



**SAN FRANCISCO  
PUBLIC UTILITIES COMMISSION**

**2023 Water and Wastewater Rate Study**

**DRAFT REPORT / APRIL 21, 2023**



San Francisco  
**Water Power Sewer**  
Services of the San Francisco Public Utilities Commission



WATER | ENVIRONMENT | ENERGY



April 21, 2023

Ms. Erin Corvinova  
Financial Planning Director, Financial Services  
San Francisco Public Utilities Commission

**Subject: 2023 Water and Wastewater Rate Study**

Dear Ms. Corvinova:

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to provide this Water and Wastewater Rate Study Report to the SFPUC. This report explains the methodologies and rationale used to develop a rate revenue requirement and rates for water and wastewater service for SFPUC retail customers.

The major study objectives include the following:

- Develop a financial plan;
- Conduct a cost of service analysis for water and wastewater services;
- Develop fair, and equitable, water and wastewater rates over a three-year period; and
- Conduct a customer impact analysis for the proposed water and wastewater rates.

It has been a pleasure working with you and we appreciate the support provided by you, Matthew Freiburg, and other SPUC staff support during this study.

Sincerely,



**Steve Gagnon, PE (AZ)**  
*Vice President*



**John Wright, CPA (CO)**  
*Senior Manager*

# Contents

<b>1. Executive Summary .....</b>	<b>1</b>
1.1. Background .....	1
1.2. Process and Approach .....	1
1.3. Retail Water Rate Study Summary .....	2
1.4. Retail Wastewater Rate Study Summary.....	3
<b>2. Introduction.....</b>	<b>11</b>
2.1. Water Enterprise Overview.....	11
2.2. Wastewater Enterprise Overview.....	12
2.3. Water and Wastewater Rate Study Overview .....	13
2.4. Financial Policies .....	13
<b>3. Water Financial Plan .....</b>	<b>15</b>
3.1. Overview of the Financial Planning Process .....	15
3.2. Financial Plan Components .....	16
<b>4. Water Cost of Service Analysis.....</b>	<b>32</b>
4.1. Water Cost of Service Methodology .....	32
4.2. Water Revenue Requirement Determination .....	32
4.3. Water Revenue Requirement Functionalization .....	33
4.4. Water Revenue Requirement Allocation to Cost Causation Components.....	37
4.5. Water Unit Cost Development.....	47
4.6. Water Customer Class Revenue Requirements .....	49
<b>5. Water Rate Design .....</b>	<b>50</b>
5.1. Water Rate Design Overview.....	50
5.2. Water Rate Calculations .....	51
5.3. Water Customer Bill Impacts .....	57
<b>6. Wastewater Financial Plan .....</b>	<b>59</b>
6.1. Overview of the Financial Planning Process .....	59
6.2. Financial Plan Components .....	60
<b>7. Sewer Cost of Service Analysis.....</b>	<b>77</b>
7.1. Sewer Cost of Service Methodology .....	77
7.2. Sewer Revenue Requirement Determination.....	77

7.3. Sewer System Cost Functionalization.....	78
7.4. Sewer Cost Component Allocations .....	83
7.5. Sewer Unit COS Development .....	91
7.6. Wastewater Customer Class Revenue Requirements .....	93
7.7. Wastewater and Stormwater Customer Class Revenue Requirement Determination .....	93
<b>8. Sewer Rate Design.....</b>	<b>96</b>
8.1. Sewer (Wastewater and Stormwater) Rate Design Overview.....	96
8.2. Wastewater Rate Calculations .....	96
8.3. Stormwater Rate Design Overview.....	98
8.4. Preliminary Sewer Bill Impacts .....	101
<b>9. Stormwater Phase-In Rates .....</b>	<b>104</b>
9.1. Introduction .....	104
9.2. Phase-In Revenue Requirement Projection .....	104
9.3. Phase-In Rate Projection .....	104
9.4. Phase-In Bill Impacts .....	105

# Tables

Table 1-1: Proposed Water Enterprise Revenue Adjustments.....	4
Table 1-2: Comparison of Proposed vs. Current Cost of Service (FY 2024).....	6
Table 1-3: Proposed and Projected Retail Water Rate Schedule (FY 2024 – FY 2028) .....	1
Table 1-4: Current Wastewater Enterprise Rates .....	3
Table 1-5: Stormwater Runoff Rates for Customers without SFPUC Accounts .....	3
Table 1-6: Proposed Wastewater Enterprise Revenue Adjustments .....	5
Table 1-7: FY 2024 Wastewater and Stormwater Cost of Service .....	7
Table 1-8: Comparison of Proposed and Current Wastewater Cost of Service (FY 2024).....	7
Table 1-9: Comparison of Proportional Share of Proposed and Current Cost of Service (FY 2024).....	7
Table 1-10: Phase-In Retail Wastewater Rate Schedule (FY 2024 – FY 2028).....	8
Table 1-11: Phase-In Retail Stormwater Rate Schedule (FY 2024 – FY 2028) .....	8
Table 3-1: Existing Retail Water Rates.....	17
Table 3-2: Projected Metered Water Connections.....	18
Table 3-3: Projected Private Fire Service Connections .....	19
Table 3-4: Projected Water Use .....	20
Table 3-5: Projected Water Enterprise Rate Revenue at Existing Rates .....	21
Table 3-6: Assumptions for Water Enterprise Other Revenues .....	22
Table 3-7: Projected Water Enterprise Other Revenue .....	22
Table 3-8: Inflationary Assumptions for Water Enterprise O&M Expenses .....	23
Table 3-9: Projected Water Enterprise O&M Expenses.....	23
Table 3-10: Water Enterprise Debt Service .....	24
Table 3-11: Water Enterprise Funding for Pay-as-you-go Capital Expenditures.....	24
Table 3-12: Status Quo Water Enterprise Financial Plan .....	26
Table 3-13: Proposed Water Enterprise Revenue Adjustments.....	28
Table 3-14: Proposed Water Enterprise Financial Plan.....	30
Table 4-1: Annualized Retail Water Rate Revenue Requirements for FY 2024.....	33
Table 4-2: Water Enterprise Functional Allocations Bases .....	35
Table 4-3: Allocation of FY 2024 Retail Water Rate Revenue Requirement to Functions.....	36
Table 4-4: Water System Peaking Factors .....	37
Table 4-5: Preliminary Allocation of FY 2024 Retail Water Rate Revenue Requirement to Cost Components .....	39
Table 4-6: Number of Water Meters and Equivalent Meter Units (In-City and Suburban Retail Only).....	41
Table 4-7: Number of Fire Protection Connections and Equivalent Fire Demand Units.....	42
Table 4-8: FY 2024 Water Use and Max Day Extra Capacity Requirements.....	43

Table 4-9: Fire Protection Extra Capacity Requirements..... 44

Table 4-10: Max Day Extra Capacity Cost Allocation ..... 44

Table 4-11: Final Adjusted Allocation of FY 2024 Retail Water Rate Revenue Requirement to Cost Components ..... 46

Table 4-12: FY 2024 Unit Costs ..... 48

Table 4-13: Comparison of Proposed vs. Current Cost of Service (FY 2024)..... 49

Table 5-1: Revenue Recovery by Charge Type ..... 50

Table 5-2: Proposed FY 2024 Fixed Monthly Service Charge Calculation ..... 51

Table 5-3: Private Fire Service Unit Cost Differentiation..... 52

Table 5-4: Proposed FY 2024 Private Fire Fixed Monthly Service Charge Calculation ..... 52

Table 5-5: Extra Capacity Unit Rate Calculation..... 53

Table 5-6: Proposed FY 2024 Variable Charge Calculation ..... 54

Table 5-7: Proposed and Projected Retail Water Rate Schedule (FY 2024 – FY 2028) ..... 56

Table 6-1: Current Wastewater Enterprise Rates ..... 61

Table 6-2: Stormwater Runoff Rates for Customers without SFPUC Accounts ..... 61

Table 6-3: Wastewater Enterprise Strength Loading Groups ..... 62

Table 6-4: Projected Wastewater Enterprise Customer Accounts ..... 63

Table 6-5: Projected Wastewater Enterprise Discharge Volumes (CCF)..... 64

Table 6-6: Projected Wastewater Enterprise COD Loadings (Pounds)..... 65

Table 6-7: Projected Wastewater Enterprise TSS Loadings (Pounds)..... 66

Table 6-8: Projected Wastewater Enterprise Oil and Grease Loadings (Pounds)..... 66

Table 6-9: Projected Wastewater Enterprise Revenue at Existing Rates ..... 67

Table 6-10: Projected Wastewater Enterprise Miscellaneous Revenues..... 68

Table 6-11: Projected Wastewater Enterprise CIP Expenditures by Funding Source ..... 68

Table 6-12: Wastewater Enterprise Debt Service..... 69

Table 6-13: Inflationary Assumptions for Wastewater Enterprise O&M Expenses ..... 69

Table 6-14: Projected Wastewater Enterprise O&M Expenses..... 70

Table 6-15: Status Quo Wastewater Enterprise Financial Plan ..... 72

Table 6-16: Proposed Wastewater Enterprise Revenue Adjustments ..... 74

Table 6-17: Proposed Wastewater Enterprise Financial Plan..... 75

Table 7-1: FY 2024 Wastewater Enterprise Revenue Requirement ..... 78

Table 7-2: Summary of FY 2024 Functional Allocation Percentages ..... 80

Table 7-3: FY 2024 Revenue Requirement Allocation Basis ..... 81

Table 7-4: Consolidated FY 2024 Revenue Requirement Functionalization ..... 82

Table 7-5: Estimation of FY 2024 Wet Weather Flows ..... 84

Table 7-6: Allocation of FY 2024 O&M to Cost Causation Components ..... 87

Table 7-7: Summary of FY 2024 Capital Costs to Cost Causation Components ..... 88

Table 7-8: Allocation of FY 2024 Non-Rate Revenue Offsets to Cost Causation Components..... 88

Table 7-9: Consolidated FY 2024 Non-Rate Revenue Requirement Allocation to Cost Causation Components ..... 90

Table 7-10: Summary FY 2024 Units of Service ..... 91

Table 7-11: Allocation of Dry Weather Infiltration to Customer Accounts..... 92

Table 7-12: Summary FY 2024 COS by Cost Causation Component..... 93

Table 7-13: Detail of FY 2024 Wastewater Customer Class Revenue Requirements..... 94

Table 7-14: FY 2024 Stormwater Revenue Requirement..... 94

Table 7-15: FY 2024 Revenue Requirement Summary ..... 95

Table 7-16: FY 2024 Wastewater Revenue Requirement vs. Revenues at Existing Rates..... 95

Table 8-1: Proposed FY 2024 Monthly Service Charge..... 96

Table 8-2: Proposed FY 2024 Residential Commodity Rates..... 96

Table 8-3: Proposed FY 2024 Non-Residential Commodity Rates ..... 97

Table 8-4: Summary of Proposed Stormwater Rates FY 2024 – FY 2028..... 98

Table 8-5: New Stormwater Rate Structure..... 98

Table 8-6: FY 2024 Stormwater Unit COS Calculation ..... 99

Table 8-7: FY 2024 Stormwater Revenue Requirement by Customer Type ..... 99

Table 8-8: \$/Thousand Square Foot/Month Unit Costs ..... 100

Table 8-9: Development of FY 2024 Stormwater Charges by Residential Tier ..... 100

Table 8-10: Summary of Proposed FY 2024 Stormwater Rates ..... 100

Table 8-11: Summary of Proposed Stormwater Rates FY 2024 – FY 2028..... 101

Table 9-1: Revenue Requirements for Stormwater Phase-In Rates ..... 104

Table 9-2: FY 2024 – FY 2034 Phase-In Wastewater and Stormwater Rate Projection ..... 105



# Figures

Figure 1-1: Projected Reserve Balances under Status Quo Water Enterprise Financial Plan..... 3

Figure 1-2: Projected Debt Coverage under Status Quo Water Enterprise Financial Plan..... 4

Figure 1-3: Projected Reserve Balances under Proposed Water Enterprise Financial Plan ..... 5

Figure 1-4: Projected Debt Coverage under Proposed Water Enterprise Financial Plan ..... 5

Figure 1-5: Sample Single Family Residential Water Monthly Bill Impacts (FY 2024) ..... 1

Figure 1-6: Sample Multiple-Family Residential Water Monthly Bill Impacts (FY 2024)..... 2

Figure 1-7: Sample Non-Residential Water Monthly Bill Impacts (FY 2024)..... 2

Figure 1-8: Projected Reserve Balances under Status Quo Wastewater Enterprise Financial Plan ..... 4

Figure 1-9: Projected Debt Coverage under Status Quo Wastewater Enterprise Financial Plan ..... 5

Figure 1-10: Projected Reserve Balances under Proposed Wastewater Enterprise Financial Plan ..... 6

Figure 1-11: Projected Debt Coverage under Proposed Wastewater Enterprise Financial Plan..... 6

Figure 1-12: FY 2024 Single Family Residential Bill Impacts by Usage Percentile ..... 9

Figure 1-13: FY 2024 Multifamily Residential Bill Impacts by Usage Percentile ..... 9

Figure 1-14: FY 2024 Non-Residential Residential Bill Impacts by Usage Percentile ..... 10

Figure 2-1: Water System Overview..... 11

Figure 2-2: Wastewater System Overview ..... 12

Figure 3-1: Projected Reserve Balances under Status Quo Water Enterprise Financial Plan..... 27

Figure 3-2: Projected Debt Coverage under Status Quo Water Enterprise Financial Plan..... 27

Figure 3-3: Projected Reserve Balances under Proposed Water Enterprise Financial Plan ..... 31

Figure 3-4: Projected Debt Coverage under Proposed Water Enterprise Financial Plan ..... 31

Figure 5-1: Sample Single Family Residential Water Monthly Bill Impacts (FY 2024) ..... 57

Figure 5-2: Sample Multiple-Family Residential Water Monthly Bill Impacts (FY 2024)..... 58

Figure 5-3: Sample Non-Residential Water Monthly Bill Impacts (FY 2024)..... 58

Figure 6-1: Projected Reserve Balances Under Status Quo Wastewater Enterprise Financial Plan..... 73

Figure 6-2: Projected Debt Coverage Under Status Quo Wastewater Enterprise Financial Plan..... 73

Figure 6-3: Projected Reserve Balances under Proposed Wastewater Enterprise Financial Plan ..... 76

Figure 6-4: Projected Wastewater Enterprise Debt Service Coverage ..... 76

Figure 8-1: FY 2024 Example Single Family Residential Bill Change (4.32 ccf Billed Discharges)..... 102

Figure 8-2: FY 2024 Single Family Residential Bill Impacts by Usage Percentile ..... 102

Figure 8-3: FY 2024 Multifamily Residential Bill Impacts by Usage Percentile ..... 103

Figure 8-4: FY 2024 Non-Residential Residential Bill Impacts by Usage Percentile ..... 103

Figure 9-1: Single Family Residential Bill Impacts at Phase-In Rates..... 106

Figure 9-2: Multifamily Residential Bill Impacts at Phase-In Rates ..... 106

Figure 9-3: Non-Residential Customer Bill Impacts at Phase-In Rates..... 107

# Appendices

Appendix A: Ten-Year Water Enterprise Financial Plan

Appendix B: Water Cost of Service: O&M Functional Allocations

Appendix C: Water Cost of Service: Debt Functional Allocations

Appendix D: Water Cost of Service: CIP Functional Allocations

Appendix E: Water Cost of Service: Wholesale Revenue Functional Allocations

Appendix F: Water Cost of Service: Federal Bond Interest Subsidy Functional Allocations

Appendix G: Sewer Cost of Service: SIC Code to SIC Group

Appendix H: Ten-Year Wastewater Enterprise Financial Plan

Appendix I: Sewer Cost of Service: O&M Functional Allocations

Appendix J: Sewer Cost of Service: Detailed Units of Service

# Glossary

Terms	Descriptions
<b>AF</b>	Acre foot / Acre feet, 1 AF = 435.6 CCF
<b>AWSS</b>	Alternative Water Supply System
<b>AWWA</b>	American Water Works Association
<b>CAP</b>	Customer Assistance Program
<b>CCF</b>	Hundred cubic feet or 100 cubic feet, 1 CCF = 748 gallons
<b>CIP</b>	Capital Improvement Program
<b>COD</b>	Chemical Oxygen Demand
<b>COS</b>	Cost of Service
<b>FY</b>	Fiscal Year (July 1 – June 30)
<b>GPM</b>	Gallons per Minute
<b>M1 Manual</b>	<i>Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1, Seventh Edition</i> (published by the AWWA)
<b>Max Day</b>	Maximum daily water demand over a one-year period
<b>Max Month</b>	Maximum monthly water demand over a one-year period
<b>Monthly Service Charge</b>	A fixed monthly charge assessed on both the water and wastewater bills.
<b>MME</b>	McGovern McDonald Engineers
<b>O&amp;M</b>	Operations and Maintenance
<b>OG</b>	Oil and Grease
<b>Raftelis</b>	Raftelis Financial Consultants, Inc.
<b>SFPUC</b>	San Francisco Public Utilities Commission
<b>SIC</b>	Standard Industrial Classification
<b>SRF</b>	Clean Water or Drinking Water State Revolving Fund Loan
<b>SRT</b>	Simplified Residential Tier
<b>SSIP</b>	Sewer System Improvement Program
<b>Stormwater Charges</b>	A fixed monthly charge assessed on parcels based on the approximated stormwater runoff generated from each property.
<b>TSS</b>	Total Suspended Solids
<b>Water Enterprise</b>	The water enterprise provides water service to retail customers in the City and County of San Francisco and wholesale water service to additional customers in the greater San Francisco Bay Area.
<b>Water Usage Charge</b>	Variable portion of the water bill assessed for all metered waters.
<b>Wastewater Charges</b>	Variable portion of the sewer bill assessed for all billed wastewater flows. This includes the volumetric and strength charges.
<b>Wastewater Enterprise</b>	The wastewater enterprise collects and treats wastewater flows from homes and businesses as well as stormwater flows from land surfaces during rain events in the City’s combined and separate sewer systems.
<b>WIFIA</b>	Water Infrastructure Finance and Innovation Act
<b>WSIP</b>	Water System Improvement Program

THIS PAGE INTENTIONALLY LEFT BLANK

# 1. Executive Summary

## 1.1. Background

Section 8B.125 of the San Francisco Charter states that the SFPUC shall “retain an independent rate consultant to conduct rate and cost of service studies for each utility at least every five years.” The SFPUC last conducted a water and wastewater cost of service study in 2018, which established the basis for the SFPUC’s existing water and wastewater retail rates currently in effect in FY 2023.

The SFPUC engaged McGovern McDonald Engineers (MME) and Raftelis (sub-consultant to MME) in 2022 to conduct this water and wastewater cost of service study to establish a proposed three-year water and wastewater retail rate schedule for FY 2024-FY 2026. Water and wastewater rates for wholesale customers are not within the scope of this study. The major study objectives are to:

- Develop multi-year financial plans for the SFPUC’s Water Enterprise and Wastewater Enterprise that sufficiently fund operations and maintenance (O&M) expenses, debt service payments, and capital expenditures while adequately funding reserves and achieving debt coverage requirements.
- Conduct cost of service analyses that establish a clear nexus between the cost to serve retail water and wastewater customers and the rates charged to customers, per Proposition 218 and industry standards.
- Review the SFPUC’s existing retail water and wastewater rate structures to ensure that proposed rates achieve the financial and policy objectives of the agency.
- Develop and introduce a stormwater charge to recover costs associated with wet weather flows and treatment.
- Develop a three-year water, wastewater, and stormwater rate schedule for retail customers that are fair, equitable, and compliant with Proposition 218 requirements.

## 1.2. Process and Approach

The study is informed by the SFPUC's policy objectives, current retail water and wastewater rates, as well as the legal requirements in California (namely, Proposition 218). The resulting cost of service analyses and rate design process considers all these factors and follows four key steps, outlined below, to derive proposed rates that fulfill the SFPUC's policy objectives, meet industry standards, and align with Proposition 218.

### Step 1: Revenue Requirement Calculation

The rate-making process begins by determining the revenue requirement for the base year, also known as the test year or rate-setting year. The base year for this study is FY 2024 (July 1, 2023 to June 30, 2024). The revenue requirement should sufficiently fund the utility's O&M costs, annual debt service, capital project expenses, and reserve funding as projected in the SFPUC's budget and 10-Year financial plans.

### Step 2: Cost of Service Analysis

The annual cost of providing the utility service, or the revenue requirement, is then distributed among customer classes commensurate with their use of and burden on the system. A cost of service analysis involves the following steps:

- Functionalize costs – expenses are categorized into system functions such as supply, treatment, and pumping for water and primary treatment, secondary treatment, and solids handling for wastewater.

- Allocate costs to cost components – the functionalized costs are then allocated to system cost components such as water supply, base delivery, and extra capacity for water and flow, chemical oxygen demand, and total suspended solids for wastewater.
- Develop unit costs – unit costs for each cost component are determined using appropriate units of service such as the number of customer accounts, equivalent meter units, water use, and wastewater flows.
- Distribute cost components – the cost components are allocated to each customer class by applying unit costs to each customer class in proportion to each class’s units of service.

### Step 3: Rate Design and Calculation

After allocating the revenue requirement for each system to its corresponding customer classes, the rate design and calculation begins. Rates do more than simply recover costs; within the legal framework and industry standards, properly designed rates should support the SFPUC's policy objectives while adhering to cost of service principles. Rates are not only a financial instrument but act as a public information tool in communicating policy objectives to customers. The rate design process also includes a customer bill impact analysis.

### Step 4: Report Preparation and Rate Adoption

The final step in a cost of service and rate study is to develop the report in preparation for the rate adoption process. The report documents the rate study results and presents the methodologies, rationale, justifications, and calculations utilized to derive the proposed rates. A thorough and methodical report serves two important functions: fully deriving the rates and showing the nexus to costs and communicating the rate adoption process to customers and other important stakeholders.

## 1.3. Retail Water Rate Study Summary

### Existing Retail Water Rates

The SFPUC’s current water rates for retail customers in FY 2023 have been in effect since July 1, 2021. Retail water customers are billed monthly and currently are subject to the following rates and charges:

- » A **Fixed Monthly Service Charge** that varies based on meter size
- » A **Private Fire Service Fixed Monthly Service Charge** that varies based on service size (these charges apply only to customers with a dedicated private fire service connection such as a fire sprinkler system, standpipe, or other private fire service)
- » **Variable Charges** per one hundred cubic feet (CCF) of water delivered that vary based on customer class
- » **Drought Surcharges:** Drought Surcharges are effective only when the Commission adopts a resolution declaring Stage 1, Stage 2, or Stage 3 of the Retail Water Shortage Allocation Plan to be in effect. Drought Surcharges are assessed as a percentage of Variable Charges and in FY 2022 and FY 2023 have been set to 5% of Variable Charges.

## Proposed Water Enterprise Financial Plan

### Water Enterprise Financial Plan Overview

MME and Raftelis prepared a water utility financial plan model in Microsoft Excel to project the SFPUC Water Enterprise’s revenues, expenses, cash flows, reserve balances, and debt coverage over a multi-year period. Although proposed retail water rates developed in this study are for the next three fiscal years only (FY 2024 to FY 2026), the financial plan extends out ten fiscal years through FY 2032 to ensure that a longer-term planning horizon is accounted for in the rate-setting process. Note that the water financial plan projections developed for this study correspond to, and are aligned with, the SFPUC staff’s own 10-year financial plan, which is updated on an annual basis as part of staff’s on-going financial management processes.

### Status Quo Water Enterprise Financial Plan

A status quo cash flow analysis was first conducted to evaluate whether existing retail water rates can adequately fund the Water Enterprise’s various expenses over a ten-year period through FY 2032. This provided a baseline scenario from which to evaluate the need for any proposed rate increases. Under the status quo scenario (i.e., no rate increases), the Water Enterprise is projected to fully deplete its cash reserves in FY 2028 (Figure 1-1) and fail to meet its debt coverage target beginning in FY 2026 (Figure 1-2). This demonstrates the insufficiency of existing rates to support the Water Enterprise’s financial needs over the next ten years.

Figure 1-1: Projected Reserve Balances under Status Quo Water Enterprise Financial Plan

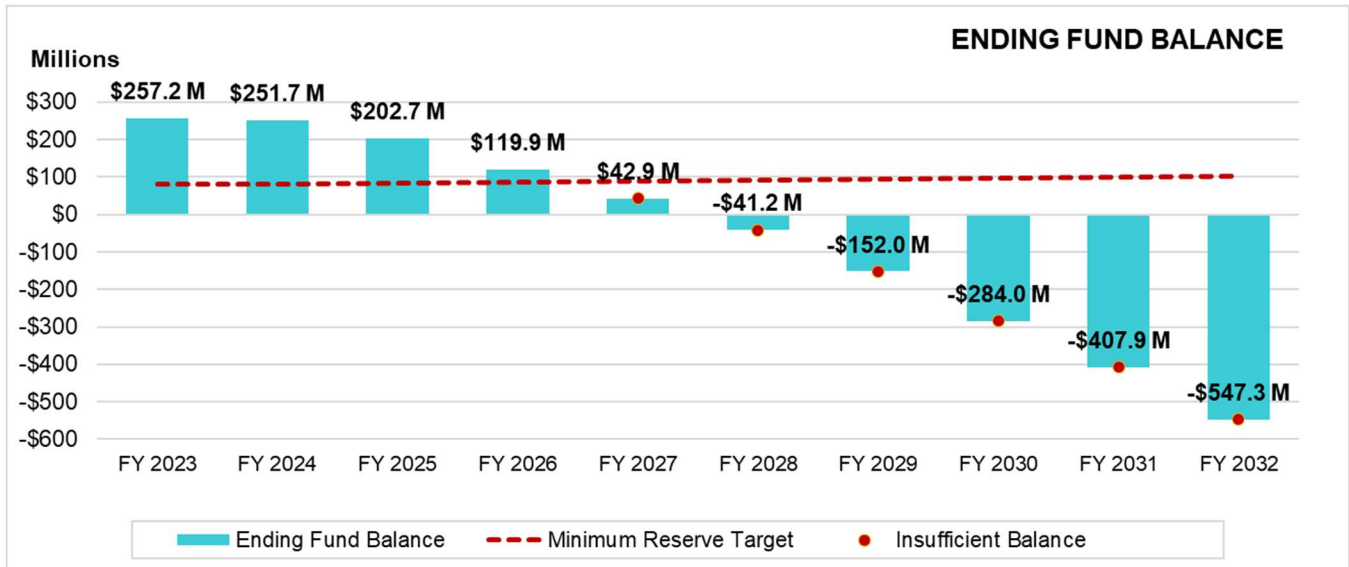
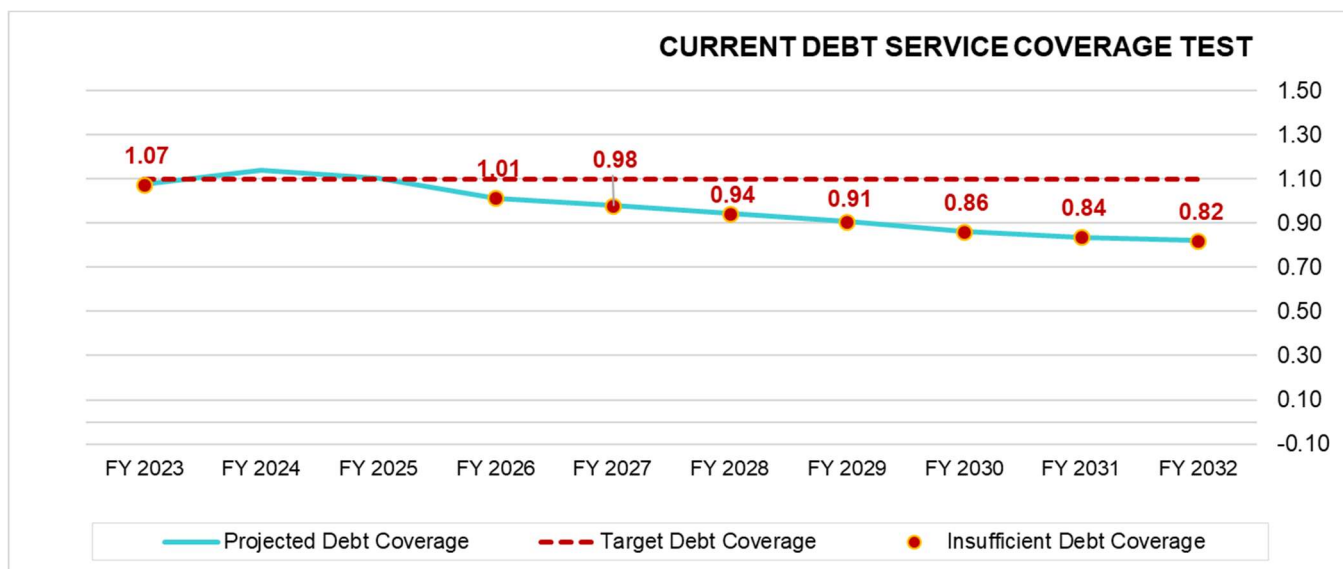


Figure 1-2: Projected Debt Coverage under Status Quo Water Enterprise Financial Plan



**Proposed Water Enterprise Financial Plan**

SFPUC staff evaluated various revenue adjustment scenarios before arriving at the proposed and planned revenue adjustments (i.e., overall annual rate increases) shown below in Table 1-1. Note that although this report includes ten-year financial projections, SFPUC staff is only recommending that the Commission consider adoption of three years of proposed rates (i.e., FY 2024-FY 2026). All revenue adjustments beyond FY 2026 are for planning purposes only. All revenue adjustments are assumed to become effective at the beginning of each fiscal year in July.

Table 1-1: Proposed Water Enterprise Revenue Adjustments

Line	Fiscal Year	Revenue Adjustment	Effective Date	Notes
1	FY 2024	5.0%	7/1/2023	Proposed
2	FY 2025	5.0%	7/1/2024	Proposed
3	FY 2026	5.0%	7/1/2025	Proposed
4	FY 2027	4.0%	7/1/2026	For Near-Term Planning Purposes Only
5	FY 2028	4.0%	7/1/2027	For Near-Term Planning Purposes Only
6	FY 2029	4.0%	7/1/2028	For Long-Term Planning Purposes Only
7	FY 2030	3.0%	7/1/2029	For Long-Term Planning Purposes Only
8	FY 2031	3.0%	7/1/2030	For Long-Term Planning Purposes Only
9	FY 2032	3.0%	7/1/2031	For Long-Term Planning Purposes Only

With the addition of revenue adjustments, the Water Enterprise’s reserve balance (see Figure 1-3) is projected to meet the minimum required level in all years and debt coverage (see Figure 1-4) is projected to meet the target level in all years future. Reserves are projected to be drawn down gradually to fund near-term capital needs. The proposed financial plan demonstrates a multi-year plan that generates sufficient revenue to support the Water Enterprise’s financial needs and meet the SFPUC’s official financial policies.



Figure 1-3: Projected Reserve Balances under Proposed Water Enterprise Financial Plan

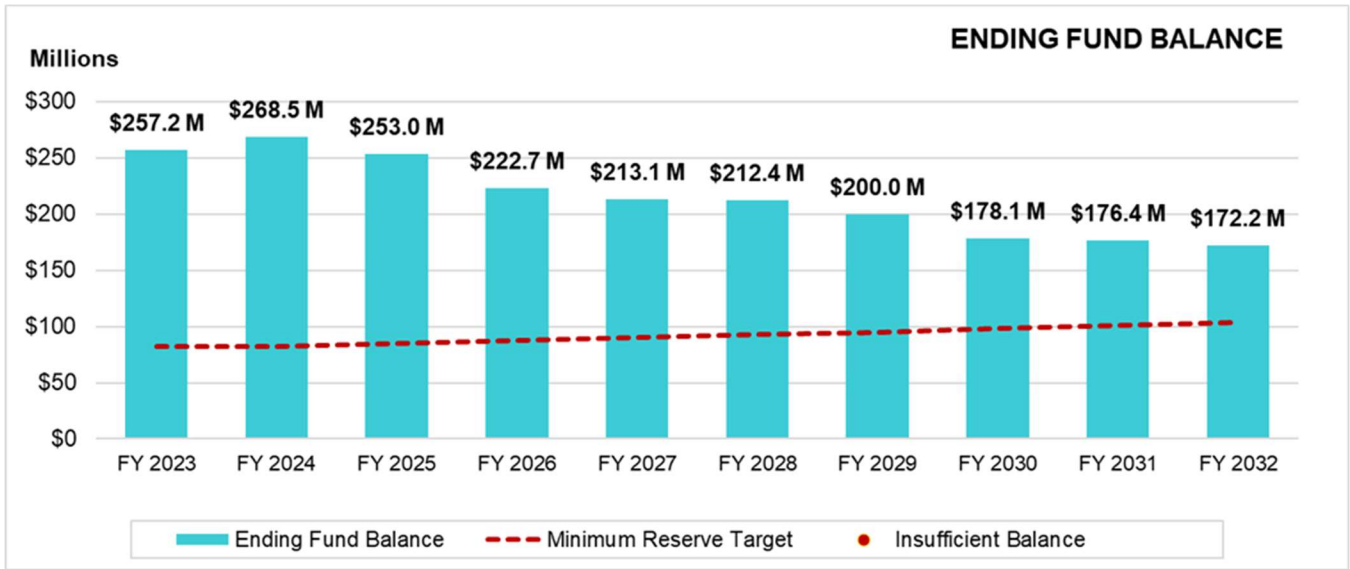
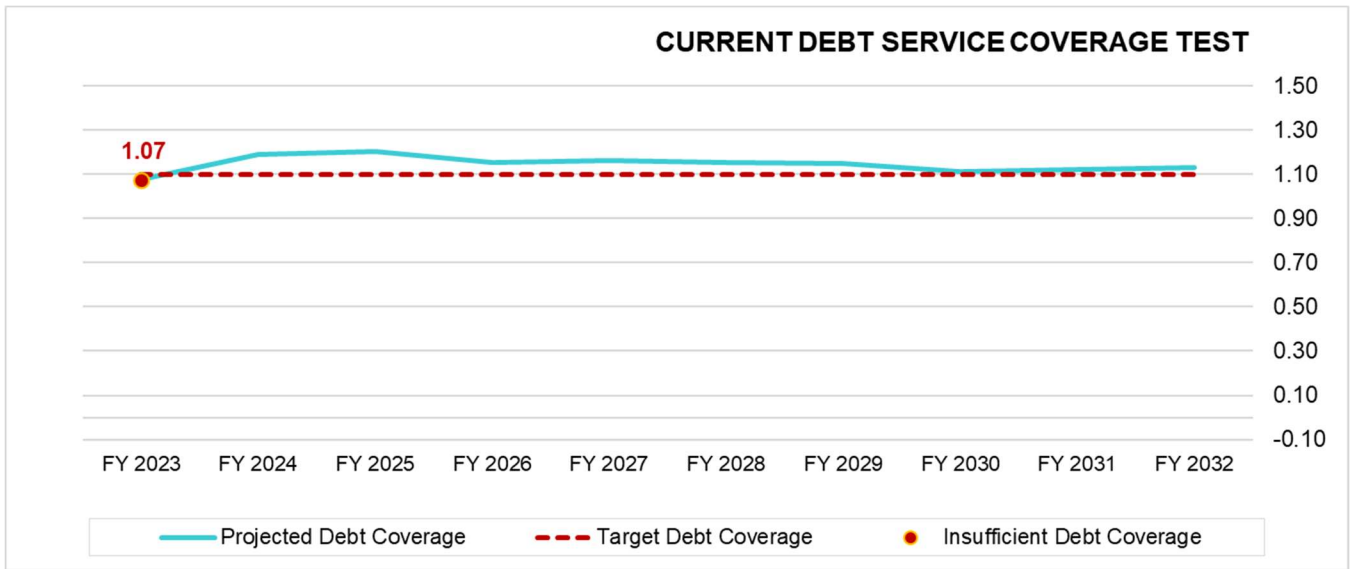


Figure 1-4: Projected Debt Coverage under Proposed Water Enterprise Financial Plan



## Water Cost of Service Analysis

Raftelis performed a water cost of service analysis for FY 2024 in accordance with industry-standard principles outlined by the American Water Works Association in its *Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1, Seventh Edition*. The cost of service analysis evaluates each customer class's use of and burden on the water system, and then proportionally allocates the overall retail rate revenue requirement to each customer class. A comparison of the proposed cost of service to the current cost of service<sup>1</sup> is shown in Table 1-2.<sup>2</sup> Most customer classes experience a relatively minor distributional impact from the proposed cost of service allocations due to changes in Water Enterprise cost structure, customer water use patterns, and methodological refinements made since the prior water cost of service study in 2018.

**Table 1-2: Comparison of Proposed vs. Current Cost of Service (FY 2024)**

Line	Customer Class	\$ Comparison		% Comparison		(E) Change (%)
		(A)	(B)	(C)	(D)	
		Proposed Cost of Service (\$)	Current Cost of Service (\$)	Proposed Cost of Service (%)	Current Cost of Service (%)	
1	Single Family Residential	\$91,236,228	\$84,575,700	26.94%	26.27%	2.53%
2	Multiple-Family Residential	\$125,138,244	\$119,486,099	36.95%	37.12%	-0.46%
3	Commercial/Industrial/Municipal	\$103,924,835	\$98,487,157	30.68%	30.59%	0.29%
4	Irrigation	\$13,545,814	\$12,840,998	4.00%	3.99%	0.26%
5	Docks & Shipping	\$79,631	\$75,358	0.02%	0.02%	0.44%
6	Builders & Contractors	\$1,551,568	\$1,469,665	0.46%	0.46%	0.34%
7	Private Fire Service	\$2,944,309	\$4,841,198	0.87%	1.50%	-42.19%
8	Non-Potable	\$289,652	\$157,974	0.09%	0.05%	74.27%
9	<b>Total</b>	<b>\$338,710,281</b>	<b>\$321,934,148</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>

## Proposed Retail Water Rates

All proposed rates shown are consistent with the SFPUC's existing retail water rate structure. No changes to the existing system of Drought Surcharges are proposed as part of this study. Current and proposed/projected water rates are shown in Table 1-3. Note that SFPUC staff is only recommending that the Commission consider adoption of the three years of proposed rates through FY 2026. All rates shown beyond FY 2026 are projections for planning purposes only. Proposed FY 2024 rates were established based on the results of the water cost of service analysis. Proposed and projected rates in FY 2025 to FY 2028 were established by increasing all proposed FY 2024 rates by the proposed and projected revenue adjustments (shown previously in Table 1-1). All rates are proposed to become effective on July 1 of each fiscal year.

<sup>1</sup> The current cost of service in Column B of Table 1-2 represents the amount of revenue each customer class is projected to generate in FY 2024 based on existing water rates.

<sup>2</sup> Retail water rate revenue from customers with rates based on contracts with the SFPUC, as well as all drought surcharge revenue, is excluded from Table 1-2, as these revenues are outside the scope of the water cost of service analysis.

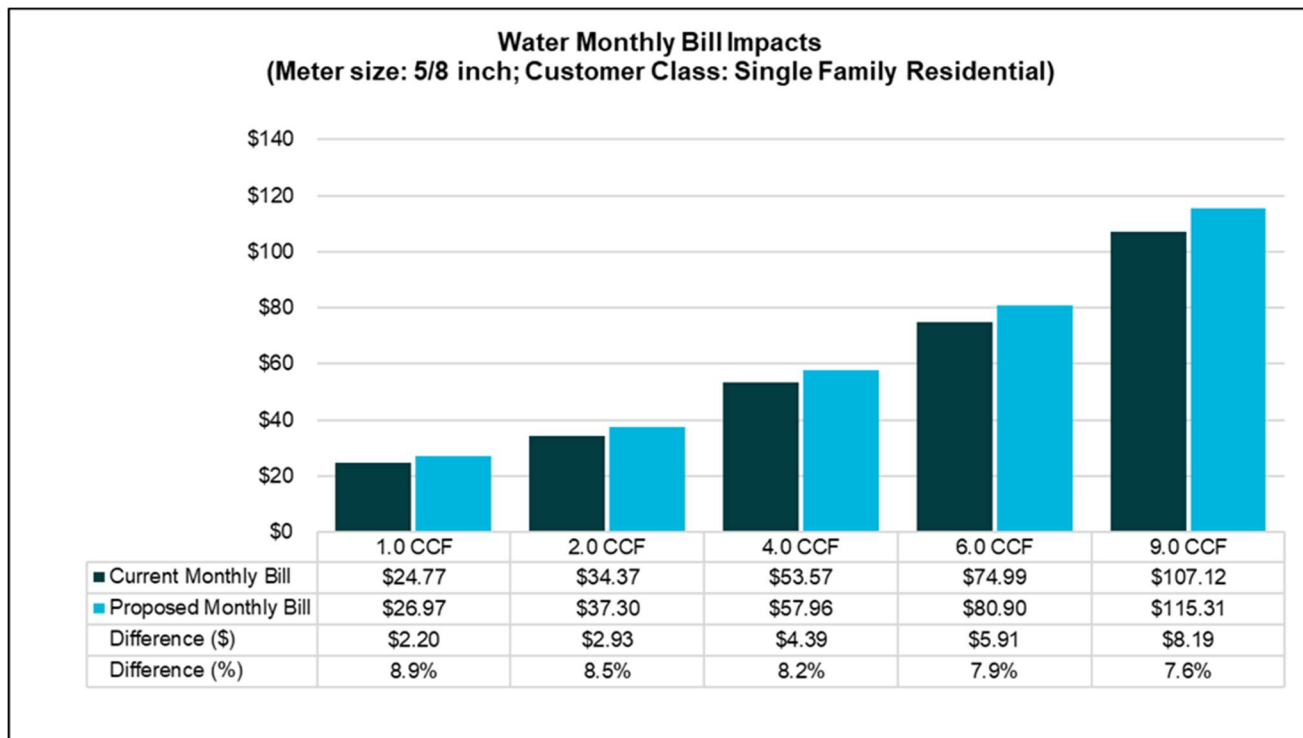
Table 1-3: Proposed and Projected Retail Water Rate Schedule (FY 2024 – FY 2028)

Line	Proposed Water Rate Schedule	(A) Current (since 7/1/2021)	(B) Proposed FY 2024 (7/1/2023)	(C) Proposed FY 2025 (7/1/2024)	(D) Proposed FY 2026 (7/1/2025)	(E) Projected FY 2027 (7/1/2026)	(F) Projected FY 2028 (7/1/2027)
1	<b>Fixed Monthly Service Charges (by Meter Size)</b>						
2	5/8 inch	\$15.17	\$16.64	\$17.48	\$18.36	\$19.10	\$19.87
3	3/4 inch	\$19.43	\$21.13	\$22.19	\$23.30	\$24.24	\$25.21
4	1-inch	\$27.95	\$30.11	\$31.62	\$33.21	\$34.54	\$35.93
5	1-1/2 inch	\$49.25	\$52.56	\$55.19	\$57.95	\$60.27	\$62.69
6	2-inch	\$74.81	\$79.51	\$83.49	\$87.67	\$91.18	\$94.83
7	3-inch	\$142.97	\$151.35	\$158.92	\$166.87	\$173.55	\$180.50
8	4-inch	\$219.65	\$232.18	\$243.79	\$255.98	\$266.22	\$276.87
9	6-inch	\$432.65	\$456.70	\$479.54	\$503.52	\$523.67	\$544.62
10	8-inch	\$688.25	\$726.13	\$762.44	\$800.57	\$832.60	\$865.91
11	10-inch	\$1,071.65	\$1,130.26	\$1,186.78	\$1,246.12	\$1,295.97	\$1,347.81
12	12-inch	\$1,838.45	\$1,938.54	\$2,035.47	\$2,137.25	\$2,222.74	\$2,311.65
13	16-inch	\$3,201.65	\$3,375.47	\$3,544.25	\$3,721.47	\$3,870.33	\$4,025.15
14							
15	<b>Private Fire Fixed Monthly Service Charges (by Service Size)</b>						
16	1-inch	\$9.55	\$8.43	\$8.86	\$9.31	\$9.69	\$10.08
17	1-1/2 inch	\$12.45	\$8.91	\$9.36	\$9.83	\$10.23	\$10.64
18	2-inch	\$15.93	\$9.73	\$10.22	\$10.74	\$11.17	\$11.62
19	3-inch	\$25.21	\$12.70	\$13.34	\$14.01	\$14.58	\$15.17
20	4-inch	\$35.65	\$17.82	\$18.72	\$19.66	\$20.45	\$21.27
21	6-inch	\$64.65	\$36.19	\$38.00	\$39.90	\$41.50	\$43.16
22	8-inch	\$99.45	\$67.88	\$71.28	\$74.85	\$77.85	\$80.97
23	10-inch	\$151.65	\$115.55	\$121.33	\$127.40	\$132.50	\$137.80
24	12-inch	\$256.05	\$181.62	\$190.71	\$200.25	\$208.26	\$216.60
25							
26	<b>Variable Charges (per CCF)</b>						
27	<u>Single-Family Residential</u>						
28	First 4 Units per Month	\$9.60	\$10.33	\$10.85	\$11.40	\$11.86	\$12.34
29	All Additional Units	\$10.71	\$11.47	\$12.05	\$12.66	\$13.17	\$13.70
30							
31	<u>Multiple-Family Residential</u>						
32	First 3 Units per Dwelling Unit per Month	\$9.60	\$10.19	\$10.70	\$11.24	\$11.69	\$12.16
33	All Additional Units	\$10.76	\$10.94	\$11.49	\$12.07	\$12.56	\$13.07
34							
35	<u>Commercial, Industrial, and General Uses</u>						
36	For All Units of Water	\$10.55	\$11.12	\$11.68	\$12.27	\$12.77	\$13.29
37							
38	<u>Untreated Water Service</u>						
39	For All Units of Water	\$0.95	\$1.80	\$1.89	\$1.99	\$2.07	\$2.16

## Retail Water Bill Impacts

Sample monthly water bill impacts are shown for single family residential customers in Figure 1-5, multiple-family residential customers in Figure 1-6, and non-residential customers in Figure 1-7.<sup>3</sup> The bill impacts compare current FY 2023 monthly water bills versus proposed FY 2024 monthly water bills at varying levels of monthly water use.<sup>4</sup> All bills exclude Drought Surcharges to provide a direct comparison of current versus proposed rates, even though Drought Surcharges currently are equal to 5% of Variable Charges in FY 2023.

**Figure 1-5: Sample Single Family Residential Water Monthly Bill Impacts (FY 2024)**



<sup>3</sup> Assumed meter sizes are 5/8-inch for single family residential and non-residential customers. Multiple-family residential bills assume a 1-inch meter and 10 dwelling units.

<sup>4</sup> The varying levels of water use correspond to the 10th percentile, 25th percentile, median, 75th percentile, and 90th percentile of monthly water use for each customer class based on an analysis of FY 2022 account-level billing data.

Figure 1-6: Sample Multiple-Family Residential Water Monthly Bill Impacts (FY 2024)

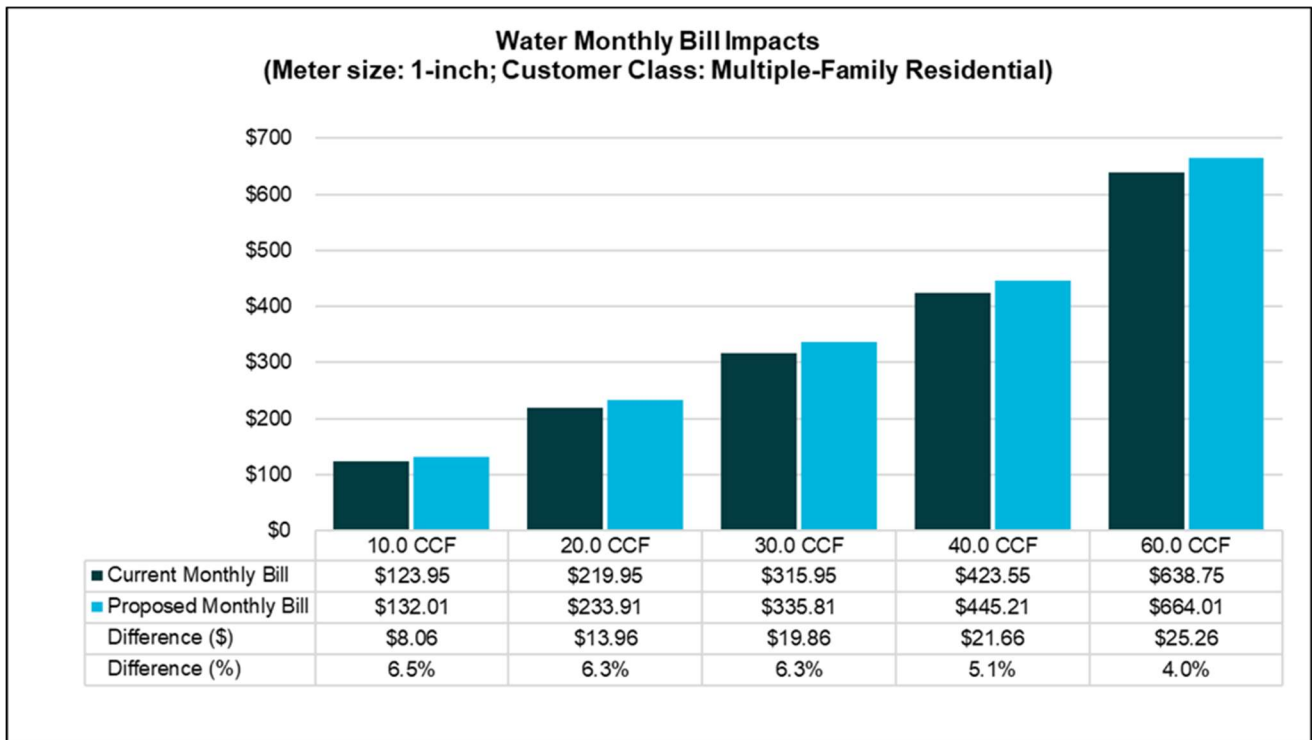
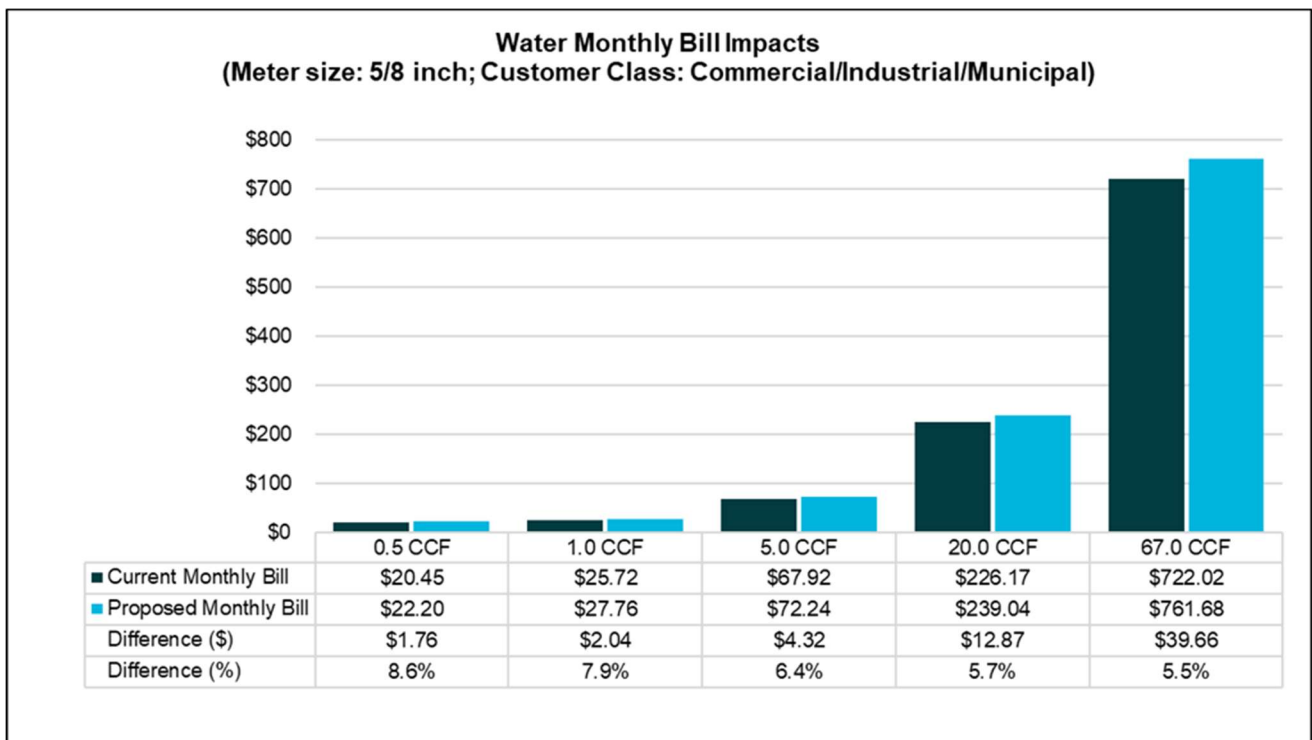


Figure 1-7: Sample Non-Residential Water Monthly Bill Impacts (FY 2024)



## 1.4. Retail Wastewater Rate Study Summary

### Existing Retail Wastewater Rates

The SFPUC's current wastewater rates for retail customers in FY 2023 have been in effect since July 1, 2021 and are shown in Table 1-4. The rates shown include:

- » A **Fixed Monthly Service Charge** that is the same for both residential and non-residential customers
- » **Variable Charges** per one hundred cubic feet (CCF) of discharge that vary based on whether the customer is residential or non-residential
- » **Chemical Oxygen Demand (COD)** per pound in one hundred cubic feet (CCF) of discharge that is charged to non-residential users. Residential users have this charge included in their volumetric charges
- » **Total Suspended Solids (TSS) Charges** per pound in one hundred cubic feet (CCF) of discharge that is charged to non-residential users. Residential users have this charge included in their volumetric charges
- » **Oil and Grease (OG) Charges** per pound in one hundred cubic feet (CCF) of discharge that is charged to non-residential users. Residential users have this charge included in their volumetric charges.

The SFPUC does not currently have separate stormwater rates other than a monthly service charge attributable to stormwater runoff for a small number of properties who do not have water and wastewater service agreements (Table 1-5). Therefore, the current sewer rates shown in Table 1-4 recover the cost of providing both wastewater and stormwater service for most accounts.

**Table 1-4: Current Wastewater Enterprise Rates**

Line	Customer Class	Current Rate
1	<b>Residential Wastewater</b>	
2	Monthly Service Charge	\$5.21
3	Volume per Discharge Unit (CCF)	\$15.97
4		
5	<b>Non-Residential Wastewater</b>	
6	Monthly Service Charge	\$5.21
7	Volume per Discharge Unit (CCF)	\$9.46
8	Chemical Oxygen Demand (COD)/lb	\$0.65
9	Total Suspended Solids (TSS)/lb	\$1.65
10	Oil and Grease (OG)/lb	\$1.66

**Table 1-5: Stormwater Runoff Rates for Customers without SFPUC Accounts**

Line	Stormwater Class	Current Rate
1	Low Runoff	\$22.16
2	Standard Runoff	\$36.31

### Proposed Wastewater Enterprise Financial Plan Overview

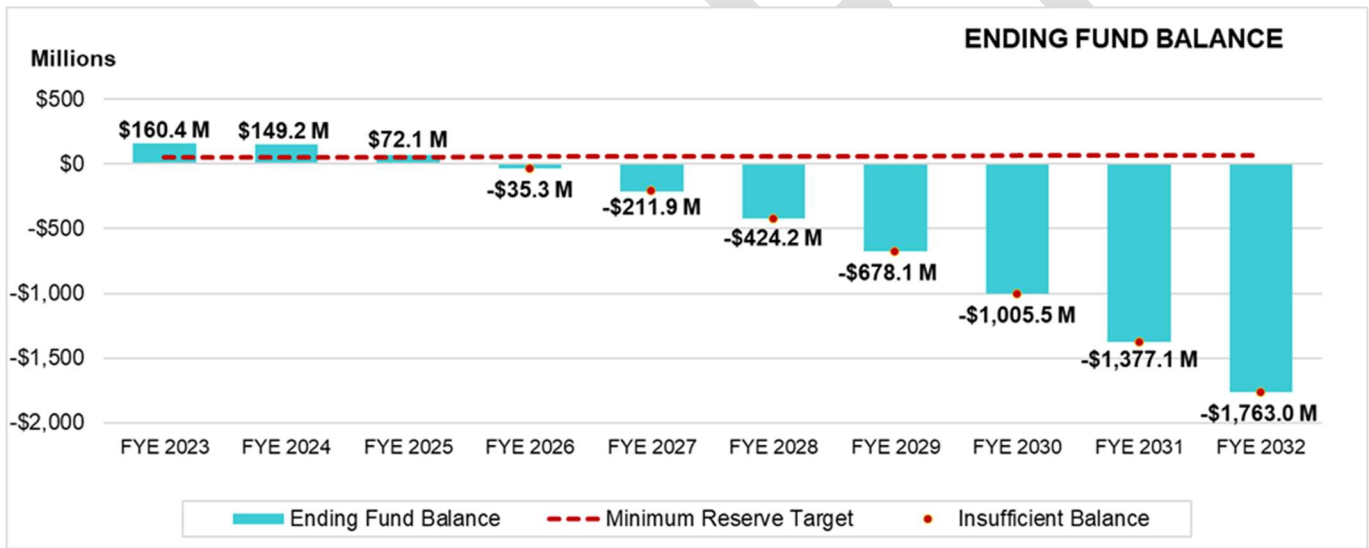
The MME and Raftelis team prepared a wastewater financial plan model in Microsoft Excel to project the SFPUC Wastewater Enterprise's revenues, expenses, cash flows, reserve balances, and debt coverage over a

multi-year period. Although proposed retail sewer rates developed in this study are for the next three fiscal years only (FY 2024 to FY 2026), the financial plan extends out ten fiscal years through FY 2032 to ensure that a longer-term planning horizon is accounted for in the rate-setting process. Note that the financial plan projections developed for this study correspond to, and are aligned with, the SFPUC staff’s own 10-year financial plan, which is updated on an annual basis as part of staff’s on-going financial management processes.

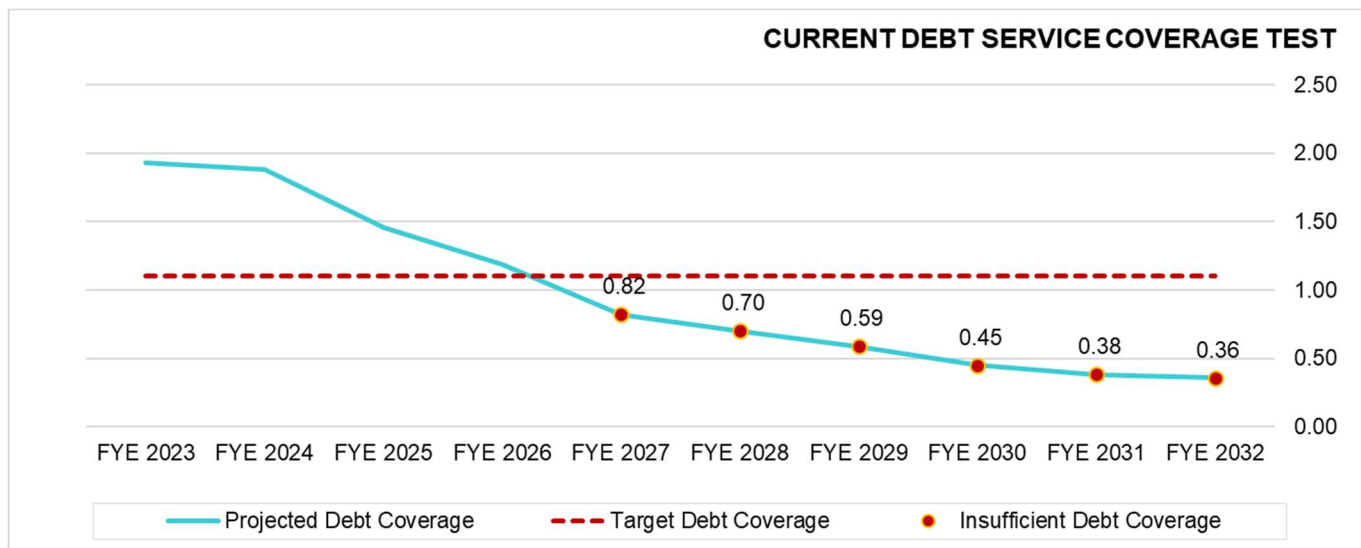
**Status Quo Wastewater Enterprise Financial Plan**

A status quo cash flow analysis was first conducted to evaluate whether existing retail water rates can adequately fund the Wastewater Enterprise’s various expenses over the next five years through FY 2028. This provided a baseline scenario from which to evaluate the need for any proposed rate increases. Under the status quo scenario (i.e., no rate increases over the next five years), the Wastewater Enterprise is projected to deplete its cash reserves by FY 2025 (Figure 1-8) and fail to meet its debt coverage requirements (per existing bond covenants) beginning in FY 2026 (Figure 1-9). This demonstrates the insufficiency of existing rates to support the Wastewater Enterprise’s financial needs over the next five years.

**Figure 1-8: Projected Reserve Balances under Status Quo Wastewater Enterprise Financial Plan**



**Figure 1-9: Projected Debt Coverage under Status Quo Wastewater Enterprise Financial Plan**



**Proposed Wastewater Enterprise Financial Plan**

SFPUC staff evaluated various revenue adjustment scenarios before arriving at the proposed and planned revenue adjustments (i.e., overall annual rate increases) shown below in Table 1-6. Nine percent revenue adjustments are proposed annually in FY 2024-FY 2026. Because this study developed proposed rates for the next three years only (FY 2024-FY 2026), the revenue adjustments shown in FY 2027 through FY 2032 are for planning purposes only and will be reevaluated as part of the next rate study. All revenue adjustments are assumed to become effective at the beginning of each fiscal year on the first of July.

