2025 Wastewater Rate Study

February 21, 2025

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

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City of Santa Cruz, Public Works Department
809 Center St., Rm 201
Santa Cruz, CA 95060

Attention: Kevin Crossley, Assistant Public Works Director / City Engineer

Re: Wastewater Rate Study

Bartle Wells Associates is pleased to submit to the City of Santa Cruz (City) the attached *Wastewater Rate Study*. The study presents Bartle Wells Associate's analysis of the operating and non-operating expenses of the City's wastewater enterprise fund and provides five-year cash flow projections and rates. The primary purpose of this study was to analyze the City's wastewater enterprise fund and make recommendations that would achieve financial sustainability while improving legal compliance and proportionality.

BWA finds that the rates and charges proposed in our report reflect the cost-of-service for each customer, follow generally accepted rate setting principles, and adhere to the substantive requirements of Proposition 218. The proposed rates incorporate both overall rate increases as well as some modifications to the rate structures designed to improve rate equity and align rates with the cost of providing service.

We have enjoyed working with the City on this rate study and appreciate the assistance of City staff members throughout the project. Please contact us with any future questions about this study and the rate recommendations.

Sincerely,

Erik Helgeson, MBA
Principal/ Vice President

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GLOSSARY OF TERMS

Terms	Descriptions
AWWA	American Water Works Association
BWA	Bartle Wells Associates
CCF	One hundred Cubic Feet
CIP	Capital Improvement Projects
City	The City of Santa Cruz
COS	Cost of Service
Cost Allocation	Apportioning expenses to utility user fees and rates in order to charge customers proportionally to the level of benefit they receive
CPI	Consumer Price Index/Indices
Enterprise Fund	Funds are established to account for governmental activities that provide goods or services primarily to the public at large on a consumer fee basis
Fixed Charges	A charge that is held constant over a period of time and applied at even intervals
FYE	Fiscal Year End (June 30)
General Fund	The main operating fund for the City
M1 Manual	"Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1", 6th edition published by AWWA
Meter Equivalent Ratios	The ratio of a water meter's maximum safe flow in comparison to a smaller water meter
Multi-family	Utility customers meeting the criteria of the multi-family class
O&M	Operations and maintenance
Prop. 218	Proposition 218, Added Articles 13C & 13D to the California Constitution
R&R	Repair and Replacement
Rate Setting Period	Limited to five (5) years under Prop. 218.
Revenue Requirements	The amount of future funding which needs to be recovered from an enterprise's user fees/rates
Solvent	Able to pay long-term debts and other financial obligations
Volumetric Rates	Utility rate based on a metered volume of water

1 EXECUTIVE SUMMARY

1.1 Introduction

The City of Santa Cruz (City) wastewater utility is a financially self-supporting enterprise that relies primarily on revenues from service charges to fund the costs of providing service. As such, the City's rates need to be set at adequate levels to a) fund the costs of operating and maintaining the wastewater system, b) fund necessary capital improvements to keep the City's infrastructure in good operating condition, and c) meet annual debt service funding requirements. The City has provided proactive financial stewardship by gradually raising rates over the past decade to keep revenues in line with the cost of providing service. The gradual rate increases have enabled the City to maintain the financial health of the utility.

In 2024, the City retained Bartle Wells Associates to develop long-term financial plans and rate studies for the City's wastewater enterprise to determine recovery of costs for providing wastewater utility services. Proposed rates are designed to fund the operating and capital needs of the City's utilities and equitably recover costs from all customers. Final recommendations incorporate input from City Staff.

1.2 Key Drivers of Proposed Rate Increases

The City's wastewater utility faces a number of financial challenges in upcoming years that can be addressed via gradual annual rate increases. These financial challenges include:

Capital Improvement Needs & Rehabilitation of Aging Infrastructure

The City takes a proactive approach to maintaining its wastewater system which requires a steady stream of repair, improvement, and replacement projects. The City has identified approximately $56.4 million of capital improvement projects over the next 5 years. The City will likely need to use a combination of financial reserves, rate revenue, and debt to fund this level of capital spending.

Ongoing Cost Inflation

The City's wastewater enterprise faces ongoing operating cost inflation due to annual increases in a range of expenses including staffing, utilities, insurance, supplies, etc. On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service.

1.3 Wastewater Rate Recommendations

Updated financial projections for the wastewater enterprise indicate the need for annual wastewater revenue increases over the next five years. With the recommended rate increases, the City will be able to fund the capital projects necessary to continue providing a high level of wastewater service, pay for rising operating costs, and maintain the financial health of the enterprise.

BWA reviewed the City's current wastewater rates and has the following recommendations to align rates with the current cost of providing service and improve compliance with the requirements of Proposition 218:

- Update the fixed and variable rates to proportionally reflect the cost-of-service analysis in this report.
- Consolidate hotels/motels and interdepartmental customers into the low, medium, and high strength customer categories as appropriate, based on class/customer characteristics. This recommendation is made because these classes lack substantive differentiation from the low, medium, and high strength classes.

Due to the cost-of-service analysis and structure adjustments, there will be some variation to the impacts to each customer class in the first year of the recommended rates, effective July 1, 2025. The remaining four years of the recommended wastewater rate increases, starting July 1, 2026, are applied on an across-the-board basis with the same percentage increase to all charges.

The following table shows a schedule of proposed wastewater rates for the next five years.

Table 1. Current and Proposed Wastewater Rates

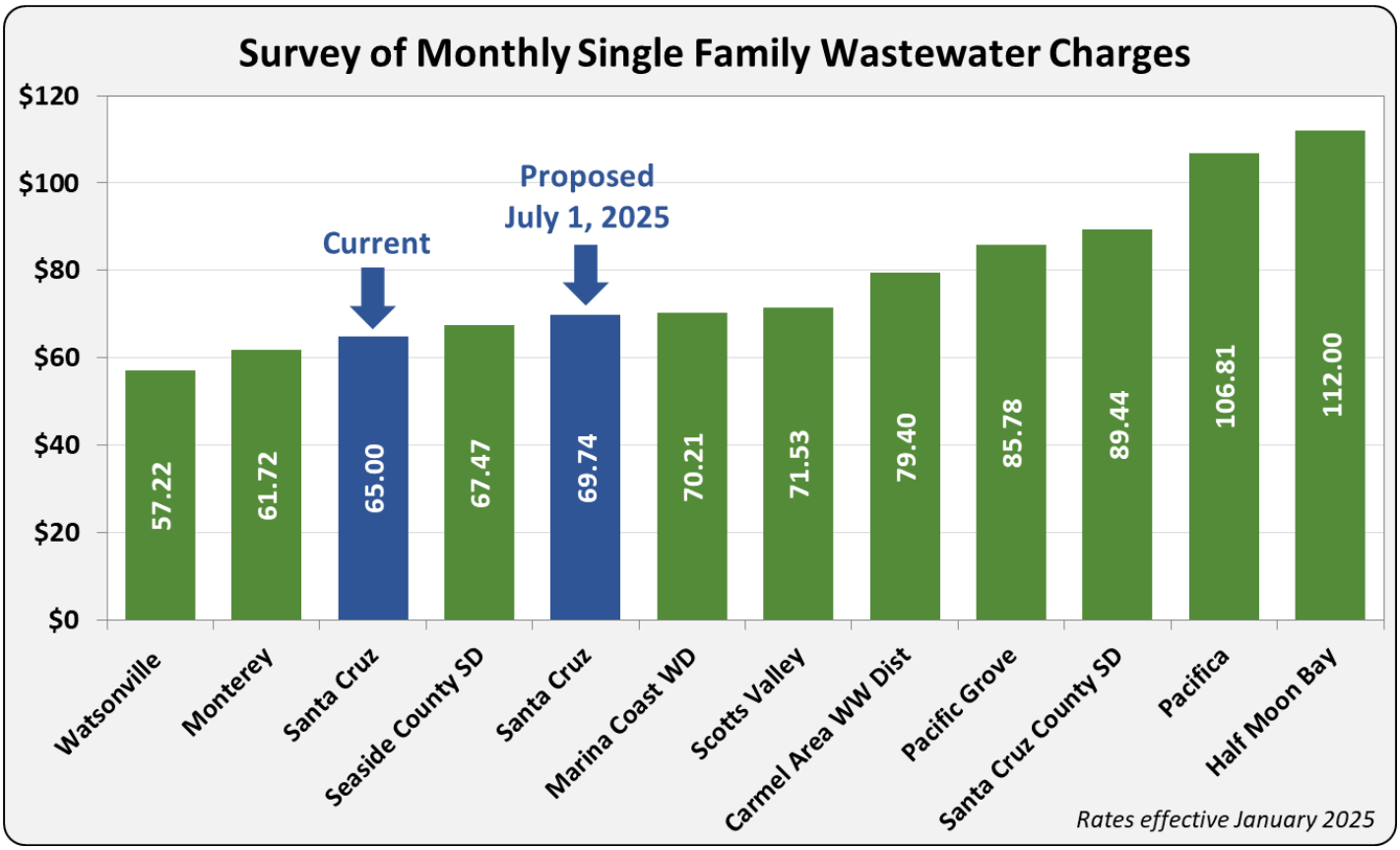
	Current Rates	Projected Wastewater Rates Effective July 1				
		2025	2026	2027	2028	2029
Residential						
Fixed Monthly Rates (per Dwelling Unit)						
Single Family	$65.00	$69.74	$75.32	$81.35	$87.04	$93.13
Multi-Family	53.10	57.58	62.19	67.17	71.87	76.90
Low Sewage Producer	38.20	41.94	45.30	48.92	52.34	56.00
Commercial						
Fixed Monthly Rates						
All Customers	Varies	$47.71	$51.53	$55.65	$59.55	$63.72
Quantity Rates ($ per ccf)						
Low Strength	4.88	5.25	5.67	6.12	6.55	7.01
Medium Strength	4.99	5.79	6.59	7.12	7.62	8.15
High Strength	10.82	12.22	13.61	14.70	15.73	16.83
Industrial & Other						
UCSC - Main Campus						
Fixed Monthly Rates	$66,886.30	$71,471.30	$77,189.00	$83,364.12	$89,199.61	$95,443.58
Quantity Rates ($ per ccf)	10.66	11.58	12.51	13.51	14.46	15.47
Graham Hill WTP						
Fixed Monthly Rates	5,511.40	3,150.03	3,402.03	3,674.19	3,931.38	4,206.58
Quantity Rates ($ per ccf)	16.70	19.30	20.84	22.51	24.09	25.78
Landfill Leachate						
Fixed Monthly Rates	2,769.40	3,071.12	3,316.81	3,582.15	3,832.90	4,101.20
Quantity Rates ($ per ccf)	8.51	9.09	9.82	10.61	11.35	12.14
Industrial						
Fixed Monthly Rates	238.40	252.30	272.48	294.28	314.88	336.92
Quantity Rates ($ per ccf)	6.70	7.25	7.83	8.46	9.05	9.68
Septage						
Quantity Rates ($ per ccf)	100.99	109.07	117.80	127.22	136.13	145.66

Note: Initial rate increase effective July 1, 2025 include modifications to the rate structure that result in a range of bill impacts depending on customer class and usage.

1.4 Regional Wastewater Rate Survey

The following chart compares the wastewater bills for a typical single-family home to those of other regional agencies. The City's wastewater rates are at the lower end of the range of coastal wastewater agencies. Many of these agencies are facing similar financial pressures and are either in the middle of multi-year rate increases or are anticipating raising rates in upcoming years.

Figure 1: Regional Wastewater Rate Survey



2 BACKGROUND & OBJECTIVES

2.1 Background and Wastewater System Overview

The City of Santa Cruz (City) wastewater system includes 21 pump stations and includes over 160 miles of sewer pipe and a wastewater treatment facility (WWTF). The treatment facility treats more than 10 million gallons of wastewater each day, with approximately half of the waste generated within City limits and the other half generated by the Santa Cruz County and Sanitation District (SCCSD). The SCCSD is responsible for paying for their proportional share of operations and maintenance costs of the wastewater treatment facility.

On an annual basis, the City typically replaces 2,500 linear feet of deteriorated and undersized pipelines. Significant improvements to the wastewater system in recent years include the completion of 50 kilowatt photovoltaic system and integration of the 1.3 megawatt cogeneration system into the facility power grid. The City has been recognized on multiple occasions for its commitment to provide quality of life services to the community by maintaining outstanding wastewater maintenance procedures while helping to reduce the City's carbon footprint and protect the environment.

The City's utilities operate as self-supporting enterprise funds. Revenues are derived primarily from service charges. As such, the City must establish rates and charges adequate to fund the costs of providing service, including costs for ongoing operations, debt service, and capital improvements needed to keep the City's aging utility infrastructure in safe and reliable operating condition.

2.2 Rate Study Objectives

In 2024, the City retained Bartle Wells Associates to develop a long-term financial plan and rate study for the City's wastewater enterprise to determine recovery of costs for providing wastewater utility services. Key goals and objectives of this study include developing wastewater rates that:

- Recover the costs of providing service, including operating, capital, and debt funding needs;
- Are fair and equitable to all customers;
- Are easy to understand and implement;
- Comply with the substantive requirements of the California Constitution, Article 13D, Section 6 (which was adopted by the voters as Proposition 218 in 1996) and the general mandate of Article 10, Section 2 that prohibits the wasteful use of water;
- Support the City's long-term operational and financial stability.

BWA worked closely with City staff to gather information and input, evaluate alternatives, and develop recommendations. This report summarizes key findings and recommendations for overall rate revenue increases over the next five years. The full set of tables are included in the appendix to this report.

3 LEGAL REQUIREMENTS & RATE METHODOLOGY

3.1 Constitutional Rate Requirements

The California Constitution includes two key articles that directly govern or impact the City's wastewater rates: Article 10 and Article 13D. In accordance with California constitutional provisions, the proposed rates are designed to a) recover the City's cost of providing service, b) recover revenues in proportion to the cost for serving each customer, and c) promote conservation and discourage waste.

Article 13D, Section 6

Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges, which the California Supreme Court subsequently ruled includes ongoing utility system charges such as water, wastewater, and garbage service rates. Article 13D, Section 6 establishes a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D also requires voter approval for new or increased property-related charges but exempts rates for water, wastewater, and garbage services from this voting requirement if the rates are adopted by the appropriate procedure and meet the substantive requirements of Proposition 218.

The substantive requirements of Article 13D, Section 6 require the City's wastewater rates to meet the following conditions:

1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property-related service.
2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
4) 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 in question.
5) No fee or charge may be imposed for general governmental services, such as police or fire services, where the service is available to the public at large in substantially the same manner as it is to property owners.

Statute of Limitations

Pursuant to California Government Code 53759, there is a 120-day statute of limitations for challenging any new, increased, or extended fees. This statute of limitations applies to the wastewater rates proposed in this rate study and is included in the Proposition 218 Notice.

3.2 Wastewater Rate-Setting Methodology

The California Constitution does not give agencies leeway to arbitrarily set rates purely based on policy preferences. Instead, it provides agencies with flexibility to implement rates within a framework established by Articles 10 and 13D. Together, these Articles establish that rates should both a) discourage waste and encourage conservation of water, and b) not exceed the costs of service attributable to each parcel or customer.

Wastewater utilities have used a wide range of approaches or perspectives for allocating and recovering their costs for providing service, and these costs are most commonly recovered from a combination of fixed and variable charges. The percentage of revenues derived from the fixed and variable charges varies for each agency. They should be proportional to each system's expenditures and must not exceed the cost of providing service. A higher level of fixed charges provides better revenue stability and less dependence on variable sales. On the other hand, higher dependence on volumetric revenues provides a greater conservation incentive.

