

CITY OF
San Diego

Wastewater Financial Plan, Cost-of-Service, and Rate Study

Report / July 8, 2025



July 8, 2025

Ms. Lisa Celaya
Executive Assistant Director
City of San Diego
9192 Topaz Way
San Diego, CA 92123

Subject: Wastewater Cost-of-Service and Rate and Fee Study Report

Dear Ms. Celaya,

Raftelis is pleased to provide this Wastewater Cost-of-Service and Rate Study Report (Report) for the City of San Diego (City). The Water Cost-of-Service and Rate Study Report is provided under a separate cover.

The primary objectives of the wastewater study included the following:

- Develop a financial plan forecast that maintains the financial health of the wastewater utility. This forecast was developed to ensure that revenue from rates and other sources meets annual operating expenses, payments on existing and proposed debt service, provides funding for the capital improvement program, and satisfies debt service coverage and reserve targets.
- Develop a comprehensive cost-of-service analysis to determine the cost of providing wastewater service to each customer class.
- Develop cost-of-service-based rates that meet the City's policy objectives and comply with legal and statutory requirements.
- Update the rate model previously developed and in use by the City.

The Report summarizes the key findings and recommendations for developing the updated wastewater rates and fees.

It has been a pleasure working with you, and we thank you and the City staff for their support during this study.

Sincerely,

A handwritten signature in black ink that reads 'Todd Cristiano'.

Todd Cristiano
Vice President

Table of Contents

EXECUTIVE SUMMARY	1
STUDY OBJECTIVES	1
STUDY FINDINGS AND RECOMMENDATIONS	1
Financial Plan	1
Cost-of-Service Analysis	2
Wastewater Rate Design	2
Recycled Water RATE Design	3
INTRODUCTION.....	5
STUDY BACKGROUND.....	5
REPORT ORGANIZATION.....	5
LEGAL AND STATUTORY CONSIDERATIONS	5
RATE SETTING PROCESS	6
Revenue Requirements	6
Cost-of-Service	6
Rate Design	6
RELIANCE ON CITY PROVIDED DATA.....	7
FINANCIAL PLAN	9
INTRODUCTION.....	9
FINANCIAL PLAN AND REVENUE REQUIREMENT	9
OPERATING FUND	9
Beginning Fund Balance	9
Target Reserves	10
Revenues.....	11
REVENUE REQUIREMENTS	11
Operations and Maintenance Expenses	11
Debt Service	12
PAYGO Capital Transfers	13
Operating Fund Financial Plan.....	14
CAPITAL FUNDS	15
Sources of Funds.....	15
Uses of Funds.....	16
COST-OF-SERVICE	17
INTRODUCTION.....	17
Projected FY 2026 Revenue at Existing Rates	18
Test Year FY 2026 Revenue Requirement	18
Revenue Requirement Cost Allocations	19
Assignment of Costs to Functions.....	19
Allocation of Functionalized Costs to Demand Parameters	24
Volume And Strength-Related Costs	24
Customer-Related Costs.....	24
Recycled Water Costs	25
Summary of FY 2026 Allocations to Demand Parameters	25
Units of Service Determination.....	39
Allocation of inflow and infiltration (I/I).....	41
Unit Cost-of-Service	44
Distribution of Costs to Customer Classes.....	44

Class Cost-of-Service versus Revenues at Existing Rates	45
RATE DESIGN.....	47
INTRODUCTION.....	47
Proposed Rates - Monthly Service Charge	47
Proposed Commodity Rates	48
Projected Rates	50
RECYCLED WATER	51
INTRODUCTION.....	51
Recycled System Revenue Requirement	51
Recycled Water Monthly Service Charges.....	52

LIST OF TABLES

Table 1: Projected Required Rate Revenue Adjustments.....	1
Table 2: Test Year FY 2026 Cost-of-Service Summary (\$/millions)	2
Table 3: Current and Proposed Wastewater Monthly Service Charges	3
Table 4: Current and Proposed Wastewater Commodity Rates	3
Table 5: Current and Proposed Recycled Water Monthly Meter Service Charges	4
Table 6: Current and Proposed Recycled Water Commodity Rates.....	4
Table 7: Operating Fund Detail (\$ millions).....	10
Table 8: Revenue Summary (\$ millions)	11
Table 9: Operations and Maintenance Expense Summary (\$ millions)	12
Table 10: Debt Service Summary (\$ millions)	13
Table 11: PAYGO Transfers to Fund Capital Projects (\$ millions)	14
Table 12: Operating Fund Financial Plan Summary (\$ millions).....	14
Table 13: Capital Funding Summary (\$ millions).....	15
Table 14: Capital Improvement Program Summary (\$ millions)	16
Table 15: Summary of Projected Revenue Requirement from Rates (\$ millions).....	17
Table 16: Projected FY 2026 Wastewater Revenue at Existing FY 2025 Rates	18
Table 17: FY 2026 Revenue Requirement Detail	19
Table 18: Functional Cost Components	20
Table 19: Functional Assignment of FY 2026 O&M Costs	21
Table 20: Functional Assignment of FY 2026 Revenue Requirement Offsets.....	23
Table 21: Functional Assignment of FY 2026 Capital Costs	24
Table 22: Allocation Percentages for Municipal Sub-System O&M Costs	26
Table 23: FY 2026 Dollar Allocations of Municipal Sub-System O&M Costs	27
Table 24: Allocation Percentages for Metropolitan Sub-System O&M Costs	29
Table 25: FY 2026 Dollar Allocations of Metropolitan Sub-System O&M Costs	30
Table 26: Allocation Percentages for Municipal Sub-System Revenue Requirement Offsets	31
Table 27: FY 2026 Dollar Allocations for Municipal Sub-System Revenue Requirement Offsets.....	32
Table 28: Allocation Percentages for Metropolitan Sub-System Revenue Requirement Offsets	33
Table 29: FY 2026 Dollar Allocations for Metropolitan Sub-System Revenue Requirement Offsets	34
Table 30: Allocation Percentages for Municipal Sub-System Capital Costs.....	35
Table 31: FY 2026 Dollar Allocation for Municipal Sub-System Capital Costs	35
Table 32: Allocation Percentages for Metropolitan Sub-System Capital Costs.....	36
Table 33: FY 2026 Dollar Allocations for Metropolitan Sub-System Capital Costs	37

Table 34: Summary of FY 2026 Revenue Requirement Allocations	38
Table 35: FY 2026 Flow and Volume Loadings Used to Determine Units of Service	40
Table 36: Detail FY 2026 Allocation of I/I to Customer Classes	42
Table 37: Summary of FY 2026 Units of Service.....	43
Table 38: FY 2026 Unit Cost-of-Service Calculation.....	44
Table 39: FY 2026 Wastewater Customer Class Cost-of-Service - Before I/I Allocation.....	45
Table 40: FY 2026 Wastewater Customer Class Cost-of-Service - After I/I Allocation	45
Table 41: Comparison of FY 2026 Customer Class Cost-of-Service to Revenue at Existing Rates	46
Table 42: Detail of Proposed FY 2026 Monthly Service Charges.....	47
Table 43: Detail Proposed FY 2026 Residential Commodity Rates	48
Table 44: Detail of Proposed FY 2026 Commercial / Industrial Commodity Rates	48
Table 45: Detail of Proposed FY 2026 Trucked Waste and Imported Flows Rates	49
Table 46: Detail of Proposed FY 2026 Stormwater Transportation	49
Table 47: Proposed Wastewater Rates for FY 2026 – FY 2029.....	50
Table 48: Test Year FY 2026 Recycled Water Revenue Requirement	52
Table 49: FY 2026 Recycled Water Monthly Service Charge Unit Cost	53
Table 50: Proposed FY 2026 Recycled Water Monthly Service Charges.....	53
Table 51: FY 2026 Recycled Water Commodity Revenue Requirement.....	54
Table 52: Proposed FY 2026 Recycled Water Commodity Rate	54
Table 53: Proposed Recycled Water Rates FY 2026 – FY 2029.....	55

GLOSSARY¹

Chemical Oxygen Demand (COD) is a measurement of the amount of oxygen required to dissolve organic matter contained in customer wastewater discharges.

Cost drivers are measurable design criteria, operational purposes, service purposes, or customer requirements that predominantly influence the size and annual operating and capital costs of the cost center.

Cost-of-service rates refer to rates developed using industry-accepted cost-allocation approaches to price wastewater utility service in a manner that is reflective of the demands placed on the system by varying types of customers.

Customer demands are the wastewater flow, COD loading in pounds, and Total Suspended Solids (TSS) loadings in pounds discharged to the wastewater treatment plant. It also includes customer service-related demands such as meter reading and billing and collection.

Demand parameters are the cost drivers behind the functional components. For this rate study, the demand parameters are defined as flow, COD, TSS, meters and services, billing, and recycling.

Functional components or cost centers are grouped activities for which the wastewater utility's chart of accounts captures direct or indirect O&M expenses and capital costs related to operating its utility.

Infiltration is groundwater entering the wastewater collection system through leaky sewer pipelines.

Inflow is water introduced into the wastewater collection and conveyance system through direct connections such as manhole covers.

Total Suspended Solids is a measurement of organic solids contained in customer wastewater discharges.

¹ Definitions and terminology were provided in the Water Environment Federation's Manual of Practice No. 27, Financing and Charges for Wastewater Systems.

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Executive Summary

Study Objectives

The City of San Diego (City) retained Raftelis to conduct a comprehensive cost-of-service and rate design analysis for its wastewater utility. The City's overall objectives for this study included:

- Develop a multi-year financial plan for FY 2026 through FY 2030 (study period)², for the Sewer Revenue Fund to ensure that revenues from rates, fees, and charges are sufficient to cover annual operating expenses, the capital improvement program net of bond and loan proceeds, and meet the City's reserve and debt service coverage requirements
- Conduct a comprehensive cost-of-service (COS) for the wastewater utility to ensure that costs are proportionally assigned to customer classes for the Study Period.
- Design rates for the Study Period to maintain proportional cost recovery from each customer class.
- Comply with Proposition 218, Proposition 26, California Government Code Section 66013, and other regulatory requirements.
- Provide appropriate education and public outreach to the City Council, the general public, and other stakeholders to ensure the successful implementation of current and future rate cases.

Raftelis utilized City-provided data for each customer class to determine the best methodology for rate changes and then applied industry best practice cost-of-service methodologies that are applicable to the City's wastewater utility and supported by the Water Environment Federation (WEF) in its *Manual of Practice No. 27, Financing and Charges for Wastewater Systems, 4th Edition, 2018* (WEF Manual No. 27).

Study Findings and Recommendations

FINANCIAL PLAN

The Sewer Revenue Fund incurs all of the costs necessary to provide wastewater service and a portion of the expenses required to provide recycled water service (the Water Revenue Fund also incurs costs to provide recycled water service). If the City's current wastewater rates remain unchanged, projected rate revenues will be inadequate to meet the wastewater utility's annual revenue requirements throughout FY 2026 through FY 2029. Table 1 illustrates the recommended rate revenue adjustments. These adjustments are required to pay for future wastewater utility operations and maintenance expenses, fund the capital improvement program, provide adequate reserves, and satisfy debt service coverage requirements throughout the study period.

Table 1: Projected Required Rate Revenue Adjustments

Year	Effective Date	% Rate Revenue Increase
FY 2026	January 1, 2026	6.00%
FY 2027	January 1, 2027	6.00%
FY 2028	January 1, 2028	8.00%
FY 2029	January 1, 2029	8.00%

² The City's financial operations are reported on a fiscal year basis July 1 through June 30 and noted in this report as FY, which is the twelve months ending June 30.

COST-OF-SERVICE ANALYSIS

The cost-of-service analysis allocates the test year's annual revenue requirement to customer classes based on the cost causation principle. The test year is when the cost-of-service rates will be effective. Customer classes are assigned costs to operate the system based on the demands they place on the system. The allocation processes used in the cost-of-service analysis consider the volume and strength of wastewater discharges and the number of customers in each customer class. As shown in Table 2, the total FY 2026 wastewater revenue requirement is approximately \$361.5 million. The projected revenues under the current rates total approximately \$341.0 million, indicating a necessary increase of 6%.

The percentage change in the revenue recovery column compares revenues recovered at existing rates with the revenue that should be recovered based on the cost-of-service analysis. Other (Navy, Prisons) has the most considerable percentage difference and indicates that contractual rates for this customer class are under recovering. This is an expected finding, since unlike the other customer classes who have their rates updated as part of the study, the Navy and Prison have provisions allowing the city to update their rates based on the actual costs observed during the fiscal year. The Navy and Prison rates have to be evaluated as part of the cost of service so that the other classes are using their actual flow and loading requirements to account for their proportional costs based on their demands.

Table 2: Test Year FY 2026 Cost-of-Service Summary (\$/millions)

Customer Class	FY 2026 Cost of Service	Revenue at Existing Rates	Required Change in Revenue Recovery from Existing Rates	Percentage Change in Revenue Recovery
Wastewater Customer Classes				
Single Family Residential	\$131,765,692	\$134,124,273	(\$2,358,581)	-1.8%
Multi-Family Residential	\$97,346,093	\$89,811,330	\$7,534,763	8.4%
Non-Residential	\$118,336,803	\$105,530,603	\$12,806,200	12.1%
Total Regular Wastewater Service	\$347,448,588	\$329,466,206	\$17,982,382	5.5%
Other (Navy, Prisons)	\$7,365,915	\$5,815,306	\$1,550,609	26.7%
Total Other (Navy, Prisons)	\$7,365,915	\$5,815,306	\$1,550,609	26.7%
Trucked Waste and Imported Flows	\$4,955,601	\$4,102,862	\$852,738	20.8%
Total Trucked Waste	\$4,955,601	\$4,102,862	\$852,738	20.8%
Stormwater Transportation	\$1,747,741	\$1,670,196	\$77,545	4.6%
Total Stormwater Transportation	\$1,747,741	\$1,670,196	\$77,545	4.6%
Total Wastewater Revenues from Rates and Charges	\$361,517,844	\$341,054,570	\$20,463,274	6.0%

WASTEWATER RATE DESIGN

In developing wastewater rate schedules, a basic consideration is establishing proportional charges to customers commensurate with the cost of providing service. The cost-of-service analysis determines the cost of serving each customer class based on the service requirements (i.e., flows and strength) they place on the wastewater utility system. Using the demand each customer class places on the wastewater utility system to calculate their costs ensures that one customer class does not subsidize another. Grouping customers into classes with similar flow and loading requirements reduces potential variability in annual changes to individual rate structures. It more accurately ties the rate structures to the parcel for service purposes without unnecessary complexity, which would lead to diminishing returns of accuracy.

The City has the following wastewater service customer classes: Single Family Residential, Multi-Family Residential, Commercial/Industrial, Other (Navy/Prisons), Trucked Waste and Imported Flows, and Stormwater Transportation. Tables 3 and 4 compare current and proposed service charges and current and proposed commodity rates for each customer class. The cost-of-service process applies revenue offsets, discussed later in this report, to the revenue requirements so that each customer class's service charges and commodity rates have a nexus with the demands they place on the system. This makes certain that each customer class is paying for their portion of the costs of using the wastewater system. Service charges and commodity rates for the Other (Navy/Prisons) customer class are not shown in Tables 3 and 4 because these rates are set via a contractual arrangement.

The City's storm drainage system serves Stormwater Transportation customers. Their rates are for the maintenance and repair of the stormwater conveyance system in areas where potential local, state, and federally regulated impacts are necessary to provide flood control. This class also includes private drainage facilities that convey surface runoff and seepage water through the City's storm drainage system.

Table 3: Current and Proposed Wastewater Monthly Service Charges

Customer Class	Current FY 2025 (1)	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
Single Family Residential	\$15.75	\$11.28	\$11.96	\$12.91	\$13.95
Multi-Family Residential	\$15.75	\$11.28	\$11.96	\$12.91	\$13.95
Commercial / Industrial	\$15.75	\$11.28	\$11.96	\$12.91	\$13.95
(1) Council approved rates effective on January 1, 2025					

Table 4: Current and Proposed Wastewater Commodity Rates

Customer Class	Unit	Current FY 2025 (1)	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
Residential						
Single Family Residential	(\$ / HCF) (2)	\$5.332	\$5.918	\$6.273	\$6.775	\$7.317
Multi-Family Residential	(\$ / HCF)	\$5.332	\$5.918	\$6.273	\$6.775	\$7.317
Commercial / Industrial						
Flow Charges	(\$ / HCF)	\$3.555	\$3.848	\$4.079	\$4.405	\$4.758
COD Charges	(\$ / lb)	\$0.232	\$0.271	\$0.287	\$0.310	\$0.335
TSS Charges	(\$ / lb)	\$0.522	\$0.678	\$0.719	\$0.776	\$0.838
Trucked Waste						
Flow Charges	(\$ / HCF)	\$3.493	\$3.688	\$3.909	\$4.222	\$4.560
COD Charges	(\$ / lb)	\$0.232	\$0.271	\$0.287	\$0.310	\$0.335
TSS Charges	(\$ / lb)	\$0.522	\$0.678	\$0.719	\$0.776	\$0.838
Stormwater Transportation						
Flow	(\$ / HCF)	\$4.242	\$4.600	\$4.876	\$5.266	\$5.687
(1) Council approved rates effective on January 1, 2025						
(2) HCF is equal to hundred cubic feet						

RECYCLED WATER RATE DESIGN

The Sewer Revenue Fund incurs expenses to provide recycled water service. Customers who receive recycled water service pay these costs. Raftelis developed the proposed recycled water rates in Tables 5 and 6 as part of this study. It is important to note that the rates below include the recycled water costs incurred by the Sewer Revenue Fund

and the Water Revenue Fund (i.e., the total recycled water revenue requirement). The recycled water system, cost-of-service analysis, and rate design are presented in detail later in this report.

Table 5: Current and Proposed Recycled Water Monthly Meter Service Charges

Meter Size	Current FY 2025 (1)	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
5/8", 3/4"	\$21.14	\$31.19	\$33.06	\$35.71	\$38.56
1"	\$32.65	\$46.48	\$49.27	\$53.21	\$57.47
1.5"	\$61.42	\$84.69	\$89.77	\$96.95	\$104.71
2"	\$95.93	\$130.55	\$138.38	\$149.45	\$161.41
3"	\$205.23	\$275.76	\$292.31	\$315.69	\$340.95
4"	\$366.30	\$489.76	\$519.15	\$560.68	\$605.53
6"	\$751.73	\$1,001.83	\$1,061.94	\$1,146.89	\$1,238.65
8"	\$1,614.61	\$2,148.25	\$2,277.15	\$2,459.32	\$2,656.06
10"	\$2,419.97	\$3,218.25	\$3,411.35	\$3,684.25	\$3,978.99
12"	\$3,052.75	\$4,058.95	\$4,302.49	\$4,646.69	\$5,018.42
16"	\$4,490.89	\$5,969.66	\$6,327.84	\$6,834.07	\$7,380.79
(1) Council approved rates effective on January 1, 2025					

Table 6: Current and Proposed Recycled Water Commodity Rates

FY2026 - FY2029 Recycled Water Commodity Rates				
Current FY 2025 (1)	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
\$2.46	\$3.58	\$3.80	\$4.10	\$4.43
(1) Council approved rates effective on January 1, 2025				

Introduction

Study Background

The City of San Diego's wastewater utility system comprises the Municipal and Metropolitan sub-systems. The Municipal sub-system is a sewage collection system for retail customers served within the City of San Diego. It consists of the piping and pumping systems required to collect and convey the wastewater generated in the City's municipal service area. The sewage collected by the Municipal sub-system is ultimately discharged into the Metropolitan sub-system. The Metropolitan sub-system is a regional sewage treatment and disposal system that serves the City of San Diego and 12 participating agencies, consisting of other cities and wastewater districts in the County of San Diego. The City, as operator of the regional metropolitan wastewater system, holds three National Pollutant Discharge Elimination System (NPDES) permits. One NPDES permit is associated with sewage discharge from the Point Loma Wastewater Treatment Plant, including flows from the City's North City Water Reclamation Plant. The City also holds an NPDES permit for wastewater discharges from its South Bay Water Reclamation Plant. In May 2020, the Regional Water Quality Control Board adopted an order that granted an NPDES permit to the City of San Diego to add purified water to the Miramar Reservoir for Phase 1 of the Pure Water Program. This is the first NPDES permit issued for a reservoir augmentation project in California.

