



**SAN FRANCISCO
PUBLIC UTILITIES COMMISSION**

2023 Water and Wastewater Rate Study

FINAL REPORT / MAY 15, 2023



May 15, 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
- 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 you, Matthew Freiberg, and other SFPUC staff have provided during this study.

Sincerely,



Steve Gagnon, PE (AZ)
Vice President



John Wright, CPA (CO)
Senior Manager

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Glossary

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

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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 and sewer 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 cost 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. In addition to being a financial instrument, rates help communicate 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 a formal report in preparation for the rate adoption process. The report documents the rate study results and presents the methodologies, rationale, justifications, and calculations used to derive the proposed rates. A thorough and methodical report serves two important functions: it derives the rates and shows the nexus to costs and communicates 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 100 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 were set to 5% of Variable Charges in FY 2022 and FY 2023, but were formally rescinded effective May 2023.¹

¹ At the time the financial plan analysis was conducted, it was anticipated that Drought Surcharges would remain in effect through FY 2024. Since the analysis was completed, however, the Commission formally rescinded Drought Surcharges effective May 1, 2023 due to significant recent improvement in drought conditions. 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.

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 2033 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 the next ten years. 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

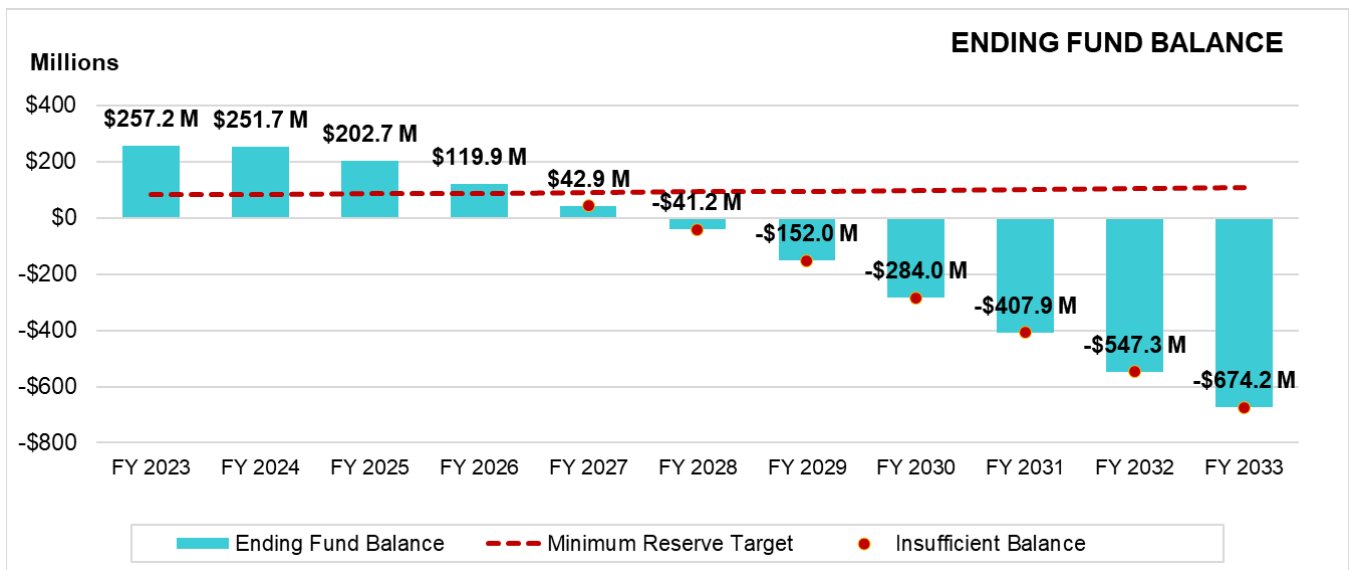
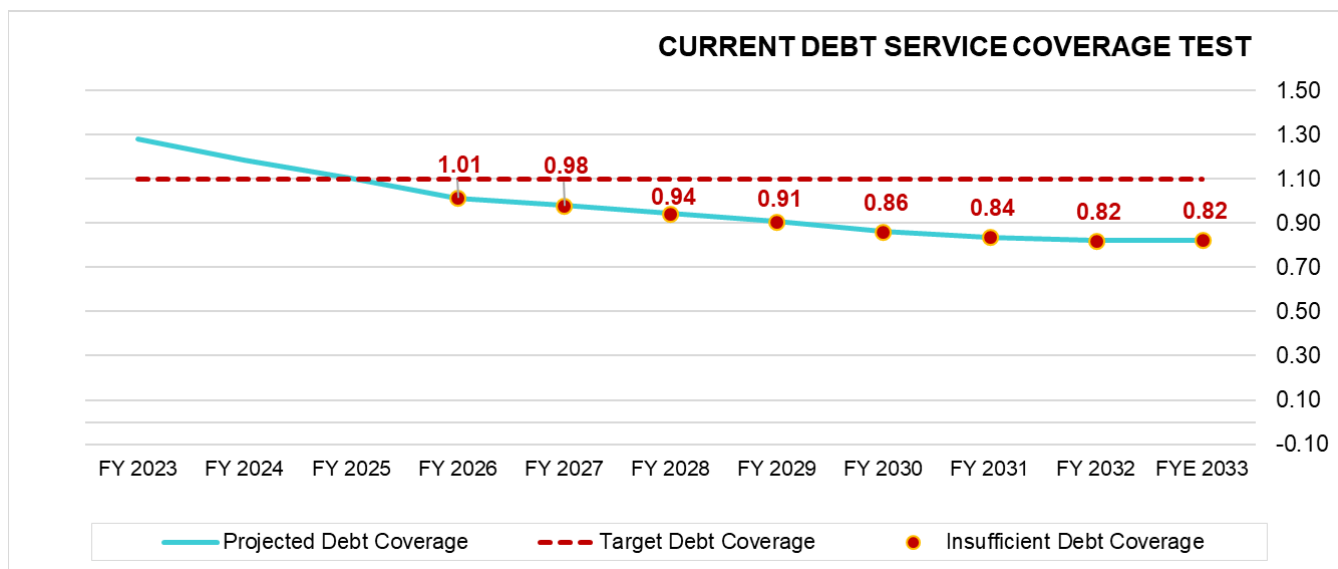


Figure 1-2: Projected Debt Coverage under Status Quo Water Enterprise Financial Plan



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
10	FY 2033	3.0%	7/1/2032	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. 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

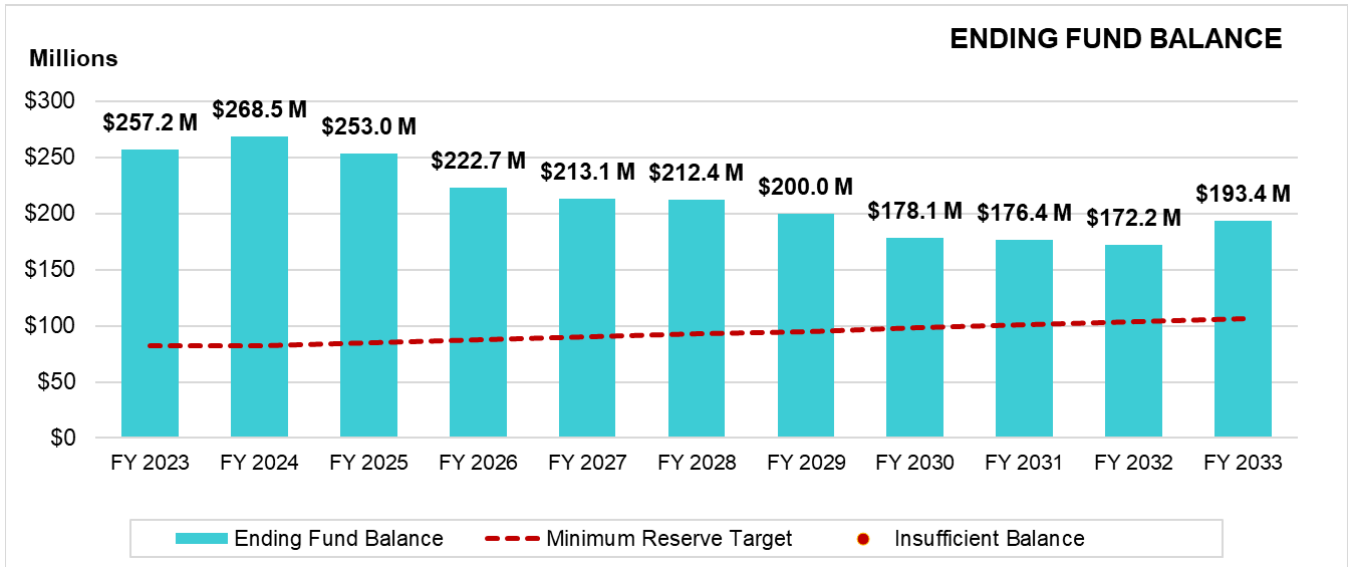
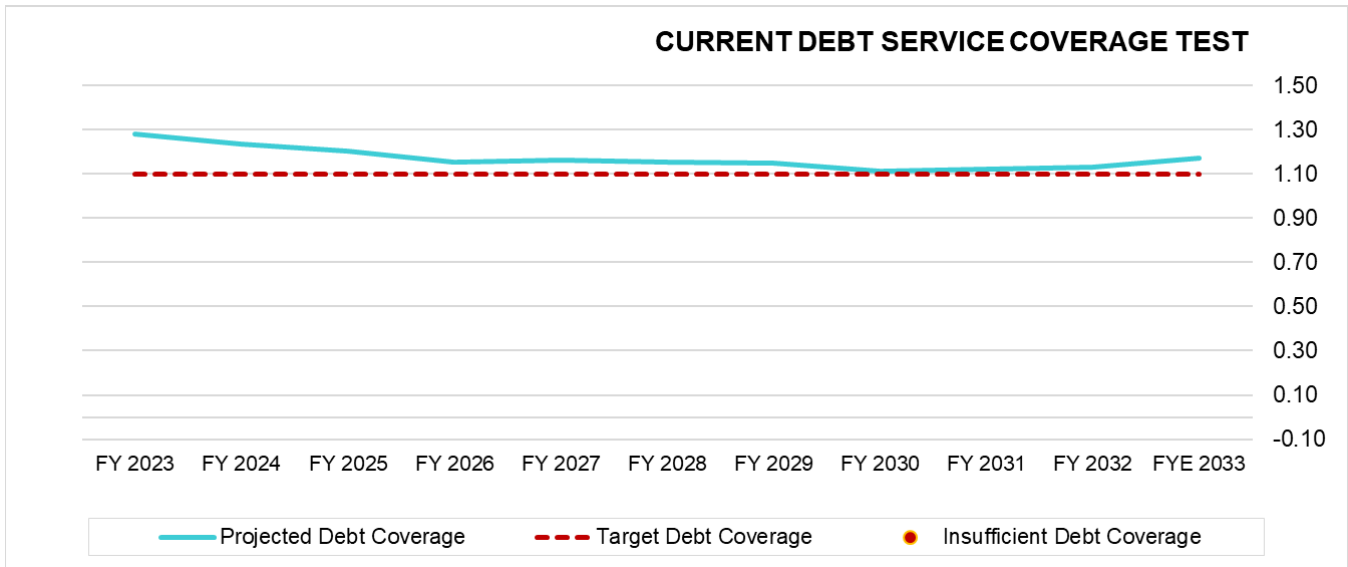


Figure 1-4: Projected Debt Coverage under Proposed Water Enterprise Financial Plan



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 cost 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 service² is shown in Table 1-2.³ 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 Water Cost of Service (FY 2024)

Line	Customer Class	\$ Comparison		% Comparison		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	Total	\$338,710,281	\$321,934,148	100.00%	100.00%	0.00%

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.

² 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.

³ 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.

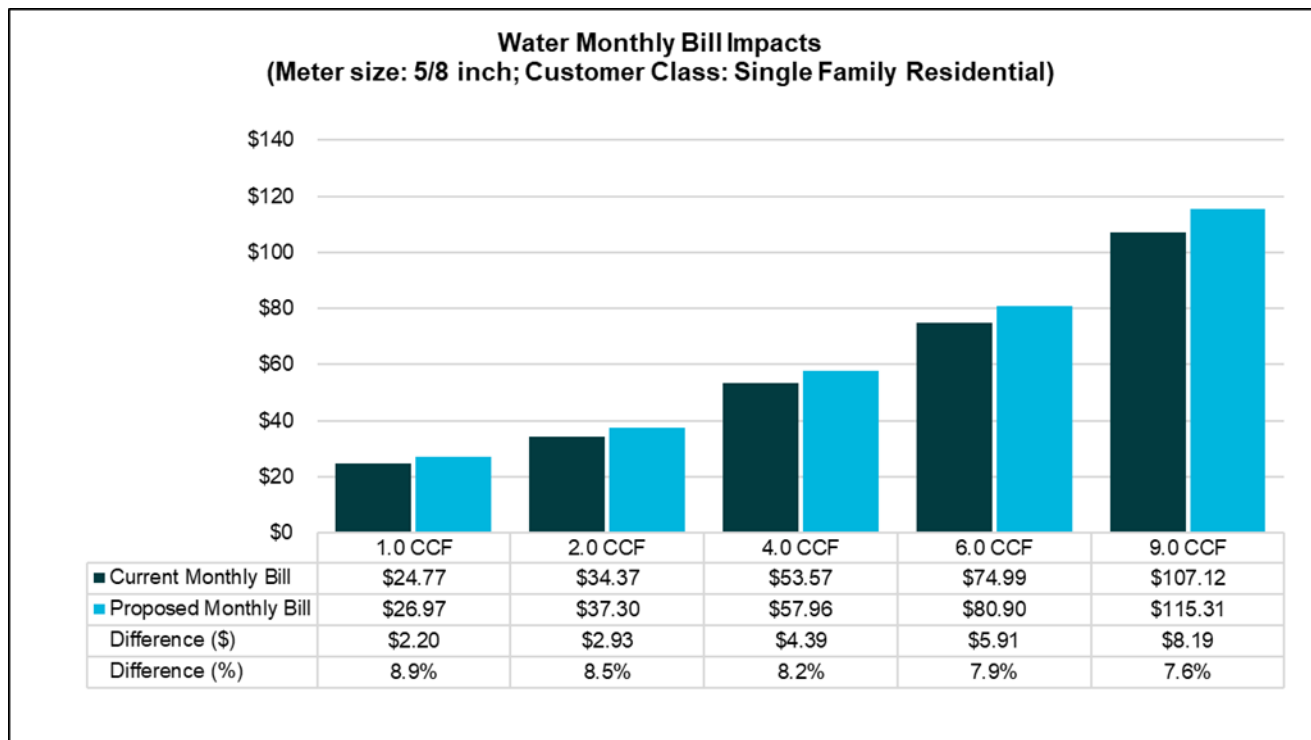
Table 1-3: Proposed and Projected Retail Water Rate Schedule (FY 2024 – FY 2028)

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	Fixed Monthly Service Charges (by Meter Size)						
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	Private Fire Fixed Monthly Service Charges (by Service Size)						
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	Variable Charges (per CCF)						
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 1-7.⁴ The bill impacts compare current FY 2023 monthly water bills with proposed FY 2024 monthly water bills at varying levels of monthly water use.⁵ All bills exclude Drought Surcharges to provide a direct comparison of current versus proposed rates, even though Drought Surcharges equal to 5% of Variable Charges were effective in FY 2023 through April 2023 before being formally rescinded effective May 2023.

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



⁴ 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 ten dwelling units.

⁵ 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)

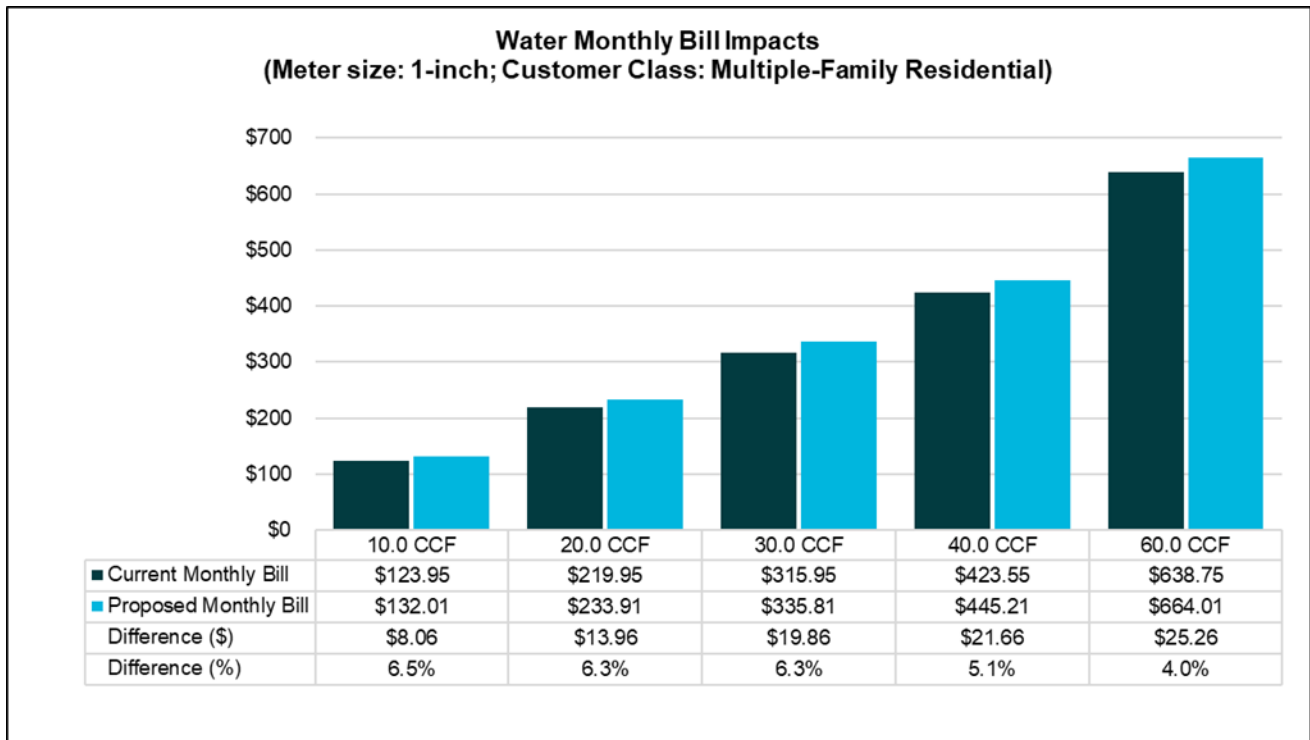
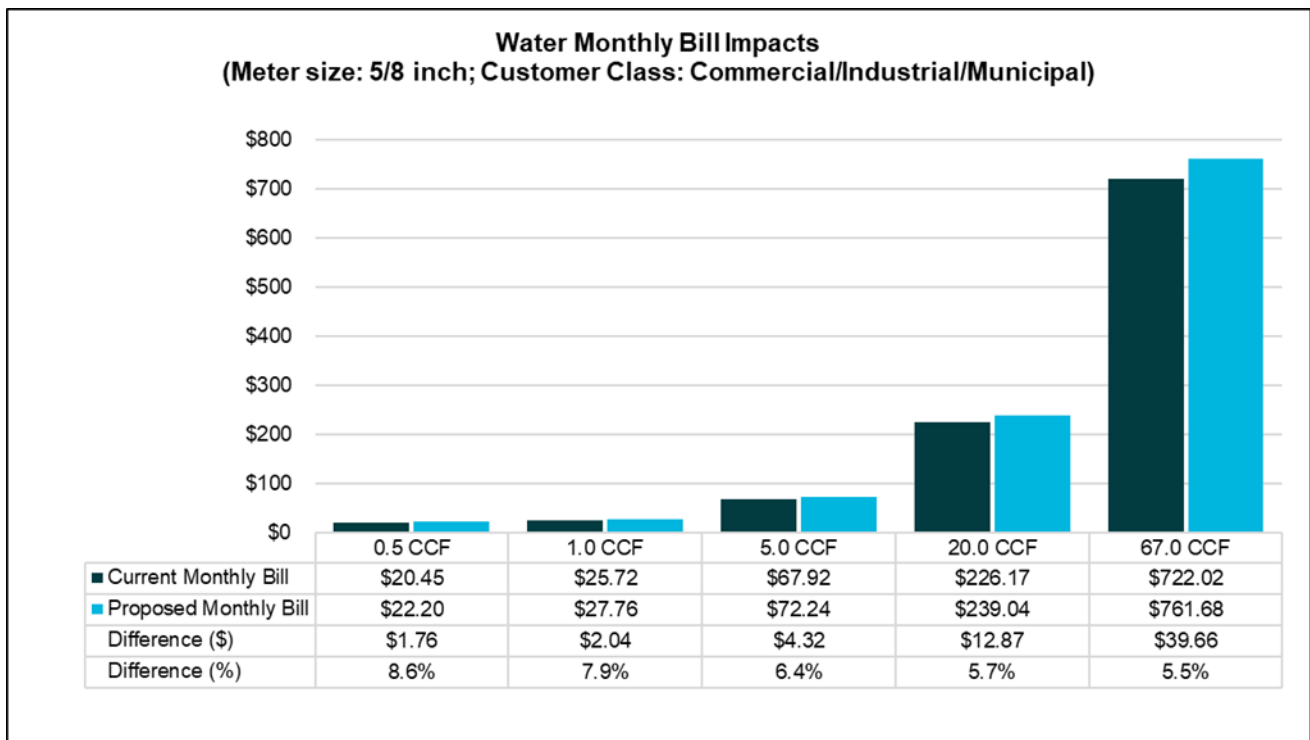


Figure 1-7: Sample Non-Residential Water Monthly Bill Impacts (FY 2024)



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 100 CCF of discharge that vary based on whether the customer is residential or non-residential
- » **Chemical Oxygen Demand (COD)** per pound in 100 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 100 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 100 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 charges. The SFPUC does have a monthly sewer service attributable to runoff charge for properties who do not have water and wastewater service agreements (Table 1-5). The current sewer rates shown in Table 1-4 recover the cost of providing both wastewater and stormwater service for most accounts, with a smaller amount being collected by the sewer service attributable to runoff charges shown in Table 1-5.

Table 1-4: Current Wastewater Enterprise Rates

Line	Customer Class	Current Rate
1	Residential Wastewater	
2	Monthly Service Charge	\$5.21
3	Volume per Discharge Unit (CCF)	\$15.97
4		
5	Non-Residential Wastewater	
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: Sewer Service Attributable to Runoff Charges for Customers without SFPUC Accounts

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

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 2033 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 through FY 2033. 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

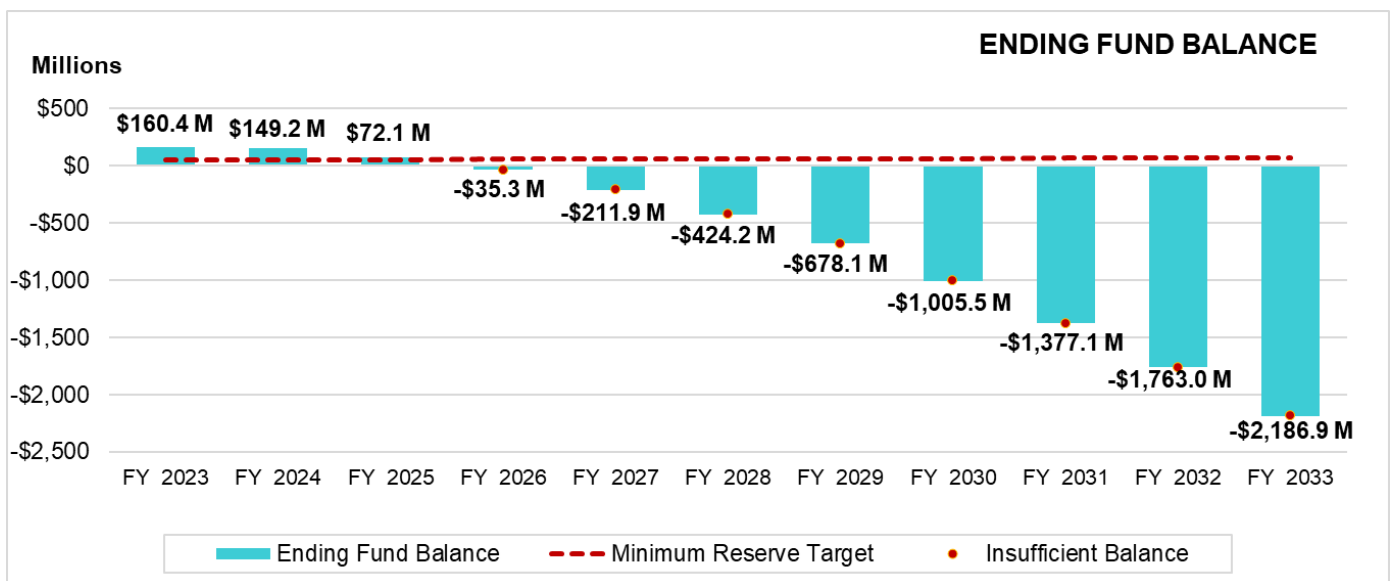
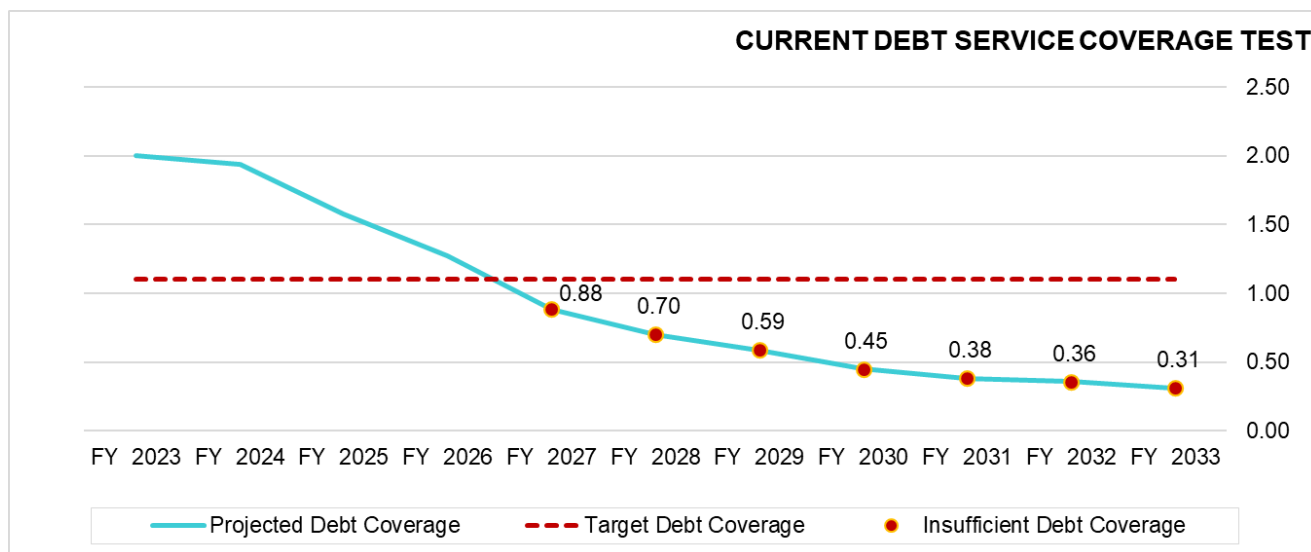