**Table 1-6: Proposed Wastewater Enterprise Revenue Adjustments**

Line	Fiscal Year	Proposed Revenue Adjustment	Effective Date	Notes
1	FY 2024	9.0%	7/1/2023	Proposed
2	FY 2025	9.0%	7/1/2024	Proposed
3	FY 2026	9.0%	7/1/2025	Proposed
4	FY 2027	10.0%	7/1/2026	For Near-Term Planning Purposes Only
5	FY 2028	10.0%	7/1/2027	For Near-Term Planning Purposes Only
6	FY 2029	10.0%	7/1/2028	For Long-Term Planning Purposes Only
7	FY 2030	9.0%	7/1/2029	For Long-Term Planning Purposes Only
8	FY 2031	9.0%	7/1/2030	For Long-Term Planning Purposes Only
9	FY 2032	5.0%	7/1/2031	For Long-Term Planning Purposes Only

With the addition of revenue adjustments, the Wastewater Enterprise’s reserve balance (see Figure 1-10) is projected to meet the minimum required level (per the SFPUC’s Fund Balance Reserve Policy) each year through FY 2028. Debt coverage (see Figure 1-11) is projected to meet the SFPUC’s required level (per the SFPUC’s Debt Service Coverage Policy) in all years per the SFPUC’s bond covenants. The proposed financial plan demonstrates a five-year plan that generates sufficient revenue to support the Wastewater Enterprise’s financial needs and meet the SFPUC’s official financial policies.



Figure 1-10: Projected Reserve Balances under Proposed Wastewater Enterprise Financial Plan

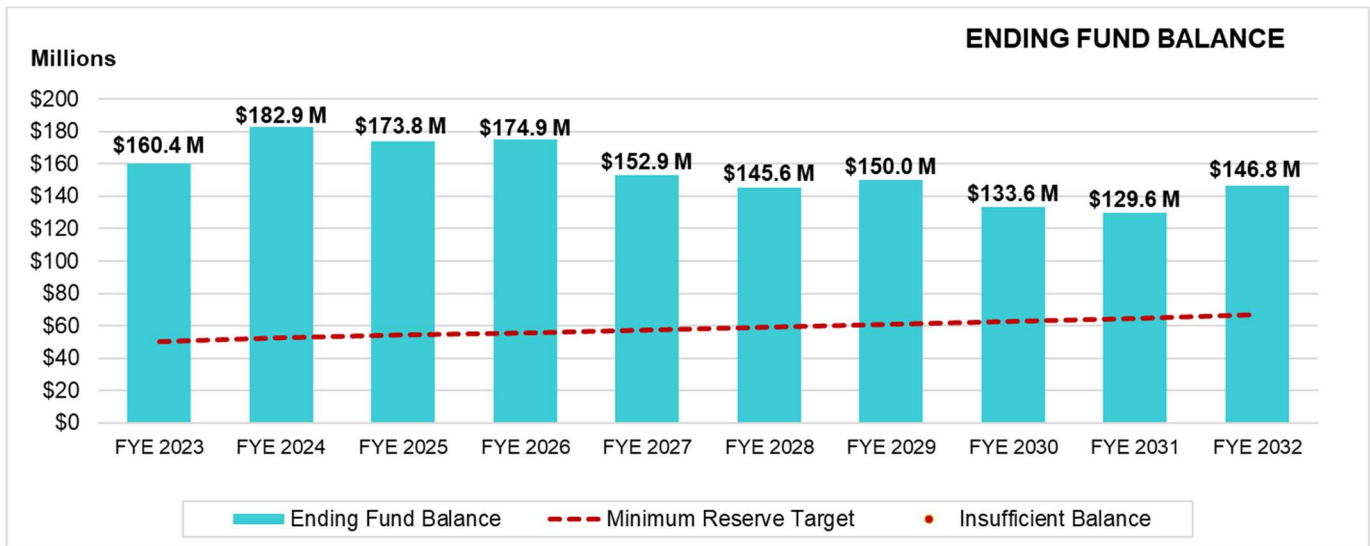
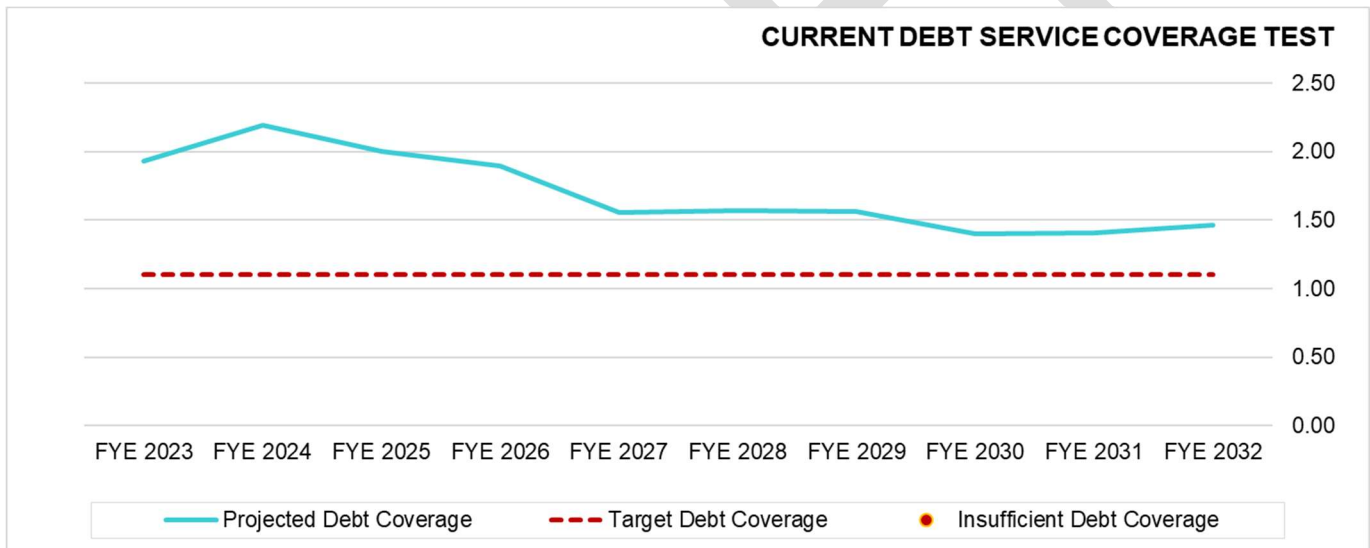


Figure 1-11: Projected Debt Coverage under Proposed Wastewater Enterprise Financial Plan



### Sewer Cost of Service Analysis

MME and Raftelis completed a sewer cost of service analysis for FY 2024 in accordance with industry-standard principles outlined by the Water Environment Federation’s *Manual of Practice No. 27, Financing and Charges for Wastewater Systems*. The cost of service analysis evaluates each customer class’s use of and burden on the sewer system, and then proportionally allocates the overall retail rate revenue requirement to each customer class.

As part of the cost of service analysis, separate FY 2024 cost of service estimates for the sanitary wastewater and stormwater components of the Wastewater Enterprise were developed. This will allow the SFPUC to implement stormwater service specific charges for FY 2024. Currently, stormwater-related costs are recovered as part of wastewater rates. Table 1-7 shows the overall FY 2024 Wastewater Enterprise cost of service of \$389,190,725. Wastewater costs represent 77.5% and stormwater costs represent 22.5% of the total.

**Table 1-7: FY 2024 Wastewater and Stormwater Cost of Service**

Line	Service	Total \$	% of Total
1	Wastewater	\$301,471,528	77.5%
2	Stormwater	\$87,719,197	22.5%
3	Total	\$389,190,725	100.0%

A comparison of the proposed FY 2024 wastewater cost of service to the current cost of service is shown in Table 1-8. In FY 2024, each wastewater customer class has a lower cost of service because stormwater costs are no longer included in the wastewater revenue requirement. Overall, there is a \$72,778,134 reduction in the FY 2024 cost of service for wastewater.

**Table 1-8: Comparison of Proposed and Current Wastewater Cost of Service (FY 2024)**

Line	Customer Class	(A)	(B)	(C)
		Proposed Cost of Service (\$)	Current Cost of Service (\$)	\$ Difference
1	Single Family Residential	\$83,747,552	\$103,329,788	(\$19,582,236)
2	Multifamily Residential	\$132,814,641	\$165,279,146	(\$32,464,505)
3	Municipal	\$6,696,852	\$8,342,234	(\$1,645,382)
4	Nonresidential/Commercial	\$77,426,304	\$96,379,418	(\$18,953,115)
5	Fire	\$761,610	\$891,175	(\$129,565)
6	Municipal Fire	\$24,568	\$27,900	(\$3,332)
7	<b>Total</b>	<b>\$301,471,528</b>	<b>\$374,249,662</b>	<b>(\$72,778,134)</b>

A comparison of the proportional share of each wastewater customer class contributes to the FY 2024 cost of service as compared to the current cost of service is shown in Table 1-9. Despite the large reduction in the overall FY 2024 wastewater revenue requirement due to the removal of stormwater costs, the proportionate share of costs for each customer class remains relatively unchanged.

**Table 1-9: Comparison of Proportional Share of Proposed and Current Cost of Service (FY 2024)**

Line	Customer Class	(A)	(B)	(C)	(D)
		Proposed Cost of Service (\$)	Current Cost of Service (\$)	Proposed Cost of Service (%)	Current Cost of Service (%)
1	Single Family Residential	\$83,747,552	\$103,329,788	27.78%	27.61%
2	Multifamily Residential	\$132,814,641	\$165,279,146	44.06%	44.16%
3	Municipal	\$6,696,852	\$8,342,234	2.22%	2.23%
4	Nonresidential/Commercial	\$77,426,304	\$96,379,418	25.68%	25.75%
5	Fire	\$761,610	\$891,175	0.25%	0.24%
6	Municipal Fire	\$24,568	\$27,900	0.01%	0.01%
7	<b>Total</b>	<b>\$301,471,528</b>	<b>\$374,249,662</b>	<b>100.00%</b>	<b>100.00%</b>

### Proposed Retail Wastewater Rates

The rates presented by MME and Raftelis in Section 8 of this report are designed to recover the FY 2024 wastewater revenue requirement of \$301,471,528 and the FY 2024 stormwater revenue requirement of \$87,719,197. The cost-of-service rates proposed by MME and Raftelis raised concerns on the part of the

SFPUC staff regarding the potential stormwater bill impacts for customers with parcels featuring large impermeable surface areas. At the request of the SFPUC staff, “phase-in” stormwater rates were calculated to move to full stormwater cost recovery in FY 2030. During the period FY 2024 – FY 2029, a portion of the annual stormwater revenue requirement will shift to (i.e., be included in) the annual wastewater revenue requirement. As a result, wastewater rates will continue to include, albeit on a decreasing level each year, a portion of stormwater-related costs. The phase-in wastewater rates requested by the SFPUC staff are shown in Table 1-10.

**Table 1-10: Phase-In Retail Wastewater Rate Schedule (FY 2024 – FY 2028)**

Line	Class	(A)	(B)	(C)	(D)	(E)	(F)
		Current (Since 7/1/2022)	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026	Planned FY 2027	Planned FY 2028
1	<b>Monthly Service Charge</b>	\$5.21	\$4.85	\$5.28	\$5.76	\$6.33	\$6.97
2							
3	<b>Residential Volumetric (per CCF)</b>	\$15.97	\$16.91	\$17.80	\$18.72	\$19.83	\$20.99
4							
5	<b>Nonresidential Volumetric</b>						
6	Discharge (CCF)	\$9.46	\$9.74	\$10.09	\$10.43	\$10.84	\$11.23
7	Chemical Oxygen Demand (lb/CCF)	\$0.65	\$0.86	\$0.93	\$0.99	\$1.08	\$1.17
8	Total Suspended Solids (lb/CCF)	\$1.65	\$1.68	\$1.81	\$1.94	\$2.11	\$2.29
9	Oil and Grease (lb/CCF)	\$1.66	\$1.05	\$1.14	\$1.24	\$1.36	\$1.49

### Proposed Stormwater Charges

Table 1-11 shows the SFPUC staff proposed phase-in stormwater rates for FY 2024 – FY 2028. These rates feature the new stormwater charge structure previously developed by SFPUC staff with the support of consultants in a prior engagement.

**Table 1-11: Phase-In Retail Stormwater Rate Schedule (FY 2024 – FY 2028)**

Line	Class	(A)	(B)	(C)	(D)	(D)	(D)
		Current (N/A)	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026	Planned FY 2027	Planned FY 2028
1	<b>Simplified Residential Tiered (SRT) Rate</b>						
2	SRT 1	N/A	\$2.31	\$5.04	\$8.24	\$12.08	\$16.61
3	SRT 2	N/A	\$3.60	\$7.84	\$12.82	\$18.80	\$25.85
4	SRT 3	N/A	\$5.41	\$11.79	\$19.27	\$28.26	\$38.86
5							
6	<b>Standard</b>						
7	Permeable (\$/KSF/Mo)	N/A	\$0.19	\$0.41	\$0.67	\$0.99	\$1.36
8	Impermeable (\$/KSF/Mo)	N/A	\$1.89	\$4.11	\$6.72	\$9.86	\$13.55

### Retail Sewer Bill Impacts

Figure 1-12 presents sample FY 2024 sewer bill impacts for Single Family Residential customers assuming a Simplified Residential Tier 2 customer. Figure 1-13 presents the FY 2024 impacts for multifamily apartments assuming the Standard stormwater rate for a medium sized apartment building with 43 sq ft of permeable area and 4,008 sq ft of impermeable area. Figure 1-14 shows the FY 2024 impacts for non-residential customers assuming the Standard stormwater rate, 22,974 square feet of permeable area, and 141,018 sq ft of impermeable. The bill impacts shown in each figure include the impact of proposed FY 2024 phase-in wastewater rates and stormwater charges.

Figure 1-12: FY 2024 Single Family Residential Bill Impacts by Usage Percentile

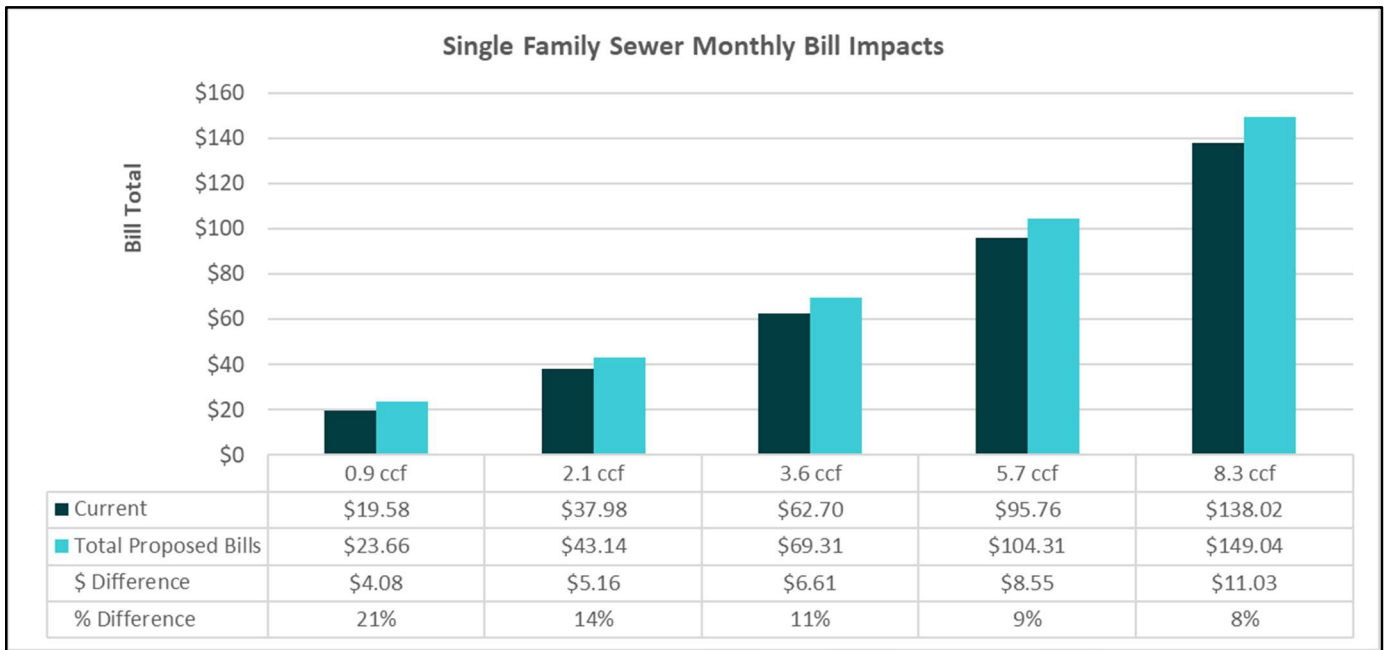


Figure 1-13: FY 2024 Multifamily Residential Bill Impacts by Usage Percentile

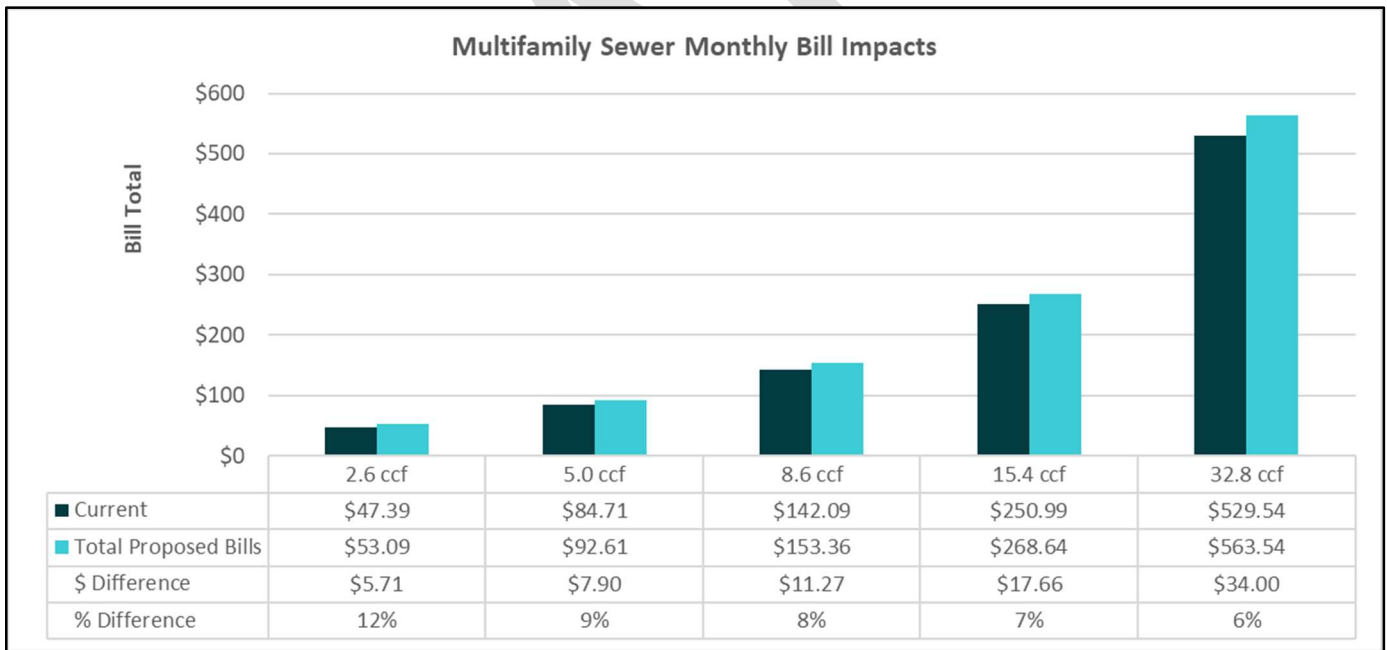
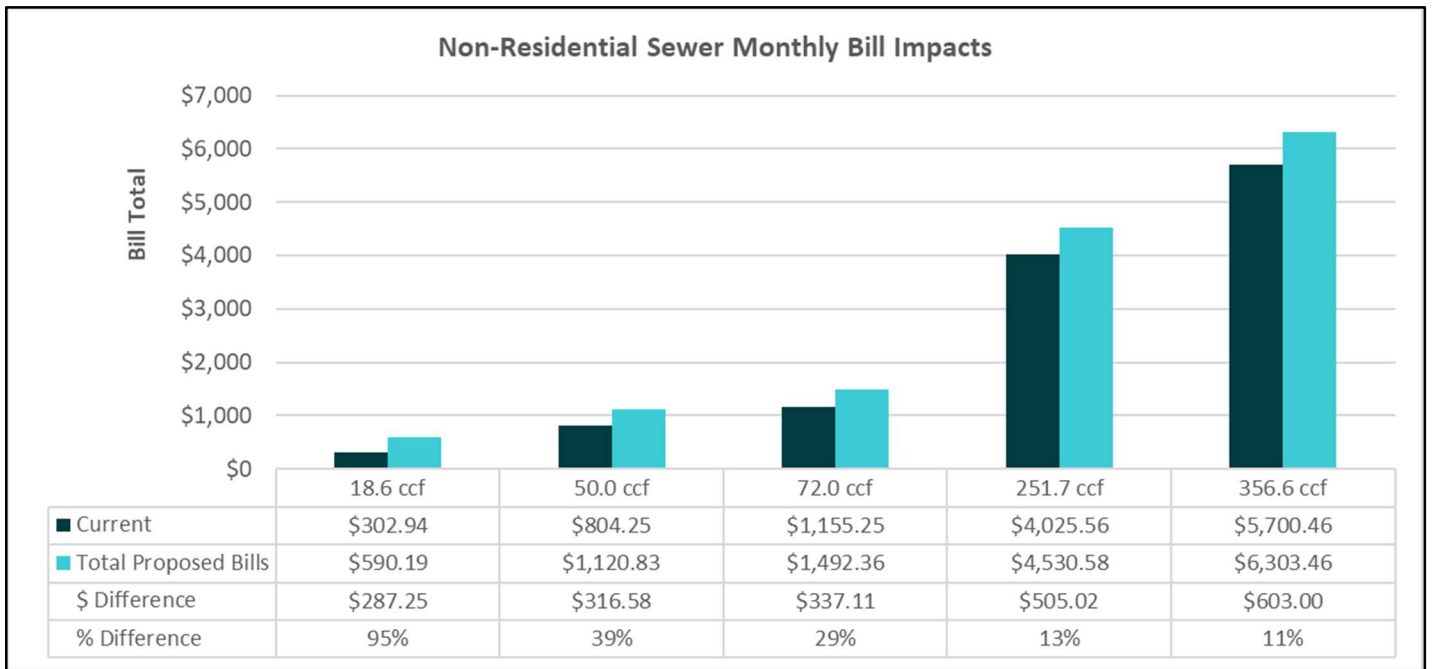


Figure 1-14: FY 2024 Non-Residential Residential Bill Impacts by Usage Percentile



DRAFT

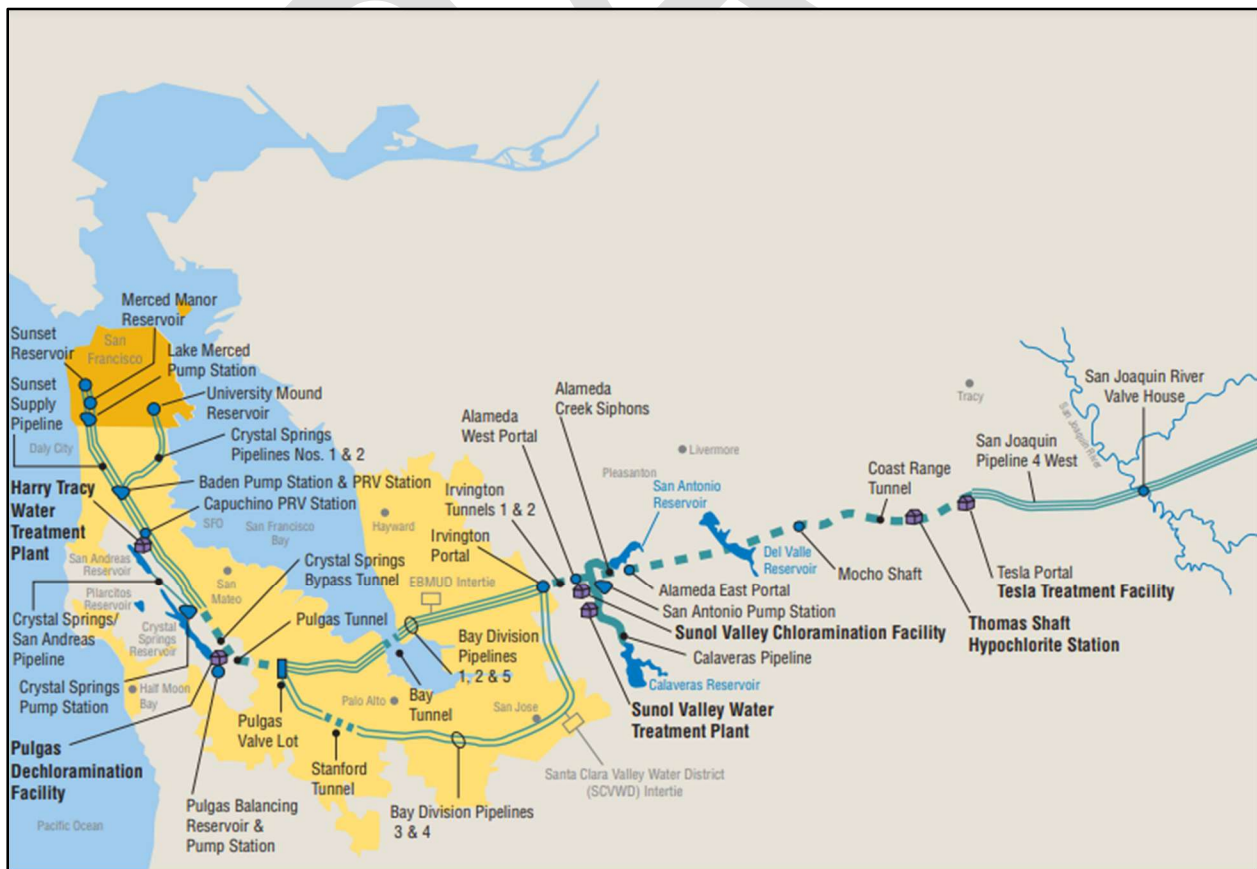
# 2. Introduction

The SFPUC is a public agency of the City and County of San Francisco that provides water, wastewater, and municipal power services to San Francisco. The SFPUC is responsible for the maintenance, operation, and development of three utility enterprises: the Water Enterprise, the Wastewater Enterprise, and the Power Enterprise. The SFPUC’s enterprises are operated and managed as separate financial entities with separate enterprise funds.

## 2.1. Water Enterprise Overview

The SFPUC is the largest water purveyor in Northern California, serving a population of nearly 2.7 million people in over 30 cities. Customers are divided into three categories: retail customers in the City and County of San Francisco, wholesale customer agencies on the San Francisco Peninsula, in the South Bay, and parts of the East Bay, and the retail customers outside of San Francisco. About one-third of the SFPUC’s water supply is served to retail customers, the remaining two-thirds is served to wholesale customers. Source water comes from three systems including 1) the Hetch Hetchy system (Hetch Hetchy, Lake Lloyd, and Lake Eleanor Reservoirs), 2) the Alameda Reservoirs (Calaveras and San Antonio), and 3) the Peninsula Reservoirs (Crystal Springs, Pilarcitos, and San Andreas) (Figure 2-1). The SFPUC delivers roughly 190 MGD of water, approximately 130 MGD to wholesale customers and 60 MGD to retail customers based on Fiscal Year (FY) 2022 flows.

Figure 2-1: Water System Overview

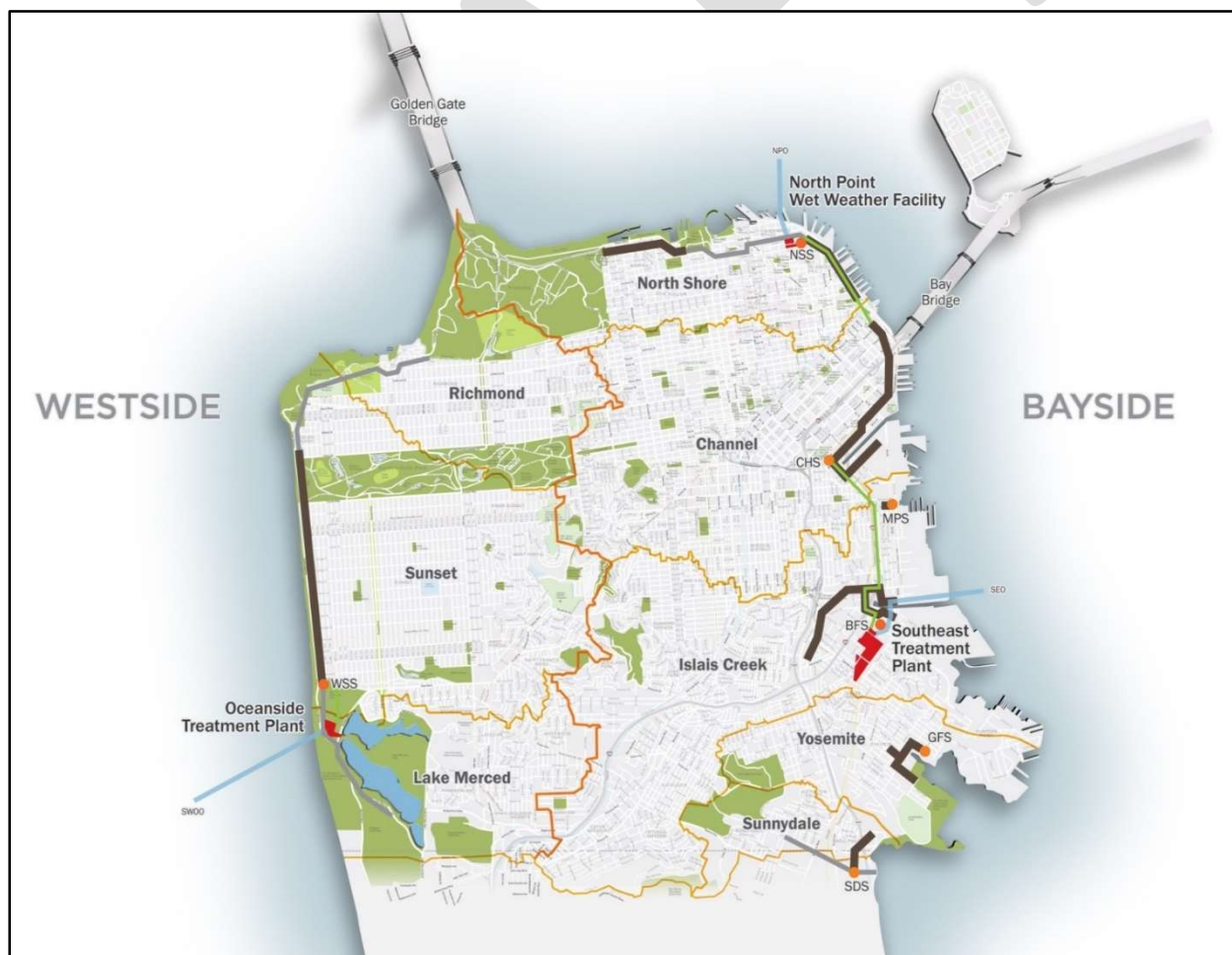


## 2.2. Wastewater Enterprise Overview

The Wastewater Enterprise provides wastewater and stormwater collection, treatment and disposal services for the City. The collection system consists of approximately 900 miles of sewer system lines throughout the City. The SFPUC treats both sanitary sewer and wet weather flows in its three water pollution control plants (Southeast Treatment Plant, Oceanside Treatment Plant, and the North Point Wet Weather Facility), which discharge effluent to the San Francisco Bay and Pacific Ocean (Figure 2-2). The combined sewer system reduces pollution in the San Francisco Bay and Pacific Ocean by managing wet weather flows, and urban runoff that would otherwise discharge to the Bay and Ocean untreated. Dry weather flows, including street runoff, receive full secondary treatment at either the Oceanside or Southeast wastewater treatment plants. Wet weather flows receive either secondary treatment at Oceanside or Southeast facilities, or primary treatment at the North Point wet weather facilities.

The collection system is a combined wastewater and stormwater system. Historically, customer wastewater rates have been collected to recover both the wastewater and stormwater incurred costs. In this analysis, stormwater rates have been bifurcated from wastewater rates. The SFPUC treats approximately 60 to 70 MGD during dry weather and 115 to 180 MGD during wet weather events.

Figure 2-2: Wastewater System Overview



## 2.3. Water and Wastewater Rate Study Overview

Section 8B.125 of the San Francisco Charter states that the SFPUC shall “retain an independent rate consultant to conduct rate and cost of service studies for each utility at least every five years.” The SFPUC last conducted a water and wastewater cost of service study in 2018, which established the basis for the SFPUC’s existing water and wastewater retail rates currently in effect in FY 2023.

The SFPUC engaged McGovern McDonald Engineers (MME) and Raftelis (sub-consultant to MME) in 2022 to conduct this water and wastewater cost of service study to establish a proposed three-year water and wastewater retail rate schedule for FY 2024-FY 2026. The major study objectives are to:

- Develop multi-year financial plans for the SFPUC’s Water Enterprise and Wastewater Enterprise that sufficiently fund operations and maintenance (O&M) expenses, debt service payments, and capital expenditures while adequately funding reserves and achieving debt coverage requirements.
- Conduct cost of service analyses that establish a clear nexus between the cost to serve retail water and wastewater customers and the rates charged to customers, per Proposition 218 and industry standards.
- Review the SFPUC’s existing retail water and wastewater rate structures to ensure that proposed rates achieve the financial and policy objectives of the agency.
- Develop and introduce a stormwater charge to recover costs associated with wet weather flows and treatment.
- Develop a three-year water, wastewater, and stormwater rate schedule for retail customers that are fair, equitable, and compliant with Proposition 218 requirements.

The study results are documented within this report. Note that proposed rates cannot be implemented until formally adopted by the SFPUC’s Commissioners after a public hearing. Proposition 218 requires that the SFPUC’s water and wastewater retail customers must be mailed a public hearing notice detailing any proposed rate changes no fewer than 45 days before the public hearing. The notice includes a customer’s right to protest the rate proposal. The SFPUC mailed out public hearing notices to customers on April 7, 2023 in advance of a public hearing scheduled for May 23, 2023.

## 2.4. Financial Policies

The study was informed by the following key financial policies adopted by the SFPUC. Each policy pertains to both the Water Enterprise and Wastewater Enterprise.

### Reserves

The SFPUC’s Fund Balance Reserve Policy states that operating and capital budgets will be proposed such that reserves total a minimum of 25% of annual O&M expenses (i.e., approximately 90 days of O&M expenses).

### Debt Coverage

The SFPUC’s Debt Service Coverage Policy states that budgets, rates, and financial plans shall be adopted such that “Indenture Coverage shall be at least 1.35x” and that “Current Coverage shall be at least 1.10x.” Note that debt coverage requirements per the SFPUC’s bond covenants are less stringent (1.25x for Indenture Coverage and 1.00x for Current Coverage). The two debt service coverage tests are calculated as follows:



$$\text{Indenture Coverage} = \frac{(\text{Annual Revenues} - \text{Operating Expenses}) + \text{Unappropriated Fund Balance}}{\text{Annual Debt Service}}$$

$$\text{Current Coverage} = \frac{(\text{Annual Revenues} - \text{Operating Expenses})}{\text{Annual Debt Service}}$$

DRAFT

# 3. Water Financial Plan

## 3.1. Overview of the Financial Planning Process

The primary goal of the financial planning process is to identify the total amount of retail water rate revenue required on an annual basis to support the Water Enterprise's financial needs. MME and Raftelis prepared a water utility financial plan model in Microsoft Excel to project the SFPUC Water Enterprise's revenues, expenses, cash flows, reserve balances, and debt coverage over a ten-year period from FY 2023 to FY 2032. However, financial plan projections presented in this section extend out through the next five fiscal years only (through FY 2028). Note that the water financial plan projections developed by MME and Raftelis for this study correspond to, and are aligned with, the SFPUC staff's own 10-year financial plan, which is updated on an annual basis as part of staff's on-going financial management processes.

The critical steps in developing a water utility financial plan include:

- **Projecting Billed Water Connections and Water Use (Demand Forecast)**: The demand forecast projects the "units of service" subject to each rate/charge, including the number of metered water connections, private fire service connections, and water use. Projections are based on factors such as customer account growth and projected changes in customer water demand patterns.
- **Projecting Retail Water Rate Revenues at Existing Rates**: This step in the financial planning process determines how much retail rate revenue will be generated annually if there are *no rate increases*. The level of rate revenues at existing rates is compared to projected expenditures to determine the annual funding shortfall that must be met by the appropriate combination of rate revenue increases or external debt financing.
- **Projecting Miscellaneous Non-Rate Revenue and Wholesale Water Rate Revenue**: Miscellaneous non-rate revenue items can include interest income from cash reserves, grants, capacity fee receipts, and miscellaneous ancillary fees. Miscellaneous non-rate revenues assist in closing the annual funding shortfall and reduce the revenue requirement from rates (i.e., the level of amount of rate revenue that must be earned from customers). Wholesale water rate revenue is also projected and incorporated into the financial plan.
- **Projecting Operating and Maintenance Expenses and Existing Debt Service**: This step in the financial planning process projects the O&M expenses that will be incurred to provide utility service as well as required debt service payments on existing debt obligations.
- **Determining a Capital Financing Strategy**: In many utilities, the key driver of the annual funding shortfall is projected CIP expenditures. In this step in the financial planning process, the utility determines the optimal mix of annual rate revenue increases and external debt financing to cover the funding shortfall. An outcome of this process is the identification of rate revenue funded CIP expenditures, required debt proceeds, and projected debt service costs.
- **Identifying Cash Reserve and Debt Service Coverage Targets**: Utilities must not only have sufficient revenues to pay for projected costs, but they must also maintain prudent cash reserves and meet both

contractually obligated and target debt service coverage requirements. The water revenue requirement from rates must include the cost of meeting both cash reserve and debt service coverage targets.

- **Determining Annual Revenue Requirement from Rates:** The final outcome of the financial planning process is the determination of the annual amount of rate revenue that must be recovered from customers to pay for all projected costs and meet financial targets.

## 3.2. Financial Plan Components

### Existing Retail Water Rates

The SFPUC's current water rates for retail customers in FY 2023 have been in effect since July 1, 2021 and were developed in the 2018 Water and Wastewater Cost of Service Study. Retail water customers are billed monthly and currently are subject to the following rates and charges described below (and shown in Table 3-1):

- » **Fixed Monthly Service Charges:** Each metered water connection is subject to a Fixed Monthly Service Charge based on meter size each monthly billing period. Larger meter sizes are subject to higher charges because larger meters burden the water system with greater capacity-related and maintenance-related costs.
- » **Private Fire Service Fixed Monthly Service Charges:** Each dedicated private fire service connection<sup>5</sup> is subject to a Fire Service Fixed Monthly Service Charge based on service size each monthly billing period. Larger service sizes are subject to higher charges because larger services burden the water system with greater capacity-related costs.
- » **Variable Charges:** Variable Charges are assessed per one hundred cubic feet (CCF) of water delivered within a monthly billing period. Residential Variable Charges are based on an inclining two-tier rate structure. Single Family Residential customers are charged at a lower rate for the first four CCF per month and a higher rate for all additional water use. Multiple-Family Residential customers are charged at a lower rate for the first three CCF per dwelling unit per month and a higher rate for all additional water use. Non-residential potable water customers are subject to a uniform rate per CCF for all usage. Non-potable customers receiving untreated water service are subject to a different uniform rate per CCF that excludes treatment and other potable-specific costs.
- » **Drought Surcharges:** Drought Surcharges are effective only when the Commission adopts a resolution declaring Stage 1, Stage 2, or Stage 3 of the Retail Water Shortage Allocation Plan is in effect. Drought Surcharges are assessed as a percentage of Variable Charges and are based on a formula designed to recover the retail revenue shortfall due to reduced water sales during drought. Current surcharges are limited to up to 10% for Stage 1, up to 20% for Stage 2, and up to 25%. Stage 1 Surcharges of 5% are currently in effect as of FY 2023.

---

<sup>5</sup> Private fire service connections include fire sprinkler systems, standpipes, and other private fire services.

Table 3-1: Existing Retail Water Rates

Line	Retail Water Rates	Current Rates (effective 7/1/2021)
1	<b>Fixed Monthly Service Charges (by Meter Size)</b>	
2	5/8 inch	\$15.17
3	3/4 inch	\$19.43
4	1-inch	\$27.95
5	1-1/2 inch	\$49.25
6	2-inch	\$74.81
7	3-inch	\$142.97
8	4-inch	\$219.65
9	6-inch	\$432.65
10	8-inch	\$688.25
11	10-inch	\$1,071.65
12	12-inch	\$1,838.45
13	16-inch	\$3,201.65
14		
15	<b>Private Fire Fixed Monthly Service Charges (by Service Size)</b>	
16	1-inch	\$9.55
17	1-1/2 inch	\$12.45
18	2-inch	\$15.93
19	3-inch	\$25.21
20	4-inch	\$35.65
21	6-inch	\$64.65
22	8-inch	\$99.45
23	10-inch	\$151.65
24	12-inch	\$256.05
25		
26	<b>Variable Charges (per CCF)</b>	
27	<u>Single-Family Residential</u>	
28	First 4 Units per Month	\$9.60
29	All Additional Units	\$10.71
30		
31	<u>Multiple-Family Residential</u>	
32	First 3 Units per Dwelling Unit per Month	\$9.60
33	All Additional Units	\$10.76
34		
35	<u>Commercial, Industrial, and General Uses</u>	
36	For All Units of Water	\$10.55
37		
38	<u>Untreated Water Service</u>	
39	For All Units of Water	\$0.95
40		
41	<b>Drought Surcharges (for Stage 1 Drought)</b>	
42	Effective Drought Surcharge (% of Variable Charges)	5.0%

## Projected Water Units of Service

Projected units of service include the number of metered water connections by meter size (Table 3-2), private fire connections by service size (Table 3-3), and water use in CCF by customer class (Table 3-4). The number of metered water connections and private fire service connections is estimated from detailed account-level monthly billing data for FY 2022. As the service area is largely built out, the majority of growth is assumed to be redevelopment resulting in no net gain in service connections. Therefore, no change in the number of accounts or connections is assumed through FY 2028. Projected water demand by customer class is based on detailed demand forecasts incorporated into SFPUC staff's 10-Year Financial Plan model. SFPUC staff's detailed water demand forecast is based on assumptions regarding population change, job growth, price elasticity (with respect to water rates), conservation trends, and changes in customer water use characteristics. Water demand is projected to increase by approximately 1.1% per year on average through FY 2028 relative to FY 2022 water demand, although demand does fluctuate from year to year. Overall demand is projected to decrease in FY 2024 due to reductions in wholesale water use and FY 2027 due to reductions in retail water use, for example.

**Table 3-2: Projected Metered Water Connections**

Line	Number of Water Meters (FY 2023-FY 2028)	In-City Retail Paying (excl. Treasure Island)	Suburban Retail Paying	Other*	Total
1	<b>Water Meter Size</b>				
2	5/8 inch	125,811	181	12	126,004
3	3/4 inch	18,310	32	2	18,344
4	1-inch	11,670	24	15	11,709
5	1-1/2 inch	5,480	13	9	5,502
6	2-inch	7,423	30	48	7,501
7	3-inch	676	1	1	678
8	4-inch	456	3	28	487
9	6-inch	249	16	33	298
10	8-inch	16	0	17	33
11	10-inch	2	6	18	26
12	12-inch	0	0	0	0
13	16-inch	1	0	1	2
14	<b>Total Water Meters</b>	<b>170,094</b>	<b>306</b>	<b>184</b>	<b>170,584</b>

\*Other includes Treasure Island, Non-Paying Municipal, Recycled Water, Upcountry/Hetch Hetchy, & Wholesale Water Meters

**Table 3-3: Projected Private Fire Service Connections**

Line	Number of Private Fire Service Connections (FY 2023-FY 2028)	In-City Retail	Suburban Retail	Total
1	<b>Connection Size</b>			
2	1-inch	186	0	<b>186</b>
3	1-1/2 inch	33	0	<b>33</b>
4	2-inch	3,899	3	<b>3,902</b>
5	3-inch	155	0	<b>155</b>
6	4-inch	3,471	5	<b>3,476</b>
7	6-inch	1,640	1	<b>1,641</b>
8	8-inch	710	5	<b>715</b>
9	10-inch	6	1	<b>7</b>
10	12-inch	23	0	<b>23</b>
11	<b>Total Private Fire Service Connections</b>	<b>10,123</b>	<b>15</b>	<b>10,138</b>

DRAFT

Table 3-4: Projected Water Use

Line	Projected Water Use (CCF)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	<b>Water Use - In-City Retail Paying</b>						
2	<b>Single Family Residential</b>						
3	First 4 Units per Month	3,981,233	3,908,473	3,966,386	4,035,732	3,996,905	3,971,835
4	All Additional Units	2,380,659	2,337,150	2,371,781	2,413,247	2,390,030	2,375,039
5	<b>Subtotal</b>	<b>6,361,892</b>	<b>6,245,622</b>	<b>6,338,167</b>	<b>6,448,980</b>	<b>6,386,935</b>	<b>6,346,874</b>
6							
7	<b>Multi-Family Residential</b>						
8	First 3 Units per Dwelling Unit per Month	6,886,851	6,760,988	6,861,168	6,981,126	6,913,961	6,870,594
9	All Additional Units	3,880,179	3,809,265	3,865,708	3,933,294	3,895,452	3,871,019
10	<b>Subtotal</b>	<b>10,767,030</b>	<b>10,570,253</b>	<b>10,726,877</b>	<b>10,914,420</b>	<b>10,809,413</b>	<b>10,741,614</b>
11							
12	<b>Non-Residential</b>						
13	In-City Retail - Residential Fire Service	8,498	8,342	8,466	8,614	8,531	8,478
14	In-City Retail - Residential Irrigation	154,470	151,647	153,894	156,585	155,079	154,106
15	In-City Retail - Municipal	708,272	743,672	759,368	777,402	761,577	748,792
16	In-City Retail - Municipal Fire Service	539	565	577	591	579	569
17	In-City Retail - Municipal Irrigation	456,746	479,574	489,696	501,326	491,121	482,876
18	In-City Retail - Commercial/Industrial	6,176,772	6,787,340	6,867,225	6,966,309	6,877,133	6,812,593
19	In-City Retail - Docks & Shipping Supply	3,572	3,925	3,971	4,028	3,977	3,939
20	In-City Retail - Builders & Contractors	89,740	98,610	99,771	101,211	99,915	98,977
21	In-City Retail - Non-Residential Fire Service	20,061	22,044	22,303	22,625	22,336	22,126
22	In-City Retail - Non-Residential Irrigation	185,485	203,820	206,219	209,194	206,516	204,578
23	In-City Retail - Treasure Island	159,085	165,930	167,682	170,358	168,448	167,591
24	<b>Subtotal</b>	<b>7,963,239</b>	<b>8,665,470</b>	<b>8,779,174</b>	<b>8,918,244</b>	<b>8,795,211</b>	<b>8,704,626</b>
25							
26	<b>Total In-City Retail Paying Water Use</b>	<b>25,092,161</b>	<b>25,481,346</b>	<b>25,844,218</b>	<b>26,281,643</b>	<b>25,991,559</b>	<b>25,793,114</b>
27							
28	<b>Water Use - Suburban Retail Paying</b>						
29	<b>Single Family Residential</b>						
30	First 4 Units per Month	5,268	5,172	5,249	5,340	5,289	5,256
31	All Additional Units	25,491	25,026	25,396	25,840	25,592	25,431
32	<b>Subtotal</b>	<b>30,760</b>	<b>30,198</b>	<b>30,645</b>	<b>31,181</b>	<b>30,881</b>	<b>30,687</b>
33							
34	<b>Non-Residential</b>						
35	Municipal	25,329	26,595	27,157	27,801	27,235	26,778
36	Commercial/Industrial	1,032,752	1,134,838	1,148,195	1,164,762	1,149,852	1,139,061
37	<i>Subject to Contract Rates</i>	142,485	143,395	143,514	143,662	143,529	143,433
38	<i>All Other</i>	890,267	991,443	1,004,681	1,021,100	1,006,323	995,628
39	Fire Service	50	55	55	56	55	55
40	Irrigation	274,680	301,832	305,385	309,791	305,825	302,955
41	<i>Subject to Contract Rates</i>	15,353	16,870	17,069	17,315	17,093	16,933
42	<i>All Other</i>	259,328	284,962	288,316	292,476	288,732	286,022
43	Untreated Water	141,383	155,358	157,187	159,455	157,414	155,936
44	Recycled Water	34,894	38,343	38,795	39,355	38,851	38,486
45	<b>Subtotal</b>	<b>1,509,088</b>	<b>1,657,022</b>	<b>1,676,773</b>	<b>1,701,220</b>	<b>1,679,232</b>	<b>1,663,271</b>
46							
47	<b>Total Suburban Retail Paying Water Use</b>	<b>1,539,848</b>	<b>1,687,220</b>	<b>1,707,418</b>	<b>1,732,400</b>	<b>1,710,113</b>	<b>1,693,959</b>
48							
49	<b>Water Use - Other</b>						
50	Non-Paying (inc. In-City Water Loss)	2,520,174	2,574,312	2,611,439	2,656,110	2,625,354	2,603,919
51	Upcountry/Hetch Hetchy	368,319	390,976	395,929	401,999	397,231	393,870
52	Wholesale	60,509,507	59,663,244	61,586,672	66,333,170	66,532,170	66,914,046
53	<b>Total Other Water Use</b>	<b>63,398,000</b>	<b>62,628,532</b>	<b>64,594,040</b>	<b>69,391,279</b>	<b>69,554,755</b>	<b>69,911,835</b>
54							
55	<b>TOTAL WATER USE (CCF)</b>	<b>90,030,008</b>	<b>89,797,098</b>	<b>92,145,676</b>	<b>97,405,323</b>	<b>97,256,427</b>	<b>97,398,908</b>
56	<i>Total Water Use (AF)</i>	<i>206,680</i>	<i>206,146</i>	<i>211,537</i>	<i>223,612</i>	<i>223,270</i>	<i>223,597</i>

## Water Enterprise Revenues at Existing Rates

Retail water rate revenues from Fixed Monthly Service Charges, Fire Service Fixed Monthly Service Charges Variable Charges, and Drought Surcharges were projected for FY 2023 to FY 2028 based on existing rates and projected units of service (Table 3-5). Annual revenue from Fixed Monthly Service Charges and Fire Service Fixed Monthly Service Charges was calculated by multiplying the existing charge (from Table 3-1) by the number of connections for each meter size (from Table 3-2) and service size (from Table 3-3) by twelve monthly billing periods per year. Annual Variable Charge revenue was calculated by multiplying the current charge per CCF (from Table 3-1) by projected annual use in CCF (from Table 3-4).

Drought Surcharge revenue was calculated by multiplying projected Variable Charge revenue from potable retail customers by 5% in FY 2023 and FY 2024 only, under the assumption that no drought stage (and accompanying Drought Surcharges) will be in effect beginning in FY 2025 through FY 2028.<sup>6</sup> Note that a small number of suburban retail customers are subject to unique water rates based on historic contracts with the SFPUC rather than the adopted rates in Table 3-1. The retail water rate revenue projections in Table 3-5 include adjustments to account for the unique rates paid by customers with contracts.

**Table 3-5: Projected Water Enterprise Rate Revenue at Existing Rates**

Line	Retail Water Rate Revenues	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	<b><u>In-City Retail (excl. Treasure Island)</u></b>						
2	Fixed Monthly Service Charges	\$44,839,107	\$44,839,107	\$44,839,107	\$44,839,107	\$44,839,107	\$44,839,107
3	Private Fire Fixed Monthly Service Charges	\$4,502,806	\$4,502,806	\$4,502,806	\$4,502,806	\$4,502,806	\$4,502,806
4	Variable Charges	\$253,915,013	\$258,115,540	\$261,792,557	\$266,220,158	\$263,268,950	\$261,241,880
5	Drought Surcharges	\$12,695,751	\$12,905,777	\$0	\$0	\$0	\$0
6	<b>Subtotal</b>	<b>\$315,952,677</b>	<b>\$320,363,230</b>	<b>\$311,134,470</b>	<b>\$315,562,071</b>	<b>\$312,610,863</b>	<b>\$310,583,793</b>
7							
8	<b><u>Suburban Retail</u></b>						
9	Fixed Monthly Service Charges	\$252,925	\$252,925	\$252,925	\$252,925	\$252,925	\$252,925
10	Private Fire Fixed Monthly Service Charges	\$11,274	\$11,274	\$11,274	\$11,274	\$11,274	\$11,274
11	Variable Charges	\$13,361,496	\$14,772,588	\$14,956,929	\$15,176,584	\$14,978,000	\$14,826,008
12	Drought Surcharges	\$636,912	\$704,272	\$0	\$0	\$0	\$0
13	<b>Subtotal</b>	<b>\$14,262,607</b>	<b>\$15,741,059</b>	<b>\$15,221,128</b>	<b>\$15,440,783</b>	<b>\$15,242,199</b>	<b>\$15,090,208</b>
14							
15	<b>Total</b>	<b>\$330,215,284</b>	<b>\$336,104,288</b>	<b>\$326,355,598</b>	<b>\$331,002,855</b>	<b>\$327,853,063</b>	<b>\$325,674,000</b>

In addition to revenues produced by retail water rates, the Water Enterprise receives revenues from different sources including wholesale water sales, interest income, miscellaneous one-time charges, and others. These other revenues were projected annually through FY 2028 (Table 3-7). Other revenues including Customer Assistance Program (CAP) Use of Revenues,<sup>7</sup> Wholesale Water Sales, Federal Bond Interest Subsidy, Power Enterprise State Revolving Fund (SRF) Loan Reimbursement, Programmatic Revenues (which include retail water rate revenue from the Treasure Island Development Authority and other revenues associated with the SFPUC's headquarters building at 525 Golden Gate Avenue), and Capacity Fees are based on detailed

<sup>6</sup> At the time the financial plan analysis was completed, it was anticipated that Drought Surcharges would remain in effect through FY 2024. However, SFPUC staff is now recommending that Drought Surcharges be deactivated in FY 2024, due to significant recent improvement in drought conditions as of April 2023. SFPUC staff conducted a sensitivity analysis indicating that the Water Enterprise will continue to be able to meet its goals and financial obligations, even with the removal of Drought Surcharges in FY 2024.

<sup>7</sup> CAP use of revenues represents the use of Water Enterprise lease and rental income anticipated to offset bill adjustments to customers enrolled in SFPUC's Customer Assistance Program. It is included in the financial plan as a negative revenue rather than an operating expense.



projections from SFPUC staff's 10-Year Financial Plan model. Rental Income, Water Service Installation Charges, and Other Non-Operating Revenue are based on the adopted budget in FY 2023 and FY 2024 and escalated annually thereafter based on SFPUC staff's forecasted changes in the Consumer Price Index (Table 3-6). Interest earnings are based on the adopted budget in FY 2023 and FY 2024 and projected thereafter by multiplying the assumed annual interest rate on cash reserves (Table 3-6) by the average of the beginning and ending projected Water Enterprise reserve balance each year.

**Table 3-6: Assumptions for Water Enterprise Other Revenues**

Line	Revenue Type	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	<b>Revenue Escalation</b>						
2	Consumer Price Index	<i>Budget</i>	<i>Budget</i>	2.71%	2.56%	2.56%	2.56%
4							
4	<b>Interest Earnings on Cash Reserves</b>						
5	Annual Interest Rate	<i>Budget</i>	<i>Budget</i>	0.50%	0.50%	0.50%	0.65%

**Table 3-7: Projected Water Enterprise Other Revenue**

Line	Other Revenues	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	CAP Use of Revenues	(\$1,245,932)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)
2	Wholesale Water Sales	\$289,598,379	\$316,979,387	\$326,505,882	\$341,633,834	\$342,654,481	\$364,404,777
3	Interest Income	\$1,109,000	\$1,133,000	\$1,300,644	\$1,186,491	\$1,086,925	\$1,378,470
4	Rental Income	\$13,136,000	\$13,595,800	\$13,964,246	\$14,321,731	\$14,688,367	\$15,064,389
5	Federal Bond Interest Subsidy	\$21,289,804	\$21,317,856	\$21,184,845	\$20,849,738	\$20,536,693	\$20,098,912
6	Other Misc Income	\$12,429,431	\$13,067,577	\$13,596,883	\$14,021,344	\$14,486,674	\$14,917,017
7	Water Service Installation Charge	\$7,373,000	\$7,596,000	\$7,801,852	\$8,001,579	\$8,206,419	\$8,416,504
8	Other Non-Operating Revenue	\$5,056,431	\$5,218,230	\$5,359,644	\$5,496,851	\$5,637,570	\$5,781,892
9	Power Enterprise SRF Loan Reimb.	\$0	\$253,347	\$435,388	\$522,914	\$642,684	\$718,621
10	Programmatic Revenues	\$7,156,000	\$7,158,000	\$7,277,000	\$7,202,000	\$7,223,000	\$7,234,000
11	Treasure Island Utilities Revenue	\$1,350,000	\$1,350,000	\$1,437,000	\$1,534,000	\$1,593,000	\$1,644,000
12	525 Golden Gate - O&M	\$1,211,000	\$1,248,000	\$1,248,000	\$1,248,000	\$1,285,000	\$1,324,000
13	525 Golden Gate - Lease Payment	\$2,650,000	\$2,650,000	\$2,650,000	\$2,650,000	\$2,650,000	\$2,650,000
14	525 Golden Gate COPS Bond Interest Subsidy	\$1,945,000	\$1,910,000	\$1,942,000	\$1,770,000	\$1,695,000	\$1,616,000
15	Capacity Fees	\$1,520,000	\$1,997,000	\$2,061,000	\$1,520,000	\$1,580,000	\$1,644,000
16	<b>Total</b>	<b>\$344,992,683</b>	<b>\$368,248,620</b>	<b>\$378,890,501</b>	<b>\$393,735,139</b>	<b>\$395,256,140</b>	<b>\$417,741,565</b>

## Water Enterprise O&M Expenses

The Water Enterprise's O&M expenses primarily consist of personnel costs, administrative overhead costs, and other operating costs associated with water production, treatment, and delivery. Programmatic Expenses<sup>8</sup> are also considered part of the Water Enterprise's O&M expenses. O&M expense projections are based on the FY 2023 and FY 2024 adopted budgets and take into account both annual inflationary and execution factor assumptions.

Before accounting for execution factors, budgeted O&M expenses in FY 2024 were increased annually by inflationary assumptions (from Table 3-8) to establish preliminary O&M projections through FY 2028 (Table 3-9, Lines 1-11). All inflationary assumptions are consistent with the SFPUC staff's 10-Year Financial Plan model. Benefits inflation is based on the City and County of San Francisco's Proposed Five-Year Financial Plan for FY 2022 through FY 2026.

<sup>8</sup> Programmatic expenses include expenses associated with the SFPUC's headquarters building at 525 Golden Gate Avenue, a drought response program, a neighborhood stewardship program, Treasure Island maintenance, and other expenses associated with specific programs.

SFPUC staff conducted an analysis of actual versus budgeted Water Enterprise O&M expenses in prior years, which provided the basis for execution factor assumptions (Table 3-9, Lines 13-22). Execution factors represent the percentage of budgeted expenses actually incurred each year. Adjusted O&M expense projections (Table 3-9, Lines 24-34) were calculated by multiplying the preliminary O&M expense projections by the corresponding execution factors. Financial plan projections presented in the following sections incorporate the adjusted O&M expense projections, inclusive of execution factors.

**Table 3-8: Inflationary Assumptions for Water Enterprise O&M Expenses**

Line	Inflationary Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	General	Budget	Budget	3.00%	3.00%	3.00%	3.00%
2	Salary	Budget	Budget	3.00%	3.00%	3.00%	3.00%
3	Benefits	Budget	Budget	4.42%	4.42%	4.42%	4.42%

**Table 3-9: Projected Water Enterprise O&M Expenses**

Line	O&M Expense Summary	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	<b>O&amp;M Expenses (excl. Execution Factors)</b>						
2	Personnel	\$114,521,247	\$116,940,812	\$120,936,111	\$125,072,809	\$129,356,099	\$133,791,373
3	Other Non-Personnel Services	\$21,802,517	\$21,554,576	\$22,201,213	\$22,867,250	\$23,553,267	\$24,259,865
4	Materials, Supplies & Equipment	\$20,185,324	\$20,415,984	\$21,028,464	\$21,659,317	\$22,309,097	\$22,978,370
5	Services of SFPUC Bureaus	\$63,140,408	\$64,047,698	\$65,969,129	\$67,948,203	\$69,986,649	\$72,086,248
6	Services of Other Departments	\$26,469,977	\$27,510,078	\$28,241,518	\$29,077,688	\$29,938,942	\$30,826,035
7	Hetch Hetchy Assessment	\$49,636,000	\$46,032,000	\$49,477,000	\$51,029,000	\$52,585,000	\$53,965,000
8	Other Operating Expenses	\$2,613,236	\$2,613,236	\$2,690,682	\$2,770,451	\$2,852,613	\$2,937,240
9	Work Orders	\$515,000	\$2,265,000	\$2,332,950	\$2,402,939	\$2,475,027	\$2,549,277
10	Programmatic Expenses	\$33,863,389	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186
11	<b>Total</b>	<b>\$332,747,098</b>	<b>\$334,645,570</b>	<b>\$346,143,253</b>	<b>\$356,093,842</b>	<b>\$366,322,880</b>	<b>\$376,659,595</b>
12							
13	<b>Execution Factors</b>						
14	Personnel	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%
15	Other Non-Personnel Services	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
16	Materials, Supplies & Equipment	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
17	Services of SFPUC Bureaus	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
18	Services of Other Departments	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
19	Hetch Hetchy Assessment	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
20	Other Operating Expenses	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
21	Work Orders	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
22	Programmatic Expenses	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
23							
24	<b>O&amp;M Expenses (incl. Execution Factors)</b>						
25	Personnel	\$112,230,822	\$114,601,996	\$118,517,389	\$122,571,352	\$126,768,977	\$131,115,546
26	Other Non-Personnel Services	\$20,712,391	\$20,476,847	\$21,091,153	\$21,723,887	\$22,375,604	\$23,046,872
27	Materials, Supplies & Equipment	\$19,176,058	\$19,395,185	\$19,977,040	\$20,576,352	\$21,193,642	\$21,829,451
28	Services of SFPUC Bureaus	\$63,140,408	\$64,047,698	\$65,969,129	\$67,948,203	\$69,986,649	\$72,086,248
29	Services of Other Departments	\$26,469,977	\$27,510,078	\$28,241,518	\$29,077,688	\$29,938,942	\$30,826,035
30	Hetch Hetchy Assessment	\$49,636,000	\$46,032,000	\$49,477,000	\$51,029,000	\$52,585,000	\$53,965,000
31	Other Operating Expenses	\$1,306,618	\$1,306,618	\$1,345,341	\$1,385,225	\$1,426,306	\$1,468,620
32	Work Orders	\$489,250	\$2,151,750	\$2,216,303	\$2,282,792	\$2,351,275	\$2,421,814
33	Programmatic Expenses	\$33,863,389	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186
34	<b>Total</b>	<b>\$327,024,913</b>	<b>\$328,788,358</b>	<b>\$340,101,058</b>	<b>\$349,860,685</b>	<b>\$359,892,582</b>	<b>\$370,025,772</b>
35							
36	<b>Overall Execution Factor</b>	<b>98.3%</b>	<b>98.2%</b>	<b>98.3%</b>	<b>98.2%</b>	<b>98.2%</b>	<b>98.2%</b>

### Water Enterprise Debt Service

Table 3-10 shows existing and proposed Water Enterprise debt service through FY 2028. The Water Enterprise’s existing debt service includes principal and interest payments associated with outstanding revenue bonds and State Revolving Fund (SRF) Loans. Proposed debt service projections are based on

detailed projections from SFPUC staff's 10-Year Financial Plan model and are associated with planned revenue bond issuances to fund Water Enterprise CIP. Proposed debt service projections assume three new revenue bond issuances through FY 2028 (\$361.25 million in FY 2023, \$360 million in FY 2025, and \$360 million in FY 2027). Total issuance amounts include assumed interim financing costs associated with commercial paper. All proposed debt service was estimated based on a 5% interest rate, 30 year term, and 30 months of capitalized interest (which effectively delays debt repayment by 30 months but results in an overall increase in total debt service payments).