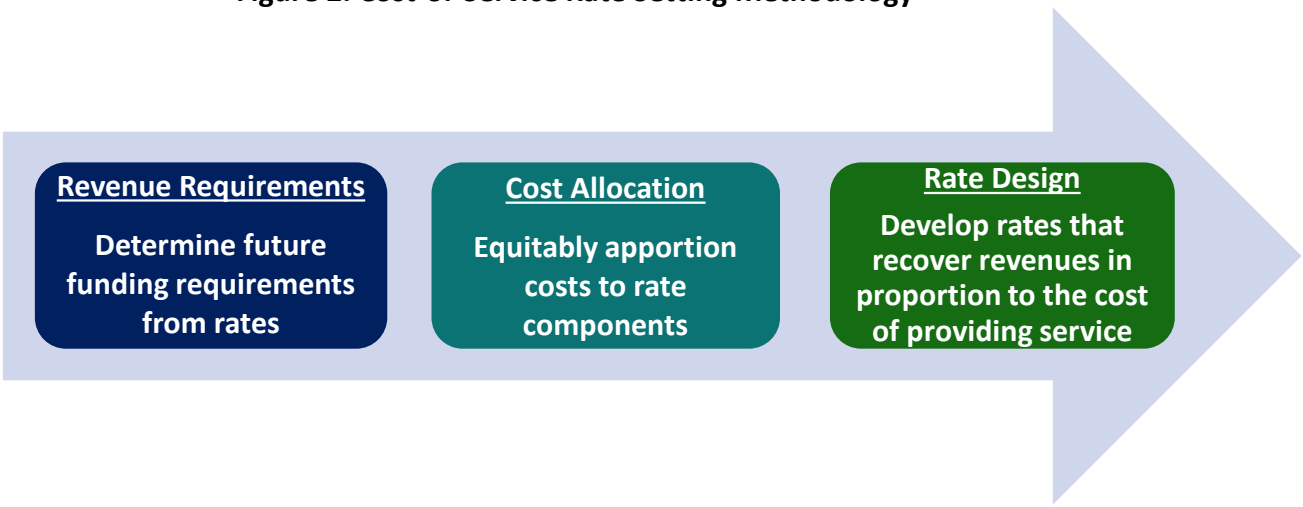
Depending on perspective, the same costs can reasonably be allocated 100 percent to fixed revenue recovery, 100 percent to variable rate recovery, or to some combination of the two. For example, debt service used to fund wastewater treatment facilities can legitimately be treated as a) a fixed annual cost that should be recovered from fixed charges, b) a cost related to meeting customer demand and therefore a cost that should be recovered from variable rates, or c) a cost that can be recovered from both fixed and variable rates in recognition of the two alternative perspectives.

Many of the utility's costs are variable costs that vary by the size of the system including personnel, supplies, and utilities. However, a portion of these variable costs can reasonably be apportioned to fixed rate recovery, and vice versa with fixed costs. For example, a share of the fixed cost of salaries related to treatment plant operations can reasonably be recovered from usage-based charges as these costs are incurred to meet demand flows. For debt service, payments may be fixed annual costs but it is reasonable to recover some of these costs from usage-based rates as the costs are incurred to fund infrastructure that will improve the wastewater system. Ultimately, there is no single correct way to allocate or attribute costs. Hence, five similar agencies may have five different rate structures provided each agency can establish a reasonable cost basis for their own particular rate structure within the parameters of meeting the various requirements of the California Constitution.

While there is no single correct approach, BWA believes that costs should be allocated within a reasonable range of fixed and variable allocation that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified.

BWA uses a straightforward methodology to establish equitable charges that recover the cost of providing service and fairly apportion costs. The general methodology is summarized in the following figure.

Figure 2: Cost-of-Service Rate Setting Methodology



Key elements of this study include:

- **Project Initiation and Data Collection** – Review financial policies; collect financial and other relevant data; and review rate structures;
- **Demand Analysis** – Analyze past customer demands and customer characteristics to forecast future demands;
- **Long Range Financial Plans** – Develop financial projections to evaluate annual revenue requirements from rates and the overall level of rate increases needed to fund the costs of providing service and support long term financial stability;
- **Cost Allocation** – Group the City's costs in terms of the function they serve as a basis to proportionally allocate the revenue requirement from rates;
- **Cost-of-Service Rate Design** – Develop rates that proportionately recover costs; and
- **Prop 218 Process** – Ensure compliance with the substantive and procedural requirements of Proposition 218.

4 WASTEWATER FINANCIAL PROJECTIONS

4.1 Wastewater Financial Plan Overview

Bartle Wells Associates conducted an independent evaluation of the wastewater enterprise finances. Key observations include:

- The enterprise is in overall good financial health but will need rate increases to keep revenues in line with rising costs and fund needed capital improvements.
- The City projects capital expenses of $56.4 million from FY 25/26 through FY 29/30.
- Average wastewater operating expenses from FY 25/26 through FY 29/30 are projected to be $28.7 million per year.

BWA developed long-term cash flow projections to determine the wastewater enterprise's annual revenue requirements and project required wastewater rate revenue increases. The financial projections incorporate the latest information available as well as a number of reasonable and slightly conservative assumptions developed with input from the City.

4.2 Wastewater Financial Plan Assumptions

Revenue Escalation Factors

The following table details the revenue escalation factors used to develop the long-term cash flow projections. Escalation factors are based on input from City Staff, historical escalations, and conservative projections for future escalations to reasonably ensure that the maximum rates adopted by the City will provide sufficient revenues to support the City's wastewater operations.

Table 2. Revenue Escalation Factors

Revenue Escalation Factors	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
Operating Costs	8.1%	5.9%	4.9%	4.6%	4.6%
Growth	1.0%	1.0%	1.0%	1.0%	1.0%
Interest on Reserves	2.5%	2.5%	2.5%	2.5%	2.5%

Revenue Assumptions

- The wastewater enterprise is projected to begin FY 25/26 with about $26.5 million in reserves.
- Projected customer growth is based on a conservative estimate of new customer connections to ensure rate revenue is sufficient to support wastewater operations. Most of the projected growth is coming from new planned multifamily housing units.
- BWA did not escalate revenues for connection charges or other miscellaneous non-rate revenues in its projections. Recommended rates are the maximum rates the City can adopt, which is why BWA uses conservative estimates when making revenue projections.

- The City of Santa Cruz is responsible for the wastewater system in its entirety. SCCSD is only responsible for paying for their proportional share of costs for the WWTF. Operating cost revenues are for reimbursements allowed under the Joint Wastewater Treatment and Disposal Agreement between Santa Cruz County and Sanitation District (SCCSD) and the City of Santa Cruz. These revenues are roughly 29% of annual O&M as of the date of this report and are directly tied to operating and maintenance costs incurred. This means that the revenues from reimbursements are expected to increase as operating costs increase, and decrease if operating costs decrease.
- Interest income is estimated based on projected reserve levels. Future projections are estimated based on a conservative interest earning estimate of 2.5%. Actual interest amounts will vary based on reserves and future interest earning rates.
- Rate adjustments are assumed to become effective July 1 of each year.

Cost Escalation Factors

The following table details the cost escalation factors used to develop long-term cash flow projections. Escalation factors are based on input from City Staff, historical escalations, and conservative projections for future escalations to reasonably ensure that the maximum rates adopted by the City will provide sufficient revenues to support the City's wastewater operations.

Table 3. Cost Escalation Factors

Cost Escalation Factors	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
General Inflation Factor	4.0%	4.0%	4.0%	4.0%	4.0%
Personnel Services	11.0%	7.0%	5.0%	5.0%	5.0%
Professional Services	5.5%	4.0%	4.0%	4.0%	4.0%
Operating Supplies	6.5%	6.5%	6.5%	4.5%	4.5%
Capital Costs	4.0%	4.0%	4.0%	4.0%	4.0%

Expense Assumptions

- Operating and maintenance costs are based on the FY 24/25 adopted budget and include updated estimates developed with the help of City Staff.
- General operating and capital cost inflation is projected to escalate at an annual rate of 4%. This is a conservative estimated based on recent and historic inflation.
- Operating Supply increases are partially driven by increases in chemical costs. Chemical costs have risen dramatically in recent years and the City projects chemical costs to increase at an annual rate of 10% for three more years. This report projects that the current and high inflation level will gradually drop back towards general inflation trends.
- Personnel Services costs are increasing due to an adjustment in cost allocation methodology for central services provided to the wastewater enterprise and salary increase projections. The City is projecting an initial increase to the wastewater enterprise's proportional share of central services for FY 25/26, allocation for future years is anticipated to drop back towards general

inflation trends. The City projects the cost of salaries and benefits to increase at an annual rate of 5% based on projected future cost of living adjustments and projected inflation of specific benefit expenses such as health insurance.

- Joint capital projects receive reimbursement under the Joint Wastewater Treatment and Disposal Agreement between Santa Cruz County and Sanitation District and the City of Santa Cruz at an 8/17 ratio of project costs.
- Debt service projections are based on outstanding debt schedules and projected issuances of new debt. The financial plan assumes the issuance of a $36.0 million bond in FY 2028/29 to fund the wastewater treatment facility electrical upgrade project.

Fund Reserves

BWA recommends the City maintain prudent fund reserves. Fund reserves will fluctuate based on the timing of revenues and expenses, but the proposed rates are projected to provide the wastewater enterprise sufficient fund reserves. BWA reviewed the City's reserve policy and recommends the wastewater enterprise aim to meet or exceed the reserve level criteria shown in the following table. The emergency fund reserve level should be periodically adjusted for inflation and risk levels.

Table 4. Recommended Fund Reserves

Reserve Description	Recommended Minimum Balance	Purpose
Operations & Maintenance	Six Months of Operating Expenditures	Cash flow and liquidity in case of revenue loss/interruption
Debt Service	One Year Annual Debt Service	To meet debt service coverage ratios
Emergency	$4,000,000	Additional funds available in an unforeseen catastrophic event or emergencies

4.3 Financial Plan Drivers

The City is anticipating a number of manageable financial challenges that will require gradual rate increases in upcoming years. Key drivers of future rate increases are summarized below.

Ongoing Cost Inflation

The City's wastewater enterprise faces ongoing operating cost inflation due to annual increases in a range of expenses including staffing, utilities, insurance, supplies, etc. On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. Historically, inflation consistently hovered between 2% and 3%. Currently, inflation has mostly normalized after forty-year highs, but remains near 3%. Given the recent volatility, BWA designed the inflation projections to be slightly conservative to leave the City in a strong financial position while not driving excessive rate increases.

Capital Improvement Needs & Rehabilitation of Aging Infrastructure

The City takes a proactive approach to maintaining its wastewater system which requires a steady stream of repair, improvement, and replacement projects. Accounting for construction cost inflation, the City has identified approximately $56.4 million of capital improvement projects over the next 5 years. SCCSD will participate in projects for the wastewater treatment plant (WWTF) and is expected to fund an additional $29.9 million of capital costs.

The largest upcoming capital project is the wastewater treatment facility electrical upgrade project. SCCSD will provide 8/17 of the funding. This study assumes the City will finance its share of project costs by issuing a $36.0 million bond in FY 2028/29. With the recommended rate increases, the City has the capacity to secure the entirety of the funding and be reimbursed for the annual debt service by SCCSD. However, this is not recommended as it will limit the City's capacity to secure future financing for other wastewater projects.

The following tables shows the projected capital funding sources for the next five years.

Table 5. Capital Funding Sources

Capital Funding	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
	Projected	*Projected*	*Projected*	*Projected*	*Projected*
Total Capital Expenditures	**$18,021,120**	**$10,194,080**	**$7,789,683**	**$24,596,276**	**$25,732,209**
Capital Funding	**$18,021,120**	**$10,194,080**	**$7,789,683**	**$24,596,276**	**$25,732,209**
Use of New Debt Proceeds	12,000,000	0	0	8,000,000	8,000,000
County WWTP Participation	$2,581,647	$3,321,148	$2,527,636	$10,638,831	$10,906,935
Cash Funded Capital	**$3,439,473**	**$6,872,932**	**$5,262,048**	**$5,957,445**	**$6,825,273**

4.4 Wastewater Cash Flow Projections

Long-term cash-flow projections were developed based on the assumptions and key drivers of future rate increases described above. The projections were used to determine the wastewater utility's annual revenue requirements and project required wastewater rate revenue increases. The long-term cash-flow projections incorporate the latest information available from the City's budget, annual reports, capital spending projections, metered water demand data, as well as a number of reasonable assumptions developed with input from the City. The overall rate revenue increases are designed to fund the City's cost of providing service, maintain roughly balanced budgets, maintain healthy debt service coverage, and maintain prudent reserves. The projections indicate the need for rate increases. Actual impacts to customers wastewater bills will vary based on strength category and water use, due to the outcome of the updated cost-of-service analysis.

In future years, the City can re-evaluate its finances and revenue requirements and adjust rates as needed based on updated projections. However, while the City always has the flexibility to implement rate adjustments that are lower than adopted, pursuant to Proposition 218, future rates cannot exceed adopted increases without going through the Proposition 218 process again.

The rate projections shown on the following table are designed to fund the City's operating and capital costs while maintaining prudent reserves.

