CITY OF ROSEVILLE, CA

# FY 2025 Water, Wastewater, and Recycled Water Rate Study

**April 22, 2025**

CITY OF ROSEVILLE CALIFORNIA

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April 22, 2025

Mr. Shane Whittington
Business Services Manager
City of Roseville
2005 Hilltop Circle
Roseville, CA 95747

**Subject: 2025 Water, Wastewater, and Recycled Water Rate Study Report**

Dear Mr. Whittington,

Raftelis is pleased to provide this report on the 2025 Water, Wastewater, and Recycled Water Rate Study prepared for the City of Roseville (City). The study's overarching goal was to develop proposed FY 2026 and FY 2027 water, wastewater, and recycled water rates for the City's utilities that are compliant with California Proposition 218 and industry standard cost of service principles. As part of the study, 5-year financial plans and projected rates were also developed for the City's water and wastewater utilities based on expected cost increases.

It has been a pleasure working with you and we would like to thank Mr. Joseph Barrow, Ms. Linda York, and Ms. Archana Wagley for the support provided to Raftelis during this study.

Sincerely,
***RAFTELIS.***

**John Wright**
Senior Manager

**Summer Simpson**
Associate Consultant

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# 1. Executive Summary

## 1.1. Study Objectives

The City of Roseville (City) engaged Raftelis in 2024 to conduct a rate study to establish proposed water, wastewater, and recycled rates compliant with California Proposition 218 and consistent with industry standard cost of service (COS) principles. The major objectives of the study include the following:

- Develop a five-year financial plan for the period FY 2026 - FY 2030
- Review and, if necessary, make recommendations to revise the City's current water, wastewater, and recycled water rate structures
- Complete a COS analysis to equitably allocate costs to customer classes and rate components
- Propose fair and equitable rates for FY 2026 and FY 2027 that will be reflected in the City's Proposition 218 notice
- Develop a five-year rate projection for the period FY 2026-FY 2027

## 1.2. Water Utility Rate Study Results

The water utility serving the City of Roseville incurs all necessary costs to provide customers with potable water service. This includes the acquisition and treatment of water supplies and the storage, pumping, transmission and distribution of treated water. If current water rates remain unchanged, rate revenues are projected to be inadequate to meet the utility's needs during the period FY 2026 - FY 2030. For this reason, annual increases in water rate revenues will be required. **Table 1-1** shows a projected summary financial plan for the City's water utility.

**Table 1-1: Water Utility Summary Financial Plan (in Millions)**

| Line | Description | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| 1 | Required % Increase in Rate Revenues | 4.0% | 4.0% | 7.5% | 7.5% | 7.5% |
| 2 | | | | | | |
| 3 | Total Rate Revenues | $45.41 | $47.45 | $51.10 | $54.91 | $58.86 |
| 4 | Other Operating Revenues | $0.85 | $0.85 | $0.85 | $0.85 | $0.85 |
| 5 | Total Revenues | $46.26 | $48.30 | $51.95 | $55.76 | $59.71 |
| 6 | | | | | | |
| 7 | O&M Expenses | $40.12 | $42.28 | $44.21 | $45.59 | $47.52 |
| 8 | Net Cash Flow From Operations | $6.14 | $6.02 | $7.74 | $10.17 | $12.19 |
| 9 | | | | | | |
| 10 | Cash Reserves | | | | | |
| 11 | Beginning Balance | $72.17 | $57.96 | $60.40 | $59.32 | $56.43 |
| 12 | Sources of Funds | $7.43 | $7.19 | $8.92 | $11.31 | $13.32 |
| 13 | Rehabilitation Fund Capital Expenditures | ($21.65) | ($4.74) | ($10.01) | ($14.20) | ($12.92) |
| 14 | Ending Balance | $57.96 | $60.41 | $59.31 | $56.43 | $56.82 |
| 15 | | | | | | |
| 16 | Target Cash Reserve | $40.67 | $42.61 | $44.39 | $45.75 | $47.55 |
| 16 | Variance from Target | $17.29 | $17.80 | $14.92 | $10.68 | $9.27 |

No change is recommended for the City's water rate structure. **Table 1-2** shows proposed monthly meter service charges for the period FY 2026 - FY 2030. The rates presented for FY 2026 and FY 2027 will be reflected in the City's Proposition 218 notice.

### Table 1-2: Proposed Meter Service Charge ($/Month)

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| 3/4" | $30.82 | $31.63 | $32.90 | $35.36 | $38.01 | $40.87 |
| 1" | $47.57 | $49.47 | $51.45 | $55.31 | $59.46 | $63.91 |
| 1.5" | $89.44 | $94.07 | $97.83 | $105.17 | $113.06 | $121.54 |
| 2" | $139.70 | $147.59 | $153.49 | $165.01 | $177.38 | $190.68 |
| 3" | $298.82 | $317.07 | $329.75 | $354.48 | $381.07 | $409.65 |
| 4" | $533.31 | $566.83 | $589.50 | $633.72 | $681.24 | $732.34 |
| 6" | $1,094.41 | $1,164.47 | $1,211.05 | $1,301.88 | $1,399.52 | $1,504.48 |
| 8" | $2,350.61 | $2,502.47 | $2,602.57 | $2,797.76 | $3,007.59 | $3,233.16 |
| 10" | $3,523.07 | $3,751.27 | $3,901.32 | $4,193.92 | $4,508.46 | $4,846.60 |

**Table 1-3** shows the proposed quantity charges for the period FY 2026 - FY 2030. The rates presented for FY 2026 and FY 2027 will be reflected in the City's Proposition 218 notice on a $/cubic foot basis.

### Table 1-3: Proposed Quantity Charge ($/Cubic Foot)

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| All Metered Usage | $0.0166 | $0.0174 | $0.0181 | $0.0195 | $0.0209 | $0.0225 |

**Table 1-4** shows proposed monthly flat charges for non-metered water customers for the period FY 2026 - FY 2030. The FY 2026 and FY 2027 rates will be reflected in the City's Proposition 218 notice.

### Table 1-4: Non-Metered Water Customer ($/Month)

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| Single-family lots up to 4,900 ft$^2$ | $50.93 | $52.95 | $55.07 | $59.20 | $63.64 | $68.41 |
| Single-family lots 4,901 to 8,900 ft$^2$ | $55.19 | $56.79 | $59.06 | $63.49 | $68.25 | $73.37 |
| Single-family lots 8,901 to 12,000 ft$^2$ | $62.73 | $66.39 | $69.05 | $74.22 | $79.79 | $85.78 |
| Single-family lots 12,001 to 15,000 ft$^2$ | $69.22 | $73.59 | $76.53 | $82.27 | $88.44 | $95.08 |
| Other Non-Metered Customer 1[1] | $43.64 | $47.68 | $49.59 | $53.30 | $57.30 | $61.60 |
| Other Non-Metered Customer 2[2] | $26.97 | $27.67 | $28.78 | $30.94 | $33.26 | $35.75 |

[1] This rate is calculated for the purpose of establishing revenue requirements and allocating costs. The City has a separate process calculating this rate outlined in Chapter 14.04.100(D) of the Roseville Municipal Code. Consequently, the actual amount administered may vary, but is still cost justified.

[2] This rate is calculated for the purpose of establishing revenue requirements and allocating costs. The City has a separate process calculating this rate outlined in Chapter 14.04.100(D) of the Roseville Municipal Code. Consequently, the actual amount administered may vary, but is still cost justified.

# 1.3. Wastewater Utility Rate Study Results

The wastewater utility serving the City of Roseville incurs all necessary costs to provide customers with wastewater collection service. If current wastewater rates remain unchanged, rate revenues are projected to be inadequate to meet the utility's needs during the period FY 2026 - FY 2030. **Table 1-5** shows a projected summary financial plan for the City's wastewater utility.

**Table 1-5: Wastewater Utility Summary Financial Plan (in Millions)**

| Line | Description | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| 1 | Required % Increase in Rate Revenues | 3.5% | 4.0% | 2.0% | 2.0% | 2.0% |
| 2 | | | | | | |
| 3 | Total Rate Revenues | $48.63 | $50.99 | $52.45 | $53.95 | $55.49 |
| 4 | Other Operating Revenues | $15.81 | $17.82 | $17.82 | $17.82 | $17.82 |
| 5 | Total Revenues | $64.44 | $68.81 | $70.27 | $71.77 | $73.31 |
| 6 | | | | | | |
| 7 | O&M Expenses | $53.20 | $55.61 | $58.23 | $59.71 | $61.46 |
| 8 | Net Cash Flow From Operations | $11.25 | $13.20 | $12.04 | $12.06 | $11.85 |
| 9 | | | | | | |
| 10 | Cash Reserves | | | | | |
| 11 | Beginning Balance | $82.61 | $86.01 | $78.56 | $66.88 | $52.68 |
| 12 | Sources of Funds | $12.93 | $14.74 | $13.35 | $13.09 | $12.92 |
| 13 | Rehabilitation Fund Capital Expenditures | ($9.53) | ($22.19) | ($25.03) | ($27.29) | ($11.08) |
| 14 | Ending Balance | $86.01 | $78.56 | $66.88 | $52.68 | $54.52 |
| 15 | | | | | | |
| 16 | Target Cash Reserve | $46.73 | $48.75 | $50.92 | $52.25 | $53.78 |
| 17 | Variance from Target | $39.28 | $29.81 | $15.96 | $0.43 | $0.75 |

No change is recommended for the City's wastewater rate structure. **Table 1-6** shows the proposed monthly per sewer unit charge for the period FY 2026 - FY 2030. The rates presented for FY 2026 and FY 2027 will be reflected in the City's Proposition 218 notice. In Proposition 218 notice, the Commercial Customer Commodity Rate will be expressed on a $/cubic foot basis.

**Table 1-6: Proposed Wastewater Rates**

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| Single Family Residential ($/Month) | $53.45 | $55.13 | $57.34 | $58.48 | $59.65 | $60.84 |
| Commercial – Flat Rate ($/Month) | $53.45 | $55.13 | $57.34 | $58.48 | $59.65 | $60.84 |
| | | | | | | |
| Commercial – Metered ($/Cubic Foot)[3] | $0.04978 | $0.05288 | $0.05500 | $0.05610 | $0.05723 | $0.05838 |

# 1.4. Recycled Water Rate Study Results

A formal financial plan and COS analysis were not completed for recycled water service. The costs incurred to provide recycled water service are included in the wastewater revenue requirement. The revenue earned from recycled water sales offsets the wastewater revenue requirement.

[3] Commercial commodity rates are administered to relevant metered customers for associated sewer consumption above 560 cubic feet of potable water usage. This is consistent with Chapter 14.16.200 of the Roseville Municipal Code.

No change is recommended for the recycled water rate structure. In FY 2026 and FY 2027, recycled water monthly meter charges will continue to be set at 90% of the potable water monthly meter service charge. The recycled water commodity charge will continue to be set at 64.5% of the potable water commodity rate. Maintaining reasonable recycled water rates achieves the following objectives:

- It enhances the potential for increased recycled water market penetration over the long term
- It reduces the long-term water supply acquisition and infrastructure costs the City must incur to provide potable water service
- It is fully aligned with the State of California initiatives designed to reduce long-term water demand

**Table 1-7** shows proposed recycled water monthly meter service charges for the period FY 2026 - FY 2030. The rates presented for FY 2026 and FY 2027 will be reflected in the City's Proposition 218 notice.

**Table 1-7: Proposed Recycled Water Meter Service Charge ($/Month)**

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| 3/4" | $27.74 | $28.47 | $29.61 | $31.83 | $34.21 | $36.78 |
| 1" | $42.82 | $44.52 | $46.31 | $49.78 | $53.51 | $57.52 |
| 1.5" | $80.50 | $84.66 | $88.05 | $94.65 | $101.75 | $109.38 |
| 2" | $125.73 | $132.83 | $138.14 | $148.51 | $159.64 | $171.62 |
| 3" | $268.94 | $285.36 | $296.78 | $319.04 | $342.96 | $368.69 |
| 4" | $479.98 | $510.15 | $530.55 | $570.34 | $613.12 | $659.10 |
| 6" | $984.97 | $1,048.02 | $1,089.95 | $1,171.69 | $1,259.57 | $1,354.03 |
| 8" | $2,115.55 | $2,252.22 | $2,342.31 | $2,517.99 | $2,706.83 | $2,909.85 |
| 10" | $3,170.77 | $3,376.14 | $3,511.19 | $3,774.53 | $4,057.62 | $4,361.94 |

**Table 1-8** shows proposed quantity charges for the period FY 2026 - FY 2030. The rates presented for FY 2026 and FY 2027 will be reflected in the City's Proposition 218 notice on a $/cubic foot basis.

**Table 1-8: Proposed Recycled Water Quantity Charge ($/Cubic Foot)**

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| All Usage | $0.0107 | $0.0112 | $0.0117 | $0.0125 | $0.0135 | $0.0145 |

# 2. Legal Requirements and Rate-Setting Methodology

This water rate study was conducted using industry-standard principles discussed in the American Water Works Association publication *Manual of Water Supply Practices M1, Principles of Water Rates, Fees, and Charges, Sixth Edition* (AWWA Manual M1). The wastewater rate study was conducted using industry-standard principles discussed by the Water Environment Federation publication *Manual of Practice, No. 27, Financing and Charges for Wastewater Systems* (WEF Manual 27). The general principles of rate structure design and the objectives of the Study are described below.

According to the AWWA M1 Manual, the first step in the ratemaking process is to determine the adequate and appropriate level of funding for a given utility. This is referred to as determining the "revenue requirement." This analysis considers the short-term and long-term service objectives of the utility over a given planning horizon, including capital facilities, system operations and maintenance, and financial reserve policies, to determine the adequacy of a utility's existing rates to recover its costs. Several factors may affect these projections, including the number of customers served, water-use trends, unexpected revenue surplus/shortfall, weather, conservation, use restrictions, inflation, interest rates, capital finance needs, and other changes in operating and economic conditions.

After determining a utility's revenue requirements, the next step is to determine the COS. Utilizing a public agency's approved budget, financial reports, operating data, and capital improvement plans, a COS study generally categorizes the operating system costs by function. Asset costs are similarly functionalized to determine the COS of the capital expenditures.

After the revenue requirement is properly categorized by function, these "functionalized costs" are allocated first to cost causation components, and then to the customer classes or specific customer charges. Rate design is the final part of the rate-making process and uses the revenue requirement and COS analysis to determine appropriate rates for each customer class or specific customer charge.

### 2.1.1. California Constitution - Article XIII D, Section 6 (Proposition 218)

Proposition 218, reflected in the California Constitution as Article XIII D, was enacted in 1996 to ensure that rates and fees are reasonable and proportional to the cost of providing service. The principal requirements, as they relate to public water and wastewater services, are as follows:

- A property-related charge (such as water or wastewater rates) imposed by a public agency on a parcel shall not exceed the costs required to provide the property-related service.
- Revenues derived from the charge shall not be used for any purpose other than that for which the charge was imposed.
- The amount of the charge imposed upon any parcel shall not exceed the proportional COS attributable to the parcel.

- No charge may be imposed for a service unless that service is used or immediately available to the owner of the property.
- A written notice of the proposed charge shall be mailed to the record owner of each parcel at least 45 days prior to the public hearing when the agency considers all written protests against the charge.

As stated in AWWA Manual M1, "rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers." Raftelis follows industry standard rate setting methodologies set forth by the AWWA Manual M1 and WEF Manual 27 to comply with the intent of Proposition 218 and create water and wastewater rates that do not exceed the proportionate cost of providing water and wastewater services on a parcel basis.

# 3. Water Rate Study

## 3.1. Water System Overview

**Water Supply**
The City obtains its surface water from Folsom Lake through wholesale purchases primarily from the United States Bureau of Reclamation (USBR) and an additional water contract with the Placer County Water Agency (PCWA). Depending on annual availability, the City has the rights to up to 32,000-acre feet (AF) of raw surface water from the USBR's Central Valley Project and up to 30,000 AF of raw surface water from the PCWA.

In addition to its surface water supplies, the City also operates 7 groundwater wells, which have a combined capacity of approximately 18,700-acre feet per year (AF/yr) or 16.7 MGD.