Figure 1-9: Projected Debt Coverage under Status Quo Wastewater Enterprise Financial Plan



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 2033 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
10	FY 2033	5.0%	7/1/2032	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. 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

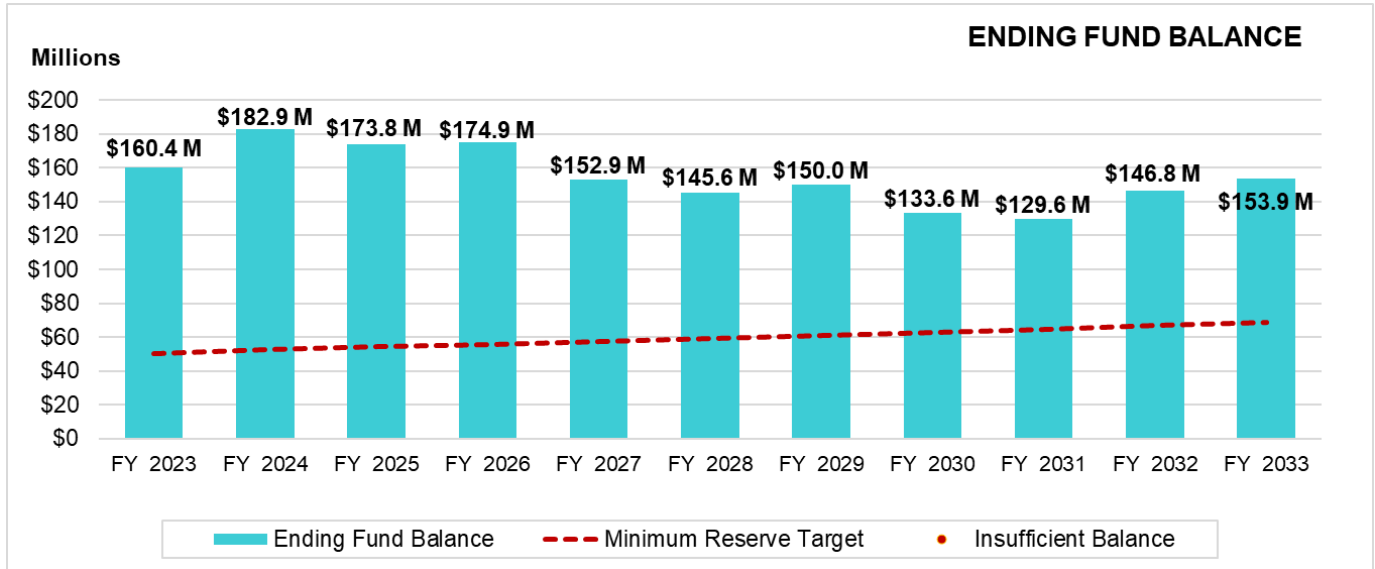
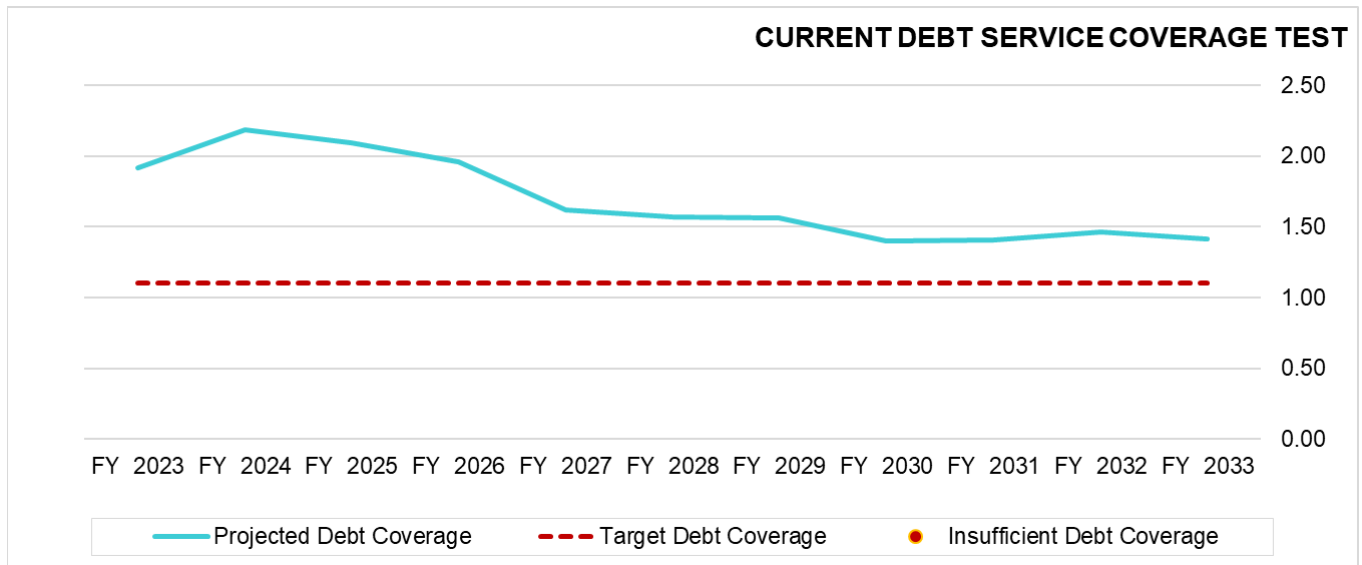


Figure 1-11: Projected Debt Coverage under Proposed Wastewater Enterprise Financial Plan



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 cost 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, sewer costs were split between the wastewater related costs for sanitary sewer service and stormwater related costs for the collection and treatment of runoff from properties. Currently, stormwater-related costs are recovered as part of wastewater rates. By splitting these costs, SFPUC will be able to enhance the equity in its rate structure by establishing a stormwater charge in addition to its wastewater rates. Under this new methodology, all customers will be billed for the total flows that they contribute to SFPUC's combined sewer system. Table 1-7 shows the overall FY 2024 Wastewater Enterprise cost of service is \$389,190,725. Wastewater costs represent 77.5% and stormwater costs represent 22.5% of the total.

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

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 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 1-8. Despite the shift in stormwater costs out of the wastewater rates, the proportionate share of costs for each customer class remains relatively unchanged, as shown in Column C and Column D.

Table 1-8: 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	Total	\$301,471,528	\$374,249,662	100.00%	100.00%

Proposed Retail Wastewater Rates

The rates presented by MME and Raftelis in Section 8, are designed to recover the FY 2024 wastewater portion of the sewer revenue requirement of \$301,471,528 as well as the FY 2024 stormwater portion of the sewer revenue requirement of \$87,719,197. This change would result in significant bill impacts on customers for parcels with large impermeable surface areas. The SFPUC's Ratepayer Assurance Policy principles of Affordability and Predictability suggests that major rate structure changes should take place over a few years instead of all at once. The SFPUC proposed sewer rates - which are discussed further in Section 9 - are phased in so that by FY 2030 they will fully recover the cost allocation as defined in Section 8. To phase in rates, wastewater rates will continue to include, albeit on a decreasing level each year, a portion of stormwater-related costs. The proposed wastewater rates for FY 2024 through FY 2026 as well as the projected rates for FY 2027 and FY 2028 are shown in Table 1-9.

Table 1-9: Proposed and Projected Retail Wastewater Rate Schedule

Line	Class	(A) Current (Since 7/1/2022)	(B) Proposed FY 2024	(C) Proposed FY 2025	(D) Proposed FY 2026	(E) Projected FY 2027	(F) Projected FY 2028
1	Monthly Service Charge	\$5.21	\$4.85	\$5.28	\$5.76	\$6.33	\$6.97
2							
3	Residential Volumetric (per CCF)	\$15.97	\$16.91	\$17.80	\$18.72	\$19.83	\$20.99
4							
5	Nonresidential Volumetric						
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 1-10 shows the SFPUC proposed stormwater charges for FY 2024 – FY 2026 as well as the projected charges for FY 2027 and FY 2028. These monthly charges feature the new stormwater charge structure previously developed by SFPUC staff with the support of consultants in a prior engagement.

Table 1-10: Proposed and Projected Retail Stormwater Monthly Charges

Line	Stormwater Class	(A) Current (N/A)	(B) Proposed FY 2024	(C) Proposed FY 2025	(D) Proposed FY 2026	(E) Projected FY 2027	(F) Projected FY 2028
1	Simplified Residential Tiered Rate						
2	SRT1 (1 - 1,700 square feet parcel size)	N/A	\$2.31	\$5.04	\$8.24	\$12.08	\$16.61
3	SRT2 (1,701 - 3,300 square feet parcel size)	N/A	\$3.60	\$7.84	\$12.82	\$18.80	\$25.85
4	SRT3 (3,301 - 6,000 square feet parcel size)	N/A	\$5.41	\$11.79	\$19.27	\$28.26	\$38.86
5							
6	Standard						
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 charge 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 charge, 22,974 sq. ft. of permeable area, and 141,018 sq. ft. of impermeable. The bill impacts shown in each figure include the impact of proposed FY 2024 phased-in wastewater rates and stormwater charges.

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

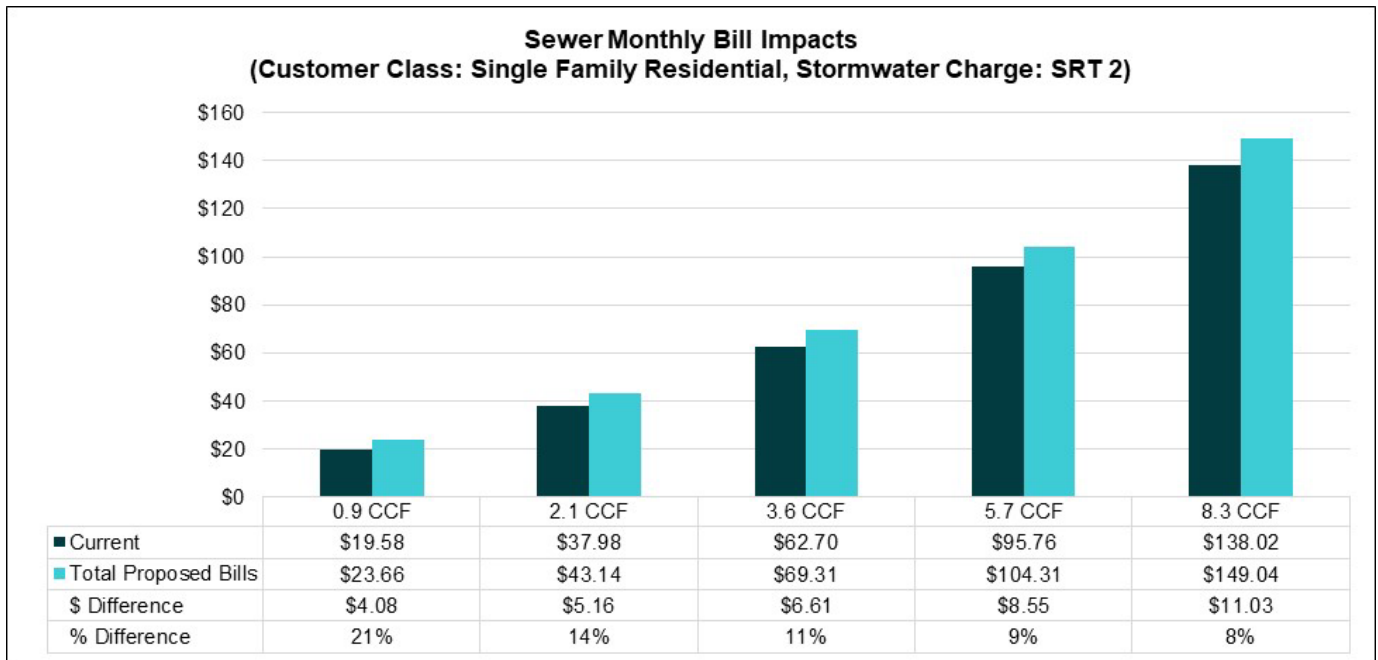


Figure 1-13: FY 2024 Multifamily Residential Bill Impacts by Usage Percentile

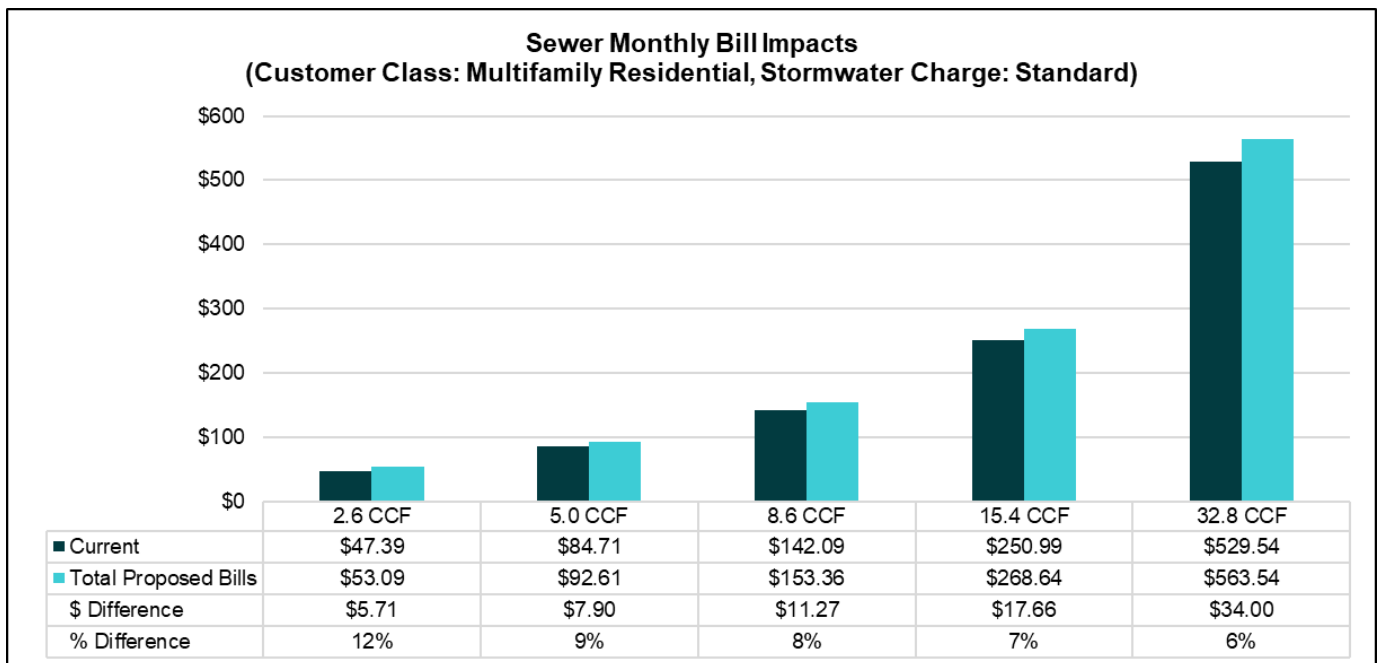
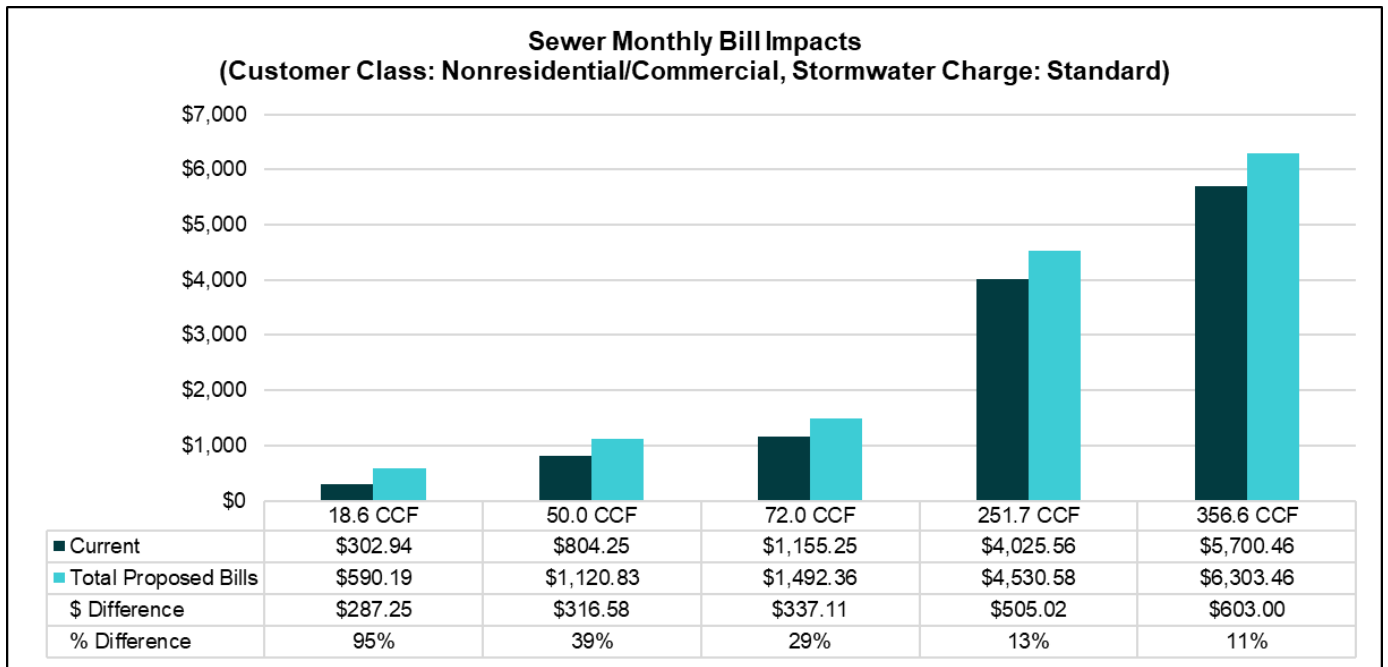


Figure 1-14: FY 2024 Non-Residential Bill Impacts by Usage Percentile



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 agencies on the San Francisco Peninsula, in the South Bay, and parts of the East Bay, and 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, with 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 charges are separated 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 and sewer 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 must mail to its water and wastewater retail customers 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:

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

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

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 through FY 2033. 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**: In addition to having sufficient revenues to pay for projected costs, utilities 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 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 the 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 connection⁶ 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 100 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 in effect when the Commission adopts a resolution declaring Stage 1, Stage 2, or Stage 3 of the Retail Water Shortage Allocation Plan. 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% for Stage 3. Stage 1 Surcharges of 5% were in effect in FY 2022 and FY 2023, but were formally rescinded effective May 2023.

⁶ 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	Fixed Monthly Service Charges (by Meter Size)	
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	Private Fire Fixed Monthly Service Charges (by Service Size)	
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	Variable Charges (per CCF)	
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	Drought Surcharges (for Stage 1 Drought)	
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. 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 in 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	Water Meter Size				
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	Total Water Meters	170,094	306	184	170,584

*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	Connection Size			
2	1-inch	186	0	186
3	1-1/2 inch	33	0	33
4	2-inch	3,899	3	3,902
5	3-inch	155	0	155
6	4-inch	3,471	5	3,476
7	6-inch	1,640	1	1,641
8	8-inch	710	5	715
9	10-inch	6	1	7
10	12-inch	23	0	23
11	Total Private Fire Service Connections	10,123	15	10,138

Table 3-4: Projected Water Use

Line	Projected Water Use (CCF)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	Water Use - In-City Retail Paying						
2	Single Family Residential						
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	Subtotal	6,361,892	6,245,622	6,338,167	6,448,980	6,386,935	6,346,874
6							
7	Multi-Family Residential						
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	Subtotal	10,767,030	10,570,253	10,726,877	10,914,420	10,809,413	10,741,614
11							
12	Non-Residential						
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	Subtotal	7,963,239	8,665,470	8,779,174	8,918,244	8,795,211	8,704,626
25							
26	Total In-City Retail Paying Water Use	25,092,161	25,481,346	25,844,218	26,281,643	25,991,559	25,793,114
27							
28	Water Use - Suburban Retail Paying						
29	Single Family Residential						
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	Subtotal	30,760	30,198	30,645	31,181	30,881	30,687
33							
34	Non-Residential						
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	Subtotal	1,509,088	1,657,022	1,676,773	1,701,220	1,679,232	1,663,271
46							
47	Total Suburban Retail Paying Water Use	1,539,848	1,687,220	1,707,418	1,732,400	1,710,113	1,693,959
48							
49	Water Use - Other						
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	Total Other Water Use	63,398,000	62,628,532	64,594,040	69,391,279	69,554,755	69,911,835
54							
55	TOTAL WATER USE (CCF)	90,030,008	89,797,098	92,145,676	97,405,323	97,256,427	97,398,908
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 12 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 2028.⁷ 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 these historic 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	<u>In-City Retail (excl. Treasure Island)</u>						
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	Subtotal	\$315,952,677	\$320,363,230	\$311,134,470	\$315,562,071	\$312,610,863	\$310,583,793
7							
8	<u>Suburban Retail</u>						
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	Subtotal	\$14,262,607	\$15,741,059	\$15,221,128	\$15,440,783	\$15,242,199	\$15,090,208
14							
15	Total	\$330,215,284	\$336,104,288	\$326,355,598	\$331,002,855	\$327,853,063	\$325,674,000

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,⁸ Wholesale Water Sales, Federal Bond Interest Subsidies, Power Enterprise State Revolving Fund (SRF) Loan Reimbursements, 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

⁷ At the time the financial plan analysis was conducted, it was anticipated that Drought Surcharges would remain in effect through FY 2024. Since the analysis was completed, however, the Commission formally rescinded Drought Surcharges effective May 1, 2023 due to significant recent improvement in drought conditions. 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.

⁸ 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.

based on detailed projections from SFPUC staff's 10-Year Financial Plan. 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	Revenue Escalation						
2	Consumer Price Index	<i>Budget</i>	<i>Budget</i>	2.71%	2.56%	2.56%	2.56%
4							
4	Interest Earnings on Cash Reserves						
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	Total	\$344,992,683	\$368,248,620	\$378,890,501	\$393,735,139	\$395,256,140	\$417,741,565

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 expenses⁹ 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. Benefits inflation is based on the City and County of San Francisco's Proposed Five-Year Financial Plan for FY 2022 through FY 2026.

⁹ 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	O&M Expenses (excl. Execution Factors)						
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	Total	\$332,747,098	\$334,645,570	\$346,143,253	\$356,093,842	\$366,322,880	\$376,659,595
12							
13	Execution Factors						
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	O&M Expenses (incl. Execution Factors)						
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	Total	\$327,024,913	\$328,788,358	\$340,101,058	\$349,860,685	\$359,892,582	\$370,025,772
35							
36	Overall Execution Factor	98.3%	98.2%	98.3%	98.2%	98.2%	98.2%

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 and are associated with planned revenue bond issuances to fund the 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	Total	\$328,352,143	\$333,499,425	\$335,387,524	\$373,652,956	\$374,456,949	\$399,419,870

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	Total	\$47,124,600	\$47,576,658	\$78,620,000	\$83,620,000	\$65,125,000	\$56,644,000

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 3-7¹⁰), 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.