Report Organization

Raftelis developed the FY 2026 wastewater revenue requirement, conducted a detailed customer class cost-of-service analysis, and designed wastewater rates and fees using the City's current wastewater rate structure. The revenue requirement analysis included calculating the revenue required from rates to meet the wastewater utility's projected FY 2026 expenditures, target reserve requirements, and debt service coverage requirements. This report contains the following sections:

- **Executive Summary.** Summarizes the study results for the wastewater financial plan, cost-of-service analysis, and rate design.
- **Study Background.** Provides an overview of the purpose of the study as well as key components of the study process.
- **Financial Plan.** Details the financial plan provided by the City, including discussion of operating expenses, capital expenditures, debt service, reserve requirements, and debt service coverage requirements.
- **Cost-of-Service Analysis.** Details the process for functionalizing, allocating, and distributing the revenue requirement to customer classes.
- **Rate Design.** Details the rate design analysis.
- **Recycled Water.** Details the process of calculating cost-of-service recycled water rates.

Legal and Statutory Considerations

Two Constitutional provisions govern and impact water and wastewater rates - Article X, Section 2 (Article X) and Article XIII D, Section 6 (Article XIII D). In November 1996, California voters approved Proposition 218, which amended the California Constitution by adding Article XIII C and Article XIII D. Article XIII D placed substantive limitations on the use of the revenue collected from property-related fees and on the amount of the fee that may be imposed on each parcel. It also established procedural requirements for imposing new or increasing existing property-related fees. The California Supreme Court has determined that water and wastewater service fees are property-related fees.

These provisions require that a property-related fee must meet all of the following requirements:

- Revenues derived from the fee must not exceed the funds required to provide the property-related service;
 - Revenues from the fee must not be used for any purpose other than that for which the fee is imposed;
 - The amount of a fee imposed upon any parcel or person as an incident of property ownership must not exceed the proportional cost of the service attributable to the parcel;
 - The fee may not be imposed for a service unless the service is actually used by, or immediately available to, the owner of the property subject to the fee. A fee based on potential or future use of a service is not permitted, and stand-by charges must be classified as assessments subject to the ballot protest and proportionality requirements for assessments; and
 - No fee may be imposed for general governmental services, such as police, fire, ambulance, or libraries, where the service is available to the public in substantially the same manner as it is to property owners.
- The five substantive requirements in Article XIII D are structured to place limitations on (1) the use of the revenue collected from property-related fees and (2) the allocation of costs recovered by such fees to ensure that they are proportionate to the cost of providing the service attributable to each parcel.

This Rate Study was prepared to comply with the cost-of-service requirements of Article XIII D for the City's wastewater service charges.

Rate Setting Process

REVENUE REQUIREMENTS

The Sewer Revenue Fund financial plan determines the test year revenue requirement. The study used the revenue requirements method to allocate service costs. This methodology is consistent with industry standards as discussed in WEF Manual No. 27. The revenue requirements analysis is conducted because in order "to provide adequate service, every wastewater utility must receive sufficient annual revenue to ensure proper operations and maintenance (O&M) of facilities, development and perpetuation of the physical condition of the system, compliance with regulatory requirements, and maintenance of the financial integrity of the utility."³

COST-OF-SERVICE

After determining a utility's revenue requirements, the next step in the rate study process is determining the cost of serving each wastewater customer class. The wastewater cost-of-service analysis starts with a comprehensive review of customer-contributed and billed wastewater flows and strength loadings to identify the proportional contribution to total wastewater system demands made by each customer class. The wastewater O&M revenue requirements are assigned to the functional activities such as treatment, engineering, customer service, etc. The wastewater capital cost revenue requirement was assigned to functional activities based on the profile of existing and projected wastewater assets. These functionalized costs were then allocated to the cost drivers of those functions, which are defined as wastewater flow, the strength loadings of chemical oxygen demand (COD) and total suspended solids (TSS), and customer service activities such as accounts and bills. The functionalized and allocated costs were then distributed to customer classes based on their proportionate share of overall wastewater system demand. The estimated customer class cost-of-service is the basis for the wastewater rates presented in this report.

RATE DESIGN

The financial plan determines the test year revenue requirement, and the cost-of-service analysis allocates the revenue requirement to customer classes. The final step in a rate study is rate design. Rate design involves

³ Water Environment Federation, Financing and Charges for Wastewater Systems, Manual of Practice No. 27, (4th Edition, 2018).

developing rates and charges that recover the cost of serving each customer class. The final rate recommendations made by Raftelis were based on the City's existing wastewater rate structures as updated to fund the utility's long-term projected costs of providing service, proportionally recover costs from all customers, and comply with the substantive requirements of Article XIII D.

Reliance on City Provided Data

During this project, the City (and/or its representatives) provided Raftelis with a variety of technical information, including cost and revenue data. Raftelis did not independently assess or test for the accuracy of historic or projected data. Raftelis relied on this data to formulate our findings and subsequent recommendations and prepare this report. Raftelis also relied on cost allocation data provided by the City as needed to complete the cost-of-service analysis. The City utilizes an enterprise resource planning (ERP) system to track revenues and expenses in a manner that supports accurate cost allocation. Key accounting elements in cost allocation include Fund, Fund or Cost Center, Division, Funded Program, and Commitment Item. For example, the Wastewater System records its operating expenses in the Municipal and Metropolitan sub-system wastewater funds. The Municipal fund is primarily used to collect and convey wastewater from residences and businesses in the City of San Diego. The Metropolitan fund provides treatment and disposal services for the City and 12 other agencies and districts.

The largest cost center within the Wastewater Treatment and Disposal Division is the Point Loma Wastewater Treatment Plant. The expenses incurred in this cost center support the operation and maintenance of the Point Loma Wastewater Treatment Plant, which serves as a regional treatment facility handling sanitary waste from both Municipal Sub-System and Metropolitan Sub-System customers. The primary commitment items used to capture costs in this cost center include Supplies, which track chemical costs used in the treatment processes, Energy and Utilities, which track electricity costs and hydrant rentals, and Contracts and Services, which track fees, permits, refuse disposal, and waste removal fees.

This accounting structure allows the city to distinguish payments between the three utility systems it operates and how those expenses relate to the functions used for rate development.

There are often differences between actual and projected data. Some of the assumptions in this report will not be realized, and unanticipated events and circumstances may occur. Therefore, there are likely differences between the data or results projected in this report and actual results achieved, which may be material. As a result, Raftelis takes no responsibility for the accuracy of data or projections provided by or prepared on behalf of the City, nor do we have any responsibility for updating this report for events occurring after the date of this report. The City utilizes an enterprise resource planning (ERP) system to track revenues and expenses in a manner that supports accurate cost allocation. Key accounting elements used in cost allocation include Fund, Division, Fund or Cost Center, Funded Program, and Commitment Items.

In conducting the cost-of-service analysis, Raftelis reviewed the books, records, agreements, capital improvement programs, customer sales, and financial projections for the City's wastewater system. The City provided the documents, information, and data to the consultant. Raftelis also conferred with City staff, including finance, planning, and engineering staff.

In the study, Raftelis made rate calculations using the best estimates of the City's expected costs, planned capital improvements, and future customer demands and loading. Making such calculations in advance is normal for public wastewater utilities because they need to recover revenue matched to public budgets adopted in advance of their fiscal periods. For this reason, achieving mathematical exactitude in rate calculations is impossible. Instead, methods and techniques are available to wastewater utilities that yield reasonable proportionality between the costs

incurred to provide wastewater service and the demand for that service. These methods and techniques are broadly referred to as "cost-of-service principles".

DRAFT

Financial Plan

Introduction

The City accounts for the operation of its wastewater utility system through an enterprise fund known as the Sewer Revenue Fund, which the Public Utilities Department manages. The Sewer Revenue Fund is a self-supporting enterprise fund. This means that the cost of paying for annual wastewater operations and maintenance expenses, capital projects, and debt service is met through cash inflows from wastewater rates, capacity fees, miscellaneous revenues, and the proceeds from external debt financing. The Sewer Revenue Fund also incurs costs for providing recycled water service.

For this study, wastewater utility financial information has been subdivided into two primary funds: operating and capital. The respective operating and capital costs of the Municipal and Metropolitan sub-systems were identified within each fund. The City provided separate financial forecasts for the operating and capital funds for the study period, FY 2026 through FY 2029, to determine the adequacy of revenues under existing rates to meet revenue requirements.

Financial Plan and Revenue Requirement

For the first step in the study, we analyzed the wastewater system's past revenues and projected expenses to determine the total revenue requirements for the wastewater system in the test year. The total revenue requirement is the total receipts the City must recover from its rates to pay all operating, capital, debt, and reserve expenses during the test year. In preparing the financial plan and calculating the total revenue requirement, Raftelis reviewed the books, records, agreements, capital improvement programs, debt and reserve policies, customer sales, and financial projections for the City's wastewater system.

Operating Fund

In the wastewater financial planning model, the operating fund tracks projected funding for operating expenditures associated with the Municipal and Metropolitan subsystems. Funding for Pure Water Program operating expenses is included within the Metropolitan subsystem.

BEGINNING FUND BALANCE

The wastewater operating fund's beginning balance was \$228.1 million at the start of FY 2025 (July 1, 2024). With the rate increases proposed in this Study, this fund's balance is projected to decrease to around \$173.8 million at the end of FY 2028 and then increase to \$275.0 million at the end of FY 2029 (June 30, 2029). Table 7 details the projected operating fund from FY 2025 through FY 2029.

Table 7: Operating Fund Detail (\$ millions)

Reserve Item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance (1)	\$228.1	\$188.5	\$317.2	\$486.0	\$173.8
Net Cash Balance	(\$39.6)	\$128.7	\$168.8	(\$312.2)	\$101.2
Other Sources / (Uses)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ending Balance	\$188.5	\$317.2	\$486.0	\$173.8	\$275.0
<i>Days Cash on Hand (2)</i>	188	314	456	159	245
Interest Earnings on Operating Fund	\$8.0	\$8.9	\$12.0	\$9.9	\$6.7
Beginning Balance	\$228.1	\$188.5	\$317.2	\$486.0	\$173.8
Less Beginning Restricted Balance	\$170.6	\$151.5	\$160.0	\$122.9	\$114.9
Beginning Unrestricted Balance	\$57.4	\$37.0	\$157.3	\$363.1	\$58.9
Unrestricted Funds					
Beginning Unrestricted Balance	\$57.4	\$37.0	\$157.3	\$363.1	\$58.9
Net Cashflow Balance	(\$39.6)	\$128.7	\$168.8	(\$312.2)	\$101.2
Other Sources / (Uses)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Transfers to / (from) Operating Fund	\$25.0	(\$8.5)	\$37.0	\$8.0	\$21.0
Total Unrestricted Funds	\$42.8	\$157.3	\$363.1	\$58.9	\$181.0
(1) ACFR for FY 2024					
(2) Days Cash on Hand = Ending Cash Balance ÷ Annual O&M Expenses * 365 days					

TARGET RESERVES

The City maintains three types of wastewater fund reserves: Emergency Operating, Emergency Capital, and Rate Stabilization. The City's goals concerning the City Reserve Policy are to provide adequate cash balances to ensure that the City meets its cash flow obligations, maximizes earnings on investments, minimizes borrowing costs, and maintains the highest credit rating on its bonds and financial obligations. The City Reserve Policy requires maintenance of minimum balances that are based on the following requirements:

- Emergency Operating: 70 days of O&M excluding contingencies and debt service. The Emergency Operating Reserve is intended to be used in a catastrophe that prevents the utility from operating normally.
- Emergency Capital: \$10,000,000. The Emergency Capital Reserve is intended to fund unforeseen emergency conditions that require immediate repair or replacement of existing assets.
- Rate Stabilization: 5% of prior year operating revenue. The Rate Stabilization Reserve is a revolving mechanism to mitigate significant fluctuations in the wastewater rates for the system operations and maintain stable debt service coverage ratios for the outstanding wastewater revenue bonds.

The "Unrestricted Funds" shown in Table 7 reflect available operating funds after subtracting the emergency operating reserve, the emergency capital reserve, and the rate stabilization reserve. Total unrestricted funds (operating funds in excess of City-mandated reserves) are projected to start at \$42.8 million in FY 2025 and increase to \$181.0 million at the end of FY 2029.

REVENUES

Revenue of the wastewater utility is derived primarily from the rates paid by customers for wastewater service (sewer service charge revenue) and reimbursements from the agencies that participate in the regional wastewater treatment system operated by the City. A high-level summary of projected wastewater utility revenues is shown in Table 8. Sewer rate revenues projected from existing rates in FY 2025 represent approximately 73% of total revenues. Annual revenue from existing wastewater rates is projected to increase during the study period based on a projected growth rate in the number of accounts of 0.25% per year, with no changes in the use per account, and is consistent with historical results. The reimbursement from the 12 participating agencies that receive wholesale wastewater treatment services from the regional wastewater system operated by the City is projected to be \$99.3 million in FY 2025 and will increase throughout the study. These reimbursements provide approximately 21% of total revenue in FY 2025.

Table 8: Revenue Summary (\$ millions)

Revenue Source	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total	% of Total
Sewer Service Charge Revenue							
Revenue from Existing Rates	\$342.8	\$341.1	\$329.4	\$330.0	\$330.7	\$1,674.0	65.7%
Revenue from Proposed Rate Adj.	\$0.0	\$10.2	\$30.2	\$55.6	\$86.6	\$182.7	7.2%
Total Rate Revenue	\$342.8	\$351.3	\$359.7	\$385.6	\$417.3	\$1,856.7	72.9%
Other Operating Revenues							
New Sewer Service Connections	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Maint & Operation Metro	\$99.3	\$102.2	\$105.2	\$108.4	\$111.6	\$526.7	20.7%
Other Sewer Treatment Plant Services	\$2.2	\$2.2	\$2.2	\$2.2	\$2.2	\$11.0	0.4%
Services Rendered Other Funds	\$5.1	\$6.1	\$6.1	\$6.1	\$6.1	\$29.4	1.2%
Total Other Operating Revenues	\$106.6	\$110.4	\$113.5	\$116.6	\$119.9	\$567.0	22.2%
Non-Operating Revenues							
Grant Assistance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Land and Building Rentals	\$0.5	\$1.1	\$1.1	\$1.1	\$1.1	\$5.1	0.2%
Other Revenues	\$14.4	\$15.1	\$14.9	\$14.9	\$14.9	\$74.3	2.9%
Total Non-Operating Revenues	\$14.9	\$16.3	\$16.0	\$16.0	\$16.0	\$79.4	3.1%
Interest Earnings on Operating Fund	\$8.0	\$8.9	\$12.0	\$9.9	\$6.7	\$45.5	1.8%
Total Revenues	\$472.2	\$486.8	\$501.3	\$528.2	\$560.0	\$2,548.6	100.0%

Revenue Requirements

The wastewater utility's revenue requirements include O&M, debt service, transfers to the capital improvement fund, and funding reserves.

OPERATIONS AND MAINTENANCE EXPENSES

O&M consists of the cost of personnel and materials to collect and treat wastewater routinely. Since these costs are an annual obligation of the wastewater utility, they must be met from annual sewer service charge revenue. Table 9 summarizes projected O&M expenses for the Municipal and Metropolitan sub-systems. As shown in Table 9, for FY 2025 through FY 2029, approximately 33% of the actual and projected O&M expenses incurred by the wastewater utility are associated with the operation of the Municipal sub-system, and approximately 67% are for the operation of the Metropolitan sub-system.

Table 9: Operations and Maintenance Expense Summary (\$ millions)

Operations and Maintenance Expenses	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total	% of Total
Municipal Sub-System							
Department Management	\$12.5	\$12.5	\$12.8	\$13.2	\$13.5	\$64.5	3.3%
Customer Support Services	\$10.0	\$10.0	\$10.3	\$10.5	\$10.8	\$51.6	2.7%
Employee Services & Quality Assurance	\$4.9	\$4.9	\$5.0	\$5.2	\$5.3	\$25.3	1.3%
Engineering Program Management	\$8.3	\$8.3	\$8.5	\$8.7	\$8.9	\$42.7	2.2%
Environmental Monitoring & Technical Services	\$8.2	\$8.2	\$8.4	\$8.6	\$8.9	\$42.3	2.2%
Finance & Budget	\$5.2	\$5.2	\$5.4	\$5.5	\$5.7	\$27.1	1.4%
Innovation & Technology	\$5.9	\$5.9	\$6.1	\$6.2	\$6.4	\$30.6	1.6%
Pure Water Program Management	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Water Systems Operations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Wastewater Collection	\$60.1	\$60.1	\$61.8	\$63.6	\$65.3	\$311.0	16.1%
Wastewater Treatment and Disposal	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.7	0.0%
Water Distribution	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Water Meter Services	\$2.9	\$2.9	\$3.0	\$3.0	\$3.1	\$14.9	0.8%
Additional Budget Items	\$0.0	\$1.0	\$8.1	\$9.4	\$10.2	\$28.7	1.5%
Capital Related O&M (Baseline Muni)	\$0.0	\$0.3	\$0.5	\$0.5	\$0.3	\$1.5	0.1%
Total Municipal Sub-System	\$118.2	\$119.4	\$130.1	\$134.7	\$138.4	\$640.8	33.1%
Metropolitan Sub-System							
Department Management	\$22.5	\$22.5	\$23.1	\$23.7	\$24.2	\$116.0	6.0%
Customer Support Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Employee Services & Quality Assurance	\$7.5	\$7.5	\$7.7	\$7.9	\$8.1	\$38.7	2.0%
Engineering Program Management	\$6.3	\$6.3	\$6.5	\$6.7	\$6.8	\$32.6	1.7%
Environmental Monitoring & Technical Services	\$24.0	\$24.0	\$24.5	\$25.1	\$25.7	\$123.3	6.4%
Finance & Budget	\$9.8	\$9.8	\$10.1	\$10.4	\$10.6	\$50.6	2.6%
Innovation & Technology	\$7.0	\$7.0	\$7.2	\$7.4	\$7.5	\$36.0	1.9%
Pure Water Operations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Recycled Water	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.3	0.0%
Pure Water Program Management	\$8.5	\$8.5	\$8.8	\$9.0	\$9.2	\$44.1	2.3%
Water Production	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Wastewater Collection	\$29.6	\$24.3	\$25.1	\$25.9	\$26.8	\$131.5	6.8%
Wastewater Treatment and Disposal	\$132.9	\$132.9	\$136.7	\$140.7	\$144.7	\$687.9	35.6%
Water Distribution	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Water Meter Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	0.0%
Additional Budget Items	\$0.0	\$6.5	\$9.5	\$8.3	\$8.3	\$32.6	1.7%
Capital Related O&M (PWNC)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Capital Related O&M (PWCF)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Capital Related O&M (PWP3)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Capital Related O&M (Baseline Metro)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
Total Metropolitan Sub-System	\$248.1	\$249.3	\$259.2	\$265.1	\$272.0	\$1,293.7	66.9%
Total Operations and Maintenance	\$366.3	\$368.7	\$389.3	\$399.9	\$410.4	\$1,934.5	100.0%

DEBT SERVICE

The wastewater utility funds its capital program using various external debt instruments. Table 10 summarizes projected debt service payments for the Municipal and Metropolitan sub-systems. As shown in Table 10, most projected debt service expenditures are associated with existing outstanding debt financing.