**Water Treatment Facilities**
The City's single water treatment plant (WTP) has a capacity of 100 MGD. There are no plans to expand the WTP as it is sized just above the pumping capacity of the Folsom Dam pump station. The WTP is a conventional treatment plant. The treatment processes include flocculation and sedimentation, clarification, filtration, and disinfection.

**Storage Facilities**
The City currently utilizes 8 potable water storage tanks, which are critical for maintaining water supply and system pressure during typical demand fluctuations, peak demand fluctuations, and emergency demands. The eight water storage tanks have a total nominal capacity of 44 million gallons (MG).

**Distribution System**
The City maintains a distribution network consisting of approximately 700 miles of pressure pipe ranging from 4 inch to 72 inches in diameter. The network of pipes delivers potable water from the WTP to the City's customers to meet water demands during average day, maximum day, and peak hour conditions.

# 4. Water Financial Plan

**Section 4** details the development of the five-year financial plan for the City's water utility. This includes the determination of annual revenues required from water rates based on annual cash flow projections. Assumptions and inputs related to projected revenues, operating expenses, and capital expenditures are outlined in the following subsections.

## 4.1. Existing Water Rates

Currently, City customers, that are metered, pay a monthly fixed charge that is based on meter size. **Table 4-1** below shows the City's existing monthly rates for metered customers.

**Table 4-1: Existing Monthly Meter Service Charge**

| Meter Size | Charge |
|---|---|
| 3/4" | $30.82 |
| 1" | $47.57 |
| 1.5" | $89.44 |
| 2" | $139.70 |
| 3" | $298.82 |
| 4" | $533.31 |
| 6" | $1,094.41 |
| 8" | $2,350.61 |
| 10" | $3,523.07 |

Metered customers also pay a quantity rate per cubic foot of water usage. **Table 4-2** below is the City's existing quantity rate for all metered customers.

**Table 4-2: Existing Volumetric Rates per Cubic Foot**

| Customer Class | Rate |
|---|---|
| All Metered Usage | $0.0166 |

Non-metered water customers pay a monthly flat charge determined by the non-metered class they fall into. **Table 4-3** shows the City's existing non-metered flat charge.

**Table 4-3: Non-Metered Flat Service Charge**

| Customer Class | Rate |
|---|---|
| Single-family lots up to 4,900 $ft^2$ | $50.93 |
| Single-family lots 4,901 to 8,900 $ft^2$ | $55.19 |
| Single-family lots 8,901 to 12,000 $ft^2$ | $62.73 |
| Single-family lots 12,001 to 15,000 $ft^2$ | $69.22 |
| Other Non-Metered Customer 1 | $43.64 |
| Other Non-Metered Customer 2 | $26.97 |

# 4.2. Assumptions

Various assumptions were used to project future revenues and expenses as part of the financial planning process. They can be divided into two major groups: assumptions related to economic factors, such as inflation, capital costs, and interest rates, and core business assumptions, such as water sale projections.

## 4.2.1. Inflationary Assumptions

The inflationary assumptions are summarized in **Table 4-4**. General inflation reflects longer-term CPI average inflation. The City provided inflated capital costs by year, so an additional inflation factor was not included.

**Table 4-4: Expense and Revenue Escalation Assumptions**

| Inflation | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|
| General | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Salaries & Benefits | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| Utilities | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| Reimbursed Cost | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| Admin Salaries & Benefits | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| Non-Rate Revenues | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Reserve Interest Rate | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |

## 4.2.2. Water Customer Account and Usage Assumptions

Based on the FY 2024 billing data, the City has a total of 49,222 metered water customers (shown below in **Table 4-5**) and 389 non-metered customers (shown below in **Table 4-6**).

The City projects a 1.0% increase in residential and commercial metered accounts each year from FY2025 to FY2030, the City does not project any new growth for its non-metered customers. Based on FY 2024 meter counts and assumed growth, Raftelis projected the number of water meters by fixed charge type (shown below in **Table 4-5**).

**Table 4-5: Projected Number of Water Meters**

| Meter Size | FY 2024 | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|---|
| **Residential** | | | | | | | |
| **3/4”** | 35,806 | 36,164 | 36,526 | 36,891 | 37,260 | 37,632 | 38,009 |
| **1”** | 11,301 | 11,414 | 11,528 | 11,643 | 11,760 | 11,877 | 11,996 |
| 1.5” | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2” | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3” | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4” | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6” | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8” | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10” | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 47,108 | 47,579 | 48,055 | 48,535 | 49,021 | 49,511 | 50,006 |
| | | | | | | | |
| Commercial | | | | | | | |
| 3/4” | 327 | 330 | 334 | 337 | 340 | 344 | 347 |
| 1” | 361 | 365 | 368 | 372 | 376 | 379 | 383 |
| 1.5” | 404 | 408 | 412 | 416 | 420 | 425 | 429 |
| 2” | 779 | 787 | 795 | 803 | 811 | 819 | 827 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3” | 121 | 122 | 123 | 125 | 126 | 127 | 128 |
| 4” | 80 | 81 | 82 | 82 | 83 | 84 | 85 |
| 6” | 30 | 30 | 31 | 31 | 31 | 32 | 32 |
| 8” | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 10” | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Total | 2,114 | 2,135 | 2,156 | 2,178 | 2,200 | 2,222 | 2,244 |

### Table 4-6: Number of Non-Metered Accounts

| Class | FY 2024 | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|---|
| Single-Family Lots up to 4,900 $ft^2$ | 54 | 54 | 54 | 54 | 54 | 54 | 54 |
| Single-Family Lots 4,901 to 8,900 $ft^2$ | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Single-Family Lots 8,901 to 12,000 $ft^2$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Single-Family Lots 12,000 to 15,000 $ft^2$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Other Non-Metered Customer 1 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Other Non-Metered Customer 2 | 231 | 231 | 231 | 231 | 231 | 231 | 231 |

Projected water usage is based on two main factors: customer account growth rates and the change in water demand on a per account basis. As discussed above, account growth for all metered customers is projected to be 1.0% from FY 2025 through FY 2030. For commercial customers, water demand is projected using a factor of 100% each year (i.e., there is no projected change in commercial water demand on a per account basis). However, for single-family residential customers, per account water demand is projected to decrease by 1.0% starting in FY 2026 through FY 2030. The reflects an expected continuing downward trend in residential consumption due to the natural replacement of low efficiency plumbing fixtures and increasingly stringent State of California water conservation requirements.

These assumptions are incorporated into the demand forecast shown below in **Table 4-7**. FY 2025 estimated demand is based on actual usage in FY 2024.

### Table 4-7: Projected Water Usage in Million Cubic Feet by Customer Class and Accounts

| Customer Type | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| Single-Family Residential | 707.45 | 707.38 | 700.17 | 685.95 | 665.1 | 638.16 |
| Commercial | 464.79 | 469.44 | 474.14 | 478.88 | 483.67 | 488.5 |
| Total | 1,172.24 | 1,176.82 | 1,174.31 | 1,164.83 | 1,148.77 | 1,126.66 |

## 4.3. Revenues

The City’s water revenues consist of rate revenues (i.e. fixed and variable revenue), non-rate revenue (such as new meter installation, backflow repair and testing, etc.), and capacity/connection fee revenue. Projected water rate revenues under existing rates are calculated by multiplying current rates (from **Table 4-1, Table 4-2, and Table 4-3**) by the corresponding units of service (from **Table 4-5**, **Table 4-6 and Table 4-7**) Projecting water rate revenues under existing rates is necessary to evaluate the City’s projected baseline financial position in the absence of any proposed rate increases. Note that the City uses a pro-rated amount when initially implementing new rates. This is shown in **Table 4-8** below.

### Table 4-8: Projected Operating Revenues Under Existing Water Rates (in Millions)

| Rate Revenues | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| Fixed Charges: | | | | | | |
| Metered Accounts (Single-Family & Commercial) | $23.73 | $23.97 | $24.21 | $24.45 | $24.69 | $24.94 |
| Non-Metered Accounts | $0.16 | $0.16 | $0.16 | $0.16 | $0.16 | $0.16 |
| | | | | | | |
| Quantity Charges: | | | | | | |
| Single-Family Residential | $11.72 | $11.74 | $11.62 | $11.39 | $11.04 | $10.59 |
| Commercial | $7.70 | $7.79 | $7.87 | $7.95 | $8.03 | $8.11 |
| **Total** | $43.31 | $43.67 | $43.87 | $43.95 | $43.93 | $43.81 |

**Table 4-9** shows a summary of non-rate revenues and capacity/connection fee revenue. The majority of non-rate revenues were projected based on FY 2026 budgeted amounts held constant through FY 2030. However, interest revenues were calculated by averaging the beginning balance and the ending cash reserve before interest, this number is then multiplied by a reserve interest rate of 2.0%. Capacity/connection fee revenues were calculated by taking the estimated incremental annual change in equivalent dwelling units (EDUs) and multiplying by the City's current water capacity/connection fee. Capacity/connection fee revenues do not lower the water utility revenue requirement from rates. Instead, they are used to offset capital expenditures made in the City's fund for capacity related construction.

### Table 4-9: Projected Other Revenues and Capacity/Connection Fee Revenues (in Millions)

| Description | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| Non-Rate Revenues | | | | | | |
| Plan Check / Inspection Fees | $0.00 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 |
| Interest | $0.34 | $1.29 | $1.17 | $1.19 | $1.15 | $1.12 |
| Installation Tap | $0.04 | $0.02 | $0.02 | $0.02 | $0.02 | $0.02 |
| Backflow Repair and Test | $0.04 | $0.03 | $0.03 | $0.03 | $0.03 | $0.03 |
| New Meter Installation | $0.50 | $0.51 | $0.51 | $0.51 | $0.51 | $0.51 |
| State Bonds and Grants | $0.080 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| Other Revenue | $0.39 | $0.28 | $0.28 | $0.28 | $0.28 | $0.28 |
| Subtotal | $1.39 | $2.14 | $2.02 | $2.03 | $1.99 | $1.97 |
| | | | | | | |
| Connection Fee Revenue | $9.68 | $9.78 | $9.88 | $9.97 | $10.07 | $10.18 |
| Total | $11.07 | $11.91 | $11.90 | $12.01 | $12.07 | $12.14 |

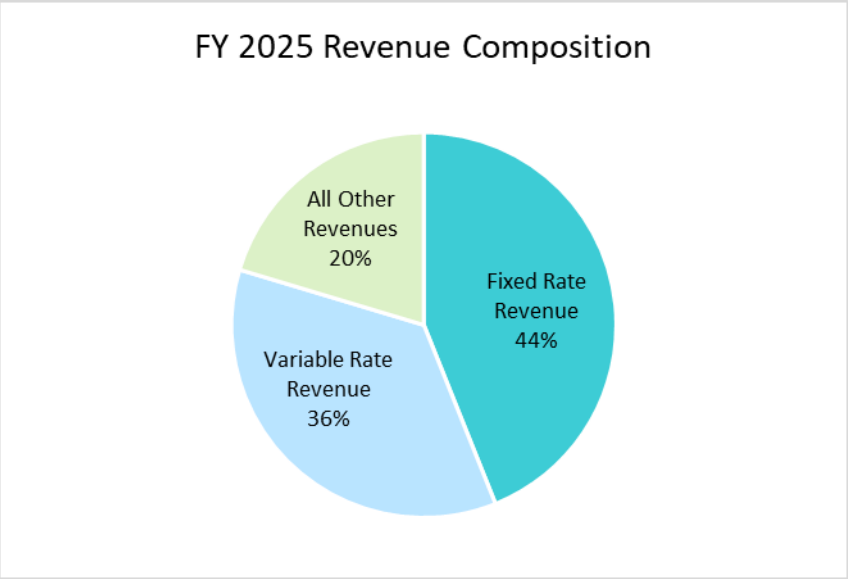
**Table 4-10** shows a revenue summary for the study period based on revenues shown previously in **Table 4-8** and **Table 4-9**. Once again, rate revenues shown in this section reflect projected water rate revenues under existing rates in the absence of any rate increases over the study period.

### Table 4-10: Revenue Summary (in Millions)

| Revenues | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| Rate Revenues | $43.31 | $43.67 | $43.87 | $43.95 | $43.93 | $43.81 |
| Non-Rate Revenue | $1.39 | $2.14 | $2.02 | $2.03 | $1.99 | $1.97 |
| Capacity/Connection Fee Revenue | $9.68 | $9.78 | $9.88 | $9.97 | $10.07 | $10.07 |
| Total | $54.38 | $55.58 | $55.76 | $55.96 | $56.00 | $55.95 |

**Figure 4-1** shows FY 2025 revenues separated into fixed rate revenue, variable rate revenues, and all other revenues. In total, rate revenues make up 80% of total revenues.

**Figure 4-1: FY 2025 Revenue Composition**




## 4.4. Operations and Maintenance Expenses

The City's FY 2026 forecasted budget was used as the baseline for projecting operations and maintenance (O&M) expenses. The expenses are then projected in the following years based on the escalation factors shown in **Table 4-4**. The projected O&M expenses are shown in **Table 4-11**. Each expense category includes detailed line-item expenditure with the appropriate escalation factor.

**Table 4-11: Projected O&M Expenses (in Millions)**

| O&M Expenses | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|
| Non-Classified | $2.36 | $2.43 | $2.51 | $2.58 | $2.66 |
| Retiree Payments | $0.69 | $0.71 | $0.74 | $0.76 | $0.78 |
| Water - Administration | $2.81 | $2.95 | $3.10 | $3.19 | $3.28 |
| Water Legislative and Regulatory Services | $0.86 | $0.88 | $0.91 | $0.93 | $1.15 |
| Water Engineering and Hydrogeology Services | $1.53 | $1.58 | $1.62 | $1.66 | $1.70 |
| Water Customer Service | $1.39 | $1.44 | $1.49 | $1.53 | $1.58 |
| Water Distribution | $5.93 | $6.21 | $6.70 | $6.92 | $7.36 |
| Cross Connection Control Program | $0.87 | $0.89 | $1.07 | $1.10 | $1.13 |
| Water Distribution System Operations | $1.24 | $1.42 | $1.45 | $1.49 | $1.53 |
| Water Distribution System Repair | $1.74 | $1.83 | $2.03 | $2.25 | $2.37 |
| Water Distribution Preventative Maintenance | $1.05 | $1.08 | $1.11 | $1.14 | $1.34 |
| Water Treatment/Storage Plant | $9.20 | $9.69 | $9.91 | $9.98 | $10.38 |
| Water Quality | $0.44 | $0.46 | $0.47 | $0.48 | $0.50 |
| Water Advanced Metering Infrastructure | $0.72 | $0.73 | $0.75 | $0.78 | $0.80 |
| Water Efficiency | $2.58 | $2.83 | $3.24 | $3.31 | $3.39 |
| Water New Meter Purchase | $0.56 | $0.57 | $0.58 | $0.60 | $0.61 |

| | | | | | |
|---|---|---|---|---|---|
| Water Outreach | $0.26 | $0.27 | $0.27 | $0.28 | $0.28 |
| Water Customer Care - Admin | $0.77 | $0.83 | $0.87 | $0.90 | $0.93 |
| Water Customer Care - Field | $0.25 | $0.27 | $0.27 | $0.28 | $0.29 |
| Water Customer Care - Billing | $0.53 | $0.55 | $0.57 | $0.59 | $0.62 |
| Water Customer Care - Cust Serv | $0.32 | $0.33 | $0.35 | $0.36 | $0.37 |
| Water UEC | $0.23 | $0.24 | $0.25 | $0.26 | $0.26 |
| Water EU Admin | $1.25 | $1.25 | $1.19 | $1.37 | $1.26 |
| Water EU Tech Serv | $1.89 | $1.99 | $2.06 | $2.12 | $2.19 |
| Water EAM Support and Maintenance | $0.08 | $0.08 | $0.09 | $0.09 | $0.09 |
| Water Compliance | $0.58 | $0.76 | $0.61 | $0.63 | $0.64 |
| Total Expenditures | $40.13 | $42.28 | $44.21 | $45.59 | $47.52 |

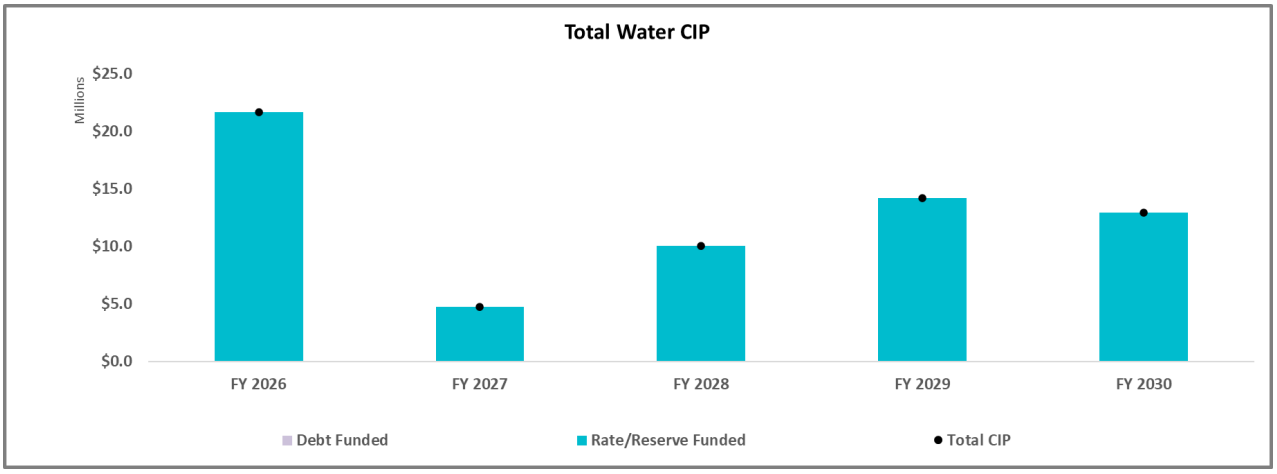
## 4.5. Capital Improvement Plan

The City has developed a capital improvement plan (CIP) to address ongoing water system needs each year throughout the study period. The total CIP costs for FY 2026 through FY 2030 seen in **Table 4-12** and **Figure 4-2**. Inflated project costs were provided by the City, so no additional inflation was applied. The CIP is funded through rate revenues and reserve funds.