¹⁰ 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 the Water Enterprise's 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 Coverage" test. 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 are not considered SFPUC operating expenses. Additionally, net revenues used to calculate debt coverage include fund balance budgeted as revenue, which is in alignment with SFPUC staff's 10-Year financial plan. 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 2033 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 2026 – FY 2033. 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 2033. 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

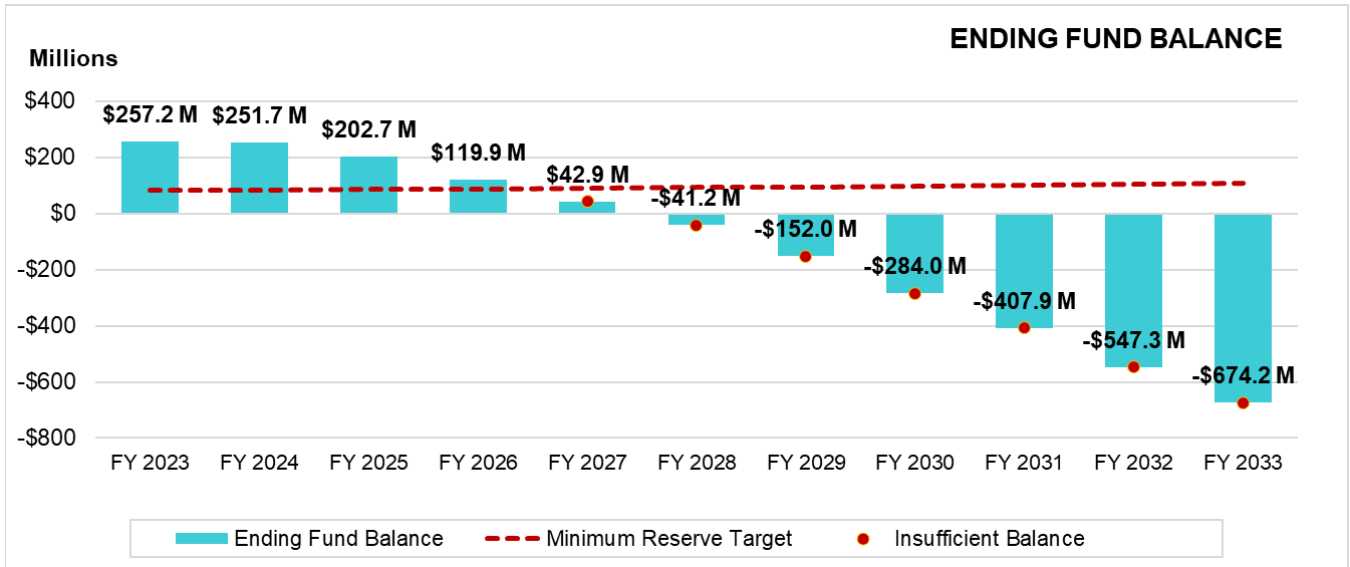
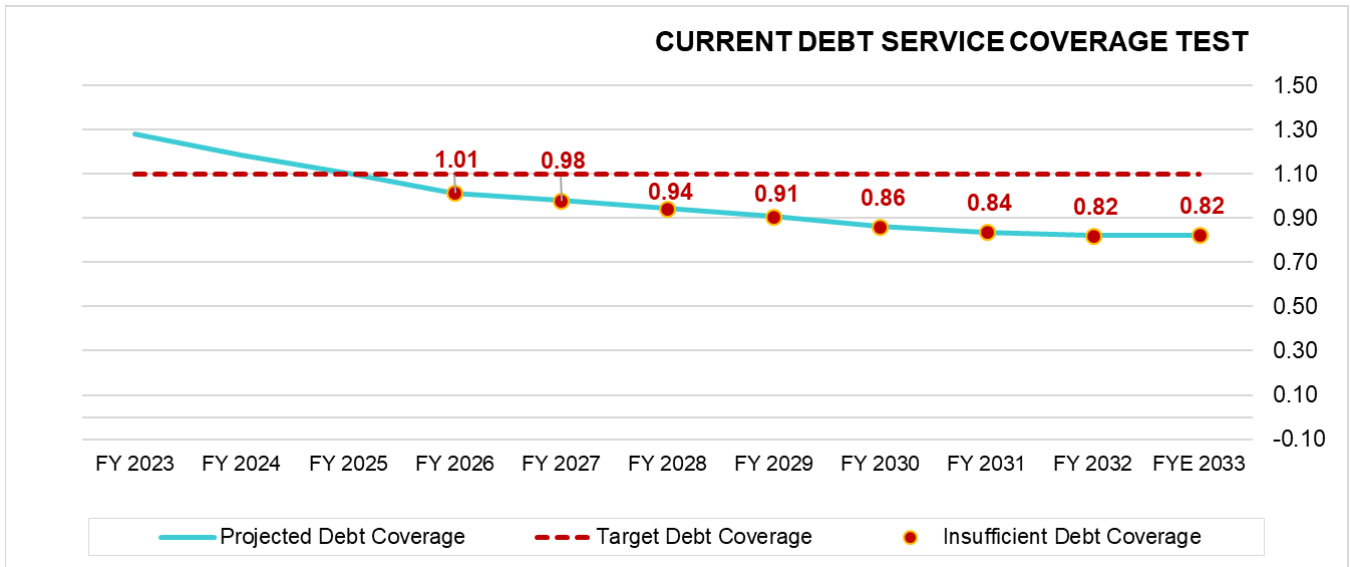


Figure 3-2: Projected Debt Coverage under Status Quo Water Enterprise Financial Plan



Proposed Water Enterprise Financial Plan

The Water Enterprise must increase its revenues from retail water rates to adequately fund its O&M 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 ten-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	<i>For Near-Term Planning Purposes Only</i>
5	FY 2028	4.0%	7/1/2027	<i>For Near-Term Planning Purposes Only</i>
6	FY 2029	4.0%	7/1/2028	<i>For Long-Term Planning Purposes Only</i>
7	FY 2030	3.0%	7/1/2029	<i>For Long-Term Planning Purposes Only</i>
8	FY 2031	3.0%	7/1/2030	<i>For Long-Term Planning Purposes Only</i>
9	FY 2032	3.0%	7/1/2031	<i>For Long-Term Planning Purposes Only</i>
10	FY 2033	3.0%	7/1/2032	<i>For Long-Term Planning Purposes Only</i>

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 annual 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 years. Projected reserve balances and debt coverage under the proposed financial plan are also shown in Figure 3-3 and Figure 3-4 over an extended timeframe through FY 2033 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

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

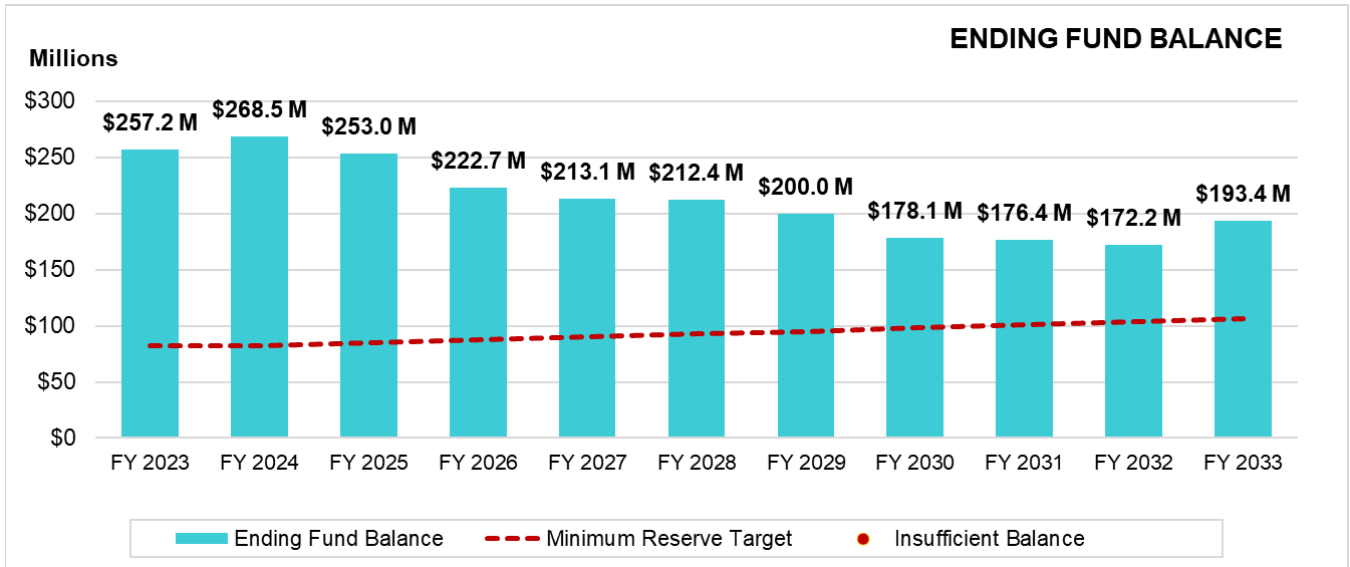
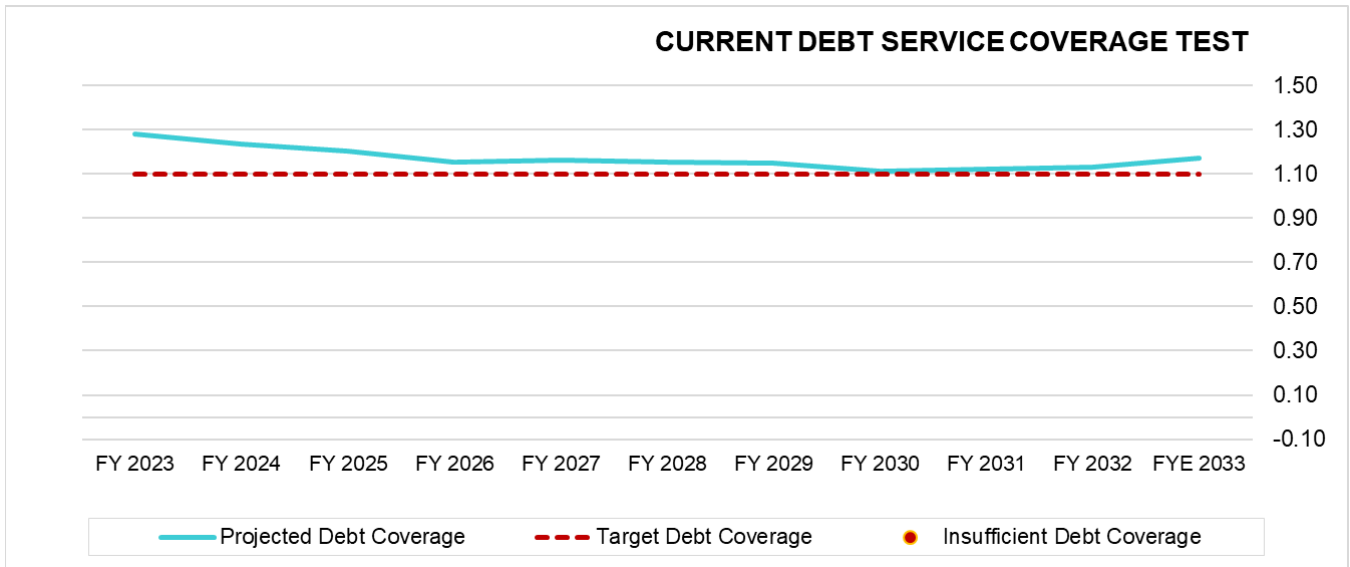


Figure 3-4: Projected Debt Coverage under Proposed Water Enterprise Financial Plan



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 cost 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 used 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 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 used 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 5% proposed revenue adjustment.

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

Line	Retail Water Rate Revenue Requirement	FY 2024
1	Revenue Requirements	
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	Subtotal	\$709,864,441
6		
7	Revenue Offsets	
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	Subtotal	(\$382,419,786)
19		
20	Adjustments	
21	Contribution to (Draw from) Reserves	\$11,265,627
22	Subtotal	\$11,265,627
23		
24	Total Retail Rate Revenue Requirement	\$338,710,281

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 the 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)	(B)	(C)	(D)	(E)	(F)	(G)
		O&M	Debt	CIP	Wholesale Revenue	Federal Bond Interest Subsidy	Indirect	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	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

*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 used 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	RETAIL RATE REVENUE REQUIREMENT	FY 2024 (\$)	Functional Allocation Basis
2	Revenue Requirements		
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	Subtotal	\$709,864,441	
7			
8	Revenue Offsets		
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	Subtotal	(\$382,419,786)	
20			
21	Adjustments		
22	Contribution to (Draw from) Reserves	\$11,265,627	CIP
23	Subtotal	\$11,265,627	
24			
25	Total Retail Rate Revenue Requirement	\$338,710,281	
26			
27	ALLOCATION OF RETAIL RATE REVENUE REQUIREMENT TO FUNCTIONS	FY 2024 (\$)	FY 2024 (%)
28	Functions		
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	Total Retail Rate Revenue Requirement	\$338,710,281	100.00%

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 used 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 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 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	Functional Allocations to Cost Components (%)									
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	Functional Allocations to Cost Components (\$)									
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	Total	\$73,071,935	\$203,940,032	\$60,143,287	\$17,593,763	\$26,574,727	\$66,678	(\$21,883,764)	(\$20,796,377)	\$338,710,281
38										
39	Preliminary Cost of Service Allocation									
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	Preliminary Cost of Service (\$)	\$68,879,148	\$192,238,177	\$56,692,331	\$16,584,252	\$25,049,898	\$62,852	\$0	(\$20,796,377)	\$338,710,281
44	Preliminary Cost of Service (%)	20.34%	56.76%	16.74%	4.90%	7.40%	0.02%	0.00%	-6.14%	100.00%

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. Units 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 2019.¹¹ 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 F). 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.

¹¹ Max Month factors were evaluated for FY 2019 and FY 2022. FY 2019 factors were used due to anomalous impacts 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	Water Meters									
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	Total		111,933	38,697	17,628	1,763	27	350	2	170,400
15										
16	Equivalent Meter Units	(Ratio)								
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	Total		124,937	102,748	67,371	8,649	311	3,926	100	308,041

*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	Fire Hydrants				
2	6-inch	111.31	8,721	970,743	64.62%
3	Subtotal		8,721	970,743	64.62%
4					
5	Private Fire Services				
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	Subtotal		10,138	531,519	35.38%
16					
17	Total		18,859	1,502,262	100.00%

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	Single Family Residential							
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	Subtotal	6,275,820	6,275,820	17,194			22,575	5,381
5								
6	Multiple-Family Residential							
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	Subtotal	10,570,253	10,570,253	28,960			36,471	7,511
10								
11	Non-Residential							
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	Subtotal	72,951,025	9,957,954	27,282			37,012	10,156
20								
21	Total	89,797,098	26,804,027	73,436			96,058	23,048

*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 gallons per minute (gpm) associated with representative fires for which the system is designed to provide capacity:

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

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	Total Fire Protection Peaking Requirements			2,005

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	Total	25,053	100.00%

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 customers with dedicated private fire service connections. Approximately 2.83% of Extra Capacity costs are reallocated to the Private Fire Service cost component (per 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)	\$338,710,281
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	Final Adjusted Cost of Service (\$)	\$68,879,148	\$192,238,177	\$46,939,258	\$16,584,252	\$33,197,511	\$1,668,313	(\$20,796,377)	\$338,710,281
6	Final Adjusted Cost of Service (%)	20.34%	56.76%	13.86%	4.90%	9.80%	0.49%	-6.14%	100.00%

4.5. Water Unit Cost Development

The next step of the COS analysis is to calculate unit costs for each cost component, which are used 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 10 (from Table 4-6 through Table 4-8). Units 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 12 monthly billing periods per year
- » **Private Fire Service:** total number of equivalent fire demand units associated with private fire service connections multiplied by 12 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	Units of Service by Customer Class							
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	Total Units of Service	26,804,027	26,648,669	23,048	2,166,456	3,696,492	6,378,232	26,804,027
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	Final Adjusted Cost of Service	\$68,879,148	\$192,238,177	\$46,939,258	\$16,584,252	\$33,197,511	\$1,668,313	(\$20,796,377)
15								
16	Unit Cost	\$2.570	\$7.214	\$2,036.611	\$7.655	\$8.981	\$0.262	(\$0.776)

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 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	Total	\$338,710,281	\$321,934,148	100.00%	100.00%	0.00%

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 and projected rates in FY 2025-FY 2028 are calculated by increasing proposed FY 2024 rates by the annual 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 (four units per month for Single Family Residential and three 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 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 Delivery, 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	\$16.64	\$15.17	\$1.47
2	3/4 inch	1.50	\$7.655	\$13.471	\$21.13	\$19.43	\$1.70
3	1-inch	2.50	\$7.655	\$22.452	\$30.11	\$27.95	\$2.16
4	1-1/2 inch	5.00	\$7.655	\$44.904	\$52.56	\$49.25	\$3.31
5	2-inch	8.00	\$7.655	\$71.847	\$79.51	\$74.81	\$4.70
6	3-inch	16.00	\$7.655	\$143.693	\$151.35	\$142.97	\$8.38
7	4-inch	25.00	\$7.655	\$224.520	\$232.18	\$219.65	\$12.53
8	6-inch	50.00	\$7.655	\$449.041	\$456.70	\$432.65	\$24.05
9	8-inch	80.00	\$7.655	\$718.465	\$726.13	\$688.25	\$37.88
10	10-inch	125.00	\$7.655	\$1,122.602	\$1,130.26	\$1,071.65	\$58.61
11	12-inch	215.00	\$7.655	\$1,930.875	\$1,938.54	\$1,838.45	\$100.09
12	16-inch	375.00	\$7.655	\$3,367.806	\$3,375.47	\$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	Total	\$1,668,313			

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	\$8.43	\$9.55	(\$1.12)
2	1-1/2 inch	2.90	\$7.655	\$0.517	\$0.731	\$8.91	\$12.45	(\$3.54)
3	2-inch	6.19	\$7.655	\$0.517	\$1.558	\$9.73	\$15.93	(\$6.20)
4	3-inch	17.98	\$7.655	\$0.517	\$4.526	\$12.70	\$25.21	(\$12.51)
5	4-inch	38.32	\$7.655	\$0.517	\$9.645	\$17.82	\$35.65	(\$17.83)
6	6-inch	111.31	\$7.655	\$0.517	\$28.018	\$36.19	\$64.65	(\$28.46)
7	8-inch	237.21	\$7.655	\$0.517	\$59.707	\$67.88	\$99.45	(\$31.57)
8	10-inch	426.58	\$7.655	\$0.517	\$107.374	\$115.55	\$151.65	(\$36.10)
9	12-inch	689.04	\$7.655	\$0.517	\$173.439	\$181.62	\$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	Single-Family Residential					
2	First 4 Units per Month	3,913,645	2,530	\$2,036.611	\$5,152,051	\$1.316
3	All Additional Units	2,362,176	2,851	\$2,036.611	\$5,807,080	\$2.458
4	Subtotal	6,275,820	5,381		\$10,959,131	
5						
6	First 3 Units per Dwelling Unit per Month	6,760,988	3,909	\$2,036.611	\$7,960,475	\$1.177
7	All Additional Units	3,809,265	3,602	\$2,036.611	\$7,336,693	\$1.926
8	Subtotal	10,570,253	7,511		\$15,297,168	
9						
10	Commercial, Industrial, and General Uses*					
11	For All Units of Water	9,802,596	10,156	\$2,036.611	\$20,682,959	\$2.110
12						
13	Untreated Water Service					
14	For All Units of Water	155,358	N/A	N/A	N/A	N/A
15						
16	Excluded from COS**					
17	All Other Water Use	62,993,071	N/A	N/A	N/A	N/A
18						
19	Total	89,797,098	23,048		\$46,939,258	

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

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	Fixed Monthly Service Charges (by Meter Size)						
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	Private Fire Fixed Monthly Service Charges (by Service Size)						
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	Variable Charges (per CCF)						
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 with proposed FY 2024 monthly water bills at varying levels of monthly water use. These examples assume meter sizes of 5/8-inch for single family residential and non-residential customers. Multiple-family residential bills assume a one-inch meter and ten dwelling units. 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. Note that all bills exclude Drought Surcharges to provide a direct comparison of current versus proposed rates, even though Drought Surcharges equal to 5% of Variable Charges were effective through April 2023 before being formally rescinded effective May 2023.

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

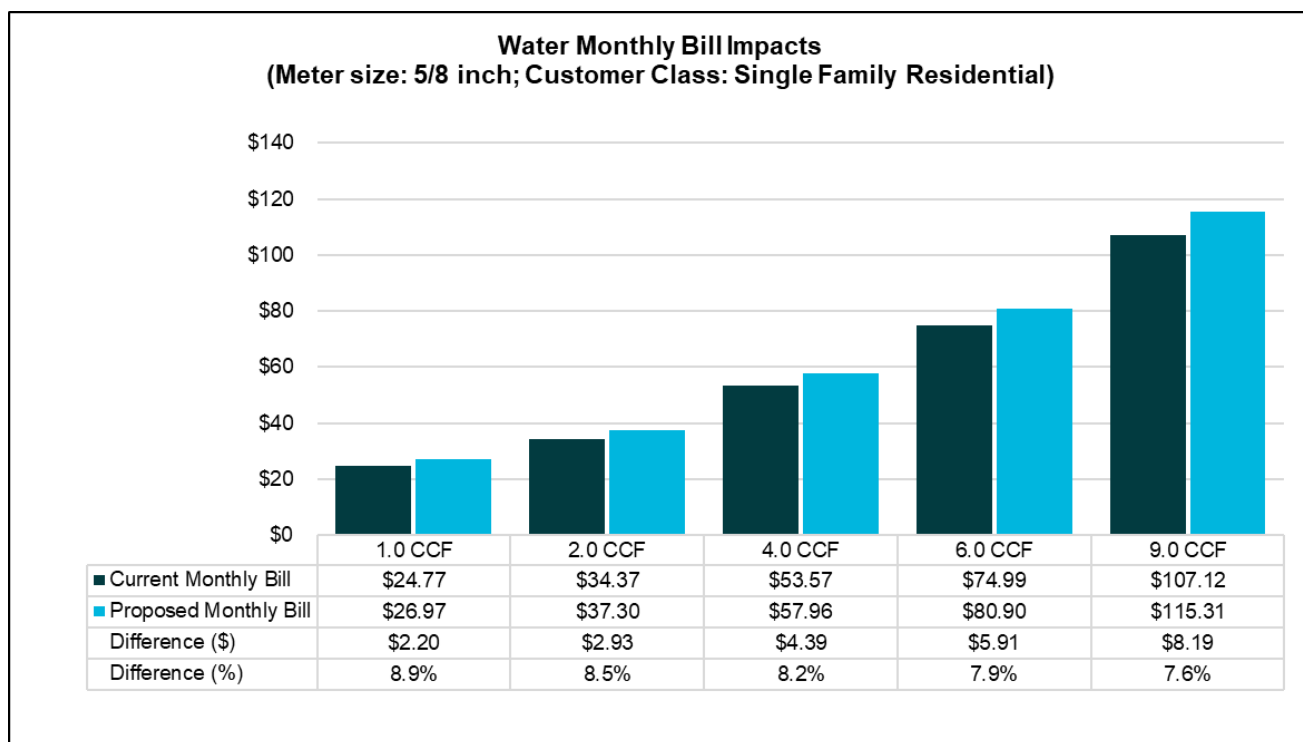


Figure 5-2: Sample Multiple-Family Residential Water Monthly Bill Impacts (FY 2024)

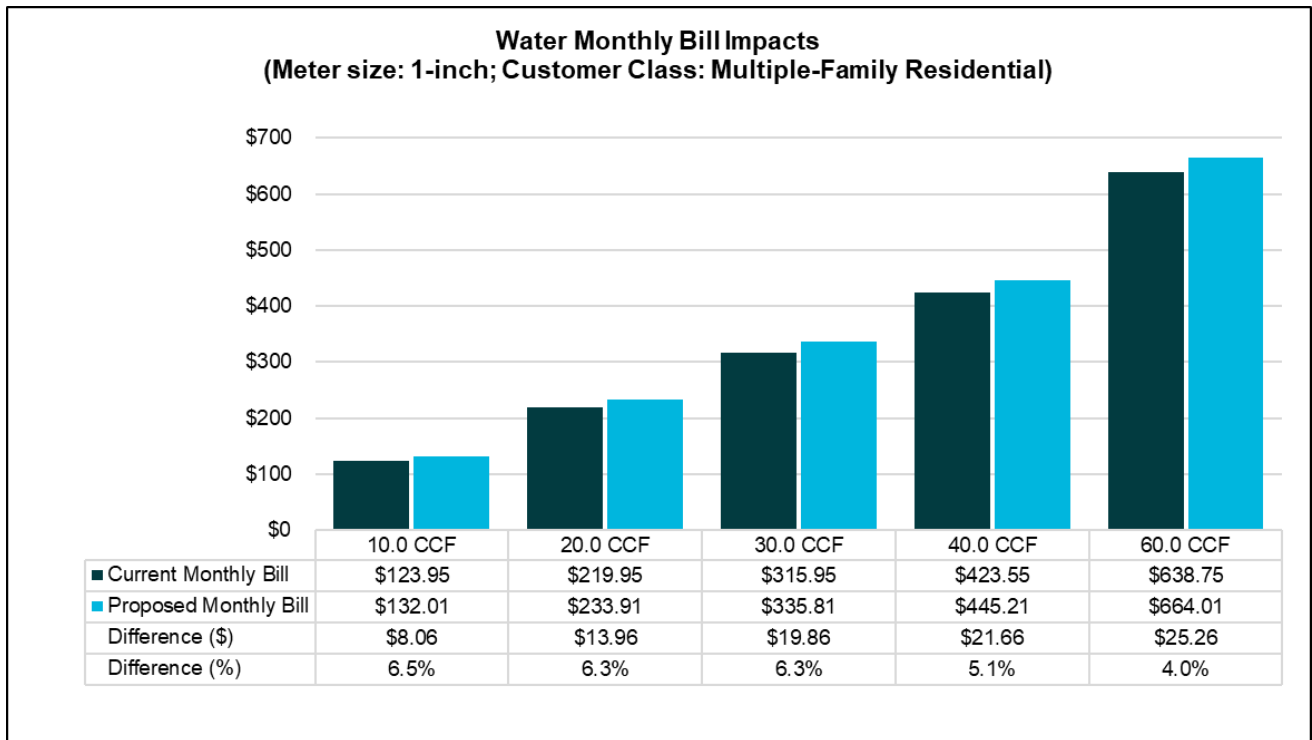
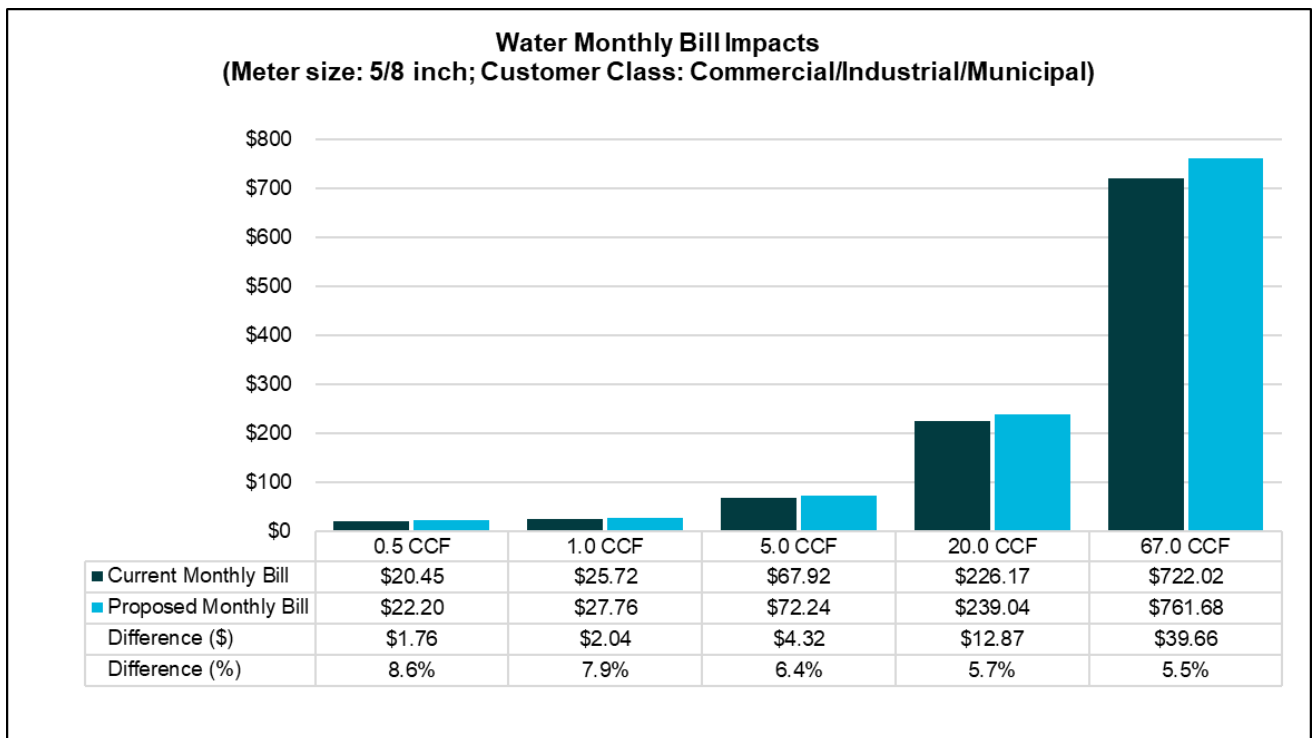