Table 6. Wastewater Cash Flow Projections

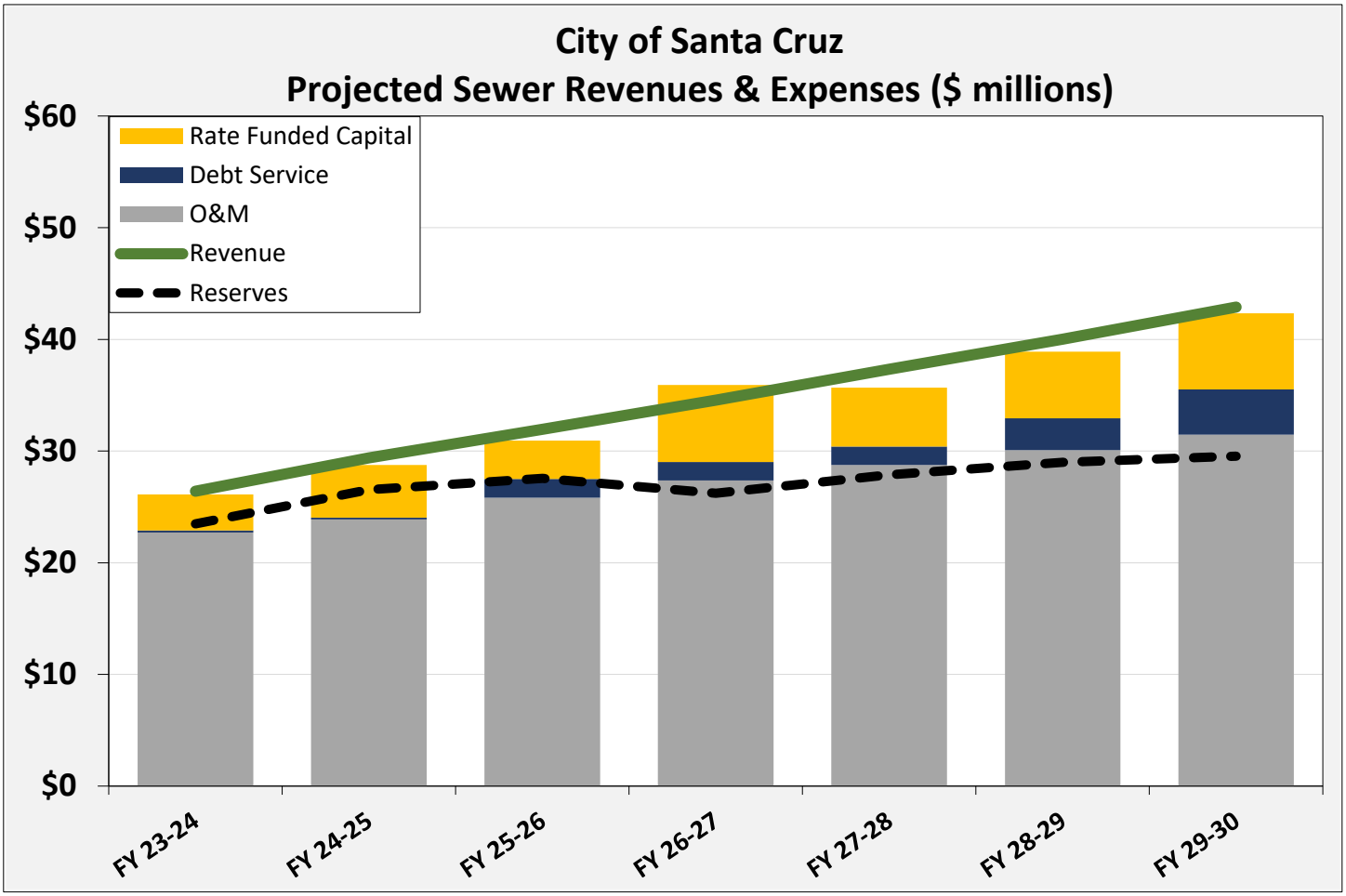
Wastewater Cashflow	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
	Actual	*Est. Budget*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Projected Revenue Growth			*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*
Rate Revenue Increases			***8.0%***	***8.0%***	***8.0%***	***7.0%***	***7.0%***
Beginning Reserve Balance	**23,188,000**	**25,922,000**	**26,549,000**	**27,559,000**	**26,221,000**	**27,875,000**	**28,992,000**
Revenues							
Rate Revenue							
Total Rate Revenue	19,852,000	21,004,000	22,911,000	24,991,000	27,260,000	29,460,000	31,837,000
Non-Rate Revenue							
Sewer Service Charges - County	5,080,000	6,880,000	7,439,000	7,875,000	8,263,000	8,641,000	9,035,000
WTP/Landfill Discharge Fee	0	0	0	0	0	0	0
Sewer Septage Service Charge	1,000,000	1,000,000	1,080,000	1,166,000	1,260,000	1,348,000	1,442,000
Sewer Connections - Customers	100,000	100,000	104,000	108,000	112,000	117,000	122,000
Other Revenue	24,000	62,000	62,000	62,000	62,000	62,000	62,000
Total Non-Rate Revenue	6,549,000	8,387,000	9,039,000	9,574,000	10,069,000	10,549,000	11,051,000
Total Revenues	**26,401,000**	**29,391,000**	**31,950,000**	**34,565,000**	**37,329,000**	**40,009,000**	**42,888,000**
Projected Debt Proceeds		*13,740,000*	*12,000,000*			*8,000,000*	*8,000,000*
Expenses							
Operating Expenses							
Personnel Services	10,130,000	10,782,000	11,980,000	12,829,000	13,494,000	14,193,000	14,926,000
Professional Services	7,523,000	7,814,000	8,251,000	8,581,000	8,924,000	9,281,000	9,653,000
Operating Supplies	3,845,000	4,514,000	4,808,000	5,126,000	5,469,000	5,713,000	5,968,000
Other Materials and Services	63,000	107,000	111,000	116,000	120,000	125,000	130,000
Other Charges	461,000	447,000	464,000	483,000	502,000	522,000	543,000
Other Financing Uses	682,000	209,000	217,000	226,000	235,000	245,000	254,000
Total Operating Expenses	22,704,000	23,873,000	25,831,000	27,361,000	28,744,000	30,079,000	31,474,000
Non-Operating Expenses							
Debt Service 2020 I-Bank	176,000	176,000	176,000	175,000	175,000	175,000	174,000
Debt Service 2025 I-Bank	0	0	1,494,000	1,494,000	1,494,000	1,494,000	1,494,000
New Debt Service	0	0	0	0	0	1,187,000	2,374,000
Rate Funded Capital	3,228,000	4,715,000	3,439,000	6,873,000	5,262,000	5,957,000	6,825,000
Total Non-Operating Expenses	3,404,000	4,891,000	5,109,000	8,542,000	6,931,000	8,813,000	10,867,000
Total Expenses	**26,108,000**	**28,764,000**	**30,940,000**	**35,903,000**	**35,675,000**	**38,892,000**	**42,341,000**
Revenues Less Expenses	**293,000**	**627,000**	**1,010,000**	**(1,338,000)**	**1,654,000**	**1,117,000**	**547,000**
Ending Reserve Balance	**23,481,000**	**26,549,000**	**27,559,000**	**26,221,000**	**27,875,000**	**28,992,000**	**29,539,000**
Fund Reserve Target [2] *180-days O&M+Debt Svc+$4M Emergency CIP*	*15,528,000*	*16,112,500*	*18,585,500*	*19,349,500*	*20,041,000*	*21,895,500*	*23,779,000*
Debt Coverage Ratio, Min. 1.3	*21.01*	*31.35*	*3.66*	*4.32*	*5.14*	*3.48*	*2.82*

[1] Assumes proposed rates are adopted July 1, 2025 and each July 1 thereafter.

[2] 180-days O&M+Debt Svc+$4M Emergency CIP

The following figure shows cash flow projections incorporating the assumptions described above.

Figure 3: Wastewater Projected Cashflow Graph

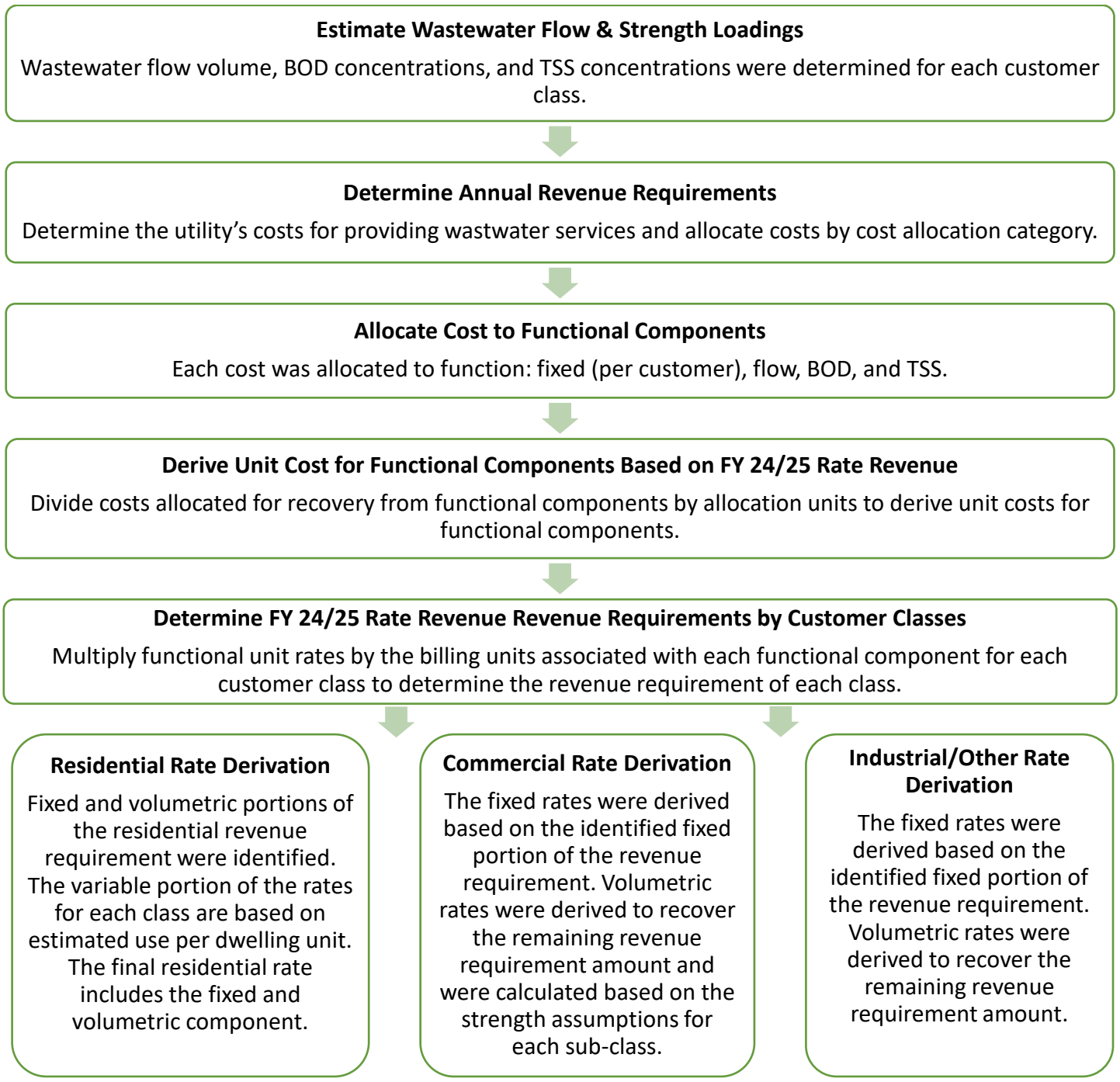


5 COST OF SERVICE ANALYSIS & RATE DERIVATION

5.1 Wastewater Cost of Service Rate Derivation Process

BWA derived updated wastewater rates that account for both a) the overall rate increases identified in the financial projections, and b) proposed rate structure modifications. The proposed rates are designed to equitably apportion and recover costs from the City's customer base. The basic methodology used to develop new rates includes the steps summarized in the figure below.

Figure 4: Wastewater Cost of Service Analysis and Rate Derivation Process



5.2 Customer Characteristics

The following table summarizes the City's wastewater customer counts by class.

Table 7. Customer Counts by Class

Customer Characteristics	FY 22/23	FY 23/24	FY 24/25
Customer Counts	*Actual*	*Actual*	*Projected*
Residential			
Single Family	8,162	8,291	8,291
Multi-Family	6,692	7,367	7,367
Low Sewage Producer	7,446	7,031	7,031
Total	*22,300*	*22,689*	*22,689*
Commercial			
Low Strength	887	880	880
Medium Strength	251	251	251
High Strength	110	108	108
Schools, 35% irrigation	1	1	1
Schools, 60% irrigation	3	3	3
Schools, 85% irrigation	3	3	3
Ready-to-Serve	2	2	2
Total	*1,257*	*1,248*	*1,248*
Industrial/Other			
Industrial	7	7	7
UCSC - Main Campus	1	1	1
Graham Hill WTP	1	1	1
Landfill Leachate	1	1	1
Total	*10*	*10*	*10*
Total Customer Counts	**23,567**	**23,947**	**23,947**

The following table includes historic and projected water use by fiscal year for the City's nonresidential customers.

Table 8. Nonresidential Customer Flows

Customer Characteristics	FY 22/23	FY 23/24	FY 24/25
Billed Customer Flows (hcf)	*Actual*	*Actual*	*Projected (Avg. 23 & 24)*
Commercial			
Low Strength	150,189	154,336	152,263
Medium Strength	171,018	172,960	171,989
High Strength	46,112	49,635	47,874
Schools, 35% irrigation	551	1,174	863
Schools, 60% irrigation	2,690	2,780	2,735
Schools, 85% irrigation	4,133	4,626	4,380
Ready-to-Serve	6,282	7,443	6,863
Total	*380,975*	*392,954*	*386,965*
Industrial/Other			
Industrial	33,027	39,108	36,068
UCSC - Main Campus	172,616	173,149	172,883
Graham Hill WTP	24,823	25,971	25,397
Landfill Leachate	27,507	22,007	24,757
Total	*257,974*	*260,236*	*259,105*
Total Billed Customer Flows	**638,949**	**653,190**	**646,069**

5.3 Customer Flows and Loadings

Estimated flows and loadings of each customer class are based on analysis of recent water consumption data by fiscal year and wastewater strength assignments for each customer class.

- Residential flows per unit are based on the average winter water use per unit. Residential wastewater strength concentrations are based on estimates previously published by the State Water Resources Control Board (SWRCB), adjusted for water conservation, City specific demands, and input from City Staff.
- Commercial/Other flows are estimated based on projected water use. A return to sewer factor (RTS) is applied to adjust water use to estimated flows into the wastewater system. Wastewater strength assumptions for the customer classes are based on the type of customers grouped in each class.

The resulting flow and strength projections for all wastewater customer classes are shown on the following tables. These projections provide the basis for allocating costs and deriving equitable wastewater rates for each customer class.

Table 9. Wastewater Flows

Classification	Sewer Units	Est. Mo. Flow CCF Per Unit	Annual Water Use CCF[1]	Return to Sewer Flow Factor[2]	Projected Wastewater Flow CCF	Projected Wastewater Flow MG[3]
Residential						
Single Family	8,291	5.30	527,308	100%	527,308	394
Multi-Family	7,367	3.90	344,776	100%	344,776	258
Low Sewage Producer	7,031	2.10	177,181	100%	177,181	133
Subtotal Residential	*22,689*		*1,049,264*		*1,049,264*	*785*
Commercial						
Low Strength[7]	880		152,263	80%	121,810	91
Medium Strength[8]	251		171,989	80%	137,591	103
High Strength	108		47,874	80%	38,299	29
Schools, 35% irrigation	1		863	65%	561	0
Schools, 60% irrigation	3		2,735	40%	1,094	1
Schools, 85% irrigation	3		4,380	15%	657	0
Ready-to-Serve	2		6,863	10%	686	1
Subtotal Commercial	*1,248*		*386,965*		*300,698*	*225*
Other						
Industrial	7		36,068	80%	28,854	22
UCSC - Main Campus	1		172,883	100%	172,883	129
Graham Hill WTP	1		25,397	100%	25,397	19
Landfill Leachate	1		24,757	100%	24,757	19
Subtotal Other	*3*		*223,037*		*223,037*	*167*
Total	**23,947**		**1,695,334**		**1,601,853**	**1,198**

[1] "CCF" stands for hundred cubic feet.

[2] Flow factor based on estimated flow returning to sewer.

[3] "MG" stands for million gallons.

[4] "GPD" stands for gallons per day.

[5] "BOD" stands for biochemical oxygen demand.

[6] "TSS" stands for total suspended solids.

[7] City Facilities class incorporated into Low Strength class.

[8] Hotels/Motels class incorporated into Medium Strength class.

Table 10. Wastewater Strength and Loadings

Customer Classification	Projected Wastewater Flow CCF	MG[3]	Strength (mg/l) GPD[4]	BOD[5]	TSS[6]	Loadings (lbs) BOD	TSS
Residential							
Single Family	527,308	394	1,080,695	300	300	987,731	987,731
Multi-Family	344,776	258	706,603	300	300	645,819	645,819
Low Sewage Producer	177,181	133	363,125	300	300	331,888	331,888
Subtotal Residential	*1,049,264*	*785*	*2,150,423*			*1,965,439*	*1,965,439*
Commercial							
Low Strength[7]	121,810	91	249,644	150	150	114,085	114,085
Medium Strength[8]	137,591	103	281,987	225	225	193,298	193,298
High Strength	38,299	29	78,492	800	800	191,306	191,306
Schools, 35% irrigation	561	0	1,149	150	150	525	525
Schools, 60% irrigation	1,094	1	2,242	150	150	1,025	1,025
Schools, 85% irrigation	657	0	1,346	150	150	615	615
Ready-to-Serve	686	1	1,406	150	150	643	643
Subtotal Commercial	*300,698*	*225*	*616,267*			*501,496*	*501,496*
Other							
Industrial	28,854	22	59,135	270	270	48,643	48,643
UCSC - Main Campus	172,883	129	354,315	750	750	809,591	809,591
Graham Hill WTP	25,397	19	52,051	0	2,200	0	348,870
Landfill Leachate	24,757	19	50,739	400	250	61,833	38,646
Subtotal Other	*223,037*	*167*	*457,105*			*871,424*	*1,197,106*
Total	**1,601,853**	**1,198**	**3,282,931**			**3,387,002**	**3,712,684**

[1] "CCF" stands for hundred cubic feet.

[2] Flow factor based on estimated flow returning to sewer.

[3] "MG" stands for million gallons.