**Table 4-12: Projected Capital Improvement Plan (in Millions)**

| Description | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FYE 2030 |
|---|---|---|---|---|---|
| **Total Project Expenditures** | $21.65 | $4.74 | $10.01 | $14.20 | $12.92 |

**Figure 4-2: Water CIP Projects**




## 4.6. Financial Policies

### 4.6.1. Reserve Policies

The City maintains three separate reserves. The Operating Reserve is designed to mitigate the impact of fluctuations in O&M expenditures. The Rehabilitation Reserve is designed to provide adequate funding for capital improvements that repair and rehabilitate existing infrastructure without increasing the capacity to service growth. The Rate Stabilization Reserve is designed to mitigate the impact of revenue variances on the City's financial condition.

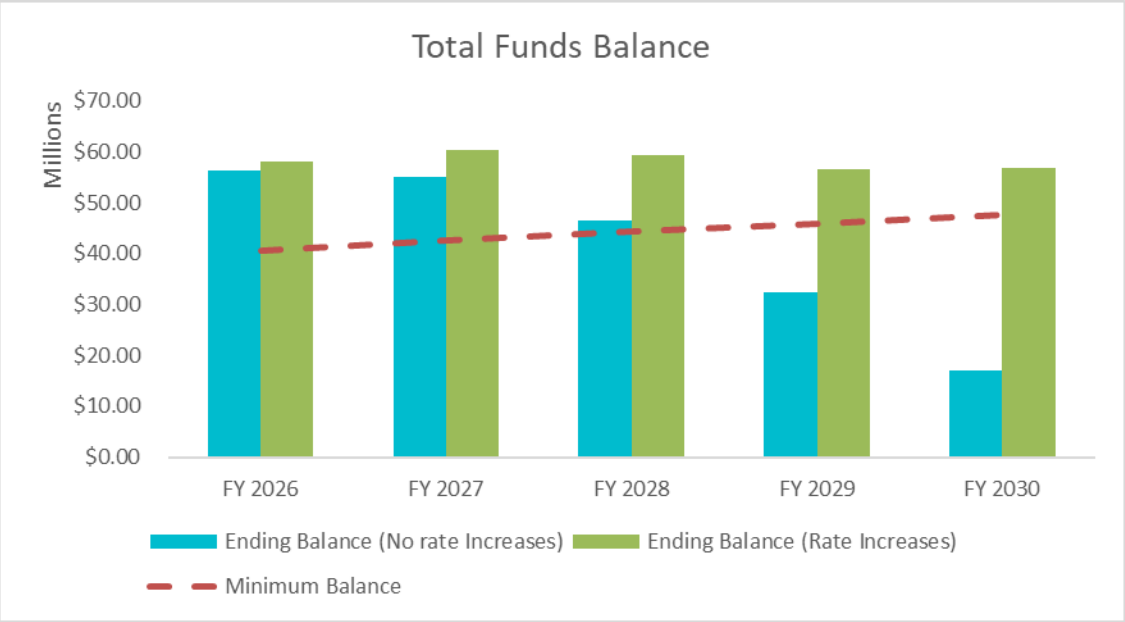
As part of the study, Raftelis consolidated these reserves to provide greater transparency regarding the financial performance and position of the water utility. However, minimum reserve targets are still calculated on an individual basis and then added together to create a single consolidated target reserve. The current reserve targets are:

1. **Operating Reserve**
    - Minimum Level: 90 days of annual O&M expenditures *($9.63 million in FY 2025)*
2. **Rate Stabilization Reserve**
    - Minimum Level: 180 days of the following year's O&M expenditures *($19.25 million in FY 2025)*
3. **Rehabilitation Reserve**
    - Minimum Level: 1% of replacement cost less depreciation of water assets *($10.27 million in FY 2025)*

## 4.7. Status Quo Financial Plan

Raftelis and City staff first evaluated the City's projected cash flow and cash reserve balances over the study period under a "status quo" financial plan before considering any rate revenue adjustments. The status quo financial plan illustrates what would occur in the absence of any water rate increases over the study period. Specifically, FY 2025 rates are assumed to remain unchanged over the study period under the status quo financial plan. **Figure 4-3** compares the projected ending cash balance in each year over the study period under the status quo and with the proposed rate increases for all three reserves combined (Operating, Rehabilitation, and Rate Stabilization). Under the status quo financial plan, the City's reserves are steadily drawn down over the five-year study period until the minimum reserve balance is no longer met in FY 2029 and FY 2030. This demonstrates the need for rate revenue increases over the study period to ensure that the City meets its minimum reserve balance as established by City policy.

**Figure 4-3: Total Fund Balance Under Status Quo and Proposed Financial Plan**




## 4.8. Proposed Financial Plan

The status quo financial plan demonstrates that the City must increase its revenues from water rates over the five-year study period to meet minimum reserve levels. Raftelis therefore, proposes annual revenue adjustments of 4% in FY 2026 and FY 2027, as well as 7.5% in FY 2028 through FY 2030 to ensure that the City maintains healthy reserve levels per City policy. The term "revenue adjustment" specifically refers to a percent increase in water rate revenues relative to the amount of water rate revenues that would be collected under the prior year's rates. Note that revenue adjustments are used only to project total water rate revenues. Allocation of the total water rate revenue requirement across the various water charges is included in the COS analysis discussed in **Section 5**. City staff approved the recommendations of the proposed revenue adjustments each year.

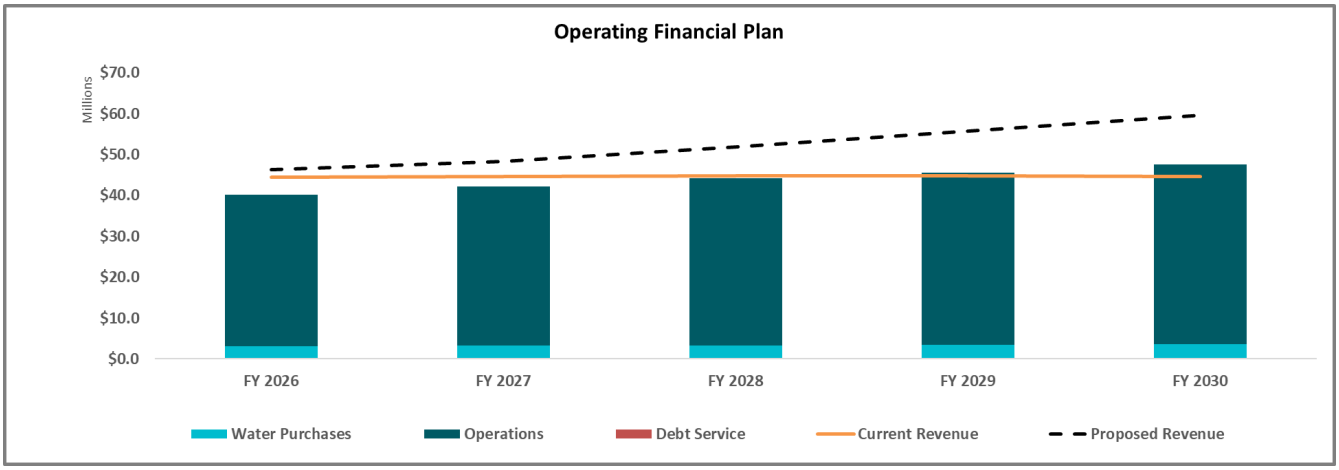
**Table 4-13** shows the proposed five-year financial plan in proforma format. Revenues and expenses were shown previously in **Section 4**. Rate revenue under existing rates is shown in Line 4, while Line 5 represents additional revenue resulting from the proposed revenue adjustments. Non-rate operating revenues in Line 8 include miscellaneous revenues from items such as plan check/inspection fees, installation tap, backflow repair and testing, and new meter installation. Capital expenditure is subtracted from cash reserves as shown on Line 26. The ending cash reserve is now meeting targets in FY 2029 and FY 2030.

## Table 4-13: Proposed Financial Plan (in Millions)

| Line | Description | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| 1 | Required % Increase in Rate Revenues | 4.0% | 4.0% | 7.5% | 7.5% | 7.5% |
| 2 | | | | | | |
| 3 | REVENUES | | | | | |
| 4 | Revenues from Current Rates | $43.67 | $43.87 | $43.95 | $43.93 | $43.81 |
| 5 | Revenue Adjustments | $1.75 | $3.58 | $7.15 | $10.98/ | $15.06 |
| 6 | Total Rate Revenue (Revenue Requirement) | $45.41 | $47.45 | $51.10 | $54.91 | $58.86 |
| 7 | | | | | | |
| 8 | Other Operating Revenue | $0.85 | $0.85 | $0.85 | $0.85 | $0.85 |
| 9 | TOTAL REVENUES | $46.26 | $48.29 | $51.95 | $55.76 | $59.71 |
| 10 | | | | | | |
| 11 | EXPENSES | | | | | |
| 12 | O&M Expenses (including purchased water) | $40.12 | $42.28 | $44.21 | $45.59 | $47.52 |
| 13 | Existing Debt Service | $0 | $0 | $0 | $0 | $0 |
| 14 | TOTAL EXPENSES | $40.12 | $42.28 | $44.21 | $45.59 | $47.52 |
| 15 | | | | | | |
| 16 | Net Annual Cash Balance (before transfers) | $6.15 | $6.02 | $7.74 | $10.17 | $12.20 |
| 17 | | | | | | |
| 18 | CASH RESERVES | | | | | |
| 19 | Beginning Cash Reserves | $72.17 | $57.96 | $60.40 | $59.32 | $56.43 |
| 20 | | | | | | |
| 21 | SOURCE OF FUNDS | | | | | |
| 22 | Operating Net Income | $6.15 | $6.02 | $7.74 | $10.17 | $12.20 |
| 23 | Total Sources | $6.15 | $6.02 | $7.74 | $10.17 | $12.20 |
| 24 | | | | | | |
| 25 | USE OF FUNDS | | | | | |
| 26 | Rehabilitation Fund Capital Expenditures | $21.65 | $4.74 | $10.01 | $14.20 | $12.92 |
| 27 | Total Uses | $21.65 | $4.74 | $10.01 | $14.20 | $12.92 |
| 28 | | | | | | |
| 29 | Net Cashflow | ($15.50) | $1.28 | ($2.27) | ($4.04) | ($0.73) |
| 30 | | | | | | |
| 31 | Ending Cash Reserves (before Interest) | $56.67 | $59.23 | $58.13 | $55.28 | $55.70 |
| 32 | Interest Income | $1.29 | $1.17 | $1.19 | $1.15 | $1.12 |
| 33 | Ending Cash Reserves | $57.96 | $60.40 | $59.32 | $56.43 | $56.82 |
| 34 | | | | | | |
| 35 | Target Reserve | | | | | |
| 36 | Operating Target | $10.03 | $10.57 | $11.05 | $11.40 | $11.88 |
| 37 | Rate Stabilization Target | $20.06 | $21.14 | $22.11 | $22.79 | $23.76 |
| 38 | Rehabilitation Target | $10.58 | $10.90 | $11.23 | $11.56 | $11.91 |
| 39 | Total Target Reserves | $40.67 | $42.61 | $44.39 | $45.75 | $47.55 |

**Figure 4-4** summarizes the tabular results from **Table 4-13** in graphical format. Operating expenses are represented by stacked bars. Revenues under current rates are represented by the solid line, while revenues inclusive of the proposed revenue adjustments are represented by the dashed line. **Figure 4-4** demonstrates that with no rate increases, the City's operating expenses surpass the City's operating revenues in FY 2029 and FY 2030.

## Figure 4-4: Proposed Financial Plan



# 5. Water Cost of Service

**Section 5** of the report provides a detailed description of the water COS analysis conducted for the City's water system. The goal of a COS analysis is to allocate the overall revenue requirement to customer classes and specific rates and charges based on the proportionate demands placed on the system. The numbers shown in this section of the report are rounded. Therefore, hand calculations based on the numbers displayed, such as summing or multiplying, may not equal the exact results shown in this report.

## 5.1. Process and Approach

The first step in the COS analysis process is to determine the revenue requirement, which is based on the results of the financial plan and the proposed revenue adjustments. The framework and methodology utilized to develop the COS analysis and to apportion the revenue requirement to each customer class and tier is informed by the processes outlined in AWWA Manual M1.

