Coastside County Water District

2024 Water Rate Study

Final Report – July 2024

Prepared by: Water Resources Economics, LLC

Water Resources Economics

PROMOTING THE VALUE AND PRICE OF WATER SERVICE

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July 1, 2024

Mary Rogren
General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, CA

Subject: Coastside County Water District Water Rate Study Report

Dear Ms. Rogren,

Water Resources Economics, LLC (WRE) is pleased to submit this 2024 Water Rate Study Report to the Coastside County Water District (District). This report documents the results and recommendations of the District's water rates study. The goal of the study was to develop an updated three-year schedule of water rates and water shortage rates that will sufficiently fund the District's water system expenses, allow the District to meet its financial goals within the study period, and comply with cost-of-service principles.

This study utilized industry-standard rate-setting methodology in accordance with guidelines developed by the American Water Works Association and incorporates guidance provided by the District's Board of Directors and Finance Committee. Our project team has a proven track record of developing fair and equitable water rates for numerous public water agencies in California over the past 25 years. We are confident in our ability to develop sound water rates that satisfy the requirements of Proposition 218.

It has been a pleasure assisting the District, and we appreciate the support provided by yourself, Mr. Jeffrey Schneider, the Board of Directors, and other District staff during this study.

Sincerely,

Sanjay Gaur
Principal Consultant

Nancy Phan
Senior Consultant

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1. EXECUTIVE SUMMARY

1.1 SYSTEM OVERVIEW

The Coastside County Water District (District) provides water service to over 6,500 metered connections, which include Single Family Residential, Multi-Family Residential, and Commercial/All Other customer classes. The District's service area encompasses the city of Half Moon Bay and the unincorporated areas of Princeton, Miramar, and El Granada within San Mateo County and is approximately 14 square miles.

The water system, which is owned and operated by the District, consists of two water treatment plants (the Nunes and Denniston Water Treatment Plants), over 100 miles of transmission and distribution pipelines, multiple pump stations, and multiple water storage facilities and tanks.

The District's water supply sources include local surface water from Pilarcitos Creek and Denniston Creek and imported, untreated water from the San Francisco Public Utilities Commission (SFPUC) via the Pilarcitos Reservoir and Upper Crystal Springs Reservoir. The District purchases approximately 60-70% of its water from SFPUC to meet customer demand, although there is some variability depending on local water supply availability and water supply conditions, such as water shortages.

1.2 RATE STUDY OVERVIEW

Public retail water agencies in California typically conduct a cost-of-service study every five years to ensure that customers are appropriately charged for water service and to reestablish the cost-of-service nexus that is required by Proposition 218. The District's existing rate structure was developed in 2018 in a cost-of-service water rate study. Since 2018, the District has adopted updated water rates every two years based on the cost-of-service rate structure developed in 2018 with additional rate increases to meet financial targets.

The District engaged Water Resources Economics, LLC (WRE) in 2023 to conduct a comprehensive water rate study, with the following objectives:

- Develop a three-year water rate schedule for Fiscal Year Ending (FYE) 2025[1] through FYE 2027
- Conduct a cost-of-service analysis based on the most recent data and customer use characteristics
- Evaluate a five-year financial plan scenario to meet financial targets for FYE 2025 to FYE 2029
- Develop updated water shortage rates for a three-year period for FYE 2025 to FYE 2027

1.3 LEGAL REQUIREMENTS

Legal considerations relating to retail water rates in California focus heavily on Proposition 218, which was enacted in 1996 and is now reflected in Article XIII C and Article XIII D of the California

[1] FYE 2025 is the year starting July 1, 2024 and ending June 30, 2025.

Constitution. Proposition 218 states that "property related fees and charges" (which include retail water rates) may not exceed the proportional cost of providing the service to the customer and may not be used for any purpose other than providing said service. The practical implication is that public retail water agencies in California must demonstrate a sufficient nexus between the costs incurred by the agency to provide water service and the rates charged to customers. The primary means by which retail water agencies address this requirement is by conducting a "cost-of-service analysis."

Proposition 218 also affects the rate adoption process by requiring agencies to hold a public hearing to adopt rates. The agency must mail public hearing notices to all customers no fewer than 45 days prior to the public hearing. The public hearing notices must clearly show all proposed rate changes, provide information on the public hearing date/time/location, and provide instructions on how customers may protest the proposed rate changes. If a majority of customers submit a protest, the proposed rate changes cannot be adopted.

1.4 RATE-SETTING METHODOLOGY

This study was conducted using industry-standard methodology outlined by the American Water Works Association (AWWA) in its *Manual of Water Supply Practices M1: Principles of Water Rates, Fees and Charges, Seventh Edition* (M1 Manual). The rate study process includes the following steps:

1. **Financial Plan**: Annual revenues and expenses are projected over the rate-setting period to determine the magnitude of rate increases needed to maintain financial sufficiency. Financial policies, such as reserve targets, are also evaluated and updated if necessary.
2. **Cost-of-Service Analysis**: Costs are allocated to customers in proportion to use of and burden on the water system. The overall goal is to establish a robust nexus between the costs incurred by an agency and the rates charged to customers, as required by Proposition 218.
3. **Rate Design**: The existing rate structure is evaluated, and potential changes are identified. A multi-year proposed rate schedule is then calculated directly from the results of the financial plan and cost-of-service analysis.
4. **Rate Study Documentation**: A rate study report is developed to document the proposed rate development process. This provides transparency and enhances legal defensibility in light of Proposition 218 requirements. This document serves as the report for this rate study.

1.5 ADDITIONAL INFORMATION AND DISCLAIMERS

This report summarizes the data, analyses, processes, and results of the District's water rate study. Some important information to keep in mind when reading the report includes the following:

- All study projections are based on the best available data as of June 2024.
- All table values are rounded to the nearest digit shown unless stated otherwise. However, all calculations are based on precise values. Attempting to manually recreate the calculations described in this report from the values displayed in tables may therefore produce slightly different results.

- All current and proposed rates and charges in this report are shown on a monthly basis.

1.6 CURRENT WATER RATES

CURRENT WATER RATES

The District's current water rate structure includes fixed monthly base charges by meter size, fixed monthly fire service charges by fire line diameter (charged to private fire customers only), and quantity charges by water usage measured in hundred cubic feet (hcf). Single Family Residential customers' quantity charges have three tiers; other customers, including Multi-Family and All Other, have a uniform quantity charge.

Table 1-1, **Table 1-2**, and **Table 1-3** show the current monthly base charges, monthly fire service charges, and quantity charges, respectively, that were adopted in the most recent two-year plan.

Table 1-1: Current Monthly Base Charges

Line	Monthly Base Charge	As of 1/19/23	As of 1/18/24
1	5/8 inch	$33.78	$35.81
2	3/4 inch	$49.92	$52.92
3	1 inch	$82.17	$87.10
4	1.5 inch	$162.82	$172.59
5	2 inch	$259.60	$275.18
6	3 inch	$566.06	$600.02
7	4 inch	$1,017.73	$1,078.79

Table 1-2: Current Monthly Fire Service Charges

Line	Monthly Fire Service Charge	As of 1/19/23	As of 1/18/24
1	3/4 inch	$5.67	$6.01
2	1 inch	$7.56	$8.01
3	1.5 inch	$11.34	$12.02
4	2 inch	$15.12	$16.02
5	3 inch	$22.68	$24.03
6	4 inch	$30.24	$32.04
7	6 inch	$45.36	$48.06
8	8 inch	$60.48	$64.08
9	10 inch	$75.60	$80.10

Table 1-3: Current Quantity Charges

Line	Quantity Charge ($/hcf)	As of 1/19/23	As of 1/18/24
1	Single Family Residential		
2	Tier 1 (1-4 units)	$10.75	$11.40
3	Tier 2 (5-8 units)	$15.72	$16.66
4	Tier 3 (9+ units)	$19.02	$20.16
5	Multi-Family	$14.33	$15.19
6	All Other Customers	$15.27	$16.19

CURRENT WATER SHORTAGE RATES

The current water rate structure includes water shortage rates based on each stage of the District's Water Shortage Contingency Plan (WSCP). **Table 1-4** shows the current water shortage rates for each of the six stages, which are based on the same customer classes and tiers as the quantity charges.

Table 1-4: Current Water Shortage Rates

Line	Incremental Water Shortage Rates ($/hcf)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**As of 1/18/24**						
2	Single Family Residential						
3	Tier 1 (1-4 units)	$2.57	$4.58	$6.48	$9.03	$13.67	$27.17
4	Tier 2 (5-8 units)	$3.75	$6.69	$9.47	$13.20	$19.98	$39.71
5	Tier 3 (9+ units)	$4.53	$8.10	$11.46	$15.97	$24.18	$48.05
6	Multi-Family	$3.42	$6.10	$8.64	$12.03	$18.22	$36.20
7	All Other Customers	$3.64	$6.50	$9.21	$12.83	$19.42	$38.59

1.7 FINANCIAL PLAN

WRE worked closely with District staff and the District's Board of Directors and Finance Committee (a subcommittee of the Board) to determine the financial plan scenario that best suits the District's needs. The results and recommendations of the water rate study are driven by the District's financial performance, input from District staff, and feedback and direction from the Board.

FACTORS AFFECTING FINANCIAL PERFORMANCE

The water system's financial performance is driven by the ability of the current water rates to meet the District's funding needs. To maintain financial sufficiency, water rates must fully fund operations and maintenance (O&M) costs, capital improvement plan (CIP) expenditures, and any relevant financial policies, which typically include target reserve balances and debt coverage.

The key factors affecting financial performance include:

- **Substantial capital investment needs over the next five years:** The cost of planned capital projects over the next five years (FYE 2025 through FYE 2029) is approximately $33.8 million. The capital execution rate is based on the District's 10-year average capital spending rate. After applying the capital execution rate of 85%, the expected CIP costs are equal to $28.7

million. Key projects include the Carter Hill Tank Improvement Project and the Highway 92 Emergency Pipeline Project.

- **Cost increases for SFPUC water:** The District is expected to purchase 65% of its water from SFPUC each year of the study. On average, purchased water costs from SFPUC are expected to increase approximately 6.5% each year. For the study period, SFPUC water costs represent approximately 24% of the District's annual O&M budget, on average.
- **Reserve policy targets:** The District's current reserve policy, which is shown in **Table 1-5**, includes targets for operating, capital replacement, and debt service reserves. The reserve policy in place allows the District to maintain cash on hand to meet short-term cash flow requirements, to execute CIP projects, and to meet debt covenants. The fund balances for FYE 2025 (the first year of the study) prior to any revenue adjustments is approximately half of the reserve target.

Table 1-5: Reserve Policy Targets

Line	Reserve Policy	Policy Targets	FYE 2025
1	Operating Reserve Target	25% of O&M expenses	$2,823,837
2	Capital Replacement Target	1 year of 5-year average CIP	$5,738,928
3	Debt Service Target	1 year of debt service	$2,029,867
4	Combined Target		$10,592,632
5			
6	Projected Reserves (Before Increases)		$5,160,634

STATUS QUO FINANCIAL PLAN

The first step in evaluating the District's financial performance is to develop a "status quo financial plan," which is the scenario in which the District does not increase its water rate revenues or issue new debt to fund CIP. This exercise is to determine whether the District's current water rates are sufficient to meet key financial performance metrics. This section shows two important metrics: fund balance and debt coverage.

Figure 1-1 shows the projected fund balances under the status quo scenario. The green bars represent the ending fund balances, and the dashed line represents the reserve policy targets. In this scenario, the District will not meet its reserve targets starting in FYE 2025. Projected fund balances will be negative starting in FYE 2028. Without additional rate revenues, the District is constrained by its fund balances.

Figure 1-1: Projected Fund Balances (Status Quo Financial Plan)

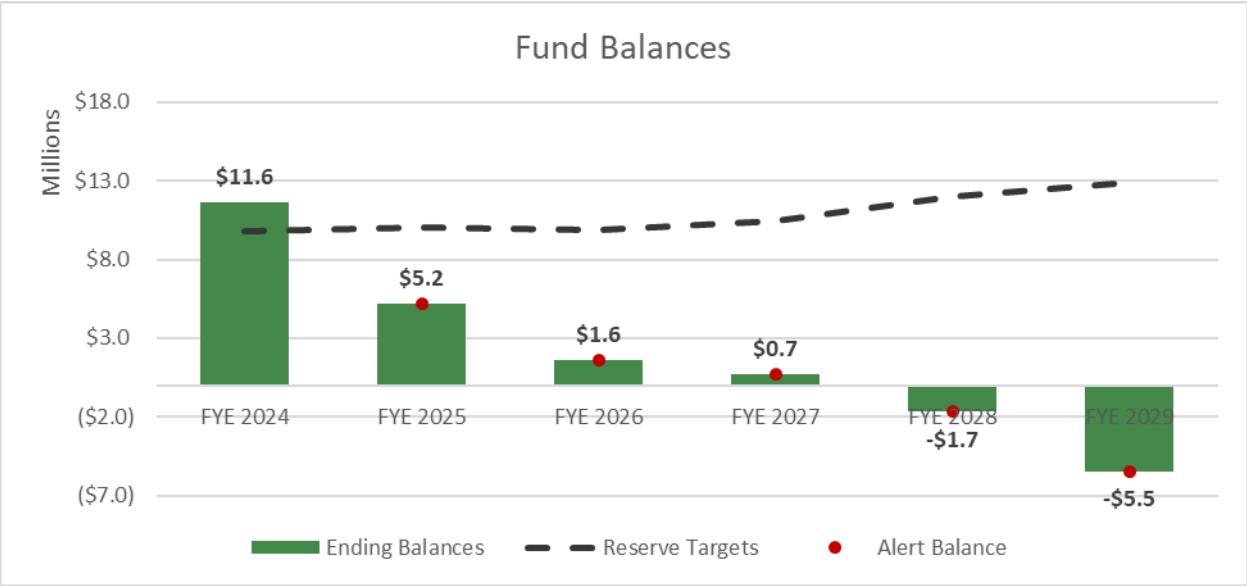
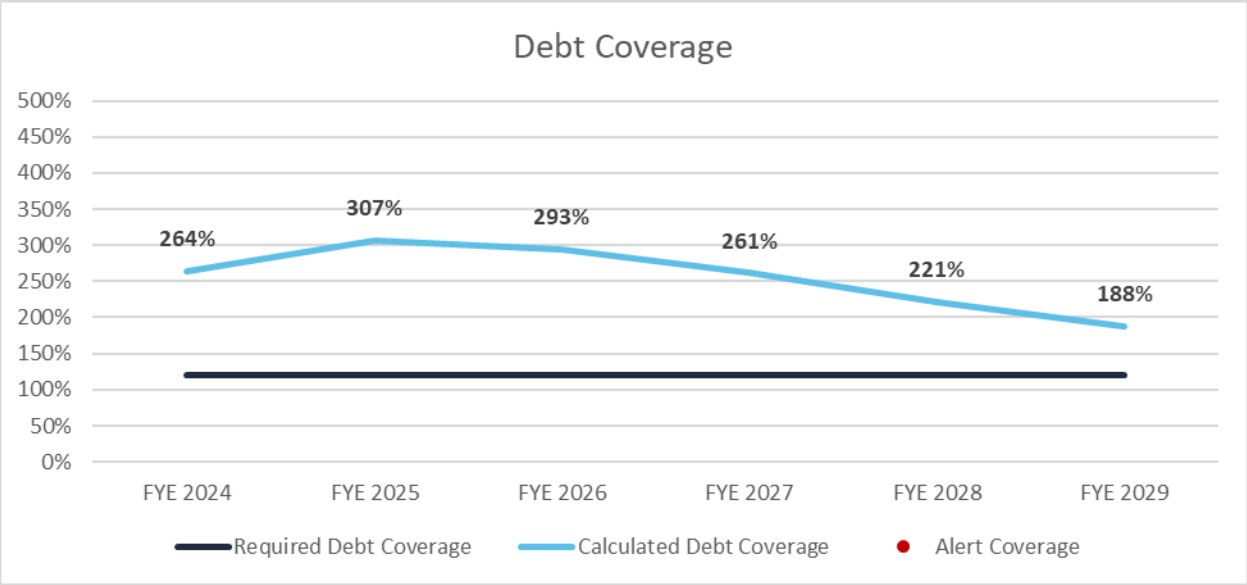


Figure 1-2 shows the projected debt coverage under the status quo scenario. The District's existing debt service has a required coverage of 120%. Debt coverage is calculated by dividing the net operating revenue (revenues less O&M expenses) by annual debt service payments. In this scenario, the District is able to meet its debt coverage requirements without revenue adjustments.

Figure 1-2: Projected Debt Coverage (Status Quo Financial Plan)



PROPOSED REVENUE ADJUSTMENTS AND DEBT ISSUANCES

Overall annual increases in water rate revenues resulting from rate increases are referred to as "revenue adjustments." WRE worked with the Board, Finance Committee, and District staff to determine the most appropriate financial plan scenario, which is shown in **Table 1-6**. Although the

District plans to adopt three years of rates, the financial plan scenario includes revenue adjustments for five years to evaluate the District's financial performance over a longer planning horizon.

The proposed financial plan scenario includes five years of revenue adjustments, which are required to maintain financial sufficiency and resiliency, and one debt issuance in FYE 2025 to fund $8 million worth of CIP projects (the Carter Hill Tank Improvement Project costs approximately $9.6 million from FYE 2025 to FYE 2026).

Table 1-6: Proposed Financial Plan Scenario

Line	Fiscal Year	Revenue Adjustments	Debt Issuance	Debt Proceeds for CIP
1	FYE 2025	8.0%	$8,040,201	$8,000,000
2	FYE 2026	8.0%	$0	$0
3	FYE 2027	8.0%	$0	$0
4	FYE 2028	8.0%	$0	$0
5	FYE 2029	8.0%	$0	$0

PROPOSED FINANCIAL PLAN

The proposed financial plan applies the revenue adjustments and debt issuance, shown in **Table 1-6**, to reevaluate financial performance based on the same two metrics: fund balance and debt coverage.

Figure 1-3 shows the projected fund balances under the proposed scenario. In this scenario, the District will meet its reserve targets for all years of the planning period.

Figure 1-3: Projected Fund Balances (Proposed Financial Plan)

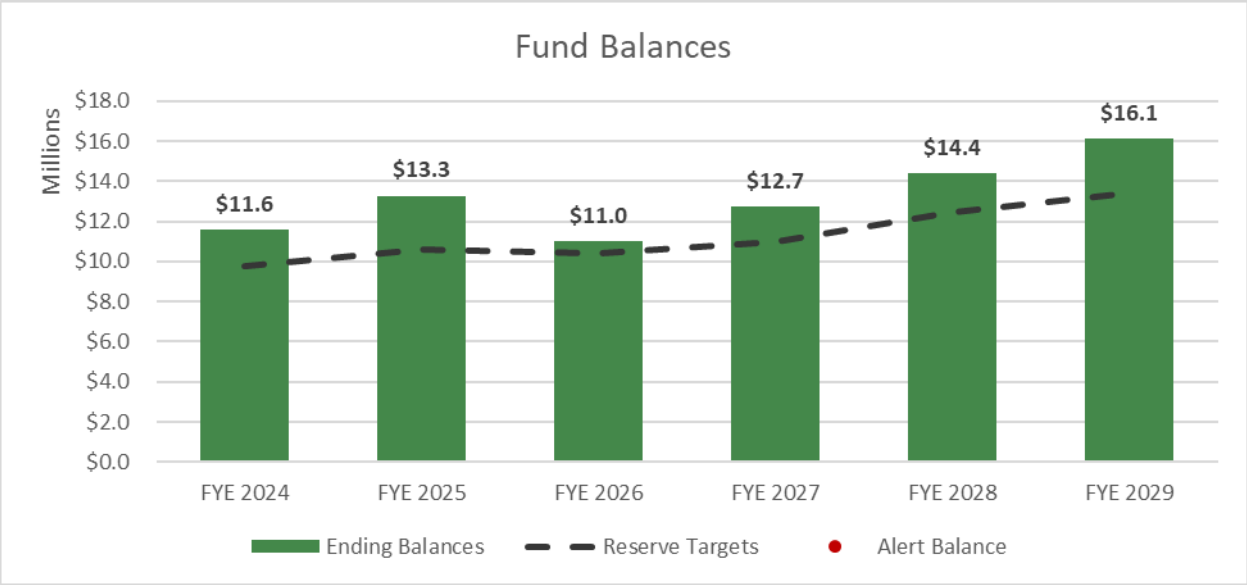
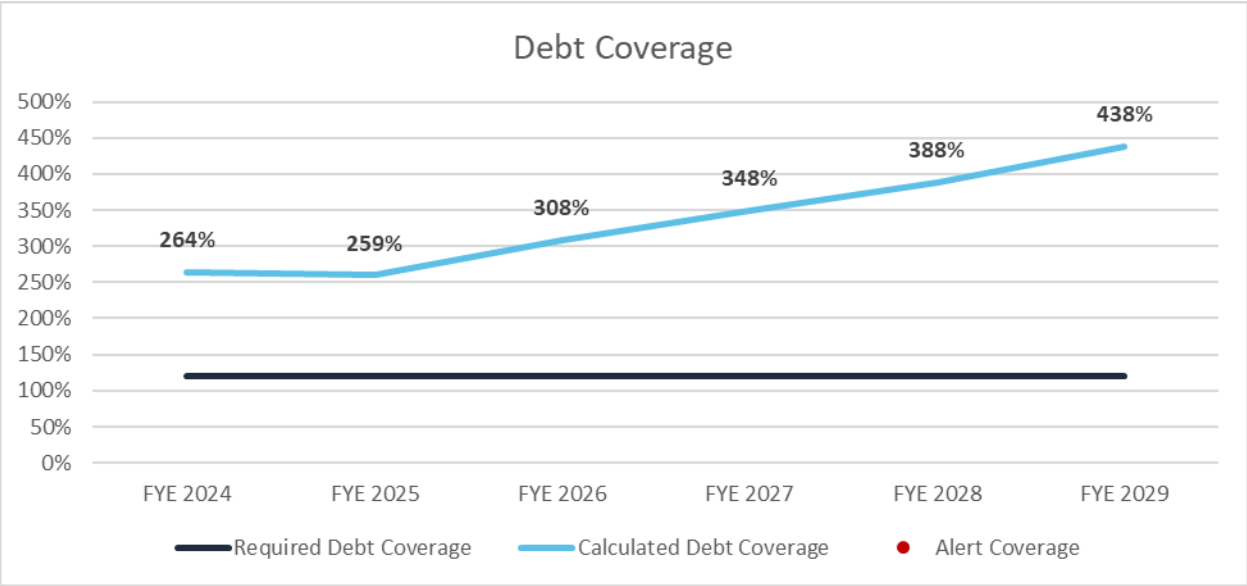


Figure 1-4 shows the projected debt coverage under the proposed scenario. Although this scenario includes an additional $8 million in debt, the District will meet coverage requirements for all years.

Figure 1-4: Projected Debt Coverage (Proposed Financial Plan)



1.8 COST-OF-SERVICE ANALYSIS

A cost-of-service analysis is a technical process used to determine the cost of providing water service to the District's customers based on each customer's use of and burden on the water system. The cost-of-service analysis is the basis of the nexus between the costs incurred by the utility to provide water service and the water rates charged to customers, which is a requirement of Proposition 218.

COST-OF-SERVICE METHODOLOGY

The cost-of-service methodology is based on industry standards set forth by AWWA in its M1 Manual; this rate study utilizes the base-extra capacity method. The overall goal of the cost-of-service analysis is to develop "unit costs," which provide the basis from which proposed rates are directly calculated. Note that although the study period spans three years, the cost-of-service analysis is limited to a single representative year referred to as the "test year." The test year in this study is FYE 2024. The key steps in conducting a water cost-of-service analysis are outlined below:

- **Revenue requirement determination**: The total rate revenue requirement for the test year is determined based on the results of the proposed financial plan and divided into primary sub-components (operating, capital, etc.).
- **Cost functionalization**: Operating and capital costs are evaluated and assigned to "functional categories" in the water system (e.g., customer service, water supply, distribution, etc.). This provides a proportional breakdown of system costs by functional category.
- **Revenue requirement allocation to cost causation components**: Functionalized costs are allocated to "cost causation components" (e.g., water supply, base delivery, max day delivery, etc.), which is used to attribute customers' use of the system to the costs incurred by the District.

- **Unit cost development**: The rate revenue requirement allocation for each individual cost causation component is divided by the appropriate units of service to establish unit costs for the test year. Unit costs provide the basis from which proposed rates are calculated.

1.9 PROPOSED WATER RATES

WRE worked closely with the Board, Finance Committee, and District staff to determine the most appropriate water rate structure that meets the District's needs.

PROPOSED RATE STRUCTURE CHANGES

The main objective was to conduct an updated cost-of-service analysis while maintaining as much of the current water rate structure as possible to minimize customer impacts. The District's current rate structure includes a monthly base charge, a monthly private fire service charge, three-tiered quantity charges for Single Family Residential, and uniform quantity charges for other customers; this rate structure best suits the needs of the District. WRE evaluated the District's Single Family tier definitions and rate methodology to validate their adherence to cost-of-service principles.

Single Family Tier 1 is based on indoor usage, which is defined as the average winter water usage per customer. Currently, Tier 1 is up to 4 hcf of water. The average winter water usage per customer based on FYE 2023 data (the most recent full year of water usage data) is 4 hcf. Single Family Tier 2 is defined by efficient outdoor usage for an average water user, which was defined in the 2018 Water Rate Study. WRE is not recommending changes to Tiers 1, 2, or 3.

After examining the existing rate methodology, WRE recommends an update to the methodology to calculate monthly fire service charges for private fire customers. The District's monthly fire service charges are currently based on a linear factor; for example, the rate for a 4" fire line is twice the rate for a 2" fire line. However, based on the Hazen-Williams equation to calculate the flow of water through a pipe, the capacity of a fire line increases exponentially as its diameter size increases. WRE recommends an update to the methodology of calculating fire capacity based on the exponential capacity factor, rather than the existing linear factor.

PROPOSED THREE-YEAR WATER RATE SCHEDULE

The proposed three-year water rate schedules in this section are based on the proposed rate structure and methodology changes, the updated cost-of-service analysis, and the proposed revenue adjustments in the three-year period. The rate schedule shows the proposed water rates to be implemented in January 2025 through January 2027. **Table 1-7**, **Table 1-8**, and **Table 1-9** show the current and proposed monthly base charges, monthly fire service charges, and quantity charges, respectively.

Table 1-7: Proposed Monthly Base Charges

Line	Monthly Base Charge	As of 1/18/24	Effective 1/1/25	Effective 1/1/26	Effective 1/1/27
1	5/8 inch	$35.81	$38.36	$41.43	$44.75
2	3/4 inch	$52.92	$53.32	$57.59	$62.20
3	1 inch	$87.10	$83.26	$89.93	$97.13
4	1.5 inch	$172.59	$158.09	$170.74	$184.40
5	2 inch	$275.18	$247.89	$267.73	$289.15
6	3 inch	$600.02	$532.27	$574.86	$620.85
7	4 inch	$1,078.79	$951.34	$1,027.45	$1,109.65
8	6 inch		$2,028.96	$2,191.28	$2,366.59

Table 1-8: Proposed Monthly Fire Service Charges

Line	Monthly Fire Service Charge	As of 1/18/24	Effective 1/1/25	Effective 1/1/26	Effective 1/1/27
1	3/4 inch	$6.01	$8.87	$9.58	$10.35
2	1 inch	$8.01	$9.37	$10.12	$10.93
3	1.5 inch	$12.02	$11.19	$12.09	$13.06
4	2 inch	$16.02	$14.31	$15.46	$16.70
5	3 inch	$24.03	$25.52	$27.57	$29.78
6	4 inch	$32.04	$44.86	$48.45	$52.33
7	6 inch	$48.06	$114.26	$123.41	$133.29
8	8 inch	$64.08	$233.97	$252.69	$272.91
9	10 inch	$80.10	$414.03	$447.16	$482.94

Table 1-9: Proposed Quantity Charges

Line	Quantity Charge ($/hcf)	As of 1/18/24	Effective 1/1/25	Effective 1/1/26	Effective 1/1/27
1	Single Family Residential				
2	Tier 1 (1-4 units)	$11.40	$12.31	$13.30	$14.37
3	Tier 2 (5-8 units)	$16.66	$18.29	$19.76	$21.35
4	Tier 3 (9+ units)	$20.16	$22.15	$23.93	$25.85
5	Multi-Family	$15.19	$14.69	$15.87	$17.14
6	All Other Customers	$16.19	$17.60	$19.01	$20.54

CUSTOMER IMPACTS

WRE evaluated the impacts to the Single Family Residential customer class, which represents approximately 90% of the District's meter connections, and the Commercial/All Others customer class based on the proposed water rates for FYE 2025.

Table 1-10 shows the proposed impacts without private fire for a Residential customer with a 5/8" meter (the most common meter size within this class, representing approximately 96% of customers) at various levels of monthly usage. For the average Single Family Residential customer that uses 5 hcf of water a month, the monthly impact will be $7.82 or 8%, which reflects the impact of the cost-of-service analysis and the 8% revenue adjustment applied to FYE 2025.

Table 1-10: Proposed Residential Customer Impacts (Without Fire)

Line	Residential Customer Impacts	Monthly Usage (hcf)	Current Bill	Proposed Bill	Difference ($)	Difference (%)
1	Single Family - Very Low Usage	1	$47.21	$50.67	$3.46	7.3%
2	Single Family - Low Usage	2	$58.61	$62.98	$4.37	7.5%
3	Single Family - Median Usage	4	$81.41	$87.60	$6.19	7.6%
4	Single Family - Average Usage	5	$98.07	$105.89	$7.82	8.0%
5	Single Family - High Usage	7	$131.39	$142.47	$11.08	8.4%
6	Single Family - Very High Usage	10	$188.37	$205.06	$16.69	8.9%
7	Multi-Family - Average Usage	28	$461.13	$449.68	($11.45)	-2.5%

Table 1-11 shows the proposed impacts for a Residential customer with a 5/8" meter and a 1" private fire line (the most common fire line size). Approximately 13% of Single Family Residential customers have a private fire line. A Single Family Residential customer using 5 hcf of water will see an increase of $9.18 per month.

