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# CITY OF SAN LEANDRO

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## WASTEWATER RATE STUDY REPORT

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*April 17, 2025*



**BARTLE WELLS ASSOCIATES**  
INDEPENDENT PUBLIC FINANCE ADVISORS



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April 17, 2025

City of San Leandro  
835 East 14th Street  
San Leandro, CA 94577

Attention: Hayes Morehouse, Water Pollution Control Manager

Re: Wastewater Rate Study

Bartle Wells Associates is pleased to submit to the City of San Leandro (City) the attached *Wastewater Rate Study*. The study presents BWA's analysis of the operating and non-operating expenses of the City's wastewater funds and provides five-year cash flow projections and recommended rates. The primary purpose of this study was to analyze the City's wastewater enterprise and make recommendations that would achieve its financial sustainability.

BWA finds that the rates and charges proposed in our report reflect the cost-of-service for each customer, follow generally accepted rate design criteria, and adhere to the substantive requirements of Proposition 218. BWA believes the proposed rates are fair and reasonable to the City's customers.

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

BARTLE WELLS ASSOCIATES

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# 1 EXECUTIVE SUMMARY

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## 1.1 Introduction

The City retained Bartle Wells Associates to develop a long-term financial plan and 5-year rate recommendations for the wastewater enterprise.

The revenues from the City's wastewater enterprise are primarily derived from charges for services. The City must establish rates and charges adequate to fund the cost of providing services, which include costs for operations and maintenance, as well as capital improvements needed to keep the City's utility infrastructure in a safe and reliable operating condition.

The City has provided proactive financial stewardship by raising rates to keep revenues in line with the costs of providing wastewater service. Those rate increases have enabled the City to maintain its financial health. The prior rate increases strengthened the financial condition of the wastewater enterprise. However, current rates are not adequate to fund the necessary improvements.

## 1.2 Rate Study Objectives

Key goals and objectives of this study include developing rates that:

- Recover the costs of providing service, including operating, capital, and debt funding needs;
- Are proportionate, 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 long-term operational and financial stability of the City.

BWA worked closely with City staff to incorporate information and input, evaluate alternatives, and develop recommendations. This report summarizes key findings and recommendations for wastewater rates over the next five years.

## 1.3 Current and Proposed Wastewater Rates

The following table shows the current and proposed wastewater rates.

**Table 1 – Current and Proposed Wastewater Rates**

Proposed Rates	Current	Proposed				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
<b>Classification A (Residential) - Fixed Monthly Rate per Unit</b>						
Single Family	\$53.20	\$57.12	\$62.26	\$67.86	\$73.97	\$80.63
Multi Family	37.40	42.19	45.99	50.13	54.64	59.56
Accessory Dwelling	37.40	42.19	45.99	50.13	54.64	59.56
<b>Classification B (Commercial &amp; Institutional) - Volumetric Rates per Hundred Cubic Feet (hcf) of Water Use</b>						
Low Strength	\$4.91	\$5.42	\$5.91	\$6.44	\$7.02	\$7.65
Medium Strength	5.51	6.17	6.73	7.34	8.00	8.72
High Strength	10.03-12.47	11.41	12.44	13.56	14.78	16.11
<b>Classification C (Industrial &amp; Other Large Users) - Volumetric Rates</b>						
Volume, per million gallons of water use	\$4,766	\$5,305	\$5,782	\$6,302	\$6,869	\$7,487
BOD (Biochemical Oxygen Demand), per thousand pounds	659	736	802	874	953	1,039
SS (Suspended Solids), per thousand pounds	1,142	1,263	1,377	1,501	1,636	1,783
<b>Classification B &amp; C - Monthly Fixed Rate per Connection</b>						
Class B & C Connections	\$9.65	\$10.71	\$11.67	\$12.72	\$13.86	\$15.11

## 2 BACKGROUND, OBJECTIVES, AND LEGAL REQUIREMENTS

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The City of San Leandro owns and operates a sewage treatment facility on 12 acres of land known as the Water Pollution Control Plant (WPCP). The WPCP was originally constructed in 1938, and several expansions and modifications have occurred since then, most recently in 2015. The WPCP is designed to treat 7.6 MGD (average dry weather flow) from residential and commercial properties and discharges the effluent into the San Francisco Bay via the East Bay Discharge Authority (EBDA) discharge facility located immediately south of the City.

The City of San Leandro encompasses approximately 15.5 square miles, serving the residents of Alameda County. It is bordered by unincorporated communities such as San Lorenzo, Ashland, and Cherryland, as well as portions of Castro Valley. San Leandro is situated along the eastern shore of the San Francisco Bay, about 13 miles south of Oakland and 30 miles north of San Jose.

Rates were last increased in 2024. Based on a survey of regional wastewater agencies, the City's rates fall in the middle range within the region.

The City's wastewater utility is a financially self-supporting enterprise. Revenues are derived primarily from rate. As such, the City's wastewater rates must be set at adequate levels to fund the costs of providing service and:

- Fund ongoing operating and maintenance expenses
- Address regulatory requirements
- Fund the capital improvement projects, related debt service and associated increased operating costs
- Provide funding for system maintenance and upgrades

The prior wastewater rate increases strengthened the financial condition of the enterprise. However, current rates are not adequate to fund the necessary improvements and operating costs.

### 2.1 Rate Study Objectives

In 2024, the City retained BWA to develop a cost-of-service based rate study. The City has historically adopted rate increases in order to keep revenues in line with the escalating costs of providing service. Key goals and objectives of this study include developing rates that:

- Recover the costs of providing service, including operating, capital, and debt funding needs;
- Are proportionate, 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 long-term operational and financial stability of the City.

## 2.2 Rate-Study Process

The general process used for this cost-of-service rate study is summarized in the following diagram.

Figure 1 – Cost-of-Service Rate Study Process



Key elements of the study include:

- 1) **Project Initiation and Data Collection** – Review financial policies; collect financial and other relevant data; and review rate structures;
- 2) **Demand Analysis** – Analyze past customer demands and customer characteristics to forecast future demands;
- 3) **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;
- 4) **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;
- 5) **Cost-of-Service Rate Design** – Develop rates that proportionately recover costs; and
- 6) **Prop 218 Process** – Ensure compliance with the substantive and procedural requirements of Proposition 218.

## 2.3 Constitutional Requirements for Rates

The wastewater rates proposed in this report are designed to comply with two key articles of the California Constitution: Article 13D and Article 10, as explained below.

### 2.3.1 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 has



ruled, includes rates imposed for water delivered through pipes connected to property. Article 13D, Section 6 establishes both a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D requires voter approval for new or increased property-related charges but exempts rates for water, wastewater, and garbage service from this voting requirement if rates are adopted by the appropriate procedure and meet the substantive requirements. This report recommends water rates designed to comply with the substantive requirements of Proposition 218.