COS analyses are tailored specifically to meet the unique needs of each water system. However, there are four distinct steps in every analysis to recover costs from customer classes in an accurate, equitable, and defensible manner:

- **Cost components:** Cost components are identified to allocate O&M expenses and capital assets by their function. Cost components for this study include account services, meter capacity, and conveyance
- **Cost component allocation:** The functionalized costs are then allocated to the cost components based on their burden on the system. The revenue requirement is allocated according to the cost components, resulting in the total revenue requirement for each cost component
- **Unit cost development:** The revenue requirement for each cost component is divided by the appropriate units of service of each customer class and specific charge to determine the unit cost for each cost component
- **Revenue requirement distribution:** The unit cost is utilized to distribute the revenue requirement for each cost component to customer classes and specific charges based on their service units. The City's customer classes include Metered (residential and commercial) and Non-Metered

## 5.2. Revenue Requirement

**Table 5-1** shows the revenue requirement, which is equal to the total projected revenue required from rates for FY 2026 (also referred to as the test year or rate-setting year). The revenue requirements include O&M expenses, revenue offsets from other revenues, and adjustments for cash balance. The proposed revenue adjustments and rates accumulate the necessary funding for capital projects and allow fund balances to comply with minimum reserve requirements. The revenue requirement is calculated using the FY 2026 expenses (Lines 2-29). The revenue offset (Lines 31-37) includes the various miscellaneous, non-rate revenues that are applied as offsets to the revenue requirement. The cash balance adjustment (Line 42) is the operating net income before transfers. The final revenue requirement (Line 45) is calculated as follows:

*Total revenue required from rates (Line 45) = Operating Costs (Line 29) - Revenue offsets (Line 37) + Adjustments (Line 43)*

## Table 5-1: FY 2026 Revenue Requirement (in Millions)

| A<br>Line | B<br>Revenue Requirement Cost Component | C<br>Amount |
|---|---|---|
| 1 | Operating Costs | |
| 2 | Purchased Water | $3.15 |
| 3 | Efficiency | $2.58 |
| 4 | Non-Classified | $2.36 |
| 5 | Retiree Payments | $0.69 |
| 6 | Water – Administration | $2.81 |
| 7 | Water Legislative and Regulatory Services | $0.86 |
| 8 | Water Engineering and Hydrogeology Services | $1.53 |
| 9 | Water Customer Service | $1.39 |
| 10 | Water Distribution | $5.93 |
| 11 | Cross Connection Control Program | $0.87 |
| 12 | Water Distribution System Operations | $1.24 |
| 13 | Water Distribution System Repair | $1.74 |
| 14 | Water Distribution Preventative Maintenance | $1.05 |
| 15 | Water Treatment/Storage Plant | $6.05 |
| 16 | Water Quality | $0.44 |
| 17 | Water Advanced Metering Infrastructure | $0.72 |
| 18 | Water New Meter Purchase | $0.56 |
| 19 | Water Outreach | $0.26 |
| 20 | Water Customer Care – Admin | $0.77 |
| 21 | Water Customer Care – Field | $0.25 |
| 22 | Water Customer Care – Billing | $0.53 |
| 23 | Water Customer Care – Cust Serv | $0.32 |
| 24 | Water UEC | $0.23 |
| 25 | Water EU Admin | $1.25 |
| 26 | Water EU Tech Serv | $1.89 |
| 27 | Water EAM Support and Maintenance | $0.08 |
| 28 | Water Compliance | $0.58 |
| 29 | Total Operating Costs | $40.13 |
| 30 | | |
| 31 | Revenue Offsets | |
| 32 | Plan Check / Inspection Fees | $0.01 |
| 33 | Installation Tap | $0.02 |
| 34 | Backflow Repair & Test | $0.03 |
| 35 | New Meter Installation | $0.51 |
| 36 | Other Revenues | $0.28 |
| 37 | Total Revenue Offsets | $0.85 |
| 38 | | |
| 39 | Net Revenue Requirement Before Adjustments | $39.27 |
| 40 | | |
| 41 | Adjustments | |
| 42 | Adjustment for Change in Cash Balance | $6.15 |
| 43 | Total Adjustments | $6.15 |
| 44 | | |
| 45 | Net Revenue Requirement from Rates After Adjustment | $45.41 |

## 5.3. O&M Allocation

**Table 5-2** shows the allocation of O&M expenses to each cost causation component. The cost causation components used in this study include account services, meter capacity, and conveyance. Account services are expenses dealing with all customer service and billing costs. Meter capacity expenses are systemwide costs not directly related to water flow. Conveyance relates directly to the flow of water, including distribution and treatment costs. The percentage allocated can be seen in Columns D-F of **Table 5-2**. FY 2026 O&M expenses are shown in Column C, Lines 1-28. **Table 5-3** shows the total allocation in dollar amounts.

### Table 5-2: FY 2026 O&M Cost Allocation (%)

| A<br>Line | B<br>Revenue Requirement<br>Cost Component | C<br>Total (in Millions) | D<br>Account Services | E<br>Meter Capacity | F<br>Conveyance |
|---|---|---|---|---|---|
| 1 | Operating Costs | | | | |
| 2 | Purchased Water | $3.15 | 0% | 0% | 100% |
| 3 | Efficiency | $2.58 | 0% | 0% | 100% |
| 4 | Non-Classified | $2.36 | 10% | 42% | 48% |
| 5 | Retiree Payments | $0.69 | 0% | 100% | 0% |
| 6 | Water – Administration | $2.81 | 0% | 100% | 0% |
| 7 | Water Legislative and Regulatory Services | $0.86 | 0% | 100% | 0% |
| 8 | Water Engineering and Hydrogeology Services | $1.53 | 0% | 100% | 0% |
| 9 | Water Customer Service | $1.39 | 100% | 0% | 0% |
| 10 | Water Distribution | $5.93 | 0% | 50% | 50% |
| 11 | Cross Connection Control Program | $0.87 | 0% | 100% | 0% |
| 12 | Water Distribution System Operations | $1.24 | 0% | 50% | 50% |
| 13 | Water Distribution System Repair | $1.74 | 0% | 50% | 50% |
| 14 | Water Distribution Preventative Maintenance | $1.05 | 0% | 50% | 50% |
| 15 | Water Treatment/Storage Plant | $6.05 | 0% | 0% | 100% |
| 16 | Water Quality | $0.44 | 0% | 50% | 50% |
| 17 | Water Advanced Metering Infrastructure | $0.72 | 0% | 100% | 0% |
| 18 | Water New Meter Purchase | $0.56 | 0% | 100% | 0% |
| 19 | Water Outreach | $0.26 | 100% | 0% | 0% |
| 20 | Water Customer Care – Admin | $0.77 | 25% | 75% | 0% |
| 21 | Water Customer Care – Field | $0.25 | 0% | 100% | 0% |
| 22 | Water Customer Care – Billing | $0.53 | 100% | 0% | 0% |
| 23 | Water Customer Care – Cust Serv | $0.32 | 0% | 100% | 0% |
| 24 | Water EUC | $0.23 | 0% | 100% | 0% |
| 25 | Water EU Admin | $1.25 | 0% | 100% | 0% |
| 26 | Water EU Tech Serv | $1.89 | 0% | 100% | 0% |
| 27 | Water EAM Support and Maintenance | $0.08 | 0% | 100% | 0% |
| 28 | Water Compliance | $0.58 | 0% | 100% | 0% |
| 29 | Total Operating Costs | $40.13 | | | |

### Table 5-3: FY 2026 O&M Cost Allocation (in Millions)

| A<br>Line | B<br>Revenue Requirement Cost Component | C<br>Total | D<br>Account Services | E<br>Meter Capacity | F<br>Conveyance |
|---|---|---|---|---|---|
| 1 | Operating Costs | | | | |
| 2 | Purchased Water | $3.15 | $0 | $0 | $3.15 |
| 3 | Efficiency | $2.58 | $0 | $0 | $2.58 |
| 4 | Non-Classified | $2.36 | $0.24 | $0.99 | $1.13 |
| 5 | Retiree Payments | $0.69 | $0 | $0.69 | $0 |
| 6 | Water – Administration | $2.81 | $0 | $2.81 | $0 |
| 7 | Water Legislative and Regulatory Services | $0.86 | $0 | $0.86 | $0 |
| 8 | Water Engineering and Hydrogeology Services | $1.53 | $0 | $1.53 | $0 |
| 9 | Water Customer Service | $1.39 | $1.39 | $0 | $0 |
| 10 | Water Distribution | $5.93 | $0 | $2.96 | $2.96 |
| 11 | Cross Connection Control Program | $0.87 | $0 | $0.87 | $0 |
| 12 | Water Distribution System Operations | $1.24 | $0 | $0.62 | $0.62 |
| 13 | Water Distribution System Repair | $1.74 | $0 | $0.87 | $0.87 |
| 14 | Water Distribution Preventative Maintenance | $1.05 | $0 | $0.52 | $0.52 |
| 15 | Water Treatment/Storage Plant | $6.05 | $0 | $0 | $6.05 |
| 16 | Water Quality | $0.44 | $0 | $0.22 | $0.22 |
| 17 | Water Advanced Metering Infrastructure | $0.72 | $0 | $0.72 | $0 |
| 18 | Water New Meter Purchase | $0.56 | $0 | $0.56 | $0 |
| 19 | Water Outreach | $0.26 | $0.26 | $0 | $0 |
| 20 | Water Customer Care – Admin | $0.77 | $0.19 | $0.58 | $0 |
| 21 | Water Customer Care – Field | $0.25 | $0 | $0.25 | $0 |
| 22 | Water Customer Care – Billing | $0.53 | $0.53 | $0 | $0 |
| 23 | Water Customer Care – Cust Serv | $0.32 | $0 | $0.32 | $0 |
| 24 | Water EUC | $0.23 | $0 | $0.23 | $0 |
| 25 | Water EU Admin | $1.25 | $0 | $1.25 | $0 |
| 26 | Water EU Tech Serv | $1.89 | $0 | $1.89 | $0 |
| 27 | Water EAM Support and Maintenance | $0.08 | $0 | $0.08 | $0 |
| 28 | Water Compliance | $0.58 | $0 | $0.58 | $0 |
| 29 | Total Operating Costs | $40.13 | $2.61 | $19.40 | $18.12 |
| 30 | O&M Allocation Percentage | 100% | 6.5% | 48.4% | 45.2% |

**Table 5-4** shows the total revenue requirement by cost component. This is calculated by multiplying the total revenue requirement from rates ($45.41) by the cost causation components allocation percentage, as shown on Line 30 of **Table 5-3**.

### Table 5-4: O&M Cost Allocation to Cost Component

| A<br>Revenue Requirement | B<br>Account Services | C<br>Meter Capacity | D<br>Conveyance | E<br>Total |
|---|---|---|---|---|
| Total Revenue Requirement From Rates | | | | $45.41 |
| Allocation Factors from Table 5-3 | 6.5% | 48.4% | 45.2% | |
| Cost Component Revenue Requirement | $2.95 | $21.96 | $20.51 | $45.41 |

## 5.4. Units of Service

This subsection describes the next step in the COS analysis, which is to determine the appropriate units of service to be used to calculate the unit costs for each cost component.

### 5.4.1. Equivalent Meters

Equivalent meter units are used to allocate meter and capacity-related costs appropriately and equitably. Larger meters impose larger demands, are more expensive to install, maintain, and replace than smaller meters, and require greater capacity in the water system.

Equivalent meter units are based on meter hydraulic capacity and are calculated to represent the potential demand on the water system compared to a base meter size. A ratio of hydraulic capacity is calculated by dividing larger meter capacities by the base meter capacity. The base meter in this study is 3/4".

**Table 5-5** shows the equivalent potable and recycled water meters for the test year FY 2026. The number of accounts (Column D) is equal to the projected number of meters subject to a meter fixed charge (**Table 4-5**). Meter capacity ratios (Column C) were provided by the City and are consistent with ratios used in the prior water COS study conducted in 2023, and consistent with the demand of each meter size on the water system. The number of accounts (Column D) is multiplied by the meter capacity ratios (Column C) to determine the number of equivalent meters (Column E). The number of accounts (Column D) is multiplied by 12 to get the annual bills in Column F.

**Table 5-5: Equivalent Meter Units (FY 2026)**

| A | B | C | D | E = C X D | F = D X 12 |
|---|---|---|---|---|---|
| Line | Meter Size | Meter Capacity Ratio | Accounts | Equivalent Meter Units | Annual Bills |
| 1 | 3/4" | 1.00 | 36,859 | 36,859 | 442,311 |
| 2 | 1" | 1.67 | 11,896 | 19,827 | 142,757 |
| 3 | 1-1/2" | 3.33 | 413 | 1,377 | 4,958 |
| 4 | 2" | 5.33 | 795 | 4,238 | 9,536 |
| 5 | 3" | 11.67 | 123 | 1,440 | 1,481 |
| 6 | 4" | 21.00 | 82 | 1,714 | 976 |
| 7 | 6" | 43.33 | 31 | 1,326 | 367 |
| 8 | 8" | 93.33 | 8 | 762 | 98 |
| 9 | 10” | 140.00 | 4 | 571 | 49 |
| 10 | Total Metered | | 50,211 | 68,115 | 602,536 |
| 11 | Non-Metered Customers | | | | |
| 12 | Single-Family lots up to 4,900 ft$^2$ | 1.00 | 54 | 54 | 648 |
| 13 | Single-Family lots 4,901 to 8,900 ft$^2$ | 1.00 | 14 | 14 | 168 |
| 14 | Single-Family lots 8,901 to 12,000 ft$^2$ | 1.00 | 1 | 1 | 12 |
| 15 | Single-Family lots 12,001 to 15,000 ft$^2$ | 1.00 | 1 | 1 | 12 |
| 16 | Other Non-Metered Customer 1 | 1.18 | 88 | 104 | 1,056 |
| 17 | Other Non-Metered Customer 2 | 0.42 | 232 | 97 | 2,784 |
| 18 | Total Non-Metered | | 390 | 271 | 4,680 |
| 19 | Total Units | | 50,601 | 68,504 | 607,204 |

## 5.4.2. Projected Water Usage

As discussed in **Section 4**, metered customers' usage is projected based on account growth and water demand. **Table 5-6** shows projected water demand for metered customers over the study period. A description of the methodology used to project demand can be found prior to **Table 4-8** in **Section 4**.

For Non-metered accounts, projected water usage is based on single-family average annual usage (12.27 CCF) and the indoor and outdoor allotment of usage. The indoor allotment is calculated by multiplying the City of Roseville’s average household density, based on person per household (pph), of 2.61[4] with the efficient indoor use target, based on gallons per capita per day (gpcd), of 52.5[5]. After multiplying this by 30 and converting it to CCF, the total indoor allotment comes to 5.5 CCF.

The outdoor allotment is calculated by subtracting the single-family average annual usage of 12.27 CCF minus the indoor allotment of 5.5 CCF. The total indoor and outdoor allotment is then assigned to the Single-

[4] US Census Bureau 2019 - 2023

[5] Senate Bill 1179

Family lots up to 4,900 s.f. as seen in **Table 5-7.** For the bigger lots, the water allotment is determined by taking the indoor allotment plus the outdoor allotment multiplied by the class allocation factor. The allocation factors are based on the characteristics of a 3/4" meter.

**Table 5-6: Projected Water Usage in Million Cubic Feet by Customer Class and Accounts**

| Customer Type | FY 2025 Projected | FY 2026 Projected | FY 2027 Projected | FY 2028 Projected | FY 2029 Projected | FY 2030 Projected |
|---|---|---|---|---|---|---|
| Single-Family Residential | 707.45 | 707.38 | 700.17 | 685.95 | 665.1 | 638.16 |
| Commercial | 464.79 | 469.44 | 474.14 | 478.88 | 483.67 | 488.5 |
| Total | 1,172.24 | 1,176.82 | 1,174.31 | 1,164.83 | 1,148.77 | 1,126.66 |

**Table 5-7: Projected Non-Metered Usage (FY 2026)**

| A Line | B Customer Type | C Number of Bills | D Square Footage | E Allocation Factor | F Water Allotment | G Total Water Allotment (Million CF) |
|---|---|---|---|---|---|---|
| 1 | Single-Family lots up to 4,900 $ft^2$ | 648 | 4,900 | 1 | 12.3 | 0.79 |
| 2 | Single-Family lots 4,901 to 8,900 $ft^2$ | 168 | 6,500 | 1.33 | 14.5 | 0.24 |
| 3 | Single-Family lots 8,901 to 12,000 $ft^2$ | 12 | 10,500 | 2.14 | 20.0 | 0.02 |
| 4 | Single-Family lots 12,001 to 15,000 $ft^2$ | 12 | 13,500 | 2.76 | 24.2 | 0.03 |
| 5 | Total Bills | 840 | | | | |

# 5.5. Unit Cost Development

This subsection describes the next step in the COS analysis, which is to divide the revenue requirement for each cost component established above by the units of service of each customer class to determine the unit cost for each cost component.

## 5.5.1. Account Services Component

The account services component is calculated by taking the account services revenue requirement (**Table 5-4**) divided by the number of bills (**Table 5-5**). This can be seen by metered and non-metered customers in **Table 5-8** below. The allocation percentage in Column D is calculated by dividing the number of bills for metered and non-metered accounts by the total number of bills. The total revenue requirement in Column E is then separated based on the allocation percentage to develop the metered and non-metered account services revenue requirements in Column E. The account services unit cost is then calculated by dividing the revenue requirement by the number of bills. For metered and non-metered accounts, this comes out to $4.86.

**Table 5-8: Customer Service Unit Cost Development**

| A Line | B Customer Class | C Number of Bills | D % Allocation | E Revenue Requirement (in Millions) | E Account Services Unit Cost $($/Account) |
|---|---|---|---|---|---|
| 1 | Metered | 602,536 | 99.2% | $2.92 | $4.86 |
| 2 | Non-Metered | 4,680 | 0.8% | $0.03 | $4.86 |
| 3 | Total | 607,216 | 100% | $2.95 | |

## 5.5.2. Meter Capacity Component

The meter capacity unit cost is shown in **Table 5-9**. The allocation percentage is calculated by dividing the total annual EMUs for metered and non-metered accounts by the specific number of EMUs for each category. Metered accounts are based on meter size while non-metered accounts are based on lot size. The revenue requirement in Column F is calculated by multiplying the total meter capacity revenue requirement in **Table**

**5-4** by the allocation percentages in Column E. The meter capacity rate is then determined by dividing the revenue requirement by the number of bills. For a 3/4" meter and non-metered accounts (excluding Other Non-Metered Customers) the meter capacity unit cost is $26.77.

