



WEST BAY SANITARY DISTRICT FY 2024-25 SEWER RATE STUDY



**February 28, 2024
Final Report**



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West Bay Sanitary District

500 Laurel Street
Menlo Park, CA 94025



FY 2024-25 Sewer Rate Study

March 1, 2024

HF&H Consultants, LLC

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Walnut Creek, CA 94596



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March 1, 2024

Mr. Sergio Ramirez

General Manager

West Bay Sanitary District

500 Laurel Street

Menlo Park, CA 94025

Subject: FY 2024-25 Sewer Rate Study – Final Report

Dear Mr. Ramirez:

HF&H Consultants (HF&H) is pleased to submit this final report to update the West Bay Sanitary District's (District's) FY 2024-25, FY 2025-26, and FY 2026-27 sewer rates. The report summarizes the analysis that was conducted to develop the recommended rates. The analysis updates last year's projections to reflect the District's and Silicon Valley Clean Water's (SVCW) current operating and capital cost projections.

The overall increase in revenues will allow the District to:

- Fund inflationary increases in existing staff and sewer collection system operating and maintenance costs.
- Fund \$19 million in average annual capital projects for the District-maintained collection system.
- Fully-fund the District's share of SVCW's projected operating and capital costs to operate the wastewater treatment plant which grows from \$13.4 million to \$20.5 million over the five-year study period.
- Adapt to large, expected increases in SVCW debt service in subsequent years without resorting to sharp increases in rates beyond the five-year planning period.
- Continue to maintain sufficient reserves to fully fund all Board-approved reserve targets. Over the next three years the District plans to balance the level of rate increases with the use of \$37 million of existing reserves to meet the increased volume of District capital expenditures and SVCW debt service.



* * * * *

We appreciate this opportunity to continue working for the District.

Sincerely,
HF&H CONSULTANTS, LLC

Rick Simonson
Senior Vice President

Gabe Sasser
Project Manager

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ACRONYMS

FY	Fiscal Year
CCF or HCF	Hundred cubic feet of metered water sold; 748 gallons; a cube of water 4.6 feet on edge
BOD	Biochemical Oxygen Demand
COS	Cost of Service
DU	Dwelling Unit
EDU	Equivalent Dwelling Unit
GPD	Gallons per Day
JPA	Joint Powers Authority
LRFP	Long Range Finance Plan
O&M	Operations and Maintenance
OWDZ	On-Site Wastewater Disposal Zone. Customers receiving supplemental service for maintenance of a STEP or Grinder sewer pump system.
PAYGo	Pay-As-You-Go, in reference to funding capital improvements from cash rather than from borrowed sources of revenue
SVCW	Silicon Valley Clean Water, a Joint Powers Authority that is responsible for regional conveyance and wastewater treatment for West Bay Sanitary District and the cities of Redwood City, San Carlos, and Belmont.
STEP	Septic Tank Effluent Pumping systems
TSS	Total Suspended Solids

ACKNOWLEDGEMENTS

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LIMITATIONS

This document was prepared solely for the West Bay 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 Rate Study

1. BACKGROUND AND SUMMARY

BACKGROUND

The District provides wastewater collection and conveyance services to approximately 55,000 residential, commercial, and industrial customers through a system of pipelines and pump stations that transport their wastewater to the Silicon Valley Clean Water (SVCW) facility for treatment and discharge into San Francisco Bay. SVCW is a Joint Powers Authority (JPA) that provides wastewater treatment services to the Cities of Redwood City, San Carlos, and Belmont as well as the District.

The District owns and operates wastewater collection system facilities serving portions of Menlo Park, Atherton, and Portola Valley. Wastewater from these communities is treated at the SVCW treatment plant, the cost for which is billed to the District and included in the District's sewer service charges. In addition, the District maintains the wastewater collection system operations for the Towns of Los Altos Hills and Woodside under service contracts. Wastewater from these communities is treated at the Palo Alto Regional Water Quality Control plant. Under the services contracts, the District is fully compensated by the towns. The towns are responsible for setting rates for their customers, which will cover the District's cost as well as the cost of treatment.

FIVE-YEAR FINANCIAL PLAN

This report presents a financial plan for the District that incorporates the capital improvements identified in the District's Master Plan, as well as the latest available projections provided by SVCW in their recent January draft of 2024 Long Range Financial Plan. The District's five-year financial plan comprises:

- Projected District operating and capital expenses to maintain the collection system.
- Projected SVCW operating and capital expenses to maintain and upgrade the sewer treatment plant.
- Projected reserve balances and targets.
- Projected revenues from the District's current and proposed sewer service charges; and,
- Projected growth within the District.

The results of the financial plan indicate the annual increases in sewer service charges that are projected to fund the District's expenses and maintain adequate reserves.

RECENT RATE INCREASES

During the last five years, the District's residential sewer service charges per dwelling unit (DU) have increased as shown in **Figure 1-1**.

Figure 1-1. Recent Rates and Rate Increases

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Residential Sewer Service Charge	\$1,177	\$1,224	\$1,255	\$1,280	\$1,306
Percentage Increase		4.0%	2.5%	2.0%	2.0%
Annual Increase - \$ per Year		\$47	\$31	\$25	\$26

The increases during this period were primarily attributable to SVCW’s increasing debt service allocation to the District to fund treatment plant upgrades and, secondarily, to inflationary increases in the District’s operating and annual capital repair and replacement expenses.

CURRENT SEWER RATES

The District charges sewer customers annually on the tax rolls, which is a common practice for billing for sewer service. Billing on the tax rolls is less expensive than it would be if the District issued its own bills while allowing the County to easily levy liens for nonpayment. Even though the District bills through the tax rolls, its sewer service charges are not a tax or assessment. Unlike taxes or assessments, which are based on land-related characteristics such as assessed value or parcel size, the District’s sewer charges are a form of service fee or charge that is proportionate to the cost of providing sewer service.

