

# CITY OF ALAMEDA

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*Sewer Rate Study*

*Draft Final Report*

February 2025

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# 1. Executive Summary

The City of Alameda (City) retained NBS to conduct a comprehensive utility rate study for its sewer enterprise fund. The City had several objectives and goals for this study including meeting revenue requirements, reviewing the rising costs of providing services, funding capital improvements, and complying with certain legal requirements (e.g., California Constitution Article XIII D, Section 6, which is commonly referred to as Proposition 218 [Prop 218]). The City’s last rate study was performed in 2019 which means it is appropriate an in-depth review of its current rates and rate design structure to ensure that new rates collect sufficient revenues to meet all financial obligations during the upcoming five-year rate period.

The City’s broader objectives in this study include ensuring adequate funding for operating and capital costs, maintaining reasonable reserves, and ensuring revenue stability in utility rates. The City operates its sewer collection system under a Federal Consent Decree, which also includes EBMUD and other East Bay agencies. The City of Alameda is mandated to replace approximately 2.6 miles of sewer pipeline annually for the remaining term of the Consent Decree, or through 2035. This significant on-going capital cost is a main driver in determining the necessary rate revenue adjustments.

The rates resulting from this study were developed in a manner that is consistent with industry standard cost-of-service principles. As part of this study, NBS projected revenues and expenditures, developed net revenue requirements, performed cost-of-service analyses, and developed the proposed sewer rates for the City. In addition to documenting the rate study methodology, this report is provided with the intent to assist the City in its continuing effort to maintain transparent communications with the residents and community it serves.

In developing new rates for the City’s enterprise funds, NBS worked cooperatively with City staff in selecting the appropriate rate alternatives that address the City’s goals and objectives. Based on input provided by City staff, this report proposes an annual 3% rate revenue adjustment for Fiscal Year 2025/26 through Fiscal Year 2029/30, as shown in the table below. The City Council (Council) has the final decision regarding the adoption of the proposed rates and whether to proceed with the Prop 218 approval process.

## Current vs. Proposed Sewer Rates

Sewer Rate Schedule	Current Rates (\$/EDU)	Proposed Monthly Sewer Rates				
		Year 1	Year 2	Year 3	Year 4	Year 5
		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
<i>Projected Increase in Rate Revenue:</i>		3.00%	3.00%	3.00%	3.00%	3.00%
<b>Customer Class</b>						
Single Family (\$/month)	\$31.22	\$31.95	\$32.91	\$33.90	\$34.92	\$35.97
Multi-Family (\$/month)	\$28.13	\$27.77	\$28.61	\$29.47	\$30.35	\$31.26
Commercial						
Fixed Charge (\$/month) (includes first 730 cubic feet)	\$28.13	\$29.50	\$30.39	\$31.30	\$32.24	\$33.21
Flow-Based Rate (\$ per HCF)	\$3.86	\$4.01	\$4.13	\$4.25	\$4.38	\$4.51

## 2. Introduction

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### 2.1 Purpose

The City of Alameda (City) retained NBS to conduct a comprehensive utility rate study for its sewer enterprise fund. The City had several objectives and goals for this study including meeting revenue requirements, reviewing the rising costs of providing services, funding capital improvements, and complying with certain legal requirements (e.g., California Constitution Article XIII D, Section 6, which is commonly referred to as Proposition 218 [Prop 218]).

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In developing new rates for the City's enterprise funds, NBS worked cooperatively with City staff in selecting the appropriate rate alternatives that address the City's goals and objectives. Based on input provided by City staff, NBS proposes the rates summarized in this report. The City Council (Council) has the final decision regarding the adoption of the proposed rates and whether to proceed with the Prop 218 approval process.

### 2.2 Overview of the Study

Comprehensive rate studies, such as this one, typically include three components: (1) preparation of a financial plan that identifies the net revenue requirements for the utility; (2) analysis of the cost to serve each customer class, and (3) the rate structure design. These steps are shown in Figure 1 and are intended to follow industry standards and reflect the fundamental principles of cost-of-service rate making embodied in the Water Environment Federation's *Financing and Charges for Wastewater Systems* (Manual of Practice No. 27).<sup>1</sup>

Rate studies also address requirements under Prop 218 that rates do not exceed the cost of providing the service and be proportionate to the cost of providing service for all customers. In terms of the chronology of the study, the three steps shown in Figure 1 represent the order in which they were performed in this study.

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<sup>1</sup> *Financing and Charges for Wastewater Systems*, Manual of Practice No. 27, Water Environment Federation, Fourth Edition, 2018.

**Figure 1. Primary Components of a Rate Study**



NBS projected revenues and expenditures, developed net revenue requirements, performed cost-of-service analyses, and developed the proposed sewer rates for the City using this approach. The following sections in this report present an overview of the methodologies, assumptions, and data used along with the financial plans and rates developed. Detailed tables and figures documenting the development of the proposed rates are provided in the Appendix.

The City provided NBS with the data necessary to conduct the study, including historical, current, and projected revenues and expenditures, number of customer accounts, and water consumption data along with other operational and capital cost information.

## FINANCIAL PLAN

As a part of the rate study, NBS projected revenues and expenditures on a cash-flow basis. The amount of required rate revenue that will allow reserves to be maintained at the recommended levels is known as the net revenue requirement. As the current rate revenue falls short of the net revenue requirement, rate adjustments – or more accurately, adjustments in the total revenue collected from rates – are recommended. This report presents an overview of the methodologies, assumptions, and data used along with the financial plan and proposed rates developed in this study.<sup>2</sup>

This financial plan lays the groundwork for the cost-of-service and rate design analyses addressed in the subsequent sections. The following subtasks were completed as part of the financial plan:

- 1. Projected Revenues and Expenditures** – NBS prepared a 10-year rate model that projects revenues, expenses, and the increases in rate revenue needed to meet all obligations. The analysis utilized a cash-based approach when addressing the City's system of accounts. The work provides the City with a financial tool that can easily model rate adjustments, varying operating and maintenance costs, infrastructure improvements, debt issuance, and appropriate reserve fund

<sup>2</sup> The complete financial plans are available in the *Appendices*.

levels. The City’s projected customer growth rates from master plan documents and planned cost inflation factors are also incorporated into the analysis.

2. **Evaluate Reserve Fund Sufficiency** – NBS evaluated the sufficiency of existing reserve funds, target reserve fund levels, reserve fund policies, and other related issues. In this evaluation, NBS considered costs for operations, maintenance, capital, and debt while balancing the need for rate stabilization. NBS has provided recommendations for reserve fund targets that are tailored to the City’s specific needs.
3. **Review Capital Improvement Program Funding** – NBS has incorporated the City’s plans for new facilities and infrastructure improvements into the financial plan. NBS has evaluated the timing, costs, and available reserves needed to fund the identified capital projects. NBS has worked closely with City staff to develop a well-conceived approach to funding these priority capital improvement needs. The proposed solution includes an appropriate balance between rate funded projects and the use of the City’s capital rehabilitation and replacement reserve funds.

## **COST-OF-SERVICE ANALYSIS**

The basic purpose of the cost-of-service analysis (COSA) is to fairly and equitably allocate costs to customer classes. The cost-of-service analysis consists of two major components: (1) the classification of expenses, and (2) the allocation of costs to customer classes.

Using the net revenue requirements developed in the financial plan, NBS then worked to equitably allocate costs to each customer class based on cost-of-service principles that comply with Prop 218. NBS reviewed the City’s existing customer classes for the sewer utility and analyzed the historical usage and billing characteristics to determine if any changes should be made in order to provide more equity among user classes or comply with industry standards.

For the City of Alameda, this exercise required NBS to compare estimated flows for customers based on their wintertime water consumption (the typical proxy for sewer flows). Additionally, NBS evaluated how costs should be allocated to various cost components and types of customers. With the City’s customer billing data, NBS developed the customer usage statistics, or allocation factors, that were used to assign costs to each customer class. The main components of the cost-of-service analysis are as follows:

1. **Functionalization/Classification of Expenses** – Functionalizing the expenses means arranging costs into basic categories, such as fixed collection costs, costs based on the amount of effluent volume, as well as administrative and overhead costs. Once the costs have been functionalized, they are then classified into their various cost components (i.e., volume, fixed capacity, or customer-related costs).
2. **Development of Customer Usage Statistics** – NBS developed the customer usage statistics, or allocation factors, that are used to assign costs to each customer class. The allocation considered the City’s collection system and industry standard customer classification data. The factors that were developed include:
  - Volume Allocation Factor – Develop estimates of the total annual volume of sewer collected for each customer class.

- Capacity Allocation Factor – Fixed expenses that do not necessarily fluctuate based on flow or strength concentrations.
- Customer Allocation Factor – Based on the number of customers by customer class in the City’s service area.

**3. Allocation of Costs to Customer Classes** – NBS then apportioned these costs to individual customer classes based on allocation factors specific to each cost classification, producing fixed and variable revenue requirements for each customer class. These allocations are used for the actual rate calculations.

Further details are discussed below and documented in the *Appendix*.

## RATE DESIGN ANALYSIS

During the rate design phase of the study, NBS and City staff worked together to develop rate alternatives that will meet the City’s objectives. It is important for the City to send proper price signals to its customers about the actual cost of providing service. This objective is typically addressed through both the magnitude of the rate adjustments and the rate structure design. In other words, both the amount of revenue collected and the way in which the revenue is collected from customers are important.

Several criteria are typically considered in setting rates and developing sound rate structures. The fundamentals of this process have been well documented in several rate-setting manuals, such as AWWA’s Manual M1. The foundation for evaluating rate structures is generally credited to James C. Bonbright in *Principles of Public Utility Rates*,<sup>3</sup> which outlines pricing policies, theories, and economic concepts along with various rate designs. The following is a simplified list of the attributes of a sound rate structure:

- Rates should be easy to understand from the customer’s perspective.
- Rates should be easy to administer from the utility’s perspective.
- Rates should be equitable and non-discriminating (i.e., cost-based).
- Rates should promote the efficient allocation of the resource.
- There should be continuity in the rate making philosophy over time.
- Rates should address other utility policies (e.g., conservation and economic development).
- Rates should provide month-to-month and year-to-year revenue stability.

## KEY FINANCIAL ASSUMPTIONS

The following is a summary of the key financial assumptions used in the analysis. The following capital and operational fund targets reflect input from City staff to meet specific utility objectives.

**Funding of Capital Projects** – The capital improvement costs will be funded with a combination of cash in reserves and the additional revenue generated from the proposed rate increases. The capital projects listed

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<sup>3</sup> James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, *Principles of Public Utility Rates*, Arlington, VA: Public Utilities Report, Inc., Second Edition, 1988, pp. 383-384.



in the financial plan are from the City’s Capital Improvement Program. Further details of the sewer capital projects included in the rate study are included in Appendix Tables 7-11. The analysis assumes:

- Only capital costs attributable to existing customers are funded using rate revenue.
- Only capital costs attributable to growth are funded by revenue from the impact fee reserves.

**Reserve Targets** – For the sewer utility, the City maintains reserves for operations, capital, and other specific needs. The details of the utility’s reserve targets are covered in their respective sections of this report.

**Inflation and Growth Projections** – Assumptions were made in the analysis regarding cost inflation to project future revenues and expenses for the study period. The following inflation factors were used in the analysis:

- Customer growth is estimated at 2.20% annually.<sup>4</sup>
- General cost inflation is estimated at 3.56% annually.<sup>5</sup>
- Labor cost inflation is estimated at 4.50% annually.<sup>6</sup>
- Construction cost inflation is estimated at 3.45% annually.<sup>7</sup>

These inflation factors are based on long-term trends; therefore, the City should re-examine these factors in another year to assess the impacts on utility costs and whether projected rate increases will be sufficient for the remainder of the rate adoption period.

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<sup>4</sup> Customer growth is estimated based on the City of Alameda 2023-2031 Housing Element.

<sup>5</sup> General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.

<sup>6</sup> Labor cost inflation is estimated based on maximum salary adjustment in Memorandum of Understanding between City of Alameda and Alameda City Employees Association for July 1, 2022 through June 30, 2025.

<sup>7</sup> Construction cost Inflation is the 5-year average change in the Construction Cost Index for 2020-2024. Source: Engineering News Record website (<http://enr.construction.com>).

## 3. Sewer Rate Study

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### 3.1 Key Sewer Rate Study Issues

The City owns and operates approximately 135 miles of sewer main and 46 pump stations and conveys its wastewater to the treatment plant owned and operated by East Bay Municipal Utility District (EBMUD) treatment plant. The City's last rate study was performed in 2019 which means it is appropriate an in-depth review of its current rates and rate design structure to ensure that new rates collect sufficient revenues to meet all financial obligations during the upcoming five-year rate period. NBS has worked closely with City staff to determine the rate design that best meets the City's financial objectives while minimizing the fiscal impact on customers.

Other City objectives that were incorporated in this sewer study analysis and rate design include:

- Ensuring equity among customer classes by collecting rate revenue through the cost-of-service process based on both fixed monthly charges and volumetric rates.
- Maintain adequate reserve levels to ensure continuity in operations.
- Ensure adequate funding for the utility's capital projects, due to the level of capital investment planned over both the upcoming five-year period as well as the upcoming ten-year horizon.
- Comply with Prop 218 requirements to ensure costs are properly allocated between user classifications.
- Creating a rate model that City staff can modify in response to changing conditions and assumptions and accommodate updates of customer data and consumption patterns.

### 3.2 Financial Plan

It is important for the sewer utility to ensure rates provide sufficient funding to cover operating and maintenance costs, planned capital expenditures, and maintain reasonable reserves. The City operates its sewer collection system under a Federal Consent Decree, which also includes EBMUD and other East Bay agencies. The City of Alameda is mandated to replace approximately 2.6 miles of sewer pipeline annually for the remaining term of the Consent Decree, or through 2035. This significant on-going capital cost is a main driver in determining the necessary rate revenue adjustments. The sewer utility's rate revenue adjustments are governed by these needs, and the current state of the City's sewer utility is as follows:

**Meeting Net Revenue Requirements:** For FY 2025/26 through FY 2029/30, the projected net revenue requirements (that is, total operating expenses plus rate-funded capital costs less non-rate revenues) for the City increases from approximately \$11.0 million to \$16.1 million annually. Annual rate revenue adjustments are recommended for the utility to keep pace with the projected increases in operating and maintenance expenses so that projected expenses do not outpace projected revenues.

