$819,722	\$832,028	
<b>Total Revenue at Proposed Rates</b>	<b>\$9,882,940</b>	<b>\$10,155,482</b>	<b>\$10,357,833</b>	<b>\$10,562,315</b>	<b>\$10,771,881</b>	<b>\$10,985,437</b>	
Net Revenue Requirement	\$9,620,585	\$9,765,523	\$9,910,800	\$10,118,762	\$10,348,912	\$10,591,582	From Above
<b>Surplus/(Deficit) after Rate Increase</b>	<b>\$262,355</b>	<b>\$389,958</b>	<b>\$447,034</b>	<b>\$443,553</b>	<b>\$422,969</b>	<b>\$393,854</b>	To Table 4

Sausalito-Marin City Sanitary District  
Wastewater Rate Model  
3B. Rev at Current Rates

	Budgeted	Projected					Notes
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
<b>Sewer Conveyance and Treatment Rate</b>							
<u>Single Family Dwelling Units</u>							
Sausalito	1,346	1,348	1,350	1,352	1,354	1,356	includes growth at 2 EDUs per yr
Unincorporated	85	85	85	85	85	85	
TCS D	1,752	1,752	1,752	1,752	1,752	1,752	
Direct Billing	0	0	0	0	0	0	
Total Units	3,183	3,185	3,187	3,189	3,191	3,193	
Conveyance and Treatment Charge per DU	\$999	\$999	\$999	\$999	\$999	\$999	
Single Family Conveyance and Treatment Revenue	\$3,179,817	\$3,181,815	\$3,183,813	\$3,185,811	\$3,187,809	\$3,189,807	
<u>Multifamily Dwelling Units</u>							
Sausalito	2,701	2,701	2,701	2,701	2,701	2,701	
Marin Housing Authority	275	275	275	275	275	275	
Unincorporated	711	711	711	711	711	711	
TCS D	681	681	681	681	681	681	
Direct Billing (Unincorporated)	204	204	204	204	204	204	
Total Units	4,572	4,572	4,572	4,572	4,572	4,572	
Conveyance and Treatment Charge per DU	\$875	\$875	\$875	\$875	\$875	\$875	
Multifamily Conveyance and Treatment Revenue	\$4,000,605	\$4,000,605	\$4,000,605	\$4,000,605	\$4,000,605	\$4,000,605	
<u>Floating Home Dwelling Units</u>							
Sausalito	0	0	0	0	0	0	
Unincorporated	398	398	398	398	398	398	
TCS D	0	0	0	0	0	0	
Direct Billing	0	0	0	0	0	0	
Total Units	398	398	398	398	398	398	
Conveyance and Treatment Charge per DU	\$753	\$753	\$753	\$753	\$753	\$753	
Floating Home Rate Revenue	\$299,694	\$299,694	\$299,694	\$299,694	\$299,694	\$299,694	
<u>Non Residential EDUs</u>							
Sausalito	1,133	1,133	1,133	1,133	1,133	1,133	
Unincorporated	377	377	377	377	377	377	
TCS D	42	42	42	42	42	42	
Direct Billing (Sausalito)	165	165	165	165	165	165	
Direct Billing (Unincorporated)	4	4	4	4	4	4	
Total Units	1,720	1,720	1,720	1,720	1,720	1,720	
Conveyance and Treatment Charge per EDU	\$999	\$999	\$999	\$999	\$999	\$999	
Non Residential Rate Revenue	\$1,718,180	\$1,718,180	\$1,718,180	\$1,718,180	\$1,718,180	\$1,718,180	
Total Conveyance and Treatment Revenue	\$9,198,296	\$9,200,294	\$9,202,292	\$9,204,290	\$9,206,288	\$9,208,286	
Less: Marin Housing Authority 5% Credit	(\$12,031)	(\$12,031)	(\$12,031)	(\$12,031)	(\$12,031)	(\$12,031)	per District
<b>Adjusted Conveyance and Treatment Revenue</b>	<b>\$9,186,265</b>	<b>\$9,188,263</b>	<b>\$9,190,261</b>	<b>\$9,192,259</b>	<b>\$9,194,257</b>	<b>\$9,196,255</b>	
Conveyance and Treatment - Total EDUs	9,873	9,875	9,877	9,879	9,881	9,883	Total EDUs served by the District
<b>TCS D Subtotal</b>							
	<b>FY 2023-24</b>						
Revenue							
Single Family Dwelling Units	\$1,750,248						
Multifamily Dwelling Units	\$595,875						
Non Residential EDUs	\$41,878						
	\$2,388,001						
<b>Sewer Collection</b>							
	Rate	EDUs	Revenue				
Single Family (Unincorporated)	\$387	85	\$32,895				
Multifamily (Unincorporated)	\$341	1,190	\$401,091				
Floating Homes (Unincorporated)	\$290	398	\$115,420				
Non-Residential EDUs (Unincorporated)	\$387	381	\$147,269				
<b>Collection Revenue</b>			<b>\$696,675</b>				
			To Tab 3A; revenue remains constant due to no growth.				