Residential customers are charged per dwelling unit. In addition, approximately 95 homes in the Portola Valley area (located within the On-Site Wastewater Disposal Zone) pay higher charges (currently \$920 per year) for the maintenance of the Septic Tank Effluent Pump (STEP) system or Grinder Sewer Collection Systems that they require.

Commercial customers pay charges based on their metered water use from the prior calendar year (measured in CCF or hundred cubic feet). Each non-residential charge is the product of the customer’s actual flow multiplied by the rate corresponding to the customer’s class.

Industrial customers are billed based on each customer’s annual flow and the strength of the customer’s wastewater based on sampling data.

Current rates for FY 2023-24 were adopted by the Board in April 2022, as follows:

Figure 1-2. Current Rates

	Current FY 2023-24
<u>Residential (charge per DU per year)</u>	
Single Family, Multi Family	\$1,306
On-site Wastewater Disposal Zone	\$2,226
<u>Commercial (charge per CCF)</u>	
Retail/Commercial	\$10.52
Institution/Public	\$9.58
Restaurants/Bakeries	\$22.16
Supermarkets with Grinders	\$22.41
Hospitals	\$10.88
Hotels with Dining Facilities	\$17.89
<u>Industrial (measured)</u>	
Flow Rate Charge per CCF	\$7.76
BOD Rate Charge per pound	\$1.37
TSS Rate Charge per pound	\$1.56

FINDINGS AND RECOMMENDATIONS

Projected Rate Increases During Five-Year Planning Period

Figure 1-3 indicates the annual rate increases projected for the five-year planning period, beginning with FY 2024-25. The increases indicated below reflect updated assumptions and currently available information. Annual revenues will increase greater than the rate increase in all five years as the District continues to experience growth in the number of customers served. The five-year financial plan assumes 73 new dwelling units each year through FY 2028-29. Note: due to the District billing on the tax roll, the projected annual revenue increases reflect a one-year delay in the realization of the revenue from growth. For example, the growth which occurs in FY 2024-25 will first appear on the tax rolls in FY 2025-26.

Figure 1-3. Projected Rate and Revenue Increases

Annual Year	Projected Base Rate Increase	Projected Revenue Increase
FY 2024-25	5.0%	5.3%
FY 2025-26	5.0%	5.3%
FY 2026-27	5.0%	5.3%
FY 2027-28	5.0%	5.3%
FY 2028-29	5.0%	5.3%

Proposed Rates for FY 2024-25

The following figure shows the current FY 2023-24 rates and the proposed FY 2024-25 through FY 2026-27 rates, which reflect a 5.0% across-the-board increase to all rates. In addition, we are recommending an additional \$150 annual, increase to those customers within the On-Site Wastewater Disposal Zone for the increases in costs to maintain the STEP or Grinder Sewer Collection Systems that they require¹.

Figure 1-4. Current and Proposed FY 2024-25, FY 2025-26, FY 2026-27 Rates

	Current	Proposed Rates		
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Residential (charge per DU per year)				
Single Family, Multi Family	\$1,306	\$1,371	\$1,440	\$1,512
On-site Wastewater Disposal Zone	\$2,226	\$2,337	\$2,454	\$2,577
Commercial (charge per CCF)				
Retail/Commercial	\$10.52	\$11.05	\$11.60	\$12.18
Institution/Public	\$9.58	\$10.06	\$10.56	\$11.09
Restaurants/Bakeries	\$22.16	\$23.27	\$24.43	\$25.65
Supermarkets with Grinders	\$22.41	\$23.53	\$24.71	\$25.95
Hospitals	\$10.88	\$11.42	\$11.99	\$12.59
Hotels with Dining Facilities	\$17.89	\$18.78	\$19.72	\$20.71
Industrial (measured)				
Flow Rate Charge per CCF	\$7.76	\$8.15	\$8.56	\$8.99
BOD Rate Charge per pound	\$1.37	\$1.44	\$1.51	\$1.59
TSS Rate Charge per pound	\$1.56	\$1.64	\$1.72	\$1.81

¹ Section 3 of this report provides details of the larger percentage increase recommended for those customers within the On-site Wastewater Disposal Zone

2. REVENUE REQUIREMENT PROJECTIONS

A spreadsheet model was developed to derive revenue requirements for a five-year planning period, FY 2024-25 through FY 2028-29. The revenue requirements represent the costs that must be covered by revenue from rates and other sources. The District’s Operations & Maintenance (O&M) budget for FY 2023-24 served as the starting point for projecting the District’s expenses and revenues. SVCW provided the projections of all future SVCW expenses, including debt service, used in the model. The escalation factors summarized in **Figure 2-1** were incorporated in the model for projecting expenses and revenues.

Figure 2-1. Key Modeling Assumptions

Assumptions		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
a General Inflation	Per Budget		3.0%	3.0%	3.0%	3.0%	3.0%
b Utilities	Per Budget		5.0%	5.0%	5.0%	5.0%	5.0%
c Salaries	Per Budget		5.0%	4.0%	4.0%	4.0%	4.0%
d Benefits	Per Budget		5.0%	4.0%	4.0%	4.0%	4.0%
e SVCW O&M Expenses Increase %	Per Budget		4.0%	4.0%	4.0%	4.0%	4.0%
f Interest on Earnings		0.3%	2.0%	2.0%	2.0%	2.0%	2.0%
g Woodside Revenue Change	Per Budget		3.0%	3.0%	3.0%	3.0%	3.0%
h Los Altos Hills Revenue Change			4.0%	4.0%	4.0%	4.0%	3.0%
i Increase in Annual Residential Customers	Per Budget		73	73	73	73	73
j Number of Total Residential Customer Accounts		19,515	19,588	19,661	19,734	19,807	19,880
k Number of STEP/STEG Customer Accounts		95	95	95	95	95	95
l Annual Percentage in Residential Account Growth	Per Budget		0.4%	0.4%	0.4%	0.4%	0.4%
m Residential Connection Fee per EDU		\$8,608	\$8,608	\$8,608	\$8,608	\$8,608	\$8,608
n Connection Fees	Per Budget		\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
o Flow Equalization	Per Budget		5.0%	\$0	\$0	\$0	\$0
p District O&M Expenses	Per Budget		3.0%	3.0%	3.0%	3.0%	3.0%
q Interest on LAIF Earnings			3.0%	3.0%	3.0%	3.0%	3.0%

The application of these assumptions to the O&M and capital expenses is described below and summarized in **Figure 2-2** and **Figure 2-3**.