The substantive requirements of Article 13D, section 6 requires property-related charges, such as the City's water and wastewater rates, to meet the following conditions:

- 1) Revenues derived from the fee or charge shall not exceed the costs 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 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.

## **2.4 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 WASTEWATER FINANCIAL PLAN

### 3.1 Wastewater Financial Overview

BWA conducted an independent evaluation of wastewater enterprise finances and concluded the previous rate increases have put the wastewater enterprise in a sound financial position. However, due to aging infrastructure, the City will need to fund a significant number of capital projects. As such, rate increases are projected to be necessary to maintain the City's financial standing.

The City relies almost entirely on revenues from wastewater rates to fund the costs of providing wastewater service. As such, wastewater rates must be set at levels adequate to fund the costs of operating and maintaining the wastewater system, fund necessary capital improvements to keep the wastewater system in good operating condition.

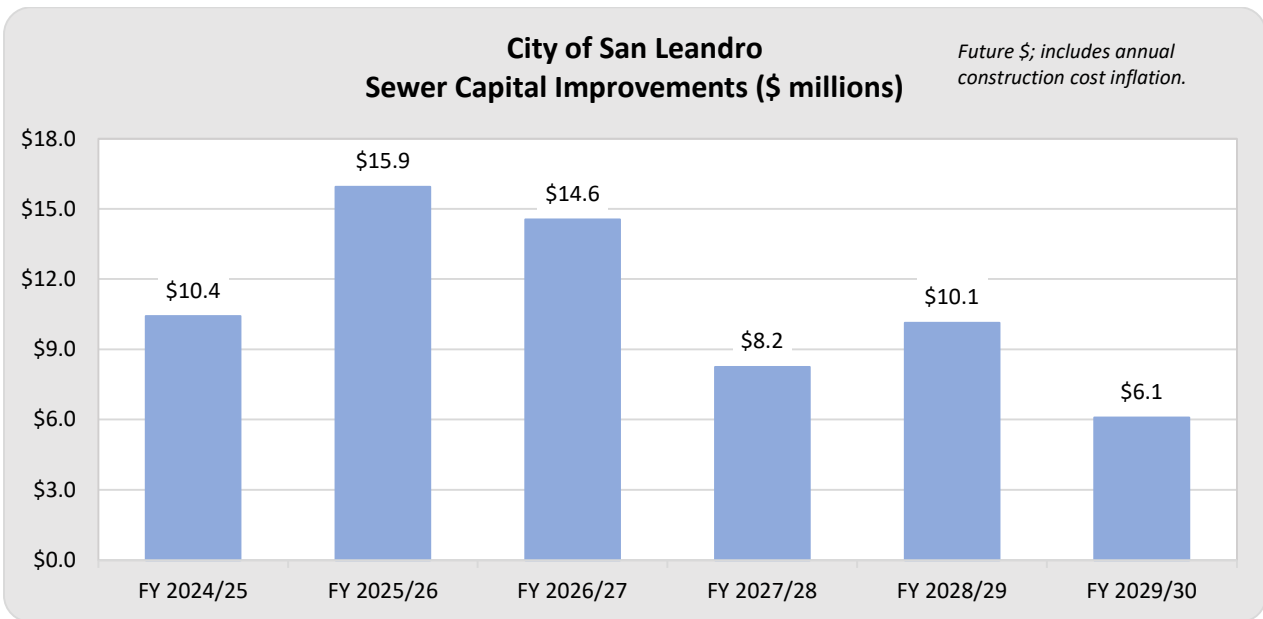
### 3.2 Key Drivers of Rate Increases

The City is facing several manageable financial challenges that will drive the need for rate increases in upcoming years. Key drivers of future rate increases are summarized below.

#### *Capital Improvement Funding Needs*

The City takes a proactive approach to maintaining its wastewater treatment plant and collection system, which requires ongoing repair and improvement projects. Accounting for construction cost inflation, the City anticipates funding approximately \$55 million of capital improvement projects over the next 5 years. The City's detailed capital improvement costs are shown in Appendix A. The following figure visually depicts the capital improvement costs over the next five years.

**Figure 2 – Sewer Capital Improvements**



### *Ongoing Operating Cost Inflation*

The City faces annual cost inflation due to annual increases in a range of expenses including sewage collection, sewage treatment, engineering, and administration, etc. On top of rate increases needed for capital improvements, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. Wastewater cost inflation has historically been higher than the Consumer Price Index (CPI) for consumer goods and services. Historically inflation has typically remained consistently around 3%, but recently inflation has reached forty-year highs with the CPI and ENR CCI exceeding 7% in 2022. It is not expected that inflation will remain at such high levels in the future. For the purposes of this rate study, inflation is projected to be 8% in the first year due to anticipated rising costs, and 3.5% for the remaining four years, in line with the City's budget inflationary projections.

### *Wastewater Reserve Funds*

Maintaining a prudent minimal level of fund reserves provides a financial cushion for dealing with unanticipated expenses, revenue shortfalls, and non-catastrophic emergency capital repairs. This rate study has set dedicated financial reserves at one year of the City's annual sewer revenues. BWA developed a financial plan designed to maintain prudent reserve levels that are in-line with industry standards.

The City has indicated that discharge standards seem likely to increase, which is why the City has created a project to address the nutrients going into the bay. To see to this need, this rate study set aside \$2 million per year from the reserve balance to go toward the City's Nutrient Optimization project.

### *Debt Service*

The City is currently making debt service payments on two different loans. The City received a State Revolving Fund (SRF) loan of \$43 million in 2015 and a Bank of America loan of \$7.6 million in 2021 to replace the aging collection system infrastructure. The debt service ends in FY 2034/35 for the SRF loan and in FY 2035/36 for the Bank of America loan.

The debt covenants on the outstanding wastewater debt require that the City generate net operating revenues of at least 1.30 times its total annual debt service payments. This is referred to as "debt service coverage."

## **3.3 Financial Plan Assumptions**

The financial projections incorporate the latest information available and several reasonable and slightly conservative assumptions for planning purposes. Key assumptions include:

### **Revenue Assumptions**

- Wastewater rate revenues are based on estimated revenues for the current fiscal year.
- Rates proposed will be effective on July 1, 2025, with rate adjustments planned to become effective on July 1 of each of the subsequent four years.
- BWA assumed 0.8% growth for residential users, in line with the Plan Bay Area 2050 growth estimate.

- Interest earnings are projected based on the annual beginning fund balance multiplied by the projected interest rate (2%). The interest rate projections are based on recent and anticipated interest rates.