**Table 3-10: Water Enterprise Debt Service**

Line	Debt Service	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Existing Revenue Bond Debt Service	\$328,352,143	\$332,575,608	\$332,048,174	\$337,015,314	\$335,590,956	\$333,534,949
2	Existing SRF Bond Debt Service	\$0	\$923,816	\$1,587,615	\$8,739,151	\$9,175,886	\$9,452,785
3	Proposed Debt Service	\$0	\$0	\$1,751,735	\$27,898,491	\$29,690,107	\$56,432,137
4	<b>Total</b>	<b>\$328,352,143</b>	<b>\$333,499,425</b>	<b>\$335,387,524</b>	<b>\$373,652,956</b>	<b>\$374,456,949</b>	<b>\$399,419,870</b>

## Water Enterprise Funding for Capital Expenditures

Table 3-11 shows the annual revenue budgeted as a funding source for capital expenditures, as approved in the SFPUC's FY 2024 10-Year Capital Improvement Plan. The revenue sources include capacity fees (i.e., one-time fees assessed to new development/intensified redevelopment), local revenue (i.e., Retail water sales), and regional revenue (i.e., a proportional allocation between Retail water sales and Wholesale water sales). The amounts shown do not represent annual spending on capital projects, but rather the amount of revenues appropriated each year through the SFPUC's budget process as a funding source for pay-as-you-go (i.e., cash funded) capital projects to meet the long-term capital replacement needs of the Water Enterprise.

**Table 3-11: Water Enterprise Funding for Pay-as-you-go Capital Expenditures**

Line	Funding for Pay-as-you-go Capital Expenditures	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Capacity Fees	\$1,520,000	\$1,997,000	\$2,061,000	\$1,520,000	\$1,580,000	\$1,644,000
2	Local Revenue	\$20,604,600	\$20,579,658	\$51,559,000	\$57,100,000	\$38,545,000	\$30,000,000
3	Regional Revenue	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000
4	<b>Total</b>	<b>\$47,124,600</b>	<b>\$47,576,658</b>	<b>\$78,620,000</b>	<b>\$83,620,000</b>	<b>\$65,125,000</b>	<b>\$56,644,000</b>

## Status Quo Water Enterprise Financial Plan

To evaluate the need for future year rate increases (referred to as "revenue adjustments"), MME and Raftelis first developed a status quo financial plan. The status quo financial plan assumes that current FY 2023 retail water rates remain unchanged over the multi-year planning period. The status quo financial plan (Table 3-12) combines projected revenues under existing rates (from Table 3-5 and Table 3-7<sup>9</sup>), O&M expenses (from Table 3-9), debt service (from Table 3-10), and funding for pay-as-you-go capital expenditures (from Table 3-11) to project net revenue (revenue less O&M expenses), net cash flow (net revenue less debt service and funding for pay-as-you-go capital expenditures), reserve balances (for the entire Water Enterprise), and debt coverage.

<sup>9</sup> Interest earnings in Table 3-12 are less than the amounts shown in FY 2025-FY 2028 in Table 3-7, as lower reserves under the status quo scenario will result in lesser interest earnings. The amounts shown Table 3-7 reflect interest earnings under the proposed financial plan shown in the next section.

Reserve balance projections (Table 3-12, Lines 55-58) are based off Water Enterprise beginning fund balance in FY 2023 (as of July 1, 2022) and projected net cash flow thereafter. Debt coverage (Table 3-12, Lines 62-65) is shown based on the “Current Coverage” test only, which is significantly more stringent than the “Indenture Test” (which allows for unappropriated fund balance to contribute towards debt service coverage). Additionally, net revenues used to calculate debt coverage (Table 3-12, Line 63) exclude specific revenues and expenses which are legally restricted from being used to pay for debt service or not considered SFPUC operating expenses, which is in alignment with SFPUC staff’s 10-year financial plan model. Projected reserve balances and debt coverage under the status quo financial plan are also shown in graphical format in Figure 3-1 and Figure 3-2 over an extended timeframe through FY 2032 to provide a longer-term financial outlook. See Appendix A for supporting financial plan projections beyond FY 2028.

In the absence of any revenue adjustments, the Water Enterprise’s reserve balance is projected to fall below the minimum level (per the SFPUC’s Fund Balance Reserve Policy) beginning in FY 2027. Furthermore, reserves are projected to be fully depleted in FY 2028. Debt coverage is projected to fall below the SFPUC’s target level (per the SFPUC’s Debt Service Coverage Policy) in FY 2023 and FY 2026 – FY 2032. More significantly, debt coverage is projected to fall below the required level per the SFPUC’s bond covenants beginning in FY 2027. The status quo financial plan is insufficient to meet the Water Enterprise’s financial needs through FY 2032. This demonstrates a clear need for near-term revenue adjustments to increase retail water rate revenues and ensure that the Water Enterprise’s financial needs are met.



Figure 3-1: Projected Reserve Balances under Status Quo Water Enterprise Financial Plan

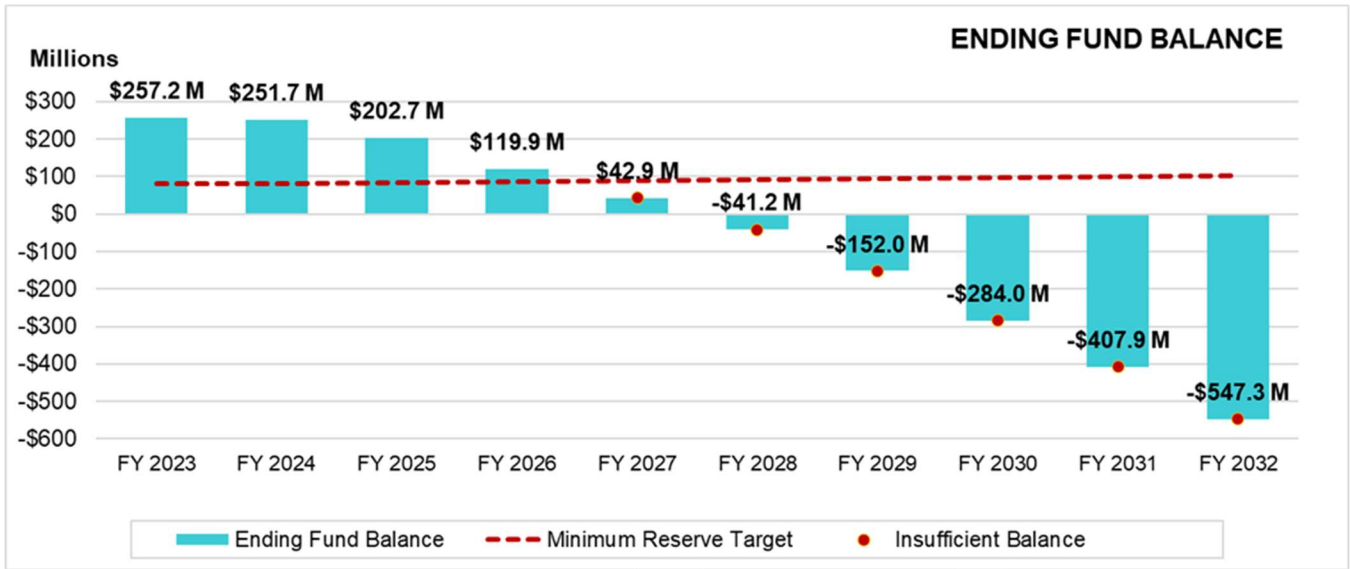
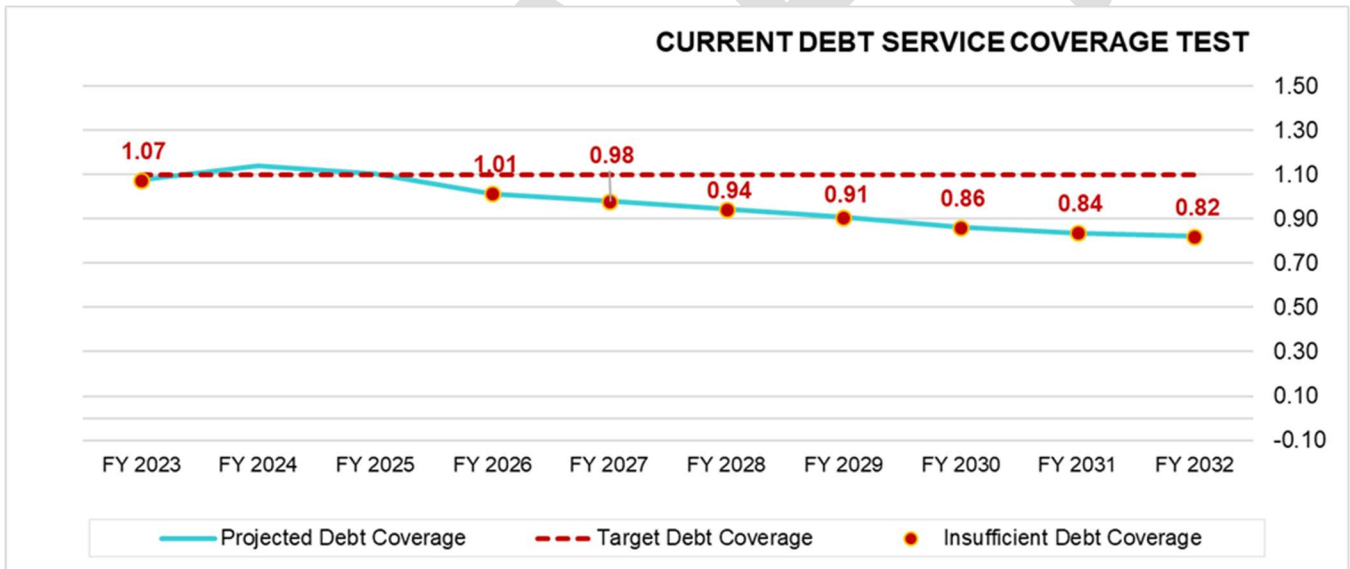


Figure 3-2: Projected Debt Coverage under Status Quo Water Enterprise Financial Plan



## Proposed Water Enterprise Financial Plan

The Water Enterprise must increase its revenues from retail water rates to adequately fund its operating and capital expenditures, meet required debt coverage, and maintain sufficient reserve funding in the near-term. SFPUC staff evaluated various scenarios using its 10-year financial plan model before arriving at the proposed and planned revenue adjustments (i.e., overall annual rate increases) shown below in Table 3-13. The proposed revenue adjustments ensure the Water Enterprise meets all its financial policies throughout the entire 10-year planning period, with some buffer in case of unexpected expenditures or revenue reductions. All revenue adjustments are assumed to become effective at the beginning of each fiscal year in July. Note that although this report includes financial projections over a ten-year period, SFPUC staff is only recommending that the Commission consider adoption of three years of proposed rates (i.e., FY 2024-FY 2026).

**Table 3-13: Proposed Water Enterprise Revenue Adjustments**

Line	Fiscal Year	Revenue Adjustment	Effective Date	Notes
1	FY 2024	5.0%	7/1/2023	Proposed
2	FY 2025	5.0%	7/1/2024	Proposed
3	FY 2026	5.0%	7/1/2025	Proposed
4	FY 2027	4.0%	7/1/2026	For Near-Term Planning Purposes Only
5	FY 2028	4.0%	7/1/2027	For Near-Term Planning Purposes Only
6	FY 2029	4.0%	7/1/2028	For Long-Term Planning Purposes Only
7	FY 2030	3.0%	7/1/2029	For Long-Term Planning Purposes Only
8	FY 2031	3.0%	7/1/2030	For Long-Term Planning Purposes Only
9	FY 2032	3.0%	7/1/2031	For Long-Term Planning Purposes Only

The proposed financial plan (Table 3-14) was developed using the same calculation methodology outlined in the previous section for the status quo financial plan (from Table 3-12). The key difference is the inclusion of additional retail water rate revenue (Table 3-14, Lines 7-15). The additional revenue from the proposed adjustments is calculated based on current revenue from retail water rates, exclusive of revenue from contract customers (which are subject to unique rates stipulated in each contract). The proposed revenue adjustments are projected to generate an additional \$52 million in retail water rate revenue relative to current rates by FY 2026.

With the addition of the proposed and planned revenue adjustments, the Water Enterprise's reserve balance is projected to meet the minimum level (per the SFPUC's Fund Balance Reserve Policy) each year. Debt coverage is projected to meet the SFPUC's required level (per the SFPUC's Debt Service Coverage Policy) in all future years. Projected reserve balances and debt coverage under the proposed financial plan are also shown in graphical format in Figure 3-3 and Figure 3-4 over an extended timeframe through FY 2032 to provide a longer-term financial outlook. See Appendix A for supporting financial plan projections beyond FY 2028. The proposed financial plan demonstrates a multi-year plan that generates sufficient revenue to meet the SFPUC's official financial policies.

Note that SFPUC staff and Raftelis opted for a levelized approach to capital planning for the purpose of setting rates to avoid any rate spikes across years during the study period. The proposed financial plan results in fund balances above the minimum reserve amount to provide added contingency given the uncertainty in future capital spending needs in any given year, and to ensure sufficient cash on hand once Drought

Surcharges are no longer in effect. Under the proposed financial plan, reserves are projected to be gradually drawn down to provide funding for capital needs.

DRAFT





Figure 3-3: Projected Reserve Balances under Proposed Water Enterprise Financial Plan

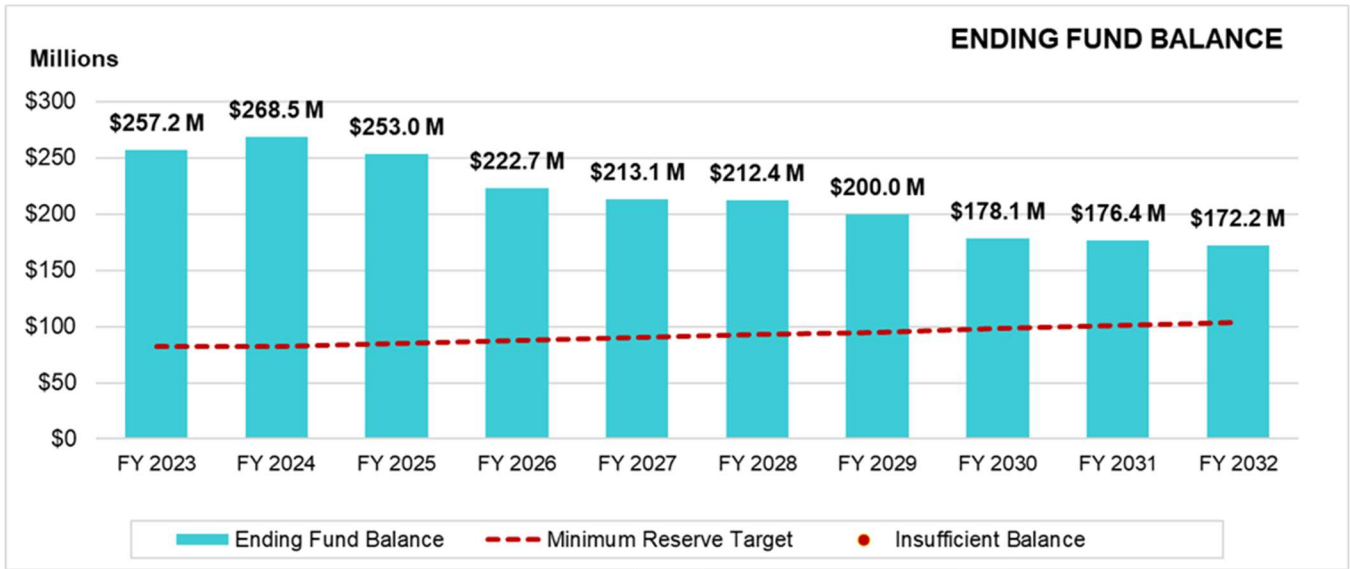
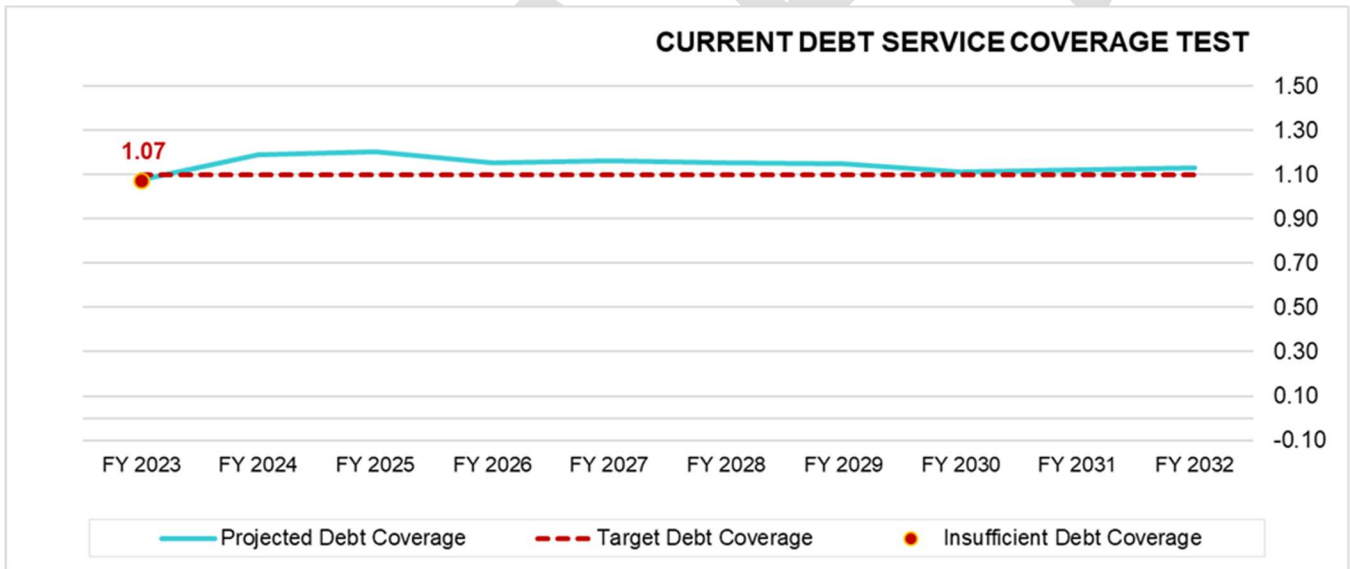


Figure 3-4: Projected Debt Coverage under Proposed Water Enterprise Financial Plan



## 4. Water Cost of Service Analysis

This section details the water cost of service (COS) analysis performed for the Water Enterprise. The COS analysis allocates the overall retail water rate revenue requirement to customer classes based on their proportion of use of and burden on the water system. As stated in the American Water Works Association (AWWA) M1 Manual, “the costs of water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers.” To develop retail water rates that comply with Proposition 218 and industry standards while meeting other goals and objectives of the SFPUC, we follow the COS methodology outlined below.

### 4.1. Water Cost of Service Methodology

The framework and methodology utilized to develop the COS analysis and to apportion the revenue requirement to each customer class is informed by the processes outlined in the M1 Manual. COS analyses are tailored specifically to meet the unique needs of each water system. However, there are five distinct steps in every COS analysis to recover costs from customers in an equitable, and defensible manner:

1. **Revenue requirement determination:** The first step in the COS analysis is to determine the revenue required from rates, which is determined directly from the results of the proposed financial plan presented in the previous section.
2. **Cost functionalization:** Expenses are categorized based on their associated function in the water system. Functions include water supply, treatment, storage, transmission, distribution, customer service, etc.
3. **Cost component allocation:** Functionalized expenses are then allocated to cost components based on the associated burden on the water system. Cost components include raw water supply, base delivery, extra capacity, meters, customer service, etc. The revenue requirement is allocated accordingly to each cost component and results in a total revenue requirement for each cost causation component.
4. **Unit cost development:** The revenue requirement for each cost component is divided by the appropriate units of service to determine the unit cost for each cost component.
5. **Revenue requirement distribution:** Unit costs for each cost component are utilized to distribute the revenue requirement to customer classes based on each class’s proportional use of the water system.

### 4.2. Water Revenue Requirement Determination

A COS analysis allocates the rate revenue requirement for a single rate-setting year, typically referred to as the “test year.” In this study, the test year is FY 2024 (i.e., the first year of the proposed three-year rate schedule). Table 4-1 shows the total retail water rate revenue requirement for FY 2024 (Line 24), which is equal to the sum of revenue requirements (Lines 1-5), revenue offsets (Lines 7-18), and adjustments (Lines 20-22).

Revenue requirements (Lines 1-5) include the sum of FY 2024 O&M expenses, debt service, and pay-as-you-go funding for CIP per the proposed financial plan (from Table 3-14). Revenue offsets (Lines 7-18) include all other revenues per the proposed financial plan (from Table 3-14), as well as Contract Rate Revenue and Drought Surcharges. Total revenue offsets (Line 18) are applied as a funding source for the overall revenue requirement (Line 5) to effectively reduce the total rate revenue requirement (Line 24). Finally, an adjustment is added (Line 21) to account for contributions to reserves, which is equal to FY 2024 net cash flow per the proposed financial plan (from Table 3-14). The total retail rate revenue requirement (Line 24) is the total

revenue to be recovered by Fixed Monthly Service Charges, Fire Service Fixed Monthly Service Charges, and Variable Charges in FY 2024, inclusive of additional revenue from the five percent proposed revenue adjustment.

**Table 4-1: Annualized Retail Water Rate Revenue Requirements for FY 2024**

Line	Retail Water Rate Revenue Requirement	FY 2024
1	<b>Revenue Requirements</b>	
2	O&M Expenses	\$328,788,358
3	Debt Service	\$333,499,425
4	Funding for Pay-as-you-go CIP	\$47,576,658
5	<b>Subtotal</b>	<b>\$709,864,441</b>
6		
7	<b>Revenue Offsets</b>	
8	Contract Rate Revenue	(\$561,118)
9	CAP Use of Revenues	\$7,000,000
10	Wholesale Water Sales	(\$316,979,387)
11	Interest Income	(\$1,133,000)
12	Rental Income	(\$13,595,800)
13	Federal Bond Interest Subsidy	(\$21,317,856)
14	Other Misc Income	(\$13,067,577)
15	Programmatic Revenues	(\$7,158,000)
16	Capacity Fees	(\$1,997,000)
17	Drought Surcharges	(\$13,610,049)
18	<b>Subtotal</b>	<b>(\$382,419,786)</b>
19		
20	<b>Adjustments</b>	
21	Contribution to (Draw from) Reserves	\$11,265,627
22	<b>Subtotal</b>	<b>\$11,265,627</b>
23		
24	<b>Total Retail Rate Revenue Requirement</b>	<b>\$338,710,281</b>

### 4.3. Water Revenue Requirement Functionalization

The next step of the COS analysis is to allocate the total retail rate revenue requirement to the following water system functions:

- » **Surface Water Supply:** relating to the SFPUC's primary raw surface water supplies, including Hetch Hetchy and the Alameda and Peninsula watersheds
- » **Alternative Water Supply:** relating to water resources planning efforts for future alternative water supply sources
- » **Groundwater:** relating to the San Francisco Groundwater Supply Project
- » **Recycled Water:** relating to the Harding Park Recycled Water Project and Pacifica Recycled Water Project
- » **Water Conservation:** relating to water conservation, outreach, and efficiency programs
- » **Pumping:** relating to transport of water across elevation gradients
- » **Transmission:** relating to the potable water transmission system
- » **Distribution:** relating to the delivery of potable water from storage facilities to the end user

- » **Storage:** relating to potable water storage tanks and reservoirs
- » **Treatment:** relating to the treatment of water to potable standards
- » **Water Quality:** relating to water quality testing
- » **Meters:** relating to water meters (including maintenance and replacement)
- » **Hydrants / Alternative Water Supply System (AWSS):** relating to fire protection provided by hydrants on both the primary potable water distribution system and the Alternative Water Supply System
- » **Private Fire Service:** relating to private fire service connections
- » **Customer Service:** relating to meter reading, billing, customer call center services, and other customer service functions
- » **Indirect – General:** relating to general administration and overhead, as well as any activities not directly attributable to one of the above functions
- » **Revenue Offsets:** relating specifically to any other revenues not attributed to any of the above functions

To allocate the retail water rate revenue requirement to the above functions, the following functional allocation bases were first established (see Table 4-2):

- » **O&M Functional Basis:** SFPUC staff conducted a detailed analysis of the Water Enterprise's FY 2024 budgeted operating and programmatic expenses. Expenses were evaluated at the departmental level and allocated across the various functions based on the best available information provided by each department's management. Most departments allocated costs based on the percentage of staff time devoted to each functional activity. See Appendix B for detailed functional allocations.
- » **Debt Functional Basis:** SFPUC staff conducted a detailed analysis of the Water Enterprise's existing revenue bond debt service over the next five years (FY 2024-FY 2028). The debt service for each revenue bond series was individually allocated based on the functions of the associated capital projects funded by each bond series. See Appendix C for detailed functional allocations.
- » **CIP Functional Basis:** SFPUC staff conducted a detailed analysis of the Water Enterprise's planned CIP projects (both local and regional) over the next five years (FY 2024-FY 2028). Each capital project was allocated on an individual basis to one or multiple functions. See Appendix D for detailed functional allocations.
- » **Wholesale Revenue Functional Basis:** SFPUC staff conducted a detailed analysis of wholesale customers' share of Water Enterprise expenses over the next five years (FY 2024-FY 2028). This functional allocation basis is required to accurately allocate projected wholesale water sales revenue, which constitutes over 40% of total Water Enterprise revenues. See Appendix E for detailed functional allocations.
- » **Federal Bond Interest Subsidy Functional Basis:** The Water Enterprise's federal bond interest subsidy is associated with three specific outstanding revenue bonds and one SRF Loan. A specific functional allocation basis was developed to accurately allocate this subsidy across the various functions. The debt service for each of the three associated revenue bonds and one SRF Loan was individually allocated based on the associated functions of the capital projects funded by each bond/loan. See Appendix F for detailed functional allocations.
- » **Indirect Functional Basis:** This functional allocation basis is not based on detailed analysis of expenses. It simply represents a 100% allocation to the "Indirect – General" function.

- » **Revenue Offset Functional Basis:** This functional allocation basis is not based on detailed analysis of expenses. It simply represents a 100% allocation to the “Revenue Offsets” function.

**Table 4-2: Water Enterprise Functional Allocations Bases**

Line	Functions	(A) O&M	(B) Debt	(C) CIP	(D) Wholesale Revenue	(E) Federal Bond Interest Subsidy	(F) Indirect	(G) Revenue Offsets
1	Surface Water Supply	32.88%	17.56%	1.02%	28.30%	20.92%	0.00%	0.00%
2	Alternative Water Supply	0.06%	0.17%	6.07%	0.56%	0.00%	0.00%	0.00%
3	Groundwater	0.65%	2.79%	0.00%	1.67%	1.02%	0.00%	0.00%
4	Recycled Water	1.74%	0.60%	2.79%	0.37%	0.78%	0.00%	0.00%
5	Water Conservation	3.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6	Pumping	2.36%	3.51%	1.42%	1.76%	2.12%	0.00%	0.00%
7	Transmission	8.77%	47.81%	17.38%	37.25%	51.77%	0.00%	0.00%
8	Distribution	5.64%	3.64%	25.45%	0.25%	0.00%	0.00%	0.00%
9	Storage	0.32%	7.09%	8.88%	3.87%	4.45%	0.00%	0.00%
10	Treatment	21.76%	15.23%	25.92%	24.26%	16.34%	0.00%	0.00%
11	Water Quality	10.22%	0.00%	3.77%	0.07%	0.00%	0.00%	0.00%
12	Meters	2.46%	1.57%	1.69%	0.51%	0.00%	0.00%	0.00%
13	Hydrants / AWSS	3.46%	0.04%	4.27%	0.01%	0.00%	0.00%	0.00%
14	Private Fire Service	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
15	Customer Service	6.19%	0.00%	1.33%	1.11%	0.00%	0.00%	0.00%
16	Indirect - General	0.00%	0.00%	0.00%	0.00%	2.60%	100.00%	0.00%
17	Revenue Offsets	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
18	<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

\*AWSS refers to the Alternative Water Supply System

Table 4-3 shows the allocation of the FY 2024 retail water rate revenue requirement to each function. Each component of the rate revenue requirement in Lines 1-25 (from Table 4-1) is allocated based on the seven functional allocation bases (from Table 4-2). The total amount associated with each component (in Table 4-3, Column A, Lines 1-25) is distributed to each function based on the corresponding functional allocation basis percentages (from Table 4-2). This results in the overall allocation of the total retail water rate revenue requirement to each function (in Table 4-3, Column A, Lines 27-46)

O&M expenses, debt service, funding for pay-as-you-go CIP, wholesale water sales, and the federal bond interest subsidy are all allocated based on the functional allocation basis that clearly corresponds with each component. Contract rate revenue, programmatic revenues, and drought surcharges all include rate revenues excluded from the scope of this COS analysis and are therefore most appropriately allocated on an indirect functional allocation basis. Capacity fees are typically utilized to fund capital projects and are therefore allocated based on the CIP functional allocation basis. All other revenue offsets are simply allocated based on the Revenue Offsets functional allocation basis. The contribution to reserves is allocated based on the CIP functional allocation basis, as reserve funding is generally most attributable to future capital funding.

Table 4-3: Allocation of FY 2024 Retail Water Rate Revenue Requirement to Functions

Line	Description	(A)	(B)
1	<b>RETAIL RATE REVENUE REQUIREMENT</b>	<b>FY 2024 (\$)</b>	<b>Functional Allocation Basis</b>
2	<b>Revenue Requirements</b>		
3	O&M Expenses	\$328,788,358	O&M
4	Debt Service	\$333,499,425	Debt
5	Funding for Pay-as-you-go CIP	\$47,576,658	CIP
6	<b>Subtotal</b>	<b>\$709,864,441</b>	
7			
8	<b>Revenue Offsets</b>		
9	Contract Rate Revenue	(\$561,118)	Indirect
10	CAP Use of Revenues	\$7,000,000	Revenue Offsets
11	Wholesale Water Sales	(\$316,979,387)	Wholesale Revenue
12	Interest Income	(\$1,133,000)	Revenue Offsets
13	Rental Income	(\$13,595,800)	Revenue Offsets
14	Federal Bond Interest Subsidy	(\$21,317,856)	Federal Bond Interest Subsidy
15	Other Misc Income	(\$13,067,577)	Revenue Offsets
16	Programmatic Revenues	(\$7,158,000)	Indirect
17	Capacity Fees	(\$1,997,000)	CIP
18	Drought Surcharges	(\$13,610,049)	Indirect
19	<b>Subtotal</b>	<b>(\$382,419,786)</b>	
20			
21	<b>Adjustments</b>		
22	Contribution to (Draw from) Reserves	\$11,265,627	CIP
23	<b>Subtotal</b>	<b>\$11,265,627</b>	
24			
25	<b>Total Retail Rate Revenue Requirement</b>	<b>\$338,710,281</b>	
26			
27	<b>ALLOCATION OF RETAIL RATE REVENUE REQUIREMENT TO FUNCTIONS</b>	<b>FY 2024 (\$)</b>	<b>FY 2024 (%)</b>
28	<b>Functions</b>		
29	Surface Water Supply	\$73,071,935	21.57%
30	Alternative Water Supply	\$2,437,496	0.72%
31	Groundwater	\$5,912,222	1.75%
32	Recycled Water	\$7,989,879	2.36%
33	Water Conservation	\$11,341,074	3.35%
34	Pumping	\$14,246,877	4.21%
35	Transmission	\$69,023,385	20.38%
36	Distribution	\$44,360,706	13.10%
37	Storage	\$16,526,769	4.88%
38	Treatment	\$56,713,182	16.74%
39	Water Quality	\$35,531,727	10.49%
40	Meters	\$12,683,934	3.74%
41	Hydrants / AWSS	\$13,890,792	4.10%
42	Private Fire Service	\$66,678	0.02%
43	Customer Service	\$17,593,763	5.19%
44	Indirect - General	(\$21,883,764)	-6.46%
45	Revenue Offsets	(\$20,796,377)	-6.14%
46	<b>Total Retail Rate Revenue Requirement</b>	<b>\$338,710,281</b>	<b>100.00%</b>

## 4.4. Water Revenue Requirement Allocation to Cost Causation Components

The next step in the COS analysis is to allocate the functionalized retail water rate revenue requirement to various cost components. Cost components (also known as cost causation components) represent different cost categories that are utilized to characterize and distribute costs to each customer class. Some cost components directly correspond to a single function. The cost components include:

- » **Raw Water Supply:** costs associated with obtaining water supplies prior to treatment
- » **Base Delivery:** costs associated with providing water under average water demand (i.e., base demand) conditions
- » **Extra Capacity:** costs associated with providing water during peak water demand conditions
- » **Customer Service:** costs associated with meter reading, billing, customer call center services, and other customer service functions; directly corresponds to the “Customer Service” function
- » **Meters:** costs associated with meter maintenance and replacement; directly corresponds to the “Meters” function
- » **Private Fire Service:** Costs associated with fire protection provided by private fire service connections; directly corresponds to the “Private Fire Service” function
- » **Revenue Offsets:** directly corresponds to the “Revenue Offsets” function

### Systemwide Peaking Factors

Peaking factors are used to allocate costs associated with certain functions between the Base Delivery and Extra Capacity cost components. Table 4-4 shows the system-wide peaking factors used to develop this cost component allocation basis. Base demand represents average daily demand during the year, which is normalized to a factor of 1.00 (Column A, Line 1). SFPUC staff provided maximum day deliveries each year for the last five calendar years (2018-2022). The system-wide Max Day peaking factor (Column A, Line 2) represents the average of the ratio of maximum day demand to average day demand each year over the last five calendar years. Costs allocated on a “Max Day” basis in the next section are distributed to the Base Delivery and Extra Capacity cost components based on the percentages shown in Columns B and C of Line 2. These percentages are calculated based on the following equations. Columns are represented in these equations as letters and rows are represented as numbers. For example, Column C, Line 2 is shown as C2.

$$\text{Base Delivery: } B2 = A1 \div A2 \times 100\%$$

$$\text{Max Day: } C2 = 100\% - B2$$

**Table 4-4: Water System Peaking Factors**

Line	Description	(A) Systemwide Peaking Factor	(B) Base Delivery	(C) Extra Capacity	(D) Total
1	Base	1.00	100.0%		100.0%
2	Max Day	1.32	75.7%	24.3%	100.0%



### **Preliminary Allocation of Revenue Requirement to Cost Components**

Table 4-5 on the following page shows the allocation of each function to the various cost components on a percentage basis in Lines 1-17. Many functions are fully allocated to a single cost component that clearly corresponds. However, other functions are allocated to cost components on the following bases that require further explanation:

- » The Alternative Water Supply, Groundwater, and Recycled Water functions are allocated fully to the Base Delivery (distribution) cost component rather than the Raw Water Supply cost component because these functions do not benefit non-potable customers (who are subject to Raw Water Supply but not Base Delivery (distribution) costs).
- » The Water Conservation function is allocated fully to the Extra Capacity cost component because conservation efforts are primarily aimed at reducing peak demand rather than average day demand.
- » The Pumping, Transmission, Distribution, Storage, and Treatment functions are all allocated on a “Max Day” basis to the Base Delivery and Extra Capacity cost components based on the systemwide peaking factors shown in Table 4-4. This is because infrastructure associated with these functions is typically sized to meet maximum day water demand conditions. Therefore, associated costs are most appropriately allocated between the Base Delivery and Extra Capacity cost components based on ratio of peak to average demand.
- » The Water Quality function is allocated fully to the Base Delivery cost component, as water quality testing costs typically do not vary per unit of potable water delivered.
- » The Hydrants/AWSS, function is allocated to the Meters cost component to ensure that all water system users support fire protection provided by hydrants.

Table 4-5 also shows the allocation of the functionalized rate revenue requirement (from Table 4-3) to each cost component in Lines 19-37 based on the percentage allocations for each function in Lines 1-17. Costs allocated to the Indirect – General cost component are proportionally reallocated to all other cost components (except Revenue Offsets) in Lines 39-41. The Indirect – General cost reallocations in Line 41 are added to the initial cost component allocations in Line 37 to determine the preliminary allocation of the retail water rate revenue requirement to each cost component in Line 43. This preliminary allocation is subject to adjustments in the following section.

**Table 4-5: Preliminary Allocation of FY 2024 Retail Water Rate Revenue Requirement to Cost Components**

Line	Functions	Cost Components								
		(A) Raw Water Supply	(B) Base Delivery	(C) Extra Capacity	(D) Customer Service	(E) Meters	(F) Private Fire Service	(G) Indirect - General	(H) Revenue Offsets	(I) Total
1	<b>Functional Allocations to Cost Components (%)</b>									
2	Surface Water Supply	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
3	Alternative Water Supply	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
4	Groundwater	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
5	Recycled Water	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
6	Water Conservation	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
7	Pumping	0.00%	75.70%	24.30%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
8	Transmission	0.00%	75.70%	24.30%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
9	Distribution	0.00%	75.70%	24.30%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
10	Storage	0.00%	75.70%	24.30%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
11	Treatment	0.00%	75.70%	24.30%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
12	Water Quality	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
13	Meters	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
14	Hydrants / AWSS	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
15	Private Fire Service	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
16	Customer Service	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
16	Indirect - General	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
17	Revenue Offsets	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
18										
19	<b>Functional Allocations to Cost Components (\$)</b>									
20	Surface Water Supply	\$73,071,935	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$73,071,935
21	Alternative Water Supply	\$0	\$2,437,496	\$0	\$0	\$0	\$0	\$0	\$0	\$2,437,496
22	Groundwater	\$0	\$5,912,222	\$0	\$0	\$0	\$0	\$0	\$0	\$5,912,222
23	Recycled Water	\$0	\$7,989,879	\$0	\$0	\$0	\$0	\$0	\$0	\$7,989,879
24	Water Conservation	\$0	\$0	\$11,341,074	\$0	\$0	\$0	\$0	\$0	\$11,341,074
25	Pumping	\$0	\$10,785,554	\$3,461,323	\$0	\$0	\$0	\$0	\$0	\$14,246,877
26	Transmission	\$0	\$52,253,940	\$16,769,446	\$0	\$0	\$0	\$0	\$0	\$69,023,385
27	Distribution	\$0	\$33,583,135	\$10,777,571	\$0	\$0	\$0	\$0	\$0	\$44,360,706
28	Storage	\$0	\$12,511,539	\$4,015,230	\$0	\$0	\$0	\$0	\$0	\$16,526,769
29	Treatment	\$0	\$42,934,538	\$13,778,643	\$0	\$0	\$0	\$0	\$0	\$56,713,182
30	Water Quality	\$0	\$35,531,727	\$0	\$0	\$0	\$0	\$0	\$0	\$35,531,727
31	Meters	\$0	\$0	\$0	\$0	\$12,683,934	\$0	\$0	\$0	\$12,683,934
32	Hydrants / AWSS	\$0	\$0	\$0	\$0	\$13,890,792	\$0	\$0	\$0	\$13,890,792
33	Private Fire Service	\$0	\$0	\$0	\$0	\$0	\$66,678	\$0	\$0	\$66,678
34	Customer Service	\$0	\$0	\$0	\$17,593,763	\$0	\$0	\$0	\$0	\$17,593,763
35	Indirect - General	\$0	\$0	\$0	\$0	\$0	\$0	(\$21,883,764)	\$0	(\$21,883,764)
36	Revenue Offsets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$20,796,377)	(\$20,796,377)
37	<b>Total</b>	<b>\$73,071,935</b>	<b>\$203,940,032</b>	<b>\$60,143,287</b>	<b>\$17,593,763</b>	<b>\$26,574,727</b>	<b>\$66,678</b>	<b>(\$21,883,764)</b>	<b>(\$20,796,377)</b>	<b>\$338,710,281</b>
38										
39	<b>Preliminary Cost of Service Allocation</b>									
40	Indirect - General Cost Reallocation (%)	19.16%	53.47%	15.77%	4.61%	6.97%	0.02%	N/A	N/A	100.00%
41	Indirect - General Cost Reallocation (\$)	(\$4,192,787)	(\$11,701,855)	(\$3,450,956)	(\$1,009,511)	(\$1,524,829)	(\$3,826)	\$21,883,764	\$0	\$0
42										
43	<b>Preliminary Cost of Service (\$)</b>	<b>\$68,879,148</b>	<b>\$192,238,177</b>	<b>\$56,692,331</b>	<b>\$16,584,252</b>	<b>\$25,049,898</b>	<b>\$62,852</b>	<b>\$0</b>	<b>(\$20,796,377)</b>	<b>\$338,710,281</b>
44	<b>Preliminary Cost of Service (%)</b>	<b>20.34%</b>	<b>56.76%</b>	<b>16.74%</b>	<b>4.90%</b>	<b>7.40%</b>	<b>0.02%</b>	<b>0.00%</b>	<b>-6.14%</b>	<b>100.00%</b>

## **Units of Service**

FY 2024 units of service must be determined to calculate adjustments to the preliminary cost component allocations and to develop unit costs. The development of units of service is shown in Table 4-6 through Table 4-8 on the following pages. Unit of service associated with Treasure Island, Non-Paying Municipal, Recycled water, Upcountry/Hetch Hetchy, and Wholesale customers are excluded, as the COS analysis only pertains to customers subject to the proposed retail water rates developed within the study scope.

### **Meters and Equivalent Meter Units**

Table 4-6 shows the number of water meters and equivalent meter units associated with each customer class. Equivalent meter units are necessary to apportion meter-related costs by meter size, as larger meters can impose greater demands on the system and are more expensive to install, maintain, and replace than smaller meters. Meter capacity ratios (Column A, Lines 17-28) are first calculated by dividing meter capacity (Column A, Lines 2-13) by 20 gallons per minute (gpm), which is the safe maximum flow through a standard 5/8-inch meter. Meter capacity ratios are then multiplied by the number of water meters at each meter size to determine equivalent meters units (Columns B-H, Lines 17-28). Equivalent meters in this study are based on AWWA-rated safe operating capacities and are calculated to represent the potential demand on the water system relative to the base 5/8-inch meter size.

### **Fire Connections and Equivalent Fire Demand Units**

Table 4-7 shows the calculation of equivalent (or potential) fire demand associated with fire hydrants and private fire service connections. Each connection size has a fire flow demand factor similar to the meter capacity ratio of a water meter. The diameter of the connection (in inches) is raised to the power of 2.63 (per the Hazen-Williams equation and AWWA M1 Manual) to determine the fire demand factor (Column A). The fire flow demand factor is multiplied by the number of connections by size (Column B) to calculate equivalent fire demand units (Column C). Total equivalent fire demand is shown for fire hydrants and private fire service connections in Lines 3 and 15 respectively.

### **Water Use and Max Day Extra Capacity**

Table 4-8 shows FY 2024 water use in CCF by customer class and the calculation of Max Day Extra Capacity requirements in CCF per day. Max Day extra capacity requirements are used to allocate Extra Capacity costs based on customer class-specific water use patterns during peak demand periods. Average daily water use (Column C) is simply annual water use (Column B) divided by 365 days. Max Month factors (Column D) represent the ratio of maximum month water use to average month water use for each customer class/tier in FY 2019.<sup>10</sup> Max Day factors (Column E) represent the ratio of maximum day water use to average day water use and are estimated by multiplying the Max Month factor for each customer class/tier (Column D) by the ratio of the systemwide Max Day factor (1.32 per Table 4-4) to systemwide Max Month factor (estimated at 1.10). Max Day capacity (Column F) is equal to average daily water use (Column C) multiplied by the Max Day factor (Column E). Max Day Extra Capacity (Column G) equals Max Day capacity (Column F) less average daily water use (Column C). Note that the Max Day Extra Capacity calculations pertain to the potable water system only. Therefore, no Max Day Extra Capacity requirements are attributed to non-potable water use.

---

<sup>10</sup> Max Month factors were evaluated for FY 2019 and FY 2022. FY 2019 factors were used due to anomalous impact of COVID-19 on water use patterns in FY 2022. FY 2019 was determined to be the most representative recent year of water use data.

Table 4-6: Number of Water Meters and Equivalent Meter Units (In-City and Suburban Retail Only)

Line	Meter Size	(A) Meter Capacity (gpm)	(B) Single Family Residential	(C) Multiple-Family Residential	(D) Commercial/Industrial/Municipal	(E) Irrigation	(F) Docks & Shipping	(G) Builders & Contractors	(H) Non-Potable	(I) Total
1	<b>Water Meters</b>									
2	5/8 inch	20	99,537	16,605	9,494	356	0	0	0	125,992
3	3/4 inch	30	9,300	7,730	1,146	166	0	0	0	18,342
4	1-inch	50	2,138	7,251	1,803	378	0	124	0	11,694
5	1-1/2 inch	100	531	3,164	1,568	219	11	0	0	5,493
6	2-inch	160	425	3,416	3,004	608	0	0	0	7,453
7	3-inch	320	0	232	193	10	16	226	0	677
8	4-inch	500	2	218	225	14	0	0	0	459
9	6-inch	1,000	0	79	173	11	0	0	2	265
10	8-inch	1,600	0	2	13	1	0	0	0	16
11	10-inch	2,500	0	0	8	0	0	0	0	8
12	12-inch	4,300	0	0	0	0	0	0	0	0
13	16-inch	7,500	0	0	1	0	0	0	0	1
14	<b>Total</b>		<b>111,933</b>	<b>38,697</b>	<b>17,628</b>	<b>1,763</b>	<b>27</b>	<b>350</b>	<b>2</b>	<b>170,400</b>
15										
16	<b>Equivalent Meter Units</b>	<b>(Ratio)</b>								
17	5/8 inch	1.00	99,537	16,605	9,494	356	0	0	0	125,992
18	3/4 inch	1.50	13,950	11,595	1,719	249	0	0	0	27,513
19	1-inch	2.50	5,345	18,128	4,508	945	0	310	0	29,235
20	1-1/2 inch	5.00	2,655	15,820	7,840	1,095	55	0	0	27,465
21	2-inch	8.00	3,400	27,328	24,032	4,864	0	0	0	59,624
22	3-inch	16.00	0	3,712	3,088	160	256	3,616	0	10,832
23	4-inch	25.00	50	5,450	5,625	350	0	0	0	11,475
24	6-inch	50.00	0	3,950	8,650	550	0	0	100	13,250
25	8-inch	80.00	0	160	1,040	80	0	0	0	1,280
26	10-inch	125.00	0	0	1,000	0	0	0	0	1,000
27	12-inch	215.00	0	0	0	0	0	0	0	0
28	16-inch	375.00	0	0	375	0	0	0	0	375
29	<b>Total</b>		<b>124,937</b>	<b>102,748</b>	<b>67,371</b>	<b>8,649</b>	<b>311</b>	<b>3,926</b>	<b>100</b>	<b>308,041</b>

\*Excludes Treasure Island, Non-Paying Municipal, Recycled Water, Upcountry/Hetch Hetchy, & Wholesale Water Meters

Table 4-7: Number of Fire Protection Connections and Equivalent Fire Demand Units

Line	Connection Size	(A) Fire Demand Factor	(B) Number of Connections	(C) Equivalent Fire Demand Units	(D) Equivalent Fire Demand (%)
1	<b>Fire Hydrants</b>				
2	6-inch	111.31	8,721	970,743	64.62%
3	<b>Subtotal</b>		<b>8,721</b>	<b>970,743</b>	<b>64.62%</b>
4					
5	<b>Private Fire Services</b>				
6	1-inch	1.00	186	186	0.01%
7	1-1/2 inch	2.90	33	96	0.01%
8	2-inch	6.19	3,902	24,154	1.61%
9	3-inch	17.98	155	2,787	0.19%
10	4-inch	38.32	3,476	133,198	8.87%
11	6-inch	111.31	1,641	182,661	12.16%
12	8-inch	237.21	715	169,603	11.29%
13	10-inch	426.58	7	2,986	0.20%
14	12-inch	689.04	23	15,848	1.05%
15	<b>Subtotal</b>		<b>10,138</b>	<b>531,519</b>	<b>35.38%</b>
16					
17	<b>Total</b>		<b>18,859</b>	<b>1,502,262</b>	<b>100.00%</b>

Table 4-8: FY 2024 Water Use and Max Day Extra Capacity Requirements

Line	Customer Class	(A) FY 2024 Projected Water Use (CCF)	(B) Water Use for COS Analysis (CCF)	(C) Average Daily Water Use (CCF/Day)	(D) Max Month Factor	(E) Max Day Factor	(F) Max Day Capacity (CCF/Day)	(G) Max Day Extra Capacity (CCF/Day)
1	<b>Single Family Residential</b>							
2	First 4 Units per Month	3,913,645	3,913,645	10,722	1.03	1.24	13,252	2,530
3	All Additional Units	2,362,176	2,362,176	6,472	1.20	1.44	9,323	2,851
4	<b>Subtotal</b>	<b>6,275,820</b>	<b>6,275,820</b>	<b>17,194</b>			<b>22,575</b>	<b>5,381</b>
5								
6	<b>Multiple-Family Residential</b>							
7	First 3 Units per Dwelling Unit per Month	6,760,988	6,760,988	18,523	1.01	1.21	22,432	3,909
8	All Additional Units	3,809,265	3,809,265	10,436	1.12	1.35	14,039	3,602
9	<b>Subtotal</b>	<b>10,570,253</b>	<b>10,570,253</b>	<b>28,960</b>			<b>36,471</b>	<b>7,511</b>
10								
11	<b>Non-Residential</b>							
12	Commercial/Industrial/Municipal	8,549,050	8,549,050	23,422	1.15	1.38	32,279	8,857
13	Irrigation	1,120,003	1,120,003	3,069	1.15	1.38	4,229	1,160
14	Docks & Shipping	3,925	3,925	11	1.15	1.38	15	4
15	Builders & Contractors	98,610	98,610	270	1.15	1.38	372	102
16	Fire Service	31,006	31,006	85	1.15	1.38	117	32
17	Non-Potable	155,358	155,358	426	N/A	N/A	N/A	N/A
18	Excluded from COS*	62,993,071	N/A	N/A	N/A	N/A	N/A	N/A
19	<b>Subtotal</b>	<b>72,951,025</b>	<b>9,957,954</b>	<b>27,282</b>			<b>37,012</b>	<b>10,156</b>
20								
21	<b>Total</b>	<b>89,797,098</b>	<b>26,804,027</b>	<b>73,436</b>			<b>96,058</b>	<b>23,048</b>

\*Treasure Island, Non-Paying Municipal, Recycled Water, Upcountry/Hetch Hetchy, Wholesale, and Suburban Contract Rate water use

### Fire Protection Extra Capacity Analysis

Fire hydrants and private fire service connections are allocated a portion of Extra Capacity costs. Table 4-9 and the formula below show the methodology (per the AWWA M1 Manual) used to calculate Max Day Extra Capacity associated with fire protection. The calculations are based on assumptions regarding the duration and flow rate in gpm associated with representative fires that the system is designed to provide capacity for:

$$\text{Max Day Requirements (CCF/day)} = \text{Duration of Fire (hrs)} \times \text{Water Use Rate (gpm)} \times 60 \text{ mins/hr} \div 748.05 \text{ gallons/CCF}$$

**Table 4-9: Fire Protection Extra Capacity Requirements**

Line	Fire Protection Extra Capacity	(A)	(B)	(C)
		Duration of Fire (Hours)	Water Use Rate (gpm)	Max Day Extra Capacity (CCF/Day)
1	Representative Fire #1	4	4,000	1,283
2	Representative Fire #2	3	3,000	722
3	<b>Total Fire Protection Peaking Requirements</b>			<b>2,005</b>

Table 4-10 shows the allocation basis used to distribute Extra Capacity costs among retail water use not used for fire protection, fire hydrants, and private fire service based on the proportion of Max Day Extra Capacity requirements in CCF per Day. Max Day Extra Capacity for retail water use not used for fire protection (Column A, Line 1) was calculated previously in Table 4-8. Total Max Day Extra Capacity attributable to fire protection (from Table 4-9) is distributed between fire hydrants (Column A, Line 2) and private fire service connections (Column A, Line 3) based on the proportion of equivalent fire demand units associated with each (from Table 4-7, Column D, Line 3 and Line 15). The percentage of Max Day Extra Capacity attributed to each category provides the Extra Capacity cost allocation basis in Column B.

**Table 4-10: Max Day Extra Capacity Cost Allocation**

Line	Max Day Extra Capacity	(A)	(B)
		Max Day Extra Capacity (CCF/Day)	Extra Capacity Cost Allocation
1	Retail (Non-Fire Protection)	23,048	92.00%
2	Fire Hydrants	1,296	5.17%
3	Private Fire Services	709	2.83%
4	<b>Total</b>	<b>25,053</b>	<b>100.00%</b>

## Final Adjusted Allocation of Revenue Requirement to Cost Components

Table 4-11 shows the final adjusted allocation of the retail water rate revenue requirement to the various cost components. The final adjusted allocation to each cost component in Line 5 ultimately provides the basis for FY 2024 rate calculations shown in the following sections. The final adjusted COS allocations in Line 5 equal the sum of the components shown in Lines 1-4, which are described in further detail below:

1. **Preliminary Cost of Service Allocation** (Line 1): The preliminary allocations to each cost component were previously developed in Table 4-5. The Indirect - General cost component is excluded because all General costs were previously reallocated to other cost components.
2. **Reallocation of Fire Hydrant Extra Capacity to Meters** (Line 2): Extra Capacity costs associated with providing fire flow for fire hydrants are reallocated to the Meters cost component to recover hydrant-related fire protection costs from metered connections. Approximately 5.17% of Extra Capacity costs are reallocated to the Meters cost component (per Table 4-10, Column B, Line 2). Note that this reallocation results in a shifting of costs between cost components but does not change the total rate revenue requirement.
3. **Reallocation of Private Fire Extra Capacity to Private Fire Service** (Line 3): Extra Capacity costs associated with providing fire flow for private fire protection are reallocated to the Private Fire Service cost component to recover the associated costs from customer with dedicated private fire service connections. Approximately 2.83% of Extra Capacity costs are reallocated to the Private Fire Service cost component (Table 4-10, Column B, Line 3). Note that this reallocation results in a shifting of costs between cost components but does not change the total rate revenue requirement.
4. **Reallocation of Extra Capacity to Meters** (Line 4): It is a common practice for public water utilities in California to recover a portion of Extra Capacity costs from fixed charges to improve revenue stability. Approximately \$5.2 million of the Extra Capacity cost component is being allocated to the Meters cost component. Public water utilities in California typically recover approximately 20-25% of rate revenues from fixed charges, compared to the SFPUC which is projected to recover approximately 15% of retail water rate revenues from fixed charges. The allocation of Extra Capacity costs to the Meters cost component will provide a degree of revenue stability without adversely affecting customer affordability (as higher fixed charges tend to disproportionately impact bills for low use residential customers).



**Table 4-11: Final Adjusted Allocation of FY 2024 Retail Water Rate Revenue Requirement to Cost Components**

Line	Final Adjusted Cost of Service Allocation	Cost Components							(H) Total
		(A) Raw Water Supply	(B) Base Delivery	(C) Extra Capacity	(D) Customer Service	(E) Meters	(F) Fire Sprinklers	(G) Revenue Offsets	
1	Preliminary Cost of Service	\$68,879,148	\$192,238,177	\$56,692,331	\$16,584,252	\$25,049,898	\$62,852	(\$20,796,377)	<b>\$338,710,281</b>
2	Extra Capacity Reallocation to Hydrants	\$0	\$0	(\$2,932,140)	\$0	\$2,932,140	\$0	\$0	\$0
3	Extra Capacity Reallocation to Private Fire Service	\$0	\$0	(\$1,605,461)	\$0	\$0	\$1,605,461	\$0	\$0
4	Extra Capacity Reallocation to Meters	\$0	\$0	(\$5,215,473)	\$0	\$5,215,473	\$0	\$0	\$0
5	<b>Final Adjusted Cost of Service (\$)</b>	<b>\$68,879,148</b>	<b>\$192,238,177</b>	<b>\$46,939,258</b>	<b>\$16,584,252</b>	<b>\$33,197,511</b>	<b>\$1,668,313</b>	<b>(\$20,796,377)</b>	<b>\$338,710,281</b>
6	<b>Final Adjusted Cost of Service (%)</b>	<b>20.34%</b>	<b>56.76%</b>	<b>13.86%</b>	<b>4.90%</b>	<b>9.80%</b>	<b>0.49%</b>	<b>-6.14%</b>	<b>100.00%</b>

## 4.5. Water Unit Cost Development

The next step of the COS analysis is to calculate unit costs for each cost component, which are utilized in the final step of the COS analysis to distribute the retail water rate revenue requirement to each customer class. Table 4-12 shows the development of unit costs for each cost component, which are calculated by dividing the final adjusted COS allocation in Line 14 (from Table 4-11) by the total units of service in Line 16 (from Table 4-12 through Table 4-8). Unit of service associated with Treasure Island, Non-Paying Municipal, Recycled water, Upcountry/Hetch Hetchy, and Wholesale customers are excluded from the unit cost calculations, as the COS analysis only pertains to customers subject to the proposed retail water rates developed within the scope of this study. The units of service applied to each cost component are as follows:

- » **Raw Water Supply Units of Service:** total retail water use in CCF
- » **Base Delivery:** total retail water use in CCF (excluding non-potable)
- » **Extra Capacity:** total Max Day Extra Capacity in CCF per day associated with retail water use not used for fire protection
- » **Customer Service:** total number of annual bills, estimated by multiplying total retail water connections (including private fire service connections) by 12 monthly billing periods per year
- » **Meters:** total number of equivalent meter units multiplied by twelve monthly billing periods per year
- » **Private Fire Service:** total number of equivalent fire demand units associated with private fire service connections multiplied by twelve monthly billing periods per year
- » **Revenue Offsets:** total retail water use in CCF

Table 4-12: FY 2024 Unit Costs

Line	Description	(A) Raw Water Supply	(B) Base Delivery	(C) Extra Capacity	(D) Customer Service	(E) Meters	(F) Private Fire Service	(G) Revenue Offsets
1	<b>Units of Service by Customer Class</b>							
2	Single Family Residential	6,275,820	6,275,820	5,381	1,343,196	1,499,244	N/A	6,275,820
3	Multiple-Family Residential	10,570,253	10,570,253	7,511	464,364	1,232,970	N/A	10,570,253
4	Commercial/Industrial/Municipal	8,549,050	8,549,050	8,857	211,536	808,446	N/A	8,549,050
5	Irrigation	1,120,003	1,120,003	1,160	21,156	103,788	N/A	1,120,003
6	Docks & Shipping	3,925	3,925	4	324	3,732	N/A	3,925
7	Builders & Contractors	98,610	98,610	102	4,200	47,112	N/A	98,610
8	Private Fire Service	31,006	31,006	32	121,656	N/A	6,378,232	31,006
9	Non-Potable	155,358	N/A	N/A	24	1,200	N/A	155,358
10	<b>Total Units of Service</b>	<b>26,804,027</b>	<b>26,648,669</b>	<b>23,048</b>	<b>2,166,456</b>	<b>3,696,492</b>	<b>6,378,232</b>	<b>26,804,027</b>
11								
12	<i>Unit Descriptions</i>	<i>Water Use (CCF)</i>	<i>Potable Water Use (CCF)</i>	<i>Max Day Extra Capacity (CCF/Day)</i>	<i>Annualized Bills</i>	<i>Annualized Equivalent Meter Units</i>	<i>Annualized Equivalent Fire Demand Units</i>	<i>Water Use (CCF)</i>
13								
14	<b>Final Adjusted Cost of Service</b>	<b>\$68,879,148</b>	<b>\$192,238,177</b>	<b>\$46,939,258</b>	<b>\$16,584,252</b>	<b>\$33,197,511</b>	<b>\$1,668,313</b>	<b>(\$20,796,377)</b>
15								
16	<b>Unit Cost</b>	<b>\$2.570</b>	<b>\$7.214</b>	<b>\$2,036.611</b>	<b>\$7.655</b>	<b>\$8.981</b>	<b>\$0.262</b>	<b>(\$0.776)</b>

## 4.6. Water Customer Class Revenue Requirements

Table 4-13 shows the distribution of the total FY 2024 retail water rate revenue requirement to each customer class under the proposed COS (Column A). Costs were distributed to each customer class by multiplying the unit costs for each cost component by the corresponding units of service associated with each customer class (from Table 4-12). The current COS in Column B represents the amount of revenue each customer class is projected to generate in FY 2024 based on existing water rates. The difference between the total proposed COS (Column A, Line 9) and current COS (Column B, Line 9) is due to the proposed 5% revenue adjustment in FY 2024. Note that retail water revenue from contract rates and Drought Surcharges is excluded from Table 4-13.