DISTRICT O&M EXPENSES

The District’s net O&M expenses (summarized by category in **Figure 2-2**) are projected to increase from approximately \$10.5 million to \$13.2 million over the five-year planning period. The District’s expenses are increasing between 3% and 5% annually per expense category listed. In addition, net expenses are increasing with the end of approximately \$400,000 in annual non-operating revenue from the flow equalization cost sharing agreement, effective FY 2023-24. In FY 2024-25, flow equalization costs are assumed to be reduced to 1/6, or two months, of FY 2023-24 revenues. This reduced amount estimates potential revenues as the program moves to an on-call format. Beyond FY 2024-25, flow-equalization cost sharing revenues are conservatively assumed to be \$0. With the regional focus on residential development, the District projects an annual increase of 73 residential accounts per year, with a total of 365 accounts added by the end of the planning period.

Figure 2-2. District O&M Expense Summary

	Current Year	Five-Year Planning Period					
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Salaries & Benefits	\$7,067,613	\$7,420,994	\$7,717,833	\$8,026,547	\$8,347,609	\$8,681,513
2	Materials & Supplies	\$751,800	\$774,354	\$797,585	\$821,512	\$846,158	\$871,542
3	Insurance	\$287,900	\$296,537	\$305,433	\$314,596	\$324,034	\$333,755
4	Contract Services	\$916,400	\$943,892	\$972,209	\$1,001,375	\$1,031,416	\$1,062,359
5	Professional Services	\$1,469,700	\$1,513,791	\$1,559,205	\$1,605,981	\$1,654,160	\$1,703,785
6	Repairs & Maintenance	\$646,100	\$665,483	\$685,447	\$706,011	\$727,191	\$749,007
7	Utilities	\$288,000	\$302,400	\$317,520	\$333,396	\$350,066	\$367,569
8	Other Operating Expenses	\$453,575	\$513,492	\$456,797	\$540,501	\$484,616	\$569,154
9	Other Operating Revenues	(\$1,321,051)	(\$1,014,458)	(\$970,883)	(\$998,857)	(\$1,027,864)	(\$1,052,700)
11	Net District Operating Costs	\$10,560,037	\$11,416,485	\$11,841,146	\$12,351,062	\$12,737,386	\$13,285,985
12			8.1%	3.7%	4.3%	3.1%	4.3%

Note: Other Operating Expenses include administrative costs such as professional memberships, travel and meetings, reimbursements from the Recycled Water Fund and Solid Waste Fund for sewer staff time, and contributions to Local Agency Formation Commission (LAFCo).

DISTRICT CAPITAL EXPENSES

The District’s capital expenses are summarized by category in **Figure 2-3** and reflect the adopted Master Plan projects approved earlier in 2024. The District’s annual budgeted capital expenditures range from a low of \$9.5 million (in FY 2028-29) to \$23.4 million (in FY 2025-26), during the five-year planning period. On average, the District expects to spend approximately \$19.0 million annually on these projects (during the five-year planning period FY 2024-25 to FY 2028-29). This level of capital investment is an increase from recent years when the District spent between nine and ten million dollars annually. In fact, the District’s investment in capital improvements over the five-year period represents more than 37% of the revenue requirement, which exceeds the combined SVCW O&M and Capital expense projections. The collection system Capital Improvement Program (CIP) expenses is largest component of the sewer rates revenue requirement.

The increase in CIP demonstrates the District’s intention to maintain its infrastructure and replace existing infrastructure at an accelerated pace, guaranteeing reliability of its system. For example, the Pipe Replacement and Rehabilitation projects, make up the majority of project costs planned over the five-year period, which will address existing collection system assets.

Figure 2-3. CIP Summary

	Current Year	Five-Year Planning Period					
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	Administration	\$150,000	\$0	\$0	\$3,000,000	\$4,000,000	\$0
2	Collection Facilities	\$600,000	\$4,600,000	\$4,600,000	\$600,000	\$600,000	\$600,000
3	Pipe Replacement and/or Rehab.	\$7,472,685	\$11,449,500	\$13,995,700	\$14,067,800	\$11,340,000	\$9,090,400
4	Pump Station Improvements	\$0	\$6,339,000	\$1,258,000	\$2,317,000	\$0	\$0
5	Subsurface Lines & Other Capital	\$440,000	\$0	\$3,000,000	\$0	\$0	\$0
6	Capacity Improvements	\$0	\$15,000	\$704,900	\$704,900	\$3,675,500	\$0
7	Manhole Raising	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
8	Construction in Progress	\$3,060,000	\$0	\$0	\$0	\$0	\$0
9	Total Capital Expenses	\$11,822,685	\$22,503,500	\$23,658,600	\$20,789,700	\$19,715,500	\$9,790,400
10	Less: Connection Fee Revenue	(\$250,000)	(\$250,000)	(\$250,000)	(\$250,000)	(\$250,000)	(\$250,000)
11	Net PAYGo Capital Expenses	\$11,572,685	\$22,253,500	\$23,408,600	\$20,539,700	\$19,465,500	\$9,540,400
12	Carryover	\$11,622,315	\$0	\$0	\$0	\$0	\$0
13	Grand Total Capital Expenses	\$23,195,000	\$22,253,500	\$23,408,600	\$20,539,700	\$19,465,500	\$9,540,400
14			-4%	5%	-12%	-5%	-51%

The District plans to fund these capital improvements from a combination of connection fee revenue (from growth), sewer service charge revenue on a pay-as-you-go (PAYGo) basis without issuing debt, and the use of reserves.