**Maintaining Reserve Funds:** Reserve funds provide a basis for a utility to cope with fiscal emergencies such as revenue shortfalls, asset failure, and natural disasters, among other events. Reserve policies provide guidelines for sound financial management, with an overall long-range perspective to maintain financial solvency and mitigate financial risks associated with revenue instability, volatile capital costs, and

emergencies. The reserve funds for the sewer utility are considered unrestricted reserves and consist of the following:

- **Operating Reserve:** The target ending fund balance for the operating reserve is equal to 60% of annual operating expenses, or approximately \$2.4 million in FY 2024/25. An operating reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures. Fluctuations in revenue can be caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (such as volumetric charges), and – particularly in periods of economic distress – changes or trends in age of receivables.
- **Capital Rehabilitation & Replacement Reserve** equal to one year of the annual expenses of the pipeline replacement program, which is approximately \$9.8 million in FY 2024/25. This reserve is set aside to address long-term capital system replacement and rehabilitation needs.
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**Maintaining Adequate Bond Coverage:** The City is required by the rate covenants to maintain a minimum debt service coverage ratio of 1.25. The benefit of maintaining a coverage ratio higher than 1.25 is that it strengthens the City’s credit rating which helps lower interest rates for debt-funded capital projects and can reduce annual debt service payments.

The recommended rate revenue increases are 3% annual rate revenue increases in FY 2025/26 through FY 2029/30. Based on the current ten-year cash flow projection, a 4% annual rate revenue increase over the next 5 years ensures adequate revenue to comply with the Consent Decree, meet debt coverage and reserve requirements and avoid a rate spike in the future. However, a 3% annual rate revenue increase nearly accomplishes these objectives and is less impactful to ratepayers. A 2% annual rate revenue increase does not keep pace with inflation and by FY 2029/30, projected expenses will outpace revenue and the fund balance begins to dip below minimum reserve target. Based on the above alternatives analysis, staff recommend an annual 3% rate revenue increase for FY 2025/26 through FY 2029/30.

**Figure 2** summarizes the sources and uses of funds, net revenue requirements, and the recommended annual increases in sewer rate revenue proposed for the next five years. **Figure 3** summarizes the projected reserve fund balances and reserve targets for the sewer utility’s unrestricted funds.

**Figure 2. Summary of Sewer Revenue Requirements**

RATE REVENUE REQUIREMENTS SUMMARY <sup>1</sup>	Budget	5-Year Projected Rate Period				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
<b>Sources of Sewer Funds<sup>1</sup></b>						
Operating Assessments	\$ 12,298,382	\$ 12,568,946	\$ 12,845,463	\$ 13,128,063	\$ 13,416,881	\$ 13,712,052
Sewer Service Fee	500,000	511,000	522,242	533,731	545,473	557,474
<b>Total Sources of Funds:</b>	<b>\$ 12,798,382</b>	<b>\$ 13,079,946</b>	<b>\$ 13,367,705</b>	<b>\$ 13,661,795</b>	<b>\$ 13,962,354</b>	<b>\$ 14,269,526</b>
<b>Uses of Sewer Funds<sup>1</sup></b>						
<i>Operating Expenses:</i>						
Salaries and Benefits	\$ 1,312,598	\$ 1,371,665	\$ 1,433,390	\$ 1,497,892	\$ 1,565,298	\$ 1,635,736
General Operating	628,400	650,771	673,938	697,931	722,777	748,508
Fees and PILOT	1,023,000	1,045,506	1,068,507	1,092,014	1,116,039	1,140,591
Water and Electricity	100,400	102,609	104,866	107,173	109,531	111,941
Cost Allocation	667,787	691,474	716,057	741,571	768,053	795,542
Equipment Replacement	218,217	225,745	233,534	241,591	249,925	258,548
Subtotal: Operating Expenses	\$ 3,950,402	\$ 4,087,771	\$ 4,230,293	\$ 4,378,173	\$ 4,531,623	\$ 4,690,866
<i>Other Expenditures:</i>						
Existing Debt Service	\$ 766,919	\$ 765,219	\$ 766,494	\$ 767,319	\$ 763,381	\$ 764,700
Future Debt Service	-	-	-	-	-	-
Rate-Funded Capital Expenses	10,654,453	6,664,288	7,608,699	9,080,661	10,341,641	11,217,657
Subtotal: Other Expenditures	\$ 11,421,372	\$ 7,429,507	\$ 8,375,193	\$ 9,847,980	\$ 11,105,022	\$ 11,982,357
<b>Total Uses of Sewer Funds:</b>	<b>\$ 15,371,774</b>	<b>\$ 11,517,277</b>	<b>\$ 12,605,485</b>	<b>\$ 14,226,152</b>	<b>\$ 15,636,645</b>	<b>\$ 16,673,223</b>
plus: Revenue from Rate Increases <sup>3</sup>	-	392,398	814,093	1,266,817	1,752,398	2,272,766
<b>Annual Surplus/(Deficit)</b>	<b>\$ (2,573,392)</b>	<b>\$ 1,955,068</b>	<b>\$ 1,576,313</b>	<b>\$ 702,460</b>	<b>\$ 78,107</b>	<b>\$ (130,932)</b>
<b>Net Revenue Req't. (Total Uses less Non-Rate Revenue)</b>	<b>\$ 14,871,774</b>	<b>\$ 11,006,277</b>	<b>\$ 12,083,243</b>	<b>\$ 13,692,421</b>	<b>\$ 15,091,172</b>	<b>\$ 16,115,749</b>
<b>Total Rate Revenue After Rate Increases</b>	<b>\$ 12,798,382</b>	<b>\$ 13,472,345</b>	<b>\$ 14,181,798</b>	<b>\$ 14,928,612</b>	<b>\$ 15,714,753</b>	<b>\$ 16,542,292</b>
<b>Projected Annual Rate Revenue Increase</b>	<b>0.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>
<b>Cumulative Increase from Annual Revenue Increases</b>	<b>0.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>6.09%</b>	<b>9.27%</b>	<b>12.55%</b>
<b>Debt Coverage After Rate Increase</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>13.75</b>	<b>14.65</b>	<b>15.50</b>

- Revenue and expenses for FY 2024/25 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 5. Source files: 1a. YTD\_Budget\_Report\_FY2425
- Interest earnings are calculated based on historical LAIF returns. Source file: *Inflation Factors\_03-18-24.xlsx*.
- Revenue from rate increases assumes an implementation date of July 1, 2025 for new rates. For each year thereafter, the assumption is that new rates will be implemented on July 1st of each year.

**Figure 3. Summary of Sewer Reserve Funds**

SUMMARY OF CASH ACTIVITY	Budget	5-Year Projected Rate Period				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
<b>Total Beginning Cash<sup>1</sup></b>	<b>\$ 18,094,386</b>					
<b>Unrestricted Reserves:</b>						
<i>Operating Reserve</i>						
Beginning Reserve Balance	\$ 18,094,386	\$ 2,692,080	\$ 2,500,919	\$ 2,582,516	\$ 2,672,969	\$ 2,766,579
Plus: Net Cash Flow (After Rate Increases)	(2,573,392)	1,955,068	1,576,313	702,460	78,107	(130,932)
Plus: Transfer of Debt Reserve Surplus	-	-	-	-	-	-
Plus: Interest Earnings	322,080	47,919	44,516	45,969	47,579	49,245
Less: Transfer Out to Capital Replacement Reserve	(13,150,994)	(2,194,148)	(1,539,232)	(657,976)	(32,076)	-
<b>Ending Operating Reserve Balance</b>	<b>\$ 2,692,080</b>	<b>\$ 2,500,919</b>	<b>\$ 2,582,516</b>	<b>\$ 2,672,969</b>	<b>\$ 2,766,579</b>	<b>\$ 2,684,892</b>
<b>Target Ending Balance (60% of O&amp;M)<sup>2</sup></b>	<b>\$ 2,370,000</b>	<b>\$ 2,453,000</b>	<b>\$ 2,538,000</b>	<b>\$ 2,627,000</b>	<b>\$ 2,719,000</b>	<b>\$ 2,815,000</b>
<i>Capital Reserve</i>						
Beginning Reserve Balance	\$ -	\$ 13,150,994	\$ 12,555,990	\$ 12,239,891	\$ 11,714,471	\$ 11,453,151
Plus: Grant Proceeds	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	13,150,994	2,194,148	1,539,232	657,976	32,076	-
Plus: Interest Earnings	-	234,088	223,497	217,870	208,518	203,866
Less: Use of Reserves for Capital Projects	-	(3,023,239)	(2,078,828)	(1,401,267)	(501,914)	-
<b>Ending Capital Reserve Balance</b>	<b>\$ 13,150,994</b>	<b>\$ 12,555,990</b>	<b>\$ 12,239,891</b>	<b>\$ 11,714,471</b>	<b>\$ 11,453,151</b>	<b>\$ 11,657,017</b>
<b>Target Ending Balance (1 Year Pipe Replacement)<sup>3</sup></b>	<b>\$ 9,790,000</b>	<b>\$ 10,127,755</b>	<b>\$ 10,477,163</b>	<b>\$ 10,838,625</b>	<b>\$ 11,212,557</b>	<b>\$ 11,599,390</b>
<b>Ending Balance - Excl. Restricted Reserves</b>	<b>\$ 15,843,074</b>	<b>\$ 15,056,909</b>	<b>\$ 14,822,408</b>	<b>\$ 14,387,440</b>	<b>\$ 14,219,730</b>	<b>\$ 14,341,909</b>
<b>Min. Target Ending Balance - Excl. Restricted Reserves</b>	<b>\$ 12,160,000</b>	<b>\$ 12,580,755</b>	<b>\$ 13,015,163</b>	<b>\$ 13,465,625</b>	<b>\$ 13,931,557</b>	<b>\$ 14,414,390</b>
<b>Ending Surplus/(Deficit) Compared to Reserve Targets</b>	<b>\$ 3,683,074</b>	<b>\$ 2,476,154</b>	<b>\$ 1,807,245</b>	<b>\$ 921,815</b>	<b>\$ 288,172</b>	<b>\$ (72,481)</b>
<b>Annual Interest Earnings Rate<sup>4</sup></b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>

- Beginning cash balances provided by City staff for Fund 501. Source files: Item 1 - Fund 501 Cash Balance - Trial Balance.
- The target ending balance is set equal to 60% of O&M expenses.
- The target ending balance is set equal to 1 year of pipe replacement projects. See *Exhibit 2 (CIP)* for details.
- Historical interest earning rates are per the average annual yields for funds invested in LAIF (2020-2024). The source is the California State Treasurer's website: <https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp>.

A more detailed version of the utility’s proposed five-year financial plan is included in *Appendix A*. The appendix tables include detailed information on revenue requirements and proposed rate increases (Table 1), reserve funds (Tables 2 and 3), revenue sources and expenses (Tables 4-6) and the City’s capital improvement program (Tables 7-11).

### 3.3 Cost-of-Service Analysis

Once the net revenue requirements are determined, the cost-of-service analysis (COSA) proportionately distributes the revenue requirements to each of the customer classes. The COSA consists of the classification of expenses and then the allocation of those expenses to customer classes based on allocation factors, such as water consumption and number of equivalent dwelling units (EDUs), or accounts. Ultimately, the COSA is intended to result in rates that are proportional to the cost of providing service to each customer class.

Budgeted costs that were developed in the financial plan were classified into the following categories to develop the basis for allocating costs to various customer classes in this analysis:

- **Flow Costs (“Volume”)** – Flow based costs are primarily related to the collection and distribution systems, which gather effluent from customers and transports it to the EBMUD treatment facilities.
- **Fixed Capacity Costs (“Account Services”)** – Fixed expenses that do not necessarily fluctuate based on flow or strength concentrations.
- **Customer Related Costs (“Customer”)** – Customer based costs are related to the billing of customers (such as mailing and staff time committed to customer service).

#### CUSTOMER CLASSES AND ALLOCATION FACTORS

Customer classes are determined by combining customers with similar demand characteristics and types of use into categories that reflect the cost differentials to serve each type of customer. The most recent water consumption data was the basis for estimating the amount of flow that each customer class sends to the EBMUD treatment plant.

**Figure 4** shows the development of the flow/volume allocation factors by customer class. Winter water usage was utilized as the basis for determining the estimated wastewater flow to the treatment plant. In developing the flow/volume allocations, a mass balance was conducted to determine the relative contributions of each customer class to the City’s effluent flows received at the wastewater treatment plant. Further details on the mass balance are contained in Appendix Table 22.

**Figure 4. Development of the Flow Allocation Factor**

Development of the FLOW ESTIMATES TO TREATMENT PLANT <sup>1</sup>				
Customer Class	Number of Accounts	Number of Units	Estimated Annual Volume (HCF) <sup>2</sup>	Percentage of Estimated Annual Volume
Single Family	14,166	14,166	1,240,942	37.3%
Multi-Family	5,396	18,839	1,650,296	49.6%
Commercial	2,808	4,998	437,862	13.2%
<b>Total:</b>	<b>22,370</b>	<b>38,003</b>	<b>3,329,100</b>	<b>100.0%</b>

1. Customer data provided by City Staff.
2. Estimated sewer flow based on average winter consumption for residential customers. Commercial customers are based on annual consumption.

**Figure 5** summarizes the development of the fixed capacity and customer services allocation factors by customer class. The fixed capacity percentages were used to allocate fixed capacity-related costs based on the number of equivalent dwelling units (EDU's) in each customer class. The customer services percentages are allocated based on the number of accounts in each customer class. Further details on the development of the fixed capacity and customers services allocation factors are found in Appendix Table 23.

**Figure 5. Development of the Fixed Capacity and Customer Allocation Factors**

Development of the Allocation Factors						
	Number of Accounts	CUSTOMER Allocation Factors % of Total Accounts	Number of EDU Billing Units	CAPACITY Allocation Factors (% of Total EDUs)	Estimated Annual Flow (HCF)	VOLUME Allocation Factor (% of Estimated Flow)
Single Family	14,166	63.3%	14,166	37.3%	1,240,942	37.3%
Multi-Family	5,396	24.1%	18,839	49.6%	1,650,296	49.6%
Commercial	2,808	12.6%	4,998	13.2%	437,862	13.2%
<b>Total:</b>	<b>22,370</b>	<b>100.0%</b>	<b>38,003</b>	<b>100.0%</b>	<b>3,329,100</b>	<b>100.0%</b>

1. Customer data provided by City Staff. Source file: 2023-24 Sewer Charge Levy Data

**Figure 6** summarizes the development of the account services allocation factor.

## CLASSIFICATION AND ALLOCATION OF COSTS

As previously noted, costs are classified into the following three categories: (1) flow-related costs, (2) fixed capacity related costs and (3) customer services-related costs. The City's budgeted costs were allocated to these three categories which serve as the basis for calculating the fixed and variable charges. Tables 18-21 in the *Appendix* show how the City's expenses were classified and allocated to these cost-causation components.