Table 1-11: Proposed Residential Customer Impacts (With Fire)

Line	Residential Customer Impacts	Monthly Usage (hcf)	Current Bill w/ 1" Fire	Proposed Bill w/ 1" Fire	Difference ($)	Difference (%)
1	Single Family - Very Low Usage	1	$55.22	$60.04	$4.82	8.7%
2	Single Family - Low Usage	2	$66.62	$72.35	$5.73	8.6%
3	Single Family - Median Usage	4	$89.42	$96.97	$7.55	8.4%
4	Single Family - Average Usage	5	$106.08	$115.26	$9.18	8.7%
5	Single Family - High Usage	7	$139.40	$151.84	$12.44	8.9%
6	Single Family - Very High Usage	10	$196.38	$214.43	$18.05	9.2%
7	Multi-Family - Average Usage	28	$469.14	$459.05	($10.09)	-2.2%

Table 1-12 shows the proposed impacts without private fire for various Commercial/All Other customers based on estimated monthly usage and meter size.

Table 1-12: Proposed Commercial/All Other Customer Impacts (Without Fire)

Line	Commercial/All Other Customer Impacts	Monthly Usage (hcf)	Meter Size	Private Fire Line	Current Bill	Proposed Bill	Difference ($)	Difference (%)
1	Agriculture	600	2 inch	none	$9,989.18	$10,807.89	$818.71	8.2%
2	Commercial Grocery	150	1.5 inch	6 inch	$2,601.09	$2,798.09	$197.00	7.6%
3	Commercial Grocery	200	1 inch	8 inch	$3,325.10	$3,603.26	$278.16	8.4%
4	Commercial Retail	50	1 inch	6 inch	$896.60	$963.26	$66.66	7.4%
5	Commercial Office	11	1 inch	none	$265.19	$276.86	$11.67	4.4%
6	Hotel	850	4 inch	6 inch	$14,840.29	$15,911.34	$1,071.05	7.2%
7	Hotel	300	2 inch	4 inch	$5,132.18	$5,527.89	$395.71	7.7%
8	Hotel	64	1.5 inch	8 inch	$1,208.75	$1,284.49	$75.74	6.3%
9	Restaurant	205	1 inch	4 inch	$3,406.05	$3,691.26	$285.21	8.4%
10	Restaurant	78	3/4 inch	none	$1,315.74	$1,426.12	$110.38	8.4%

Table 1-13 shows the proposed impacts with private fire for various Commercial/All Other customers based on estimated monthly usage, meter size, and private fire line size.

Table 1-13: Proposed Commercial/All Other Customer Impacts (With Fire)

Line	Commercial/All Other Customer Impacts	Monthly Usage (hcf)	Meter Size	Private Fire Line	Current Bill	Proposed Bill	Difference ($)	Difference (%)
1	Agriculture	600	2 inch	none	$9,989.18	$10,807.89	$818.71	8.2%
2	Commercial Grocery	150	1.5 inch	6 inch	$2,649.15	$2,912.35	$263.20	9.9%
3	Commercial Grocery	200	1 inch	8 inch	$3,389.18	$3,837.23	$448.05	13.2%
4	Commercial Retail	50	1 inch	6 inch	$944.66	$1,077.52	$132.86	14.1%
5	Commercial Office	11	1 inch	none	$265.19	$276.86	$11.67	4.4%
6	Hotel	850	4 inch	6 inch	$14,888.35	$16,025.60	$1,137.25	7.6%
7	Hotel	300	2 inch	4 inch	$5,164.22	$5,572.75	$408.53	7.9%
8	Hotel	64	1.5 inch	8 inch	$1,272.83	$1,518.46	$245.63	19.3%
9	Restaurant	205	1 inch	4 inch	$3,438.09	$3,736.12	$298.03	8.7%
10	Restaurant	78	3/4 inch	none	$1,315.74	$1,426.12	$110.38	8.4%

1.10 PROPOSED WATER SHORTAGE RATES

PROPOSED WATER SHORTAGE RATES

The District's WSCP includes six stages of water shortages, which all require a different level of usage reduction by the District's customers. When customers reduce their usage in each stage, the District's rate revenues from quantity charges are directly impacted. Water shortage rates are a tool for the District to effectively respond to water shortage emergencies while maintaining financial sufficiency and operational reliability. Water shortage rates are designed to recover the costs of a water shortage: loss of quantity charge revenues, water supply cost differences, and other water shortage-related O&M expenses.

Table 1-14 shows the proposed water shortage rates in each stage, which are incremental charges in addition to the quantity charges shown in **Table 1-9**.

Table 1-14: Proposed Water Shortage Rates

Line	Water Shortage Rates ($/hcf)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**As of 1/18/24**						
2	Single Family Residential						
3	Tier 1 (1-4 units)	$2.57	$4.58	$6.48	$9.03	$13.67	$27.17
4	Tier 2 (5-8 units)	$3.75	$6.69	$9.47	$13.20	$19.98	$39.71
5	Tier 3 (9+ units)	$4.53	$8.10	$11.46	$15.97	$24.18	$48.05
6	Multi-Family	$3.42	$6.10	$8.64	$12.03	$18.22	$36.20
7	All Other Customers	$3.64	$6.50	$9.21	$12.83	$19.42	$38.59
8							
9	**Effective 1/1/25**						
10	Single Family Residential						
11	Tier 1 (1-4 units)	$1.86	$4.42	$6.66	$10.50	$14.13	$19.58
12	Tier 2 (5-8 units)	$2.77	$6.57	$9.89	$15.60	$20.99	$29.08
13	Tier 3 (9+ units)	$3.35	$7.95	$11.97	$18.89	$25.42	$35.22
14	Multi-Family	$2.22	$5.27	$7.94	$12.53	$16.86	$23.36
15	All Other Customers	$2.66	$6.32	$9.51	$15.01	$20.20	$27.98
16							
17	**Effective 1/1/26**						
18	Single Family Residential						
19	Tier 1 (1-4 units)	$2.01	$4.78	$7.20	$11.34	$15.27	$21.15
20	Tier 2 (5-8 units)	$3.00	$7.10	$10.69	$16.85	$22.67	$31.41
21	Tier 3 (9+ units)	$3.62	$8.59	$12.93	$20.41	$27.46	$38.04
22	Multi-Family	$2.40	$5.70	$8.58	$13.54	$18.21	$25.23
23	All Other Customers	$2.88	$6.83	$10.28	$16.22	$21.82	$30.22
24							
25	**Effective 1/1/27**						
26	Single Family Residential						
27	Tier 1 (1-4 units)	$2.18	$5.17	$7.78	$12.25	$16.50	$22.85
28	Tier 2 (5-8 units)	$3.24	$7.67	$11.55	$18.20	$24.49	$33.93
29	Tier 3 (9+ units)	$3.91	$9.28	$13.97	$22.05	$29.66	$41.09
30	Multi-Family	$2.60	$6.16	$9.27	$14.63	$19.67	$27.25
31	All Other Customers	$3.12	$7.38	$11.11	$17.52	$23.57	$32.64

Table 1-15 shows the current and proposed combined quantity charges and water shortage rates in each stage. The quantity charges in **Table 1-9** are added to the incremental water shortage rates in **Table 1-14** to calculate the current and proposed combined charges.

Table 1-15: Proposed Combined Quantity Charges and Water Shortage Rates

Line	Combined Quantity Charges ($/hcf)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**As of 1/18/24**						
2	Single Family Residential						
3	Tier 1 (1-4 units)	$13.97	$15.98	$17.88	$20.43	$25.07	$38.57
4	Tier 2 (5-8 units)	$20.41	$23.35	$26.13	$29.86	$36.64	$56.37
5	Tier 3 (9+ units)	$24.69	$28.26	$31.62	$36.13	$44.34	$68.21
6	Multi-Family	$18.61	$21.29	$23.83	$27.22	$33.41	$51.39
7	All Other Customers	$19.83	$22.69	$25.40	$29.02	$35.61	$54.78
8							
9	**Effective 1/1/25**						
10	Single Family Residential						
11	Tier 1 (1-4 units)	$14.17	$16.73	$18.97	$22.81	$26.44	$31.89
12	Tier 2 (5-8 units)	$21.06	$24.86	$28.18	$33.89	$39.28	$47.37
13	Tier 3 (9+ units)	$25.50	$30.10	$34.12	$41.04	$47.57	$57.37
14	Multi-Family	$16.91	$19.96	$22.63	$27.22	$31.55	$38.05
15	All Other Customers	$20.26	$23.92	$27.11	$32.61	$37.80	$45.58
16							
17	**Effective 1/1/26**						
18	Single Family Residential						
19	Tier 1 (1-4 units)	$15.31	$18.08	$20.50	$24.64	$28.57	$34.45
20	Tier 2 (5-8 units)	$22.76	$26.86	$30.45	$36.61	$42.43	$51.17
21	Tier 3 (9+ units)	$27.55	$32.52	$36.86	$44.34	$51.39	$61.97
22	Multi-Family	$18.27	$21.57	$24.45	$29.41	$34.08	$41.10
23	All Other Customers	$21.89	$25.84	$29.29	$35.23	$40.83	$49.23
24							
25	**Effective 1/1/27**						
26	Single Family Residential						
27	Tier 1 (1-4 units)	$16.55	$19.54	$22.15	$26.62	$30.87	$37.22
28	Tier 2 (5-8 units)	$24.59	$29.02	$32.90	$39.55	$45.84	$55.28
29	Tier 3 (9+ units)	$29.76	$35.13	$39.82	$47.90	$55.51	$66.94
30	Multi-Family	$19.74	$23.30	$26.41	$31.77	$36.81	$44.39
31	All Other Customers	$23.66	$27.92	$31.65	$38.06	$44.11	$53.18

CUSTOMER IMPACTS

WRE evaluated the impacts of the water shortage rates for Residential customers. This section shows the impacts for Stages 2 and 3, which are the water shortage rates that are most likely to be implemented in a water shortage. The body of the report includes the customer impacts for all six stages.

Table 1-16 shows the proposed Stage 2 impacts for a Single Family Residential customer with a 5/8" meter using 5 hcf of usage per month (prior to any usage reductions mandated by stage). During a Stage 2 water shortage, this customer will pay $24.25 more each month if they do not reduce their usage according to Stage 2, which correlates to a 20% reduction. However, if this customer does reduce their usage by 20% and uses 4 hcf per month instead, they will have a monthly bill approximately equal to their bill in normal, non-water shortage, conditions.

Table 1-16: Proposed Residential Customer Impacts (Stage 2 Water Shortage)

Line	Stage 2 Residential Impacts (5/8 inch meter, 5 hcf use)	No Water Shortage (5 hcf)	Water Shortage, No Reduction (5 hcf)	Water Shortage, w/ 20% Reduction (4 hcf)
1	Monthly Base Charge (5/8 inch)	$38.36	$38.36	$38.36
2	Quantity Charge	$67.53	$67.53	$49.24
3	Water Shortage Charge	$0.00	$24.25	$17.68
4	**Total Monthly Bill**	**$105.89**	**$130.14**	**$105.28**

Figure 1-5 shows the impacts in **Table 1-16** in a graphical format.

Figure 1-5: Proposed Residential Customer Impacts (Stage 2 Water Shortage)

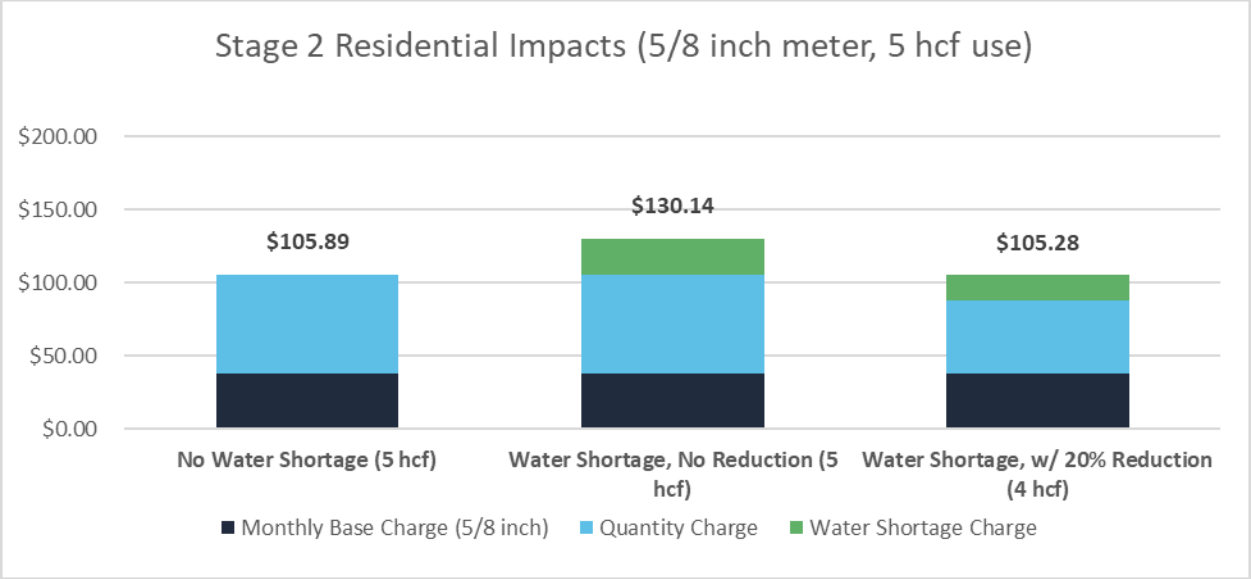


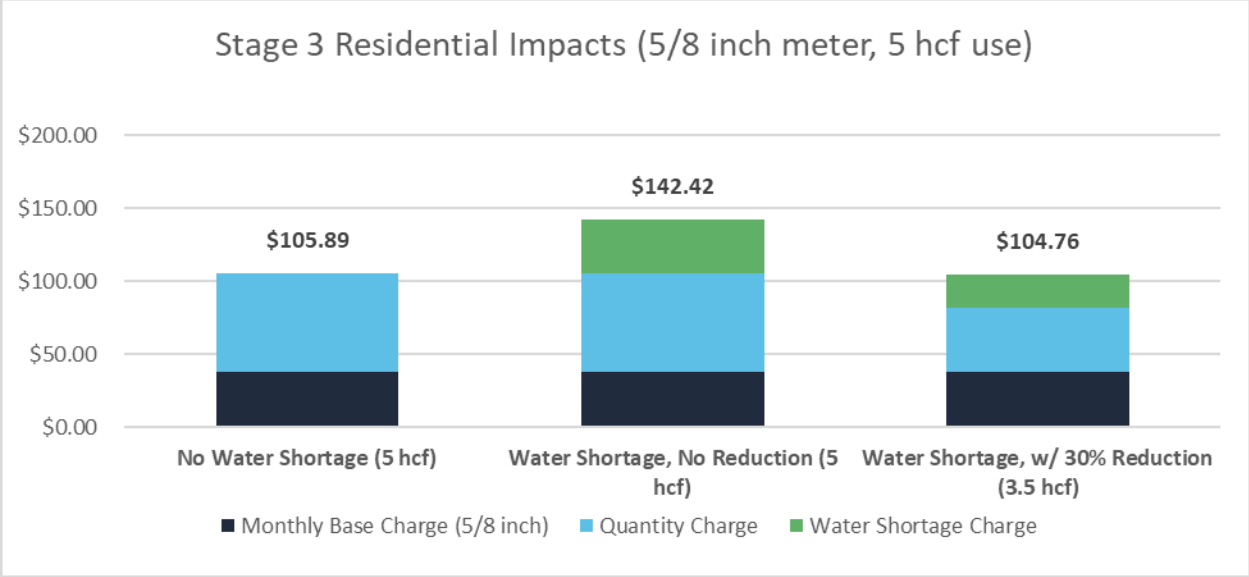
Table 1-17 shows the proposed Stage 3 impacts for a Single Family Residential customer with a 5/8" meter using 5 hcf of usage per month (prior to any usage reductions mandated by stage). During a Stage 3 water shortage, this customer will pay $36.53 more each month if they do not reduce their usage according to Stage 3, which correlates to a 30% reduction. However, if this customer does reduce their usage by 30% and uses 3.5 hcf per month instead, they will have a monthly bill approximately equal to their bill in normal, non-water shortage conditions.

Table 1-17: Proposed Residential Customer Impacts (Stage 3 Water Shortage)

Line	Stage 3 Residential Impacts (5/8 inch meter, 5 hcf use)	No Water Shortage (5 hcf)	Water Shortage, No Reduction (5 hcf)	Water Shortage, w/ 30% Reduction (3.5 hcf)
1	Monthly Base Charge (5/8 inch)	$38.36	$38.36	$38.36
2	Quantity Charge	$67.53	$67.53	$43.09
3	Water Shortage Charge	$0.00	$36.53	$23.31
4	**Total Monthly Bill**	**$105.89**	**$142.42**	**$104.76**

Figure 1-6 shows the impacts in **Table 1-17** in a graphical format.

Figure 1-6: Proposed Residential Customer Impacts (Stage 3 Water Shortage)



2. FINANCIAL PLAN

2.1 FINANCIAL PLAN METHODOLOGY

The purpose of a financial plan is to project revenues, expenses, cash flows, reserve balances, and debt coverage over a multi-year period to assess financial sufficiency and performance and to determine the amount of required rate revenue. For this study, the planning period is from FYE 2025 through FYE 2029; data for FYE 2023 and FYE 2024 are shown when needed to represent actual or budgeted data inputs. The key steps in developing a financial plan for a water enterprise are below:

- **Revenue projections:** Annual revenues from rates and other miscellaneous sources are projected over the planning period. Rate revenues are projected based on current rates to establish baseline revenues from which the need for additional rate increases can be evaluated.
- **Expense projections:** Annual expenses are projected over the study period, including O&M expenses, debt service, and CIP costs. CIP funding options (grants, debt, etc.) are evaluated.
- **Financial policy evaluation:** Key financial policies include debt coverage requirements and reserve targets. Debt coverage requirements are typically explicitly stated in official agreements on outstanding debt issuances. Reserve targets are typically set by an agency's elected officials and may need to be periodically evaluated and updated.
- **Status quo financial plan projections:** Cash flow, reserve balances, and debt coverage are projected over the study period in the absence of additional rate increases (this scenario is called the "status quo"). Projected reserve balances and debt coverage are then compared to the agency's financial policy requirements and targets. The status quo financial plan provides a baseline to evaluate the need for rate increases.
- **Proposed financial plan projections:** The magnitude and timing of annual proposed revenue increases over the study period are evaluated and determined based on the agency's financial policies, financial performance, and policy objectives. Proposed rate increases (referred to as "revenue adjustments") should generate sufficient revenue to recover the agency's expenses, maintain adequate reserves, and meet all debt coverage requirements. The proposed financial plan determines the total annual rate revenue requirement over the study period.

2.2 REVENUES

CURRENT WATER RATES

The District's current water rates include a monthly base charge based on meter size, a monthly fire service charge based on fire line diameter (for customers with private fire service), and a quantity charge based on units of water in hcf. Single Family Residential customers have a three-tiered quantity charge; Multi-Family and All Other customers have a uniform quantity charge.

Table 2-1, **Table 2-2**, and **Table 2-3** show the current monthly base charges, monthly fire service charges, and quantity charges, respectively. The current rates are based on the District's most recent water rate study and were implemented on January 19, 2023 (for FYE 2023) and January 18, 2024 (for FYE 2024).

Table 2-1: Current Monthly Base Charges

Line	Monthly Base Charge	As of 1/19/23	As of 1/18/24
1	5/8 inch	$33.78	$35.81
2	3/4 inch	$49.92	$52.92
3	1 inch	$82.17	$87.10
4	1.5 inch	$162.82	$172.59
5	2 inch	$259.60	$275.18
6	3 inch	$566.06	$600.02
7	4 inch	$1,017.73	$1,078.79

Table 2-2: Current Monthly Fire Service Charges

Line	Monthly Fire Service Charge	As of 1/19/23	As of 1/18/24
1	3/4 inch	$5.67	$6.01
2	1 inch	$7.56	$8.01
3	1.5 inch	$11.34	$12.02
4	2 inch	$15.12	$16.02
5	3 inch	$22.68	$24.03
6	4 inch	$30.24	$32.04
7	6 inch	$45.36	$48.06
8	8 inch	$60.48	$64.08
9	10 inch	$75.60	$80.10

Table 2-3: Current Quantity Charges

Line	Quantity Charge ($/hcf)	As of 1/19/23	As of 1/18/24
1	Single Family Residential		
2	Tier 1 (1-4 units)	$10.75	$11.40
3	Tier 2 (5-8 units)	$15.72	$16.66
4	Tier 3 (9+ units)	$19.02	$20.16
5	Multi-Family	$14.33	$15.19
6	All Other Customers	$15.27	$16.19

EFFECTIVE FISCAL YEAR WATER RATES

The District's budget is based on a Fiscal Year starting July 1 and ending June 30. Since the current water rates were implemented in mid-year, this section shows the effective water rates for each fiscal year prior to any revenue adjustments in **Table 2-4**, **Table 2-5**, and **Table 2-6**. FYE 2024 rates were implemented on January 18, 2024, meaning that those rates were effective for 162 days out of the year. The remaining 203 days of FYE 2024 are charged based on the FYE 2023 rate. The effective FYE 2024 rate is pro-rated based on the mid-year implementation date. The current water rates for all other years are representative of the full fiscal year before revenue adjustments are assumed.

Table 2-4: Effective Monthly Base Charges (Current)

Line	Effective Monthly Base Charge	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	5/8 inch	$34.68	$35.81	$35.81	$35.81	$35.81	$35.81
2	3/4 inch	$51.25	$52.92	$52.92	$52.92	$52.92	$52.92
3	1 inch	$84.36	$87.10	$87.10	$87.10	$87.10	$87.10
4	1.5 inch	$167.16	$172.59	$172.59	$172.59	$172.59	$172.59
5	2 inch	$266.51	$275.18	$275.18	$275.18	$275.18	$275.18
6	3 inch	$581.13	$600.02	$600.02	$600.02	$600.02	$600.02
7	4 inch	$1,044.83	$1,078.79	$1,078.79	$1,078.79	$1,078.79	$1,078.79

Table 2-5: Effective Monthly Fire Service Charges (Current)

Line	Effective Monthly Fire Service Charge	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	3/4 inch	$5.82	$6.01	$6.01	$6.01	$6.01	$6.01
2	1 inch	$7.76	$8.01	$8.01	$8.01	$8.01	$8.01
3	1.5 inch	$11.64	$12.02	$12.02	$12.02	$12.02	$12.02
4	2 inch	$15.52	$16.02	$16.02	$16.02	$16.02	$16.02
5	3 inch	$23.28	$24.03	$24.03	$24.03	$24.03	$24.03
6	4 inch	$31.04	$32.04	$32.04	$32.04	$32.04	$32.04
7	6 inch	$46.56	$48.06	$48.06	$48.06	$48.06	$48.06
8	8 inch	$62.08	$64.08	$64.08	$64.08	$64.08	$64.08
9	10 inch	$77.60	$80.10	$80.10	$80.10	$80.10	$80.10

Table 2-6: Effective Quantity Charges (Current)

Line	Effective Quantity Charge ($/hcf)	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	Single Family Residential						
2	Tier 1 (1-4 units)	$11.04	$11.40	$11.40	$11.40	$11.40	$11.40
3	Tier 2 (5-8 units)	$16.14	$16.66	$16.66	$16.66	$16.66	$16.66
4	Tier 3 (9+ units)	$19.53	$20.16	$20.16	$20.16	$20.16	$20.16
5	Multi-Family	$14.71	$15.19	$15.19	$15.19	$15.19	$15.19
6	All Other Customers	$15.68	$16.19	$16.19	$16.19	$16.19	$16.19

CUSTOMER ACCOUNTS AND USAGE

This section details the customer accounts and water usage for all years of the study, which are referred to as the units of service. Units of service represent the quantity of billing units that are subject to the District's water rates and charges.

Table 2-7 shows the projected number of meters for each customer class for the study period. District staff provided actual data for FYE 2024; this study assumes no growth in metered connections throughout the period. The number of metered connections is the unit of service for the District's monthly base charges.

Table 2-7: Projected Customer Accounts (Meters)

Line	Customer Accounts (Meters)	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Single Family Residential**						
2	5/8 inch	5,650	5,650	5,650	5,650	5,650	5,650
3	3/4 inch	172	172	172	172	172	172
4	1 inch	63	63	63	63	63	63
5	1.5 inch	0	0	0	0	0	0
6	2 inch	0	0	0	0	0	0
7	3 inch	0	0	0	0	0	0
8	4 inch	0	0	0	0	0	0
9	**Subtotal**	**5,885**	**5,885**	**5,885**	**5,885**	**5,885**	**5,885**
10							
11	**Multi-Family**						
12	5/8 inch	74	74	74	74	74	74
13	3/4 inch	3	3	3	3	3	3
14	1 inch	26	26	26	26	26	26
15	1.5 inch	8	8	8	8	8	8
16	2 inch	0	0	0	0	0	0
17	3 inch	3	3	3	3	3	3
18	4 inch	0	0	0	0	0	0
19	**Subtotal**	**114**	**114**	**114**	**114**	**114**	**114**
20							
21	**All Other Customers**						
22	5/8 inch	390	390	390	390	390	390
23	3/4 inch	26	26	26	26	26	26
24	1 inch	98	98	98	98	98	98
25	1.5 inch	23	23	23	23	23	23
26	2 inch	35	35	35	35	35	35
27	3 inch	2	2	2	2	2	2
28	4 inch	2	2	2	2	2	2
29	**Subtotal**	**576**	**576**	**576**	**576**	**576**	**576**
30							
31	**Total - Meters**	**6,575**	**6,575**	**6,575**	**6,575**	**6,575**	**6,575**

Table 2-8 shows the projected number of private fire lines for the study period. District staff provided actual date for FYE 2024; this study assumes no growth in private fire connections for the period. The number of private fire lines is the unit of service for the District's monthly fire service charges.

Table 2-8: Projected Customer Accounts (Fire)

Line	Customer Accounts (Fire)	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Private Fire**						
2	3/4 inch	10	10	10	10	10	10
3	1 inch	753	753	753	753	753	753
4	1.5 inch	50	50	50	50	50	50
5	2 inch	89	89	89	89	89	89
6	3 inch	4	4	4	4	4	4
7	4 inch	130	130	130	130	130	130
8	6 inch	61	61	61	61	61	61
9	8 inch	15	15	15	15	15	15
10	10 inch	1	1	1	1	1	1
11	**Total**	**1,113**	**1,113**	**1,113**	**1,113**	**1,113**	**1,113**

Table 2-9 shows the water demand growth assumptions for each customer class. WRE worked with District staff to determine the most appropriate estimates for annual water usage based on historical trends and expected water usage rebounds from the most recent water shortage.

Table 2-9: Water Demand Growth Assumptions

Line	Water Demand Growth	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	Single Family Residential	2.8%	5.4%	0.0%	0.0%	0.0%
2	Multi-Family	6.5%	5.8%	0.0%	0.0%	0.0%
3	All Other Customers	12.0%	6.2%	0.0%	0.0%	0.0%

Table 2-10 shows the projected water usage for each customer class and tier. District staff provided estimated water usage projections for FYE 2024, which are then projected forward based on the water demand growth assumptions (**Table 2-9**). The District expects a rebound to 550 million gallons (MG) per year of water usage by FYE 2026 from the current levels of 488 MG in FYE 2024, but growth is expected to remain flat thereafter.

Table 2-10: Projected Customer Water Usage (hcf)

Line	Water Usage (hcf)	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	Single Family Residential						
2	Tier 1 (1-4 units)	225,000	231,264	243,849	243,849	243,849	243,849
3	Tier 2 (5-8 units)	95,000	97,645	102,958	102,958	102,958	102,958
4	Tier 3 (9+ units)	48,000	49,336	52,021	52,021	52,021	52,021
5	Multi-Family	39,000	41,552	43,961	43,961	43,961	43,961
6	All Other Customers	246,000	275,572	292,717	292,717	292,717	292,717
7	**Total (hcf)**	**653,000**	**695,369**	**735,507**	**735,507**	**735,507**	**735,507**
8	**Total (MG)**	**488**	**520**	**550**	**550**	**550**	**550**

REVENUES FROM CURRENT RATES

Table 2-11 shows the calculated water rate revenues for the study period based on the current effective water rates and the projected units of service. The monthly base charge revenues (Lines 1-5) are calculated by multiplying the effective monthly base charge (**Table 2-4**) by the projected meter connections (**Table 2-7**) for a period of 12 months. The monthly fire service charge revenues (Lines 7-9) are calculated by multiplying the effective monthly fire service charge (**Table 2-5**) by the projected private fire connections (**Table 2-8**) for a period of 12 months. The quantity charge revenues (Lines 11-15) are calculated by multiplying the effective quantity charges (**Table 2-6**) by the projected water usage (**Table 2-9**) in each year.

Table 2-11: Calculated Rate Revenues at Current Rates

Line	Calculated Rate Revenues	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Monthly Base Charge**						
2	Single Family Residential	$2,520,929	$2,602,992	$2,602,992	$2,602,992	$2,602,992	$2,602,992
3	Multi-Family	$95,929	$99,049	$99,049	$99,049	$99,049	$99,049
4	All Other Customers	$474,597	$490,033	$490,033	$490,033	$490,033	$490,033
5	**Subtotal**	**$3,091,455**	**$3,192,075**	**$3,192,075**	**$3,192,075**	**$3,192,075**	**$3,192,075**
6							
7	**Monthly Fire Service Charge**						
8	Private Fire	$190,098	$196,229	$196,229	$196,229	$196,229	$196,229
9	**Subtotal**	**$190,098**	**$196,229**	**$196,229**	**$196,229**	**$196,229**	**$196,229**
10							
11	**Quantity Charge**						
12	Single Family Residential	$4,953,942	$5,257,786	$5,543,912	$5,543,912	$5,543,912	$5,543,912
13	Multi-Family	$573,756	$631,180	$667,772	$667,772	$667,772	$667,772
14	All Other Customers	$3,809,834	$4,413,518	$4,690,864	$4,690,864	$4,690,864	$4,690,864
15	**Subtotal**	**$9,337,532**	**$10,302,484**	**$10,902,548**	**$10,902,548**	**$10,902,548**	**$10,902,548**
16							
17	**Total - Rate Revenues**	**$12,619,085**	**$13,690,788**	**$14,290,852**	**$14,290,852**	**$14,290,852**	**$14,290,852**

REVENUE SUMMARY

Table 2-12 shows the summary of projected revenues for the study period. District staff provided the budgeted revenues for FYE 2024 and FYE 2025; all other years are projected based on the relevant assumptions or calculations. Water rate revenues (Line 1) are equal to the rate revenues at current rates (**Table 2-11**, Line 17). Hydrant sales (Line 2) are projected based on temporary usage estimates. Property Taxes (Line 3) are not inflated for future years. Miscellaneous Revenues (Line 4) are inflated based on a 2% growth rate, and Interest Income (Line 5) is calculated based on ending fund balances and a 0.9% interest rate.