Table 10: Debt Service Summary (\$ millions)

Debt Service	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total	% of Total
Existing Debt Service							
Municipal Sub-System							
Revenue Bonds	\$51.3	\$46.6	\$44.1	\$47.3	\$47.3	\$236.5	38.7%
SRF Loans	\$1.5	\$1.5	\$1.6	\$1.6	\$1.6	\$7.9	1.3%
Municipal Sub-System Existing Debt Service	\$52.8	\$48.2	\$45.7	\$48.9	\$48.9	\$244.3	39.9%
Metropolitan Sub-System							
Revenue Bonds	\$52.1	\$38.6	\$40.4	\$20.3	\$20.3	\$171.6	28.1%
SRF Loans	\$8.9	\$9.0	\$14.6	\$14.8	\$22.7	\$70.0	11.4%
Metropolitan System Existing Debt Service	\$61.0	\$47.6	\$54.9	\$35.1	\$42.9	\$241.6	39.5%
Total Existing Debt Service	\$113.7	\$95.8	\$100.6	\$84.0	\$91.8	\$485.9	79.4%
Proposed Debt Service							
Municipal Sub-System							
New Revenue Bonds	\$0.0	\$5.9	\$26.6	\$26.6	\$39.9	\$99.0	16.2%
Municipal Sub-System Proposed Debt Service	\$0.0	\$5.9	\$26.6	\$26.6	\$39.9	\$99.0	16.2%
Metropolitan Sub-System							
New Revenue Bonds	\$0.0	\$0.0	\$11.0	\$11.0	\$18.9	\$40.9	6.7%
Metropolitan System Proposed Debt Service	\$0.0	\$0.0	\$11.0	\$11.0	\$18.9	\$40.9	6.7%
Total Proposed Debt Service	\$0.0	\$5.9	\$37.6	\$37.6	\$58.8	\$139.9	22.9%
Transfers from Reserve (final pmt)	\$0.0	\$0.0	(\$13.7)	\$0.0	\$0.0	(\$13.7)	-2.2%
Less: Interest Earnings on Debt Service Reserve (Note 1)	(\$0.2)	(\$0.0)	(\$0.2)	(\$0.0)	(\$0.0)	(\$0.5)	-0.1%
Total Debt Service	\$113.5	\$101.6	\$124.4	\$121.5	\$150.6	\$611.6	100.0%

PAYGO CAPITAL TRANSFERS

Cash transfers to the capital fund from the operating fund are used to partially pay for the City's wastewater capital improvement program. Using operating cash flows (i.e., cash generated primarily from rate revenues) to fund capital improvements is referred to as pay-as-you-go or "PAYGO" funding. PAYGO funding is one component of the overall capital improvement program funding strategy to align the costs of capital projects with the benefits the projects will provide. While PAYGO funding can lower the overall cost of the capital improvement program, it requires larger initial outlays that assign costs to current customers. These transfers vary each year based on the number of projects funded and the type of funding used for each project. Table 11 summarizes the projected transfers of cash to/from the wastewater operating fund to pay for capital improvement projects from FY 2025 through FY 2029.

The negative values shown in Table 11 reflect transfers from the operating fund to pay for capital improvements (i.e., transfers out) during those years in which projected capital improvement expenditures are greater than other funding sources. A positive value indicates that projected funding sources exceed project capital improvement program expenditures. For example, the positive value of \$75.5 million for Pure Water in FY 2026 reflects projected receipt of State Revolving Fund (SRF) loan proceeds in excess of actual projected FY 2026 Pure Water capital improvement program expenditures. Note that proceeds from bonds, SRF loans, and grants are distributed on a reimbursement basis, which may include prior year and current year capital improvement program expenditures.

Table 11: PAYGO Transfers to Fund Capital Projects (\$ millions)

PAYGO Transfers In / (Out)	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total	% of Total
Municipal Sub-System	\$90.0	\$106.8	\$41.7	(\$204.0)	\$78.9	\$113.4	254.9%
Metropolitan Sub-System	\$48.4	(\$70.1)	\$92.6	(\$120.5)	\$33.3	(\$16.2)	-36.5%
Pure Water (Metropolitan Sub-System)	(\$170.5)	\$75.5	\$46.9	\$5.5	(\$10.0)	(\$52.7)	-118.4%
Total Metropolitan Sub-system	(\$122.1)	\$5.4	\$139.5	(\$115.0)	\$23.3	(\$68.9)	-154.9%
Total Transfers	(\$32.0)	\$112.2	\$181.2	(\$319.1)	\$102.2	\$44.5	100.0%

OPERATING FUND FINANCIAL PLAN

The financial planning process's outcome is a projection of the rate revenues required for wastewater service. For the wastewater utility, revenues under existing rates are inadequate to sustain minimum reserve and debt service coverage targets during FY 2025 through FY 2029. Table 12 summarizes the revenue adjustments and the resulting financial plan for the operating fund.

Table 12: Operating Fund Financial Plan Summary (\$ millions)

Financial Plan Component	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Annual Revenue Adjustment	0.0%	6.0%	6.0%	8.0%	8.0%
Cumulative Revenue Adjustment	0.0%	6.0%	12.4%	21.3%	31.1%
Revenue					
Revenue from Existing Rates	\$342.8	\$341.1	\$329.4	\$330.0	\$330.7
Revenue from Proposed Rate Adjustments	\$0.0	\$10.2	\$30.2	\$55.6	\$86.6
Total Rate Revenue	\$342.8	\$351.3	\$359.7	\$385.6	\$417.3
Other Operating Revenue	\$106.6	\$110.4	\$113.5	\$116.6	\$119.9
Total Operating Revenue	\$449.3	\$461.7	\$473.2	\$502.3	\$537.2
Non-Operating Revenue	\$14.9	\$16.3	\$16.0	\$16.0	\$16.0
Interest Earnings on Operating Fund	\$8.0	\$8.9	\$12.0	\$9.9	\$6.7
Total Revenue	\$472.2	\$486.8	\$501.3	\$528.2	\$560.0
Expenditures					
O&M Expenses	\$366.3	\$368.7	\$389.3	\$399.9	\$410.4
Debt Service	\$113.5	\$101.6	\$124.4	\$121.5	\$150.6
PAYGO Transfers	\$32.0	(\$112.2)	(\$181.2)	\$319.1	(\$102.2)
Total Expenditures	\$511.8	\$358.1	\$332.5	\$840.5	\$458.8
Net Cash Flow	(\$39.6)	\$128.7	\$168.8	(\$312.2)	\$101.2
Beginning Cash Reserves	\$228.1	\$188.5	\$317.2	\$486.0	\$173.8
Ending Cash Reserves	\$188.5	\$317.2	\$486.0	\$173.8	\$275.0
Senior Debt Service Coverage	1.71	2.14	2.54	3.08	3.26
Aggregate Debt Service Coverage	1.30	1.40	1.33	1.41	1.37
Note: PAYGO Transfers are positive or negative due to the timing of cashflows.					

Capital Funds

In the wastewater financial planning model, the capital fund (referenced in the paragraph above) tracks projected funding for capital improvement program expenditures associated with the Municipal and Metropolitan sub-systems. Funding for Pure Water Program capital projects is included as part of the Metropolitan sub-system.

SOURCES OF FUNDS

The City funds wastewater capital improvement program expenditures through various sources, including cash transfers from the operating fund, revenue bond proceeds, SRF loans, and grants. Table 13 shows the detailed projected funding for capital improvement program expenditures for FY 2025 through FY 2029.

Table 13: Capital Funding Summary (\$ millions)

Summary of All Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Total All CIP Expenditures	\$419.0	\$275.8	\$312.0	\$394.1	\$272.8	\$1,673.7
Grants	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
SRF Loans	\$83.2	\$130.0	\$84.2	\$40.1	\$18.9	\$356.3
Commercial Paper	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Bonds	\$280.9	\$225.0	\$375.0	\$0.0	\$320.0	\$1,200.9
Capacity Fees	\$22.9	\$33.0	\$34.0	\$35.0	\$36.1	\$161.0
Cash	\$32.0	(\$112.2)	(\$181.2)	\$319.1	(\$102.2)	(\$44.5)
Total All CIP Funding	\$419.0	\$275.8	\$312.0	\$394.1	\$272.8	\$1,673.7

Funding Detail	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Muni Subsystem CIP Expenditures	\$131.8	\$162.2	\$209.6	\$256.8	\$168.9	\$929.2
Grants	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
SRF Loans	\$0.0	\$11.0	\$17.3	\$17.7	\$11.7	\$57.7
Commercial Paper	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Revenue Bonds	\$198.9	\$225.0	\$200.0	\$0.0	\$200.0	\$823.9
Capacity Fees	\$22.9	\$33.0	\$34.0	\$35.0	\$36.1	\$161.0
Cash	(\$90.0)	(\$106.8)	(\$41.7)	\$204.0	(\$78.9)	(\$113.4)
Muni Subsystem CIP Funding	\$131.8	\$162.2	\$209.6	\$256.8	\$168.9	\$929.2

Funding Detail	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Metro Subsystem CIP Expenditures	\$33.6	\$70.1	\$82.4	\$120.5	\$86.7	\$393.3
Grants	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
SRF Loans	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Commercial Paper	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Bonds	\$82.0	\$0.0	\$175.0	\$0.0	\$120.0	\$377.0
Capacity Fees	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Cash	(\$48.4)	\$70.1	(\$92.6)	\$120.5	(\$33.3)	\$16.2
Metro Subsystem CIP Funding	\$33.6	\$70.1	\$82.4	\$120.5	\$86.7	\$393.3

Funding Detail	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Pure Water CIP Expenditures	\$253.6	\$43.6	\$20.0	\$16.9	\$17.2	\$351.3
Grants	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
SRF Loans	\$83.2	\$119.0	\$66.9	\$22.3	\$7.2	\$298.6
Commercial Paper	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Bonds	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Capacity Fees	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Cash	\$170.5	(\$75.5)	(\$46.9)	(\$5.5)	\$10.0	\$52.7
Pure Water CIP Funding	\$253.6	\$43.6	\$20.0	\$16.9	\$17.2	\$351.3

USES OF FUNDS

The City's wastewater capital improvement program for FY 2025 through FY 2029 totals \$1,673.7 million. Projects include expansion-related infrastructure designed to accommodate growth and repair and replacement projects intended to ensure the service quality provided by existing infrastructure. Pure Water projects total \$351.3 million for FY 2025 through FY 2029, representing 21% of the total wastewater utility capital program. Pure Water projects will be funded through a combination of cash reserves and state revolving fund loans. The detailed capital improvement program project listing is contained in Appendix A. Table 14 summarizes the capital improvement program by sub-system and facility type.

The major facility types are noted below. The category Miscellaneous Projects includes projects such as the following:

- Building roof replacements
- Energy improvements
- Information technology projects
- Smart metering infrastructure
- Laboratory improvements

Table 14: Capital Improvement Program Summary (\$ millions)

Project	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Municipal Subsystem CIP Expenditures						
Sewer Treatment Plants	\$1.2	\$0.0	\$0.0	\$0.0	\$0.1	\$1.3
Trunk Sewers	\$17.4	\$59.7	\$56.5	\$62.9	\$25.5	\$221.9
Muni Pump Station	\$0.1	\$1.9	\$3.7	\$6.2	\$9.2	\$21.2
Sewer Pipelines	\$112.7	\$90.8	\$137.1	\$168.8	\$120.2	\$629.6
Miscellaneous Projects	\$0.4	\$9.8	\$12.3	\$18.9	\$13.9	\$55.2
Total Municipal Subsystem	\$131.8	\$162.2	\$209.6	\$256.8	\$168.9	\$929.2
Metropolitan Subsystem CIP Expenditures						
Sewer Treatment Plants	\$14.1	\$31.4	\$14.5	\$21.6	\$22.4	\$104.0
Trunk Sewers	\$0.2	\$2.8	\$7.8	\$20.2	\$3.3	\$34.3
Large Sewer Pump Station	\$14.0	\$28.6	\$34.8	\$39.3	\$32.8	\$149.6
SDG&E Relocation Advance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Recycled Water	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Miscellaneous Projects	\$5.2	\$7.3	\$25.3	\$39.4	\$28.2	\$105.4
Total Metropolitan Subsystem	\$33.6	\$70.1	\$82.4	\$120.5	\$86.7	\$393.3
Pure Water CIP Expenditures						
Pure Water - North City	\$238.4	\$41.4	\$18.1	\$9.9	\$2.9	\$310.7
Pure Water - Demo Facility	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Pure Water - Central Facility	\$15.2	\$2.2	\$1.9	\$7.0	\$14.3	\$40.6
Total All Pure Water	\$253.6	\$43.6	\$20.0	\$16.9	\$17.2	\$351.3
Total All CIP Expenditures	\$419.0	\$275.8	\$312.0	\$394.1	\$272.8	\$1,673.7

Cost-of-Service

Introduction

The cost-of-service process assigns costs to each customer class based on their proportionate share of total system wastewater demands. The starting point for the cost-of-service analysis is the revenue requirement from rates developed as part of the financial planning process. Table 15 provides a summary of the revenue requirement from rates for the period FY 2025 through FY 2029. As shown in Table 15, the test year FY 2026 revenue requirement from rates is \$361.5 million. This cost amount is the basis for the cost-of-service study and proposed FY 2026 rates developed by Raftelis. A detail of the FY 2026 revenue requirement is provided later in this section.

Table 15: Summary of Projected Revenue Requirement from Rates (\$ millions)

Revenue Requirement Component	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
O&M Expenses	\$366.3	\$368.7	\$389.3	\$399.9	\$410.4
Debt Service Expenditures	\$113.5	\$101.6	\$124.4	\$121.5	\$150.6
PAYGO Transfers	\$32.0	(\$112.2)	(\$181.2)	\$319.1	(\$102.2)
Annualized Change in Cash Reserves	(\$39.6)	\$139.0	\$179.3	(\$297.4)	\$117.2
Total Gross Revenue Requirement	\$472.2	\$497.1	\$511.7	\$543.1	\$576.1
Less: Revenue Requirement Offsets					
Other Operating Revenues	\$106.6	\$110.4	\$113.5	\$116.6	\$119.9
Non-Operating Revenues	\$14.9	\$16.3	\$16.0	\$16.0	\$16.0
Interest Earnings on Operating Fund	\$8.0	\$8.9	\$12.0	\$9.9	\$6.7
Total Revenue Requirement Offsets	\$129.5	\$135.5	\$141.6	\$142.6	\$142.7
Net Revenue Requirement from Rates	\$342.8	\$361.5	\$370.2	\$400.5	\$433.4
Annual Rate Revenue Adjustment	0.0%	6.0%	6.0%	8.0%	8.0%
Cumulative Rate Revenue Adjustment	0.0%	6.0%	12.4%	21.3%	31.1%

The first step in the cost-of-service process is to assign the revenue requirement to specific functional categories. The wastewater O&M revenue requirements are then assigned to the functional activities in which the costs were incurred to fund (e.g., treatment, engineering, customer service, etc.). The wastewater capital cost revenue requirement was assigned to functional activities based on the profile of existing and projected wastewater assets. These functionalized costs are then allocated to the specific types of demand parameters or cost drivers, which are defined as flow, COD, TSS, meters and services, billing, and recycling for this rate study. Finally, the costs are distributed to customer classes based on their respective units of service (e.g., HCF of flow, pounds of COD and TSS, and number of customer accounts). The cost-of-service process consists of the following nine steps:

- Determine the revenue from existing rates that will be earned during the test year
- Determine test year revenue requirement (the amount of rate revenue that customers must pay to fund the cost of providing wastewater service)
- Functionalize revenue requirement (group costs by wastewater activity or cost centers)
- Allocate functionalized costs to demand parameters (allocate to flow, COD, TSS, meters and services, billing, and recycling)
- Determine wastewater system units of service
- Determine unit cost-of-service (divide functionalized and allocated revenue requirements by the wastewater system's total units of service)

- Determine customer class units of service (projected flow and loading for each customer class)
- Distribute costs to customer classes (multiply the unit cost-of-service by the customer classes' units of service)
- Design rates to recover class cost-of-service and total revenue requirement

PROJECTED FY 2026 REVENUE AT EXISTING RATES

The projected FY 2026 wastewater revenue that will be earned under the City's current FY 2025 wastewater rates was developed using detailed billing records provided by the City. Table 16 shows these projected revenues for those customer classes and/or services that must pay sewer service charges based on their proportional contribution of system wastewater volumes and strength loadings.

Table 16: Projected FY 2026 Wastewater Revenue at Existing FY 2025 Rates

Customer Class/Type	FY26 Revenue with Existing FY25 Rates
Wastewater Customer Classes	
Single Family Residential	\$134,124,273
Multi-Family Residential	\$89,811,330
Non-Residential	\$105,530,603
Subtotal	\$329,466,206
Other (Navy, Prisons)	\$5,815,306
Subtotal	\$5,815,306
Trucked Waste and Imported Flows	\$4,102,862
Subtotal	\$4,102,862
Stormwater Transportation	\$1,670,196
Subtotal	\$1,670,196
Total Wastewater Revenues from Rates and Charges	\$341,054,570

TEST YEAR FY 2026 REVENUE REQUIREMENT

Raftelis conducted a cost-of-service study and developed proposed rates and charges for FY 2026. Thus, FY 2026 is referred to as the COS study "test year." As noted previously, the starting point for the cost-of-service analysis is developing the revenue requirement from rates. The accumulated costs for the revenue requirements are based on the cash-needs approach, so the City has adequate cash to meet its revenue requirements. Table 17 provides details of the FY 2026 test year revenue requirements, with amounts shown for both the Metropolitan and Municipal sub-systems. The O&M expenditures are organized and totaled by department. The "Paygo CIP Transfer in" offsets a portion of the capital need and is thus subtracted from the revenue requirements. The "Change in Cash Reserves" is the net change in the utility's cash position, less non-rate revenues, and is added to the revenue requirements. The Other and Non-Operating Revenues are not recovered from rates, so they are excluded from the revenue requirements. Note that the total system net revenue requirement from rates shown in Table 17 is \$361.5 million. This amount can be directly traced to Table 15 (Summary of Projected Revenue Requirement from Rates).