[4] "GPD" stands for gallons per day.

[5] "BOD" stands for biochemical oxygen demand.

[6] "TSS" stands for total suspended solids.

[7] City Facilities class incorporated into Low Strength class.

[8] Hotels/Motels class incorporated into Medium Strength class.

5.4 Cost of Service Analysis

This section describes the steps BWA took to determine the rate revenue requirement need from each customer class that is proportional to their cost of service.

5.4.1 Cost Allocation Category Rate Revenue Requirements

Cost allocation categories are groupings of the wastewater's non-rate revenues and expenses that are then allocated to the utility's functional components (Customer, Flow, BOD & TSS, described in the next section). In each cost allocation category, the expenses are reduced by non-rate revenues to determine the amount in each cost allocation category that needs to be funded by rates.

The cash flow shows revenues and expenses using the City's budget labels, which don't align well with the functions of the wastewater system. The City also tracks expenses by activity, and the activities do align with functions of the wastewater system. The revenues and expenses in the allocation categories presented in this section are the same as those in the cash flow except they are now grouped by activity. To ensure the rates derived for the next five years are proportional to the costs, the amounts in the allocation categories are based on an average of the projected revenues and expenses for the next five years.

The cost allocation categories are as follows:

- As All Other – Expenses in this category do not impact the functional allocation because they are driven by the overall activity of the utility. These expenses include other financing uses, namely transfers to other City funds. They were allocated entirely to the "As All Other" functional component.
- Customer Service – Expenses in this category are related to the customer service provided to the City's wastewater customers. These costs are driven by the number of customers and are entirely allocated to the customer functional component.
- Collection – Expenses in this category are related to the wastewater collection system. These costs are largely driven by the volume of wastewater flow and also impacted by the number of connections to the system. Expenses in this category are allocated to the customer and flow functional components.
- Treatment – Expenses in this category are related to wastewater treatment. These costs are largely driven by the volume of wastewater flows and loadings and also impacted by the number of connections to the system. Expenses in this category are allocated to the customer and flow and strength functional components.
- Admin – Expenses in this category are related to internal administration services provided to the wastewater utility. These costs are largely driven by the by the number of customers and also impacted by the volume of wastewater flows and loadings. Expenses in this category are allocated to the customer and flow and strength functional components.

- Engineering – Expenses in this category are related to engineering activities performed by the wastewater utility. Expenses in this category are allocated to the flow and strength functional components based on the blend of capital collection and treatment projects.
- Capital – Expenses in this category reflect costs for capital projects. This category is allocated to the flow and strength functional components based on the blend of capital collection and treatment projects.
- Debt – Expenses in this category reflect annual debt service payments. Expenses in this category are allocated to the flow and strength functional components based on the blend of capital collection and treatment projects.

The following table shows rate revenue requirements by cost allocation category based on a five-year average of projected revenue and expenses for the City's wastewater utility.

Table 11. Rate Revenue Requirements by Cost Allocation Category

	5-Year Average		
Allocation Category	Expenses	Less Non-Rate Revenue	Revenue Requirement
As All Other	235,400	433,200	(197,800)
Customer Service	491,162	0	491,162
Collection	4,692,693	0	4,692,693
Treatment	21,685,603	9,509,800	12,175,803
Admin	1,350,510	0	1,350,510
Engineering	242,433	0	242,433
Capital	5,671,200	112,700	5,558,500
Debt	2,381,200	0	2,381,200
Total	$36,750,200	$10,055,700	$26,694,500

5.4.2 Functional Components

Functional cost components reflect the functions of the utility that drive its costs. The functional cost components used in this study are as follows:

- Customer – Costs related to providing service to each customer were allocated to this functional component. These costs are related to the number of customers served by the City.
- Flow – Costs related to system flows were allocated to this functional component. These costs are related to the volume of wastewater flows.
- BOD – Costs related to treating BOD are allocated to this functional component. These costs are allocated related to the pounds of BOD loadings treated.
- TSS – Costs related to treating TSS are allocated to this functional component. These costs are allocated related to the pounds of TSS loadings treated.

5.4.3 Functional Allocation

The purpose of the functional allocation is to determine the portion of rate revenues needed to support each function of the wastewater system. This is done by assigning wastewater system costs to each allocation category for revenue recovery via the functional cost components of customer costs, flow, BOD (biochemical oxygen demand), and TSS (total suspended solids). While there is no single correct approach for cost allocation, BWA believes that costs should be allocated within a reasonable range that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified. This process is intended to proportionately allocate costs to each functional component to determine the revenue requirement for each component. The allocations to each functional component were based on input from City staff.

The following table shows a breakdown of the revenue recovery needed from rates (revenue requirement) for each cost allocation category allocated by function. The result of this allocation is the percent of the revenue requirement associated with each functional allocation category.

Table 12. Rate Revenue Requirements by Functional Components

Allocation Category	5-Year Average Revenue Requirement	Customer	Flow	BOD	TSS	As All Other	Total
As All Other	(197,800)	0%	0%	0%	0%	100.0%	100.0%
Customer Service	491,162	100%	0%	0%	0%	0.0%	100.0%
Collection	4,692,693	0%	90%	5%	5%	0.0%	100.0%
Treatment	12,175,803	20%	32%	24%	24%	0.0%	100.0%
Admin	1,350,510	85%	5%	5%	5%	0.0%	100.0%
Engineering	242,433	25%	38%	19%	19%	0.0%	100.0%
Capital	5,558,500	25%	38%	19%	19%	0.0%	100.0%
Debt	2,381,200	25%	38%	19%	19%	0.0%	100.0%
Total	$26,694,500	$6,119,789	$11,255,506	$4,758,503	$4,758,503	-$197,800	$26,694,500
	Cost Allocation, $	$6,119,789	$11,255,506	$4,758,503	$4,758,503		$26,892,300
	Cost Allocation, %	**22.8%**	**41.8%**	**17.7%**	**17.7%**		**100%**

5.4.4 Functional FY 24/25 Rate Revenue Requirements

To determine current rate revenue requirements by function, projected rate revenues for FY 24/25 are multiplied by the functional allocation percentages developed above. Approximately $4.8 million of the wastewater utility's costs are fixed expenses that do not vary with changes in customer flow and strength characteristics.

Table 13. FY 24/25 Functional Rate Revenue Requirements

FY 24/25 Functional Rate Revenue Requirement	FY 24/25 Rate Revenue	Customer	Flow	BOD	TSS
Functional Allocation %	100%	22.8%	41.8%	17.7%	17.7%
FY 24/25 Functional Rate Revenue Requirements $	**$21,004,000**	**$4,788,912**	**$8,779,672**	**$3,717,708**	**$3,717,708**

5.4.5 Functional Component FY 24/25 Unit Costs

The table below calculates the unit rates for each functional cost component. The wastewater rate revenue requirements from the prior table for each functional component are divided by the units related to each function.

Table 14. FY 24/25 Functional Component Unit Costs

Allocation Units	Fixed	Flow	BOD	TSS
	(Customers)	*(CCF)*	*(LBS)*	*(LBS)*
Revenue Requirement	$4,788,912	$8,779,672	$3,717,708	$3,717,708
Demand Units	23,947	1,601,853	3,387,002	3,712,684
Functional Unit Rates	**$199.98**	**$5.48**	**$1.10**	**$1.00**

5.4.6 Rate Revenue Requirements by Customer Class

Total revenue requirements for each customer class is calculated by multiplying the unit rate for each functional cost component by the units related to each function. The table below details the units related to each function for each customer class.

Table 15. Functional Allocation Units by Class

Allocation Units	Fixed	Flow	BOD	TSS
	(Customers)	*(CCF)*	*(LBS)*	*(LBS)*
Residential	22,689	1,049,264	1,965,439	1,965,439
Commercial	1,248	300,698	501,496	501,496
Industrial	7	28,854	48,643	48,643
UCSC - Main Campus	1	172,883	809,591	809,591
Graham Hill WTP	1	25,397	0	348,870
Landfill Leachate	1	24,757	61,833	38,646
Total	23,947	1,601,853	3,387,002	3,712,684

The table below details the total revenue requirements by functional cost component for each customer class.

Table 16. Total Functional Rate Revenue Requirements by Class

Revenue Requirements	Fixed	Flow	BOD	TSS	Total Revenue Requirement
	(Customers)	*(CCF)*	*(LBS)*	*(LBS)*	
Residential	$4,537,338	$5,750,961	$2,157,344	$1,968,098	**$14,413,741**
Commercial	249,575	1,648,108	550,462	502,175	**2,950,319**
Industrial	1,400	158,147	53,393	48,709	**261,649**
UCSC - Main Campus	200	947,560	888,639	810,686	**2,647,085**
Graham Hill WTP	200	139,201	0	349,342	**488,743**
Landfill Leachate	200	135,694	67,870	38,698	**242,463**
Total	4,788,912	8,779,672	3,717,708	3,717,708	**$21,004,000**

After determining the revenue requirements by class, a portion of the flow functional cost component was reallocated to be recovered from the fixed charge to reflect the fixed nature of some collection system costs. The fixed allocation for the industrial and UCSC customer classes was determined in rate design to more reasonably collect the fixed charge from those customers.

Table 17. Adjusted Rate Revenue Requirements by Class

Adjusted Revenue Requirements	Flow Allocation to Fixed	Fixed	Flow	BOD	TSS	Total
Residential	25.0%	$5,975,078	$4,313,221	$2,157,344	$1,968,098	$14,413,741
Commercial	25.0%	661,602	1,236,081	550,462	502,175	$2,950,319
Industrial	n/a					
UCSC - Main Campus	n/a					
Graham Hill WTP	25.0%	35,000	104,401	0	349,342	$488,743
Landfill Leachate	25.0%	34,124	101,771	67,870	38,698	$242,463

5.5 Rate Derivation

This section describes how rates for each sub-class of customer are derived to reflect the proportional cost of providing wastewater service.

5.5.1 Residential Rate Derivation

The City currently charges all residential customers a fixed monthly rate per dwelling unit. Residential customers are split into three subclasses which include, single-family, multi-family, and low sewage producers. Low Sewage Producers are single-family customers or multi-family customers who average 225 cubic feet or less of water per month, per dwelling unit, during four out of the five winter months (December through April).

The total residential customer class revenue requirement was calculated above. A portion of the residential revenue requirement is recovered as a fixed amount per dwelling unit for each residential sub class to reflect the fixed capacity that must be maintained for each dwelling unit. The remaining portion of the revenue requirement, the flow portion, is recovered based on the estimated wastewater flow per dwelling unit for each residential subclass. Estimated flows per dwelling unit were based on an analysis of winter water use. The monthly fixed rate component and the monthly flow rate component are added together to derive the total monthly rate per dwelling unit.

The following table details the calculation for residential wastewater rates.

Table 18. Residential Rate Derivation

Residential Rate Derivation

Unit Cost Calculation	Total	Fixed	Flow
		(Dwelling Units)	*(CCF)*
Revenue Requirement	$14,413,741	$5,975,078	$8,438,663
Allocation %	100.0%	41.5%	58.5%
Allocation Units		22,689	1,049,264
Unit Cost ($ per Unit)		$263.35	$8.04

Fixed Rate Derivation	Monthly Flow	Monthly Flow Rate	Monthly Fixed Rate	Total Monthly Rate
	(Estimated CCF/ Dwelling Unit)	*($/ Dwelling Unit)*	*($/ Dwelling Unit)*	*($/ Dwelling Unit)*
Single Family	5.30	$42.63	$21.95	**$64.57**
Multi-Family	3.90	$31.37	$21.95	**$53.31**
Low Sewage Producers	2.10	$16.89	$21.95	**$38.83**

5.5.2 Commercial Customer Class Rate Derivation

The existing commercial class has several sub classes with different strength and flow characteristics. Bartle Wells Associates recommends the City consolidate subclasses that have little differentiating characteristics from the low, medium, or high strength customer sub-classes. BWA recommends including hotels/motels in the medium strength sub-class, interdepartmental customers in the low strength sub-class, and reclassifying the smaller industrial customers into either the low, medium, or high strength sub-classes as appropriate based on each customer's characteristics.

Commercial customers are currently charged monthly fixed rates per customer, plus a quantity rate per CCF of estimated wastewater discharge. The current fixed rates vary by sub-class. BWA recommends all commercial customers pay the same fixed charge to reflect the minimum fixed costs to serve the capacity of each connection. The costs related to the different strength and flow characteristics for each sub-class will be reflected in the quantity rate recovered per unit of water demand.

The total FY 2024/25 revenue requirement for this class is calculated above. The fixed revenue recovery was set to reflect the fixed capacity that must be maintained per connection.

The remaining portion of the revenue requirement was reallocated proportionally, based on the wastewater system allocation to flow, BOD and TSS. The volumetric unit cost per CCF is calculated based on strength assumptions for each sub-class and the commercial class flow, BOD and TSS unit costs. Volumetric costs are adjusted by the estimated return to sewer factor for each sub-class, to reflect the metered water use. This adjustment is necessary to account for the estimated sewer discharge of commercial customers based on year-round water use data, which includes some water use that does not enter the sewer system.

The following table displays the derivation of commercial wastewater rates.

Table 19. Commercial Rate Derivation

Commercial Rate Derivation

Unit Cost Calculation	Total	Fixed	Flow	BOD	TSS
		(Custome	*(CCF)*	*(LBS)*	*(LBS)*
Revenue Requirement	$2,950,319	$661,602	$1,236,081	$550,462	$502,175
Allocation %	100.0%	22.4%	42.0%	17.8%	17.8%
Allocation Units		1,248	300,698	501,496	501,496
Unit Cost ($ per Unit)		$530.13	$4.11	$1.10	$1.00

Volumetric Rate Derivation	Strength BOD	Strength SS	Volumetric Unit Cost Flow	Volumetric Unit Cost BOD	Volumetric Unit Cost TSS	Total Volumetric Unit Cost	Return to Sewer	Volumetric Rates	Monthly Fixed Rates
	(MG/L)	*(MG/L)*	*($/ CCF)*	*($/ CCF)*	*($/ CCF)*	*($/ CCF)*		*($/ CCF)*	*($/ CCF)*
Low Strength	150	150	$4.11	$1.03	$0.94	$6.07	80%	**$4.86**	**$44.18**
Medium Strength	225	225	$4.11	$1.54	$1.41	$7.06	80%	**$5.65**	**$44.18**
High Strength	800	800	$4.11	$5.48	$5.00	$14.59	80%	**$11.67**	**$44.18**
Hotels/Motels	225	225	$4.11	$1.54	$1.41	$7.06	80%	**$5.65**	**$44.18**
Schools, 35% irrigation	150	150	$4.11	$1.03	$0.94	$6.07	65%	**$3.95**	**$44.18**
Schools, 60% irrigation	150	150	$4.11	$1.03	$0.94	$6.07	40%	**$2.43**	**$44.18**
Schools, 85% irrigation	150	150	$4.11	$1.03	$0.94	$6.07	15%	**$0.91**	**$44.18**
Ready-to-Serve	150	150	$4.11	$1.03	$0.94	$6.07	10%	**$0.61**	**$44.18**

5.5.3 Industrial/Other Customer Class Rate Derivation

Customers in the Other customer class include industrial customers and other large wastewater customers. As shown above, each subclass has its FY 2024/25 revenue requirement calculated as if each subclass is its own customer class. Other class customers are charged a monthly fixed rate per customer plus a quantity rate per CCF of water use. Monthly fixed rates are calculated by dividing the total fixed revenue requirements for each customer by 12 (months). Volumetric costs are determined by dividing the remaining revenue requirement for each customer by their projected water use.