Sausalito-Marin City Sanitary District  
Wastewater Rate Model  
4. Reserves

	Actual	Budgeted	Projected				Notes	
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28		FY 2028-29
<b>Operating Reserves with increase</b>								
Sewer Conveyance and Treatment Rate		\$2,385,682	\$2,999,402	\$1,745,903	\$473,660	\$182,456	\$167,639	
Operating Surplus/(Deficit)		\$262,355	\$389,958	\$447,034	\$443,553	\$422,969	\$393,854	From Table 3A
<b>TCSD Payments (non-service charge):</b>								
Capital deferral repayment		\$183,855	\$183,855	\$183,855	\$183,855	\$183,855	\$183,855	per draft agreement
Interdistrict Loan P&I		\$74,892	\$74,892	\$74,892	\$74,892	\$74,892	\$74,892	per draft agreement
<b>Transfers:</b>								
(To)/From Revenue Requirements			\$50,812					
(To)/From R&R Reserve		\$0	\$0	\$0	\$0	\$0	\$0	
(To)/From Capital Reserve		\$0	(\$2,000,000)	(\$2,000,000)	(\$1,000,000)	(\$700,000)	\$0	
Subtotal		\$2,906,784	\$1,698,920	\$451,684	\$175,960	\$164,172	\$820,240	
Estimated Interest Income		\$92,618	\$46,983	\$21,976	\$6,496	\$3,466	\$9,879	Assumption a.
<b>Year-End Balance</b>	<b>\$2,385,682</b>	<b>\$2,999,402</b>	<b>\$1,745,903</b>	<b>\$473,660</b>	<b>\$182,456</b>	<b>\$167,639</b>	<b>\$830,118</b>	
Target Balance	\$2,480,000	\$2,480,000	\$2,580,000	\$2,690,000	\$2,800,000	\$2,920,000	\$3,040,000	Target
% of target			68%	18%	7%	6%	27%	6 mos. Of O&M Expenses
Minimum Balance (Board Policy)	\$826,982	\$826,982	\$861,413	\$897,409	\$934,825	\$973,747	\$1,014,231	2 mos. Of O&M Expenses
<b>Capital Reserve</b>								
Beginning Balance		\$3,637,400	\$3,408,967	\$1,409,215	\$2,078,478	\$1,227,102	\$3,266,196	To Above
<b>Transfers:</b>								
(To)/From Revenue Requirements		\$3,240,000	\$2,851,582	\$2,851,582	\$2,851,582	\$2,851,582	\$2,851,582	To Table 1
(To)/From Operating Reserve			\$2,000,000	\$2,000,000	\$1,000,000	\$700,000	\$0	From Above
(To)/From Disaster Recovery		\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	From Below
Connection Fee Revenues		\$0	\$12,260	\$12,260	\$12,260	\$12,260	\$12,260	2 EDUs per year
Capital outlay		(\$378,199)	(\$155,000)	(\$159,650)	(\$164,440)	(\$169,373)	(\$174,454)	FY 2023-24 budget, general inflation assumed for future years
Unincorp Collection System CIP (PAYGo)		\$0	(\$415,650)	(\$2,213,554)	(\$4,207,610)	\$0	\$0	
Unincorp Collection System "Debt Service" Revenue			\$385,625	\$385,625	\$385,625	\$385,625	\$385,625	
Conveyance & Treatment CIP expenditures (PAYGo)		(\$3,240,000)	(\$6,806,273)	(\$2,321,532)	(\$841,522)	(\$1,865,487)	(\$2,423,095)	From Table 5
Subtotal		\$3,339,201	\$1,361,510	\$2,043,947	\$1,194,373	\$3,221,708	\$3,998,114	
Estimated Interest Income		\$69,766	\$47,705	\$34,532	\$32,729	\$44,488	\$72,643	Assumption a.
<b>Year-End Balance</b>	<b>\$3,637,400</b>	<b>\$3,408,967</b>	<b>\$1,409,215</b>	<b>\$2,078,478</b>	<b>\$1,227,102</b>	<b>\$3,266,196</b>	<b>\$4,070,758</b>	
Target Balance	\$4,277,373	\$4,277,373	\$4,277,373	\$4,277,373	\$4,277,373	\$4,277,373	\$4,277,373	1.5x Avg Annual PAYGo CIP expenditures
Minimum Balance (Board Policy)	\$2,137,400	\$2,851,582	\$2,851,582	\$2,851,582	\$2,851,582	\$2,851,582	\$2,851,582	1.0x Avg Annual PAYGo CIP expenditures
<b>Repair &amp; Replacement Reserve</b>								
Beginning Balance		\$220,000	\$224,400	\$256,689	\$272,733	\$272,154	\$269,715	
<b>Transfers:</b>								
(To)/From Revenue Requirements								
Annual R&R Contributions		\$55,800	\$85,000	\$70,000	\$55,000	\$55,000	\$55,000	To Table 2
(To)/From Capital Reserve		\$0	\$0	\$0	\$0	\$0	\$0	To Above
R&R Expenditures		(\$55,800)	(\$57,474)	(\$59,198)	(\$60,974)	(\$62,803)	(\$64,687)	FY 2023-24 budget, general inflation assumed for future years
Debt Service		\$0	\$0	\$0	\$0	\$0	\$0	
Subtotal		\$220,000	\$251,926	\$267,491	\$266,759	\$264,350	\$260,028	
Estimated Interest Income		\$4,400	\$4,763	\$5,242	\$5,395	\$5,365	\$5,297	Assumption a.
<b>Year-End Balance</b>	<b>\$220,000</b>	<b>\$224,400</b>	<b>\$256,689</b>	<b>\$272,733</b>	<b>\$272,154</b>	<b>\$269,715</b>	<b>\$265,325</b>	
Target Balance	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	2x Avg R&R Cost
Minimum Balance (Board Policy)	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	1x Avg R&R Cost