**Figure 6** summarizes the allocation of the net revenue requirements to each cost causation component for the proposed rates based on the cost-of-service analysis. Additional details on allocation of revenue requirements by customer class are found in Appendix Table 25.

**Figure 6. Allocation of Revenue Requirements by Customer Class based on COSA**

Customer Class	Cost Classification Components			Cost-of-Service Net Revenue Req'ts.	% of COS Net Revenue Req'ts.
	Volume	Capacity	Customer Related		
<b>Net Revenue Requirements<sup>1</sup></b>	<b>\$ 5,164,019</b>	<b>\$ 6,736,172</b>	<b>\$ 1,572,154</b>	<b>\$ 13,472,345</b>	<b>--</b>
	38.3%	50.0%	11.7%	100.0%	
Single Family	\$ 1,924,918	\$ 2,510,948	\$ 995,580	\$ 5,431,446	40.3%
Multi-Family	\$ 2,559,900	\$ 3,339,245	\$ 379,228	\$ 6,278,373	46.6%
Commercial	\$ 679,201	\$ 885,979	\$ 197,345	\$ 1,762,525	13.1%
<b>Total:</b>	<b>\$ 5,164,019</b>	<b>\$ 6,736,172</b>	<b>\$ 1,572,154</b>	<b>\$ 13,472,345</b>	<b>100%</b>

1. The revenue requirement for each customer class is determined by multiplying the revenue requirement from each cost classification by the allocation factors for each customer class.

The existing rates for each customer class will be adjusted in accordance with the proportional share of each customer class to the total net revenue requirements of the sewer utility in order to meet the legal requirements set forth in Prop 218 under California law. The proposed rates will need to be designed to capture the cost-of-service from each customer class in order to accurately reflect the cost-of-service net revenue requirements as calculated in Figure 6 above.

### 3.4 Rate Design Analysis

During this rate study, NBS discussed with City staff various rate alternatives that collected revenue differently from fixed vs. variable charges. Ultimately, the rate alternative selected by City staff is one similar to the existing rate design. The reasons for selecting this alternative are (1) it generally maintains the existing customer classes while simplifying the billing structure (2) it provides continuity for sewer customers, and (3) it is easy to understand from a customer's perspective and easy to administrate from City staff's perspective.

#### FIXED CHARGES AND VARIABLE CHARGES

The fixed charge recognizes that the sewer utility incurs fixed costs regardless of whether customers send any sewer into the City's collection system. There are three factors used to develop the fixed charge: 1) the number of dwelling units for residential customers, 2) the number of accounts for non-residential customers, and 3) the annual revenue requirement.

The monthly fixed charge is calculated by taking 100% of total revenue requirements for residential customer classes and dividing by the number of accounts (for single-family) and by the number of dwelling units (for multi-family).

Non-residential monthly fixed charges are based on the directly allocated program costs divided by the number of accounts in the seven non-residential categorical customer classes. The monthly fixed charge for non-residential customers includes the first 730 cubic feet of effluent. The variable charges are calculated by dividing 100% of the annual net revenue requirements by the annual consumption (per CCF) for the customer class

### 3.5 Proposed Sewer Rates

Figure 7 compares the current and proposed rates for FY 2025/26 through FY 2029/30 by customer class. While proposed rates in the first year (FY 2025/26) reflect the cost-of-service realignment that often occurs when rates have not been updated for several years, the projected rates for future years are strictly tied to annual rate increase in an “across-the-board” adjustment. As mentioned throughout the Study report, more detailed tables on the development of the proposed rates are documented in the *Appendix*.

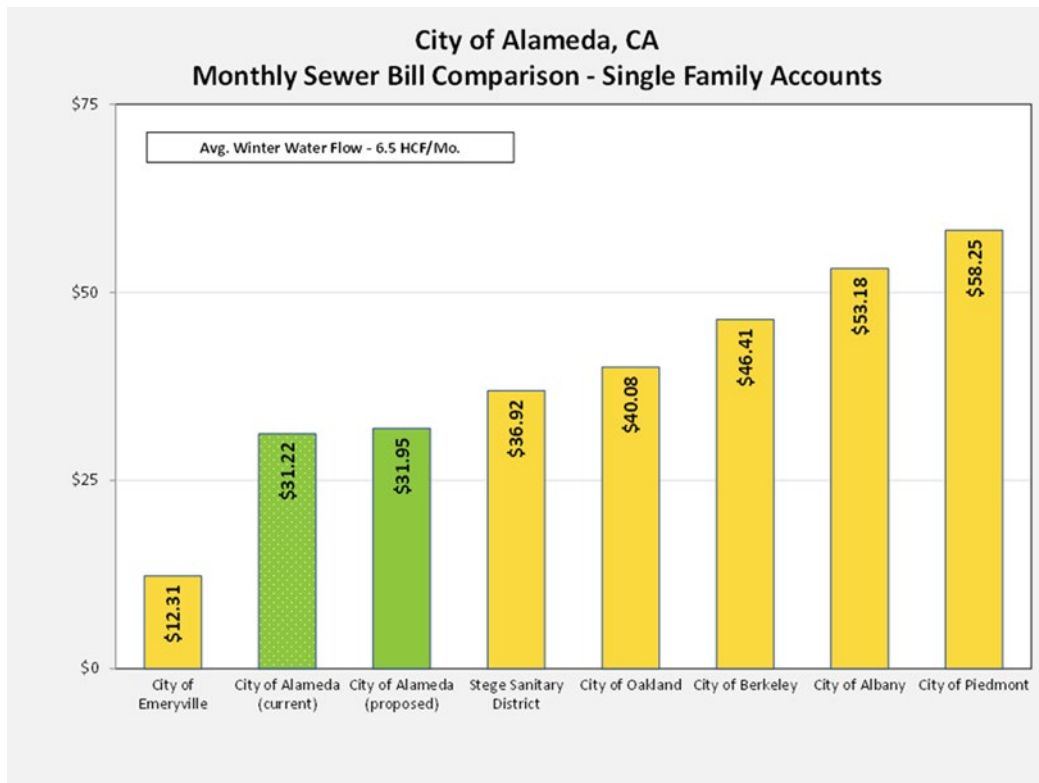
**Figure 7. Current vs. Proposed Sewer Rates**

Sewer Rate Schedule	Current Rates (\$/EDU)	Proposed Monthly Sewer Rates				
		Year 1	Year 2	Year 3	Year 4	Year 5
		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
Projected Increase in Rate Revenue:		3.00%	3.00%	3.00%	3.00%	3.00%
Customer Class						
Single Family (\$/month)	\$31.22	\$31.95	\$32.91	\$33.90	\$34.92	\$35.97
Multi-Family (\$/month)	\$28.13	\$27.77	\$28.61	\$29.47	\$30.35	\$31.26
Commercial						
Fixed Charge (\$/month) (includes first 730 cubic feet)	\$28.13	\$29.50	\$30.39	\$31.30	\$32.24	\$33.21
Flow-Based Rate (\$ per HCF)	\$3.86	\$4.01	\$4.13	\$4.25	\$4.38	\$4.51

### 3.6 Comparison of Current and Proposed Sewer Bills

Figure 8 presents a comparison of residential sewer rates for EBMUD satellite sanitation agencies. These bill comparisons are calculated at typical levels of consumption.

**Figure 8. Regional Monthly Sewer Bill Comparison – Single Family Customers**





## 4. Recommendations and Next Steps

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### 4.1 Consultant Recommendations

NBS recommends the City take the following actions:

- **Receive this Study:** NBS recommends the City Council formally receive this Study and its recommendations and proceed with the next steps outlined below to implement the proposed rates in accordance with Prop 218 procedural requirements. This will provide documentation of the rate study analyses and the basis for analyzing potential changes to future rates.
- **Implement Recommended Levels of Rate Increases and Proposed Rates:** Based on successfully meeting the Prop 218 procedural requirements, the City should proceed with implementing the 5-year schedule of proposed rates and rate increases previously shown in **Figure 7**. This will help ensure the continued financial health of City's utilities.
- **Adopt Reserve Fund Targets:** NBS recommends the City Council adopt the consultant-proposed reserve fund targets described in this study. The City should periodically evaluate reserve fund levels and attempt to maintain the recommended levels for the Operating and Capital Rehabilitation and Replacement reserve funds.

### 4.2 Next steps

**Annually Review Rates and Revenue** – Any time an agency adopts new utility rates or rate structures, those new rates should be closely monitored over the next several years to ensure the revenue generated is sufficient to meet the annual revenue requirements. Changing economic and water consumption patterns underscore the need for this review, as well as potential and unseen changing revenue requirements — particularly those related to environmental regulations that can significantly affect capital improvements and repair and replacement costs.

*Note: The attached Technical Appendices provide more detailed information on the analysis of the financial plan, revenue requirements, cost-of-service, and the rate design analyses that have been summarized in this report.*

### 4.3 NBS' Principal Assumptions and Considerations

In preparing this report and the opinions and recommendations included herein, NBS has relied on several principal assumptions and considerations regarding financial matters, conditions, and events that may occur in the future. This information and these assumptions, including the City's budgets, capital improvement costs, customer accounts and consumption, and information from City staff were provided by sources we believe to be reliable, although NBS has not independently verified this data.

While we believe NBS' use of such information and assumptions is reasonable for the purpose of this report and its recommendations, some assumptions will invariably not materialize as stated herein and may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others.

# Technical Appendices

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These Appendices contain:

- Appendix: Sewer Rate Study Tables and Figures

# Appendix. Sewer Rate Study Tables and Figures

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Financial Plan and Reserve Projections

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

TABLE 1: FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY <sup>1</sup>	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
<b>Sources of Sewer Funds<sup>1</sup></b>											
Operating Assessments	\$ 12,298,382	\$ 12,568,946	\$ 12,845,463	\$ 13,128,063	\$ 13,416,881	\$ 13,712,052	\$ 14,013,717	\$ 14,322,019	\$ 14,637,104	\$ 14,959,120	\$ 15,288,220
Sewer Service Fee	500,000	511,000	522,242	533,731	545,473	557,474	569,738	582,272	595,082	608,174	621,554
<b>Total Sources of Funds:</b>	<b>\$ 12,798,382</b>	<b>\$ 13,079,946</b>	<b>\$ 13,367,705</b>	<b>\$ 13,661,795</b>	<b>\$ 13,962,354</b>	<b>\$ 14,269,526</b>	<b>\$ 14,583,456</b>	<b>\$ 14,904,292</b>	<b>\$ 15,232,186</b>	<b>\$ 15,567,294</b>	<b>\$ 15,909,775</b>
<b>Uses of Sewer Funds<sup>1</sup></b>											
<i>Operating Expenses :</i>											
Salaries and Benefits	\$ 1,312,598	\$ 1,371,665	\$ 1,433,390	\$ 1,497,892	\$ 1,565,298	\$ 1,635,736	\$ 1,709,344	\$ 1,786,265	\$ 1,866,646	\$ 1,950,646	\$ 2,038,425
General Operating	628,400	650,771	673,938	697,931	722,777	748,508	775,155	802,750	831,328	860,923	891,572
Fees and PILOT	1,023,000	1,045,506	1,068,507	1,092,014	1,116,039	1,140,591	1,165,684	1,191,330	1,217,539	1,244,325	1,271,700
Water and Electricity	100,400	102,609	104,866	107,173	109,531	111,941	114,403	116,920	119,493	122,121	124,808
Cost Allocation	667,787	691,474	716,057	741,571	768,053	795,542	824,078	853,701	884,457	916,390	949,546
Equipment Replacement	218,217	225,745	233,534	241,591	249,925	258,548	267,468	276,695	286,241	296,117	306,333
Subtotal: Operating Expenses	\$ 3,950,402	\$ 4,087,771	\$ 4,230,293	\$ 4,378,173	\$ 4,531,623	\$ 4,690,866	\$ 4,856,132	\$ 5,027,662	\$ 5,205,704	\$ 5,390,522	\$ 5,582,384
<i>Other Expenditures:</i>											
Existing Debt Service	\$ 766,919	\$ 765,219	\$ 766,494	\$ 767,319	\$ 763,381	\$ 764,700	\$ 764,956	\$ 764,131	\$ 762,856	\$ 766,056	\$ 763,731
Future Debt Service	-	-	-	-	-	-	-	-	-	-	-
Rate-Funded Capital Expenses	10,654,453	6,664,288	7,608,699	9,080,661	10,341,641	11,217,657	11,604,666	12,005,027	12,419,201	12,543,289	11,951,798
Subtotal: Other Expenditures	\$ 11,421,372	\$ 7,429,507	\$ 8,375,193	\$ 9,847,980	\$ 11,105,022	\$ 11,982,357	\$ 12,369,622	\$ 12,769,158	\$ 13,182,057	\$ 13,309,345	\$ 12,715,529
<b>Total Uses of Sewer Funds:</b>	<b>\$ 15,371,774</b>	<b>\$ 11,517,277</b>	<b>\$ 12,605,485</b>	<b>\$ 14,226,152</b>	<b>\$ 15,636,645</b>	<b>\$ 16,673,223</b>	<b>\$ 17,225,754</b>	<b>\$ 17,796,820</b>	<b>\$ 18,387,762</b>	<b>\$ 18,699,867</b>	<b>\$ 18,297,913</b>
plus: Revenue from Rate Increases <sup>3</sup>	-	392,398	814,093	1,266,817	1,752,398	2,272,766	2,829,953	3,426,107	4,063,492	4,744,494	5,471,632
<b>Annual Surplus/(Deficit)</b>	<b>\$ (2,573,392)</b>	<b>\$ 1,955,068</b>	<b>\$ 1,576,313</b>	<b>\$ 702,460</b>	<b>\$ 78,107</b>	<b>\$ (130,932)</b>	<b>\$ 187,654</b>	<b>\$ 533,579</b>	<b>\$ 907,916</b>	<b>\$ 1,611,921</b>	<b>\$ 3,083,493</b>
<b>Net Revenue Req't. (Total Uses less Non-Rate Revenue)</b>	<b>\$ 14,871,774</b>	<b>\$ 11,006,277</b>	<b>\$ 12,083,243</b>	<b>\$ 13,692,421</b>	<b>\$ 15,091,172</b>	<b>\$ 16,115,749</b>	<b>\$ 16,656,016</b>	<b>\$ 17,214,547</b>	<b>\$ 17,792,679</b>	<b>\$ 18,091,692</b>	<b>\$ 17,676,359</b>
<b>Total Rate Revenue After Rate Increases</b>	<b>\$ 12,798,382</b>	<b>\$ 13,472,345</b>	<b>\$ 14,181,798</b>	<b>\$ 14,928,612</b>	<b>\$ 15,714,753</b>	<b>\$ 16,542,292</b>	<b>\$ 17,413,409</b>	<b>\$ 18,330,399</b>	<b>\$ 19,295,678</b>	<b>\$ 20,311,788</b>	<b>\$ 21,381,407</b>
<b>Projected Annual Rate Revenue Increase</b>	<b>0.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>
<b>Cumulative Increase from Annual Revenue Increases</b>	<b>0.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>6.09%</b>	<b>9.27%</b>	<b>12.55%</b>	<b>15.93%</b>	<b>19.41%</b>	<b>22.99%</b>	<b>26.68%</b>	<b>30.48%</b>
<b>Debt Coverage After Rate Increase</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>13.75</b>	<b>14.65</b>	<b>15.50</b>	<b>16.42</b>	<b>17.41</b>	<b>18.47</b>	<b>19.48</b>	<b>20.69</b>

1. Revenue and expenses for FY 2024/25 provided by the City. Revenues and expenses for all other years are escalated based on the forecasting assumptions in Table 5.