Table 2-12: Revenue Summary

Line	Revenues	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	Water Rate Revenues	$12,619,085	$13,690,788	$14,290,852	$14,290,852	$14,290,852	$14,290,852
2	Hydrant Sales	$52,000	$68,212	$68,455	$68,455	$68,455	$68,455
3	Property Taxes	$995,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000
4	Miscellaneous Revenues	$825,000	$921,000	$927,420	$933,968	$940,648	$947,461
5	Interest Income	$108,005	$300,014	$104,050	$101,733	$116,173	$130,711
6	**Total - Revenues**	**$14,599,090**	**$16,015,014**	**$16,425,777**	**$16,430,008**	**$16,451,128**	**$16,472,479**

2.3 OPERATING EXPENSES

INFLATIONARY ASSUMPTIONS

WRE worked with District staff to determine the annual inflationary assumptions to apply to the District's O&M expense budget. District staff provided the budgeted O&M expenses for FYE 2024 and FYE 2025; all other years are projected based on the inflationary assumptions shown in **Table 2-13**.

Table 2-13: Expense Inflationary Assumptions

Line	Inflationary Assumptions	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	General	2.7%	2.7%	2.7%	2.7%
2	Salary	4.5%	4.5%	4.5%	4.5%
3	Benefits	4.5%	4.5%	4.5%	4.5%
4	Power	7.0%	7.0%	7.0%	7.0%
5	Water Purchases	1.5%	3.4%	7.9%	3.8%
6	Capital	3.2%	3.2%	3.2%	3.2%

WATER SUPPLY COSTS

The District has two main sources of supply: local sources of water and purchased water from SFPUC. The cost of purchasing water from SFPUC represents a significant portion, approximately 24% on average, of the District's O&M expenses and can vary based on supply availability from local sources, water demand and production for each year, and the projected variable rate of SFPUC water. **Table 2-14** shows the calculated SFPUC water supply costs for the study period based on these factors.

During non-water shortage years, the District expects to purchase approximately 65% of its water from SFPUC to meet customer water demand (Line 3); the remaining is supplied via local sources. The system water loss percentage of 4% (Line 5) is applied to the total water demand in each year (Line 7; equal to **Table 2-10**, Line 7) to determine the amount of water produced each year (Line 8). Water production by source is calculated by multiplying the percentage of water produced by each source (Lines 2-3) by the total amount of water produced (Line 8).

The SFPUC net variable rate (Line 18) is the sum of the variable wholesale treated water rate (Line 16) and the credit applied to the District for purchasing untreated water from SFPUC (Line 17). The projected SFPUC variable rates for future years were provided by District staff. The net variable rate (Line 18) is multiplied by the water production for SFPUC (Line 12) to determine the SFPUC water

purchase cost (Line 20). The District also pays for a portion of debt service (Line 21) as a member agency of the Bay Area Water Supply and Conservation Agency (BAWSCA) that receives SFPUC water.

Table 2-14: Calculated SFPUC Water Supply Costs

Line	SFPUC Supply Cost	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Water Supply Sources**						
2	Local Supply	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
3	SFPUC	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%
4							
5	System Water Loss (%)	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
6							
7	Water Demand (hcf)	653,000	695,369	735,507	735,507	735,507	735,507
8	**Water Production (hcf)**	**680,208**	**724,342**	**766,153**	**766,153**	**766,153**	**766,153**
9							
10	**Water Production by Source**						
11	Local Supply	238,073	253,520	268,154	268,154	268,154	268,154
12	SFPUC	442,135	470,823	498,000	498,000	498,000	498,000
13	**Total**	**680,208**	**724,342**	**766,153**	**766,153**	**766,153**	**766,153**
14							
15	**SFPUC Water Purchases**						
16	Variable Rate ($/hcf)	$5.21	$5.67	$5.75	$5.93	$6.37	$6.60
17	Wholesale Rate Credit ($/hcf)	($0.38)	($0.39)	($0.39)	($0.39)	($0.39)	($0.39)
18	Net SFPUC Rate	**$4.83**	**$5.28**	**$5.36**	**$5.54**	**$5.98**	**$6.21**
19							
20	SFPUC Water Purchase Cost	$2,260,502	$2,551,972	$2,669,278	$2,758,918	$2,978,038	$3,092,578
21	BAWSCA Bond Surcharge	$200,844	$38,772	$200,844	$200,844	$200,844	$200,844
22	**Total Purchased Water Costs**[2]	**$2,461,346**	**$2,590,744**	**$2,870,122**	**$2,959,762**	**$3,178,882**	**$3,293,422**

OPERATING EXPENSE SUMMARY

Table 2-15 shows the summary of O&M expenses for the study period. District staff provided budgeted expenses for FYE 2024 and FYE 2025; expenses for other years are projections. SFPUC and BAWSCA costs (Line 1) are from **Table 2-14**. All other expenses are inflated based on the assumptions in **Table 2-13**. Detailed operating expense projections are included in the **Appendix** (**Table 6-1**).

[2] FYE 2024 and FYE 2025 costs for SFPUC are derived from the District's operating budget, which differ slightly from the calculated costs. All other years are projected based on the calculated costs.

Table 2-15: Operating Expense Summary

Line	Operating Expenses	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	SFPUC and BAWSCA	$2,461,346	$2,590,744	$2,870,122	$2,959,762	$3,178,882	$3,293,422
2	Operations and Maintenance	$1,598,000	$1,775,300	$1,852,729	$1,934,299	$2,020,266	$2,110,901
3	Salaries and Benefits	$4,792,603	$5,042,555	$5,269,470	$5,506,596	$5,754,393	$6,013,341
4	Other Expenses	$1,757,699	$1,886,750	$1,938,258	$1,991,173	$2,045,532	$2,101,375
5	**Total - Operating Expenses**	**$10,609,648**	**$11,295,349**	**$11,930,580**	**$12,391,831**	**$12,999,073**	**$13,519,038**

2.4 DEBT SERVICE

EXISTING AND PROPOSED DEBT SERVICE

Table 2-16 shows the District's annual debt service for the study period. The District has existing debt service payments on four outstanding issues (Lines 1-6), totaling approximately $1.5 million each year. The proposed financial plan scenario also includes a new debt issuance in FYE 2025 of $8,040,201 (assuming a 5% interest rate, a 30-year term, and 0.5% issuance cost), resulting in $0.5 million of additional annual debt service payments. This debt issuance results in $8 million of proceeds used to fund CIP.

Table 2-16: Existing and Proposed Debt Service

Line	Debt Service	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Existing Debt Service**						
2	2011 - Ibank	$335,343	$335,173	$334,998	$334,819	$334,634	$334,444
3	2017 - Ibank	$321,923	$321,412	$320,883	$320,337	$319,771	$319,186
4	2018 - Chase	$437,233	$432,821	$432,880	$437,180	$435,634	$432,944
5	2022 - First Foundation	$417,501	$417,434	$417,365	$417,295	$417,223	$417,150
6	**Subtotal**	**$1,512,000**	**$1,506,840**	**$1,506,127**	**$1,509,630**	**$1,507,262**	**$1,503,724**
7							
8	**Proposed Debt Service**						
9	Proposed FYE 2025 Issuance	$0	$523,027	$523,027	$523,027	$523,027	$523,027
10	**Subtotal**	**$0**	**$523,027**	**$523,027**	**$523,027**	**$523,027**	**$523,027**
11							
12	**Total - Debt Service**	**$1,512,000**	**$2,029,867**	**$2,029,153**	**$2,032,657**	**$2,030,289**	**$2,026,751**

2.5 CAPITAL IMPROVEMENT PLAN

CAPITAL IMPROVEMENT PROJECTS

Table 2-17 shows the District's six-year CIP; project costs are inflated based on the Capital factor (Table 2-13, Line 6) starting in FYE 2026. The capital execution rate (Line 10) is then applied to the total CIP (Line 8) to determine the total CIP executed each year. The execution rate is based on the District's 10-year average executed CIP. The execution rate for FYE 2024 is 90%, rather than 85%, to match what the District expects to spend at the end the year based on year-to-date capital spending data. Detailed CIP costs are included in the **Appendix** (**Table 6-2**).

Table 2-17: Capital Project Costs and Execution Rate

Line	Capital Improvement Projects	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	Equipment Purchase & Replacement	$0	$100,000	$103,200	$106,502	$109,910	$680,566
2	Facilities & Maintenance	$250,000	$550,000	$154,800	$159,754	$164,866	$170,141
3	Pipeline Projects	$1,820,000	$3,500,000	$825,600	$958,522	$3,956,777	$3,516,256
4	Pump Stations/Tanks/Wells	$665,000	$4,550,000	$5,985,600	$2,130,048	$219,821	$1,134,276
5	Water Supply Development	$550,000	$2,050,000	$567,600	$479,261	$494,597	$510,424
6	Water Treatment Plants	$1,700,000	$500,000	$0	$79,877	$0	$0
7	Other Capital Projects	$0	$0	$0	$0	$0	$0
8	**Total - Capital Projects**	**$4,985,000**	**$11,250,000**	**$7,636,800**	**$3,913,963**	**$4,945,971**	**$6,011,663**
9							
10	Capital Execution Rate	90.0%	85.0%	85.0%	85.0%	85.0%	85.0%
11	**Total - Executed Projects**	**$4,486,500**	**$9,562,500**	**$6,491,280**	**$3,326,869**	**$4,204,076**	**$5,109,914**

CAPITAL EXPENSE SUMMARY

Table 2-18 shows the capital expense summary and funding sources. The proposed debt issuance will provide $8 million in debt proceeds, which will fund capital projects in FYE 2025 (Line 1). All other project costs will be funded by water rates or reserves (Line 2). Unfunded CIP (Line 3) is equal to the difference between total capital projects (**Table 2-17**, Line 8) and executed capital projects (**Table 2-17**, Line 11).

Table 2-18: Capital Expense Summary

Line	Capital Financing Plan	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	Debt Funded CIP	$0	$8,000,000	$0	$0	$0	$0
2	Rate Funded CIP	$4,486,500	$1,562,500	$6,491,280	$3,326,869	$4,204,076	$5,109,914
3	Unfunded CIP	$498,500	$1,687,500	$1,145,520	$587,094	$741,896	$901,750
4	**Total - Capital Financing Plan**	**$4,985,000**	**$11,250,000**	**$7,636,800**	**$3,913,963**	**$4,945,971**	**$6,011,663**

2.6 FINANCIAL POLICIES

RESERVE POLICY

The District's reserve policy maintains cash on hand to meet short-term cash imbalances, to execute CIP projects, and to meet required debt covenants. The reserve target for the study period ranges from approximately $11 to $16 million in the District's reserve funds.

The District currently has an adopted reserve policy that consists of the following components:

- Operating Reserve Target: 25% of annual operating expenses
- Capital Replacement Reserve Target: 100% of five-year average CIP costs
- Debt Service Reserve Target: 100% of annual debt service

DEBT COVERAGE REQUIREMENT

The District's debt coverage requirement is 120% of annual debt service. To meet coverage requirements, net revenues (revenues less operating expenses) must be 120% or more of annual debt service.

2.7 STATUS QUO FINANCIAL PLAN

STATUS QUO FINANCIAL PLAN SCENARIO

Table 2-19 shows the status quo financial plan scenario, which assumes no revenue adjustments and no proposed debt issuances. This scenario is used to evaluate the ability of the current water rates to meet the District's financial targets and to determine the need for revenue adjustments.

Table 2-19: Status Quo Financial Plan Scenario

Line	Fiscal Year	Revenue Adjustments	Effective Month	Debt Issuance	Debt Proceeds for CIP
1	FYE 2025	0.0%	January	$0	$0
2	FYE 2026	0.0%	January	$0	$0
3	FYE 2027	0.0%	January	$0	$0
4	FYE 2028	0.0%	January	$0	$0
5	FYE 2029	0.0%	January	$0	$0

STATUS QUO CASH FLOW PROJECTIONS

Table 2-20 shows the cash flow projections for the status quo financial plan. Revenues[3] (Lines 1-8) are from **Table 2-12**. Operating expenses (Lines 10-15) are from **Table 2-15**. Net operating revenue (Line 17) is equal to the difference between total revenues (Line 8) and total expenses (Line 15). Debt service (Lines 19-22) is from **Table 2-16**. Rate funded CIP (Line 25) is from **Table 2-18**. The status quo scenario assumes no new debt; all CIP is expected to be rate funded. Net cash flow (Line 28) is equal to the net operating revenue (Line 17) less debt service (Line 22) and rate funded CIP (Line 25). Debt proceeds and debt funded CIP are not included in the cash flow projections.

The net operating revenue in this scenario is positive for all years, meaning that the District's current revenues are sufficient to fund its operating expenses. However, the net cash flow in the status quo scenario is negative for all years, meaning that the District's current revenues are not sufficient to fund its debt service and annual CIP.

[3] Interest income (Line 7) is different in the status quo financial plan scenario because it is based on projected fund balances. The status quo scenario results in lower fund balances; therefore, the District has less interest income. **Table 2-12** shows the interest income for the proposed financial plan scenario.

Table 2-20: Projected Cash Flows (Status Quo Financial Plan)

Line	Cash Flow Projections	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Revenues**						
2	Rate Revenues at Existing Rates	$12,619,085	$13,690,788	$14,290,852	$14,290,852	$14,290,852	$14,290,852
3	Revenue Adjustments	$0	$0	$0	$0	$0	$0
4	Hydrant Sales	$52,000	$68,212	$68,455	$68,455	$68,455	$68,455
5	Property Taxes	$995,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000
6	Miscellaneous Revenues	$825,000	$921,000	$927,420	$933,968	$940,648	$947,461
7	Interest Income	$108,005	$202,114	$28,875	$9,746	$0	$0
8	**Subtotal**	**$14,599,090**	**$15,917,114**	**$16,350,602**	**$16,338,022**	**$16,334,955**	**$16,341,768**
9							
10	**Operating Expenses**						
11	SFPUC and BAWSCA	$2,461,346	$2,590,744	$2,870,122	$2,959,762	$3,178,882	$3,293,422
12	Operations and Maintenance	$1,598,000	$1,775,300	$1,852,729	$1,934,299	$2,020,266	$2,110,901
13	Salaries and Benefits	$4,792,603	$5,042,555	$5,269,470	$5,506,596	$5,754,393	$6,013,341
14	Other Expenses	$1,757,699	$1,886,750	$1,938,258	$1,991,173	$2,045,532	$2,101,375
15	**Subtotal**	**$10,609,648**	**$11,295,349**	**$11,930,580**	**$12,391,831**	**$12,999,073**	**$13,519,038**
16							
17	**Net Operating Revenue**	**$3,989,443**	**$4,621,765**	**$4,420,022**	**$3,946,191**	**$3,335,882**	**$2,822,730**
18							
19	**Debt Service**						
20	Existing Debt Service	$1,512,000	$1,506,840	$1,506,127	$1,509,630	$1,507,262	$1,503,724
21	Proposed Debt Service	$0	$0	$0	$0	$0	$0
22	**Subtotal**	**$1,512,000**	**$1,506,840**	**$1,506,127**	**$1,509,630**	**$1,507,262**	**$1,503,724**
23							
24	**Capital Projects**						
25	Rate Funded CIP	$4,486,500	$9,562,500	$6,491,280	$3,326,869	$4,204,076	$5,109,914
26	**Subtotal**	**$4,486,500**	**$9,562,500**	**$6,491,280**	**$3,326,869**	**$4,204,076**	**$5,109,914**
27							
28	**Net Cash Flow**	**($2,009,057)**	**($6,447,575)**	**($3,577,384)**	**($890,308)**	**($2,375,456)**	**($3,790,908)**

STATUS QUO FUND BALANCE PROJECTIONS

Table 2-21 shows the fund balance projections for the status quo financial plan. Based on the sources (revenues) and uses (operating expenses, debt service, and CIP) of funds, the District's fund balances will be negative by the end of FYE 2028. At the end of the study period, the District's fund balances will be approximately negative $5.5 million in FYE 2029, from a starting balance of $13.6 million in FYE 2024. This represents a net loss of $19.1 million in six years.

Table 2-21: Projected Fund Balances (Status Quo Financial Plan)

Line	Fund Balance Projections	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Beginning Balance**	**$13,617,266**	**$11,608,209**	**$5,160,634**	**$1,583,250**	**$692,942**	**($1,682,514)**
2							
3	**Sources of Funds**						
4	Rate Revenues at Existing Rates	$12,619,085	$13,690,788	$14,290,852	$14,290,852	$14,290,852	$14,290,852
5	Revenue Adjustments	$0	$0	$0	$0	$0	$0
6	Hydrant Sales	$52,000	$68,212	$68,455	$68,455	$68,455	$68,455
7	Property Taxes	$995,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000
8	Miscellaneous Revenues	$825,000	$921,000	$927,420	$933,968	$940,648	$947,461
9	Debt Proceeds for CIP	$0	$0	$0	$0	$0	$0
10	Interest Income	$108,005	$202,114	$28,875	$9,746	$0	$0
11	**Subtotal**	**$14,599,090**	**$15,917,114**	**$16,350,602**	**$16,338,022**	**$16,334,955**	**$16,341,768**
12							
13	**Uses of Funds**						
14	Operating Expenses	$10,609,648	$11,295,349	$11,930,580	$12,391,831	$12,999,073	$13,519,038
15	Debt Service	$1,512,000	$1,506,840	$1,506,127	$1,509,630	$1,507,262	$1,503,724
16	Debt Funded CIP	$0	$0	$0	$0	$0	$0
17	Rate Funded CIP	$4,486,500	$9,562,500	$6,491,280	$3,326,869	$4,204,076	$5,109,914
18	**Subtotal**	**$16,608,147**	**$22,364,689**	**$19,927,986**	**$17,228,329**	**$18,710,411**	**$20,132,676**
19							
20	**Ending Balance**	**$11,608,209**	**$5,160,634**	**$1,583,250**	**$692,942**	**($1,682,514)**	**($5,473,422)**

STATUS QUO FINANCIAL PERFORMANCE

The District's financial performance is evaluated based on the reserve targets and debt coverage requirements, as shown in **Table 2-22**. Under the status quo financial plan, the District will not meet its reserve targets from FYE 2025 to FYE 2029. The District will be able to meet its debt coverage requirements in all years without any revenue adjustments. Fund balances are the District's constraining factor during the study period.

Table 2-22: Forecasted Financial Performance (Status Quo Financial Plan)

Line	Financial Performance	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Reserve Policy**						
2	Operating Reserve Target	$2,652,412	$2,823,837	$2,982,645	$3,097,958	$3,249,768	$3,379,760
3	Capital Replacement Target	$5,614,245	$5,738,928	$5,388,557	$5,846,175	$7,204,799	$8,015,313
4	Debt Service Target	$1,512,000	$1,506,840	$1,506,127	$1,509,630	$1,507,262	$1,503,724
5	Combined Target	$9,778,657	$10,069,605	$9,877,329	$10,453,763	$11,961,830	$12,898,796
6	Combined Reserves	$11,608,209	$5,160,634	$1,583,250	$692,942	($1,682,514)	($5,473,422)
7	Meets Target?	Yes	No	No	No	No	No
8							
9	**Debt Coverage**						
10	Required Debt Coverage	120%	120%	120%	120%	120%	120%
11	Calculated Debt Coverage	264%	307%	293%	261%	221%	188%
12	Meets Target?	Yes	Yes	Yes	Yes	Yes	Yes

Figure 2-1 shows the comparison of revenues and the revenue requirement for the status quo scenario. The stacked bars represent the revenue requirements, or costs: dark teal for O&M expenses, green for debt service, and turquoise for rate funded CIP. The District will not be adding to its reserves (grey bars) in this scenario. The current revenue, shown as a solid line, is lower than the revenue requirements, meaning that revenues are insufficient to fund necessary costs.

Figure 2-1: Revenue Requirements vs. Revenues (Status Quo Financial Plan)

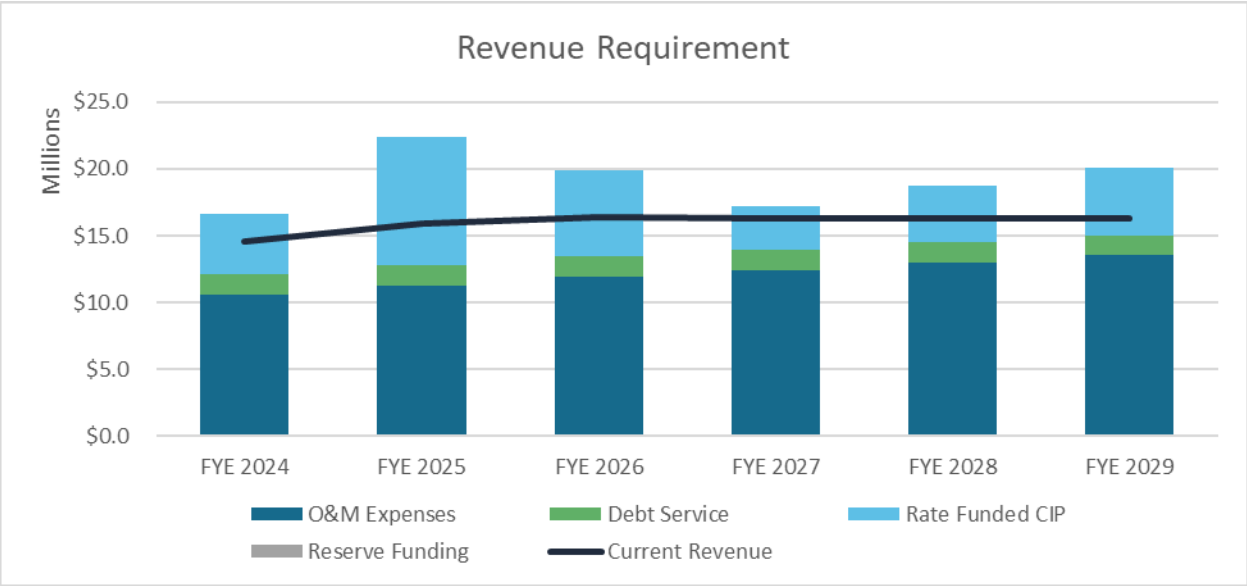


Figure 2-2 shows the debt coverage projections in the status quo financial plan. The required debt coverage (solid black line) is equal to 120%. The District is expected to meet its debt coverage requirements for all years of this scenario.

Figure 2-2: Projected Debt Coverage (Status Quo Financial Plan)

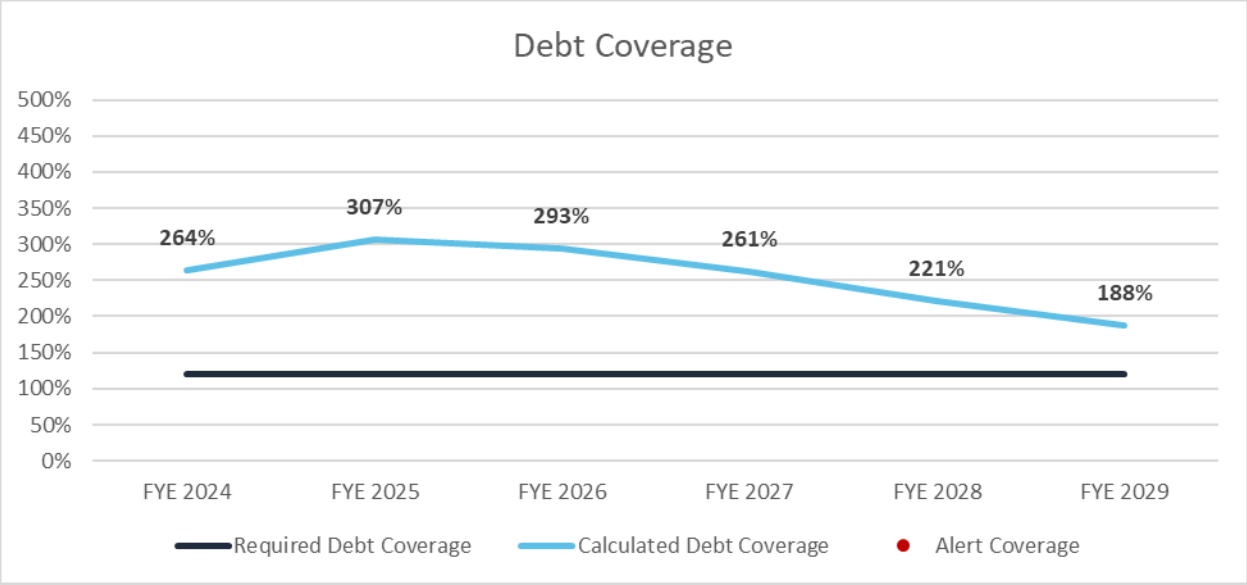
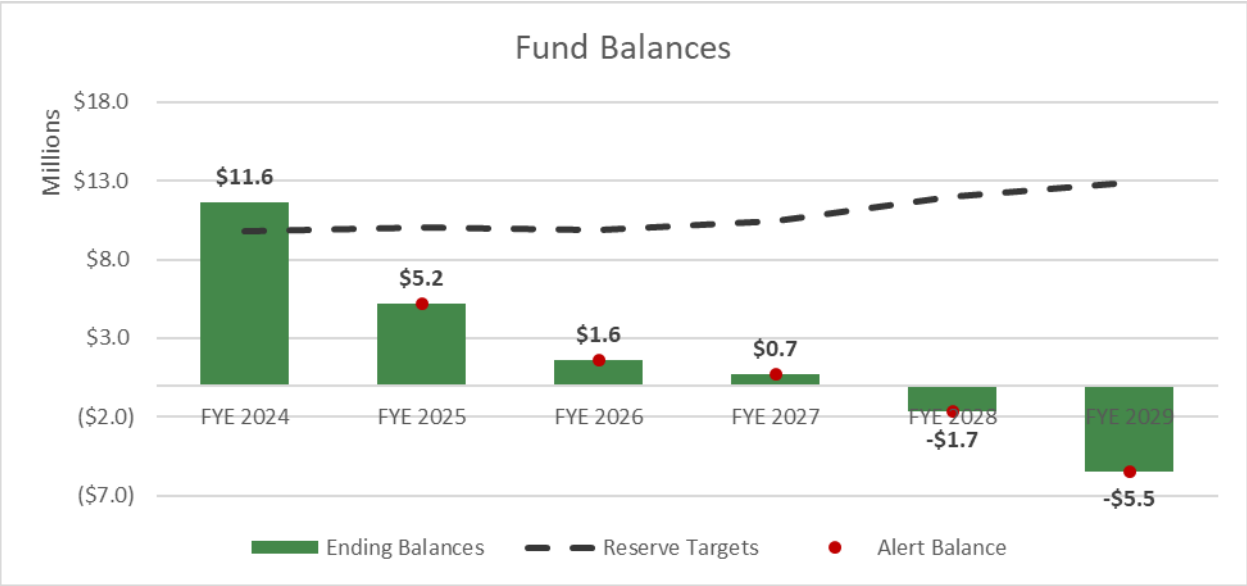


Figure 2-3 shows the fund balance projections in the status quo financial plan. The District's ending balance (green bars) will not meet the reserve targets (dashed line) from FYE 2025 through FYE 2029. The District's fund balances will be negative by FYE 2028.

Figure 2-3: Projected Fund Balances (Status Quo Financial Plan)



2.8 PROPOSED FINANCIAL PLAN

PROPOSED FINANCIAL PLAN SCENARIO

The proposed financial plan includes five years of revenue adjustments and a debt issuance in FYE 2025, shown in **Table 2-23**. These adjustments are needed to maintain the District's financial sufficiency and were developed based on direction from the District's Board and Finance Committee.

Table 2-23: Proposed Financial Plan Scenario

Line	Fiscal Year	Revenue Adjustments	Effective Month	Debt Issuance	Debt Proceeds for CIP
1	FYE 2025	8.0%	January	$8,040,201	$8,000,000
2	FYE 2026	8.0%	January	$0	$0
3	FYE 2027	8.0%	January	$0	$0
4	FYE 2028	8.0%	January	$0	$0
5	FYE 2029	8.0%	January	$0	$0

PROPOSED CASH FLOW PROJECTIONS

Table 2-24 shows the cash flow projections for the proposed financial plan. Revenues (Lines 1-8) are from **Table 2-12**. Revenue adjustments (Line 3) are based on the proposed revenue adjustments in **Table 2-23**. Operating expenses (Lines 10-15) are from **Table 2-15**. Net operating revenue (Line 17) is equal to the difference between total revenues (Line 8) and total expenses (Line 15). Debt service (Lines 19-22) is from **Table 2-16**. Rate funded CIP (Line 25) is from **Table 2-18**. Net cash flow (Line 28) is equal to the net operating revenue (Line 17) less debt service (Line 22) and rate funded CIP (Line 25). Debt proceeds and debt funded CIP are not included in the cash flow projections, since they are included in the rate funded CIP projection numbers.

Table 2-24: Projected Cash Flows (Proposed Financial Plan)

Line	Cash Flow Projections	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Revenues**						
2	Rate Revenues at Existing Rates	$12,619,085	$13,690,788	$14,290,852	$14,290,852	$14,290,852	$14,290,852
3	Revenue Adjustments	$0	$547,632	$1,760,633	$3,044,752	$4,431,600	$5,929,396
4	Hydrant Sales	$52,000	$68,212	$68,455	$68,455	$68,455	$68,455
5	Property Taxes	$995,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000
6	Miscellaneous Revenues	$825,000	$921,000	$927,420	$933,968	$940,648	$947,461
7	Interest Income	$108,005	$300,014	$104,050	$101,733	$116,173	$130,711
8	**Subtotal**	**$14,599,090**	**$16,562,646**	**$18,186,410**	**$19,474,760**	**$20,882,728**	**$22,401,875**
9							
10	**Operating Expenses**						
11	SFPUC and BAWSCA	$2,461,346	$2,590,744	$2,870,122	$2,959,762	$3,178,882	$3,293,422
12	Operations and Maintenance	$1,598,000	$1,775,300	$1,852,729	$1,934,299	$2,020,266	$2,110,901
13	Salaries and Benefits	$4,792,603	$5,042,555	$5,269,470	$5,506,596	$5,754,393	$6,013,341
14	Other Expenses	$1,757,699	$1,886,750	$1,938,258	$1,991,173	$2,045,532	$2,101,375
15	**Subtotal**	**$10,609,648**	**$11,295,349**	**$11,930,580**	**$12,391,831**	**$12,999,073**	**$13,519,038**
16							
17	**Net Operating Revenue**	**$3,989,443**	**$5,267,297**	**$6,255,830**	**$7,082,930**	**$7,883,655**	**$8,882,837**
18							
19	**Debt Service**						
20	Existing Debt Service	$1,512,000	$1,506,840	$1,506,127	$1,509,630	$1,507,262	$1,503,724
21	Proposed Debt Service	$0	$523,027	$523,027	$523,027	$523,027	$523,027
22	**Subtotal**	**$1,512,000**	**$2,029,867**	**$2,029,153**	**$2,032,657**	**$2,030,289**	**$2,026,751**
23							
24	**Capital Projects**						
25	Rate Funded CIP	$4,486,500	$1,562,500	$6,491,280	$3,326,869	$4,204,076	$5,109,914
26	**Subtotal**	**$4,486,500**	**$1,562,500**	**$6,491,280**	**$3,326,869**	**$4,204,076**	**$5,109,914**
27							
28	**Net Cash Flow**	**($2,009,057)**	**$1,674,930**	**($2,264,603)**	**$1,723,404**	**$1,649,291**	**$1,746,173**

PROPOSED FUND BALANCE PROJECTIONS

Table 2-25 shows the fund balance projections for the proposed financial plan. Based on the sources (revenues, revenue adjustments, debt proceeds) and uses (operating expenses, debt service, and CIP) of funds, the District's fund balances will be approximately $16.1 million at the end of the study.