Table 17: FY 2026 Revenue Requirement Detail

Revenue Requirement Component	Municipal Sub-System			Metropolitan Sub-System		
	Operating	Capital	Total	Operating	Capital	Total
O&M						
Department Management	\$12,495,400		\$12,495,400	\$22,463,300		\$22,463,300
Customer Support Services	\$9,985,800		\$9,985,800	\$0		\$0
Employee Services & Quality Assurance	\$4,891,000		\$4,891,000	\$7,490,200		\$7,490,200
Engineering Program Management	\$8,281,400		\$8,281,400	\$6,306,600		\$6,306,600
Environmental Monitoring & Technical Services	\$8,189,800		\$8,189,800	\$23,955,800		\$23,955,800
Finance & Budget	\$5,246,600		\$5,246,600	\$9,810,800		\$9,810,800
Innovation & Technology	\$5,918,500		\$5,918,500	\$6,977,000		\$6,977,000
Pure Water Operations	\$0		\$0	\$0		\$0
Recycled Water	\$0		\$0	\$50,200		\$50,200
Pure Water Program Management	\$0		\$0	\$8,537,200		\$8,537,200
Water Production	\$0		\$0	\$7,300		\$7,300
Long Range Planning	\$0		\$0	\$0		\$0
Wastewater Collection	\$60,149,800		\$60,149,800	\$24,277,700		\$24,277,700
Wastewater Treatment and Disposal	\$131,300		\$131,300	\$132,928,500		\$132,928,500
Water Distribution	\$0		\$0	\$0		\$0
Water Meter Services	\$2,882,700		\$2,882,700	\$9,300		\$9,300
Additional Budget Items	\$967,528		\$967,528	\$6,454,304		\$6,454,304
Total O&M	\$119,139,828	\$0	\$119,139,828	\$249,268,204	\$0	\$249,268,204
Debt Service						
Existing		\$48,167,329	\$48,167,329		\$47,622,248	\$47,622,248
Proposed		\$5,872,915	\$5,872,915		\$0	\$0
Interest Earnings on Debt Service Reserve		(\$7,741)	(\$7,741)		(\$16,197)	(\$16,197)
Total Debt Service	\$0	\$54,032,503	\$54,032,503	\$0	\$47,606,051	\$47,606,051
Total Expense Items Before Transfers	\$119,139,828	\$54,032,503	\$173,172,331	\$249,268,204	\$47,606,051	\$296,874,255
Less: PAYGO CIP Transfer In		\$106,832,995	\$106,832,995		\$5,393,856	\$5,393,856
Add: Change in Cash Reserves	\$35,291,011	\$16,005,241	\$51,296,252	\$73,836,995	\$14,101,629	\$87,938,624
Gross Revenue Requirement from Rates	\$154,430,839	(\$36,795,251)	\$117,635,588	\$323,105,199	\$56,313,824	\$379,419,023
Revenue Requirement Offsets						
Other Operating Revenues						
New Sewer Service Connections	\$1,655		\$1,655			
Maint & Operation Metro			\$0	\$102,150,250		\$102,150,250
Other Sewer Treatment Plant Services	\$2,184,276		\$2,184,276			\$0
Services Rendered Other Funds	\$2,048,015		\$2,048,015	\$4,018,092		\$4,018,092
Total Other Operating Revenues	\$4,233,946	\$0	\$4,233,946	\$106,168,342	\$0	\$106,168,342
Non-Operating Revenues	\$13,739,034		\$13,739,034	\$2,544,884	\$0	\$2,544,884
Interest Earnings on Operating Fund	\$2,862,191		\$2,862,191	\$5,988,370		\$5,988,370
Total Revenue Requirement Offsets	\$20,835,171	\$0	\$20,835,171	\$114,701,595	\$0	\$114,701,595
Net Revenue Requirement from Rates	\$133,595,667	(\$36,795,251)	\$96,800,416	\$208,403,603	\$56,313,824	\$264,717,428
			Total System Net Revenue Requirement from Rates	\$361,517,844		

REVENUE REQUIREMENT COST ALLOCATIONS

The underlying principle in cost allocation is to convert the test year revenue requirement into costs that best reflect the costs associated with customer demands placed on the wastewater system. Those costs are proportionately allocated to customer classes based on the flow and loadings they send to the plant. This process is accomplished by first assigning the revenue requirement to functional components, which can be thought of as wastewater cost or activity centers. These functional components or cost centers are grouped activities for which the wastewater utility's chart of accounts captures direct or indirect O&M expenses and capital costs related to operating its utility.

ASSIGNMENT OF COSTS TO FUNCTIONS

Wastewater systems comprise several facilities (unit processes or functions) designed and operated to collect, convey, and treat customers' wastewater discharges. The costs are first separated into functional components to

determine each functional category's unit cost (\$/unit). Then, those costs are distributed to the customer classes by multiplying the unit cost by the demand (flow and loading) placed on the system by those customers to determine their responsibility for the system. Table 18 summarizes key functional cost components for the City's wastewater utility system. These functional cost components were used to functionalize the O&M and capital cost components for the Municipal and Metropolitan sub-systems of the City's wastewater utility.

Table 18: Functional Cost Components

O&M Functions	Capital Cost Functions
Engineering	Large Sewer Pump Station
General and Administrative	Muni Pump Station
Operational Support	Miscellaneous Projects
Quality Control	Smart Metering
Transmission	Pipelines
Treatment and Disposal	Sewer Treatment Plants
Customer	Trunk Sewers
Recycled Water	Pure Water
	Recycled Water

Table 19 shows the assignment of O&M costs to functions for both the Municipal and Metropolitan sub-systems. The functionalization developed for O&M costs was based on consultations with the Public Utilities Department staff. It reflects their best estimate of the functional justification for the incurrence of each major O&M line item.

The total functionalized FY 2026 O&M costs assigned for the Municipal sub-system total \$154.4 million. This value can be seen in Table 17 (line labeled Gross Revenue Requirement from Rates). It reflects the total Municipal sub-system O&M costs of \$119.1 million plus the allocation of \$35.3 million associated with the FY 2026 change in cash reserves.

Similarly, the total functionalized FY 2026 O&M costs assigned for the Metropolitan sub-system are \$323.1 million. This amount can also be seen in Table 17 (line labeled Gross Revenue Requirement from Rates). It reflects the total Metropolitan sub-system O&M costs of \$249.3 million plus the allocation of \$73.8 million associated with the FY 2026 change in cash reserves.

Table 19: Functional Assignment of FY 2026 O&M Costs

O&M Function	Municipal Sub-System	Metropolitan Sub-System
Engineering		
Environmental Support	\$2,391,989	\$1,145,307
Program Management & Review	\$8,171,574	\$19,612,921
Subtotal	\$10,563,563	\$20,758,228
General and Administrative		
Business Support Admin	\$23,942,742	\$50,940,842
Operating Division Admin	\$14,108,156	\$12,989,876
Subtotal	\$38,050,898	\$63,930,718
Operational Support		
Central Support Comnet/Comc	\$2,339	\$3,749,046
Operational Support	\$1,541,783	\$7,027,244
Subtotal	\$1,544,122	\$10,776,290
Quality Control		
Industrial Permitting and Compliance	\$8,687,065	\$33,105
Marine Biology & Ocean Operations	\$0	\$12,365,795
Sewage Testing and Control	\$338,410	\$768,771
Wastewater Chemistry Services	\$591,239	\$14,163,275
Subtotal	\$9,616,714	\$27,330,946
Transmission		
Main Cleaning	\$19,632,851	\$0
Other Muni Agencies	\$4,675,565	\$0
Other Pump Stations	\$21,705	(\$245,876)
Pipeline Maintenance & Repair	\$21,585,371	\$0
Pump Station 1	\$0	\$15,497,722
Pump Station 2	\$0	\$15,561,287
Sewer Pump Stations	\$20,117,042	\$0
WWC Engineering & Planning	\$4,271,016	\$0
Subtotal	\$70,303,549	\$30,813,132
Treatment and Disposal		
Cogen Facilities	\$0	\$890,201
GUF	\$0	\$1,188,646
MBC	\$0	\$27,786,232
NCWRP	\$0	\$29,794,417
PTLWWTP	\$0	\$56,201,864
SBWRP	(\$1)	\$10,830,223
WWTD Plant Engineering	\$0	\$20,758,534
Subtotal	(\$1)	\$147,450,116
Customer		
Meters and Services	\$3,736,599	\$0
Billing	\$20,554,907	\$9,043,753
Subtotal	\$24,291,506	\$9,043,753
Recycled	\$60,487	\$13,002,016
Subtotal	\$60,487	\$13,002,016
Total Functionalized O&M	\$154,430,839	\$323,105,199
Note: Other pump stations is negative as a result of allocating some of the wastewater treatment and disposal costs to recycled water.		

Table 20 shows the assignment of revenue that is received from sources other than rates, which reduces the revenue requirement from rates (“Revenue Requirement Offset”) to either the Municipal Sub-system or the Metropolitan Sub-system. This is known as the functional assignment of FY 2026 Revenue Requirement Offsets. Other revenues for the revenue requirement offsets were organized as either Municipal or Metropolitan Sub-System based on the accounting line item description details in the City’s budget. The most significant of these is the \$102 million reimbursement the participating agencies provide to the City of San Diego to operate the regional wastewater treatment system. As shown in Table 20, this item is recorded in the Metropolitan sub-system. The total functionalized revenue requirement offset for the Municipal sub-system is \$20.8 million. This value is provided in Table 17 (line labeled Total Revenue Requirement Offset). Similarly, the total functionalized revenue requirement offset for the Metropolitan sub-system is \$114.7 million. This amount can also be seen in Table 17.

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Table 20: Functional Assignment of FY 2026 Revenue Requirement Offsets

Revenue Requirement Offsets	Municipal Sub-System	Metropolitan Sub-System
Other Operating Revenues		
New Sewer Service Connections	\$1,655	\$0
Maint & Operation Metro	\$0	\$102,150,250
Other Sewer Treatment Plant Services		
Sewer Service (SSC)-Navy	\$492,494	\$0
Sewerage Treatment Services	\$983,048	\$0
M & O Trunk Sewers Muni	\$708,734	\$0
Services Rendered Other Funds		
Reimb From Other Agencies	\$1,700	\$0
Reimbursements Between Funds/Depts	\$1,200,682	\$2,801,592
Other Services To Outside	\$0	\$1,216,500
Transport Charge Muni System	\$735,633	\$0
Service To Other Depts	\$110,000	\$0
Land and Building Rentals		
Lease Revenue	\$1,129,334	\$0
Other Land/Bldg Leases	\$6,600	\$0
Other Revenues		
Lab Services Fees	\$16,100	\$0
Developer Contributions	\$514,900	\$0
Non Profit Administration	\$600	\$0
IWCP Notice of Violation Fees	\$0	\$40,000
IWCP Industrial User Discharge Permit Fees	\$0	\$2,191,184
IWCP Lab Monitoring Fees	\$0	\$300,000
Revenue from Small Projects	\$27,000	\$0
Food Permit Violation Fee	\$0	\$13,700
Other Sewer Revenue	\$11,918,000	\$0
Expenditure Refund of Prior Year	\$6,300	\$0
Industrial Leave Recovered	\$15,200	\$0
Pcard Rebate	\$2,300	\$0
Repair Damages Recovered	\$2,100	\$0
Transfers From Other Funds	\$600	\$0
Rental Of Non-Agricultural Land	\$100,000	\$0
Interest Earnings on Operating Fund	\$2,862,191	\$5,988,370
Total Revenue Requirement Offsets	\$20,835,171	\$114,701,595

Table 21 shows the FY 2026 functional allocation of the capital cost revenue requirement for the Municipal and Metropolitan sub-systems. The asset allocation percentages shown in Table 21 reflect the profile of existing wastewater utility assets as of June 30, 2023, coupled with the functional profile of projected capital improvement program expenditures during the five years FY 2025 through FY 2029. Existing assets and projected capital expenditures for the Pure Water Program are included in the functionalized asset percentage of the Metropolitan sub-system. The total functionalized capital costs assigned to the Municipal sub-system total is (\$36.8 million) because the City is planning to issue \$225 million in municipal revenue bonds, which results in a transfer-in and

will lower the revenue requirements. This value is also seen in Table 17 (line labeled Gross Revenue Requirement from Rates). Similarly, the total functionalized capital costs assigned for the Metropolitan sub-system are approximately \$56.3 million. This amount can also be seen in Table 17.

Table 21: Functional Assignment of FY 2026 Capital Costs

Capital Infrastructure Function	Municipal Sub-System		Metropolitan Sub-System	
	Asset Percentage	Amount	Asset Percentage	Amount
Large Sewer Pump Station	0.1%	(\$36,534)	11.2%	\$6,320,620
Muni Pump Station	2.2%	(\$827,267)	0.0%	\$0
Miscellaneous Projects	0.6%	(\$215,189)	4.1%	\$2,285,969
Smart Metering	0.1%	(\$25,421)	0.0%	\$0
Pipelines	92.3%	(\$33,968,880)	0.0%	\$0
Sewer Treatment Plants	0.0%	\$0	58.9%	\$33,193,660
Trunk Sewers	4.7%	(\$1,721,959)	23.0%	\$12,937,524
PW-CF	0.0%	\$0	0.0%	\$0
PW-Demo	0.0%	\$0	0.0%	\$0
PW-NC	0.0%	\$0	2.8%	\$1,576,051
Recycled Water	0.0%	\$0	0.0%	\$0
Total Capital Cost Revenue Req.	100.0%	(\$36,795,251)	100.0%	\$56,313,824

ALLOCATION OF FUNCTIONALIZED COSTS TO DEMAND PARAMETERS

Wastewater utility systems are designed and operated to meet three primary types of customer demands: the volume of customer wastewater discharges (flow), the strength of customer wastewater discharges (COD and TSS), and customer service-related demands such as meter reading and billing and collection. After costs are organized on a functional basis, they are allocated to the demand parameters, which are the cost drivers for those functions. The demand parameters are defined as flow, COD, TSS, meters and services, billing, and recycling for this rate study. Here is a description of the demand parameters used in the allocation of the City's functionalized FY 2026 revenue requirement for both the Municipal and Metropolitan sub-systems:

VOLUME AND STRENGTH-RELATED COSTS

- Flow: Varies directly with the quantity of customer wastewater discharges reaching a wastewater treatment facility.
- COD: Varies directly with the strength of customer wastewater discharges as measured by the concentration of Chemical Oxygen Demand (COD). COD is a measurement of the amount of oxygen required to dissolve organic matter contained in customer wastewater discharges. Customers pay for the treatment and removal of COD in their wastewater discharge.
- TSS: Varies directly with the strength of customer wastewater discharges reaching a wastewater treatment facility as measured by the concentration of Total Suspended Solids (TSS). TSS is a measurement of organic solids contained in customer wastewater discharges. Customers pay for the treatment and removal of TSS in their wastewater discharge.

CUSTOMER-RELATED COSTS

These costs include both meter-related costs and services, as well as billing and customer support. Meter costs reflect the wastewater utility's proportionate share of costs incurred by the water utility's construction maintenance function that benefit wastewater customers. Meter costs also include the wastewater utility's proportionate share of capital expenditures made by the City to install an automated meter reading system. These costs are shared with the City's water utility because wastewater customers are billed based on metered water consumption. Lastly, meter costs also include allocating capital costs associated with sewer pipelines, trunk sewers, and municipal pump

stations. These costs reflect that the City's wastewater collection and conveyance system must stand ready to meet the instantaneous wastewater discharges imposed by customers. Such costs are, for the most part, fixed in nature and do not vary with the volume of customer wastewater discharges. For this reason, they have been allocated to meter costs, which are recovered from all customers through a fixed monthly meter service charge. Billing and collection costs include billing, customer service, and customer accounting.

RECYCLED WATER COSTS

Recycled water costs are incurred by the City's water and wastewater utilities to provide recycled water service. They include the cost of providing tertiary level wastewater treatment at the City's North City and South Bay Water Reclamation Facilities and debt service related to the recycled water distribution system, in addition to depreciation expenses.

SUMMARY OF FY 2026 ALLOCATIONS TO DEMAND PARAMETERS

The following section illustrates how functionalized costs are allocated to demand parameters. The percentage allocations were used in the previous wastewater study based on a functional analysis from Stantec. Costs are allocated based on the predominant purpose of that process. This allocation step is completed for Municipal sub-system O&M, Metropolitan sub-system O&M, Municipal sub-system revenue requirement offsets, Metropolitan sub-system revenue requirement offsets, Municipal sub-system capital costs, and Metropolitan sub-system capital costs. For example, the purpose of the costs under the transmission function is to convey wastewater, so the costs are allocated to flow by 100%. The rationale for each allocation is provided in the last column of Table 22.

Table 22 shows the percentages used to allocate Municipal sub-system O&M costs to demand parameters. These percentages were determined based on consultations with the Public Utilities Department staff. Engineering, operational support, quality control, and treatment and disposal costs are allocated to flow, COD, and TSS because the purpose of these processes or the processes they support is the conveyance of wastewater, as well as the treatment and removal of COD and TSS. General and administrative costs are allocated based on a weighted average of the engineering, operational support, quality control, transmission, treatment and disposal, customer, and recycled O&M costs in Table 23. Transmission costs are allocated to flow. Meters and services costs are allocated to meters and services. Billing costs are allocated to billing, and recycled costs are allocated to recycled.

Table 22: Allocation Percentages for Municipal Sub-System O&M Costs

Function	FY 2026 Allocation of Municipal Sub-System O&M to Demand Parameters							Rationale
	Volume-Related			Customer-Related		Recycled	Total	
	FLOW	COD	TSS	Meters and Services	Billing			
<u>Engineering</u>								
Environmental Support	45.30%	24.60%	30.10%				100.00%	Supports treatment plant functions that were designed to convey wastewater flow and treatment of COD and TSS discharges.
Program Management & Review	45.30%	24.60%	30.10%				100.00%	
<u>General and Administrative</u>								
Business Support Admin	68.79%	4.62%	5.67%	3.21%	17.66%	0.05%	100.00%	General and administrative functions support all aspects of the wastewater utility so a weighted average of all functions in this table was used to allocate the costs.
Operating Division Admin	68.79%	4.62%	5.67%	3.21%	17.66%	0.05%	100.00%	
<u>Operational Support</u>								
Central Support Comnet/Comc	45.30%	24.60%	30.10%				100.00%	Supports operational functions that convey wastewater flow and treatment of COD and TSS discharges.
Operational Support	45.30%	24.60%	30.10%				100.00%	
<u>Quality Control</u>								
Industrial Permitting and Compliance	45.30%	24.60%	30.10%				100.00%	Quality control supports functions that convey wastewater flow and treatment of COD and TSS discharges so costs are allocated among these categories.
Marine Biology & Ocean Operations	30.00%	30.00%	40.00%				100.00%	
Sewage Testing and Control	45.30%	24.60%	30.10%				100.00%	
Wastewater Chemistry Services	30.00%	30.00%	40.00%				100.00%	
<u>Transmission</u>								
Main Cleaning	100.00%						100.00%	The purpose of transmission is to convey wastewater to the plant so costs are allocated to flow.
Other Muni Agencies	100.00%						100.00%	
Other Pump Stations	100.00%						100.00%	
Pipeline Maintenance & Repair	100.00%						100.00%	
Pump Station 1	100.00%						100.00%	
Pump Station 2	100.00%						100.00%	
Sewer Pump Stations	100.00%						100.00%	
WWC Engineering & Planning	100.00%						100.00%	
<u>Treatment and Disposal</u>								
MBC	0.00%	50.00%	50.00%				100.00%	The treatment plants are comprised of various types of equipment based on the design criteria or purpose of conveying volume or treating COD and TSS so costs are allocated between these categories.
NCWRP	75.00%	15.00%	10.00%				100.00%	
PTLWWTP	35.40%	29.30%	35.30%				100.00%	
SBWRP	75.00%	15.00%	10.00%				100.00%	
WWTD Plant Engineering	45.30%	24.60%	30.10%				100.00%	
<u>Customer</u>								
Meters and Services				100.00%			100.00%	Customer-related costs are allocated to their respective categories.
Billing					100.00%		100.00%	
<u>Recycled</u>						100.00%	100.00%	Recycling costs are allocated to recycling.