Source files: 1a. YTD\_Budget\_Report\_FY2425

2. Interest earnings are calculated based on historical LAIF returns. Source file: Inflation Factors\_03-18-24.xlsx .

3. Revenue from rate increases assumes an implementation date of July 1, 2025 for new rates.

For each year thereafter, the assumption is that new rates will be implemented on July 1st of each year.

2	<-- Select Financial Plan Scenario Here	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
1	Alternative 1 - 2% Annual Rate Increases	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
2	Alternative 2 - 3% Annual Rate Increases	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3	Alternative 3 - 4% Annual Rate Increases	0.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
4	Alternative 4 - No Rate Increases	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Financial Plan and Reserve Projections

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

TABLE 2: RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
<b>Total Beginning Cash<sup>1</sup></b>	<b>\$ 18,094,386</b>										
<b>Unrestricted Reserves:</b>											
<b>Operating Reserve</b>											
Beginning Reserve Balance	\$ 18,094,386	\$ 2,692,080	\$ 2,500,919	\$ 2,582,516	\$ 2,672,969	\$ 2,766,579	\$ 2,684,892	\$ 2,920,338	\$ 3,068,982	\$ 3,177,628	\$ 3,290,562
Plus: Net Cash Flow (After Rate Increases)	(2,573,392)	1,955,068	1,576,313	702,460	78,107	(130,932)	187,654	533,579	907,916	1,611,921	3,083,493
Plus: Transfer of Debt Reserve Surplus	-	-	-	-	-	-	-	-	-	-	-
Plus: Interest Earnings	322,080	47,919	44,516	45,969	47,579	49,245	47,791	51,982	54,628	56,562	58,572
Less: Transfer Out to Capital Replacement Reserve	(13,150,994)	(2,194,148)	(1,539,232)	(657,976)	(32,076)	-	-	(436,916)	(853,898)	(1,555,549)	(3,025,055)
<b>Ending Operating Reserve Balance</b>	<b>\$ 2,692,080</b>	<b>\$ 2,500,919</b>	<b>\$ 2,582,516</b>	<b>\$ 2,672,969</b>	<b>\$ 2,766,579</b>	<b>\$ 2,684,892</b>	<b>\$ 2,920,338</b>	<b>\$ 3,068,982</b>	<b>\$ 3,177,628</b>	<b>\$ 3,290,562</b>	<b>\$ 3,407,572</b>
<b>Target Ending Balance (60% of O&amp;M)<sup>2</sup></b>	<b>\$ 2,370,000</b>	<b>\$ 2,453,000</b>	<b>\$ 2,538,000</b>	<b>\$ 2,627,000</b>	<b>\$ 2,719,000</b>	<b>\$ 2,815,000</b>	<b>\$ 2,914,000</b>	<b>\$ 3,017,000</b>	<b>\$ 3,123,000</b>	<b>\$ 3,234,000</b>	<b>\$ 3,349,000</b>
<b>Capital Reserve</b>											
Beginning Reserve Balance	\$ -	\$ 13,150,994	\$ 12,555,990	\$ 12,239,891	\$ 11,714,471	\$ 11,453,151	\$ 11,657,017	\$ 11,864,512	\$ 12,512,617	\$ 13,589,239	\$ 15,082,303
Plus: Grant Proceeds	-	-	-	-	-	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	13,150,994	2,194,148	1,539,232	657,976	32,076	-	-	436,916	853,898	1,555,549	3,025,055
Plus: Interest Earnings	-	234,088	223,497	217,870	208,518	203,866	207,495	211,188	222,725	241,888	268,465
Less: Use of Reserves for Capital Projects	-	(3,023,239)	(2,078,828)	(1,401,267)	(501,914)	-	-	-	-	(304,374)	(1,339,110)
<b>Ending Capital Reserve Balance</b>	<b>\$ 13,150,994</b>	<b>\$ 12,555,990</b>	<b>\$ 12,239,891</b>	<b>\$ 11,714,471</b>	<b>\$ 11,453,151</b>	<b>\$ 11,657,017</b>	<b>\$ 11,864,512</b>	<b>\$ 12,512,617</b>	<b>\$ 13,589,239</b>	<b>\$ 15,082,303</b>	<b>\$ 17,036,713</b>
<b>Target Ending Balance (1 Year Pipe Replacement)<sup>3</sup></b>	<b>\$ 9,790,000</b>	<b>\$ 10,127,755</b>	<b>\$ 10,477,163</b>	<b>\$ 10,838,625</b>	<b>\$ 11,212,557</b>	<b>\$ 11,599,390</b>	<b>\$ 11,999,569</b>	<b>\$ 12,413,555</b>	<b>\$ 12,841,822</b>	<b>\$ 13,284,865</b>	<b>\$ 13,743,193</b>
<b>Ending Balance - Excl. Restricted Reserves</b>	<b>\$ 15,843,074</b>	<b>\$ 15,056,909</b>	<b>\$ 14,822,408</b>	<b>\$ 14,387,440</b>	<b>\$ 14,219,730</b>	<b>\$ 14,341,909</b>	<b>\$ 14,784,849</b>	<b>\$ 15,581,599</b>	<b>\$ 16,766,867</b>	<b>\$ 18,372,864</b>	<b>\$ 20,444,285</b>
<b>Min. Target Ending Balance -Excl. Restricted Reserves</b>	<b>\$ 12,160,000</b>	<b>\$ 12,580,755</b>	<b>\$ 13,015,163</b>	<b>\$ 13,465,625</b>	<b>\$ 13,931,557</b>	<b>\$ 14,414,390</b>	<b>\$ 14,913,569</b>	<b>\$ 15,430,555</b>	<b>\$ 15,964,822</b>	<b>\$ 16,518,865</b>	<b>\$ 17,092,193</b>
<b>Ending Surplus/(Deficit) Compared to Reserve Targets</b>	<b>\$ 3,683,074</b>	<b>\$ 2,476,154</b>	<b>\$ 1,807,245</b>	<b>\$ 921,815</b>	<b>\$ 288,172</b>	<b>\$ (72,481)</b>	<b>\$ (128,720)</b>	<b>\$ 151,044</b>	<b>\$ 802,045</b>	<b>\$ 1,853,999</b>	<b>\$ 3,352,092</b>
<b>Annual Interest Earnings Rate<sup>4</sup></b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>

1. Beginning cash balances provided by City staff for Fund 501. Source files: Item 1 - Fund 501 Cash Balance - Trial Balance.
2. The target ending balance is set equal to 60% of O&M expenses.
3. The target ending balance is set equal to 1 year of pipe replacement projects. See Exhibit 2 (CIP) for details.
4. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2020-2024).  
The source is the California State Treasurer's website: <https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp>.

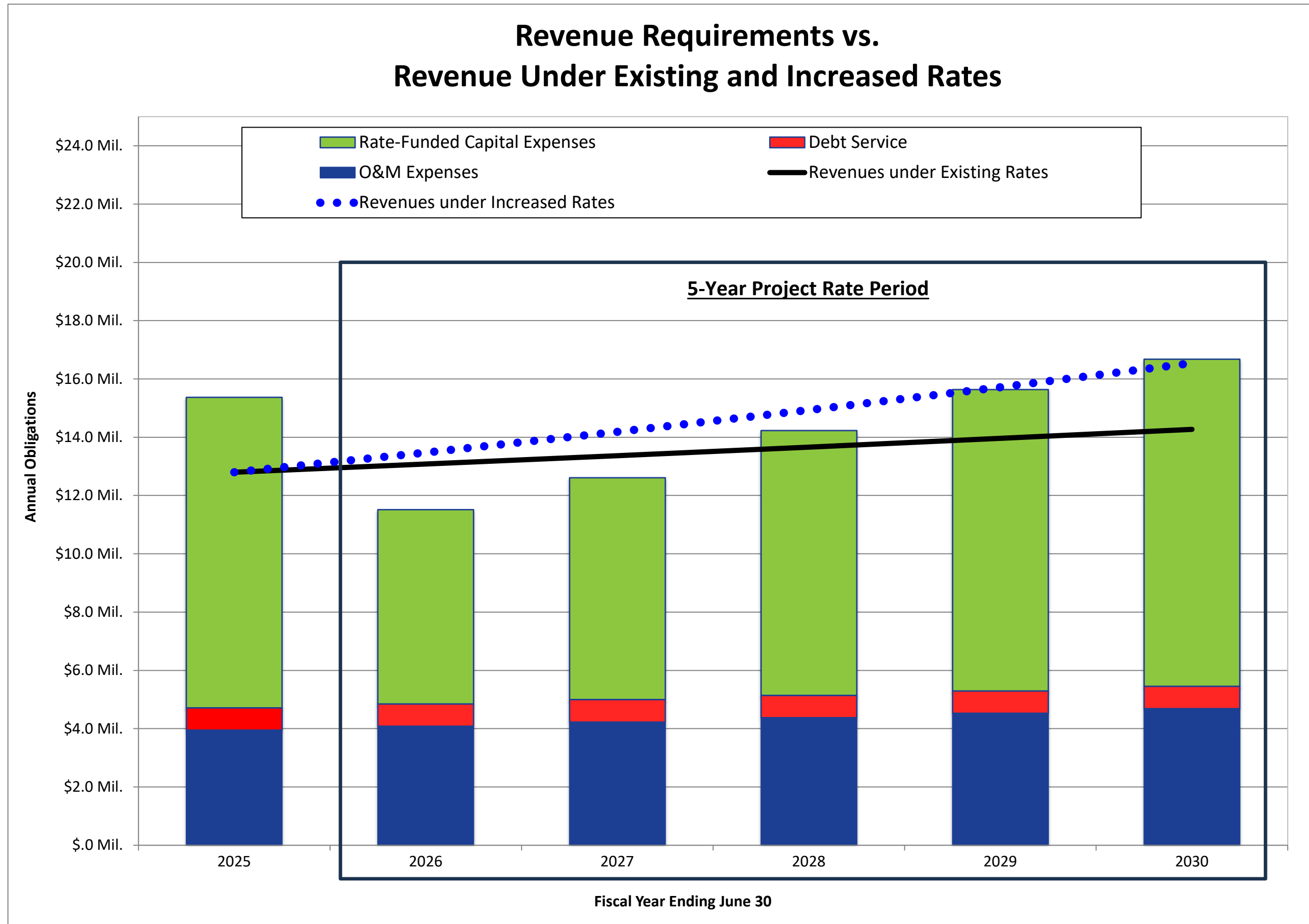
TABLE 3: RESERVE FUND SUMMARY, cont.

SUMMARY OF CASH ACTIVITY	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
<b>Restricted Reserves:</b>											
<b>Debt Reserve Fund</b>											
Beginning Reserve Balance <sup>1</sup>	\$ 771,869	\$ 785,608	\$ 799,592	\$ 813,825	\$ 828,311	\$ 843,055	\$ 858,061	\$ 873,334	\$ 888,880	\$ 904,702	\$ 920,806
Plus: Reserve Funding from Future Debt Obligations	-	-	-	-	-	-	-	-	-	-	-
Plus: Interest Earnings	13,739	13,984	14,233	14,486	14,744	15,006	15,273	15,545	15,822	16,104	16,390
Less: Transfer of Surplus to Operating Reserve	-	-	-	-	-	-	-	-	-	-	-
<b>Ending Debt Reserve Balance</b>	<b>\$ 785,608</b>	<b>\$ 799,592</b>	<b>\$ 813,825</b>	<b>\$ 828,311</b>	<b>\$ 843,055</b>	<b>\$ 858,061</b>	<b>\$ 873,334</b>	<b>\$ 888,880</b>	<b>\$ 904,702</b>	<b>\$ 920,806</b>	<b>\$ 937,196</b>
<b>Annual Interest Earnings Rate<sup>2</sup></b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>	<b>1.78%</b>

1. Beginning cash balances provided by City staff for Fund 501. Source files: Item 1 - Fund 501 Cash Balance - Trial Balance.
2. Historical interest earning rates are per the average annual yields for funds invested in LAIF (2020-2024). The source is the California State Treasurer's website: <https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp>.