Table 2-25: Projected Fund Balances (Proposed Financial Plan)

Line	Fund Balance Projections	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Beginning Balance**	**$13,617,266**	**$11,608,209**	**$13,283,139**	**$11,018,536**	**$12,741,940**	**$14,391,231**
2							
3	**Sources of Funds**						
4	Rate Revenues at Existing Rates	$12,619,085	$13,690,788	$14,290,852	$14,290,852	$14,290,852	$14,290,852
5	Revenue Adjustments	$0	$547,632	$1,760,633	$3,044,752	$4,431,600	$5,929,396
6	Hydrant Sales	$52,000	$68,212	$68,455	$68,455	$68,455	$68,455
7	Property Taxes	$995,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000	$1,035,000
8	Miscellaneous Revenues	$825,000	$921,000	$927,420	$933,968	$940,648	$947,461
9	Debt Proceeds for CIP	$0	$8,000,000	$0	$0	$0	$0
10	Interest Income	$108,005	$300,014	$104,050	$101,733	$116,173	$130,711
11	**Subtotal**	**$14,599,090**	**$24,562,646**	**$18,186,410**	**$19,474,760**	**$20,882,728**	**$22,401,875**
12							
13	**Uses of Funds**						
14	Operating Expenses	$10,609,648	$11,295,349	$11,930,580	$12,391,831	$12,999,073	$13,519,038
15	Debt Service	$1,512,000	$2,029,867	$2,029,153	$2,032,657	$2,030,289	$2,026,751
16	Debt Funded CIP	$0	$8,000,000	$0	$0	$0	$0
17	Rate Funded CIP	$4,486,500	$1,562,500	$6,491,280	$3,326,869	$4,204,076	$5,109,914
18	**Subtotal**	**$16,608,147**	**$22,887,716**	**$20,451,013**	**$17,751,356**	**$19,233,437**	**$20,655,703**
19							
20	**Ending Balance**	**$11,608,209**	**$13,283,139**	**$11,018,536**	**$12,741,940**	**$14,391,231**	**$16,137,404**

PROPOSED FINANCIAL PERFORMANCE

Table 2-26 shows the forecasted financial performance for the proposed financial plan. Under this plan, the District will meet its reserve targets in all years of the study. The District will be able to meet its debt coverage requirements in all years without any revenue adjustments.

Table 2-26: Forecasted Financial Performance (Proposed Financial Plan)

Line	Financial Performance	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Reserve Policy**						
2	Operating Reserve Target	$2,652,412	$2,823,837	$2,982,645	$3,097,958	$3,249,768	$3,379,760
3	Capital Replacement Target	$5,614,245	$5,738,928	$5,388,557	$5,846,175	$7,204,799	$8,015,313
4	Debt Service Target	$1,512,000	$2,029,867	$2,029,153	$2,032,657	$2,030,289	$2,026,751
5	Combined Target	$9,778,657	$10,592,632	$10,400,355	$10,976,789	$12,484,856	$13,421,823
6	Combined Reserves	$11,608,209	$13,283,139	$11,018,536	$12,741,940	$14,391,231	$16,137,404
7	Meets Target?	Yes	Yes	Yes	Yes	Yes	Yes
8							
9	**Debt Coverage**						
10	Required Debt Coverage	120%	120%	120%	120%	120%	120%
11	Calculated Debt Coverage	264%	259%	308%	348%	388%	438%
12	Meets Target?	Yes	Yes	Yes	Yes	Yes	Yes

Figure 2-4 shows the comparison of revenues and the revenue requirement for the proposed scenario. The stacked bars represent the revenue requirements, or costs. The District will add to its reserves (grey bars) in this scenario. The current revenue, shown as a solid line, is lower than the revenue requirements. The proposed revenue, shown as a dotted line, is greater than the revenue requirements (except for FYE 2026), meaning that the District's revenues are able to sufficiently fund its expenses.

Figure 2-4: Revenue Requirements vs. Revenues (Proposed Financial Plan)

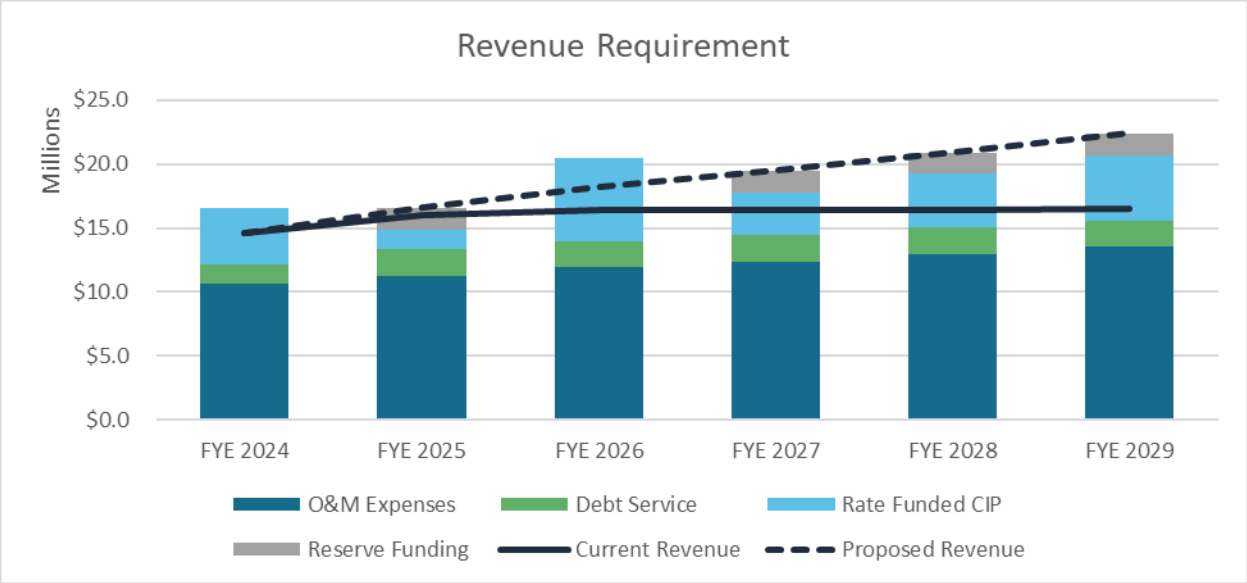


Figure 2-5 shows the debt coverage projections in the proposed financial plan. The required debt coverage (solid black line) is equal to 120%. The District is expected to meet its debt coverage requirements for all years of this scenario.

Figure 2-5: Projected Debt Coverage (Proposed Financial Plan)

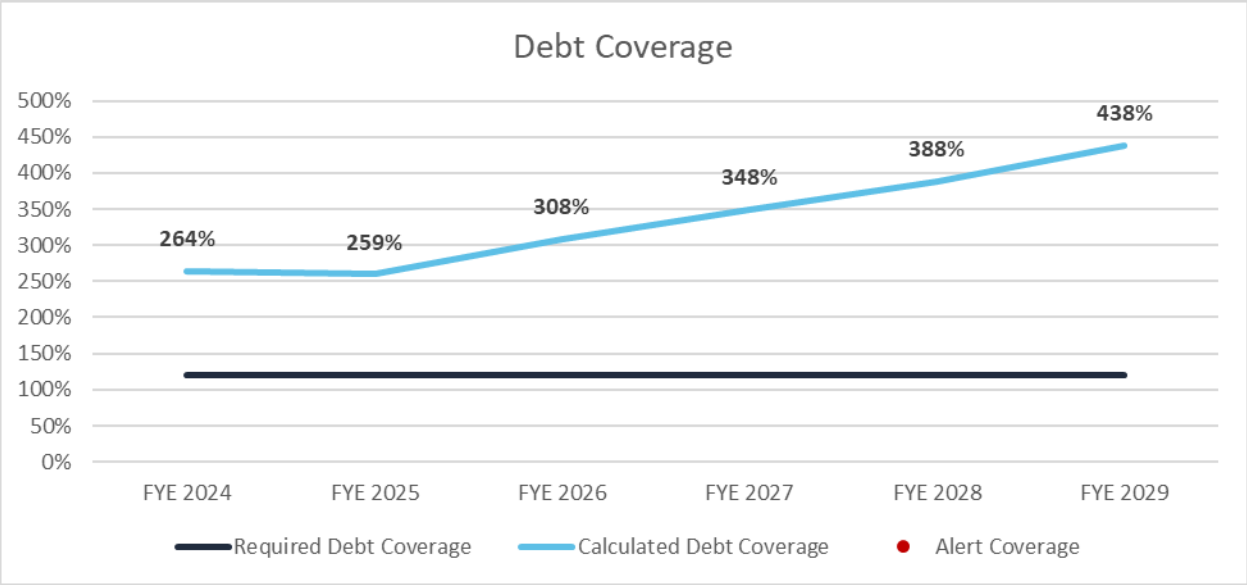
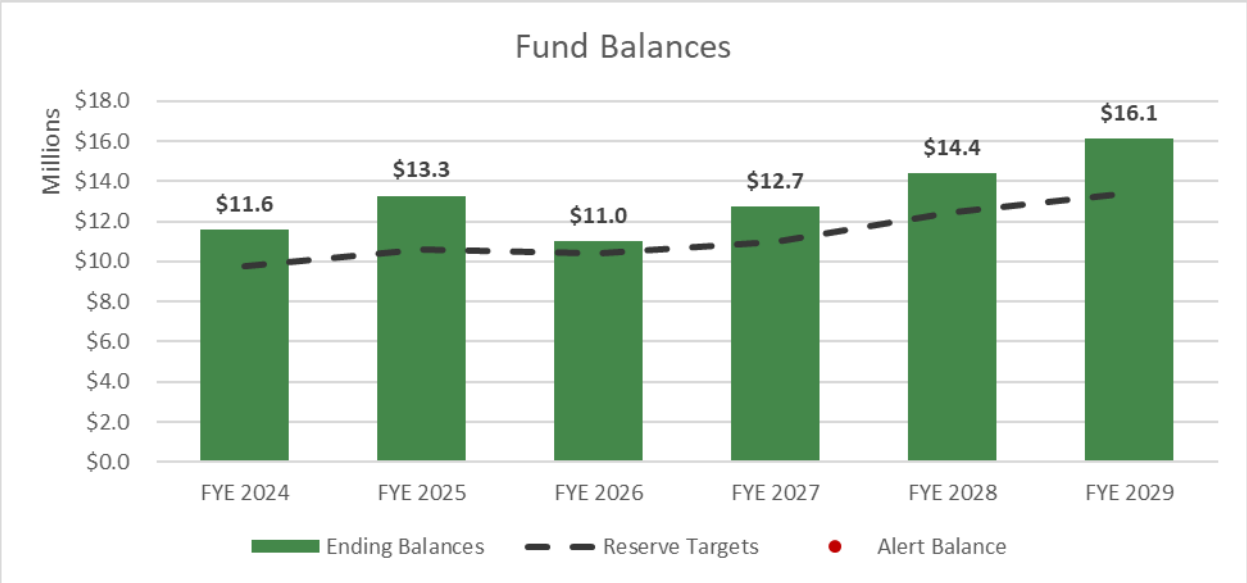


Figure 2-6 shows the fund balance projections in the proposed financial plan. The District's ending balance (green bars) will meet the reserve targets (dashed line) from FYE 2024 through FYE 2029.

Figure 2-6: Projected Fund Balances (Proposed Financial Plan)



3. COST-OF-SERVICE ANALYSIS

3.1 COST-OF-SERVICE METHODOLOGY

A cost-of-service analysis was conducted to allocate the proposed FYE 2024 rate revenue requirement to customers in proportion to use of and burden on the District's water system. The overall goal of the cost-of-service analysis is to develop "unit costs," which provide the basis from which proposed rates are directly calculated from. Note that although the study period spans five years, the cost-of-service analysis is limited to a single representative year referred to as the "test year." The test year in this study is FYE 2024.

The cost-of-service analysis is "revenue neutral," meaning that the resulting cost-of-service based rates collect the same amount of revenue as the District expects to collect in FYE 2024[4]. The revenue neutral unit costs determine revenue neutral rates, which are then adjusted based on the proposed financial plan increases to arrive at the proposed water rates for five years. All values presented in this section pertain to FYE 2024 and are revenue neutral unless stated otherwise.

The key steps in conducting a water cost-of-service analysis are outlined below:

- **Revenue requirement determination**: The total rate revenue requirement for the test year is determined based on the results of the proposed financial plan and divided into primary sub-components (operating, capital, etc.).
- **Cost functionalization**: Operating and capital costs are evaluated and assigned to "functional categories" in the water system (e.g., customer service, water supply, distribution, etc.). This provides a proportional breakdown of system costs by functional category.
- **Revenue requirement allocation to cost causation components**: Functionalized costs are allocated to "cost causation components" (e.g., water supply, base delivery, max day delivery, etc.), which is used to attribute customers' use of the system to the costs incurred by the District.
- **Unit cost development**: The rate revenue requirement allocation for each individual cost causation component is divided by the appropriate units of service to establish unit costs for the test year. Unit costs provide the basis from which proposed rates are calculated.

3.2 REVENUE REQUIREMENT

REVENUE REQUIREMENT DETERMINATION

The total rate revenue requirement for the test year, FYE 2024, is based on the financial plan projections (**Table 2-24**) and is allocated between the Operating, Capital, and Revenue Offset components, as shown in **Table 3-1**. The Operating revenue requirement consists of operating expenses (Line 2), adjustments for cash from reserves (Line 15; from **Table 2-24**, Line 28), and

[4] The FYE 2024 revenue requirement will differ from the expected revenues in FYE 2024 due to a mid-year rate increase. The revenue requirement reflects a full fiscal year of rate revenues based on the District's current water rates.

adjustments for to annualize the revenue adjustment in FYE 2024 (Line 16). The District adopted its FYE 2024 rates on January 18, 2024; this adjustment is to calculate the total rate revenue if the FYE 2024 rates were effective for the full fiscal year. The Capital revenue requirement includes debt service (Line 3) and rate funded CIP (Line 4). The Revenue Offset revenue requirement reduces the overall revenue requirement by the miscellaneous non-rate revenues (Lines 8-11; from **Table 2-24**, Lines 4-7). The total revenue requirement (Line 19) less the adjustment for the mid-year rate increase (Line 16) is equal to the amount of rate revenue collected in FYE 2024 (**Table 2-24**, Line 2).

Table 3-1: FYE 2024 Revenue Requirement

Line	FYE 2024 Revenue Requirement	Operating	Capital	Rev. Offset	Total
1	**Revenue Requirements**				
2	Operating Expenses	$10,609,648	$0	$0	$10,609,648
3	Debt Service	$0	$1,512,000	$0	$1,512,000
4	Rate Funded CIP	$0	$4,486,500	$0	$4,486,500
5	**Subtotal**	**$10,609,648**	**$5,998,500**	**$0**	**$16,608,147**
6					
7	**Revenue Offsets**				
8	Hydrant Sales	$0	$0	($52,000)	($52,000)
9	Property Taxes	$0	$0	($995,000)	($995,000)
10	Miscellaneous Revenues	$0	$0	($825,000)	($825,000)
11	Interest Income	$0	$0	($108,005)	($108,005)
12	**Subtotal**	**$0**	**$0**	**($1,980,005)**	**($1,980,005)**
13					
14	**Adjustments**				
15	Cash to/(from) Reserves	($2,009,057)	$0	$0	($2,009,057)
16	Revenue Adjustment Annualization	$411,179	$0	$0	$411,179
17	**Subtotal**	**($1,597,879)**	**$0**	**$0**	**($1,597,879)**
18					
19	**Total - Revenue Requirement**	**$9,011,769**	**$5,998,500**	**($1,980,005)**	**$13,030,264**

3.3 COST FUNCTIONALIZATION

FUNCTIONAL CATEGORY DEFINITIONS

After determining the revenue requirement, the next step in the cost-of-service analysis is to allocate the District's costs into various functional categories. These categories represent the main functions of the District's water system and include:

- **Meters**: costs of meter maintenance and replacement
- **Customer**: costs related to customer service and billing
- **Fire**: costs related to providing fire protection services
- **SFPUC Supply**: costs of acquiring water from SFPUC to serve the District's customers
- **Local Supply**: costs of supplying water from local sources to serve the District's customers
- **Treatment**: costs related to the treatment of water to potable standards
- **Pumping**: costs relating to pumping water to higher elevations
- **Storage**: costs related to water storage facilities (such as reservoirs and tanks)

- **Transmission and Distribution (T&D)**: costs related to the transmission and distribution of water through the District's water system
- **Maintenance**: costs of equipment and vehicles for staff
- **Conservation**: costs related to the District's water conservation program
- **General**: costs that are not directly attributable to any other functional category
- **Revenue Offset**: miscellaneous revenues that are not generated by specific customer classes or for payment of services provided by the District; these revenues can be used to offset rates at the District's discretion under Proposition 218 requirements

OPERATING COST FUNCTIONALIZATION

WRE worked closely with District staff to evaluate and allocate the operating expenses for FYE 2024 (**Table 2-15**) to the most closely associated functional categories within the water system, as shown in **Table 3-2**. The detailed allocation of the operating expense budget to the functional categories is included in the **Appendix** (**Table 6-3**).

Table 3-2: Operating Costs by System Functions

Line	Cost Functions	Operating Expenses	Percent of Total
1	Meters	$124,087	1.2%
2	Customer	$754,561	7.1%
3	Supply	$2,461,346	23.2%
4	Treatment	$1,710,558	16.1%
5	Pumping	$1,577,783	14.9%
6	T&D	$1,238,337	11.7%
7	Conservation	$89,500	0.8%
8	General	$2,653,476[5]	25.0%
9	**Total**	**$10,609,648**	**100.0%**

CAPITAL ASSET FUNCTIONALIZATION

WRE worked with District staff to evaluate and allocate the District's current capital assets to the most closely associated functional categories within the water system, as shown in **Table 3-3**. The detailed allocation of the current capital assets to the functional categories is included in the **Appendix** (**Table 6-4**).

It is standard practice in most water cost-of-service studies to functionalize current capital assets rather than planned CIP costs, since the latter can fluctuate more significantly from year to year. The current capital asset base provides a more stable representation of long-term capital needs and their associated costs. The asset valuation methodology used in this study is Replacement Cost Less Depreciation (RCLD), which takes both inflation and depreciation of the District's water system into account.

[5] General operating costs include the majority of administrative salaries, payroll-related expenses, and some administrative expenses.

Table 3-3: Capital Assets by System Functions

Line	Cost Functions	Capital Assets (RCLD)	Percent of Total
1	Meters	$2,375,498	2.7%
2	Fire	$786,499	0.9%
3	Local Supply	$2,192,109	2.5%
4	Treatment	$12,610,488	14.5%
5	Pumping	$23,056,728	26.5%
6	Storage	$3,296,769	3.8%
7	T&D	$38,851,024	44.7%
8	Maintenance	$748,283	0.9%
9	General	$2,961,665	3.4%
10	**Total**	**$86,879,063**	**100.0%**

REVENUE OFFSET FUNCTIONALIZATION

Table 3-4 shows the revenue offsets allocated by functional categories. Based on the definition of Revenue Offsets in the beginning of this subsection of the report, only property tax revenues can be allocated to this function (Line 13; from **Table 3-1**, Line 9). The remaining non-rate revenues, which include hydrant sales, miscellaneous revenues, and interest income (**Table 3-1**, Lines 8 and 10-11) are allocated to the General cost function.

Table 3-4: Revenue Offsets by System Functions

Line	Cost Functions	Revenue Offsets	Percent of Total
1	General	($985,005)	49.7%
2	Revenue Offset	($995,000)	50.3%
3	**Total**	**($1,980,005)**	**100.0%**

3.4 COST CAUSATION COMPONENTS

COST COMPONENT DEFINITIONS

While the functional categories represent the costs of system functions, cost causation components represent the reasons for why and how those costs are incurred within the system (thus, cost causation). Cost causation components will be referred to as cost components in this report. The next step of the cost-of-service analysis is to allocate the Operating, Capital, and Revenue Offsets in the functional categories between the cost components, most of which directly correspond to a single functional category.

The cost components in this study include the following:

- **Meter**: directly corresponds to the Meter functional category
- **Customer**: directly corresponds to the Customer functional category
- **Fire**: directly corresponds to the Fire functional category
- **SFPUC Supply**: directly corresponds to the SFPUC Supply functional category

- **Local Supply**: directly corresponds to the Local Supply functional category
- **Average Day Demand (Base)**: costs associated with delivering water to customers during average water demand conditions (average daily use)
- **Maximum Day Demand (Max Day)**: costs associated with delivering water to customers during maximum day demand conditions (water usage during highest day of year)
- **Maximum Hour Demand (Max Hour)**: costs associated with delivering water to customer during maximum hour demand conditions (water usage during highest hour of highest day)
- **Conservation**: directly corresponds to the Conservation functional category
- **Revenue Offset**: directly corresponds to the Revenue Offset functional category
- **General**: directly corresponds to the General functional category

SYSTEM-WIDE MAXIMUM CAPACITY FACTORS

System-wide maximum capacity factors for the District's water system, shown in **Table 3-5**, are used to allocate costs associated with the Treatment, Pumping, Storage, and T&D functional categories to the Base, Max Day, and Max Hour cost components. Maximum capacity factors represent the ratio of maximum to average water demand over the course of one year for the entire system. This provides a basis to identify costs incurred to provide water service during average demand conditions and to provide additional capacity during maximum demand conditions.

District staff provided the average day, maximum day, and maximum hour demand capacity factors, which are normalized based on average day demand (meaning that the average day demand is always equal to 1.00).

The percentage allocations to the Base, Max Day, and Max Hour cost components based on the average day, maximum day, and maximum demand capacity factors are calculated as follows:

- Average day demand is allocated entirely to Base
- Max day demand is allocated proportionately to Base[6] and Max Day[7]
- Max hour demand is allocated proportionately to Base[8], Max Day[9], and Max Hour[10]
- Average of max day and max hour is based on the average percentages of Lines 2-3

Table 3-5: System-Wide Maximum Capacity Allocation

Line	System-Wide Maximum Capacity	Factor	Base	Max Day	Max Hour	Total
1	Average Day Demand	1.00	100.0%	0.0%	0.0%	100.0%
2	Max Day Demand	1.40	71.4%	28.6%	0.0%	100.0%
3	Max Hour Demand	2.80	35.7%	14.3%	50.0%	100.0%
4	Average of Max Day/Hour		53.6%	21.4%	25.0%	100.0%

[6] 1.00/1.40 = 71.4%
[7] (1.40-1.00)/1.40 = 28.6%
[8] 1.00/2.80 = 35.7%
[9] (1.40-1.00)/2.80 = 14.3%
[10] (2.80-1.40)/2.80 = 50.0%

COST COMPONENT ALLOCATION FACTORS

Table 3-6 shows the factors used to allocate the functionalized costs to the cost components. For the cost components that directly correlate to a functional category (Meter, Customer, Fire, SFPUC Supply, Local Supply, Conservation, Revenue Offset, and General), the functionalized costs are allocated entirely to the matching cost component. Treatment, Pumping, and Storage facilities (Lines 6-8) are sized based on maximum day demand and are allocated based on the Max Day maximum capacity factor (**Table 3-5**, Line 2). Transmission and Distribution facilities (Line 9) are sized based on maximum day and maximum hour demand, respectively, and are allocated based on the average of Max Day and Max Hour maximum capacity factors (**Table 3-5**, Line 4). Maintenance costs (Line 10) are incurred to support water system staff and are allocated to General to be indirectly allocated to all other cost components.

Table 3-6: System Function Allocation to Cost Components

Line	Cost Functions	Meter	Customer	Fire	SFPUC Supply	Local Supply	Base	Max Day	Max Hour	Conser-vation	Rev. Offset	General	Total
1	Meters	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2	Customer	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3	Fire	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
4	SFPUC Supply	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
5	Local Supply	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
6	Treatment	0.0%	0.0%	0.0%	0.0%	0.0%	71.4%	28.6%	0.0%	0.0%	0.0%	0.0%	100.0%
7	Pumping	0.0%	0.0%	0.0%	0.0%	0.0%	71.4%	28.6%	0.0%	0.0%	0.0%	0.0%	100.0%
8	Storage	0.0%	0.0%	0.0%	0.0%	0.0%	71.4%	28.6%	0.0%	0.0%	0.0%	0.0%	100.0%
9	T&D	0.0%	0.0%	0.0%	0.0%	0.0%	53.6%	21.4%	25.0%	0.0%	0.0%	0.0%	100.0%
10	Maintenance	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
11	Conservation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
12	General	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
13	Revenue Offset	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

OPERATING COST COMPONENT ALLOCATION

Table 3-7 shows the operating cost allocation by cost component. The functionalized operating expenses from **Table 3-2** are allocated based on the cost component allocation factors in **Table 3-6**. The operating allocation (Line 15) is derived from the total operating expenses by cost component (Line 14) and represents the proportion of the Operating revenue requirement that will be allocated to each cost component.

Table 3-7: Operating Allocation by Cost Component

Line	Operating Expenses	Meter	Customer	Fire	SFPUC Supply	Local Supply	Base	Max Day	Max Hour	Conser-vation	Rev. Offset	General	Total
1	Meters	$124,087	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$124,087
2	Customer	$0	$754,561	$0	$0	$0	$0	$0	$0	$0	$0	$0	$754,561
3	Fire	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	SFPUC Supply	$0	$0	$0	$2,461,346	$0	$0	$0	$0	$0	$0	$0	$2,461,346
5	Local Supply	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6	Treatment	$0	$0	$0	$0	$0	$1,221,827	$488,731	$0	$0	$0	$0	$1,710,558
7	Pumping	$0	$0	$0	$0	$0	$1,126,988	$450,795	$0	$0	$0	$0	$1,577,783
8	Storage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
9	T&D	$0	$0	$0	$0	$0	$663,395	$265,358	$309,584	$0	$0	$0	$1,238,337
10	Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Conservation	$0	$0	$0	$0	$0	$0	$0	$0	$89,500	$0	$0	$89,500
12	General	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,653,476	$2,653,476
13	Revenue Offset	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
14	**Total**	**$124,087**	**$754,561**	**$0**	**$2,461,346**	**$0**	**$3,012,210**	**$1,204,884**	**$309,584**	**$89,500**	**$0**	**$2,653,476**	**$10,609,648**
15	***Operating Allocation***	***1.2%***	***7.1%***	***0.0%***	***23.2%***	***0.0%***	***28.4%***	***11.4%***	***2.9%***	***0.8%***	***0.0%***	***25.0%***	***100.0%***

CAPITAL COST COMPONENT ALLOCATION

Table 3-8 shows the capital cost allocation by cost component. The functionalized capital assets from **Table 3-3** are allocated based on the cost component allocation factors in **Table 3-6**. The capital allocation (Line 15) is derived from the total capital asset value by cost component (Line 14) and represents the proportion of the Capital revenue requirement that will be allocated to each cost component.

Table 3-8: Capital Allocation by Cost Component

Line	Capital Assets (RCLD)	Meter	Customer	Fire	SFPUC Supply	Local Supply	Base	Max Day	Max Hour	Conser-vation	Rev. Offset	General	Total
1	Meters	$2,375,498	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,375,498
2	Customer	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Fire	$0	$0	$786,499	$0	$0	$0	$0	$0	$0	$0	$0	$786,499
4	SFPUC Supply	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Local Supply	$0	$0	$0	$0	$2,192,109	$0	$0	$0	$0	$0	$0	$2,192,109
6	Treatment	$0	$0	$0	$0	$0	$9,007,491	$3,602,996	$0	$0	$0	$0	$12,610,488
7	Pumping	$0	$0	$0	$0	$0	$16,469,092	$6,587,637	$0	$0	$0	$0	$23,056,728
8	Storage	$0	$0	$0	$0	$0	$2,354,835	$941,934	$0	$0	$0	$0	$3,296,769
9	T&D	$0	$0	$0	$0	$0	$20,813,049	$8,325,220	$9,712,756	$0	$0	$0	$38,851,024
10	Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$748,283	$748,283
11	Conservation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	General	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,961,665	$2,961,665
13	Revenue Offset	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
14	**Total**	**$2,375,498**	**$0**	**$786,499**	**$0**	**$2,192,109**	**$48,644,466**	**$19,457,787**	**$9,712,756**	**$0**	**$0**	**$3,709,948**	**$86,879,063**
15	***Capital Allocation***	***2.7%***	***0.0%***	***0.9%***	***0.0%***	***2.5%***	***56.0%***	***22.4%***	***11.2%***	***0.0%***	***0.0%***	***4.3%***	***100.0%***

REVENUE OFFSET COST COMPONENT ALLOCATION

Table 3-8 shows the allocation of revenue offsets to each cost component. The functionalized revenue offsets from **Table 3-4** are allocated based on the cost component allocation factors in **Table 3-6**. The revenue offsets (Line 14) in each cost component will be applied to the total revenue requirement based on these allocations.

Table 3-9: Revenue Offset Allocation by Cost Component

Line	Revenue Offsets	Meter	Customer	Fire	SFPUC Supply	Local Supply	Base	Max Day	Max Hour	Conser-vation	Rev. Offset	General	Total
1	Meters	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	Customer	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Fire	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	SFPUC Supply	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Local Supply	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6	Treatment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
7	Pumping	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	Storage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
9	T&D	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	Conservation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	General	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	($985,005)	($985,005)
13	Revenue Offset	$0	$0	$0	$0	$0	$0	$0	$0	$0	($995,000)	$0	($995,000)
14	**Total**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**($995,000)**	**($985,005)**	**($1,980,005)**

3.5 SYSTEM CAPACITY ALLOCATIONS

The costs for certain system functions are based on the capacity requirements related to that function. For example, meter-related costs are allocated based on meter capacity, which is defined by the safe maximum operating capacity of each meter size. This section describes and defines capacity requirements and allocations relating to water meters, private fire lines, customer water usage, and fire protection.

