





Stege Sanitary District Sewer Rate Study

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LIST OF ACRONYMS

CIP – capital improvement plan

EBMUD – East Bay Municipal Utility District

EDU – equivalent dwelling unit (i.e. a single family home)

EPA – Environmental Protection Agency

FY – fiscal year (July 1 to June 30)

LF – linear feet

O&M – operations and maintenance

Prop 218 – Proposition 218

SPASPA – San Pablo Ave Specific Plan Area

Stege SD – Stege Sanitary District

SECTION 1: EXECUTIVE SUMMARY

1.1 Background

The Stege Sanitary District (Stege SD or District) owns and operates a sewer collection system serving the City of El Cerrito, the Richmond Annex, and the Kensington community. Stege SD is commonly referred to as one of the East Bay Municipal Utility District's (EBMUD) satellite sanitation agencies. Sewer flows collected within the District's service area are conveyed to EBMUD for treatment and disposal. The Stege Sanitary District last conducted a sewer rate study in April 2019 which established rates through fiscal year (FY) 2024. Stege SD has established the following financial goals to guide the rate adjustment:

- 1) Fund operating costs and existing debt service expenses
- 2) Fund capital improvements on a pay-as-you-go basis
- Maintain reasonable and adequate operating and capital fund working capital targets and reserves
- 4) Minimize rate impacts on customers

1.2 Need for a Rate Adjustment

Stege SD has increased the sewer rates over the past five years according to the five-year rate plan adopted in 2019. The sewer utility is an infrastructure-intensive enterprise. Stege SD's most significant funding challenge is the construction cost of the Sewer Rehabilitation Program. The program was initiated to conduct pipeline replacements required by the Environmental Protection Agency's (EPA) Consent Decree to reduce inflow and infiltration. The District is required to replace over two miles of sewer pipelines per year. The rehabilitation program is conducted in conjunction with the District's other planned capital projects such as vehicle replacement, interceptor cleaning, pump station rehabilitation, and others. Over the next five years, total planned capital projects are projected to cost about \$20.3 million.¹

The District's primary source of revenue is the sewer service charges which are collected annually with the Contra Costa County property taxes. Other revenue sources include property taxes, interest earnings, permit fees, and contracted services. Current rate revenue for FY 2024 is \$7.52 million. This amount of revenue is adequate to cover operations and maintenance (O&M) and debt service expenses but is not adequate to fully fund this year's capital improvement plan (CIP). This year has unusually high capital costs due to pump station rehabilitation, flow meter purchases, and vehicle replacements. District revenues and expenditures for FY 2023 and FY 2024 are summarized in Table 1. Stege SD has more than adequate reserves to cover the projected deficit in FY 2024.

¹ Does not include debt service costs or the private sewer lateral program

As of June 30, 2023, Stege SD's total reserve fund balance was estimated at about \$10.4 million. Working capital fund targets have been established for the Operating Fund and the Capital Fund and are accounted for separately due to the magnitude of the cost of the CIP. For the Operating Fund, the District maintains a target consisting of 60% of annual O&M costs. This target is intended to equal the O&M expenses incurred each year between July and December, the gap in time each year when the District has limited revenues before the sewer service charges are collected with the property taxes. For FY 2024, the operating target fund balance is approximately \$2.1 million.

The capital fund target is equal to a 3-year average of the annual capital cost (i.e. average of the previous, current, and future year capital cost) plus the annual debt service cost. The goal of the capital fund target is to ensure that the District will have adequate funds available on an annual basis to conduct the sewer pipeline replacements required by the EPA. However, capital reserves can also be used to fund any emergency repair or cash flow shortfall. For FY 2024, the capital fund target balance is approximately \$4.2 million.

Table 1: Summary of Revenues and Expenses Stege Sanitary District Sewer Rate Study

Budget	Budget	
FY 2023	FY 2024	
\$500,000	\$500,000	
6,984,000	7,521,000	[1]
50,000	50,000	
<u>136,000</u>	<u>136,000</u>	
7,670,000	8,207,000	
3,328,000	3,471,000	
<u>4,314,000</u>	<u>5,713,000</u>	
\$7,642,000	\$9,184,000	
\$28,000	(\$977,000)	
	\$500,000 6,984,000 50,000 136,000 7,670,000 3,328,000 4,314,000 \$7,642,000	\$500,000 \$500,000 6,984,000 7,521,000 50,000 50,000 136,000 136,000 7,670,000 8,207,000 3,328,000 3,471,000 4,314,000 5,713,000 \$7,642,000 \$9,184,000

^{1 -} The FY2024 tax roll revenue is shown above. The adopted FY2024 budget estimated \$7,733,000 in service charge revenues.