DISTRICT RESERVES

In addition to covering annual expenses, sewer service charges need to generate revenue to maintain adequate operations and capital reserves. To determine what constitutes adequate reserve amounts, the reserve balance was subdivided into Operations, Capital, Vehicle and Equipment Replacement, Rate Stabilization, Recycled Water Project, Emergency Reserves, OPEB/PERS Retirement Liability Reserve Fund, and a Treatment Plant Reserve. In this way, it is possible to set recommended target balances for each purpose.

Operations Reserve Minimum Balance

The Operations Reserve provides working capital for monthly O&M expenses. There is a nine-month lag between sewer service charge payments from the County tax assessor; therefore, the minimum Operations Reserve balance is set equal to six months of O&M expenses to provide adequate cash flow. If this minimum balance is maintained, the District should be able to fund its monthly operations cash flow over this extended period without relying on the Capital Reserve for a short-term loan. Maintaining the minimum balance for the Operations Reserve is recommended as the highest priority for the District's reserve accounts.

Emergency Reserve Target Balance

The target balances for the Operations and Capital Reserves are sufficient to provide working capital on an ongoing basis, but do not provide for unforeseen contingencies such as emergencies. Should an emergency strike (e.g., earthquake), the District cannot suddenly raise rates to generate additional funds due to state law requirements for such rate increases (e.g., Proposition 218). Moreover, the District bills annually on the tax rolls. Therefore, the District has set a target for the Emergency Reserve of \$5.0 million. With such a reserve, the District would have funds on hand to take immediate remedial steps without waiting to procure a loan or issue bonds.

Maintaining the target balance for the Emergency Reserve is recommended as the second highest priority after meeting the minimum balance for the Operations Reserve. The Emergency Reserve can be used for funding capital projects at times when the Capital Reserve is not fully funded.

Capital Reserve Target Balance

The Capital Reserve provides liquidity to fund construction for projects that are funded on a PAYGo basis (as opposed to those that are funded from debt). With adequate capital reserves, the District can pay contractors without encroaching on the Operations or Emergency Reserves. The target balance of \$6.0 million meets this objective. Maintaining the target balance for the Capital Reserve is recommended after meeting the minimum balances for the Operations and Emergency Reserves.

Vehicle and Equipment Replacement Fund

The Vehicle and Equipment Replacement fund provides resources to replace District fleet vehicles and operations equipment. The District maintains a schedule for replacement based on the useful life of the asset. The target reserve balance of \$1.0 million ensures there are sufficient funds on hand to keep up

with the retirement of old equipment or vehicles with the purchase of their replacements. This fund is tracked separately from the Capital Reserve.

Rate Stabilization Reserve Fund

The Board established a rate stabilization fund to allow a margin of safety for the uncertainty of the timing and amount of SVCW capital expenditures to upgrade the wastewater treatment facility. The funds could be used to minimize future rates increases and/or to reduce interest expenses by buying down the amount of debt to be issued by SVCW to fund the upgrades. In the past, the District has utilized this reserve to remove a \$13.0 million debt obligation. The District anticipates future debt obligations and is building this reserve to buy down future debt. The target reserve of the revenue stabilization fund is currently set at \$10 million.

OPEB/PERS Retirement Liability Reserve Fund

In February 2018, the Board established a reserve fund to offset the District's unfunded pension liability. In FY 2020-21, the District contributed \$6.2 million of the fund balance to pay off the entire balance of its unfunded accrued liability. The fund has a current balance of \$734,330 as of the end of FY 2022-23 and there are no plans to increase the amount as the District has satisfied their unfunded liability and plans to fund their OPEB/PERS obligations on a PAYGo basis.

Treatment Plant Reserve Fund

In FY 2020-21, the Board established a reserve to fund increasing SVCW capital expenses. The reserve is intended to address two notable requirements placed on the District beginning in FY 2024-25. First, SVCW will require each member agency to contribute additional funds in lieu of further debt issuance. The District will contribute \$0.7 million in lieu of debt issuance to SVCW in FY 2023-24. Based on the draft 2024 Long Range Financial Plan (LRFP), the District will be asked to make an additional contribution of \$3.6 million to SVCW in FY 2024-25, followed by additional contributions as shown in **Figure 2-4**. Second, in FY 2027-28, each SVCW member agency will begin making payments for its share on a group of WIFIA loans with a 30-year term. The District's annual obligation will begin at average \$3.0 million per annum. These long-term expenses prompted the Board to establish an additional reserve intended to fund planned and unplanned SVCW treatment plant expenses. The Board established a target of \$12.0 million. The reserve is currently fully funded. The District has discretion whether to first use funds from its Rate Stabilization Reserve Fund or its Treatment Plant Reserve Fund but intends to use existing reserves to meet future SVCW capital expenses.

SVCW EXPENSES

Over the next five years, SVCW's treatment costs are projected to be approximately 36% of the District's total revenue requirement. As shown in **Figure 2-4**, SVCW's cost will increase significantly to fund the debt service on a series of bonds and SRF loans, that has been issued to fund the rehabilitation of its interceptors, pump stations, and wastewater treatment plant. The District's treatment charge is allocated in proportion to the number of its EDUs compared with the other SVCW member agencies, currently 26.84%.