**Table 5-9: Meter Capacity Unit Cost Development**

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| Line | Meter Size | Number of Bills | Equivalent Meter Units | % Allocation | Revenue Requirement (in Millions) | Meter Capacity Component ($/Account) |
| 1 | 3/4" | 442,311 | 442,311 | 53.9% | $11.84 | $26.77 |
| 2 | 1" | 142,757 | 237,928 | 29.0% | $6.37 | $44.61 |
| 3 | 1-1/2" | 4,958 | 16,526 | 2.0% | $0.44 | $89.21 |
| 4 | 2" | 9,536 | 50,858 | 6.2% | $1.36 | $142.73 |
| 5 | 3" | 1,481 | 17,280 | 2.1% | $0.46 | $312.21 |
| 6 | 4" | 979 | 20,565 | 2.5% | $0.55 | $561.97 |
| 7 | 6" | 367 | 15,914 | 1.9% | $0.43 | $1,159.61 |
| 8 | 8" | 8 | 9,140 | 1.1% | $0.24 | $2,497.61 |
| 9 | 10" | 49 | 6,855 | 0.8% | $0.18 | $3,746.41 |
| 10 | Total Metered | 602,536 | 817,378 | 99.6% | $21.87 | |
| 11 | Non-Metered Customers | | | | | |
| 12 | Single-Family lots up to 4,900 ft$^2$ | 648 | 648 | 0.1% | $0.02 | $26.77 |
| 13 | Single-Family lots 4,901 to 8,900 ft$^2$ | 168 | 168 | 0.0% | $0.00 | $26.77 |
| 14 | Single-Family lots 8,901 to 12,000 ft$^2$ | 12 | 12 | 0.0% | $0.00 | $26.77 |
| 15 | Single-Family lots 12,001 to 15,000 ft$^2$ | 12 | 12 | 0.0% | $0.00 | $26.77 |
| 16 | Other Non-Metered Customer 1 | 1056 | 1248 | 0.2% | $0.03 | $31.63 |
| 17 | Other Non-Metered Customer 2 | 2784 | 1180 | 0.1% | $0.03 | $11.24 |
| 18 | Total Non-Metered | 4,680 | 3,268 | 0.4% | $0.08 | |
| 19 | Total Meter Capacity Revenue Requirement | 607,216 | 820,646 | 100% | $21.95 | |

## 5.5.3. Conveyance Component

The conveyance unit cost is shown in **Table 5-10**. The allocation percentage is calculated based on the water allotment shown in **Table 4-7** and **Table 5-7.** The revenue requirement in Column E is then calculated by multiplying the total conveyance component revenue requirement by the allocation percentages. For metered accounts, the conveyance rate is calculated by dividing the revenue requirement by the water allotment. For non-metered accounts, the conveyance rate is calculated using the number of bills.

**Table 5-10: Conveyance Unit Cost Development**

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| Line | Customer Class | Water Allotment (Million CF) | % Allocation | Revenue Requirement (in Millions) | Number of Bills | Conveyance Component |
| 1 | Metered | 1,174.82 | 99.7% | $20.44 | 602,536 | $1.74 |
| 2 | Non-metered | 3.61 | 0.3% | $0.06 | 4,680 | *Allocated Below* |
| 3 | Total | 1,180.44 | 100% | $20.51 | 607,204 | |
| 4 | | | | | | |
| 5 | Single-Family lots up to 4,900 ft$^2$ | 0.79 | 22.0% | $0.01 | 648 | $21.32 |
| 6 | Single-Family lots 4,901 to 8,900 ft$^2$ | 0.24 | 6.7% | $0.00 | 168 | $25.16 |
| 7 | Single-Family lots 8,901 to 12,000 ft$^2$ | 0.02 | 0.7% | $0.00 | 12 | $34.76 |
| 8 | Single-Family lots 12,001 to 15,000 ft$^2$ | 0.03 | 0.8% | $0.00 | 12 | $41.96 |
| 9 | Other Non-Metered Customer 1 | 0.68 | 18.9% | $0.01 | 1,056 | $11.23 |
| 10 | Other non-Metered Customer 2 | 1.85 | 51.0% | $0.03 | 2,784 | $11.57 |
| 11 | Total Non-Metered | 3.61 | 100% | $0.06 | 4,680 | |

# 5.6. Rate Structure Design

This subsection describes the final step in the COS analysis, which is to distribute the unit costs to the appropriate charge and class.

## 5.6.1. Fixed Component

**Table 5-11** shows the distribution of the cost components to fixed rates by class. The cost components that make up the fixed charges include account services and meter capacity. Account services costs are costs incurred by all customers. These costs typically encompass billing and other customer service expenses. Meter capacity costs are often system-wide costs related to maintaining the system. Column C shows that customer types incur the $4.86 account services component established in **Table 5-8**. Column D shows the meter capacity component established in **Table 5-9**. Column E is the sum of Columns C and D.

**Table 5-11: Summary of Fixed Components**

| A<br>Line | B<br>Meter Size | C<br>Account Services | D<br>Meter Capacity | E<br>Total Fixed Charge |
|---|---|---|---|---|
| 1 | 3/4” | $4.86 | $26.77 | $31.63 |
| 2 | 1” | $4.86 | $44.61 | $49.47 |
| 3 | 1.5” | $4.86 | $89.21 | $94.07 |
| 4 | 2” | $4.86 | $142.73 | $147.59 |
| 5 | 3” | $4.86 | $312.21 | $317.07 |
| 6 | 4” | $4.86 | $561.97 | $566.83 |
| 7 | 6” | $4.86 | $1,159.61 | $1,164.47 |
| 8 | 8” | $4.86 | $2,497.61 | $2,502.47 |
| 9 | 10” | $4.86 | $3,746.41 | $3,751.27 |
| 10 | Non-Metered | $4.86 | $26.77 | $31.63 |

## 5.6.2. Variable Component

**Table 5-12** shows the distribution of the cost components to variable rates. Conveyance is the cost component that makes up variable charges. Conveyance charges are variable as they relate to operating and maintaining the distribution system.

**Table 5-12: Summary of Variable Components**

| A<br>Line | B<br>Meter Size | C<br>Conveyance | D<br>Total Variable Charge |
|---|---|---|---|
| 1 | Metered (per cubic foot) | $0.0174 | $0.0174 |
| 2 | Non-Metered[6] (per month) | | |
| 3 | Single-Family lots up to 4,900 $ft^2$ | $21.32 | $21.32 |
| 4 | Single-Family lots 4,901 to 8,900 $ft^2$ | $25.16 | $25.16 |
| 5 | Single-Family lots 8,901 to 12,000 $ft^2$ | $34.76 | $34.76 |
| 6 | Single-Family lots 12,001 to 15,000 $ft^2$ | $41.96 | $41.96 |
| 7 | Other Non-Metered Customer 1 | $11.23 | $11.23 |
| 8 | Other Non-Metered Customer 2 | $11.57 | $11.57 |

[6] Non-metered variable charges are administered as a fixed monthly charge because there is no meter at these locations to measure water use. Water use assumptions follow water allotments and water factors found in Tables 5-7 and 5-10.

# 5.7. Proposed COS Rates

This subsection outlines the proposed rates based on the above COS.

## 5.7.1. Metered Rates

**Table 5-13** shows the proposed FY 2026 meter service charge based on the customer service and meter capacity unit cost in **Table 5-11**.

**Table 5-13: Proposed FY 2026 Meter Service Charge ($/Month)**

| A | B | C | D | D | E | F | G |
|---|---|---|---|---|---|---|---|
| Line | Meter Size | Account Services | Meter Capacity | Proposed FY 2026 Meter Service Charge | Current Meter Service Charge | Difference ($) | Difference (%) |
| 1 | 3/4” | $4.86 | $26.77 | $31.63 | $30.82 | $0.81 | 2.6% |
| 2 | 1” | $4.86 | $44.61 | $49.47 | $47.57 | $1.90 | 4.0% |
| 3 | 1.5” | $4.86 | $89.21 | $94.07 | $89.44 | $4.63 | 5.2% |
| 4 | 2” | $4.86 | $142.73 | $147.59 | $139.70 | $7.89 | 5.6% |
| 5 | 3” | $4.86 | $312.21 | $317.07 | $298.82 | $18.25 | 6.1% |
| 6 | 4” | $4.86 | $561.97 | $566.83 | $533.31 | $33.52 | 6.3% |
| 7 | 6” | $4.86 | $1,159.61 | $1,164.47 | $1,094.41 | $70.06 | 6.4% |
| 8 | 8” | $4.86 | $2,497.61 | $2,502.47 | $2,350.61 | $151.86 | 6.5% |
| 9 | 10” | $4.86 | $3,746.41 | $3,751.27 | $3,523.07 | $228.26 | 6.5% |

**Table 5-14** shows the proposed FY 2026 variable rate for metered customers based on the unit cost for conveyance in **Table 5-12**.

**Table 5-14: Proposed FY 2026 Quantity Charge ($/Cubic Foot)**

| A | B | C | D | E | F |
|---|---|---|---|---|---|
| Class | Conveyance | Proposed FY 2026 Variable Charge | Current Variable Charge | Difference ($) | Difference (%) |
| Metered Customers | $0.0174 | $0.0174 | $0.0166 | $0.008 | 4.8% |

## 5.7.2. Non-Metered Rates

**Table 5-15** shows the non-metered rates. The proposed FY 2026 non-metered flat service charge is calculated by adding up the account services, meter capacity, and conveyance unit costs.

**Table 5-15: Proposed FY 2026 Non-Metered Flat Service Charge**

| A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|
| Line | Square Footage | Account Services | Meter Capacity | Conveyance | FY 2026 Proposed Non-Metered Flat Service Charge | Current Flat Service Charge | Differ ($) | Differ (%) |
| 1 | Single-Family lots up to 4,900 $ft^2$ | $4.86 | $26.77 | $21.32 | $52.95 | $50.93 | $2.02 | 4.0% |
| 2 | Single-Family lots 4,901 to 8,900 $ft^2$ | $4.86 | $26.77 | $25.16 | $56.79 | $55.19 | $1.60 | 2.9% |
| 3 | Single-Family lots 8,901 to 12,000 $ft^2$ | $4.86 | $26.77 | $34.76 | $66.39 | $62.73 | $3.66 | 5.8% |
| 4 | Single-Family lots 12,001 to 15,000 $ft^2$ | $4.86 | $26.77 | $41.96 | $73.59 | $69.22 | $4.37 | 6.3% |
| 5 | Other Non-Metered Customer 1 | $4.86 | $31.59 | $11.23 | $47.68 | $43.64 | $4.04 | 9.3% |
| 6 | Other Non-Metered Customer 2 | $4.86 | $11.24 | $11.57 | $27.67 | $26.97 | $0.70 | 2.6% |

## 5.7.3. FY 2026 – FY 2030 Rate Projections

**Table 5-16** shows proposed monthly meter service charges for the period FY 2026 - FY 2030 based on the financial planning and COS process. The FY 2026 and FY 2027 rates will be reflected in the City’s Proposition 218 notice.

### Table 5-16: Proposed Meter Service Charge ($/Month)

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| 3/4” | $30.82 | $31.63 | $32.90 | $35.36 | $38.01 | $40.87 |
| 1” | $47.57 | $49.47 | $51.45 | $55.31 | $59.46 | $63.91 |
| 1.5” | $89.44 | $94.07 | $97.83 | $105.17 | $113.06 | $121.54 |
| 2” | $139.70 | $147.59 | $153.49 | $165.01 | $177.38 | $190.68 |
| 3” | $298.82 | $317.07 | $329.75 | $354.48 | $381.07 | $409.65 |
| 4” | $533.31 | $566.83 | $589.50 | $633.72 | $681.24 | $732.34 |
| 6” | $1,094.41 | $1,164.47 | $1,211.05 | $1,301.88 | $1,399.52 | $1,504.48 |
| 8” | $2,350.61 | $2,502.47 | $2,602.57 | $2,797.76 | $3,007.59 | $3,233.16 |
| 10” | $3,523.07 | $3,751.27 | $3,901.32 | $4,193.92 | $4,508.46 | $4,846.60 |

**Table 5-17** shows proposed quantity charges for the period FY 2026 - FY 2030 based on the financial planning and COS process. The rates presented for FY 2026 and FY 2027 will be reflected in the City’s Proposition 218 notice.

### Table 5-17: Proposed Quantity Charge ($/Cubic Foot)

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| All Usage | $0.0166 | $0.0174 | $0.0181 | $0.0195 | $0.0209 | $0.0225 |

**Table 5-18** shows proposed monthly flat charges for non-metered water customers for the period FY 2026 - FY 2030 based on the financial planning and COS process. The rates presented for FY 2026 and FY 2027 will be reflected in the City’s Proposition 218 notice.

### Table 5-18: Proposed Meter Service Charge ($/Month)

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| Single-family lots up to 4,900 ft$^2$ | $50.93 | $52.95 | $55.07 | $59.20 | $63.64 | $68.41 |
| Single-family lots 4,901 to 8,900 ft$^2$ | $55.19 | $56.79 | $59.06 | $63.49 | $68.25 | $73.37 |
| Single-family lots 8,901 to 12,000 ft$^2$ | $62.73 | $66.39 | $69.05 | $74.22 | $79.79 | $85.78 |
| Single-family lots 12,001 to 15,000 ft$^2$ | $69.22 | $73.59 | $76.53 | $82.27 | $88.44 | $95.08 |
| Other Non-Metered Customer 1 | $43.64 | $47.68 | $49.59 | $53.30 | $57.30 | $61.60 |
| Other Non-Metered Customer 2 | $26.97 | $27.67 | $28.78 | $30.94 | $33.26 | $35.75 |

# 6. Wastewater Rate Study

## 6.1. Wastewater System Overview

**Regional Wastewater Planning**

The City currently owns and operates two regional wastewater treatment facilities that treat flows collected from the City, South Placer Municipal Utilities District (SPMUD), and some areas of unincorporated Placer County. The South Placer Wastewater Authority (SPWA) was created under a Joint Powers Agreement in October 2000 and is comprised of the City of Roseville, South Placer Municipal Utilities District, and the County of Placer. The SPWA oversees policy for funding regional wastewater infrastructure. The City collaborates with the regional partners on planning and best practices for the management of these regional facilities.

**Wastewater Collection System**

The wastewater collection and treatment facilities within the City's service area are maintained and operated by City staff. The wastewater collection facilities outside of the City's service area are maintained by the other SPWA agencies (Placer County and SPMUD). Wastewater outside of the City's service area but within the SPWA Service Area Boundary is conveyed through trunk sewers to the City's wastewater treatment facilities located within the City limits.

Metering stations are located at the City's service area boundaries to account for the wastewater entering the City's collection system originating from Placer County and SPMUD collection areas. The City owns and operates on behalf of the SPWA the Dry Creek Wastewater Treatment Plant (Dry Creek WWTP) and the Pleasant Grove Wastewater Treatment Plant (Pleasant Grove WWTP). Both plants discharge tertiary treated wastewater to surface water. Dry Creek WWTP discharges to Dry Creek, while the Pleasant Grove WWTP discharges to Pleasant Grove Creek.

**Wastewater Treatment Facilities**

The Dry Creek WWTP provides tertiary-level wastewater treatment. The treatment consists of screening, grit removal, primary clarification, aeration, nitrification and denitrification, secondary clarification, filtration, and ultraviolet disinfection. The Pleasant Grove WWTP (2020) treats approximately 8.1 MGD ADWF, with approximately 65% or 5.3 MGD coming from the City of Roseville. The Pleasant Grove WWTP provides disinfected tertiary-level treatment through the process of screening, grit removal, secondary aeration, secondary clarification, filtration, and ultraviolet disinfection.

# 7. Wastewater Financial Plan

**Section 7** details the development of the five-year financial plan for the City's wastewater utility. This includes the determination of annual revenues required from wastewater rates on annual cash flow projections. Assumptions and inputs related to projected revenues, operating expenses, and capital expenditures are outlined in the following subsections.