1.3 Requirements of Proposition 218

Proposition 218, the "Right to Vote on Taxes Act", was approved by California voters in November 1996 and is codified as Articles XIIIC and XIIID of the California Constitution. Proposition 218 establishes requirements for imposing any new or increasing any existing property-related fees and charges. For many years, there was no legal consensus on whether water and sewer service fees met the definition of "property-related fees." In July 2007, the California Supreme Court essentially confirmed that Proposition 218 applies to water and wastewater (sewer) service fees.

Stege SD must follow the procedural requirements of Proposition 218 for all utility rate increases. These requirements include:

- 1. **Noticing Requirement** Stege SD must mail a notice of the proposed rate increases to all affected property owners or ratepayers. The notice must specify the amount of the fee, the basis upon which it was calculated, the reason for the fee, and the date/time/location of a public rate hearing at which the proposed rates will be considered/adopted.
- 2. **Public Hearing** Stege SD must hold a public hearing prior to adopting the proposed rate increases. The public hearing must be held not less than 45 days after the required notices are mailed.
- 3. **Rate Increases are Subject to Majority Protest** At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of affected property owners or ratepayers submit written protests against the proposed rate increases, the increases cannot be adopted.

Proposition 218 also established substantive requirements that apply to sewer rates and charges, including:

- 1. **Cost of Service** Revenues derived from the fee or charge cannot exceed the funds required to provide the service. In essence, fees cannot exceed the "cost of service".
- 2. **Intended Purpose** Revenues derived from the fee or charge can only be used for the purpose for which the fee was imposed.
- 3. **Proportional Cost Recovery** The amount of the fee or charge levied on any customer shall not exceed the proportional cost of service attributable to that customer.
- 4. **Availability of Service** No fee or charge may be imposed for a service unless that service is used by, or immediately available to, the owner of the property.
- 5. **General Government Services** No fee or charge may be imposed for general governmental services where the service is available to the public at large.

Charges for sewer service are exempt from additional voting requirements of Proposition 218, provided the charges do not exceed the cost of providing service and are adopted pursuant to procedural requirements of Proposition 218.

1.4 Proposed Rates

The District's current sewer service charges are \$35.75 monthly (\$429 annually) for single family residential customers, \$24.74 monthly (\$297 annually) for multi-family residential customers, and \$9.02 per 1,000 gallons for non-residential customers. The recommended service charges are shown in Table 2. The rate per equivalent dwelling unit (EDU; i.e. the typical single family customer) is proposed to increase by \$7 annually over the next five years to keep up with inflationary cost increases. As part of the rate setting process, the definition of one EDU is proposed to be updated to reflect current patterns in wastewater flows. While sewer flows for all customer classes have decreased over the past five years, single family residential flows have decreased by a greater percentage than multi-family residential or commercial sewer flows.

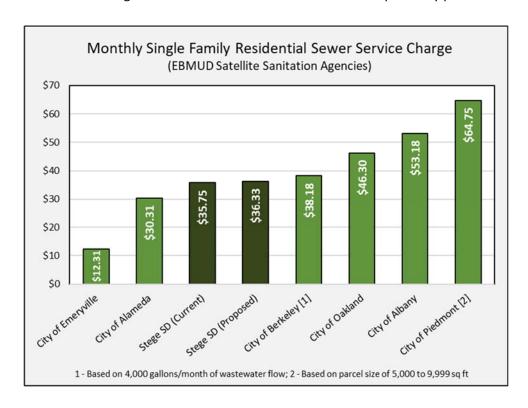
Table 2: Recommended Monthly Sewer Service Charges Stege Sanitary District Sewer Rate Study

	5-	5-Year Planning Horizon (Prop 218)					
Service Charges	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	
Single Family Residential [1] % Increase	\$35.75	\$36.33 1.6%	\$36.92 1.6%	\$37.50 1.6%	\$38.08 1.5%	\$38.67 1.5%	
Multi-family Residential [1] % Increase	\$24.74	\$25.31 2.3%	\$25.88 2.3%	\$26.47 2.3%	\$27.06 2.2%	\$27.66 2.2%	
Non-Residential (per 1,000 gal) % Increase	\$9.02	\$9.25 2.5%	\$9.48 2.5%	\$9.72 2.5%	\$9.96 2.5%	\$10.21 2.5%	

Note: Stege SD bills customers annually on the property tax roll. The equivalent monthly residential rates are shown here.