Figure 2-4. SVCW O&M and Debt Service Revenue Requirement

SVCW Projected Expenses	Current Year	Projected				
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1 Net Operating Expense	\$6,117,648	\$6,360,275	\$6,614,686	\$6,879,274	\$7,154,445	\$7,440,623
2 Revenue-Funded Capital (PAYGo)	\$531,432	\$402,600	\$402,600	\$402,600	\$402,600	\$402,600
3 Debt Reserves	\$877,594	\$989,900	\$1,126,120	\$1,262,421	\$1,398,806	\$1,535,278
4 Cash-in-lieu of Debt/Debt Service Reserves	\$762,622	\$3,656,334	\$0	\$1,511,728	\$0	\$0
5 Debt Service						
6 Existing 2018 Bond	\$4,569,269	\$4,577,316	\$4,724,364	\$5,027,100	\$5,056,279	\$5,717,633
7 2018, 2021 Revenue Bonds	\$506,765	\$2,385,927	\$2,385,927	\$2,385,927	\$2,385,927	\$2,385,927
8 SRF for Conveyance Planning	\$51,936	\$0	\$0	\$0	\$0	\$0
9 Subtotal SVCW Debt Service	\$5,127,970	\$6,963,243	\$7,110,291	\$7,413,027	\$10,453,525	\$11,114,878
10 Total, SVCW Project Expenses	\$13,417,267	\$18,372,353	\$15,253,698	\$17,469,051	\$19,409,375	\$20,493,379

TOTAL REVENUE REQUIREMENTS

The foregoing modeling assumptions lead to the projected revenue requirements shown in **Figure 2-5**.

Figure 2-5. Projected Revenue Requirements

	Current Year	Five-Year Planning Period				
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
SVCW PAYGo Capital/Reserve Contributions	\$1,409,026	\$1,392,500	\$1,528,720	\$1,665,021	\$1,801,406	\$1,937,878
SVCW Debt-funded Capital	\$5,890,592	\$10,619,578	\$7,110,291	\$8,924,756	\$10,453,525	\$11,114,878
SVCW Operating Expenses	\$6,117,648	\$6,360,275	\$6,614,686	\$6,879,274	\$7,154,445	\$7,440,623
WBSD PAYGo Capital	\$11,974,262	\$18,478,342	\$18,490,751	\$18,503,532	\$18,516,696	\$18,530,255
WBSD Operating Expenses	\$11,881,088	\$12,430,943	\$12,812,029	\$13,349,919	\$13,765,250	\$14,338,685
Total Net Revenue Requirement	\$37,272,617	\$49,281,638	\$46,556,478	\$49,322,501	\$51,691,321	\$53,362,319

Highlights of the District’s projected revenue requirements are as follows:

- The District will fund an average of \$6.8 million annually in SVCW operating expenses.
- The District will fund an average of \$10.9 million annually of combined SVCW capital expenditures through contributions to reserves or existing debt service payments.
- The District will fund an average of \$13.3 million annually in collection system O&M costs
- The District will fund an average of \$18.5 million annually in capital expenditures, net of connection fee revenues. for its own collection system.
- All reserve targets will continue to be met through FY 2026-27, capturing three years of proposed rates to be discussed in further detail in the next sections.

REVENUE INCREASES

The District’s revenue requirement is increasing approximately 43% over the next five years. Current rates cannot support the projected revenue requirements shown in **Figure 2-5**. However, it is not necessary to increase rates a cumulative 43% over the next five-year period, as the District has adequate reserves to fully fund all reserve targets and contribute excess reserves to partially offset the revenue requirement increases (as discussed below). **Figure 2-6** summarizes the annual increase in the District’s revenue requirement and the proposed rate increases.

Figure 2-6. Annual Revenue Increases

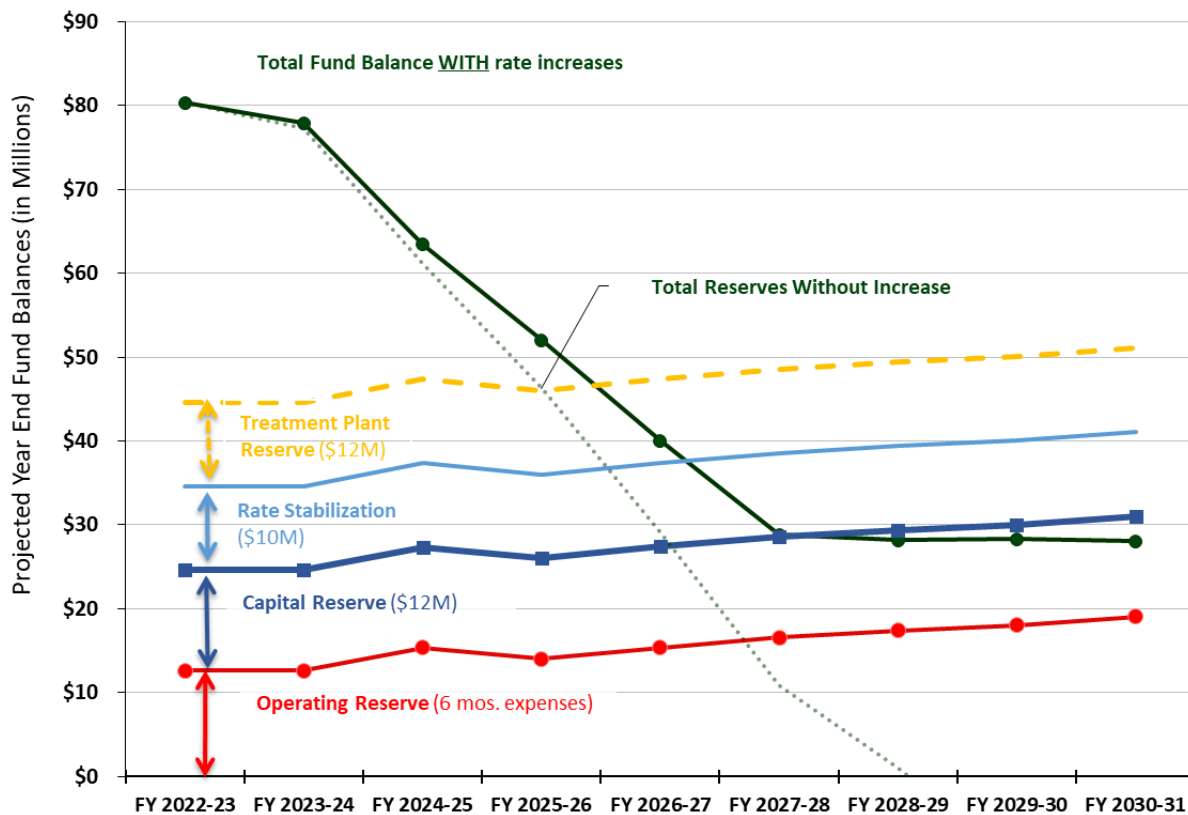
	Five-Year Planning Period				
	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Projected Revenue Requirement Increases	32%	-6%	6%	5%	3%
Proposed Rate Increases	5.0%	5.0%	5.0%	5.0%	5.0%