Sausalito-Marin City Sanitary District  
Wastewater Rate Model  
4. Reserves

	Actual	Budgeted	Projected					Notes
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
<b>Disaster Recovery Reserve</b>								
Beginning Balance		\$2,500,000	\$2,469,200	\$2,437,784	\$2,405,740	\$2,373,054	\$2,339,716	
Transfers (To)/From Capital Reserve		(\$80,000)	(\$80,000)	(\$80,000)	(\$80,000)	(\$80,000)	(\$80,000)	From Above
Subtotal		\$2,420,000	\$2,389,200	\$2,357,784	\$2,325,740	\$2,293,054	\$2,259,716	
Estimated Interest Income		\$49,200	\$48,584	\$47,956	\$47,315	\$46,661	\$45,994	Assumption a.
<b>Year-End Balance</b>	<b>\$2,500,000</b>	<b>\$2,469,200</b>	<b>\$2,437,784</b>	<b>\$2,405,740</b>	<b>\$2,373,054</b>	<b>\$2,339,716</b>	<b>\$2,305,710</b>	
Target Balance	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	Avg Annual PAYGo Capital Expense
Minimum Balance (Board Policy)	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	Minimum amount
<b>Self-Insurance &amp; Deductible Reserve</b>								
Beginning Balance		\$100,000	\$102,000	\$104,040	\$106,121	\$108,243	\$110,408	
Transfers:								
(To)/From Revenue Requirements			\$0	\$0	\$0	\$0	\$0	
Subtotal		\$100,000	\$102,000	\$104,040	\$106,121	\$108,243	\$110,408	
Estimated Interest Income		\$2,000	\$2,040	\$2,081	\$2,122	\$2,165	\$2,208	
<b>Year-End Balance</b>	<b>\$100,000</b>	<b>\$102,000</b>	<b>\$104,040</b>	<b>\$106,121</b>	<b>\$108,243</b>	<b>\$110,408</b>	<b>\$112,616</b>	
Target Balance	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
Minimum Balance (Board Policy)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
<b>Medical OPEB Unfunded Liability</b>								
Beginning Balance		\$2,311,163	\$2,311,163	\$2,436,163	\$2,561,163	\$2,686,163	\$2,811,163	
Transfer (To)/From Revenue Requirements		\$0	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	
Subtotal		\$2,311,163	\$2,436,163	\$2,561,163	\$2,686,163	\$2,811,163	\$2,936,163	
Estimated Interest Income								
<b>Year-End Balance</b>	<b>\$2,311,163</b>	<b>\$2,311,163</b>	<b>\$2,436,163</b>	<b>\$2,561,163</b>	<b>\$2,686,163</b>	<b>\$2,811,163</b>	<b>\$2,936,163</b>	
Target Balance	\$3,546,453	\$3,546,453	\$3,546,453	\$3,546,453	\$3,546,453	\$3,546,453	\$3,546,453	
<b>CEPPT Unfunded Liability</b>								
Beginning Balance		\$1,242,011	\$1,242,011	\$1,367,011	\$1,492,011	\$1,617,011	\$1,742,011	
Transfer (To)/From Revenue Requirements		\$0	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	
Subtotal		\$1,242,011	\$1,367,011	\$1,492,011	\$1,617,011	\$1,742,011	\$1,867,011	
Estimated Interest Income								
<b>Year-End Balance</b>	<b>\$1,242,011</b>	<b>\$1,242,011</b>	<b>\$1,367,011</b>	<b>\$1,492,011</b>	<b>\$1,617,011</b>	<b>\$1,742,011</b>	<b>\$1,867,011</b>	
Target Balance	\$1,905,197	\$1,905,197	\$1,905,197	\$1,905,197	\$1,905,197	\$1,905,197	\$1,905,197	