1 - Per dwelling unit; i.e. per each single family home or apartment/townhouse/condo unit

The survey below compares Stege SD's equivalent monthly single family charge to the rates of other EBMUD satellite sanitation agencies. The District's rates will remain competitively priced.



SECTION 2: CURRENT RATES AND CUSTOMER BASE

This section provides an overview of Stege SD's sewer rates, customer base, and current rate revenues.

2.1 Current Sewer Rates

Table 3 below shows a history of sewer service charges which were approved as part of the prior rate study beginning in 2019 through 2024. Stege SD currently charges residential customers on an equivalent dwelling unit (EDU) basis and commercial customers based on metered water use as billed by EBMUD. Prior to 2019, the District had not raised its rates for three years. Additionally, the District did not distinguish between single family and multi-family residential customers and both groups paid the same rates. Because the average multi-family residential customer discharges less flow than the average single family customer, a new multi-family rate was adopted beginning in FY 2020. Currently, single family residential sewer flow is assumed to be 47,574 gallons per year which equates to a flow charge of \$9.02 per 1,000 gallons. The flow charge is the commercial rate and demonstrates proportionality as required by Proposition 218 (i.e. both residential and commercial customers pay the equivalent of \$9.02 per 1,000 gallons). The current assumed annual flow per multi-family residential dwelling unit is 32,924 gallons per year.

Table 3: Historical Sewer Service Charges Stege Sanitary District Sewer Rate Study

Fiscal Year	Single Family Residential (\$/EDU/mo)		Multi-family Residential (\$/EDU/mo)		Non-Residential (\$/1,000 gal)	
2019	\$20.17	-	\$20.17	-	\$4.97	-
2020	\$22.58	12.0%	\$21.00	4.1%	\$5.59	12.6%
2021	\$25.33	12.2%	\$21.91	4.3%	\$6.30	12.7%
2022	\$28.42	12.2%	\$22.82	4.1%	\$7.10	12.7%
2023	\$31.92	12.3%	\$23.78	4.2%	\$8.01	12.8%
2024	\$35.75	12.0%	\$24.74	4.1%	\$9.02	12.5%

2.2 Current Rate Revenues

Stege SD serves about 13,100 parcels which equate to about 17,500 equivalent dwelling units, see Table 4. As described on the previous page, every 47,574 gallons of commercial sewer flow is one EDU. There are currently about 4,800 multi-family dwelling units within Stege SD. Based on the current assumption of about 33,000 gallons of sewer flow per multi-family dwelling unit compared to 47,574 gallons per single family dwelling unit, the ratio of one multi-family dwelling unit to one single family dwelling unit is about 69%. Thus, the number of multi-family EDUs is about 3,300. Current rates generate about \$7.52 million annually. The residential class contributes about 84% of rate revenues including single family and multi-family residential.

Table 4: Summary of Sewer Service Units (EDUs) FY2023/24 Stege Sanitary District Sewer Rate Study

		Number of		
Customer Class [1]	Number of Parcels	EDUs	Revenue	% of Revenue
Residential	11,361	11,384	\$4,884,000	65%
Multi-Family Residential	1,039	3,349	1,437,000	19%
Commercial	347	1,714	735,000	10%
Industrial	23	408	175,000	2%
Institutional	245	662	284,000	4%
Miscellaneous	<u>104</u>	<u>15</u>	<u>6,000</u>	<u>0%</u>
Total	13,119	17,532	\$7,521,000	100%

^{1 -} The District's single agricultural parcel is not billed and is not included in this table. Source: Stege Sanitary District FY 2023/24 Sewer Service Charges Summary for Contra Costa County Tax Rolls

2.3 Updated Residential Flows

Stege SD does not directly meter the wastewater flow of individual utility accounts. However, metered water use can be used as a proxy for sewer flow. This method for estimating sewer discharge is commonly used by sewer service providers throughout California. Residential customers typically have high water use in the summer due to irrigation for landscaping. This water use occurs outdoors and does not flow into the sewer system. Therefore, it is necessary to identify low water use periods during the winter to better estimate water use that flows into the sewer. Based on the 5-year average of winter water usage data from 2018 through 2022, the average single family residential sewer flow is estimated as 45,448 gallons. This represents a 4.5% reduction from the current assumed flow of 47,574 gallons per year established in the 2019 Rate Study.