FUND BALANCE

Figure 2-7 shows the projected annual fund balances with the rate revenue increases recommended in Figure 2-6 (solid green line). Although the projections show straight lines between years, the fund balance will be drawn down during each year. In other words, the reserves are actively drawn from at all times during the year but only periodically added to when payments are received from the County. The reserves are not simply accumulated without being used.

Over the five-year period, the District use existing reserves to partially offset the growing revenue requirement. The use of reserves would allow the District to avoid implementing sharp rate increases to pay for growing SVCW capital expenses and the District’s collection system capital expenses.

Figure 2-7. Fund Balance With and Without Increased Rate Revenue



Minimum Fund Balance

The minimum balance (red line) is the balance that is required to meet the District's operating expenses during the year. The balance is large because the District bills annually on the tax rolls and receives reimbursement from the County twice each year. As a result, there are several months over which the District must rely heavily on its operating reserve to meet its monthly cash flow requirements. Because of the lag between payments from the County, the minimum Operations Reserve balance is set equal to five months of SVCW and District operating expenses.

Target Fund Balance

The target balance is the sum of the minimum balance for operations (red line) plus an allowance for capital projects (\$6.0 million), emergency capital reserves (\$5.0 million), vehicle and equipment replacement fund (\$1.0 million), rate stabilization reserves (\$10.0 million), and treatment plant reserves (\$12.0 million). The capital allowance provides working capital to maintain sufficient funds in order to pay contractors so that work can proceed without delay. Emergency reserves help manage risks associated with sudden asset failures caused by emergencies such as natural disasters or human error. Emergency reserves are a form of capital reserve that can provide a measure of self-insurance so that immediate funding is available for disaster recovery until loans can be arranged. The vehicle and equipment replacement fund provides for the scheduled replacement of the District's fleet vehicles and operational equipment. The District has discretion to use funds from its rate stabilization and treatment plant reserves to address anticipated cost increases to help offset impacts to ratepayers.

3. PROJECTED RATE INCREASES

Current rates cannot support the projected revenue requirements shown in **Figure 2-5**. The projected rate increases, and corresponding residential sewer service charges per DU, are summarized in **Figure 3-1** and **Figure 3-2**.

Figure 3-1. Projected Rates – Residential

	Adopted	Five-Year Planning Period				
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Residential Sewer Service Charge	\$1,306	\$1,371	\$1,440	\$1,512	\$1,588	\$1,667
Percentage Increase		5.0%	5.0%	5.0%	5.0%	5.0%
Annual Increase - \$ per Year		\$65	\$69	\$72	\$76	\$79

Figure 3-2. Projected Rates – Residential, Commercial, and Industrial

	Adopted	Projected				
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Residential (charge per DU per year)						
Single Family, Multi Family	\$1,306	\$1,371	\$1,440	\$1,512	\$1,588	\$1,667
On-site Wastewater Disposal Zone	\$2,226	\$2,337	\$2,454	\$2,577	\$2,706	\$2,841
Commercial (charge per CCF)						
Retail/Commercial	\$10.52	\$11.05	\$11.60	\$12.18	\$12.79	\$13.43
Institution/Public	\$9.58	\$10.06	\$10.56	\$11.09	\$11.64	\$12.22
Restaurants/Bakeries	\$22.16	\$23.27	\$24.43	\$25.65	\$26.93	\$28.28
Supermarkets with Grinders	\$22.41	\$23.53	\$24.71	\$25.95	\$27.25	\$28.61
Hospitals	\$10.88	\$11.42	\$11.99	\$12.59	\$13.22	\$13.88
Hotels with Dining Facilities	\$17.89	\$18.78	\$19.72	\$20.71	\$21.75	\$22.84
Industrial (measured)						
Flow Rate Charge per CCF	\$7.76	\$8.15	\$8.56	\$8.99	\$9.44	\$9.91
BOD Rate Charge per pound	\$1.37	\$1.44	\$1.51	\$1.59	\$1.67	\$1.75
TSS Rate Charge per pound	\$1.56	\$1.64	\$1.72	\$1.81	\$1.90	\$2.00

STEP/GRINDER CHARGES

The District has approximately 95 single family residential customers located in the On-Site Wastewater Disposal Zone who require either Septic Tank Effluent Pumping systems (STEP) or Grinder Pumping systems. These customers are currently charged an additional \$920 annually for the services the District provides these customers to service and replace their pumps and appurtenances.

The District re-examined the service costs specific to these customers and found the revenues collected have not been keeping pace with the annual rate increases. **Figure 3-3** details the calculated cost to provide STEP/grinder system maintenance for these customers.