EQUIVALENT METER UNITS

Costs related to meter capacity increase based on meter size. Therefore, equivalent meter units are calculated to provide a basis from which to allocate costs in proportion to meter size. Equivalent meter calculations are shown in **Table 3-10**.

Equivalent meters are calculated based on meter capacity ratios, which represent the safe operating capacity of a water meter relative to the base meter size. For this study, the base meter size is a 5/8" meter, which is the most common meter size in the District's system. Capacity in gallons per minute (gpm) is derived from the AWWA M1 Manual. The meter ratio for a 1.5" meter is 5.00, which means that the capacity of a 1.5" meter is five times that of a 5/8" meter.

The number of meters in each meter size is from **Table 2-7**. Equivalent meters are calculated by multiplying the meter counts by the meter ratio in each size.

Table 3-10: Equivalent Meter Units

Line	Meter Size	Safe Operating Capacity (gpm)	Meter Ratio	Meter Counts	Meter Equivalents
1	5/8 inch	20	1.00	6,114	6,114
2	3/4 inch	30	1.50	201	302
3	1 inch	50	2.50	187	468
4	1.5 inch	100	5.00	31	155
5	2 inch	160	8.00	35	280
6	3 inch	350	17.50	5	88
7	4 inch	630	31.50	2	63
8	6 inch	1,350	67.50	0	0
9	**Total**			**6,575**	**7,469**

EQUIVALENT FIRE LINES

WRE recommends an update to the methodology used to calculate fire capacity and equivalent fire lines. The District's current methodology is based on a linear factor; for example, the rate for a 4" fire line is twice the rate for a 2" fire line. However, based on the Hazen-Williams equation to calculate the flow of water through a pipe, the capacity of a fire line increases exponentially as its diameter size increases. WRE recommends an update to the methodology of calculating fire capacity based on the exponential capacity factor, rather than the existing linear factor.

Costs related to fire protection capacity increase exponentially based on fire line diameter and are attributable to both public fire hydrants and private fire connections. Therefore, equivalent fire lines are calculated to provide a basis from which to allocate costs in proportion to fire line size, and between public and private fire connections. Equivalent fire line calculations are shown in **Table 3-11**; private fire line counts are from **Table 2-8**.

The capacity of a fire line is based on the diameter of the connection and is equal to the connection diameter in inches raised to power of 2.63 based on the Hazen-Williams equation in the AWWA M1 Manual. The fire line ratio is the fire capacity of each diameter size divided by the base fire line, which is a 3/4" diameter. Equivalent fire lines are calculated by multiplying the fire line ratio of each diameter size by the number of connections by size.

The concept of equivalent fire lines provides a methodology to compare the capacity requirements of both private fire protection and public hydrants. The fire protection capacity attributed to private fire connections is equal to 19%; the remaining 81% is attributed to public fire hydrants (Line 11).

Table 3-11: Equivalent Fire Lines

Line	Fire Line Size	Fire Capacity	Fire Line Ratio	Private Fire Counts	Public Hydrant Counts	Private Fire Equivalents	Public Hydrant Equivalents
1	3/4 inch	0.47	1.00	10	0	10	0
2	1 inch	1.00	2.13	753	0	1,605	0
3	1.5 inch	2.90	6.19	50	0	310	0
4	2 inch	6.19	13.19	89	0	1,174	0
5	3 inch	17.98	38.32	4	0	153	0
6	4 inch	38.32	81.66	130	0	10,616	0
7	6 inch	111.31	237.21	61	665	14,470	157,742
8	8 inch	237.21	505.49	15	0	7,582	0
9	10 inch	426.58	909.05	1	0	909	0
10	**Total**			**1,113**	**665**	**36,828**	**157,742**
11	***Percent of Total***			***63%***	***37%***	***19%***	***81%***

CUSTOMER DEMAND AND FIRE CAPACITY

Cost-of-service allocations are typically based on system-wide capacity (which is the combination of customer demand and fire protection). However, Max Day and Max Hour cost components are further allocated between customer demand and fire protection based on their proportion share of each within the water system.

Table 3-12 shows the maximum month capacity factor by customer class and tier. The maximum monthly usage is divided by the average monthly usage to determine the maximum capacity factor for all customer groups. Max Month maximum capacity factor data is typically used as a proxy for Max Day maximum capacity factors in lieu of daily water use data for all customers.

Table 3-12: Max Month Maximum Capacity Factor by Customer Class and Tier

Line	Customer Class	Max Month Usage	Average Month Usage	Max Month Capacity Factor
1	Single Family Residential			
2	Tier 1 (1-4 units)	19,889	18,753	1.06
3	Tier 2 (5-8 units)	10,076	7,500	1.34
4	Tier 3 (9+ units)	6,090	3,426	1.78
5	Multi-Family	3,606	3,182	1.13
6	All Other Customers	27,617	15,798	1.75

Table 3-13 shows the customer demand capacity calculations for Max Day and Max Hour. Max Day maximum capacity is from **Table 3-12**. Max Hour maximum capacity is equal to the customer-specific Max Day maximum capacity increased by the ratio of system-wide Max Hour to system-wide Max Day (**Table 3-5**). The annual use for each customer class and tier is from **Table 2-10**. The daily use is equal to the annual use divided by 365 days.

Max Day demand is calculated by multiplying the daily use in hcf by the Max Day maximum capacity factor for each customer class and tier. Max Day extra capacity is equal to Max Day demand less daily use. Similarly, Max Hour demand is calculated by multiplying the daily use in hcf by the Max Hour maximum capacity factor for each customer class and tier. Max Hour extra capacity is equal to the Max Hour demand less Max Day demand.

The total Max Day and Max Hour extra capacity (Line 7) represents the capacity required to meet customer demand that will be used to allocate Max Day and Max Hour costs between public fire hydrant capacity, private fire line capacity, and customer demand capacity.

Table 3-13: Customer Demand Capacity

Line	Customer Class	Annual Use	Daily Use	Max Day Capacity Factor	Max Day Demand	Max Day Extra Capacity	Max Hour Capacity Factor	Max Hour Demand	Max Hour Extra Capacity
1	Single Family Residential								
2	Tier 1 (1-4 units)	225,000	616	1.06	654	37	2.12	1,308	654
3	Tier 2 (5-8 units)	95,000	260	1.34	350	89	2.69	699	350
4	Tier 3 (9+ units)	48,000	132	1.78	234	102	3.55	467	234
5	Multi-Family	39,000	107	1.13	121	14	2.27	242	121
6	All Other Customers	243,000	666	1.75	1,164	498	3.50	2,328	1,164
7	**Total**	**650,000**	**1,781**		**2,522**	**741**		**5,044**	**2,522**

Table 3-14 shows the calculation of fire capacity requirements in the District's system and the maximum capacity allocation between fire and customer demand. The extra capacity required for fire is based on a maximum fire that lasts two hours using 1,000 gpm of water based on the District's Water Master Plan. The fire capacity is allocated between public hydrants (Line 5) and private fire (Line 6) using the proportion of equivalent fire lines attributed to each service (**Table 3-11**).

The customer demand (**Table 3-13**), public hydrant, and private fire extra capacity (Lines 9-11) are added together to form the total capacity requirements of the system within the Max Day and Max Hour cost components. From there, the capacity allocation factors (Lines 15-17) are calculated based on the proportion of the total capacity requirements related to each service. These allocations are used in a later section of the report to reallocate Max Day and Max Hour costs.

Table 3-14: Maximum Capacity Allocation by Fire and Customer Demand

Line	Maximum Capacity Allocation	Max Day	Max Hour
1	**Fire Capacity**		
2	Hours for Fire	2	2
3	Capacity for Fire (gpm)	1,000	1,000
4	Fire Extra Capacity	160[11]	1,765[12]
5	*Public Hydrants*	*81.1%*	*81.1%*
6	*Private Fire*	*18.9%*	*18.9%*
7			
8	**Capacity Requirements (hcf/day)**		
9	Customer Demand	741	2,522
10	Public Hydrants	130	1,431
11	Private Fire	30	334
12	**Total**	**902**	**4,287**
13			
14	**Fire Capacity Allocation**		
15	Customer Demand	82.2%	58.8%
16	Public Hydrants	14.4%	33.4%
17	Private Fire	3.4%	7.8%
18	**Total**	**100.0%**	**100.0%**

[11] 2 hours x 1,000 gpm x 60 minutes/hour x 748 gallons/hcf

[12] (1,000 gpm x 60 minutes/hour x 24 hours/day / 748 gallons/hcf) - 160 (Max Day fire capacity)

3.6 ALLOCATION TO COST COMPONENTS

PRELIMINARY COST-OF-SERVICE ALLOCATION AND GENERAL REALLOCATION

Table 3-15 shows the preliminary cost-of-service allocation prior to any adjustments and the adjusted cost-of-service allocations after the General cost reallocation. The Operating costs (Line 1) are equal to the total Operating revenue requirements (**Table 3-1**, Line 19) allocated to each cost component based on the Operating allocation (**Table 3-7**, Line 15). The Capital costs (Line 2) are equal to the total Capital revenue requirements (**Table 3-1**, Line 19) allocated to each cost component based on the Capital allocation (**Table 3-8**, Line 15). The Revenue Offsets (Line 3) are equal to the total Revenue Offset requirements (**Table 3-1**, Line 19) and are allocated based on the Revenue Offset allocation (**Table 3-9**, Line 14). Note that the total cost-of-service (Line 4) is equal to the total rate revenue requirement for FYE 2024 (**Table 3-1**, Line 19).

The next step is to reallocate General costs (Line 5) based on the proportion of costs in each cost component (except General and Revenue Offset, which is restricted to specific revenues only) in the preliminary allocation. The total revenue requirement (Line 6) stays the same after the General cost reallocation.

Table 3-15: Cost-of-Service Allocation by Cost Component (Preliminary, General)

Line	Revenue Requirement	Meter	Customer	Fire	SFPUC Supply	Local Supply	Base	Max Day	Max Hour	Conser-vation	Rev. Offset	General	Total
1	Operating Costs	$105,399	$640,919	$0	$2,090,652	$0	$2,558,552	$1,023,421	$262,959	$76,021	$0	$2,253,846	$9,011,769
2	Capital Costs	$164,014	$0	$54,303	$0	$151,353	$3,358,621	$1,343,448	$670,610	$0	$0	$256,151	$5,998,500
3	Revenue Offsets	$0	$0	$0	$0	$0	$0	$0	$0	$0	($995,000)	($985,005)	($1,980,005)
4	**Preliminary Allocation**	**$269,413**	**$640,919**	**$54,303**	**$2,090,652**	**$151,353**	**$5,917,173**	**$2,366,869**	**$933,569**	**$76,021**	**($995,000)**	**$1,524,992**	**$13,030,264**
5	General Cost Allocation	$32,868	$78,190	$6,625	$255,053	$18,465	$721,875	$288,750	$113,892	$9,274	$0	($1,524,992)	$0
6	**Adjusted for General**	**$302,281**	**$719,109**	**$60,928**	**$2,345,704**	**$169,817**	**$6,639,049**	**$2,655,619**	**$1,047,461**	**$85,295**	**($995,000)**	**$0**	**$13,030,264**

FIRE PROTECTION AND MAXIMUM CAPACITY REALLOCATION

Table 3-16 shows the cost-of-service in each cost component after reallocating fire protection and maximum capacity-related costs. The cost-of-service after General cost reallocation (Line 1) is from **Table 3-15**.

Public Fire costs (Line 2) are reallocated from Fire, Max Day, and Max Hour based on the proportion of public fire capacity related to those components. Public Fire costs within the Fire cost component are reallocated based on the proportion of equivalent fire lines for public hydrants (**Table 3-14**, Line 5). Public Fire costs within the Max Day and Max Hour components are reallocated based on the proportion of

capacity related to public fire protection (**Table 3-14**, Line 16). All Public Fire costs are reallocated to the Meter component, since public fire protection is a safety benefit shared by all District customers.

Private Fire costs (Line 3) are reallocated from Max Day and Max Hour to the Fire cost component based on the proportion of capacity related to private fire service (**Table 3-14**, Line 17).

Finally, the maximum capacity reallocation (Line 5) adjusts the costs in Max Day and Max Hour to recover maximum capacity costs in the Meter cost component. This allocation is to maintain the same percentage of fixed revenue recovery (26% fixed revenues to 74% variable revenues), which will provide a similar level of financial and rate stability for the District. 50% of Max Day and Max Hour costs are reallocated to the Meter component to achieve the same percentage of fixed revenues.

Table 3-16: Cost-of-Service Allocation by Cost Component (Fire Protection, Maximum Capacity)

Line	Revenue Requirement	Meter	Customer	Fire	SFPUC Supply	Local Supply	Base	Max Day	Max Hour	Conser-vation	Rev. Offset	Total
1	**Adjusted for General**	**$302,281**	**$719,109**	**$60,928**	**$2,345,704**	**$169,817**	**$6,639,049**	**$2,655,619**	**$1,047,461**	**$85,295**	**($995,000)**	**$13,030,264**
2	Public Fire Allocation	$782,034	$0	($49,396)	$0	$0	$0	($383,056)	($349,583)	$0	$0	$0
3	Private Fire Allocation	$0	$0	$171,050	$0	$0	$0	($89,433)	($81,617)	$0	$0	$0
4	**Adjusted for Fire**	**$1,084,315**	**$719,109**	**$182,582**	**$2,345,704**	**$169,817**	**$6,639,049**	**$2,183,131**	**$616,261**	**$85,295**	**($995,000)**	**$13,030,264**
5	Maximum Capacity Reallocation	$1,399,696	$0	$0	$0	$0	$0	($1,091,565)	($308,131)	$0	$0	$0
6	**Adjusted for Max. Capacity**	**$2,484,011**	**$719,109**	**$182,582**	**$2,345,704**	**$169,817**	**$6,639,049**	**$1,091,565**	**$308,131**	**$85,295**	**($995,000)**	**$13,030,264**

FINAL COST-OF-SERVICE ALLOCATION

Table 3-17 shows the final cost-of-service allocation based on the adjustments for General, Fire, and Maximum Capacity from the prior report tables. The Fire component, after removing costs related to public fire protection, now represents Private Fire costs and is renamed in the following table. The Max Day and Max Hour components now represent the capacity requirements of customer water demand only and do not include costs related to public or private fire protection capacity.

Table 3-17: Cost-of-Service Allocation by Cost Component (Final)

Line	Cost Components	Final Cost Allocation
1	Meter	$2,484,011
2	Customer	$719,109
3	Private Fire	$182,582
4	SFPUC Supply	$2,345,704
5	Local Supply	$169,817
6	Base	$6,639,049
7	Max Day	$1,091,565
8	Max Hour	$308,131
9	Conservation	$85,295
10	Rev. Offset	($995,000)
11	**Total**	**$13,030,264**

3.7 UNIT COST CALCULATION

UNITS OF SERVICE DEFINITIONS

The appropriate units of service are then established for each cost component based on cost causation, which is shown in **Table 3-18**. Cost components to be recovered by the fixed charges are assigned units of service based on the number of equivalent meters (**Table 3-10**), customers (sum of meter counts and private fire line counts from **Table 3-10** and **Table 3-11**), and equivalent fire lines (**Table 3-11**). Cost components to be recovered by the quantity charges are assigned units based on annual usage in hcf or extra capacity for Max Day or Max Hour (**Table 3-13**).

Table 3-18: Units of Service Definitions

Line	Cost Components	Units of Service Definition	Units of Service	Units
1	Meter	*Equivalent meters x 12 mo.*	89,622	equiv. meters/year
2	Customer	*Meter & private fire counts x 12 mo.*	92,256	bills/year
3	Private Fire	*Equivalent fire lines x 12 mo.*	441,940	equiv. lines/year
4	SFPUC Supply	*Annual usage in hcf*	650,000	hcf/year
5	Local Supply	*Annual usage in hcf*	650,000	hcf/year
6	Base	*Annual usage in hcf*	650,000	hcf/year
7	Max Day	*Max Day extra capacity*	741	hcf/day
8	Max Hour	*Max Hour extra capacity*	2,522	hcf/day
9	Conservation	*Annual usage in hcf*	650,000	hcf/year
10	Rev. Offset	*Annual usage in hcf*	650,000	hcf/year

UNIT COST BY COST COMPONENT

Table 3-19 shows the calculation of unit costs by each cost component. The final cost-of-service allocation (**Table 3-17**) is divided by the units of service (**Table 3-18**) for each cost component to derive the unit cost. These unit costs will determine the cost-of-service by customer class.

Table 3-19: Unit Cost by Cost Component

Line	Cost Components	Final Cost Allocation	Units of Service	Unit Cost	Units
1	Meter	$2,484,011	89,622	$27.72	per equiv. meter
2	Customer	$719,109	92,256	$7.79	per bill
3	Private Fire	$182,582	441,940	$0.41	per equiv. line
4	SFPUC Supply	$2,345,704	650,000	$3.61	per hcf
5	Local Supply	$169,817	650,000	$0.26	per hcf
6	Base	$6,639,049	650,000	$10.21	per hcf
7	Max Day	$1,091,565	741	$1,472.59	per hcf/day
8	Max Hour	$308,131	2,522	$122.17	per hcf/day
9	Conservation	$85,295	650,000	$0.13	per hcf
10	Rev. Offset	($995,000)	650,000	($1.53)	per hcf

3.8 COST-OF-SERVICE BY CUSTOMER CLASS

The final step in the cost-of-service analysis is to determine the cost to serve each customer class based on the cost components, which is shown in **Table 3-20**. The unit cost by cost component (**Table 3-19**) is multiplied by the units of service for each customer class to determine the cost to serve each class. Note that the total cost-of-service is equal to the total rate revenue requirement for FYE 2024 (**Table 3-1**).

Table 3-20: Cost-of-Service Allocation by Cost Component and Customer Class

Line	Customer Class	Meter	Customer	Private Fire	SFPUC Supply	Local Supply	Base	Max Day	Max Hour	Conser-vation	Rev. Offset	Total
1	Single Family Residential	$2,017,375	$550,463	$0	$1,328,030	$96,143	$3,758,723	$337,179	$151,152	$48,290	($563,323)	$7,724,031
2	*Tier 1 (1-4 units)*						*$2,298,132*	*$55,007*	*$79,876*			
3	*Tier 2 (5-8 units)*						*$970,322*	*$131,631*	*$42,719*			
4	*Tier 3 (9+ units)*						*$490,268*	*$150,542*	*$28,556*			
5	Multi-Family	$78,493	$10,663	$0	$140,742	$10,189	$398,343	$20,976	$14,794	$5,118	($59,700)	$619,618
6	All Other Customers	$388,142	$53,877	$0	$876,933	$63,485	$2,481,983	$733,410	$142,185	$31,887	($371,977)	$4,399,926
7	Private Fire	$0	$104,106	$182,582	$0	$0	$0	$0	$0	$0	$0	$286,689
8	**Total**	**$2,484,011**	**$719,109**	**$182,582**	**$2,345,704**	**$169,817**	**$6,639,049**	**$1,091,565**	**$308,131**	**$85,295**	**($995,000)**	**$13,030,264**

4. WATER RATES

4.1 RATE DESIGN METHODOLOGY

A three-year proposed water rate schedule was developed based on the results of the proposed financial plan and cost-of-service analysis. The key steps in developing the proposed rate schedule are outlined below:

- **Rate structure evaluation**: The existing rate structure is evaluated, and any proposed changes are identified. Proposed rate structure changes are typically intended to address specific policy objectives or to allocate costs based on the cost-of-service analysis.
- **Test year rate development**: Rates are calculated for the proposed rate structure for the cost-of-service test year (FYE 2024). Rate calculations directly incorporate the unit costs developed in the cost-of-service analysis. The test year rates are revenue neutral, then are increased based on the proposed financial plan revenue adjustments. Although total rate revenues in the first year of adjustments (FYE 2025) are designed to increase by the proposed revenue adjustment percentage (8% in FYE 2025), the proposed percentage increase to each rate/charge varies due to the updated cost-of-service allocations.
- **Three-year rate schedule development**: Proposed rates for the full three-year period are calculated by increasing the cost-of-service rates by the proposed annual revenue adjustment percentages from the proposed financial plan.

4.2 PROPOSED CHANGES TO RATE STRUCTURE

The main objective of the rate study was to conduct an updated cost-of-service analysis while maintaining as much of the current water rate structure as possible to minimize customer impacts. The District's current rate structure includes a monthly base charge, a monthly fire service charge, three-tiered quantity charges for Single Family Residential, and uniform quantity charges for other customers. Aside from a change in cost-of-service methodology for the monthly fire service charges, WRE is not recommending any changes to the District's water rate structure. The water rate structure aligns with cost-of-service principles and is best suited to meet the District's needs.

4.3 PROPOSED MONTHLY BASE CHARGES

REVENUE NEUTRAL RATES

The revenue neutral rate represents the cost-of-service analysis for FYE 2024 but does not include the proposed revenue adjustments for the first year of rates in FYE 2025. **Table 4-1** shows the revenue neutral monthly base charge calculations. The Meter and Customer unit costs are from **Table 3-19** (Lines 1-2). Meter unit costs are multiplied by the meter capacity ratio; Customer costs do not vary based on meter size and thus are the same for all meter sizes.

Table 4-1: Revenue Neutral Monthly Base Charges

Line	Meter Size	Meter Ratio	Number of Accounts	Meter Cost	Customer Cost	Revenue Neutral Rate
1	5/8 inch	1.00	6,114	$27.72	$7.79	$35.52
2	3/4 inch	1.50	201	$41.57	$7.79	$49.37
3	1 inch	2.50	187	$69.29	$7.79	$77.09
4	1.5 inch	5.00	31	$138.58	$7.79	$146.38
5	2 inch	8.00	35	$221.73	$7.79	$229.53
6	3 inch	17.50	5	$485.04	$7.79	$492.84
7	4 inch	31.50	2	$873.07	$7.79	$880.87
8	6 inch	67.50	0	$1,870.87	$7.79	$1,878.67

PROPOSED RATES WITH ADJUSTMENT

Table 4-2 shows the proposed monthly base charges for FYE 2025 based on the revenue neutral rate (**Table 4-1**) adjusted by the proposed revenue adjustment of 8% in the first year (**Table 2-23**) and rounded up to the nearest cent.

Table 4-2: Proposed Monthly Base Charges after Adjustment

Line	Meter Size	Revenue Neutral Rate	Proposed Rate (w/ 8% Adj.)	Current Rate	Difference ($)	Difference (%)
1	5/8 inch	$35.52	$38.36	$35.81	$2.55	7.1%
2	3/4 inch	$49.37	$53.32	$52.92	$0.40	0.8%
3	1 inch	$77.09	$83.26	$87.10	($3.84)	-4.4%
4	1.5 inch	$146.38	$158.09	$172.59	($14.50)	-8.4%
5	2 inch	$229.53	$247.89	$275.18	($27.29)	-9.9%
6	3 inch	$492.84	$532.27	$600.02	($67.75)	-11.3%
7	4 inch	$880.87	$951.34	$1,078.79	($127.45)	-11.8%
8	6 inch	$1,878.67	$2,028.96			

4.4 PROPOSED MONTHLY FIRE SERVICE CHARGES

REVENUE NEUTRAL RATES

The revenue neutral rate represents the cost-of-service analysis for FYE 2024 but does not include the proposed revenue adjustments for the first year of rates in FYE 2025. **Table 4-3** shows the revenue neutral monthly fire service charge calculations. The Private Fire and Customer unit costs are from **Table 3-19** (Lines 2-3). Private Fire unit costs are multiplied by the fire ratio; Customer costs do not vary based on fire line size and thus are the same for all sizes.

Table 4-3: Revenue Neutral Monthly Fire Service Charges

Line	Fire Line Size	Fire Ratio	Number of Accounts	Private Fire Cost	Customer Cost	Revenue Neutral Rate
1	3/4 inch	1.00	10	$0.41	$7.79	$8.21
2	1 inch	2.13	753	$0.88	$7.79	$8.68
3	1.5 inch	6.19	50	$2.56	$7.79	$10.36
4	2 inch	13.19	89	$5.45	$7.79	$13.25
5	3 inch	38.32	4	$15.83	$7.79	$23.63
6	4 inch	81.66	130	$33.74	$7.79	$41.54
7	6 inch	237.21	61	$98.00	$7.79	$105.80
8	8 inch	505.49	15	$208.84	$7.79	$216.64
9	10 inch	909.05	1	$375.57	$7.79	$383.36

PROPOSED RATES WITH ADJUSTMENT

Table 4-4 shows the proposed monthly fire service charges for FYE 2025 based on the revenue neutral rate (**Table 4-3**) adjusted by the proposed revenue adjustment of 8% in the first year (**Table 2-23**) and rounded up to the nearest cent.

Table 4-4: Proposed Monthly Fire Service Charges after Adjustment

Line	Fire Line Size	Revenue Neutral Rate	Proposed Rate (w/ 8% Adj.)	Current Rate	Difference ($)	Difference (%)
1	3/4 inch	$8.21	$8.87	$6.01	$2.86	47.6%
2	1 inch	$8.68	$9.37	$8.01	$1.36	17.0%
3	1.5 inch	$10.36	$11.19	$12.02	($0.83)	-6.9%
4	2 inch	$13.25	$14.31	$16.02	($1.71)	-10.7%
5	3 inch	$23.63	$25.52	$24.03	$1.49	6.2%
6	4 inch	$41.54	$44.86	$32.04	$12.82	40.0%
7	6 inch	$105.80	$114.26	$48.06	$66.20	137.7%
8	8 inch	$216.64	$233.97	$64.08	$169.89	265.1%
9	10 inch	$383.36	$414.03	$80.10	$333.93	416.9%

4.5 PROPOSED QUANTITY CHARGES

The quantity charge calculations include the Supply, Base, Maximum Capacity, Conservation, and Revenue Offset components, which are detailed in this section.

SUPPLY COST

Table 4-5 shows the calculation of unit cost by source of supply: Local Supply and SFPUC Supply. The total cost (Line 1) is equal to the cost-of-service allocation to the Local Supply and SFPUC Supply cost components (**Table 3-17**, Lines 4-5). The availability of each source (Line 2) is the same percentage as that shown in the financial plan for FYE 2024 (**Table 2-14**, Lines 2-3).

The available supply in hcf (Line 3) is calculated by multiplying the total annual water use for all customers (**Table 3-13**) by the available percentage from each source. The unit cost for each source (Line 4) is calculated by dividing the total cost (Line 1) by the available supply in hcf (Line 3).

Table 4-5: Unit Cost by Source of Supply

Line	Water Supply Cost	Local Supply Cost	SFPUC Supply Cost	Total
1	Total Cost of Service	$169,817	$2,345,704	$2,515,521
2	Available Supply (%)	35%	65%	100%
3	Available Supply (hcf)	227,500	422,500	650,000
4	**Unit Cost ($/hcf)**	**$0.75**	**$5.55**	**$3.87**

Table 4-6 shows the supply unit cost by customer class and tier. The available water from each source of supply (**Table 4-5**, Line 3) is divided between each customer class based on proportion of usage. For Single Family Residential customers, the cheapest source of supply (Local Supply) is allocated to the lower tiers first. This follows the guidance set by Article X of the California Constitution, which prioritizes the most "beneficial use" of water, typically defined as indoor water usage for health and safety requirements. Tier 1 includes a combination of Local Supply and SFPUC Supply; Tiers 2 and 3 are served entirely by more expensive SFPUC water. The Supply Unit cost for each customer class and tier is the weighted average of the two unit costs for each source.

Table 4-6: Supply Unit Cost by Customer Class

Line	Customer Class	Usage (hcf)	Local Supply	SFPUC Supply	Supply Unit Cost
1	Single Family Residential		*128,800*	*239,200*	
2	Tier 1 (1-4 units)	225,000	128,800	96,200	$2.80
3	Tier 2 (5-8 units)	95,000	0	95,000	$5.55
4	Tier 3 (9+ units)	48,000	0	48,000	$5.55
5	Multi-Family	39,000	13,650	25,350	$3.87
6	All Other Customers	243,000	85,050	157,950	$3.87
7	**Total**	**650,000**	**227,500**	**422,500**	

BASE COST

The Base unit cost of $10.21 per hcf is from **Table 3-19** and is charged to all customer classes and tiers equally.

MAXIMUM CAPACITY COST

Table 4-7 shows the combined Maximum Capacity unit cost by customer class and tier. The total Maximum Capacity costs are the sum of Max Day and Max Hour costs (**Table 3-20**). The Maximum Capacity unit cost is calculated by dividing the total Maximum Capacity costs by the annual usage in hcf for each customer class and tier.

Table 4-7: Maximum Capacity Unit Cost by Customer Class

Line	Customer Class	Usage (hcf)	Max Day Cost	Max Hour Cost	Total Cost	Maximum Capacity Unit Cost
1	Single Family Residential					
2	Tier 1 (1-4 units)	225,000	$55,007	$79,876	$134,882	$0.60
3	Tier 2 (5-8 units)	95,000	$131,631	$42,719	$174,351	$1.84
4	Tier 3 (9+ units)	48,000	$150,542	$28,556	$179,098	$3.73
5	Multi-Family	39,000	$20,976	$14,794	$35,770	$0.92
6	All Other Customers	243,000	$733,410	$142,185	$875,595	$3.60
7	**Total**	**650,000**	**$1,091,565**	**$308,131**		

CONSERVATION COST

Table 4-8 shows the calculation of Conservation unit costs by customer class and tier. Conservation costs for Single Family Residential customers are allocated entirely to Tier 3, which represents the usage tier that the District's water conservation program targets. The Conservation costs for all other customer classes are allocated to all usage. Conservation costs are from **Table 3-20** and are divided by the annual usage in each customer class and applicable usage tier.

Table 4-8: Conservation Unit Cost by Customer Class

Line	Customer Class	Usage (hcf)	Allocated to Conservation	Allotted Usage (hcf)	Conservation Cost	Conservation Unit Cost
1	Single Family Residential					
2	Tier 1 (1-4 units)	225,000	0%	0	$0	$0.00
3	Tier 2 (5-8 units)	95,000	0%	0	$0	$0.00
4	Tier 3 (9+ units)	48,000	100%	48,000	$48,290	$1.01
5	Multi-Family	39,000	100%	39,000	$5,118	$0.13
6	All Other Customers	243,000	100%	243,000	$31,887	$0.13
7	**Total**	**650,000**			**$85,295**	**$0.13**

REVENUE OFFSET

Table 4-9 shows the Revenue Offset by customer class and tier. Revenue offsets consist of property tax revenues, which are not generated by any specific customer class for a direct water service that the District provides. The District has discretion to use these revenues to offset the cost of water; all customer classes benefit from the Revenue Offsets equally, which are allocated based on usage in each customer class.