The same analysis was conducted for multi-family residential customers. The current multi-family sewer flow established in the 2019 Rate Study is estimated to be 32,924 gallons annually per dwelling unit. Based on 2018 through 2022 winter water usage data, the average annual flow per multi-family dwelling

unit is now estimated as 32,514 gallons per year, a 1.2% reduction. The average multi-family dwelling unit flow is about 72% of the average single family flow.

2.4 EDU Adjustment

It is recommended that Stege SD adjust its EDU definition to reflect the lower sewer flows of single family customers relative to the sewer flows measured in 2019. It is proposed that one EDU reflect 45,448 gallons of annual flow rather than 47,574 gallons (current) and this flow adjustment be phased-in over the next five years. Individual single family customers may discharge more or less than 45,448 gallons per month but this amount is used for rate design purposes.

The water use of commercial customers is metered monthly by EBMUD. Commercial customers typically have a water meter for indoor use and a dedicated meter for outdoor irrigation. It is assumed that 100% of indoor commercial water use flows into the sewer. Outdoor water use is not included in this study. It is also assumed that indoor commercial water use will remain constant at the FY 2024 level over the next five years. Due to the change in EDU flow from 47,574 gallons to 45,448 gallons, the commercial customer class will gain 131 EDUs, which is about 4.7% more EDUs than current.

Table 5: Current and Proposed EDU Count Stege Sanitary District Sewer Rate Study

		Proposed to be		
	Current	phased in by FY 2029	Units	% Change
Flow per Single Family Dwelling	47,574	45,448	gallons per year	-4.5%
Flow per Multi-Family Dwelling	32,924	32,514	gallons per year	-1.2%
Single Family Residential	11,384	11,384	EDUs	0.0%
Multi-Family Residential [1], [2]	3,349	3,461	EDUs	3.3%
Commercial	<u>2,799</u>	<u>2,930</u>	EDUs	4.7%
Total	17,532	17,775	Systemwide	1.4%

^{1 -} There are currently 4,838 multi-family dwelling units. Based on the current EDU assignment, these 4,838 MF dwellling units equal 3,349 EDUs. The ratio of one MF dwelling unit to one single family dwelling unit is 0.69. Current average annual MF flow per dwelling is about 33,000 gallons compared to the current average annual single family flow per dwelling unit of 47,574 gallons (i.e. 69%)

^{2 -} Based on the proposed EDU assignment, there are 3,461 MF EDUs. The ratio of one MF dwelling unit to one single family dwelling unit is 0.72. The proposed average annual MF flow per dwelling is about 32,514 gallons compared to the proposed average annual single family flow per dwelling unit of 45,448 gallons (i.e. 72%)

SECTION 3: REVENUE REQUIREMENT

Proposition 218 requires that utility rates be based on the reasonable cost of providing service to customers. The cost of service includes annual operating expenses, debt service payments, capital projects, and the accumulation of appropriate reserves. The sewer utility cost of service was developed based on the FY 2023-24 adopted budget, capital project list developed by staff, and reserve recommendations from the Board.

3.1 Revenues

For FY 2024, Stege SD budgeted about \$8.21 million in total revenues. The majority, approximately \$7.52 million (about 92%), is made up of service charges paid by ratepayers, see Table 6. Other revenue categories include property taxes, capacity fees, interest earnings, permit fees, and other.

Table 6: Revenues Stege Sanitary District Sewer Rate Study

	Budget	Budget	
Revenue	FY 2023	FY 2024	
Property Tax	\$500,000	\$500,000	
Sewer Service Charges	6,984,000	7,521,000	[1]
Stege SD Capacity Fees	50,000	50,000	
San Pablo Ave SPA Impact Fees	50,000	50,000	
Permit Fees and Contracted Services	45,000	45,000	
Interest	20,000	20,000	
Other	<u>21,000</u>	<u>21,000</u>	
Total Revenue	\$7,670,000	\$8,207,000	

^{1 -} The FY 2024 tax roll revenue is shown above. The adopted FY 2024 budget estimated \$7,733,000 in service charge revenues.

3.2 Operating Expenses

Stege SD manages its finances via an Operating Fund and a Capital Fund. Operating expenses are shown in Table 7. About \$3.47 million in expenses are budgeted for FY 2024 and all line-items are expected to increase by 3% annually over the next ten years.