#### **Expense Assumptions**

- Operating and maintenance costs are primarily based on the 2024/25 budget.
- Operating costs are projected to escalate at 8% for the first year and 3.5% per year for the remaining four years to account for cost inflation.
- Debt service projections are based on outstanding debt schedules and projected issuances of new debt.
- Capital improvement costs are based on the most recent engineering cost estimates. Capital costs include a 3.5% annual construction cost inflation factor for the next five years.

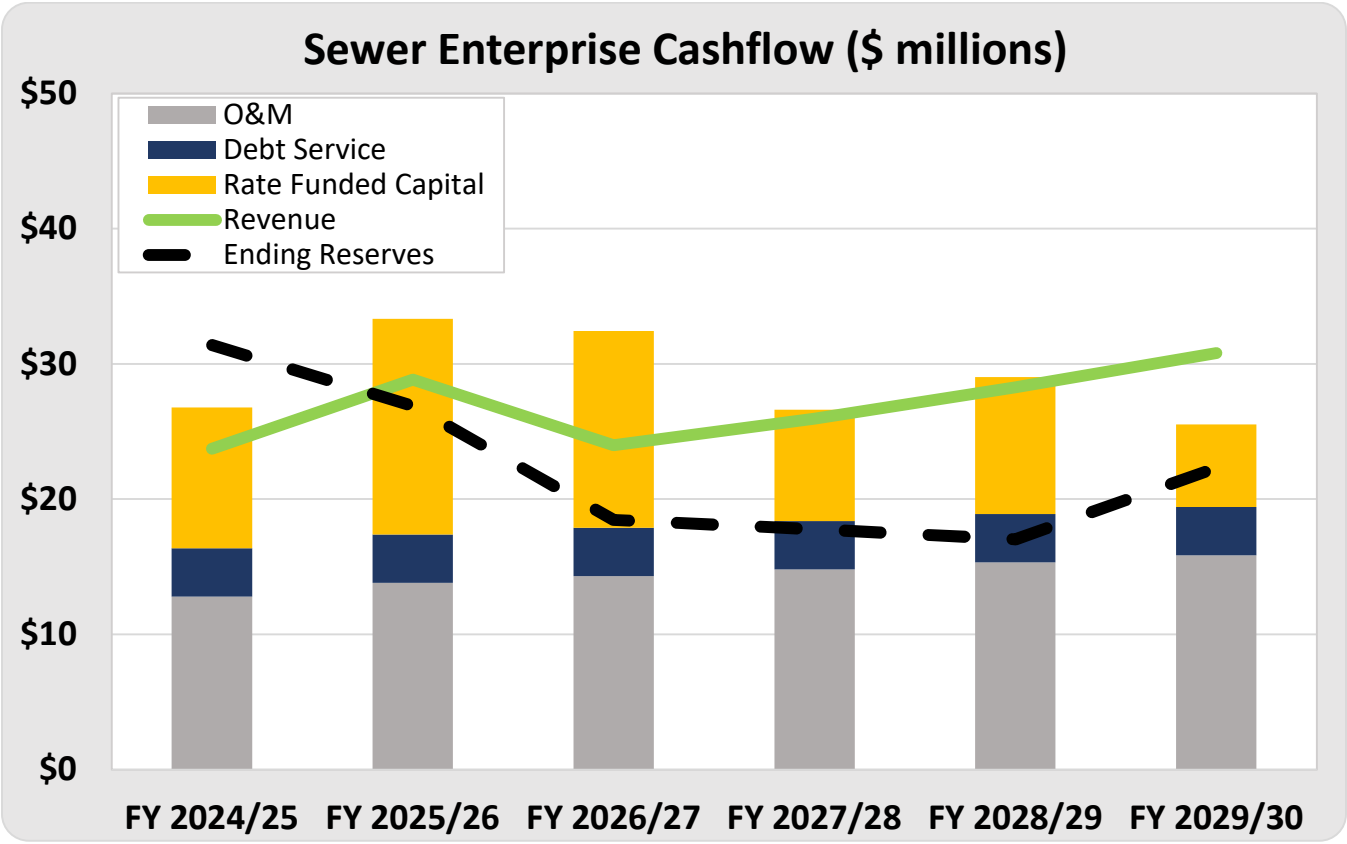
### **3.4 Cash Flow Projections**

Cash-flow projections were developed based on 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 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 shown for each of the following scenarios 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 proposed rate increase in the first year is lower than the remaining years to mitigate the impacts from rate structure adjustments. The projections indicate the need for increases for wastewater rate revenues for each of the next five fiscal years. 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 and change in rate structure.

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. Rates adopted pursuant to Proposition 218 are essentially future rate caps.

The following figure visually depicts the cash-flow projections with the proposed rate increases for the next five years. Projected expenses are summarized into key categories. The figure also shows the projected fund reserves at the end of each fiscal year.

Figure 3 – Projected Cashflow Graph



Detailed, long-term, cash-flow projections for this scenario are shown in the following table.