Sausalito-Marin City Sanitary District  
Wastewater Rate Model  
5. CIP

Cash-funded (PAYGo) Projects	Budgeted	Projected					5-year Total	Notes
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	(FY 2024-25 to FY 2028-29)	
<b>Treatment Plant Improvements</b>								
South Clarifier and Headworks Gates Rehabilitation	\$700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operations and Lab Remodel	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Shop/Operator/Equipment Facilities Study/Pre-Design	\$0	\$0	\$150,000	\$750,000	\$750,000	\$0	\$1,650,000	
Biosolids Handling (Plant)	\$240,000	\$750,000	\$1,000,000	\$0	\$0	\$0	\$1,750,000	
Primary Clarifier and Headworks Gates Rehab Project	\$0	\$3,000,000	\$1,000,000	\$0	\$0	\$0	\$4,000,000	
Primary Digester Heating System Replacement	\$400,000	\$200,000	\$0	\$0	\$0	\$0	\$200,000	
Plant Electric Upgrades	\$800,000	\$500,000	\$0	\$0	\$0	\$0	\$500,000	
Primary Digester Cleaning and Upgrade Project	\$0	\$0	\$0	\$0	\$150,000	\$1,000,000	\$1,150,000	
<b>Subtotal, Treatment Plant</b>	<b>\$2,440,000</b>	<b>\$4,450,000</b>	<b>\$2,150,000</b>	<b>\$750,000</b>	<b>\$900,000</b>	<b>\$1,000,000</b>	<b>\$9,250,000</b>	
Accumulated Construction Cost Inflation		3.91%	7.98%	12.20%	16.59%	21.15%		
<b>Inflation Adjusted Subtotal, Treatment Plant</b>	<b>\$2,440,000</b>	<b>\$4,624,109</b>	<b>\$2,321,532</b>	<b>\$841,522</b>	<b>\$1,049,337</b>	<b>\$1,211,547</b>	<b>\$10,048,047</b>	
<b>Conveyance System (excl. Marin City collection system)</b>								
TCS D Receipt Flow Meter	\$200,000	\$100,000	\$0	\$0	\$0	\$0	\$100,000	
Beach Force Main Rehabilitation	\$600,000	\$2,000,000	\$0	\$0	\$0	\$0	\$2,000,000	
Main St. to Alexander Ave Force Main Inspection	\$0	\$0	\$0	\$0	\$250,000	\$0	\$250,000	
Locust St. Force Main Inspection	\$0	\$0	\$0	\$0	\$250,000	\$0	\$250,000	
Princess St. Pump Station Rehabilitation & Permanent Emergency Generator	\$0	\$0	\$0	\$0	\$200,000	\$1,000,000	\$1,200,000	
<b>Subtotal, Conveyance System</b>	<b>\$800,000</b>	<b>\$2,100,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$700,000</b>	<b>\$1,000,000</b>	<b>\$3,800,000</b>	
Accumulated Construction Cost Inflation		3.91%	7.98%	12.20%	16.59%	21.15%		
<b>Inflation Adjusted Subtotal, Conveyance</b>	<b>\$800,000</b>	<b>\$2,182,164</b>	<b>\$0</b>	<b>\$0</b>	<b>\$816,151</b>	<b>\$1,211,547</b>	<b>\$4,209,862</b>	
<b>Unincorporated Collection System</b>								
Marin City Pump Station Rehabilitation & FM Inspection (Design)	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000	
Marin City Pump Station Rehabilitation & FM Inspection (Construction)	\$0	\$0	\$1,750,000	\$1,750,000	\$0	\$0	\$3,500,000	
Marin City Sewer Collection System Rehab, Phase II (Design)	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000	
Marin City Sewer Collection System Rehab, Phase II (Construction)	\$0	\$0	\$0	\$2,000,000	\$0	\$0	\$2,000,000	
<b>Subtotal, Unincorporated Collection System</b>	<b>\$0</b>	<b>\$400,000</b>	<b>\$2,050,000</b>	<b>\$3,750,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,200,000</b>	
Accumulated Construction Cost Inflation		3.91%	7.98%	12.20%	16.59%	21.15%		
<b>Inflation Adjusted Subtotal, Collection System</b>	<b>\$0</b>	<b>\$415,650</b>	<b>\$2,213,554</b>	<b>\$4,207,610</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,836,814</b>	To Table 9
<b>Grand Total Pay-As-You-Go Projects</b>	<b>\$3,240,000</b>	<b>\$6,950,000</b>	<b>\$4,200,000</b>	<b>\$4,500,000</b>	<b>\$1,600,000</b>	<b>\$2,000,000</b>	<b>\$19,250,000</b>	Avg. Annual
Construction Cost Inflation	1.000	1.039	1.080	1.122	1.166	1.212		\$3,850,000
<b>Grand Total Inflated Pay-As-You-Go Projects</b>	<b>\$6,480,000</b>	<b>\$7,221,924</b>	<b>\$4,535,085</b>	<b>\$5,049,132</b>	<b>\$1,865,487</b>	<b>\$2,423,095</b>	<b>\$21,094,724</b>	<b>\$4,218,945</b>
								To Table 4
<b>Conveyance &amp; Treatment</b>	<b>\$3,240,000</b>	<b>\$6,806,273</b>	<b>\$2,321,532</b>	<b>\$841,522</b>	<b>\$1,865,487</b>	<b>\$2,423,095</b>		<b>\$2,851,582</b>
<b>Unincorp Collection</b>	<b>\$0</b>	<b>\$415,650</b>	<b>\$2,213,554</b>	<b>\$4,207,610</b>	<b>\$0</b>	<b>\$0</b>		<b>\$1,367,363</b>
	<b>\$3,240,000</b>	<b>\$7,221,924</b>	<b>\$4,535,085</b>	<b>\$5,049,132</b>	<b>\$1,865,487</b>	<b>\$2,423,095</b>		<b>\$4,218,945</b>