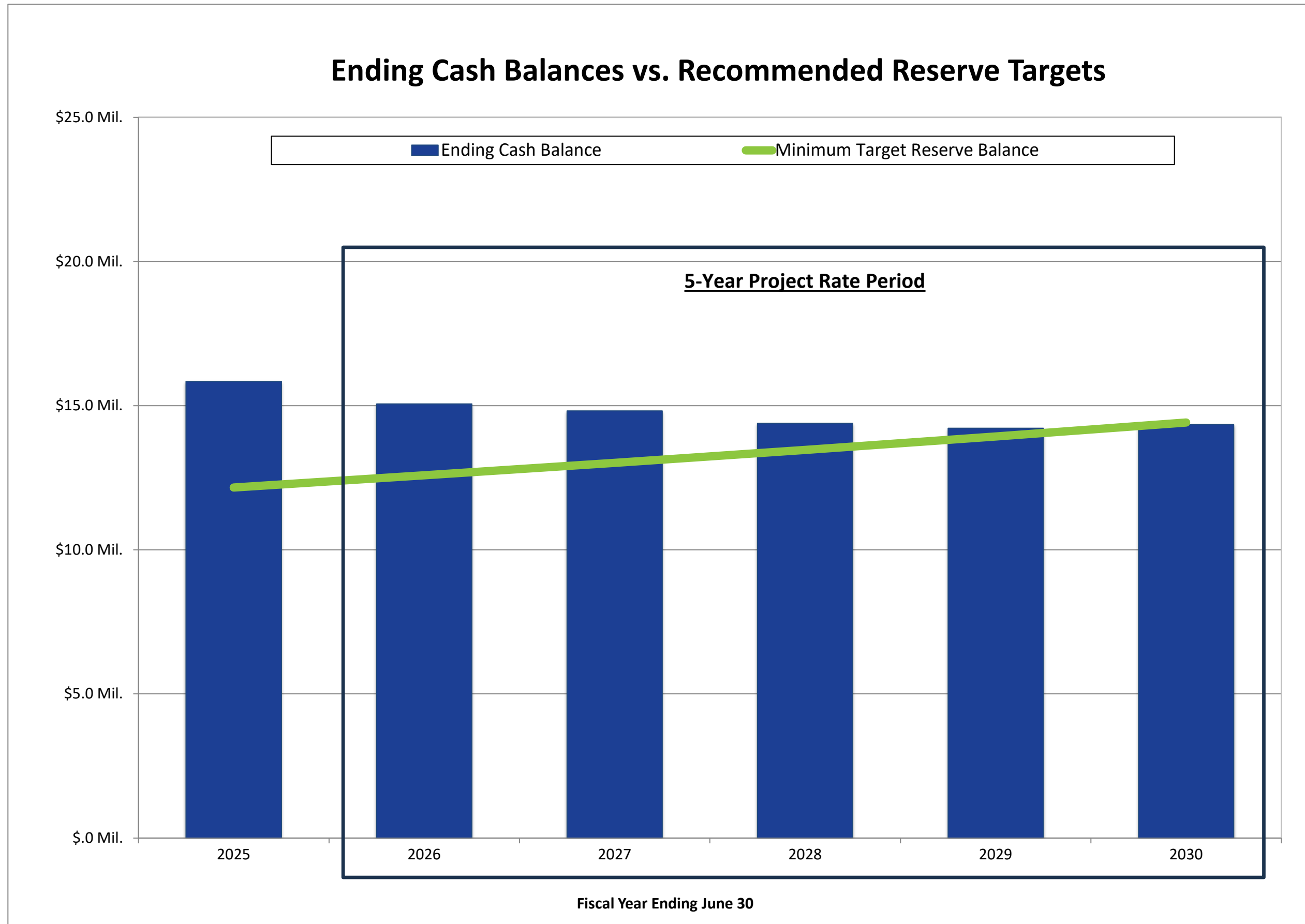
*Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute*

CHART 1



*Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute*

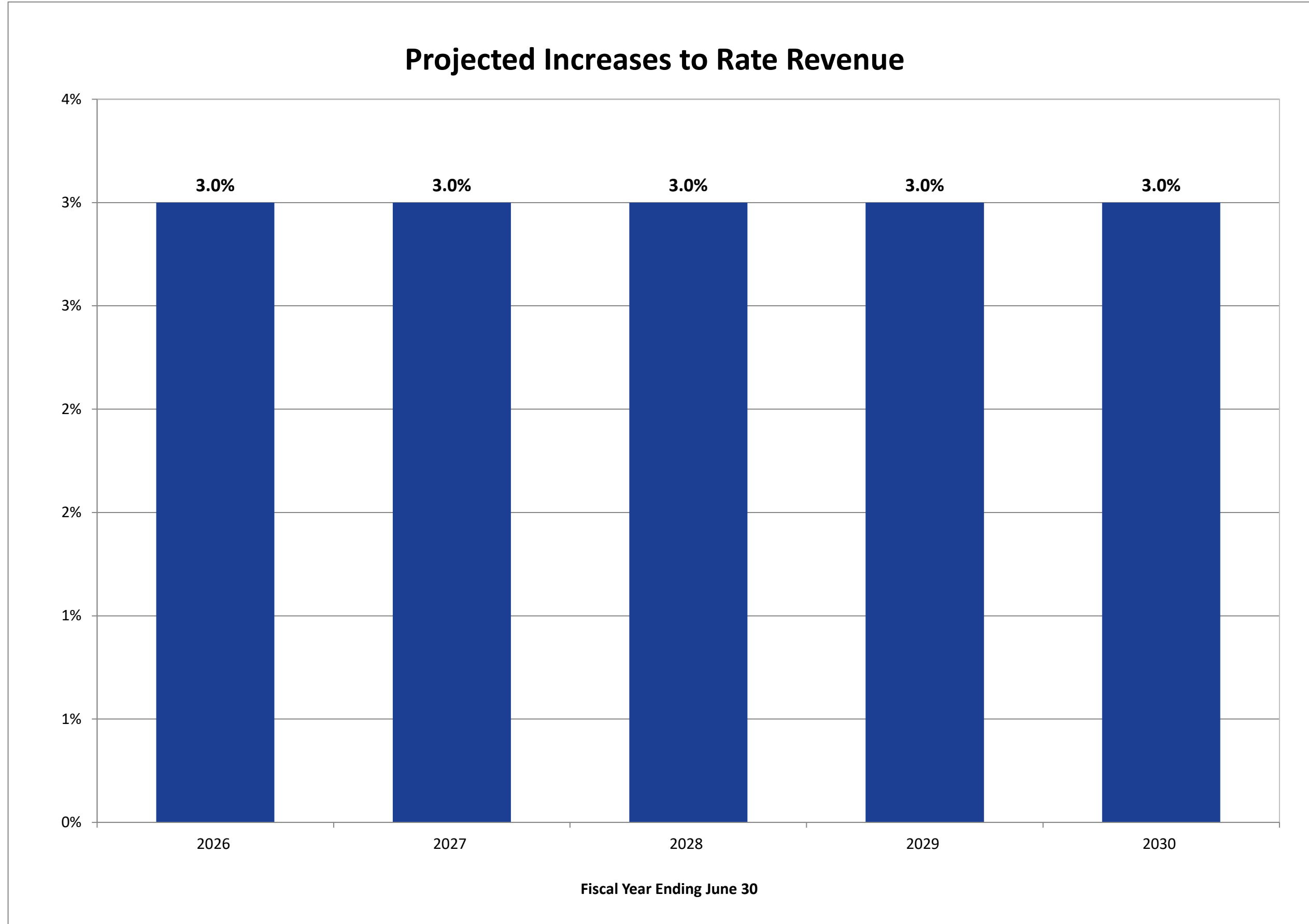
CHART 2





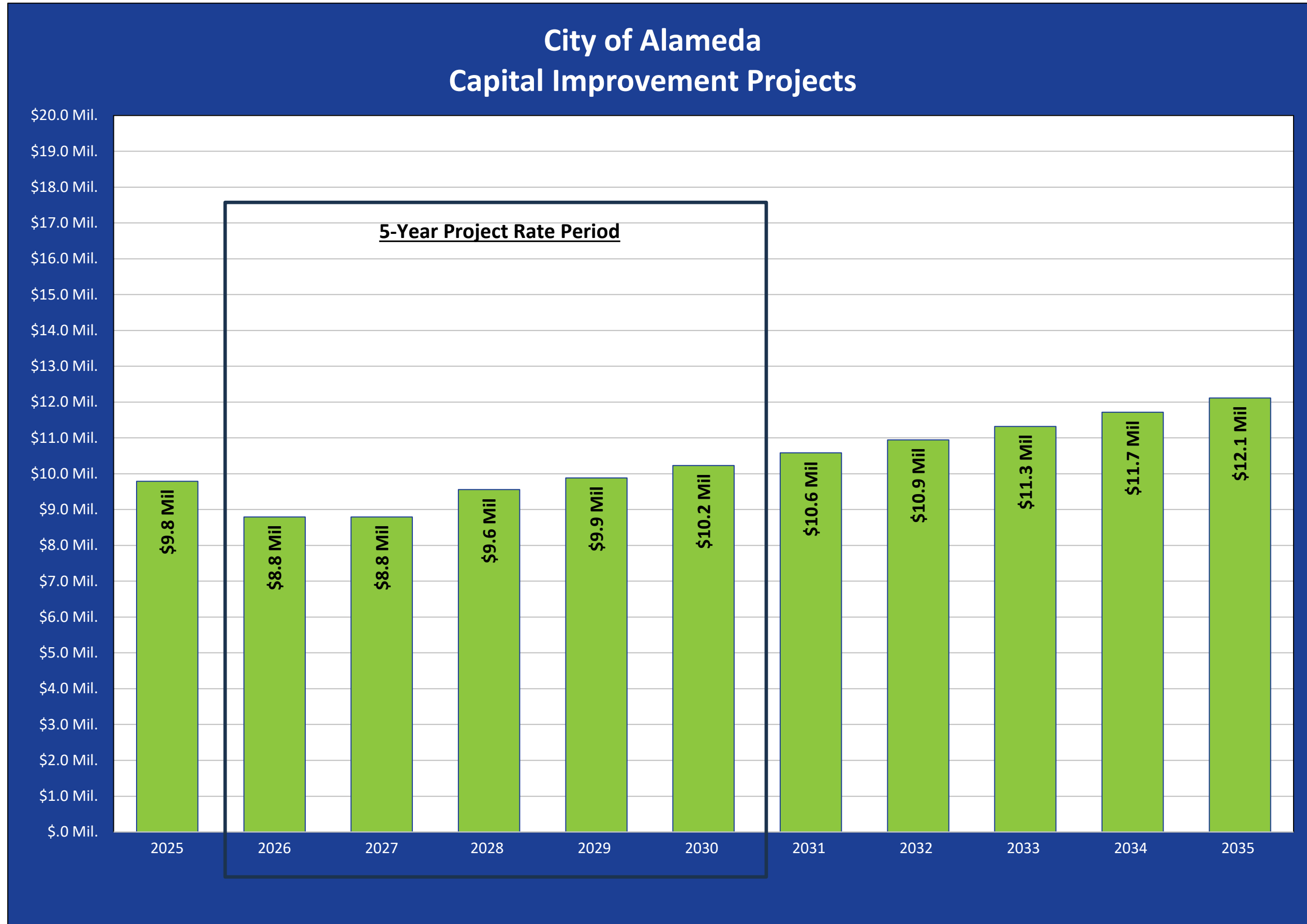
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CHART 3



*Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute*

CHART 4



Operating Revenue and Expenses

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

TABLE 4: REVENUE FORECAST<sup>1</sup>

Operations and Maintenance Forecast			Budget	5-Year Projected Rate Period					Projected				
DESCRIPTION	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35	
<b>Operating Revenue</b>													
501-40-41-600 -31210 - Operating Assessments	1	\$ 12,298,382	\$ 12,568,946	\$ 12,845,463	\$ 13,128,063	\$ 13,416,881	\$ 13,712,052	\$ 14,013,717	\$ 14,322,019	\$ 14,637,104	\$ 14,959,120	\$ 15,288,220	
501-40-41-600 -34360 - Sewer Service Fee	1	\$ 500,000	\$ 511,000	\$ 522,242	\$ 533,731	\$ 545,473	\$ 557,474	\$ 569,738	\$ 582,272	\$ 595,082	\$ 608,174	\$ 621,554	
501-40-41-600 -36120 - Mrket Val Adj - GASB 31 Non-GF	1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
501-40-41-600 -36150 - Interest Income	See FP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>TOTAL: REVENUE</b>		<b>\$ 12,798,382</b>	<b>\$ 13,079,946</b>	<b>\$ 13,367,705</b>	<b>\$ 13,661,795</b>	<b>\$ 13,962,354</b>	<b>\$ 14,269,526</b>	<b>\$ 14,583,456</b>	<b>\$ 14,904,292</b>	<b>\$ 15,232,186</b>	<b>\$ 15,567,294</b>	<b>\$ 15,909,775</b>	