Columns C-E provide a comparison of the proposed versus current COS in percentage terms. Most customer classes experience a relatively minor distributional impact from the proposed COS allocations. Private fire service customers’ cost allocation decreases largely due to the refinement of the methodology used to allocate fire-related extra capacity costs relative to the prior cost of service study in 2018. Non-potable customers’ cost allocation increases primarily because the updated O&M expense functionalization allocates more costs to the Surface Water Supply function relative to the prior study.

**Table 4-13: Comparison of Proposed vs. Current Cost of Service (FY 2024)**

Line	Customer Class	\$ Comparison		% Comparison		
		(A)	(B)	(C)	(D)	(E)
		Proposed Cost of Service (\$)	Current Cost of Service (\$)	Proposed Cost of Service (%)	Current Cost of Service (%)	Change (%)
1	Single Family Residential	\$91,236,228	\$84,575,700	26.94%	26.27%	2.53%
2	Multiple-Family Residential	\$125,138,244	\$119,486,099	36.95%	37.12%	-0.46%
3	Commercial/Industrial/Municipal	\$103,924,835	\$98,487,157	30.68%	30.59%	0.29%
4	Irrigation	\$13,545,814	\$12,840,998	4.00%	3.99%	0.26%
5	Docks & Shipping	\$79,631	\$75,358	0.02%	0.02%	0.44%
6	Builders & Contractors	\$1,551,568	\$1,469,665	0.46%	0.46%	0.34%
7	Private Fire Service	\$2,944,309	\$4,841,198	0.87%	1.50%	-42.19%
8	Non-Potable	\$289,652	\$157,974	0.09%	0.05%	74.27%
9	<b>Total</b>	<b>\$338,710,281</b>	<b>\$321,934,148</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>

# 5. Water Rate Design

## 5.1. Water Rate Design Overview

This section details the proposed retail water rate calculations. FY 2024 proposed rates are calculated directly from the unit costs developed in the COS analysis. Proposed rates in FY 2025 and FY 2026 are calculated by increasing prior year proposed rates by the annual 5% proposed revenue adjustments from the proposed financial plan. SFPUC staff and Raftelis evaluated the need to modify the existing rate structure but determined that no changes will be proposed as part of this study. Raftelis also analyzed residential water use data to ensure that the existing residential tier allotments (4 units per month for Single Family Residential and 3 units per month per dwelling unit for Multiple-Family Residential) are reasonable. The proposed rates shown are consistent with the SFPUC's existing retail water rate structure. Note also that no changes to the existing system of Drought Surcharges are recommended as part of this study.

Table 5-1 indicates which cost components are collected to by each charge type to develop proposed retail water rates in FY 2024. Fixed Monthly Service Charges are designed to recover a share of Customer Service costs and all Meters costs. Private Fire Fixed Monthly Service Charges are designed to recover a share of Customer Service costs and all Private Fire Service costs. Variable Charges are designed to recover all remaining cost components, including Raw Water Supply, Base Deliver, Extra Capacity, and Revenue Offsets. Note that Untreated Water Variable Charges are exempted from Base Delivery and Extra Capacity costs, which only pertain to the potable water system.

**Table 5-1: Revenue Recovery by Charge Type**

Line	Cost Component	Associated Charge
1	Raw Water Supply	Variable Charges
2	Base Delivery	Variable Charges (excluding Untreated Water)
3	Extra Capacity	Variable Charges (excluding Untreated Water)
4	Customer Service	Fixed Monthly Service Charges; Private Fire Fixed Monthly Service Charges
5	Meters	Fixed Monthly Service Charges
6	Private Fire Service	Private Fire Fixed Monthly Service Charges
7	Revenue Offsets	Variable Charges

## 5.2. Water Rate Calculations

### Proposed FY 2024 Fixed Monthly Service Charge Calculation

Fixed Monthly Service Charges are designed to recover costs associated with the Customer Service and Meters cost components. The Meters cost component includes costs to repair or replace meters and include a portion of Extra Capacity costs as allocated in Table 4-11. Table 5-2 shows the detailed calculation of Fixed Monthly Service Charges in FY 2024 based on Customer Service and Meters unit costs (from Table 4-12). Customer Service costs do not vary by meter size. Therefore, the Customer Service unit cost is applied uniformly to all proposed charges regardless of meter size (Column B). Because Meters costs vary by meter size based on meter capacity, AWWA capacity ratios in Column A (from Table 4-6) are used to differentiate Meters charges by meter size. The Meters charges (Column C) are calculated by multiplying the Meters unit cost (from Table 4-12) by the corresponding meter capacity ratio (Column A). Proposed charges (Column D) equal the sum of Columns B-C, and are compared to current FY 2023 charges in Columns E-F.

**Table 5-2: Proposed FY 2024 Fixed Monthly Service Charge Calculation**

Line	Meter Size	(A) Meter Capacity Ratio	(B) Customer Service	(C) Meters	(D) Proposed Charge (FY 2024)	(E) Current Charge (FY 2023)	(F) Difference (\$)
1	5/8 inch	1.00	\$7.655	\$8.981	<b>\$16.64</b>	\$15.17	\$1.47
2	3/4 inch	1.50	\$7.655	\$13.471	<b>\$21.13</b>	\$19.43	\$1.70
3	1-inch	2.50	\$7.655	\$22.452	<b>\$30.11</b>	\$27.95	\$2.16
4	1-1/2 inch	5.00	\$7.655	\$44.904	<b>\$52.56</b>	\$49.25	\$3.31
5	2-inch	8.00	\$7.655	\$71.847	<b>\$79.51</b>	\$74.81	\$4.70
6	3-inch	16.00	\$7.655	\$143.693	<b>\$151.35</b>	\$142.97	\$8.38
7	4-inch	25.00	\$7.655	\$224.520	<b>\$232.18</b>	\$219.65	\$12.53
8	6-inch	50.00	\$7.655	\$449.041	<b>\$456.70</b>	\$432.65	\$24.05
9	8-inch	80.00	\$7.655	\$718.465	<b>\$726.13</b>	\$688.25	\$37.88
10	10-inch	125.00	\$7.655	\$1,122.602	<b>\$1,130.26</b>	\$1,071.65	\$58.61
11	12-inch	215.00	\$7.655	\$1,930.875	<b>\$1,938.54</b>	\$1,838.45	\$100.09
12	16-inch	375.00	\$7.655	\$3,367.806	<b>\$3,375.47</b>	\$3,201.65	\$173.82

## Proposed FY 2024 Private Fire Fixed Monthly Service Charge Calculation

Private Fire Fixed Monthly Service Charges are designed to recover costs associated with the Customer Service and Private Fire Service cost components. A Private Fire Service unit cost was calculated previously in Table 4-12, but is further refined into two components in Table 5-3 below. Private Fire Service costs associated with backflow administration do not vary based on service size, as do all other Private Fire Service costs associated with Extra Capacity. Therefore, a “Backflow Administration” unit cost is calculated (Column C, Line 1) by dividing direct backflow administration costs (Column A, Line 1) by annualized private fire service connections (Column B, Line 1). All remaining Private Fire Service costs (Column A, Line 2) are divided by annualized equivalent fire demand units associated with private fire service connections (Column B, Line 2) to determine a “Private Fire Extra Capacity” unit cost (Column C, Line 2).

**Table 5-3: Private Fire Service Unit Cost Differentiation**

Line	Private Fire Service Cost Component	(A) FY 2024 COS Allocation	(B) Units of Service	(C) Unit Cost	(D) Unit Description
1	Backflow Administration	\$62,852	121,656	\$0.517	Annualized Private Fire Service Connections
2	Private Fire Extra Capacity	\$1,605,461	6,378,232	\$0.252	Annualized Private Fire Service Equivalent Fire Demand Units
3	<b>Total</b>	<b>\$1,668,313</b>			

Table 5-4 shows the detailed calculation of Private Fire Fixed Monthly Service Charges in FY 2024 based on Customer Service, Backflow Administration, and Private Fire Extra Capacity unit costs. Customer Service and Backflow Administration costs do not vary by service size. Therefore, Customer Service unit costs (from Table 4-12) and Backflow Administration unit costs (from Table 5-3) are applied uniformly to all proposed charges regardless of service size (Columns B-C). Because Private Fire Extra Capacity costs vary by service size based on equivalent fire demand, fire demand factors in Column A (from Table 4-7) are used to differentiate Private Fire Extra Capacity charges by service size. The Private Fire Extra Capacity charges (Column D) are calculated by multiplying the Private Fire Extra Capacity unit cost (from Table 5-3) by the corresponding fire demand factor (Column A). Proposed charges (Column E) equal the sum of Columns B-D, and are compared to current FY 2023 charges in Columns F-G.

**Table 5-4: Proposed FY 2024 Private Fire Fixed Monthly Service Charge Calculation**

Line	Connection Size	(A) Fire Demand Factor	(B) Customer Service	(C) Backflow Adminis- tration	(D) Private Fire Extra Capacity	(E) Proposed Charge (FY 2024)	(F) Current Charge (FY 2023)	(G) Difference (\$)
1	1-inch	1.00	\$7.655	\$0.517	\$0.252	<b>\$8.43</b>	\$9.55	(\$1.12)
2	1-1/2 inch	2.90	\$7.655	\$0.517	\$0.731	<b>\$8.91</b>	\$12.45	(\$3.54)
3	2-inch	6.19	\$7.655	\$0.517	\$1.558	<b>\$9.73</b>	\$15.93	(\$6.20)
4	3-inch	17.98	\$7.655	\$0.517	\$4.526	<b>\$12.70</b>	\$25.21	(\$12.51)
5	4-inch	38.32	\$7.655	\$0.517	\$9.645	<b>\$17.82</b>	\$35.65	(\$17.83)
6	6-inch	111.31	\$7.655	\$0.517	\$28.018	<b>\$36.19</b>	\$64.65	(\$28.46)
7	8-inch	237.21	\$7.655	\$0.517	\$59.707	<b>\$67.88</b>	\$99.45	(\$31.57)
8	10-inch	426.58	\$7.655	\$0.517	\$107.374	<b>\$115.55</b>	\$151.65	(\$36.10)
9	12-inch	689.04	\$7.655	\$0.517	\$173.439	<b>\$181.62</b>	\$256.05	(\$74.43)

## Proposed FY 2024 Variable Charge Calculation

Variable Charges are designed to recover costs associated with the Raw Water Supply, Base Delivery, Extra Capacity, and Revenue Offsets cost components. An Extra Capacity unit cost was calculated previously in Table 4-12, but is further refined into unique “unit rates” in Table 5-5 below. This provides a basis to differentiate potable Variable Charges by customer class and tier. Max Day Extra Capacity in CCF per day in Column B (from Table 4-8) is multiplied by the Extra Capacity unit cost per CCF per day in Column C (from Table 4-12) to determine the Extra Capacity cost allocation for each customer class and tier in Column D. The Extra Capacity cost allocation in Column D is then divided by FY 2024 water use in CCF in Column A to establish unique Extra Capacity unit rates for each customer class and tier in Column E.

**Table 5-5: Extra Capacity Unit Rate Calculation**

Line	Customer Class	(A) FY 2024 Water Use (CCF)	(B) Max Day Extra Capacity (CCF/Day)	(C) Extra Capacity Unit Cost (per CCF/Day)	(D) Extra Capacity Cost Allocation	(E) Extra Capacity Unit Rate (\$/CCF)
1	<b>Single-Family Residential</b>					
2	First 4 Units per Month	3,913,645	2,530	\$2,036.611	\$5,152,051	<b>\$1.316</b>
3	All Additional Units	2,362,176	2,851	\$2,036.611	\$5,807,080	<b>\$2.458</b>
4	<b>Subtotal</b>	<b>6,275,820</b>	<b>5,381</b>		<b>\$10,959,131</b>	
5						
6	First 3 Units per Dwelling Unit per Month	6,760,988	3,909	\$2,036.611	\$7,960,475	<b>\$1.177</b>
7	All Additional Units	3,809,265	3,602	\$2,036.611	\$7,336,693	<b>\$1.926</b>
8	<b>Subtotal</b>	<b>10,570,253</b>	<b>7,511</b>		<b>\$15,297,168</b>	
9						
10	<b>Commercial, Industrial, and General Uses*</b>					
11	For All Units of Water	9,802,596	10,156	\$2,036.611	\$20,682,959	<b>\$2.110</b>
12						
13	<b>Untreated Water Service</b>					
14	For All Units of Water	155,358	N/A	N/A	N/A	<b>N/A</b>
15						
16	<b>Excluded from COS**</b>					
17	All Other Water Use	62,993,071	N/A	N/A	N/A	<b>N/A</b>
18						
19	<b>Total</b>	<b>89,797,098</b>	<b>23,048</b>		<b>\$46,939,258</b>	

\*Includes Commercial, Industrial, Municipal, Irrigation, Docks & Shipping, Builders & Contractors, & Fire Service water use

\*\*Includes Treasure Island, Non-Paying Municipal, Recycled Water, Upcountry/Hetch Hetch, & Wholesale water use

Table 5-6 shows the detailed calculation of Variable Charges in FY 2024 based on Raw Water Supply, Base Delivery, and Revenue Offsets unit costs (from Table 4-12) and Extra Capacity unit rates (from Table 5-5) in Columns A-D. Proposed charges per CCF (Column E) equal the sum of Columns A-D, and are compared to current FY 2023 charges in Columns F-G. Potable water charges are differentiated based on Extra Capacity unit rates only, which reflect differences in peak water demand patterns between residential and non-residential customers. Untreated Water charges are exempt from Base Delivery and Extra Capacity costs, which only pertain to the potable water system.



Table 5-6: Proposed FY 2024 Variable Charge Calculation

Line	Customer Class	(A) Raw Water Supply	(B) Base Delivery	(C) Extra Capacity	(D) Revenue Offsets	(E) Proposed Charge per CCF (FY 2024)	(F) Current Charge per CCF (FY 2023)	(G) Difference (\$)
1	<b>Single-Family Residential</b>							
2	First 4 Units per Month	\$2.570	\$7.214	\$1.316	(\$0.776)	<b>\$10.33</b>	\$9.60	\$0.73
3	All Additional Units	\$2.570	\$7.214	\$2.458	(\$0.776)	<b>\$11.47</b>	\$10.71	\$0.76
4								
5	<b>Multiple-Family Residential</b>							
6	First 3 Units per Dwelling Unit per Month	\$2.570	\$7.214	\$1.177	(\$0.776)	<b>\$10.19</b>	\$9.60	\$0.59
7	All Additional Units	\$2.570	\$7.214	\$1.926	(\$0.776)	<b>\$10.94</b>	\$10.76	\$0.18
8								
9	<b>Commercial, Industrial, and General Uses*</b>							
10	For All Units of Water	\$2.570	\$7.214	\$2.110	(\$0.776)	<b>\$11.12</b>	\$10.55	\$0.57
11								
12	<b>Untreated Water Service</b>							
13	For All Units of Water	\$2.570	N/A	N/A	(\$0.776)	<b>\$1.80</b>	\$0.95	\$0.85

\*Includes Commercial, Industrial, Municipal, Irrigation, Docks & Shipping, Builders & Contractors, and Fire Service water use

### **Proposed Retail Water Rate Schedule (FY 2024 – FY 2028)**

Table 5-7 shows current FY 2023 retail water rates and proposed/projected water rates for FY 2024 to FY 2028. Note that SFPUC staff is only recommending that the Commission consider adoption of three years of proposed rates through FY 2026. All rates shown beyond FY 2026 are projections for planning purposes only. Proposed FY 2024 rates were calculated in Table 5-2, Table 5-4, and Table 5-6. Proposed and projected rates in FY 2025-FY 2028 were calculated by increasing all proposed FY 2024 rates each year by the proposed and planned revenue adjustments in Table 3-13. All rates are proposed to become effective on July 1 of each fiscal year and are rounded up to the nearest cent to ensure adequate revenue recovery.

DRAFT

Table 5-7: Proposed and Projected Retail Water Rate Schedule (FY 2024 – FY 2028)

Line	Proposed Water Rate Schedule	(A) Current (since 7/1/2021)	(B) Proposed FY 2024 (7/1/2023)	(C) Proposed FY 2025 (7/1/2024)	(D) Proposed FY 2026 (7/1/2025)	(E) Projected FY 2027 (7/1/2026)	(F) Projected FY 2028 (7/1/2027)
1	<b>Fixed Monthly Service Charges (by Meter Size)</b>						
2	5/8 inch	\$15.17	\$16.64	\$17.48	\$18.36	\$19.10	\$19.87
3	3/4 inch	\$19.43	\$21.13	\$22.19	\$23.30	\$24.24	\$25.21
4	1-inch	\$27.95	\$30.11	\$31.62	\$33.21	\$34.54	\$35.93
5	1-1/2 inch	\$49.25	\$52.56	\$55.19	\$57.95	\$60.27	\$62.69
6	2-inch	\$74.81	\$79.51	\$83.49	\$87.67	\$91.18	\$94.83
7	3-inch	\$142.97	\$151.35	\$158.92	\$166.87	\$173.55	\$180.50
8	4-inch	\$219.65	\$232.18	\$243.79	\$255.98	\$266.22	\$276.87
9	6-inch	\$432.65	\$456.70	\$479.54	\$503.52	\$523.67	\$544.62
10	8-inch	\$688.25	\$726.13	\$762.44	\$800.57	\$832.60	\$865.91
11	10-inch	\$1,071.65	\$1,130.26	\$1,186.78	\$1,246.12	\$1,295.97	\$1,347.81
12	12-inch	\$1,838.45	\$1,938.54	\$2,035.47	\$2,137.25	\$2,222.74	\$2,311.65
13	16-inch	\$3,201.65	\$3,375.47	\$3,544.25	\$3,721.47	\$3,870.33	\$4,025.15
14							
15	<b>Private Fire Fixed Monthly Service Charges (by Service Size)</b>						
16	1-inch	\$9.55	\$8.43	\$8.86	\$9.31	\$9.69	\$10.08
17	1-1/2 inch	\$12.45	\$8.91	\$9.36	\$9.83	\$10.23	\$10.64
18	2-inch	\$15.93	\$9.73	\$10.22	\$10.74	\$11.17	\$11.62
19	3-inch	\$25.21	\$12.70	\$13.34	\$14.01	\$14.58	\$15.17
20	4-inch	\$35.65	\$17.82	\$18.72	\$19.66	\$20.45	\$21.27
21	6-inch	\$64.65	\$36.19	\$38.00	\$39.90	\$41.50	\$43.16
22	8-inch	\$99.45	\$67.88	\$71.28	\$74.85	\$77.85	\$80.97
23	10-inch	\$151.65	\$115.55	\$121.33	\$127.40	\$132.50	\$137.80
24	12-inch	\$256.05	\$181.62	\$190.71	\$200.25	\$208.26	\$216.60
25							
26	<b>Variable Charges (per CCF)</b>						
27	<u>Single-Family Residential</u>						
28	First 4 Units per Month	\$9.60	\$10.33	\$10.85	\$11.40	\$11.86	\$12.34
29	All Additional Units	\$10.71	\$11.47	\$12.05	\$12.66	\$13.17	\$13.70
30							
31	<u>Multiple-Family Residential</u>						
32	First 3 Units per Dwelling Unit per Month	\$9.60	\$10.19	\$10.70	\$11.24	\$11.69	\$12.16
33	All Additional Units	\$10.76	\$10.94	\$11.49	\$12.07	\$12.56	\$13.07
34							
35	<u>Commercial, Industrial, and General Uses</u>						
36	For All Units of Water	\$10.55	\$11.12	\$11.68	\$12.27	\$12.77	\$13.29
37							
38	<u>Untreated Water Service</u>						
39	For All Units of Water	\$0.95	\$1.80	\$1.89	\$1.99	\$2.07	\$2.16

### 5.3. Water Customer Bill Impacts

Sample monthly water bill impacts are shown for single family residential customers in Figure 5-1, multiple-family residential customers in Figure 5-2, and non-residential customers in Figure 5-3. The bill impacts compare current FY 2023 monthly water bills versus proposed FY 2024 monthly water bills at varying levels of monthly water use. Assumed meter sizes are 5/8-inch for single family residential and non-residential customers. Multiple-family residential bills assume a 1-inch meter and 10 dwelling units. The varying levels of water use correspond to the 10<sup>th</sup> percentile, 25<sup>th</sup> percentile, median, 75<sup>th</sup> percentile, and 90<sup>th</sup> percentile of monthly water use for each customer class based on an analysis of FY 2022 account-level billing data. Note that all bills exclude Drought Surcharges to provide a direct comparison of current versus proposed rates, even though Drought Surcharges currently are equal to 5% of Variable Charges in FY 2023.

**Figure 5-1: Sample Single Family Residential Water Monthly Bill Impacts (FY 2024)**

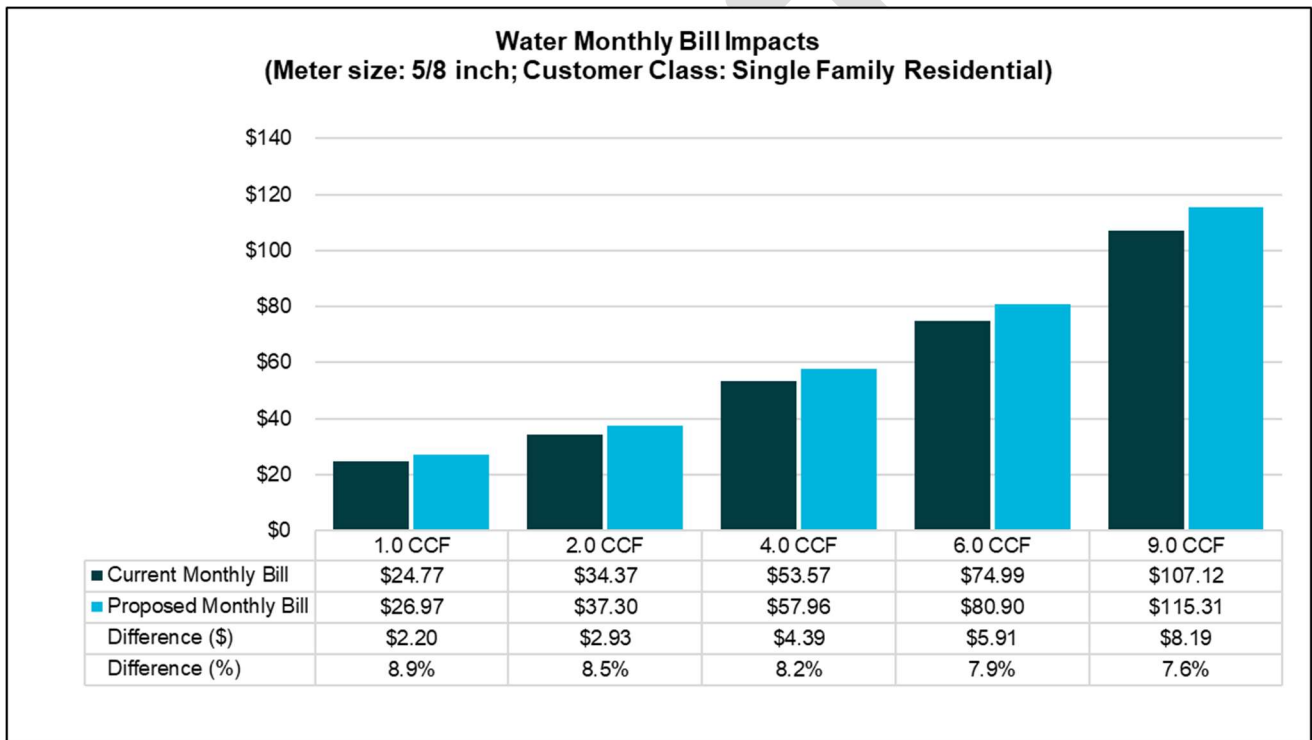


Figure 5-2: Sample Multiple-Family Residential Water Monthly Bill Impacts (FY 2024)

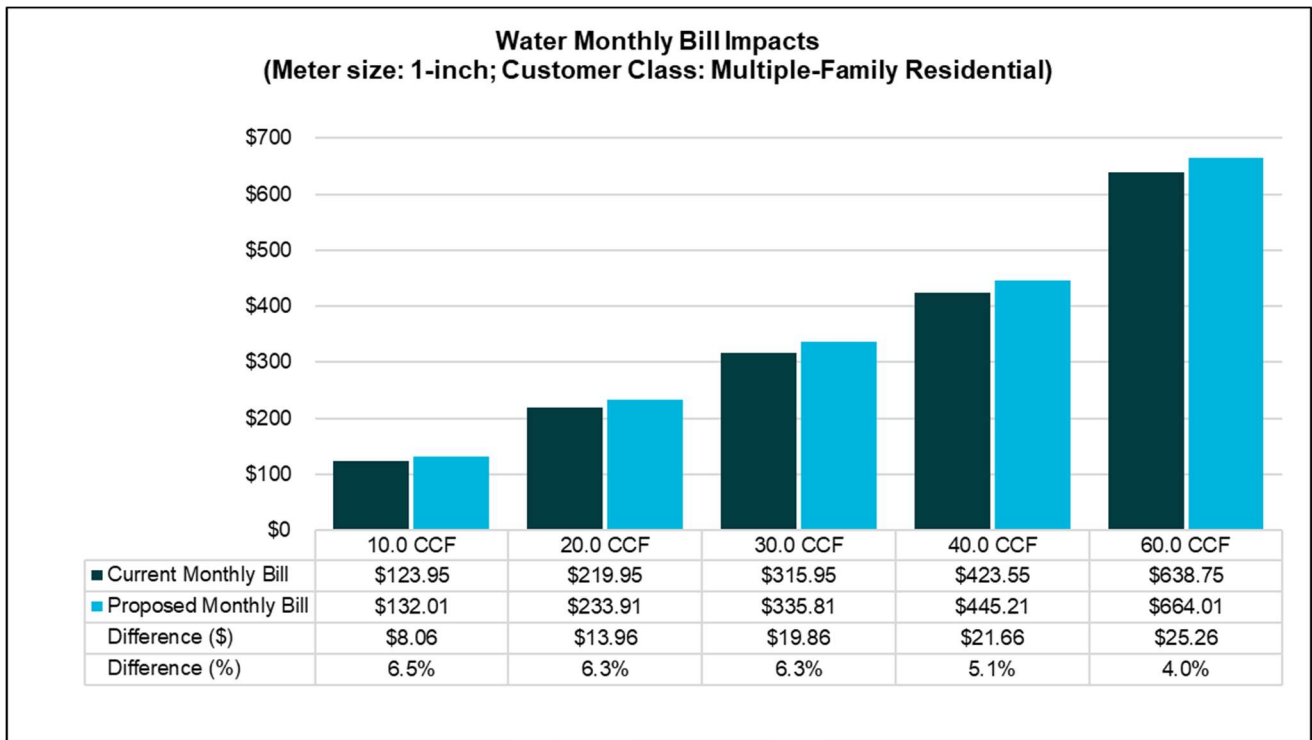
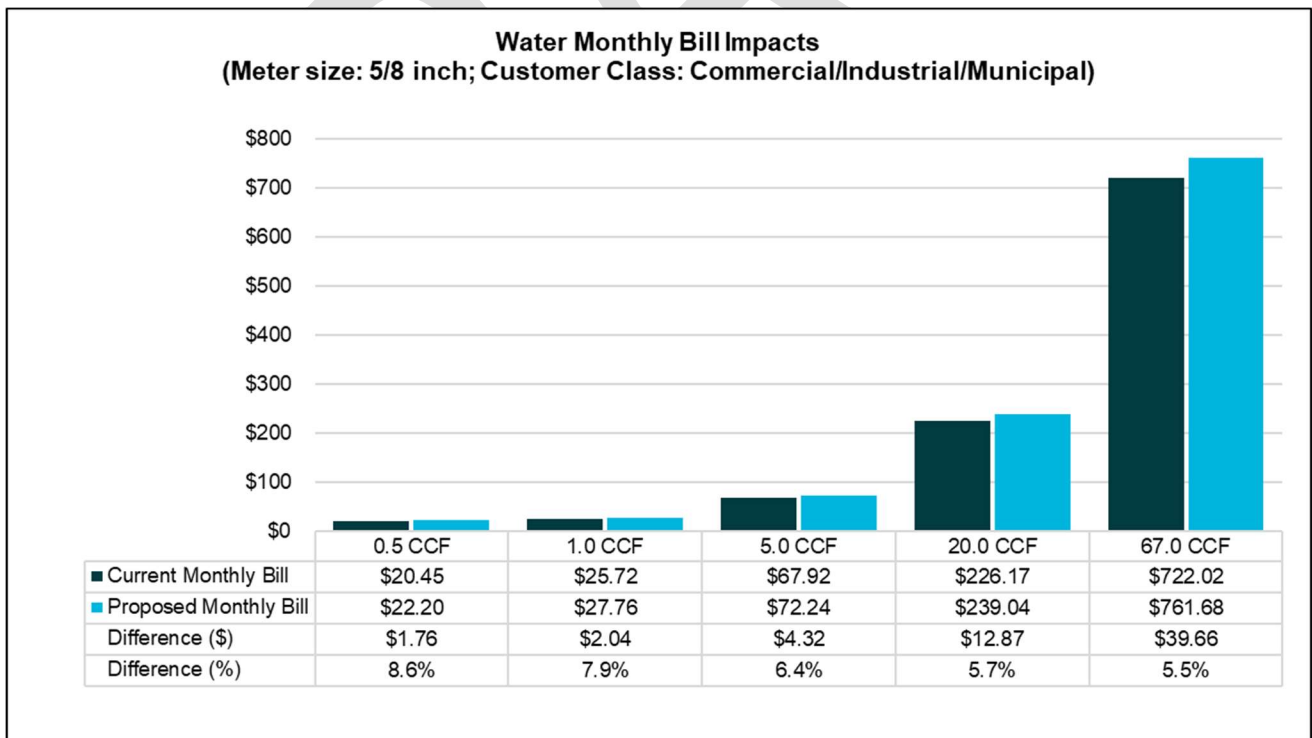


Figure 5-3: Sample Non-Residential Water Monthly Bill Impacts (FY 2024)



# 6. Wastewater Financial Plan

## 6.1. Overview of the Financial Planning Process

The primary goal of the financial planning process is to identify the total amount of retail wastewater rate revenue required on an annual basis to support the Wastewater Enterprise's financial needs. MME and Raftelis prepared a wastewater utility financial plan model in Microsoft Excel to project the SFPUC Wastewater Enterprise's revenues, expenses, cash flows, reserve balances, and debt coverage over a ten-year period from FY 2023 to FY 2032. Note that financial plan projections presented in this report extend out through the next five fiscal years only (through FY 2028). Also note that the wastewater financial plan projections developed by MME and Raftelis for this study correspond to, and are aligned with, the SFPUC staff's own 10-Year Financial Plan, which is updated on an annual basis as part of staff's on-going financial management processes.

The critical steps in developing a wastewater utility financial plan include:

- **Understanding the Existing Rate Structure and Billing Methodology**: This initial step in the financial planning process lays the foundation for the development of demand forecast and the projection of rate revenues at existing rates that accurately reflects customer usage characteristics and Wastewater Enterprise cost recovery procedures.
- **Projecting Wastewater Units of Service (Demand Forecast)**: The demand forecast projects the "units of service" subject to each rate/charge, including the number of wastewater service connections, volumetric wastewater discharges, and the strength loadings of the wastewater discharges. Projections are based on factors such as customer account growth and projected changes in customer water demand patterns and associated wastewater discharges.
- **Projecting Wastewater Rate Revenues at Existing Rates**: This step in the financial planning process determines how much rate revenue will be generated annually if there are *no rate increases*. The level of rate revenues at existing rates is compared to projected expenditures to determine the annual funding shortfall that must be met by the appropriate combination of rate revenue increases or external debt financing.
- **Projecting Miscellaneous Non-Rate Revenue**: Miscellaneous non-rate revenue items can include interest income from cash reserves, grants, capacity fee receipts, and miscellaneous ancillary fees. Miscellaneous non-rate revenues assist in closing the annual funding shortfall and reduce the revenue requirement from rates (i.e., the level of amount of rate revenue that must be earned from customers).
- **Projecting Operating and Maintenance Expenses and Existing Debt Service**: This step in the financial planning process projects the O&M expenses that will be incurred to provide utility service as well as required debt service payments on existing debt obligations.
- **Determining a Capital Financing Strategy**: In many utilities, the key driver of the annual funding shortfall is projected CIP expenditures. In this step in the financial planning process, the utility determines the optimal mix of annual rate revenue increases and external debt financing to cover the

funding shortfall. An outcome of this process is the identification of rate revenue funded CIP expenditures, required debt proceeds, and projected debt service costs.

- **Identifying Cash Reserve and Debt Service Coverage Targets:** Utilities must not only have sufficient revenues to pay for projected costs, but they must also maintain prudent cash reserves and meet both contractually obligated and target debt service coverage requirements. The sewer revenue requirement from rates must include the cost of meeting both cash reserve and debt service coverage targets.
- **Determining Annual Revenue Requirement from Rates:** The final outcome of the financial planning process is the determination of the annual amount of rate revenue that must be recovered from customers to pay for all projected Wastewater Enterprise costs and meet financial targets.

## 6.2. Financial Plan Components

### Existing Retail Wastewater Rates

The SFPUC's currently effective FY 2023 wastewater rates are shown in Table 6-1. The rates shown include:

- » A **Fixed Monthly Service Charge** that is the same for both residential and non-residential customers
- » **Variable Charges** per one hundred cubic feet (CCF) of discharge that vary based on whether the customer is residential or non-residential
- » **Chemical Oxygen Demand (COD)** per pound in one hundred cubic feet (CCF) of discharge that is charged to non-residential users. Residential users have this charge included in their volumetric charges
- » **Total Suspended Solids (TSS) Charges** per pound in one hundred cubic feet (CCF) of discharge that is charged to non-residential users. Residential users have this charge included in their volumetric charges
- » **Oil and Grease (OG) Charges** per pound in one hundred cubic feet (CCF) of discharge that is charged to non-residential users. Residential users have this charge included in their volumetric charges.

In addition to the current wastewater rates, the SFPUC currently assesses a monthly service charge to a small number of non-metered parcels to account for the stormwater runoff generated from these properties (see Table 6-2). Therefore, the current wastewater rates shown in Table 6-1 recover the cost of providing both wastewater and stormwater service.

**Table 6-1: Current Wastewater Enterprise Rates**

Line	Customer Class	Current Rate
1	<b>Residential Wastewater</b>	
2	Monthly Service Charge	\$5.21
3	Volume per Discharge Unit (CCF)	\$15.97
4		
5	<b>Non-Residential Wastewater</b>	
6	Monthly Service Charge	\$5.21
7	Volume per Discharge Unit (CCF)	\$9.46
8	Chemical Oxygen Demand (COD)/lb	\$0.65
9	Total Suspended Solids (TSS)/lb	\$1.65
10	Oil and Grease (OG)/lb	\$1.66

**Table 6-2: Stormwater Runoff Rates for Customers without SFPUC Accounts**

Line	Stormwater Class	Current Rate
1	Low Runoff	\$22.16
2	Standard Runoff	\$36.31

## Wastewater Billing Methodology

The volumetric wastewater rates paid by SFPUC customers reflect the volume of their billed wastewater discharges and their assumed strength loadings for chemical oxygen demand (COD), total suspended solids (TSS) and Oil and Grease (OG). The \$/CCF volumetric rate paid by residential customers combines the costs the SFPUC incurs to treat both the volume and strength loadings of residential customers (Line 3 in Table 6-1). In contrast, non-residential customers pay separately identified \$/CCF and \$/lb (dollars per pound) components for the volume of billed discharges (Line 7 in Table 6-1 and strength loadings (Lines 8 – 10 on Table 6-1).

The SFPUC's billing system assigns all wastewater customers to one of eleven (11) strength loading groups based on their Standard Industrial Classification (SIC) Code. For example, a residential hotel with no eating facilities with an SIC Code of 7014 is assigned to strength loading Group 2. Similarly, a nursing facility with an SIC Code of 8050 is assigned to strength loading Group 3. With very few exceptions, residential customers are assigned strength loading Group 4. The SIC Codes and their loading groups are shown in Appendix G. This information is used to calculate the monthly volumetric bill paid by each wastewater customer. Table 6-3 shows the SFPUC's strength loading associated with each group.



**Table 6-3: Wastewater Enterprise Strength Loading Groups**

Line	SIC Code	Strength Concentration (mg/L)			Strength (lbs/CCF)		
		COD	TSS	OG	COD	TSS	OG
1	SIC Group 2	194	56	26	1.211	0.350	0.162
2	SIC Group 3	640	239	63	3.995	1.492	0.393
3	SIC Group 4	684	279	85	4.270	1.742	0.531
4	SIC Group 5	641	224	86	4.002	1.398	0.537
5	SIC Group 6	396	59	100	2.472	0.368	0.624
6	SIC Group 7	1,387	171	112	8.659	1.068	0.699
7	SIC Group 8	1,539	181	125	9.608	1.130	0.780
8	SIC Group 9	1,616	284	137	10.088	1.773	0.855
9	SIC Group 10	1,153	303	251	7.198	1.892	1.567
10	SIC Group 11	4,921	1,371	559	30.721	8.559	3.490
11	SIC Group 12	715	303	100	4.464	1.892	0.624

### Wastewater Unit-of-Service (Demand Forecast)

Table 6-4 through Table 6-8 summarize the projected wastewater discharge volumes and strength loadings for the FY 2023 – FY 2028. The information shown Table 6-4 through Table 6-8 provides a foundation for the projection of revenues at existing rates, the allocation of costs to customer classes, and the determination of wastewater rates. This units of service projections shown in Table 6-4 through Table 6-8 are based on actual historical recorded values for FY 2022 as obtained from the SFPUC's billing system. The FY 2022 units of service were projected forward using the following methodologies:

- **Projected Customer Accounts (Table 6-4):** There is no projected customer account growth during the financial planning period. This reflects that fact that the City of San Francisco is virtually 100% built out.
- **Projected Discharge Volumes (Table 6-5):** Discharge volumes in FY 2022 reflected the impact of the COVID-19 pandemic coupled with the effects of prolonged drought conditions on customer water usage. Beginning in FY 2023 customer wastewater discharge volumes are projected to begin moving back to historical norms for each type of customer.
- **Projected Discharge Strength Loadings (Table 6-6 through Table 6-8):** Projected strength loading are directly correlated to projected discharge volumes.

**Table 6-4: Projected Wastewater Enterprise Customer Accounts**

Line	Customer Type	Customer Rate Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Single Family Residential	Residential	111,671	111,671	111,671	111,671	111,671	111,671
2	Multifamily Residential	Residential	36,443	36,443	36,443	36,443	36,443	36,443
3	Municipal	Non-Residential	797	797	797	797	797	797
4	Nonresidential/Commercial	Non-Residential	15,182	15,182	15,182	15,182	15,182	15,182
5	Fire	Non-Residential	9,775	9,775	9,775	9,775	9,775	9,775
6	Municipal Fire	Non-Residential	354	354	354	354	354	354
7	<b>Total Accounts</b>		<b>174,222</b>	<b>174,222</b>	<b>174,222</b>	<b>174,222</b>	<b>174,222</b>	<b>174,222</b>
8								
9	Strength Group	Customer Rate Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
10	SICGRP1	Varies	208	208	208	208	208	208
11	SICGRP2	Varies	356	356	356	356	356	356
12	SICGRP3	Varies	43	43	43	43	43	43
13	SICGRP4	Varies	99,297	99,297	99,297	99,297	99,297	99,297
14	SICGRP5	Varies	328	328	328	328	328	328
15	SICGRP6	Varies	9	9	9	9	9	9
16	SICGRP7	Varies	198	198	198	198	198	198
17	SICGRP8	Varies	111	111	111	111	111	111
18	SICGRP9	Varies	11	11	11	11	11	11
19	SICGRP10	Varies	1,891	1,891	1,891	1,891	1,891	1,891
20	SICGRP11	Varies	4	4	4	4	4	4
21	SICGRP12	Varies	319	319	319	319	319	319
22	NO SIC CODE (Note 1)	Varies	71,447	71,447	71,447	71,447	71,447	71,447
23	<b>Total Accounts</b>		<b>174,222</b>	<b>174,222</b>	<b>174,222</b>	<b>174,222</b>	<b>174,222</b>	<b>174,222</b>

Note 1: Customers without an assigned SIC Code either have measured strength loadings or are assigned to Strength Group 4

Table 6-5: Projected Wastewater Enterprise Discharge Volumes (CCF)

Line	Customer Type	Customer Rate Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Single Family Residential	Residential	5,852,347	5,745,781	5,831,301	5,933,638	5,877,158	5,841,158
2	Multifamily Residential	Residential	9,900,937	9,720,649	9,865,331	10,038,464	9,942,912	9,882,008
3	Municipal	Non-Residential	478,645	502,612	513,265	525,501	514,877	506,336
4	Nonresidential/Commercial	Non-Residential	5,230,218	5,747,608	5,815,681	5,900,020	5,825,165	5,771,448
5	Fire	Non-Residential	25,656	28,194	28,528	28,942	28,575	28,311
6	Municipal Fire	Non-Residential	552	580	592	606	594	584
7	<b>Total Discharge</b>		<b>21,488,357</b>	<b>21,745,424</b>	<b>22,054,698</b>	<b>22,427,172</b>	<b>22,189,281</b>	<b>22,029,846</b>
8								
9	Strength Group	Customer Rate Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
10	SICGRP1	Varies	10,433	11,391	11,528	11,697	11,550	11,446
11	SICGRP2	Varies	589,153	647,433	655,101	664,602	656,170	650,119
12	SICGRP3	Varies	63,797	70,108	70,938	71,967	71,054	70,399
13	SICGRP4	Varies	13,066,514	13,196,809	13,386,809	13,615,240	13,469,806	13,372,058
14	SICGRP5	Varies	845,942	929,607	940,620	954,265	942,155	933,464
15	SICGRP6	Varies	3,054	3,356	3,396	3,445	3,402	3,370
16	SICGRP7	Varies	180,645	198,514	200,866	203,779	201,193	199,338
17	SICGRP8	Varies	19,004	20,884	21,131	21,438	21,166	20,971
18	SICGRP9	Varies	12,938	14,217	14,386	14,594	14,409	14,276
19	SICGRP10	Varies	498,801	548,062	554,569	562,627	555,476	550,341
20	SICGRP11	Varies	760	835	845	857	846	838
21	SICGRP12	Varies	137,980	151,629	153,425	155,650	153,676	152,258
22	NO SIC CODE (Note 1)	Varies	6,059,338	5,952,578	6,041,084	6,147,011	6,088,379	6,050,968
23	<b>Total Accounts</b>		<b>21,488,357</b>	<b>21,745,424</b>	<b>22,054,698</b>	<b>22,427,172</b>	<b>22,189,281</b>	<b>22,029,846</b>

Note 1: Customers without an assigned SIC Code either have measured strength loadings or are assigned to Strength Group 4

Table 6-6: Projected Wastewater Enterprise COD Loadings (Pounds)

Line	Customer Type	Customer Rate Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Single Family Residential	Residential	24,989,962	24,534,916	24,900,091	25,337,080	25,095,906	24,942,184
2	Multifamily Residential	Residential	42,277,835	41,507,991	42,125,792	42,865,086	42,457,071	42,197,005
3	Municipal	Non-Residential	2,024,408	2,125,773	2,170,833	2,222,582	2,177,648	2,141,526
4	Nonresidential/Commercial	Non-Residential	23,768,545	26,119,805	26,429,159	26,812,436	26,472,258	26,228,144
5	Fire	Non-Residential	9	10	10	10	10	10
6	Municipal Fire	Non-Residential	0	0	0	0	0	0
7	<b>Total COD (lbs)</b>		<b>93,060,758</b>	<b>94,288,494</b>	<b>95,625,885</b>	<b>97,237,194</b>	<b>96,202,893</b>	<b>95,508,868</b>
8								
9	Strength Group	Customer Rate Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
10	SICGRP1	Varies	5,295	5,505	5,578	5,667	5,604	5,561
11	SICGRP2	Varies	717,457	788,430	797,768	809,337	799,069	791,700
12	SICGRP3	Varies	254,805	280,011	283,327	287,436	283,789	281,172
13	SICGRP4	Varies	56,971,927	57,645,753	58,472,189	59,466,386	58,828,694	58,399,373
14	SICGRP5	Varies	3,288,404	3,613,631	3,656,444	3,709,485	3,662,409	3,628,624
15	SICGRP6	Varies	9,548	10,493	10,617	10,771	10,634	10,536
16	SICGRP7	Varies	1,561,472	1,715,937	1,736,260	1,761,440	1,739,092	1,723,055
17	SICGRP8	Varies	157,489	173,068	175,118	177,658	175,404	173,786
18	SICGRP9	Varies	100,530	110,475	111,783	113,404	111,966	110,933
19	SICGRP10	Varies	3,571,034	3,923,852	3,970,409	4,028,073	3,976,898	3,940,159
20	SICGRP11	Varies	21,898	24,064	24,349	24,702	24,389	24,164
21	SICGRP12	Varies	619,696	680,998	689,064	699,057	690,187	683,823
22	NO SIC CODE (Note 1)	Varies	25,781,204	25,316,277	25,692,979	26,143,778	25,894,759	25,735,982
23	<b>Total Accounts</b>		<b>93,060,758</b>	<b>94,288,494</b>	<b>95,625,885</b>	<b>97,237,194</b>	<b>96,202,893</b>	<b>95,508,868</b>

Note 1: Customers without an assigned SIC Code either have measured strength loadings or are assigned to Strength Group 4

**Table 6-7: Projected Wastewater Enterprise TSS Loadings (Pounds)**

Line	Customer Type	Customer Rate Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Single Family Residential	Residential	10,193,273	10,007,662	10,156,615	10,334,861	10,236,487	10,173,785
2	Multifamily Residential	Residential	17,244,873	16,930,858	17,182,856	17,484,409	17,317,982	17,211,903
3	Municipal	Non-Residential	800,096	840,158	857,966	878,419	860,660	846,384
4	Nonresidential/Commercial	Non-Residential	7,774,587	8,543,674	8,644,863	8,770,231	8,658,960	8,579,111
5	Fire	Non-Residential	0	0	0	0	0	0
6	Municipal Fire	Non-Residential	0	0	0	0	0	0
7	<b>Total TSS (lbs)</b>		<b>36,012,829</b>	<b>36,322,352</b>	<b>36,842,300</b>	<b>37,467,919</b>	<b>37,074,090</b>	<b>36,811,182</b>
8								
Line	Strength Group	Customer Rate Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
10	SICGRP1	Varies	2,160	2,246	2,275	2,312	2,286	2,268
11	SICGRP2	Varies	207,432	227,952	230,652	233,997	231,028	228,898
12	SICGRP3	Varies	95,121	104,531	105,769	107,303	105,941	104,964
13	SICGRP4	Varies	22,604,391	22,817,727	23,146,341	23,541,408	23,290,569	23,122,154
14	SICGRP5	Varies	1,147,726	1,261,237	1,276,180	1,294,692	1,278,262	1,266,470
15	SICGRP6	Varies	2,653	2,915	2,950	2,993	2,955	2,927
16	SICGRP7	Varies	192,254	211,273	213,775	216,875	214,123	212,149
17	SICGRP8	Varies	19,187	21,085	21,335	21,644	21,370	21,173
18	SICGRP9	Varies	17,228	18,932	19,157	19,434	19,188	19,011
19	SICGRP10	Varies	942,318	1,035,389	1,047,680	1,062,902	1,049,393	1,039,694
20	SICGRP11	Varies	8,776	9,644	9,758	9,900	9,774	9,684
21	SICGRP12	Varies	260,776	286,573	289,967	294,172	290,440	287,762
22	NO SIC CODE (Note 1)	Varies	10,512,807	10,322,848	10,476,461	10,660,288	10,558,760	10,494,029
23	<b>Total Accounts</b>		<b>36,012,829</b>	<b>36,322,352</b>	<b>36,842,300</b>	<b>37,467,919</b>	<b>37,074,090</b>	<b>36,811,182</b>

Note 1: Customers without an assigned SIC Code either have measured strength loadings or are assigned to Strength Group 4

**Table 6-8: Projected Wastewater Enterprise Oil and Grease Loadings (Pounds)**

Line	Customer Type	Customer Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Single Family Residential	Residential	3,105,478	3,048,930	3,094,310	3,148,614	3,118,643	3,099,541
2	Multifamily Residential	Residential	5,253,846	5,158,178	5,234,951	5,326,823	5,276,119	5,243,801
3	Municipal	Non-Residential	220,000	231,016	235,913	241,537	236,654	232,728
4	Nonresidential/Commercial	Non-Residential	3,036,535	3,336,919	3,376,440	3,425,406	3,381,946	3,350,760
5	Fire	Non-Residential	0	0	0	0	0	0
6	Municipal Fire	Non-Residential	0	0	0	0	0	0
7	<b>Total O/G (lbs)</b>		<b>11,615,859</b>	<b>11,775,042</b>	<b>11,941,614</b>	<b>12,142,379</b>	<b>12,013,363</b>	<b>11,926,829</b>
8								
Line	Strength Group	Customer Rate Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
10	SICGRP1	Varies	658	684	693	704	696	691
11	SICGRP2	Varies	95,923	105,412	106,661	108,208	106,835	105,850
12	SICGRP3	Varies	25,072	27,552	27,879	28,283	27,924	27,667
13	SICGRP4	Varies	6,836,188	6,897,383	6,996,616	7,115,933	7,040,427	6,989,821
14	SICGRP5	Varies	441,325	484,972	490,718	497,836	491,518	486,984
15	SICGRP6	Varies	1,801	1,979	2,003	2,032	2,006	1,988
16	SICGRP7	Varies	126,077	138,549	140,190	142,223	140,419	139,124
17	SICGRP8	Varies	12,989	14,274	14,443	14,652	14,466	14,333
18	SICGRP9	Varies	7,190	7,902	7,995	8,111	8,008	7,934
19	SICGRP10	Varies	774,809	851,379	861,477	873,985	862,884	854,916
20	SICGRP11	Varies	2,493	2,739	2,772	2,812	2,776	2,751
21	SICGRP12	Varies	87,462	96,114	97,253	98,663	97,411	96,513
22	NO SIC CODE (Note 1)	Varies	3,203,872	3,146,102	3,192,916	3,248,937	3,217,991	3,198,259
23	<b>Total Accounts</b>		<b>11,615,859</b>	<b>11,775,042</b>	<b>11,941,614</b>	<b>12,142,379</b>	<b>12,013,363</b>	<b>11,926,829</b>

Note 1: Customers without an assigned SIC Code either have measured strength loadings or are assigned to Strength Group 4

## Projected Wastewater Revenues at Existing Rates

Table 6-9 shows a detail of projected rate revenues for the period FY 2023 – FY 2028 assuming that existing wastewater rates remain unchanged. The projection of revenues at existing rates, when compared to projected expenditures, allows for the quantification of the funding gap that must be filled by rate revenue increases, external debt financing, or some other form of funding. The revenues shown in Table 6-9 were calculated by multiplying the projected units of service each for each year by the existing wastewater rates.

**Table 6-9: Projected Wastewater Enterprise Revenue at Existing Rates**

Line	Customer Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Single Family Residential	\$100,443,646	\$98,741,782	\$100,107,532	\$101,741,860	\$100,839,877	\$100,264,958
2	Multifamily Residential	\$160,396,402	\$157,517,207	\$159,827,768	\$162,592,707	\$161,066,741	\$160,094,100
3	Municipal	\$7,570,774	\$7,947,357	\$8,114,760	\$8,307,017	\$8,140,081	\$8,005,882
4	Nonresidential/Commercial	\$83,653,724	\$91,835,121	\$92,911,544	\$94,245,186	\$93,061,510	\$92,212,094
5	Fire	\$853,829	\$877,839	\$880,998	\$884,911	\$881,438	\$878,945
6	Municipal Fire	\$27,365	\$27,626	\$27,742	\$27,876	\$27,760	\$27,667
7	<b>Total</b>	<b>\$352,945,740</b>	<b>\$356,946,933</b>	<b>\$361,870,344</b>	<b>\$367,799,557</b>	<b>\$364,017,407</b>	<b>\$361,483,646</b>

## Projected Sewer Non-Rate Revenue Offsets

In addition to revenues produced by retail sewer rates, the Wastewater Enterprise has several sources of miscellaneous non-rate revenues that offset the amount of rate revenue that must be collected from retail sewer customers.

Table 6-10 provides a detailed projection of these miscellaneous revenues for the period FY 2023 – FY 2028. They include Other Retail Charges earned from providing retail sewer service to communities located outside of the City of San Francisco (lines 2 and 3). They also include Operating Revenues from the provision of wastewater collection services to local sewer utility districts (line 7), interest income (line 8), and Federal Bond Interest Subsidy revenue (line 9). Programmatic Revenue include revenues from specific Wastewater Enterprise programs (lines 14 – 18), which include wastewater rate revenue from the Treasure Island Development Authority and other revenues associated with the SFPUC's headquarters building at 525 Golden Gate Avenue. In addition, the Wastewater Enterprise also earns significant Non-Debt Capital Revenue from capacity charges (line 22).

Table 6-10: Projected Wastewater Enterprise Miscellaneous Revenues

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	<b>Other Retail Charges</b>						
2	Saddleback	\$73,782	\$81,348	\$89,924	\$99,664	\$108,475	\$118,472
3	Suburban Sanitary Retail (SSR)	\$4,927	\$5,290	\$5,587	\$6,189	\$6,748	\$7,380
4	<b>Total Non-Rate Operating Revenue</b>	<b>\$78,709</b>	<b>\$86,638</b>	<b>\$95,511</b>	<b>\$105,853</b>	<b>\$115,223</b>	<b>\$125,852</b>
5							
6	<b>Operating Revenues</b>						
7	Wholesale Sewer Charges Total	\$11,034,000	\$12,121,000	\$13,334,000	\$14,656,000	\$16,141,000	\$17,464,000
8	Interest Income Total	\$1,600,000	\$1,654,000	\$2,121,000	\$1,953,000	\$1,903,000	\$2,180,000
9	Federal Bond Interest Subsidy Total	\$3,470,860	\$3,356,167	\$3,234,710	\$3,105,412	\$2,967,774	\$2,821,938
10	Rental Revenue Total	\$747,800	\$774,000	\$795,000	\$815,000	\$836,000	\$857,000
11	Other Misc Income Total	\$735,033	\$910,608	\$935,000	\$959,000	\$984,000	\$1,009,000
12	<b>Total Non-Rate Operating Revenue</b>	<b>\$17,587,693</b>	<b>\$18,815,775</b>	<b>\$20,419,710</b>	<b>\$21,488,412</b>	<b>\$22,831,774</b>	<b>\$24,331,938</b>
13							
14	<b>Programmatic Revenues</b>						
15	Treasure Island Sewer Charges	\$1,555,000	\$1,715,000	\$1,896,000	\$2,102,000	\$2,288,000	\$2,499,000
16	525GG Infrastructure Recovery - O&M	\$265,000	\$268,000	\$268,000	\$268,000	\$276,000	\$284,000
17	525GG Infrastructure Recovery - Lease	\$1,872,000	\$1,872,000	\$1,872,000	\$1,872,000	\$1,872,000	\$1,872,000
18	525GG COPS Bond Interest Subsidy	\$520,828	\$511,760	\$493,247	\$473,961	\$453,862	\$432,911
19	<b>Total Programmatic Revenue</b>	<b>\$4,212,828</b>	<b>\$4,366,760</b>	<b>\$4,529,247</b>	<b>\$4,715,961</b>	<b>\$4,889,862</b>	<b>\$5,087,911</b>
20							
21	<b>Non-Debt Capital Revenues</b>						
22	Capacity Charges	\$5,695,000	\$6,329,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000
23	<b>Total Non-Debt Capital Revenue</b>	<b>\$5,695,000</b>	<b>\$6,329,000</b>	<b>\$5,695,000</b>	<b>\$5,695,000</b>	<b>\$5,695,000</b>	<b>\$5,695,000</b>
24							
25							
26	<b>TOTAL REVENUE</b>	<b>\$396,920,863</b>	<b>\$437,648,873</b>	<b>\$460,796,192</b>	<b>\$508,434,886</b>	<b>\$552,204,836</b>	<b>\$601,798,753</b>

## Projected Rate Funded CIP Expenditures

Table 6-11 shows the annual revenue budgeted as a funding source for capital expenditures, as approved in the SFPUC's FY 2024 10-Year Capital Improvement Plan. The revenue sources include capacity fees (i.e., one-time fees assessed to new development/intensified redevelopment) and local revenue (i.e., Retail Sewer sales). The amounts shown do not represent annual spending on capital projects, but rather the amount of revenues appropriated each year through the SFPUC's budget process as a funding source for pay-as-you-go (i.e., cash funded) capital projects to meet the long-term capital replacement needs of the Wastewater Enterprise.

Table 6-11: Projected Wastewater Enterprise CIP Expenditures by Funding Source

Line	CIP Expenditures by Funding Source	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Rate Funded	\$83,005,000	\$92,038,000	\$122,657,438	\$125,110,586	\$127,612,798	\$130,165,054
2	Revenue Bonds	\$658,750,000	\$607,500,000	\$0	\$825,855,000	\$736,610,000	\$0
3	Capacity Fees	\$5,695,000	\$6,329,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000
4	<b>Annual CIP Expenditures</b>	<b>\$747,452,023</b>	<b>\$705,869,024</b>	<b>\$128,354,463</b>	<b>\$956,662,612</b>	<b>\$869,919,825</b>	<b>\$135,862,082</b>
5	<b>Cumulative CIP Expenditures</b>	<b>\$747,452,023</b>	<b>\$1,453,321,047</b>	<b>\$1,581,675,510</b>	<b>\$2,538,338,122</b>	<b>\$3,408,257,947</b>	<b>\$3,544,120,029</b>

## Projected Debt Service Expenditures

Table 6-12 shows existing and proposed Wastewater Enterprise debt service through FY 2028. The Wastewater Enterprise's existing debt service includes principal and interest payments associated with outstanding revenue bonds, State Revolving Fund (SRF) Loans, and Water Infrastructure Finance and Innovation Act (WIFIA) Loans.

Proposed debt service projections are based on the SFPUC Capital Financing Team’s planned revenue bond issuances to fund Wastewater Enterprise CIP. The proposed debt service projections assume four new revenue bond issuances through FY 2028 (\$658,750,000 in FY 2023, \$607,500,000 in FY 2024, \$825,855,000 in FY 2026, and \$736,610,000 in FY 2027). Total issuance amounts include assumed interim financing costs associated with commercial paper. All proposed debt service was estimated based on a 5% interest rate, 30-year term, and 30 months of capitalized interest. The capitalized interest delays the payment of debt by adding the interest that would be accrued to the principal. This results in a lag in the timing of the proposed debt service.

**Table 6-12: Wastewater Enterprise Debt Service**

Line	Debt Service	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Senior Lien Revenue Bonds	\$96,538,372	\$98,754,602	\$111,094,427	\$112,704,838	\$112,616,493	\$112,478,633
2	Senior Lien SRF	\$4,004,851	\$4,004,851	\$10,152,294	\$10,483,590	\$15,738,159	\$15,738,159
3	Senior Lien WIFIA	\$0	\$0	\$0	\$5,239,457	\$10,478,914	\$10,478,914
4	Senior Lien Revenue Notes	\$3,474,650	\$3,474,650	\$3,474,650	\$2,382,875	\$645,550	\$0
5	Proposed Debt Service	\$0	\$0	\$0	\$22,403,639	\$71,487,376	\$97,647,836
6	<b>Total</b>	<b>\$104,017,873</b>	<b>\$106,234,104</b>	<b>\$124,721,371</b>	<b>\$153,214,399</b>	<b>\$210,966,492</b>	<b>\$236,343,542</b>

## Projected Wastewater Operations and Maintenance Expenses

The Wastewater Enterprise’s O&M expenses primarily consist of personnel costs, administrative overhead costs, and other operating costs associated with wastewater and stormwater collection, conveyance, treatment, and disposal. Programmatic Expenses<sup>11</sup> are also included in the Wastewater Enterprise’s O&M expenses. O&M expense projections are based on the FY 2023 and FY 2024 adopted budgets and take into account both annual inflationary and execution factor assumptions.

Before accounting for execution factors, budgeted O&M expenses in FY 2024 were escalated annually by inflationary assumptions (from Table 6-13) to establish preliminary O&M projections through FY 2028 (Table 6-14, Lines 1-14). All inflationary assumptions are consistent with the SFPUC staff’s 10-Year Financial Plan model. SFPUC staff conducted an analysis of actual versus budgeted Water Enterprise O&M expenses in prior years, which provided the basis for execution factor assumptions (Table 6-14, Lines 16-25). Execution factors represent the percentage of budgeted expenses actually incurred each year. Adjusted O&M expense projections (Table 6-14, Lines 27-40) were calculated by multiplying the preliminary O&M expense projections by the corresponding execution factors. Financial plan projections presented in the following sections incorporate the adjusted O&M expense projections, inclusive of execution factors.

**Table 6-13: Inflationary Assumptions for Wastewater Enterprise O&M Expenses**

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	General	<i>Budget</i>	<i>Budget</i>	3.00%	3.00%	3.00%	3.00%
2	Salary	<i>Budget</i>	<i>Budget</i>	3.00%	3.00%	3.00%	3.00%
3	Benefits	<i>Budget</i>	<i>Budget</i>	4.40%	4.40%	4.40%	4.40%
4	Utilities	<i>Budget</i>	<i>Budget</i>	3.00%	3.00%	3.00%	3.00%
5	Chemicals	<i>Budget</i>	<i>Budget</i>	3.00%	3.00%	3.00%	3.00%

<sup>11</sup> Programmatic expenses include expenses associated with the SFPUC’s headquarters building at 525 Golden Gate Avenue, Treasure Island operating costs, and the cost of other specific programs such as low impact development and the Youth Employment and Environment Program.