Sausalito-Marín City Sanitary District  
Wastewater Rate Model  
6. Debt Service

	Budgeted	Projected					Notes
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
Sewer Conveyance and Treatment Rate							
<u>2017 Revenue Bond (matures 2042)</u>							
Principle	\$1,025,000	\$1,065,000	\$1,105,000	\$1,150,000	\$1,195,000	\$1,245,000	
Interest	\$1,133,000	\$1,092,000	\$1,049,400	\$1,005,200	\$959,200	\$911,400	
Total Payment	\$2,158,000	\$2,157,000	\$2,154,400	\$2,155,200	\$2,154,200	\$2,156,400	per debt service schedule
Total debt and loan repayment	\$2,158,000	\$2,157,000	\$2,154,400	\$2,155,200	\$2,154,200	\$2,156,400	
<b>Debt Service Coverage</b>							
<b>Revenue Sources</b>							
Sewer Service Charges	\$9,186,265	\$9,372,028	\$9,561,547	\$9,754,899	\$9,952,159	\$10,153,408	from Table 2
Sausalito Pump Station	\$112,177	\$114,421	\$116,709	\$119,043	\$121,424	\$123,852	from Table 2
Tax allocation	\$675,000	\$675,000	\$675,000	\$675,000	\$675,000	\$675,000	from Table 2
Reserve interest earnings	\$215,984	\$148,035	\$109,705	\$91,934	\$99,981	\$133,814	from Table 4
Connection Fees	\$0	\$12,260	\$12,260	\$12,260	\$12,260	\$12,260	from Table 4
	\$10,189,426	\$10,321,744	\$10,475,221	\$10,653,136	\$10,860,824	\$11,098,335	
<b>Operating Expenses</b>	<b>(\$4,961,892)</b>	<b>(\$5,168,480)</b>	<b>(\$5,384,457)</b>	<b>(\$5,608,953)</b>	<b>(\$5,842,484)</b>	<b>(\$6,085,383)</b>	from Table 2
<b>Net Revenue</b>	<b>\$5,227,534</b>	<b>\$5,153,264</b>	<b>\$5,090,765</b>	<b>\$5,044,183</b>	<b>\$5,018,340</b>	<b>\$5,012,952</b>	
<b>Debt Service</b>	<b>\$2,158,000</b>	<b>\$2,157,000</b>	<b>\$2,154,400</b>	<b>\$2,155,200</b>	<b>\$2,154,200</b>	<b>\$2,156,400</b>	
<b>Coverage ratio</b>	<b>2.42</b>	<b>2.39</b>	<b>2.36</b>	<b>2.34</b>	<b>2.33</b>	<b>2.32</b>	

Sausalito-Marín City Sanitary District  
Wastewater Rate Model  
7. Base vs Volumetric