Figure 5-3: Sample Non-Residential Water Monthly Bill Impacts (FY 2024)



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 the next ten fiscal years (through FY 2033). Note that the financial plan projections presented in the body of this report extend through the next five fiscal years (through FY 2028). However, graphical representations of the financial plan are presented for the period FY 2023 – FY 2033. 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 where possible, which is updated on an annual basis as part of staff's ongoing 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 a 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, 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 recovered 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 therefore 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 100 CCF of discharge that vary based on whether the customer is residential or non-residential
- » **Chemical Oxygen Demand (COD)** per pound in 100 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 100 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 100 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 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	Residential Wastewater	
2	Monthly Service Charge	\$5.21
3	Volume per Discharge Unit (CCF)	\$15.97
4		
5	Non-Residential Wastewater	
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: 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 a separately identified amount per CCF and dollars per pound (\$/lb) 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 11 strength loading groups based on their Standard Industrial Classification (SIC) Code. For example, a residential hotel with no eating facilities with a SIC Code of 7014 is assigned to strength loading Group 2. Similarly, a nursing facility with a 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 Units of Service (Demand Forecast)

Table 6-4 through Table 6-8 summarize the projected wastewater discharge volumes and strength loadings for 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. These unit 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 return to historical norms for each type of customer.
- **Projected Discharge Strength Loadings (Table 6-6 through Table 6-8):** Projected strength loading is 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	Total Accounts		174,222	174,222	174,222	174,222	174,222	174,222
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	Total Accounts		174,222	174,222	174,222	174,222	174,222	174,222

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	Total Discharge		21,488,357	21,745,424	22,054,698	22,427,172	22,189,281	22,029,846
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	Total Accounts		21,488,357	21,745,424	22,054,698	22,427,172	22,189,281	22,029,846

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	Total COD (lbs)		93,060,758	94,288,494	95,625,885	97,237,194	96,202,893	95,508,868
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	Total Accounts		93,060,758	94,288,494	95,625,885	97,237,194	96,202,893	95,508,868

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	Total TSS (lbs)		36,012,829	36,322,352	36,842,300	37,467,919	37,074,090	36,811,182
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	Total Accounts		36,012,829	36,322,352	36,842,300	37,467,919	37,074,090	36,811,182

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	Total O/G (lbs)		11,615,859	11,775,042	11,941,614	12,142,379	12,013,363	11,926,829
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	Total Accounts		11,615,859	11,775,042	11,941,614	12,142,379	12,013,363	11,926,829

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 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	Total	\$352,945,740	\$356,946,933	\$361,870,344	\$367,799,557	\$364,017,407	\$361,483,646

Projected Wastewater 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 providing wastewater collection services to local sewer utility districts (Line 7), interest income (Line 8), and Federal Bond Interest Subsidy revenue (Line 9). Programmatic Revenue includes revenues from specific Wastewater Enterprise programs (Lines 15 – 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	Other Retail Charges						
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	Total Non-Rate Operating Revenue	\$78,709	\$86,638	\$95,511	\$105,853	\$115,223	\$125,852
5							
6	Operating Revenues						
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	Total Non-Rate Operating Revenue	\$17,587,693	\$18,815,775	\$20,419,710	\$21,488,412	\$22,831,774	\$24,331,938
13							
14	Programmatic Revenues						
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	Total Programmatic Revenue	\$4,212,828	\$4,366,760	\$4,529,247	\$4,715,961	\$4,889,862	\$5,087,911
20							
21	Non-Debt Capital Revenues						
22	Capacity Charges	\$5,695,000	\$6,329,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000
23	Total Non-Debt Capital Revenue	\$5,695,000	\$6,329,000	\$5,695,000	\$5,695,000	\$5,695,000	\$5,695,000
24							
25							
26	TOTAL REVENUE	\$396,920,863	\$437,648,873	\$460,796,192	\$508,434,886	\$552,204,836	\$601,798,753

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	Annual CIP Expenditures	\$747,452,023	\$705,869,024	\$128,354,463	\$956,662,612	\$869,919,825	\$135,862,082
5	Cumulative CIP Expenditures	\$747,452,023	\$1,453,321,047	\$1,581,675,510	\$2,538,338,122	\$3,408,257,947	\$3,544,120,029

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	Total	\$104,017,873	\$106,234,104	\$124,721,371	\$153,214,399	\$210,966,492	\$236,343,542

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 Expenses¹² 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. SFPUC staff conducted an analysis of actual versus budgeted Wastewater 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.

¹² 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 6-13: 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%

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

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1	O&M Expenses (Before Execution Factors)						
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	Subtotal O&M	\$201,667,499	\$210,774,252	\$217,261,057	\$223,958,038	\$230,872,185	\$238,010,728
9							
10	Programmatic Expenses						
11	Programmatic Expenses	\$7,736,917	\$7,766,551	\$7,807,711	\$7,850,106	\$7,893,772	\$7,938,749
12	Subtotal Programmatic	\$7,736,917	\$7,766,551	\$7,807,711	\$7,850,106	\$7,893,772	\$7,938,749
13							
14	Total O&M before Execution Factors	\$209,404,416	\$218,540,803	\$225,068,768	\$231,808,144	\$238,765,958	\$245,949,477
15							
16	O&M Expenses Execution Factors						
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	Programmatic Expenses Execution Factors						
25	Programmatic Expenses	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
26							
27	O&M Expenses (After Execution Factors)						
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	Subtotal O&M	\$193,855,121	\$202,771,615	\$209,004,879	\$215,439,933	\$222,083,483	\$228,942,463
35							
36	Programmatic Expenses						
37	Programmatic Expenses	\$7,736,917	\$7,766,551	\$7,807,711	\$7,850,106	\$7,893,772	\$7,938,749
38	Subtotal Programmatic	\$7,736,917	\$7,766,551	\$7,807,711	\$7,850,106	\$7,893,772	\$7,938,749
39							
40	Total O&M after Execution Factors	\$201,592,038	\$210,538,166	\$216,812,590	\$223,290,039	\$229,977,256	\$236,881,212

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 59-62) are based on the 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 66-69) is shown based on the “Indenture Test,” which allows for unappropriated fund balance to contribute toward debt service coverage. Additionally, net revenues used to calculate debt coverage (Table 6-15, Line 67) exclude specific revenues and expenses, which are legally restricted from being used to pay for debt service or not considered SFPUC operating expenses. This is in alignment with SFPUC staff’s 10-Year Financial Plan. 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 is 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 therefore 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

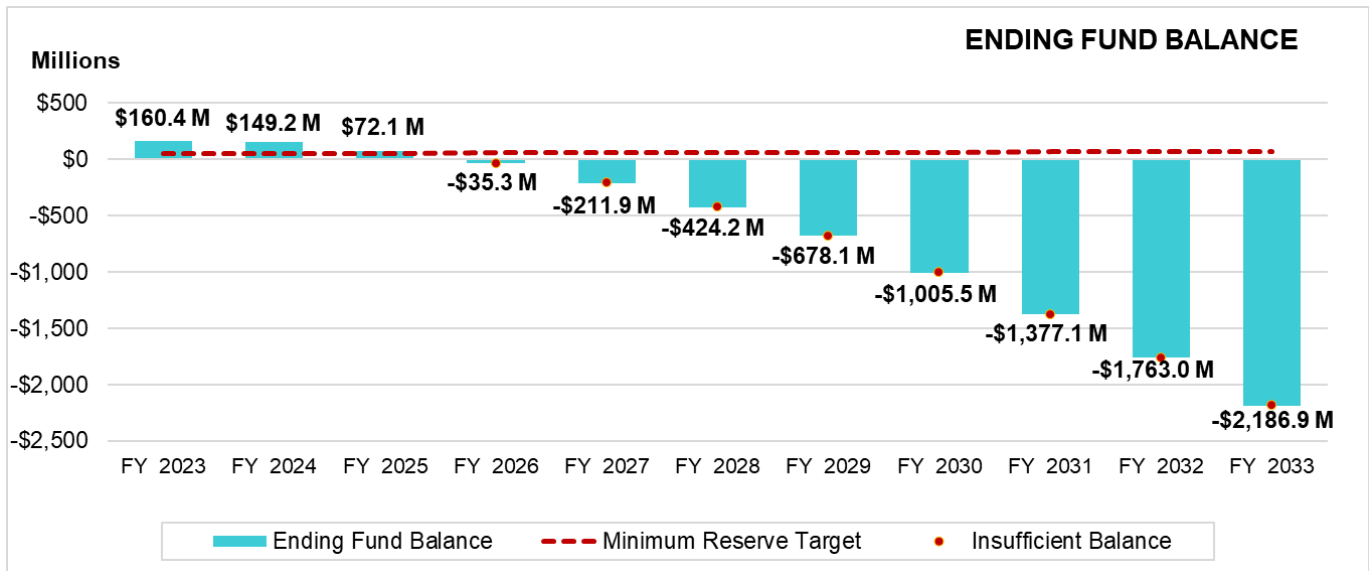
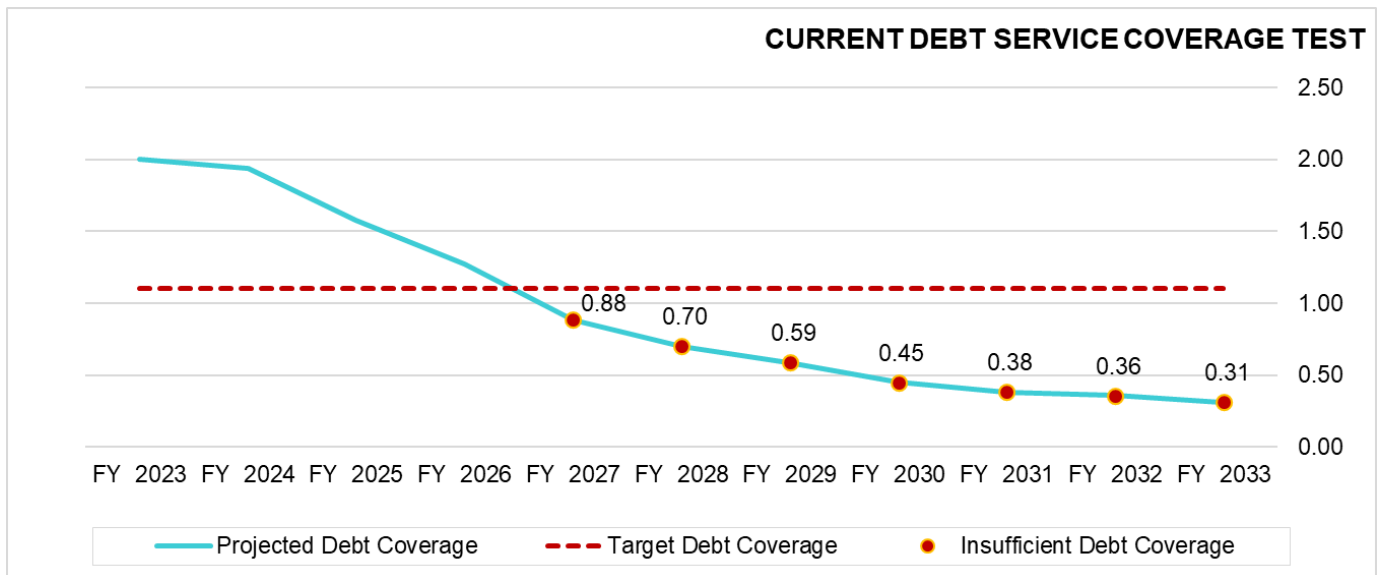


Figure 6-2: Projected Debt Coverage Under Status Quo Wastewater Enterprise Financial Plan



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 6-16. The proposed revenue adjustments ensure the Wastewater Enterprise meets all its financial policies throughout the entire ten-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	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	<i>For Near-Term Planning Purposes Only</i>
5	FY 2028	10.0%	7/1/2027	<i>For Near-Term Planning Purposes Only</i>
6	FY 2029	10.0%	7/1/2028	<i>For Long-Term Planning Purposes Only</i>
7	FY 2030	9.0%	7/1/2029	<i>For Long-Term Planning Purposes Only</i>
8	FY 2031	9.0%	7/1/2030	<i>For Long-Term Planning Purposes Only</i>
9	FY 2032	5.0%	7/1/2031	<i>For Long-Term Planning Purposes Only</i>
10	FY 2033	5.0%	7/1/2032	<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 wastewater 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 ten-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

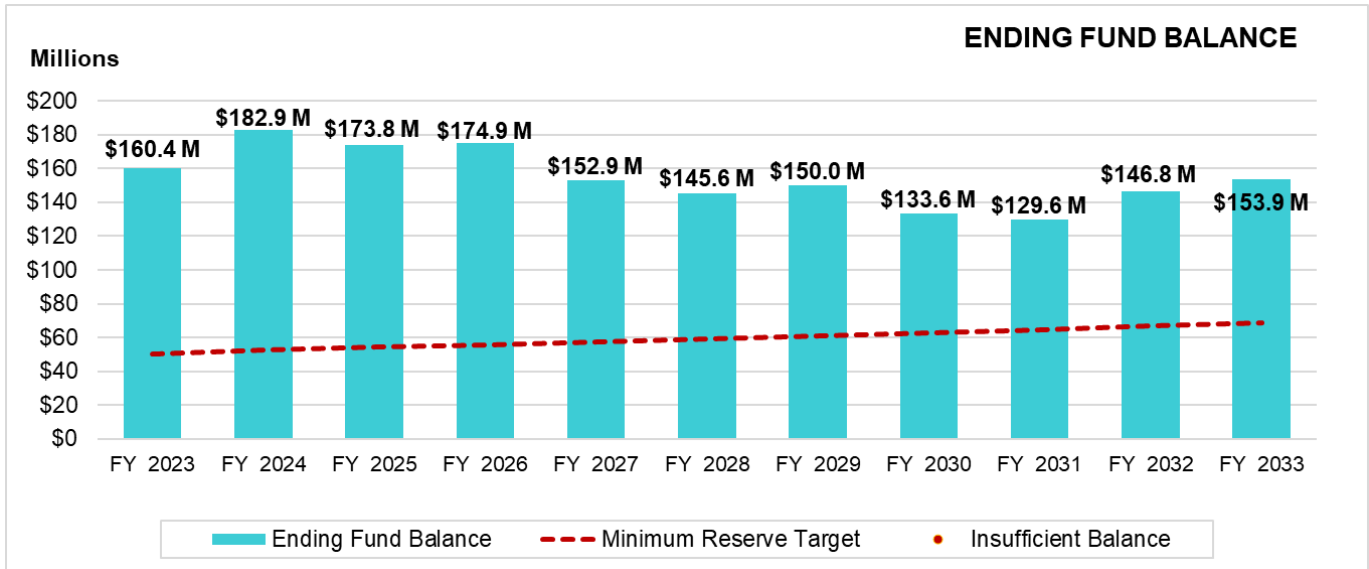
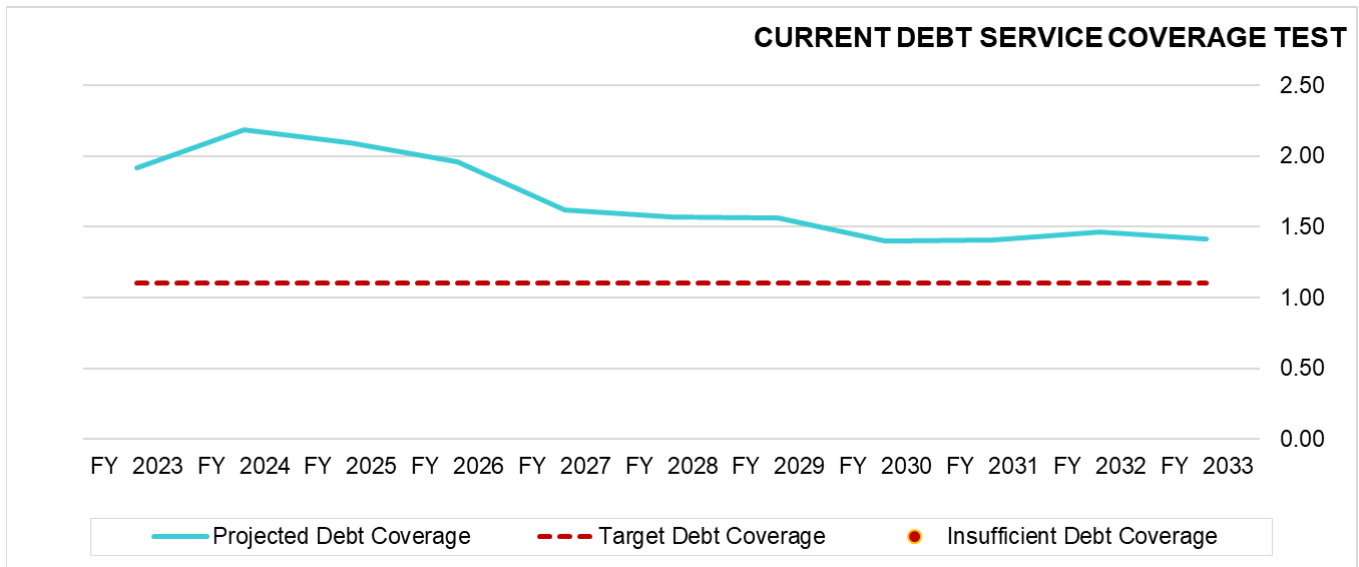


Figure 6-4: Projected Wastewater Enterprise Debt Service Coverage



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).

As part of the cost of service analysis in this study, sewer costs¹³ were split between the wastewater related costs for sanitary sewer service and stormwater related costs for the collection and treatment of runoff from properties. Currently, stormwater-related costs are recovered as part of wastewater rates. By splitting these costs, SFPUC will be able to enhance the equity in their rate structure by establishing a stormwater charge in addition to the wastewater rates. Under this new methodology, all customers will be billed for the total flows that they contribute to SFPUC's combined sewer system.

7.1. Sewer Cost of Service Methodology

The framework and methodology used 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 class's 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 COD and 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.

¹³ The term sewer is used when referring to both wastewater and stormwater expenses, revenues, and charges.

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 7-13) 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 9% proposed revenue adjustment.

Table 7-1: FY 2024 Wastewater Enterprise Revenue Requirement

Line	Category	Operating (O&M)	Capital	Total
1	Revenue Requirements			
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	Total	\$210,538,166	\$198,272,104	\$408,810,270
6				
7	Less: Revenue Offsets			
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	Total Revenue Offset	\$42,129,148	\$0	\$42,129,148
14				
15	Adjustments			
16	Change in Cash Reserves		\$22,509,603	\$22,509,603
17	Total Adjustments	\$0	\$22,509,603	\$22,509,603
18				
19	Revenue Requirement from Rates	\$168,409,018	\$220,781,707	\$389,190,725

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 are:

- » **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 surface water runoff that is generated from both permeable and impermeable surfaces during wet weather events (rainfall). Stormwater enters the sewer collection system and is conveyed to the SFUC's wastewater treatment plants
- » **General Collections:** relating to the 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 \$210,538,166 (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. Details of the cost functionalization are shown in Appendix I.

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 (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 12 past revenue bond issues, seven state revolving fund loans, and two existing loans associated with WIFIA. 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 similar to the overall outcome of the O&M cost functionalization process. The Drought Rate Offset was functionalized based on the combined functionalization of both O&M and capital costs. Table 7-2 shows the functional allocation percentages for the FY 2024 revenue requirement.

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

Line	(A) Function	(B) O&M	(C) Debt	(D) Cash-Funded Capital	(E) 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	RETAIL REVENUE REQUIREMENT	FY 2024 (\$)	Functional Allocation Basis
2	Revenue Requirements		
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	Subtotal	\$408,810,270	
7			
8	Revenue Offsets		
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	Subtotal	\$42,129,148	
22			
23	Adjustments		
24	Contribution To (Draw Down From) Reserves	\$22,509,603	CIP
25	Subtotal	\$22,509,603	
26			
27	Total Retail Revenue Requirement	\$389,190,725	
28			
29	ALLOCATION OF RETAIL RATE REVENUE REQUIREMENT TO FUNCTIONS	FY 2024 (\$)	FY2024 (%)
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 shows the consolidated functionalization of the FY 2024. The FY 2024 O&M revenue requirement allocated to each function in Table 7-4 was determined by multiplying the O&M revenue requirement show in Line 5 of Table 7-1 by the percentage allocations summarized in Column B of Table 7-2. These same percentage allocations can be seen in Line 5 of Table 7-4.

The FY 2024 capital cost revenue requirement allocated to each function in Table 7-4 was determined by multiplying the capital cost revenue requirements shown in Lines 3 and 4 of Table 7-1 by the percentage allocations shown in Columns C and D of Table 7-2, respectively. The change in cash reserves is being used to cash fund capital projects and is also multiplied by Column D. The outcome of this capital cost allocation process, when expressed on a percentage basis, can be seen in Line 13 of Table 7-4.

The FY 2024 non-rate revenue offset allocated to each function in Table 7-4 was determined by multiplying the non-rate revenue offset shown in Line 13 of Table 7-1 by the percentage allocations summarized in Column E of Table 7-2. These same percentage allocations can be seen in Line 2 of Table 7-4.

The final revenue requirement of \$389,190,725 shown in Column N, Line 25 of Table 7-4 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	(A) Component	(B) Headworks	(C) Primary Treatment	(D) Secondary Treatment	(E) Disinfection / Discharge	(F) Solids Handling	(G) Pumping / Lift Stations	(H) Stormwater	(I) General Collections	(J) Interceptors	(K) Customer Service	(L) Bureau	(M) Indirect	(N) Total
1	O&M Including Execution Factors													
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	3.54%	3.50%	8.08%	5.03%	16.72%	8.29%	4.06%	11.58%	0.00%	0.00%	17.21%	21.99%	100.00%
6														
7	Capital Costs													
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	2.23%	0.99%	1.74%	2.21%	40.14%	6.22%	3.82%	23.65%	18.95%	0.07%	0.00%	0.00%	100.00%
14														
15	Gross Revenue Requirement	\$12,384,410	\$9,553,358	\$20,848,933	\$15,470,543	\$123,826,468	\$31,170,189	\$16,973,632	\$76,578,461	\$41,831,958	\$147,268	\$36,237,828	\$46,296,826	\$431,319,873
16	% of Total	2.87%	2.21%	4.83%	3.59%	28.71%	7.23%	3.94%	17.75%	9.70%	0.03%	8.40%	10.73%	100.00%
17														
18	Revenue Requirement Offsets													
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	3.24%	2.93%	6.63%	4.38%	22.09%	7.81%	4.00%	14.34%	4.34%	0.02%	13.27%	16.95%	100.00%
26														
27	Net Revenue Requirement	\$11,018,555	\$8,320,215	\$18,056,463	\$13,623,641	\$114,521,884	\$27,878,971	\$15,287,355	\$70,536,203	\$40,002,806	\$140,828	\$30,648,196	\$39,155,608	\$389,190,725
28	% of Total	2.83%	2.14%	4.64%	3.50%	29.43%	7.16%	3.93%	18.12%	10.28%	0.04%	7.87%	10.06%	100.00%

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 for storm runoff generated from properties, as well as strength loading components for COD, TSS, and oil and OG. Considering that SFPUC operates a combined sewer system that treats both wastewater and stormwater, the cost allocations were conducted in two steps.

- First, the split of wet weather to dry weather flows were evaluated; this is the first step of splitting costs between wastewater related expenses and stormwater related costs.
- Second, the remaining dry weather related expenses were allocated to cost causation components. This provided 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, the stormwater related portion of the sewer cost of service has been calculated to enable the split of the sewer rates into wastewater rates and stormwater charges. To allocate costs between wastewater and stormwater service, the projected volume of dry weather flows (customer wastewater discharges and dry weather infiltration) and stormwater flows 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 – FY 2022:

Identification of Wet Weather Days (Line 1): 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 inches from recorded weather data (FY 2021).

Estimation of Customer and Non-Customer Treatment Plant Influent (Lines 8 – 11): This shows the estimate of customer and non-customer flows to the SFPUC's treatment plants. Approximately 16,704 million gallons (67.4%) of influent flows at the wastewater treatment plans are estimated to be associated with customer wastewater discharges (Line 10) and 8,093 million gallons (32.6%) of the flows are estimated to be from non-customer sources (Line 11).

Estimation of Non-Customer Wet Weather Flows and Dry Weather Infiltration (Lines 13 – 19): Of the non-customer influent of 8,093 million gallons (Line 11), 4,353 million gallons (17.6%) is estimated to be from flows on wet weather days and 3,740 (15.1%) is associated with dry weather infiltration (Line 17).

Flows on Wet Weather Days Excluding Customer Flows (Lines 21 – 24): In order to isolate infiltration on wet weather days -which includes some daily infiltration and pure stormwater flows- the customer flows on wet weather days of 1,368 (Line 23) is subtracted from the total wet weather flow of 4,352 million gallons (Line 22). This results in wet weather infiltration (daily infiltration and stormwater flows) of 2,984 million gallons (Line 24).

Determination of Pure Stormwater Flows (Lines 26 – 31): 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 stormwater.