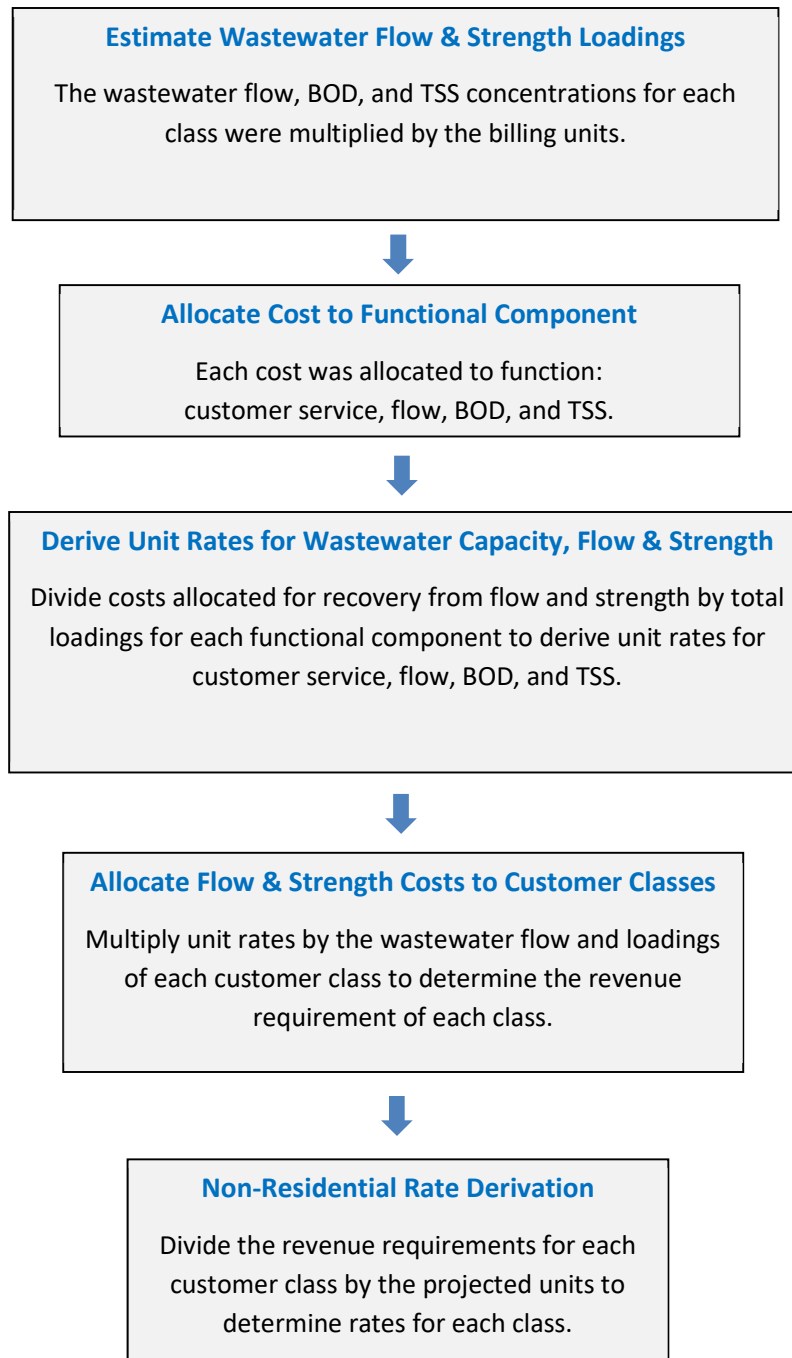
**Table 2 – Detailed Cash Flow Projections**

Operating Fund	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
	<i>Budgeted</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<b>Revenue Escalation</b>						
<i>Rate Revenue Increase</i>		<i>8.0%</i>	<i>9.0%</i>	<i>9.0%</i>	<i>9.0%</i>	<i>9.0%</i>
<b>Revenues</b>						
Sewer Rate Revenue						
Total Sewer Rate Revenue	\$18,640,428	\$20,227,293	\$22,152,822	\$24,262,021	\$26,572,445	\$29,103,328
Non-Rate Revenue						
Connection Fees	273,000	273,000	273,000	273,000	273,000	273,000
Interest Income (2%)	446,331	627,992	538,032	369,221	355,855	340,797
Sampling Service Charges	224,822	224,822	224,822	224,822	224,822	224,822
Pretreatment Lab/Permit Fees	389,000	396,780	404,716	412,810	421,066	429,487
Reimbursements	338,602	365,690	378,489	391,736	405,447	419,637
Other Revenues	59,554	7,990	7,990	7,990	7,990	7,990
Loan Disbursement	3,372,000	-	-	-	-	-
Grants	-	6,700,000	-	-	-	-
<b>Total Revenues</b>	<b>23,743,735</b>	<b>28,823,566</b>	<b>23,979,870</b>	<b>25,941,599</b>	<b>28,260,624</b>	<b>30,799,062</b>
<b>Expenses</b>						
Operating Expenses						
<i>General Inflation</i>		<i>8.00%</i>	<i>3.50%</i>	<i>3.50%</i>	<i>3.50%</i>	<i>3.50%</i>
Collections	1,619,907	1,749,499	1,810,732	1,874,108	1,939,701	2,007,591
Operations	10,486,961	11,325,918	11,722,325	12,132,607	12,557,248	12,996,752
Pretreatment	548,520	592,402	613,136	634,596	656,806	679,795
Lift Stations	132,300	142,884	147,885	153,061	158,418	163,963
<b>Total Operating Expenses</b>	<b>12,787,688</b>	<b>13,810,703</b>	<b>14,294,078</b>	<b>14,794,371</b>	<b>15,312,174</b>	<b>15,848,100</b>
Non-Operating Expenses						
Debt Service	3,572,169	3,572,169	3,572,169	3,572,169	3,572,169	3,572,169
CIP	10,425,200	15,938,690	14,554,198	8,243,317	10,129,186	6,094,018
<b>Total Non-Operating Expenses</b>	<b>13,997,369</b>	<b>19,510,859</b>	<b>18,126,368</b>	<b>11,815,487</b>	<b>13,701,355</b>	<b>9,666,188</b>
<b>Total Expenses</b>	<b>26,785,058</b>	<b>33,321,562</b>	<b>32,420,446</b>	<b>26,609,858</b>	<b>29,013,529</b>	<b>25,514,288</b>
<b>Net Revenues</b>	<b>(3,041,322)</b>	<b>(4,497,996)</b>	<b>(8,440,576)</b>	<b>(668,259)</b>	<b>(752,904)</b>	<b>5,284,774</b>
<i>Debt Coverage Ratio (Min. 1.30)</i>	<i>1.90</i>	<i>2.11</i>	<i>2.49</i>	<i>2.89</i>	<i>3.39</i>	<i>3.95</i>
<b>Reserves</b>						
<b>Total Beginning Balance</b>	<b>34,440,923</b>	<b>31,399,601</b>	<b>26,901,605</b>	<b>18,461,029</b>	<b>17,792,770</b>	<b>17,039,866</b>
Nutrient Optimization Balance	-	-	2,000,000	4,000,000	6,000,000	8,000,000
Other Cash and Investments	34,440,923	31,399,601	24,901,605	14,461,029	11,792,770	9,039,866
<b>Total Ending Reserve Balance</b>	<b>31,399,601</b>	<b>26,901,605</b>	<b>18,461,029</b>	<b>17,792,770</b>	<b>17,039,866</b>	<b>22,324,640</b>
Nutrient Optimization Balance	-	2,000,000	4,000,000	6,000,000	8,000,000	10,000,000
Other Cash and Investments	31,399,601	24,901,605	14,461,029	11,792,770	9,039,866	12,324,640
<b>Reserve Target (1 Yr O&amp;M)</b>	<b>12,787,688</b>	<b>13,810,703</b>	<b>14,294,078</b>	<b>14,794,371</b>	<b>15,312,174</b>	<b>15,848,100</b>

## 4 WASTEWATER COST OF SERVICE ANALYSIS AND RATE DERIVATION

BWA derived updated wastewater rates that account for both a) the overall rate increases identified in the financial projections, and b) the 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 following steps:

**Figure 4 – WW Cost of Service Analysis and Rate Derivation Process**



## 4.1 Customer Summary

The table below summarizes the City’s historical and current customer characteristics, including customer count for residential users, water consumption for commercial users, and strength for significant industrial users.