TABLE 5: OPERATING EXPENSE FORECAST<sup>1</sup>

FUND	CATEGORY	Basis	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
<b>501 Sewer Services</b>													
501-40-41-600 -41010 - Regular Pay - Full Time		3	779,732	\$ 814,820	\$ 851,487	\$ 889,804	\$ 929,845	\$ 971,688	\$ 1,015,414	\$ 1,061,108	\$ 1,108,857	\$ 1,158,756	\$ 1,210,900
501-40-41-600 -41030 - Part Time Pay - Temp		3	15,500	\$ 16,198	\$ 16,926	\$ 17,688	\$ 18,484	\$ 19,316	\$ 20,185	\$ 21,093	\$ 22,043	\$ 23,034	\$ 24,071
501-40-41-600 -41300 - Overtime		3	60,000	\$ 62,700	\$ 65,522	\$ 68,470	\$ 71,551	\$ 74,771	\$ 78,136	\$ 81,652	\$ 85,326	\$ 89,166	\$ 93,178
501-40-41-600 -41350 - Special Pay - PERSable		3	8,730	\$ 9,123	\$ 9,533	\$ 9,962	\$ 10,411	\$ 10,879	\$ 11,369	\$ 11,880	\$ 12,415	\$ 12,974	\$ 13,557
501-40-41-600 -41360 - Special Pay - Non-PERSable		3	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -41415 - Acting/Add Duties (NONPERS)		3	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -41440 - Health in Lieu (NONPERS)		3	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -41455 - Standby/Call back (NONPERS)		3	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -41470 - Misc Other Special Pays (PERS)		3	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -41610 - Leave Payout (NONPERS)		3	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -41620 - Payout at Separation (NONPERS)		3	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -42000 - Benefits		3	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -42010 - Medical		3	218,804	\$ 228,650	\$ 238,939	\$ 249,692	\$ 260,928	\$ 272,670	\$ 284,940	\$ 297,762	\$ 311,161	\$ 325,164	\$ 339,796
501-40-41-600 -42020 - Dental		3	13,091	\$ 13,680	\$ 14,296	\$ 14,939	\$ 15,611	\$ 16,314	\$ 17,048	\$ 17,815	\$ 18,617	\$ 19,454	\$ 20,330
501-40-41-600 -42040 - Long Term Disability		3	852	\$ 890	\$ 930	\$ 972	\$ 1,016	\$ 1,062	\$ 1,110	\$ 1,159	\$ 1,212	\$ 1,266	\$ 1,323
501-40-41-600 -42050 - Medicare		3	11,433	\$ 11,947	\$ 12,485	\$ 13,047	\$ 13,634	\$ 14,248	\$ 14,889	\$ 15,559	\$ 16,259	\$ 16,991	\$ 17,755
501-40-41-600 -42060 - Deferred Comp Plan		3	832	\$ 869	\$ 909	\$ 949	\$ 992	\$ 1,037	\$ 1,083	\$ 1,132	\$ 1,183	\$ 1,236	\$ 1,292
501-40-41-600 -42100 - Other Benefits		3	2,174	\$ 2,272	\$ 2,374	\$ 2,481	\$ 2,593	\$ 2,709	\$ 2,831	\$ 2,959	\$ 3,092	\$ 3,231	\$ 3,376
501-40-41-600 -43010 - PERS Normal Cost - Misc		3	64,469	\$ 67,370	\$ 70,402	\$ 73,570	\$ 76,880	\$ 80,340	\$ 83,955	\$ 87,733	\$ 91,681	\$ 95,807	\$ 100,118
501-40-41-600 -43020 - PERS Unfunded - Misc		3	128,666	\$ 134,456	\$ 140,506	\$ 146,829	\$ 153,437	\$ 160,341	\$ 167,557	\$ 175,097	\$ 182,976	\$ 191,210	\$ 199,814
501-40-41-600 -43050 - PARS - Part-Time		3	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -43060 - OPEB ISF Charges		3	8,315	\$ 8,689	\$ 9,080	\$ 9,489	\$ 9,916	\$ 10,362	\$ 10,828	\$ 11,316	\$ 11,825	\$ 12,357	\$ 12,913
501-40-41-600 -51030 - Office Supplies		2	1,500	\$ 1,553	\$ 1,609	\$ 1,666	\$ 1,725	\$ 1,787	\$ 1,850	\$ 1,916	\$ 1,984	\$ 2,055	\$ 2,128
501-40-41-600 -51040 - Computer Software and Hardware		2	11,000	\$ 11,392	\$ 11,797	\$ 12,217	\$ 12,652	\$ 13,102	\$ 13,569	\$ 14,052	\$ 14,552	\$ 15,070	\$ 15,607
501-40-41-600 -51110 - Other Repair/Mtce Supplies		2	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -51120 - Machinery/Equipment Supplies		2	90,000	\$ 93,204	\$ 96,522	\$ 99,958	\$ 103,517	\$ 107,202	\$ 111,018	\$ 114,971	\$ 119,064	\$ 123,302	\$ 127,692
501-40-41-600 -51130 - Small Tools		2	12,000	\$ 12,427	\$ 12,870	\$ 13,328	\$ 13,802	\$ 14,294	\$ 14,802	\$ 15,329	\$ 15,875	\$ 16,440	\$ 17,026
501-40-41-600 -51140 - Meeting Refreshments		2	500	\$ 518	\$ 536	\$ 555	\$ 575	\$ 596	\$ 617	\$ 639	\$ 661	\$ 685	\$ 709
501-40-41-600 -51150 - Uniforms and Clothing		2	8,000	\$ 8,285	\$ 8,580	\$ 8,885	\$ 9,201	\$ 9,529	\$ 9,868	\$ 10,220	\$ 10,583	\$ 10,960	\$ 11,350
501-40-41-600 -51200 - Books/Manual/Periodicals/etc		2	2,000	\$ 2,071	\$ 2,145	\$ 2,221	\$ 2,300	\$ 2,382	\$ 2,467	\$ 2,555	\$ 2,646	\$ 2,740	\$ 2,838
501-40-41-600 -51210 - Postage and Mailing		2	200	\$ 207	\$ 214	\$ 222	\$ 230	\$ 238	\$ 247	\$ 255	\$ 265	\$ 274	\$ 284
501-40-41-600 -51270 - Forms Printing		2	2,000	\$ 2,071	\$ 2,145	\$ 2,221	\$ 2,300	\$ 2,382	\$ 2,467	\$ 2,555	\$ 2,646	\$ 2,740	\$ 2,838
501-40-41-600 -51390 - Other Operating Supplies		2	2,000	\$ 2,071	\$ 2,145	\$ 2,221	\$ 2,300	\$ 2,382	\$ 2,467	\$ 2,555	\$ 2,646	\$ 2,740	\$ 2,838
501-40-41-600 -52010 - Professional Services		2	45,000	\$ 46,602	\$ 48,261	\$ 49,979	\$ 51,758	\$ 53,601	\$ 55,509	\$ 57,485	\$ 59,532	\$ 61,651	\$ 63,846
501-40-41-600 -52020 - Consulting Services		2	20,000	\$ 20,712	\$ 21,449	\$ 22,213	\$ 23,004	\$ 23,823	\$ 24,671	\$ 25,549	\$ 26,459	\$ 27,400	\$ 28,376

CITY OF ALAMEDA  
SEWER RATE STUDY

Operating Revenue and Expenses

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501-40-41-600 -52140 -	Maintenance Contracts	2	387,000	\$ 400,777	\$ 415,045	\$ 429,820	\$ 445,122	\$ 460,968	\$ 477,379	\$ 494,374	\$ 511,973	\$ 530,200	\$ 549,075
501-40-41-600 -52180 -	Cellular Phone	2	17,000	\$ 17,605	\$ 18,232	\$ 18,881	\$ 19,553	\$ 20,249	\$ 20,970	\$ 21,717	\$ 22,490	\$ 23,290	\$ 24,120
501-40-41-600 -53000 -	Recruitment Expense	2	600	\$ 621	\$ 643	\$ 666	\$ 690	\$ 715	\$ 740	\$ 766	\$ 794	\$ 822	\$ 851
501-40-41-600 -53030 -	Medical Examinations	2	2,400	\$ 2,485	\$ 2,574	\$ 2,666	\$ 2,760	\$ 2,859	\$ 2,960	\$ 3,066	\$ 3,175	\$ 3,288	\$ 3,405
501-40-41-600 -54000 -	Travel and Education	2	1,000	\$ 1,036	\$ 1,072	\$ 1,111	\$ 1,150	\$ 1,191	\$ 1,234	\$ 1,277	\$ 1,323	\$ 1,370	\$ 1,419
501-40-41-600 -54010 -	Professional Development	2	10,000	\$ 10,356	\$ 10,725	\$ 11,106	\$ 11,502	\$ 11,911	\$ 12,335	\$ 12,775	\$ 13,229	\$ 13,700	\$ 14,188
501-40-41-600 -54030 -	Training and Conferences	2	5,500	\$ 5,696	\$ 5,899	\$ 6,109	\$ 6,326	\$ 6,551	\$ 6,784	\$ 7,026	\$ 7,276	\$ 7,535	\$ 7,803
501-40-41-600 -54040 -	Mileage Reimbursement	2	1,200	\$ 1,243	\$ 1,287	\$ 1,333	\$ 1,380	\$ 1,429	\$ 1,480	\$ 1,533	\$ 1,588	\$ 1,644	\$ 1,703
501-40-41-600 -54060 -	Long Distance Travel	2	2,500	\$ 2,589	\$ 2,681	\$ 2,777	\$ 2,875	\$ 2,978	\$ 3,084	\$ 3,194	\$ 3,307	\$ 3,425	\$ 3,547
501-40-41-600 -54070 -	Meals and Lodging	2	1,000	\$ 1,036	\$ 1,072	\$ 1,111	\$ 1,150	\$ 1,191	\$ 1,234	\$ 1,277	\$ 1,323	\$ 1,370	\$ 1,419
501-40-41-600 -54090 -	Memberships and Dues	2	6,000	\$ 6,214	\$ 6,435	\$ 6,664	\$ 6,901	\$ 7,147	\$ 7,401	\$ 7,665	\$ 7,938	\$ 8,220	\$ 8,513
501-40-41-600 -56050 -	County Admin Fees	1	191,000	\$ 195,202	\$ 199,496	\$ 203,885	\$ 208,371	\$ 212,955	\$ 217,640	\$ 222,428	\$ 227,322	\$ 232,323	\$ 237,434
501-40-41-600 -56060 -	Permit Fees	1	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
501-40-41-600 -56110 -	Pmt In Lieu of Taxes (PILOT)	1	832,000	\$ 850,304	\$ 869,011	\$ 888,129	\$ 907,668	\$ 927,636	\$ 948,044	\$ 968,901	\$ 990,217	\$ 1,012,002	\$ 1,034,266
501-40-41-600 -58010 -	Water	1	32,000	\$ 32,704	\$ 33,423	\$ 34,159	\$ 34,910	\$ 35,678	\$ 36,463	\$ 37,265	\$ 38,085	\$ 38,923	\$ 39,779
501-40-41-600 -58020 -	Electricity	1	68,400	\$ 69,905	\$ 71,443	\$ 73,014	\$ 74,621	\$ 76,262	\$ 77,940	\$ 79,655	\$ 81,407	\$ 83,198	\$ 85,029
501-40-41-600 -70000 -	Cost Allocation	1	171,230	\$ 174,997	\$ 178,847	\$ 182,782	\$ 186,803	\$ 190,912	\$ 195,113	\$ 199,405	\$ 203,792	\$ 208,275	\$ 212,857
501-40-41-600 -70700 -	Cost Allocation - Facil Mtce	4	46,881	\$ 48,498	\$ 50,172	\$ 51,903	\$ 53,693	\$ 55,546	\$ 57,462	\$ 59,444	\$ 61,495	\$ 63,617	\$ 65,812
501-40-41-600 -70800 -	Cost Allocation - Facil Replac	4	39,775	\$ 41,147	\$ 42,567	\$ 44,035	\$ 45,555	\$ 47,126	\$ 48,752	\$ 50,434	\$ 52,174	\$ 53,974	\$ 55,836
501-40-41-600 -71000 -	Cost Allocation - Fleet Mtce	4	144,280	\$ 149,258	\$ 154,407	\$ 159,734	\$ 165,245	\$ 170,946	\$ 176,844	\$ 182,945	\$ 189,256	\$ 195,786	\$ 202,540
501-40-41-600 -71200 -	Cost Allocation - Gen Liabil	3	19,482	\$ 20,359	\$ 21,275	\$ 22,232	\$ 23,233	\$ 24,278	\$ 25,371	\$ 26,512	\$ 27,705	\$ 28,952	\$ 30,255
501-40-41-600 -71400 -	Cost Allocation - IT Ops	3	58,568	\$ 61,204	\$ 63,958	\$ 66,836	\$ 69,843	\$ 72,986	\$ 76,271	\$ 79,703	\$ 83,290	\$ 87,038	\$ 90,954
501-40-41-600 -71500 -	Cost Allocation - IT Replace	3	6,853	\$ 7,161	\$ 7,484	\$ 7,820	\$ 8,172	\$ 8,540	\$ 8,924	\$ 9,326	\$ 9,746	\$ 10,184	\$ 10,642
501-40-41-600 -72000 -	Cost Allocation - PW Admin	3	161,675	\$ 168,950	\$ 176,553	\$ 184,498	\$ 192,800	\$ 201,476	\$ 210,543	\$ 220,017	\$ 229,918	\$ 240,264	\$ 251,076
501-40-41-600 -72400 -	Cost Allocation - Workers Comp	3	14,572	\$ 15,228	\$ 15,913	\$ 16,629	\$ 17,377	\$ 18,159	\$ 18,977	\$ 19,830	\$ 20,723	\$ 21,655	\$ 22,630
501-40-41-600 -72500 -	Cost Allocation - EOC	3	4,471	\$ 4,672	\$ 4,882	\$ 5,102	\$ 5,332	\$ 5,572	\$ 5,822	\$ 6,084	\$ 6,358	\$ 6,644	\$ 6,943
501-40-41-600 -81050 -	Equipment Replacement > \$10K	4	218,217	\$ 225,745	\$ 233,534	\$ 241,591	\$ 249,925	\$ 258,548	\$ 267,468	\$ 276,695	\$ 286,241	\$ 296,117	\$ 306,333
501-40-41-600 -90310 -	Transfer Out - Cap Improv Proj	See Exh 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Subtotal: 501 Sewer Services</b>			<b>\$ 3,950,402</b>	<b>\$ 4,087,771</b>	<b>\$ 4,230,293</b>	<b>\$ 4,378,173</b>	<b>\$ 4,531,623</b>	<b>\$ 4,690,866</b>	<b>\$ 4,856,132</b>	<b>\$ 5,027,662</b>	<b>\$ 5,205,704</b>	<b>\$ 5,390,522</b>	<b>\$ 5,582,384</b>
<b>SEWER CAPITAL PROJECTS</b>													
Capital Expenditures	See Exh 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Subtotal: Sewer Capital Projects</b>			<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>DEBT SERVICE</b>													
Debt Service - Principal Payment	See Exh 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service - Interest Payment	See Exh 3	-	-	-	-	-	-	-	-	-	-	-	-
Debt Service - Fiscal Agent Fees	See Exh 3	-	-	-	-	-	-	-	-	-	-	-	-
<b>Subtotal: Debt Service</b>			<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL: SEWER SYSTEM</b>			<b>\$ 3,950,402</b>	<b>\$ 4,087,771</b>	<b>\$ 4,230,293</b>	<b>\$ 4,378,173</b>	<b>\$ 4,531,623</b>	<b>\$ 4,690,866</b>	<b>\$ 4,856,132</b>	<b>\$ 5,027,662</b>	<b>\$ 5,205,704</b>	<b>\$ 5,390,522</b>	<b>\$ 5,582,384</b>

Plus Debt Service  
Check

Operating Revenue and Expenses

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**TABLE 6: FORECASTING ASSUMPTIONS<sup>2</sup>**

INFLATION FACTORS	Basis	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Customer Growth <sup>3</sup>	1	--	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%
General Cost Inflation <sup>4</sup>	2	--	3.56%	3.56%	3.56%	3.56%	3.56%	3.56%	3.56%	3.56%	3.56%	3.56%
Labor Cost Inflation <sup>5</sup>	3	--	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Construction Cost Inflation <sup>6</sup>	4	--	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%
No Escalation	5	--	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

2. Expenses are inflated each year by the following annual inflation factor categories.

3. Customer growth is estimated based on the City of Alameda 2023-2031 Housing Element.

4. General cost inflation is based on the 5-year average annual change in the Consumer Price Index for all Urban Consumers in the San Francisco-Oakland-Hayward, CA area.

5. Labor cost inflation is estimated based on maximum salary adjustment in Memorandum of Understanding between City of Alameda and Alameda City Employees Association for July 1, 2022 through June 30, 2025.

6. Construction cost inflation is the 5-year average change in the Construction Cost Index for 2020-2024. Source: Engineering News Record website (<http://enr.construction.com>).