Table 6-14: Projected Wastewater Enterprise O&amp;M Expenses

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	<b>O&amp;M Expenses (Before Execution Factors)</b>						
2	Personnel	\$87,160,554	\$88,584,816	\$91,596,129	\$94,713,347	\$97,940,333	\$101,281,093
3	Other Non-Personnel Services	\$26,603,401	\$27,295,904	\$28,114,906	\$28,958,483	\$29,827,373	\$30,722,336
4	Materials, Supplies & Equipment	\$14,348,388	\$15,252,857	\$15,710,443	\$16,181,756	\$16,667,209	\$17,167,225
5	Services of SFPUC Bureaus	\$37,573,094	\$38,145,082	\$39,289,434	\$40,468,117	\$41,682,161	\$42,932,626
6	Services of Other Departments	\$35,700,349	\$41,213,880	\$42,268,433	\$43,354,622	\$44,473,397	\$45,625,735
7	Other Operating Expenses	\$281,713	\$281,713	\$281,713	\$281,713	\$281,713	\$281,713
8	<b>Subtotal O&amp;M</b>	<b>\$201,667,499</b>	<b>\$210,774,252</b>	<b>\$217,261,057</b>	<b>\$223,958,038</b>	<b>\$230,872,185</b>	<b>\$238,010,728</b>
9							
10	<b>Programmatic Expenses</b>						
11	Programmatic Expenses	\$7,736,917	\$7,766,551	\$7,807,711	\$7,850,106	\$7,893,772	\$7,938,749
12	<b>Subtotal Programmatic</b>	<b>\$7,736,917</b>	<b>\$7,766,551</b>	<b>\$7,807,711</b>	<b>\$7,850,106</b>	<b>\$7,893,772</b>	<b>\$7,938,749</b>
13							
14	<b>Total O&amp;M before Execution Factors</b>	<b>\$209,404,416</b>	<b>\$218,540,803</b>	<b>\$225,068,768</b>	<b>\$231,808,144</b>	<b>\$238,765,958</b>	<b>\$245,949,477</b>
15							
16	<b>O&amp;M Expenses Execution Factors</b>						
17	Personnel	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
18	Other Non-Personnel Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
19	Materials, Supplies & Equipment	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
20	Services of SFPUC Bureaus	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
21	Services of Other Departments	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
22	Other Operating Expenses	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
23							
24	<b>Programmatic Expenses Execution Factors</b>						
25	Programmatic Expenses	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
26							
27	<b>O&amp;M Expenses (After Execution Factors)</b>						
28	Personnel	\$82,802,526	\$84,155,575	\$87,016,323	\$89,977,680	\$93,043,316	\$96,217,039
29	Other Non-Personnel Services	\$26,603,401	\$27,295,904	\$28,114,906	\$28,958,483	\$29,827,373	\$30,722,336
30	Materials, Supplies & Equipment	\$12,913,549	\$13,727,571	\$14,139,398	\$14,563,580	\$15,000,488	\$15,450,502
31	Services of SFPUC Bureaus	\$35,694,439	\$36,237,828	\$37,324,963	\$38,444,712	\$39,598,053	\$40,785,995
32	Services of Other Departments	\$35,700,349	\$41,213,880	\$42,268,433	\$43,354,622	\$44,473,397	\$45,625,735
33	Other Operating Expenses	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857
34	<b>Subtotal O&amp;M</b>	<b>\$193,855,121</b>	<b>\$202,771,615</b>	<b>\$209,004,879</b>	<b>\$215,439,933</b>	<b>\$222,083,483</b>	<b>\$228,942,463</b>
35							
36	<b>Programmatic Expenses</b>						
37	Programmatic Expenses	\$7,736,917	\$7,766,551	\$7,807,711	\$7,850,106	\$7,893,772	\$7,938,749
38	<b>Subtotal Programmatic</b>	<b>\$7,736,917</b>	<b>\$7,766,551</b>	<b>\$7,807,711</b>	<b>\$7,850,106</b>	<b>\$7,893,772</b>	<b>\$7,938,749</b>
39							
40	<b>Total O&amp;M after Execution Factors</b>	<b>\$201,592,038</b>	<b>\$210,538,166</b>	<b>\$216,812,590</b>	<b>\$223,290,039</b>	<b>\$229,977,256</b>	<b>\$236,881,212</b>

## Status Quo Financial Plan

To evaluate the need for future year rate increases (referred to as “revenue adjustments”), MME and Raftelis first developed a status quo financial plan. The status quo financial plan assumes that current FY 2023 retail water rates remain unchanged through FY 2028. The status quo financial plan (Table 6-15) combines projected revenues under existing rates (from Table 6-9), miscellaneous revenues (from Table 6-10), O&M expenses (from Table 6-14), debt service (from Table 6-12), and funding for pay-as-you-go capital expenditures (from Table 6-11) to project net revenue (revenue less O&M expenses), net cash flow (net revenue less debt service and funding for pay-as-you-go capital expenditures), reserve balances (for the entire Wastewater Enterprise), and debt coverage.

Reserve balance projections (Table 6-15, Lines 55-60) are based off Wastewater Enterprise beginning fund balance in FY 2023 (as of July 1, 2022) and projected net cash flow thereafter. Debt coverage (Table 6-15, Lines 62-65) is shown based on the “Current Coverage” test only, which is significantly more stringent than the “Indenture Test” (which allows for unappropriated fund balance to contribute towards debt service coverage). Additionally, net revenues used to calculate debt coverage (Table 6-15, Line 63) exclude specific revenues and expenses which are legally restricted from being used to pay for debt service or not considered SFPUC operating expenses, which is in alignment with SFPUC staff’s 10-year financial plan model. Projected reserve balances and debt coverage under the status quo financial plan are also shown in graphical format in Figure 6-1 and Figure 6-2.

In the absence of any revenue adjustments, the Wastewater Enterprise’s reserve balance is projected to fall below the minimum level (per the SFPUC’s Fund Balance Reserve Policy) and are even fully depleted beginning in FY 2026. Debt coverage is projected to fall below the SFPUC’s required level (per the SFPUC’s Debt Service Coverage Policy) in FY 2026. More significantly, debt coverage is projected to fall below the required level per the SFPUC’s bond covenants in FY 2027 and FY 2028. The status quo financial plan is insufficient to meet the Wastewater Enterprise’s financial needs through FY 2028. This demonstrates a clear need for revenue adjustments over the next five fiscal years to increase retail sewer rate revenues and ensure that Wastewater Enterprise’s financial needs are met.



Figure 6-1: Projected Reserve Balances Under Status Quo Wastewater Enterprise Financial Plan

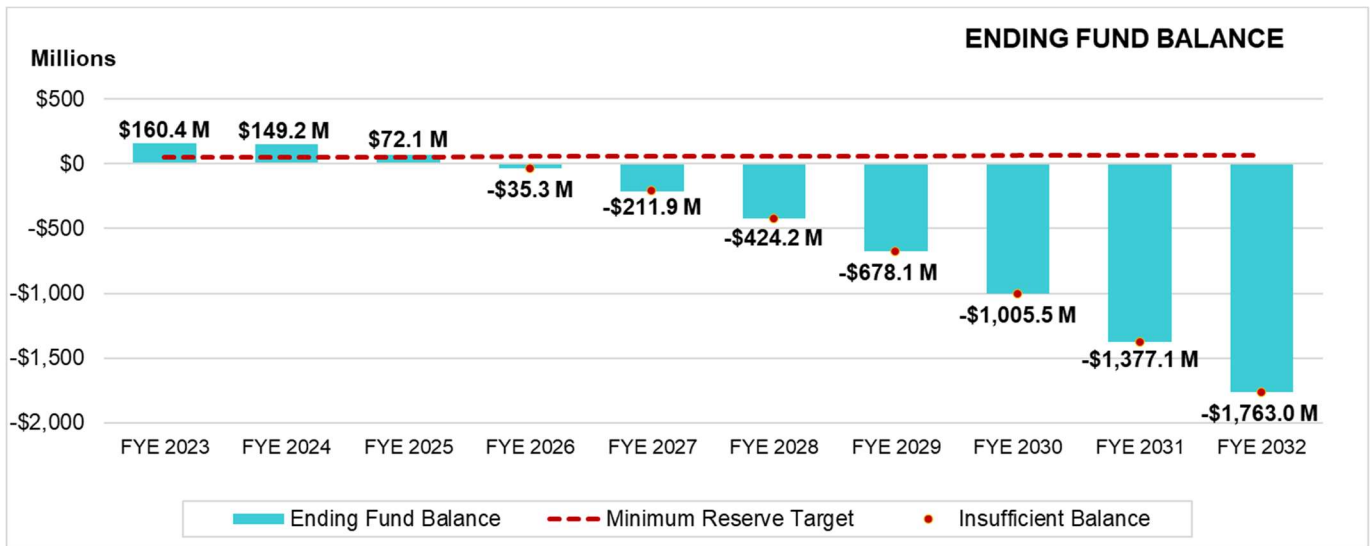
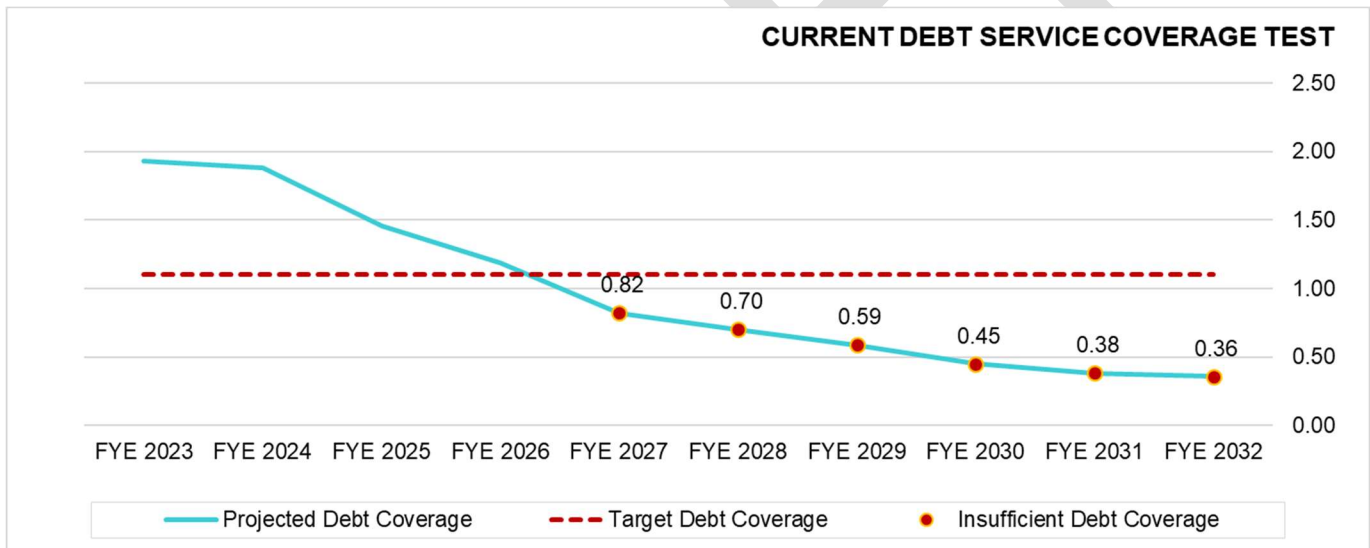


Figure 6-2: Projected Debt Coverage Under Status Quo Wastewater Enterprise Financial Plan



### Proposed Wastewater Enterprise Financial Plan

The Wastewater Enterprise must increase its revenues from retail sewer rates to adequately fund its operating and capital expenditures, meet required debt coverage, and maintain sufficient reserve funding over the next five years. SFPUC staff evaluated various scenarios using its 10-year financial plan model before arriving at the proposed and planned revenue adjustments (i.e., overall annual rate increases) shown below in Table 6-13. The proposed revenue adjustments ensure the Wastewater Enterprise meets all its financial policies throughout the entire 10-year planning period, with some buffer in case of unexpected expenditures or revenue reductions or the removal of the drought surcharge. All revenue adjustments are assumed to become effective at the beginning of each fiscal year in July. Note that although this report includes proposed rates over a five-year period, SFPUC staff is only recommending that the Commission consider adoption of the first three years of proposed rates (i.e., FY 2024-FY 2026).

**Table 6-16: Proposed Wastewater Enterprise Revenue Adjustments**

Line	Fiscal Year	Proposed Revenue Adjustment	Effective Date	Notes
1	<b>FY 2024</b>	<b>9.0%</b>	<b>7/1/2023</b>	<b>Proposed</b>
2	<b>FY 2025</b>	<b>9.0%</b>	<b>7/1/2024</b>	<b>Proposed</b>
3	<b>FY 2026</b>	<b>9.0%</b>	<b>7/1/2025</b>	<b>Proposed</b>
4	FY 2027	10.0%	<b>7/1/2026</b>	<i>For Near-Term Planning Purposes Only</i>
5	FY 2028	10.0%	<b>7/1/2027</b>	<i>For Near-Term Planning Purposes Only</i>
6	FY 2029	10.0%	<b>7/1/2028</b>	<i>For Long-Term Planning Purposes Only</i>
7	FY 2030	9.0%	<b>7/1/2029</b>	<i>For Long-Term Planning Purposes Only</i>
8	FY 2031	9.0%	<b>7/1/2030</b>	<i>For Long-Term Planning Purposes Only</i>
9	FY 2032	5.0%	<b>7/1/2031</b>	<i>For Long-Term Planning Purposes Only</i>

The proposed financial plan (Table 6-17) was developed using the same calculation methodology outlined in the previous section for the status quo financial plan (from Table 6-15). The key difference is the inclusion of additional retail water rate revenue (Table 6-17, Lines 9-17). The additional revenue from revenue adjustments is calculated based on current revenue from retail wastewater rates, exclusive of revenue from contract customers (which are subject to unique rates stipulated in each contract). The proposed revenue adjustments are projected to generate an additional \$208.7 million in retail wastewater rate revenue relative to current rates by FY 2026.

With the addition of the proposed and planned revenue adjustments, the Wastewater Enterprise's reserve balance is projected to meet the minimum level (per the SFPUC's Fund Balance Reserve Policy) each year through FY 2028. Debt coverage is projected to meet the SFPUC's required level (per the SFPUC's Debt Service Coverage Policy) in all future years. Projected reserve balances and debt coverage under the proposed financial plan are also shown in graphical format in Figure 6-3 and Figure 6-4. The proposed financial plan demonstrates a five-year plan that generates sufficient revenue to meet the SFPUC's official financial policies.

Note that SFPUC staff and the MME and Raftelis team opted for a levelized approach to capital planning for the purpose of setting rates to avoid any rate spikes across years during the study period. The proposed financial plan results in fund balances above the minimum reserve amount to provide added contingency given the uncertainty in future capital spending needs in any given year, and to ensure sufficient cash on hand once Drought Surcharges are no longer in effect. In future years, the 10-year plan shows the enterprise fund balance gradually approaching the minimum target for O&M and the minimum debt coverage in the out years (Figure 6-3).



Figure 6-3: Projected Reserve Balances under Proposed Wastewater Enterprise Financial Plan

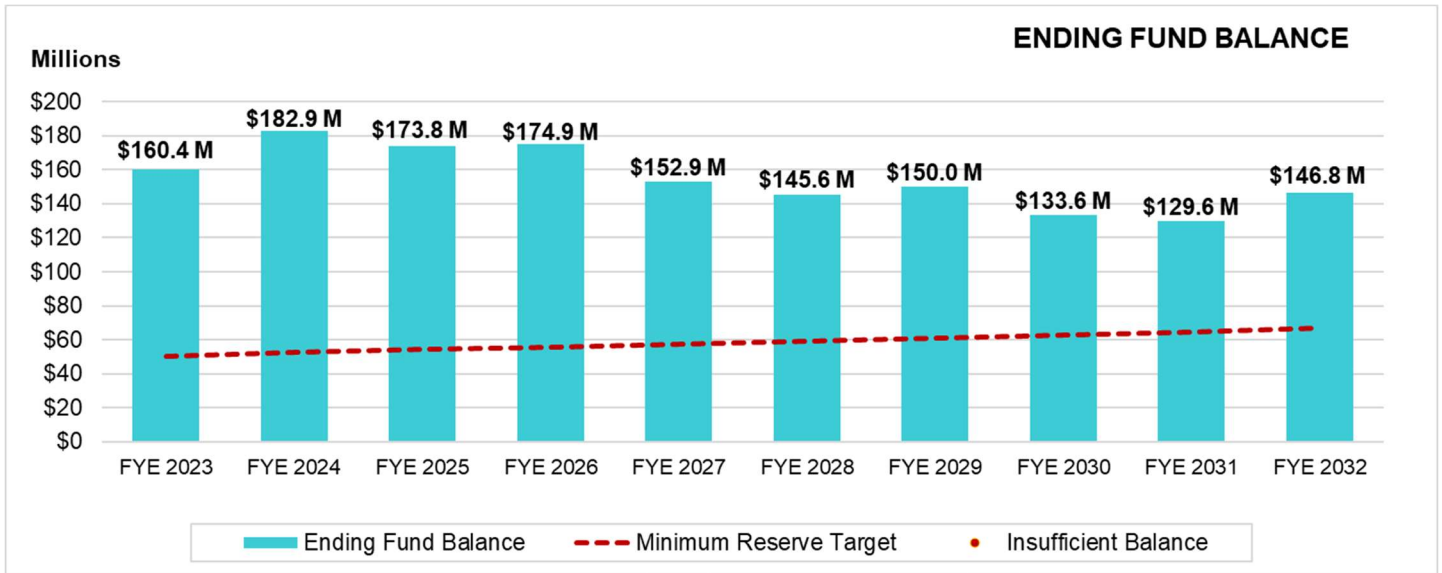
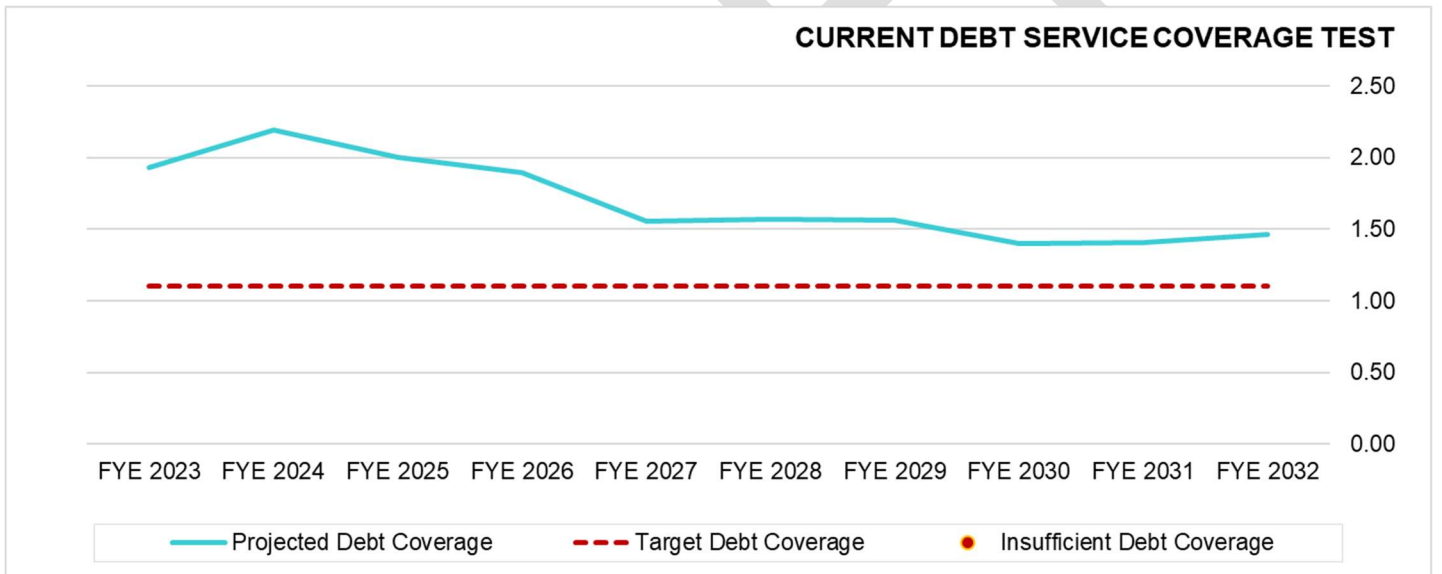


Figure 6-4: Projected Wastewater Enterprise Debt Service Coverage



# 7. Sewer Cost of Service Analysis

This section details the sewer cost of service (COS) analysis performed for the Wastewater Enterprise. A COS analysis distributes a utility's revenue requirements from rates (costs) to each customer class based on their proportionate share of total system sewer demand. The COS analysis completed by Raftelis for the Wastewater Enterprise follows industry standard cost allocation principles as presented in the Water Environment Federation's *Manual of Practice No. 27, Financing and Charges for Wastewater Systems* (WEF Manual No. 27).

## 7.1. Sewer Cost of Service Methodology

The framework and methodology utilized to develop the COS analysis and to apportion the revenue requirement to each customer class is informed by the processes outlined in WEF Manual No. 27. COS analyses are tailored specifically to meet the unique needs of each customer classes use of the sewer system. However, there are five distinct steps in every COS analysis to recover costs from customers in an equitable, and defensible manner:

- **Revenue Requirement Determination**: The first step in the COS analysis is to determine the revenue required from rates, which is determined directly from the results of the proposed financial plan presented in the previous section.
- **Cost Functionalization**: Expenses are categorized based on their associated function in the wastewater system. Functions include primary treatment, secondary treatment, disinfection, pumping/lift stations, collection, biosolids handling, etc.
- **Cost Component Allocation**: Functionalized expenses are then allocated to cost components based on the associated burden on the wastewater system. Cost components include flow (the volume of wastewater discharges), and strength loading characteristics such as chemical oxygen demand (COD) and total suspended solids (TSS). The revenue requirement is allocated accordingly to each cost component and results in a total revenue requirement for each cost causation component.
- **Unit COS Development**: The revenue requirement for each cost component is divided by the appropriate units of service to determine the unit COS for each cost component.
- **Revenue Requirement Distribution**: Unit costs for each cost component are utilized to distribute the revenue requirement to customer classes based on each class's proportional use of the wastewater system.

## 7.2. Sewer Revenue Requirement Determination

A COS analysis allocates the rate revenue requirement for a single rate-setting year, typically referred to as the "test year." In this study, the test year is FY 2024 (i.e., the first year of the proposed three-year rate schedule). Table 7-1 shows the total retail sewer rate revenue requirement for FY 2024, divided between operating and capital cost components (Line 19). The total revenue requirement is equal to the sum of revenue requirements (Lines 1-5), revenue offsets (Lines 7-13), and adjustments (Lines 15-17).



Revenue requirements (Lines 1-5) include the sum of FY 2024 O&M expenses, debt service, and pay-as-you-go funding for CIP per the proposed financial plan (from Table 6-11). Revenue offsets (Lines 7-18) include all other revenues per the proposed financial plan (from Table 6-17). Total revenue offsets (Line 13) are applied as a funding source for the overall revenue requirement (Line 5) to effectively reduce the total rate revenue requirement (Line 19). Finally, an adjustment is added (Line 16) to account for contributions to reserves, which is equal to FY 2024 net cash flow per the proposed financial plan (from Table 6-17). The total retail rate revenue requirement (Line 19) is the total revenue to be recovered by sewer rates and charges in FY 2024, inclusive of additional revenue from the nine percent proposed revenue adjustment.

**Table 7-1: FY 2024 Wastewater Enterprise Revenue Requirement**

Line	Category	Operating (O&M)	Capital	Total
1	<b>Revenue Requirements</b>			
2	Wastewater O&M	\$210,538,166		\$210,538,166
3	Existing Debt Service		\$106,234,104	\$106,234,104
4	Rate Funded CIP		\$92,038,000	\$92,038,000
5	<b>Total</b>	<b>\$210,538,166</b>	<b>\$198,272,104</b>	<b>\$408,810,270</b>
6				
7	<b>Less: Revenue Offsets</b>			
8	Other Retail Charges	\$86,638		\$86,638
9	Operating Revenues	\$18,815,775		\$18,815,775
10	Programmatic Revenues	\$4,366,760		\$4,366,760
11	Non-Debt Capital Revenues		\$0	\$0
12	Drought Rate Offset	\$18,859,974		\$18,859,974
13	<b>Total Revenue Offset</b>	<b>\$42,129,148</b>	<b>\$0</b>	<b>\$42,129,148</b>
14				
15	<b>Adjustments</b>			
16	Change in Cash Reserves		\$22,509,603	\$22,509,603
17	<b>Total Adjustments</b>	<b>\$0</b>	<b>\$22,509,603</b>	<b>\$22,509,603</b>
18				
19	<b>Revenue Requirement from Rates</b>	<b>\$168,409,018</b>	<b>\$220,781,707</b>	<b>\$389,190,725</b>

### 7.3. Sewer System Cost Functionalization

The assignment of costs to functional categories is a critical step in the COS process. It answers the question, what sewer system utility functions are supported by (i.e., paid for) the rate revenue provided by customers? The total retail rate revenue requirement to the following sewer system functions:

- » **Headworks:** relating to removing large inorganic materials from the influent streams entering the SFPUC's wastewater treatment plants
- » **Primary Treatment:** relating to the sedimentation process that removes suspended organic solids from sewage
- » **Secondary Treatment:** relating to the process of removing soluble organic material from sewage through biological processes and secondary settling
- » **Solid Handling:** relating to the process used to reduce and stabilize the volume of sludge produced

- » **Pumping/Lift Stations:** relating to the process of pumping from a lower elevation to a higher elevation as sewage moves through the sanitary sewer collection and conveyance system
- » **Stormwater:** relating to an abnormal amount of surface water caused by wet weather events (rainfall) that enters the sewer collection system and is conveyed to the SFUC's wastewater treatment plants
- » **General Collections:** relating to system of pipes that collect and convey customer wastewater discharges and stormwater flows caused by wet weather events
- » **Interceptors:** relating to large diameter sewer pipes that aggregate customer wastewater discharges and stormwater flows caused by wet weather events before delivery to the SFPUC's wastewater treatment plants
- » **Customer Service:** relating to meter reading, billing, customer call center services, and other customer service functions
- » **Bureau:** relating to costs that are directly associated with SFPUC administrative activities
- » **Indirect - General:** relating to general administration and overhead, as well as any activities not directly attributable to one of the above functions
- » **Revenue Offsets:** relating specifically to any other revenues not attributed to any of the above functions

To allocate the retail wastewater rate revenue requirement to the above functions, the following functional allocation bases were first established (see Table 7-2):

**O&M Cost Functionalization Basis:** The FY 2024 Wastewater Enterprise O&M revenue requirement is \$210,538,200 (See line 5 in Table 7-1). The FY 2024 O&M revenue requirement was assigned to functions based on a detailed SFPUC staff analysis of approximately 350 O&M budget operating and programmatic expenses. Expenses were evaluated at the departmental level and allocated across various functions based on the best available information provided by each department's management. Most departments allocated costs based on the percentage of staff time devoted to each functional activity.

**Capital Cost Functionalization Basis:** The total FY 2024 capital cost revenue requirement is \$220,781,707. This amount reflects the revenue requirement associated with existing debt service payments, rate-funded CIP, and the change in cash reserves. This revenue requirement corresponds to line 19 of Table 7-1. Capital costs were allocated to functions using the following methodology:

- **Existing Debt Service:** This portion of capital costs was allocated to functions by identifying the specific capital assets paid for by past SFPUC debt issues. The SFPUC staff reviewed a total of twelve past revenue bond issues, seven state revolving fund loans, and two existing loans associated with Water Infrastructure and Finance and Innovation (WIFIA) Act. The result was the direct allocation of existing debt service to the functions it was used to finance.
- **Rate-Funded CIP and Change in Cash Reserves:** This capital cost component was allocated to functions based on the specific functions that will be performed by the capital projects included in the SFPUC's 10-year CIP plan for the period FY 2024 – FY 2033.

**Functionalization Basis for Non-Rate Revenue Offsets:** The FY 2024 non-rate revenue offsets total \$42,129,148. This amount is detailed in Table 7-1, Lines 8 -12 and includes Other Retail Charges, Operating Revenues, Programmatic Revenues, and a Drought Rate Offset. With the exception of the Drought Rate

Offset, all of the items were functionalized in a manner to the O&M cost functionalization. The Drought Rate Offset was functionalized based on the combined functionalization of both O&M and capital costs.

Table 7-2 shows a summary of the functional allocation percentages for the FY 2024 revenue requirement.

**Table 7-2: Summary of FY 2024 Functional Allocation Percentages**

Line		O&M	Debt	Capital	Revenue Offsets
1	Headworks	3.54%	3.96%	0.63%	3.24%
2	Primary Treatment	3.50%	1.31%	0.69%	2.93%
3	Secondary Treatment	8.08%	1.80%	1.68%	6.63%
4	Disinfection / Discharge	5.03%	3.43%	1.08%	4.38%
5	Solids Handling	16.72%	45.04%	35.61%	22.09%
6	Pumping / Lift Stations	8.29%	5.16%	7.20%	7.81%
7	Stormwater	4.06%	7.94%	0.00%	4.00%
8	General Collections	11.58%	31.37%	16.48%	14.34%
9	Interceptors	0.00%	0.01%	36.51%	4.34%
10	Customer Service	0.00%	0.00%	0.13%	0.02%
11	Bureau	17.21%	0.00%	0.00%	13.27%
12	Indirect	21.99%	0.00%	0.00%	16.95%
13	Total	100.00%	100.00%	100.00%	100.00%

Table 7-3 shows the allocation basis for each revenue requirement component.

Table 7-3: FY 2024 Revenue Requirement Allocation Basis

Line	Description	(A)	(B)
1	<b>RETAIL REVENUE REQUIREMENT</b>	<b>FY 2024 (\$)</b>	<b>Functional Allocation Basis</b>
2	<b>Revenue Requirements</b>		
3	O&M Expenses	\$210,538,166	O&M
4	Debt Service	\$106,234,104	Debt
5	Funding for Pay-as-You-Go CIP	\$92,038,000	CIP
6	<b>Subtotal</b>	<b>\$408,810,270</b>	
7			
8	<b>Revenue Offsets</b>		
9	Saddleback	\$81,348	Overall O&M Allocation
10	Suburban Sanitary Retail (SSR)	\$5,290	Overall O&M Allocation
11	Wholesale Sewer Charges Total	\$12,121,000	Overall O&M Allocation
12	Interest Income Total	\$1,654,000	Overall O&M Allocation
13	Federal Bond Interest Subsidy Total	\$3,356,167	Overall O&M Allocation
14	Rental Revenue Total	\$774,000	Overall O&M Allocation
15	Other Misc Income Total	\$910,608	Overall O&M Allocation
16	Treasure Island Sewer Charges	\$1,715,000	Overall O&M Allocation
17	525GG Infrastructure Recovery - O&M	\$268,000	Overall O&M Allocation
18	525GG Infrastructure Recovery - Lease	\$1,872,000	Overall O&M Allocation
19	525GG COPS Bond Interest Subsidy	\$511,760	Overall O&M Allocation
20	Drought Surcharges	\$18,859,974	Overall Capital Allocation
21	<b>Subtotal</b>	<b>\$42,129,148</b>	
22			
23	Adjustments		
24	Contribution To (Draw Down From) Reserves	\$22,509,603	CIP
25	<b>Subtotal</b>	<b>\$22,509,603</b>	
26			
27	<b>Total Retail Revenue Requirement</b>	<b>\$389,190,725</b>	
28			
29	<b>ALLOCATION OF RETAIL RATE REVENUE REQUIREMENT TO FUNCTIONS</b>	<b>FY 2024 (\$)</b>	<b>FY2024 (%)</b>
30	Headworks	\$11,018,555	2.83%
31	Primary Treatment	\$8,320,215	2.14%
32	Secondary Treatment	\$18,056,463	4.64%
33	Disinfection / Discharge	\$13,623,641	3.50%
34	Solids Handling	\$114,521,884	29.43%
35	Pumping / Lift Stations	\$27,878,971	7.16%
36	Stormwater	\$15,287,355	3.93%
37	General Collections	\$70,536,203	18.12%
38	Interceptors	\$40,002,806	10.28%
39	Customer Service	\$140,828	0.04%
40	Bureau	\$30,648,196	7.87%
41	Indirect	\$39,155,608	10.06%
42	Total Retail Revenue Requirement	\$389,190,725	100.00%

### Consolidated Revenue Requirement Functionalization

Table 7-4 consolidated FY 2024 revenue requirement functionalization. The final revenue requirement of \$389,190,725 matches line 19 of Table 7-1 and several other preceding tables in this report.

**Table 7-4: Consolidated FY 2024 Revenue Requirement Functionalization**

Line	Component	Headworks	Primary Treatment	Secondary Treatment	Disinfection / Discharge	Solids Handling	Pumping / Lift Stations	Stormwater	General Collections	Interceptors	Customer Service	Bureau	Indirect	Total
1	<b>O&amp;M Including Execution Factors</b>													
2	O&M Net of Programmatic	\$7,458,510	\$7,377,788	\$17,017,601	\$10,590,026	\$35,197,624	\$17,446,821	\$7,861,024	\$24,373,118	\$0	\$0	\$36,237,828	\$39,211,275	\$202,771,615
3	Programmatic	\$0	\$0	\$0	\$0	\$0	\$0	\$681,000	\$0	\$0	\$0	\$0	\$7,085,551	\$7,766,551
4	Total O&M	\$7,458,510	\$7,377,788	\$17,017,601	\$10,590,026	\$35,197,624	\$17,446,821	\$8,542,024	\$24,373,118	\$0	\$0	\$36,237,828	\$46,296,826	\$210,538,166
5	% of Total	3.5%	3.5%	8.1%	5.0%	16.7%	8.3%	4.1%	11.6%	0.0%	0.0%	17.2%	22.0%	100.0%
6														
7	<b>Capital Costs</b>													
8	Existing Debt Service	\$4,206,626	\$1,386,862	\$1,907,402	\$3,639,684	\$47,842,905	\$5,479,519	\$8,431,608	\$33,328,447	\$11,053	\$0	\$0	\$0	\$106,234,104
9	Proposed Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	Cash Funded CIP	\$577,931	\$633,720	\$1,545,862	\$996,999	\$32,771,146	\$6,623,861	\$0	\$15,167,421	\$33,602,732	\$118,328	\$0	\$0	\$92,038,000
11	Change in Cash Reserves	\$141,344	\$154,988	\$378,069	\$243,835	\$8,014,793	\$1,619,988	\$0	\$3,709,475	\$8,218,173	\$28,939	\$0	\$0	\$22,509,603
12	Total Capital Costs	\$4,925,901	\$2,175,569	\$3,831,332	\$4,880,517	\$88,628,844	\$13,723,368	\$8,431,608	\$52,205,343	\$41,831,958	\$147,268	\$0	\$0	\$220,781,707
13	% of Total	2.2%	1.0%	1.7%	2.2%	40.1%	6.2%	3.8%	23.6%	18.9%	0.1%	0.0%	0.0%	100.0%
14														
15	<b>Gross Revenue Requirement</b>	<b>\$12,384,410</b>	<b>\$9,553,358</b>	<b>\$20,848,933</b>	<b>\$15,470,543</b>	<b>\$123,826,468</b>	<b>\$31,170,189</b>	<b>\$16,973,632</b>	<b>\$76,578,461</b>	<b>\$41,831,958</b>	<b>\$147,268</b>	<b>\$36,237,828</b>	<b>\$46,296,826</b>	<b>\$431,319,873</b>
16	% of Total	2.9%	2.2%	4.8%	3.6%	28.7%	7.2%	3.9%	17.8%	9.7%	0.0%	8.4%	10.7%	100.0%
17														
18	<b>Revenue Requirement Offsets</b>													
19	Other Retail Charges	\$3,069	\$3,036	\$7,003	\$4,358	\$14,484	\$7,180	\$3,515	\$10,030	\$0	\$0	\$14,912	\$19,052	\$86,638
20	Non-Rate Operating Revenues	\$666,566	\$659,352	\$1,520,861	\$946,430	\$3,145,608	\$1,559,221	\$763,400	\$2,178,223	\$0	\$0	\$3,238,571	\$4,137,543	\$18,815,775
21	Programmatic Revenues	\$154,697	\$153,022	\$352,961	\$219,647	\$730,032	\$361,864	\$177,170	\$505,521	\$0	\$0	\$751,607	\$960,240	\$4,366,760
22	Non-Debt Capital Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
23	Drought Offset	\$541,523	\$417,732	\$911,644	\$676,468	\$5,414,460	\$1,362,954	\$742,192	\$3,348,484	\$1,829,152	\$6,439	\$1,584,542	\$2,024,384	\$18,859,974
24	Total Offsets	\$1,365,855	\$1,233,142	\$2,792,470	\$1,846,902	\$9,304,584	\$3,291,217	\$1,686,277	\$6,042,259	\$1,829,152	\$6,439	\$5,589,632	\$7,141,218	\$42,129,148
25	% of Total	3.2%	2.9%	6.6%	4.4%	22.1%	7.8%	4.0%	14.3%	4.3%	0.0%	13.3%	17.0%	100.0%
26														
27	<b>Net Revenue Requirement</b>	<b>\$11,018,555</b>	<b>\$8,320,215</b>	<b>\$18,056,463</b>	<b>\$13,623,641</b>	<b>\$114,521,884</b>	<b>\$27,878,971</b>	<b>\$15,287,355</b>	<b>\$70,536,203</b>	<b>\$40,002,806</b>	<b>\$140,828</b>	<b>\$30,648,196</b>	<b>\$39,155,608</b>	<b>\$389,190,725</b>
28	% of Total	2.8%	2.1%	4.6%	3.5%	29.4%	7.2%	3.9%	18.1%	10.3%	0.0%	7.9%	10.1%	100.0%

## 7.4. Sewer Cost Component Allocations

The allocation of costs to cost causation component answers the question, what types of customer demands are met by different functional components of the sewer system? Cost causation components on the SFPUC's sewer system include a flow component for the volume of customer wastewater discharges, and strength loading components for chemical oxygen demand (COD), total suspended solids (TSS), and oil and grease (O/G or OG). Due to the fact that SFPUC operates a combined sewer system that treats both wastewater and stormwater, the cost allocations in this conducted in two steps.

- First, we evaluated the split of wet weather to dry weather flows, this is the first step of splitting costs between wastewater related expenses and stormwater related costs
- Second, we allocated the remaining dry weather related expenses to cost causation components. This provides the basis for allocating wastewater related expenses to flow and strength cost drivers.

### Determination of Wet Weather Flows (Stormwater Flows)

The SFPUC has historically recovered stormwater-related costs through wastewater rates. In this study, a separate stormwater revenue requirement must be calculated so that the SFPUC can implement stormwater specific rates. In order to allocate costs between wastewater and stormwater service, the projected volume of dry weather flows (customer wastewater discharges and dry weather infiltration) and wet weather flows (stormwater) must be determined for a "typical" year. The analysis required to determine wet weather flows included the following key steps as shown in Table 7-5 for the period FY 2020 - FY2022:

**Identification of Wet Weather Days (Lines 1 - 4):** This reflects the number of days designated as experiencing wet weather flows at the Oceanside Wastewater Treatment Plant (FY 2020 and FY 2022) or the number of days with precipitation in excess of 0.10" (FY 2021).

**Estimation of Customer and Non-Customer Treatment Plant Influent (Lines 12 – 18):** This shows the estimate of customer and non-customer flows to the SFPUC's treatment plants. Approximately 67.4% of influent flows at the wastewater treatment plans are estimated to be associated with customer wastewater discharges (Line 16) and 32.6% of the flows are estimated to be from non-customer sources (Line 17).

**Estimation of Non-Customer Wet Weather Flows and Dry Weather Infiltration (Lines 20 – 28):** Of the non-customer influent of 32.6% (Line 17), 17.6% is estimated to be from flows on wet weather days and 15.1% is associated with dry weather infiltration (slight discrepancy in addition due to rounding).

**Determination of Pure Stormwater Flows (Lines 38 – 48):** This section of the analysis shows the final derivation of the estimate of 10.8% of SFPUC treatment plant influent being associated with "pure" stormwater flows. By definition, this means that 89.2% of all remaining flows are not associated with stormwater.

The outcome of the above analysis indicates that 89.2% of wastewater flows entering the SFPUC's wastewater treatment facilities were dry weather-related and that 10.8% were created by wet weather flows from stormwater.

Table 7-5: Estimation of FY 2024 Wet Weather Flows

Line	Metric	FY 2019 - 20	FY 20-21	FY 2021 - 22	Average
1	<b>Wet Weather Days</b>				
2	Based on NPP	16	17	0	
3	Based on OSPW Designation	28	0	34	
4	Based on Weather Data > .10"	31	28	32	
5					
6	<b>Customer Flows (Retail + Wholesale)</b>				
7	Annual Customer Flows from 10-Year Plan (HCF)	24,054,483	21,766,768	21,171,513	22,330,921
8	Annual Customer Flows (MG)	17,994	16,283	15,837	16,705
9	Customer Average Daily Flows (MGD)	49.3	44.6	43.4	45.8
10	Customer Flows on Wet Weather Days (MGD)	1,380.4	1,249.1	1,475.3	1,368
11					
12	<b>Treatment Plant Influent</b>				
13	Total Annual Plant Influent (MG)	26,222	23,170	25,002	24,798
14	Annual Customer Flows (MG)	17,994	16,283	15,837	16,705
15	Total Non-Customer Flows (MG)	8,227.9	6,887.6	9,164.3	8,093
16	Customer Flows as a % of Total Plant Influent	68.6%	70.3%	63.3%	<b>67.4%</b>
17	Non-Customer Flows as a % of Total Plant Influent	31.4%	29.7%	36.7%	<b>32.6%</b>
18	Total Influent	100.0%	100.0%	100.0%	100.0%
19					
20	<b>Wet Weather Flow</b>				
21	Annual Wet Weather Flow (MG)	3,216	3,694	6,148	4,353
22	Wet Weather Flows as a % of Total Annual Plant Influent	12.3%	15.9%	24.6%	<b>17.6%</b>
23					
24	<b>Dry Weather Infiltration</b>				
25	Dry Weather Infiltration (MG)	5,012.3	3,193.3	3,016.7	3,741
26	Daily Dry Weather Infiltration (MGD)	13.73	8.75	8.26	10.25
27	Dry Weather Infiltration on Wet Weather Days (MG)	384.5	245.0	281.0	303.5
28	Dry Weather Infiltration as a % of Total Annual Plant Influent	19.1%	13.8%	12.1%	<b>15.1%</b>
29					
30	<b>Flows on Wet Weather Days Excluding Customer Flows (Retail + Wholesale)</b>				
31	Annual Wet Weather Flow (MG)	3,215.6	3,694.3	6,147.7	4,352.5
32	Less: Customer Flows on Wet Weather Days (MG)	1,380.4	1,249.1	1,475.3	1,368.2
33	Flows on Wet Weather Days Excluding Customers (MG)	1,835.3	2,445.2	4,672.4	2,984.3
34	% Customer Portion of Wet Weather Flows	42.9%	33.8%	24.0%	31.4%
35	% Non-Customer Portion of Wet Weather Flows	57.1%	66.2%	76.0%	68.6%
36	Total Wet Weather Flows	100.0%	100.0%	100.0%	100.0%
37					
38	<b>Pure SW Flows (Flows Net of Customers and Dry Weather Infiltration)</b>				
39	Flows on Wet Weather Days Excluding Customers (MG)	1,835.3	2,445.2	4,672.4	2,984.3
40	Less: Dry Weather Infiltration on Wet Weather Days (MG)	384.5	245.0	281.0	303.5
41	Total Stormwater Flows on Wet Weather Days (MG)	1,450.8	2,200.3	4,391.4	2,680.8
42	% Dry Weather Infiltration on Wet Weather Days	21.0%	10.0%	6.0%	10.2%
43	% Non-Customer Portion of Wet Weather Flows	79.0%	90.0%	94.0%	89.8%
44	Total Wet Weather Flows	100.0%	100.0%	100.0%	100.0%
45					
46	Customer Flows on Wet Weather Days as a % of Total Plant Influent	5.3%	5.4%	5.9%	5.5%
47	Dry Weather Infiltration on Wet Weather Days as a % of Total Plant Influent	1.5%	1.1%	1.1%	1.2%
48	<b>Pure Stormwater Flows as a % of Treatment Plant Influent (Note 1)</b>	<b>5.5%</b>	<b>9.5%</b>	<b>17.6%</b>	<b>10.8%</b>

Note 1: 10.8% equals Total Stormwater Flows on Wet Weather Days from Line 41 / Total Annual Treatment Plant Influent from Line 13. Specifically, 2,680.8 MG / 24m798 MG = 10.8%

## Allocation to Cost Causation Components

The determination of how functional costs should be allocated to cost causation components was based on an analysis conducted by MME. The wastewater utility industry typically uses one of two basic cost-allocation approaches when allocating wastewater costs to billable constituents (i.e. Flow, COD, TSS, and fats, oil, and

grease, or OG). These are the design-basis cost-allocation methodology and the functional cost-allocation methodology.<sup>12</sup>

The design-basis method (sometimes called the Capital Cost Allocations) allocates capital costs based on parameters that set the basis of design for the sizing of the major system components. The functional cost-allocation methodology (sometimes called the Operation and Maintenance cost allocations) allocates O&M costs (power, labor, chemicals, and supplies) based on the function that each process serves in removing pollutants of concern (flow, TDS, and BOD<sub>5</sub>). Both methodologies are commonly used together in a hybrid approach.

MME reviewed the underlying design basis and operational characteristics of each major functional components to provide site specific characteristics of the SFPUC system. For O&M costs, wet weather and dry weather flows are split based on flow percentages.

A summary of the allocation of the FY 2024 O&M revenue requirements to cost causation components is presented in Table 7-7. A summary of the allocation of the FY 2024 capital cost revenue requirements to cost causation components is presented in Table 7-8. Table 7-9 shows a summary of the allocation of non-rate revenue offsets to cost causation components. The underlying rationale for the allocation shown in Table 7-7, Table 7-8, and Table 7-9 are as follows:

**Headworks:**

The headworks is the first treatment process in the wastewater treatment plant. Its job is to remove larger inorganic materials such as rags, sticks, floatables, and grit. The headworks is designed to accommodate peak wet weather wastewater flows, resulting in a greater allocation to flow. Further, the SFPUC headworks includes back-up pumps in case of pump failure. These pumps also process wet weather flows, resulting in a portion of the flow allocation being allocated to wet weather.

Headworks system components such as bar screens and grit collection facilities are TSS based, so this proportionate share of the cost allocation of the headworks is appropriately based on TSS. The SFPUC headworks facilities also include odor control. The measure of odor potential is based on COD and OG. Therefore, a portion of the headworks costs are also allocated to COD and OG.

**Primary Treatment:**

After sewer flows are screened in the headworks facility, they go through primary treatment, where suspended solids and organic matter are removed through settling and floating to the top and being skimmed off. Flows determine overall sizing and volume of the primary settling tanks because the tanks must be sized large enough to provide time to settle out the suspended solids. Therefore, flow is given a high capital cost allocation. Upsizing to accommodate wet weather capacity is reflected in the allocation for wet weather flow.

Capital cost allocations for strength are given because 1) primary sludge mechanical rakes and sludge removal equipment costs remove TSS and OG, and 2) primary tanks are covered at both the SFPUC Southeast Plant and Oceanside Plant for odor control facilities, which costs are attributed to COD and OG.

---

<sup>12</sup> Reference: *Financing and Charges for Wastewater Systems*, Water Environment Federation Manual of Practice, No. 27 4<sup>th</sup> Edition, 2018.



O&M cost allocations for the primary process is mainly for mechanical raking for sludge removal (TSS and OG) and ventilation and treatment through the odor control facilities (COD and OG). Therefore, while a large percentage of the capital costs for construction of the Primary Sedimentation process is logically attributed to flow, there is a lesser allocation to flow and a greater allocation towards TSS, COD, and OG using the Functional-Basis for allocation of the O&M costs.

### **Secondary Treatment:**

Secondary treatment is where biodegradable organic matter is removed, and requires aeration of the flow in one set of basins followed by a second set of clarifications basins to settle out biomass. The secondary process is designed to meet the plant's discharge requirements for TSS and COD removal. Both the secondary treatment process at the Southeast Wastewater Treatment Plant (SEP) and at the Oceanside Wastewater Treatment Plant are High Purity Oxygen Activated Sludge (HPOAS) processes. Both plants have conventional aeration basins (pure-oxygen) followed by final clarifiers.

The design and sizing of the aeration system and aeration equipment costs is directly controlled by the organic loading, and the COD and TSS associated with that organic loading and flow. Structural and equipment costs (i.e. channels and gates) are attributable to the flow component, yet are a relatively minor portion of this process. The cost allocation for the aeration basins is 95 percent to COD and 5 percent to flow.

The secondary clarifiers are designed primarily based on flow and TSS to settle out the mixed liquor, and for sizing of the secondary sludge pumping for the waste activated sludge and return activated sludge.

Therefore, the blended cost allocation for the secondary process including the aeration basins and the clarifiers is 25 percent to flow, 70 percent to COD, 3 percent to TSS, and 2 percent to OG (scum) including surface skimmers and injection pumps.

### **Solids Handling/Digesters:**

Solids that are settled from both the primary and secondary clarifiers are treated in the digester and solids handling facilities. The Southeast Treatment Plant has recently completed a major rebuild of the solids handling and digestion process and implemented a new state-of-the-art thermal hydrolysis process (CAMBI Process). The Oceanside Plant has egg-shaped digesters. The overall solids handling system includes primary and secondary sludge thickening, CAMBI Digestion Process, Conventional Anaerobic Digestion (OSP), Sludge Dewatering, Truck Transfer Station, and Trucking. These facilities all are designed based solely the solids loadings as measured by COD, TSS, and OG.

### **Disinfection and Effluent Discharge:**

Disinfection is the final treatment step before discharging the treated water into receiving waters, or in the case of the Southeast Treatment Plant, San Francisco Bay. Ultraviolet light (UV) disinfection is used at the Southeast Treatment plant. The Oceanside Treatment Plant does not disinfect.

Average day monthly flows are the parameter for determining the size of UV system to achieve the required contact time. The hypochlorite feed system handles peak wet weather flows. Therefore, the cost allocations are attributed 100% to flow, with a portion attributed to accommodating wet weather flows.

**Pumping/Lift Stations:**

Lift and pumping stations move water from one area to another. Sizing and design are based solely on flow. Added capacity costs are based on the design 5-year wet weather events. Therefore, flows are the basis for allocation costs for pumping/lift stations, with a portion allocated to wet weather flows.

**Collection System:**

The collection system is a system of underground pipes that move sewage to the headworks of the treatment plants. In addition, in San Francisco, the collection system also collects wet weather stormwater flows. Design of collection system is based on peak flow conditions including consideration for rainfall-induced infiltration and inflow (RDI/I). An incremental cost is associated with upsizing for accommodating wet weather flows.

Using the Functional-Basis for allocation of the O&M costs, rags and OG are the primary O&M expense for the collections system. That includes eliminating roots and rag and grease build-up in order to keep the wastewater flowing freely in the collection system. This is a large O&M expense with regard to the collection system and has been allocated to reflect this.

**Interceptors:**

San Francisco collects both dry weather and wet weather flows. Large interceptors (Transport/Storage Boxes) have been built to accommodate wet weather flows. The percent allocation for the interceptors is 100% flow, and the majority of this going to wet weather.

**Table 7-6: Allocation of FY 2024 O&M to Cost Causation Components**

Line	Category	Flow (Dry)	Flow (Wet)	Flow (Total)	COD	TSS	O/G	Customer Svc.	Admin.	Total
1	Headworks	74.0%	9.0%	83.0%	2.0%	14.0%	1.0%			100.0%
2	Primary Treatment	35.7%	4.3%	40.0%	0.0%	55.0%	5.0%			100.0%
3	Secondary Treatment	22.3%	2.7%	25.0%	70.0%	3.0%	2.0%			100.0%
4	Disinfection / Discharge	89.2%	10.8%	100.0%						100.0%
5	Solids Handling	0.0%	0.0%	0.0%	55.0%	40.0%	5.0%			100.0%
6	Pumping / Lift Stations	89.2%	10.8%	100.0%						100.0%
7	Stormwater		100.0%	100.0%						100.0%
8	General Collections	44.6%	5.4%	50.0%		20.0%	20.0%	10.0%		100.0%
9	Interceptors	89.2%	10.8%	100.0%						100.0%
10	Customer Service	0.0%	0.0%	0.0%				100.0%		100.0%
11	Bureau	0.0%	0.0%	0.0%					100.0%	100.0%
12	Indirect	89.2%	10.8%	100.0%						100.0%
13										
14	<b>Category</b>	<b>Flow (Dry)</b>	<b>Flow (Wet)</b>	<b>Flow (Total)</b>	<b>COD</b>	<b>TSS</b>	<b>O/G</b>	<b>Customer Svc.</b>	<b>Admin.</b>	<b>Total</b>
15	Headworks	\$5,521,326	\$669,237	\$6,190,563	\$149,170	\$1,044,191	\$74,585			\$7,458,510
16	Primary Treatment	\$2,632,082	\$319,033	\$2,951,115		\$4,057,784	\$368,889			\$7,377,788
17	Secondary Treatment	\$3,794,474	\$459,926	\$4,254,400	\$11,912,320	\$510,528	\$340,352			\$17,017,601
18	Disinfection / Discharge	\$9,445,181	\$1,144,845	\$10,590,026						\$10,590,026
19	Solids Handling				\$19,358,693	\$14,079,050	\$1,759,881			\$35,197,624
20	Pumping / Lift Stations	\$15,560,716	\$1,886,105	\$17,446,821						\$17,446,821
21	Stormwater		\$8,542,024	\$8,542,024						\$8,542,024
22	General Collections	\$10,869,120	\$1,317,440	\$12,186,559		\$4,874,624	\$4,874,624	\$2,437,312		\$24,373,118
23	Bureau								\$36,237,828	\$36,237,828
24	Indirect	\$41,291,864	\$5,004,962	\$46,296,826						\$46,296,826
25	<b>Total</b>	<b>\$89,114,763</b>	<b>\$19,343,571</b>	<b>\$108,458,335</b>	<b>\$31,420,184</b>	<b>\$24,566,176</b>	<b>\$7,418,331</b>	<b>\$2,437,312</b>	<b>\$36,237,828</b>	<b>\$210,538,166</b>
26	<b>Percentage of Total</b>	<b>42.3%</b>	<b>9.2%</b>	<b>51.5%</b>	<b>14.9%</b>	<b>11.7%</b>	<b>3.5%</b>	<b>1.2%</b>	<b>17.2%</b>	<b>100.0%</b>

**Table 7-7: Summary of FY 2024 Capital Costs to Cost Causation Components**

Line	Category	Flow (Dry)	Flow (Wet)	Flow (Total)	COD	TSS	O/G	Customer Svc.	Admin.	Total
1	Headworks	75.0%	8.0%	83.0%	2.0%	14.0%	1.0%			100.0%
2	Primary Treatment	65.0%	10.0%	75.0%	2.0%	20.0%	3.0%			100.0%
3	Secondary Treatment	25.0%	0.0%	25.0%	70.0%	3.0%	2.0%			100.0%
4	Disinfection / Discharge	80.0%	20.0%	100.0%						100.0%
5	Solids Handling / Digestors				55.0%	40.0%	5.0%			100.0%
6	Pumping / Lift Stations	80.0%	20.0%	100.0%						100.0%
7	Stormwater		100.0%	100.0%						100.0%
8	General Collections	80.0%	20.0%	100.0%						100.0%
9	Interceptors	30.0%	70.0%	100.0%						100.0%
10	Customer Service							100.0%		100.0%
11	Indirect								100.0%	100.0%
12										
13										
Line	Category	Flow (Dry)	Flow (Wet)	Flow (Total)	COD	TSS	O/G	Customer Svc.	Admin.	Total
15	Headworks	\$3,694,425	\$394,072	\$4,088,497	\$98,518	\$689,626	\$49,259			\$4,925,901
16	Primary Treatment	\$1,414,120	\$217,557	\$1,631,677	\$43,511	\$435,114	\$65,267			\$2,175,569
17	Secondary Treatment	\$957,833		\$957,833	\$2,681,933	\$114,940	\$76,627			\$3,831,332
18	Disinfection / Discharge	\$3,904,414	\$976,103	\$4,880,517						\$4,880,517
19	Solids Handling / Digestors				\$48,745,864	\$35,451,538	\$4,431,442			\$88,628,844
20	Pumping / Lift Stations	\$10,978,694	\$2,744,674	\$13,723,368						\$13,723,368
21	Stormwater		\$8,431,608	\$8,431,608						\$8,431,608
22	General Collections	\$41,764,274	\$10,441,069	\$52,205,343						\$52,205,343
23	Interceptors	\$12,549,587	\$29,282,371	\$41,831,958						\$41,831,958
24	Customer Service							\$147,268		\$147,268
25	<b>Total</b>	<b>\$75,263,348</b>	<b>\$52,487,453</b>	<b>\$127,750,801</b>	<b>\$51,569,826</b>	<b>\$36,691,218</b>	<b>\$4,622,595</b>	<b>\$147,268</b>	<b>\$0</b>	<b>\$220,781,707</b>
26	<b>Percentage of Total</b>	<b>34.1%</b>	<b>23.8%</b>	<b>57.9%</b>	<b>23.4%</b>	<b>16.6%</b>	<b>2.1%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>100.0%</b>

**Table 7-8: Allocation of FY 2024 Non-Rate Revenue Offsets to Cost Causation Components**

Line	Category	Flow (Dry)	Flow (Wet)	Flow (Total)	COD	TSS	O/G	Customer Svc.	Admin.	Total
1	Headworks	74.0%	9.0%	83.0%	2.0%	14.0%	1.0%			100.0%
2	Primary Treatment	66.9%	8.1%	75.0%	2.0%	20.0%	3.0%			100.0%
3	Secondary Treatment	22.3%	2.7%	25.0%	70.0%	3.0%	2.0%			100.0%
4	Disinfection / Discharge	89.2%	10.8%	100.0%						100.0%
5	Solids Handling				55.0%	40.0%	5.0%			100.0%
6	Pumping / Lift Stations	89.2%	10.8%	100.0%						100.0%
7	Stormwater		100.0%	100.0%						100.0%
8	General Collections	89.2%	10.8%	100.0%						100.0%
9	Interceptors	89.2%	10.8%	100.0%						100.0%
10	Customer Service							100.0%		100.0%
11	Bureau								100.0%	100.0%
12	Indirect	89.2%	10.8%	100.0%						100.0%
13										
Line	Category	Flow (Dry)	Flow (Wet)	Flow (Total)	COD	TSS	O/G	Customer Svc.	Admin.	Total
15	Headworks	\$1,011,104	\$122,555	\$1,133,660	\$27,317	\$191,220	\$13,659			\$1,365,855
16	Primary Treatment	\$824,874	\$99,983	\$924,857	\$24,663	\$246,628	\$36,994			\$1,233,142
17	Secondary Treatment	\$622,647	\$75,471	\$698,117	\$1,954,729	\$83,774	\$55,849			\$2,792,470
18	Disinfection / Discharge	\$1,647,241	\$199,661	\$1,846,902						\$1,846,902
19	Solids Handling				\$5,117,521	\$3,721,834	\$465,229			\$9,304,584
20	Pumping / Lift Stations	\$2,935,417	\$355,800	\$3,291,217						\$3,291,217
21	Stormwater		\$1,686,277	\$1,686,277						\$1,686,277
22	General Collections	\$5,389,055	\$653,204	\$6,042,259						\$6,042,259
23	Interceptors	\$1,631,410	\$197,742	\$1,829,152						\$1,829,152
24	Customer Service							\$6,439		\$6,439
25	Bureau								\$5,589,632	\$5,589,632
26	Indirect	\$6,369,210	\$772,008	\$7,141,218						\$7,141,218
27	<b>Total</b>	<b>\$20,430,958</b>	<b>\$4,162,701</b>	<b>\$24,593,659</b>	<b>\$7,124,230</b>	<b>\$4,243,456</b>	<b>\$571,731</b>	<b>\$6,439</b>	<b>\$5,589,632</b>	<b>\$42,129,148</b>
28	<b>Percentage of Total</b>	<b>83.1%</b>	<b>16.9%</b>	<b>58.4%</b>	<b>16.9%</b>	<b>10.1%</b>	<b>1.4%</b>	<b>0.0%</b>	<b>13.3%</b>	<b>100.0%</b>

## **Consolidated Revenue Requirement Allocation to Cost Causation Components**

Table 7-9 summarizes the information provided in Table 7-6, Table 7-7, and Table 7-8 into a single consolidated FY 2024 revenue requirement allocation to cost causation components. The final revenue requirement of \$389,190,725 matches line 26 of Table 7-4 and several other preceding tables in this report.

DRAFT

**Table 7-9: Consolidated FY 2024 Non-Rate Revenue Requirement Allocation to Cost Causation Components**

Line	Cost Component	Flow (Dry)	Flow (Wet)	Flow (Total)	COD	TSS	O/G	Customer Svc.	Admin.	Total
1	O&M	\$89,114,763	\$19,343,571	\$108,458,335	\$31,420,184	\$24,566,176	\$7,418,331	\$2,437,312	\$36,237,828	\$210,538,166
2		82%	18%	52%	15%	12%	4%	1%	17%	100%
3										
4	Capital Costs	\$75,263,348	\$52,487,453	\$127,750,801	\$51,569,826	\$36,691,218	\$4,622,595	\$147,268	\$0	\$220,781,707
5		59%	41%	58%	23%	17%	2%	0%	0%	100%
6										
7	Gross Revenue Requirement	\$164,378,111	\$71,831,024	\$236,209,135	\$82,990,010	\$61,257,394	\$12,040,926	\$2,584,579	\$36,237,828	\$431,319,873
8		38%	17%	55%	19%	14%	3%	1%	8%	100%
9										
10	Non-Rate Revenue Offsets	\$20,430,958	\$4,162,701	\$24,593,659	\$7,124,230	\$4,243,456	\$571,731	\$6,439	\$5,589,632	\$42,129,148
11		83%	17%	58%	17%	10%	1%	0%	13%	100%
12										
13	<b>Net Revenue Requirement</b>	<b>\$143,947,153</b>	<b>\$67,668,323</b>	<b>\$211,615,476</b>	<b>\$75,865,780</b>	<b>\$57,013,938</b>	<b>\$11,469,195</b>	<b>\$2,578,140</b>	<b>\$30,648,196</b>	<b>\$389,190,725</b>
14	<b>Percentage of Total</b>	<b>68%</b>	<b>32%</b>	<b>54%</b>	<b>19%</b>	<b>15%</b>	<b>3%</b>	<b>1%</b>	<b>8%</b>	<b>100%</b>

## 7.5. Sewer Unit COS Development

### Customer Contributed Units of Service

The units of service are used in the allocation of costs to customer classes and the eventual determination of proposed FY 2024 rates and charges as part of the rate design process. This process involves developing estimates, in consultation with SFPUC staff, of the projected FY 2024 contributed units of service (i.e., customer wastewater discharges flowing to the treatment plants), billed units of service, return flows, strength loadings, and infiltration volumes, originally shown in Table 6-4 through Table 6-8. Table 7-10 shows the volume and strength loading inputs used to determine the units of service for FY 2024. Key points regarding include Table 7-10:

**Projected Flow (Column C):** The SFPUC’s wastewater billing system calculates the projected flow volumes shown in column C of Table 7-10 by applying a return flow factor to each customer’s billed water consumption. Therefore, the projected flow volumes shown in column C include return flow adjustment made by the billing system. The return flow factor assumed for Single Family Residential is 90% and Multifamily Residential customers is 95%. The return flow factors for non-residential customers are based on the SIC code assigned to each customer in the billing system.