**Table 3 – Customer Summary**

Customer Characteristics	Strength	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
<i>Residential Growth Rate</i>					0.80%	0.80%	0.80%	0.80%	0.80%
<b>Classification A (Residential) - unit</b>									
Single Family		14,189	14,197	14,191	14,305	14,419	14,534	14,651	14,768
Multi Family / Accessory Dwelling		4,267	4,370	4,398	4,433	4,469	4,504	4,540	4,577
<b>Classification B (Commercial &amp; Institutional) - hcf</b>									
<i>Annual Water Use, Hundred Cubic Feet</i>									
Auto Services	Medium	15,553	14,614	16,103	16,103	16,103	16,103	16,103	16,103
Bakery, Wholesale	High	687	984	4,445	4,445	4,445	4,445	4,445	4,445
Laundries	Medium	19,612	22,320	22,261	22,261	22,261	22,261	22,261	22,261
Markets/Foods	High	22,857	21,995	21,119	21,119	21,119	21,119	21,119	21,119
Mixed Use	Medium	3,816	4,229	4,535	4,535	4,535	4,535	4,535	4,535
Restaurants	High	36,487	35,890	34,027	34,027	34,027	34,027	34,027	34,027
All Other	Medium	306,908	306,536	313,170	313,170	313,170	313,170	313,170	313,170
Schools	Low	19,896	16,094	23,104	23,104	23,104	23,104	23,104	23,104
<i>Number of Connections</i>									
Connections		7,845	7,761	7,631	7,631	7,631	7,631	7,631	7,631
<b>Classification C (Industrial &amp; Other Large Users)</b>									
Number of Connections		108	108	108	108	108	108	108	108
Annual Water Use, million gallons		202	202	202	202	202	202	202	202
Biochemical Oxygen Demand (BOD), thousand pounds		3,844,392	3,844,392	3,844,392	3,844,392	3,844,392	3,844,392	3,844,392	3,844,392
Total Suspended Solids (TSS), thousand pounds		881,093	881,093	881,093	881,093	881,093	881,093	881,093	881,093

## 4.2 Commercial Customers Strength Classifications

To align the City’s rates with industry norms, BWA recommended implementing a rate structure where commercial customers are charged by their strength classifications. Current commercial categories were recategorized under either low, medium, or high strength. Table 5 displays the reclassification of commercial customers.



**Table 4 – Strength Classifications**

<b>Strength Classification</b>	<b>Customer Type</b>
<b>Low Strength</b>	Schools
<b>Medium Strength</b>	Residential - All Auto Services Laundries Mixed Use All Other
<b>High Strength</b>	Bakery, Wholesale Markets/Foods Restaurants

Note: Wastewater users who have Fats, Oils, and Grease (FOG) waste will be put into the High Strength user category.

### 4.3 Flows and Loadings

The following tables estimate the flows and loadings of each customer class based on the following information:

- Residential flows per unit are based on the average household size in the City of San Leandro and the median water use in California.
- Residential wastewater strength concentrations are based on estimates previously published by the State Water Resources Control Board (SWRCB). Residential wastewater strength concentrations have increased over the past decade as the volume of wastewater flow has decreased due to transition to low-flow toilets, water-efficient appliances, and other water conservation and efficiency measures.
- Commercial wastewater flows are estimated based on projected water use and the estimated flow returning to the sewer system. Wastewater strength assignments for commercial customer classes are largely based on strength estimates previously published by the SWRCB.
  - Commercial customers were classified between low, medium, and high strength.

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

**Table 5 – Wastewater Flows**

	EDUs <sup>1</sup>	Est. Mo Flow <sup>2</sup> (hcf per EDU)	Projected Water Use (hcf) <sup>3</sup>	Flow Factor <sup>4</sup> (%)	<u>Projected Wastewater Flow</u>		
					HCF	MG <sup>5</sup>	GPD <sup>6</sup>
<b>Classification A (Residential)</b>							
Single Family	14,191	6.02	1,024,792	100%	1,024,792	767	2,100,268
Multi Family / ADU	<u>4,398</u>	5.33	<u>281,117</u>	100%	<u>281,117</u>	<u>210</u>	<u>576,138</u>
<b>Total Residential</b>	<b>18,589</b>				<b>1,305,910</b>	<b>977</b>	<b>2,676,406</b>
<b>Classification B (Commercial &amp; Institutional)</b>							
Low			23,104	80%	18,483	14	37,881
Medium			356,069	80%	284,855	213	583,799
High			59,591	80%	47,673	36	97,703
<b>Classification C (Industrial &amp; Other Large Users)</b>							
Industrial			269,629	100%	<u>269,629</u>	<u>202</u>	<u>552,593</u>
<b>Total Non-Residential</b>					<b>620,640</b>	<b>464</b>	<b>1,271,976</b>
<b>Total</b>					<b>1,926,550</b>	<b>1,441</b>	<b>3,948,382</b>

<sup>1</sup> "EDU" stands for equivalent dwelling unit.

<sup>2</sup> Residential flow is based on the City's census data.

<sup>3</sup> "HCF" stands for hundred cubic feet.

<sup>4</sup> Flow factor based on estimated flow returning to sewer.

<sup>5</sup> "MG" stands for 1,000,000 gallons.

<sup>6</sup> "GPD" stands for gallons per day.

**Table 6 – Wastewater Loadings**

	EDUs <sup>1</sup>	<u>Strength (mg/l)</u> <sup>3</sup>		<u>Loadings (lbs)</u>		Annual Bills
		BOD <sup>1</sup>	TSS <sup>2</sup>	BOD	TSS	
		(mg/l)	(mg/l)	(lbs)	(lbs)	(#)
<b>Classification A (Residential)</b>						
Single Family	14,191	300	300	1,919,598	1,919,598	170,292
Multi Family / ADU	4,398	300	300	526,577	526,577	5,472
<b>Total Residential</b>	<b>18,589</b>			<b>2,446,176</b>	<b>2,446,176</b>	<b>175,764</b>
<b>Classification B (Commercial &amp; Institutional)</b>						
Low		225	225	25,966	25,966	240
Medium		300	300	533,579	533,579	13,440
High		825	825	245,571	245,571	1,582
<b>Classification C (Industrial &amp; Other Large Users)</b>						
Industrial				3,844,392	881,093	108
<b>Total Non-Residential</b>				<b>4,649,508</b>	<b>1,686,210</b>	<b>15,370</b>
<b>Total</b>				<b>7,095,684</b>	<b>4,132,386</b>	<b>191,134</b>

<sup>1</sup> "BOD" stands for biochemical oxygen demand.