Figure 3-3. Annual STEP/Grinder System Costs

Private Pump System Maintenance		Annual Costs
1. Labor Cost		
STEP System Bi-Annual Pump Maint. - Pump Mechanic		\$6,892
STEP System Bi-Annual Pump Maint. - Facility Supv.		\$9,006
Grinder System Bi-Annual Pump Maint. - Pump Mechanic		\$11,815
Grinder System Bi-Annual Pump Maint. - Facility Supv.		\$15,438
STEP pump replacements		\$3,180
Grinder pump replacements		\$5,450
Private pump station repairs		\$2,157
Force lateral repairs		\$1,817
Subtotal Labor Costs		\$55,755
2. Material Costs		
Grinder pump replacements		\$24,000
STEP Pump replacements		\$3,325
Envirozyme - Fog Digester		\$1,500
Grider Panel replacements		\$3,000
STEP Panel replacements		\$1,313
Miscellaneous parts - lids, filters, etc.		\$2,000
Subtotal Material Costs		\$35,138
Total Costs For Private Pump Systems		\$90,893
Number of Private Units		95
Total Cost per Private Pump Site (FY 2023-24)		\$956

It is recommended the STEP/Grinder charge be increased to meet the cost of service for FY 2024-25. **Figure 3-4** summarizes the proposed annual STEP/Grinder charge over the next five fiscal years, assuming 5% annual increases, which follows the recommended increases to the base service charge. The proposed rate for FY 2024-25 meets the cost analysis conducted based on FY 2023-24 expenses and assumes an inflationary increase in the cost of service.

Figure 3-4. Projected STEP/Grinder System Cost Increases

	Adopted	Five-Year Planning Period				
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Annual STEP/Grinder Charge	\$920	\$966	\$1,014	\$1,065	\$1,118	\$1,174
\$ Increase		\$46	\$48	\$51	\$53	\$56

Figure 3-5 summarizes the total annual charge for those customers with a STEP/Grinder System. Such customers are charged the base service charge and the additional costs to maintain the STEP/Grinder System.

Figure 3-5. Total Projected Annual Charges – Customers with STEP/Grinder Systems

	Adopted	Five-Year Planning Period				
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Base Service Charge	\$1,306	\$1,371	\$1,440	\$1,512	\$1,588	\$1,667
Annual STEP/Grinder Charge	\$920	\$1,070	\$1,220	\$1,370	\$1,439	\$1,511
Annual Bill	\$2,226	\$2,441	\$2,660	\$2,882	\$3,027	\$3,178
\$ Increase		\$215	\$219	\$222	\$145	\$151

SUMMARY OF PROPOSED RATES

Figure 3-6 provides a schedule of proposed FY 2024-25 through FY 2026-27 rates for all customer types, as discussed above. **Figure 3-7** provides the nominal annual adjustment for all proposed rates.

Figure 3-6. FY 2024-25, FY 2025-26, FY 2026-27 Proposed Rates

	Current	Proposed Rates		
	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Residential (charge per DU per year)				
Single Family, Multi Family	\$1,306	\$1,371	\$1,440	\$1,512
On-site Wastewater Disposal Zone	\$2,226	\$2,337	\$2,454	\$2,577
Commercial (charge per CCF)				
Retail/Commercial	\$10.52	\$11.05	\$11.60	\$12.18
Institution/Public	\$9.58	\$10.06	\$10.56	\$11.09
Restaurants/Bakeries	\$22.16	\$23.27	\$24.43	\$25.65
Supermarkets with Grinders	\$22.41	\$23.53	\$24.71	\$25.95
Hospitals	\$10.88	\$11.42	\$11.99	\$12.59
Hotels with Dining Facilities	\$17.89	\$18.78	\$19.72	\$20.71
Industrial (measured)				
Flow Rate Charge per CCF	\$7.76	\$8.15	\$8.56	\$8.99
BOD Rate Charge per pound	\$1.37	\$1.44	\$1.51	\$1.59
TSS Rate Charge per pound	\$1.56	\$1.64	\$1.72	\$1.81

Figure 3-7. Projected Rate Adjustments (FY 2024-25 through FY 2026-27)

	Current	FY 2024-25 Proposed		FY 2025-26 Proposed		FY 2026-27 Proposed	
	FY 2023-24	Rate	\$ Chg	Rate	\$ Chg	Rate	\$ Chg
Residential (charge per DU per year)							
Single Family, Multi Family	\$1,306	\$1,371	\$65	\$1,440	\$69	\$1,512	\$72
On-site Wastewater Disposal Zone	\$2,226	\$2,337	\$111	\$2,454	\$117	\$2,577	\$123
Commercial (charge per CCF)							
Retail/Commercial	\$10.52	\$11.05	\$0.53	\$11.60	\$0.55	\$12.18	\$0.58
Institution/Public	\$9.58	\$10.06	\$0.48	\$10.56	\$0.50	\$11.09	\$0.53
Restaurants/Bakeries	\$22.16	\$23.27	\$1.11	\$24.43	\$1.16	\$25.65	\$1.22
Supermarkets with Grinders	\$22.41	\$23.53	\$1.12	\$24.71	\$1.18	\$25.95	\$1.24
Hospitals	\$10.88	\$11.42	\$0.54	\$11.99	\$0.57	\$12.59	\$0.60
Hotels with Dining Facilities	\$17.89	\$18.78	\$0.89	\$19.72	\$0.94	\$20.71	\$0.99
Industrial (measured)							
Flow Rate Charge per CCF	\$7.76	\$8.15	\$0.39	\$8.56	\$0.41	\$8.99	\$0.43
BOD Rate Charge per pound	\$1.37	\$1.44	\$0.07	\$1.51	\$0.07	\$1.59	\$0.08
TSS Rate Charge per pound	\$1.56	\$1.64	\$0.08	\$1.72	\$0.08	\$1.81	\$0.09

Revenue increases for subsequent years have been projected in this financial plan and are based on several assumptions and information that will require review prior to adopting any future rate increases. **Figure 3-8** summarizes projected rates over the entire five-year financial planning period.