Table 7: Operating Expenses Stege Sanitary District Sewer Rate Study

	Budget	Budget
Operating Expenses	FY 2023	FY 2024
Maintenance/Engineering	\$2,225,000	\$2,301,000
Pump Stations	40,000	40,000
Contracted Repairs	70,000	72,000
General and Administrative	<u>993,000</u>	1,058,000
Total Operating Expenses	\$3,328,000	\$3,471,000

3.3 Capital Expenses

A summary of the District's budgeted FY 2023 and FY 2024 capital expenses is shown in Table 8. More detailed information regarding sewer rehabilitation, capital equipment costs, and other capital costs is provided in Table 9. The District's Capital Improvement Plan includes over \$45.4 million in expenditures over the next 10 years (FY 2025-FY 2034) (not including debt service or the private sewer lateral program). The sewer rehabilitation funding group was developed to comply with the Environmental Protection Agency's Consent Decree and is comprised of the annual pipebursting project. Annually, Stege SD expects to replace 3 to 4 miles of pipeline at a cost of \$185 per linear foot plus inflation of 3% per year. Over the next 10 years, approximately 37 miles of pipeline are projected be replaced at a total cost of \$42.3 million. The pipebursting project represents 93% of projected capital improvement projects over the next decade. The capital equipment funding group includes smaller value capital items including flow meters, vehicle replacement, manhole "smart" covers, and other miscellaneous items. The other capital costs funding group includes manhole adjustments, minor repairs to the Administration Building, pump station rehabilitation, and interceptor cleaning.

Table 8: Capital Expenses Stege Sanitary District Sewer Rate Study

	Budget	Budget
Capital Expenses	FY 2023	FY 2024
Debt Service	\$44,000	\$44,000
Construction	3,833,000	4,558,000
Capital Equipment	<u>437,000</u>	<u>785,000</u>
Total Capital Expenses	\$4,314,000	\$5,387,000

Table 9: 10-Year Capital Improvement Plan Stege Sanitary District Sewer Rate Study

	Budget	5-Yea	5-Year Planning Horizon (Proposition 218)			10-Year	Planning H	lorizon		10-Year		
	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	Projection Total
Costs in \$1,000s												
Sewer Rehabilitation Projec	t											
Footage (LF)	18,812	18,900	18,988	19,084	19,168	19,259	19,347	19,440	19,532	20,304	19,713	193,735
Cost per LF	\$185	\$190	\$196	\$202	\$208	\$214	\$220	\$227	\$234	\$241	\$248	
Total Project Cost	\$3,473	\$3,594	\$3,719	\$3,850	\$3,983	\$4,122	\$4,265	\$4,414	\$4,568	\$4,891	\$4,891	\$42,297
Capital Equipment												
Flow Meters	175	40	0	0	40	0	40	0	0	0	150	270
Vehicle Replacement	610	30	0	35	0	25	30	0	35	0	35	190
Manhole Covers ("Smart")	0	0	0	15	0	0	0	0	15	0	0	30
Rodders	0	0	0	0	0	300	0	0	0	0	300	600
Vactor	0	0	0	0	0	0	425	0	0	0	425	850
Misc. Other	<u>0</u>	<u>10</u>	<u>10</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>10</u>	<u>10</u>	<u>20</u>	<u>20</u>	<u>10</u>	<u>150</u>
Total Capital Equipment	785	80	10	70	60	345	505	10	70	20	920	2,090
Other capital costs												
Manhole Adjustments	25	50	50	25	25	25	30	30	50	25	30	340
Administration Building [1]	10	10	10	10	10	10	10	10	10	10	40	130
Pump Station Rehab	1,000	0	0	0	0	0	0	0	30	0	0	30
Interceptor Cleaning	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>500</u>
Total other capital costs	1,085	110	110	85	85	85	90	90	140	85	120	1,000
Total Capital Projects	\$5,343	\$3,784	\$3,839	\$4,005	\$4,128	\$4,552	\$4,860	\$4,514	\$4,778	\$4,996	\$5,931	\$45,387

^{1 –} Minor annual repairs

3.4 Working Capital and Additional Reserve

3.4.1 Operating Working Capital

Currently the District maintains an Operating Working Capital target balance and a Capital Improvement Working Capital target balance. It is recommended that the Operating target remain at its current level equal to 60% of operating and maintenance costs. This level of funding adjusts annually to equal the District's costs from July to December, reflecting the lag in the collection of service charges on the property tax roll.

3.4.2 Capital Improvement Working Capital

The current Capital Improvement target balance is equal to a 3-year rolling average of the annual capital cost (i.e. average of the previous, current, and future year capital cost) plus the annual debt service cost. The ultimate goal of the capital fund target is to ensure that the District will have adequate funds available on an annual basis to conduct sewer pipeline replacements or to fund other emergency needs. Due to the high construction cost of the annual pipeline replacements, Stege SD makes large payments to contractors throughout the year. The District needs appropriate working capital to fund these disbursements. The reserve and working capital recommendations for the District's funds as well as the current estimated fund balances are summarized in Table 10.