Table 23 shows the dollar allocations for FY 2026 Municipal sub-system O&M costs to demand parameters based on the allocation percentages shown in Table 22. The O&M costs shown in Table 23 total \$154.4 million, which is also shown in Table 19 (Functional Assignment of FY 2026 O&M Costs).

Table 23: FY 2026 Dollar Allocations of Municipal Sub-System O&M Costs

Function	FY 2026 Allocation of Municipal Sub-System O&M to Demand Parameters							
	Volume-Related			Customer-Related			Recycled	Total
	FLOW	COD	TSS	Meters and Services	Billing	Readiness to Serve Allocation		
Engineering								
Environmental Support	\$1,083,571	\$588,429	\$719,989	\$0	\$0	\$0	\$0	\$2,391,989
Program Management & Review	\$3,701,723	\$2,010,207	\$2,459,644	\$0	\$0	\$0	\$0	\$8,171,574
	\$4,785,294	\$2,598,637	\$3,179,633	\$0	\$0	\$0	\$0	\$10,563,563
General and Administrative								
Business Support Admin	\$16,469,488	\$1,106,026	\$1,357,314	\$768,727	\$4,228,743	\$0	\$12,444	\$23,942,742
Operating Division Admin	\$9,704,574	\$651,721	\$799,791	\$452,969	\$2,491,768	\$0	\$7,332	\$14,108,156
	\$26,174,063	\$1,757,747	\$2,157,105	\$1,221,696	\$6,720,511	\$0	\$19,776	\$38,050,898
Operational Support								
Central Support Comnet/Comc	\$1,060	\$575	\$704	\$0	\$0	\$0	\$0	\$2,339
Operational Support	\$698,428	\$379,279	\$464,077	\$0	\$0	\$0	\$0	\$1,541,783
	\$699,487	\$379,854	\$464,781	\$0	\$0	\$0	\$0	\$1,544,122
Quality Control								
Industrial Permitting and Compliance	\$3,935,240	\$2,137,018	\$2,614,807	\$0	\$0	\$0	\$0	\$8,687,065
Marine Biology & Ocean Operations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewage Testing and Control	\$153,300	\$83,249	\$101,861	\$0	\$0	\$0	\$0	\$338,410
Wastewater Chemistry Services	\$177,372	\$177,372	\$236,495	\$0	\$0	\$0	\$0	\$591,239
	\$4,265,912	\$2,397,638	\$2,953,163	\$0	\$0	\$0	\$0	\$9,616,714
Transmission								
Main Cleaning	\$19,632,851	\$0	\$0	\$0	\$0	\$0	\$0	\$19,632,851
Other Muni Agencies	\$4,675,565	\$0	\$0	\$0	\$0	\$0	\$0	\$4,675,565
Other Pump Stations	\$21,705	\$0	\$0	\$0	\$0	\$0	\$0	\$21,705
Pipeline Maintenance & Repair	\$21,585,371	\$0	\$0	\$0	\$0	\$0	\$0	\$21,585,371
Pump Station 1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pump Station 2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer Pump Stations	\$20,117,042	\$0	\$0	\$0	\$0	\$0	\$0	\$20,117,042
WWC Engineering & Planning	\$4,271,016	\$0	\$0	\$0	\$0	\$0	\$0	\$4,271,016
	\$70,303,549	\$0	\$0	\$0	\$0	\$0	\$0	\$70,303,549
Treatment and Disposal								
MBC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NCWRP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PTLWWTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SBWRP	(\$1)	(\$0)	(\$0)	\$0	\$0	\$0	\$0	(\$1)
WWTD Plant Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	(\$1)	(\$0)	(\$0)	\$0	\$0	\$0	\$0	(\$1)
Customer								
Meters and Services	\$0	\$0	\$0	\$3,736,599	\$0	\$0	\$0	\$3,736,599
Billing	\$0	\$0	\$0	\$0	\$20,554,907	\$0	\$0	\$20,554,907
	\$0	\$0	\$0	\$3,736,599	\$20,554,907	\$0	\$0	\$24,291,506
Recycled								
	\$0	\$0	\$0	\$0	\$0	\$0	\$60,487	\$60,487
	\$0	\$0	\$0	\$0	\$0	\$0	\$60,487	\$60,487
Total	\$106,228,305 68.79%	\$7,133,876 4.62%	\$8,754,681 5.67%	\$4,958,296 3.21%	\$27,275,417 17.66%	\$0 0.00%	\$80,263 0.05%	\$154,430,839 100.00%

Table 24 shows the percentages used to allocate Metropolitan sub-system O&M costs to demand parameters. These percentages were determined based on consultations with the Public Utilities Department staff. These costs are directly determined through the process dictated through the 1998 treatment and disposal agreement. Engineering, operational support, quality control, and treatment and disposal costs are allocated to flow, COD, and TSS because the purpose of these processes or the processes they support is the conveyance of wastewater, as well as the treatment and removal of COD and TSS. General and administrative costs are allocated based on a weighted average of the engineering, operational support, transmission, treatment and disposal, customer, and recycled O&M costs in Table 25. Transmission costs are allocated to flow. Meters and services costs are allocated to meters and services. Billing costs are allocated to billing, and recycled costs are allocated to recycled.

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Table 24: Allocation Percentages for Metropolitan Sub-System O&M Costs

Function	FY 2026 Allocation of Metropolitan Sub-System O&M to Demand Parameters							Rationale
	Volume-Related			Customer-Related		Recycled	Total	
	FLOW %	COD %	TSS %	Meters and Services	Billing			
<u>Engineering</u>								
Environmental Support	45.30%	24.60%	30.10%				100.00%	Supports treatment plant functions that were designed to convey wastewater flow and treatment of COD and TSS discharges.
Program Management & Review	45.30%	24.60%	30.10%				100.00%	
<u>General and Administrative</u>								
Business Support Admin	43.67%	22.50%	25.32%	0.00%	3.49%	5.02%	100.00%	General and administrative functions support all aspects of the wastewater utility so a weighted average of all functions in this table was used to allocate the costs.
Operating Division Admin	43.67%	22.50%	25.32%	0.00%	3.49%	5.02%	100.00%	
<u>Operational Support</u>								
Central Support Comnet/Comc	45.30%	24.60%	30.10%				100.00%	Supports operational functions that convey wastewater flow and treatment of COD and TSS discharges.
Operational Support	45.30%	24.60%	30.10%				100.00%	
<u>Quality Control</u>								
Industrial Permitting and Compliance	45.30%	24.60%	30.10%				100.00%	Quality control supports functions that convey wastewater flow and treatment of COD and TSS discharges so costs are allocated among these categories.
Marine Biology & Ocean Operations	30.00%	30.00%	40.00%				100.00%	
Sewage Testing and Control	45.30%	24.60%	30.10%				100.00%	
Wastewater Chemistry Services	30.00%	30.00%	40.00%				100.00%	
<u>Transmission</u>								
Main Cleaning	100.00%						100.00%	The purpose of transmission is to convey wastewater to the plant so costs are allocated to flow.
Other Muni Agencies	100.00%						100.00%	
Other Pump Stations	100.00%						100.00%	
Pipeline Maintenance & Repair	100.00%						100.00%	
Pump Station 1	100.00%						100.00%	
Pump Station 2	100.00%						100.00%	
Sewer Pump Stations	100.00%						100.00%	
WWC Engineering & Planning	100.00%						100.00%	
<u>Treatment and Disposal</u>								
Cogen Facilities	0.00%	40.00%	60.00%				100.00%	The treatment plants are comprised of various types of equipment based on the design criteria or purpose of conveying volume or treating COD and TSS so costs are allocated between these categories.
GUF	0.00%	40.00%	60.00%				100.00%	
MBC	0.00%	50.00%	50.00%				100.00%	
NCWRP	75.00%	15.00%	10.00%				100.00%	
PTLWWTP	35.40%	29.30%	35.30%				100.00%	
SBWRP	75.00%	15.00%	10.00%				100.00%	
WWTD Plant Engineering	45.30%	24.60%	30.10%				100.00%	
<u>Customer</u>								
Meters and Services				100.00%			100.00%	Customer-related costs are allocated to their respective categories.
Billing					100.00%		100.00%	
<u>Recycled</u>						100.00%	100.00%	Recycling costs are allocated to recycling.

Table 25 shows the dollar allocations of the FY 2026 Metropolitan sub-system O&M costs to demand parameters based on the allocation percentages shown in Table 24. The total O&M costs shown in Table 25 sum to \$323.1 million, which is also shown in Table 19 (Functional Assignment of FY 2026 O&M Costs).

Table 25: FY 2026 Dollar Allocations of Metropolitan Sub-System O&M Costs

Function	FY 2026 Allocation of Metropolitan Sub-System O&M to Demand Parameters						
	Volume-Related			Customer-Related		Recycled	Total
	FLOW	COD	TSS	Meters and Services	Billing		
<u>Engineering</u>							
Environmental Support	\$518,824	\$281,746	\$344,737	\$0	\$0	\$0	\$1,145,307
Program Management & Review	\$8,884,653	\$4,824,779	\$5,903,489	\$0	\$0	\$0	\$19,612,921
	\$9,403,477	\$5,106,524	\$6,248,227	\$0	\$0	\$0	\$20,758,228
<u>General and Administrative</u>							
Business Support Admin	\$22,247,104	\$11,459,982	\$12,900,652	\$0	\$1,777,553	\$2,555,551	\$50,940,842
Operating Division Admin	\$5,672,995	\$2,922,287	\$3,289,656	\$0	\$453,275	\$651,664	\$12,989,876
	\$27,920,098	\$14,382,268	\$16,190,309	\$0	\$2,230,828	\$3,207,215	\$63,930,718
<u>Operational Support</u>							
Central Support Comnet/Comc	\$1,698,318	\$922,265	\$1,128,463	\$0	\$0	\$0	\$3,749,046
Operational Support	\$3,183,341	\$1,728,702	\$2,115,200	\$0	\$0	\$0	\$7,027,244
	\$4,881,659	\$2,650,967	\$3,243,663	\$0	\$0	\$0	\$10,776,290
<u>Quality Control</u>							
Industrial Permitting and Compliance	\$14,997	\$8,144	\$9,965	\$0	\$0	\$0	\$33,105
Marine Biology & Ocean Operations	\$3,709,738	\$3,709,738	\$4,946,318	\$0	\$0	\$0	\$12,365,795
Sewage Testing and Control	\$348,253	\$189,118	\$231,400	\$0	\$0	\$0	\$768,771
Wastewater Chemistry Services	\$4,248,982	\$4,248,982	\$5,665,310	\$0	\$0	\$0	\$14,163,275
	\$8,321,971	\$8,155,982	\$10,852,993	\$0	\$0	\$0	\$27,330,946
<u>Transmission</u>							
Main Cleaning	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Muni Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Pump Stations	(\$245,876)	\$0	\$0	\$0	\$0	\$0	(\$245,876)
Pipeline Maintenance & Repair	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pump Station 1	\$15,497,722	\$0	\$0	\$0	\$0	\$0	\$15,497,722
Pump Station 2	\$15,561,287	\$0	\$0	\$0	\$0	\$0	\$15,561,287
Sewer Pump Stations	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WWC Engineering & Planning	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$30,813,132	\$0	\$0	\$0	\$0	\$0	\$30,813,132
<u>Treatment and Disposal</u>							
Cogen Facilities	\$0	\$356,080	\$534,121	\$0	\$0	\$0	\$890,201
GUF	\$0	\$475,458	\$713,187	\$0	\$0	\$0	\$1,188,646
MBC	\$0	\$13,893,116	\$13,893,116	\$0	\$0	\$0	\$27,786,232
NCWRP	\$22,345,813	\$4,469,163	\$2,979,442	\$0	\$0	\$0	\$29,794,417
PTLWWTP	\$19,895,460	\$16,467,146	\$19,839,258	\$0	\$0	\$0	\$56,201,864
SBWRP	\$8,122,667	\$1,624,533	\$1,083,022	\$0	\$0	\$0	\$10,830,223
WWTD Plant Engineering	\$9,403,616	\$5,106,599	\$6,248,319	\$0	\$0	\$0	\$20,758,534
	\$59,767,556	\$42,392,096	\$45,290,464	\$0	\$0	\$0	\$147,450,116
<u>Customer</u>							
Meters and Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Billing	\$0	\$0	\$0	\$0	\$9,043,753	\$0	\$9,043,753
	\$0	\$0	\$0	\$0	\$9,043,753	\$0	\$9,043,753
<u>Recycled</u>							
	\$0	\$0	\$0	\$0	\$0	\$13,002,016	\$13,002,016
	\$0	\$0	\$0	\$0	\$0	\$13,002,016	\$13,002,016
Total	\$141,107,894 43.67%	\$72,687,838 22.50%	\$81,825,655 25.32%	\$0 0.00%	\$11,274,581 3.49%	\$16,209,231 5.02%	\$323,105,199 100.00%

Table 26 shows the percentages used to allocate Municipal sub-system revenue requirement offsets to demand parameters. These percentages were determined based on consultations with the Public Utilities Department staff. New sewer service connections are allocated to meters and services. Sewer service (SSC)-Navy, sewer treatment services, telecom lease, revenue from small projects, and other sewer revenue offsets are allocated to flow, COD, and TSS because the purpose of these processes or the processes they support is the conveyance of wastewater, and the treatment and removal of COD and TSS. M&O (maintenance and operations) trunk sewers and the transport charge are allocated to flow. Reimbursements between funds/departments, service to other departments, and interest earnings on operating fund are allocated based on a weighted average of the offsets allocated in this table.

Table 26: Allocation Percentages for Municipal Sub-System Revenue Requirement Offsets

Function	FY 2026 Allocation of Municipal Sub-System Rev. Offsets to Demand Parameters							Rationale
	Volume-Related			Customer-Related		Recycled	Total	
	FLOW	COD	TSS	Meters and Services	Billing			
<u>Other Operating Revenues</u>								
New Sewer Service Connections				100.00%			100.00%	The purpose of the costs are to support customer-related costs establishing new accounts under meters and services.
<u>Other Sewer Treatment Plant Services</u>								
Sewer Service (SSC)-Navy	45.30%	24.60%	30.10%				100.00%	Supports treatment plant functions that convey wastewater flow and treatment of COD and TSS discharges, except for M&O Trunk Sewers which supports conveyance of wastewater and is thus allocated to flow.
Waste Discharge-Trucked Fee	45.30%	24.60%	30.10%				100.00%	
Sewerage Treatment Services	45.30%	24.60%	30.10%				100.00%	
M & O Trunk Sewers Muni	100.00%						100.00%	
<u>Services Rendered Other Funds</u>								
Reimb From Other Agencies	68.79%	4.62%	5.67%	3.21%	17.66%	0.05%	100.00%	Services rendered support all aspects of the wastewater utility so a weighted average of all functions in this table was used to allocate the costs, except for transport charges, which are allocated to support conveyance of wastewater flow.
Reimbursements Between Funds/Depts	68.79%	4.62%	5.67%	3.21%	17.66%	0.05%	100.00%	
Transport Charge Muni System	100.00%						100.00%	
Service To Other Depts	68.79%	4.62%	5.67%	3.21%	17.66%	0.05%	100.00%	
<u>Land and Building Rentals</u>								
Telecom Lease	86.99%	5.84%	7.17%				100.00%	General type of function that supports the treatment plant so costs are allocated to wastewater flow and treatment of COD and TSS discharges.
<u>Other Revenues</u>								
Lab Services Fees	45.30%	24.60%	30.10%				100.00%	Other revenues that supports the treatment plant so costs are allocated to wastewater flow and treatment of COD and TSS discharges.
Developer Contributions	45.30%	24.60%	30.10%				100.00%	
Non Profit Administration	45.30%	24.60%	30.10%				100.00%	
Revenue from Small Projects	86.99%	5.84%	7.17%				100.00%	
Other Sewer Revenue	45.30%	24.60%	30.10%				100.00%	
Expenditure Refund of Prior Year	45.30%	24.60%	30.10%				100.00%	
Industrial Leave Recovered	45.30%	24.60%	30.10%				100.00%	
Pcard Rebate	45.30%	24.60%	30.10%				100.00%	
Repair Damages Recovered	45.30%	24.60%	30.10%				100.00%	
Transfers From Other Funds	45.30%	24.60%	30.10%				100.00%	
Rental Of Non-Agricultural Land	45.30%	24.60%	30.10%				100.00%	
Interest Earnings on Operating Fund	68.79%	4.62%	5.67%	3.21%	17.66%	0.05%	100.00%	Interest earnings support all aspects of the wastewater utility so a weighted average of all functions in this table was used to allocate the costs.

Table 27 shows the dollar allocations of the FY 2026 Municipal sub-system revenue requirement offsets to demand parameters based on the allocation percentages shown in Table 26. The total revenue requirement offsets shown in Table 27 sum to \$20.8 million, which is also shown in Table 17 (line labeled Total Revenue Requirement Offsets).

Table 27: FY 2026 Dollar Allocations for Municipal Sub-System Revenue Requirement Offsets

Function	FY 2026 Allocation of Municipal Sub-System Rev Offsets to Demand Parameters							
	Volume-Related			Customer-Related			Recycled	Total
	FLOW	COD	TSS	Meters and Services	Billing	Readiness to Serve Allocation		
<u>Other Operating Revenues</u>								
New Sewer Service Connections	\$0	\$0	\$0	\$1,655	\$0	\$0	\$0	\$1,655
<u>Other Sewer Treatment Plant Services</u>								
Sewer Service (SSC)-Navy	\$223,100	\$121,154	\$148,241	\$0	\$0	\$0	\$0	\$492,494
Sewerage Treatment Services	\$445,321	\$241,830	\$295,898	\$0	\$0	\$0	\$0	\$983,048
M & O Trunk Sewers Muni	\$708,734	\$0	\$0	\$0	\$0	\$0	\$0	\$708,734
<u>Services Rendered Other Funds</u>								
Reimb From Other Agencies	\$1,169	\$79	\$96	\$55	\$300	\$0	\$1	\$1,700
Reimbursements Between Funds/Depts	\$825,913	\$55,465	\$68,067	\$38,550	\$212,063	\$0	\$624	\$1,200,682
Transport Charge Muni System	\$735,633	\$0	\$0	\$0	\$0	\$0	\$0	\$735,633
Service To Other Depts	\$75,666	\$5,081	\$6,236	\$3,532	\$19,428	\$0	\$57	\$110,000
<u>Land and Building Rentals</u>								
Telecom Lease	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<u>Other Revenues</u>								
Lab Services Fees	\$7,293	\$3,961	\$4,846	\$0	\$0	\$0	\$0	\$16,100
Developer Contributions	\$233,250	\$126,665	\$154,985	\$0	\$0	\$0	\$0	\$514,900
Non Profit Administration	\$272	\$148	\$181	\$0	\$0	\$0	\$0	\$600
Revenue from Small Projects	\$23,487	\$1,577	\$1,936	\$0	\$0	\$0	\$0	\$27,000
Other Sewer Revenue	\$5,398,854	\$2,931,828	\$3,587,318	\$0	\$0	\$0	\$0	\$11,918,000
Expenditure Refund of Prior Year	\$2,854	\$1,550	\$1,896	\$0	\$0	\$0	\$0	\$6,300
Industrial Leave Recovered	\$6,886	\$3,739	\$4,575	\$0	\$0	\$0	\$0	\$15,200
Pcard Rebate	\$1,042	\$566	\$692	\$0	\$0	\$0	\$0	\$2,300
Repair Damages Recovered	\$951	\$517	\$632	\$0	\$0	\$0	\$0	\$2,100
Transfers From Other Funds	\$272	\$148	\$181	\$0	\$0	\$0	\$0	\$600
Rental Of Non-Agricultural Land	\$45,300	\$24,600	\$30,100	\$0	\$0	\$0	\$0	\$100,000
Interest Earnings on Operating Fund	\$1,968,815	\$132,218	\$162,258	\$91,896	\$505,517	\$0	\$1,488	\$2,862,191
Total	\$11,692,949	\$3,717,484	\$4,549,573	\$135,688	\$737,309	\$0	\$2,170	\$20,835,171
	56.12%	17.84%	21.84%	0.65%	3.54%	0.00%	0.01%	100.00%

Table 28 shows the percentages used to allocate Metropolitan sub-system revenue requirement offsets to demand parameters. These percentages were determined based on consultations with the Public Utilities Department staff. Maintenance and operations Metro, reimbursements between funds/departments, other services to outside, and IWCP industrial user discharge permit fee offsets are allocated to flow, COD, and TSS because the purpose of these processes or the processes they support is the conveyance of wastewater, and the treatment and removal of COD and TSS. IWCP notice of violation fees are allocated to billing. IWCP costs do not equal the revenue offsets because some of the IWCP activities benefit all customers. Interest earnings on operating funds are allocated based on a weighted average of the offsets allocated in this table.