Capital Improvement Plan Expenditures

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

TABLE 7: CAPITAL FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
<b>Funding Sources:</b>											
Grant Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Capacity Fee Reserves	-	-	-	-	-	-	-	-	-	-	-
SRF Loan Funding	-	-	-	-	-	-	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-
Use of Capital Rehabilitation and Replacement Reserve	-	3,023,239	2,078,828	1,401,267	501,914	-	-	-	-	304,374	1,339,110
Rate Revenue	10,654,453	6,664,288	7,608,699	9,080,661	10,341,641	11,217,657	11,604,666	12,005,027	12,419,201	12,543,289	11,951,798
<b>Total Sources of Capital Funds</b>	<b>\$ 10,654,453</b>	<b>\$ 9,687,527</b>	<b>\$ 9,687,527</b>	<b>\$ 10,481,928</b>	<b>\$ 10,843,555</b>	<b>\$ 11,217,657</b>	<b>\$ 11,604,666</b>	<b>\$ 12,005,027</b>	<b>\$ 12,419,201</b>	<b>\$ 12,847,663</b>	<b>\$ 13,290,908</b>
<b>Uses of Capital Funds:</b>											
Total Project Costs	\$ 10,654,453	\$ 9,687,527	\$ 9,687,527	\$ 10,481,928	\$ 10,843,555	\$ 11,217,657	\$ 11,604,666	\$ 12,005,027	\$ 12,419,201	\$ 12,847,663	\$ 13,290,908
<b>Capital Funding Surplus (Deficiency)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>SRF Loan Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>New Revenue Bond Proceeds</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

\$ - Use of Loan Proceeds don't exceed proceeds check

TABLE 8: CAPITAL IMPROVEMENT PROGRAM FUNDING OPTIONS

Policy Choice	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
1 Alternative 1 - Full Funding of CIP	\$ 10,654,453	\$ 9,687,527	\$ 9,687,527	\$ 10,481,928	\$ 10,843,555	\$ 11,217,657	\$ 11,604,666	\$ 12,005,027	\$ 12,419,201	\$ 12,847,663	\$ 13,290,908
2 Alternative 2 - 75% Funding of CIP	\$ 7,990,840	\$ 7,265,645	\$ 7,265,645	\$ 7,861,446	\$ 8,132,666	\$ 8,413,243	\$ 8,703,500	\$ 9,003,771	\$ 9,314,401	\$ 9,635,747	\$ 9,968,181
3 Alternative 3 - 50% Funding of CIP	\$ 5,327,227	\$ 4,843,763	\$ 4,843,763	\$ 5,240,964	\$ 5,421,777	\$ 5,608,829	\$ 5,802,333	\$ 6,002,514	\$ 6,209,600	\$ 6,423,832	\$ 6,645,454

Insert policy choice in box to right, based on options listed above: **1**

Capital Improvement Program Funding Choice	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Effective Annual Funding Amount	\$ 10,654,453	\$ 9,687,527	\$ 9,687,527	\$ 10,481,928	\$ 10,843,555	\$ 11,217,657	\$ 11,604,666	\$ 12,005,027	\$ 12,419,201	\$ 12,847,663	\$ 13,290,908

Capital Improvement Plan Expenditures

Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute

CAPITAL IMPROVEMENT PROGRAM

TABLE 9: CAPITAL IMPROVEMENT PROGRAM COSTS (in Current-Year Dollars)<sup>1</sup>

Project #	Description <sup>2</sup>	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
<b>Capital Improvement Plan</b>												
C21000	Sewer Rehabilitation	\$ 9,790,000	\$ 8,500,000	\$ 8,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C22000	Sewer Pump Stations	\$ 562,000	\$ 562,000	\$ 562,000	\$ 562,000	\$ 562,000	\$ 562,000	\$ 562,000	\$ 562,000	\$ 562,000	\$ 562,000	\$ 562,000
	Vehicle/Equipment Replacement	\$ 302,453	\$ 302,453	\$ 302,453	\$ 302,453	\$ 302,453	\$ 302,453	\$ 302,453	\$ 302,453	\$ 302,453	\$ 302,453	\$ 302,453
<b>Estimated Future Projects</b>												
	Future Projects <sup>3</sup>	-	-	-	8,930,000	8,930,000	8,930,000	8,930,000	8,930,000	8,930,000	8,930,000	8,930,000
<b>Total: CIP Program Costs (Current-Year Dollars)</b>		<b>\$ 10,654,453</b>	<b>\$ 9,364,453</b>	<b>\$ 9,364,453</b>	<b>\$ 9,794,453</b>	<b>\$ 9,794,453</b>	<b>\$ 9,794,453</b>	<b>\$ 9,794,453</b>	<b>\$ 9,794,453</b>	<b>\$ 9,794,453</b>	<b>\$ 9,794,453</b>	<b>\$ 9,794,453</b>

TABLE 10: CAPITAL IMPROVEMENT PROGRAM COSTS (in Future-Year Dollars)<sup>4</sup>

Project #	Description <sup>2</sup>	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
<b>Capital Improvement Plan</b>												
C21000	Sewer Rehabilitation	\$ 9,790,000	\$ 8,793,250	\$ 8,793,250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C22000	Sewer Pump Stations	\$ 562,000	\$ 581,389	\$ 581,389	\$ 601,447	\$ 622,197	\$ 643,663	\$ 665,869	\$ 688,841	\$ 712,607	\$ 737,191	\$ 762,625
	Vehicle/Equipment Replacement	\$ 302,453	\$ 312,888	\$ 312,888	\$ 323,682	\$ 334,849	\$ 346,402	\$ 358,352	\$ 370,716	\$ 383,505	\$ 396,736	\$ 410,424
<b>Estimated Future Projects</b>												
	Future Projects <sup>3</sup>	-	-	-	9,556,799	9,886,508	10,227,593	10,580,445	10,945,470	11,323,089	11,713,736	12,117,860
<b>Total: CIP Program Costs (Future-Year Dollars)</b>		<b>\$ 10,654,453</b>	<b>\$ 9,687,527</b>	<b>\$ 9,687,527</b>	<b>\$ 10,481,928</b>	<b>\$ 10,843,555</b>	<b>\$ 11,217,657</b>	<b>\$ 11,604,666</b>	<b>\$ 12,005,027</b>	<b>\$ 12,419,201</b>	<b>\$ 12,847,663</b>	<b>\$ 13,290,908</b>

TABLE 11: FORECASTING ASSUMPTIONS

Economic Variables	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Annual Construction Cost Inflation, Per Engineering News Record <sup>5</sup>	0.00%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%
Cumulative Construction Cost Multiplier from FY 2026/27	1.00	1.03	1.03	1.07	1.11	1.15	1.18	1.23	1.27	1.31	1.36

- Capital project costs were provided by City Staff. Source file: 8C21000 - Sewer and 9-C2200 - Sewer Pump Stations.
- The City's Annual Sewer Rehabilitation Program includes the design and construction of priority sewer projects due to critical needs of the sewer facilities. These projects include the replacement and rehabilitation due to pipe size and condition as well as sewer pump stations.
- Future project costs are based on the average of the City's capital improvement plan.
- Capital improvement projects are inflated to future year estimated costs with ENR CCI for the region. Source: Engineering News Record website (<http://enr.construction.com>).
- For reference purposes, the annual Construction Cost Inflation percentage is the 10-year average change in the Construction Cost Index from 2013 to 2023 (3.45%). Source: Engineering News Record website (<http://enr.construction.com>).

Debt Service

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TABLE 12: EXISTING DEBT OBLIGATIONS

EXISTING DEBT OBLIGATIONS	Budget	5-Year Projected Rate Period					Projected				
	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
<b>Annual Repayment Schedules:</b>											
2012 Sewer Revenue Bond											
Principal Payment	\$ 440,000	\$ 450,000	\$ 465,000	\$ 480,000	\$ 490,000	\$ 505,000	\$ 520,000	\$ 535,000	\$ 550,000	\$ 570,000	\$ 585,000
Interest Payment	326,919	315,219	301,494	287,319	273,381	259,700	244,956	229,131	212,856	196,056	178,731
<b>Subtotal: Annual Debt Service</b>	<b>\$ 766,919</b>	<b>\$ 765,219</b>	<b>\$ 766,494</b>	<b>\$ 767,319</b>	<b>\$ 763,381</b>	<b>\$ 764,700</b>	<b>\$ 764,956</b>	<b>\$ 764,131</b>	<b>\$ 762,856</b>	<b>\$ 766,056</b>	<b>\$ 763,731</b>
Coverage Requirement (\$-Amnt above annual payment)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserve Requirement (total fund balance)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total: Existing Annual Debt Service</b>	<b>\$ 766,919</b>	<b>\$ 765,219</b>	<b>\$ 766,494</b>	<b>\$ 767,319</b>	<b>\$ 763,381</b>	<b>\$ 764,700</b>	<b>\$ 764,956</b>	<b>\$ 764,131</b>	<b>\$ 762,856</b>	<b>\$ 766,056</b>	<b>\$ 763,731</b>
<b>Total: Existing Annual Coverage Requirement</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total: Existing Debt Reserve Target</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

1. Revenue bonds issued to refund the 2004 Bonds with an original principal balance of \$8.675M. Source file: 8a. Sewer Refund Refinancing Bond 01 16.pdf.

TABLE 13: EXISTING ANNUAL DEBT OBLIGATIONS TO BE SATISFIED BY WATER RATES

Annual Obligations	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35
Existing Annual Debt Service	\$ 766,919	\$ 765,219	\$ 766,494	\$ 767,319	\$ 763,381	\$ 764,700	\$ 764,956	\$ 764,131	\$ 762,856	\$ 766,056	\$ 763,731
Existing Annual Coverage Requirement	-	-	-	-	-	-	-	-	-	-	-
Existing Debt Reserve Target	-	-	-	-	-	-	-	-	-	-	-



CITY OF ALAMEDA  
SEWER RATE STUDY

Projected Sewer Rates Under Existing Rate Schedule

*Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute*

TABLE 17: CURRENT SEWER RATES

Sewer Rate Schedule	FY 2025
<b>Customer Class</b>	
Single Family (\$/month)	\$31.22
Multi-Family (\$/month)	\$28.13
Commercial	
Fixed Charge (\$/month) (includes first 730 cubic feet)	\$28.13
Flow-Based Rate (\$ per HCF)	\$3.86

*Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute*

**TABLE 18: CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS**

Classification of Expenses							
Budget Categories	Total Revenue Requirements	Flow	Fixed (EDUs)	Customer	Basis of Classification		
	FY 2025/26	(VOL)	(CAP)	(CA)	(VOL)	(CAP)	(CA)
<b>501 Sewer Services</b>							
Regular Pay - Full Time	\$ 814,820	\$ 305,557	\$ 407,410	\$ 101,852	37.5%	50.0%	12.5%
Part Time Pay - Temp	\$ 16,198	\$ 6,074	\$ 8,099	\$ 2,025	37.5%	50.0%	12.5%
Overtime	\$ 62,700	\$ 23,513	\$ 31,350	\$ 7,838	37.5%	50.0%	12.5%
Special Pay - Persable	\$ 9,123	\$ 3,421	\$ 4,561	\$ 1,140	37.5%	50.0%	12.5%
Special Pay - Non-Persable	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Acting/Add Duties (Nonpers)	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Health In Lieu (Nonpers)	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Standby/Call Back (Nonpers)	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Misc Other Special Pays (Pers)	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Leave Payout (Nonpers)	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Payout At Separation (Nonpers)	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Benefits	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Medical	\$ 228,650	\$ 85,744	\$ 114,325	\$ 28,581	37.5%	50.0%	12.5%
Dental	\$ 13,680	\$ 5,130	\$ 6,840	\$ 1,710	37.5%	50.0%	12.5%
Long Term Disability	\$ 890	\$ 334	\$ 445	\$ 111	37.5%	50.0%	12.5%
Medicare	\$ 11,947	\$ 4,480	\$ 5,974	\$ 1,493	37.5%	50.0%	12.5%
Deferred Comp Plan	\$ 869	\$ 326	\$ 435	\$ 109	37.5%	50.0%	12.5%
Other Benefits	\$ 2,272	\$ 852	\$ 1,136	\$ 284	37.5%	50.0%	12.5%
Pers Normal Cost - Misc	\$ 67,370	\$ 25,264	\$ 33,685	\$ 8,421	37.5%	50.0%	12.5%
Pers Unfunded - Misc	\$ 134,456	\$ 50,421	\$ 67,228	\$ 16,807	37.5%	50.0%	12.5%
Pars - Part-Time	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Opeb Isf Charges	\$ 8,689	\$ 3,258	\$ 4,345	\$ 1,086	37.5%	50.0%	12.5%
Office Supplies	\$ 1,553	\$ 583	\$ 777	\$ 194	37.5%	50.0%	12.5%
Computer Software And Hardware	\$ 11,392	\$ 4,272	\$ 5,696	\$ 1,424	37.5%	50.0%	12.5%
Other Repair/Mtce Supplies	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Machinery/Equipment Supplies	\$ 93,204	\$ 34,952	\$ 46,602	\$ 11,651	37.5%	50.0%	12.5%
Small Tools	\$ 12,427	\$ 4,660	\$ 6,214	\$ 1,553	37.5%	50.0%	12.5%
Meeting Refreshments	\$ 518	\$ 194	\$ 259	\$ 65	37.5%	50.0%	12.5%
Uniforms And Clothing	\$ 8,285	\$ 3,107	\$ 4,142	\$ 1,036	37.5%	50.0%	12.5%
Books/Manual/Periodicals/Etc	\$ 2,071	\$ 777	\$ 1,036	\$ 259	37.5%	50.0%	12.5%
Postage And Mailing	\$ 207	\$ 78	\$ 104	\$ 26	37.5%	50.0%	12.5%
Forms Printing	\$ 2,071	\$ 777	\$ 1,036	\$ 259	37.5%	50.0%	12.5%
Other Operating Supplies	\$ 2,071	\$ 777	\$ 1,036	\$ 259	37.5%	50.0%	12.5%
Professional Services	\$ 46,602	\$ 17,476	\$ 23,301	\$ 5,825	37.5%	50.0%	12.5%
Consulting Services	\$ 20,712	\$ 7,767	\$ 10,356	\$ 2,589	37.5%	50.0%	12.5%
Maintenance Contracts	\$ 400,777	\$ 150,291	\$ 200,389	\$ 50,097	37.5%	50.0%	12.5%
Cellular Phone	\$ 17,605	\$ 6,602	\$ 8,803	\$ 2,201	37.5%	50.0%	12.5%
Recruitment Expense	\$ 621	\$ 233	\$ 311	\$ 78	37.5%	50.0%	12.5%
Medical Examinations	\$ 2,485	\$ 932	\$ 1,243	\$ 311	37.5%	50.0%	12.5%
Travel And Education	\$ 1,036	\$ 388	\$ 518	\$ 129	37.5%	50.0%	12.5%
Professional Development	\$ 10,356	\$ 3,884	\$ 5,178	\$ 1,295	37.5%	50.0%	12.5%
Training And Conferences	\$ 5,696	\$ 2,136	\$ 2,848	\$ 712	37.5%	50.0%	12.5%
Mileage Reimbursement	\$ 1,243	\$ 466	\$ 621	\$ 155	37.5%	50.0%	12.5%