Table 20. Industrial/Other Customer Class Rate Derivation

Industrial/Other Customer Class Rate Derivation

	Strength BOD	Strength SS	Revenue Requirement	Fixed Rate Derivation: Fixed Allocation	Fixed Rate Derivation: Revenue Requirement	Fixed Rate Derivation: Customers	Fixed Rate Derivation: Monthly Fixed Rate	Variable Rate Derivation: Revenue Requirement	Variable Rate Derivation: Return to Sewer	Variable Rate Derivation: Water Use	Variable Rate Derivation: Water Use
	(MG/L)	*(MG/L)*				(#)	*($/ Customer)*			*(CCF)*	*($/ CCF)*
Industrial	270	270	$261,649	7.5%	$19,624	7	**$233.62**	$242,025	80%	36,068	**$6.71**
UCSC - Main Campus	750	750	$2,647,085	30.0%	$794,126	1	**$66,177.13**	$1,852,960	100%	172,883	**$10.72**
Graham Hill WTP	0	2200	$488,743	7.2%	$35,000	1	**$2,916.69**	$453,743	100%	25,397	**$17.87**
Landfill Leachate	400	250	$242,463	7.2%	$34,124	1	**$2,843.63**	$208,339	100%	24,757	**$8.42**

5.6 Proposed Wastewater Rates

The following table shows a 5-year schedule of proposed wastewater rates. The first rate increase is projected to become effective on July 1, 2025. The rates are designed to recover the City's costs of providing wastewater service while achieving roughly balanced budgets.

Table 21. Proposed Wastewater Rates

	Current Rates	Projected Wastewater Rates Effective July 1				
		2025	2026	2027	2028	2029
Residential						
Fixed Monthly Rates (per Dwelling Unit)						
Single Family	$65.00	$69.74	$75.32	$81.35	$87.04	$93.13
Multi-Family	53.10	57.58	62.19	67.17	71.87	76.90
Low Sewage Producer	38.20	41.94	45.30	48.92	52.34	56.00
Commercial						
Fixed Monthly Rates						
All Customers	Varies	$47.71	$51.53	$55.65	$59.55	$63.72
Quantity Rates ($ per ccf)						
Low Strength	4.88	5.25	5.67	6.12	6.55	7.01
Medium Strength	4.99	5.79	6.59	7.12	7.62	8.15
High Strength	10.82	12.22	13.61	14.70	15.73	16.83
Industrial & Other						
UCSC - Main Campus						
Fixed Monthly Rates	$66,886.30	$71,471.30	$77,189.00	$83,364.12	$89,199.61	$95,443.58
Quantity Rates ($ per ccf)	10.66	11.58	12.51	13.51	14.46	15.47
Graham Hill WTP						
Fixed Monthly Rates	5,511.40	3,150.03	3,402.03	3,674.19	3,931.38	4,206.58
Quantity Rates ($ per ccf)	16.70	19.30	20.84	22.51	24.09	25.78
Landfill Leachate						
Fixed Monthly Rates	2,769.40	3,071.12	3,316.81	3,582.15	3,832.90	4,101.20
Quantity Rates ($ per ccf)	8.51	9.09	9.82	10.61	11.35	12.14
Industrial						
Fixed Monthly Rates	238.40	252.30	272.48	294.28	314.88	336.92
Quantity Rates ($ per ccf)	6.70	7.25	7.83	8.46	9.05	9.68
Septage						
Quantity Rates ($ per ccf)	100.99	109.07	117.80	127.22	136.13	145.66

Note: Initial rate increase effective July 1, 2025 includes modifications to the rate structure that result in a range of bill impacts depending on customer class and billed usage.

5.7 Ready to Serve Rates

The City also serves a small number of customers whose water use does not accurately reflect their wastewater discharge. Rates for these customers are based on the standard commercial rates but account for reduced levels of wastewater discharge.

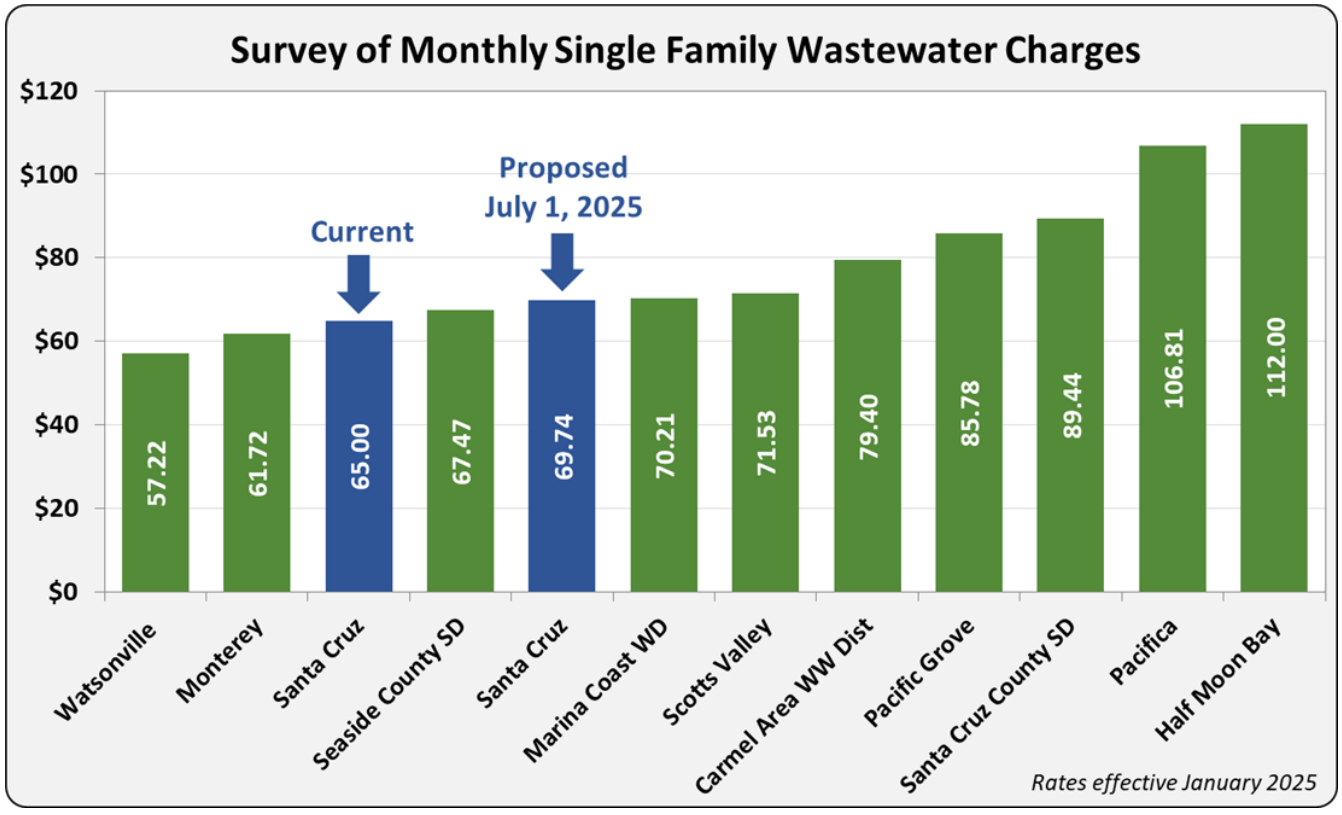
Table 22. Ready to Serve Rates

	Current Rates	Projected Wastewater Rates Effective July 1				
		2025	2026	2027	2028	2029
Ready to Serve						
Fixed Monthly Rates						
All Customers	$41.70	$47.71	$51.53	$55.65	$59.55	$63.72
Quantity Rates ($ per ccf)						
Schools, 35% irrigation	4.09	4.26	4.60	4.97	5.32	5.69
Schools, 60% irrigation	3.04	2.62	2.83	3.06	3.27	3.50
Schools, 85% irrigation	0.91	0.98	1.06	1.14	1.22	1.31
Other Ready-to-Serve	0.48	0.66	0.71	0.77	0.82	0.88

5.8 Regional Wastewater Rate Survey

The following chart compares the wastewater bills for a typical single-family home to those of other regional agencies. The City's wastewater rates are at the lower end of the range of coastal wastewater agencies. Many of these agencies are facing similar financial pressures and are either in the middle of multi-year rate increases or are anticipating raising rates in upcoming years.

Figure 5: Regional Single Family Residential Wastewater Rate Survey



6 CONCLUSION & RECOMMENDATIONS

In conclusion, the City's wastewater enterprise is in overall good financial health but will need rate increases in upcoming year to provide adequate funding for high-priority capital improvement needs and keep rates aligned with escalating costs of operations. The proposed 5-year schedule of wastewater rates is designed to recover the costs of providing wastewater service while supporting roughly balanced budgets in future years.

Based on the survey of regional wastewater charges, the City's wastewater rates are currently in the lower-middle range and are projected to remain in the lower-middle to middle range in future years with the proposed rate increases. Many other regional agencies are facing similar financial challenges with cost inflation and the need to increase investment in aging infrastructure and are also anticipating rate increases in upcoming years.

General rate recommendations for the wastewater enterprise include:

- BWA recommends the City adopt the proposed wastewater rates starting July 1, 2025.
- The City should update the wastewater financial projections within the next five years to evaluate funding needs and rate increases in subsequent years.
- After the proposed rates are implemented, the City should continue to adopt annual rate increases to keep revenues in line with the cost of providing service and minimize the need for larger, periodic rate spikes.

APPENDIX A

Wastewater
Financial Plan and
Rate Study Tables

City of Santa Cruz

Draft Wastewater Financial Plan and Rate Study Tables

February 21, 2025

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Table 1, Historical Wastewater Rates
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Historical Wastewater Rates	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24
Fixed Monthly Rates						
Residential (per dwelling unit)						
Single Family	50.50	50.50	54.00	57.80	61.30	65.00
Multi-Family	41.30	41.30	44.20	47.30	50.10	53.10
Low Sewage Producer	29.70	29.70	31.80	34.00	36.00	38.20
Commercial (per customer)						
Low Strength	32.40	32.40	34.70	37.10	39.30	41.70
Medium Strength	54.70	54.70	58.50	62.60	66.40	70.40
High Strength	107.90	107.90	115.50	123.60	131.00	138.90
Hotel / Motel	54.70	54.70	58.50	62.60	66.40	70.40
City Facilities	21.40	21.40	22.90	24.50	26.00	27.60
All Schools	32.40	32.40	34.70	37.10	39.30	41.70
Ready-to-Serve	32.40	32.40	34.70	37.10	39.30	41.70
Industrial/Other (per customer)						
Industrial	185.30	185.30	198.30	212.20	224.90	238.40
UCSC - Main Campus	51,994.60	51,994.60	55,634.20	59,528.60	63,100.30	66,886.30
Graham Hill WTP	4,284.30	4,284.30	4,584.20	4,905.10	5,199.40	5,511.40
Landfill Leachate	2,152.80	2,152.80	2,303.50	2,464.70	2,612.60	2,769.40
Quantity Charges, per CCF [1]						
Commercial						
Low Strength	3.79	3.79	4.06	4.34	4.60	4.88
Medium Strength	3.88	3.88	4.15	4.44	4.71	4.99
High Strength	8.41	8.41	9.00	9.63	10.21	10.82
Hotel / Motel	3.94	3.94	4.22	4.52	4.79	5.08
City Facilities	3.66	3.66	3.92	4.19	4.44	4.71
Schools, 35% irrigation	3.18	3.18	3.40	3.64	3.86	4.09
Schools, 60% irrigation	2.36	2.36	2.53	2.71	2.87	3.04
Schools, 85% irrigation	0.71	0.71	0.76	0.81	0.86	0.91
Ready-to-Serve	0.37	0.37	0.40	0.43	0.45	0.48
Industrial/Other						
Industrial	5.21	5.21	5.57	5.96	6.32	6.70
UCSC - Main Campus	8.29	8.29	8.87	9.49	10.06	10.66
Graham Hill WTP	12.98	12.98	13.89	14.86	15.75	16.70
Landfill Leachate	6.62	6.62	7.08	7.58	8.03	8.51

[1] CCF = 100 Cubic Feet or approximately 748 gallons

Table 2, Operating Expenses and Non-Rate Revenue
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Escalation Factors [1]	Factor	FY 23-24	FY 24-25	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35
General Inflation Factor	Gen.				4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
No Escalation	None				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Operating Costs	Op.				8.1%	5.9%	4.9%	4.6%	4.6%	4.1%	4.1%	4.1%	4.1%	4.1%
Interest on Reserves	Int.				2.5%	2.5%	2.5%	2.5%	2.5%	2.0%	2.0%	2.0%	2.0%	2.0%
Rate Revenue	Rate				8.0%	8.0%	8.0%	7.0%	7.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Personnel Services	Per.				11.0%	7.0%	5.0%	5.0%	5.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Professional Services	Pro.				5.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Operating Supplies	Sup.				6.5%	6.5%	6.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Non-Rate Revenues [2]	Factor	FY 23-24	FY 24-25	FY 24-25 [3]	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35
		Actual	*Ado. Budget*	*Est. Budget*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
County Reimbursements [4]	Op.	6,691,289	5,080,000	6,880,000	7,439,020	7,874,691	8,263,470	8,640,618	9,035,142	9,405,127	9,790,298	10,191,279	10,608,721	11,043,300
Septage Service Charge	Rate	750,103	1,000,000	1,000,000	1,080,000	1,166,400	1,259,712	1,347,892	1,442,244	1,485,512	1,530,077	1,575,979	1,623,259	1,671,956
Capacity Charges	Gen.	122,457	100,000	100,000	104,000	108,160	112,486	116,986	121,665	126,532	131,593	136,857	142,331	148,024
Interest on Reserves [5]	Int.	555,164	345,042	345,042	353,668	362,510	371,572	380,862	390,383	398,191	406,155	414,278	422,563	431,015
Other Revenues	None	187,707	23,500	61,500	61,500	61,500	61,500	61,500	61,500	61,500	61,500	61,500	61,500	61,500
Total Non-Rate Revenues		**8,306,721**	**6,548,542**	**8,386,542**	**9,038,188**	**9,573,261**	**10,068,741**	**10,547,857**	**11,050,935**	**11,476,862**	**11,919,623**	**12,379,893**	**12,858,374**	**13,355,796**

Operating Expenses [6]	Factor	FY 23-24	FY 24-25	FY 24-25 [3]	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35
		Actual	*Ado. Budget*	*Est. Budget*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Personnel Services [7]	Per.	10,129,746	10,931,492	10,782,255	11,968,303	12,806,084	13,446,388	14,118,708	14,824,643	15,417,629	16,034,334	16,675,708	17,342,736	18,036,445
Professional Services [8]	Pro.	7,522,722	9,742,618	7,814,316	8,244,103	8,573,868	8,916,822	9,273,495	9,644,435	10,030,212	10,431,421	10,848,678	11,282,625	11,733,930
Operating Supplies [9]	Sup.	3,845,247	3,923,330	4,513,550	4,806,931	5,119,381	5,452,141	5,697,487	5,953,874	6,221,798	6,501,779	6,794,359	7,100,106	7,419,610
Other Materials & Services	Gen.	63,127	255,200	106,900	111,176	115,623	120,248	125,058	130,060	135,263	140,673	146,300	152,152	158,238
Other Charges	Gen.	461,100	446,500	446,500	464,360	482,934	502,252	522,342	543,236	564,965	587,564	611,066	635,509	660,929
Other Financing Uses	Gen.	682,027	116,817	209,021	217,382	226,077	235,120	244,525	254,306	264,478	275,057	286,060	297,502	309,402
Total Operating Expenses		**22,703,969**	**25,415,957**	**23,872,542**	**25,812,255**	**27,323,967**	**28,672,971**	**29,981,615**	**31,350,554**	**32,634,345**	**33,970,828**	**35,362,170**	**36,810,629**	**38,318,554**
Operating Costs Increase %					*8.1%*	*5.9%*	*4.9%*	*4.6%*	*4.6%*	*4.1%*	*4.1%*	*4.1%*	*4.1%*	*4.1%*

[1] General inflation factor based on conservative estimates of costs. Specific escalation factors based on recent revenue and expense trends and input from City staff.
[2] Not escalated unless otherwise noted.
[3] Wastewater budget amounts adjusted based on input from City Staff for rate-making purposes.
[4] Escalated by operating costs factor for reimbursements allowed under the Joint Wastewater Treatment and Disposal Agreement between Santa Cruz County and Sanitation District and the City of Santa Cruz.
[5] This is the assumed interest rate which is applied to projected reserves in the model.
[6] Escalated by general inflation factor unless otherwise noted.
[7] Escalated by salary and benefits cost factor based on projected future cost of living adjustments and projected inflation of specific benefit expenses such as health insurance.
[8] Reflects internal services increasing by 10% in FY 25/26 due to the revised Central Services Cost Allocation Plan.
[9] Reflects assumption of continued above average chemicals cost inflation.