## 7.1. Existing Wastewater Rates

Currently, all wastewater accounts pay a fixed charge of $53.45. This is shown below is **Table 7-1.**

**Table 7-1: Existing Monthly Fixed Charges ($/Month)**

| Class | Charge |
|---|---|
| Single-Family Residential | $53.45 |
| Commercial – Flat Rate | $53.45 |

Additionally, some commercial metered customers also pay a quantity rate per cubic foot of usage. **Table 7-2** below shows the City's existing quantity rate for all metered customers.

**Table 7-2: Existing Commercial Commodity Rate ($/Cubic Foot)**

| Customer Class | Rate |
|---|---|
| Commercial - Metered | $0.04978 |

## 7.2. Assumptions

Various assumptions are used to project future revenues and expenses. They can be divided into two major groups: assumptions related to economic factors, such as inflation, capital cost, and interest rates, and core business assumptions, such as wastewater sale projections.

### 7.2.1. Inflationary Assumptions

The inflationary assumptions are summarized in **Table 7-3**. General inflation reflects longer-term CPI average inflation. The City provided inflated capital costs by year, so an additional inflation factor was not included.

**Table 7-3: Expense and Revenue Escalation Assumptions**

| Inflation | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|
| General | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Salaries & Benefits | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| Utilities | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% |
| Reimbursed Cost | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% |
| Admin Salaries & Benefits | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| Non-Rate Revenues | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Reserve Interest Rate | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |

### 7.2.2. Wastewater Account and Usage Assumptions

Based on the FY 2024 billing data, the City has a total of 63,435 wastewater accounts (shown below in **Table 7-4)**.

### Table 7-4: Number of Wastewater Accounts by Customer Class (FY 2024)

| Single-Family Residential | Commercial – Metered | Commercial – Flat Rate | Total Accounts |
|---|---|---|---|
| 49,519 | 1,665 | 12,251 | 63,435 |

The City projects a 1.0% increase in single-family residential and commercial meters each year from FY 2025 to FY 2030. The city does not project any account growth on commercial flat-rate accounts. Based on the number of accounts in FY 2024 and assumed growth, Raftelis projected the number of wastewater accounts (shown below in **Table 7-5**)

### Table 7-5: Number of Wastewater Accounts

| Class | FY 2024 Actual | FY 2025 Projected | FY 2026 Projected | FY 2027 Projected | FY 2028 Projected | FY 2029 Projected | FY 2030 Projected |
|---|---|---|---|---|---|---|---|
| Single-Family Residential | 49,519 | 50,014 | 50,514 | 51,019 | 51,530 | 52,045 | 52,565 |
| Commercial – Metered | 1,665 | 1,682 | 1,698 | 1,715 | 1,733 | 1,750 | 1,767 |
| Commercial – Flat Rate | 12,251 | 12,251 | 12,251 | 12,251 | 12,251 | 12,251 | 12,251 |
| Total | 63,435 | 63,947 | 64,464 | 64,986 | 65,513 | 66,046 | 66,584 |

Projected wastewater usage is based on two main factors: account growth and wastewater demand. As discussed above, growth is 1.0% from FY 2025 to FY 2030. Wastewater demand is projected at 100% (i.e., no change in wastewater discharges) each year. **Table 7-6** shows projected wastewater usage for those commercial customers that pay a commodity charge. FY 2025 is based on actual usage in FY 2024.

### Table 7-6: Projected Wastewater Usage in Million Cubic Feet

| Customer Type | FY 2025 Projected | FY 2026 Projected | FY 2027 Projected | FY 2028 Projected | FY 2029 Projected | FY 2030 Projected |
|---|---|---|---|---|---|---|
| Commercial – Metered | 112.12 | 113.25 | 114.38 | 115.52 | 116.68 | 117.84 |
| Total | 112.12 | 113.25 | 114.38 | 115.52 | 116.68 | 117.84 |

## 7.3. Revenues

The City's wastewater revenues consist of rate revenues (i.e. fixed and variable revenues), non-rate revenues (such as plan check/inspection fees, installation tap, rental revenues, etc.), and capacity/connection fee revenue. Projected wastewater rate revenues under existing rates are calculated by multiplying the current rates (from **Table 7-1** and **Table 7-2**) by the corresponding units of service (from **Table 7-5** and **Table 7-6**). Projecting wastewater rate revenues under existing rates is necessary to evaluate the City's projected baseline financial position in the absence of any proposed rate increases. Note that the city uses a pro-rated amount when implementing new rates. This is shown in **Table 7-7** below.

### Table 7-7: Projected Operating Revenues Under Existing Wastewater Rates (in Millions)

| Rate Revenues | FY 2025 Projected | FY 2026 Projected | FY 2027 Projected | FY 2028 Projected | FY 2029 Projected | FY 2030 Projected |
|---|---|---|---|---|---|---|
| Monthly Fixed Charges: | $41.02 | $41.35 | $41.68 | $42.02 | $42.36 | $42.71 |
| Commercial Metered Commodity Rate: | $5.57 | $5.64 | $5.69 | $5.75 | $5.81 | $5.87 |
| Total | $46.58 | $46.98 | $47.38 | $47.77 | $48.17 | $48.57 |

Table 7-8 shows a summary of non-rate revenues, recycled water, and capacity/connection fee revenue. The majority of non-rate revenues were projected based on FY 2026 budgeted amounts held constant through FY 2030. However, interest revenues were calculated by averaging the beginning balance and the ending cash reserve before interest, this number is then multiplied by a reserve interest rate of 2.0%. Recycled water revenue was calculated based on the FY 2024 billing data. Capacity/connection fee revenues were calculated

by taking the estimated incremental annual change in equivalent dwelling units (EDUs) and multiplying by the City's current wastewater capacity/connection fee. Capacity/connection fee revenues do not lower the wastewater utility revenue requirement from rates. Instead, they are used to offset capacity-related expenditures made in the City's fund for capacity-related construction.

### Table 7-8: Projected Other Revenues and Capacity/Connection Fee Revenues (in Millions)

| Description | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| | Budget | Projected | Projected | Projected | Projected | Projected |
| Non-Rate Revenues | | | | | | |
| Plan Check / Inspection Fees | $0.30 | $0.18 | $0.18 | $0.18 | $0.18 | $0.18 |
| Interest | $0.30 | $1.69 | $1.54 | $1.31 | $1.03 | $1.07 |
| Installation Tap | $0.04 | $0.02 | $0.02 | $0.02 | $0.02 | $0.02 |
| Rental Revenue | $0.00 | $0.01 | $0.01 | $0.01 | $0.01 | $0.01 |
| Industrial WW Treatment Charges | $0.19 | $0.19 | $0.19 | $0.19 | $0.19 | $0.19 |
| Other Revenue | $19.32 | $13.23 | $15.24 | $15.24 | $15.24 | $15.24 |
| Subtotal | $20.15 | $15.32 | $17.18 | $16.95 | $16.67 | $16.71 |
| | | | | | | |
| Recycled Water Revenue | $2.19 | $2.19 | $2.19 | $2.19 | $2.19 | $2.19 |
| Capacity/Connection Fee Revenue | $0.40 | $0.69 | $0.70 | $0.71 | $0.71 | $0.73 |
| Total | $22.74 | $18.21 | $20.07 | $19.85 | $19.57 | $19.63 |

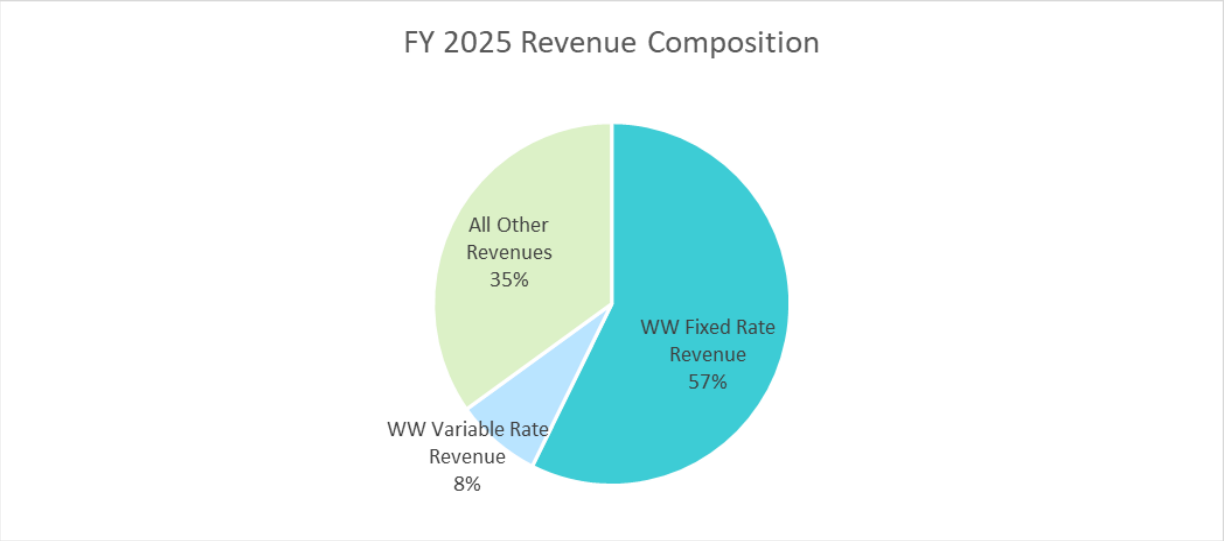
**Table 7-9** shows a revenue summary for the study period based on the revenues shown previously in **Table 7-7** and **Table 7-8**. Once again, the rate revenues shown in this section reflect projected wastewater rate revenues under existing rates in the absence of any rate increases over the study period.

### Table 7-9: Revenue Summary

| Revenues | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| Rate Revenues | $46.58 | $46.98 | $47.38 | $47.77 | $48.17 | $48.57 |
| Non-Rate Revenue | $20.15 | $15.32 | $17.18 | $16.95 | $16.67 | $16.71 |
| Recycled Water Revenue | $2.19 | $2.19 | $2.19 | $2.19 | $2.19 | $2.19 |
| Capacity/Connection Fee Revenue | $0.40 | $0.69 | $0.70 | $0.71 | $0.71 | $0.73 |
| Total | $69.32 | $65.18 | $67.45 | $67.62 | $67.74 | $68.20 |

**Figure 7-1** shows FY 2025 revenues broken down into fixed rate revenue, variable rate revenues, and all other revenues. In total, rate revenues make up 65% of total revenues.

**Figure 7-1: FY 2025 Revenue Composition**




## 7.4. Operations and Maintenance Expenses

The City's FY 2026 forecasted budget was used as the baseline for operations and maintenance (O&M). The expenses are then projected in the following years based on the escalation factors shown in **Table 7-3**. The projected O&M expenses are shown in **Table 7-10**. Each expense category includes detailed line-item expenditures with the appropriate escalation factor.

**Table 7-10: Projected O&M Expenses (in Millions)**

| O&M Expenses | FY 2026 Projected | FY 2027 Projected | FY 2028 Projected | FY 2029 Projected | FY 2030 Projected |
|---|---|---|---|---|---|
| Non-Classified | $3.13 | $3.22 | $3.32 | $3.42 | $3.52 |
| Retiree Payments | $0.81 | $0.83 | $0.86 | $0.89 | $0.91 |
| Wastewater Administration | $3.44 | $3.63 | $3.74 | $3.93 | $3.95 |
| Industrial Treatment | $0.59 | $0.61 | $0.79 | $0.81 | $0.84 |
| Environmental Treatment Lab | $2.20 | $2.26 | $2.48 | $2.55 | $2.62 |
| Dry Creek WWTP | $11.72 | $12.17 | $12.46 | $12.73 | $13.05 |
| Pleasant Grove WWTP | $13.05 | $13.51 | $13.86 | $14.17 | $14.53 |
| Wastewater Collection | $9.06 | $9.66 | $10.09 | $10.39 | $10.70 |
| Wastewater Maintenance | $2.92 | $3.20 | $3.63 | $3.72 | $3.83 |
| Recycled Water | $0.54 | $0.55 | $0.92 | $0.74 | $1.05 |
| Wastewater Outreach | $0.21 | $0.21 | $0.21 | $0.22 | $0.22 |
| Wastewater Customer Care – Admin | $0.85 | $0.91 | $0.95 | $0.98 | $1.01 |
| Wastewater Customer Care - Field | $0.25 | $0.27 | $0.27 | $0.28 | $0.29 |
| Wastewater Customer Care - Billing | $0.54 | $0.56 | $0.59 | $0.61 | $0.63 |
| Wastewater Customer Care – Customer Service | $0.34 | $0.36 | $0.37 | $0.38 | $0.39 |
| Wastewater UEC | $0.23 | $0.24 | $0.25 | $0.26 | $0.26 |
| Wastewater EU Admin | $1.22 | $1.17 | $1.16 | $1.29 | $1.23 |
| Wastewater EU Tech Serv | $1.88 | $1.96 | $2.03 | $2.10 | $2.16 |
| Wastewater EAM Support and Maintenance | $0.08 | $0.08 | $0.09 | $0.09 | $0.09 |
| Wastewater Compliance | $0.15 | $0.20 | $0.16 | $0.17 | $0.17 |
| Wastewater Technology Replacement | $0.05 | $0.05 | $0.05 | $0.05 | $0.05 |
| **Total Expenditures** | $53.25 | $55.66 | $58.28 | $59.76 | $61.51 |

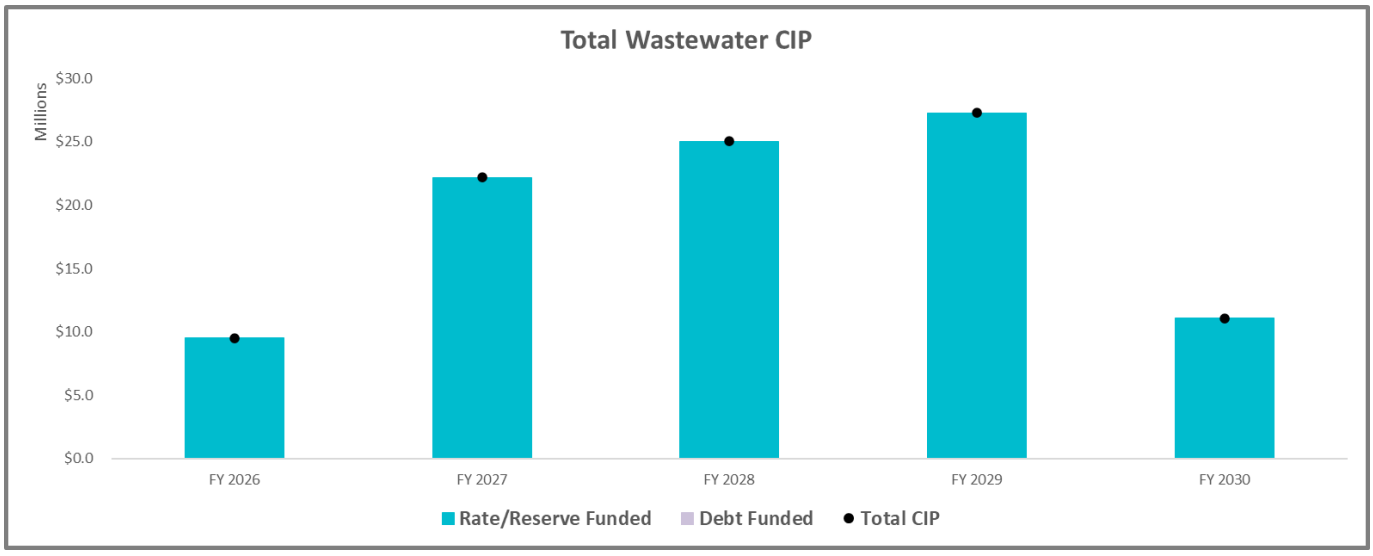
# 7.5. Capital Improvement Plan

The City has developed a capital improvement plan (CIP) to address ongoing wastewater system needs each year throughout the study period. The total CIP costs for FY 2026 through FY 2030 seen in **Table 7-11** and **Figure 7-2**. Inflated project costs were provided by the City, so no additional inflation was applied. The CIP is funded through rate revenues and reserve funds.