Within the Single Family Residential class, Tier 1 receives the full Revenue Offset, while Tier 2 receives a partial offset. This allocation within the Single Family Residential class is to lower costs of water for low water users, enhancing affordability of essential uses of water.

Table 4-9: Revenue Offset by Customer Class

Line	Customer Class	Usage (hcf)	Allocated to Rev. Offset	Allotted Usage (hcf)	Rev. Offset	Rev. Offset Unit Cost
1	Single Family Residential			*253,500*	*($563,323)*	*($2.22)*
2	Tier 1 (1-4 units)	225,000	100%	225,000	$0	($2.22)
3	Tier 2 (5-8 units)	95,000	30%	28,500	$0	($0.67)
4	Tier 3 (9+ units)	48,000	0%	0	$0	$0.00
5	Multi-Family	39,000	100%	39,000	($59,700)	($1.53)
6	All Other Customers	243,000	100%	243,000	($371,977)	($1.53)
7	**Total**	**650,000**			**($995,000)**	

REVENUE NEUTRAL RATES

The revenue neutral rate represents the cost-of-service analysis for FYE 2024 but does not include the proposed revenue adjustments for the first year of rates in FYE 2025. **Table 4-10** shows the revenue neutral quantity charges for all classes and tiers, based on the Supply unit cost from **Table 4-6**, the Base unit cost from **Table 3-19**, the Maximum Capacity unit cost from **Table 4-7**, the Conservation unit cost from **Table 4-8**, and the Revenue Offset from **Table 4-9**.

Table 4-10: Revenue Neutral Quantity Charges

Line	Customer Class	Usage (hcf)	Supply Cost	Base Cost	Max. Capacity Cost	Conserv-ation Cost	Rev. Offset	Revenue Neutral Rate
1	Single Family Residential							
2	Tier 1 (1-4 units)	225,000	$2.80	$10.21	$0.60	$0.00	($2.22)	$11.40
3	Tier 2 (5-8 units)	95,000	$5.55	$10.21	$1.84	$0.00	($0.67)	$16.94
4	Tier 3 (9+ units)	48,000	$5.55	$10.21	$3.73	$1.01	$0.00	$20.51
5	Multi-Family	39,000	$3.87	$10.21	$0.92	$0.13	($1.53)	$13.61
6	All Other Customers	243,000	$3.87	$10.21	$3.60	$0.13	($1.53)	$16.29

PROPOSED RATES WITH ADJUSTMENT

Table 4-11 shows the proposed quantity charges for FYE 2025 based on the revenue neutral rate (**Table 4-10**) adjusted by the proposed revenue adjustment of 8% in the first year (**Table 2-23**) and rounded up to the nearest cent.

Table 4-11: Proposed Quantity Charges after Adjustment

Line	Customer Class	Revenue Neutral Rate	Proposed Rate (w/ 8% Adj.)	Current Rate	Difference ($)	Difference (%)
1	Single Family Residential					
2	Tier 1 (1-4 units)	$11.40	$12.31	$11.40	$0.91	8.0%
3	Tier 2 (5-8 units)	$16.94	$18.29	$16.66	$1.63	9.8%
4	Tier 3 (9+ units)	$20.51	$22.15	$20.16	$1.99	9.9%
5	Multi-Family	$13.61	$14.69	$15.19	($0.50)	-3.3%
6	All Other Customers	$16.29	$17.60	$16.19	$1.41	8.7%

4.6 PROPOSED WATER RATE SCHEDULE

PROPOSED THREE-YEAR REVENUE ADJUSTMENTS

Table 4-12 shows the revenue adjustments for the three-year period and their effective date based on the proposed financial plan (**Table 2-23**).

Table 4-12: Proposed Revenue Adjustments

Line	Fiscal Year	Revenue Adjustments	Effective Date
1	FYE 2025	8.0%	1/1/2025
2	FYE 2026	8.0%	1/1/2026
3	FYE 2027	8.0%	1/1/2027

PROPOSED THREE-YEAR WATER RATE SCHEDULE

The proposed three-year water rate schedules are based on the proposed rate methodology changes, the updated cost-of-service analysis, and the proposed revenue adjustments (**Table 4-12**) in the three-year period. The proposed rates for FYE 2026 and FYE 2027 were calculated by increasing the FYE 2025 rates by the revenue adjustments, rounded up to the nearest cent. **Table 4-13**, **Table 4-14**, and **Table 4-15** show the current and proposed monthly base charges, monthly fire service charges, and quantity charges, respectively.

Table 4-13: Proposed Monthly Base Charges

Line	Monthly Base Charge	As of 1/18/24	Effective 1/1/25	Effective 1/1/26	Effective 1/1/27
1	5/8 inch	$35.81	$38.36	$41.43	$44.75
2	3/4 inch	$52.92	$53.32	$57.59	$62.20
3	1 inch	$87.10	$83.26	$89.93	$97.13
4	1.5 inch	$172.59	$158.09	$170.74	$184.40
5	2 inch	$275.18	$247.89	$267.73	$289.15
6	3 inch	$600.02	$532.27	$574.86	$620.85
7	4 inch	$1,078.79	$951.34	$1,027.45	$1,109.65
8	6 inch		$2,028.96	$2,191.28	$2,366.59

Table 4-14: Proposed Monthly Fire Service Charges

Line	Monthly Fire Service Charge	As of 1/18/24	Effective 1/1/25	Effective 1/1/26	Effective 1/1/27
1	3/4 inch	$6.01	$8.87	$9.58	$10.35
2	1 inch	$8.01	$9.37	$10.12	$10.93
3	1.5 inch	$12.02	$11.19	$12.09	$13.06
4	2 inch	$16.02	$14.31	$15.46	$16.70
5	3 inch	$24.03	$25.52	$27.57	$29.78
6	4 inch	$32.04	$44.86	$48.45	$52.33
7	6 inch	$48.06	$114.26	$123.41	$133.29
8	8 inch	$64.08	$233.97	$252.69	$272.91
9	10 inch	$80.10	$414.03	$447.16	$482.94

Table 4-15: Proposed Quantity Charges

Line	Quantity Charge ($/hcf)	As of 1/18/24	Effective 1/1/25	Effective 1/1/26	Effective 1/1/27
1	Single Family Residential				
2	Tier 1 (1-4 units)	$11.40	$12.31	$13.30	$14.37
3	Tier 2 (5-8 units)	$16.66	$18.29	$19.76	$21.35
4	Tier 3 (9+ units)	$20.16	$22.15	$23.93	$25.85
5	Multi-Family	$15.19	$14.69	$15.87	$17.14
6	All Other Customers	$16.19	$17.60	$19.01	$20.54

4.7 CUSTOMER IMPACTS

RESIDENTIAL CUSTOMER IMPACTS

Table 4-16 shows the proposed impacts without private fire for a Residential customer with a 5/8" meter (the most common meter size within this class, representing approximately 96% of customers) at various levels of monthly usage. For the average Single Family Residential customer that uses 5 hcf of water a month, the monthly impact will be $7.82 or 8%, which reflects the impact of the cost-of-service analysis and the 8% revenue adjustment applied to FYE 2025.

Table 4-16: Proposed Residential Customer Impacts (Without Fire)

Line	Residential Customer Impacts	Monthly Usage (hcf)	Current Bill	Proposed Bill	Difference ($)	Difference (%)
1	Single Family - Very Low Usage	1	$47.21	$50.67	$3.46	7.3%
2	Single Family - Low Usage	2	$58.61	$62.98	$4.37	7.5%
3	Single Family - Median Usage	4	$81.41	$87.60	$6.19	7.6%
4	Single Family - Average Usage	5	$98.07	$105.89	$7.82	8.0%
5	Single Family - High Usage	7	$131.39	$142.47	$11.08	8.4%
6	Single Family - Very High Usage	10	$188.37	$205.06	$16.69	8.9%
7	Multi-Family - Average Usage	28	$461.13	$449.68	($11.45)	-2.5%

Table 4-17 shows the proposed impacts for a Residential customer with a 5/8" meter and a 1" private fire line (the most common fire line size). Approximately 13% of Single Family Residential customers have a private fire line. A Single Family Residential customer using 5 hcf of water will see an increase of $9.18 per month.

Table 4-17: Proposed Residential Customer Impacts (With Fire)

Line	Residential Customer Impacts	Monthly Usage (hcf)	Current Bill w/ 1" Fire	Proposed Bill w/ 1" Fire	Difference ($)	Difference (%)
1	Single Family - Very Low Usage	1	$55.22	$60.04	$4.82	8.7%
2	Single Family - Low Usage	2	$66.62	$72.35	$5.73	8.6%
3	Single Family - Median Usage	4	$89.42	$96.97	$7.55	8.4%
4	Single Family - Average Usage	5	$106.08	$115.26	$9.18	8.7%
5	Single Family - High Usage	7	$139.40	$151.84	$12.44	8.9%
6	Single Family - Very High Usage	10	$196.38	$214.43	$18.05	9.2%
7	Multi-Family - Average Usage	28	$469.14	$459.05	($10.09)	-2.2%

COMMERCIAL AND ALL OTHER CUSTOMER IMPACTS

Table 4-18 shows the proposed impacts without private fire for various Commercial/All Other customers based on estimated monthly usage and meter size.

Table 4-18: Proposed Commercial/All Other Customer Impacts (Without Fire)

Line	Commercial/All Other Customer Impacts	Monthly Usage (hcf)	Meter Size	Private Fire Line	Current Bill	Proposed Bill	Difference ($)	Difference (%)
1	Agriculture	600	2 inch	none	$9,989.18	$10,807.89	$818.71	8.2%
2	Commercial Grocery	150	1.5 inch	6 inch	$2,601.09	$2,798.09	$197.00	7.6%
3	Commercial Grocery	200	1 inch	8 inch	$3,325.10	$3,603.26	$278.16	8.4%
4	Commercial Retail	50	1 inch	6 inch	$896.60	$963.26	$66.66	7.4%
5	Commercial Office	11	1 inch	none	$265.19	$276.86	$11.67	4.4%
6	Hotel	850	4 inch	6 inch	$14,840.29	$15,911.34	$1,071.05	7.2%
7	Hotel	300	2 inch	4 inch	$5,132.18	$5,527.89	$395.71	7.7%
8	Hotel	64	1.5 inch	8 inch	$1,208.75	$1,284.49	$75.74	6.3%
9	Restaurant	205	1 inch	4 inch	$3,406.05	$3,691.26	$285.21	8.4%
10	Restaurant	78	3/4 inch	none	$1,315.74	$1,426.12	$110.38	8.4%

Table 4-19 shows the proposed impacts with private fire for various Commercial/All Other customers based on estimated monthly usage, meter size, and fire line size.

Table 4-19: Proposed Commercial/All Other Customer Impacts (With Fire)

Line	Commercial/All Other Customer Impacts	Monthly Usage (hcf)	Meter Size	Private Fire Line	Current Bill	Proposed Bill	Difference ($)	Difference (%)
1	Agriculture	600	2 inch	none	$9,989.18	$10,807.89	$818.71	8.2%
2	Commercial Grocery	150	1.5 inch	6 inch	$2,649.15	$2,912.35	$263.20	9.9%
3	Commercial Grocery	200	1 inch	8 inch	$3,389.18	$3,837.23	$448.05	13.2%
4	Commercial Retail	50	1 inch	6 inch	$944.66	$1,077.52	$132.86	14.1%
5	Commercial Office	11	1 inch	none	$265.19	$276.86	$11.67	4.4%
6	Hotel	850	4 inch	6 inch	$14,888.35	$16,025.60	$1,137.25	7.6%
7	Hotel	300	2 inch	4 inch	$5,164.22	$5,572.75	$408.53	7.9%
8	Hotel	64	1.5 inch	8 inch	$1,272.83	$1,518.46	$245.63	19.3%
9	Restaurant	205	1 inch	4 inch	$3,438.09	$3,736.12	$298.03	8.7%
10	Restaurant	78	3/4 inch	none	$1,315.74	$1,426.12	$110.38	8.4%

5. WATER SHORTAGE RATES

5.1 WATER SHORTAGE RATE DESIGN METHODOLOGY

In addition to the base water rates developed in the prior section of the report, water shortage rates were developed to be implemented during water shortage emergencies. The key steps in determining the water shortage rates are as follows:

- **Evaluate financial risks**: the District faces different risks based on two main water shortage conditions – a constrained year water supply (when water supply is low and more expensive to purchase) and a water shortage emergency (when government-mandated usage cutbacks reduce the District 's consumption charge revenues).
- **Determine cost impact**: the cost impact is dependent upon the water shortage condition. Constrained water supply results in higher costs to purchase water for the District to meet its customer demand. Water shortage emergencies result in lost revenues from consumption charges when customers use less water.
- **Calculate water shortage rates**: the resulting cost impact is then used to calculate water shortage rates, to be implemented during water shortage emergencies and which vary based on stages (from the District's Water Shortage Contingency Plan).

5.2 RISKS RELATED TO WATER SHORTAGES

WATER SHORTAGE EMERGENCIES

The District's WCSP includes six stages of water shortage, which all require a different level of usage reduction from the District's customers. When customers reduce their usage in each stage, the District's rate revenues from quantity charges are directly impacted. When water shortage emergencies occur, especially during more severe stages, the amount of lost revenue can significantly impact the District's ability to meet its operating, capital, and reserve requirements.

Water shortage rates are a tool for the District to effectively respond to water shortage emergencies while maintaining financial sufficiency and operational reliability. Water shortage rates are designed to recover the costs of water shortage: loss of quantity charge rate revenues, water supply cost differences, and other water shortage-related O&M expenses.

5.3 PROPOSED WATER SHORTAGE RATES

USAGE REDUCTIONS BY WATER SHORTAGE STAGE

Table 5-1 shows the projected water usage reductions in each water shortage stage by customer class. The total usage reduction (Line 1) for each stage is based on the District's WSCP. The total usage reduction in each stage is applied to the total usage for each customer class equally. For example, in Stage 1, Single Family Residential, Multi-Family, and All Other Customers are expected to reduce their class usage by 10%.

However, within the Single Family Residential class, the usage reductions are assumed to happen at the highest tiers first. Customers using water in the highest usage tiers have more capacity to

conserve water during a shortage compared to lower water users that are already conserving. By Stage 2, Single Family Residential Tier 3 usage reduces to zero; by Stage 4, Tier 2 usage reduces to zero, leaving only Tier 1 usage.

Table 5-1: Water Usage Reductions by Stage and Customer Class

Line	Water Shortage Stages	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**Total Usage Reduction**	**0%**	**10%**	**20%**	**30%**	**40%**	**50%**	**60%**
2								
3	**Usage Reduction by Class**							
4	Single Family Residential	*378,245*	*340,420*	*302,596*	*264,771*	*226,947*	*189,122*	*151,298*
5	Tier 1 (1-4 units)	231,264	231,264	231,264	231,264	226,947	189,122	151,298
6	Tier 2 (5-8 units)	97,645	97,645	71,332	33,508	0	0	0
7	Tier 3 (9+ units)	49,336	11,512	0	0	0	0	0
8	Multi-Family	41,552	37,397	33,242	29,087	24,931	20,776	16,621
9	All Other Customers	275,572	248,015	220,457	192,900	165,343	137,786	110,229
10	**Total**	**695,369**	**625,832**	**556,295**	**486,758**	**417,221**	**347,684**	**278,147**
11	***Total Usage Reduction***	***0%***	***-10%***	***-20%***	***-30%***	***-40%***	***-50%***	***-60%***

CONSUMPTION REVENUE LOSS

Table 5-2 shows the estimated consumption revenue loss by stage based on the proposed quantity charges for FYE 2025 (**Table 4-15**). The proposed FYE 2025 quantity charge is multiplied by the estimated usage in each stage (**Table 5-1**) to determine the consumption revenues by stage. The difference from Baseline, or the "no water shortage" scenario, represents the revenue loss during each water shortage stage (Line 18).

Table 5-2: Consumption Revenue Loss by Stage

Line	Consumption Revenue Loss	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**Quantity Charges FYE 2025**							
2	Single Family Residential							
3	Tier 1 (1-4 units)	$12.31	$12.31	$12.31	$12.31	$12.31	$12.31	$12.31
4	Tier 2 (5-8 units)	$18.29	$18.29	$18.29	$18.29	$18.29	$18.29	$18.29
5	Tier 3 (9+ units)	$22.15	$22.15	$22.15	$22.15	$22.15	$22.15	$22.15
6	Multi-Family	$14.69	$14.69	$14.69	$14.69	$14.69	$14.69	$14.69
7	All Other Customers	$17.60	$17.60	$17.60	$17.60	$17.60	$17.60	$17.60
8								
9	**Consumption Revenues**							
10	Single Family Residential							
11	Tier 1 (1-4 units)	$2,846,856	$2,846,856	$2,846,856	$2,846,856	$2,793,715	$2,328,096	$1,862,477
12	Tier 2 (5-8 units)	$1,785,921	$1,785,921	$1,304,662	$612,853	$0	$0	$0
13	Tier 3 (9+ units)	$1,092,798	$254,986	$0	$0	$0	$0	$0
14	Multi-Family	$610,404	$549,364	$488,323	$427,283	$366,243	$305,202	$244,162
15	All Other Customers	$4,850,062	$4,365,056	$3,880,049	$3,395,043	$2,910,037	$2,425,031	$1,940,025
16	**Total**	**$11,186,041**	**$9,802,183**	**$8,519,891**	**$7,282,035**	**$6,069,994**	**$5,058,329**	**$4,046,663**
17								
18	**Consumption Revenue Loss**	**$0**	**$1,383,858**	**$2,666,150**	**$3,904,006**	**$5,116,047**	**$6,127,713**	**$7,139,378**

WATER SUPPLY COST DIFFERENCES

Table 5-3 shows the calculation of water supply costs for each stage based on changing supply availability. The water supply cost differences in this section do not assume an increase to the SFPUC variable cost of water. In Stage 1, the availability of local water is

reduced to 25%. In Stages 2 and 3, the availability of local water is reduced to 6%. In Stages 4 through 6, local water is not expected to be available. The District must purchase more water from SFPUC to offset the reduction in local supply availability.

The total consumption in each stage (Line 7) is from **Table 5-1**. The demand served by SFPUC (Line 8) is calculated by multiplying the total consumption (Line 7) by the SFPUC supply availability (Line 3). A water loss percentage of 4% (Line 9; from **Table 2-14**, Line 5) is applied to the demand served by SFPUC (Line 8) to determine the total amount of water purchased from SFPUC (Line 10). The SFPUC net unit cost (Line 10; from **Table 2-14**, Line 18) is the FYE 2025 rate. The SFPUC variable cost (Line 12) is calculated by multiplying the SFPUC purchases (Line 10) by the SFPUC net unit cost (Line 11). Note that the water supply cost differences do not assume any change to SFPUC variable costs; water shortage rates are designed to recover the costs of each stage, with all other costs being equal.

The supply cost difference (Line 14) represents the impacts of the changing water supply availability and the usage reductions in each stage. The District will incur additional costs in Stages 1-3 by purchasing more SFPUC water; however, the District will see cost savings in Stages 4-6 due to more severe usage reductions in those stages, despite purchasing SFPUC water to meet all demand.

Table 5-3: Water Supply Cost Differences by Stage

Line	Water Supply Cost	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**Water Supply Mix**							
2	Local Supply	35%	25%	6%	6%	0%	0%	0%
3	SFPUC	65%	75%	94%	94%	100%	100%	100%
4	**Total**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
5								
6	**SFPUC Water Purchases**							
7	Total Consumption (hcf)	695,369	625,832	556,295	486,758	417,221	347,684	278,147
8	Served by SFPUC (hcf)	451,990	469,374	522,917	457,553	417,221	347,684	278,147
9	Water Loss	4%	4%	4%	4%	4%	4%	4%
10	SFPUC Purchases (hcf)	470,823	488,931	544,705	476,617	434,605	362,171	289,737
11	SFPUC Net Unit Cost	$5.28	$5.28	$5.28	$5.28	$5.28	$5.28	$5.28
12	**SFPUC Variable Cost**	**$2,485,943**	**$2,581,556**	**$2,876,045**	**$2,516,539**	**$2,294,717**	**$1,912,264**	**$1,529,811**
13								
14	**Supply Cost Difference**	**$0**	**$95,613**	**$390,102**	**$30,596**	**($191,226)**	**($573,679)**	**($956,132)**

WATER SHORTAGE COSTS

Table 5-4 shows the water shortage costs by stage, which includes the consumption revenue loss (**Table 5-2**), supply cost differences (**Table 5-3**), and additional O&M expenses in Stages 4-6. The additional O&M expenses (Line 3) include the addition of two full-time temporary positions, additional outreach costs, door tagging costs, and purchases of bottled water in the more severe water shortage stages.

The total cost of each water shortage stage (Line 4) represents the costs that the proposed water shortage rates are designed to recover. The consumption revenues (Line 6) are from the projections shown in **Table 5-2** for each stage. The percent change from revenues (Line 7) is calculated by dividing the cost in each stage (Line 4) by the consumption revenues in that stage (Line 6).

Table 5-4: Water Shortage Costs by Stage

Line	Water Shortage Costs	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	Consumption Revenue Loss	$0	$1,383,858	$2,666,150	$3,904,006	$5,116,047	$6,127,713	$7,139,378
2	Supply Cost Difference	$0	$95,613	$390,102	$30,596	($191,226)	($573,679)	($956,132)
3	O&M Expense Difference	$0	$0	$0	$0	$250,000	$250,000	$250,000
4	**Total Costs**	**$0**	**$1,479,472**	**$3,056,252**	**$3,934,602**	**$5,174,821**	**$5,804,034**	**$6,433,246**
5								
6	**Consumption Revenues**	**$11,186,041**	**$9,802,183**	**$8,519,891**	**$7,282,035**	**$6,069,994**	**$5,058,329**	**$4,046,663**
7	***% Change from Revenues***	***0%***	***15%***	***36%***	***54%***	***85%***	***115%***	***159%***

PROPOSED WATER SHORTAGE RATES

Table 5-5 shows the proposed water shortage rates by stage for FYE 2025. The Baseline quantity charges are equal to the first year of quantity rates (**Table 4-15**). The percentage increase to quantity charges (Line 1) is from **Table 5-4**.

The percentage increase for each stage is applied to the Baseline quantity charges (Lines 2-7). The difference between the combined rates in each stage by the Baseline quantity charge represents the incremental water shortage rate by stage (Line 10-15).

Table 5-5: Proposed Water Shortage Rates (FYE 2025)

Line	Water Shortage Rates ($/hcf)	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**Increase to Quantity Charges**	**0%**	**15%**	**36%**	**54%**	**85%**	**115%**	**159%**
2	Single Family Residential							
3	Tier 1 (1-4 units)	$12.31	$14.17	$16.73	$18.97	$22.81	$26.44	$31.89
4	Tier 2 (5-8 units)	$18.29	$21.06	$24.86	$28.18	$33.89	$39.28	$47.37
5	Tier 3 (9+ units)	$22.15	$25.50	$30.10	$34.12	$41.04	$47.57	$57.37
6	Multi-Family	$14.69	$16.91	$19.96	$22.63	$27.22	$31.55	$38.05
7	All Other Customers	$17.60	$20.26	$23.92	$27.11	$32.61	$37.80	$45.58
8								
9	**Incremental Water Shortage Rates**							
10	Single Family Residential							
11	Tier 1 (1-4 units)	$0.00	$1.86	$4.42	$6.66	$10.50	$14.13	$19.58
12	Tier 2 (5-8 units)	$0.00	$2.77	$6.57	$9.89	$15.60	$20.99	$29.08
13	Tier 3 (9+ units)	$0.00	$3.35	$7.95	$11.97	$18.89	$25.42	$35.22
14	Multi-Family	$0.00	$2.22	$5.27	$7.94	$12.53	$16.86	$23.36
15	All Other Customers	$0.00	$2.66	$6.32	$9.51	$15.01	$20.20	$27.98

5.4 PROPOSED WATER SHORTAGE RATE SCHEDULE

PROPOSED THREE-YEAR REVENUE ADJUSTMENTS

Table 5-6 shows the revenue adjustments for the three-year period and their effective date based on the proposed financial plan (**Table 2-23**).

Table 5-6: Proposed Revenue Adjustments

Line	Fiscal Year	Revenue Adjustments	Effective Date
1	FYE 2025	8.0%	1/1/2025
2	FYE 2026	8.0%	1/1/2026
3	FYE 2027	8.0%	1/1/2027

PROPOSED THREE-YEAR WATER SHORTAGE RATE SCHEDULE

Table 5-7 shows the current and proposed water shortage rates in each stage for the three-year period, which are incremental charges in addition to the quantity charges shown in **Table 4-15**. The proposed rates for FYE 2026 and FYE 2027 were calculated by increasing the FYE 2025 rates by the revenue adjustments, rounded up to the nearest cent.

Table 5-7: Proposed Water Shortage Rates

Line	Water Shortage Rates ($hcf)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**As of 1/18/24**						
2	Single Family Residential						
3	Tier 1 (1-4 units)	$2.57	$4.58	$6.48	$9.03	$13.67	$27.17
4	Tier 2 (5-8 units)	$3.75	$6.69	$9.47	$13.20	$19.98	$39.71
5	Tier 3 (9+ units)	$4.53	$8.10	$11.46	$15.97	$24.18	$48.05
6	Multi-Family	$3.42	$6.10	$8.64	$12.03	$18.22	$36.20
7	All Other Customers	$3.64	$6.50	$9.21	$12.83	$19.42	$38.59
8							
9	**Effective 1/1/25**						
10	Single Family Residential						
11	Tier 1 (1-4 units)	$1.86	$4.42	$6.66	$10.50	$14.13	$19.58
12	Tier 2 (5-8 units)	$2.77	$6.57	$9.89	$15.60	$20.99	$29.08
13	Tier 3 (9+ units)	$3.35	$7.95	$11.97	$18.89	$25.42	$35.22
14	Multi-Family	$2.22	$5.27	$7.94	$12.53	$16.86	$23.36
15	All Other Customers	$2.66	$6.32	$9.51	$15.01	$20.20	$27.98
16							
17	**Effective 1/1/26**						
18	Single Family Residential						
19	Tier 1 (1-4 units)	$2.01	$4.78	$7.20	$11.34	$15.27	$21.15
20	Tier 2 (5-8 units)	$3.00	$7.10	$10.69	$16.85	$22.67	$31.41
21	Tier 3 (9+ units)	$3.62	$8.59	$12.93	$20.41	$27.46	$38.04
22	Multi-Family	$2.40	$5.70	$8.58	$13.54	$18.21	$25.23
23	All Other Customers	$2.88	$6.83	$10.28	$16.22	$21.82	$30.22
24							
25	**Effective 1/1/27**						
26	Single Family Residential						
27	Tier 1 (1-4 units)	$2.18	$5.17	$7.78	$12.25	$16.50	$22.85
28	Tier 2 (5-8 units)	$3.24	$7.67	$11.55	$18.20	$24.49	$33.93
29	Tier 3 (9+ units)	$3.91	$9.28	$13.97	$22.05	$29.66	$41.09
30	Multi-Family	$2.60	$6.16	$9.27	$14.63	$19.67	$27.25
31	All Other Customers	$3.12	$7.38	$11.11	$17.52	$23.57	$32.64

Table 5-8 shows the current and proposed combined quantity charges and water shortage rates in each stage for the three-year period. The quantity charges in **Table 4-15** are added to the incremental water shortage rates in **Table 5-7** to calculate the combined charges.

Table 5-8: Proposed Combined Quantity Charges and Water Shortage Rates

Line	Combined Quantity Charges ($/hcf)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
1	**As of 1/18/24**						
2	Single Family Residential						
3	Tier 1 (1-4 units)	$13.97	$15.98	$17.88	$20.43	$25.07	$38.57
4	Tier 2 (5-8 units)	$20.41	$23.35	$26.13	$29.86	$36.64	$56.37
5	Tier 3 (9+ units)	$24.69	$28.26	$31.62	$36.13	$44.34	$68.21
6	Multi-Family	$18.61	$21.29	$23.83	$27.22	$33.41	$51.39
7	All Other Customers	$19.83	$22.69	$25.40	$29.02	$35.61	$54.78
8							
9	**Effective 1/1/25**						
10	Single Family Residential						
11	Tier 1 (1-4 units)	$14.17	$16.73	$18.97	$22.81	$26.44	$31.89
12	Tier 2 (5-8 units)	$21.06	$24.86	$28.18	$33.89	$39.28	$47.37
13	Tier 3 (9+ units)	$25.50	$30.10	$34.12	$41.04	$47.57	$57.37
14	Multi-Family	$16.91	$19.96	$22.63	$27.22	$31.55	$38.05
15	All Other Customers	$20.26	$23.92	$27.11	$32.61	$37.80	$45.58
16							
17	**Effective 1/1/26**						
18	Single Family Residential						
19	Tier 1 (1-4 units)	$15.31	$18.08	$20.50	$24.64	$28.57	$34.45
20	Tier 2 (5-8 units)	$22.76	$26.86	$30.45	$36.61	$42.43	$51.17
21	Tier 3 (9+ units)	$27.55	$32.52	$36.86	$44.34	$51.39	$61.97
22	Multi-Family	$18.27	$21.57	$24.45	$29.41	$34.08	$41.10
23	All Other Customers	$21.89	$25.84	$29.29	$35.23	$40.83	$49.23
24							
25	**Effective 1/1/27**						
26	Single Family Residential						
27	Tier 1 (1-4 units)	$16.55	$19.54	$22.15	$26.62	$30.87	$37.22
28	Tier 2 (5-8 units)	$24.59	$29.02	$32.90	$39.55	$45.84	$55.28
29	Tier 3 (9+ units)	$29.76	$35.13	$39.82	$47.90	$55.51	$66.94
30	Multi-Family	$19.74	$23.30	$26.41	$31.77	$36.81	$44.39
31	All Other Customers	$23.66	$27.92	$31.65	$38.06	$44.11	$53.18

5.5 CUSTOMER IMPACTS

WRE evaluated the customer impacts for Single Family Residential customers for Stages 1-6 based on the proposed water shortage rates. The customer impacts are based on the first year of water shortage rates (FYE 2025).