Table 3, Capital Improvement Costs (Current $)
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

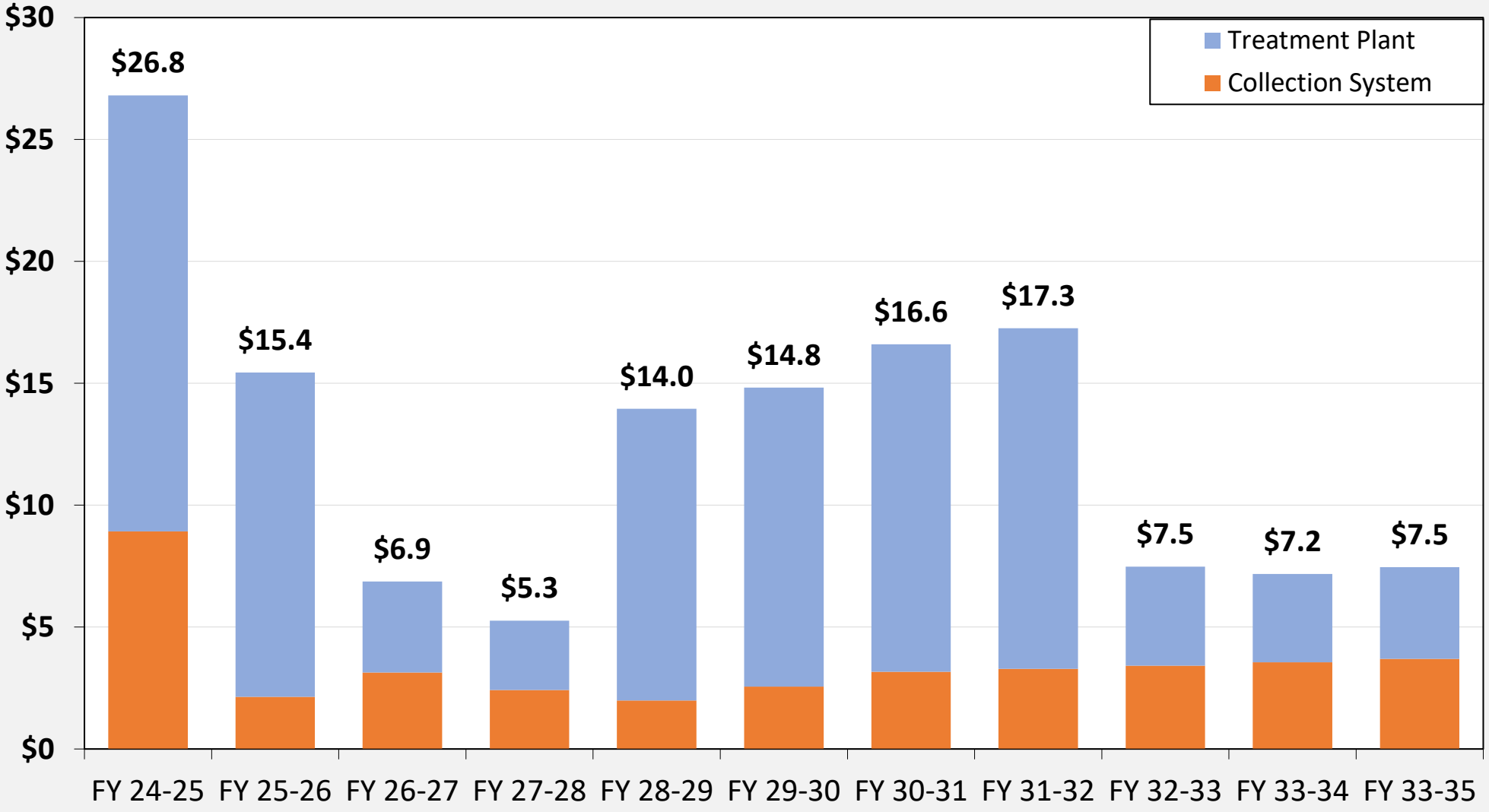
CIP (Current Dollars)	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35
	Actual	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
01 - Active (8/17th County Share)												
Jessie Street Marsh	12,520	200,000	0	0	0	0	0	0	0	0	0	0
Neary Lagoon Park Rehab-Maint (annual)	985,510	275,000	275,000	525,000	275,000	275,000	300,000	300,000	300,000	300,000	300,000	300,000
WWTF Infra. And Major Equip Study (annual)	1,259,882	3,000,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
WWTF -CMMS Upgrade	174,753	0	0	0	0	0	0	0	0	0	0	0
WWTF - Electrical System	106,178	2,000,000	2,000,000	2,000,000	2,000,000	15,250,000	15,250,000	15,250,000	15,250,000	0	0	0
WWTF - Equipment Replacement (annual)	1,417,066	1,000,000	1,000,000	1,000,000	1,000,000	1,500,000	2,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
WWTF Master Plan	0	1,750,000	0	0	0	0	0	0	0	0	0	0
WWTF Odor Control Project	0	50,000	0	0	0	0	0	0	0	0	0	0
02 - Active												
City WWTF Headworks Replacement	496,989	13,500,000	10,000,000	0	0	0	0	0	0	0	0	0
Front-Spruce-Pacific-Sewer Main Rehab	80,465	6,500,000	0	0	0	0	0	0	0	0	0	0
Isbel Pump Station Replacement	17,769	0	0	0	0	0	0	0	0	0	0	0
Pelton Ave Pump Station Generator	0	30,000	0	0	0	0	0	0	0	0	0	0
San Lorenzo River Sanitary Sewer Siphon	0	0	0	0	250,000	0	0	0	0	0	0	0
Sewer System Improvements (annual)	511,123	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	1,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
03 - Future (8/17th County Share)												
WWTF - Laboratory Modernization	0	0	500,000	1,500,000	0	0	0	0	0	0	0	0
WWTF - Upgrade Digester Equipment	10,584	0	0	0	0	800,000	0	0	0	800,000	0	0
04 - Future												
Fairmount/Harrison Sewer Main Upgrade	0	0	0	0	0	400,000	0	0	0	0	0	0
May/Coulson/Berry Trunk Sewer	0	0	250,000	750,000	0	0	0	0	0	0	0	0
Monterey St. and Lighthouse Ave. Sewer	0	0	0	0	600,000	0	0	0	0	0	0	0
Sewer Realignment Project	0	500,000	0	0	0	0	0	0	0	0	0	0
Trevethan Ave Sewer	0	0	100,000	0	0	0	600,000	0	0	0	0	0
Arroyo Seco Slide	0	0	50,000	850,000	0	0	0	0	0	0	0	0
High Street Sewer Upsizing	0	600,000	0	0	0	0	0	0	0	0	0	0
Lee Street Bridge Sewer Crossing Replacement	0	0	353,000	0	0	0	0	0	0	0	0	0
Total CIP (Current Dollars)	5,072,839	30,705,000	17,328,000	9,425,000	6,925,000	21,025,000	21,150,000	22,550,000	22,550,000	8,100,000	7,300,000	7,300,000
Total (8/17th County Share)	*1,866,585*	*3,894,118*	*2,482,353*	*3,070,588*	*2,247,059*	*9,094,118*	*8,964,706*	*9,435,294*	*9,435,294*	*2,635,294*	*2,258,824*	*2,258,824*
Total Santa Cruz CIP	**3,206,254**	**26,810,882**	**14,845,647**	**6,354,412**	**4,677,941**	**11,930,882**	**12,185,294**	**13,114,706**	**13,114,706**	**5,464,706**	**5,041,176**	**5,041,176**

Table 4, Capital Improvement Costs (Future $)
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

CIP (Inflated Dollars)	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35
	Actual	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Annual Inflation Rate			4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
01 - Active (8/17th County Share)												
Jessie Street Marsh	12,520	200,000	0	0	0	0	0	0	0	0	0	0
Neary Lagoon Park Rehab-Maint (annual)	985,510	275,000	286,000	567,840	309,338	321,711	364,996	379,596	394,780	410,571	426,994	444,073
WWTF Infra. And Major Equip Study (annual)	1,259,882	3,000,000	1,560,000	1,622,400	1,687,296	1,754,788	1,824,979	1,897,979	1,973,898	2,052,854	2,134,968	2,220,366
WWTF -CMMS Upgrade	174,753	0	0	0	0	0	0	0	0	0	0	0
WWTF - Electrical System	106,178	2,000,000	2,080,000	2,163,200	2,249,728	17,840,343	18,553,957	19,296,115	20,067,960	0	0	0
WWTF - Equipment Replacement (annual)	1,417,066	1,000,000	1,040,000	1,081,600	1,124,864	1,754,788	2,433,306	3,795,957	3,947,795	4,105,707	4,269,935	4,440,733
WWTF Master Plan	0	1,750,000	0	0	0	0	0	0	0	0	0	0
WWTF Odor Control Project	0	50,000	0	0	0	0	0	0	0	0	0	0
02 - Active												
City WWTF Headworks Replacement	496,989	13,500,000	10,400,000	0	0	0	0	0	0	0	0	0
Front-Spruce-Pacific-Sewer Main Rehab	80,465	6,500,000	0	0	0	0	0	0	0	0	0	0
Isbel Pump Station Replacement	17,769	0	0	0	0	0	0	0	0	0	0	0
Pelton Ave Pump Station Generator	0	30,000	0	0	0	0	0	0	0	0	0	0
San Lorenzo River Sanitary Sewer Siphon	0	0	0	0	281,216	0	0	0	0	0	0	0
Sewer System Improvements (annual)	511,123	1,300,000	1,352,000	1,406,080	1,462,323	1,520,816	1,824,979	3,163,298	3,289,829	3,421,423	3,558,280	3,700,611
03 - Future (8/17th County Share)												
WWTF - Laboratory Modernization	0	0	520,000	1,622,400	0	0	0	0	0	0	0	0
WWTF - Upgrade Digester Equipment	10,584	0	0	0	0	935,887	0	0	0	1,094,855	0	0
04 - Future												
Fairmount/Harrison Sewer Main Upgrade	0	0	0	0	0	467,943	0	0	0	0	0	0
May/Coulson/Berry Trunk Sewer	0	0	260,000	811,200	0	0	0	0	0	0	0	0
Monterey St. and Lighthouse Ave. Sewer	0	0	0	0	674,918	0	0	0	0	0	0	0
Sewer Realignment Project	0	500,000	0	0	0	0	0	0	0	0	0	0
Trevethan Ave Sewer	0	0	104,000	0	0	0	729,992	0	0	0	0	0
Arroyo Seco Slide	0	0	52,000	919,360	0	0	0	0	0	0	0	0
High Street Sewer Upsizing	0	600,000	0	0	0	0	0	0	0	0	0	0
Lee Street Bridge Sewer Crossing Replacement	0	0	367,120	0	0	0	0	0	0	0	0	0
Total CIP (Inflated Dollars)	5,072,839	30,705,000	18,021,120	10,194,080	7,789,683	24,596,276	25,732,209	28,532,944	29,674,262	11,085,409	10,390,176	10,805,783
Total (8/17th County Share)	*1,866,585*	*3,894,118*	*2,581,647*	*3,321,148*	*2,527,636*	*10,638,831*	*10,906,935*	*11,938,657*	*12,416,203*	*3,606,582*	*3,215,010*	*3,343,611*
Total Santa Cruz CIP	**3,206,254**	**26,810,882**	**15,439,473**	**6,872,932**	**5,262,048**	**13,957,445**	**14,825,273**	**16,594,287**	**17,258,058**	**7,478,827**	**7,175,166**	**7,462,173**

City of Santa Cruz

Wastewater Capital Improvements ($ millions)



Source: City of Santa Cruz CIP; future $ includes 4.0% annual construction cost inflation. Note: Amounts include City of Santa Cruz capital expenses only.

Table 5, Existing and Proposed Debt
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Fiscal Year	2020 I-Bank Wastewater Loan	2025 I-Bank Wastewater Loan	2029 Proposed Wastewater Loan
Status	*Existing*	*Existing*	*Proposed*
Principal		$25,740,000	$36,000,000
Financing Costs		$260,000	$500,000
Interest		3.95%	5.00%
Term (Years)		30	30
FY 2025	175,913		
FY 2026	175,629	1,494,468	
FY 2027	175,337	1,494,468	
FY 2028	175,038	1,494,468	
FY 2029	174,732	1,494,468	1,187,000
FY 2030	174,418	1,494,468	2,374,000
FY 2031	174,096	1,494,468	2,374,000
FY 2032	173,767	1,494,468	2,374,000
FY 2033	173,429	1,494,468	2,374,000
FY 2034	173,082	1,494,468	2,374,000
FY 2035	172,727	1,494,468	2,374,000
FY 2036	172,363	1,494,468	2,374,000
FY 2037	171,990	1,494,468	2,374,000
FY 2038	171,607	1,494,468	2,374,000
FY 2039	171,215	1,494,468	2,374,000
FY 2040	170,813	1,494,468	2,374,000
FY 2041	170,402	1,494,468	2,374,000
FY 2042	169,979	1,494,468	2,374,000
FY 2043	169,547	1,494,468	2,374,000
FY 2044	169,103	1,494,468	2,374,000
FY 2045	168,649	1,494,468	2,374,000
FY 2046	168,183	1,494,468	2,374,000
FY 2047	167,705	1,494,468	2,374,000
FY 2048	167,215	1,494,468	2,374,000
FY 2049	166,713	1,494,468	2,374,000
FY 2050	166,199	1,494,468	2,374,000
FY 2051	165,672	1,494,468	2,374,000
FY 2052	0	1,494,468	2,374,000
FY 2053		1,494,468	2,374,000
FY 2054		1,494,468	2,374,000
FY 2055		1,494,468	2,374,000
FY 2056		0	2,374,000
FY 2057			2,374,000
FY 2058			2,374,000
FY 2059			2,374,000
FY 2060			0
Total Debt Service	**$4,625,524**	**$44,834,036**	**$72,407,000**

Table 6, Capital Funding
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Capital Funding	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35
	Actual	*Adj. Budget*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Total Capital Expenditures	5,072,839	30,705,000	18,021,120	10,194,080	7,789,683	24,596,276	25,732,209	28,532,944	29,674,262	11,085,409	10,390,176	10,805,783
Capital Funding	5,072,839	30,705,000	18,021,120	10,194,080	7,789,683	24,596,276	25,732,209	28,532,944	29,674,262	11,085,409	10,390,176	10,805,783
Use of New Debt Proceeds		13,740,000	12,000,000			8,000,000	8,000,000	10,000,000	10,000,000			
Grants		364,706										
County WWTP Participation	1,844,557	11,884,992	2,581,647	3,321,148	2,527,636	10,638,831	10,906,935	11,938,657	12,416,203	3,606,582	3,215,010	3,343,611
Rate Funded Capital	**3,228,282**	**4,715,302**	**3,439,473**	**6,872,932**	**5,262,048**	**5,957,445**	**6,825,273**	**6,594,287**	**7,258,058**	**7,478,827**	**7,175,166**	**7,462,173**