Operating and Administrative Expenses	FY 2024-25		BASE		VOLUMETRIC	
	From Table 2	%	\$	%	\$	
<u>Salaries and Benefits</u>						
Salary	\$2,279,216	100%	\$2,279,216	0%	\$0	
Payroll Taxes	\$158,271	100%	158,271	0%	0	
Retirement	\$265,130	100%	265,130	0%	0	
Employee Benefits	\$329,869	100%	329,869	0%	0	
Workers Comp	\$51,079	100%	51,079	0%	0	
					0	
<u>Operations</u>					0	
Chemicals	418,544	20%	83,709	80%	334,835	
Fuel	23,958	100%	23,958	0%	0	
Permits & Fees	135,217	100%	135,217	0%	0	
Waste Disposal	109,902	20%	21,980	80%	87,922	
Vehicle & Equip Maint	15,382	100%	15,382	0%	0	
Safety	34,002	20%	6,800	80%	27,201	
Materials & Supplies	102,089	100%	102,089	0%	0	
Monitoring & Testing	74,970	100%	74,970	0%	0	
Utilities	414,254	100%	414,254	0%	0	
City of Sausalito M&R-Billable	18,126	20%	3,625	80%	14,501	
Unincorp. Collection M&R	79,047	100%	79,047	0%	0	
Conveyence & Treatment M&R	231,186	100%	231,186	0%	0	
			0		0	
<u>General &amp; Administrative</u>			0		0	
Professional Development	20,822	100%	20,822	0%	0	
Professional Services	256,281	100%	256,281	0%	0	
Insurance	98,747	100%	98,747	0%	0	
Administrative	52,387	100%	52,387	0%	0	
			-		-	
<b>Total Operating and Admin Expenses</b>	<b>\$5,168,480</b>		<b>\$ 4,704,021</b>		<b>\$ 464,459</b>	
<b>% of Total</b>	<b>100%</b>		<b>91%</b>		<b>9%</b>	

Sausalito-Marín City Sanitary District  
Wastewater Rate Model  
7. Base vs Volumetric

CAPITAL PROJECTS	5-Yr Total		BASE	VOLUMETRIC	
	From Table 5	%	\$	%	\$
<b>Treatment Plant Improvements</b>					
Shop/Operator/Equipment Facilities Study/Pre-Design	\$1,650,000	100%	\$1,650,000	0%	\$0
Biosolids Handling (Long Term)	1,750,000	20%	350,000	80%	1,400,000
Primary Clarifier and Headworks Gates Rehab Project	4,000,000	100%	4,000,000	0%	0
Primary Digester Heating System Replacement	200,000	100%	200,000	0%	0
Plant Electric Upgrades	500,000	100%	500,000	0%	0
Primary Digester Cleaning and Upgrade Project	1,150,000	20%	230,000	80%	920,000
<b>Conveyance System</b>					
TCS D Recept Flow Meter	100,000	20%	20,000	80%	80,000
Beach Force Main Rehabilitation	2,000,000	20%	400,000	80%	1,600,000
Main St. to Alexander Ave Force Main Inspection	250,000	20%	50,000	80%	200,000
Locust St. Force Main Inspection	250,000	20%	50,000	80%	200,000
Princess St. Pump Station Study	1,200,000	20%	240,000	80%	960,000
<b>Unincorporated Collection System</b>					
Marin City Pump Station Rehabilitation & FM Inspe	400,000	20%	80,000	80%	320,000
Marin City Pump Station Rehabilitation & FM Inspe	3,500,000	20%	700,000	80%	2,800,000
Marin City Sewer Collection System Rehab, Phase II	300,000	20%	60,000	80%	240,000
Marin City Sewer Collection System Rehab, Phase II	2,000,000	20%	400,000	80%	1,600,000
<b>Total Capital Expenses (5-yr period)</b>	<b>\$19,250,000</b>		<b>\$ 8,930,000</b>		<b>\$ 10,320,000</b>
<b>Average Annual Capital</b>	<b>\$3,850,000</b>		<b>\$ 1,786,000</b>		<b>\$ 2,064,000</b>
<b>% of Total</b>	<b>100%</b>		<b>46%</b>		<b>54%</b>

REVENUE REQUIREMENT	BASE	VOLUMETRIC	TOTAL
	\$	\$	
FY 2024-25 Operating & Admin. Expenses	\$ 4,704,021	\$464,459	\$5,168,480
Average Annual Capital Expenses	\$ 1,786,000	\$2,064,000	\$3,850,000
Grand Total	\$6,490,021	\$2,528,459	\$9,018,480
% of Total	71.96%	28.04%	100%

Sausalito-Marín City Sanitary District  
Wastewater Rate Model  
8A. Collection System Costs

Collection System Costs	Current Rate	Projected					Notes
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
<b>Annual Operations and Maintenance Costs</b>							
Labor & Benefits		\$242,482	\$249,756	\$257,249	\$264,967	\$272,916	Provided by District
Expenses		\$103,456	\$106,560	\$109,756	\$113,049	\$116,441	Provided by District
Overhead		\$51,891	\$53,447	\$55,051	\$56,702	\$58,403	Provided by District
Subtotal - O&M Costs		\$397,829	\$409,764	\$422,056	\$434,718	\$447,760	
<b>Annual Debt Service - Capital Projects</b>							
Total Costs		\$385,625	\$385,625	\$385,625	\$385,625	\$385,625	From Table 9
Total Adjusted EDUs		1,756	1,756	1,756	1,756	1,756	From Below
<b>Annual Charge (\$/EDU) - SFR and Nonres.</b>	<b>\$387</b>	<b>\$446</b>	<b>\$453</b>	<b>\$460</b>	<b>\$467</b>	<b>\$474</b>	To Table 3 and Summary
Annual % Increase		15.3%	1.5%	1.5%	1.6%	1.6%	