<sup>2</sup> "TSS" stands for total suspended solids.

<sup>3</sup> State Water Resource Control Board (SWRCB) Guidelines for Wastewater Agencies.

#### 4.4 Functional Allocation

The next step in the cost of service analysis is to assign wastewater system costs in each allocation category for revenue recovery via the functional cost components of customer service, 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 functional cost components are described as follows:

- **Customer Service** reflects costs associated with administration and serving the City's customers.
- **Flow** reflects costs associated with the volume of wastewater collected and treated.
- **BOD** reflects costs associated with treating BOD.
- **TSS** reflects costs associated with treating TSS.

Collections and Lift Station costs are driven by the volume of flow and are thus allocated 100% to the flow function. Operations and Other Revenues are allocated 20% to customer service, 20% to flow, and the remainder to treatment to generally reflect the cost components contained in that budget category. Pretreatment costs are driven by the amount of discharge strength and is allocated evenly between BOD and TSS. Capital related items including debt service, cash-funded capital spending, use of reserves, connection fees, interest income, and loan disbursements are allocated 50% to flow, and 25% to each BOD and TSS to reflect a blend of both collection system and treatment costs.

The following tables show a breakdown of the wastewater utility's expenses, how they are allocated between the flows and loadings, and the revenue requirement for flow, BOD and TSS.

**Table 7 – Functional Cost Allocation**

Budget Line Items	FY 2024/25 Budget	Customer Service	Flow	BOD	TSS
<b>Operating Costs</b>					
Collections	\$1,619,907		100%		
Operations	10,486,961	20%	20%	30%	30%
Pretreatment	548,520			50%	50%
Lift Stations	132,300		100%		
<b>Non-Operating Costs</b>					
Debt Service	3,572,169		50%	25%	25%
Cash-Funded Capital Spending	10,425,200		50%	25%	25%
<b>Sources</b>					
Use of Reserves	(3,041,322)		50%	25%	25%
Connection Fees	(273,000)		50%	25%	25%
Interest Income (2%)	(446,331)		50%	25%	25%
Other Revenues	(1,011,977)	20%	20%	30%	30%
Loan Disbursement	(3,372,000)		50%	25%	25%
<b>Total:</b>	<b>\$18,640,428</b>				

**Table 8 – Functional Cost Allocation Revenue Requirement**

Budget Line Items	FY 2024/25 Budget	Customer Service	Flow	BOD	TSS
<b>Operating Costs</b>					
Collections	\$1,619,907		\$1,619,907		
Operations	10,486,961	2,097,392	2,097,392	3,146,088	3,146,088
Pretreatment	548,520			274,260	274,260
Lift Stations	132,300		132,300		
<b>Non-Operating Costs</b>					
Debt Service	3,572,169		1,786,085	893,042	893,042
Cash-Funded Capital Spending	10,425,200		5,212,600	2,606,300	2,606,300
<b>Sources</b>					
Use of Reserves	(3,041,322)		(1,520,661)	(760,331)	(760,331)
Connection Fees	(273,000)		(136,500)	(68,250)	(68,250)
Interest Income (2%)	(446,331)		(223,165)	(111,583)	(111,583)
Other Revenues	(1,011,977)	(202,395)	(202,395)	(303,593)	(303,593)
Loan Disbursement	(3,372,000)		(1,686,000)	(843,000)	(843,000)
<b>Total:</b>	<b>\$18,640,428</b>	<b>\$1,894,997</b>	<b>\$7,079,562</b>	<b>\$4,832,934</b>	<b>\$4,832,934</b>

#### 4.5 Flow and Strength Revenue Requirement by Class

The table below calculates the unit rates per unit of flow, BOD, and TSS, as well as a unit customer cost. The wastewater rate revenue requirements from the prior table for each functional component are divided by the units related to each function. Revenue requirements for each customer class are then calculated by multiplying the unit rates for customer costs, flow, BOD and TSS from the volume of wastewater flow and loadings and annual bills associated with each class.

**Table 9 –Revenue Requirement by Class**

Allocation Units	Flow (hcf)	BOD (lbs)	TSS (lbs)	Customer Cost (customers)
Demand Units	1,926,550	7,095,684	4,132,386	191,134
Revenue Requirement	\$7,079,562	\$4,832,934	\$4,832,934	\$1,894,997
Unit Rate	\$3.67	\$0.68	\$1.17	\$9.91

Class	Flow (hcf)	BOD (lbs)	TSS (lbs)	Customer Accounts (#)	Revenue Requirement (\$)
<b>Classification A (Residential)</b>					
Single Family	1,024,792	1,919,598	1,919,598	170,292	\$9,006,677
Multi Family / Accessory Dwelling	281,117	526,577	526,577	5,472	2,061,787
<b>Classification B (Commercial &amp; Institutional)</b>					
Low Strength	18,483	25,966	25,966		115,975
Medium Strength	284,855	533,579	533,579		2,034,228
High Strength	47,673	245,571	245,571		629,648
<b>Classification C (Industrial &amp; Other Large Users)</b>					
Flow	269,629				990,816
BOD		3,844,392			2,618,450
TSS			881,093		1,030,462
<b>All Non-Residential Connections</b>				15,370	152,386

## 4.6 Rate Derivation

Rates are derived by dividing the total amount of costs designated rate recovery per customer class by the total number of fixed billing units for such customer class.

**Table 10 – Rate Derivation**

Class	Revenue Requirement	Units	Units	Reallocated FY 2024/25 Rate
	(\$)			(\$ per unit)
<b>Classification A (Residential)</b>				
Single Family	\$9,006,677	14,191	Customers	\$52.89
Multi Family / Accessory Dwelling	2,061,787	4,398	Customers	\$39.07
<b>Classification B (Commercial &amp; Institutional)</b>				
Low Strength	115,975	23,104	hcf	\$5.02
Medium Strength	2,034,228	356,069	hcf	\$5.71
High Strength	629,648	59,591	hcf	\$10.57
<b>Classification C (Industrial &amp; Other Large Users)</b>				
Flow (per million gallons)	990,816	269,629	hcf	\$4,912
BOD (per thousand pounds)	2,618,450	3,844,392	lbs	\$681
TSS (per thousand pounds)	1,030,462	881,093	lbs	\$1,170
<b>Per Non-Residential Connection</b>	152,386			\$9.91