CITY OF ALAMEDA  
SEWER RATE STUDY  
Cost of Service Analysis

Functionalization & Classification

*Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute*

Long Distance Travel	\$ 2,589	\$ 971	\$ 1,295	\$ 324	37.5%	50.0%	12.5%
Meals And Lodging	\$ 1,036	\$ 388	\$ 518	\$ 129	37.5%	50.0%	12.5%
Memberships And Dues	\$ 6,214	\$ 2,330	\$ 3,107	\$ 777	37.5%	50.0%	12.5%
County Admin Fees	\$ 195,202	\$ 73,201	\$ 97,601	\$ 24,400	37.5%	50.0%	12.5%
Permit Fees	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
Pmt In Lieu Of Taxes (Pilot)	\$ 850,304	\$ 318,864	\$ 425,152	\$ 106,288	37.5%	50.0%	12.5%
Water	\$ 32,704	\$ 12,264	\$ 16,352	\$ 4,088	37.5%	50.0%	12.5%
Electricity	\$ 69,905	\$ 26,214	\$ 34,952	\$ 8,738	37.5%	50.0%	12.5%
Cost Allocation	\$ 174,997	\$ 65,624	\$ 87,499	\$ 21,875	37.5%	50.0%	12.5%
Cost Allocation - Facil Mtce	\$ 48,498	\$ 18,187	\$ 24,249	\$ 6,062	37.5%	50.0%	12.5%
Cost Allocation - Facil Replac	\$ 41,147	\$ 15,430	\$ 20,574	\$ 5,143	37.5%	50.0%	12.5%
Cost Allocation - Fleet Mtce	\$ 149,258	\$ 55,972	\$ 74,629	\$ 18,657	37.5%	50.0%	12.5%
Cost Allocation - Gen Liabil	\$ 20,359	\$ 7,635	\$ 10,179	\$ 2,545	37.5%	50.0%	12.5%
Cost Allocation - It Ops	\$ 61,204	\$ 22,951	\$ 30,602	\$ 7,650	37.5%	50.0%	12.5%
Cost Allocation - It Replace	\$ 7,161	\$ 2,686	\$ 3,581	\$ 895	37.5%	50.0%	12.5%
Cost Allocation - Pw Admin	\$ 168,950	\$ 63,356	\$ 84,475	\$ 21,119	37.5%	50.0%	12.5%
Cost Allocation - Workers Comp	\$ 15,228	\$ 5,710	\$ 7,614	\$ 1,903	37.5%	50.0%	12.5%
Cost Allocation - Eoc	\$ 4,672	\$ 1,752	\$ 2,336	\$ 584	37.5%	50.0%	12.5%
Equipment Replacement > \$10K	\$ 225,745	\$ 84,655	\$ 112,873	\$ 28,218	37.5%	50.0%	12.5%
Transfer Out - Cap Improv Proj	\$ -	\$ -	\$ -	\$ -	37.5%	50.0%	12.5%
<b>Subtotal: 501 Sewer Services</b>	<b>\$ 4,087,771</b>	<b>\$ 1,532,914</b>	<b>\$ 2,043,885</b>	<b>\$ 510,971</b>	<b>37.5%</b>	<b>50.0%</b>	<b>12.5%</b>
<b>TOTAL: SEWER SYSTEM</b>	<b>\$ 4,087,771</b>	<b>\$ 1,532,914</b>	<b>\$ 2,043,885</b>	<b>\$ 510,971</b>	<b>37.5%</b>	<b>50.0%</b>	<b>12.5%</b>

TABLE 19: CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS, cont.

Classification of Expenses, cont.							
Budget Categories	Total Revenue Requirements	Flow	Fixed (EDUs)	Customer	Basis of Classification		
	FY 2025/26	(VOL)	(CAP)	(CA)	(VOL)	(CAP)	(CA)
<b>Debt Service Payments</b>							
Outstanding Debt	\$ 765,219	\$ 382,609	\$ 382,609	\$ -	50.0%	50.0%	0.0%
New Debt Issue - SRF Loan	-	-	-	-	50.0%	50.0%	0.0%
New Debt Issue - Revenue Bond	-	-	-	-	50.0%	50.0%	0.0%
<b>Total Debt Service Payments</b>	<b>\$ 765,219</b>	<b>\$ 382,609</b>	<b>\$ 382,609</b>	<b>\$ -</b>	<b>50.0%</b>	<b>50.0%</b>	<b>0.0%</b>
<b>Capital Expenditures</b>							
Rate Funded Capital Expenses	\$ 6,664,288	2,499,108	3,332,144	833,036	37.5%	50.0%	12.5%
<b>TOTAL REVENUE REQUIREMENTS</b>	<b>\$ 11,517,277</b>	<b>\$ 4,414,631</b>	<b>\$ 5,758,639</b>	<b>\$ 1,344,007</b>	<b>38.3%</b>	<b>50.0%</b>	<b>11.7%</b>
<i>Less: Non-Rate Revenues</i>							
<b>NET REVENUE REQUIREMENTS</b>	<b>\$ 11,517,277</b>	<b>\$ 4,414,631</b>	<b>\$ 5,758,639</b>	<b>\$ 1,344,007</b>			
<i>Allocation of Revenue Requirements</i>	100.0%	38.3%	50.0%	11.7%			

*Net Revenue Req't. Check from Financial Plan \$ -*

**TABLE 20: ADJUSTMENT TO CLASSIFICATION OF EXPENSES FOR COST OF SERVICE ANALYSIS**

Adjustments to Classification of Expenses		Flow	Fixed (EDUs)	Customer
Adjustment to Current Rate Level:	Total	(VOL)	(CAP)	(CA)
Test Year (FY 2025/26) Target Rate Rev. After Rate Increases	\$ 13,472,345			
Projected Rate Revenue at Current Rates	13,079,946			
Test Year (FY 2025/26) Projected Rate Adjustment	3.0%			
<b>Adjusted Net Revenue Requirements</b>	<b>\$ 13,472,345</b>	<b>\$ 5,164,019</b>	<b>\$ 6,736,172</b>	<b>\$ 1,572,154</b>
<i>Percent of Revenue</i>	<i>100.0%</i>	<i>38.3%</i>	<i>50.0%</i>	<i>11.7%</i>

**TABLE 21: RATE ALTERNATIVES BASED ON COST-OF-SERVICE ANALYSIS**

COST-OF-SERVICE NET REVENUE REQUIREMENTS	Total	Flow	Fixed (EDUs)	Customer
		(VOL)	(CAP)	(CA)
Rate-Design Adjustments to Fixed/Variable %	100.0%	38.3%	50.0%	11.7%
Rate-Design Adjustments to Fixed/Variable (\$)	\$ 13,472,345	\$5,164,019	\$6,736,172	\$1,572,154

Variable (Volumetric Rates)	38.3%
Fixed Charges	61.7%

**TABLE 22: DEVELOPMENT OF THE FLOW ESTIMATES TO TREATMENT PLANT**

Development of the FLOW ESTIMATES TO TREATMENT PLANT <sup>1</sup>				
Customer Class	Number of Accounts	Number of Units	Estimated Annual Volume (HCF) <sup>2</sup>	Percentage of Estimated Annual Volume
Single Family	14,166	14,166	1,240,942	37.3%
Multi-Family	5,396	18,839	1,650,296	49.6%
Commercial	2,808	4,998	437,862	13.2%
<b>Total:</b>	<b>22,370</b>	<b>38,003</b>	<b>3,329,100</b>	<b>100.0%</b>

1. Customer data provided by City Staff.
2. Estimated sewer flow based on average winter consumption for residential customers.  
Commercial customers are based on annual consumption.

**TABLE 23: DEVELOPMENT OF THE SEWER ALLOCATION FACTORS**

Development of the Allocation Factors						
	Number of Accounts	CUSTOMER Allocation Factors % of Total Accounts	Number of EDU Billing Units	CAPACITY Allocation Factors (% of Total EDUs)	Estimated Annual Flow (HCF)	VOLUME Allocation Factor (% of Estimated Flow)
Single Family	14,166	63.3%	14,166	37.3%	1,240,942	37.3%
Multi-Family	5,396	24.1%	18,839	49.6%	1,650,296	49.6%
Commercial	2,808	12.6%	4,998	13.2%	437,862	13.2%
<b>Total:</b>	<b>22,370</b>	<b>100.0%</b>	<b>38,003</b>	<b>100.0%</b>	<b>3,329,100</b>	<b>100.0%</b>

1. Customer data provided by City Staff. Source file: 2023-24 Sewer Charge Levy Data

**TABLE 24 : TOTAL REVENUE BY CUSTOMER CLASS**

Customer Class	FY 2024/25 Rate Revenue <sup>1</sup>	Percentage of Accounts
Single Family	\$ 5,307,150	40.4%
Multi-Family	\$ 6,145,816	46.7%
Commercial	\$ 1,697,126	12.9%
<b>Total:</b>	<b>\$ 13,150,092</b>	<b>100.0%</b>

1. Source file: 2024-25 Sewer Charge Levy Data

*Preliminary Draft Subject to Material Revision, Do Not Cite or Distribute*

TABLE 25: ALLOCATION OF NET REVENUE REQUIREMENTS

**COST-OF-SERVICE NET REVENUE REQUIREMENTS**

Customer Class	Cost Classification Components			Cost-of-Service Net Revenue Req'ts.	% of COS Net Revenue Req'ts.
	Volume	Capacity	Customer Related		
<b>Net Revenue Requirements<sup>1</sup></b>	<b>\$ 5,164,019</b>	<b>\$ 6,736,172</b>	<b>\$ 1,572,154</b>	<b>\$ 13,472,345</b>	<b>--</b>
	38.3%	50.0%	11.7%	100.0%	
Single Family	\$ 1,924,918	\$ 2,510,948	\$ 995,580	\$ 5,431,446	40.3%
Multi-Family	\$ 2,559,900	\$ 3,339,245	\$ 379,228	\$ 6,278,373	46.6%
Commercial	\$ 679,201	\$ 885,979	\$ 197,345	\$ 1,762,525	13.1%
<b>Total:</b>	<b>\$ 5,164,019</b>	<b>\$ 6,736,172</b>	<b>\$ 1,572,154</b>	<b>\$ 13,472,345</b>	<b>100%</b>

1. The revenue requirement for each customer class is determined by multiplying the revenue requirement from each cost classification by the allocation factors for each customer class.

TABLE 26 : RATE DESIGN - SUMMARY OF REVENUE REQUIREMENTS

Customer Class	Cost-of-Service Net Revenue Requirements		NET REVENUE REQUIREMENTS							
	FY 2024/25 COS Rev. Req't	% of COS Rev. Req't.	% Fixed Revenue	% Variable Revenue	Volume	Capacity	Customer Related	Estimated Fixed Revenue	Estimated Variable Revenue	
Single Family	\$ 5,431,446	40.3%	100%	0%	\$ -	\$ 4,435,866	\$ 995,580	\$ 5,431,446	\$ -	\$ 5,431,446
Multi-Family	\$ 6,278,373	46.6%	100%	0%	-	5,899,145	379,228	6,278,373	-	6,278,373
Commercial	\$ 1,762,525	13.1%	56%	44%	768,493	796,687	197,345	994,032	\$ 768,493	1,762,525
<b>Total</b>	<b>\$ 13,472,345</b>	<b>100.0%</b>			<b>\$ 768,493</b>	<b>\$ 11,131,698</b>	<b>\$ 1,572,154</b>	<b>\$ 12,703,852</b>	<b>\$ 768,493</b>	<b>\$ 13,472,345</b>
	<i>Percent of Total Revenue Collected</i>		94%	6%						\$ - Check

TABLE 27 : PROPOSED SEWER RATES

NET REVENUE REQUIREMENTS								Fixed Revenue	Variable Revenue	Total Revenue	Total Revenue check
Customer Class	Number of Units	Net Revenue Requirement	Estimated Fixed Revenue	Estimated Variable Revenue	Monthly Fixed Charge Per Unit	Annual Charge Per Unit	Volumetric Rate (\$/HCF)				
Single Family	14,166	\$ 5,431,446	\$ 5,431,446	\$ -	\$31.95	\	N/A	\$ 5,431,446	\$ -	\$ 5,431,446	\$ -
Multi-Family	18,839	\$ 6,278,373	\$ 6,278,373	\$ -	\$27.77	\	N/A	\$ 6,278,373	\$ -	\$ 6,278,373	\$ -
Commercial	2,808	\$ 1,762,525	\$ 994,032	\$ 768,493	\$29.50	\	\$4.01	\$ 994,032	\$ 768,493	\$ 1,762,525	\$ 0
<b>Total</b>	<b>35,813</b>	<b>\$ 13,472,345</b>	<b>\$ 12,703,852</b>	<b>\$ 768,493</b>				<b>\$ 12,703,852</b>	<b>\$ 768,493</b>	<b>\$ 13,472,345</b>	<b>\$ 0</b>

TABLE 28: CURRENT VS. PROPOSED SEWER RATES

Sewer Rate Schedule	Current Rates (\$/EDU)	Proposed Monthly Sewer Rates				
		Year 1	Year 2	Year 3	Year 4	Year 5
		FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
<i>Projected Increase in Rate Revenue:</i>		3.00%	3.00%	3.00%	3.00%	3.00%
<b>Customer Class</b>						
Single Family (\$/month)	\$31.22	\$31.95	\$32.91	\$33.90	\$34.92	\$35.97
Multi-Family (\$/month)	\$28.13	\$27.77	\$28.61	\$29.47	\$30.35	\$31.26
Commercial						
Fixed Charge (\$/month) (includes first 730 cubic feet)	\$28.13	\$29.50	\$30.39	\$31.30	\$32.24	\$33.21
Flow-Based Rate (\$ per HCF)	\$3.86	\$4.01	\$4.13	\$4.25	\$4.38	\$4.51