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

Line	(A) Metric	(B) Comments	(C) FY 2019 - 20	(D) FY 20-21	(E) FY 2021 - 22	(F) Average
1	Wet Weather Days	Oceanside Plant or Weather Station Data	28	28	34	
2						
3	Customer Flows on Wet Weather Days					
4	Annual Customer Flows (Million Gallons)	From SFPUC 10-Year Plan	17,994.0	16,282.6	15,837.4	16,704.6
5	Customer Average Daily Flows (Million Gallons per Day)	Line 4 Converted to Millions of Gallons per Day	49.3	44.6	43.4	45.8
6	Total Annual Customer Flows on Wet Weather Days (Million Gallons)	Line 5 * Line 1	1,380.4	1,249.1	1,475.3	1,368.2
7						
8	Treatment Plant Influent					
9	Total Annual Plant Influent (Million Gallons)	All Forms of Treatment Plant Influent	26,221.9	23,170.2	25,001.7	24,797.9
10	Annual Customer Flows (Million Gallons)	From Line 4	17,994.0	16,282.6	15,837.4	16,704.6
11	Total Annual Non-Customer Flows (Million Gallons)	Line 9 - Line 10	8,227.9	6,887.6	9,164.3	8,093.3
12						
13	Wet Weather Flows Received at Treatment Plants					
14	Annual Wet Weather Flow (Million Gallons)	Total Plant Influent on Wet Weather Days	3,215.6	3,694.3	6,147.7	4,352.5
15						
16	Dry Weather Infiltration on Wet Weather Days					
17	Dry Weather Infiltration (Million Gallons per Day)	Line 11 - Line 14	5,012.3	3,193.3	3,016.7	3,740.8
18	Dry Weather Infiltration on Wet Weather Days (Million Gallons)	Line 18 / 365	13.7	8.7	8.3	10.2
19		Line 18 * Line 1	384.5	245.0	281.0	303.5
20						
21	Flows on Wet Weather Days Excluding Customer Flows					
22	Annual Wet Weather Flow (Million Gallons)	Line 14	3,215.6	3,694.3	6,147.7	4,352.5
23	Less: Customer Flows on Wet Weather Days (Million Gallons)	Line 6	1,380.4	1,249.1	1,475.3	1,368.2
24	Flows on Wet Weather Days Excluding Customers (Million Gallons)	Line 22 - Line 23	1,835.3	2,445.2	4,672.4	2,984.3
25						
26	Pure SW Flows (Flows Net of Customer and Dry Weather Infiltration)					
27	Flows on Wet Weather Days Excluding Customers (Million Gallons)	Line 24	1,835.3	2,445.2	4,672.4	2,984.3
28	Less: Dry Weather Infiltration on Wet Weather Days (Million Gallons)	Line 19	384.5	245.0	281.0	303.5
29	Pure Stormwater Flows on Wet Weather Days (Million Gallons)	Line 27 - Line 28	1,450.8	2,200.3	4,391.4	2,680.8
30						
31	Pure Stormwater Flows as a % of Treatment Plant Influent	Line 29 / Line 9	5.53%	9.50%	17.56%	10.81%

Allocation to Cost Causation Components

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 OG). These are the Design Basis Cost-allocation Method and the Functional Cost Allocation Method.¹⁴ The Design Basis Cost-Allocation Method (sometimes called the Capital Cost Allocation Method) is used in this study to proportionally allocate capital costs based on industry design standards for each functional area to cost components based on the relative costs borne by the utility to construct or repair capital assets¹⁵. The Functional Cost Allocation Method (sometimes called the Operation and Maintenance Cost Allocation Method) allocates O&M functional costs based on the drivers of costs as they relate to flows and loads.

The allocations presented in the 2018 Rate Study served as the starting point for this analysis. The allocations in the 2018 Rate Study were based on a 2014 functional allocation completed by MME for the rate study prior to the 2018 Rate Study. The allocations were then updated based on the changes that have been made to the facilities and customer uses that have impacted the combined sewer system¹⁶ over the last ten years. The SFPUC is in the process of undergoing major wastewater improvements based on the needs identified in the Sewer System Improvement Program (SSIP). Where appropriate, the percentages allocated to the flow and strength components were reevaluated considering these on-going capital improvements and customer use changes.

The allocations to each cost causation component were conducted in a multi-step evaluation. First costs were allocated more generally to flows and loads. Flows were distributed between wastewater (dry flows) and stormwater (wet flows), and loads were split between COD, TSS, and OG. To allocate the flow component of operating costs and non-rate revenues between dry flows and wet flows, the total allocation to flow for each function was multiplied by the wet and dry weather flow allocation that was calculated in the previous section (Table 7-5). The flow component for capital costs as well as the cost components were based on the specific design standards and operations of each functional group.

The following sections provide a description of each functional area and a summary of the considerations that went into assigning the allocation factors for each function to cost causation component. The final allocation factors used in the analysis are presented in Table 7-6 through Table 7-8.

Headworks:

The Headworks is the first treatment process in the wastewater treatment plant. The Headworks has several treatment functions. These include screening grit, rags and large debris, flow metering, and typically influent pumping. The Headworks are designed to accommodate all influent flow. Following the Design Basis Cost-Allocation Method for capital cost allocations, the percentage allocated to flow reflects the expected capital expenditures for accommodating flow. Headworks system components such as bar screens and grit collection

¹⁴ Reference: *Financing and Charges for Wastewater Systems*, Water Environment Federation Manual of Practice, No. 27 4th Edition, 2018.

¹⁵ The following manuals were referenced for consideration of design standards and industry best practices ; 1) *Design of Municipal Wastewater Treatment Plants*, 5th Edition, Joint Publication: Water Environment Foundations (WEF), Manual of Practice (MOP) No.8, 2) *ASCE Manuals and Reports on Engineering Practice No.76.*, and 3) *Wastewater Engineering Treatment and Resource Recovery*, 5th Edition, Metcalf & Eddy | AECOM, McGraw-Hill, 2014.

¹⁶ In the last ten years, conservation efforts have successfully reduced indoor water use. Consequentially wastewater has become more concentrated, resulting in a greater allocation of costs from flows to loads.

facilities are TSS based, so this proportionate share of the cost allocation of the headworks is appropriately based on TSS. The 2018 values are 86.5% for flow and 17.5% for TSS. Since that time, the Headworks has been upgraded to include a new Head Cell grit screening system and a new odor control system. The Headworks is where the odors and hazardous air emissions are first released in the treatment process. Air and odor emissions come from the strength components (COD, TSS, and OG). The strength components of COD and OG were not included in the 2018 allocations but have been added here to reflect Headworks screening and air emissions and odor control. Percentages of 2% for COD, 14% for TSS, and 1% for O/G that reflect the estimated capital expenditures spent on each strength component at the Headworks. A similar breakdown can be expected of the O&M expenditures.

The Headworks are sized to accommodate peak wet weather flows. Further, the SFPUC headworks includes back-up pumps in case of pump failure. These pumps also convey wet weather flows. The proportion of costs associated with the wet weather flows allocated towards the sizing and back-up pumps is 10% of total flows. The resulting cost allocation for wet weather is roughly 8% of the total allocation for the Headworks (10% of the total allocation to flow). Historical wet weather and dry weather flow splits are used to allocate the flow component of the O&M costs between them using the Functional Cost Allocation Method.

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 oil and grease is floated to the top and skimmed off. As previously discussed in the example, flows determine overall sizing and volume of the primary settling tanks because the tanks must be sized large enough to slow the velocity of the wastewater flow and to settle out the suspended solids.

Approximately 75% of capital cost for primary treatment is typically attributed to the settling tanks, so a 75% allocation is given to flow. The purpose of the primary tanks is to settle out and skim off the solids (i.e., TSS, and OG). Therefore, the costs for the rakes and skimmers and associated sludge pumps can be attributable to strength. Costs for the racks/skimbers/sludge pumps are typically 20% of the total capital cost of the primary tanks. In addition, the primary tanks at both the Southeast Plant and the Oceanside Plant are covered to contain odors. An odor control system treats the air emissions associated with the COD and OG strength components. This study has similar allocations to the 2018 study, reflecting odor control improvements, and resulting in an allocation of 75% flow, 20% TSS, 2% COD, and 3% O/G.

Primary tanks are typically sized with some allowance to accommodate peak wet weather flows. Typical design ratios for overflow rates for dry weather versus wet weather flows in primary tanks are approximately 1,200 gallons per day per square foot (gpd/sf) versus 1,400 gpd/sf. This is an increase of approximately 10% and is the basis of the wet weather allocation.

The O&M costs for the primary process include electrical power for sludge raking (TSS) and primary sludge pumping (TSS), chemical addition (TSS), and chemical and electrical use for the odor control facilities (COD). Related operational costs for handling flow include the operation and maintenance of the gates and valves and associated SCADA and control system. In addition, the primary tanks are designed to remove roughly 70% of the TSS and 30% of COD. The 2018 study reported an O&M allocation of costs of 40% flow and 60% TSS for primary treatment. This cost allocation is updated to reflect odor control and improvements to sludge raking resulting in an allocation of 55% TSS, 5% COD, and 40% to flow. Finally, historically

recorded wet weather and dry weather flows are used to allocate the flow component of the O&M costs between wet and dry weather in this analysis (Table 7-5).

Secondary Treatment:

Secondary treatment is where biodegradable organic matter is removed. The secondary treatment process requires aeration of the flow in one set of basins followed by a second set of clarification 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 tanks, which is the first set of secondary treatment basins, and the aeration equipment costs are directly controlled by the organic loading and the COD associated with that organic loading and flow. Structural and equipment costs (i.e., channels and gates) are attributable to the flow component. The flow component must also be managed in this process to allow for the required hydraulic retention time. Therefore, the Aeration Basins are sized based on hydraulic retention time (HRT), solids retention time (SRT), and oxygen feed concentrations to meet the COD design loading treatment requirement. The costs for the aeration basins in the 2014 Study are 95% derived from COD and 5% derived from flow. This study maintains this allocation.

The aeration basins are followed by the secondary clarifiers. The secondary clarifiers are the greatest expense of the secondary system after the aeration basins. The secondary clarifiers are designed primarily based on flow, as their purpose is to settle the TSS out the mixed liquor. The secondary sludge pumping equipment is sized for the waste activated sludge and return activated sludge (COD & OG). The 2014 allocations were 32% COD, 8% TSS, and 60% flow. This study maintains these allocations, with the addition of OG to reflect the proportional cost contributions of OG from the sludge pumping equipment.

The secondary allocation is a combination of the proportional costs of the aeration process and secondary clarifiers. The ratio of costs between the aeration system and the secondary clarifiers, including sludge pumping, is estimated to be roughly 60% and 40% respectively. The blended cost allocation for the secondary process, including the aeration basins and the clarifiers, is 25% to flow, 70% to COD, 3% to TSS, and 2% to OG¹⁷. This results in an increase from the 2018 study in the strength allocations, reflecting water conservation efforts. A similar breakdown can be expected of the O&M expenditures.

Wet weather flows do not significantly impact the sizing of the secondary treatment process due to several reasons. First, the design of the secondary treatment process is such that a wide range of flows, including peak flows due to diurnal variability, is accommodated without significant cost adjustments. The secondary system is also designed with the ability to take tankage out of service for routine maintenance, so the additional capacity with all tanks in service can also be deployed during wet weather conditions. Also, the SFPUC wet weather flows are dampened in the Storage/Transport system. Therefore, no allowance is given to wet weather flows for the secondary system for the Capital Cost Allocation. Historically recorded wet weather and dry weather flows are used to allocate the flow component of the O&M costs between wet and dry weather in this analysis (Table 7-5).

¹⁷ Example calculation for COD: $0.6 \times 95\% + 0.4 \times 32\% = 70\%$

It is recommended that consideration be given to separating out the aeration and secondary clarification processes during the next scheduled rate study due to their relatively different rationale and cost allocation results. Nutrients are an increasing regulatory concern in the Bay, consequently putting more of a focus on the secondary treatment system operation.

Solids Handling/Digesters:

Solids that are settled from both the primary and secondary clarifiers are treated in the solids handling and treatment facilities. Both the Oceanside Plant and the Southeast Treatment Plant use sludge digestion to handle and to treat the biosolids. 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 overall solids handling system includes primary and secondary sludge thickening, CAMBI Digestion Process (SEP), Conventional Anaerobic Digestion (OSP), Sludge Dewatering, Truck Transfer Station, and Trucking. These facilities all are designed based solely on the solids loadings as measured by COD, TSS, and OG. The solids handling facilities are not significantly impacted by wastewater flow. Therefore, the capital cost allocation using the Design Basis Cost Allocation Method for the solids handling/digesters is 100% to strength. The O&M cost allocation using the Functional Cost Allocation Method is also 100% to strength. The percentages of 55% COD, 40% TSS, and 5% OG reflect the allocations that are reasonably assigned to the solids handling/digester system to capital and O&M cost expenditures based on the influent wastewater characteristics.

Disinfection and Effluent Discharge:

Disinfection is the final treatment step before discharging the treated wastewater into receiving waters, or in the case of the Southeast Treatment Plant, San Francisco Bay. The Oceanside Treatment Plant does not disinfect due to ocean discharge. Ultraviolet light (UV) disinfection is used at the Southeast Treatment Plant. Average day monthly flows are the parameter for determining the size of UV system to achieve the required contact time. Therefore, both capital and O&M cost allocations are attributed 100% to flow. The hypochlorite feed system handles peak wet weather flows. Historically recorded wet weather and dry weather flows are used to allocate the flow component of the O&M costs between wet and dry weather.

Pumping/Lift Stations:

Lift and pumping stations convey wastewater and storm water from one area to another. Sizing and design are based solely on flow. Therefore, flows are the basis for both the capital and O&M allocation costs for pumping/lift stations. The capacity of the pumping/lift stations is based on the design 5-year wet weather event. Historically recorded wet weather and dry weather flows are used to allocate the flow component of the O&M costs between wet and dry weather.

Collection System:

The collection system is a system of underground pipes that move sewage to the headworks of the treatment plants. The sizing of the collection system piping, pumping, and other system components is based solely on flow. Therefore, 100% of the capital cost allocation is based on flow. The pipe sizes are increased to accommodate peak flows because San Francisco has a combined collection system that collects and combines wastewater with wet weather stormwater flows. The incremental capital cost of 20% is associated with upsizing for accommodating wet weather flows.

Using the Functional Cost Allocation Method for allocation of the O&M costs, rags (TSS) 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 piping. This is a large O&M expense with regard to the collection system. The O&M allocation reflects this. The estimated O&M costs, including accepting and responding to customer complaints of system backups due to TSS and OG related issues are (TSS 20%, O/G 20% and Customer Service 10%). The remaining O&M flow allocation is split based on the historically recorded wet weather and dry weather daily average flows.

Interceptors:

San Francisco collects both dry weather and wet weather flows. Large interceptors (Transport/Storage Boxes) have been built to accommodate wet weather flows. Therefore, the percentage allocation for both capital and O&M for the interceptors is 100% flow. Although they were built with the goal to partially treat wet weather flows during wet weather events, the T/S Boxes also include design accommodations to transport dry weather flows on a daily basis. For the capital cost allocation, the 70% allocation to wet and 30% allocation to dry flows, reflect the estimated wet and dry weather expenditure split. Historically recorded wet weather and dry weather flows are used to allocate the flow component of the O&M costs between wet and dry weather.

Table 7-6 shows the allocation of estimated FY 2024 O&M costs to cost causation components. The percent allocations shown in Lines 1–13 reflect the outcome of the cost causation factor allocation analysis discussed above. These percentage allocations are then multiplied by the total FY 2024 O&M revenue requirement for each function as determined in Table 7-4. Note that the total FY 2024 O&M costs identified in Line 4 of Table 7-4 match the total O&M costs shown in Column J, Lines 16–27, in Table 7-6.

Table 7-7 shows the allocation of estimated FY 2024 capital costs to cost causation components. The percentage allocations shown in Lines 1 – 12 reflect the outcome of the cost causation factor allocation analysis discussed above. These percentage allocations are then multiplied by the total FY 2024 capital cost revenue requirement for each function as determined in Table 7-4. Note that the total FY 2024 capital costs identified in Line 12 of Table 7-4 match the total capital costs shown in Column J, Lines 15–26, in Table 7-7.

Table 7-8 shows the allocation of estimated FY 2024 non-rate revenue offsets to cost causation components. The percentage allocations shown in Lines 1-13 reflect the outcome of the cost causation factor allocation analysis discussed above. These percentage allocations are then multiplied by the total FY 2024 non-rate revenue offset for each function as determined in Table 7-4. With the exception of primary treatment and general collections, the allocations match those used for O&M costs. For primary treatment and general collections, the allocations are similar to those used for capital costs. Note that the total FY 2024 non-rate revenue offsets identified in Line 24 of Table 7-4 match the total capital costs shown in Column J, Lines 16–27, in Table 7-7.

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

Line	(A) Category	(B) Flow (Dry)	(C) Flow (Wet)	(D) Flow (Total)	(E) COD	(F) TSS	(G) O/G	(H) Customer Service	(I) Admin.	(J) Total
1	Percent Allocations									
2	Headworks	74.03%	8.97%	83.00%	2.00%	14.00%	1.00%			100.0%
3	Primary Treatment	35.68%	4.32%	40.00%	0.00%	55.00%	5.00%			100.0%
4	Secondary Treatment	22.30%	2.70%	25.00%	70.00%	3.00%	2.00%			100.0%
5	Disinfection / Discharge	89.19%	10.81%	100.00%						100.0%
6	Solids Handling	0.00%	0.00%	0.00%	55.00%	40.00%	5.00%			100.0%
7	Pumping / Lift Stations	89.19%	10.81%	100.00%						100.0%
8	Stormwater		100.00%	100.00%						100.0%
9	General Collections	44.59%	5.41%	50.00%		20.00%	20.00%	10.00%		100.0%
10	Interceptors	89.19%	10.81%	100.00%						100.0%
11	Customer Service	0.00%	0.00%	0.00%				100.00%		100.0%
12	Bureau	0.00%	0.00%	0.00%					100.00%	100.0%
13	Indirect	89.19%	10.81%	100.00%						100.0%
14										
15	O&M Costs									
16	Headworks	\$5,521,326	\$669,237	\$6,190,563	\$149,170	\$1,044,191	\$74,585			\$7,458,510
17	Primary Treatment	\$2,632,082	\$319,033	\$2,951,115		\$4,057,784	\$368,889			\$7,377,788
18	Secondary Treatment	\$3,794,474	\$459,926	\$4,254,400	\$11,912,320	\$510,528	\$340,352			\$17,017,601
19	Disinfection / Discharge	\$9,445,181	\$1,144,845	\$10,590,026						\$10,590,026
20	Solids Handling				\$19,358,693	\$14,079,050	\$1,759,881			\$35,197,624
21	Pumping / Lift Stations	\$15,560,716	\$1,886,105	\$17,446,821						\$17,446,821
22	Stormwater		\$8,542,024	\$8,542,024						\$8,542,024
23	General Collections	\$10,869,120	\$1,317,440	\$12,186,559		\$4,874,624	\$4,874,624	\$2,437,312		\$24,373,118
24	Bureau								\$36,237,828	\$36,237,828
25	Indirect	\$41,291,864	\$5,004,962	\$46,296,826						\$46,296,826
26	Total	\$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
27	Percentage of Total	42.33%	9.19%	51.51%	14.92%	11.67%	3.52%	1.16%	17.21%	100.00%

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

Line	(A) Category	(B) Flow (Dry)	(C) Flow (Wet)	(D) Flow (Total)	(E) COD	(F) TSS	(G) O/G	(H) Customer Service	(I) Admin.	(J) Total
1	Percent Allocations									
2	Headworks	75.00%	8.00%	83.00%	2.00%	14.00%	1.00%			100.00%
3	Primary Treatment	65.00%	10.00%	75.00%	2.00%	20.00%	3.00%			100.00%
4	Secondary Treatment	25.00%	0.00%	25.00%	70.00%	3.00%	2.00%			100.00%
5	Disinfection / Discharge	80.00%	20.00%	100.00%						100.00%
6	Solids Handling / Digestors				55.00%	40.00%	5.00%			100.00%
7	Pumping / Lift Stations	80.00%	20.00%	100.00%						100.00%
8	Stormwater		100.00%	100.00%						100.00%
9	General Collections	80.00%	20.00%	100.00%						100.00%
10	Interceptors	30.00%	70.00%	100.00%						100.00%
11	Customer Service							100.00%		100.00%
12	Indirect								100.00%	100.00%
13										
14	Cash-Funded Capital Costs									
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	Total	\$75,263,348	\$52,487,453	\$127,750,801	\$51,569,826	\$36,691,218	\$4,622,595	\$147,268	\$0	\$220,781,707
26	Percentage of Total	34.09%	23.77%	57.86%	23.36%	16.62%	2.09%	0.07%	0.00%	100.00%

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

Line	(A) Category	(B) Flow (Dry)	(C) Flow (Wet)	(D) Flow (Total)	(E) COD	(F) TSS	(G) O/G	(H) Customer Service	(I) Admin.	(J) Total
1	Percent Allocations									
2	Headworks	74.03%	8.97%	83.00%	2.00%	14.00%	1.00%			100.00%
3	Primary Treatment	66.89%	8.11%	75.00%	2.00%	20.00%	3.00%			100.00%
4	Secondary Treatment	22.30%	2.70%	25.00%	70.00%	3.00%	2.00%			100.00%
5	Disinfection / Discharge	89.19%	10.81%	100.00%						100.00%
6	Solids Handling				55.00%	40.00%	5.00%			100.00%
7	Pumping / Lift Stations	89.19%	10.81%	100.00%						100.00%
8	Stormwater		100.00%	100.00%						100.00%
9	General Collections	89.19%	10.81%	100.00%						100.00%
10	Interceptors	89.19%	10.81%	100.00%						100.00%
11	Customer Service							100.00%		100.00%
12	Bureau								100.00%	100.00%
13	Indirect	89.19%	10.81%	100.00%						100.00%
14										
15	Non-Rate Revenue Offsets									
16	Headworks	\$1,011,104	\$122,555	\$1,133,660	\$27,317	\$191,220	\$13,659			\$1,365,855
17	Primary Treatment	\$824,874	\$99,983	\$924,857	\$24,663	\$246,628	\$36,994			\$1,233,142
18	Secondary Treatment	\$622,647	\$75,471	\$698,117	\$1,954,729	\$83,774	\$55,849			\$2,792,470
19	Disinfection / Discharge	\$1,647,241	\$199,661	\$1,846,902						\$1,846,902
20	Solids Handling				\$5,117,521	\$3,721,834	\$465,229			\$9,304,584
21	Pumping / Lift Stations	\$2,935,417	\$355,800	\$3,291,217						\$3,291,217
22	Stormwater		\$1,686,277	\$1,686,277						\$1,686,277
23	General Collections	\$5,389,055	\$653,204	\$6,042,259						\$6,042,259
24	Interceptors	\$1,631,410	\$197,742	\$1,829,152						\$1,829,152
25	Customer Service							\$6,439		\$6,439
26	Bureau								\$5,589,632	\$5,589,632
27	Indirect	\$6,369,210	\$772,008	\$7,141,218						\$7,141,218
28	Total	\$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
29	Percentage of Total	83.07%	16.93%	58.38%	16.91%	10.07%	1.36%	0.02%	13.27%	100.00%

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 27 of Table 7-4 and several other preceding tables in this report (for example, Line 27 of Table 7-4).

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

Line	(A) Cost Component	(B) Flow (Dry)	(C) Flow (Wet)	(D) Flow (Total)	(E) COD	(F) TSS	(G) O/G	(H) Customer Service	(I) Admin.	(J) 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	% Allocation	82.16%	17.84%	51.51%	14.92%	11.67%	3.52%	1.16%	17.21%	100.00%
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	% Allocation	58.91%	41.09%	57.86%	23.36%	16.62%	2.09%	0.07%	0.00%	100.00%
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	% Allocation	38.11%	16.65%	54.76%	19.24%	14.20%	2.79%	0.60%	8.40%	100.00%
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	% Allocation	83.07%	16.93%	58.38%	16.91%	10.07%	1.36%	0.02%	13.27%	100.00%
12										
13	Net Revenue Requirement	\$143,947,153	\$67,668,323	\$211,615,476	\$75,865,780	\$57,013,938	\$11,469,195	\$2,578,140	\$30,648,196	\$389,190,725
14	Percentage of Total	68.02%	31.98%	54.37%	19.49%	14.65%	2.95%	0.66%	7.87%	100.00%

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 prior to the allocation of flows from dry water infiltration. Key points of Table 7-10 include:

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 a 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 concentration (mg/L) of the strength loadings shown in Columns D, E, and 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.

Strength Loading Pounds (Columns G-I): The pounds of strength loadings were determined based on the projected flow volumes in Column C by the weighted average strength loadings for each customer class as shown in Columns D-F.

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	Customer Contributions								
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	Total Billed Retail		21,745,424	2,665	1,147	145	93,197,901	36,546,507	11,909,623
9									
10	Wholesale		138,860	687	269	88	595,137	233,376	76,052
11									
12	Non-Customer Flows								
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	Total Non-Customer	32.6%	10,876,027	284	101	10	10,365,927	3,699,771	379,531
16									
17	Estimated Customer and Non-Customer Contributions		32,760,311	510	198	60	104,158,964	40,479,654	12,365,206

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 to determine how dry weather infiltration volumes loadings should be allocated to each customer class.

There is no industry standard 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 OG allocated to each customer class due to dry weather infiltration.

As shown in Line 1 of Column B in Table 7-11, the estimated FY 2024 volume of dry weather infiltration is 5,026,950 CCF. Of this amount, 3,770,213 (75%) is allocated to customer classes based on the volume of wastewater projected to be contributed by each customer class (Column C, Line 1). The remaining 1,256,738 CCF of dry weather flow (25%) is allocated to customer classes based on number of accounts projected for each customer classes (Column D, Line 1).

Column B, Lines 7–14 of Table 7-11 show the volume of wastewater projected to be contributed to each customer class before the allocation of dry weather infiltration. For example, the projected volume of wastewater for Single Family Residential customers is 5,745,781 (Column B, Line 8). After allocating flows from dry water infiltration to Single Family Residential customers based on their proportionate share of projected FY 2024 contributed volumes and accounts, the estimated total flow contribution assigned to Single Family Residential customers is 7,547,512 CCF as shown in Column B, Line 17. Note that the amount of strength loading pounds projected for each customer classes is the same both before and after the allocation of dry weather infiltration (Columns C, D, and E, Lines 7-23). As noted previously, this is due to the fact that no strength loadings were assigned to dry weather flows infiltration.

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

Line	(A) Dry Weather Infiltration	(B) Dry Weather Flow (CCF)	(C) Allocation on Flow	(D) Allocation on Accounts	(E) Sum of Allocations
1	Flow (CCF)	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	Before Allocation of Dry Weather	Flow (CCF)	Est. COD Pounds	Est. TSS Pounds	Est. O/G
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	After Allocation of Dry Weather	Flow (CCF)	Est. COD Pounds	Est. TSS Pounds	Est. O/G
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. Sewer Customer Class Revenue Requirements

As discussed previously in Section 7.2 (Table 7-1, Line 19), the total FY 2024 sewer revenue requirement for the Wastewater Enterprise is \$389,190,725. The calculated wastewater service-related revenue requirement is \$301,185,528 or 77.5% of the total. The calculated stormwater service-related revenue requirement is \$87,719,197 or 22.5% of the total. This report section discusses the derivation of these service-related costs 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. To allocate costs to customer classes, a unit COS is calculated 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. Line 1 of Table 7-12 corresponds to the amounts presented in Line 1 of Table 7-9. Lines 2 and 3 of Table 7-12 correspond to Lines 2 and 10 of Table 7-9, respectively. Administrative costs totaling \$30,648,196 (Column I, Line 4) were identified in the process of assigning costs to functions. These costs were allocated to each cost causation component as shown in Line 8 of Table 7-12. Specifically, administrative costs were allocated to each cost causation component shown in Columns B-H based on their proportionate share of the

of the FY 2024 revenue requirement. 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 preceding tables.