**Table 7-11: Projected Capital Improvement Plan (in Millions)**

| Description | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|
| **Total Project Expenditures** | $9.53 | $22.19 | $25.03 | $27.29 | $11.08 |

**Figure 7-2: Wastewater CIP Projects**




# 7.6. Financial Policies

## 7.6.1. Reserve Policies

The City maintains three separate reserves. The Operating Reserve is designed to mitigate the impact of fluctuations in O&M expenditures. The Rehabilitation Reserves are designed to provide adequate funding for capital improvements. The Rate Stabilization Reserve is designed to mitigate the impact of revenue variances on the City's financial condition.

As part of the study, Raftelis combined these funds into one large fund. As part of the study, Raftelis consolidated these reserves to provide greater transparency regarding the financial performance and position of the wastewater utility. However, minimum reserve targets are still calculated on an individual basis and then added together to create a single consolidated target reserve. The current reserve targets are:

1. **Operating Reserve**
    - Minimum Level: 90 days of annual O&M expenditures *($12.26 million in FY 2025)*
2. **Rate Stabilization Reserve**
    - Minimum Level: 180 days of following years O&M expenditures *($24.52 million in FY 2025)*
3. **Rehabilitation Reserve**

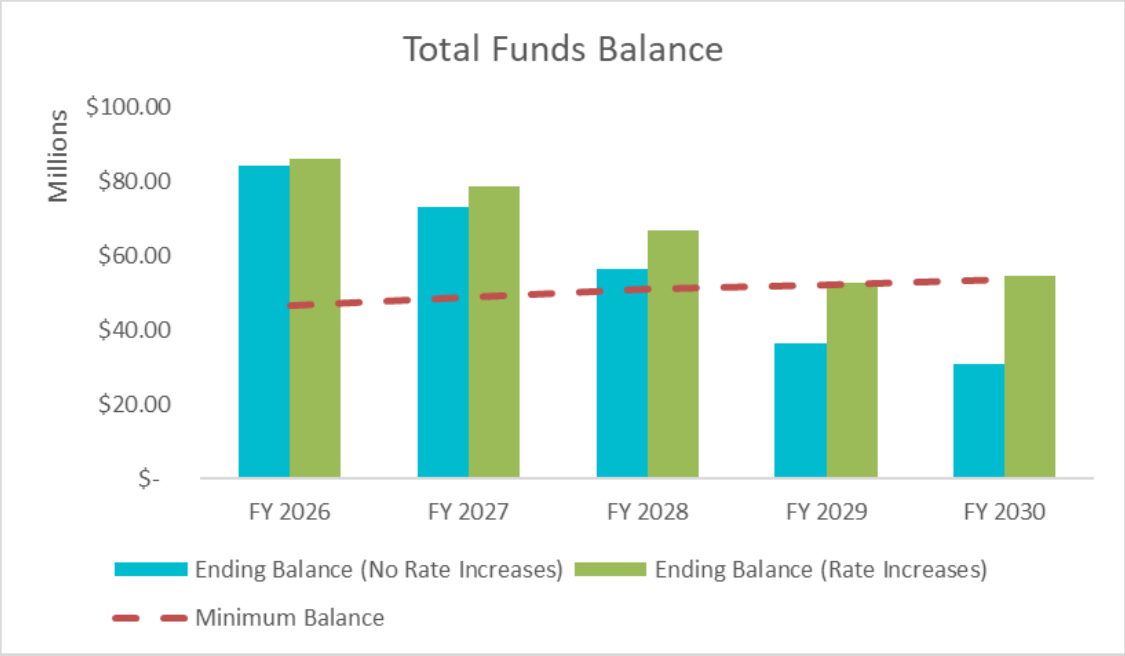
- Minimum Level: 1% of replacement cost less depreciation of wastewater assets *($6.63 million in FY 2025)*

## 7.7. Status Quo Financial Plan

Raftelis and City staff first evaluated the City's projected cash flow and cash reserve balances over the study period under a "status quo" financial plan before considering any rate revenue adjustments. The status quo financial plan illustrates what would occur in the absence of any wastewater rate increases over the study period. Specifically, FY 2025 rates are assumed to remain unchanged over the study period under the status quo financial plan.

**Figure 7-3** shows the projected ending cash balance in each year over the study period under the status quo and with the proposed rate increases for all three reserves combined (Operating, Rehabilitation, and Rate Stabilization). Under the status quo financial plan, the City's reserves are steadily drawn down over the five-year study period until the minimum reserve balance is no longer met in FY 2029 and FY 2030. This demonstrates the need for rate revenue increases over the study period to ensure that the City meets its minimum reserve balance as established by City policy.

**Figure 7-3: Total Fund Balance Under Status Quo and Proposed Financial Plan**




## 7.8. Proposed Financial Plan

The status quo financial plan demonstrates that the City must increase its revenues from wastewater rates over the five-year study period to meet minimum reserve levels. Raftelis, therefore, proposed annual revenue adjustments of 3.5% in FY 2026, 4% in FY 2027, and 2% in FY 2028 through FY 2030 to ensure that the City maintains healthy reserve levels per City policy. The term "revenue adjustment" specifically refers to a percent increase in wastewater revenues (from Volumetric Charges and Flat Charges) relative to the amount of wastewater rate revenues that would be collected under the prior year's rates. Note that revenue adjustments are used only to project total wastewater rate revenues. Allocation of the total wastewater rate

revenue requirement across the various wastewater charges is included in the COS analysis in **Section 8**. City staff approved the recommendations of the proposed revenue adjustments each year.

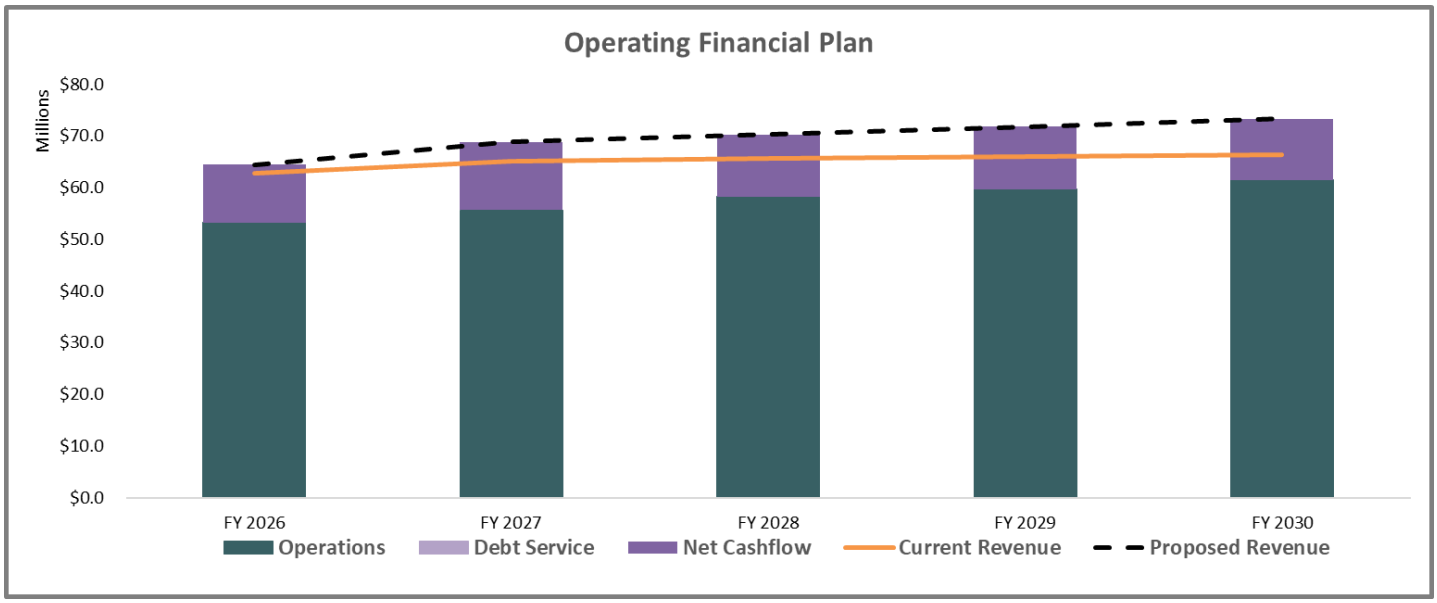
**Table 7-12** shows the proposed five-year financial plan in proforma format. Rate revenue under existing rates is shown in Line 4, while Line 5 represents additional revenue resulting from the proposed revenue adjustments. Other operating revenues in Line 8 includes miscellaneous items such as plan check/inspection fees, installation tap, backflow repair and test, and other revenue. Capital improvement expenditures are on line 26 being taken out of the reserve fund. The ending cash reserve is now meeting targets.

### Table 7-12: Proposed Financial Plan (in Millions)

| | Description | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 |
|---|---|---|---|---|---|---|
| 1 | Required % Increase in Rate Revenues | 3.5% | 4.0% | 2.0% | 2.0% | 2.0% |
| 2 | | | | | | |
| 3 | REVENUES | | | | | |
| 4 | Revenues from Current Rates | $46.98 | $47.38 | $47.77 | $48.17 | $48.57 |
| 5 | Revenue Adjustments | $1.64 | $3.62 | $4.68 | $5.77 | $6.91 |
| 6 | Total Rate Revenue (Revenue Requirement) | $48.63 | $50.99 | $52.45 | $53.94 | $55.48 |
| 7 | | | | | | |
| 8 | Other Operating Revenue | $15.81 | $17.82 | $17.82 | $17.82 | $17.82 |
| 9 | TOTAL REVENUES | $64.44 | $68.81 | $70.27 | $71.77 | $73.31 |
| 10 | | | | | | |
| 11 | EXPENSES | | | | | |
| 12 | O&M Expenses | $53.20 | $55.61 | $58.23 | $59.71 | $61.46 |
| 13 | Existing Debt Service | $0 | $0 | $0 | $0 | $0 |
| 14 | TOTAL EXPENSES | $53.20 | $55.61 | $58.23 | $59.71 | $61.46 |
| 15 | | | | | | |
| 16 | Net Annual Cash Balance (before transfers) | $11.25 | $13.20 | $12.04 | $12.06 | $11.85 |
| 17 | | | | | | |
| 18 | CASH RESERVES | | | | | |
| 19 | Beginning Cash Reserves | $82.61 | $86.01 | $78.56 | $66.88 | $52.68 |
| 20 | | | | | | |
| 21 | SOURCE OF FUNDS | | | | | |
| 22 | Operating Net Income | $11.25 | $13.20 | $12.04 | $12.06 | $11.85 |
| 23 | Total Sources | $11.25 | $13.20 | $12.04 | $12.06 | $11.85 |
| 24 | | | | | | |
| 25 | USE OF FUNDS | | | | | |
| 26 | Rehabilitation Fund Capital Expenditures | $9.53 | $22.19 | $25.03 | $27.29 | $11.08 |
| 27 | Total Uses | $9.53 | $22.19 | $25.03 | $27.29 | $11.08 |
| 28 | | | | | | |
| 29 | Net Cashflow | $1.72 | ($8.99) | ($12.99) | ($15.23) | $0.77 |
| 30 | | | | | | |
| 31 | Ending Cash Reserves (Before Interest) | $84.33 | $77.02 | $65.57 | $51.65 | $53.46 |
| 33 | Interest Income | $1.69 | $1.54 | $1.31 | $1.03 | $1.07 |
| 35 | Ending Cash Reserves | $86.01 | $78.56 | $66.88 | $52.68 | $54.53 |
| **36** | | | | | | |
| 37 | **Target Reserve** | | | | | |
| 38 | Operating Target | $13.30 | $13.90 | $14.56 | $14.93 | $15.36 |
| 39 | Rate Stabilization Target | $26.60 | $27.81 | $29.12 | $29.86 | $30.73 |
| 40 | Rehabilitation Target | $6.83 | $7.04 | $7.25 | $7.46 | $7.69 |
| 41 | Total Target Reserves | $46.73 | $48.75 | $50.92 | $52.25 | $53.78 |

**Figure 7-4** summarizes the tabular results from **Table 7-12** in graphical format. Operating expenses are represented by stacked bars. Revenues under current rates are represented by the solid line, while revenues inclusive of the proposed revenue adjustments are represented by the dashed line.

## Figure 7-4: Proposed Operating Financial Plan



# 8. Wastewater Cost of Service

**Section 8** of the report provides a detailed description of the wastewater COS analysis conducted for the City's wastewater system. The goal of a COS analysis is to allocate the overall revenue requirement to all customer classes and tiers based on their proportion of usage and burden on the system. The numbers shown in this section of the report are rounded. Therefore, hand calculations based on the numbers displayed, such as summing or multiplying, may not equal the exact results shown in this report.

## 8.1. Process and Approach

The first step in the COS analysis process is to determine the revenue requirement, which is based on the results of the financial plan and the proposed revenue adjustments. The proposed wastewater utility COS was developed in alignment with guidelines detailed in the WEF Manual 27.

COS analyses are tailored specifically to meet the unique needs of each wastewater system. However, there are four distinct steps in every analysis to recover costs from customer classes in an accurate, equitable, and defensible manner:

- **Cost components:** Cost components are identified to allocate O&M expenses and capital assets by their function. Cost components for this study include account services, flow fixed, and flow variable.
- **Cost component allocation:** The functionalized costs are then allocated to the cost components based on their burden on the system. The revenue requirement is allocated according to the cost components, resulting in the total revenue requirement for each cost component.
- **Unit cost development:** The revenue requirement for each cost component is divided by the appropriate units of service for each customer class and specific charge of the unit cost for each cost component.
- **Revenue requirement distribution:** The unit cost is utilized to distribute the revenue requirement for each cost component to customer classes and tiers based on their service units. The City's customer classes include Non-Metered (residential and commercial) and Metered (commercial).

## 8.2. Revenue Requirement

**Table 8-1** shows the revenue requirement, which is equal to the total projected revenue required from rates for FY 2026 (also referred to as the test year or rate-setting year). The revenue requirements include O&M expenses, revenue offsets from other revenues, and adjustments for cash balance. The proposed revenue adjustments and rates accumulate the necessary funding for capital projects and allow fund balances to comply with minimum reserve requirements.

The revenue requirement is calculated using the FY 2026 expenses (Lines 2-29), which include O&M expenses. The revenue offsets (Lines 31-37) include the various miscellaneous, non-rate revenues that are applied as offsets to the revenue requirement. The cash balance adjustment (Line 42) is the operating net income before transfers. The final revenue requirement (Line 45) is calculated as follows:

*Total revenue required from rates (Line 45) = Operating Costs (Line 29) - Revenue offsets (Line 37) + Adjustments (Line 43)*

### Table 8-1: FY 2026 Revenue Requirement (in Millions)

| A | B | C |
|---|---|---|
| **Line** | **Revenue Requirements Cost Component** | **Amount** |
| 1 | Operating Costs | |
| 2 | Non-Classified | $3.13 |
| 3 | Retiree Payments | $0.81 |
| 4 | Wastewater Administration | $3.44 |
| 5 | Industrial Treatment | $.59 |
| 6 | Environmental Treatment Lab | $2.20 |
| 7 | Dry Creek WWTP | $11.72 |
| 8 | Pleasant Grove WWTP | $13.05 |
| 9 | Wastewater Collection | $9.06 |
| 10 | Wastewater Maintenance | $2.92 |
| 11 | Recycled Water | $0.54 |
| 12 | Wastewater Outreach | $0.21 |
| 13 | Wastewater Customer Care - Admin | $0.85 |
| 14 | Wastewater Customer Care - Field | $0.25 |
| 15 | Wastewater Customer Care - Billing | $0.54 |
| 16 | Wastewater Customer Care – Customer Service | $0.34 |
| 17 | Wastewater UEC | $0.23 |
| 18 | Wastewater EU Admin | $1.22 |
| 19 | Wastewater EU Tech Serv | $1.88 |
| 20 | Wastewater EAM Support and Maintenance | $0.08 |
| 21 | Wastewater Compliance | $0.15 |
| 22 | Total Operating Costs | $53.20 |
| 23 | | |
| 24 | Revenue Offsets | |
| 25 | Plan Check / Inspection Fees | $0.18 |
| 26 | Installation Tap | $0.02 |
| 27 | Rental Revenue | 0.01 |
| 28 | Industrial WW Treatment Charges | $0.19 |
| 29 | Other Revenues | $13.23 |
| 30 | Recycled Water Rate Revenue | $2.19 |
| 31 | Total Revenue Offsets | 15.81 |
| 32 | | |
| 33 | Net Revenue Requirement Before Adjustments | $37.38 |
| 34 | | |
| 35 | Adjustments | |
| 36 | Adjustment for Cash Balance | $11.25 |
| 37 | Total Adjustments | $1.25 |
| 38 | | |
| 39 | Net Revenue Requirement from Rates After Adjustment | $48.63 |

## 8.3. O&M Allocation

**Table 8-2** shows the allocation of O&M expenses to each cost causation component. The cost causation components used in this study include account services, flow fixed, and flow variable. The percentage allocated can be seen in Columns D-F of **Table 8-2**. FY 2026 O&M expenses are shown in Column C, Lines 1-20. **Table 8-3** shows the total allocation in dollar amounts.