<b>Dwelling Units</b>							
Single Family Dwelling Units	85	85	85	85	85	85	From Tab 3B
Multifamily Dwelling Units	1176	1176	1176	1176	1176	1176	From Tab 3B
Floating Home Dwelling Units	398	398	398	398	398	398	From Tab 3B
Non Residential EDUs	381	381	381	381	381	381	From Tab 3B
	2,040	2,040	2,040	2,040	2,040	2,040	

**EDU Calculation**

	Dwelling Units/EDUs	Ratio to SFR	Adjusted Dwelling Units/EDUs
<u>Residential Dwelling</u>	(a)	(b)	(c) = (a)*(b)
Single family	85	1.00	85
Multifamily	1,176	0.85	996
Floating Homes	398	0.74	295
Total Residential	1,659		1,376
Non Residential ED	381	1.00	381
Total	2,040		1,756

Sausalito-Marin City Sanitary District  
Wastewater Rate Model  
8A. Collection System Costs

Collection System Costs	Current Rate	Projected					Notes
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
<b>Annual Collection Charge (by Component)</b>							
Annual O&M Collection Costs		\$397,829	\$409,764	\$422,056	\$434,718	\$447,760	
Total EDUs		1,756	1,756	1,756	1,756	1,756	
<b>Annual O&amp;M Collection Charge (\$/EDU)</b>		<b>\$227</b>	<b>\$233</b>	<b>\$240</b>	<b>\$248</b>	<b>\$255</b>	
<i>% of Total Collection Charge</i>		51%	52%	52%	53%	54%	
Annual CIP Collection Costs		\$385,625	\$385,625	\$385,625	\$385,625	\$385,625	
Total EDUs		1,756	1,756	1,756	1,756	1,756	
<b>Annual CIP Collection Charge (\$/EDU)</b>		<b>\$220</b>	<b>\$220</b>	<b>\$220</b>	<b>\$220</b>	<b>\$220</b>	
<i>% of Total Collection Charge</i>		49%	48%	48%	47%	46%	
		\$446	\$453	\$460	\$467	\$474	
Revenue Collected							
	<b>Charges per Customer Type - based on Table 1A.</b>						
Single family		\$446	\$453	\$460	\$467	\$474	
Multifamily		\$378	\$384	\$389	\$395	\$401	
Floating Homes		\$331	\$336	\$341	\$346	\$351	
Non Residential EDUs		\$446	\$453	\$460	\$467	\$474	
Single family		\$37,916	\$38,505	\$39,100	\$39,695	\$40,290	
Multifamily		\$444,223	\$451,668	\$457,550	\$464,607	\$471,664	
Floating Homes		\$131,568	\$133,728	\$135,718	\$137,708	\$139,698	
Total Residential		\$613,707	\$623,901	\$632,368	\$642,010	\$651,652	
Non Residential EDUs		\$169,747	\$172,385	\$175,048	\$177,712	\$180,376	
<b>Total Revenue</b>	\$696,675	\$783,454	\$796,286	\$807,416	\$819,722	\$832,028	
		12.5%	1.6%	1.4%	1.5%	1.5%	

Sausalito-Marin City Sanitary District  
Wastewater Rate Model  
8B. Collection System Collected

Fiscal Year Ending	Total				Collection Component				Treatment Component			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
A1	\$98,256	\$98,770	\$107,185	\$117,810	\$15,957	\$18,700	\$24,735	\$32,895	\$73,386	\$80,070	\$82,450	\$84,915
B1	330,738	348,250	376,753	415,114	59,302	65,670	86,546	115,420	271,436	282,580	290,207	299,694
C1	392,602	413,308	447,525	492,480	70,470	78,764	103,680	138,105	321,165	334,544	343,845	355,250
D1	481,566	511,036	338,130	372,096	93,300	97,388	78,336	104,346	237,900	413,648	259,794	267,750
G1	32,899	39,403	37,653	43,520	5,900	7,460	8,689	12,152	26,999	31,943	28,964	31,369
H1	332,238	231,087	279,375	330,007	59,586	43,751	64,471	92,145	272,652	187,336	214,904	237,862
I1	118,459	124,304	134,902	148,357	20,849	23,534	31,131	41,401	95,402	100,769	103,771	106,933
Residential	1,303,162	1,371,364	1,269,593	1,397,500	239,029	260,522	293,297	390,766	903,887	1,110,842	976,296	1,007,609
Non-Residential	483,596	394,794	451,930	521,884	86,336	74,746	104,291	145,698	395,052	320,048	347,638	376,163
<b>Total Tax Roll Revenue</b>	<b>\$1,786,758</b>	<b>\$1,766,158</b>	<b>\$1,721,523</b>	<b>\$1,919,384</b>	<b>\$325,365</b>	<b>\$335,268</b>	<b>\$397,588</b>	<b>\$536,464</b>	<b>\$1,298,939</b>	<b>\$1,430,890</b>	<b>\$1,323,934</b>	<b>\$1,383,772</b>