## 4.7 Proposed Wastewater Rates

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

**Table 11 – Proposed Wastewater Rates**

Proposed Rates	Current	Proposed				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
<b>Classification A (Residential) - Fixed Monthly Rate per Unit</b>						
Single Family	\$53.20	\$57.12	\$62.26	\$67.86	\$73.97	\$80.63
Multi Family	37.40	42.19	45.99	50.13	54.64	59.56
Accessory Dwelling	37.40	42.19	45.99	50.13	54.64	59.56
<b>Classification B (Commercial &amp; Institutional) - Volumetric Rates per Hundred Cubic Feet (hcf) of Water Use</b>						
Low Strength	\$4.91	\$5.42	\$5.91	\$6.44	\$7.02	\$7.65
Medium Strength	5.51	6.17	6.73	7.34	8.00	8.72
High Strength	10.03-12.47	11.41	12.44	13.56	14.78	16.11
<b>Classification C (Industrial &amp; Other Large Users) - Volumetric Rates</b>						
Volume, per million gallons of water use	\$4,766	\$5,305	\$5,782	\$6,302	\$6,869	\$7,487
BOD (Biochemical Oxygen Demand), per thousand pounds	659	736	802	874	953	1,039
SS (Suspended Solids), per thousand pounds	1,142	1,263	1,377	1,501	1,636	1,783
<b>Classification B &amp; C - Monthly Fixed Rate per Connection</b>						
Class B & C Connections	\$9.65	\$10.71	\$11.67	\$12.72	\$13.86	\$15.11



## 4.8 Bill Impacts

The following table presents the monthly bill impacts for residential customers under existing rates and the proposed rates.

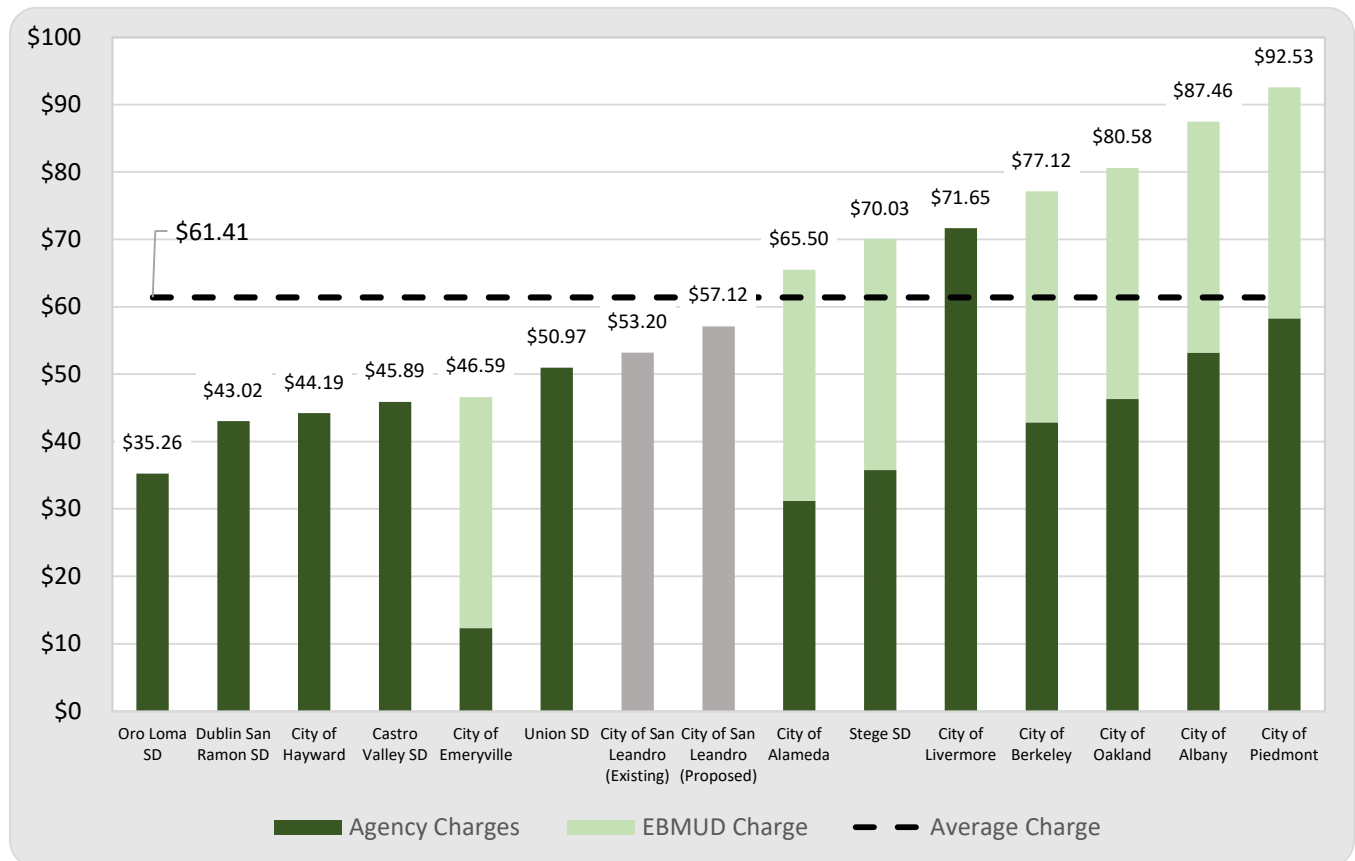
**Table 12 – Residential Bill Impacts**

	<i>Current</i>		<i>Proposed</i>			
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
<b>Monthly Residential (\$/month)</b>						
Single Family	\$53.20	\$57.12	\$62.26	\$67.86	\$73.97	\$80.63
<i>\$ Increase</i>		3.92	5.14	5.60	6.11	6.66
Multi Family / Accessory Dwelling Each Unit	\$37.40	\$42.19	\$45.99	\$50.13	\$54.64	\$59.56
<i>\$ Increase</i>		4.79	3.80	4.14	4.51	4.92

## 4.9 Regional Wastewater Rate Survey

The following charts compare the wastewater monthly bills for a typical single-family home to those of other regional agencies.