Table 7-12 also shows the unit COS calculation for each cost causation component. The unit COS is calculated by dividing the revenue requirement for each cost causation component (Line 7) by the units of service (Line 20). The value of \$7.04 per CCF shown in Line 22 of Column B reflects the cost of providing service for all types of sewer flows on the SFPUC system. This includes dry weather flows consisting of customer wastewater discharges and dry weather infiltration (Column C) and wet weather flows from stormwater (Column D). The value of \$5.84 per CCF shown in Line 22 of Column C is used in the calculation of the revenue requirement for each wastewater customer class. The value of \$12.56 per CCF shown in Line 22 of Column D is used in the calculation of the stormwater revenue requirement. A detail of the unit COS calculation for flow, COD, TSS, OG, and customer billing is shown in Appendix J.

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

Line	(A) COS Component	Flow (CCF)			Strength (Pounds)			(H) Customer Service	(I) Admin.	(J) Total
		(B) Flow (Total)	(C) Flow (Dry)	(D) Flow (Wet)	(E) COD	(F) TSS	(G) 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	Percent of Total	59.02%	40.15%	18.87%	21.16%	15.90%	3.20%	0.72%	0.00%	100.00%
9										
10	Units of Service									
11	Single Family Residential	7,547,512	7,547,512		24,534,916	10,007,662	3,048,930	1,340,050		
12	Multifamily Residential	11,668,893	11,668,893		41,507,991	16,930,858	5,158,178	437,320		
13	Municipal	595,502	595,502		2,125,773	840,158	231,016	9,562		
14	Nonresidential/Commercial	6,853,641	6,853,641		26,119,805	8,543,674	3,336,919	182,184		
15	Fire	103,592	103,592		0	0	0	117,298		
16	Municipal Fire	3,235	3,235		0	0	0	4,249		
17	Total Wastewater	26,772,375	26,772,375		94,288,484	36,322,352	11,775,042	2,090,663		
18										
19	Stormwater	5,849,076		5,849,076	10,365,927	3,699,771	379,531	0		
20	Total Units of Service	32,621,451	26,772,375	5,849,076	104,654,412	40,022,124	12,154,574	2,090,663		
21										
22	Total System Unit COS	\$7.04	\$5.84	\$12.56	\$0.79	\$1.55	\$1.02	\$1.34		
23	Type of Units	\$/CCF	\$/CCF	\$/CCF	\$/Pound	\$/Pound	\$/Pound	\$/Bill		

Wastewater Portion of Sewer Revenue Requirement

The wastewater portion of the sewer revenue requirement allocated to each customer class is calculated by multiplying the customer class units of service for each cost causation component by the total system unit COS for each cost causation component. Lines 2 -7 of Table 7-13 show the units of service for each customer class for each cost causation component. The unit cost of service shown in Line 11 was derived in Table 7-12.

The customer class revenue requirements are shown in Table 7-13, Lines 15 – 20. The total wastewater revenue requirement for each customer class is the sum of the flow portion of the revenue requirement, each strength portion of the revenue requirement (COD, TSS, and OG), and the total customer service portion of the revenue requirement. The resulting aggregate wastewater portion of the FY 2024 sewer revenue requirement is \$301,471,528 as shown in Column K, Line 21 of Table 7-13. This is 77.5% of the \$389,190,725 total sewer revenue requirement shown, for example, in Column K, Line 7 of Table 7-12.

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

Line	(A) Class	Flow (CCF)			Strength (Pounds)			(H) (Account Allocation)	(I) Customer Service	(J) Customer Service Total	(K) Aggregate Total
		(B) Dry Weather	(C) Infiltration (Flow Allocation)	(D) (Dry Weather Flow + Infiltration)	(E) COD	(F) TSS	(G) O/G				
1	Units of Service										
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/Commerc	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	Total	21,745,424	3,770,213	25,515,637	94,288,484	36,322,352	11,775,042	1,256,738	2,090,663		
9											
10	Unit COS										
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	\$Blil		
13											
14	Revenue Requirement										
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/Commerc	\$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	Total	\$126,912,931	\$22,004,112	\$148,917,044	\$74,194,011	\$56,166,412	\$12,060,838	\$7,334,704	\$2,798,519	\$10,133,223	\$301,471,528

Wastewater Portion of Sewer Revenue Requirement versus Revenues at Existing Rates

Table 7-14 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 cost to serve (Column B), 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 services. The calculated FY 2024 wastewater revenue requirement excludes stormwater-related costs. However, the proportion of costs incurred between classes has remained at a similar level, as shown in Column D and Column E.

Table 7-14: FY 2024 Wastewater Portion of Revenue Requirement vs. Revenues at Existing Rates

Line	(A) Customer Class	(B) Proposed Cost of Service (\$)	(C) Current Cost of Service (\$)	(D) Proposed Cost of Service (%)	(E) 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	Total	\$301,471,528	\$374,249,662	100.00%	100.00%

Stormwater Portion of Sewer Revenue Requirement

The stormwater portion of the sewer revenue requirement is calculated by multiplying the units of service for each cost causation component by the unit cost of service. Line 9, Column F of Table 7-15 shows the calculated FY 2024 stormwater related costs of \$87,719,197 which is 22.5% of the total FY 2024 Wastewater Enterprise revenue requirement of \$389,190,725. The units of service shown in Line 2 of Table 7-15 were originally presented in Line 19 of Table 7-12. No allocation of dry weather infiltration costs or customer service costs were included in the stormwater revenue requirement.

Table 7-15: FY 2024 Stormwater Revenue Requirement

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

8. Sewer Rate Design

8.1. Sewer (Wastewater and Stormwater) Rate Design Overview

This report section shows the calculation of FY 2024 rates for each wastewater customer class. The 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. The rates are designed to recover wastewater service-related costs of \$301,471,528 (see Line 1 of Table 7-16) and stormwater service-related costs of \$87,719,197 (see Line 2 of Table 7-16) 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 FY 2024 monthly service charge. The cost components recovered in the monthly service charge include the cost of dry weather infiltration and the cost of customer service, each of which are allocated on the basis of accounts. The proposed monthly service charge is calculated by dividing the total revenue requirement (Column B plus Column C) by the total number of bills (Column E). This results in a monthly service charge of \$4.85 per bill which is \$0.36 less than the current monthly service charge of \$5.21 per monthly.

Table 8-1: Proposed FY 2024 Monthly Service Charge

Line	(A) Customer Class	(B) Account Allocated Infiltration	(C) Customer Service	(D) Total Revenue Requirement	(E) Bills	(F) Calculated \$/Bill	(G) Current \$/Bill	(H) \$ 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	Total	\$7,334,704	\$2,798,519	\$10,133,223	2,090,663	\$4.85	\$5.21	-\$0.36

Residential Commodity Rates

Table 8-2 shows the calculation of COS FY 2024 residential commodity rates. This rate is calculated by taking the FY 2024 revenue requirement for each residential class (Column B) and dividing it by the billed units (Column C). This results in a rate of \$13.45/CCF which is \$2.52 less than the current residential commodity rate of \$15.97/CCF. A detail of the components of the FY 2024 revenue requirement shown in Lines 1 and 2 in Column B was presented in Table 7-13, Columns D-G, Lines 15 and 16. The projected FY 2024 billed units shown in Column C of Table 8-2 are based on the projected FY 2024 billable wastewater discharge volumes presented in the FY 2024 Column of Table 6-5.

Table 8-2: Proposed FY 2024 Residential Commodity Rates

Line	(A) Class	(B) Revenue Requirement	(C) Billed Units	(D) Calculated \$/CCF	(E) Current \$/CCF	(F) \$ 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	Blended Total	\$207,947,470	15,466,430	\$13.45	\$15.97	(\$2.52)

Non-Residential Commodity Rates

Table 8-3 shows the calculation of FY 2024 non-residential commodity rates which consist of components for flow and strength (COD, TSS, OG). The rate is derived by taking the total flow or strength related revenue requirement Billed units refers to the total CCF of non-residential billed wastewater discharges as well as the billed pounds of COD, TSS, and OG. For example, the volumetric \$/CCF rate is determined by dividing the FY 2024 revenue requirement (Column D, Lines 1-4) by the projected billed units (Column E, Lines 1-4). The projected \$/lb. rate for COD is determined by dividing the FY 2024 revenue requirement (Column B, Lines 9 and 10) by the projected billed units (Column C, Lines 9 and 10). A similar process is followed for the \$/lb. rates for TSS and OG.

With the exception of the \$/lb. rate for COD (Columns D and E, Line 9 and 10 of Table 8-3), each billing component declines as compared to current rates. The increase in the dollar per pound (\$/lb.) rate for COD is primarily due to the large investment in treatment plant digester technologies made by the SFPUC.

A detail of the components of the FY 2024 revenue requirement values shown in Table 8-3 can be found in Table 7-13, Columns D-G, Lines 17 and 18. The various projected FY 2024 billed units shown in Table 8-3 (flow, COS, TSS, OG) can be found in the FY 2024 Columns of the following tables: Table 6-5, Table 6-6, Table 6-7, and Table 6-8.

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

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Flow Revenue Requirement Component							
Line	Class	Flow Revenue Requirement	Infiltration (Flow Alloc)	Total Flow	Billed Units	Calculated \$/CCF	Current \$/CCF \$ Difference
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	Blended Total	\$36,646,125	\$6,353,690	\$42,999,816	6,278,994	\$6.85	\$9.46 (\$2.61)
6							
7	COD						
8	Class	COD Revenue Requirement	Billed Units	Calculated \$/Lb.	Current \$/Lb.	\$ Difference	
9	Municipal	\$1,672,735	2,125,773	\$0.79	\$0.65	\$0.14	
10	Nonresidential/Commercial	\$20,553,232	26,119,805	\$0.79	\$0.65	\$0.14	
11	Blended Total	\$22,225,967	28,245,578	\$0.79	\$0.65	\$0.14	
12							
13	TSS						
14	Class	TSS Revenue Requirement	Billed Units	Calculated \$/Lb.	Current Charge	\$ Difference	
15	Municipal	\$1,299,163	840,158	\$1.55	\$1.65	(\$0.10)	
16	Nonresidential/Commercial	\$13,211,356	8,543,674	\$1.55	\$1.65	(\$0.10)	
17	Blended Total	\$14,510,518	9,383,832	\$1.55	\$1.65	(\$0.10)	
18							
19	O/G						
20	Class	OG Revenue Requirement	Billed Units	Calculated \$/Lb.	Current Charge	\$ Difference	
21	Municipal	\$236,623	231,016	\$1.02	\$1.66	(\$0.64)	
22	Nonresidential/Commercial	\$3,417,910	3,336,919	\$1.02	\$1.66	(\$0.64)	
23	Blended Total	\$3,654,534	3,567,935	\$1.02	\$1.66	(\$0.64)	

Five-Year Wastewater Rate Projection

Table 8-4 summarizes COS 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 in Table 6-16, which are also shown in Line 1 in Table 8-4.

Table 8-4: Summary of Cost of Service Wastewater Rates FY 2024 – FY 2028

Line	(A) Wastewater	(B) Current (Since 7/1/2022)	(C) Proposed FY 2024	(D) Proposed FY 2025	(E) Proposed FY 2026	(F) Projected FY 2027	(G) Projected FY 2028
1	Revenue Rate Increase		9%	9%	9%	10%	10%
2							
3	Residential Volumetric (\$/CCF)	\$13.45	\$14.66	\$15.97	\$17.57	\$19.33	\$21.26
4							
5	Nonresidential Volumetric						
6	Discharge (\$/CCF)	\$6.85	\$7.46	\$8.14	\$8.95	\$9.84	\$10.83
7	COS (\$/pound)	\$0.79	\$0.86	\$0.93	\$1.03	\$1.13	\$1.24
8	TSS (\$/Pound)	\$1.55	\$1.69	\$1.84	\$2.02	\$2.22	\$2.45
9	O/G (\$/pound)	\$1.02	\$1.12	\$1.22	\$1.34	\$1.47	\$1.62

8.3. Stormwater Charge 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 charges. As discussed in Section 7, the projected FY 2024 stormwater service-related costs

are \$87,719,197 (see Line 2 of Table 7-16). The stormwater rates presented in this section of the report are “full cost” (or COS based) rates that are designed to recover all the projected FY 2024 stormwater specific costs.

New Stormwater Charge Structure

The SFPUC has elected to implement a stormwater charge 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 will be assessed 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 residential criteria are charged under the Standard rate structure based on their actual square footage of permeable and impermeable area. It is worth noting that any parcel area that does not drain to SFPUC’s combined sewer will be excluded from the calculation of billable area¹⁸. Table 8-5 summarizes this rate structure.

Table 8-5: New Stormwater Charge 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 Charge Calculation

Table 8-6 shows the calculation of the FY 2024 stormwater unit COS (dollar per thousand square feet per month or \$/KSF/mo.). The total billable permeable and impermeable areas shown in Column B are based on a geospatial analysis of areal imaging that was prepared for SFPUC. The total billable areas are then multiplied by a runoff coefficient (Column C) that was determined by SFPUC by calculating the runoff generated from impervious area and various pervious surfaces. The pervious surface analysis included multiple vegetation and soil conditions. For the purpose of setting up the stormwater charge, it was determined that 100% of precipitation would run off from impermeable surfaces, while 10% of precipitation would run off from the typical permeable surface in the city. To normalize the unit cost calculation, the billable areas were multiplied by the runoff coefficient (Column B * Column C) to calculate the effective permeable and impermeable areas. The total revenue requirements (Column E) were then divided by the effective area to calculate the rate on a dollar per square foot per year basis. The rate was then converted to dollar per thousand square feet per month (Column G).

¹⁸ Excluded area includes land that drains to a lake, pond, or to the Bay; submerged portions of waterfront parcels; and areas that are managed by their own stormwater management system under a separate permit.

Table 8-6: FY 2024 Stormwater Unit COS Calculation

(A) Surface	(B) Area (Sq. Ft.)	(C) RO Coeff	(D=B*C) Effective Area	(E) Revenue Collection	(F=E/D) Rate (\$/Sq. Ft./Yr)	(G=F*1,000/12) Rate (\$/K Sq. Ft./Mo)
Impermeable Area	521,418,549	1.00	521,418,549	\$82,576,137	\$0.16	\$13.20
Permeable	324,753,283	0.10	32,475,328	\$5,143,061	\$0.02	\$1.32
Total	846,171,832		553,893,878	\$87,719,197		

Having established the unit COS for all permeable and impermeable surfaces, the next step in the development of the stormwater charge is to calculate the 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 D and Column E 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 F) and impermeable revenue requirements (Column G) 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	(A) Customer Type	(B) Effective Permeable Area (Sq. Ft.)	(C) Effective Impermeable Area (Sq. Ft.)	(D) Permeable Area as a % of Total	(E) Impermeable Area as a % of Total	(F) Permeable Revenue Requirement	(G) Impermeable Revenue Requirement	(H) Total Revenue Requirement
1	Simplified Residential							
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	Standard	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 the stormwater charge is the development of dollar per thousand square foot per 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. The permeable charge is the permeable revenue requirement (Column B) divided by the permeable area (Column E) and multiplied by 1,000 and divided by 12 to create a monthly charge. The impermeable charge is derived in the same manner (Column C divided by Column F * 1,000 * 12).

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

Line	(A) Customer Type	(B) Permeable Revenue Requirement	(C) Impermeable Revenue Requirement	(D) Total Revenue Requirement	(E) Permeable Area (Sq. Ft.)	(F) Impermeable Area (Sq. Ft.)	(G) Permeable \$/KSF/Mo.	(H) 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 the stormwater charge is the development of the differentiated monthly fixed charge for each residential tier in the Simplified portion of the stormwater charge structure. This calculation requires the use of average residential parcel size estimates as developed by the SFPUC. Table 8-9

shows this calculation. The impermeable monthly charge (Column D) is derived by multiplying Columns B and C and dividing by 1,000. The permeable monthly charge is the permeable unit rate multiplied by the assumed permeable area and divided by 1,000. The total monthly charge is the sum of the impermeable monthly charge and the permeable monthly charge.

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

Line	(A) Simplified Residential Tier	(B) Impermeable \$/KSF/Mo	(C) Assumed Impermeable Area (Sq. Ft.)	(D) Impermeable Monthly Charge	(E) Permeable \$/KSF/Mo	(F) Assumed Permeable Area (Sq. Ft.)	(G) Permeable Monthly Charge	(H) Total Monthly Charge
1	SRT1 (1 - 1,700 square feet parcel size)	\$13.20	1,207	\$15.93	\$1.32	188	\$0.25	\$16.18
2	SRT2 (1,701 - 3,300 square feet parcel size)	\$13.20	1,832	\$24.18	\$1.32	754	\$1.00	\$25.17
3	SRT3 (3,301 - 6,000 square feet parcel size)	\$13.20	2,731	\$36.04	\$1.32	1,365	\$1.80	\$37.84

FY 2024 Stormwater Cost of Service Rate Summary

Table 8-10 summarizes the COS FY 2024 stormwater charge calculated as shown in Table 8-7, Table 8-8, and Table 8-9.

Table 8-10: Cost of Service FY 2024 Stormwater Charge

Line	Simplified Residential Tier	\$/KSF/Mo	Assumed Area (Sq. Ft.)	Monthly Charge
1	Permeable			
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	Impermeable			
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	Combined			
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

Five-Year Stormwater Cost of Service Rate Projection

Table 8-11 summarizes stormwater charges 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 Cost of Service Stormwater Charges FY 2024 – FY 2028

Line	Stormwater Class	(A) Current (N/A)	(B) Proposed FY 2024	(C) Proposed FY 2025	(D) Proposed FY 2026	(E) Projected FY 2027	(F) Projected FY 2028
1	Revenue Rate Increase		9%	9%	9%	10%	10%
2							
3	Simplified Residential Tiered Rate						
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	Standard Rate Impermeable (\$/ksqft/mo.)	N/A	\$13.20	\$14.39	\$15.68	\$17.25	\$18.97
9	Standard Rate Permeable (\$/ksqft/mo.)	N/A	\$1.32	\$1.44	\$1.57	\$1.72	\$1.90

8.4. COS 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 shown in each figure include the impact of proposed FY 2024 sewer rates, which include a monthly sewer service charge, a stormwater charge, and volumetric wastewater rates without a phase-in period for the stormwater charge.

Table 8-1 presents FY 2024 bill impacts for Single Family Residential customers assuming the Simplified Residential Tier 2 charges without a phase-in.

Figure 8-2 presents the FY 2024 impacts for multifamily apartments assuming the Standard stormwater charge 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 8-3 shows the FY 2024 impacts for non-residential customers assuming the Standard stormwater charge with 22,924 sq. ft. of permeable area and 141,018 sq. ft. of impermeable area.

Figure 8-1: FY 2024 Single Family Residential Bill Impacts by Usage Percentile

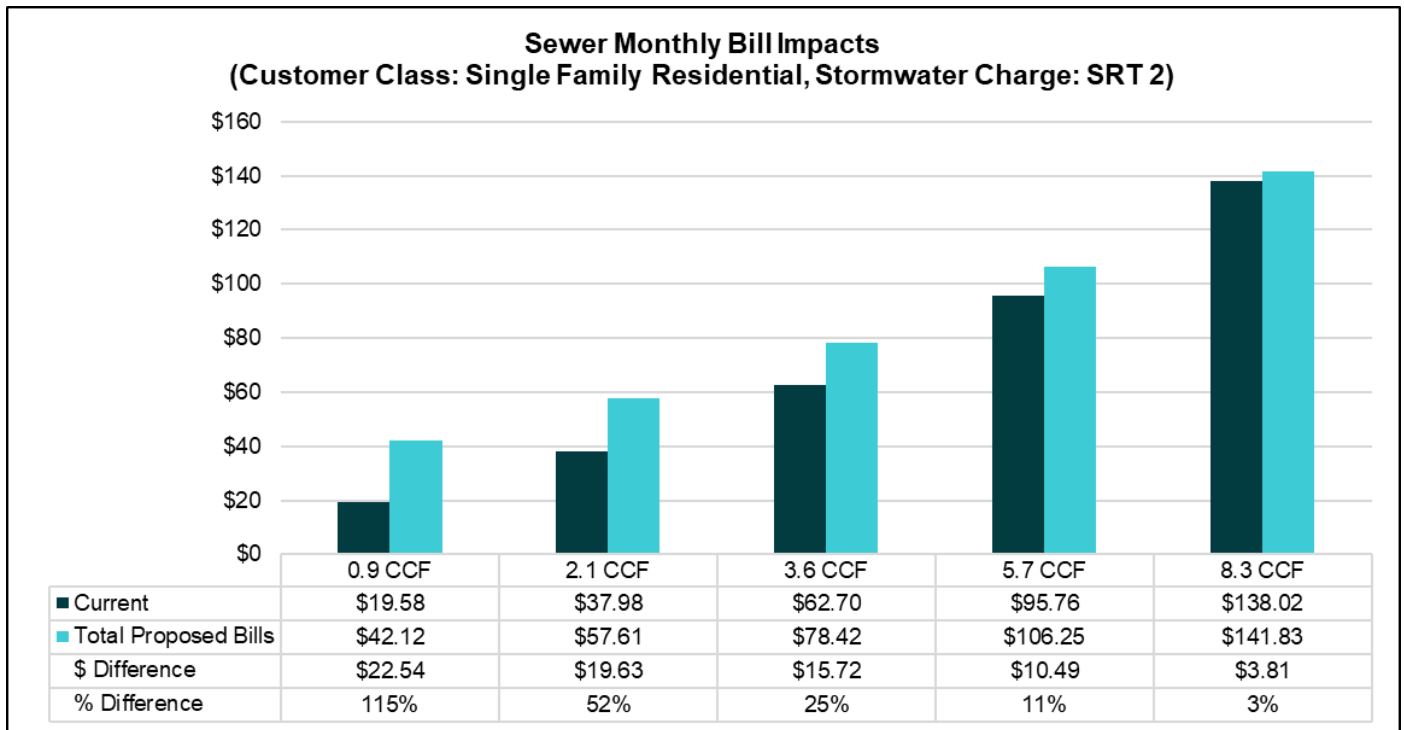


Figure 8-2: FY 2024 Multifamily Residential Bill Impacts by Usage Percentile

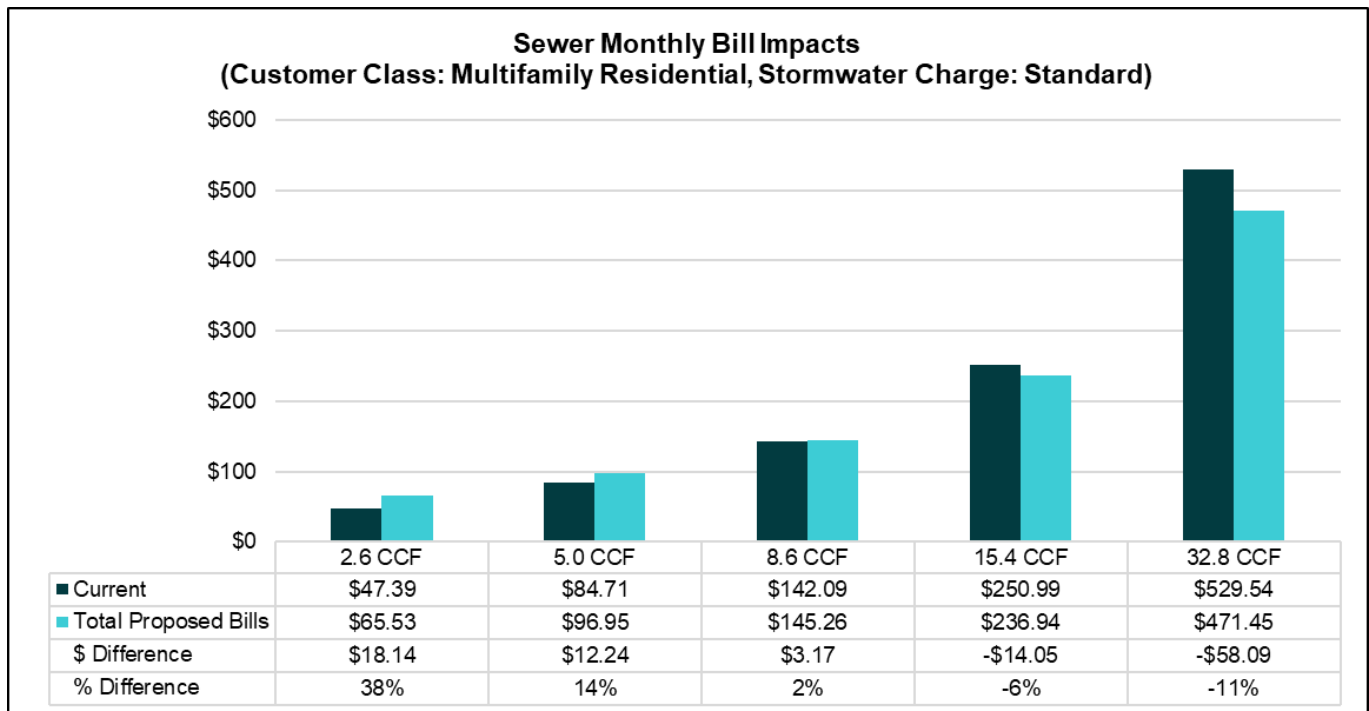
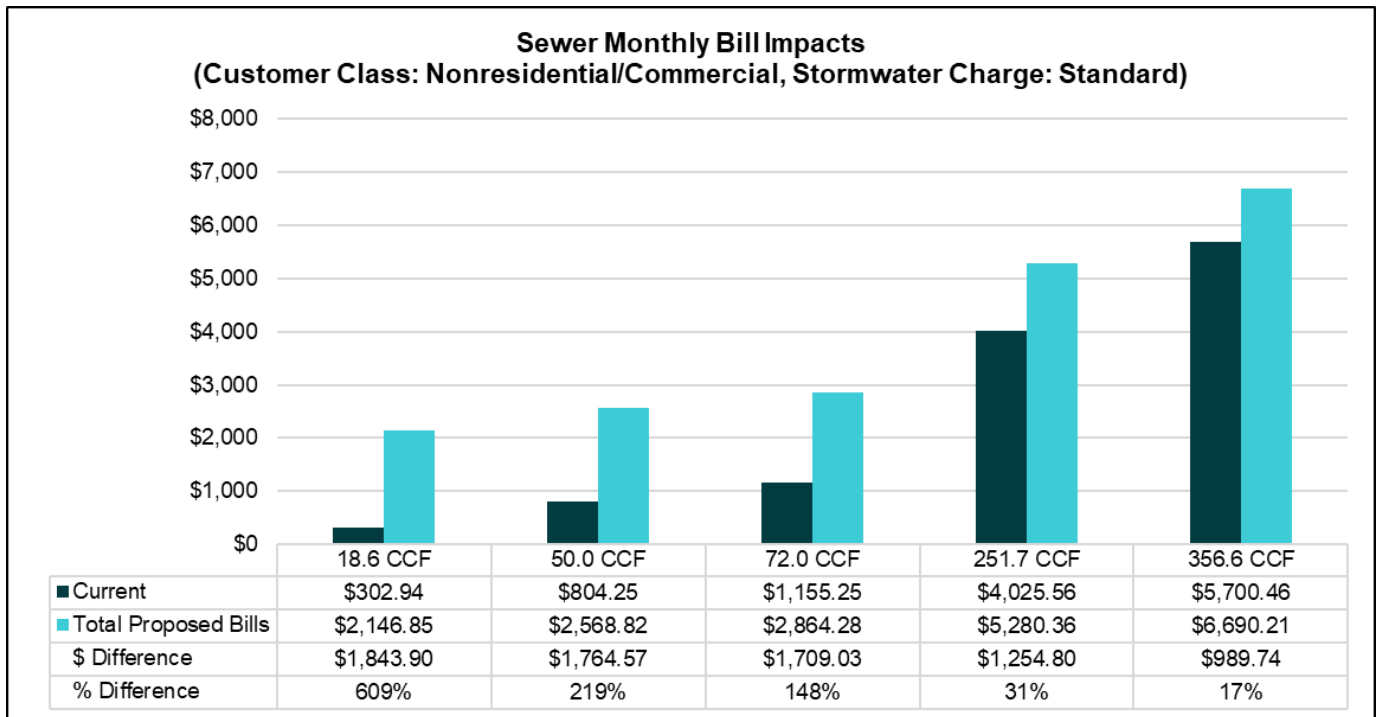


Figure 8-3: FY 2024 Non-Residential Residential Bill Impacts by Usage Percentile



9. Proposed Sewer Rates

9.1. Introduction

The rates presented by MME and Raftelis in Section 8 are designed to recover the FY 2024 wastewater service-related costs of \$301,471,528 and the FY 2024 stormwater service-related costs of \$87,719,197. This change would result in significant bill impacts on customers with parcels that have large impermeable surface areas. The SFPUC's Ratepayer Assurance Policy principles of Affordability and Predictability suggests that major rate structure changes should take place over a few years instead of all at once. The SFPUC proposed sewer rates include a phase in of the stormwater charges to full stormwater cost recovery in FY 2030. From FY 2024 – FY 2029, wastewater rates will continue to include, albeit on a decreasing level each year, a portion of stormwater-related costs, as shown in Table 9-1. The proposed sewer rates for FY 2024 through FY 2026 as well as the projected rates for FY 2027 and FY 2028 are shown in Table 9-2.