RESIDENTIAL CUSTOMER IMPACTS (STAGE 1)

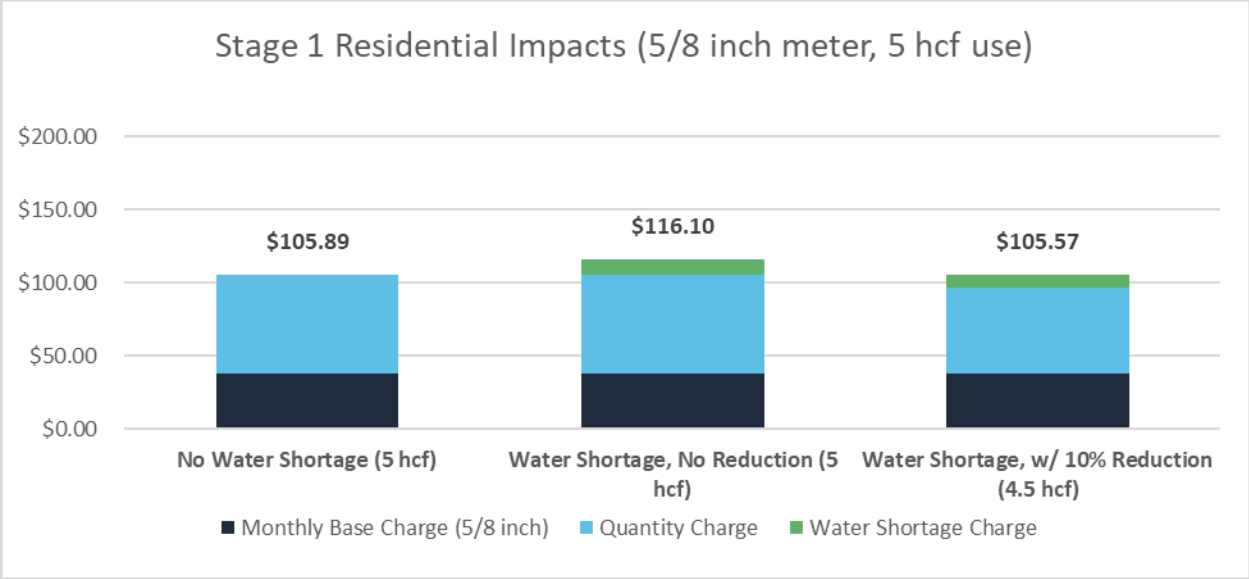
Table 5-9 and **Figure 5-1** show the proposed Stage 1 impacts for a Single Family Residential customer with a 5/8" meter using 5 hcf of usage per month (prior to any usage reductions mandated by stage). During a Stage 1 water shortage, this customer will pay $10.21 more each month if they do not reduce their usage according to Stage 1 (i.e., a 10% reduction). However, if this customer does reduce

their usage by 10% and uses 4.5 hcf per month instead, they will have a monthly bill approximately equal to their bill in normal, non-water shortage conditions.

Table 5-9: Proposed Residential Customer Impacts (Stage 1 Water Shortage)

Line	Stage 1 Residential Impacts (5/8 inch meter, 5 hcf use)	No Water Shortage (5 hcf)	Water Shortage, No Reduction (5 hcf)	Water Shortage, w/ 10% Reduction (4.5 hcf)
1	Monthly Base Charge (5/8 inch)	$38.36	$38.36	$38.36
2	Quantity Charge	$67.53	$67.53	$58.39
3	Water Shortage Charge	$0.00	$10.21	$8.83
4	**Total Monthly Bill**	**$105.89**	**$116.10**	**$105.57**

Figure 5-1: Proposed Residential Customer Impacts (Stage 1 Water Shortage)



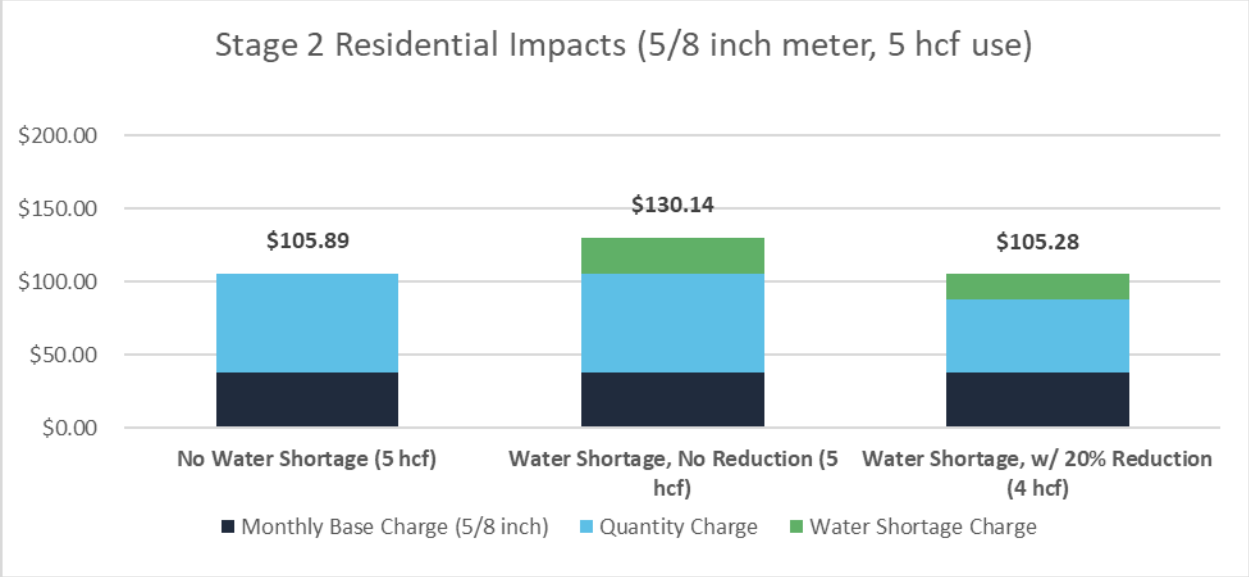
RESIDENTIAL CUSTOMER IMPACTS (STAGE 2)

Table 5-10 and **Figure 5-2** show the proposed Stage 2 impacts for a Single Family Residential customer with a 5/8" meter using 5 hcf of usage per month (prior to any usage reductions mandated by stage). During a Stage 2 water shortage, this customer will pay $24.25 more each month if they do not reduce their usage according to Stage 2 (i.e., a 20% reduction). However, if this customer does reduce their usage by 20% and uses 4 hcf per month instead, they will have a monthly bill approximately equal to their bill in normal, non-water shortage conditions.

Table 5-10: Proposed Residential Customer Impacts (Stage 2 Water Shortage)

Line	Stage 2 Residential Impacts (5/8 inch meter, 5 hcf use)	No Water Shortage (5 hcf)	Water Shortage, No Reduction (5 hcf)	Water Shortage, w/ 20% Reduction (4 hcf)
1	Monthly Base Charge (5/8 inch)	$38.36	$38.36	$38.36
2	Quantity Charge	$67.53	$67.53	$49.24
3	Water Shortage Charge	$0.00	$24.25	$17.68
4	**Total Monthly Bill**	**$105.89**	**$130.14**	**$105.28**

Figure 5-2: Proposed Residential Customer Impacts (Stage 2 Water Shortage)



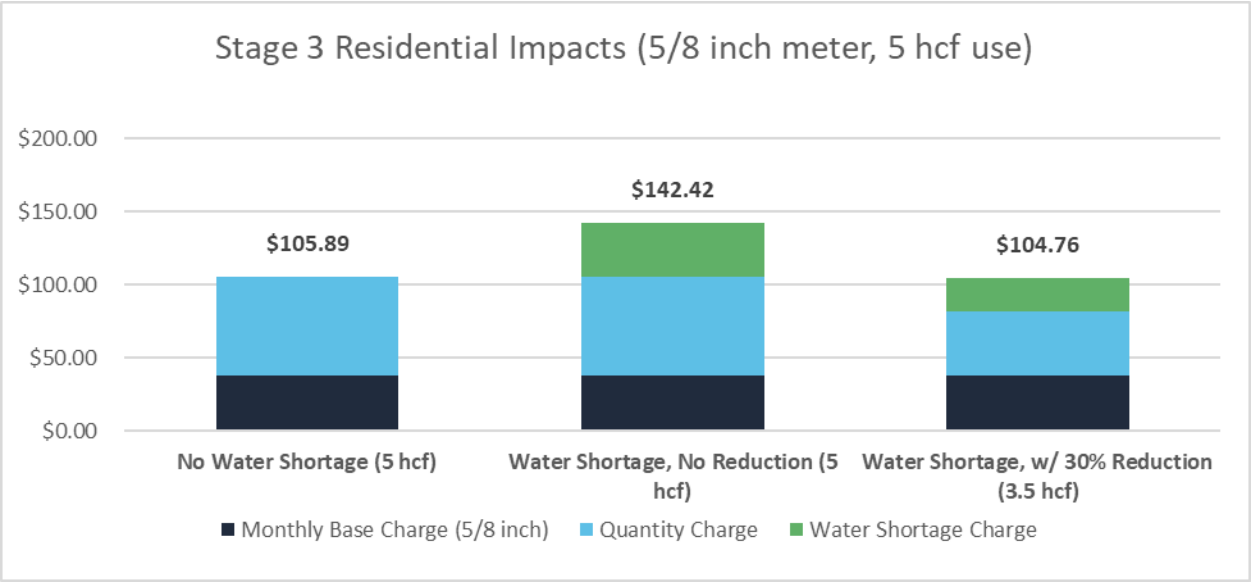
RESIDENTIAL CUSTOMER IMPACTS (STAGE 3)

Table 5-11 and **Figure 5-3** show the proposed Stage 3 impacts for a Single Family Residential customer with a 5/8" meter using 5 hcf of usage per month (prior to any usage reductions mandated by stage). During a Stage 3 water shortage, this customer will pay $36.53 more each month if they do not reduce their usage according to Stage 3 (i.e., a 30% reduction). However, if this customer does reduce their usage by 30% and uses 3.5 hcf per month instead, they will have a monthly bill approximately equal to their bill in normal, non-water shortage conditions.

Table 5-11: Proposed Residential Customer Impacts (Stage 3 Water Shortage)

Line	Stage 3 Residential Impacts (5/8 inch meter, 5 hcf use)	No Water Shortage (5 hcf)	Water Shortage, No Reduction (5 hcf)	Water Shortage, w/ 30% Reduction (3.5 hcf)
1	Monthly Base Charge (5/8 inch)	$38.36	$38.36	$38.36
2	Quantity Charge	$67.53	$67.53	$43.09
3	Water Shortage Charge	$0.00	$36.53	$23.31
4	**Total Monthly Bill**	**$105.89**	**$142.42**	**$104.76**

Figure 5-3: Proposed Residential Customer Impacts (Stage 3 Water Shortage)



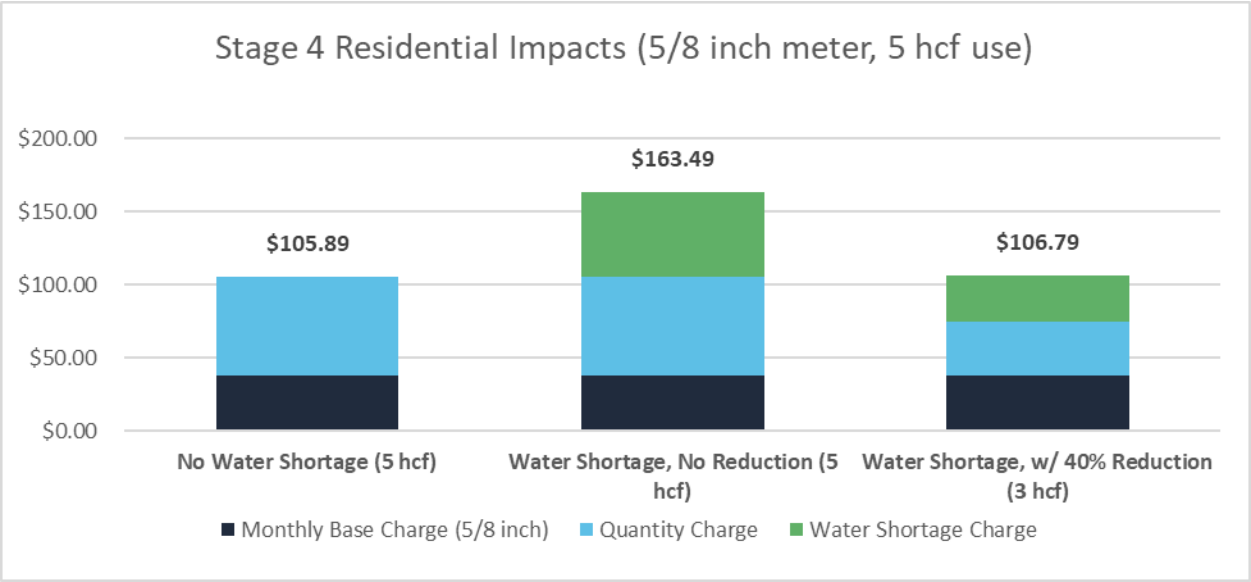
RESIDENTIAL CUSTOMER IMPACTS (STAGE 4)

Table 5-12 and **Figure 5-4** show the proposed Stage 4 impacts for a Single Family Residential customer with a 5/8" meter using 5 hcf of usage per month (prior to any usage reductions mandated by stage). During a Stage 4 water shortage, this customer will pay $57.60 more each month if they do not reduce their usage according to Stage 4 (i.e., a 40% reduction). However, if this customer does reduce their usage by 40% and uses 3 hcf per month instead, they will have a monthly bill approximately equal to their bill in normal, non-water shortage conditions.

Table 5-12: Proposed Residential Customer Impacts (Stage 4 Water Shortage)

Line	Stage 4 Residential Impacts (5/8 inch meter, 5 hcf use)	No Water Shortage (5 hcf)	Water Shortage, No Reduction (5 hcf)	Water Shortage, w/ 40% Reduction (3 hcf)
1	Monthly Base Charge (5/8 inch)	$38.36	$38.36	$38.36
2	Quantity Charge	$67.53	$67.53	$36.93
3	Water Shortage Charge	$0.00	$57.60	$31.50
4	**Total Monthly Bill**	**$105.89**	**$163.49**	**$106.79**

Figure 5-4: Proposed Residential Customer Impacts (Stage 4 Water Shortage)



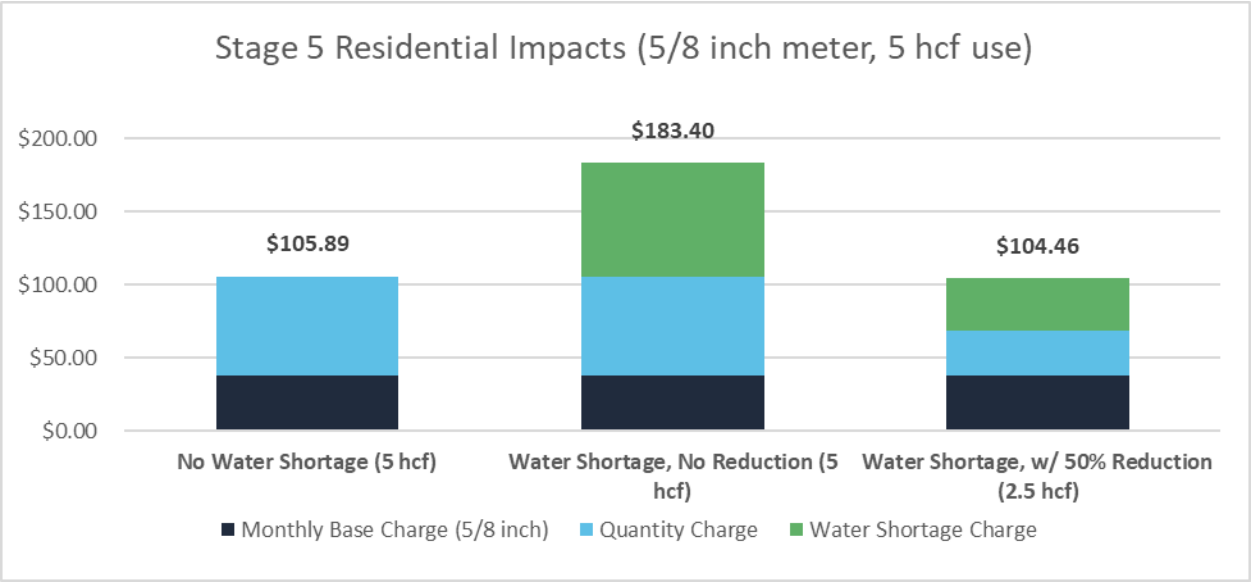
RESIDENTIAL CUSTOMER IMPACTS (STAGE 5)

Table 5-13 and **Figure 5-5** show the proposed Stage 5 impacts for a Single Family Residential customer with a 5/8" meter using 5 hcf of usage per month (prior to any usage reductions mandated by stage). During a Stage 5 water shortage, this customer will pay $77.51 more each month if they do not reduce their usage according to Stage 5 (i.e., a 50% reduction). However, if this customer does reduce their usage by 50% and uses 2.5 hcf per month instead, they will have a monthly bill approximately equal to their bill in normal, non-water shortage conditions.

Table 5-13: Proposed Residential Customer Impacts (Stage 5 Water Shortage)

Line	Stage 5 Residential Impacts (5/8 inch meter, 5 hcf use)	No Water Shortage (5 hcf)	Water Shortage, No Reduction (5 hcf)	Water Shortage, w/ 50% Reduction (2.5 hcf)
1	Monthly Base Charge (5/8 inch)	$38.36	$38.36	$38.36
2	Quantity Charge	$67.53	$67.53	$30.78
3	Water Shortage Charge	$0.00	$77.51	$35.33
4	**Total Monthly Bill**	**$105.89**	**$183.40**	**$104.46**

Figure 5-5: Proposed Residential Customer Impacts (Stage 5 Water Shortage)



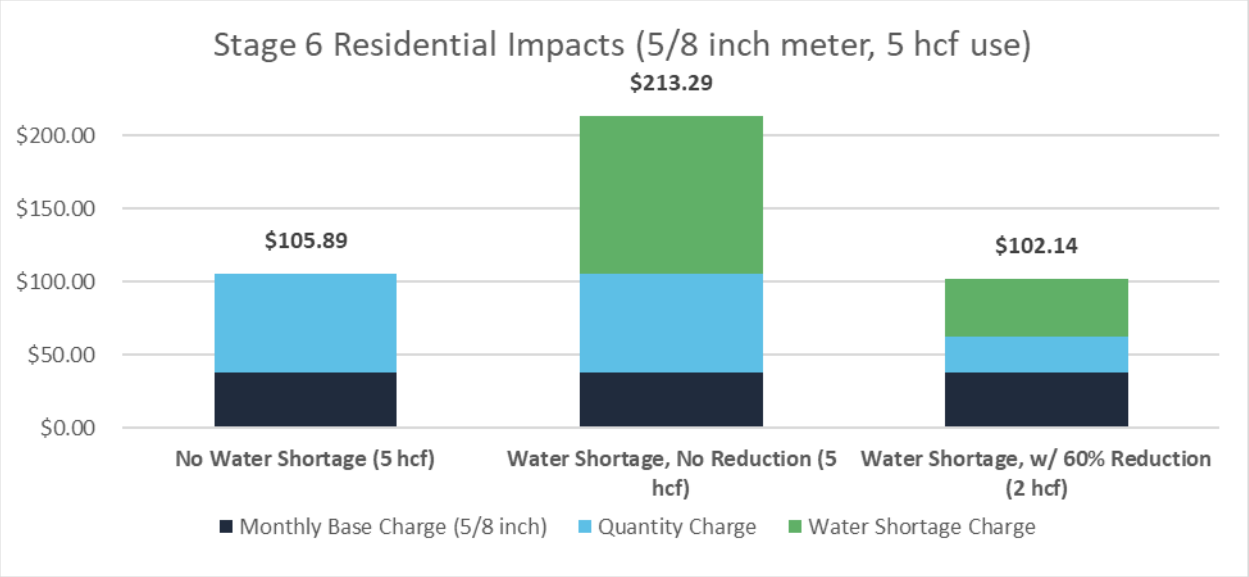
RESIDENTIAL CUSTOMER IMPACTS (STAGE 6)

Table 5-14 and **Figure 5-6** show the proposed Stage 6 impacts for a Single Family Residential customer with a 5/8" meter using 5 hcf of usage per month (prior to any usage reductions mandated by stage). During a Stage 6 water shortage, this customer will pay $107.40 more each month if they do not reduce their usage according to Stage 6 (i.e., a 60% reduction). However, if this customer does reduce their usage by 60% and uses 2 hcf per month instead, they will have a monthly bill approximately equal to their bill in normal, non-water shortage conditions.

Table 5-14: Proposed Residential Customer Impacts (Stage 6 Water Shortage)

Line	Stage 6 Residential Impacts (5/8 inch meter, 5 hcf use)	No Water Shortage (5 hcf)	Water Shortage, No Reduction (5 hcf)	Water Shortage, w/ 60% Reduction (2 hcf)
1	Monthly Base Charge (5/8 inch)	$38.36	$38.36	$38.36
2	Quantity Charge	$67.53	$67.53	$24.62
3	Water Shortage Charge	$0.00	$107.40	$39.16
4	**Total Monthly Bill**	**$105.89**	**$213.29**	**$102.14**

Figure 5-6: Proposed Residential Customer Impacts (Stage 6 Water Shortage)



6. APPENDICES

6.1 FINANCIAL PLAN APPENDICES

Table 6-1: Operating Expenses (Detail)

Line	Operating Expenses	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	SFPUC Water Purchased	$2,260,502	$2,551,972	$2,669,278	$2,758,918	$2,978,038	$3,092,578
2	BAWSCA Bond Surcharge	$200,844	$38,772	$200,844	$200,844	$200,844	$200,844
3	Electrical Exp. Nunes WTP	$57,000	$65,550	$70,139	$75,048	$80,302	$85,923
4	Electrical Expenses, CSP	$350,000	$400,000	$428,000	$457,960	$490,017	$524,318
5	Electrical Expenses/Trans. & Dist.	$27,000	$31,050	$33,224	$35,549	$38,038	$40,700
6	Elec Exp/Pilarcitos Cyn	$69,000	$79,350	$84,905	$90,848	$97,207	$104,012
7	Electrical Exp., Denn	$89,000	$102,350	$109,515	$117,181	$125,383	$134,160
8	CSP - Operation	$13,000	$13,000	$13,355	$13,719	$14,094	$14,479
9	CSP - Maintenance	$35,000	$45,000	$46,229	$47,491	$48,787	$50,119
10	Nunes WTP Oper	$102,000	$109,000	$111,976	$115,033	$118,173	$121,399
11	Nunes WTP Maint	$125,000	$135,000	$138,686	$142,472	$146,361	$150,357
12	Denn. WTP Oper.	$54,000	$78,000	$80,129	$82,317	$84,564	$86,873
13	Denn WTP Maint	$155,000	$165,000	$169,505	$174,132	$178,886	$183,769
14	Laboratory Expenses	$77,000	$81,000	$83,211	$85,483	$87,817	$90,214
15	Maintenance Expenses	$395,000	$421,000	$432,493	$444,300	$456,430	$468,890
16	Maintenance, Wells	$50,000	$50,000	$51,365	$52,767	$54,208	$55,688
17	Uniforms	$14,000	$14,700	$15,101	$15,514	$15,937	$16,372
18	Studies/Surveys/Consulting	$160,000	$160,000	$164,368	$168,855	$173,465	$178,201
19	Water Resources	$21,500	$20,000	$20,546	$21,107	$21,683	$22,275
20	Community Outreach	$68,000	$68,000	$69,856	$71,763	$73,723	$75,735
21	Water Shortage Program	$0	$0	$0	$0	$0	$0
22	Legal	$110,000	$116,000	$119,167	$122,420	$125,762	$129,195
23	Engineering	$86,000	$90,000	$92,457	$94,981	$97,574	$100,238
24	Financial Services	$23,000	$24,150	$24,809	$25,487	$26,182	$26,897
25	Computer Services	$339,974	$357,000	$366,746	$376,758	$387,044	$397,610
26	Salaries, Admin.	$1,381,887	$1,448,113	$1,513,278	$1,581,376	$1,652,538	$1,726,902
27	Salaries - Field	$1,931,847	$2,020,370	$2,111,286	$2,206,294	$2,305,577	$2,409,328
28	Payroll Taxes	$235,945	$248,189	$259,358	$271,029	$283,225	$295,970

Line	Operating Expenses	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
29	Employee Medical Insurance	$516,000	$516,434	$539,674	$563,959	$589,338	$615,858
30	Retiree Medical Insurance	$46,000	$58,151	$60,768	$63,503	$66,360	$69,346
31	Employee Retirement	$642,924	$713,281	$745,379	$778,921	$813,973	$850,601
32	SIP 401a Plan	$38,000	$38,016	$39,727	$41,514	$43,383	$45,335
33	Motor Vehicle Exp.	$90,000	$95,000	$97,594	$100,258	$102,995	$105,807
34	Office, Billing & Facilities Expenses	$414,000	$436,000	$447,903	$460,131	$472,692	$485,597
35	Meetings/Training/Seminars	$45,000	$52,300	$53,728	$55,195	$56,701	$58,249
36	Insurance	$182,000	$209,000	$214,706	$220,567	$226,589	$232,775
37	Memberships & Subscriptions	$118,825	$125,000	$128,413	$131,918	$135,520	$139,219
38	Election Expense	$0	$30,000	$30,819	$31,660	$32,525	$33,413
39	Labor Relations	$6,000	$6,000	$6,164	$6,332	$6,505	$6,683
40	County Fees	$31,400	$33,000	$33,901	$34,826	$35,777	$36,754
41	State Fees	$48,000	$50,600	$51,981	$53,400	$54,858	$56,356
42	**Total - Operating Expenses**	**$10,609,648**	**$11,295,349**	**$11,930,580**	**$12,391,831**	**$12,999,073**	**$13,519,038**

Table 6-2: Capital Projects (Detail)

Line	Capital Projects (Inflated)	Project Number	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
1	**Equipment Purchase & Replacement**							
2	SCADA/Telemetry/Electric Controls Replacement	06-03	$0	$50,000	$51,600	$53,251	$54,955	$56,714
3	Vactor Truck/Trailer	15-04	$0	$0	$0	$0	$0	$567,138
4	Vehicle Fleet Replacement	99-02	$0	$50,000	$51,600	$53,251	$54,955	$56,714
5	Facilities & Maintenance							
6	Fire Hydrant Replacement	09-09	$140,000	$140,000	$144,480	$149,103	$153,875	$158,799
7	Pilarcitos Canyon Culvert Replacement/Slides	NN-00	$100,000	$400,000	$0	$0	$0	$0
8	Meter Change Program	99-01	$10,000	$10,000	$10,320	$10,650	$10,991	$11,343
9	**Pipeline Projects**							
10	Highway 92 - Emergency Pipeline Restoration/Replacement	14-01	$600,000	$3,000,000	$206,400	$213,005	$3,846,867	$0
11	Magellan at Hwy 1/Miramar Dead Ends	16-09	$250,000	$0	$0	$639,014	$0	$0
12	Alameda Ave Crossing at Medio Creek	22-07	$150,000	$0	$0	$0	$0	$0
13	Pine Willow Oak Pipeline Replacement	18-01	$0	$0	$0	$0	$0	$2,835,690
14	Redondo Beach Loop to St Andrews Road	21-01	$70,000	$400,000	$516,000	$0	$0	$0
15	Miramar Tank/Pipeline Replacement (600 ft)	21-09	$0	$0	$0	$0	$0	$567,138
16	Poplar Street Pipeline Replacement	23-02	$400,000	$0	$0	$0	$0	$0
17	HMB Valve Replacement	24-01	$250,000	$0	$0	$0	$0	$0
18	Unscheduled CIP	NN-00	$100,000	$100,000	$103,200	$106,502	$109,910	$113,428
19	**Pump Stations/Tanks/Wells**							
20	Carter Hill Tank Improvement Project	21-07	$300,000	$4,000,000	$5,572,800	$0	$0	$0
21	Alves Tank Rehabilitation/Replacement	08-14	$0	$0	$0	$0	$0	$1,134,276
22	EG#1 Tank Improvement Project/New Pump Station	19-01	$150,000	$0	$0	$1,065,024	$0	$0
23	Miramar Tank Rehabilitation	14-33	$0	$0	$0	$0	$219,821	$0
24	Cahill Tank Rehabilitation	08-16	$0	$0	$206,400	$0	$0	$0
25	Denniston Tank Rehabilitation	20-16	$0	$0	$206,400	$0	$0	$0
26	Upper Pilarcitos Well Field Replacements	09-18	$0	$0	$0	$532,512	$0	$0
27	Denniston Well Field Replacements	16-08	$50,000	$450,000	$0	$0	$0	$0
28	CSP Pump #1/2 Spare	20-01	$90,000	$0	$0	$0	$0	$0
29	CSP Pump #3 Replacement	21-03	$0	$0	$0	$266,256	$0	$0
30	CSP Screens - Intake Valves	23-11	$25,000	$50,000	$0	$266,256	$0	$0
31	Tanks - THM Control	19-05	$50,000	$50,000	$0	$0	$0	$0
32	**Water Supply Development**							

Line	Capital Projects (Inflated)	Project Number	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
33	San Vicente/Denniston Water Supply Project	12-12	$350,000	$2,000,000	$206,400	$213,005	$219,821	$226,855
34	Lower Pilarcitos Well Development	23-04	$0	$0	$103,200	$266,256	$274,776	$283,569
35	Water Reuse Project Development	17-12	$200,000	$0	$0	$0	$0	$0
36	Denniston Sluice Gates		$0	$50,000	$258,000	$0	$0	$0
37	**Water Treatment Plants**							
38	Nunes Water Treatment Plant Improvement Project	20-14	$1,700,000	$0	$0	$0	$0	$0
39	Sodium Hypochlorite Generator Replacement (Nunes)	23-05	$0	$200,000	$0	$0	$0	$0
40	Existing Sedimentation Basin Rehabilitation	23-06	$0	$300,000	$0	$0	$0	$0
41	Denniston Contact Clarifier Hatch Replacements	23-07	$0	$0	$0	$79,877	$0	$0
42	**Total - Capital Projects**		**$4,985,000**	**$11,250,000**	**$7,636,800**	**$3,913,963**	**$4,945,971**	**$6,011,663**

6.2 COST-OF-SERVICE ANALYSIS APPENDICES

Table 6-3: Operating Expenses by System Functions (Detail)