Table 7, Cash Flow Projection | **City of Santa Cruz** | **Wastewater Rate Study - Draft 2/21/2025**

Wastewater Cashflow	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35
	Actual	*Est. Budget*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Projected Revenue Growth			*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*0.1%*	*0.1%*	*0.1%*	*0.1%*	*0.1%*
Rate Revenue Increases			***8.0%***	***8.0%***	***8.0%***	***7.0%***	***7.0%***	***3.0%***	***3.0%***	***3.0%***	***3.0%***	***3.0%***
Beginning Reserve Balance	**23,188,000**	**25,922,000**	**26,549,000**	**27,559,000**	**26,221,000**	**27,875,000**	**28,992,000**	**29,539,000**	**30,427,000**	**30,751,000**	**30,951,000**	**31,542,000**
Revenues												
Rate Revenue												
Total Rate Revenue	19,852,000	21,004,000	22,911,000	24,991,000	27,260,000	29,460,000	31,837,000	32,825,000	33,844,000	34,894,000	35,977,000	37,093,000
Non-Rate Revenue												
Sewer Service Charges - County	5,080,000	6,880,000	7,439,000	7,875,000	8,263,000	8,641,000	9,035,000	9,405,000	9,790,000	10,191,000	10,609,000	11,043,000
Sewer Septage Service Charge	1,000,000	1,000,000	1,080,000	1,166,000	1,260,000	1,348,000	1,442,000	1,486,000	1,530,000	1,576,000	1,623,000	1,672,000
Sewer Connections - Customers	100,000	100,000	104,000	108,000	112,000	117,000	122,000	127,000	132,000	137,000	142,000	148,000
Other Revenue	24,000	62,000	62,000	62,000	62,000	62,000	62,000	62,000	62,000	62,000	62,000	62,000
Total Non-Rate Revenue	6,549,000	8,387,000	9,039,000	9,574,000	10,069,000	10,549,000	11,051,000	11,478,000	11,920,000	12,380,000	12,859,000	13,356,000
Total Revenues	**26,401,000**	**29,391,000**	**31,950,000**	**34,565,000**	**37,329,000**	**40,009,000**	**42,888,000**	**44,303,000**	**45,764,000**	**47,274,000**	**48,836,000**	**50,449,000**
Projected Debt Proceeds		*13,740,000*	*12,000,000*			*8,000,000*	*8,000,000*	*10,000,000*	*10,000,000*			
Expenses												
Operating Expenses												
Personnel Services	10,130,000	10,782,000	11,980,000	12,829,000	13,494,000	14,193,000	14,926,000	15,542,000	16,183,000	16,849,000	17,542,000	18,263,000
Professional Services	7,523,000	7,814,000	8,251,000	8,581,000	8,924,000	9,281,000	9,653,000	10,039,000	10,440,000	10,858,000	11,292,000	11,744,000
Operating Supplies	3,845,000	4,514,000	4,808,000	5,126,000	5,469,000	5,713,000	5,968,000	6,234,000	6,513,000	6,804,000	7,109,000	7,427,000
Other Materials and Services	63,000	107,000	111,000	116,000	120,000	125,000	130,000	135,000	141,000	146,000	152,000	158,000
Other Charges	461,000	447,000	464,000	483,000	502,000	522,000	543,000	565,000	588,000	611,000	636,000	661,000
Other Financing Uses	682,000	209,000	217,000	226,000	235,000	245,000	254,000	264,000	275,000	286,000	298,000	309,000
Total Operating Expenses	22,704,000	23,873,000	25,831,000	27,361,000	28,744,000	30,079,000	31,474,000	32,779,000	34,140,000	35,554,000	37,029,000	38,562,000
Non-Operating Expenses												
Debt Service 2020 I-Bank	176,000	176,000	176,000	175,000	175,000	175,000	174,000	174,000	174,000	173,000	173,000	173,000
Debt Service 2025 I-Bank	0	0	1,494,000	1,494,000	1,494,000	1,494,000	1,494,000	1,494,000	1,494,000	1,494,000	1,494,000	1,494,000
New Debt Service	0	0	0	0	0	1,187,000	2,374,000	2,374,000	2,374,000	2,374,000	2,374,000	2,374,000
Rate Funded Capital	3,228,000	4,715,000	3,439,000	6,873,000	5,262,000	5,957,000	6,825,000	6,594,000	7,258,000	7,479,000	7,175,000	7,462,000
Total Non-Operating Expenses	3,404,000	4,891,000	5,109,000	8,542,000	6,931,000	8,813,000	10,867,000	10,636,000	11,300,000	11,520,000	11,216,000	11,503,000
Total Expenses	**26,108,000**	**28,764,000**	**30,940,000**	**35,903,000**	**35,675,000**	**38,892,000**	**42,341,000**	**43,415,000**	**45,440,000**	**47,074,000**	**48,245,000**	**50,065,000**
Revenues Less Expenses	**293,000**	**627,000**	**1,010,000**	**(1,338,000)**	**1,654,000**	**1,117,000**	**547,000**	**888,000**	**324,000**	**200,000**	**591,000**	**384,000**
Ending Reserve Balance	**23,481,000**	**26,549,000**	**27,559,000**	**26,221,000**	**27,875,000**	**28,992,000**	**29,539,000**	**30,427,000**	**30,751,000**	**30,951,000**	**31,542,000**	**31,926,000**
Fund Reserve Target [2]	*15,528,000*	*16,112,500*	*18,585,500*	*19,349,500*	*20,041,000*	*21,895,500*	*23,779,000*	*24,431,500*	*25,112,000*	*25,818,000*	*26,555,500*	*27,322,000*
180-days O&M+Debt Svc+$4M Emergency CIP												
Debt Coverage Ratio, Min. 1.3	*21.01*	*31.35*	*3.66*	*4.32*	*5.14*	*3.48*	*2.82*	*2.85*	*2.88*	*2.90*	*2.92*	*2.94*

[1] Assumes proposed rates are adopted July 1, 2025 and each July 1 thereafter.

[2] 180-days O&M+Debt Svc+$4M Emergency CIP

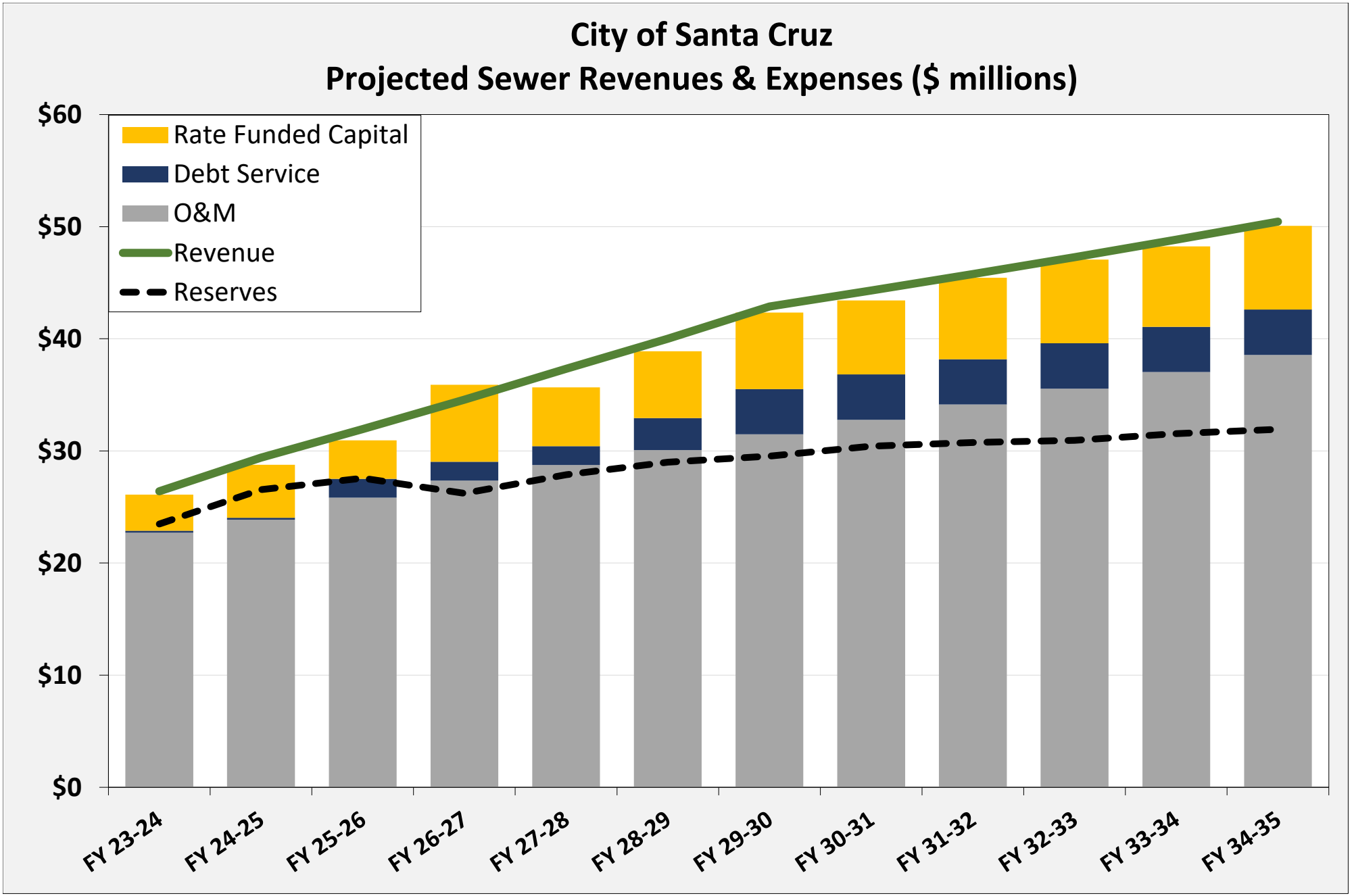

City of Santa Cruz
Projected Sewer Revenues & Expenses ($ millions)
$60
$50
$40
$30
$20
$10
$0
Rate Funded Capital
Debt Service
O&M
Revenue
Reserves
FY 23-24
FY 24-25
FY 25-26
FY 26-27
FY 27-28
FY 28-29
FY 29-30
FY 30-31
FY 31-32
FY 32-33
FY 33-34
FY 34-35

Table 8, Expense Allocation by Activity
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Allocation by Activity	Personnel Services	Professional Services	Operating Supplies	Other Materials and Services	Other Charges and Financing Uses	Other Financing Uses	Total
5-Year Average Projected Expenses by Activity	**$13,484,400**	**$8,938,000**	**$5,416,800**	**$120,400**	**$502,800**	**$235,400**	**$28,697,800**
FY 2025 Amount by Activity [1]							
As All Other	0%	0%	0%	0%	0%	100%	
Customer Service	0%	5%	0%	0%	0%	0%	
Collection	25%	8%	5%	1%	64%	0%	
Treatment	75%	69%	94%	97%	36%	0%	
Admin	0%	15%	0%	0%	0%	0%	
Engineering	0%	2%	1%	2%	0%	0%	
Total	100%	100%	100%	100%	100%	100%	
5-Year Average Projected Expenses							
As All Other	0	0	0	0	0	235,400	**235,400**
Customer Service	0	491,162	0	0	0	0	**491,162**
Collection	3,392,836	688,912	287,375	944	322,625	0	**4,692,693**
Treatment	10,091,564	6,208,025	5,088,742	117,097	180,175	0	**21,685,603**
Admin	0	1,350,510	0	0	0	0	**1,350,510**
Engineering	0	199,391	40,683	2,359	0	0	**242,433**
Total	$13,484,400	$8,938,000	$5,416,800	$120,400	$502,800	$235,400	**$28,697,800**

[1] Based on adopted budget by activity.

Table 9, Non-Rate Revenues by Allocation Activity
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Non Rate Revenue	Activity Category	Five Year Average
		(FY 26-30)
County Reimbursements	Treatment	8,250,600
Sewer septage service charge	Treatment	1,259,200
Capacity Charges	Capital	112,700
Interest on Reserves	As All Other	371,700
Other Revenues	As All Other	61,500
Total		**$10,055,700**

Table 10, Functional Cost Allocation
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

	5-Year Average								
Allocation Category	Expenses	Less Non-Rate Revenue	Revenue Requirement	Customer	Flow	BOD	TSS	As All Other	Total
As All Other	235,400	433,200	(197,800)	0%	0%	0%	0%	100.0%	100.0%
Customer Service	491,162	0	491,162	100%	0%	0%	0%	0.0%	100.0%
Collection	4,692,693	0	4,692,693	0%	90%	5%	5%	0.0%	100.0%
Treatment	21,685,603	9,509,800	12,175,803	20%	32%	24%	24%	0.0%	100.0%
Admin	1,350,510	0	1,350,510	85%	5%	5%	5%	0.0%	100.0%
Engineering	242,433	0	242,433	25%	38%	19%	19%	0.0%	100.0%
Capital	5,671,200	112,700	5,558,500	25%	38%	19%	19%	0.0%	100.0%
Debt	2,381,200	0	2,381,200	25%	38%	19%	19%	0.0%	100.0%
Total	$36,750,200	$10,055,700	$26,694,500	$6,119,789	$11,255,506	$4,758,503	$4,758,503	-$197,800	$26,694,500
			Cost Allocation, $	$6,119,789	$11,255,506	$4,758,503	$4,758,503		$26,892,300
			Cost Allocation, %	**22.8%**	**41.8%**	**17.7%**	**17.7%**		**100%**

Table 11, Customer Characteristics
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Customer Characteristics	FY 22/23	FY 23/24	FY 24/25
Customer Counts	*Actual*	*Actual*	*Projected*
Residential			
Single Family	8,162	8,291	8,291
Multi-Family	6,692	7,367	7,367
Low Sewage Producer	7,446	7,031	7,031
Total	*22,300*	*22,689*	*22,689*
Commercial			
Low Strength	887	880	880
Medium Strength	251	251	251
High Strength	110	108	108
Schools, 35% irrigation	1	1	1
Schools, 60% irrigation	3	3	3
Schools, 85% irrigation	3	3	3
Ready-to-Serve	2	2	2
Total	*1,257*	*1,248*	*1,248*
Industrial/Other			
Industrial	7	7	7
UCSC - Main Campus	1	1	1
Graham Hill WTP	1	1	1
Landfill Leachate	1	1	1
Total	*10*	*10*	*10*
Total Customer Counts	**23,567**	**23,947**	**23,947**
Billed Customer Flows (hcf)	*Actual*	*Actual*	*Projected (Avg. 23 & 24)*
Commercial			
Low Strength	150,189	154,336	152,263
Medium Strength	171,018	172,960	171,989
High Strength	46,112	49,635	47,874
Schools, 35% irrigation	551	1,174	863
Schools, 60% irrigation	2,690	2,780	2,735
Schools, 85% irrigation	4,133	4,626	4,380
Ready-to-Serve	6,282	7,443	6,863
Total	*380,975*	*392,954*	*386,965*
Industrial/Other			
Industrial	33,027	39,108	36,068
UCSC - Main Campus	172,616	173,149	172,883
Graham Hill WTP	24,823	25,971	25,397
Landfill Leachate	27,507	22,007	24,757
Total	*257,974*	*260,236*	*259,105*
Total Billed Customer Flows	**638,949**	**653,190**	**646,069**

Table 12, Wastewater Flows and Loadings
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Customer Classification	Sewer Units	Est. Mo. Flow CCF Per Unit	Projected Annual Water Use CCF[1]	Return to Sewer Flow Factor[2]	Projected Wastewater Flow CCF	Projected Wastewater Flow MG[3]	Strength (mg/l) GPD[4]	Strength (mg/l) BOD[5]	Strength (mg/l) TSS[6]	Loadings (lbs) BOD	Loadings (lbs) TSS
Residential											
Single Family	8,291	5.30	527,308	100%	527,308	394	1,080,695	300	300	987,731	987,731
Multi-Family	7,367	3.90	344,776	100%	344,776	258	706,603	300	300	645,819	645,819
Low Sewage Producer	7,031	2.10	177,181	100%	177,181	133	363,125	300	300	331,888	331,888
Subtotal Residential	*22,689*		*1,049,264*		*1,049,264*	*785*	*2,150,423*			*1,965,439*	*1,965,439*
Commercial											
Low Strength[7]	880		152,263	80%	121,810	91	249,644	150	150	114,085	114,085
Medium Strength[8]	251		171,989	80%	137,591	103	281,987	225	225	193,298	193,298
High Strength	108		47,874	80%	38,299	29	78,492	800	800	191,306	191,306
Schools, 35% irrigation	1		863	65%	561	0	1,149	150	150	525	525
Schools, 60% irrigation	3		2,735	40%	1,094	1	2,242	150	150	1,025	1,025
Schools, 85% irrigation	3		4,380	15%	657	0	1,346	150	150	615	615
Ready-to-Serve	2		6,863	10%	686	1	1,406	150	150	643	643
Subtotal Commercial	*1,248*		*386,965*		*300,698*	*225*	*616,267*			*501,496*	*501,496*
Other											
Industrial	7		36,068	80%	28,854	22	59,135	270	270	48,643	48,643
UCSC - Main Campus	1		172,883	100%	172,883	129	354,315	750	750	809,591	809,591
Graham Hill WTP	1		25,397	100%	25,397	19	52,051	0	2,200	0	348,870
Landfill Leachate	1		24,757	100%	24,757	19	50,739	400	250	61,833	38,646
Subtotal Other	*3*		*223,037*		*223,037*	*167*	*457,105*			*871,424*	*1,197,106*
Total	**23,947**		**1,695,334**		**1,601,853**	**1,198**	**3,282,931**			**3,387,002**	**3,712,684**

[1] "CCF" stands for hundred cubic feet.