9.2. Phase-In Revenue Requirement Projection

Table 9-1 shows the revenue requirements from Section 8 of this report and the re-allocation of the stormwater costs between FY 2024 and FY 2029. Key items shown on this table include:

Stormwater Phase-In Percentage (Line 1): This is the percentage of the annual stormwater related costs that will be collected through wastewater rates each year of the phase in period.

Adjusted Wastewater Total (Line 5): This is annual revenues to be collected through wastewater rates after the addition of a portion of the stormwater related costs.

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

Table 9-1: Revenue Requirements for Proposed Sewer Rates

Line	(A) Description	(B) FY 2024	(C) FY 2025	(D) FY 2026	(E) FY 2027	(F) FY 2028	(G) FY 2029	(H) FY 2030	(I) FY 2031
1	Stormwater Phase-In Percentage	85.71%	71.43%	57.14%	42.86%	28.57%	14.29%	0.00%	0.00%
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	Adjusted Wastewater Total	\$376,659,411	\$396,899,626	\$417,732,138	\$443,128,053	\$469,425,829	\$496,551,879	\$519,641,528	\$566,409,266
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	Adjusted Stormwater Total	\$12,531,314	\$27,318,264	\$44,665,362	\$65,509,198	\$90,075,147	\$118,899,194	\$151,200,142	\$164,808,155
11	% Change	0.00%	118.00%	63.50%	46.67%	37.50%	32.00%	27.17%	9.00%
12									
13	Total Revenue Requirement	\$389,190,725	\$424,217,890	\$462,397,501	\$508,637,251	\$559,500,976	\$615,451,073	\$670,841,670	\$731,217,420

9.3. Proposed Sewer Rates

Table 9-2 shows the proposed sewer rates for FY 2024 – FY 2028. All rates and charges were calculated using the same methodology described in Section 8, with the exception of adjustments made to phase-in the rates. The phase-in period is from FY 2024 – FY 2030.

Table 9-2: Proposed Sewer Rates

Line	Class	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026	Projected FY 2027	Projected FY 2028
1	Wastewater Rates					
2	Monthly Service Charge (All Classes)	\$4.85	\$5.28	\$5.76	\$6.33	\$6.97
3						
4	Residential Rate (\$/ccf)	\$16.91	\$17.80	\$18.72	\$19.83	\$20.99
5						
6	Non-Residential (\$/ccf)	\$9.74	\$10.09	\$10.43	\$10.84	\$11.23
7	COD (\$/lb)	\$0.86	\$0.93	\$0.99	\$1.08	\$1.17
8	TSS (\$/lb)	\$1.68	\$1.81	\$1.94	\$2.11	\$2.29
9	OG (\$/lb)	\$1.05	\$1.14	\$1.24	\$1.36	\$1.49
10						
11	Stormwater Charges					
12	Simplified Residential					
13	SRT1 (1 - 1,700 square feet parcel size)	\$2.31	\$5.04	\$8.24	\$12.08	\$16.61
14	SRT2 (1,701 - 3,300 square feet parcel size)	\$3.60	\$7.84	\$12.82	\$18.80	\$25.85
15	SRT3 (3,301 - 6,000 square feet parcel size)	\$5.41	\$11.79	\$19.27	\$28.26	\$38.86
16						
17	Standard					
18	Permeable (\$/KSF/Mo)	\$0.19	\$0.41	\$0.67	\$0.99	\$1.36
19	Impermeable (\$/KSF/Mo)	\$1.89	\$4.11	\$6.72	\$9.86	\$13.55

9.4. Proposed Sewer Bill Impacts

Figure 9-1 presents sample FY 2024 sewer bill impacts for Single Family Residential customers assuming a Simplified Residential Tier 2 customer.

Figure 9-2 presents the FY 2024 impacts for multifamily apartments assuming the standard stormwater charge for a medium-sized apartment building with 43 sq. ft. of permeable area and 4,008 sq. ft. of impermeable area.

Figure 9-3 shows the FY 2024 impacts for non-residential customers assuming the standard stormwater charge, 22,974 sq. ft. of permeable area, and 141,018 sq. ft. of impermeable area. The bill impacts shown in each figure include the impact of proposed FY 2024 phased-in wastewater rates and stormwater charges.

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

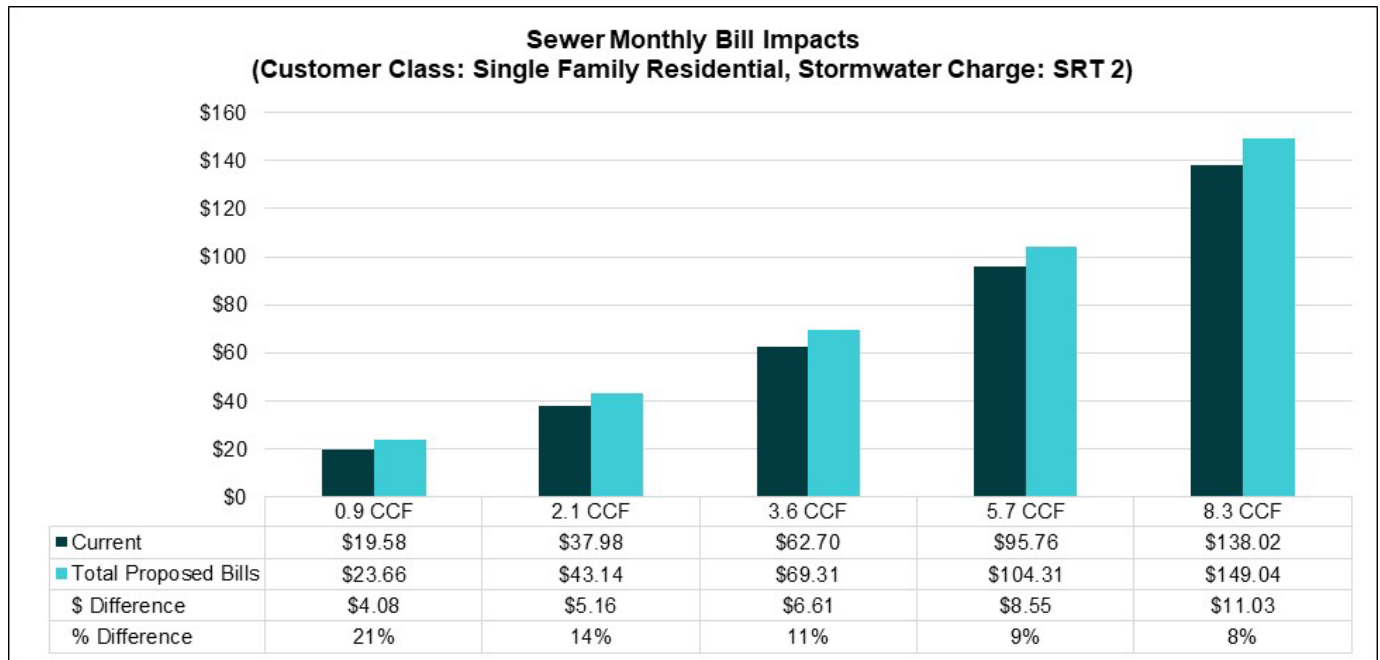


Figure 9-2: FY 2024 Multifamily Residential Bill Impacts by Usage Percentile

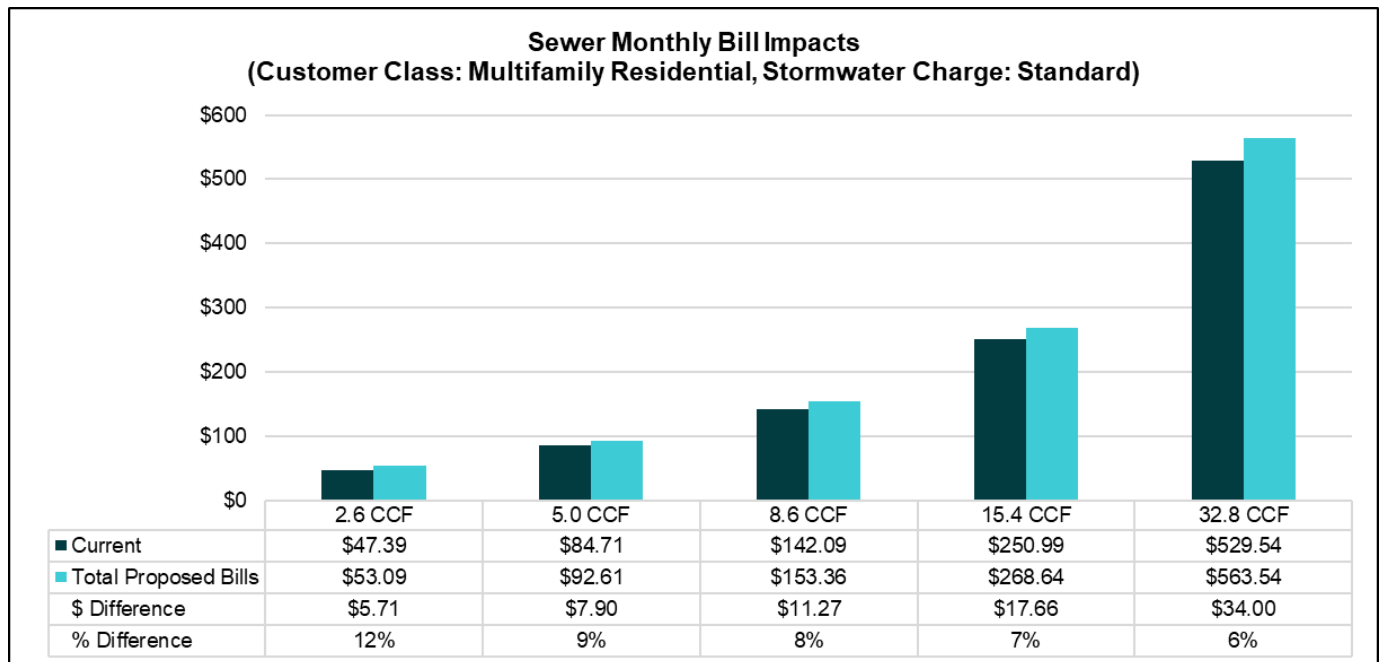


Figure 9-3: FY 2024 Non-Residential Residential Bill Impacts by Usage Percentile

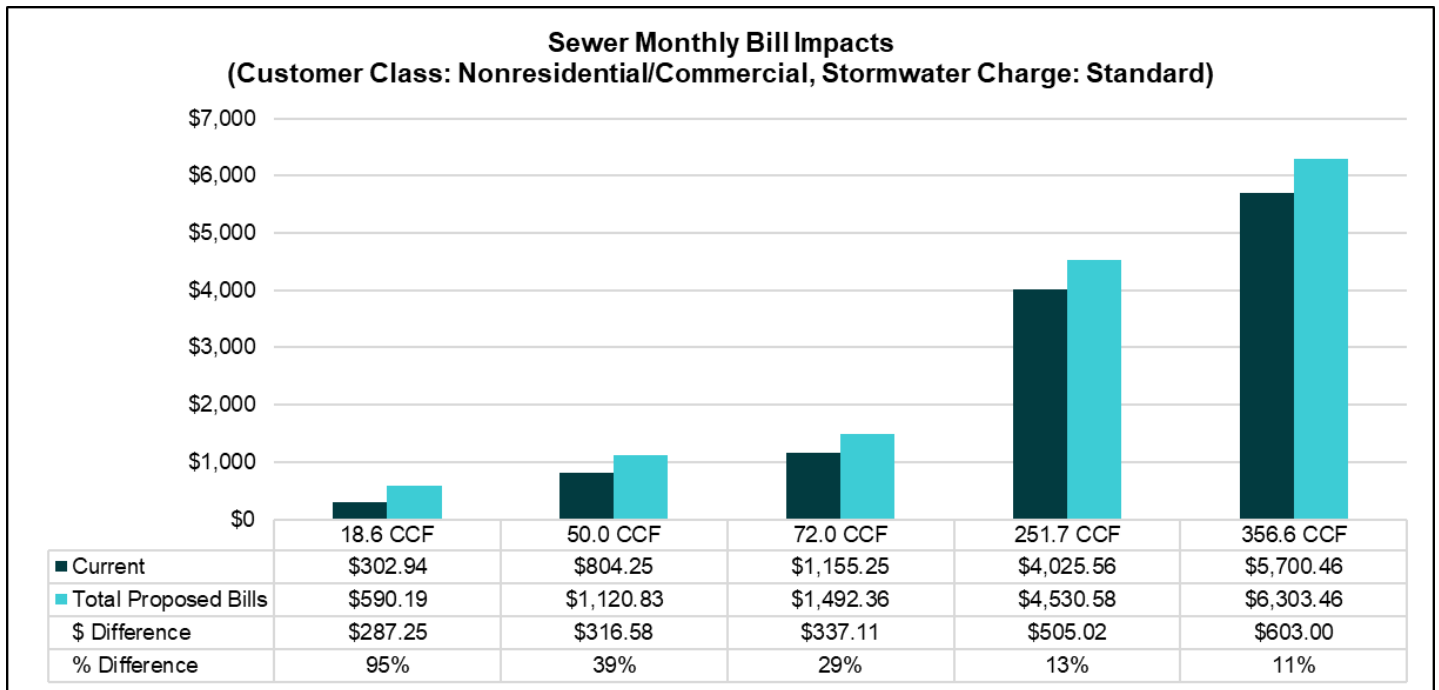


Figure 9-4, Figure 9-5, and Figure 9-6 show the proposed bill impacts from FY 2024 to FY 2030 for three different types of customers. Figure 9-4 is a Single Family Residential customer with billed sewer discharges of 4.32 CCF in Simplified Residential Tier SRT 2. Figure 9-5 shows the bill impacts for a Multifamily Residential building with monthly billed discharges of 71.2 CCF, 43 sq. ft. of permeable area, and 4,008 sq. ft. of impermeable area. Figure 9-6 shows the impacts for a Non-Residential customer with monthly billed discharges of 307.6 CCF, 22,924 sq. ft. of permeable area, and 141,018 sq. ft. of impermeable area.

Figure 9-4: Proposed and Planned Single Family Residential Bill Impacts

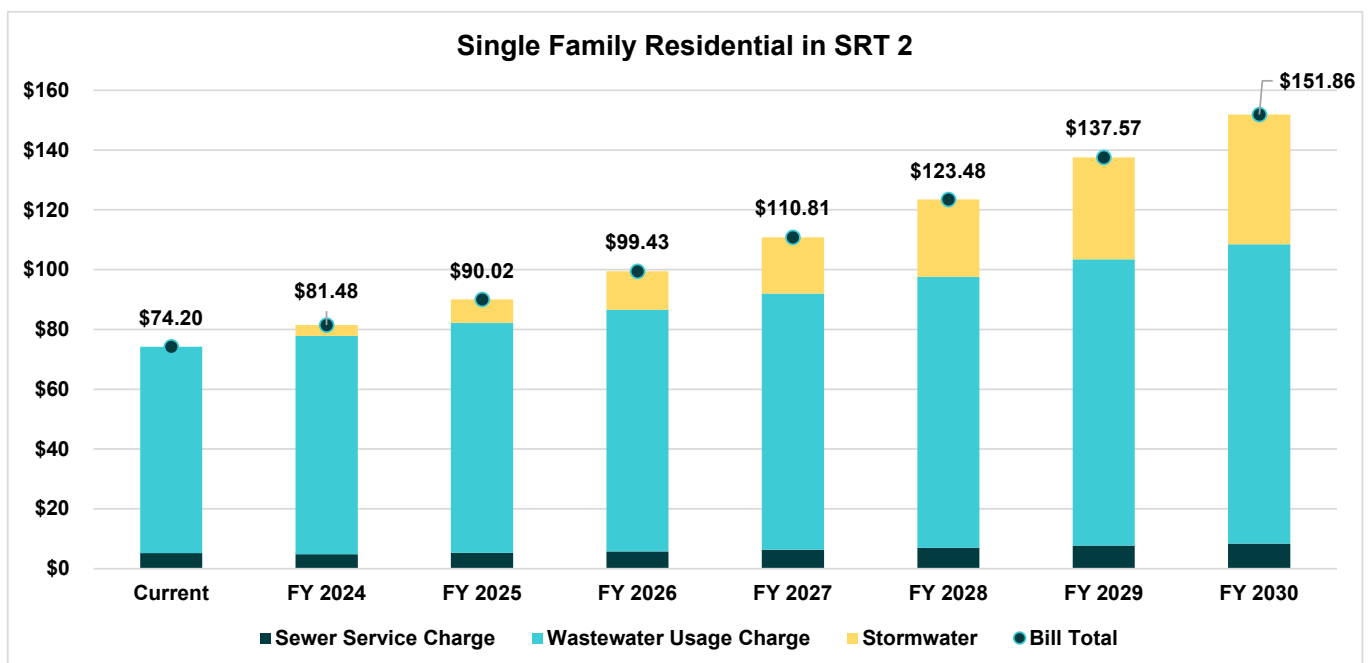


Figure 9-5: Proposed and Planned Multifamily Residential Bill Impacts

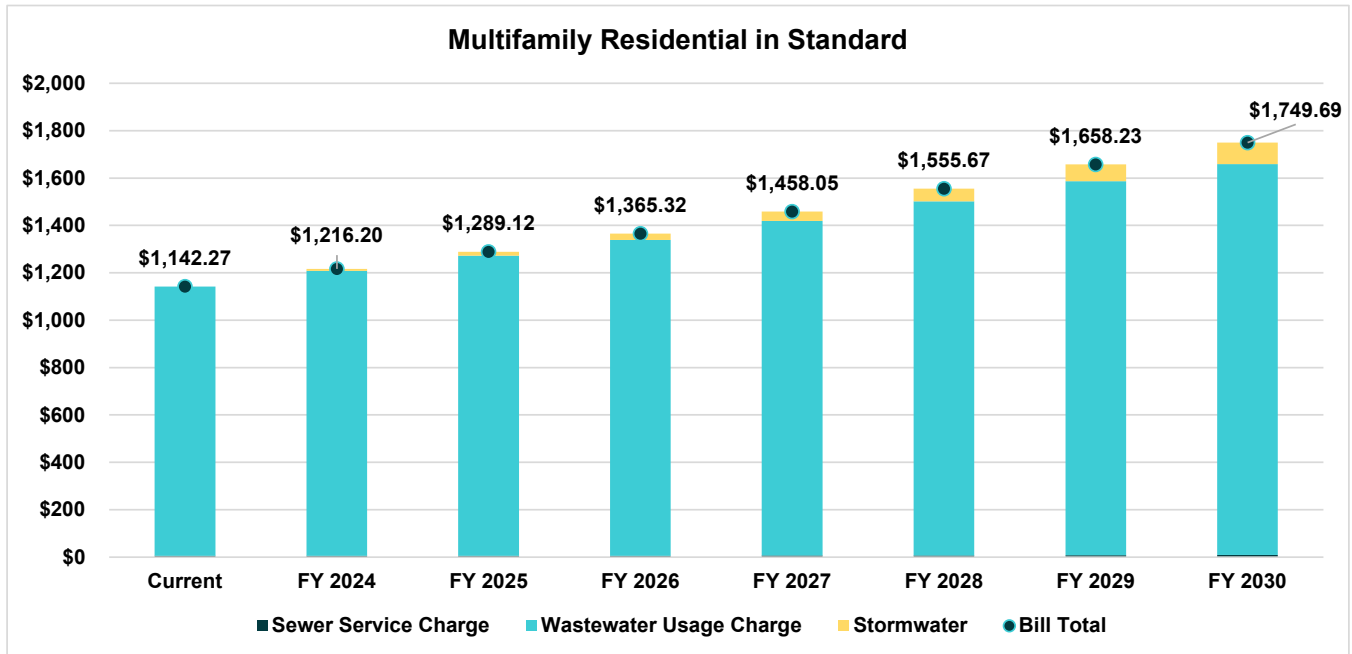
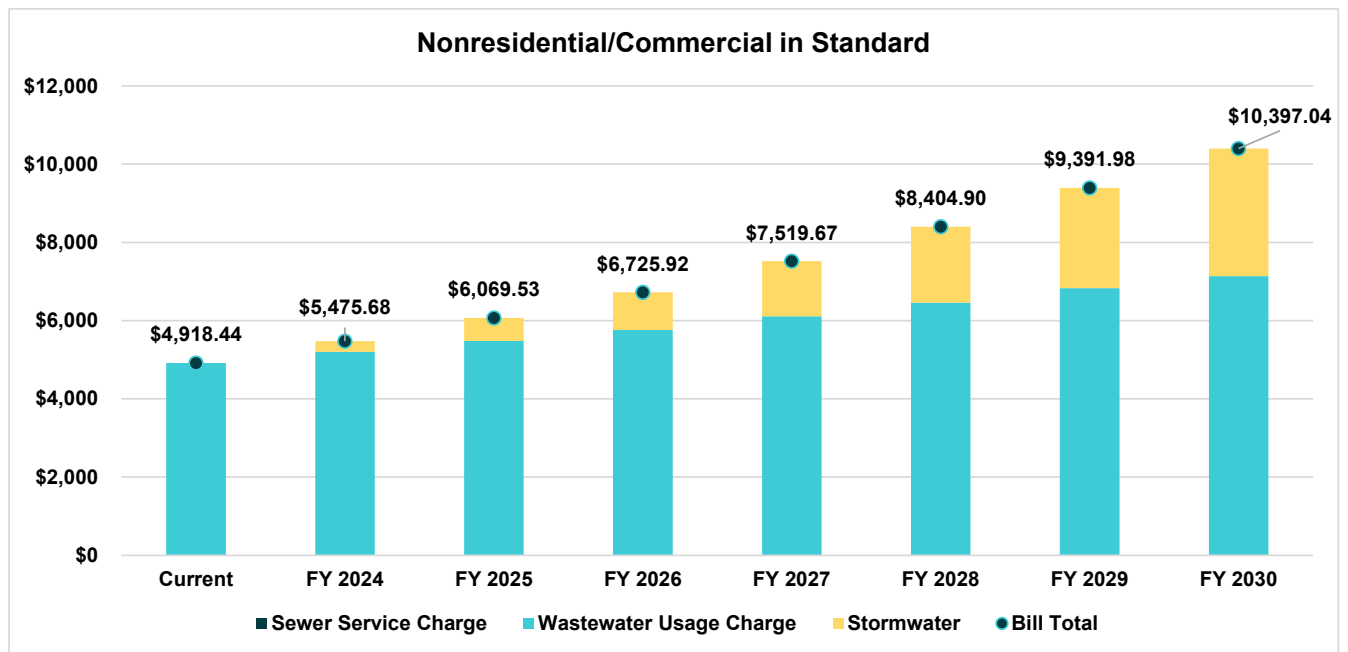


Figure 9-6: Proposed and Planned Non-Residential Customer Bill Impacts



APPENDIX A:

**Ten-Year Water Enterprise
Financial Plan**



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	FY 2033
1	Retail Rate Revenue from Existing Rates											
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	\$300,494,150
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	\$14,368,507
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)	(\$533,379)
5	Total Rate Revenue subject to Adjustments	\$329,706,730	\$335,543,171	\$325,798,581	\$330,457,894	\$327,300,214	\$325,123,456	\$321,407,688	\$318,813,675	\$316,217,599	\$315,844,777	\$314,329,278
6												
7	Proposed Revenue Adjustments											
8	Fiscal											
9	Year											
10	Revenue											
11	Adjustment											
12	Month											
13	Effective											
14	FY 2024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	FY 2025	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	FY 2026	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	FY 2027	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	FY 2028	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	FY 2029	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20	FY 2030	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	FY 2031	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
22	FY 2032	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
23	FY 2033	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24	Total Revenue Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25												
26	REVENUE											
27	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	\$314,862,657
28	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)	(\$7,000,000)
29	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	\$402,060,094
30	Interest Income	\$1,109,000	\$1,133,000	\$1,133,273	\$804,576	\$406,013	\$5,565	\$0	\$0	\$0	\$0	\$0
31	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	\$17,093,917
32	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	\$19,710,866
33	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	\$18,679,810
34	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	\$7,083,407
35	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	\$1,520,000
36	TOTAL REVENUE	\$675,207,967	\$704,352,909	\$705,078,728	\$724,356,078	\$722,428,291	\$742,042,660	\$745,750,583	\$761,547,420	\$761,318,290	\$766,253,118	\$774,010,752
37												
38	O&M Expenses											
39	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	\$155,282,100
40	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	\$26,717,641
41	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	\$25,306,317
42	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	\$83,567,719
43	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	\$35,677,019
44	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	\$62,689,000
45	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	\$4,507,553
46	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	\$33,266,186
47	TOTAL O&M	\$327,024,913	\$328,788,358	\$340,101,058	\$349,860,685	\$359,892,582	\$370,025,772	\$380,577,592	\$391,657,705	\$403,026,107	\$414,714,148	\$427,013,536
48												
49	NET REVENUE	\$348,183,054	\$375,564,551	\$364,977,669	\$374,495,393	\$362,535,709	\$372,016,888	\$365,172,991	\$369,889,716	\$358,292,183	\$351,538,970	\$346,997,216
50												
51	DEBT SERVICE											
52	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	\$341,823,983
53	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	\$85,562,710
54	TOTAL DEBT SERVICE	\$328,352,143	\$333,499,425	\$335,387,524	\$373,652,956	\$374,456,949	\$399,419,870	\$407,394,498	\$434,849,593	\$433,116,321	\$433,718,379	\$427,386,693
55												
56	FUNDING FOR PAY-AS-YOU-GO CIP											
57	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	\$1,520,000
58	Local Revenue	\$20,604,600	\$20,579,658	\$51,559,000	\$57,100,000	\$38,545,000	\$30,000,000	\$42,000,000	\$40,327,975	\$27,600,000	\$35,698,998	\$23,000,000
59	Regional Revenue	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$20,000,000	\$19,958,681	\$22,000,000
60	TOTAL FUNDING FOR PAY-AS-YOU-GO CIP	\$										

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	FY 2033
1	Retail Rate Revenue from Existing Rates											
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	\$300,494,150
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	\$14,368,507
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)	(\$533,379)
5	Total Rate Revenue subject to Adjustments	\$329,706,730	\$335,543,171	\$325,798,581	\$330,457,894	\$327,300,214	\$325,123,456	\$321,407,688	\$318,813,675	\$316,217,599	\$315,844,777	\$314,329,278
6												
7	Proposed Revenue Adjustments											
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
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
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
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	FY 2028	4.0%	July	\$0	\$0	\$0	\$0	\$0	\$15,657,035	\$15,478,094	\$15,353,174	\$15,228,154
15	FY 2029	4.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$16,097,218	\$15,967,301	\$15,837,280
16	FY 2030	3.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,454,495	\$12,353,079
17	FY 2031	3.0%	July	\$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	\$13,089,930
19	FY 2033	3.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,417,935
20	Total Revenue Adjustments	\$0	\$16,777,159	\$33,394,355	\$52,088,425	\$66,746,333	\$81,959,462	\$97,119,982	\$108,790,642	\$120,628,439	\$133,576,148	\$146,353,152
21												
22	REVENUE											
23	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	\$461,215,809
24	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)	(\$7,000,000)
25	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	\$402,060,094
26	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	\$1,710,506
27	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	\$17,093,917
28	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	\$19,710,866
29	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	\$18,679,810
30	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	\$7,083,407
31	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	\$1,520,000
32	TOTAL REVENUE	\$675,207,967	\$721,130,067	\$738,640,454	\$776,826,419	\$789,855,535	\$825,375,027	\$844,206,521	\$871,562,852	\$883,605,016	\$901,460,226	\$922,074,410
33												
34	O&M Expenses											
35	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	\$155,282,100
36	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	\$26,717,641
37	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	\$25,306,317
38	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	\$83,567,719
39	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	\$35,677,019
40	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	\$62,689,000
41	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	\$4,507,553
42	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	\$33,266,186
43	TOTAL O&M	\$327,024,913	\$328,788,358	\$340,101,058	\$349,860,685	\$359,892,582	\$370,025,772	\$380,577,592	\$391,657,705	\$403,026,107	\$414,714,148	\$427,013,536
44												
45	NET REVENUE	\$348,183,054	\$392,341,709	\$398,539,395	\$426,965,734	\$429,962,954	\$455,349,256	\$463,628,928	\$479,905,147	\$480,578,909	\$486,746,078	\$495,060,874
46												
47	DEBT SERVICE											
48	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	\$341,823,983
49	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	\$85,562,710
50	TOTAL DEBT SERVICE	\$328,352,143	\$333,499,425	\$335,387,524	\$373,652,956	\$374,456,949	\$399,419,870	\$407,394,498	\$434,849,593	\$433,116,321	\$433,718,379	\$427,386,693
51												
50	FUNDING FOR PAY-AS-YOU-GO CIP											
51	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	\$1,520,000
52	Local Revenue	\$20,604,600	\$20,579,658	\$51,559,000	\$57,100,000	\$38,545,000	\$30,000,000	\$42,000,000	\$40,327,975	\$27,600,000	\$35,698,998	\$23,000,000
53	Regional Revenue	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$20,000,000	\$19,958,681	\$22,000,000
54	TOTAL FUNDING FOR PAY-AS-YOU-GO CIP	\$47,124,600	\$47,576,658									

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	Retiree 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

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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

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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

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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

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		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	\$665,285	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 Envnmntl Services	UW Water Treatment	5010Salary	Overtime - Scheduled Misc	\$75,685	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5010Salary	Perm Salaries-Misc-Regular	\$2,404,540	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5010Salary	Premium Pay - Misc	\$434,367	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5010Salary	Temp Misc Regular Salaries	\$27,048	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	Dental Coverage	\$20,387	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	Dependent Coverage	\$252,366	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	Health Service-City Match	\$68,924	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	Long Term Disability Insurance	\$8,797	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	Retire City Misc	\$339,414	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	Retiree Health-Match-Prop B	\$18,226	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	RetireeHlthCare-CityMatchPropC	\$11,194	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	Social Sec-Medicare(HI Only)	\$42,652	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	Social Security (OASDI & HI)	\$178,397	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5130Fringe	Unemployment Insurance	\$2,943	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5210NPSvcs	Other Current Expenses - Bdgt	\$4,750	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5210NPSvcs	Other Equip Maint	\$19,000	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$403,750	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$4,750	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5210NPSvcs	Software Licensing Fees	\$29,743	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5210NPSvcs	Subscriptions	\$4,750	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$1,330	100% Water Quality
WTR0403 WQD Envnmntl Services	UW Water Treatment	5400Mat&Su	Minor Data Processing Equipmnt	\$14,250	100% Water Quality
WTR0403 WQD Envnmntl 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	5810OthDep	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

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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

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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	5810OthDep	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	5810OthDep	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

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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
Total FY 2024 O&M				\$328,788,358	

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	\$108,115,229	32.88%
Alternative Water Supply	\$127,535	\$0	\$75,826	\$203,361	0.06%
Groundwater	\$1,342,008	\$0	\$797,884	\$2,139,893	0.65%
Recycled Water	\$3,596,061	\$0	\$2,138,021	\$5,734,082	1.74%
Water Conservation	\$7,112,420	\$0	\$4,228,654	\$11,341,074	3.45%
Pumping	\$4,869,092	\$0	\$2,894,895	\$7,763,987	2.36%
Transmission	\$18,075,017	\$0	\$10,746,412	\$28,821,429	8.77%
Distribution	\$11,629,529	\$0	\$6,914,279	\$18,543,809	5.64%
Storage	\$666,106	\$0	\$396,030	\$1,062,136	0.32%
Treatment	\$44,874,985	\$0	\$26,680,201	\$71,555,186	21.76%
Water Quality	\$21,083,167	\$0	\$12,534,893	\$33,618,059	10.22%
Meters	\$1,022,566	\$4,057,430	\$3,020,286	\$8,100,282	2.46%
Hydrants / AWSS	\$7,134,047	\$0	\$4,241,513	\$11,375,560	3.46%
Fire Sprinklers	\$41,817	\$0	\$24,862	\$66,678	0.02%
Customer	\$4,530,661	\$8,230,091	\$7,586,842	\$20,347,593	6.19%
Bureau	\$64,047,698	(\$64,047,698)	\$0	\$0	0.00%
Indirect - General	\$70,832,466	\$51,760,177	(\$122,592,643)	\$0	0.00%
Total	\$328,788,358	\$0	\$0	\$328,788,358	100.00%

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
Total	\$1,670,765,002	

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

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
REGIONAL WATER		
19056-UW Regional Water Treatment Program		
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
19057-UW Water Transmission Program		
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
19058-UW Water Supply and Storage		
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
19059-UW Watersheds and Land Management		
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
19060-UW Communication and Monitoring Program		
15514-UW Microwave Backbone Upgrade	\$4,300,000	100% Indirect - General
15515-UW Security System	\$11,948,767	100% Indirect - General
19061-UW Buildings and Grounds - Regional		
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
19069-UW Long Term Monitoring & Perm		
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
LOCAL WATER		
80119-Water Supply Projects		
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
19063-UW Local Water Conveyance-dist		
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
19065-UW Systems Monitoring and Control		
15534-UW Systems Monitoring and Control	\$15,219,102	100% Customer
19066-UW Local Reservoir Tank Improv		
15538-UW Local Reservoir - Budget	\$36,306,817	100% Storage
19067-UW Pump Station Improvements		
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
19071-UW Groundwater Project		
15555-UW Lake Merced Water Level Res	\$9,996,228	100% Alternative Water Supply
19072-UW Recycled Water Project		
15558-UW Recycled Water Project	\$2,368,382	100% Recycled Water
19112-UW Automated Meter Reading System		
15612-UW Automated Meter Reading Sys	\$18,782,778	100% Meters
19114-UW Buildings & Grounds Improvements - Local		
15617-UW Buildings & Grounds Improvements - Local	\$2,838,628	100% Indirect - General
21396 - New CDD Headquarter	\$343,562,838	100% Indirect - General
Total	\$1,763,068,939	

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

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
Total	\$1,692,036,503	

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%
Total	\$1,692,036,503	\$0	\$0	\$1,692,036,503	100.00%

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
Total	\$448,996,295	

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%
Total	\$448,996,295	\$0	\$0	\$448,996,295	100.00%

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	FY 2033
1	RETAIL RATE REVENUE SUBJECT TO ADJUSTMENTS											
2	Drought Revenue	\$16,282,325	\$17,302,729	\$0	\$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	\$330,410,147
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	\$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	\$7,327,902
6	Municipal - Fixed	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957
7	Total Rate Revenue Subject to Adjustments	\$369,228,064	\$374,249,662	\$361,870,344	\$367,799,557	\$364,017,407	\$361,483,646	\$356,997,621	\$353,897,328	\$350,790,316	\$350,440,842	\$348,630,404
8												
9	PROPOSED REVENUE ADJUSTMENTS											
10	Fiscal Year	Revenue Adjustment	Month Effective									
11												
12	FY 2024	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	FY 2025	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	FY 2026	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	FY 2027	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	FY 2028	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	FY 2029	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	FY 2030	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	FY 2031	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20	FY 2032	0.0%	July	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	Total Revenue Adjustments	\$0	\$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	\$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	\$118,568
25	Total Rate Revenue without Drought Rates	\$369,346,633	\$357,065,501	\$361,988,912	\$367,918,125	\$364,135,975	\$361,602,214	\$357,116,190	\$354,015,896	\$350,908,885	\$350,559,410	\$348,748,973
26												
27	OTHER REVENUE											
28	Drought Rates (with Revenue Increase)	\$0	\$17,302,729	\$0	\$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	\$173,128
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	\$29,186,894
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	\$5,913,912
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	\$5,695,000
33	TOTAL REVENUES	\$396,920,863	\$403,966,403	\$392,728,380	\$399,923,351	\$397,667,835	\$396,842,915	\$393,601,074	\$392,127,747	\$390,251,348	\$390,593,802	\$389,717,907
34												
35	O&M EXPENSES											
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	\$113,850,629
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	\$35,616,464
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	\$17,911,367
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	\$47,282,146
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	\$51,927,191
41	Other Operating Expenses	\$140,857	\$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	\$8,184,700
43	TOTAL O&M EXPENSES	\$201,592,038	\$210,538,166	\$216,812,590	\$223,290,039	\$229,977,256	\$236,881,212	\$244,009,120	\$251,368,439	\$258,966,885	\$266,812,437	\$274,913,353
44												
45	NET REVENUE	\$195,328,824	\$193,428,237	\$175,915,790	\$176,633,312	\$167,690,579	\$159,961,703	\$149,591,953	\$140,759,308	\$131,284,463	\$123,781,365	\$114,804,554
46												
47	DEBT SERVICE											
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	\$146,232,085
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	\$243,051,484
50	TOTAL DEBT SERVICE	\$104,017,873	\$106,234,104	\$124,721,371	\$153,214,399	\$210,966,492	\$236,343,542	\$265,066,896	\$327,021,914	\$359,094,216	\$363,101,652	\$389,283,569
51												
52	FUNDING FOR PAY-AS-YOU-GO CIP											
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	\$143,712,738
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	\$5,695,000
55	TOTAL FUNDING FOR PAY-AS-YOU-GO CIP	\$88,700,000	\$98,367,000	\$128,352,438	\$130,805,586	\$133,307,798	\$135,860,054	\$138,463,355	\$141,118,722	\$143,827,197	\$146,589,841	\$149,407,738
56												
57	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)	(\$423,886,753)

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
58	FUNDING BALANCE (EXCLUDING PROPOSED DEBT PROCEEDS)											
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)	(\$1,763,028,963)
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)	(\$423,886,753)
61	ENDING BALANCE	\$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)	(\$1,763,028,963)	(\$2,186,915,716)
62	Ending Balance (% of Annual O&M)	79.6%	70.9%	33.2%	-15.8%	-92.1%	-179.1%	-277.9%	-400.0%	-531.8%	-660.8%	-795.5%
63	Minimum Reserve Target (% of Annual O&M)	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	125.0%	225.0%	325.0%	425.0%	525.0%
64												
65	CURRENT DEBT SERVICE COVERAGE TEST											
66	Net Revenue Subject to Debt Coverage Test	\$200,355,741	\$198,444,788	\$180,932,341	\$181,649,863	\$172,707,130	\$164,978,254	\$154,608,504	\$145,775,859	\$136,301,014	\$128,797,916	\$119,821,105
67	Projected Debt Coverage	2.00	1.94	1.58	1.27	0.88	0.70	0.59	0.45	0.38	0.36	0.31
68	Required Debt Coverage	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	2.10	3.10

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	FY 2033
1	RETAIL RATE REVENUE SUBJECT TO ADJUSTMENTS											
2	Drought Revenue	\$16,282,325	\$17,302,729	\$0	\$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	\$330,410,147
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	\$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	\$7,327,902
6	Municipal - Fixed	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957	\$71,957
7	Total Rate Revenue Subject to Adjustments	\$369,228,064	\$374,249,662	\$361,870,344	\$367,799,557	\$364,017,407	\$361,483,646	\$356,997,621	\$353,897,328	\$350,790,316	\$350,440,842	\$348,630,404
8												
9	PROPOSED REVENUE ADJUSTMENTS											
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	\$31,539,676
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	\$34,378,247
14	FY 2026	9.0%	July			\$39,328,439	\$38,924,017	\$38,653,085	\$38,173,399	\$37,841,887	\$37,509,658	\$37,472,289
15	FY 2027	10.0%	July				\$47,141,310	\$46,813,180	\$46,232,227	\$45,830,730	\$45,428,363	\$45,383,105
16	FY 2028	10.0%	July					\$51,494,498	\$50,855,450	\$50,413,803	\$49,971,200	\$49,921,416
17	FY 2029	10.0%	July						\$55,940,995	\$55,455,184	\$54,968,320	\$54,913,557
18	FY 2030	9.0%	July							\$54,900,632	\$54,418,636	\$54,364,422
19	FY 2031	9.0%	July								\$59,316,314	\$59,257,220
20	FY 2032	5.0%	July									\$35,883,539
21	Total Revenue Adjustments		\$0	\$32,125,224	\$68,067,812	\$108,511,536	\$154,537,001	\$204,955,837	\$202,412,329	\$200,654,508	\$198,892,879	\$198,694,732
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	\$118,568
25	Total Rate Revenue without Drought Rates	\$369,346,633	\$389,190,725	\$430,056,724	\$476,429,661	\$518,672,976	\$566,558,051	\$559,528,518	\$554,670,404	\$549,801,764	\$549,254,143	\$546,417,214
26												
27	OTHER REVENUE											
28	Drought Rates (with Revenue Increase)	\$0	\$18,859,974	\$0	\$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	\$173,128
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	\$29,186,894
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	\$5,913,912
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	\$5,695,000
33	TOTAL REVENUES	\$396,920,863	\$437,648,873	\$460,796,192	\$508,434,886	\$552,204,836	\$601,798,753	\$596,013,402	\$592,782,255	\$589,144,227	\$589,288,535	\$587,386,148
34												
35	O&M EXPENSES											
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	\$113,850,629
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	\$35,616,464
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	\$17,911,367
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	\$47,282,146
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	\$51,927,191
41	Other Operating Expenses	\$140,857	\$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	\$8,184,700
43	TOTAL O&M EXPENSES	\$201,592,038	\$210,538,166	\$216,812,590	\$223,290,039	\$229,977,256	\$236,881,212	\$244,009,120	\$251,368,439	\$258,966,885	\$266,812,437	\$274,913,353
44												
45	NET REVENUE	\$195,328,824	\$227,110,707	\$243,983,602	\$285,144,848	\$322,227,580	\$364,917,541	\$352,004,282	\$341,413,816	\$330,177,342	\$322,476,097	\$312,472,795
46												
47	DEBT SERVICE											
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	\$146,232,085
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	\$243,051,484
50	TOTAL DEBT SERVICE	\$104,017,873	\$106,234,104	\$124,721,371	\$153,214,399	\$210,966,492	\$236,343,542	\$265,066,896	\$327,021,914	\$359,094,216	\$363,101,652	\$389,283,569
51												
52	FUNDING FOR PAY-AS-YOU-GO CIP											
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	\$143,712,738
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	\$5,695,000
55	TOTAL FUNDING FOR PAY-AS-YOU-GO CIP	\$88,700,000	\$98,367,000	\$128,352,438	\$130,805,586	\$133,307,798	\$135,860,054	\$138,463,355	\$141,118,722	\$143,827,197	\$146,589,841	\$149,407,738
56												
57	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)	(\$226,218,512)

Line	Category	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
58	FUNDING BALANCE (EXCLUDING PROPOSED DEBT PROCEEDS)											
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	\$146,798,958
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)	(\$226,218,512)
61	ENDING BALANCE	\$160,380,902	\$182,890,506	\$173,800,299	\$174,925,162	\$152,878,452	\$145,592,397	\$94,066,428	\$23,280,603	(\$39,107,653)	(\$57,619,779)	(\$79,419,553)
62	Ending Balance (% of Annual O&M)	79.6%	86.9%	80.2%	78.3%	66.5%	61.5%	38.6%	9.3%	-15.1%	-21.6%	-28.9%
63	Minimum Reserve Target (% of Annual O&M)	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	125.0%	225.0%	325.0%	425.0%	525.0%
64												
65	CURRENT DEBT SERVICE COVERAGE TEST											
66	Net Revenue Subject to Debt Coverage Test	\$191,908,023	\$223,289,201	\$239,760,360	\$280,211,768	\$316,659,477	\$358,627,062	\$400,920,651	\$444,000,753	\$490,309,014	\$517,804,374	\$536,358,062
67	Projected Debt Coverage	1.92	2.18	2.09	1.96	1.62	1.57	1.56	1.40	1.41	1.47	1.42
68	Required Debt Coverage	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	2.10	3.10

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
WWE Op Annual Ctrl Total						
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	Retire 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.%,
WWE Op Annual Account Ctrl Total					\$51,001,874	

Fund Title	Dept ID Title	Project Title	Account Lvl 5		O&M Expenses	Functional Allocation Basis
			Title	Account Title		
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	58100thDep	GF-GSA-Facilities Mgmt Svcs	\$367,946	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	58100thDep	Sr-DPW-Building Repair	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0102 Admin SE Community	UC Administration WWE	58100thDep	Sr-SAS-Building Repair	\$75,869	Indirect - 100.%,
WWE Op Annual Account Ctrl Total					\$2,538,241	

Fund Title	Dept ID Title	Project Title	Account Lvl 5		O&M Expenses	Functional Allocation Basis
			Title	Account Title		
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	58100thDep	GF-Chs-Medical Service	\$41,178	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	58100thDep	Sr-DPW-Engineering	\$140,405	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	58100thDep	Sr-DPW-Urban Forestry	\$0	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	58100thDep	SR-Neighborhood Beautification	\$100,000	Indirect - 100.%,
WWE Op Annual Account Ctrl	WWE0103 Planning & Regulation	UC Administration WWE	58100thDep	Sr-SAS-Urban Forestry	\$341,250	Indirect - 100.%,
WWE Op Annual Account Ctrl Total					\$8,709,062	

Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
WWE Op Annual Account Ctrl 1WWE03 Maintenance					\$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	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	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$5,906,245	Solids Handling - 100.%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$2,200,000	Solids Handling - 100.%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5210NPSvcs	Taxes, Licenses & Permits-Bdgt	\$109,195	Solids Handling - 100.%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5210NPSvcs	Utilities Expenses-Budget	\$988,590	Solids Handling - 100.%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5400Mat&Su	Other Equipment Maint Supplies	\$90,000	Disinfection / Discharge - 60.%, Solids Handling - 20.%, Pumping / Lift Stations - 20.%,
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.%, Solids Handling - 20.%, Pumping / Lift Stations - 20.%,
WWE Op Annual Account Ctrl	WWE04 Bayside Operations	UC Wastewater Treatment	5600CapOut	Automotive & Other Vehicles	\$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.%, Solids Handling - 30.%, Pumping / Lift Stations - 20.%,
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-DPWC-Construction Mgmt	\$0	
WWE Op Annual Account Ctrl Total					\$53,747,065	

Fund Title	Dept ID Title	Project Title	Account Lvl 5		O&M	
			Title	Account Title	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.%,
WWE Op Annual Account Ctrl Total					\$7,706,252	

Fund Title	Dept ID Title	Project Title	Account Lvl 5		O&M	Functional Allocation Basis
			Title	Account Title	Expenses	
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	5210NPSvcs	Employee Field Expenses-Budget	\$203	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NPSvcs	Fees Licenses Permits	\$135,828	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NPSvcs	Maint Svcs-Bldgs & Impvts-Bdgt	\$814,884	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NPSvcs	Maint Svcs-Equipment-Budget	\$37,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NPSvcs	Other Bldg Maint Svcs	\$500,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NPSvcs	Other Current Expenses - Bdgt	\$741,378	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NPSvcs	Prof & Specialized Svcs-Bdgt	\$0	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NPSvcs	Rents & Leases-Equipment-Bdgt	\$956,116	Stormwater - 25.%, General Collections - 75.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5210NPSvcs	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 Collections - 75.%,
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	5810OthDep	Ef-Municipal Railway	\$70,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	GF-Chs-Medical Service	\$100,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	Is-Purch-Centr Shop-AutoMaint	\$419,685	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	Is-Purch-Centr Shop-FuelStock	\$242,684	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	Sr-DPW-Building Repair	\$0	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	Sr-DPW-Engineering	\$100,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	Sr-DPW-Sewer Repair	\$0	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	Sr-DPW-Street Cleaning	\$0	Stormwater - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	Sr-SAS-Building Repair	\$83,287	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	Sr-SAS-Sewer Repair	\$2,100,000	General Collections - 100.%,
WWE Op Annual Account Ctrl	WWE1001 Sewer Operations	UC Wastewater Collection	5810OthDep	Sr-SAS-Street Cleaning	\$5,853,728	Stormwater - 100.%,
WWE Op Annual Account Ctrl Total					\$24,698,415	

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.%,
WWE Op Annual Account Ctrl Total					\$5,793,674	

Fund Title	Dept ID Title	Project Title	Account Lvl 5 Title	Account Title	O&M Expenses	Functional Allocation Basis
WWE Annual Authority Ctrl						
WWE Annual Authority Ctrl	WWE0101 Administration	525 Golden Gate - Lease Payme	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	5060ProgPr	Programmatic Projects-Budget	\$0	Indirect - 100.%,
WWE Annual Authority Ctrl	WWE0101 Administration	Youth Employment & Environnr	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.%,
WWE Annual Authority Ctrl Total					\$7,766,551	

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
Unit COS	\$7.12	\$5.92	\$12.61
Units	\$/CCF	\$/CCF	\$/CCF

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
Unit COS	\$0.79
Units	\$/Pound

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		Unit Cost (\$/lb)	
13	Unit of Service	TSS	
14	COS	\$61,887,487	
15	Units of Service	40,022,124	
16	Unit COS	\$1.55	
17	Units	\$/Pound	

Units of Service Detailed Calculation (OG)

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		Unit Cost (\$/lb)	
13	Unit of Service	O/G	
14	COS	\$12,449,581	
15	Units of Service	12,154,574	
16	Unit COS	\$1.02	
17	Units	\$/Pound	

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	Unit Cost of Service		
13	Unit of Service	Customer	
14	COS	\$152,866	
15	Units of Service	2,090,663	
16	Unit COS	\$0.07	
17	Units	\$/Bill	