**Weighted Average Strength Loadings (Column D-F):** The mg/L strength loadings shown in column D, column E, and column F reflected the aggregate weighted average of each customer type (e.g., Single Family Residential, Municipal, Nonresidential/Commercial) based on their strength loading assignment (see Wastewater Strength Loading Groups).

**Wet Weather Flows (Line 13):** The strength loading of wet weather flows shown on Line 13 were estimated based on an analysis of treatment plant influent data for the three-year period FY 2020 - FY 2022.

**Table 7-10: Summary FY 2024 Units of Service**

Line	(A) Description	(B) % of Treatment Effluent	(C) Projected Flow (CCF)	(D) Wtd Avg. COD (mg/L)	(E) Wtd. Avg. TSS (mg/L)	(F) Wtd. Avg O/G (mg/L)	(G) Est. COD Pounds	(H) Est. TSS Pounds	(I) Est. O/G Pounds
1	<b>Customer Contributions</b>								
2	Single Family Residential		5,745,781	566	258	34	24,534,916	10,007,662	3,048,930
3	Multifamily Residential		9,720,649	780	333	35	41,507,991	16,930,858	5,158,178
4	Municipal		502,612	308	152	17	2,150,964	875,535	268,434
5	Nonresidential/Commercial		5,747,608	407	134	27	25,004,030	8,732,452	3,434,081
6	Fire		28,194	0	0	0			
7	Municipal Fire		580	604	271	33			
8	<b>Total Billed Retail</b>		<b>21,745,424</b>	<b>2,665</b>	<b>1,147</b>	<b>145</b>	<b>93,197,901</b>	<b>36,546,507</b>	<b>11,909,623</b>
9									
10	<b>Wholesale</b>		138,860	687	269	88	595,137	233,376	76,052
11									
12	<b>Non-Customer Flows</b>								
13	Wet Weather Flows	17.6%	5,849,076	284	101	10	10,365,927	3,699,771	379,531
14	Dry Weather Infiltration	15.1%	5,026,950	0	0	0	0	0	0
15	<b>Total Non-Customer</b>	<b>32.6%</b>	<b>10,876,027</b>	<b>284</b>	<b>101</b>	<b>10</b>	<b>10,365,927</b>	<b>3,699,771</b>	<b>379,531</b>
16									
17	<b>Estimated Customer and Non-Customer Contributions</b>		<b>32,760,311</b>	<b>510</b>	<b>198</b>	<b>60</b>	<b>104,158,964</b>	<b>40,479,654</b>	<b>12,365,206</b>

## Allocation of Dry Weather Infiltration to Customer Units of Service

After determining the test year units of service summarized in Table 7-10 the next step in the COS process is the determination of how dry weather infiltration volumes and their associated strength loadings should be allocated to each customer class.

There is no industry standard one-size-fits-all approach for the allocation of infiltration in every situation. Methods for allocating infiltration 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, 25% of dry weather infiltration volumes were allocated based on customer accounts and 75% of dry weather infiltration volumes were allocated based on customer volumes.

Table 7-11 shows a summary of the allocation of dry weather infiltration to each wastewater customer class. Note that no strength loadings were assigned to dry weather infiltration volumes (see line 14 of Table 7-10). This is because there was no data available to appropriately assign dry weather infiltration strength loadings. Therefore, there is no change in the pounds of COD, TSS, or O/G allocated to each customer class due to dry weather infiltration.

**Table 7-11: Allocation of Dry Weather Infiltration to Customer Accounts**

Line	Dry Weather Infiltration	Dry Weather Flow (CCF)	Allocation on Flow	Allocation on Accounts	Sum of Allocations
1	Flow (HCF)	5,026,950	3,770,213	1,256,738	5,026,950
2	Est. COD Pounds	0	0	0	0
3	Est. TSS Pounds	0	0	0	0
4	Est. O/G Pounds	0	0	0	0
5	Total Pounds	0	0	0	0
6					
7	<b>Before Allocation of Dry Weather</b>	<b>Flow (CCF)</b>	<b>Est. COD Pounds</b>	<b>Est. TSS</b>	<b>Est. O/G</b>
8	Single Family Residential	5,745,781	24,534,916	10,007,662	3,048,930
9	Multifamily Residential	9,720,649	41,507,991	16,930,858	5,158,178
10	Municipal	502,612	2,125,773	840,158	231,016
11	Nonresidential/Commercial	5,747,608	26,119,805	8,543,674	3,336,919
12	Fire	28,194	0	0	0
13	Municipal Fire	580	0	0	0
14	Total	21,745,424	94,288,484	36,322,352	11,775,042
15					
16	<b>After Allocation of Dry Weather Infiltration</b>	<b>Flow (CCF)</b>	<b>Est. COD Pounds</b>	<b>Est. TSS</b>	<b>Est. O/G</b>
17	Single Family Residential	7,547,512	24,534,916	10,007,662	3,048,930
18	Multifamily Residential	11,668,893	41,507,991	16,930,858	5,158,178
19	Municipal	595,502	2,125,773	840,158	231,016
20	Nonresidential/Commercial	6,853,641	26,119,805	8,543,674	3,336,919
21	Fire	103,592	0	0	0
22	Municipal Fire	3,235	0	0	0
23	Total	26,772,375	94,288,484	36,322,352	11,775,042

## 7.6. Wastewater Customer Class Revenue Requirements

As discussed previously in this report in Section 7.2, the total FY 2024 revenue requirement for the Wastewater Enterprise is \$389,190,725. As a final outcome of the cost allocation process, the calculated wastewater revenue requirement was determined to be \$301,185,528 or 77.5% of the total. The calculated stormwater revenue requirement was determined to be \$87,719,197 or 22.5% of the total. This section of the report discusses the derivation of these amounts and the specific revenue requirement for each wastewater customer class.

### Unit Cost of Service Calculation

Having established the units of service for each customer class (Table 7-11), the next step in the wastewater COS process is to calculate the revenue requirement for each customer class. The foundation for the development in the customer class revenue requirement is to calculate the unit COS for each cost causation component.

A starting point in the unit COS calculation process is to summarize the allocated FY 2024 COS as shown in Table 7-12. Administrative costs totaling \$30,648,196 were identified in the process of assigning costs to functions. These costs were allocated to each cost causation component as shown in line 8. The total allocated revenue requirement sums to \$389,190,725 (line 4 and line 7) which matches the overall rate revenue requirement developed in the financial plan and shown in several proceeding tables.

**Table 7-12: Summary FY 2024 COS by Cost Causation Component**

COS Component	Flow (HCF)			Strength (Pounds)			Customer Service	Admin.	Total
	Flow (Total)	Flow (Dry)	Flow (Wet)	COD	TSS	O/G			
1 O&M	\$108,458,335	\$89,114,763	\$19,343,571	\$31,420,184	\$24,566,176	\$7,418,331	\$2,437,312	\$36,237,828	\$210,538,166
2 Capital	\$127,750,801	\$75,263,348	\$52,487,453	\$51,569,826	\$36,691,218	\$4,622,595	\$147,268	\$0	\$220,781,707
3 Less: Non-Rate Revenue Offsets	\$24,593,659	\$20,430,958	\$4,162,701	\$7,124,230	\$4,243,456	\$571,731	\$6,439	\$5,589,632	\$42,129,148
4 Subtotal Before Allocation of Admin	\$211,615,476	\$143,947,153	\$67,668,323	\$75,865,780	\$57,013,938	\$11,469,195	\$2,578,140	\$30,648,196	\$389,190,725
5									
6 Allocation of Admin. Costs	\$18,088,879	\$12,304,595	\$5,784,285	\$6,485,003	\$4,873,548	\$980,386	\$220,379	(\$30,648,196)	\$0
7 Final Net Revenue Requirement	\$229,704,355	\$156,251,748	\$73,452,607	\$82,350,783	\$61,887,486	\$12,449,581	\$2,798,519	\$0	\$389,190,725
8	59.02%	40.15%	18.87%	21.16%	15.90%	3.20%	0.72%	0.00%	100%

The unit COS is calculated by dividing the revenue requirement for each cost causation component (line 7 of Table 7-12) by the units of service. A detail of the unit COS calculation for flow, COD, TSS, O/G, and customer billing is shown in Appendix J.

## 7.7. Wastewater and Stormwater Customer Class Revenue Requirement Determination

### Wastewater Customer Class Revenue Requirement

The wastewater customer class revenue requirement is calculated by multiplying the customer class units of service for each cost causation component by the calculated unit COS. Table 7-13 shows the calculated FY 2024 wastewater customer class revenue requirement. As shown in line 21, the wastewater portion of the Wastewater Enterprise revenue requirement is \$301,471,528, or 77.5% of the total of \$389,190,725.



**Table 7-13: Detail of FY 2024 Wastewater Customer Class Revenue Requirements**

Line	Class	Flow (CCF)			Strength (Pounds)			Customer		Total	Aggregate Total
		Dry Weather	Infiltration (Flow Allocation)	Total Flow	COD	TSS	O/G	Infiltration (Account Allocation)	Customer Service		
1	<b>Units of Service</b>										
2	Single Family Residential	5,745,781	996,201	6,741,982	24,534,916	10,007,662	3,048,930	805,530	1,340,050		
3	Multifamily Residential	9,720,649	1,685,362	11,406,012	41,507,991	16,930,858	5,158,178	262,881	437,320		
4	Municipal	502,612	87,143	589,754	2,125,773	840,158	231,016	5,748	9,562		
5	Nonresidential/Commercial	5,747,608	996,518	6,744,126	26,119,805	8,543,674	3,336,919	109,514	182,184		
6	Fire	28,194	4,888	33,082	0	0	0	70,510	117,298		
7	Municipal Fire	580	101	681	0	0	0	2,554	4,249		
8	<b>Total</b>	<b>21,745,424</b>	<b>3,770,213</b>	<b>25,515,637</b>	<b>94,288,484</b>	<b>36,322,352</b>	<b>11,775,042</b>	<b>1,256,738</b>	<b>2,090,663</b>		
9											
10	<b>Unit COS</b>										
11	Unit Cost	\$5.84	\$5.84	\$5.84	\$0.79	\$1.55	\$1.02	\$5.84	\$1.34		
12	Units	\$/CCF	\$/CCF	\$/CCF	\$/Pound	\$/Pound	\$/Pound	\$/CCF	\$/Bbl		
13											
14	<b>Revenue Requirement</b>										
15	Single Family Residential	\$33,534,131	\$5,814,134	\$39,348,264	\$19,306,109	\$15,475,167	\$3,122,931	\$4,701,316	\$1,793,764	\$6,495,080	\$83,747,552
16	Multifamily Residential	\$56,732,675	\$9,836,288	\$66,568,963	\$32,661,935	\$26,180,726	\$5,283,373	\$1,534,256	\$585,388	\$2,119,644	\$132,814,641
17	Municipal	\$2,933,395	\$508,591	\$3,441,986	\$1,672,735	\$1,299,163	\$236,623	\$33,547	\$12,799	\$46,346	\$6,696,852
18	Nonresidential/Commercial	\$33,544,796	\$5,815,983	\$39,360,779	\$20,553,232	\$13,211,356	\$3,417,910	\$639,159	\$243,868	\$883,026	\$77,426,304
19	Fire	\$164,549	\$28,529	\$193,079	\$0	\$0	\$0	\$411,518	\$157,013	\$568,531	\$761,610
20	Municipal Fire	\$3,385	\$587	\$3,972	\$0	\$0	\$0	\$14,908	\$5,688	\$20,596	\$24,568
21	<b>Total</b>	<b>\$126,912,931</b>	<b>\$22,004,112</b>	<b>\$148,917,044</b>	<b>\$74,194,011</b>	<b>\$56,166,412</b>	<b>\$12,060,838</b>	<b>\$7,334,704</b>	<b>\$2,798,519</b>	<b>\$10,133,223</b>	<b>\$301,471,528</b>

### Stormwater Revenue Requirement

The wastewater customer class revenue requirement is calculated by multiplying the customer class units of service for each cost causation component by the unit cost of service. Table 7-14 shows the calculated FY 2024 stormwater revenue requirement of \$87,719,197 which is 22.5% of the total FY 2024 Wastewater Enterprise revenue requirement of \$389,190,725. In addition, no allocation of dry weather infiltration costs or customer service costs were included in the stormwater revenue requirement.

**Table 7-14: FY 2024 Stormwater Revenue Requirement**

Line	Class	Flow (CCF)		Strength (Pounds)			Aggregate Total
		Wet Weather	COD	TSS	O/G		
1	<b>Units of Service</b>						
2	Stormwater	5,849,076	10,365,927	3,699,771	379,531		
3							
4	<b>Unit COS</b>						
5	Unit Cost	\$12.56	\$0.79	\$1.55	\$1.02		
6	Units	\$/CCF	\$/Pound	\$/Pound	\$/Pound		
7							
8	<b>Revenue Requirement</b>						
9	Stormwater	\$73,452,607	\$8,156,772	\$5,721,074	\$388,743	\$87,719,197	

## Revenue Requirement Summary

Table 7-22 provides a final summary of the FY 2024 revenue requirement for both wastewater and stormwater.

**Table 7-15: FY 2024 Revenue Requirement Summary**

Line	Service	Flow	COD	TSS	O/G	CS	Total
1	Wastewater	\$148,917,044	\$74,194,011	\$56,166,412	\$12,060,838	\$10,133,223	\$301,471,528
2	Stormwater	\$73,452,607	\$8,156,772	\$5,721,074	\$388,743	\$0	\$87,719,197
3	<b>Total</b>	<b>\$222,369,651</b>	<b>\$82,350,783</b>	<b>\$61,887,486</b>	<b>\$12,449,581</b>	<b>\$10,133,223</b>	<b>\$389,190,725</b>
4							
5	% Wastewater	67.0%	90.1%	90.8%	96.9%	100.0%	77.5%
6	% Stormwater	33.0%	9.9%	9.2%	3.1%	0.0%	22.5%
7	<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

## FY 2024 Wastewater Customer Class Revenue Requirement versus Revenues at Existing Rates

Table 7-16 provides a summary comparison of how the FY 2024 wastewater customer class revenue requirements compare to the level of revenue earned from existing rates. For all wastewater customer classes, the FY 2024 is less than the amount earned from existing rates. This is because the SFPUC’s current wastewater rates recover the cost of both wastewater and stormwater activities. The calculated FY 2024 wastewater revenue requirement excludes stormwater-related costs.

**Table 7-16: FY 2024 Wastewater Revenue Requirement vs. Revenues at Existing Rates**

Line	Customer Class	(A) Proposed Cost of Service (\$)	(B) Current Cost of Service (\$)	(C) Proposed Cost of Service (%)	(D) Current Cost of Service (%)	(E) % Difference
1	Single Family Residential	\$83,747,552	\$103,329,788	27.78%	27.61%	-19.0%
2	Multifamily Residential	\$132,814,641	\$165,279,146	44.06%	44.16%	-19.6%
3	Municipal	\$6,696,852	\$8,342,234	2.22%	2.23%	-19.7%
4	Nonresidential/Commercial	\$77,426,304	\$96,379,418	25.68%	25.75%	-19.7%
5	Fire	\$761,610	\$891,175	0.25%	0.24%	-14.5%
6	Municipal Fire	\$24,568	\$27,900	0.01%	0.01%	-11.9%
7	<b>Total</b>	<b>\$301,471,528</b>	<b>\$374,249,662</b>	<b>100.00%</b>	<b>100.00%</b>	<b>-19.4%</b>

# 8. Sewer Rate Design

## 8.1. Sewer (Wastewater and Stormwater) Rate Design Overview

This section of the report shows the calculation of proposed FY 2024 rates for each wastewater customer class. The proposed rates are an outcome of the comprehensive analysis of customer flows and strength loadings completed as part of the wastewater COS process described in Section 7 of this report. They are designed to recover wastewater service-related costs of \$301,471,528 (see for example, line 1 of Table 7-15) and stormwater service-related costs of \$87,719, 197 (see for example, line 2 of Table 7-15) for the projected FY 2024 total sewer revenue requirement of \$389,190,725.

## 8.2. Wastewater Rate Calculations

### Monthly Service Charge

Table 8-1 shows the calculation of the proposed FY 2024 monthly service charge. The cost components recovered in the monthly service charge include the cost of dry weather infiltration allocated on the basis of accounts and the cost of customer service. The proposed monthly service charge is \$4.85 per bill. This amount is 7.0% less than the current monthly service charge of \$5.21.

**Table 8-1: Proposed FY 2024 Monthly Service Charge**

Line	Customer Class	Account Allocated Infiltration	Customer Service	Total Revenue Requirement	Bills	Calculated \$/Bill	Current \$/Bill	\$ Difference
1	Single Family Residential	\$4,701,316	\$1,793,764	\$6,495,080	1,340,050	\$4.85	\$5.21	-\$0.36
2	Multifamily Residential	\$1,534,256	\$585,388	\$2,119,644	437,320	\$4.85	\$5.21	-\$0.36
3	Municipal	\$33,547	\$12,799	\$46,346	9,562	\$4.85	\$5.21	-\$0.36
4	Nonresidential/Commercial	\$639,159	\$243,868	\$883,026	182,184	\$4.85	\$5.21	-\$0.36
5	Fire	\$411,518	\$157,013	\$568,531	117,298	\$4.85	\$5.21	-\$0.36
6	Municipal Fire	\$14,908	\$5,688	\$20,596	4,249	\$4.85	\$5.21	-\$0.36
7	<b>Total</b>	<b>\$7,334,704</b>	<b>\$2,798,519</b>	<b>\$10,133,223</b>	<b>2,090,663</b>	<b>\$4.85</b>	<b>\$5.21</b>	<b>-\$0.36</b>

### Residential Commodity Rates

Table 8-2 shows the calculation of the proposed FY 2024 residential commodity rates. The proposed rate is \$13.45/CCF which is \$2.52 or 15.8% less than the current residential commodity rate of \$15.97/CCF.

**Table 8-2: Proposed FY 2024 Residential Commodity Rates**

Line	Class	Flow and Strength	Billed Units	Calculated \$/CCF	Current \$/CCF	\$ Difference
1	Single Family Residential	\$77,252,472	5,745,781	\$13.45	\$15.97	(\$2.52)
2	Multifamily Residential	\$130,694,998	9,720,649	\$13.45	\$15.97	(\$2.52)
3	<b>Blended Total</b>	<b>\$207,947,470</b>	<b>15,466,430</b>	<b>\$13.45</b>	<b>\$15.97</b>	<b>(\$2.52)</b>

### Non-Residential Commodity Rates

Table 8-3 shows the calculation of the proposed FY 2024 non-residential commodity rates which consist of separate components for flow and strength (COD, TSS, O/G). With the exception of the proposed \$/lb. rate for COD (line 11 of Table 8-3), each billing component declines as compared to current rates. The increase in

the \$/lb. rate for COD is primarily attributable to the large investment in treatment plant digester technologies made by the SFPUC.

**Table 8-3: Proposed FY 2024 Non-Residential Commodity Rates**

Line	Class	Revenue Requirement			Billed Units	Calculated \$/CCF	Current \$/CCF	\$ Difference
		Flow (HCF)	Infil. (Flow Alloc)	Total Flow				
1	Municipal	\$2,933,395	\$508,591	\$3,441,986	502,612	\$6.85	\$9.46	(\$2.61)
2	Nonresidential/Commercial	\$33,544,796	\$5,815,983	\$39,360,779	5,747,608	\$6.85	\$9.46	(\$2.61)
3	Fire	\$164,549	\$28,529	\$193,079	28,194	\$6.85	\$9.46	(\$2.61)
4	Municipal Fire	\$3,385	\$587	\$3,972	580	\$6.85	\$9.46	(\$2.61)
5	<b>Blended Total</b>	<b>\$36,646,125</b>	<b>\$6,353,690</b>	<b>\$42,999,816</b>	<b>6,278,994</b>	<b>\$6.85</b>	<b>\$9.46</b>	<b>(\$2.61)</b>
6								
7	<b>COD</b>							
8	<b>Class</b>	<b>COD Revenue Requirement</b>	<b>Billed Units</b>	<b>Calculated \$/Lb.</b>	<b>Current \$/Lb.</b>	<b>\$ Difference</b>		
9	Municipal	\$1,672,735	2,125,773	\$0.79				
10	Nonresidential/Commercial	\$20,553,232	26,119,805	\$0.79				
11	Fire	\$0	0					
12	Municipal Fire	\$0	0					
13	<b>Blended Total</b>	<b>\$22,225,967</b>	<b>28,245,578</b>	<b>\$0.79</b>	<b>\$0.65</b>	<b>\$0.14</b>		
14								
15								
16	<b>TSS</b>							
17	<b>Class</b>	<b>TSS Revenue Requirement</b>	<b>Billed Units</b>	<b>Calculated \$/Lb.</b>	<b>Current Charge</b>	<b>\$ Difference</b>		
18	Municipal	\$1,299,163	840,158	\$1.55	\$1.65	(\$0.10)		
19	Nonresidential/Commercial	\$13,211,356	8,543,674	\$1.55	\$1.65	(\$0.10)		
20	Fire	\$0	0					
21	Municipal Fire	\$0	0					
22	<b>Blended Total</b>	<b>\$14,510,518</b>	<b>9,383,832</b>	<b>\$1.55</b>	<b>\$1.65</b>	<b>(\$0.10)</b>		
23								
24								
25	<b>O/G</b>							
26	<b>Class</b>	<b>OG Revenue Requirement</b>	<b>Billed Units</b>	<b>Calculated \$/Lb.</b>	<b>Current Charge</b>	<b>\$ Difference</b>		
27	Municipal	\$236,623	231,016	\$1.02	\$1.66	(\$0.64)		
28	Nonresidential/Commercial	\$3,417,910	3,336,919	\$1.02	\$1.66	(\$0.64)		
29	Fire	\$0	0					
30	Municipal Fire	\$0	0					
31	<b>Blended Total</b>	<b>\$3,654,534</b>	<b>3,567,935</b>	<b>\$1.02</b>	<b>\$1.66</b>	<b>(\$0.64)</b>		

### 5-Year Wastewater Rate Projection

Table 8-4 summarizes wastewater rates for the period FY 2024 – FY 2028. The increase in rates after FY 2024 are based on the overall rate revenue increases specified in the financial plan. Table 6-16 shows these increases.

Table 8-4: Summary of Proposed Stormwater Rates FY 2024 – FY 2028

Line	Class	(A) Current (Since 7/1/2022)	(B) Proposed FY 2024	(C) Proposed FY 2025	(D) Proposed FY 2026	(E) Planned FY 2027	(F) Planned FY 2028
1	<b>Total Rate Increase</b>		<b>9%</b>	<b>9%</b>	<b>9%</b>	<b>10%</b>	<b>10%</b>
2	<b>Service Charge</b>	\$5.21	\$4.85	\$5.28	\$5.76	\$6.33	\$6.97
3							
4	<b>Residential Volumetric</b>	\$15.97	\$13.45	\$14.66	\$15.97	\$17.57	\$19.33
5							
6	<b>Nonresidential Volumetric</b>						
7	Discharge	\$9.46	\$6.85	\$7.46	\$8.14	\$8.95	\$9.84
8	COS	\$0.65	\$0.79	\$0.86	\$0.93	\$1.03	\$1.13
9	TSS	\$1.65	\$1.55	\$1.69	\$1.84	\$2.02	\$2.22
10	O/G	\$1.66	\$1.02	\$1.12	\$1.22	\$1.34	\$1.47

### 8.3. Stormwater Rate Design Overview

The Wastewater Enterprise has historically recovered stormwater-related costs through wastewater rates. In this study, a separate stormwater revenue requirement was calculated so that the SFPUC can implement stormwater specific rates. As discussed in Section 7 of this report, the projected FY 2024 stormwater requirement is \$87,719,197 (see for example, line 2 of Table 7-15). The stormwater rates presented in this section of the report are “full cost” rates that are designed to recover all of the projected FY 2024 stormwater specific costs.

#### New Stormwater Rate Structure

The SFPUC has elected to implement a stormwater specific rate design beginning in FY 2024 that features a “Simplified” structure for residential customers and a “Standard” structure for non-residential customers. Residential customers are defined as having a maximum of six dwelling units and a maximum lot size of 6,000 square feet. Under the Simplified rate structure, residential customers who meet this definition are charged a flat monthly charge in one of three Simplified Residential Tiers (SRT), based on parcel size. This flat charge is based on the average amount of permeable and impermeable area for parcels within each tier. These averages are based on a GIS analysis of all parcels in the City of San Francisco. Customers who do not meet the definition of residential are considered charged under the Standard rate structure based on their actual square footage of permeable and impermeable area. Table 8-5 summarizes this rate structure.

Table 8-5: New Stormwater Rate Structure

Line	Customer Type	Type of Charge
1	Simplified Residential Tiered Rate	
2	SRT1 (1 - 1,700 square feet parcel size)	Monthly Flat Charge
3	SRT2 (1,701 - 3,300 square feet parcel size)	Monthly Flat Charge
4	SRT3 (3,301 - 6,000 square feet parcel size)	Monthly Flat Charge
5		
6	Standard Non-Residential Rate Structure	
7	Standard Rate Impermeable	\$/Thousand Square Feet / Month
8	Standard Rate Permeable	\$/Thousand Square Feet / Month

### Stormwater Rate Calculation

The proposed FY 2024 stormwater rates calculated used estimates of the inventory of permeable and impermeable square footage developed by the SFPUC staff. This inventory of permeable and impermeable area is based on geospatial imaging conducted by SFPUC wherein all land area was determined to either be permeable or impermeable. Table 8-6 shows the calculation of the FY 2024 unit COS (\$/thousand square feet per month or \$/KSF/mo.) based on the revenue requirement of \$87,719,197 and the inventory of permeable and impermeable square footage provided by the SFPUC staff. Column C of Table 8-6 shows the run-off coefficient determined with SFPUC staff. This correlates to the area (column D) that would result in run off from wet weather events.

**Table 8-6: FY 2024 Stormwater Unit COS Calculation**

(A) Surface	(B) Area	(C) RO Coeff	(D=B*C) Effective Area	(E) Revenue Collection	(F=E/D) Rate (\$/SF/Yr)	(G=F*1,000/12) Rate (\$/KSF/Mo)
Impermeable Area	521,418,549	1.00	521,418,549	\$82,576,137	\$0.1584	\$13.1974
Permeable	324,753,283	0.10	32,475,328	\$5,143,061	\$0.0158	\$1.3197
<b>Total</b>	<b>846,171,832</b>		<b>553,893,878</b>	<b>\$87,719,197</b>		

Having established the unit COS for all permeable and impermeable surfaces, the next step in the development of stormwater rates is to calculate revenue requirement for each customer type and each tier. The percentage of the total effective permeable and impermeable areas for each class and tier is calculated and shown in column C and column D of Table 8-7 and are based on the effective areas originally shown in column D of Table 8-6. These percentages are then used to determine the portion of the revenue requirement that is allocated to each class and tier. The total permeable revenue requirements (column E) and impermeable revenue requirements (column F) in Table 8-7 are equal to the revenue collections in column E of Table 8-6. Table 8-7 shows a summarized version of this calculation.

**Table 8-7: FY 2024 Stormwater Revenue Requirement by Customer Type**

Line	Customer Type	(A) Effective Permeable Area	(B) Effective Impermeable Area	(C) Permeable Area as a % of Total	(D) Impermeable Area as a % of Total	(E) Permeable Revenue Requirement	(F) Impermeable Revenue Requirement	(G) Total Revenue Requirement
1	<b>Simplified Residential</b>							
2	SRT 1	139,473	8,963,289	0.03%	1.62%	\$22,088	\$1,419,500	\$1,441,588
3	SRT 2	7,475,135	181,523,041	1.35%	32.77%	\$1,183,824	\$28,747,484	\$29,931,308
4	SRT 3	3,067,956	61,377,834	0.55%	11.08%	\$485,867	\$9,720,299	\$10,206,166
5	<b>Standard</b>	21,792,765	269,554,385	3.93%	48.67%	\$3,451,282	\$42,688,853	\$46,140,135
6	Total	32,475,328	521,418,549	5.86%	94.14%	\$5,143,061	\$82,576,137	\$87,719,197

The third step in the calculation of stormwater rates is the development of \$/thousand square foot/month unit costs for both permeable and impermeable areas. Table 8-8 shows this calculation which is a more detailed version of the information previously provided in Table 8-7 and Table 8-6.

**Table 8-8: \$/Thousand Square Foot/Month Unit Costs**

Line	Customer Type	Permeable Revenue Requirement	Impermeable Revenue Requirement	Total Revenue Requirement	Permeable Area (Sq. Ft.)	Impermeable Area (Sq. Ft.)	Permeable \$/KSF/Mo.	Impermeable \$/KSF/Mo.
1	Simplified Residential							
2	SRT 1	\$22,088	\$1,419,500	\$1,441,588	1,394,726	8,963,289	\$1.32	\$13.20
3	SRT 2	\$1,183,824	\$28,747,484	\$29,931,308	74,751,352	181,523,041	\$1.32	\$13.20
4	SRT 3	\$485,867	\$9,720,299	\$10,206,166	30,679,558	61,377,834	\$1.32	\$13.20
5	Standard	\$3,451,282	\$42,688,853	\$46,140,135	217,927,647	269,554,385	\$1.32	\$13.20
6	Total	\$5,143,061	\$82,576,137	\$87,719,197	324,753,283	521,418,549		

The fourth step in the calculation of stormwater rates is the actual development of the differentiated monthly fixed charge for each residential tier in the Simplified portion of the stormwater rate structure. This calculation requires the use of average residential parcel size estimates as developed by the SFPUC. Table 8-9 shows this calculation.

**Table 8-9: Development of FY 2024 Stormwater Charges by Residential Tier**

Line	Simplified Residential Tier	Impermeable \$/KSF/Mo	Assumed Impermeable Area (Sq. Ft.)	Impermeable Monthly Charge	Permeable \$/KSF/Mo	Assumed Permeable Area (Sq. Ft.)	Permeable Monthly Charge	Total Monthly Charge
1	SRT1 (1 - 1,700 square feet parcel size)	\$13.20	1,207	\$15.93	\$1.3197	188	\$0.25	\$16.175
2	SRT2 (1,701 - 3,300 square feet parcel size)	\$13.20	1,832	\$24.18	\$1.3197	754	\$1.00	\$25.171
3	SRT3 (3,301 - 6,000 square feet parcel size)	\$13.20	2,731	\$36.04	\$1.3197	1,365	\$1.80	\$37.844

### FY 2024 Stormwater Rate Summary

Table 8-10 summarizes the proposed FY 2024 stormwater rates calculated as shown in Table 8-7, Table 8-8, Table 8-9.

**Table 8-10: Summary of Proposed FY 2024 Stormwater Rates**

Line	Simplified Residential Tier	\$/KSF/Mo	Assumed Area (Sq. Ft.)	Monthly Charge
1	<b>Permeable</b>			
2	SRT1 (1 - 1,700 square feet parcel size)	\$1.32	188	\$0.25
3	SRT2 (1,701 - 3,300 square feet parcel size)	\$1.32	754	\$1.00
4	SRT3 (3,301 - 6,000 square feet parcel size)	\$1.32	1,365	\$1.80
5				
6	<b>Impermeable</b>			
7	SRT1 (1 - 1,700 square feet parcel size)	\$13.20	1,207	\$15.93
8	SRT2 (1,701 - 3,300 square feet parcel size)	\$13.20	1,832	\$24.18
9	SRT3 (3,301 - 6,000 square feet parcel size)	\$13.20	2,731	\$36.04
10				
11	<b>Combined</b>			
12	SRT1 (1 - 1,700 square feet parcel size)			\$16.18
13	SRT2 (1,701 - 3,300 square feet parcel size)			\$25.17
14	SRT3 (3,301 - 6,000 square feet parcel size)			\$37.84

### 5-Year Stormwater Rate Projection

Table 8-11 summarizes stormwater rates for the period FY 2024 – FY 2028. The increase in rates after FY 2024 are based on the overall rate revenue increases specified in the financial plan.

**Table 8-11: Summary of Proposed Stormwater Rates FY 2024 – FY 2028**

Line	Stormwater Class	(A) Current (N/A)	(B) Proposed FY 2024	(C) Proposed FY 2025	(D) Proposed FY 2026	(E) Planned FY 2027	(F) Planned FY 2028
1	<b>Revenue Rate Increase</b>		9%	9%	9%	10%	10%
2							
3	<b>Simplified Residential Tiered Rate</b>						
4	SRT1 (\$/Month)	N/A	\$16.18	\$17.63	\$19.22	\$21.14	\$23.25
5	SRT2 (\$/Month)	N/A	\$25.17	\$27.44	\$29.91	\$32.90	\$36.19
6	SRT3 (\$/Month)	N/A	\$37.84	\$41.25	\$44.96	\$49.46	\$54.41
7							
8	<b>Standard Rate Impermeable (\$/ksqft/mo.)</b>	N/A	\$13.20	\$14.39	\$15.68	\$17.25	\$18.97
9	<b>Standard Rate Permeable (\$/ksqft/mo.)</b>	N/A	\$1.32	\$1.44	\$1.57	\$1.72	\$1.90

## 8.4. Preliminary Sewer Bill Impacts

Several examples are presented in this section to illustrate the bill impacts for different users of the proposed rate structure. The bills referenced in each figures include the impact of proposed FY 2024 stormwater and wastewater water rates without a phase-in period for the stormwater charge.

Figure 8-1 and Figure 8-2 present FY 2024 bill impacts for Single Family Residential customers with monthly wastewater discharges of 4.32 CCF in Simplified Residential Tier 2 without any phase-in. Average monthly Single Family Residential billed water consumption is 4.8 CCF with assumed return flow factor of 90%.

Figure 8-3 presents the FY 2024 impacts for multifamily apartments assuming the Standard stormwater rate for a medium sized apartment building with 43 sq ft of permeable area and 4,008 sq ft of impermeable area and 71.2 CCF of discharge.

Figure 8-4 shows the FY 2024 impacts for non-residential customers assuming the Standard stormwater rate with 22,924 sq. ft. of permeable area and 141,018 sq. ft. of impermeable area.



Figure 8-1: FY 2024 Example Single Family Residential Bill Change (4.32 ccf Billed Discharges)

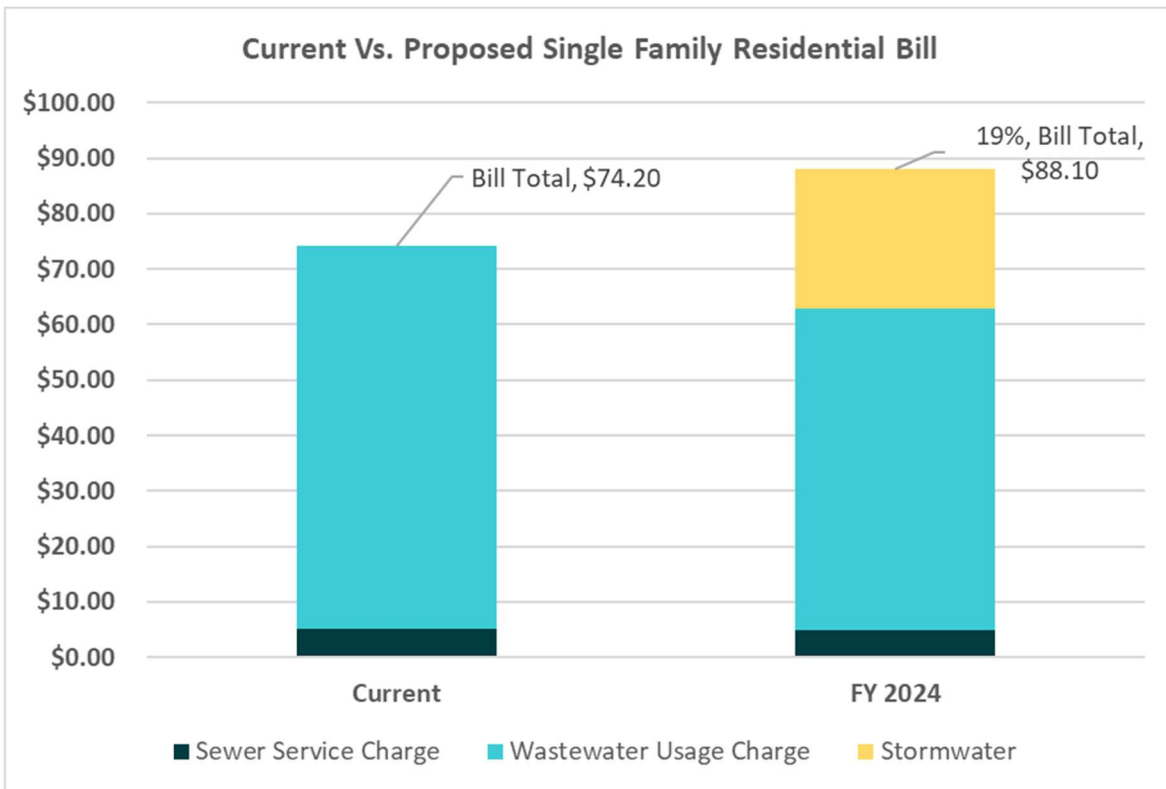


Figure 8-2: FY 2024 Single Family Residential Bill Impacts by Usage Percentile

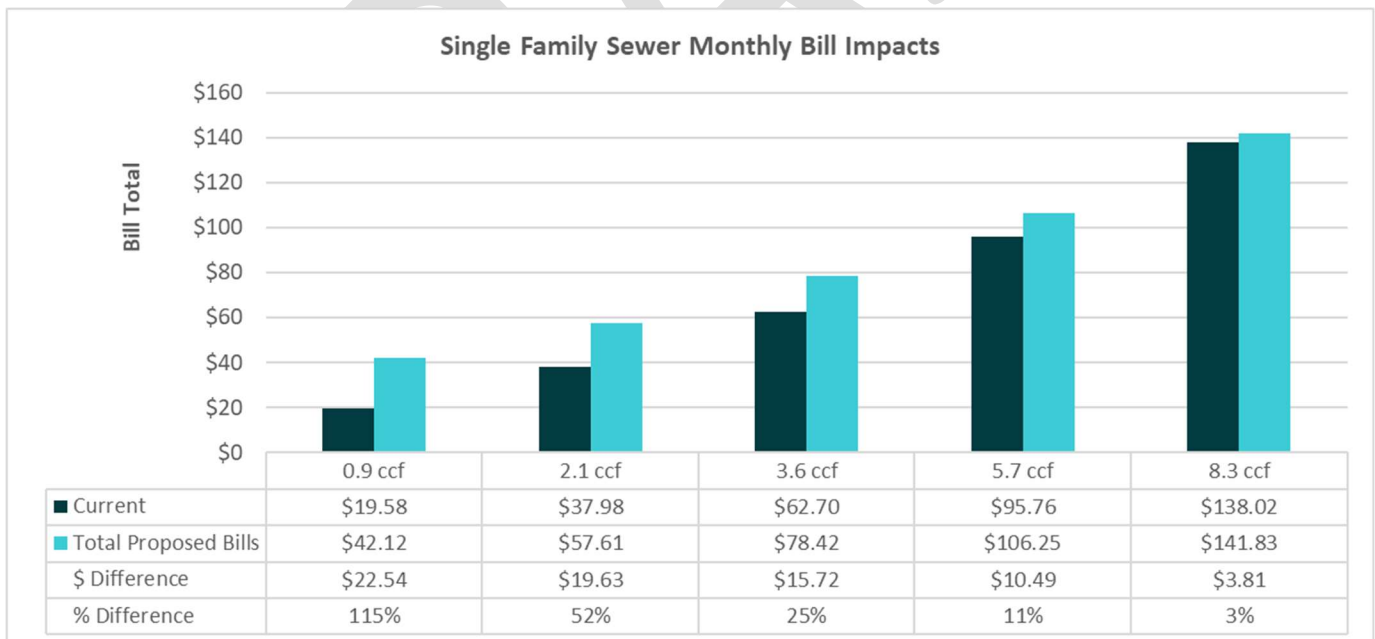


Figure 8-3: FY 2024 Multifamily Residential Bill Impacts by Usage Percentile

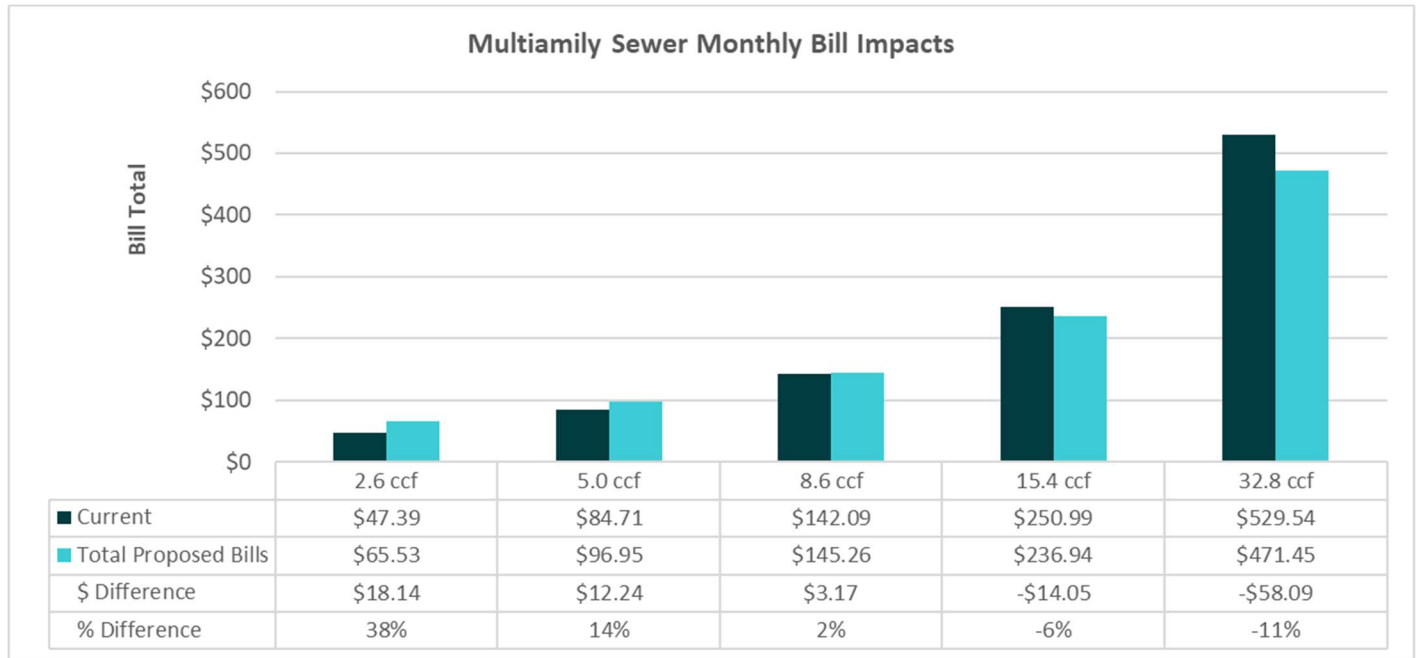
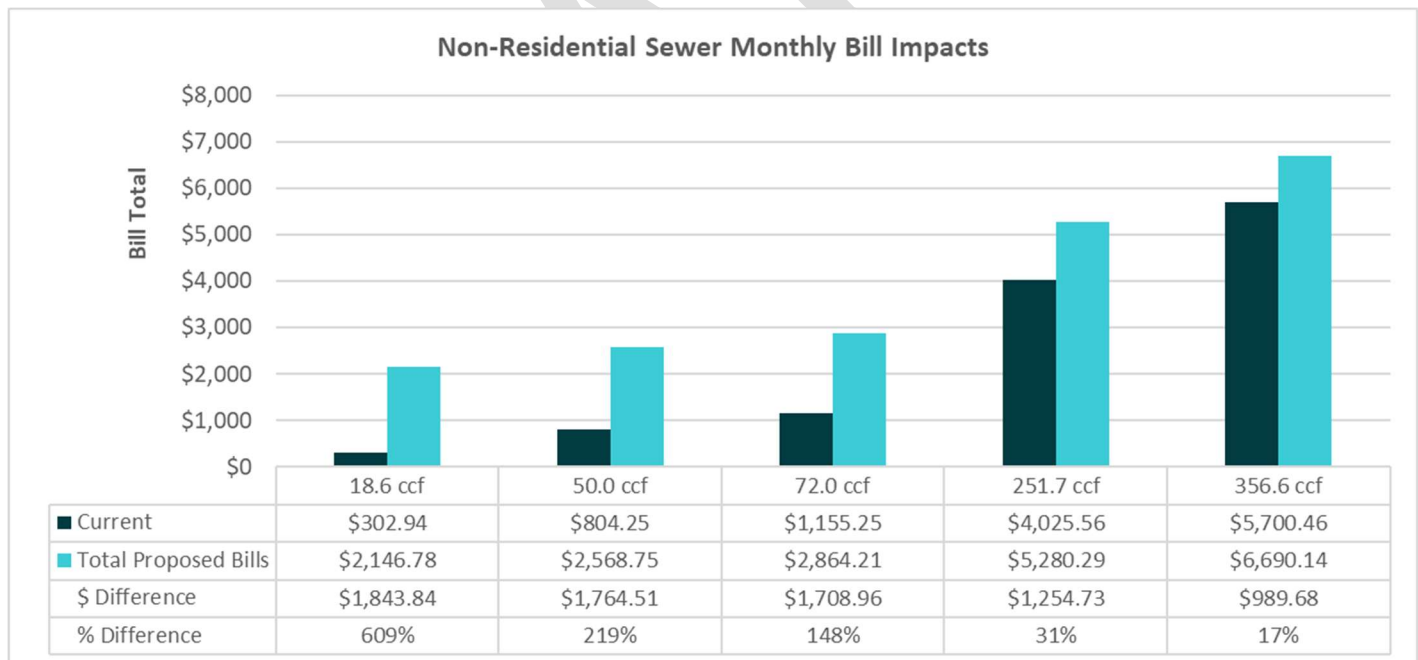


Figure 8-4: FY 2024 Non-Residential Residential Bill Impacts by Usage Percentile



# 9. Stormwater Phase-In Rates

## 9.1. Introduction

The rates presented by MME and Raftelis in Section 8 of this report are designed to recover the FY 2024 wastewater revenue requirement of \$301,471,528 and the FY 2024 stormwater revenue requirement of \$87,719,197. This change would result in significant bill impacts on customers with parcels featuring large impermeable surface areas. The SFPUC’s Ratepayer Assurance Policy principles of Affordability and Predictability, as well as best practice outreach to other utilities that have implemented stormwater charges, suggests that major changes to rate structures should be phased in to avoid rate shock. At the request of the SFPUC staff, “phase-in” rates were calculated that are designed to move to full stormwater cost recovery in FY 2030. During the period FY 2024 – FY 2029, a portion of the annual stormwater revenue requirement will shift to (i.e., be included in) the annual wastewater revenue requirement. As a result, wastewater rates will continue to include, albeit on a decreasing level each year, a portion of stormwater-related costs. The phase-in rates requested by the SFPUC staff are shown in Table 9-2.

## 9.2. Phase-In Revenue Requirement Projection

Table 9-1 shows the change in wastewater and stormwater revenue requirements necessary to move to full cost stormwater rates in FY 2030. Key items shown on this table include:

**Stormwater Phase-In Percentage (Line 1):** This is the percentage of the annual stormwater revenue requirement shifted to the wastewater revenue requirement each year.

**Adjusted Wastewater Total (Line 5):** This is annual wastewater revenue requirement after the including of a portion of the stormwater revenue requirement.

**Adjusted Stormwater Total (Line 10):** This is the annual stormwater revenue requirement after a portion of costs have been shifted to wastewater.

**Table 9-1: Revenue Requirements for Stormwater Phase-In Rates**

Line	Description	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
1	Stormwater Phase-In Percentage	86%	71%	57%	43%	29%	14%	0%	0%
2									
3	Wastewater Cost of Service	\$301,471,528	\$328,603,965	\$358,178,322	\$393,996,154	\$433,395,770	\$476,735,347	\$519,641,528	\$566,409,266
4	Add: Stormwater Phase-In	\$75,187,883	\$68,295,661	\$59,553,816	\$49,131,898	\$36,030,059	\$19,816,532	\$0	\$0
5	<b>Adjusted Wastewater Total</b>	<b>\$376,659,411</b>	<b>\$396,899,626</b>	<b>\$417,732,138</b>	<b>\$443,128,053</b>	<b>\$469,425,829</b>	<b>\$496,551,879</b>	<b>\$519,641,528</b>	<b>\$566,409,266</b>
6	% Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7									
8	Stormwater Cost of Service	\$87,719,197	\$95,613,925	\$104,219,178	\$114,641,096	\$126,105,206	\$138,715,726	\$151,200,142	\$164,808,155
9	Less: Stormwater Phase-In	(\$75,187,883)	(\$68,295,661)	(\$59,553,816)	(\$49,131,898)	(\$36,030,059)	(\$19,816,532)	\$0	\$0
10	<b>Adjusted Stormwater Total</b>	<b>\$12,531,314</b>	<b>\$27,318,264</b>	<b>\$44,665,362</b>	<b>\$65,509,198</b>	<b>\$90,075,147</b>	<b>\$118,899,194</b>	<b>\$151,200,142</b>	<b>\$164,808,155</b>
11	% Change	0%	118%	64%	47%	38%	32%	27%	\$0
12									
13	<b>Total Revenue Requirement</b>	<b>\$389,190,725</b>	<b>\$424,217,890</b>	<b>\$462,397,501</b>	<b>\$508,637,251</b>	<b>\$559,500,976</b>	<b>\$615,451,073</b>	<b>\$670,841,670</b>	<b>\$731,217,420</b>

## 9.3. Phase-In Rate Projection

Table 9-2 shows a projection of the SFPUC requested wastewater and stormwater rates during the period FY 2024 – FY 2034. The phase-in period to full stormwater cost recovery is FY 2024 – FY 2030.

Table 9-2: FY 2024 – FY 2034 Phase-In Wastewater and Stormwater Rate Projection

Line	Class	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
1	<b>Wastewater Rates</b>											
2												
3	Monthly Service Charge (All Classes)	\$4.85	\$5.28	\$5.76	\$6.33	\$6.97	\$7.66	\$8.35	\$9.11	\$9.56	\$9.94	\$10.34
4												
5	Residential Rate (\$/ccf)	\$16.91	\$17.80	\$18.72	\$19.83	\$20.99	\$22.17	\$23.18	\$25.26	\$26.52	\$27.58	\$28.69
6												
7	Non-Residential (\$/ccf)	\$9.74	\$10.09	\$10.43	\$10.84	\$11.23	\$11.59	\$11.80	\$12.87	\$13.51	\$14.05	\$14.61
8	COD (\$/lb)	\$0.86	\$0.93	\$0.99	\$1.08	\$1.17	\$1.26	\$1.36	\$1.48	\$1.55	\$1.61	\$1.68
9	TSS (\$/lb)	\$1.68	\$1.81	\$1.94	\$2.11	\$2.29	\$2.48	\$2.67	\$2.91	\$3.05	\$3.17	\$3.30
10	OG (\$/lb)	\$1.05	\$1.14	\$1.24	\$1.36	\$1.49	\$1.63	\$1.77	\$1.92	\$2.02	\$2.10	\$2.19
11												
12	<b>Stormwater Rates</b>											
13												
14	Simplified Residential											
15	Simplified Residential Tier 1	\$2.31	\$5.04	\$8.24	\$12.08	\$16.61	\$21.92	\$27.88	\$30.39	\$31.91	\$33.19	\$34.51
16	Simplified Residential Tier 2	\$3.60	\$7.84	\$12.82	\$18.80	\$25.85	\$34.12	\$43.39	\$47.29	\$49.66	\$51.64	\$53.71
17	Simplified Residential Tier 3	\$5.41	\$11.79	\$19.27	\$28.26	\$38.86	\$51.30	\$65.23	\$71.10	\$74.66	\$77.64	\$80.75
18												
19	Standard											
20	Permeable (\$/KSF/Mo)	\$0.19	\$0.41	\$0.67	\$0.99	\$1.36	\$1.79	\$2.27	\$2.48	\$2.60	\$2.71	\$2.82
21	Impermeable (\$/KSF/Mo)	\$1.89	\$4.11	\$6.72	\$9.86	\$13.55	\$17.89	\$22.75	\$24.80	\$26.04	\$27.08	\$28.16

## 9.4. Phase-In Bill Impacts

Continuing the examples previously presented in Section 8.4, Figure 9-1, Figure 9-2, and Figure 9-3 show the projected bill impacts for three different types of customers. Figure 9-1 is a Single Family Residential customer with billed sewer discharges of 4.32 CCF in Simplified Residential Tier SRT 2. Figure 9-2 shows the bill impacts for a Multifamily Residential customer with monthly billed discharges of 71.2 CCF, 43 square feet of permeable area, and 4,008 square feet of impermeable area. Figure 9-3 shows the impacts for a Non-Residential customer with monthly billed discharges of 307.6 CCF, 22,924 square feet of permeable area, and 141,018 square feet of impermeable area.