Table 10: Current Estimated Reserves Stege Sanitary District Sewer Rate Study

	Current Estimated Fund Balance [1]	Target Fund Balance	Policy
Operating Reserve	\$2,500,000	\$2,082,000	60% of annual O&M to account for break in tax revenue collection from May to December; target increases as operating costs increase
Capital Reserve	<u>\$7,878,000</u>	\$4,726,000	3-year rolling average of capital improvements (average of past, current, and future years) [2] plus the annual debt service cost
Total Reserves	\$10,378,000	\$6,808,000	

^{1 -} Source: FY 2024 Budget; estimated as of June 30, 2023

^{2 -} For FY 2024 (shown in table), the target is the average of the past year (FY 2023), current year (FY 2024), and future year (FY 2025) capital costs.

3.5 Cash Flow

This subsection provides the operating and capital cash flows. Stege SD has established the following financial goals to guide the cash flow analysis and rate study process:

- 1) Fund operating costs and existing debt service expenses
- 2) Fund capital improvements on a pay-as-you-go basis
- 3) Maintain reasonable and adequate operating and capital fund working capital targets and reserves
- 4) Minimize rate impacts on customers

Although Stege SD is budgeted to operate at a deficit in FY 2024 as shown in Table 1, the District's reserve funds will remain well above their respective targets.

3.5.1 Operating Fund Cash Flow

The Operating Fund cash flow is provided in Table 11.

EDU Adjustment

As shown in Table 5, there is a proposed adjustment in EDUs for existing customers from 17,532 to 17,775. To mitigate rate impacts, this adjustment is proposed to be phased-in over the next five years. In addition, it is expected that Stege SD will gain two new EDUs annually from growth.

Rate Change

Stege SD's current service charge is \$429 per EDU which is made up of \$191 for the O&M service charge and \$238 for the capital service charge. The O&M service charge is proposed to increase to \$226 over the next five years to fund operating expenses and maintain the target fund balance.

Other Revenue Sources and Expenses

The Operating Fund's other revenue sources such as interest earnings, permit fees, and contracted services currently generate about \$81,000 annually and are projected to remain the same through FY 2029. Expenses are expected to increase by 3% annually due to inflation.

Fund Balance

The FY 2024 fund balance is about \$2.5 million which is above the fund target of \$2.1 million based on 60% of expenses. From FY 2025 to FY 2029, the target balance is projected to be met each year with the proposed rate increases.

Table 11: Operating Fund Cash Flow Stege Sanitary District Sewer Rate Study

	Budget	5-Year Planning Horizon (Proposition 218)			10-Year Planning Horizon						
	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Number of EDUs	17,532	17,582	17,630	17,678	17,727	17,777	17,779	17,781	17,783	17,785	17,787
Increase		\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00
O&M Service Charge	\$191.00	\$198.00	\$205.00	\$212.00	\$219.00	\$226.00	\$233.00	\$240.00	\$247.00	\$254.00	\$261.00
Beginning Fund Balance	\$2,500	\$2,459	\$2,446	\$2,458	\$2,494	\$2,551	\$2,626	\$2,704	\$2,784	\$2,860	\$2,930
Carriage											
Sources Operating Service Charge	3,349	3,481	3,614	3,748	3,882	4,018	4,142	4,267	4,392	4,517	4,642
Interest Earnings	15	15	15	15	15	15	15	15	15	15	15
Permit Fees & Contracted Services	45	45	45	45	45	45	45	45	45	45	45
Other	21	21	21	21	21	21	21	21	21	21	<u>21</u>
Total Sources	3,430	3,562	3,695	3,829	3,963	4,099	4,223	4,348	4,473	4,598	4,723
	5, .55	-,	-,	-,	5,555	.,	-,	.,	.,	.,	.,. ==
Uses [1]											
Maintenance/Engineering	2,301	2,370	2,441	2,514	2,590	2,667	2,748	2,830	2,915	3,002	3,092
Pump Stations	40	41	42	44	45	46	48	49	51	52	54
Contracted Repairs	72	74	76	79	81	83	86	89	91	94	97
General and Administrative	<u>1,058</u>	1,090	<u>1,122</u>	<u>1,156</u>	<u>1,191</u>	<u>1,227</u>	<u>1,263</u>	<u>1,301</u>	<u>1,340</u>	1,380	<u>1,422</u>
Total Uses	3,471	3,575	3,682	3,793	3,907	4,024	4,145	4,269	4,397	4,529	4,665
Net Sources and Uses	(41)	(13)	13	36	57	75	79	79	76	69	59
"Transfer" to Capital Fund		. ,				_	_	_	_		
Ending Fund Balance	<u>0</u> 2,459	<u>0</u> 2,446	<u>0</u> 2,458	<u>0</u> 2,494	<u>0</u> 2,551	<u>0</u> 2,626	<u>0</u> 2,704	<u>0</u> 2,784	<u>0</u> 2,860	<u>0</u> 2,930	<u>0</u> 2,988
Ciluling Fully Delatice	2,439	2,440	2,438	2,454	2,331	2,020	2,704	2,704	2,000	2,930	2,308
Target Minimum Balance [2]	2,083	2,145	2,209	2,276	2,344	2,414	2,487	2,561	2,638	2,717	2,799
Does it meet target?	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Costs shown as \$1,000s