Figure 3-8. Five-Year Projected Rate Adjustments

	Adopted	Proposed			Projected	
	Fiscal Year: FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
Residential (Charge per DU per year)						
Single Family, Multi Family	\$1,306	\$1,371	\$1,440	\$1,512	\$1,588	\$1,667
On-Site Wastewater Disposal Zone	\$2,226	\$2,337	\$2,454	\$2,577	\$2,706	\$2,841
Commercial (charge per CCF)						
Retail/Commercial	\$10.52	\$11.05	\$11.60	\$12.18	\$12.79	\$13.43
Institution/Public	\$9.58	\$10.06	\$10.56	\$11.09	\$11.64	\$12.22
Restaurants/Bakeries	\$22.16	\$23.27	\$24.43	\$25.65	\$26.93	\$28.28
Supermarkets with Grinders	\$22.41	\$23.53	\$24.71	\$25.95	\$27.25	\$28.61
Hospitals	\$10.88	\$11.42	\$11.99	\$12.59	\$13.22	\$13.88
Hotels with Dining Facilities	\$17.89	\$18.78	\$19.72	\$20.71	\$21.75	\$22.84
Industrial (measured)						
Flow Rate Charge per CCF	\$7.76	\$8.15	\$8.56	\$8.99	\$9.44	\$9.91
BOD Rate Charge per pound	\$1.37	\$1.44	\$1.51	\$1.59	\$1.67	\$1.75
TSS Rate Charge per pound	\$1.56	\$1.64	\$1.72	\$1.81	\$1.90	\$2.00

RESIDENTIAL SEWER CHARGE COMPARISON

Based on available sources, **Figure 3-9** shows the recent residential charges for sewer service among various San Mateo and Santa Clara County agencies. The bills reflect current rates for fiscal year 2023-24, assuming 70 HCF of billed wastewater per year, for agencies with flow-based charges, based on historical residential flow monitoring data. The proposed rate increase in FY 2024-25 would increase the District's charges above what San Bruno currently charges. However, the District's residential customers would still pay less than other agencies charge.

Fellow SVCW member agencies (San Carlos, Belmont, and Redwood City) also face similar additional costs. It is expected that these agencies will be required to increase their rates to cover their share of SVCW costs. Even with the projected rate increases, we would not expect the District's relative position among its neighbors to change significantly.

Figure 3-9. Comparison of Annual Residential Bills

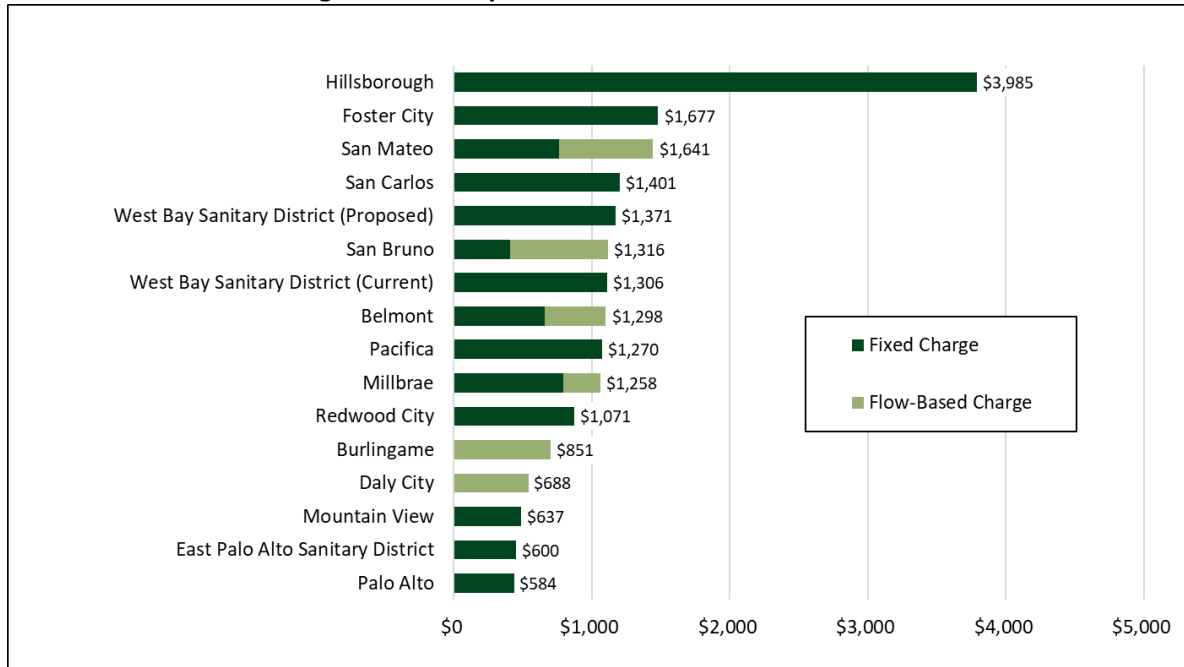


Figure 3-10 provides context as to why the District's charges are more than those of other agencies. The graph shows the District's current and proposed sewer rates along with the other SVCW member agencies (identified with blue squares in the figure below). Based on the graph, there is some correlation to larger agencies charging lower rates because they can take advantage of economies of scale and have a larger base of customers over which to distribute fixed costs. Admittedly, there are outliers, such as the higher populated City of San Mateo charging higher rates, and the smaller jurisdiction of East Palo Alto Sanitary District charging lower rates. However, the graph helps explain why the District's customers are charged higher rates than larger agencies, such as Redwood City, Mountain View, and Palo Alto.

Figure 3-10. Comparison of Monthly Residential Bills