Figure 9-1: Single Family Residential Bill Impacts at Phase-In Rates

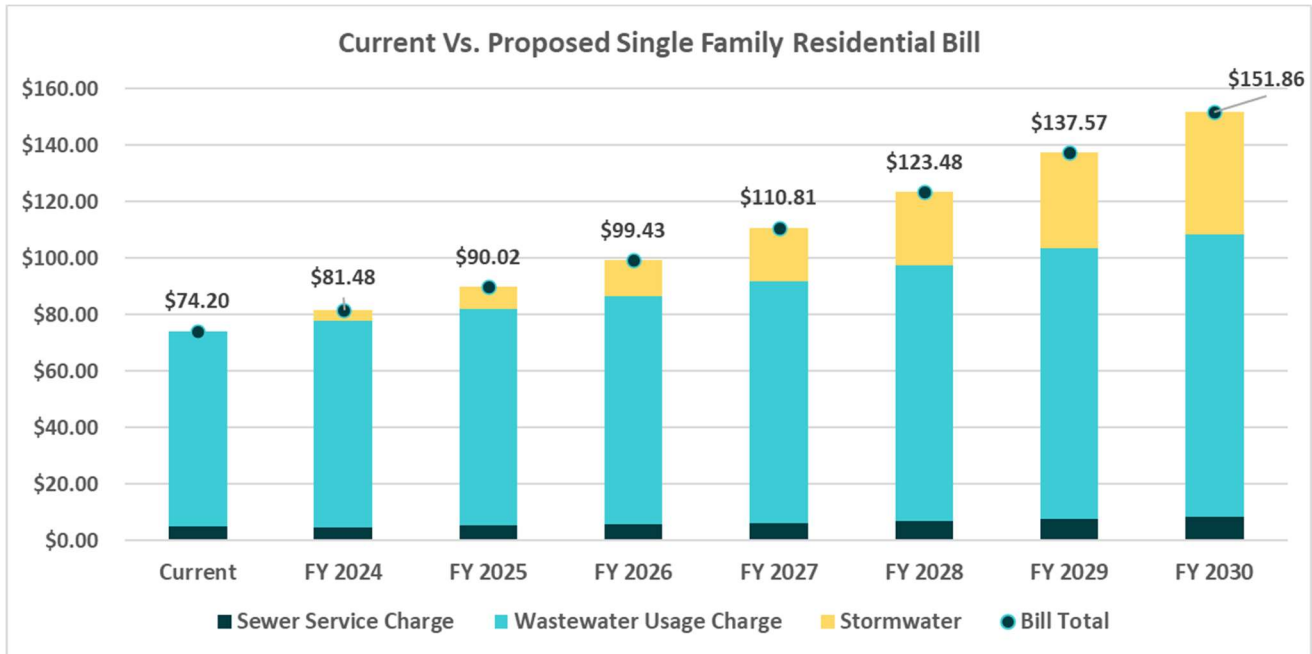


Figure 9-2: Multifamily Residential Bill Impacts at Phase-In Rates

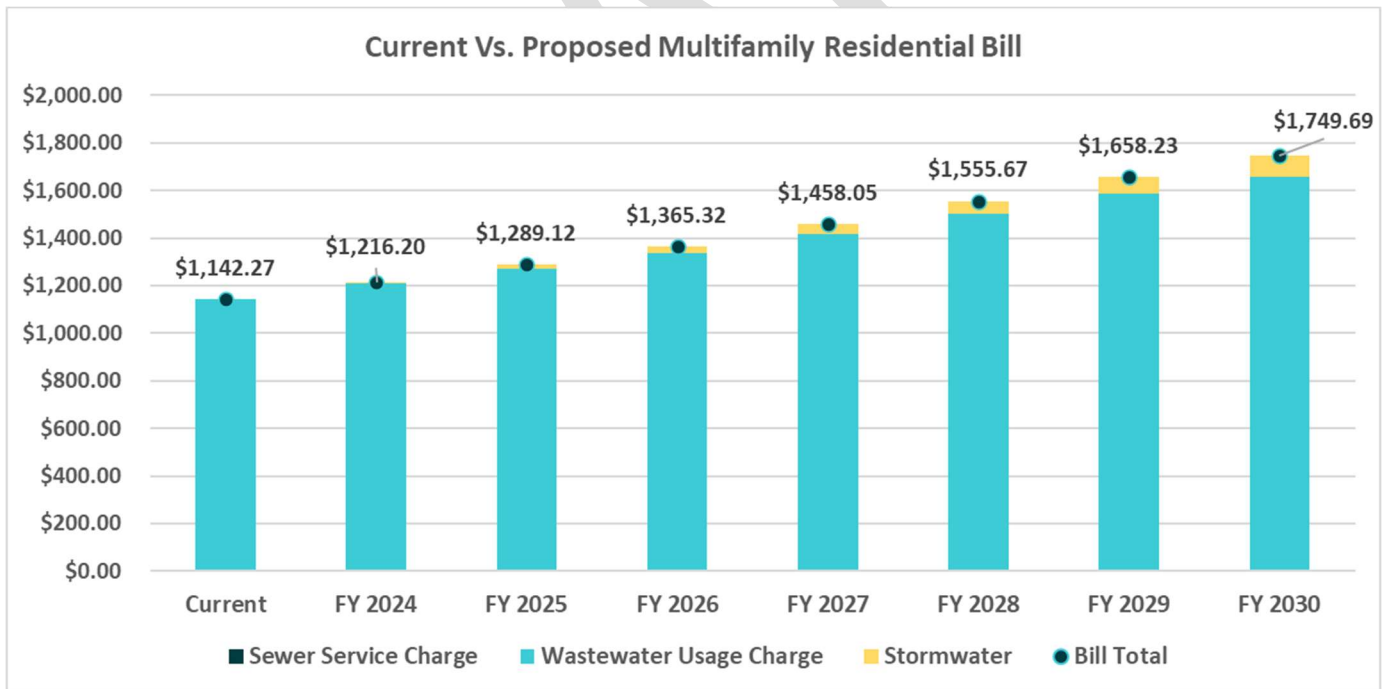
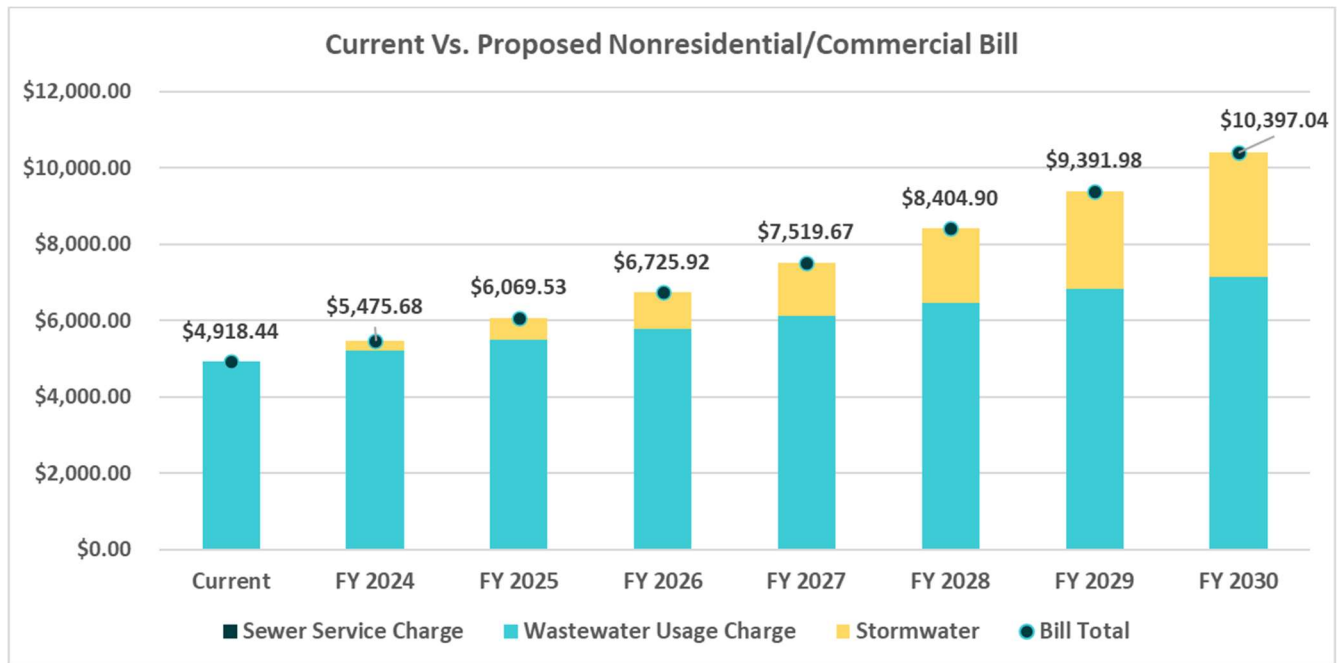


Figure 9-3: Non-Residential Customer Bill Impacts at Phase-In Rates



DRAFT

**APPENDIX A:**

**Ten-Year Water Enterprise  
Financial Plan Pro Forma**



**Ten-Year Status Quo Water Enterprise Financial Plan**

Line	Water Enterprise Financial Plan	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
1	<b>Retail Rate Revenue from Existing Rates</b>										
2	In-City Retail (excl. Treasure Island)	\$315,952,677	\$320,363,230	\$311,134,470	\$315,562,071	\$312,610,863	\$310,583,793	\$307,104,623	\$304,677,067	\$302,247,320	\$301,910,414
3	Suburban Retail	\$14,262,607	\$15,741,059	\$15,221,128	\$15,440,783	\$15,242,199	\$15,090,208	\$14,848,189	\$14,678,137	\$14,508,134	\$14,470,480
4	Less Contract Rate Revenue	(\$508,554)	(\$561,118)	(\$557,017)	(\$544,961)	(\$552,849)	(\$550,544)	(\$545,125)	(\$541,529)	(\$537,855)	(\$536,117)
5	<b>Total Rate Revenue subject to Adjustments</b>	<b>\$329,706,730</b>	<b>\$335,543,171</b>	<b>\$325,798,581</b>	<b>\$330,457,894</b>	<b>\$327,300,214</b>	<b>\$325,123,456</b>	<b>\$321,407,688</b>	<b>\$318,813,675</b>	<b>\$316,217,599</b>	<b>\$315,844,777</b>
6											
7	<b>Proposed Revenue Adjustments</b>										
8	Fiscal Year	Revenue Adjustment	Month Effective								
9											
10	FY 2024	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	FY 2025	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	FY 2026	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	FY 2027	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	FY 2028	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	FY 2029	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	FY 2030	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	FY 2031	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	FY 2032	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	<b>Total Revenue Adjustments</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
20											
21	<b>REVENUE</b>										
22	Retail Rate Revenue incl. Adjustments	\$330,215,284	\$336,104,288	\$326,355,598	\$331,002,855	\$327,853,063	\$325,674,000	\$321,952,812	\$319,355,204	\$316,755,454	\$316,380,894
23	CAP Use of Revenues	(\$1,245,932)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)
24	Wholesale Water Sales	\$289,598,379	\$316,979,387	\$326,505,882	\$341,633,834	\$342,654,481	\$364,404,777	\$366,410,350	\$384,657,715	\$386,956,713	\$392,273,772
25	Interest Income	\$1,109,000	\$1,133,000	\$1,133,273	\$804,576	\$406,013	\$5,565	\$0	\$0	\$0	\$0
26	Rental Income	\$13,136,000	\$13,595,800	\$13,964,246	\$14,321,731	\$14,688,367	\$15,064,389	\$15,450,038	\$15,845,559	\$16,251,205	\$16,667,236
27	Federal Bond Interest Subsidy	\$21,289,804	\$21,317,856	\$21,184,845	\$20,849,738	\$20,536,693	\$20,098,912	\$22,885,952	\$22,223,726	\$21,535,376	\$20,702,559
28	Other Misc Income	\$12,429,431	\$13,067,577	\$13,596,883	\$14,021,344	\$14,486,674	\$14,917,017	\$17,130,431	\$17,503,215	\$17,885,542	\$18,277,657
29	Programmatic Revenues	\$7,156,000	\$7,158,000	\$7,277,000	\$7,202,000	\$7,223,000	\$7,234,000	\$7,277,000	\$7,328,000	\$7,380,000	\$7,431,000
30	Capacity Fees	\$1,520,000	\$1,997,000	\$2,061,000	\$1,520,000	\$1,580,000	\$1,644,000	\$1,644,000	\$1,634,000	\$1,554,000	\$1,520,000
31	<b>TOTAL REVENUE</b>	<b>\$675,207,967</b>	<b>\$704,352,909</b>	<b>\$705,078,728</b>	<b>\$724,356,078</b>	<b>\$722,428,291</b>	<b>\$742,042,660</b>	<b>\$745,750,583</b>	<b>\$761,547,420</b>	<b>\$761,318,290</b>	<b>\$766,253,118</b>
32											
33	<b>O&amp;M Expenses</b>										
34	Personnel	\$112,230,822	\$114,601,996	\$118,517,389	\$122,571,352	\$126,768,977	\$131,115,546	\$135,616,547	\$140,277,675	\$145,104,844	\$150,104,194
35	Other Non-Personnel Services	\$20,712,391	\$20,476,847	\$21,091,153	\$21,723,887	\$22,375,604	\$23,046,872	\$23,738,278	\$24,450,426	\$25,183,939	\$25,939,457
36	Materials, Supplies & Equipment	\$19,176,058	\$19,395,185	\$19,977,040	\$20,576,352	\$21,193,642	\$21,829,451	\$22,484,335	\$23,158,865	\$23,853,631	\$24,569,240
37	Services of SFPUC Bureaus	\$63,140,408	\$64,047,698	\$65,969,129	\$67,948,203	\$69,986,649	\$72,086,248	\$74,248,836	\$76,476,301	\$78,770,590	\$81,133,708
38	Services of Other Departments	\$26,469,977	\$27,510,078	\$28,241,518	\$29,077,688	\$29,938,942	\$30,826,035	\$31,739,740	\$32,680,856	\$33,650,206	\$34,648,636
39	Hetch Hetchy Assessment	\$49,636,000	\$46,032,000	\$49,477,000	\$51,029,000	\$52,585,000	\$53,965,000	\$55,477,000	\$57,221,000	\$58,947,000	\$60,676,000
40	Other Operating Expenses	\$1,795,868	\$3,458,368	\$3,561,643	\$3,668,017	\$3,777,582	\$3,890,434	\$4,006,671	\$4,126,395	\$4,249,712	\$4,376,727
41	Programmatic Expenses	\$33,863,389	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186
42	<b>TOTAL O&amp;M</b>	<b>\$327,024,913</b>	<b>\$328,788,358</b>	<b>\$340,101,058</b>	<b>\$349,860,685</b>	<b>\$359,892,582</b>	<b>\$370,025,772</b>	<b>\$380,577,592</b>	<b>\$391,657,705</b>	<b>\$403,026,107</b>	<b>\$414,714,148</b>
43											
44	<b>NET REVENUE</b>	<b>\$348,183,054</b>	<b>\$375,564,551</b>	<b>\$364,977,669</b>	<b>\$374,495,393</b>	<b>\$362,535,709</b>	<b>\$372,016,888</b>	<b>\$365,172,991</b>	<b>\$369,889,716</b>	<b>\$358,292,183</b>	<b>\$351,538,970</b>
45											
46	<b>DEBT SERVICE</b>										
47	Existing Debt Service	\$328,352,143	\$333,499,425	\$333,635,790	\$345,754,465	\$344,766,842	\$342,987,734	\$349,133,265	\$349,286,883	\$347,553,611	\$348,155,670
48	Proposed Debt Service	\$0	\$0	\$1,751,735	\$27,898,491	\$29,690,107	\$56,432,137	\$58,261,233	\$85,562,710	\$85,562,710	\$85,562,710
49	<b>TOTAL DEBT SERVICE</b>	<b>\$328,352,143</b>	<b>\$333,499,425</b>	<b>\$335,387,524</b>	<b>\$373,652,956</b>	<b>\$374,456,949</b>	<b>\$399,419,870</b>	<b>\$407,394,498</b>	<b>\$434,849,593</b>	<b>\$433,116,321</b>	<b>\$433,718,379</b>





**Ten-Year Proposed Water Enterprise Financial Plan**

Line	Water Enterprise Financial Plan	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032		
1	<b>Retail Rate Revenue from Existing Rates</b>												
2	In-City Retail (excl. Treasure Island)	\$315,952,677	\$320,363,230	\$311,134,470	\$315,562,071	\$312,610,863	\$310,583,793	\$307,104,623	\$304,677,067	\$302,247,320	\$301,910,414		
3	Suburban Retail	\$14,262,607	\$15,741,059	\$15,221,128	\$15,440,783	\$15,242,199	\$15,090,208	\$14,848,189	\$14,678,137	\$14,508,134	\$14,470,480		
4	Less Contract Rate Revenue	(\$508,554)	(\$561,118)	(\$557,017)	(\$544,961)	(\$552,849)	(\$550,544)	(\$545,125)	(\$541,529)	(\$537,855)	(\$536,117)		
5	<b>Total Rate Revenue subject to Adjustments</b>	<b>\$329,706,730</b>	<b>\$335,543,171</b>	<b>\$325,798,581</b>	<b>\$330,457,894</b>	<b>\$327,300,214</b>	<b>\$325,123,456</b>	<b>\$321,407,688</b>	<b>\$318,813,675</b>	<b>\$316,217,599</b>	<b>\$315,844,777</b>		
6													
7	<b>Proposed Revenue Adjustments</b>												
8	Fiscal Year	Revenue Adjustment	Month Effective										
9													
10	FY 2024	5.0%	July	\$0	\$16,777,159	\$16,289,929	\$16,522,895	\$16,365,011	\$16,256,173	\$16,070,384	\$15,940,684	\$15,810,880	\$15,792,239
11	FY 2025	5.0%	July	\$0	\$0	\$17,104,425	\$17,349,039	\$17,183,261	\$17,068,981	\$16,873,904	\$16,737,718	\$16,601,424	\$16,581,851
12	FY 2026	5.0%	July	\$0	\$0	\$0	\$18,216,491	\$18,042,424	\$17,922,431	\$17,717,599	\$17,574,604	\$17,431,495	\$17,410,943
13	FY 2027	4.0%	July	\$0	\$0	\$0	\$0	\$15,155,636	\$15,054,842	\$14,882,783	\$14,762,667	\$14,642,456	\$14,625,192
14	FY 2028	4.0%	July	\$0	\$0	\$0	\$0	\$0	\$15,657,035	\$15,478,094	\$15,353,174	\$15,228,154	\$15,210,200
15	FY 2029	4.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$16,097,218	\$15,967,301	\$15,837,280	\$15,818,608
16	FY 2030	3.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,454,495	\$12,353,079	\$12,338,514
17	FY 2031	3.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,723,671	\$12,708,670
18	FY 2032	3.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,089,930
19	<b>Total Revenue Adjustments</b>	<b>\$0</b>	<b>\$16,777,159</b>	<b>\$33,394,355</b>	<b>\$52,088,425</b>	<b>\$66,746,333</b>	<b>\$81,959,462</b>	<b>\$97,119,982</b>	<b>\$108,790,642</b>	<b>\$120,628,439</b>	<b>\$133,576,148</b>		
20													
21	<b>REVENUE</b>												
22	Retail Rate Revenue incl. Adjustments	\$330,215,284	\$352,881,447	\$359,749,953	\$383,091,280	\$394,599,395	\$407,633,462	\$419,072,794	\$428,145,847	\$437,383,893	\$449,957,042		
23	CAP Use of Revenues	(\$1,245,932)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)	(\$7,000,000)		
24	Wholesale Water Sales	\$289,598,379	\$316,979,387	\$326,505,882	\$341,633,834	\$342,654,481	\$364,404,777	\$366,410,350	\$384,657,715	\$386,956,713	\$392,273,772		
25	Interest Income	\$1,109,000	\$1,133,000	\$1,300,644	\$1,186,491	\$1,086,925	\$1,378,470	\$1,335,955	\$1,224,789	\$1,658,287	\$1,630,960		
26	Rental Income	\$13,136,000	\$13,595,800	\$13,964,246	\$14,321,731	\$14,688,367	\$15,064,389	\$15,450,038	\$15,845,559	\$16,251,205	\$16,667,236		
27	Federal Bond Interest Subsidy	\$21,289,804	\$21,317,856	\$21,184,845	\$20,849,738	\$20,536,693	\$20,098,912	\$22,885,952	\$22,223,726	\$21,535,376	\$20,702,559		
28	Other Misc Income	\$12,429,431	\$13,067,577	\$13,596,883	\$14,021,344	\$14,486,674	\$14,917,017	\$17,130,431	\$17,503,215	\$17,885,542	\$18,277,657		
29	Programmatic Revenues	\$7,156,000	\$7,158,000	\$7,277,000	\$7,202,000	\$7,223,000	\$7,234,000	\$7,277,000	\$7,328,000	\$7,380,000	\$7,431,000		
30	Capacity Fees	\$1,520,000	\$1,997,000	\$2,061,000	\$1,520,000	\$1,580,000	\$1,644,000	\$1,644,000	\$1,634,000	\$1,554,000	\$1,520,000		
31	<b>TOTAL REVENUE</b>	<b>\$675,207,967</b>	<b>\$721,130,067</b>	<b>\$738,640,454</b>	<b>\$776,826,419</b>	<b>\$789,855,535</b>	<b>\$825,375,027</b>	<b>\$844,206,521</b>	<b>\$871,562,852</b>	<b>\$883,605,016</b>	<b>\$901,460,226</b>		
32													
33	<b>O&amp;M Expenses</b>												
34	Personnel	\$112,230,822	\$114,601,996	\$118,517,389	\$122,571,352	\$126,768,977	\$131,115,546	\$135,616,547	\$140,277,675	\$145,104,844	\$150,104,194		
35	Other Non-Personnel Services	\$20,712,391	\$20,476,847	\$21,091,153	\$21,723,887	\$22,375,604	\$23,046,872	\$23,738,278	\$24,450,426	\$25,183,939	\$25,939,457		
36	Materials, Supplies & Equipment	\$19,176,058	\$19,395,185	\$19,977,040	\$20,576,352	\$21,193,642	\$21,829,451	\$22,484,335	\$23,158,865	\$23,853,631	\$24,569,240		
37	Services of SFPUC Bureaus	\$63,140,408	\$64,047,698	\$65,969,129	\$67,948,203	\$69,986,649	\$72,086,248	\$74,248,836	\$76,476,301	\$78,770,590	\$81,133,708		
38	Services of Other Departments	\$26,469,977	\$27,510,078	\$28,241,518	\$29,077,688	\$29,938,942	\$30,826,035	\$31,739,740	\$32,680,856	\$33,650,206	\$34,648,636		
39	Hetch Hetchy Assessment	\$49,636,000	\$46,032,000	\$49,477,000	\$51,029,000	\$52,585,000	\$53,965,000	\$55,477,000	\$57,221,000	\$58,947,000	\$60,676,000		
40	Other Operating Expenses	\$1,795,868	\$3,458,368	\$3,561,643	\$3,668,017	\$3,777,582	\$3,890,434	\$4,006,671	\$4,126,395	\$4,249,712	\$4,376,727		
41	Programmatic Expenses	\$33,863,389	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186	\$33,266,186		
42	<b>TOTAL O&amp;M</b>	<b>\$327,024,913</b>	<b>\$328,788,358</b>	<b>\$340,101,058</b>	<b>\$349,860,685</b>	<b>\$359,892,582</b>	<b>\$370,025,772</b>	<b>\$380,577,592</b>	<b>\$391,657,705</b>	<b>\$403,026,107</b>	<b>\$414,714,148</b>		
43													
44	<b>NET REVENUE</b>	<b>\$348,183,054</b>	<b>\$392,341,709</b>	<b>\$398,539,395</b>	<b>\$426,965,734</b>	<b>\$429,962,954</b>	<b>\$455,349,256</b>	<b>\$463,628,928</b>	<b>\$479,905,147</b>	<b>\$480,578,909</b>	<b>\$486,746,078</b>		
45													
46	<b>DEBT SERVICE</b>												
47	Existing Debt Service	\$328,352,143	\$333,499,425	\$333,635,790	\$345,754,465	\$344,766,842	\$342,987,734	\$349,133,265	\$349,286,883	\$347,553,611	\$348,155,670		
48	Proposed Debt Service	\$0	\$0	\$1,751,735	\$27,898,491	\$29,690,107	\$56,432,137	\$58,261,233	\$85,562,710	\$85,562,710	\$85,562,710		
49	<b>TOTAL DEBT SERVICE</b>	<b>\$328,352,143</b>	<b>\$333,499,425</b>	<b>\$335,387,524</b>	<b>\$373,652,956</b>	<b>\$374,456,949</b>	<b>\$399,419,870</b>	<b>\$407,394,498</b>	<b>\$434,849,593</b>	<b>\$433,116,321</b>	<b>\$433,718,379</b>		



**APPENDIX B:**

**Water Cost of Service:  
O&M Functional Allocations**



Dept ID Title	Project Title	Account Level		FY 2024 O&M	
		5 Title	Account Title	Expenses	Functional Allocation Basis
WTR01 Administration	UW Administration WTR	5010Salary	Perm Salaries-Misc-Regular	\$2,366,683	100% Indirect - General
WTR01 Administration	UW Administration WTR	5010Salary	Ret Payout - SP & Vac - Misc	\$353,349	100% Indirect - General
WTR01 Administration	UW Administration WTR	5010Salary	Temp Misc Regular Salaries	\$270,345	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Dental Coverage	\$13,626	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Dependent Coverage	\$153,048	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Flexible Benefit Package	\$19,424	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Fringe Adjustments-Budget	\$113,225	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Health Service-Admin Cost	\$202,974	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Health Service-City Match	\$59,531	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Health Service-Retiree Subsidy	\$4,837,318	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Long Term Disability Insurance	\$5,252	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Retire City Misc	\$329,969	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Retiree Health-Match-Prop B	\$18,526	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	RetireeHlthCare-CityMatchPropC	\$11,378	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Social Sec-Medicare(HI Only)	\$43,360	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Social Security (OASDI & HI)	\$153,803	100% Indirect - General
WTR01 Administration	UW Administration WTR	5130Fringe	Unemployment Insurance	\$2,992	100% Indirect - General
WTR01 Administration	UW Administration WTR	5200OHallo	Department Overhead	\$64,047,698	100% Bureau
WTR01 Administration	UW Administration WTR	5210NPSvcs	Air Travel - Employees	\$46,925	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Employee Field Expenses-Budget	\$950	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Judgements & Claims-Budget	\$950,000	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Membership Fees	\$600,928	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Non-Air Travel - Employees	\$86,835	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Other Current Expenses - Bdgt	\$19,000	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Other Equip Maint	\$426,884	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$2,538,875	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Rents-Leases-Bldgs&Struct-Bdgt	\$146,443	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Software Licensing Fees	\$133,000	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$24,267	100% Indirect - General
WTR01 Administration	UW Administration WTR	5210NPSvcs	Training - Budget	\$167,452	100% Indirect - General
WTR01 Administration	UW Administration WTR	5400Mat&Su	Data Processing Supplies	\$475	100% Indirect - General
WTR01 Administration	UW Administration WTR	5400Mat&Su	Food	\$7,600	100% Indirect - General
WTR01 Administration	UW Administration WTR	5400Mat&Su	Minor Data Processing Equipmnt	\$9,500	100% Indirect - General
WTR01 Administration	UW Administration WTR	5400Mat&Su	Other Equipment Maint Supplies	\$475	100% Indirect - General
WTR01 Administration	UW Administration WTR	5400Mat&Su	Other Materials & Supplies	\$91,427	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	DT Technology Infrastructure	\$2,474,086	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	DT Telecommunications Services	\$1,343,587	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	GF-Bus & Ecn Dev	\$252,210	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	GF-Chs-Medical Service	\$519,080	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	GF-Chs-Toxic Waste&Haz Mat Svc	\$246,327	100% Treatment
WTR01 Administration	UW Administration WTR	5810OthDep	GF-City Attorney-Legal Service	\$2,680,787	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	GF-Emergency Communications	\$60,375	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	GF-Environment	\$124,000	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	GF-HR-Employee Relations	\$46,704	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	GF-HR-Workers' Comp Claims	\$2,225,000	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	GF-Risk Management Svcs (AAO)	\$1,798,482	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	Is-Purch-Reproduction	\$2,812	100% Indirect - General
WTR01 Administration	UW Administration WTR	5810OthDep	Sr-CWP-Clean Water Department	\$530,450	100% Indirect - General
WTR01 Administration	UW Administration WTR	5910_OTO	OTO To 2S/GSF-General Svcs Fd	\$15,856	100% Indirect - General
WTR01 Administration	UW Administration WTR	5910_OTO	OTO To 5T-Hetch Hetchy W&P Fds	\$46,032,000	100% Surface Water Supply

Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0301 CDD Program and Maint	UW Water Distribution	5010Salary	Overtime - Scheduled Misc	\$311,325	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5010Salary	Perm Salaries-Misc-Regular	\$6,471,778	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5010Salary	Premium Pay - Misc	\$210,700	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5010Salary	Temp Misc Regular Salaries	\$9,800	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Dental Coverage	\$63,030	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Dependent Coverage	\$806,455	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Flexible Benefit Package	\$9,712	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Health Service-City Match	\$159,381	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Long Term Disability Insurance	\$12,767	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Retire City Misc	\$921,612	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Retiree Health-Match-Prop B	\$43,387	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	RetireeHlthCare-CityMatchPropC	\$26,652	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Social Sec-Medicare(HI Only)	\$101,551	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Social Security (OASDI & HI)	\$427,428	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5130Fringe	Unemployment Insurance	\$7,009	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5210NPSvcs	Maint Svcs-Equipment-Budget	\$242,250	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5210NPSvcs	Other Current Expenses - Bdgt	\$2,375	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$44,650	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5400Mat&Su	Data Processing Supplies	\$475	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5400Mat&Su	Fuels & Lubricants	\$324,162	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5400Mat&Su	Minor Data Processing Equipmnt	\$4,750	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5400Mat&Su	Other Bldg Maint Supplies	\$389,420	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5400Mat&Su	Other Equipment Maint Supplies	\$341,187	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$2,375	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5400Mat&Su	Other Materials & Supplies	\$78,821	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0301 CDD Program and Maint	UW Water Distribution	5400Mat&Su	Other Safety Expenses	\$13,300	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General

Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0302 CDD Admin	UW Water Distribution	5010Salary	Overtime - Scheduled Misc	\$15,498	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5010Salary	Perm Salaries-Misc-Regular	\$2,657,956	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5010Salary	Premium Pay - Misc	\$77,507	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5010Salary	Temp Misc Regular Salaries	\$88,200	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Dental Coverage	\$22,891	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Dependent Coverage	\$251,768	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Flexible Benefit Package	\$9,712	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Health Service-City Match	\$113,348	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Long Term Disability Insurance	\$8,064	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Retire City Misc	\$376,621	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Retiree Health-Match-Prop B	\$17,591	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	RetireeHlthCare-CityMatchPropC	\$10,805	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Social Sec-Medicare(HI Only)	\$41,167	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Social Security (OASDI & HI)	\$164,926	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5130Fringe	Unemployment Insurance	\$2,838	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5210NPSvcs	Employee Field Expenses-Budget	\$1,235	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5210NPSvcs	Fees Licenses Permits	\$146,593	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$94,782	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5210NPSvcs	Maint Svcs-Equipment-Budget	\$33,388	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5210NPSvcs	Other Current Expenses - Bdgt	\$24,700	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5210NPSvcs	Rents-Leases-Bldgs&Struct-Bdgt	\$986,319	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5210NPSvcs	Software Licensing Fees	\$950	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$60,432	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5400Mat&Su	Data Processing Supplies	\$3,800	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5400Mat&Su	Minor Data Processing Equipmnt	\$5,700	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5400Mat&Su	Other Equipment Maint Supplies	\$1,900	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General

Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0302 CDD Admin	UW Water Distribution	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$3,325	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5400Mat&Su	Other Materials & Supplies	\$66,772	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5400Mat&Su	Other Safety Expenses	\$475	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5600CapOut	Automotive & Other Vehicles	\$38,662	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5810OthDep	Is-Purch-Centrl Shop-AutoMaint	\$44,820	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5810OthDep	Is-Purch-Centrl Shop-FuelStock	\$6,115	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0302 CDD Admin	UW Water Distribution	5810OthDep	PUC Sewer Service Charges	\$84,495	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5010Salary	Holiday Pay - Misc	\$26,460	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5010Salary	Overtime - Scheduled Misc	\$383,814	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5010Salary	Perm Salaries-Misc-Regular	\$3,041,681	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5010Salary	Premium Pay - Misc	\$257,358	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5010Salary	Temp Misc Regular Salaries	\$68,600	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	Dental Coverage	\$29,204	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	Dependent Coverage	\$355,248	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	Health Service-City Match	\$96,865	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	Long Term Disability Insurance	\$11,854	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	Retire City Misc	\$434,026	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	Retiree Health-Match-Prop B	\$23,406	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	RetireeHlthCare-CityMatchPropC	\$14,373	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	Social Sec-Medicare(HI Only)	\$54,774	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	Social Security (OASDI & HI)	\$232,368	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5130Fringe	Unemployment Insurance	\$3,775	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$471,632	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5210NPSvcs	Maint Svcs-Equipment-Budget	\$38,475	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5210NPSvcs	Other Current Expenses - Bdgt	\$39,425	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$5,047	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General



Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5400Mat&Su	Data Processing Supplies	\$1,425	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5400Mat&Su	Fuels & Lubricants	\$33,250	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5400Mat&Su	Minor Data Processing Equipmnt	\$9,500	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5400Mat&Su	Other Bldg Maint Supplies	\$146,803	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5400Mat&Su	Other Equipment Maint Supplies	\$33,250	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5400Mat&Su	Other Materials & Supplies	\$154,030	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5400Mat&Su	Other Safety Expenses	\$19,570	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5400Mat&Su	Water & Sewage Treatment Supply	\$28,500	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5810OthDep	GF-Fire	\$322,495	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Distribution	5810OthDep	GF-Rec & Park-Gardener	\$1,187,962	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0303 CDD Bldgs & Grounds	UW Water Transmission WTR	5810OthDep	GF-PUC-Light Heat & Power	\$4,692,823	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5010Salary	Overtime - Scheduled Misc	\$6,185	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5010Salary	Perm Salaries-Misc-Regular	\$744,317	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	Dental Coverage	\$4,793	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	Dependent Coverage	\$52,870	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	Health Service-City Match	\$23,825	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	Long Term Disability Insurance	\$2,372	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	Retire City Misc	\$99,218	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	Retiree Health-Match-Prop B	\$4,650	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	RetireeHlthCare-CityMatchPropC	\$2,855	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	Social Sec-Medicare(HI Only)	\$10,884	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	Social Security (OASDI & HI)	\$32,819	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5130Fringe	Unemployment Insurance	\$752	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5210NPSvcs	Other Current Expenses - Bdgt	\$2,850	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$928,845	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5210NPSvcs	Software Licensing Fees	\$44,650	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General

Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0304 CDD Engineering	UW Water Distribution	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$1,900	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5400Mat&Su	Data Processing Supplies	\$2,780	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5400Mat&Su	Minor Data Processing Equipmnt	\$1,900	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0304 CDD Engineering	UW Water Distribution	5400Mat&Su	Other Materials & Supplies	\$59,581	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5010Salary	Holiday Pay - Misc	\$15,307	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5010Salary	Overtime - Scheduled Misc	\$701,262	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5010Salary	Perm Salaries-Misc-Regular	\$8,562,784	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5010Salary	Premium Pay - Misc	\$744,008	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5010Salary	Temp Misc Regular Salaries	\$12,555	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	Dental Coverage	\$76,699	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	Dependent Coverage	\$1,052,805	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	Health Service-City Match	\$171,998	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	Long Term Disability Insurance	\$31,217	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	Retire City Misc	\$1,212,339	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	Retiree Health-Match-Prop B	\$62,194	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	RetireeHlthCare-CityMatchPropC	\$38,181	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	Social Sec-Medicare(HI Only)	\$145,542	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	Social Security (OASDI & HI)	\$608,465	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5130Fringe	Unemployment Insurance	\$10,021	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5210NPSvcs	Fees Licenses Permits	\$53,675	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$59,850	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$151,889	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5400Mat&Su	Data Processing Supplies	\$32,822	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5400Mat&Su	Fuels & Lubricants	\$85,500	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5400Mat&Su	Minor Data Processing Equipmnt	\$142,500	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5400Mat&Su	Other Bldg Maint Supplies	\$858,469	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General

Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0305 CDD Const & Maint	UW Water Distribution	5400Mat&Su	Other Equipment Maint Supplies	\$95,000	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5400Mat&Su	Other Materials & Supplies	\$71,725	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5400Mat&Su	Other Safety Expenses	\$119,771	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5600CapOut	Automotive & Other Vehicles	\$184,220	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5600CapOut	Other Equipment	\$714,209	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5810OthDep	GF-GSA-Facilities Mgmt Svcs	\$76,656	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5810OthDep	Sr-DPW-Street Use & Mapping	\$53,045	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0305 CDD Const & Maint	UW Water Distribution	5810OthDep	Sr-SAS-Urban Forestry	\$1,071,520	7.8% Pumping / 7.4% Transmission / 23.4% Distribution / 1.0% Storage / 2.1% Meters / 9.7% Hydrants/AWSS / 0.1% Fire Sprinklers / 9.4% Customer / 39.0% Indirect - General
WTR0401 WQD Administration	UW Water Treatment	5010Salary	Overtime - Scheduled Misc	\$5,096	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5010Salary	Perm Salaries-Misc-Regular	\$1,278,504	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5010Salary	Premium Pay - Misc	\$5,390	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5010Salary	Temp Misc Regular Salaries	\$24,304	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Dental Coverage	\$10,138	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Dependent Coverage	\$109,226	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Flexible Benefit Package	\$9,712	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Health Service-City Match	\$53,688	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Long Term Disability Insurance	\$3,370	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Retire City Misc	\$181,926	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Retiree Health-Match-Prop B	\$8,139	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	RetireeHlthCare-CityMatchPropC	\$4,998	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Social Sec-Medicare(HI Only)	\$19,042	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Social Security (OASDI & HI)	\$74,400	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5130Fringe	Unemployment Insurance	\$1,315	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Employee Field Expenses-Budget	\$3,800	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$100,700	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Maint Svcs-Equipment-Budget	\$9,975	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Other Current Expenses - Bdgt	\$59,850	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Other Equip Maint	\$80,057	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Other Equipment Rentals	\$2,850	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$217,550	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Software Licensing Fees	\$76,000	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Subscriptions	\$9,500	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$541,500	100% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5210NPSvcs	Utilities Expenses-Budget	\$28,500	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5400Mat&Su	Food	\$1,900	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5400Mat&Su	Minor Data Processing Equipmnt	\$71,250	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5400Mat&Su	Other Bldg Maint Supplies	\$14,250	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5400Mat&Su	Other Equipment Maint Supplies	\$4,750	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5400Mat&Su	Other Materials & Supplies	\$118,265	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5400Mat&Su	Other Safety Expenses	\$24,258	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5600CapOut	Automotive & Other Vehicles	\$35,438	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	5810OthDep	DT Technology Projects	\$20,000	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality

Dept ID Title	Project Title	Account Level		FY 2024 O&M	
		5 Title	Account Title	Expenses	Functional Allocation Basis
WTR0401 WQD Administration	UW Water Treatment	58100thDep	GF-PUC-Light Heat & Power	\$103,000	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	58100thDep	Is-Purch-Reproduction	\$25,750	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0401 WQD Administration	UW Water Treatment	58100thDep	Sr-SAS-Building Repair	\$100,000	1.6% Distribution / 3.2% Treatment / 95.2% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5010Salary	Overtime - Scheduled Misc	\$2,450	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5010Salary	Perm Salaries-Misc-Regular	\$4,038,899	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5010Salary	Premium Pay - Misc	\$72,830	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5010Salary	Temp Misc Regular Salaries	\$52,430	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	Dental Coverage	\$25,378	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	Dependent Coverage	\$290,020	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	Health Service-City Match	\$108,816	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	Long Term Disability Insurance	\$14,086	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	Retire City Misc	\$565,285	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	Retiree Health-Match-Prop B	\$25,813	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	RetireeHlthCare-CityMatchPropC	\$15,852	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	Social Sec-Medicare(HI Only)	\$60,419	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	Social Security (OASDI & HI)	\$218,607	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5130Fringe	Unemployment Insurance	\$4,167	5.6% Distribution / 11.1% Treatment / 83.3% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5210NPSvcs	Other Current Expenses - Bdgt	\$4,750	100% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5210NPSvcs	Other Equip Maint	\$86,660	100% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$753,350	100% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5210NPSvcs	Software Licensing Fees	\$28,500	100% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5400Mat&Su	Food	\$1,900	100% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5400Mat&Su	Other Equipment Maint Supplies	\$31,350	100% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$142,500	100% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5400Mat&Su	Other Materials & Supplies	\$47,500	100% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5400Mat&Su	Other Safety Expenses	\$4,750	100% Water Quality
WTR0402 WQD Engineering	UW Water Treatment	5600CapOut	Medical, Dental & Lab Equipmnt	\$20,534	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5010Salary	Overtime - Scheduled Misc	\$75,685	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5010Salary	Perm Salaries-Misc-Regular	\$2,404,540	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5010Salary	Premium Pay - Misc	\$434,367	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5010Salary	Temp Misc Regular Salaries	\$27,048	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	Dental Coverage	\$20,387	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	Dependent Coverage	\$252,366	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	Health Service-City Match	\$68,924	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	Long Term Disability Insurance	\$8,797	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	Retire City Misc	\$339,414	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	Retiree Health-Match-Prop B	\$18,226	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	RetireeHlthCare-CityMatchPropC	\$11,194	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	Social Sec-Medicare(HI Only)	\$42,652	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	Social Security (OASDI & HI)	\$178,397	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5130Fringe	Unemployment Insurance	\$2,943	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5210NPSvcs	Other Current Expenses - Bdgt	\$4,750	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5210NPSvcs	Other Equip Maint	\$19,000	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$403,750	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$4,750	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5210NPSvcs	Software Licensing Fees	\$29,743	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5210NPSvcs	Subscriptions	\$4,750	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$1,330	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5400Mat&Su	Minor Data Processing Equipmnt	\$14,250	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5400Mat&Su	Other Equipment Maint Supplies	\$14,250	100% Water Quality

Dept ID Title	Project Title	Account Level		FY 2024 O&M	
		5 Title	Account Title	Expenses	Functional Allocation Basis
WTR0403 WQD Envmntl Services	UW Water Treatment	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$118,750	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5400Mat&Su	Other Materials & Supplies	\$47,500	100% Water Quality
WTR0403 WQD Envmntl Services	UW Water Treatment	5400Mat&Su	Other Safety Expenses	\$23,750	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5010Salary	Overtime - Scheduled Misc	\$2,940	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5010Salary	Perm Salaries-Misc-Regular	\$3,603,449	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5010Salary	Premium Pay - Misc	\$68,104	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5010Salary	Temp Misc Regular Salaries	\$75,215	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Dental Coverage	\$24,366	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Dependent Coverage	\$275,881	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Flexible Benefit Package	\$4,856	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Health Service-City Match	\$107,771	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Long Term Disability Insurance	\$11,677	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Retire City Misc	\$508,232	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Retiree Health-Match-Prop B	\$23,234	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	RetireeHlthCare-CityMatchPropC	\$14,262	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Social Sec-Medicare(HI Only)	\$54,369	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Social Security (OASDI & HI)	\$213,624	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5130Fringe	Unemployment Insurance	\$3,749	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5210NPSvcs	Fees Licenses Permits	\$85,500	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5210NPSvcs	Other Current Expenses - Bdgt	\$9,500	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5210NPSvcs	Other Equip Maint	\$427,500	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$546,250	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5210NPSvcs	Software Licensing Fees	\$104,500	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5400Mat&Su	Other Equipment Maint Supplies	\$71,793	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$551,591	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5400Mat&Su	Other Materials & Supplies	\$104,500	100% Water Quality
WTR0404 WQD Labs	UW Water Treatment	5600CapOut	Medical, Dental & Lab Equipmnt	\$617,500	100% Water Quality
WTR0501 WST Admin	UW Water Transmission WTR	5010Salary	Overtime - Scheduled Misc	\$8,330	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5010Salary	Perm Salaries-Misc-Regular	\$1,781,010	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5010Salary	Premium Pay - Misc	\$6,370	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5010Salary	Temp Misc Regular Salaries	\$67,620	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Dental Coverage	\$14,841	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Dependent Coverage	\$160,757	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Flexible Benefit Package	\$9,712	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Health Service-City Match	\$77,256	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Long Term Disability Insurance	\$4,881	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Retire City Misc	\$251,404	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Retiree Health-Match-Prop B	\$11,546	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	RetireeHlthCare-CityMatchPropC	\$7,090	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Social Sec-Medicare(HI Only)	\$27,019	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Social Security (OASDI & HI)	\$102,683	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5130Fringe	Unemployment Insurance	\$1,863	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5210NPSvcs	Employee Field Expenses-Budget	\$1,161	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$22,800	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$2,375,000	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5400Mat&Su	Food	\$3,800	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5400Mat&Su	Other Materials & Supplies	\$10,925	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5400Mat&Su	Other Safety Expenses	\$4,940	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5810OthDep	Is-Purch-Centrl Shop-AutoMaint	\$47,393	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General
WTR0501 WST Admin	UW Water Transmission WTR	5810OthDep	Is-Purch-Centrl Shop-FuelStock	\$825	32.3% Transmission / 12.0% Treatment / 49.9% Indirect - General

Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5010Salary	Overtime - Scheduled Misc	\$191,198	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5010Salary	Perm Salaries-Misc-Regular	\$6,083,085	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5010Salary	Premium Pay - Misc	\$392,000	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5010Salary	Temp Misc Regular Salaries	\$94,840	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Dental Coverage	\$60,671	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Dependent Coverage	\$787,827	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Flexible Benefit Package	\$4,856	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Health Service-City Match	\$166,770	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Long Term Disability Insurance	\$19,445	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Retire City Misc	\$867,019	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Retiree Health-Match-Prop B	\$41,898	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	RetireeHlthCare-CityMatchPropC	\$25,725	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Social Sec-Medicare(HI Only)	\$98,050	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Social Security (OASDI & HI)	\$409,819	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5130Fringe	Unemployment Insurance	\$6,751	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5210NPSvcs	Other Equip Maint	\$57,000	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$166,250	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$14,250	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5210NPSvcs	Software Licensing Fees	\$3,325	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5400Mat&Su	Other Equipment Maint Supplies	\$203,300	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5400Mat&Su	Other Materials & Supplies	\$38,000	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5400Mat&Su	Other Safety Expenses	\$94,888	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5600CapOut	Automotive & Other Vehicles	\$254,957	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5600CapOut	Equipment Purchase-Budget	\$0	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General
WTR0502 WST Distribution Ops	UW Water Transmission WTR	5810thDep	GF-PUC-Hetch Hetchy	\$297,052	8.9% Surface Water Supply / 0.1% Alternative Water Supply / 0.6% Groundwater / 0.2% Pumping / 81.8% Transmission / 0.4% Distribution / 0.5% Storage / 7.1% Treatment / 0.4% Indirect - General

Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0503 WST Maint Engr	UW Water Transmission WTR	5010Salary	Overtime - Scheduled Misc	\$49,431	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5010Salary	Perm Salaries-Misc-Regular	\$2,777,469	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5010Salary	Temp Misc Regular Salaries	\$122,527	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Dental Coverage	\$18,256	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Dependent Coverage	\$207,613	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Flexible Benefit Package	\$0	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Health Service-City Match	\$79,655	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Long Term Disability Insurance	\$9,542	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Retire City Misc	\$389,233	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Retiree Health-Match-Prop B	\$18,275	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	RetireeHlthCare-CityMatchPropC	\$11,222	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Social Sec-Medicare(HI Only)	\$42,768	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Social Security (OASDI & HI)	\$157,071	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5130Fringe	Unemployment Insurance	\$2,951	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5210NPSvcs	Employee Field Expenses-Budget	\$1,900	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5210NPSvcs	Maint Svcs-Equipment-Budget	\$4,750	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5210NPSvcs	Other Current Expenses - Bdgt	\$25,080	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5210NPSvcs	Software Licensing Fees	\$18,905	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5210NPSvcs	Subscriptions	\$5,900	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$23,750	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5400Mat&Su	Data Processing Supplies	\$2,850	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5400Mat&Su	Fuels & Lubricants	\$7,125	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5400Mat&Su	Minor Data Processing Equipmnt	\$6,650	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5400Mat&Su	Other Equipment Maint Supplies	\$10,450	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5400Mat&Su	Other Materials & Supplies	\$1,425	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General

Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0503 WST Maint Engr	UW Water Transmission WTR	5400Mat&Su	Other Safety Expenses	\$6,650	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5600CapOut	Automotive & Other Vehicles	\$61,467	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5600CapOut	Equipment Purchase-Budget	\$0	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5810OthDep	Sr-Building Inspection	\$2,000	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0503 WST Maint Engr	UW Water Transmission WTR	5810OthDep	Sr-DPW-Construction Mgmt	\$2,500	5.9% Surface Water Supply / 0.02% Groundwater / 0.4% Pumping / 80.3% Transmission / 0.2% Distribution / 3.0% Storage / 9.6% Treatment / 0.4% Indirect - General
WTR0504 WST Maintenance	UW Water Transmission WTR	5010Salary	Overtime - Scheduled Misc	\$186,309	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5010Salary	Perm Salaries-Misc-Regular	\$7,918,569	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5010Salary	Premium Pay - Misc	\$392,000	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5010Salary	Temp Misc Regular Salaries	\$222,460	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Dental Coverage	\$74,228	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Dependent Coverage	\$933,429	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Flexible Benefit Package	\$4,856	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Health Service-City Match	\$204,543	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Long Term Disability Insurance	\$27,198	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Retire City Misc	\$1,120,426	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Retiree Health-Match-Prop B	\$54,023	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	RetireeHlthCare-CityMatchPropC	\$33,170	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Social Sec-Medicare(HI Only)	\$126,427	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Social Security (OASDI & HI)	\$530,876	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5130Fringe	Unemployment Insurance	\$8,712	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$336,381	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5210NPSvcs	Other Equip Maint	\$513,000	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$166,250	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$128,250	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5210NPSvcs	Software Licensing Fees	\$3,325	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5400Mat&Su	Data Processing Supplies	\$1,900	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5400Mat&Su	Fuels & Lubricants	\$380,000	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5400Mat&Su	Minor Data Processing Equipmnt	\$6,650	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5400Mat&Su	Other Bldg Maint Supplies	\$1,279,839	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5400Mat&Su	Other Equipment Maint Supplies	\$203,300	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5400Mat&Su	Other Materials & Supplies	\$152,000	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5400Mat&Su	Other Safety Expenses	\$95,000	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5400Mat&Su	Water & Sewage Treatment Supply	\$71,250	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5600CapOut	Automotive & Other Vehicles	\$198,552	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0504 WST Maintenance	UW Water Transmission WTR	5810OthDep	Sr-SAS-Building Repair	\$50,000	6.0% Pumping / 3.5% Transmission / 90.5% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5010Salary	Overtime - Scheduled Misc	\$216,678	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5010Salary	Perm Salaries-Misc-Regular	\$7,844,599	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5010Salary	Premium Pay - Misc	\$245,000	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5010Salary	Temp Misc Regular Salaries	\$49,000	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	Dental Coverage	\$67,389	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	Dependent Coverage	\$859,382	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment



Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	Health Service-City Match	\$166,407	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	Long Term Disability Insurance	\$29,090	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	Retire City Misc	\$1,110,327	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	Retiree Health-Match-Prop B	\$51,746	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	RetireeHlthCare-CityMatchPropC	\$31,771	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	Social Sec-Medicare(HI Only)	\$121,148	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	Social Security (OASDI & HI)	\$510,216	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5130Fringe	Unemployment Insurance	\$8,354	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$142,500	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5210NPSvcs	Maint Svcs-Equipment-Budget	\$855,000	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5210NPSvcs	Other Current Expenses - Bdgt	\$103,550	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$427,500	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5210NPSvcs	Sludge Removal	\$71,250	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$142,500	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5400Mat&Su	Data Processing Supplies	\$950	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5400Mat&Su	Fuels & Lubricants	\$95,000	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5400Mat&Su	Minor Data Processing Equipmnt	\$4,750	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5400Mat&Su	Other Bldg Maint Supplies	\$9,500	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5400Mat&Su	Other Equipment Maint Supplies	\$142,500	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$237,500	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5400Mat&Su	Other Materials & Supplies	\$741,000	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5400Mat&Su	Other Safety Expenses	\$96,888	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5400Mat&Su	Water & Sewage Treatment Supply	\$7,600,000	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	5600CapOut	Automotive & Other Vehicles	\$73,636	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	58100thDep	GF-PUC-Hetch Hetchy	\$10,609	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR0505 WST Systems Ops	UW Water Treatment	58100thDep	GF-PUC-Light Heat & Power	\$6,719,814	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment

Dept ID Title	Project Title	Account Level		FY 2024 O&M Expenses	Functional Allocation Basis
		5 Title	Account Title		
WTR0505 WST Systems Ops	UW Water Treatment	5810OthDep	Sr-CWP-Clean Water Department	\$70,019	0.3% Surface Water Supply / -.04% Alternative Water Supply / 0.1% Groundwater / 0.5% Pumping / 1.2% Transmission / 97.9% Treatment
WTR06 Natural Resources	UW Water Supply & Storage WTR	5010Salary	Holiday Pay - Misc	\$29,400	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5010Salary	Overtime - Scheduled Misc	\$105,458	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5010Salary	Perm Salaries-Misc-Regular	\$8,969,888	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5010Salary	Premium Pay - Misc	\$134,809	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5010Salary	Temp Misc Regular Salaries	\$142,100	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Dental Coverage	\$71,670	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Dependent Coverage	\$808,317	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Flexible Benefit Package	\$58,271	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Health Service-City Match	\$318,211	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Long Term Disability Insurance	\$25,054	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Retire City Misc	\$1,267,094	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Retiree Health-Match-Prop B	\$58,125	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	RetireeHlthCare-CityMatchPropC	\$35,689	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Social Sec-Medicare(HI Only)	\$136,029	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Social Security (OASDI & HI)	\$552,594	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5130Fringe	Unemployment Insurance	\$9,381	98.0% Surface Water Supply / 2.0% Transmission
WTR06 Natural Resources	UW Water Supply & Storage WTR	5210NPSvcs	Employee Field Expenses-Budget	\$4,750	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$131,480	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5210NPSvcs	Maint Svcs-Equipment-Budget	\$47,500	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5210NPSvcs	Other Current Expenses - Bdgt	\$299,250	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$418,760	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$16,150	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$25,650	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5210NPSvcs	Utilities Expenses-Budget	\$3,800	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5400Mat&Su	Food	\$2,850	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5400Mat&Su	Other Bldg Maint Supplies	\$104,500	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5400Mat&Su	Other Equipment Maint Supplies	\$80,750	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$52,250	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5400Mat&Su	Other Materials & Supplies	\$95,233	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5400Mat&Su	Other Safety Expenses	\$85,500	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5600CapOut	Automotive & Other Vehicles	\$273,820	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5600CapOut	Other Equipment	\$41,946	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5810OthDep	GF-Environment	\$34,265	100% Surface Water Supply
WTR06 Natural Resources	UW Water Supply & Storage WTR	5810OthDep	Sr-SAS-Street Repair	\$68,685	100% Surface Water Supply
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5010Salary	Perm Salaries-Misc-Regular	\$1,435,521	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Dental Coverage	\$8,380	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Dependent Coverage	\$95,803	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Flexible Benefit Package	\$14,568	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Health Service-City Match	\$34,093	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Long Term Disability Insurance	\$2,933	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Retire City Misc	\$197,287	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Retiree Health-Match-Prop B	\$8,894	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	RetireeHlthCare-CityMatchPropC	\$5,461	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Social Sec-Medicare(HI Only)	\$20,815	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Social Security (OASDI & HI)	\$73,633	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5130Fringe	Unemployment Insurance	\$1,439	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5210NPSvcs	Employee Field Expenses-Budget	\$950	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5210NPSvcs	Payments To Other Govt	\$190,000	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$665,000	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water

Dept ID Title	Project Title	Account Level		FY 2024 O&M	
		5 Title	Account Title	Expenses	Functional Allocation Basis
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5400Mat&Su	Data Processing Supplies	\$950	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5400Mat&Su	Minor Data Processing Equipmnt	\$4,655	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0701 Wtr Resources Planning	UW Water Supply & Storage WTR	5400Mat&Su	Other Materials & Supplies	\$69,904	6.7% Alternative Water Supply / 46.7% Groundwater / 46.7% Recycled Water
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5010Salary	Perm Salaries-Misc-Regular	\$2,032,596	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5010Salary	Premium Pay - Misc	\$11,956	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5010Salary	Temp Misc Regular Salaries	\$312,071	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Dental Coverage	\$16,608	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Dependent Coverage	\$205,673	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Flexible Benefit Package	\$19,424	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Health Service-City Match	\$53,813	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Long Term Disability Insurance	\$5,052	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Retire City Misc	\$285,106	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Retiree Health-Match-Prop B	\$14,605	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	RetireeHlthCare-CityMatchPropC	\$8,967	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Social Sec-Medicare(HI Only)	\$34,172	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Social Security (OASDI & HI)	\$140,026	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5130Fringe	Unemployment Insurance	\$2,360	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5210NPSvcs	Entertainment & Promotion Bdgt	\$4,750	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5210NPSvcs	Other Current Expenses - Bdgt	\$152,000	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$570,000	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5210NPSvcs	Rents-Leases-Bldgs&Struct-Bdgt	\$4,750	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5210NPSvcs	Software Licensing Fees	\$6,650	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$19,000	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5380CityGP	CBO Services - Budget	\$1,290,762	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5400Mat&Su	Food	\$4,750	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5400Mat&Su	Minor Data Processing Equipmnt	\$19,000	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5400Mat&Su	Other Bldg Maint Supplies	\$171,000	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5400Mat&Su	Other Materials & Supplies	\$28,500	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5810OthDep	GF-Environment	\$110,000	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5810OthDep	Is-Purch-CentrI Shop-AutoMaint	\$6,705	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5810OthDep	Is-Purch-CentrI Shop-FuelStock	\$298	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5810OthDep	Is-Purch-Reproduction	\$31,827	100% Water Conservation
WTR0703 Water Conservation	UW Water Supply & Storage WTR	5810OthDep	Sr-DPW-Architecture	\$50,000	100% Water Conservation
N/A	Oceanside Recycled Water O&M	N/A	N/A	\$2,151,750	100% Recycled Water
WTR01 Administration	525 Golden Gate - Lease Paymen	5610FacMai	Facilities Maintenance-Budget	\$9,139,186	100% Indirect - General
WTR01 Administration	525 Golden Gate - O & M	5610FacMai	Facilities Maintenance-Budget	\$3,096,038	100% Indirect - General
WTR01 Administration	525 Golden Gate - O & M	5810OthDep	GF-Sheriff	\$1,344,962	100% Indirect - General
WTR01 Administration	Drought Response Program	5610FacMai	Facilities Maintenance-Budget	\$500,000	100% Water Conservation
WTR01 Administration	Neighborhood Steward Prog	5060ProgPr	Programmatic Projects-Budget	\$770,000	100% Indirect - General
WTR01 Administration	Water Resources Planning And D	5610FacMai	Facilities Maintenance-Budget	\$500,000	100% Surface Water Supply
WTR01 Administration	Youth Employment & Environment	5610FacMai	Facilities Maintenance-Budget	\$1,290,000	100% Indirect - General
WTR0305 CDD Const & Maint	Awss Maintenance - Cdd	5610FacMai	Facilities Maintenance-Budget	\$2,500,000	100% Hydrants/AWSS
WTR0305 CDD Const & Maint	Treasure Island - Maintenance	5610FacMai	Facilities Maintenance-Budget	\$1,350,000	100% Indirect - General
WTR0701 Wtr Resources Planning	Watershed Structure Projection	5610FacMai	Facilities Maintenance-Budget	\$5,486,000	100% Surface Water Supply
N/A	Landscape Conservation Program	N/A	N/A	\$1,000,000	100% Water Conservation
N/A	Retrofit Grant Program	N/A	N/A	\$500,000	100% Indirect - General
N/A	Natural Resources Planning	N/A	N/A	\$900,000	100% Indirect - General
N/A	Long Term Monitoring & Permit Program	N/A	N/A	\$4,890,000	100% Indirect - General
<b>Total FY 2024 O&amp;M</b>				<b>\$328,788,358</b>	

Function	Preliminary O&M Functional Allocation	Reallocation of Bureau	Reallocation of Indirect - General	Final O&M Functional Allocation (%)	Final O&M Functional Allocation (\$)
Surface Water Supply	\$67,803,182	\$0	\$40,312,047	<b>\$108,115,229</b>	<b>32.88%</b>
Alternative Water Supply	\$127,535	\$0	\$75,826	<b>\$203,361</b>	<b>0.06%</b>
Groundwater	\$1,342,008	\$0	\$797,884	<b>\$2,139,893</b>	<b>0.65%</b>
Pumping	\$4,869,092	\$0	\$2,894,895	<b>\$7,763,987</b>	<b>2.36%</b>
Transmission	\$18,075,017	\$0	\$10,746,412	<b>\$28,821,429</b>	<b>8.77%</b>
Distribution	\$11,629,529	\$0	\$6,914,279	<b>\$18,543,809</b>	<b>5.64%</b>
Storage	\$666,106	\$0	\$396,030	<b>\$1,062,136</b>	<b>0.32%</b>
Treatment	\$44,874,985	\$0	\$26,680,201	<b>\$71,555,186</b>	<b>21.76%</b>
Water Quality	\$21,083,167	\$0	\$12,534,893	<b>\$33,618,059</b>	<b>10.22%</b>
Meters	\$1,022,566	\$4,057,430	\$3,020,286	<b>\$8,100,282</b>	<b>2.46%</b>
Hydrants / AWSS	\$7,134,047	\$0	\$4,241,513	<b>\$11,375,560</b>	<b>3.46%</b>
Fire Sprinklers	\$41,817	\$0	\$24,862	<b>\$66,678</b>	<b>0.02%</b>
Customer	\$4,530,661	\$8,230,091	\$7,586,842	<b>\$20,347,593</b>	<b>6.19%</b>
Bureau	\$64,047,698	(\$64,047,698)	\$0	<b>\$0</b>	<b>0.00%</b>
Indirect - General	\$70,832,466	\$51,760,177	(\$122,592,643)	<b>\$0</b>	<b>0.00%</b>
<b>Total</b>	<b>\$328,788,358</b>	<b>\$0</b>	<b>\$0</b>	<b>\$328,788,358</b>	<b>100.00%</b>

Notes:

1. Bureau costs reallocated as follows: 6.3% to Meters / 12.8% to Customer / 80.8% to Indirect – General
2. Indirect – General costs reallocated proportionally to all other functions

**APPENDIX C:**

**Water Cost of Service:  
Debt Functional Allocations**



Water Enterprise Revenue Bonds	FY 2024-FY 2028	
	Debt Service	Functional Allocation Basis
2010 Series B (BABs)	\$161,536,488	5.7% Surface Water Supply / 0.0003% Alternative Water Supply / 1.5% Groundwater / 1.9% Recycled Water / 3.4% Pumping / 56.5% Transmission / 9.0% Storage / 18.8% Treatment / 3.1% Indirect - General
2010 Series E (BABs)	\$158,778,771	3.5% Surface Water Supply / 0.0001% Alternative Water Supply / 1.3% Groundwater / 0.2% Recycled Water / 2.5% Pumping / 72.7% Transmission / 3.4% Storage / 12.1% Treatment / 4.2% Indirect - General
2010 Series G (BABs)	\$122,135,825	59.5% Surface Water Supply / 0.01% Alternative Water Supply / 0.01% Groundwater / 0.003% Pumping / 21.0% Transmission / 19.5% Treatment
2015 Series A - Ref. 06A	\$159,558,095	6.0% Surface Water Supply / 1.1% Alternative Water Supply / 1.1% Groundwater / 1.2% Recycled Water / 7.0% Pumping / 40.3% Transmission / 2.5% Distribution / 26.4% Storage / 4.8% Treatment / 0.4% Hydrants/AWSS / 9.2% Indirect - General
2015 Series A - Ref. 09A	\$39,852,625	4.2% Surface Water Supply / 0.4% Alternative Water Supply / 1.4% Groundwater / 1.0% Recycled Water / 13.2% Pumping / 43.6% Transmission / 0.02% Distribution / 14.2% Storage / 24.2% Treatment / 0.002% Hydrants/AWSS / -2.3% Indirect - General
2016 Series A - Ref. 09A	\$86,675,875	4.2% Surface Water Supply / 0.4% Alternative Water Supply / 1.4% Groundwater / 1.0% Recycled Water / 13.2% Pumping / 43.6% Transmission / 0.02% Distribution / 14.2% Storage / 24.2% Treatment / 0.002% Hydrants/AWSS / -2.3% Indirect - General
2016 Series A - Ref. 09B	\$124,581,625	2.4% Surface Water Supply / 0.3% Alternative Water Supply / 1.3% Groundwater / 0.7% Recycled Water / 8.8% Pumping / 54.7% Transmission / 0.0003% Distribution / 10.0% Storage / 19.5% Treatment / 2.7% Indirect - General
2016 Series A - Ref. 10F	\$90,494,625	51.5% Surface Water Supply / 20.6% Transmission / 27.9% Treatment / 0.01 Indirect - General
2016 Series B - Ref. 06B	\$22,598,875	100% Indirect - General
2016 Series B - Ref. 06C	\$7,965,100	100% Indirect - General
2016 Series B - Ref. 10A	\$22,286,075	100% Meters
2016 Series C	\$72,851,951	13.4% Surface Water Supply / 6.4% Groundwater / 0.001% Recycled Water / 0.2% Pumping / 59.9% Transmission / 0.001% Storage / 13.7% Treatment / 6.5% Indirect - General
2017 Series A	\$18,093,000	37.3% Surface Water Supply / 5.7% Groundwater / 0.01% Recycled Water / 0.3% Pumping / 6.7% Transmission / 0.01% Storage / 9.0% Treatment / 40.9% Indirect - General
2017 Series B	\$22,065,625	1.2% Surface Water Supply / 0.01% Recycled Water / 40.1% Transmission / 25.5% Distribution / 31.6% Treatment / 0.02% Meters / 1.6% Indirect - General
2017 Series C	\$10,555,625	100% Indirect - General
2017 Series D - Ref. 11A	\$124,586,500	3.6% Surface Water Supply / 0.02% Alternative Water Supply / 2.0% Groundwater / 0.5% Recycled Water / 1.5% Pumping / 69.2% Transmission / 4.3% Storage / 9.2% Treatment / 9.6% Indirect - General
2017 Series D - Ref. 12A	\$30,573,750	34.8% Surface Water Supply / 0.1% Alternative Water Supply / 13.3% Groundwater / 0.01% Recycled Water / 0.2% Pumping / 31.9% Transmission / 2.8% Storage / 12.2% Treatment / 4.7% Indirect - General
2017 Series E - Ref 11 C, 11D, and 12C	\$33,293,875	100% Distribution
2017 Series F - Ref. 2011B	\$5,763,625	100% Indirect - General
2017 Series G - Ref. 2011A	\$19,309,478	3.6% Surface Water Supply / 0.02% Alternative Water Supply / 2.0% Groundwater / 0.5% Recycled Water / 1.5% Pumping / 69.2% Transmission / 4.3% Storage / 9.2% Treatment / 9.6% Indirect - General
2019 Series A - Ref. 11A	\$63,956,053	3.6% Surface Water Supply / 0.02% Alternative Water Supply / 2.0% Groundwater / 0.5% Recycled Water / 1.5% Pumping / 69.2% Transmission / 4.3% Storage / 9.2% Treatment / 9.6% Indirect - General
2019 Series A - Ref. 12A	\$50,165,105	34.8% Surface Water Supply / 0.1% Alternative Water Supply / 13.3% Groundwater / 0.01% Recycled Water / 0.2% Pumping / 31.9% Transmission / 2.8% Storage / 12.2% Treatment / 4.7% Indirect - General
2019 Series B - Ref. 2011B	\$3,134,442	100% Indirect - General
2019 Series C - Ref. 2011C	\$3,415,722	100% Distribution
2020 Series A	\$36,473,750	81.6% Surface Water Supply / 14.3% Groundwater / 0.8% Recycled Water / 0.1% Pumping / 0.3% Transmission / 0.2% Storage / 0.6% Treatment / 2.3% Indirect - General
2020 Series B	\$15,332,500	22.7% Surface Water Supply / 44.1% Transmission / 18.1% Treatment / 15.0% Indirect - General
2020 Series C	\$17,067,000	0.4% Pumping / 81.9% Transmission / 7.6% Distribution / 1.6% Storage / 0.3% Treatment / 5.7% Meters / 2.4% Indirect - General
2020 Series D	\$7,380,000	37.2% Surface Water Supply / 44.2% Transmission / 18.6% Indirect - General
2020 Series E Ref 2012A	\$33,797,541	34.8% Surface Water Supply / 0.1% Alternative Water Supply / 13.3% Groundwater / 0.01% Recycled Water / 0.2% Pumping / 31.9% Transmission / 2.8% Storage / 12.2% Treatment / 4.7% Indirect - General
2020 Series E Ref 2017A	\$21,320,313	37.3% Surface Water Supply / 5.7% Groundwater / 0.01% Recycled Water / 0.3% Pumping / 6.7% Transmission / 0.01% Storage / 9.0% Treatment / 40.9% Indirect - General
2020 Series F Ref 2017B	\$25,123,806	1.2% Surface Water Supply / 0.01% Recycled Water / 40.1% Transmission / 25.5% Distribution / 31.6% Treatment / 0.02% Meters / 1.6% Indirect - General
2020 Series G Ref 2011D	\$11,753,047	100% Indirect - General
2020 Series G Ref 2012B	\$2,787,135	100% Indirect - General
2020 Series G Ref 2012C	\$33,478,911	100% Indirect - General
2020 Series H Ref 2017C	\$12,022,270	100% Indirect - General
<b>Total</b>	<b>\$1,670,765,002</b>	