Table 28: Allocation Percentages for Metropolitan Sub-System Revenue Requirement Offsets

Functional Component	FY 2026 Allocation of Metropolitan Sub-System Rev. Offsets to Demand Parameters							Rationale
	Volume-Related			Customer-Related		Recycled	Total	
	FLOW %	COD %	TSS %	Meters and Services	Billing			
Other Operating Revenues								
Maint & Operation Metro	45.30%	24.60%	30.10%				100.00%	Other revenues that supports the treatment plant so costs are allocated to wastewater flow and treatment of COD and TSS discharges.
Services Rendered Other Funds								
Reimbursements Between Funds/Depts	47.73%	24.59%	27.68%				100.00%	Services rendered support all aspects of the wastewater utility so a weighted average of all functions in this table was used to allocate the costs, except for IWCP Notice of Violation Fees, which are allocated to support billing.
Other Services To Outside	47.73%	24.59%	27.68%				100.00%	
IWCP Notice of Violation Fees					100.00%		100.00%	
IWCP Industrial User Discharge Permit Fees	45.30%	24.60%	30.10%				100.00%	
IWCP Lab Monitoring Fees	45.30%	24.60%	30.10%				100.00%	
Food Permit Violation Fee	45.30%	24.60%	30.10%				100.00%	
Interest Earnings on Operating Fund								
	43.67%	22.50%	25.32%	0.00%	3.49%	5.02%	100.00%	Interest earnings support all aspects of the wastewater utility so a weighted average of all functions in this table was used to allocate the costs.

Table 29 shows the dollar allocations of the FY 2026 Metropolitan sub-system revenue requirement offsets to demand parameters based on the allocation percentages shown in Table 28. Note that the total revenue requirement offsets shown in Table 29 sum to \$114.7 million. This amount is also shown in Table 17 (line labeled Total Revenue Requirement Offsets).

Table 29: FY 2026 Dollar Allocations for Metropolitan Sub-System Revenue Requirement Offsets

Functional Component	FY 2026 Allocation of Metropolitan Sub-System Rev. Offsets to Demand Parameters						
	Volume-Related			Customer-Related		Recycled	Total
	FLOW	COD	TSS	Meters and Services	Billing		
Other Operating Revenues							
Maint & Operation Metro	\$46,274,063	\$25,128,962	\$30,747,225	\$0	\$0	\$0	\$102,150,250
Services Rendered Other Funds							
Reimbursements Between Funds/Depts	\$1,337,274	\$688,860	\$775,458	\$0	\$0	\$0	\$2,801,592
Other Services To Outside	\$580,668	\$299,115	\$336,718	\$0	\$0	\$0	\$1,216,500
IWCP Notice of Violation Fees	\$0	\$0	\$0	\$0	\$40,000	\$0	\$40,000
IWCP Industrial User Discharge Permit Fees	\$992,606	\$539,031	\$659,546	\$0	\$0	\$0	\$2,191,184
IWCP Lab Monitoring Fees	\$135,900	\$73,800	\$90,300	\$0	\$0	\$0	\$300,000
Food Permit Violation Fee	\$6,206	\$3,370	\$4,124	\$0	\$0	\$0	\$13,700
Interest Earnings on Operating Fund	\$2,615,267	\$1,347,182	\$1,516,541	\$0	\$208,961	\$300,419	\$5,988,370
Total Non-Rate Revenues	\$51,941,984	\$28,080,320	\$34,129,912	\$0	\$248,961	\$300,419	\$114,701,595
	45.28%	24.48%	29.76%	0.00%	0.22%	0.26%	100.00%

Table 30 shows the percentages used to allocate Municipal sub-system capital costs to demand parameters. Large sewer pump stations, municipal pump stations, miscellaneous projects, sewer treatment plants, and trunk sewers are allocated to flow. As explained previously, these costs reflect that the City's wastewater collection and conveyance pipelines must stand ready to meet the instantaneous wastewater discharges imposed by customers. Pipeline costs are fixed and allocated to flow, meters, and services. Their design process considers the volume of wastewater discharges and the number of customers. Therefore, the cost is related to both volume and the number of customers. One-third is allocated to flow, and the remaining two-thirds are considered customer-related and allocated to the monthly service charge to align with the type of cost, which is fixed. The smart metering costs are allocated to billing.

Table 30: Allocation Percentages for Municipal Sub-System Capital Costs

Function	FY 2026 % Allocation of Municipal Sub-System Capital Costs to Demand Parameters								Rationale
	Total	Volume-Related			Customer-Related			Recycled	
		FLOW %	COD %	TSS %	Meters and Services	Billing	Readiness to Serve Allocation		
Large Sewer Pump Station	100%	100.00%							The purpose of pumping and these miscellaneous projects are to convey wastewater to the plant so costs are allocated to flow.
Muni Pump Station	100%	100.00%							
Miscellaneous Projects	100%	100.00%							
Smart Metering	100%					100.00%			Customer-related costs related to billing.
Pipelines	100%	33.33%			66.67%				The cost of local sewers is also related to the number of customers instead of just flow. Therefore, some of the cost is allocated to meters and services using a one-thirds and two-thirds split.
Trunk Sewers	100%	100.00%							Trunk sewers are designed for and have the purpose of conveying wastewater to the plant so costs are allocated to flow.

Table 31 shows the dollar allocation of the FY 2026 Municipal sub-system capital costs based on the percentage allocations shown in Table 30. The total capital costs shown in Table 31 sum to (\$36.8 million). This amount is also shown in Table 21 (Functional Assignment of FY 2026 Capital Costs).

Table 31: FY 2026 Dollar Allocation for Municipal Sub-System Capital Costs

Function	FY 2026 \$ Allocation of Municipal Sub-System Capital Costs to Demand Parameters						
	Total	Volume-Related			Customer-Related		Recycled
		FLOW	COD	TSS	Meters and Services	Billing	
Large Sewer Pump Station	(\$36,534)	(\$36,534)	\$0	\$0	\$0	\$0	\$0
Muni Pump Station	(\$827,267)	(\$827,267)	\$0	\$0	\$0	\$0	\$0
Miscellaneous Projects	(\$215,189)	(\$215,189)	\$0	\$0	\$0	\$0	\$0
Smart Metering	(\$25,421)	\$0	\$0	\$0	\$0	(\$25,421)	\$0
Pipelines	(\$33,968,880)	(\$11,322,960)	\$0	\$0	(\$22,645,920)	\$0	\$0
Trunk Sewers	(\$1,721,959)	(\$1,721,959)	\$0	\$0	\$0	\$0	\$0
Total	(\$36,795,251)	(\$14,123,909)	\$0	\$0	(\$22,645,920)	(\$25,421)	\$0
Total %	100.0%	38.4%	0.0%	0.0%	61.5%	0.1%	0.0%

Table 32 shows the percentages used to allocate Metropolitan sub-system capital costs to demand parameters. These percentages were determined based on consultations with the Public Utilities Department staff. The costs in this table are allocated to flow, COD, TSS, and recycled because the purpose of these processes or the processes they support is the conveyance of wastewater, as well as the treatment and removal of COD and TSS.

Table 32: Allocation Percentages for Metropolitan Sub-System Capital Costs

Function	FY 2026 % Allocation of Metropolitan Sub-System Capital Costs to Demand Parameters								Rationale
	Total	Volume-Related			Customer-Related			Recycled	
		FLOW %	COD %	TSS %	Meters and Services	Billing	Readiness to Serve Allocation		
Large Sewer Pump Station	100%	55.56%	21.91%	22.11%				0.42%	The costs under these Metropolitan sub-system categories supports functions that convey wastewater flow, treatment of COD and TSS discharges, and recycling so costs are allocated among these categories.
Miscellaneous Projects	100%	55.56%	21.91%	22.11%				0.42%	
Sewer Treatment Plants	100%	55.56%	21.91%	22.11%				0.42%	
Trunk Sewers	100%	55.56%	21.91%	22.11%				0.42%	
PW-NC	100%	55.56%	21.91%	22.11%				0.42%	

Table 33 shows the dollar allocation of the FY 2026 Metropolitan sub-system capital costs based on the percentage allocations shown in Table 33. The total capital costs in Table 33 sum to \$56.3 million, which is also shown in Table 21 (Functional Assignment of FY 2026 Capital Costs).

Table 33: FY 2026 Dollar Allocations for Metropolitan Sub-System Capital Costs

Function	FY 2026 \$ Allocation of Metropolitan Sub-System Capital Costs to Demand Parameters						
	Total	Volume-Related			Customer-Related		Recycled
		FLOW	COD	TSS	Meters and Services	Billing	
Large Sewer Pump Station	\$6,320,620	\$3,511,754	\$1,384,551	\$1,397,744	\$0	\$0	\$26,570
Miscellaneous Projects	\$2,285,969	\$1,270,091	\$500,748	\$505,520	\$0	\$0	\$9,610
Sewer Treatment Plants	\$33,193,660	\$18,442,492	\$7,271,171	\$7,340,459	\$0	\$0	\$139,539
Trunk Sewers	\$12,937,524	\$7,188,125	\$2,834,004	\$2,861,009	\$0	\$0	\$54,386
PW-NC	\$1,576,051	\$875,658	\$345,239	\$348,529	\$0	\$0	\$6,625
Total	\$56,313,824	\$31,288,120	\$12,335,713	\$12,453,261	\$0	\$0	\$236,731
Total %	100.0%	55.6%	21.9%	22.1%	0.0%	0.0%	0.4%

Table 34 shows a final summary of the FY 2026 revenue requirement allocations discussed in this report section. The total allocated revenue requirement amounts to approximately \$361.5 million. This corresponds to the revenue requirement from rates developed in the financial plan and referenced in several tables in this report (see Table 15, Summary of Projected Revenue Requirement from Rates and Table 17, FY 2026 Revenue Requirement Detail). Secondly, based on the allocations presented above, approximately \$16.2 million of this revenue requirement is associated with costs related to the provision of recycled water service and is used as part of the recycled water revenue requirements in the recycled water section of this report.

Table 34: Summary of FY 2026 Revenue Requirement Allocations

Summary of Allocated Revenue Requirement Components							
Revenue Requirement Component	Total	Volume			Customer-Related		Recycled
		FLOW	COD	TSS	Meters	Billing	
Municipal Sub-System O&M	\$154,430,839	\$106,228,305	\$7,133,876	\$8,754,681	\$4,958,296	\$27,275,417	\$80,263
Municipal Sub-System Capital Costs	(\$36,795,251)	(\$14,123,909)	\$0	\$0	(\$22,645,920)	(\$25,421)	\$0
Less: Municipal Sub-System Rev. Req. Offsets	\$20,835,171	\$11,692,949	\$3,717,484	\$4,549,573	\$135,688	\$737,309	\$2,170
Total Municipal Sub-System	\$96,800,416	\$80,411,447	\$3,416,393	\$4,205,109	(\$17,823,312)	\$26,512,687	\$78,093
Metropolitan Sub-System O&M	\$323,105,199	\$141,107,894	\$72,687,838	\$81,825,655	\$0	\$11,274,581	\$16,209,231
Metropolitan Sub-System Capital Costs	\$56,313,824	\$31,288,120	\$12,335,713	\$12,453,261	\$0	\$0	\$236,731
Less: Metropolitan Sub-System Rev. Req. Offsets	\$114,701,595	\$51,941,984	\$28,080,320	\$34,129,912	\$0	\$248,961	\$300,419
Total Metropolitan Sub-System	\$264,717,428	\$120,454,030	\$56,943,231	\$60,149,004	\$0	\$11,025,620	\$16,145,543
Combined O&M	\$477,536,037	\$247,336,199	\$79,821,714	\$90,580,337	\$4,958,296	\$38,549,998	\$16,289,494
Combined Capital Costs	\$19,518,574	\$17,164,211	\$12,335,713	\$12,453,261	(\$22,645,920)	(\$25,421)	\$236,731
Less: Combined Revenue Requirement Offsets	\$135,536,767	\$63,634,932	\$31,797,804	\$38,679,485	\$135,688	\$986,270	\$302,588
Combined Net Rev. Req. from Rates	\$361,517,844	\$200,865,477	\$60,359,623	\$64,354,113	(\$17,823,312)	\$37,538,307	\$16,223,636

UNITS OF SERVICE DETERMINATION

The next step in the cost-of-service study process is to determine the total system and customer class units of service. The units of service are used in the distribution of costs to customer classes and the eventual determination of test year rates and charges as part of the rate design process. The process of determining the units of service involves developing estimates, in consultation with Public Utilities Department staff, of the projected test year contributed units of service (i.e., wastewater flowing to treatment plants), billed units of service, return flows, strength loadings, and inflow and infiltration volumes. Table 35 shows the volume and strength loading inputs used to determine the units of service for test year FY 2026.

The units of service shown in Table 35 for Single Family Residential and Multi-Family Residential customers reflect a 95% return flow factor. Additionally, the billed sewer commodity rate for Single Family Residential customers is based on their lowest water usage during a winter monitoring period. Water consumption during the winter typically reflects the highest percentage of water returned to the sewer system. It is associated with non-discretionary indoor activities such as showers, clothes washing, and toilet flushing. Thus, 95% of this usage is assumed to return to the City's sewer system, and only 5% is lost to factors such as outdoor usage or evaporation. Although the costs allocated to Single Family Residential customers in the cost-of-service process are based on the units of service associated with a 95% return flow assumption, it is important to note that the \$/HCF rates they pay are calculated based on 100% of their lowest water consumption during the winter monitoring period.

Also, the City currently imposes a 20 HCF monthly cap on the billed sewer volumes for Single Family Residential customers. The State Water Resources Control Board suggested the cap be set at a level that captures 95% of the Single Family Residential accounts. In a previous project, the City analyzed the consumption of Single Family Residential accounts over several years to determine the appropriate cap. The 20 HCF monthly cap is based on an average of five years of winter usage. The cap is set at 20 HCF because it captures 95% of the flow from Single Family Residential accounts. Irrigation is minimal during the winter period due to cooler weather and increased rainfall, and is therefore a good estimate of how much water is returned to the sewer. This means that if a customer's lowest water consumption during the winter monitoring period exceeds 20 HCF, they are not billed for any amounts exceeding the 20 HCF monthly cap.

The majority of wastewater customers are far below the monthly cap. There are approximately 230,000 Single Family Residential accounts, which represent 83% of wastewater customers, and over 90% of those are served by 5/8" or 3/4" meters by the water utility. While a 3/4" meter has the physical capacity to deliver high volumes of water, actual usage among Single Family Residential customers is far below that potential. For example, if a 3/4" meter was left fully open at 20 gallons per minute (GPM), it could theoretically deliver over 1,155 HCF of water in a 30-day period. Even at a modest 2 GPM, continuous flow would result in roughly 115 HCF over the same period. By contrast, the average Single Family Residential customer with a 3/4" meter uses just 9 HCF per month. This comparison highlights that most residential customers operate well below the meter's capacity and monthly cap, using only a small fraction of what their meter could theoretically deliver.

The City maintains this policy because Single Family Residential customers with such a high level of water consumption during the winter monitoring period are invariably using the water for activities that do not create return flows to the sewer system and do not impose a cost on the City's sewer infrastructure (e.g., outdoor irrigation). The Water Research Foundation conducted research⁴ in 2016 to investigate residential water usage trends. The Water Research Foundation is anticipated to release an updated residential water use report in 2025 that will be used, in conjunction with City of San Diego data, to evaluate the monthly sewer volume cap in a future cost of service study. At this time, Raftelis recommends no change in the sewer monthly cap policy.

⁴ Water Research Foundation, October 2017, Residential Water Use, [HousingEconomics.com](https://www.housingeconomics.com)

Sewer pipes and treatment plants must be sized to handle peak loads without overflowing. Treatment facilities and pump stations may adjust operations to accommodate various flow rates. The City's wastewater system utilizes ADS flow meters to continuously monitor the sewer capacity of specific sewer basins. ADS flow meter data indicate two distinct diurnal curves; one belonging to residential areas and the other to commercial/industrial service areas. The residential diurnal curves showcase two distinct peaks in a day, one peak during the early morning and the other during the evening. The commercial/industrial diurnal curve is accompanied by a single daily peak, usually occurring at noon. Residential diurnal curves also experience a higher peak flow during the weekends when compared to weekdays. Commercial/industrial diurnal curves show a lower peak flow during weekends compared to weekdays. If all classes peaked at the same time, the system would need to be sized even bigger.