[2] Flow factor based on estimated flow returning to sewer.

[3] "MG" stands for million gallons.

[4] "GPD" stands for gallons per day.

[5] "BOD" stands for biochemical oxygen demand.

[6] "TSS" stands for total suspended solids.

[7] City Facilities class incorporated into Low Strength class.

[8] Hotels/Motels class incorporated into Medium Strength class.

Table 13, Unit Cost Derivation
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

FY 24/25 Revenue Requirement by Function	FY 24/25 Rate Revenue	Customer	Flow	BOD	TSS
Cost Allocation %	100%	22.8%	41.8%	17.7%	17.7%
FY 24/25 Rate Revenue $	**$21,004,000**	**$4,788,912**	**$8,779,672**	**$3,717,708**	**$3,717,708**

FY 24/25 Functional Unit Cost	Customer	Flow	BOD	TSS
	(Customers)	*(CCF)*	*(LBS)*	*(LBS)*
Revenue Requirement	$4,788,912	$8,779,672	$3,717,708	$3,717,708
Demand Units	23,947	1,601,853	3,387,002	3,712,684
Unit Rate ($ per Unit)	**$199.98**	**$5.48**	**$1.10**	**$1.00**

Table 14, Class Allocation
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

FY 24/25 Class Revenue Requirements	Fixed	Flow	BOD	TSS	Total Revenue Requirement
	(Customers)	*(CCF)*	*(LBS)*	*(LBS)*	
Unit Rate ($ per Unit)	**$199.98**	**$5.48**	**$1.10**	**$1.00**	
Allocation Units					
Residential	22,689	1,049,264	1,965,439	1,965,439	
Commercial	1,248	300,698	501,496	501,496	
Industrial	7	28,854	48,643	48,643	
UCSC - Main Campus	1	172,883	809,591	809,591	
Graham Hill WTP	1	25,397	0	348,870	
Landfill Leachate	1	24,757	61,833	38,646	
Total	23,947	1,601,853	3,387,002	3,712,684	
Revenue Requirements					
Residential	$4,537,338	$5,750,961	$2,157,344	$1,968,098	**$14,413,741**
Commercial	249,575	1,648,108	550,462	502,175	**2,950,319**
Industrial	1,400	158,147	53,393	48,709	**261,649**
UCSC - Main Campus	200	947,560	888,639	810,686	**2,647,085**
Graham Hill WTP	200	139,201	0	349,342	**488,743**
Landfill Leachate	200	135,694	67,870	38,698	**242,463**
Total	4,788,912	8,779,672	3,717,708	3,717,708	**$21,004,000**

Adjusted Revenue Requirements	**Flow Allocation to Fixed**					
Residential	25.0%	$5,975,078	$4,313,221	$2,157,344	$1,968,098	$14,413,741
Commercial	25.0%	661,602	1,236,081	550,462	502,175	$2,950,319
Industrial	n/a					
UCSC - Main Campus	n/a					
Graham Hill WTP	25.0%	35,000	104,401	0	349,342	$488,743
Landfill Leachate	25.0%	34,124	101,771	67,870	38,698	$242,463

Table 15, Residential Rate Derivation
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Residential Rate Derivation

Unit Cost Calculation	Total	Fixed	Flow
		(Dwelling Units)	*(CCF)*
Revenue Requirement	$14,413,741	$5,975,078	$8,438,663
Allocation %	100.0%	41.5%	58.5%
Allocation Units		22,689	1,049,264
Unit Cost ($ per Unit)		$263.35	$8.04

Fixed Rate Derivation	Monthly Flow	Monthly Flow Rate	Monthly Fixed Rate	Total Monthly Rate
	(Estimated CCF/ Dwelling Unit)	*($/ Dwelling Unit)*	*($/ Dwelling Unit)*	*($/ Dwelling Unit)*
Single Family	5.30	$42.63	$21.95	**$64.57**
Multi-Family	3.90	$31.37	$21.95	**$53.31**
Low Sewage Producers	2.10	$16.89	$21.95	**$38.83**

Table 16, Commercial Rate Derivation
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Commercial Rate Derivation

Unit Cost Calculation	Total	Fixed	Flow	BOD	TSS
		(Custome	*(CCF)*	*(LBS)*	*(LBS)*
Revenue Requirement	$2,950,319	$661,602	$1,236,081	$550,462	$502,175
Allocation %	100.0%	22.4%	42.0%	17.8%	17.8%
Allocation Units		1,248	300,698	501,496	501,496
Unit Cost ($ per Unit)		$530.13	$4.11	$1.10	$1.00

Volumetric Rate Derivation	Strength BOD	Strength SS	Volumetric Unit Cost Flow	Volumetric Unit Cost BOD	Volumetric Unit Cost TSS	Total Volumetric Unit Cost	Return to Sewer	Volumetric Rates
	(MG/L)	*(MG/L)*	*($/ CCF)*	*($/ CCF)*	*($/ CCF)*	*($/ CCF)*		*($/ CCF)*
Low Strength	150	150	$4.11	$1.03	$0.94	$6.07	80%	**$4.86**
Medium Strength	225	225	$4.11	$1.54	$1.41	$7.06	80%	**$5.65**
High Strength	800	800	$4.11	$5.48	$5.00	$14.59	80%	**$11.67**
Hotels/Motels	225	225	$4.11	$1.54	$1.41	$7.06	80%	**$5.65**
Schools, 35% irrigation	150	150	$4.11	$1.03	$0.94	$6.07	65%	**$3.95**
Schools, 60% irrigation	150	150	$4.11	$1.03	$0.94	$6.07	40%	**$2.43**
Schools, 85% irrigation	150	150	$4.11	$1.03	$0.94	$6.07	15%	**$0.91**
Ready-to-Serve	150	150	$4.11	$1.03	$0.94	$6.07	10%	**$0.61**

Table 17, Industrial/Other Rate Derivation
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

Industrial/Other Customer Class Rate Derivation

	Strength			Fixed Rate Derivation				Variable Rate Derivation			
	BOD	SS	Revenue Requirement	Fixed Allocation	Revenue Requirement	Customers	Monthly Fixed Rate	Revenue Requirement	Return to Sewer	Water Use	Water Use
	(MG/L)	*(MG/L)*				(#)	*($/ Customer)*			*(CCF)*	*($/ CCF)*
Industrial	270	270	$261,649	7.5%	$19,624	7	**$233.62**	$242,025	80%	36,068	**$6.71**
UCSC - Main Campus	750	750	$2,647,085	30.0%	$794,126	1	**$66,177.13**	$1,852,960	100%	172,883	**$10.72**
Graham Hill WTP	0	2200	$488,743	7.2%	$35,000	1	**$2,916.69**	$453,743	100%	25,397	**$17.87**
Landfill Leachate	400	250	$242,463	7.2%	$34,124	1	**$2,843.63**	$208,339	100%	24,757	**$8.42**

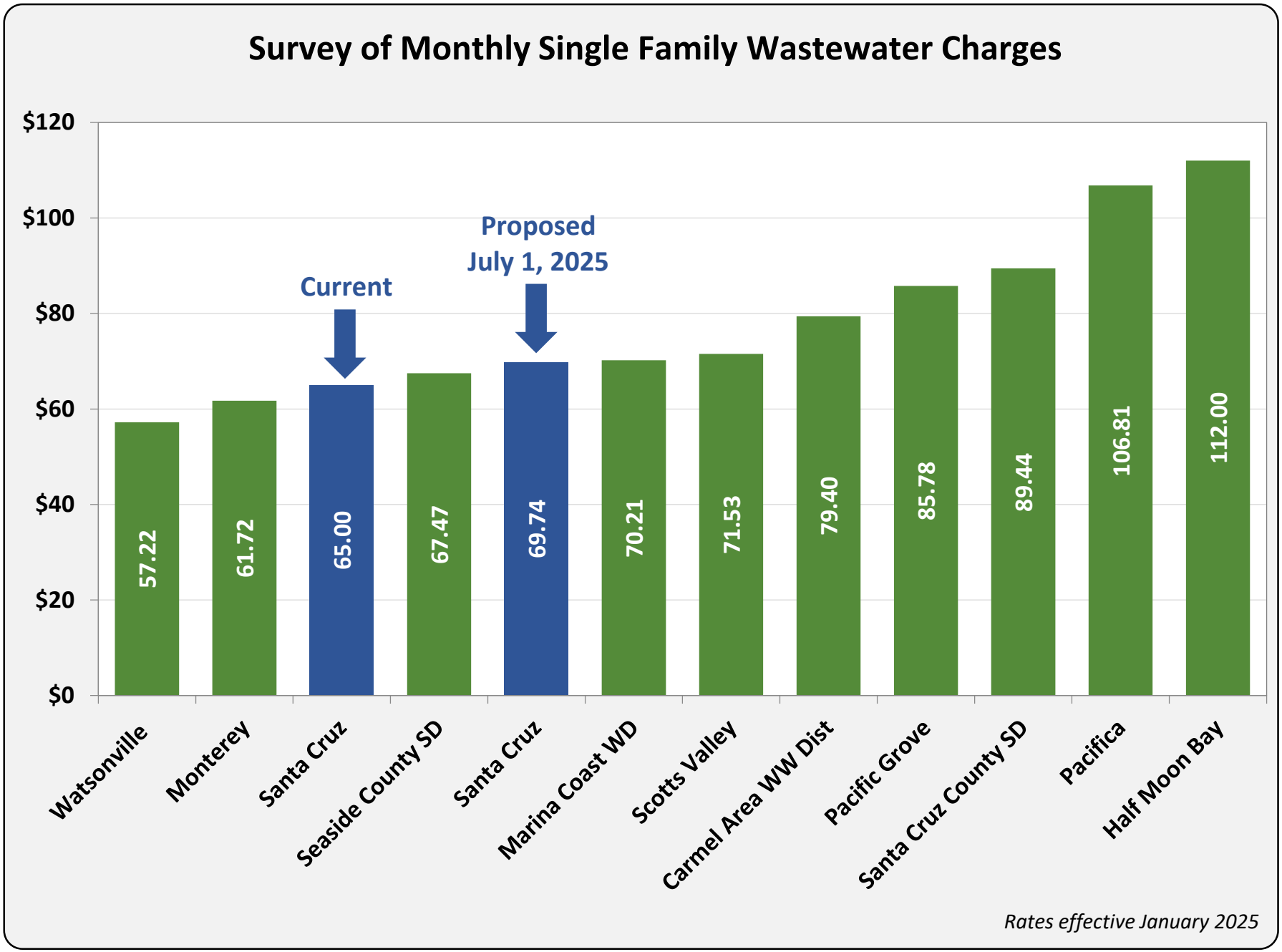
Table 18, Projected Rates
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

	Current Rates	Projected Wastewater Rates Effective July 1				
		2025	2026	2027	2028	2029
Residential						
Fixed Monthly Rates (per Dwelling Unit)						
Single Family	$65.00	$69.74	$75.32	$81.35	$87.04	$93.13
Multi-Family	53.10	57.58	62.19	67.17	71.87	76.90
Low Sewage Producer	38.20	41.94	45.30	48.92	52.34	56.00
Commercial						
Fixed Monthly Rates						
All Customers	Varies	$47.71	$51.53	$55.65	$59.55	$63.72
Quantity Rates ($ per ccf)						
Low Strength	4.88	5.25	5.67	6.12	6.55	7.01
Medium Strength	4.99	5.79	6.59	7.12	7.62	8.15
High Strength	10.82	12.22	13.61	14.70	15.73	16.83
Industrial & Other						
UCSC - Main Campus						
Fixed Monthly Rates	$66,886.30	$71,471.30	$77,189.00	$83,364.12	$89,199.61	$95,443.58
Quantity Rates ($ per ccf)	10.66	11.58	12.51	13.51	14.46	15.47
Graham Hill WTP						
Fixed Monthly Rates	5,511.40	3,150.03	3,402.03	3,674.19	3,931.38	4,206.58
Quantity Rates ($ per ccf)	16.70	19.30	20.84	22.51	24.09	25.78
Landfill Leachate						
Fixed Monthly Rates	2,769.40	3,071.12	3,316.81	3,582.15	3,832.90	4,101.20
Quantity Rates ($ per ccf)	8.51	9.09	9.82	10.61	11.35	12.14
Industrial						
Fixed Monthly Rates	238.40	252.30	272.48	294.28	314.88	336.92
Quantity Rates ($ per ccf)	6.70	7.25	7.83	8.46	9.05	9.68
Septage						
Quantity Rates ($ per ccf)	100.99	109.07	117.80	127.22	136.13	145.66

Note: Initial rate increase effective July 1, 2025 includes modifications to the rate structure that result in a range of bill impacts depending on customer class and billed usage.

Table 19, Projected Ready to Serve Rates
City of Santa Cruz
Wastewater Rate Study - Draft 2/21/2025

	Current	Projected Wastewater Rates Effective July 1				
	Rates	2025	2026	2027	2028	2029
Ready to Serve						
Fixed Monthly Rates						
All Customers	$41.70	$47.71	$51.53	$55.65	$59.55	$63.72
Quantity Rates ($ per ccf)						
Schools, 35% irrigation	4.09	4.26	4.60	4.97	5.32	5.69
Schools, 60% irrigation	3.04	2.62	2.83	3.06	3.27	3.50
Schools, 85% irrigation	0.91	0.98	1.06	1.14	1.22	1.31
Other Ready-to-Serve	0.48	0.66	0.71	0.77	0.82	0.88


Survey of Monthly Single Family Wastewater Charges
$120
$100
$80
$60
$40
$20
$0
Current
Proposed
July 1, 2025
57.22
61.72
65.00
67.47
69.74
70.21
71.53
79.40
85.78
89.44
106.81
112.00
Watsonville
Monterey
Santa Cruz
Seaside County SD
Santa Cruz
Marina Coast WD
Scotts Valley
Carmel Area WW Dist
Pacific Grove
Santa Cruz County SD
Pacifica
Half Moon Bay
Rates effective January 2025