Function	Preliminary Debt Functional Allocation	Reallocation of Bureau	Reallocation of Indirect - General	Final Debt Functional Allocation (%)	Final Debt Functional Allocation (\$)
Surface Water Supply	\$260,162,603	\$0	\$33,149,427	<b>\$293,312,030</b>	<b>17.56%</b>
Alternative Water Supply	\$2,483,874	\$0	\$316,491	<b>\$2,800,364</b>	<b>0.17%</b>
Groundwater	\$41,308,416	\$0	\$5,263,440	<b>\$46,571,856</b>	<b>2.79%</b>
Recycled Water	\$8,864,922	\$0	\$1,129,552	<b>\$9,994,474</b>	<b>0.60%</b>
Water Conservation	\$0	\$0	\$0	<b>\$0</b>	<b>0.00%</b>
Pumping	\$52,076,950	\$0	\$6,635,546	<b>\$58,712,496</b>	<b>3.51%</b>
Transmission	\$708,445,241	\$0	\$90,268,752	<b>\$798,713,993</b>	<b>47.81%</b>
Distribution	\$53,979,458	\$0	\$6,877,960	<b>\$60,857,418</b>	<b>3.64%</b>
Storage	\$105,079,148	\$0	\$13,388,986	<b>\$118,468,134</b>	<b>7.09%</b>
Treatment	\$225,705,218	\$0	\$28,758,932	<b>\$254,464,150</b>	<b>15.23%</b>
Water Quality	\$0	\$0	\$0	<b>\$0</b>	<b>0.00%</b>
Meters	\$23,263,688	\$0	\$2,964,215	<b>\$26,227,903</b>	<b>1.57%</b>
Hydrants / AWSS	\$569,605	\$0	\$72,578	<b>\$642,183</b>	<b>0.04%</b>
Fire Sprinklers	\$0	\$0	\$0	<b>\$0</b>	<b>0.00%</b>
Customer	\$0	\$0	\$0	<b>\$0</b>	<b>0.00%</b>
Bureau	\$0	\$0	\$0	<b>\$0</b>	<b>0.00%</b>
Indirect - General	\$188,825,879	\$0	(\$188,825,879)	<b>\$0</b>	<b>0.00%</b>
<b>Total</b>	<b>\$1,670,765,002</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,670,765,002</b>	<b>100.00%</b>

Notes:

1. Indirect – General costs reallocated proportionally to all other functions

**APPENDIX D:**

**Water Cost of Service:  
CIP Functional Allocations**





Regional & Local Water Enterprise CIP Projects	FY 2024-FY 2028	
	CIP	Functional Allocation Basis
<b>REGIONAL WATER</b>		
<b>19056-UW Regional Water Treatment Program</b>		
21392 - Regional Water Treatment RNR	\$18,792,072	100% Treatment
15479-UW Regional Water Treatment Pr	\$11,791,500	100% Treatment
15481-UW Sunol Valley Water Treatment	\$263,079,251	100% Treatment
15479 - Reg Groundwater Treatment Pr	\$3,067,454	100% Treatment
<b>19057-UW Water Transmission Program</b>		
15483-UW Water Transmission Program	\$894,521	100% Transmission
15484-UW Corrosion Control	\$21,313,470	100% Transmission
15485-UW Water Transmission Program	\$6,800,000	100% Transmission
15487-UW Pump Station Upgrades	\$8,434,144	100% Pumping
15488-UW Pipeline Improvements	\$154,696,928	100% Transmission
15489-UW Valve Replacement	\$6,206,051	100% Transmission
21394 - WTR Transmission R&R (Valve Replacement R&R)	\$6,642,521	100% Transmission
21394 - WTR Transmission R&R (Pump Station Upgrades R&R)	\$813,750	100% Pumping
21394 - WTR Transmission R&R (Metering Upgrades R&R)	\$570,000	100% Meters
21394 - WTR Transmission R&R (Vault Upgrades R&R)	\$2,400,000	100% Transmission
<b>19058-UW Water Supply and Storage</b>		
15493-UW Dam Structural Upgrades	\$65,367,512	100% Storage
21388 Purified Water & Other Supplies (Daly City Recycled Water Expansion Project)	\$6,150,000	100% Recycled Water
21388 Purified Water & Other Supplies (All Other Projects)	\$56,564,685	100% Alternative Water Supply
<b>19059-UW Watersheds and Land Management</b>		
15499-UW Watershed & Land Management	\$1,215,000	100% Surface Water Supply
15507-UW Row Gaps Project	\$1,354,969	100% Surface Water Supply
15508-UW Skyline Ridge Trail	\$1,682,585	100% Indirect - General
15511-UW Native Plant Nursery	\$900,000	100% Surface Water Supply
15512-Sa-1 Service Road-Ingoing Road	\$10,641,911	100% Indirect - General
<b>19060-UW Communication and Monitoring Program</b>		
15514-UW Microwave Backbone Upgrade	\$4,300,000	100% Indirect - General
15515-UW Security System	\$11,948,767	100% Indirect - General
<b>19061-UW Buildings and Grounds - Regional</b>		
15517-UW Sunol Long Term Improvement	\$9,580,347	100% Indirect - General
15518-UW Sunol Yard Upgrades	\$1,836,000	100% Indirect - General
15519-UW Millbrae Yard Upgrade	\$221,443,945	100% Indirect - General
<b>19069-UW Long Term Monitoring &amp; Perm</b>		
15549-UW Long Term Monitoring & Perm (Long Term Monitoring & Permit Program [Capital])	\$10,264,443	100% Indirect - General
15549-UW Long Term Monitoring & Perm (Alameda Watershed Monitoring)	\$4,370,178	100% Surface Water Supply
15551-UW Peninsula Watershed Monitor	\$3,894,265	100% Surface Water Supply
<b>LOCAL WATER</b>		
<b>80119-Water Supply Projects</b>		
20711-Water Diversification Projects (Water Bottling Plant)	\$2,943,000	100% Alternative Water Supply
20711-Water Diversification Projects (All Other Projects)	\$23,407,442	100% Recycled Water
<b>19063-UW Local Water Conveyance-dist</b>		
15527-UW New Services	\$39,100,000	100% Distribution
15528-UW Renew Services (Local Water - Lead Component Services Program)	\$37,750,000	100% Water Quality
15528-UW Renew Services (Water Quality Distribution System)	\$5,433,600	100% Water Quality
15528-UW Renew Services (All Other Projects)	\$25,991,172	100% Distribution
15531-UW Pipeline Replacement (Potable Emergency Firefighting Water System)	\$48,942,280	100% Hydrants / AWSS
15531-UW Pipeline Replacement (All Other Projects)	\$220,938,745	100% Distribution
20504-New Services Connection Program	\$2,402,400	100% Distribution
20505-Town of Sunol Pipeline	\$3,013,341	100% Distribution

Regional & Local Water Enterprise CIP Projects	FY 2024-FY 2028	
	CIP	Functional Allocation Basis
<b>19065-UW Systems Monitoring and Control</b>		
15534-UW Systems Monitoring and Control	\$15,219,102	100% Customer
<b>19066-UW Local Reservoir Tank Improv</b>		
15538-UW Local Reservoir - Budget	\$36,306,817	100% Storage
<b>19067-UW Pump Station Improvements</b>		
15543-Pump Station Improvements	\$1,328,000	100% Pumping
15546-UW Bay Bridge West Pump Station	\$389,489	100% Pumping
15547-UW Harding Park Pump Station	\$5,338,428	100% Pumping
<b>19071-UW Groundwater Project</b>		
15555-UW Lake Merced Water Level Res	\$9,996,228	100% Alternative Water Supply
<b>19072-UW Recycled Water Project</b>		
15558-UW Recycled Water Project	\$2,368,382	100% Recycled Water
<b>19112-UW Automated Meter Reading System</b>		
15612-UW Automated Meter Reading Sys	\$18,782,778	100% Meters
<b>19114-UW Buildings &amp; Grounds Improvements - Local</b>		
15617-UW Buildings & Grounds Improvements - Local	\$2,838,628	100% Indirect - General
21396 - New CDD Headquarter	\$343,562,838	100% Indirect - General
<b>Total</b>	<b>\$1,763,068,939</b>	

Function	Preliminary CIP Functional Allocation	Reallocation of Bureau	Reallocation of Indirect - General	Final CIP Functional Allocation (%)	Final CIP Functional Allocation (\$)
Surface Water Supply	\$11,734,412	\$0	\$6,334,696	<b>\$18,069,108</b>	<b>1.02%</b>
Alternative Water Supply	\$69,503,913	\$0	\$37,520,940	<b>\$107,024,853</b>	<b>6.07%</b>
Groundwater	\$0	\$0	\$0	<b>\$0</b>	<b>0.00%</b>
Recycled Water	\$31,925,824	\$0	\$17,234,813	<b>\$49,160,637</b>	<b>2.79%</b>
Water Conservation	\$0	\$0	\$0	<b>\$0</b>	<b>0.00%</b>
Pumping	\$16,303,811	\$0	\$8,801,437	<b>\$25,105,248</b>	<b>1.42%</b>
Transmission	\$198,953,491	\$0	\$107,402,904	<b>\$306,356,395</b>	<b>17.38%</b>
Distribution	\$291,445,658	\$0	\$157,333,806	<b>\$448,779,464</b>	<b>25.45%</b>
Storage	\$101,674,329	\$0	\$54,887,794	<b>\$156,562,123</b>	<b>8.88%</b>
Treatment	\$296,730,277	\$0	\$160,186,651	<b>\$456,916,928</b>	<b>25.92%</b>
Water Quality	\$43,183,600	\$0	\$23,312,202	<b>\$66,495,802</b>	<b>3.77%</b>
Meters	\$19,352,778	\$0	\$10,447,389	<b>\$29,800,167</b>	<b>1.69%</b>
Hydrants / AWSS	\$48,942,280	\$0	\$26,420,964	<b>\$75,363,244</b>	<b>4.27%</b>
Fire Sprinklers	\$0	\$0	\$0	<b>\$0</b>	<b>0.00%</b>
Customer	\$15,219,102	\$0	\$8,215,869	<b>\$23,434,971</b>	<b>1.33%</b>
Bureau	\$0	\$0	\$0	<b>\$0</b>	<b>0.00%</b>
Indirect - General	\$618,099,464	\$0	(\$618,099,464)	<b>\$0</b>	<b>0.00%</b>
<b>Total</b>	<b>\$1,763,068,939</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,763,068,939</b>	<b>100.00%</b>

Notes:

1. Indirect – General costs reallocated proportionally to all other functions

**APPENDIX E:**

**Water Cost of Service:  
Wholesale Revenue  
Functional Allocations**



FY 2024-FY 2028 Wholesale Revenue		
Wholesale Revenue Requirement	Requirement	Functional Allocation Basis
Water Operations & Maintenance	\$418,818,306	25.1% Surface Water Supply / 26.8% Transmission / 47.7% Treatment / 0.3% Customer
Hetch Hetchy Operations & Maintenance	\$112,028,080	100% Surface Water Supply
Administrative and General Expenses	\$207,871,819	11.2% Surface Water Supply / 58.1% Bureau / 30.7% Indirect - General
Property Taxes	\$8,534,861	100% Surface Water Supply
Debt Service - Existing	\$876,828,982	Groundwater / 0.6% Recycled Water / 3.2% Pumping / 49.8% Transmission / 0.5% Distribution / 6.2% Storage / 15.9% Treatment / 0.0002% Meters / 0.03% Hydrants/AWSS
Debt Service - Proposed	\$37,494,863	11.1% Surface Water Supply / 6.2% Alternative Water Supply / 0.7% Recycled Water / 1.0% Pumping / 40.3% Transmission / 7.2% Storage / 32.5% Treatment / 0.9% Water Quality / 0.1% Meters
Federal Bond Interest Subsidy	(\$64,881,279)	Groundwater / 0.6% Recycled Water / 3.2% Pumping / 49.8% Transmission / 0.5% Distribution / 6.2% Storage / 15.9% Treatment / 0.0002% Meters / 0.03% Hydrants/AWSS
Water Revenue Funded Capital	\$84,360,000	11.1% Surface Water Supply / 6.2% Alternative Water Supply / 0.7% Recycled Water / 1.0% Pumping / 40.3% Transmission / 7.2% Storage / 32.5% Treatment / 0.9% Water Quality / 0.1% Meters
Interest on Balancing Account	\$23,468	100% Indirect - General
Interest on Coverage Reserve	(\$1,381,811)	100% Indirect - General
Wholesale Share of Coverage	\$10,487,708	100% Indirect - General
Balancing Account Due (To)/From Wholesale Customers	\$1,851,504	100% Indirect - General
<b>Total</b>	<b>\$1,692,036,503</b>	

Function	Preliminary Wholesale Revenue Requirement Functional Allocation	Reallocation of Bureau	Reallocation of Indirect - General	Final Wholesale Revenue Requirement Functional Allocation (%)	Final Wholesale Revenue Requirement Functional Allocation (\$)
Surface Water Supply	\$430,083,124	\$0	\$48,805,006	\$478,888,131	28.30%
Alternative Water Supply	\$8,509,062	\$0	\$965,592	\$9,474,654	0.56%
Groundwater	\$25,441,650	\$0	\$2,887,070	\$28,328,720	1.67%
Recycled Water	\$5,555,139	\$0	\$630,387	\$6,185,526	0.37%
Water Conservation	\$0	\$0	\$0	\$0	0.00%
Pumping	\$26,817,188	\$0	\$3,043,163	\$29,860,351	1.76%
Transmission	\$566,025,421	\$0	\$64,231,477	\$630,256,898	37.25%
Distribution	\$3,837,267	\$0	\$435,446	\$4,272,712	0.25%
Storage	\$58,881,005	\$0	\$6,681,703	\$65,562,709	3.87%
Treatment	\$368,582,003	\$0	\$41,825,977	\$410,407,981	24.26%
Water Quality	\$1,104,081	\$0	\$125,289	\$1,229,370	0.07%
Meters	\$77,753	\$7,652,518	\$877,216	\$8,607,487	0.51%
Hydrants / AWSS	\$205,337	\$0	\$23,301	\$228,638	0.01%
Fire Sprinklers	\$0	\$0	\$0	\$0	0.00%
Customer	\$1,301,784	\$15,522,369	\$1,909,173	\$18,733,326	1.11%
Bureau	\$120,797,209	(\$120,797,209)	\$0	\$0	0.00%
Indirect - General	\$74,818,479	\$97,622,322	(\$172,440,800)	\$0	0.00%
<b>Total</b>	<b>\$1,692,036,503</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,692,036,503</b>	<b>100.00%</b>

Notes:

1. Bureau costs reallocated as follows: 6.3% to Meters / 12.8% to Customer / 80.8% to Indirect – General
2. Indirect – General costs reallocated proportionally to all other functions

**APPENDIX F:**

**Water Cost of Service:  
Federal Bond Interest  
Subsidy Functional  
Allocations**



FY 2024-FY 2028		
Debt Issuances Eligible for Interest Subsidy	Debt Service	Functional Allocation Basis
2010 Series B (BABs)	\$161,536,488	5.7% Surface Water Supply / 0.0003% Alternative Water Supply / 1.5% Groundwater / 1.9% Recycled Water / 3.4% Pumping / 56.5% Transmission / 9.0% Storage / 18.8% Treatment / 3.1% Indirect - General
2010 Series E (BABs)	\$158,778,771	3.5% Surface Water Supply / 0.0001% Alternative Water Supply / 1.3% Groundwater / 0.2% Recycled Water / 2.5% Pumping / 72.7% Transmission / 3.4% Storage / 12.1% Treatment / 4.2% Indirect - General
2010 Series G (BABs)	\$122,135,825	59.5% Surface Water Supply / 0.01% Alternative Water Supply / 0.01% Groundwater / 0.003% Pumping / 21.0% Transmission / 19.5% Treatment
Mountain Tunnel SRF (Retail Portion Only)	\$6,545,211	100% Surface Water Supply
<b>Total</b>	<b>\$448,996,295</b>	

Function	Preliminary Federal Bond Interest Functional Allocation	Reallocation of Bureau	Reallocation of Indirect - General	Final Federal Bond Interest Functional Allocation (%)	Final Federal Bond Interest Functional Allocation (\$)
Surface Water Supply	\$93,948,069	\$0	\$0	\$93,948,069	20.92%
Alternative Water Supply	\$13,025	\$0	\$0	\$13,025	0.00%
Groundwater	\$4,566,960	\$0	\$0	\$4,566,960	1.02%
Recycled Water	\$3,485,014	\$0	\$0	\$3,485,014	0.78%
Water Conservation	\$0	\$0	\$0	\$0	0.00%
Pumping	\$9,523,628	\$0	\$0	\$9,523,628	2.12%
Transmission	\$232,444,125	\$0	\$0	\$232,444,125	51.77%
Distribution	\$0	\$0	\$0	\$0	0.00%
Storage	\$19,973,209	\$0	\$0	\$19,973,209	4.45%
Treatment	\$73,361,347	\$0	\$0	\$73,361,347	16.34%
Water Quality	\$0	\$0	\$0	\$0	0.00%
Meters	\$0	\$0	\$0	\$0	0.00%
Hydrants / AWSS	\$0	\$0	\$0	\$0	0.00%
Fire Sprinklers	\$0	\$0	\$0	\$0	0.00%
Customer	\$0	\$0	\$0	\$0	0.00%
Bureau	\$0	\$0	\$0	\$0	0.00%
Indirect - General	\$11,680,918	\$0	\$0	\$11,680,918	2.60%
<b>Total</b>	<b>\$448,996,295</b>	<b>\$0</b>	<b>\$0</b>	<b>\$448,996,295</b>	<b>100.00%</b>

**APPENDIX G:**

**Sewer Cost of Service:  
SIC Code to SIC Group**



Line	SIC Group	SIC Code	Description	SIC Group	SIC Code	Description
1	2	7012	Hotel without Eating	4	5541	Gasoline Stations
2	2	7014	Residential Hotel No Eating	4	5810	Cafe/Sandwich Shops
3	3	8050	Nursing Facility	4	5813	Drinking Places
4	4	8600	Memberships/Religious Org	4	6800	Office Buildings
5	4	9900	Vacant/Under Construction	4	7000	Services
6	4	0	SF IC Not Assigned Yet	4	7212	Laundry Agents
7	4	100	Agricultural - Crops	4	7218	Industrial Laundries
8	4	200	Agricultural - Livestock	4	7230	Beauty Shops
9	4	742	Veterinary Services	4	7374	Prepress/Desktop Publishing
10	4	910	Commercial Fishing	4	7384	Photo Laboratory
11	4	1500	Building Construction	4	7538	Auto Repair Shops
12	4	2000	Manufacturing	4	7542	Car Washes
13	4	2011	Meat Packing	4	7830	Movie Theaters
14	4	2015	Poultry Processing	4	7991	Physical Fitness
15	4	2020	Dairy Product Process	4	8010	Medical Offices
16	4	2030	Fruit and Vegetable	4	8021	Offices of Dentists
17	4	2052	Cookies and Crackers	4	8060	Hospitals & Clinics
18	4	2053	Bread Bakery	4	8210	Schools
19	4	2077	Oil/Fats Rendering	4	8220	College/Vocational
20	4	2080	Beverage & Bottling	4	8400	Museum/Art Gallery
21	4	2091	Can/Cure Fish & Seafood	4	8810	Single Family Residence
22	4	2092	Prepared Fish & Seafood	4	8811	Multiple Family Residence
23	4	2200	Textile, Apparel, Fabric	4	8812	Mix Use 50%+ Residential
24	4	2400	Lumber and Wood Product	4	8813	General Use in Common Area
25	4	2500	Furniture & Fixtures	4	9000	Government/Civic Service
26	4	2600	Pulp & Paper Product	4	9003	Collection System Sampling
27	4	2700	Printing & Publishing	4	9004	Wet Weather Sampling
28	4	2840	Soap and Sanitation	4	9993	Mix Use 50%+ Non Residential
29	4	2850	Paint Manufacturing	4	9994	Live/Work/Lofts
30	4	2870	Agricultural Chemical	4	9997	No Sewer/ Septic
31	4	2893	Printing Inks	4	9998	Out of SF Border
32	4	2900	Petroleum Refining	4	2800	Chemicals & Products
33	4	3000	Rubber and Plastics	4	7213	Linen Supply
34	4	3100	Leather and Products	5	7041	Lodging Houses with Eating
35	4	3200	Gravel/Stone/Glass	5	7011	Hotel with Eating
36	4	3470	Metal Coatings	5	7013	Residential Hotel with Eating
37	4	3500	Machinery/Computers	6	5146	Fish and Seafood
38	4	3600	Electronic Equipment	7	7215	Coin-Op Laundries
39	4	4000	Transport &Utility	8	7211	Commercial/Power Laundry
40	4	5000	Wholesale Trade	9	2013	Sausage Manufacturing
41	4	5143	Dairy Product Distribution	10	5812	Restaurant/Kitchen
42	4	5144	Poultry Products	10	5814	FSE with HGI
43	4	5147	Meat Products	11	2051	Wholesale Bakery
44	4	5200	Retail Trade	12	5815	FSE with GRD
45	4	5460	Retail Bakeries	12	5816	FSE with GGI



**APPENDIX H:**

# **Ten-Year Wastewater Enterprise Financial Plan**



### Ten-Year Status Quo Wastewater Enterprise Financial Plan

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
1	<b>RETAIL RATE REVENUE SUBJECT TO ADJUSTMENTS</b>										
2	Drought Revenue	\$16,282,325	\$17,302,729	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Retail Rate Revenue from Existing Rates - Volumetric	\$334,527,202	\$338,151,551	\$342,907,443	\$348,644,265	\$345,029,167	\$342,629,698	\$338,320,896	\$335,366,464	\$332,403,623	\$332,123,051
4	Retail Rate Revenue from Existing Rates - Fixed	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399
5	Municipal - Volumetric	\$7,526,181	\$7,903,026	\$8,070,545	\$8,262,935	\$8,095,884	\$7,961,591	\$7,784,369	\$7,638,508	\$7,494,337	\$7,425,435
6	Municipal - Fixed	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957
7	<b>Total Rate Revenue Subject to Adjustments</b>	<b>\$369,228,064</b>	<b>\$374,249,662</b>	<b>\$361,870,344</b>	<b>\$367,799,557</b>	<b>\$364,017,407</b>	<b>\$361,483,646</b>	<b>\$356,997,621</b>	<b>\$353,897,328</b>	<b>\$350,790,316</b>	<b>\$350,440,842</b>
8											
9	<b>PROPOSED REVENUE ADJUSTMENTS</b>										
10	Fiscal	Revenue	Month								
11	Year	Adjustment	Effective								
12	FY 2024	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	FY 2025	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	FY 2026	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	FY 2027	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	FY 2028	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	FY 2029	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	FY 2030	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	FY 2031	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20	FY 2032	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	Total Revenue Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
22											
23	Adjustment for Drought Revenue		(\$17,302,729)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24	Stormwater Rate Revenue	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568
25	<b>Total Rate Revenue without Drought Rates</b>	<b>\$369,346,633</b>	<b>\$357,065,501</b>	<b>\$361,988,912</b>	<b>\$367,918,125</b>	<b>\$364,135,975</b>	<b>\$361,602,214</b>	<b>\$357,116,190</b>	<b>\$354,015,896</b>	<b>\$350,908,885</b>	<b>\$350,559,410</b>
26											
27	<b>OTHER REVENUE</b>										
28	Drought Rates (with Revenue Increase)	\$0	\$17,302,729	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	Other Retail Charges	\$78,709	\$86,638	\$95,511	\$105,853	\$115,223	\$125,852	\$136,691	\$147,679	\$159,534	\$167,347
30	Operating Revenues	\$17,587,693	\$18,815,775	\$20,419,710	\$21,488,412	\$22,831,774	\$24,331,938	\$25,372,115	\$26,792,840	\$27,800,540	\$28,354,859
31	Programmatic Revenues	\$4,212,828	\$4,366,760	\$4,529,247	\$4,715,961	\$4,889,862	\$5,087,911	\$5,281,078	\$5,476,333	\$5,687,389	\$5,817,186
32	Non-Debt Capital Revenues	\$5,695,000	\$6,329,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000
33	<b>TOTAL REVENUES</b>	<b>\$396,920,863</b>	<b>\$403,966,403</b>	<b>\$392,728,380</b>	<b>\$399,923,351</b>	<b>\$397,667,835</b>	<b>\$396,842,915</b>	<b>\$393,601,074</b>	<b>\$392,127,747</b>	<b>\$390,251,348</b>	<b>\$390,593,802</b>
34											
35	<b>O&amp;M EXPENSES</b>										
36	Personnel	\$82,802,526	\$84,155,575	\$87,016,323	\$89,977,680	\$93,043,316	\$96,217,039	\$99,502,800	\$102,904,701	\$106,426,999	\$110,074,112
37	Other Non-Personnel Services	\$26,603,401	\$27,295,904	\$28,114,906	\$28,958,483	\$29,827,373	\$30,722,336	\$31,644,154	\$32,593,634	\$33,571,604	\$34,578,920
38	Materials, Supplies & Equipment	\$12,913,549	\$13,727,571	\$14,139,398	\$14,563,580	\$15,000,488	\$15,450,502	\$15,914,018	\$16,391,438	\$16,883,181	\$17,389,677
39	Services of SFPUC Bureaus	\$35,694,439	\$36,237,828	\$37,324,963	\$38,444,712	\$39,598,053	\$40,785,995	\$42,009,574	\$43,269,862	\$44,567,957	\$45,904,996
40	Services of Other Departments	\$35,700,349	\$41,213,880	\$42,268,433	\$43,354,622	\$44,473,397	\$45,625,735	\$46,812,643	\$48,035,158	\$49,294,349	\$50,591,316
41	Other Operating Expenses	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857
42	Programmatic Expenses	\$7,736,917	\$7,766,551	\$7,807,711	\$7,850,106	\$7,893,772	\$7,938,749	\$7,985,075	\$8,032,791	\$8,081,938	\$8,132,560
43	<b>TOTAL O&amp;M EXPENSES</b>	<b>\$201,592,038</b>	<b>\$210,538,166</b>	<b>\$216,812,590</b>	<b>\$223,290,039</b>	<b>\$229,977,256</b>	<b>\$236,881,212</b>	<b>\$244,009,120</b>	<b>\$251,368,439</b>	<b>\$258,966,885</b>	<b>\$266,812,437</b>
44											
45	<b>NET REVENUE</b>	<b>\$195,328,824</b>	<b>\$193,428,237</b>	<b>\$175,915,790</b>	<b>\$176,633,312</b>	<b>\$167,690,579</b>	<b>\$159,961,703</b>	<b>\$149,591,953</b>	<b>\$140,759,308</b>	<b>\$131,284,463</b>	<b>\$123,781,365</b>
46											
47	<b>DEBT SERVICE</b>										
48	Existing Debt Service	\$104,017,873	\$106,234,104	\$124,721,371	\$130,810,760	\$139,479,116	\$138,695,706	\$138,538,646	\$138,386,976	\$138,223,966	\$142,231,402
49	Proposed Debt Service	\$0	\$0	\$0	\$22,403,639	\$71,487,376	\$97,647,836	\$126,528,250	\$188,634,938	\$220,870,250	\$220,870,250
50	<b>TOTAL DEBT SERVICE</b>	<b>\$104,017,873</b>	<b>\$106,234,104</b>	<b>\$124,721,371</b>	<b>\$153,214,399</b>	<b>\$210,966,492</b>	<b>\$236,343,542</b>	<b>\$265,066,896</b>	<b>\$327,021,914</b>	<b>\$359,094,216</b>	<b>\$363,101,652</b>
51											
52	<b>FUNDING FOR PAY-AS-YOU-GO CIP</b>										
53	Rate Funded	\$83,005,000	\$92,038,000	\$122,657,438	\$125,110,586	\$127,612,798	\$130,165,054	\$132,768,355	\$135,423,722	\$138,132,197	\$140,894,841
54	Capacity Fee Funded	\$5,695,000	\$6,329,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000
55	<b>TOTAL FUNDING FOR PAY-AS-YOU-GO CIP</b>	<b>\$88,700,000</b>	<b>\$98,367,000</b>	<b>\$128,352,438</b>	<b>\$130,805,586</b>	<b>\$133,307,798</b>	<b>\$135,860,054</b>	<b>\$138,463,355</b>	<b>\$141,118,722</b>	<b>\$143,827,197</b>	<b>\$146,589,841</b>
56											
57	<b>NET CASH FLOW</b>	<b>\$2,610,951</b>	<b>(\$11,172,866)</b>	<b>(\$77,158,019)</b>	<b>(\$107,386,672)</b>	<b>(\$176,583,711)</b>	<b>(\$212,241,893)</b>	<b>(\$253,938,297)</b>	<b>(\$327,381,328)</b>	<b>(\$371,636,950)</b>	<b>(\$385,910,128)</b>

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
58	<b>FUNDING BALANCE (EXCLUDING PROPOSED DEBT PROCEEDS)</b>										
59	Beginning Balance	\$157,769,951	\$160,380,902	\$149,208,036	\$72,050,018	(\$35,336,655)	(\$211,920,366)	(\$424,162,259)	(\$678,100,556)	(\$1,005,481,884)	(\$1,377,118,834)
60	Net Cash Flow	\$2,610,951	(\$11,172,866)	(\$77,158,019)	(\$107,386,672)	(\$176,583,711)	(\$212,241,893)	(\$253,938,297)	(\$327,381,328)	(\$371,636,950)	(\$385,910,128)
61	<b>ENDING BALANCE</b>	<b>\$160,380,902</b>	<b>\$149,208,036</b>	<b>\$72,050,018</b>	<b>(\$35,336,655)</b>	<b>(\$211,920,366)</b>	<b>(\$424,162,259)</b>	<b>(\$678,100,556)</b>	<b>(\$1,005,481,884)</b>	<b>(\$1,377,118,834)</b>	<b>(\$1,763,028,963)</b>
62	<i>Ending Balance (% of Annual O&amp;M)</i>	79.6%	70.9%	33.2%	-15.8%	-92.1%	-179.1%	-277.9%	-400.0%	-531.8%	-660.8%
63	<i>Minimum Reserve Target (% of Annual O&amp;M)</i>	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	125.0%	225.0%	325.0%	425.0%
64											
65	<b>CURRENT DEBT SERVICE COVERAGE TEST</b>										
66	Net Revenue Subject to Debt Coverage Test	\$201,023,824	\$199,757,237	\$181,610,790	\$182,328,312	\$173,385,579	\$165,656,703	\$155,286,953	\$146,454,308	\$136,979,463	\$129,476,365
67	<i>Projected Debt Coverage</i>	1.93	1.88	1.46	1.19	0.82	0.70	0.59	0.45	0.38	0.36
68	<i>Required Debt Coverage</i>	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	2.10

DRAFT

### Ten-Year Proposed Sewer Financial Plan

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
1	<b>RETAIL RATE REVENUE SUBJECT TO ADJUSTMENTS</b>										
2	Drought Revenue	\$16,282,325	\$17,302,729	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Retail Rate Revenue from Existing Rates - Volumetric	\$334,527,202	\$338,151,551	\$342,907,443	\$348,644,265	\$345,029,167	\$342,629,698	\$338,320,896	\$335,366,464	\$332,403,623	\$332,123,051
4	Retail Rate Revenue from Existing Rates - Fixed	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399	\$10,820,399
5	Municipal - Volumetric	\$7,526,181	\$7,903,026	\$8,070,545	\$8,262,935	\$8,095,884	\$7,961,591	\$7,784,369	\$7,638,508	\$7,494,337	\$7,425,435
6	Municipal - Fixed	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957
7	<b>Total Rate Revenue Subject to Adjustments</b>	<b>\$369,228,064</b>	<b>\$374,249,662</b>	<b>\$361,870,344</b>	<b>\$367,799,557</b>	<b>\$364,017,407</b>	<b>\$361,483,646</b>	<b>\$356,997,621</b>	<b>\$353,897,328</b>	<b>\$350,790,316</b>	<b>\$350,440,842</b>
8											
9	<b>PROPOSED REVENUE ADJUSTMENTS</b>										
10	Fiscal Year	Revenue Adjustment	Month Effective								
11											
12	FY 2024	9.0%	July	\$32,125,224	\$32,568,331	\$33,101,960	\$32,761,567	\$32,533,528	\$32,129,786	\$31,850,759	\$31,571,128
13	FY 2025	9.0%	July		\$35,499,481	\$36,081,137	\$35,710,108	\$35,461,546	\$35,021,467	\$34,717,328	\$34,412,530
14	FY 2026	9.0%	July			\$39,328,439	\$38,924,017	\$38,653,085	\$38,173,399	\$37,841,887	\$37,509,658
15	FY 2027	10.0%	July				\$47,141,310	\$46,813,180	\$46,232,227	\$45,830,730	\$45,428,363
16	FY 2028	10.0%	July					\$51,494,498	\$50,855,450	\$50,413,803	\$49,971,200
17	FY 2029	10.0%	July						\$55,940,995	\$55,455,184	\$54,968,320
18	FY 2030	9.0%	July							\$54,900,632	\$54,364,422
19	FY 2031	9.0%	July								\$59,316,314
20	FY 2032	5.0%	July								\$35,883,539
21	<b>Total Revenue Adjustments</b>	<b>\$0</b>	<b>\$32,125,224</b>	<b>\$68,067,812</b>	<b>\$108,511,536</b>	<b>\$154,537,001</b>	<b>\$204,955,837</b>	<b>\$202,412,329</b>	<b>\$200,654,508</b>	<b>\$198,892,879</b>	<b>\$198,694,732</b>
22											
23	Adjustment for Drought Revenue		(\$17,302,729)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24	Stormwater Rate Revenue	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568	\$118,568
25	<b>Total Rate Revenue without Drought Rates</b>	<b>\$369,346,633</b>	<b>\$389,190,725</b>	<b>\$430,056,724</b>	<b>\$476,429,661</b>	<b>\$518,672,976</b>	<b>\$566,558,051</b>	<b>\$559,528,518</b>	<b>\$554,670,404</b>	<b>\$549,801,764</b>	<b>\$549,254,143</b>
26											
27	<b>OTHER REVENUE</b>										
28	Drought Rates (with Revenue Increase)	\$0	\$18,859,974	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	Other Retail Charges	\$78,709	\$86,638	\$95,511	\$105,853	\$115,223	\$125,852	\$136,691	\$147,679	\$159,534	\$167,347
30	Operating Revenues	\$17,587,693	\$18,815,775	\$20,419,710	\$21,488,412	\$22,831,774	\$24,331,938	\$25,372,115	\$26,792,840	\$27,800,540	\$28,354,859
31	Programmatic Revenues	\$4,212,828	\$4,366,760	\$4,529,247	\$4,715,961	\$4,889,862	\$5,087,911	\$5,281,078	\$5,476,333	\$5,687,389	\$5,817,186
32	Non-Debt Capital Revenues	\$5,695,000	\$6,329,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000
33	<b>TOTAL REVENUES</b>	<b>\$396,920,863</b>	<b>\$437,648,873</b>	<b>\$460,796,192</b>	<b>\$508,434,886</b>	<b>\$552,204,836</b>	<b>\$601,798,753</b>	<b>\$596,013,402</b>	<b>\$592,782,255</b>	<b>\$589,144,227</b>	<b>\$589,288,535</b>
34											
35	<b>O&amp;M EXPENSES</b>										
36	Personnel	\$82,802,526	\$84,155,575	\$87,016,323	\$89,977,680	\$93,043,316	\$96,217,039	\$99,502,800	\$102,904,701	\$106,426,999	\$110,074,112
37	Other Non-Personnel Services	\$26,603,401	\$27,295,904	\$28,114,906	\$28,958,483	\$29,827,373	\$30,722,336	\$31,644,154	\$32,593,634	\$33,571,604	\$34,578,920
38	Materials, Supplies & Equipment	\$12,913,549	\$13,727,571	\$14,139,398	\$14,563,580	\$15,000,488	\$15,450,502	\$15,914,018	\$16,391,438	\$16,883,181	\$17,389,677
39	Services of SFPUC Bureaus	\$35,694,439	\$36,237,828	\$37,324,963	\$38,444,712	\$39,598,053	\$40,785,995	\$42,009,574	\$43,269,862	\$44,567,957	\$45,904,996
40	Services of Other Departments	\$35,700,349	\$41,213,880	\$42,268,433	\$43,354,622	\$44,473,397	\$45,625,735	\$46,812,643	\$48,035,158	\$49,294,349	\$50,591,316
41	Other Operating Expenses	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857	\$140,857
42	Programmatic Expenses	\$7,736,917	\$7,766,551	\$7,807,711	\$7,850,106	\$7,893,772	\$7,938,749	\$7,985,075	\$8,032,791	\$8,081,938	\$8,132,560
43	<b>TOTAL O&amp;M EXPENSES</b>	<b>\$201,592,038</b>	<b>\$210,538,166</b>	<b>\$216,812,590</b>	<b>\$223,290,039</b>	<b>\$229,977,256</b>	<b>\$236,881,212</b>	<b>\$244,009,120</b>	<b>\$251,368,439</b>	<b>\$258,966,885</b>	<b>\$266,812,437</b>
44											
45	<b>NET REVENUE</b>	<b>\$195,328,824</b>	<b>\$227,110,707</b>	<b>\$243,983,602</b>	<b>\$285,144,848</b>	<b>\$322,227,580</b>	<b>\$364,917,541</b>	<b>\$352,004,282</b>	<b>\$341,413,816</b>	<b>\$330,177,342</b>	<b>\$322,476,097</b>
46											
47	<b>DEBT SERVICE</b>										
48	Existing Debt Service	\$104,017,873	\$106,234,104	\$124,721,371	\$130,810,760	\$139,479,116	\$138,695,706	\$138,538,646	\$138,386,976	\$138,223,966	\$142,231,402
49	Proposed Debt Service	\$0	\$0	\$0	\$22,403,639	\$71,487,376	\$97,647,836	\$126,528,250	\$188,634,938	\$220,870,250	\$220,870,250
50	<b>TOTAL DEBT SERVICE</b>	<b>\$104,017,873</b>	<b>\$106,234,104</b>	<b>\$124,721,371</b>	<b>\$153,214,399</b>	<b>\$210,966,492</b>	<b>\$236,343,542</b>	<b>\$265,066,896</b>	<b>\$327,021,914</b>	<b>\$359,094,216</b>	<b>\$363,101,652</b>
51											
52	<b>FUNDING FOR PAY-AS-YOU-GO CIP</b>										
53	Rate Funded	\$83,005,000	\$92,038,000	\$122,657,438	\$125,110,586	\$127,612,798	\$130,165,054	\$132,768,355	\$135,423,722	\$138,132,197	\$140,894,841
54	Capacity Fee Funded	\$5,695,000	\$6,329,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000
55	<b>TOTAL FUNDING FOR PAY-AS-YOU-GO CIP</b>	<b>\$88,700,000</b>	<b>\$98,367,000</b>	<b>\$128,352,438</b>	<b>\$130,805,586</b>	<b>\$133,307,798</b>	<b>\$135,860,054</b>	<b>\$138,463,355</b>	<b>\$141,118,722</b>	<b>\$143,827,197</b>	<b>\$146,589,841</b>
56											
57	<b>NET CASH FLOW</b>	<b>\$2,610,951</b>	<b>\$22,509,603</b>	<b>(\$9,090,207)</b>	<b>\$1,124,863</b>	<b>(\$22,046,710)</b>	<b>(\$7,286,055)</b>	<b>(\$51,525,969)</b>	<b>(\$126,726,820)</b>	<b>(\$172,744,071)</b>	<b>(\$187,215,396)</b>

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
58	<b>FUNDING BALANCE (EXCLUDING PROPOSED DEBT PROCEEDS)</b>										
59	Beginning Balance	\$157,769,951	\$160,380,902	\$182,890,506	\$173,800,299	\$174,925,162	\$152,878,452	\$145,592,397	\$150,007,423	\$133,636,418	\$129,595,617
60	Net Cash Flow	\$2,610,951	\$22,509,603	(\$9,090,207)	\$1,124,863	(\$22,046,710)	(\$7,286,055)	(\$51,525,969)	(\$126,726,820)	(\$172,744,071)	(\$187,215,396)
61	<b>ENDING BALANCE</b>	<b>\$160,380,902</b>	<b>\$182,890,506</b>	<b>\$173,800,299</b>	<b>\$174,925,162</b>	<b>\$152,878,452</b>	<b>\$145,592,397</b>	<b>\$94,066,428</b>	<b>\$23,280,603</b>	<b>(\$39,107,653)</b>	<b>(\$57,619,779)</b>
62	<i>Ending Balance (% of Annual O&amp;M)</i>	79.6%	86.9%	80.2%	78.3%	66.5%	61.5%	38.6%	9.3%	-15.1%	-21.6%
63	<i>Minimum Reserve Target (% of Annual O&amp;M)</i>	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	125.0%	225.0%	325.0%	425.0%
64											
65	<b>CURRENT DEBT SERVICE COVERAGE TEST</b>										
66	Net Revenue Subject to Debt Coverage Test	\$201,023,824	\$233,439,707	\$249,678,602	\$290,839,848	\$327,922,580	\$370,612,541	\$357,699,282	\$347,108,816	\$335,872,342	\$328,171,097
67	<i>Projected Debt Coverage</i>	1.93	2.20	2.00	1.90	1.55	1.57	1.35	1.06	0.94	0.90
68	<i>Required Debt Coverage</i>	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	2.10

DRAFT

**APPENDIX I:**

**Sewer Cost of Service:  
O&M Functional Allocations**



Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
<b>WWE Op Annual Ctrl Total</b>						
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5010Salary	Perm Salaries-Misc-Budget	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5010Salary	Perm Salaries-Misc-Regular	\$1,441,713	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5010Salary	Premium Pay - Misc	\$14,187	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5010Salary	Ret Payout - SP & Vac - Misc	\$403,750	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5010Salary	Temp Misc Regular Salaries	\$154,632	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Dental Coverage	\$5,637	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Dependent Coverage	\$50,080	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Flexible Benefit Package	\$23,536	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Fringe Adjustments-Budget	\$170,428	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Health Service-Admin Cost	\$122,938	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Health Service-City Match	\$47,251	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Health Service-Retiree Subsidy	\$2,929,865	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Long Term Disability Insurance	\$844	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Other Fringe Benefits	(\$60,260)	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Retiree City Misc	\$196,603	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Retiree Health-Match-Prop B	\$12,480	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	RetireeHlthCare-CityMatchPropC	\$7,664	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Retirement - Budget	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Social Sec-Medicare(HI Only)	\$29,208	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Social Security (OASDI & HI)	\$99,715	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5130Fringe	Unemployment Insurance	\$2,019	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5200OHallo	Department Overhead	\$36,237,828	Bureau - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Air Travel - Employees	\$39,278	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Employee Field Expenses-Budget	\$2,333	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Judgements & Claims-Budget	\$160,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$132,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Maint Svcs-Equipment-Budget	\$57,373	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Membership Fees	\$603,195	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Non-Air Travel - Employees	\$66,964	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Other Current Expenses - Bdgt	\$6,988	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$1,247,135	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$117,729	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$155,561	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5210NPSvcs	Training - Budget	\$114,845	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5400Mat&Su	Food	\$1,710	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5400Mat&Su	Other Bldg Maint Supplies	\$40,500	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5400Mat&Su	Other Materials & Supplies	\$86,315	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5400Mat&Su	Other Safety Expenses	\$36,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	DT Enterprise Tech Contracts	\$6,683	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	DT Technology Projects	\$62,175	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	DT Telecommunications Services	\$881,528	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	GF-Bus & Ecn Dev	\$198,400	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	GF-City Attorney-Legal Service	\$1,116,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	GF-Con-Financial Systems	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	GF-Environment	\$124,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	GF-HR-Employee Relations	\$22,789	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	GF-HR-Tuition Reimbursemnt W-O	\$10,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	GF-HR-Workers' Comp Claims	\$2,600,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	GF-Risk Management Svcs (AAO)	\$896,100	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	Is-Purch-Reproduction	\$10,300	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	Sr-DPW-Street Repair	\$0	Stormwater - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	58100thDep	Sr-SAS-Street Repair	\$300,000	Stormwater - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5910_OTO	OTO To 2S/GSF-General Svcs Fd	\$15,857	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5950_ITO	ITO To 5C-Cleanwater ProgramFd	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Administration WWE	5980UARDes	Designated For General Reserve	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Capital Investment WWE	5700DebSvc	Bond Interest-Expense	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0101 Administration	UC Capital Investment WWE	5700DebSvc	Bond Redemption	\$0	Indirect - 100.%,
<b>Placeholder for EPA Compliance</b>						
<b>WWE Op Annual Account Ctrl Total</b>	<b>WWE0101 Administration</b>				<b>\$51,001,874</b>	

Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5010Salary	Overtime - Scheduled Misc	\$24,808	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5010Salary	Perm Salaries-Misc-Regular	\$553,556	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5010Salary	Temp Misc Regular Salaries	\$41,017	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Dental Coverage	\$4,559	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Dependent Coverage	\$49,087	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Flexible Benefit Package	\$4,707	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Health Service-City Match	\$23,707	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Long Term Disability Insurance	\$1,532	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Retire City Misc	\$78,887	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Retiree Health-Match-Prop B	\$3,838	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	RetireeHlthCare-CityMatchPropC	\$2,357	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Social Sec-Medicare(HI Only)	\$8,981	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Social Security (OASDI & HI)	\$37,496	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5130Fringe	Unemployment Insurance	\$619	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5210NPSvcs	Crt Fees & Other Compensation	\$8,400	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5210NPSvcs	Employee Field Expenses-Budget	\$520	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5210NPSvcs	Entertainment & Promotion Bdgt	\$7,200	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$660,780	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$500,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$20,359	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5210NPSvcs	Utilities Expenses-Budget	\$30,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5400Mat&Su	Other Materials & Supplies	\$32,015	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5810OthDep	GF-GSA-Facilities Mgmt Svcs	\$367,946	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5810OthDep	Sr-DPW-Building Repair	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	5810OthDep	Sr-SAS-Building Repair	\$75,869	Indirect - 100.%,
Placeholder for EPA Compliance					\$0	Indirect - 100.%,
<b>WWE Op Annual Account Ctrl Total</b>	<b>WWE0102 Admin SE Community</b>				<b>\$2,538,241</b>	



Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5010Salary	Perm Salaries-Misc-Regular	\$2,411,475	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5010Salary	Premium Pay - Misc	\$23,336	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5010Salary	Temp Misc Regular Salaries	\$305,738	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Dental Coverage	\$22,468	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Dependent Coverage	\$257,414	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Flexible Benefit Package	\$9,415	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Health Service-City Match	\$96,250	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Long Term Disability Insurance	\$7,292	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Retire City Misc	\$341,111	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Retiree Health-Match-Prop B	\$16,978	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	RetireeHlthCare-CityMatchPropC	\$10,423	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Social Sec-Medicare(HI Only)	\$39,738	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Social Security (OASDI & HI)	\$158,623	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5130Fringe	Unemployment Insurance	\$2,742	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5210NPSvcs	Employee Field Expenses-Budget	\$800	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5210NPSvcs	Fees Licenses Permits	\$676,976	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5210NPSvcs	Other Current Expenses - Bdgt	\$347,385	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$3,135,786	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$7,200	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5400Mat&Su	Food	\$450	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5400Mat&Su	Other Materials & Supplies	\$214,628	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5810OthDep	GF-Chs-Medical Service	\$41,178	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5810OthDep	Sr-DPW-Engineering	\$140,405	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5810OthDep	Sr-DPW-Urban Forestry	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5810OthDep	SR-Neighborhood Beautification	\$100,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	5810OthDep	Sr-SAS-Urban Forestry	\$341,250	Indirect - 100.%,
<b>Placeholder for EPA Compliance</b>					\$0	Indirect - 100.%,
<b>WWE Op Annual Account Ctrl Total</b>	<b>WWE0103 Planning &amp; Regulation</b>				<b>\$8,709,062</b>	

Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
<b>WWE Op Annual Account Ctrl Total</b>	<b>WWE03 Maintenance</b>				\$39,438,755	
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5010Salary	Holiday Pay - Misc	\$160,387	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5010Salary	Overtime - Scheduled Misc	\$1,309,960	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5010Salary	Perm Salaries-Misc-Regular	\$12,866,150	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5010Salary	Premium Pay - Misc	\$387,578	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5010Salary	Temp Misc Regular Salaries	\$201,215	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	Dental Coverage	\$109,541	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	Dependent Coverage	\$1,393,167	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	Health Service-City Match	\$280,218	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	Long Term Disability Insurance	\$49,709	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	Retire City Misc	\$1,821,996	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	Retiree Health-Match-Prop B	\$92,434	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	RetireeHlthCare-CityMatchPropC	\$56,756	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	Social Sec-Medicare(HI Only)	\$216,415	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	Social Security (OASDI & HI)	\$909,203	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5130Fringe	Unemployment Insurance	\$14,919	Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$5,906,245	Solids Handling - 100.0%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$2,200,000	Solids Handling - 100.0%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$109,195	Solids Handling - 100.0%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5210NPSvcs	Utilities Expenses-Budget	\$988,590	Solids Handling - 100.0%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5400Mat&Su	Other Equipment Maint Supplies	\$90,000	Disinfection / Discharge - 60.0%, Solids Handling - 20.0%, Pumping / Lift Stations - 20.0%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5400Mat&Su	Other Materials & Supplies	\$220,904	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5400Mat&Su	Other Safety Expenses	\$112,119	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5400Mat&Su	Water & Sewage Treatment Supply	\$6,176,391	Disinfection / Discharge - 60.0%, Solids Handling - 20.0%, Pumping / Lift Stations - 20.0%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5600CapOut	Automotive & Other Vehides	\$79,436	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5600CapOut	Equipment Purchase-Budget	\$0	
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	58100thDep	Ef-SFGH-Medical Service	\$85,904	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	58100thDep	GF-Chs-Medical Service	\$50,000	Headworks - 10.91%, Primary Treatment - 10.91%, Secondary Treatment - 10.91%, Disinfection / Discharge - 10.91%, Solids Handling - 36.85%, Pumping / Lift Stations - 19.52%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	58100thDep	GF-PUC-Light Heat & Power	\$17,858,634	Secondary Treatment - 50.0%, Solids Handling - 30.0%, Pumping / Lift Stations - 20.0%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	58100thDep	GF-Rec & Park-Gardener	\$0	
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	58100thDep	Sr-DPW-Construction Mgmt	\$0	
<b>Placeholder for EPA Compliance</b>					\$0	
<b>WWE Op Annual Account Ctrl Total</b>	<b>WWE04 Bayside Operations</b>				\$53,747,065	

Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5010Salary	Overtime - Scheduled Misc	\$5,225	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5010Salary	Perm Salaries-Misc-Regular	\$5,243,834	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5010Salary	Temp Misc Regular Salaries	\$95,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	Dental Coverage	\$29,196	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	Dependent Coverage	\$332,394	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	Health Service-City Match	\$127,342	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	Long Term Disability Insurance	\$18,268	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	Retire City Misc	\$729,990	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	Retiree Health-Match-Prop B	\$33,109	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	RetireeHlthCare-CityMatchPropC	\$20,329	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	Social Sec-Medicare(HI Only)	\$77,492	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	Social Security (OASDI & HI)	\$267,828	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5130Fringe	Unemployment Insurance	\$5,346	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5210NPSvcs	Other Current Expenses - Bdgt	\$25,064	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5210NPSvcs	Other Equip Maint	\$16,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5210NPSvcs	Rents-Leases-Bldgs&Struct-Bdgt	\$220,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5210NPSvcs	Software Licensing Fees	\$448,700	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$4,391	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$2,700	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE06 Environmental Engr	UC Wastewater Treatment	5400Mat&Su	Other Materials & Supplies	\$4,046	Indirect - 100.%,
<b>Placeholder for EPA Compliance</b>					\$0	
<b>WWE Op Annual Account Ctrl Total</b>	<b>WWE06 Environmental Engr</b>				<b>\$7,706,252</b>	

Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5010Salary	Holiday Pay - Misc	\$7,370	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5010Salary	Overtime - Scheduled Misc	\$372,082	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5010Salary	Perm Salaries-Misc-Regular	\$7,673,104	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5010Salary	Premium Pay - Misc	\$102,998	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5010Salary	Temp Misc Regular Salaries	\$28,754	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Dental Coverage	\$72,529	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Dependent Coverage	\$923,355	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Flexible Benefit Package	\$14,122	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Health Service-City Match	\$210,134	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Long Term Disability Insurance	\$26,595	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Retire City Misc	\$1,095,635	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Retiree Health-Match-Prop B	\$50,707	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	RetireeHlthCare-CityMatchPropC	\$31,145	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Social Sec-Medicare(HI Only)	\$118,668	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Social Security (OASDI & HI)	\$502,761	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5130Fringe	Unemployment Insurance	\$8,180	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NP Svcs	Employee Field Expenses-Budget	\$203	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NP Svcs	Fees Licenses Permits	\$135,828	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NP Svcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$814,884	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NP Svcs	Maint Svcs-Equipment-Budget	\$37,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NP Svcs	Other Bldg Maint Svcs	\$500,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NP Svcs	Other Current Expenses - Bdgt	\$741,378	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NP Svcs	Prof & Specialized Svcs-Bdgt	\$0	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NP Svcs	Rents & Leases-Equipment-Bdgt	\$956,116	Stormwater - 25.%, General
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NP Svcs	Training - Budget	\$0	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5380CityGP	CBO Services - Budget	\$125,000	Stormwater - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5400Mat&Su	Inventories-Purchase	\$90,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5400Mat&Su	Other Bldg Maint Supplies	\$60,233	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5400Mat&Su	Other Equipment Maint Supplies	\$61,559	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$20,666	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5400Mat&Su	Other Materials & Supplies	\$330,399	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5400Mat&Su	Other Safety Expenses	\$31,047	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5600CapOut	Automotive & Other Vehicles	\$549,250	Stormwater - 25.%, General
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5600CapOut	Equipment Purchase-Budget	\$0	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5600CapOut	Other Equipment	\$37,329	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	EF-Municipal Railway	\$70,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	GF-Chs-Medical Service	\$100,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	Is-Purch-Centr Shop-AutoMaint	\$419,685	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	Is-Purch-Centr Shop-FuelStock	\$242,684	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	Sr-DPW-Building Repair	\$0	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	Sr-DPW-Engineering	\$100,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	Sr-DPW-Sewer Repair	\$0	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	Sr-DPW-Street Cleaning	\$0	Stormwater - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	Sr-SAS-Building Repair	\$83,287	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	Sr-SAS-Sewer Repair	\$2,100,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	58100thDep	Sr-SAS-Street Cleaning	\$5,853,728	Stormwater - 100.%,
Placeholder for EPA Compliance					\$0	
<b>WWE Op Annual Account Ctrl Total</b>	<b>WWE1001 Sewer Operations</b>				<b>\$24,698,415</b>	



Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5010Salary	Overtime - Scheduled Misc	\$7,125	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5010Salary	Perm Salaries-Misc-Regular	\$3,662,032	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5010Salary	Premium Pay - Misc	\$2,375	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5010Salary	Temp Misc Regular Salaries	\$33,979	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	Dental Coverage	\$27,313	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	Dependent Coverage	\$312,475	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	Health Service-City Match	\$115,872	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	Long Term Disability Insurance	\$12,714	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	Retire City Misc	\$520,601	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	Retiree Health-Match-Prop B	\$22,961	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	RetireeHlthCare-CityMatchPropC	\$14,097	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	Social Sec-Medicare(HI Only)	\$53,727	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	Social Security (OASDI & HI)	\$219,958	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5130Fringe	Unemployment Insurance	\$3,705	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5210NPSvcs	Fees Licenses Permits	\$21,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5210NPSvcs	Maint Svcs-Equipment-Budget	\$69,173	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5210NPSvcs	Other Current Expenses - Bdgt	\$12,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$45,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$7,500	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5400Mat&Su	Other Equipment Maint Supplies	\$16,200	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5400Mat&Su	Other Hosp, Clinics&Lab Supply	\$239,631	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5400Mat&Su	Other Materials & Supplies	\$49,500	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5600CapOut	Equipment Purchase-Budget	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5600CapOut	Medical, Dental & Lab Equipmnt	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE11 Wastewater Lab	UC Wastewater Treatment	5600CapOut	Other Equipment	\$324,735	Indirect - 100.%,
Placeholder for EPA Compliance					\$0	
<b>WWE Op Annual Account Ctrl Total</b>					<b>\$5,793,674</b>	
					\$0	
<b>WWE Op Annual Ctrl Total</b>					<b>\$202,771,615</b>	
Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
<b>WWE Annual Authority Ctrl</b>						
WWE Annual Authority Ctrl	WWE0101 Administration	525 Golden Gate - Lease Paymen	5610FacMai	Facilities Maintenance-Budget	\$2,416,551	Indirect - 100.%,
WWE Annual Authority Ctrl	WWE0101 Administration	525 Golden Gate - O & M	5610FacMai	Facilities Maintenance-Budget	\$1,372,000	Indirect - 100.%,
WWE Annual Authority Ctrl	WWE0101 Administration	Low Impact Development	5610FacMai	Facilities Maintenance-Budget	\$681,000	Stormwater - 100.%,
WWE Annual Authority Ctrl	WWE0101 Administration	Wastewater Add-backs Master Pr	5060ProgPr	Programmatic Projects-Budget	\$0	Indirect - 100.%,
WWE Annual Authority Ctrl	WWE0101 Administration	Youth Employment & Environment	5610FacMai	Facilities Maintenance-Budget	\$697,000	Indirect - 100.%,
WWE Annual Authority Ctrl	WWE03 Maintenance	Treasure Island - Maintenance	5610FacMai	Facilities Maintenance-Budget	\$2,600,000	Indirect - 100.%,
Placeholder					\$0	
<b>WWE Annual Authority Ctrl Total</b>					<b>\$7,766,551</b>	

**APPENDIX J:**

**Sewer Cost of Service:  
Detailed Units of Service**



**Units of Service Detailed Calculation (Flow)**

Units of Service (CCF)							
Line	Customer Type	Flow (Total)	Flow (Dry)	Flow (Wet)	Infil. (Flow Alloc)	Infil. (Acct. Alloc)	Total
1	Single Family Residential	5,745,781	5,745,781		996,201	805,530	7,547,512
2	Multifamily Residential	9,720,649	9,720,649		1,685,362	262,881	11,668,893
3	Municipal	502,612	502,612		87,143	5,748	595,502
4	Nonresidential/Commercial	5,747,608	5,747,608		996,518	109,514	6,853,641
5	Fire	28,194	28,194		4,888	70,510	103,592
6	Municipal Fire	580	580		101	2,554	3,235
7	Total Wastewater	21,745,424	21,745,424		3,770,213	1,256,738	26,772,375
8							
9	Stormwater	5,849,076		5,849,076	0	0	5,849,076
10	Total	27,594,500	21,745,424	5,849,076	3,770,213	1,256,738	32,621,451
11							
12							
13							
14							
15							
16							
17							

Unit COS (\$/CCF)			
Unit of Service	Flow (Total)	Flow (Dry)	Flow (Wet)
COS	\$232,350,042	\$158,611,420	73,738,622
Units of Service	32,621,451	26,772,375	5,849,076
<b>Unit COS</b>	<b>\$7.12</b>	<b>\$5.92</b>	<b>\$12.61</b>
<b>Units</b>	<b>\$/CCF</b>	<b>\$/CCF</b>	<b>\$/CCF</b>

**Units of Service Detailed Calculation (COD)**

COD (Pounds)			
Line	Customer Type	Contributed	Total
1	Single Family Residential	24,534,916	24,534,916
2	Multifamily Residential	41,507,991	41,507,991
3	Municipal	2,125,773	2,125,773
4	Nonresidential/Commercial	26,119,805	26,119,805
5	Fire	0	0
6	Municipal Fire	0	0
7	Total Wastewater	94,288,484	94,288,484
8			
9	Stormwater	10,365,927	10,365,927
10	Total	104,654,412	104,654,412
11			
12			
13			
14			
15			
16			
17			

Unit Cost (\$/lb)	
Unit of Service	COD
COS	\$82,350,784
Units of Service	104,654,412
<b>Unit COS</b>	<b>\$0.79</b>
<b>Units</b>	<b>\$/Pound</b>



**Units of Service Detailed Calculation (TSS)**

Line	Customer Type	TSS (Pounds)	
		Contributed	Total
1	Single Family Residential	10,007,662	10,007,662
2	Multifamily Residential	16,930,858	16,930,858
3	Municipal	840,158	840,158
4	Nonresidential/Commercial	8,543,674	8,543,674
5	Fire	0	0
6	Municipal Fire	0	0
7	Total Wastewater	36,322,352	36,322,352
8			
9	Stormwater	3,699,771	3,699,771
10	Total	40,022,124	40,022,124
11			
12		<b>Unit Cost (\$/lb)</b>	
13	<b>Unit of Service</b>	<b>TSS</b>	
14	COS	\$61,887,487	
15	Units of Service	40,022,124	
16	<b>Unit COS</b>	<b>\$1.55</b>	
17	<b>Units</b>	<b>\$/Pound</b>	

**Units of Service Detailed Calculation (O/G)**

Line	Customer Type	O/G (Pounds)	
		Contributed	Total
1	Single Family Residential	3,048,930	3,048,930
2	Multifamily Residential	5,158,178	5,158,178
3	Municipal	231,016	231,016
4	Nonresidential/Commercial	3,336,919	3,336,919
5	Fire	0	0
6	Municipal Fire	0	0
7	Total Wastewater	11,775,042	11,775,042
8			
9	Stormwater	379,531	379,531
10	Total	12,154,574	12,154,574
11			
12		<b>Unit Cost (\$/lb)</b>	
13	<b>Unit of Service</b>	<b>O/G</b>	
14	COS	\$12,449,581	
15	Units of Service	12,154,574	
16	<b>Unit COS</b>	<b>\$1.02</b>	
17	<b>Units</b>	<b>\$/Pound</b>	

**Units of Service Detailed Calculation (Customer Bills)**

Line	Customer Type	Customer	
		Accounts	Bills
1	Single Family Residential	111,671	1,340,050
2	Multifamily Residential	36,443	437,320
3	Municipal	797	9,562
4	Nonresidential/Commercial	15,182	182,184
5	Fire	9,775	117,298
6	Municipal Fire	354	4,249
7	Total Wastewater	174,222	2,090,663
8			
9	Stormwater		
10	Total	174,222	2,090,663
11			
12	<b>Unit Cost of Service</b>		
13	<b>Unit of Service</b>	<b>Customer</b>	
14	COS	\$152,866	
15	Units of Service	2,090,663	
16	<b>Unit COS</b>	<b>\$0.07</b>	
17	<b>Units</b>	<b>\$/Bill</b>	