^{1 -} Operating cost inflation estimated at 3%

^{2 -} Minimum balance 60% of O&M

3.5.2 Capital Fund Cash Flow

The Capital Fund cash flow is provided in Table 12.

Rate Change

The capital service charge is proposed to remain the same at \$238 per EDU over the next five years.

Other Revenue Sources and Expenses

As new development occurs, the Capital Fund collects capacity fees and impact fees from the San Pablo Avenue Specific Plan Area (SPASPA) development. These customers pay SPASPA impact fees as well as Districtwide capacity fees. Stege SD's other main capital revenue source is property taxes which are assumed to remain the same through FY 2029.

In addition to the capital improvements described above, the Capital Fund is responsible for debt service payments on the District's outstanding State Revolving Fund Loan. The current payment is about \$43,000 annually. In FY 2026, the loan will be paid off and the annual debt service cost will fall to \$0 beginning in FY 2027.

Fund Balance

The FY 2024 beginning fund balance is \$7.9 million which is well in excess of the fund target of about \$4.7 million. From FY 2025 to FY 2029, the target balance is projected to be met each year with the proposed rate adjustments.

Table 12: Capital Fund Cash Flow Stege Sanitary District Sewer Rate Study

·	Budget	5-Year Planning Horizon (Proposition 218)			10-Year Planning Horizon						
	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Number of EDUs	17,532	17,582	17,630	17,678	17,727	17,777	17,779	17,781	17,783	17,785	17,787
Capital Service Charge											
Capital Service Charge	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00
O&M Charge	\$191.00	<u>\$198.00</u>	<u>\$205.00</u>	<u>\$212.00</u>	<u>\$219.00</u>	\$226.00	<u>\$233.00</u>	<u>\$240.00</u>	<u>\$247.00</u>	<u>\$254.00</u>	<u>\$261.00</u>
Total Charge (O&M + Capital)	\$429.00	\$436.00	\$443.00	\$450.00	\$457.00	\$464.00	\$471.00	\$478.00	\$485.00	\$492.00	\$499.00
% Increase over previous year	0%	1.6%	1.6%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%	1.4%	1.4%
Beginning Fund Balance	\$7,878	\$6,944	\$7,495	\$8,002	\$8,398	\$8,683	\$8,556	\$8,122	\$8,033	\$7,682	\$7,112
Sources											
Capital Service Charges	4,173	4,184	4,196	4,207	4,219	4,231	4,231	4,232	4,232	4,233	4,233
Property Taxes	500	500	500	500	500	500	500	500	500	500	500
Interest Earnings	5	5	5	5	5	5	5	5	5	5	5
Stege SD Capacity Fees	50	5	5	5	5	5	5	5	5	5	5
San Pablo Ave SPA Impact Fees	<u>50</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
Total Sources	4,778	4,704	4,716	4,727	4,739	4,751	4,751	4,752	4,752	4,753	4,753
Uses											
Sewer Rehabilitation	3,473	3,594	3,719	3,850	3,983	4,122	4,265	4,414	4,568	4,891	4,891
Private Sewer Lateral Program	326	326	326	326	326	326	326	326	326	326	326
Capital Equipment	785	80	10	70	60	345	505	10	70	20	920
Other capital costs	1,085	110	110	85	85	85	90	90	140	85	120
Debt Service	<u>43</u>	<u>43</u>	<u>44</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Uses	5,712	4,153	4,209	4,331	4,454	4,878	5,186	4,840	5,104	5,322	6,257
Net Sources and Uses	(934)	551	507	396	285	(127)	(435)	(88)	(352)	(569)	(1,504)
"Transfer" from Operating Fund	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Ending Fund Balance	6,944	7,495	8,002	8,398	8,683	8,55 6	8,122	8,033	7,682	7,112	5,609
Fund Target Minimum Balance [1]	4,726	4,691	4,246	4,317	4,554	4,731	4,751	4,717	4,763	5,235	5,464
Does it meet target?	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
C											

Costs shown as \$1,000s

^{1 -} The capital fund target each year is equal to an average of the past year, current year, and future year capital improvement cost (not including the private sewer lateral program) plus the annual debt service payment.