Table 35: FY 2026 Flow and Volume Loadings Used to Determine Units of Service

Customer Class	Estimated Test-Year Billed Flow (HCF)	Test-Year Flow Used in Plant Balance (HCF)	Est. Test Year Flow for Plant Balance Analysis (MGD)	Estimated Weighted Test Year COD Strength (mg/L)	Estimated Test Year COD Pounds	Estimated Weighted Test Year TSS Strength (mg/L)	Estimated Test Year TSS Pounds
Single Family Residential (Note 1)	17,029,681	16,178,197	33.15	692	69,885,198	287	28,984,179
Multi-Family Residential (Note 2)	15,739,823	14,952,832	30.64	692	64,591,969	287	26,788,866
Commercial / Industrial (Note 3)	18,744,380	18,744,380	38.41	703	82,216,824	276	32,303,029
Total Retail	51,513,884	49,875,408	102.21	696	216,693,991	283	88,076,074
Other (Navy, Prisons)(Note 4)	1,384,248	1,384,248	2.84	414	3,577,365	183	1,581,299
Total Other (Navy, Prisons)	1,384,248	1,384,248	2.84	414	3,577,365	183	1,581,299
Trucked Waste (Note 5)	77,551	77,551	0.16	7,855	3,802,474	9,448	4,573,932
Imported Flows (Note 5)	133,681	133,681	0.27	100	83,448	50	41,724
Total Trucked Waste	211,232	211,232	0.43	2,947	3,885,922	3,500	4,615,656
Stormwater Transportation (Note 6)	380,015	380,015	0.78	320	759,102	88	208,753
Total Stormwater Transportation	380,015	380,015	0.78	320	759,102	88	208,753
Total Billed Flow	53,489,379	51,850,904	106.26	695	224,916,380	292	94,481,782
Estimated Inflow/Infiltration (Note 7)	5,348,938	5,185,090	10.63	276	8,933,351	154	4,984,551
Total Estimated I/I	5,348,938	5,185,090	10.63	276	8,933,351	154	4,984,551
Estimated Contributed Flow	58,838,317	57,035,994	117	657	233,849,731	279	99,466,333
Note 1: Single Family Residential test-year flows are based on FY26 projected volumes reduced to reflect a 95% return flow factor. Projected volumes reflect a customer's lowest winter water consumption. Note that there is a 20 HCF cap on billed volumes for each account. Under the cap, customers are not billed for any amounts in excess of the 20 HCF cap. Test year COD and TSS mg/L strength loadings were provided by Public Utilities Department staff. Note 2: Multi-Family Residential test-year units flows are based on FY26 projected volumes reduced to reflect a 95% return flow factor. Test year COD and TSS mg/L strength loadings were provided by Public Utilities Department staff. Note 3: Commercial/Industrial test year flows for FY26 reflect actual meter water consumption after being adjusted for estimated return flows in the City's billing system. Test year COD and TSS mg/L strength loadings were based on the average of estimated strength pounds for FY24. Note 4: Other (Navy/Prisons) test year flow are based on projected FY26 levels. Test year COD and TSS mg/L strength loadings are based on actual FY23 sampled loadings. Note 5: Test Year flows for Trucked Waste and Imported Flows (Groundwater Discharges) are based on projected FY26 billed flows. Test year COD and TSS mg/L strength loadings are based on data provided by the Public Utilities Department staff. Note 6: Dry-Weather Stormwater Transportation test year flow were developed in consultation with Public Utilities Department staff. Test year COD and TSS mg/L strength loadings are based on those specified in the contract between the Public Utilities Department and the City of San Diego's Storm Water Department. Note 7: The estimate of Inflow and Infiltration was provided by the Public Utilities Department Staff. It is equivalent to 10.0% of the total volumes specified in the analysis. Note 8: Test year flows for all customer classes are based on FY 26. The most up to date information from actual sampling is used for COD and TSS strengths, which may vary as indicated in the notes above.							

ALLOCATION OF INFLOW AND INFILTRATION (I/I)

After determining the test year contributed units of service, which are summarized in Table 35, the next step in the cost-of-service process is determining how inflow and infiltration (I/I) volumes and associated strength loadings should be allocated to each customer class. Inflow is water introduced into the wastewater collection and conveyance system through direct connections such as manhole covers. Infiltration is groundwater entering the wastewater collection system through leaky sewer pipelines. I/I volumes and related strength loadings are allocated to customers because there is a cost to collect and treat the I/I received at the wastewater treatment plant. This cost must be borne by the customers whose rates pay for the wastewater utility system.

There is no industry standard one-size-fits-all approach for allocating I/I in every situation. Methods for allocating I/I to customer classes range from relying entirely on the proportionate share of contributed volume from each customer class (100% volume) to relying entirely on the proportionate share of customer accounts/wastewater service connections (100% accounts). For this study, Raftelis has allocated I/I to customer classes based on 67% for accounts and 33% for contributed volumes. Our rationale for this approach, based on our experience, is that the majority of infiltration entering the wastewater system is from leaky connections from service lines that connect to individual customer premises. Approximately 84% of the City's wastewater system customer accounts are associated with the Single Family Residential customer class. Allocating I/I on a basis that emphasizes accounts (67%) over volumes (33%) more closely ties to the cost-of-service standard of cost causation. Raftelis did not allocate any I/I to the Trucked Waste or Stormwater Transportation customer classes. This is because trucked waste discharges bypass the wastewater collection and conveyance system, and Stormwater Transportation volumes reflect dry-weather flows.

Table 36 shows the FY 2026 allocation of I/I to each customer class. The City provided the estimated test year strength of I/I for COD and TSS.

Table 36: Detail FY 2026 Allocation of I/I to Customer Classes

FY 2026 Allocation of I/I Units						
Allocation of I/I	Estimated Test Year Flow (MGD)	Estimated Test Year Flow (HCF)	Estimated Test Year COD Strength (mg/L)	Estimated Test Year COD Pounds	Estimated Test Year TSS Strength (mg/L)	Estimated Test Year TSS Pounds
Estimated I/I	10.63	5,185,090	276.00	8,933,351	154.00	4,984,551
Amount Allocated on Accounts	7.12	3,474,011	276.00	5,985,345	154.00	3,339,649
Amount Allocated on Flow	3.51	1,711,080	276.00	2,948,006	154.00	1,644,902
Total	10.63	5,185,090	276.00	8,933,351	154.00	4,984,551
I/I Allocated on Accounts						
Single Family Residential	5.91	2,884,861	276.00	4,970,303	154.00	2,773,285
Multi-Family Residential	0.80	391,995	276.00	675,365	154.00	376,834
Commercial / Industrial	0.40	196,966	276.00	339,352	154.00	189,349
Other (Navy, Prisons)	0.00	189	276.00	325	154.00	181
Trucked Waste and Imported Flows	0.00	0		0		0
Stormwater Transportation						
Total I/I Allocated on Accounts	7.12	3,474,011	276.00	5,985,345	154.00	3,339,649
I/I Allocated on Volume						
Single Family Residential	1.11	540,038	276.00	930,428	154.00	519,152
Multi-Family Residential	1.02	499,135	276.00	859,956	154.00	479,830
Commercial / Industrial	1.28	625,699	276.00	1,078,012	154.00	601,500
Other (Navy, Prisons)	0.09	46,207	276.00	79,610	154.00	44,420
Trucked Waste and Imported Flows	0.00	0		0		0
Stormwater Transportation	0.00	0		0		0
Total I/I Allocated on Volume	3.51	1,711,080	276.00	2,948,006	154.00	1,644,902
Allocated I/I Reconciliation						
Single Family Residential	7.02	3,424,899	276.00	5,900,731	154.00	3,292,437
Multi-Family Residential	1.83	891,130	276.00	1,535,320	154.00	856,664
Commercial / Industrial	1.69	822,666	276.00	1,417,364	154.00	790,848
Other (Navy, Prisons)	0.10	46,396	276.00	79,935	154.00	44,601
Trucked Waste and Imported Flows	0.00	0		0		0
Stormwater Transportation	0.00	0		0		0
Total Allocated I/I	10.63	5,185,090	276.00	8,933,351	154.00	4,984,551

Allocation of I/I Between Accounts & Volume	
% of I/I Allocated on Accounts	67.00%
% of I/I Allocated on Flow	33.00%

Table 37 summarizes the units of service used to calculate the unit cost-of-service for each demand parameter. The return flow factors discussed in Table 35 reduce the billed units of service to derive the return flow units of service. The total units of service are the sum of the return flow units of service and allocated I/I units of service. Likewise, the total units of service for pounds of COD and TSS are added together from the return flow and allocated I/I units of service. The projected number of accounts, EDUs, and flow by class for FY 2026 are at the bottom of the table.

Table 37: Summary of FY 2026 Units of Service

FY 2026 Billed Units of Service				
Billed Units of Service				
Customer Class		Flow (HCF)	COD Pounds	TSS Pounds
Single Family Residential		17,029,681	82,216,824	32,303,029
Multi-Family Residential		15,739,823		
Commercial / Industrial		18,744,380		
Other (Navy, Prisons)		1,384,248		
Trucked Waste and Imported Flows		211,232		
Stormwater Transportation		380,015		
Total		53,489,379	82,216,824	32,303,029
FY 2026 Return Flow Units of Service				
Customer Class		Flow (HCF)	COD Pounds	TSS Pounds
Single Family Residential		16,178,197	69,885,198	28,984,179
Multi-Family Residential		14,952,832	64,591,969	26,788,866
Commercial / Industrial		18,744,380	82,216,824	32,303,029
Other (Navy, Prisons)		1,384,248	3,577,365	1,581,299
Trucked Waste and Imported Flows		211,232	3,885,922	4,615,656
Stormwater Transportation		380,015	759,102	208,753
Total		51,850,904	224,916,380	94,481,782
FY 2026 Allocated I/I Units of Service				
Customer Class		Flow (HCF)	COD Pounds	TSS Pounds
Single Family Residential		3,424,899	5,900,731	3,292,437
Multi-Family Residential		891,130	1,535,320	856,664
Commercial / Industrial		822,666	1,417,364	790,848
Other (Navy, Prisons)		46,396	79,935	44,601
Trucked Waste and Imported Flows		0	0	0
Stormwater Transportation		0	0	0
Total		5,185,090	8,933,351	4,984,551
FY 2026 Total Units of Service				
Customer Class		Flow (HCF)	COD Pounds	TSS Pounds
Single Family Residential		19,603,096	75,785,929	32,276,616
Multi-Family Residential		15,843,962	66,127,289	27,645,530
Commercial / Industrial		19,567,045	83,634,188	33,093,877
Other (Navy, Prisons)		1,430,644	3,657,300	1,625,900
Trucked Waste and Imported Flows		211,232	3,885,922	4,615,656
Stormwater Transportation		380,015	759,102	208,753
Total		57,035,994	233,849,731	99,466,333
	Accounts/EDUs		Flow	
FY 2026 Accounts	Accounts	Percentage	HCF	Percentage
SFR	229,217	83.04%	16,178,197	31.56%
MFR	31,146	11.28%	14,952,832	29.17%
Non-Residential	15,650	5.67%	18,744,380	36.57%
Other (Navy, Prisons)	15	0.01%	1,384,248	2.70%
Trucked Waste and Imported Flows	0	0.00%	0	0.00%
Stormwater Transportation	0	0.00%	0	
Total	276,028	100.00%	51,259,656	100.00%

UNIT COST-OF-SERVICE

Having established the units of service for each customer class, the next step in the cost-of-service process is to calculate the unit cost-of-service for each demand parameter. Table 38 shows a detailed calculation of the unit cost-of-service, which is done by dividing the Net Revenue Requirement from Rates (shown for each demand parameter at the top of the column) by the Total Contributed Units (shown for each demand parameter at the bottom of the column). As shown in Table 38, the estimated FY 2026 unit cost-of-service for the volume-related demand parameters of flow, COD, and TSS are \$3.69/HCF for flow, \$0.27/pound for COD, and \$0.68/pound for TSS.

Table 38: FY 2026 Unit Cost-of-Service Calculation

FY 2026 Unit Cost of Service Calculation					
Customer Class	Volume-Related			Customer-Related	
	Flow	COD	TSS	Meters and Service Accounts	Bills
	Total Flow HCF/Year	Total COD Lbs/Year	Total TSS Lbs/Year		
Net Revenue Requirement from Rates	\$210,303,134	\$63,195,618	\$67,377,788	(\$18,660,740)	\$39,302,043
Single Family Residential	16,178,197	69,885,198	28,984,179	229,217	2,750,604
Multi-Family Residential	14,952,832	64,591,969	26,788,866	31,146	373,752
Commercial / Industrial	18,744,380	82,216,824	32,303,029	15,650	187,800
Subtotal	49,875,408	216,693,991	88,076,074	276,013	3,312,156
Other (Navy, Prisons)	1,384,248	3,577,365	1,581,299	15	180
Subtotal	1,384,248	3,577,365	1,581,299	15	180
Trucked Waste and Imported Flows	211,232	3,885,922	4,615,656	0	0
Subtotal	211,232	3,885,922	4,615,656	0	0
Stormwater Transportation	380,015	759,102	208,753	0	0
Subtotal	380,015	759,102	208,753	0	0
I/I (Total)	5,185,090	8,933,351	4,984,551		
Total Contributed Units	57,035,994	233,849,731	99,466,333	276,028	3,312,336
Unit Cost of Service	\$3.69	\$0.27	\$0.68	(\$67.60)	\$11.87

DISTRIBUTION OF COSTS TO CUSTOMER CLASSES

The first step in distributing costs to customer classes is multiplying the units of service for each customer class (Table 37) by the unit cost-of-service (Table 38). This determines the test year FY 2026 customer class cost-of-service. Table 39 shows a detailed calculation for FY 2026 *before* allocating I/I to each customer class. The total calculated COS for wastewater customer classes is \$361.5 million.

Table 39: FY 2026 Wastewater Customer Class Cost-of-Service - Before I/I Allocation

FY 2026 Class Cost of Service Before Allocation of I/I (Net of Recycled)						
Customer Class	Total Calculated COS	Volume-Related			Customer-Related	
		Flow	COD	TSS	Meters and Services	Billing
Single Family Residential	\$115,312,515	\$59,652,253	\$18,885,796	\$19,633,677	(\$15,496,105)	\$32,636,893
Multi-Family Residential	\$93,065,115	\$55,134,085	\$17,455,352	\$18,146,588	(\$2,105,610)	\$4,434,700
Commercial / Industrial	\$114,384,726	\$69,114,282	\$22,218,298	\$21,881,843	(\$1,058,011)	\$2,228,314
Subtotal	\$322,762,355	\$183,900,620	\$58,559,446	\$59,662,108	(\$18,659,726)	\$39,299,907
Other (Navy, Prisons)	\$7,143,030	\$5,103,999	\$966,748	\$1,071,161	(\$1,014)	\$2,136
Subtotal	\$7,143,030	\$5,103,999	\$966,748	\$1,071,161	(\$1,014)	\$2,136
Trucked Waste and Imported Flows	\$4,955,601	\$778,855	\$1,050,133	\$3,126,613	\$0	\$0
Subtotal	\$4,955,601	\$778,855	\$1,050,133	\$3,126,613	\$0	\$0
Stormwater Transportation	\$1,747,741	\$1,401,193	\$205,140	\$141,408	\$0	\$0
Subtotal	\$1,747,741	\$1,401,193	\$205,140	\$141,408	\$0	\$0
Total Allocated I/I	\$24,909,118	\$19,118,467	\$2,414,151	\$3,376,499		
Net Revenue Requirement	\$361,517,844	\$210,303,134	\$63,195,618	\$67,377,788	(\$18,660,740)	\$39,302,043

The final step in determining the customer class COS is to allocate I/I costs to each class. As noted in this report, Raftelis allocated I/I to customer classes based on 67% for accounts and 33% for contributed volumes. Table 40 shows this calculation.

Table 40: FY 2026 Wastewater Customer Class Cost-of-Service - After I/I Allocation

FY 2026 Class Cost of Service After Allocation of I/I (Net of Recycled)								
Customer Class	Total Calculated COS	Volume-Related				Customer-Related		
		Flow	I/I Allocated on Flow	COD	TSS	Meters and Services	I/I Allocated on Accounts	Billing
Single Family Residential	\$131,765,692	\$59,652,253	\$2,594,339	\$18,885,796	\$19,633,677	(\$15,496,105)	\$13,858,838	\$32,636,893
Multi-Family Residential	\$97,346,093	\$55,134,085	\$2,397,839	\$17,455,352	\$18,146,588	(\$2,105,610)	\$1,883,139	\$4,434,700
Commercial / Industrial	\$118,336,803	\$69,114,282	\$3,005,852	\$22,218,298	\$21,881,843	(\$1,058,011)	\$946,225	\$2,228,314
Subtotal	\$347,448,588	\$183,900,620	\$7,998,030	\$58,559,446	\$59,662,108	(\$18,659,726)	\$16,688,202	\$39,299,907
Other (Navy, Prisons)	\$7,365,915	\$5,103,999	\$221,978	\$966,748	\$1,071,161	(\$1,014)	\$907	\$2,136
Subtotal	\$7,365,915	\$5,103,999	\$221,978	\$966,748	\$1,071,161	(\$1,014)	\$907	\$2,136
Trucked Waste and Imported Flows	\$4,955,601	\$778,855	\$0	\$1,050,133	\$3,126,613	\$0	\$0	\$0
Subtotal	\$4,955,601	\$778,855	\$0	\$1,050,133	\$3,126,613	\$0	\$0	\$0
Stormwater Transportation	\$1,747,741	\$1,401,193	\$0	\$205,140	\$141,408	\$0	\$0	\$0
Subtotal	\$1,747,741	\$1,401,193	\$0	\$205,140	\$141,408	\$0	\$0	\$0
Net Revenue Requirement	\$361,517,844	\$191,184,668	\$8,220,009	\$60,781,467	\$64,001,289	(\$18,660,740)	\$16,689,109	\$39,302,043
		\$324,187,432				\$37,330,412		

CLASS COST-OF-SERVICE VERSUS REVENUES AT EXISTING RATES

Table 41 compares each customer class's estimated FY 2026 cost-of-service to the projected revenues earned if existing rates remain in place. The last column shows the percentage change in revenue recovery compared to revenues at existing rates.

Table 41: Comparison of FY 2026 Customer Class Cost-of-Service to Revenue at Existing Rates

FY 2026 Cost of Service vs. Revenue at Existing Rates				
Customer Class	FY 2026 Cost of Service	Revenue at Existing Rates	Required Change in Revenue Recovery from Existing Rates	Percentage Change in Revenue Recovery
Wastewater Net Revenue Requirement	\$361,517,844			
Wastewater Customer Classes				
Single Family Residential	\$131,765,692	\$134,124,273	(\$2,358,581)	-1.8%
Multi-Family Residential	\$97,346,093	\$89,811,330	\$7,534,763	8.4%
Non-Residential	\$118,336,803	\$105,530,603	\$12,806,200	12.1%
Total Regular Wastewater Service	\$347,448,588	\$329,466,206	\$17,982,382	5.5%
Other (Navy, Prisons)	\$7,365,915	\$5,815,306	\$1,550,609	26.7%
Total Other (Navy, Prisons)	\$7,365,915	\$5,815,306	\$1,550,609	26.7%
Trucked Waste	\$4,955,601	\$4,102,862	\$852,738	20.8%
Total Trucked Waste	\$4,955,601	\$4,102,862	\$852,738	20.8%
Stormwater Transportation	\$1,747,741	\$1,670,196	\$77,545	4.6%
Total Stormwater Transportation	\$1,747,741	\$1,670,196	\$77,545	4.6%
Total Wastewater Service	\$361,517,844	\$341,054,570	\$20,463,274	6.00%

Rate Design

Introduction

This section of the report discusses the development of a schedule of sewer service charges for the City's customer classes. The proposed sewer service charges result from the comprehensive analysis of customer flows and strength loadings completed in the cost-of-service analysis. Raftelis recommends no changes to the City's existing rate structures. The City's proposed FY 2026 wastewater rate revenue increase of 6.0% is anticipated to become effective on January 1, 2026.

PROPOSED RATES - MONTHLY SERVICE CHARGE

Table 42 shows the detailed calculation of the proposed FY 2026 monthly service charge for retail customers. The monthly service charge is calculated using the customer-related costs presented in the Wastewater Customer Class Cost-of-Service – After I/I Allocation Table in the previous section. The calculated monthly service charge of \$11.28 is \$4.47 lower (28.4%) than the FY 2025 monthly service charge of \$15.75. This proposed service charge is based on identifying costs in the FY 2026 revenue requirement that can reasonably be considered appropriate for fixed revenue recovery. The proposed monthly service charge of \$11.28 results in projected FY26 revenue recovery being approximately 10% fixed and 90% variable. The current (FY 2025) revenue recovery profile is approximately 15% fixed and 85% variable.