## Table 8-2: FY 2026 O&M Cost Allocation (%)

| A | B | C | D | E | F |
|---|---|---|---|---|---|
| Line | Revenue Requirement Cost Component | Total (in Millions) | Account Services | Flow Fixed | Flow Variable |
| 1 | Non-Classified | $3.13 | 100% | 0% | 0% |
| 2 | Retiree Payments | $0.81 | 100% | 0% | 0% |
| 3 | Wastewater Administration | $3.44 | 100% | 0% | 0% |
| 4 | Industrial Treatment | $0.59 | 0% | 100% | 0% |
| 5 | Environmental Treatment Lab | $2.20 | 100% | 0% | 0% |
| **6** | Dry Creek WWTP | $11.72 | 0% | 75% | 25% |
| **7** | Pleasant Grove WWTP | $13.05 | 0% | 75% | 25% |
| **8** | Wastewater Collection | $9.06 | 25% | 75% | 0% |
| **9** | Wastewater Maintenance | $2.92 | 0% | 0% | 0% |
| **10** | Recycled Water | $0.54 | 100% | 0% | 0% |
| **11** | Wastewater Outreach | $0.21 | 100% | 0% | 0% |
| **12** | Wastewater Customer Care - Admin | $0.85 | 100% | 0% | 0% |
| **13** | Wastewater Customer Care - Field | $0.25 | 100% | 0% | 0% |
| **14** | Wastewater Customer Care - Billing | $0.54 | 100% | 0% | 0% |
| **15** | Wastewater Customer Care - Customer Service | $0.34 | 100% | 0% | 0% |
| **16** | Wastewater UEC | $0.23 | 100% | 0% | 0% |
| **17** | Wastewater EU Admin | $1.22 | 100% | 0% | 0% |
| **18** | Wastewater EU Tech Serv | $1.88 | 100% | 0% | 0% |
| **19** | Wastewater EAM Support and Maintenance | $0.08 | 100% | 0% | 0% |
| **20** | Wastewater Compliance | $0.15 | 100% | 0% | 0% |
| **21** | Total Operating Costs | $53.20 | | | |

## Table 8-3: FY 2026 O&M Cost Allocation (In Millions)

| A | B | C | D | E | F |
|---|---|---|---|---|---|
| Line | Revenue Requirement Cost Component | Total | Account Services | Flow Fixed | Flow Variable |
| 1 | Operating Costs | | | | |
| 2 | Non-Classified | $3.13 | $3.13 | $0.00 | $0.00 |
| 3 | Retiree Payments | $0.81 | $0.81 | $0.00 | $0.00 |
| 4 | Wastewater Administration | $3.44 | $3.44 | $0.00 | $0.00 |
| 5 | Industrial Treatment | $0.59 | $0.00 | $0.59 | $0.00 |
| 6 | Environmental Treatment Lab | $2.20 | $2.20 | $0.00 | $0.00 |
| 7 | Dry Creek WWTP | $11.72 | $0.00 | $8.79 | $2.93 |
| 8 | Pleasant Grove WWTP | $13.05 | $0.00 | $9.78 | $3.26 |
| 9 | Wastewater Collection | $9.06 | $2.27 | $6.80 | $0.00 |
| 10 | Wastewater Maintenance[7] | $2.92 | $0.00 | $0.00 | $0.00 |
| 11 | Recycled Water | $0.54 | $0.54 | $0.00 | $0.00 |
| 12 | Wastewater Outreach | $0.21 | $0.21 | $0.00 | $0.00 |
| 13 | Wastewater Customer Care - Admin | $0.85 | $0.85 | $0.00 | $0.00 |
| 14 | Wastewater Customer Care - Field | $0.25 | $0.25 | $0.00 | $0.00 |
| 15 | Wastewater Customer Care - Billing | $0.54 | $0.54 | $0.00 | $0.00 |
| 16 | Wastewater Customer Care - Customer Service | $0.34 | $0.34 | $0.00 | $0.00 |
| 17 | Wastewater UEC | $0.23 | $0.23 | $0.00 | $0.00 |
| 18 | Wastewater EU Admin | $1.22 | $1.22 | $0.00 | $0.00 |
| 19 | Wastewater EU Tech Serv | $1.88 | $1.88 | $0.00 | $0.00 |
| 20 | Wastewater EAM Support and Maintenance | $0.08 | $0.08 | $0.00 | $0.00 |

[7] Wastewater Maintenance supports all aspects of the wastewater system, and the relative benefit to different cost components can vary from year to year. To avoid skewing the allocation factors based on fluctuating or non-attributable costs, Raftelis has excluded Wastewater Maintenance from the development of functional allocation factors. However, these costs are included in the total revenue requirement and are proportionally recovered across customer classes based on the distribution of all other allocated costs.

| | | | | | |
|---|---|---|---|---|---|
| 21 | Wastewater Compliance | $0.15 | $0.15 | $0.00 | $0.00 |
| **29** | Total Operating Costs | $53.20 | $18.13 | $25.96 | $6.19 |
| **30** | O&M Allocation Percentage | 100% | 36.06% | 51.63% | 12.31% |

**Table 8-4** shows the total revenue requirement by cost component. This is calculated by multiplying the total revenue requirement from rates ($48.63) by the cost causation components allocation percentage as shown on Line 30 of **Table 8-3**.

**Table 8-4: O&M Cost Allocation to Cost Component (in Millions)**

| A<br>Revenue Requirement<br>(FY 2026) | B<br>Account Services | C<br>Flow<br>Fixed | D<br>Flow<br>Variable | E<br>Total |
|---|---|---|---|---|
| Total Revenue Requirement From Rates | | | | $48.63 |
| Allocation Factors from Table 8-3 | 36.06% | 51.63% | 12.31% | 100% |
| Cost Component Revenue Requirement | $17.53 | $25.11 | $5.99 | $48.63 |

# 8.4. Units Cost Development

This subsection describes the next step in the COS analysis, which involves dividing the revenue requirement for each cost component established above by the units of service for each customer class to determine the unit cost for each cost component.

## 8.4.1. Account Services Component

The account services component is calculated by dividing the account services revenue requirement (**Table 8-4**) by the total number of accounts. This can be seen below in **Table 8-5.**

**Table 8-5: Account Services Unit Cost Development**

| A<br>Customer<br>Class | B<br>Accounts | C<br>Revenue<br>Requirement | D<br>Account Services<br>Unit Cost ($/Account) |
|---|---|---|---|
| All Classes | 64,464 | $17.53 | $22.67 |

## 8.4.2. Flow Fixed Component

The flow fixed component is calculated using the forecasted flow. The forecasted flow is calculated by multiplying the number of accounts by the flow per unit (557 cubic feet). The flow per unit is calculated based on the water average of 586 and a 95% return flow. This can be seen below in **Table 8-6**.

**Table 8-6: Flow Fixed Unit Cost Development**

| A<br>Customer<br>Class | B<br>Flow (Million CF) | D<br>Revenue<br>Requirement | E<br>Flow Fixed Component<br>Unit Cost ($/Account) |
|---|---|---|---|
| All Classes | 430.64 | $25.11 | $32.46 |

## 8.4.3. Flow Variable Component

The flow variable component is calculated by dividing the flow fixed revenue requirement by the FY 2026 sewer demand. This can be seen below in **Table 8-7**.

Table 8-7: Flow Fixed Unit Cost Development

| A<br>Customer Class | B<br>Flow (Million CF) | D<br>Revenue Requirement (in Millions) | E<br>Flow Variable Component Unit Cost ($/ccf) |
|---|---|---|---|
| **Commercial - Metered** | 113.25 | $5.99 | $5.288 |

# 8.5. Rate Structure Design

This subsection describes the final step in the COS analysis, which is to distribute the costs to the appropriate charge and class.

## 8.5.1. Fixed Component

**Table 8-8** shows the distribution of the cost components to fixed rates. The cost components that make up the fixed charges include account services and flow fixed. Account services costs are costs incurred by all customers. These costs generally relate to billing and other customer service costs. Flow fixed relates to the treatment and collection of wastewater. The total fixed charge is calculated by adding the account services and the flow fixed unit cost together.

Table 8-8: Summary of Fixed Components

| A<br>Customer Class | B<br>Account Services | C<br>Flow Fixed | D<br>Total Fixed Charge |
|---|---|---|---|
| All Classes per Sewer unit[8] | $22.67 | $32.46 | $55.13 |

## 8.5.2. Variable Component

**Table 8-9** shows the distribution of the cost components to variable rates. The flow variable is the cost component that makes up the variable charge. The flow variable component relates to wastewater treatment plants.

Table 8-9: Summary of Variable Components ($/Cubic Foot)

| A<br>Customer Class | B<br>Flow Variable | C<br>Total Variable Charge |
|---|---|---|
| Commercial - Metered | $0.05288 | $0.05288 |

# 8.6. Proposed COS Rates

This subsection outlines the proposed rates based on the above COS.

## 8.6.1. Flat Rates

**Table 8-10** shows the proposed FY 2026 wastewater flat charge based on the account services and flow fixed unit cost in **Table 8-8.**

Table 8-10: Proposed FY 2026 Flat Charge

| A<br>Line | B<br>Customer Class | C<br>Account Services | D<br>Flow Fixed | E<br>Proposed FY 2026 Monthly Flat Charge | F<br>Current Monthly Flat Charge | G<br>Difference ($) | H<br>Difference (%) |
|---|---|---|---|---|---|---|---|

[8] Sewer units are determined by Chapter 14.16.100 of the Roseville Municipal Code.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Single-Family Residential | $22.67 | $32.46 | $55.13 | $53.45 | $1.68 | 3.1% |
| 2 | Commercial Flat Rate | $22.67 | $32.46 | $55.13 | $53.45 | $1.68 | 3.1% |
| 3 | Commercial - Metered | $22.67 | $32.46 | $55.13 | $53.45 | $1.68 | 3.1% |

**Table 8-11** shows the proposed FY 2026 commodity rate for metered commercial customers based on the flow variable unit cost in **Table 8-9**.

**Table 8-11: Proposed FY 2026 Quantity Charge**

| A | B | C | D | E | F |
|---|---|---|---|---|---|
| **Class** | Flow Variable | Proposed FY 2026 Variable Charge | Current Variable Charge | Difference ($) | Difference (%) |
| Metered Customers | $0.05288 | $0.05288 | $0.04978 | $0.00310 | 6.3% |

## 8.6.2. FY 2026 – FY 2030 Rate Projections

**Table 8-12** shows proposed monthly meter service charges and commodity rate for the period FY 2026 - FY 2030 based on the financial planning and COS process. The rates presented for FY 2026 and FY 2027 will be reflected in the City's Proposition 218 notice.

**Table 8-12: Proposed Wastewater Rates**

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| Single Family Residential ($/Month) | $53.45 | $55.13 | $57.34 | $58.48 | $59.65 | $60.84 |
| Commercial – Metered ($/Month) | $53.45 | $55.13 | $57.34 | $58.48 | $59.65 | $60.84 |
| Commercial – Flat Rate ($/Month) | $53.45 | $55.13 | $57.34 | $58.48 | $59.65 | $60.84 |
| | | | | | | |
| Commercial – Metered ($/Cubic Foot) | $0.04978 | $0.05288 | $0.05500 | $0.05612 | $0.05724 | $0.05838 |

# 9. Recycled Water Rates

## 9.1. Recycled Water System Overview

The City regards recycled water as a valuable resource that is a key component of its overall water supply portfolio. Recycled water service is provided predominantly to landscape irrigation customers such as golf courses, parks, schools, and many miles of streetscape for landscape irrigation within the City's potable water service area. The City's 2020 Urban Water Management Plan (UWMP) projected beneficial demand for recycled water of 4,435 AF in FY 2030 growing to 4,933 AF in FY 2045. FY 2026, recycled water service revenues are estimated to be approximately $2.2 million. This level is revenue is based on projected recycled water sales of 3,445 AF. This can be seen below in **Table 9-1**.

**Table 9-1: Projected FY 2026 Recycled Water Demand and Customer Accounts**

| Line | Description | Demand |
|---|---|---|
| 1 | Recycled Water Demand | 1,500,646 ccf / 3,445 AF |
| 2 | | |
| 3 | **Meter Size** | **Accounts** |
| 4 | 3/4" | 9 |
| 5 | 1" | 32 |
| 6 | 1.5" | 47 |
| 7 | 2" | 93 |
| 8 | 3" | 29 |
| 9 | 4" | 13 |
| 10 | 6" | 5 |
| 11 | 8" | 3 |
| 12 | 10" | 2 |

## 9.2. Proposed Recycled Water Rates

A formal financial plan and COS analysis were not completed for the recycled water service. The costs incurred to provide recycled water service are included in the wastewater revenue requirement. The revenue earned from recycled water sales offsets the wastewater revenue requirement.

No change is recommended for the recycled water rate structure. In FY 2026 and FY 2027, recycled water monthly meter charges will continue to be set at 90% of the potable water monthly meter service charge. The recycled water commodity charge will continue to be set at 64.5% of the potable water commodity rate. This is consistent with Chapters 14.08.090 and 14.17.080 of Roseville's Municipal Code. Maintaining reasonable recycled water rates achieves the following objectives:

- It enhances the potential for increased recycled water market penetration over the long term
- It reduces the long-term water supply acquisition and infrastructure costs that the City must incur to provide potable water service
- It is fully aligned with the State of California initiatives designed to reduce long-term water demand

**Table 9-2** shows proposed recycled water monthly meter service charges for the period FY 2026 - FY 2030. The rates presented for FY 2026 and FY 2027 will be reflected in the City's Proposition 218 notice.

### Table 9-2: Proposed Recycled Water Meter Service Charge ($/Month)

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| **3/4-inch** | $27.74 | $28.47 | $29.61 | $31.83 | $34.21 | $36.78 |
| **1-inch** | $42.82 | $44.52 | $46.31 | $49.78 | $53.51 | $57.52 |
| **1.5-inch** | $80.50 | $84.66 | $88.05 | $94.65 | $101.75 | $109.38 |
| **2-inch** | $125.73 | $132.83 | $138.14 | $148.51 | $159.64 | $171.62 |
| **3-inch** | $268.94 | $285.36 | $296.78 | $319.04 | $342.96 | $368.69 |
| **4-inch** | $479.98 | $510.15 | $530.55 | $570.34 | $613.12 | $659.10 |
| **6-inch** | $984.97 | $1,048.02 | $1,089.95 | $1,171.69 | $1,259.57 | $1,354.03 |
| **8-inch** | $2,115.55 | $2,252.22 | $2,342.31 | $2,517.99 | $2,706.83 | $2,909.85 |
| **10-inch** | $3,170.77 | $3,376.14 | $3,511.19 | $3,774.53 | $4,057.62 | $4,361.94 |

**Table 9-3** shows proposed quantity charges for the period FY 2026 - FY 2030. The rates presented for FY 2026 and FY 2027 will be reflected in the City's Proposition 218 notice on a $/cubic foot basis.

### Table 9-3: Proposed Recycled Water Quantity Charge ($/Cubic Foot)

| Meter Size | Current | Proposed FY 2026 | Proposed FY 2027 | Proposed FY 2028 | Proposed FY 2029 | Proposed FY 2030 |
|---|---|---|---|---|---|---|
| **All Usage** | $0.0107 | $0.0112 | $0.0117 | $0.0125 | $0.0135 | $0.0145 |