**Figure 5 – Residential Wastewater Rate Survey (Average Monthly Residential Water Use 6 CCF)**



# **APPENDIX A**

## **Wastewater Rate Study Tables**

**Appendix A**  
**City of San Leandro**  
**Revenues and Expenses**

Escalation	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
<i>General Inflation</i>		<i>8.00%</i>	<i>3.50%</i>	<i>3.50%</i>	<i>3.50%</i>	<i>3.50%</i>
<i>Interest</i>		<i>2.00%</i>	<i>2.00%</i>	<i>2.00%</i>	<i>2.00%</i>	<i>2.00%</i>
<i>Permit Fees</i>		<i>2.00%</i>	<i>2.00%</i>	<i>2.00%</i>	<i>2.00%</i>	<i>2.00%</i>

Non-Rate Revenues	Escalation	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
		<i>Budgeted</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
Connection Fees		\$273,000	\$273,000	\$273,000	\$273,000	\$273,000	\$273,000
Interest Income (2%)	Interest	446,331	622,392	526,609	351,746	332,093	310,505
Sampling Service Charges		224,822	224,822	224,822	224,822	224,822	224,822
Pretreatment Lab/Permit Fees	Permit Fees	109,000	111,180	113,404	115,672	117,985	120,345
Reimbursements	General Inflation	338,602	365,690	378,489	391,736	405,447	419,637
Other Revenues		59,554	7,990	7,990	7,990	7,990	7,990
Loan Disbursement		3,372,000	-	-	-	-	-
Grants		-	6,700,000	-	-	-	-
<b>Total Non-Rate Revenues</b>		<b>4,823,308</b>	<b>8,305,073</b>	<b>1,524,313</b>	<b>1,364,965</b>	<b>1,361,337</b>	<b>1,356,299</b>

Operating Expenses	Escalation	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
		<i>Budgeted</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
Collections	General Inflation	1,619,907	1,749,499	1,810,732	1,874,108	1,939,701	2,007,591
Operations	General Inflation	10,486,961	11,325,918	11,722,325	12,132,607	12,557,248	12,996,752
Pretreatment	General Inflation	548,520	592,402	613,136	634,596	656,806	679,795
Lift Stations	General Inflation	132,300	142,884	147,885	153,061	158,418	163,963
<b>Total Operating Expenses</b>		<b>12,787,688</b>	<b>13,810,703</b>	<b>14,294,078</b>	<b>14,794,371</b>	<b>15,312,174</b>	<b>15,848,100</b>

**Appendix A**  
**City of San Leandro**  
**Capital Improvement Costs**

Description	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
	<i>Budgeted</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
<b>Capital Costs (Current Dollars)</b>						
Nutrient Alternatives Analysis	\$100,000					
Sidestream Alternatives Analysis		60,000				
Nature Based Nutrient Treatment Wetland	500,000	4,520,000	4,500,000			
Sidestream Implementation					2,500,000	
Concrete Renewal	350,000	300,000	100,000	100,000	100,000	100,000
Influent Pipeline Inspections	40,000					30,000
Demo Old FFR	50,000	2,250,000				
Blower Swing Unit						600,000
Aeration Basin Piping and Concrete Rehabilitation		350,000				
Effluent Pump Station Rehabilitation Pre-design	75,000					
Effluent Pump Station Rehabilitation Design		250,000				
Effluent Pump Station Rehabilitation Construction			2,600,000			
Hypo Tanks and Piping						
Storage Building Rehabilitation	500,000					
Roediger Rotating Drum Thickener Replacement				650,000		
Polymer System Replacements		100,000			100,000	
Belt Press Replacement					1,400,000	
Belt Press Standby Unit						140,000
Solar Biosolids Dryer				2,000,000		
Digester No. 1 and 2 Cleaning		150,000				
Digester No. 1 Assessment	30,000					
Digester No. 1 Cover Rehabilitation			340,000			
Digester No. 1 and 2 Piping Replacement		800,000				
Digester No. 2 Assessment		30,000				
Digester No. 2 Cover Rehabilitation			340,000			
Digester No. 3 Assessment		30,000				
Energy Efficiency and Resiliency Project	3,372,000					

Description	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
	<i>Budgeted</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
Digester No. 4 Cover Rehabilitation	80,000					
Boiler Predesign and Permit Coordination		30,000				
Boiler Replacement			180,000			
Boiler Room Valve Replacements			110,000			
Beneficial Biogas Reuse		65,000				
Valley Service Area Reconnection	50,000					
Broadmore Area Sewer Pipe Rehabilitation -		1,300,000				
Westbay Easement Pipe Rehabilitation			165,200			
Davis St San Sewer Manhole & Pipe Rehab	2,500,000					
SS Replacement	200,000	890,000	2,024,800	2,190,000	2,190,000	2,190,000
Bermuda and Neptune Drainage Area Flow Modeling		60,000				
Wet Weather Flow Monitoring			60,000		60,000	
Cathodic Protection	50,000					
Merced SS Lift Station		1,117,000				
Packaged Lift Station Feasibility Review	15,000					
General Renewal and Replacement	420,000	435,000	470,000	510,000	470,000	450,000
Plant Painting			150,000		150,000	
Electrical Maintenance Building Rehabilitation		90,000				
Sea Rise Adaptation Study			75,000			
CIP Program Management	200,000	200,000	200,000	200,000	200,000	200,000
Budgeted Contingency (10%)	1,053,200	1,502,700	1,331,500	765,000	717,000	521,000
Plant Electrical Breaker Maintenance and Replacements	75,000	75,000	75,000	75,000	75,000	75,000
SCADA and Plant Network	50,000	50,000	50,000	50,000	50,000	50,000
Roof Maintenance/Reroof		35,000	20,000	80,000	20,000	20,000
VFD Replacements - Plant	60,000	60,000	60,000	60,000	60,000	60,000
Instrumentation Replacements	30,000	30,000	30,000	30,000	30,000	30,000
Plant Paving Maintenance	30,000	30,000	30,000	30,000	30,000	30,000
Gate and Valve Replacement	50,000	50,000	50,000	50,000	50,000	50,000
Solar Drying Bed Maintenance	20,000	20,000	20,000	20,000	20,000	20,000
Plant Security	25,000	25,000	25,000	25,000	25,000	25,000
Treatment Wetland Maintenance			30,000	30,000	30,000	30,000
FFR Ongoing Pump Renewal		40,000		40,000		40,000
Hypo Feed Pump - Ongoing Repair/Replacements	20,000		20,000		20,000	

Description	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
	<i>Budgeted</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>	<i>Projected</i>
Chlorine Analyzers Maintenance	20,000	20,000	20,000	20,000	20,000	20,000
Influent Pump Rebuild	40,000		40,000		40,000	
Plant Renewal and Replacement	420,000	435,000	470,000	510,000	470,000	450,000
<b>Total CIP (Current Dollars)</b>	<b>10,425,200</b>	<b>15,399,700</b>	<b>13,586,500</b>	<b>7,435,000</b>	<b>8,827,000</b>	<b>5,131,000</b>
<b>Capital Costs (Inflated Dollars)</b>						
<i>Projected Annual Inflation Rate</i>		3.50%	3.50%	3.50%	3.50%	3.50%
<b>Total CIP (Inflated Dollars)</b>	<b>10,425,200</b>	<b>15,938,690</b>	<b>14,554,198</b>	<b>8,243,317</b>	<b>10,129,186</b>	<b>6,094,018</b>