Table 42: Detail of Proposed FY 2026 Monthly Service Charges

FY 2026 Meter Service Charge for SFR, MFR and Commercial/Industrial										
Customer Class	Meters and Services Revenue Requirement	Readiness to Serve Revenue Requirement	Billing Revenue Requirement	I/I Accounts Revenue Requirement	Total Customer Revenue Requirement	Projected Test-Year Bills for Fixed Charge Calculation	FY 2026 Calculated Service Charge	FY 2025 Service Charge	\$ Difference	% Difference
Single Family Residential	-\$15,496,105	\$0	\$32,636,893	\$13,858,838	\$30,999,627	2,750,604	\$11.28	\$15.75	(\$4.47)	-28.4%
Multi-Family Residential	-\$2,105,610	\$0	\$4,434,700	\$1,883,139	\$4,212,228	373,752	\$11.28	\$15.75	(\$4.47)	-28.4%
Commercial / Industrial	-\$1,058,011	\$0	\$2,228,314	\$946,225	\$2,116,528	187,800	\$11.28	\$15.75	(\$4.47)	-28.4%
Subtotal	-\$18,659,726	\$0	\$39,299,907	\$16,688,202	\$37,328,383	3,312,156				
Other (Navy, Prisons)	-\$1,014	\$0	\$2,136	\$907	\$2,029	180	\$11.28	\$15.75	(\$4.47)	-28.4%
Subtotal	-\$1,014	\$0	\$2,136	\$907	\$2,029	180				
TOTAL	-\$18,660,740	\$0	\$39,302,043	\$16,689,109	\$37,330,412	3,312,336	\$11.28	\$15.75	(\$4.47)	-28.4%

PROPOSED COMMODITY RATES

Tables 43 through 46 below provide details of the commodity rates for the City's wastewater customers. No details are provided for the Other (Navy/Prisons) customer class. Although a revenue requirement for this customer class was calculated as part of the COS study (\$7.4 million, as shown in Table 41), this customer class is not shown because these rates are set via a contractual arrangement.

Table 43 shows the calculation details of proposed commodity rates (\$/HCF) for Single Family and Multi Family Residential customers. The calculation shows that the commodity rates will increase by approximately \$0.59. As is the case for all proposed FY 2026 customer class rates, this outcome reflects updated cost allocations, the results of which are summarized in Table 40, updated volume and strength loadings (Table 35), updated units of service calculation (Table 37), and an updated unit cost-of-service calculation (Table 38).

Table 43: Detail Proposed FY 2026 Residential Commodity Rates

FY 2026 Single Family and Multi-Family Residential Flow Based Charges										
Customer Class	Flow Revenue Requirement	COD Revenue Requirement	TSS Revenue Requirement	I/I Volume Revenue Requirement	Total Volumetric Revenue Requirement	Projected Test-Year Billable Units of Service	FY 2026 \$/HCF Calculated Charge	FY 2025 \$/HCF Charge	\$ Difference	% Difference
Single Family	\$59,652,253	\$18,885,796	\$19,633,677	\$2,594,339	\$100,766,065	17,029,681	\$5.9180	\$5.3320	\$0.5860	11.0%
Multi Family	\$55,134,085	\$17,455,352	\$18,146,588	\$2,397,839	\$93,133,864	15,739,823	\$5.9180	\$5.3320	\$0.5860	11.0%
TOTAL	\$114,786,339	\$36,341,148	\$37,780,265	\$4,992,178	\$193,899,930	32,769,504				

Table 44 shows the calculation of proposed FY 2026 commodity rates for the Commercial/Industrial customer class. As shown in Table 44, flow-based, COD, and TSS charges will increase. As is the case for all proposed FY 2026 customer class rates, this outcome reflects updated cost allocations, the results of which are summarized in Table 40, updated volume and strength loadings (Table 35), updated units of service calculation (Table 37), and an updated unit cost-of-service calculation (Table 38).

Table 44: Detail of Proposed FY 2026 Commercial / Industrial Commodity Rates

FY 2026 Commercial Flow and Strength Charges								
Commercial/Industrial	Flow and Strength Revenue Requirement	I/I Volume Revenue Requirement	Total Revenue Requirement	Projected Test-Year Billable Units of Service	FY 2026 Calculated Charges	Current Charges	\$ Difference	% Difference
Flow Charges (\$ / HCF)	\$69,114,282	\$3,005,852	\$72,120,134	18,744,380	\$3.8480	\$3.5550	\$0.2930	8.2%
COD Charges (\$ / lb)	\$22,218,298		\$22,218,298	82,216,824	\$0.2710	\$0.2320	\$0.0390	16.8%
TSS Charges (\$ / lb)	\$21,881,843		\$21,881,843	32,303,029	\$0.6780	\$0.5220	\$0.1560	29.9%
TOTAL	\$113,214,423	\$3,005,852	\$116,220,275					

Table 45 calculates the proposed FY 2026 commodity rates (\$/HCF and \$/lb.) for trucked waste and imported flows.

Table 45: Detail of Proposed FY 2026 Trucked Waste and Imported Flows Rates

FY 2026 Trucked Waste						
Flow Based Charges	Revenue Requirement	Projected Test-Year Billable Units of Service	FY 2026 Calculated Charges	Current Charges	\$ Difference	% Difference
Flow Charges (\$ / HCF)	\$778,855	211,232	\$3.6880	\$3.4930	\$0.1950	5.6%
COD Charges (\$ / lb)	\$1,050,133	3,885,922	\$0.2710	\$0.2320	\$0.0390	16.8%
TSS Charges (\$ / lb)	\$3,126,613	4,615,656	\$0.6780	\$0.5220	\$0.1560	29.9%
TOTAL	\$4,955,601					

Table 46 calculates proposed commodity rates (\$/HCF) for dry weather stormwater transportation service. Rates for this non-operating service are established by a contract between the Public Utilities Department and the City's Stormwater Department.

Table 46: Detail of Proposed FY 2026 Stormwater Transportation

FY 2026 Stormwater Transportation						
Flow Based Charges	Revenue Requirement	Projected Test-Year Billable Units of Service (HCF)	FY 2026 Calculated \$/HCF Charge	Current Charges	\$ Difference	% Difference
Flow Charges (\$ / HCF)	\$1,401,193					
COD Charges (\$ / lb)	\$205,140					
TSS Charges (\$ / lb)	\$141,408					
TOTAL	\$1,747,741	380,015	\$4.6000	\$4.2420	\$0.3580	8.4%

PROJECTED RATES

Table 47 summarizes the projected wastewater service rates for FY 2026 through FY 2029. The projected rates for FY 2027 through FY 2029 are based on the proposed FY 2026 cost-of-service rates increased on the same percentage basis as the overall systemwide percentage revenue increases specified in Table 1, Projected Required Rate Revenue Adjustments.

Table 47: Proposed Wastewater Rates for FY 2026 – FY 2029

FY 2026 Wastewater Rate Summary					
FY 2026 Wastewater Service Charges (\$/month)					
Customer Class		Current FY 2025 (1)	Proposed FY 2026	\$ Diff	% Diff
Single Family Residential	\$/Month	\$15.75	\$11.28	(\$4.47)	-28.4%
Multi-Family Residential	\$/Month	\$15.75	\$11.28	(\$4.47)	-28.4%
Commercial / Industrial	\$/Month	\$15.75	\$11.28	(\$4.47)	-28.4%

FY 2026 Wastewater Commodity and Strength Charges					
Customer Class		Current FY 2025 (1)	Proposed FY 2026	\$ Diff	% Diff
Residential					
Single Family Residential	(\$ / HCF)	\$5.332	\$5.918	\$0.586	11.0%
Multi-Family Residential	(\$ / HCF)	\$5.332	\$5.918	\$0.586	11.0%
Commercial / Industrial					
Flow Charges	(\$ / HCF)	\$3.555	\$3.848	\$0.293	8.2%
COD Charges	(\$ / lb)	\$0.232	\$0.271	\$0.039	16.8%
TSS Charges	(\$ / lb)	\$0.522	\$0.678	\$0.156	29.9%
Trucked Waste					
Flow Charges	(\$ / HCF)	\$3.493	\$3.688	\$0.195	5.6%
COD Charges	(\$ / lb)	\$0.232	\$0.271	\$0.039	16.8%
TSS Charges	(\$ / lb)	\$0.522	\$0.678	\$0.156	29.9%
Stormwater Transportation					
Flow	(\$ / HCF)	\$4.242	\$4.600	\$0.358	8.4%
(1) Council approved rates effective on January 1, 2025					

Rate Projection for FY 2026 - FY 2029				
FY 2026 - FY 2029 Wastewater Service Charges (\$/Month)				
Current FY 2025 (1)	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
\$15.75	\$11.28	\$11.96	\$12.91	\$13.95
\$15.75	\$11.28	\$11.96	\$12.91	\$13.95
\$15.75	\$11.28	\$11.96	\$12.91	\$13.95

FY2026 - FY2029 Wastewater Commodity and Strength Charges				
Current FY 2025 (1)	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
\$5.3320	\$5.918	\$6.273	\$6.775	\$7.317
\$5.3320	\$5.918	\$6.273	\$6.775	\$7.317
\$3.5550	\$3.848	\$4.079	\$4.405	\$4.758
\$0.2320	\$0.271	\$0.287	\$0.310	\$0.335
\$0.5220	\$0.678	\$0.719	\$0.776	\$0.838
\$3.4930	\$3.688	\$3.909	\$4.222	\$4.560
\$0.2320	\$0.271	\$0.287	\$0.310	\$0.335
\$0.5220	\$0.678	\$0.719	\$0.776	\$0.838
\$4.2420	\$4.600	\$4.876	\$5.266	\$5.687
(1) Council approved rates effective on January 1, 2025				

Recycled Water

Introduction

The North City Plant has an average flow rate of 16 million gallons per day (MGD) and typically produces approximately 7 MGD of recycled water for distribution to users through the Northern Distribution System. The North City Plant also uses approximately 1 MGD of recycled water for plant processes. The City is committed to maximizing recycling and beneficial reuse and is expanding the North City Plant's total wastewater treatment capacity up to 52 MGD with the Pure Water Program. The North City Plant limits its recycled water production to meet demand, and excess treated effluent is returned to the sewer system for conveyance to the Point Loma Plant.

The South Bay Plant has an average flow rate of 7 MGD and typically produces approximately 3 MGD of recycled water. The recycled water is distributed to one wholesaler and six retail meters. The South Bay Plant limits its recycled water production to meet demand, and excess treated effluent is discharged to the South Bay Outfall for disposal.

The City collects revenues from selling recycled water for deposit in the Water Revenue Fund. The fixed meter charge is used for the recycled water distribution system and customer service charges. The variable commodity charge is first used to cover operations and maintenance costs for tertiary treatment of recycled water. Then any remaining revenue is transferred to the Sewer Revenue Fund. Revenues from recycled water sales depend highly on weather patterns; thus, the City does not rely on it as a revenue source. Recycled water revenues are considered other operating revenues.

The City provides recycled water service to 794 customers who use approximately 4.36 million HCF annually. The costs incurred to provide recycled water service are accounted for in the Water Revenue Fund and the Sewer Revenue Fund. The wastewater utility also incurs a small portion of the billing and collection costs related to recycled water customers. The recycled water transmission and distribution system has an annual depreciation of just under \$1.0 million. Raftelis developed proposed FY 2026 rates for the recycled water system as part of the wastewater COS, which are discussed in this section of the report.

RECYCLED SYSTEM REVENUE REQUIREMENT

Table 48 details the calculation of the FY 2026 recycled water revenue requirement, which is estimated to be \$17.2 million. Of this amount, approximately \$16.2 million was identified as part of the wastewater cost-of-service process. This amount reflects the best estimate of FY 2026 Sewer Revenue Fund costs incurred to assist in the provision of recycled water service. The remaining FY 2026 recycled revenue requirement is associated with the annual depreciation of the recycled water transmission and distribution assets, which is covered by the fixed monthly meter charge.

Table 48: Test Year FY 2026 Recycled Water Revenue Requirement

FY 2026 Recycled Revenue Requirement Components		
Revenue Requirement Component	Cost Description	FY 2026
Metro Subsystem & Muni Subsystem O&M		
Metro O&M - Treatment	Recycled Water	\$65,070
	Wastewater Treatment	\$12,612,472
	Water Distribution	\$0
	Water Meter Services	\$12,055
Metro O&M - Water System Operations	Water Systems Operations	\$7,300
Metro O&M for Billing	Customer Support Services	\$0
Metro Addl Budget Items	Personnel	\$305,119
General and Administrative	Business Support Admin	\$2,555,551
General and Administrative	Operating Division Admin	\$651,664
Muni O&M for Billing	Customer Support Services	\$80,263
Metro Capital	Recycled Share of Metro Capital Revenue Requirement based on Recycled Debt Service as % of Total Non-	\$236,731
	Recycled Share of Muni Capital Revenue Requirement based on Recycled Debt Service as % of Total Non-	
Muni Capital	Recycled Debt Service	\$0
Total Gross Wastewater Costs Allocated to Recycled		\$16,526,225
Non-Rate Revenue Offsets		
Metro Non-Rate Revenue Offset	Recycled Allocation of Operating Fund Interest Earnings	\$300,419
Muni Non-Rate Revenue Offset	Recycled Allocation of Various Muni O&M Offsets	\$2,170
Total Net Wastewater Costs Allocated to Recycled		\$16,223,636
Other Recycled Costs		
Estimated repair and replacement costs for recycled water assets	Recycled Data Inputs Worksheet & Asset Listing	\$990,699
Total Recycled Net Revenue Requirement from Rates		\$17,214,335

RECYCLED WATER MONTHLY SERVICE CHARGES

Table 49 details the revenue requirement components for the FY 2026 recycled water monthly service charge calculation. To determine the amount of the revenue requirement to be recovered from the service charge, 34% of the revenue requirement was allocated to the meter component, and the balance is recovered through the volumetric rate. Because some revenue requirements do not vary with consumption, they are conceptually suitable for recovery through the monthly service charge.

Table 49: FY 2026 Recycled Water Monthly Service Charge Unit Cost

FY 2026 Calculation of Recycled Monthly Service Charge Unit Cost	
Billing Component	FY 2026
Billing Component	
Amount Identified as Billing in Wastewater COS Allocations	\$80,263
Number of Accounts	810
Annual Unit Cost per Account	\$99.10
Unit Cost per Bill (12 Bills per Year)	\$8.26
Meter Capacity Component	
Fixed Recycled Water Costs and Depreciation	\$4,290,231
Percentage Allocated to Meter Service Charge	34.00%
Amount Allocated to Meter Service Charge	\$1,458,679
Equivalent Meters	5,302
Annual Unit Cost per Equivalent Meter	\$275.14
Unit Cost per Equivalent Meter (12 Bills per Year)	\$22.93

Table 50 details the calculation of the proposed FY 2026 monthly service charge for recycled water. As shown in Table 50, the proposed FY 2026 service charge for a 3/4" meter increases from \$21.14 to \$31.19.

Table 50: Proposed FY 2026 Recycled Water Monthly Service Charges

FY 2026 Meter Service Charge Calculation							
Meter Size	Meter Flow Rate Equivalency	Monthly Capacity Component	Monthly Billing Component	Calculated Meter Charge	Current Meter Service Charge	Change - \$	Change - %
5/8", 3/4"	1.00	\$22.93	\$8.26	\$31.19	\$21.14	\$10.05	47.5%
1"	1.67	\$38.21	\$8.26	\$46.48	\$32.65	\$13.83	42.4%
1.5"	3.33	\$76.43	\$8.26	\$84.69	\$61.42	\$23.27	37.9%
2"	5.33	\$122.29	\$8.26	\$130.55	\$95.93	\$34.62	36.1%
3"	11.67	\$267.50	\$8.26	\$275.76	\$205.23	\$70.53	34.4%
4"	21.00	\$481.50	\$8.26	\$489.76	\$366.30	\$123.46	33.7%
6"	43.33	\$993.57	\$8.26	\$1,001.83	\$751.73	\$250.10	33.3%
8"	93.33	\$2,139.99	\$8.26	\$2,148.25	\$1,614.61	\$533.64	33.1%
10"	140.00	\$3,209.98	\$8.26	\$3,218.25	\$2,419.97	\$798.28	33.0%
12"	176.67	\$4,050.69	\$8.26	\$4,058.95	\$3,052.75	\$1,006.20	33.0%
16"	260.00	\$5,961.39	\$8.26	\$5,969.66	\$4,490.89	\$1,478.77	32.9%

Table 51 shows the calculation of the FY 2026 revenue requirement for recycled water commodity charges. As shown in this table, of the total FY 2026 recycled revenue requirement of \$17.2 million, approximately \$15.7 million is recovered through commodity rates. The unit cost is calculated by dividing the net volumetric revenue requirement by the projected sales for the test year. The City provided the projected sales, which are based on the average sales from FY 2021 through FY 2024.

Table 51: FY 2026 Recycled Water Commodity Revenue Requirement

FY 2026 Commodity Rate Calculation	
Component	FY 2026
Total Revenue Requirement	\$17,135,425
Less: Meter Service Charge Revenue Recovery	\$1,538,997
Net Volumetric Revenue Requirement	\$15,596,428
Projected Test-Year Sales (HCF)	4,356,006
Unit Cost per HCF	\$3.58

Table 52 compares the proposed FY 2026 recycled water commodity rate of \$3.58 per HCF to the FY 2025 rate of \$2.46 per HCF, which is a \$1.12 increase.

Table 52: Proposed FY 2026 Recycled Water Commodity Rate

FY 2026 Recycled Water Commodity Rates					
Customer Class		Apr. 2025	FY 2026	\$ Diff	% Diff
All Consumption	(\$ / HCF)	\$2.46	\$3.58	\$1.12	45.5%
(1) Council approved rates effective on January 1, 2025					

Table 53 summarizes the projected recycled water service rates for FY 2026 and FY 2029. The projected rates for FY 2026 are based on the cost-of-service results. The FY 2027 through FY 2029 projected rates are based on FY 2026 cost-of-service rates increased on the same percentage basis as the overall systemwide percentage revenue increase specified in Table 1, Projected Required Rate Revenue Adjustments.

Table 53: Proposed Recycled Water Rates FY 2026 – FY 2029

Meter Size	Current FY 2025 (1)	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
5/8", 3/4"	\$21.14	\$31.19	\$33.06	\$35.71	\$38.56
1"	\$32.65	\$46.48	\$49.27	\$53.21	\$57.47
1.5"	\$61.42	\$84.69	\$89.77	\$96.95	\$104.71
2"	\$95.93	\$130.55	\$138.38	\$149.45	\$161.41
3"	\$205.23	\$275.76	\$292.31	\$315.69	\$340.95
4"	\$366.30	\$489.76	\$519.15	\$560.68	\$605.53
6"	\$751.73	\$1,001.83	\$1,061.94	\$1,146.89	\$1,238.65
8"	\$1,614.61	\$2,148.25	\$2,277.15	\$2,459.32	\$2,656.06
10"	\$2,419.97	\$3,218.25	\$3,411.35	\$3,684.25	\$3,978.99
12"	\$3,052.75	\$4,058.95	\$4,302.49	\$4,646.69	\$5,018.42
16"	\$4,490.89	\$5,969.66	\$6,327.84	\$6,834.07	\$7,380.79
(1) Council approved rates effective on January 1, 2025					

FY2026 - FY2029 Recycled Water Commodity Rates				
Current FY 2025 (1)	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
\$2.46	\$3.58	\$3.80	\$4.10	\$4.43
(1) Council approved rates effective on January 1, 2025				