<i>% CIP Collection Charge</i>	8%	28%	44%	Per Previous Rate Study
<i>Amount Collected (Tax Roll)</i>	\$26,821	\$111,325	\$236,044	
<i>Direct Billing Revenue</i>	\$58,200	\$253,572	\$71,102	Per District Tax Roll Spreadsheet
<i>% CIP Collection Charge</i>	8%	28%	44%	
<i>Amount Collected (Direct Billing)</i>	\$4,656	\$71,000	\$31,285	
<b>Amount Collected CIP (Actual)</b>	<b>\$31,477</b>	<b>\$182,325</b>	<b>\$267,329</b>	<b>\$481,131</b> 3-Year Total (Actual), To Table 9

Sausalito-Marín City Sanitary District  
Wastewater Rate Model  
9. Unincorp Capital Debt Servc

Loan Assumptions:

Term	25	years (bond term)
Interest Rate	3.50%	per District bond rate

Fiscal Year	Annual Collection System Capital							Notes
	Project Costs	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
	(From below)							
FY 2024-2025	\$6,355,683		\$385,625	\$0	\$0	\$0	\$0	see Loan Assumptions
FY 2025-2026	\$0			\$385,625	\$0	\$0	\$0	see Loan Assumptions
FY 2026-2027	\$0				\$385,625	\$0	\$0	see Loan Assumptions
FY 2027-2028	\$0					\$385,625	\$0	see Loan Assumptions
FY 2029-2030	\$0						\$385,625	see Loan Assumptions
<b>Total</b>	<b>\$6,355,683</b>	<b>\$0</b>	<b>\$385,625</b>	<b>\$385,625</b>	<b>\$385,625</b>	<b>\$385,625</b>	<b>\$385,625</b>	

Note: Total shown in column C is Collection System capital costs from Table 5, net of capital collection rate revenues from previous five years, shown in Table 8B. See below.

	Collection Capital	Annual Debt Service (25 years @ 3.5%)					
	Project Costs	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	
Collection Capital Costs	\$6,836,814						From Table 5
(Less) Prior Revenues	(\$481,131)						From Table 8B
<b>Adjusted Capital Costs Total</b>	<b>\$6,355,683</b>	<b>\$385,625</b>	<b>\$385,625</b>	<b>\$385,625</b>	<b>\$385,625</b>	<b>\$385,625</b>	To Above

Sausalito-Marín City Sanitary District  
Wastewater Rate Model  
10A. Units of Service

SMCSD

	3-Year Average Total (HCF)	3-Year Average Annualized (HCF)	MMWD Annual Total (GPD)	Return Rate (%)	Annual Total (GPD) - Adjusted	FY22-23 EDUs Reported to County	GPD per EDU	Factors based on GPD per EDU
<u>Customer Classes</u>								
Residential (1 winter bill)								
Single Family	15,592	93,552	191,731	100%	191,731	1,431	134	1.00
Multifamily	24,498	146,988	301,246	100%	301,246	3,891	77	0.58
Floating Homes	1,100	6,600	13,526	100%	13,526	398	34	0.25
Subtotal - Residential	41,190	247,140	506,503		506,503	5,720		

MF includes Marin City Housing Authority

TCSD

	3-Year Average Total (HCF)	3-Year Average Annualized (HCF)	MMWD Annual Total (GPD)	Return Rate (%)	Annual Total (GPD) - Adjusted	FY22-23 EDUs Reported to County	GPD per EDU	Factors based on GPD per EDU
<u>Customer Classes</u>								
Residential (1 winter bill)								
Single Family	21,650	129,900	266,225	100%	266,225	1,752	152	1.00
Multifamily	4,800	28,800	59,024	100%	59,024	681	87	0.57
Subtotal - Residential	26,450	158,700	325,249		325,249	2,433		

Combined SMCSD & TCSD

	3-Year Average Total (HCF)	3-Year Average Annualized (HCF)	MMWD Annual Total (GPD)	Return Rate (%)	Annual Total (GPD) - Adjusted	FY22-23 EDUs Reported to County	GPD per EDU	Volume Factor
<u>Customer Classes</u>								
Residential (1 winter bill)								
Single Family	37,242	223,452	457,955	100%	457,955	3,183	144	1.00
Multifamily	29,298	175,788	360,270	100%	360,270	4,572	79	0.55
Floating Homes	1,100	6,600	13,526	100%	13,526	398	34	0.24
Subtotal - Residential	67,640	405,840	831,752		831,752	8,153		