SECTION 4: RATE DESIGN

4.1 Rate Structure Recommendations

As described in previous sections, it is recommended that Stege SD's current billing method remains the same where single family and multi-family customers are billed a flat charge per EDU and commercial customers are billed a flow rate per 1,000 gallons of metered use.

The definition of one EDU is proposed to be adjusted based on the observed new trends in flows over the past five years. The service charges for multi-family and commercial customers are proposed to be adjusted to reflect the new EDU definition of 45,448 gallons per year, down from the current EDU definition of 47,574 gallons per year.

4.2 Rate Smoothing Plan

A rate smoothing plan was developed to phase in the proposed changes in EDUs, see Table 13. The adjustment in single family and multi-family residential flows (and corresponding EDU count) is phased-in over five years.

Table 13: Rate Smoothing Plan Stege Sanitary District Sewer Rate Study

Rate Smoothing Plan	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Single Family Gallons/Year	47,574	47,149	46,724	46,299	45,873	45,448
EDUs	11,384	11,384	11,384	11,384	11,384	11,384
Multi-Family Gallons/Year	32,924	32,842	32,760	32,678	32,596	32,514
EDUs	3,349	3,372	3,394	3,417	3,439	3,461
Commercial Gallons/Year	133,160,280	133,160,280	133,160,280	133,160,280	133,160,280	133,160,280
EDUs	2,799	2,824	2,850	2,876	2,903	2,930
Total EDUs – Existing Customers [1]	17,532	17,580	17,628	17,676	17,725	17,775

^{1 -} Does not include growth

4.3 Recommended Rates

The proposed rate adjustments are provided in Table 14. The rate adjustments are designed to keep up with inflationary cost increases. Based on the evaluation of sewer flows described in this report, single family residential customers contribute lower flows than previously assumed and the multi-family and commercial customer classes make up a higher relative amount of total District flows.

Table 14: Proposed Service Charges Stege Sanitary District Sewer Rate Study

SINGLE FAMILY							
Fiscal Year	\$/dwelling/yr	\$/dwelling/month	% Change				
2024	\$429	\$35.75					
2025	\$436	\$36.33	1.6%				
2026	\$443	\$36.92	1.6%				
2027	\$450	\$37.50	1.6%				
2028	\$457	\$38.08	1.6%				
2029	\$464	\$38.67	1.5%				
	MULTI-F	AMILY					
Fiscal Year	\$/dwelling/yr	\$/dwelling/month	% Change				
2024	\$297	\$24.74					
2025	\$304	\$25.31	2.3%				
2026	\$311	\$25.88	2.3%				
2027	\$318	\$26.47	2.3%				
2028	\$325	\$27.06	2.2%				
2029	\$332	\$27.66	2.2%				
	COMME	RCIAL					
Fiscal Year		00 gallons	% Change				
2024							
2025		2.5%					
2026	:	2.5%					
2027	:	2.5%					
2028	:	\$9.96					
2029	¢	2.5%					

4.4 Bill Impacts

A rate survey was conducted to compare Stege SD's current and FY 2025 proposed rates with the rates of other local agencies. The typical single family bill will remain competitive with the other EBMUD satellite sanitation agencies. The only satellite agencies with lower single family residential bills than Stege SD are the City of Emeryville and the City of Alameda. Stege SD's current and proposed multifamily bill is also in the lower half of bills for the surveyed agencies. All other agencies besides the City of Albany offer a multi-family rate that is less than the single family rate.

Stege SD's current and proposed commercial rates are in the upper range of surveyed agencies but less than the City of Berkeley's high strength commercial rate. However, the bill survey provided here shows the equivalent flow rate per 1,000 gallons and does not necessarily reflect the minimum charges of the agencies. For example, the City of Emeryville's minimum commercial charge is \$12.31 per month which reflects about 4,800 gallons per month. Use over 4,800 gallons per month is charged a rate of \$2.57 (rounded) per 1,000 gallons. Lower flow customers would pay a higher average rate per 1,000 gallons than indicated.