Line	Operating Expenses	FYE 2024	Meters	Customer	Fire	Supply	Local Supply	Treatment	Pumping	Storage	T&D	Main-tenance	Conserv-ation	General	Total
1	SFPUC Water Purchased	$2,260,502	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
2	BAWSCA Bond Surcharge	$200,844	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
3	Electrical Exp. Nunes WTP	$57,000	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
4	Electrical Expenses, CSP	$350,000	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
5	Electrical Expenses/Trans. & Dist.	$27,000	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
6	Elec Exp/Pilarcitos Cyn	$69,000	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
7	Electrical Exp., Denn	$89,000	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
8	CSP - Operation	$13,000	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
9	CSP - Maintenance	$35,000	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%
10	Nunes WTP Oper	$102,000	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
11	Nunes WTP Maint	$125,000	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
12	Denn. WTP Oper.	$54,000	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
13	Denn WTP Maint	$155,000	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
14	Laboratory Expenses	$77,000	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
15	Maintenance Expenses	$395,000	0%		0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
16	Maintenance, Wells	$50,000	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
17	Uniforms	$14,000	0%	0%	0%	0%	0%	37%	36%	0%	27%	0%	0%	0%	100%
18	Studies/Surveys/Consulting	$160,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
19	Water Resources	$21,500	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%
20	Community Outreach	$68,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%
21	Water Shortage Program	$0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%
22	Legal	$110,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
23	Engineering	$86,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
24	Financial Services	$23,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
25	Computer Services	$339,974	19%	15%	0%	0%	0%	27%	0%	0%	0%	0%	0%	39%	100%
26	Salaries, Admin.	$1,381,887	0%	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	69%	100%
27	Salaries - Field	$1,931,847	2%	0%	0%	0%	0%	36%	35%	0%	26%	0%	0%	0%	100%
28	Payroll Taxes	$235,945	1%	13%	0%	0%	0%	21%	21%	0%	15%	0%	0%	29%	100%
29	Employee Medical Insurance	$516,000	1%	13%	0%	0%	0%	21%	21%	0%	15%	0%	0%	29%	100%
30	Retiree Medical Insurance	$46,000	1%	13%	0%	0%	0%	21%	21%	0%	15%	0%	0%	29%	100%

Coastside County Water District 2024 Water Rate Study

Line	Operating Expenses	FYE 2024	Meters	Customer	Fire	Supply	Local Supply	Treatment	Pumping	Storage	T&D	Main-tenance	Conserv-ation	General	Total
31	Employee Retirement	$642,924	1%	13%	0%	0%	0%	21%	21%	0%	15%	0%	0%	29%	100%
32	SIP 401a Plan	$38,000	1%	13%	0%	0%	0%	21%	21%	0%	15%	0%	0%	29%	100%
33	Motor Vehicle Exp.	$90,000	2%	0%	0%	0%	0%	36%	35%	0%	26%	0%	0%	0%	100%
34	Office, Billing & Facilities Expenses	$414,000	0%	22%	0%	0%	0%	0%	0%	0%	0%	0%	0%	78%	100%
35	Meetings/Training/Seminars	$45,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
36	Insurance	$182,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
37	Memberships & Subscriptions	$118,825	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
38	Election Expense	$0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
39	Labor Relations	$6,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
40	County Fees	$31,400	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
41	State Fees	$48,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
42	**Total - Operating Expenses**	**$10,609,648**	**$124,087**	**$754,561**	**$0**	**$2,461,346**	**$0**	**$1,710,558**	**$1,577,783**	**$0**	**$1,238,337**	**$0**	**$89,500**	**$2,653,476**	**$10,609,648**

Table 6-4: Capital Assets by System Functions (Detail)

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
1	1050 - General	00000663	06/30/2017	120	$17,032	$8,456	Treatment
2	1050 - General	00000692	12/07/2017	120	$26,528	$14,817	Treatment
3	1050 - General	00000730	05/31/2019	120	$29,171	$20,390	Treatment
4	1050 - General	196	01/01/1993	360	$659	$0	T&D
5	1050 - General	235	12/01/2000	600	$2,095,491	$2,461,516	T&D
6	1050 - General	248	12/01/1999	600	$1,145,990	$1,331,743	T&D
7	1051 - Nunes WTP	00000616	09/30/2015	240	$5,133	$4,176	Treatment
8	1051 - Nunes WTP	00000617	11/09/2015	240	$1,227	$1,012	Treatment
9	1051 - Nunes WTP	00000618	12/31/2015	240	$29,680	$24,635	Treatment
10	1051 - Nunes WTP	00000619	07/01/2015	240	$58,174	$46,355	Treatment
11	1051 - Nunes WTP	00000664	06/20/2017	240	$87,001	$75,591	Treatment
12	1051 - Nunes WTP	00000665	02/28/2017	240	$28,194	$23,914	Treatment
13	1051 - Nunes WTP	00000681	10/25/2017	120	$17,450	$9,386	Treatment
14	1051 - Nunes WTP	00000693	10/31/2017	240	$14,850	$13,210	Treatment
15	1051 - Nunes WTP	00000751	04/30/2019	60	$99,673	$19,625	Treatment
16	1051 - Nunes WTP	00000805	09/30/2020	84	$16,249	$11,467	Treatment
17	1051 - Nunes WTP	00000829	06/28/2022	240	$177,030	$172,317	Treatment
18	1051 - Nunes WTP	171	01/01/1992	360	$420	$0	Treatment
19	1051 - Nunes WTP	172	01/01/1992	360	$92	$0	Treatment
20	1051 - Nunes WTP	173A-161	01/01/1992	360	$2,144	$0	Treatment
21	1051 - Nunes WTP	174	01/01/1993	360	$119	$0	Treatment
22	1051 - Nunes WTP	175	01/01/1993	360	$428	$0	Treatment
23	1051 - Nunes WTP	176	01/01/1993	360	$3,116	$0	Treatment
24	1051 - Nunes WTP	177	01/01/1993	360	$144	$0	Treatment
25	1051 - Nunes WTP	178	01/01/1993	360	$452	$0	Treatment
26	1051 - Nunes WTP	179	01/01/1993	360	$99	$0	Treatment
27	1051 - Nunes WTP	180	01/01/1993	360	$13,860	$0	Treatment
28	1051 - Nunes WTP	181	01/01/1993	360	$826	$0	Treatment
29	1051 - Nunes WTP	182	01/01/1993	360	$20,790	$0	Treatment
30	1051 - Nunes WTP	183	01/01/1993	360	$12,909	$0	Treatment
31	1051 - Nunes WTP	184	01/01/1993	360	$21,190	$0	Treatment
32	1051 - Nunes WTP	185	01/01/1993	360	$429	$0	Treatment

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
33	1051 - Nunes WTP	186	01/01/1993	360	$3,850	$0	Treatment
34	1051 - Nunes WTP	187	01/01/1993	360	$85	$0	Treatment
35	1051 - Nunes WTP	197	01/01/1993	360	$14	$0	Treatment
36	1051 - Nunes WTP	313	11/04/2004	600	$60,737	$71,482	Treatment
37	1051 - Nunes WTP	317	06/01/2005	600	$75,253	$85,977	Treatment
38	1051 - Nunes WTP	341	08/02/2005	120	$41,728	$0	Treatment
39	1051 - Nunes WTP	377	05/31/2007	120	$10,777	$0	Treatment
40	1051 - Nunes WTP	380	01/01/2007	120	$94,544	$0	Treatment
41	1051 - Nunes WTP	383	10/01/2006	120	$6,078	$0	Treatment
42	1051 - Nunes WTP	384	03/01/2007	120	$5,228	$0	Treatment
43	1051 - Nunes WTP	416	08/28/2007	60	$4,588	$0	Treatment
44	1051 - Nunes WTP	417	12/26/2007	60	$11,486	$0	Treatment
45	1051 - Nunes WTP	418	01/25/2008	120	$14,156	$0	Treatment
46	1051 - Nunes WTP	419	04/25/2008	60	$1,282	$0	Treatment
47	1051 - Nunes WTP	420	05/29/2008	60	$272	$0	Treatment
48	1051 - Nunes WTP	421	05/15/2008	120	$7,748	$0	Treatment
49	1051 - Nunes WTP	422	06/30/2008	60	$8,016	$0	Treatment
50	1051 - Nunes WTP	441	09/26/2008	120	$4,131	$0	Treatment
51	1051 - Nunes WTP	442	10/31/2008	120	$15,064	$0	Treatment
52	1051 - Nunes WTP	443	06/26/2009	120	$8,891	$0	Treatment
53	1051 - Nunes WTP	448	10/29/2008	120	$1,039	$0	Treatment
54	1051 - Nunes WTP	452	04/14/2009	120	$62,114	$0	Treatment
55	1051 - Nunes WTP	453	07/08/2008	120	$63,344	$0	Treatment
56	1051 - Nunes WTP	460	05/11/2010	600	$49,487	$55,340	Treatment
57	1051 - Nunes WTP	469	06/30/2009	120	$7,421	$0	Treatment
58	1051 - Nunes WTP	470	03/25/2010	120	$40,290	$0	Treatment
59	1051 - Nunes WTP	471	04/05/2010	120	$1,398	$0	Treatment
60	1051 - Nunes WTP	472	05/26/2010	120	$2,961	$0	Treatment
61	1051 - Nunes WTP	497	09/27/2010	120	$44,311	$0	Treatment
62	1051 - Nunes WTP	498	11/24/2010	120	$11,000	$0	Treatment
63	1051 - Nunes WTP	499	06/27/2011	120	$11,400	$0	Treatment
64	1051 - Nunes WTP	507	12/14/2010	600	$1,866,199	$2,119,914	Treatment
65	1051 - Nunes WTP	522	09/27/2011	60	$3,795	$0	Treatment

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
66	1051 - Nunes WTP	537	10/25/2012	60	$1,009	$0	Treatment
67	1051 - Nunes WTP	538	11/26/2012	120	$10,272	$0	Treatment
68	1051 - Nunes WTP	539	11/26/2012	84	$1,104	$0	Treatment
69	1051 - Nunes WTP	540	02/26/2013	120	$17,840	$0	Treatment
70	1051 - Nunes WTP	549	12/24/2013	240	$6,455	$4,731	Treatment
71	1051 - Nunes WTP	550	12/24/2013	240	$11,208	$8,214	Treatment
72	1051 - Nunes WTP	551	02/13/2014	240	$8,426	$6,107	Treatment
73	1051 - Nunes WTP	552	02/13/2014	240	$2,603	$1,886	Treatment
74	1051 - Nunes WTP	553	03/26/2014	240	$3,905	$2,853	Treatment
75	1051 - Nunes WTP	554	05/27/2014	60	$7,724	$0	Treatment
76	1051 - Nunes WTP	555	04/25/2014	120	$989	$112	Treatment
77	1051 - Nunes WTP	586	07/01/2014	120	$94,697	$12,870	Treatment
78	1051 - Nunes WTP	588	07/01/2014	360	$87,602	$83,340	Treatment
79	1051 - Nunes WTP	599	04/27/2015	120	$3,019	$735	Treatment
80	1051 - Nunes WTP	600	04/27/2015	120	$5,680	$1,383	Treatment
81	1051 - Nunes WTP	601	05/27/2015	60	$828	$0	Treatment
82	1051 - Nunes WTP	602	06/25/2015	120	$5,428	$1,442	Treatment
83	1051 - Nunes WTP	603	07/01/2014	120	$159,502	$21,677	Treatment
84	1051 - Nunes WTP	74	01/01/1998	120	$101	$0	Treatment
85	1052 - Denniston WTP	00000611	05/17/2016	240	$6,119	$5,094	Treatment
86	1052 - Denniston WTP	00000620	11/19/2015	60	$2,495	$0	Treatment
87	1052 - Denniston WTP	00000627	02/19/2016	240	$94,509	$77,161	Treatment
88	1052 - Denniston WTP	00000682	01/05/2018	120	$9,370	$5,174	Treatment
89	1052 - Denniston WTP	00000694	04/03/2018	60	$29,866	$0	Treatment
90	1052 - Denniston WTP	00000726	07/01/2017	120	$479,916	$238,273	Treatment
91	1052 - Denniston WTP	00000727	07/01/2017	120	$510,060	$253,239	Treatment
92	1052 - Denniston WTP	00000736	12/31/2018	240	$34,328	$32,052	Treatment
93	1052 - Denniston WTP	00000758	08/01/2018	60	$6,599	$133	Treatment
94	1052 - Denniston WTP	00000775	10/11/2019	240	$11,010	$10,622	Treatment
95	1052 - Denniston WTP	00000776	11/15/2019	120	$29,736	$22,541	Treatment
96	1052 - Denniston WTP	00000778	01/07/2020	120	$22,676	$17,351	Treatment
97	1052 - Denniston WTP	00000806	06/30/2021	240	$558,626	$552,240	Treatment
98	1052 - Denniston WTP	00000807	06/30/2021	240	$6,964	$6,884	Treatment

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
99	1052 - Denniston WTP	00000808	08/25/2020	180	$473,339	$446,245	Treatment
100	1052 - Denniston WTP	00000811	09/30/2020	84	$16,249	$11,467	Treatment
101	1052 - Denniston WTP	00000830	03/11/2022	120	$29,591	$26,529	Treatment
102	1052 - Denniston WTP	00000837	06/30/2022	120	$98,661	$90,980	Treatment
103	1052 - Denniston WTP	147	01/01/1992	360	$11,403	$0	Treatment
104	1052 - Denniston WTP	148	01/01/1992	360	$2,250	$0	Treatment
105	1052 - Denniston WTP	162	01/01/1992	360	$275	$0	Treatment
106	1052 - Denniston WTP	163	01/01/1993	360	$8,507	$0	Treatment
107	1052 - Denniston WTP	164	01/01/1993	360	$6,032	$0	Treatment
108	1052 - Denniston WTP	165	01/01/1993	360	$1,174	$0	Treatment
109	1052 - Denniston WTP	166	01/01/1993	360	$108	$0	Treatment
110	1052 - Denniston WTP	167	01/01/1993	360	$54	$0	Treatment
111	1052 - Denniston WTP	168	01/01/1993	360	$41	$0	Treatment
112	1052 - Denniston WTP	169	01/01/1993	360	$137	$0	Treatment
113	1052 - Denniston WTP	170	01/01/1993	360	$359	$0	Treatment
114	1052 - Denniston WTP	199	01/01/1993	360	$359	$0	Treatment
115	1052 - Denniston WTP	225	01/01/2000	360	$78,352	$36,368	Treatment
116	1052 - Denniston WTP	226	01/01/2000	360	$292	$136	Treatment
117	1052 - Denniston WTP	227	01/01/2000	360	$27,638	$12,828	Treatment
118	1052 - Denniston WTP	229A-232	01/01/2000	360	$18,606	$8,636	Treatment
119	1052 - Denniston WTP	230	01/01/2000	360	$8,499	$3,945	Treatment
120	1052 - Denniston WTP	254	01/01/2002	600	$259	$301	Treatment
121	1052 - Denniston WTP	295	01/01/2003	600	$101,959	$119,763	Treatment
122	1052 - Denniston WTP	378	06/27/2007	120	$1,988	$0	Treatment
123	1052 - Denniston WTP	381	06/01/2007	120	$3,008	$0	Treatment
124	1052 - Denniston WTP	382	03/01/2007	120	$32,324	$0	Treatment
125	1052 - Denniston WTP	389	12/12/2006	600	$25,000	$28,800	Treatment
126	1052 - Denniston WTP	423	08/10/2007	60	$2,152	$0	Treatment
127	1052 - Denniston WTP	424	12/26/2007	60	$8,529	$0	Treatment
128	1052 - Denniston WTP	425	04/25/2008	120	$74,997	$0	Treatment
129	1052 - Denniston WTP	426	05/29/2008	60	$4,412	$0	Treatment
130	1052 - Denniston WTP	444	09/26/2008	120	$11,204	$0	Treatment
131	1052 - Denniston WTP	445	09/26/2008	120	$1,923	$0	Treatment

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
132	1052 - Denniston WTP	446	09/26/2008	120	$1,323	$0	Treatment
133	1052 - Denniston WTP	447	10/29/2008	120	$1,806	$0	Treatment
134	1052 - Denniston WTP	449	03/05/2009	120	$7,198	$0	Treatment
135	1052 - Denniston WTP	450	03/05/2009	120	$11,150	$0	Treatment
136	1052 - Denniston WTP	459	05/11/2010	600	$85,134	$95,204	Treatment
137	1052 - Denniston WTP	473	04/29/2010	120	$8,303	$0	Treatment
138	1052 - Denniston WTP	500	02/25/2011	120	$7,725	$0	Treatment
139	1052 - Denniston WTP	528	11/08/2011	600	$296,324	$334,535	Treatment
140	1052 - Denniston WTP	531	11/13/2012	600	$34,348	$38,769	Treatment
141	1052 - Denniston WTP	544	02/28/2013	600	$6,424,141	$7,114,367	Treatment
142	1052 - Denniston WTP	556	11/26/2013	240	$2,480	$1,803	Treatment
143	1052 - Denniston WTP	557	03/26/2014	180	$9,518	$4,959	Treatment
144	1052 - Denniston WTP	558	12/24/2013	240	$15,480	$11,345	Treatment
145	1052 - Denniston WTP	559	03/26/2014	180	$13,592	$7,081	Treatment
146	1052 - Denniston WTP	564	11/12/2013	600	$46,715	$52,712	Treatment
147	1052 - Denniston WTP	577	07/01/2014	180	$30,031	$16,326	Treatment
148	1052 - Denniston WTP	578	07/01/2014	180	$2,648	$1,440	Treatment
149	1052 - Denniston WTP	582	07/01/2014	60	$188,217	$0	Treatment
150	1052 - Denniston WTP	604	07/01/2014	120	$13,047	$1,773	Treatment
151	1055 - Crystal Springs PS	00000628	03/02/2016	60	$437	$0	Pumping
152	1055 - Crystal Springs PS	00000666	06/30/2017	120	$16,467	$8,176	Pumping
153	1055 - Crystal Springs PS	00000680	06/30/2017	240	$63,953	$55,566	Pumping
154	1055 - Crystal Springs PS	00000696	11/15/2017	240	$24,705	$22,104	Pumping
155	1055 - Crystal Springs PS	00000697	06/18/2018	240	$43,880	$39,648	Pumping
156	1055 - Crystal Springs PS	00000698	12/27/2017	240	$81,926	$73,724	Pumping
157	1055 - Crystal Springs PS	00000704	06/30/2018	240	$31,227	$28,216	Pumping
158	1055 - Crystal Springs PS	00000705	02/01/2018	120	$64,161	$35,428	Pumping
159	1055 - Crystal Springs PS	00000706	06/30/2018	240	$29,168	$26,355	Pumping
160	1055 - Crystal Springs PS	00000728	07/01/2017	12	$48,137	$0	Pumping
161	1055 - Crystal Springs PS	00000737	10/31/2018	120	$70,556	$45,335	Pumping
162	1055 - Crystal Springs PS	00000738	12/31/2018	120	$11,399	$7,553	Pumping
163	1055 - Crystal Springs PS	00000739	08/31/2018	120	$41,450	$25,801	Pumping
164	1055 - Crystal Springs PS	00000740	06/30/2019	120	$113,183	$80,226	Pumping

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165	1055 - Crystal Springs PS	00000752	06/30/2019	60	$20,670	$4,884	Pumping
166	1055 - Crystal Springs PS	00000759	09/30/2018	120	$1,485	$939	Pumping
167	1055 - Crystal Springs PS	00000767	06/30/2019	120	$13,795	$9,778	Pumping
168	1055 - Crystal Springs PS	00000777	06/30/2020	120	$47,396	$38,562	Pumping
169	1055 - Crystal Springs PS	00000779	05/21/2020	120	$5,220	$4,197	Pumping
170	1055 - Crystal Springs PS	00000780	09/04/2019	120	$89,803	$66,307	Pumping
171	1055 - Crystal Springs PS	00000782	03/24/2020	180	$70,440	$64,134	Pumping
172	1055 - Crystal Springs PS	00000847	01/31/2023	120	$292,779	$280,580	Pumping
173	1055 - Crystal Springs PS	133	6/30/1951	360	$512,814	$0	T&D
174	1055 - Crystal Springs PS	133	6/30/1955	360	$20,381	$0	T&D
175	1055 - Crystal Springs PS	133	6/30/1960	360	$39,303	$0	T&D
176	1055 - Crystal Springs PS	133	6/30/1965	360	$429,670	$0	T&D
177	1055 - Crystal Springs PS	133	6/30/1970	360	$740,972	$0	T&D
178	1055 - Crystal Springs PS	133	6/30/1975	360	$1,978,822	$0	T&D
179	1055 - Crystal Springs PS	133	6/30/1980	360	$1,051,660	$0	T&D
180	1055 - Crystal Springs PS	133	6/30/1985	360	$1,334,526	$0	T&D
181	1055 - Crystal Springs PS	133	6/30/1985	360	$2,200,393	$0	Treatment
182	1055 - Crystal Springs PS	133	6/30/1990	360	$129,268	$0	T&D
183	1055 - Crystal Springs PS	133	6/30/1990	360	$31,089	$0	Treatment
184	1055 - Crystal Springs PS	133	6/30/1991	360	$14,423	$0	Treatment
185	1055 - Crystal Springs PS	133	6/30/1991	360	$621,098	$0	T&D
186	1055 - Crystal Springs PS	236	07/01/1992	600	$2,746,355	$2,790,021	Pumping
187	1055 - Crystal Springs PS	237	04/01/1993	600	$3,221,460	$3,254,951	Pumping
188	1055 - Crystal Springs PS	238	07/01/1993	600	$3,197,786	$3,271,930	Pumping
189	1055 - Crystal Springs PS	239	12/01/1995	600	$7,249,622	$7,917,391	Pumping
190	1055 - Crystal Springs PS	240	12/01/1995	600	$2,769,920	$3,025,060	Pumping
191	1055 - Crystal Springs PS	241	12/01/1995	120	$6,397	$0	Pumping
192	1055 - Crystal Springs PS	242	01/01/1996	600	$4,928	$5,259	Pumping
193	1055 - Crystal Springs PS	243	01/01/1997	600	$135,363	$145,532	Pumping
194	1055 - Crystal Springs PS	244	01/01/1998	600	$545,714	$601,966	Pumping
195	1055 - Crystal Springs PS	245	01/01/1999	600	$106,909	$119,927	Pumping
196	1055 - Crystal Springs PS	246	01/31/2000	600	$23,034	$26,235	Pumping
197	1055 - Crystal Springs PS	247	01/01/2000	600	$39,183	$44,488	Pumping

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198	1055 - Crystal Springs PS	256	01/01/2002	600	$596	$692	Pumping
199	1055 - Crystal Springs PS	268	01/01/2002	600	$50,499	$58,674	Pumping
200	1055 - Crystal Springs PS	276	01/01/2003	600	$17,999	$21,142	Pumping
201	1055 - Crystal Springs PS	291	06/01/2003	600	$353	$420	Pumping
202	1055 - Crystal Springs PS	300	01/01/2004	600	$25,909	$29,603	Pumping
203	1055 - Crystal Springs PS	318	07/01/2004	600	$95,117	$110,460	Pumping
204	1055 - Crystal Springs PS	325	12/31/2004	600	$9,337	$11,018	Pumping
205	1055 - Crystal Springs PS	345	12/31/2005	600	$4,106	$4,777	Pumping
206	1055 - Crystal Springs PS	368	04/26/2006	120	$4,135	$0	Pumping
207	1055 - Crystal Springs PS	474	02/25/2010	120	$36,080	$0	Pumping
208	1055 - Crystal Springs PS	475	05/26/2010	120	$13,365	$0	Pumping
209	1055 - Crystal Springs PS	501	03/25/2011	180	$25,981	$6,999	Pumping
210	1055 - Crystal Springs PS	502	06/27/2011	120	$1,698	$0	Pumping
211	1055 - Crystal Springs PS	503	06/30/2011	120	$1,098	$0	Pumping
212	1055 - Crystal Springs PS	512	05/10/2011	600	$105,321	$117,354	Pumping
213	1055 - Crystal Springs PS	529	07/10/2012	600	$119,554	$133,801	Pumping
214	1055 - Crystal Springs PS	541	02/26/2013	180	$38,162	$16,573	Pumping
215	1055 - Crystal Springs PS	560	06/25/2014	240	$41,046	$30,681	Pumping
216	1055 - Crystal Springs PS	574	07/01/2014	360	$243,550	$231,701	Pumping
217	1055 - Crystal Springs PS	576	07/01/2014	240	$208,589	$155,917	Pumping
218	1055 - Crystal Springs PS	605	05/27/2015	60	$828	$0	Pumping
219	1055 - Crystal Springs PS	606	07/01/2014	120	$33,868	$4,603	Pumping
220	1056 - Other Pump Stations	581	07/01/2014	120	$14,994	$2,038	Pumping
221	1058 - Tanks	00000612	06/29/2016	240	$23,544	$19,728	Storage
222	1058 - Tanks	00000649	07/29/2016	240	$3,128	$2,637	Storage
223	1058 - Tanks	00000679	02/28/2017	240	$206,019	$174,739	Storage
224	1058 - Tanks	00000699	01/05/2018	120	$11,666	$6,442	Storage
225	1058 - Tanks	00000708	06/30/2018	360	$864,932	$868,359	Storage
226	1058 - Tanks	00000709	06/30/2018	360	$39,129	$39,284	Storage
227	1058 - Tanks	00000741	01/31/2019	240	$10,410	$9,582	Storage
228	1058 - Tanks	00000744	06/30/2019	120	$128,685	$91,214	Storage
229	1058 - Tanks	00000783	03/05/2020	120	$32,845	$25,769	Storage
230	1058 - Tanks	00000812	03/11/2021	120	$29,900	$25,453	Storage

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231	1058 - Tanks	00000813	06/21/2021	120	$35,506	$31,200	Storage
232	1058 - Tanks	00000848	06/30/2023	120	$19,872	$19,872	Storage
233	1058 - Tanks	457	07/14/2009	600	$585,280	$656,828	Storage
234	1058 - Tanks	506	07/13/2010	600	$311,145	$349,518	Storage
235	1058 - Tanks	511	05/10/2011	600	$27,512	$30,655	Storage
236	1058 - Tanks	523	12/31/2011	120	$13,432	$0	Storage
237	1058 - Tanks	524	11/28/2011	180	$17,589	$5,887	Storage
238	1058 - Tanks	525	03/13/2012	180	$14,734	$5,274	Storage
239	1058 - Tanks	530	08/14/2012	240	$352,207	$231,130	Storage
240	1058 - Tanks	542	12/31/2012	120	$8,537	$0	Storage
241	1058 - Tanks	561	08/15/2013	120	$5,860	$136	Storage
242	1058 - Tanks	562	12/31/2013	120	$28,930	$2,019	Storage
243	1058 - Tanks	584	07/01/2014	180	$28,055	$15,251	Storage
244	1058 - Tanks	587	07/01/2014	360	$704,721	$670,434	Storage
245	1058 - Tanks	608	07/01/2014	120	$1,613	$219	Storage
246	1058 - Tanks	609	05/27/2015	120	$14,522	$3,697	Storage
247	1058 - Tanks	610	07/01/2014	120	$84,176	$11,440	Storage
248	1059 - Well Fields	00000652	02/28/2017	120	$15,181	$6,909	T&D
249	1059 - Well Fields	00000668	04/30/2017	120	$108,309	$51,533	T&D
250	1059 - Well Fields	00000724	07/01/2017	240	$39,460	$34,285	T&D
251	1059 - Well Fields	159	01/01/1991	360	$18,930	$0	T&D
252	1059 - Well Fields	255	01/01/2002	600	$26,344	$30,609	T&D
253	1059 - Well Fields	296	01/01/2003	600	$23,302	$27,371	T&D
254	1059 - Well Fields	567	07/01/2014	120	$149,736	$20,350	T&D
255	1060 - New Pipeline/Pipeline Replacement	00000615	04/19/2016	360	$13,009	$12,764	T&D
256	1060 - New Pipeline/Pipeline Replacement	00000621	02/29/2016	360	$25,972	$25,297	T&D
257	1060 - New Pipeline/Pipeline Replacement	00000624	06/30/2016	600	$821,515	$910,772	T&D
258	1060 - New Pipeline/Pipeline Replacement	00000629	06/30/2016	600	$505,130	$560,012	T&D
259	1060 - New Pipeline/Pipeline Replacement	00000630	06/30/2016	120	$12,913	$4,994	T&D
260	1060 - New Pipeline/Pipeline Replacement	00000631	04/30/2016	600	$460,520	$508,577	T&D
261	1060 - New Pipeline/Pipeline Replacement	00000632	02/29/2016	120	$10,512	$3,614	T&D
262	1060 - New Pipeline/Pipeline Replacement	00000653	03/31/2017	360	$33,684	$33,099	T&D
263	1060 - New Pipeline/Pipeline Replacement	00000654	10/17/2016	600	$5,775	$6,452	T&D

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
264	1060 - New Pipeline/Pipeline Replacement	00000667	02/28/2017	600	$713,211	$773,121	T&D
265	1060 - New Pipeline/Pipeline Replacement	00000669	05/31/2017	60	$95,633	$0	T&D
266	1060 - New Pipeline/Pipeline Replacement	00000670	10/31/2016	60	$82,781	$0	T&D
267	1060 - New Pipeline/Pipeline Replacement	00000672	02/28/2017	600	$6,194	$6,714	T&D
268	1060 - New Pipeline/Pipeline Replacement	00000673	10/31/2016	60	$21,979	$0	T&D
269	1060 - New Pipeline/Pipeline Replacement	00000677	07/01/2016	600	$1,836	$2,035	T&D
270	1060 - New Pipeline/Pipeline Replacement	00000733	03/31/2019	240	$15,032	$13,985	T&D
271	1060 - New Pipeline/Pipeline Replacement	00000742	02/28/2019	600	$230,991	$249,235	T&D
272	1060 - New Pipeline/Pipeline Replacement	00000746	03/31/2019	600	$16,673	$18,023	T&D
273	1060 - New Pipeline/Pipeline Replacement	00000750	02/28/2019	600	$602,382	$649,960	T&D
274	1060 - New Pipeline/Pipeline Replacement	00000753	02/28/2019	600	$354,779	$382,800	T&D
275	1060 - New Pipeline/Pipeline Replacement	00000754	02/28/2019	600	$46,932	$50,639	T&D
276	1060 - New Pipeline/Pipeline Replacement	00000755	03/31/2019	360	$43,722	$44,334	T&D
277	1060 - New Pipeline/Pipeline Replacement	00000768	04/30/2019	600	$60,679	$65,711	T&D
278	1060 - New Pipeline/Pipeline Replacement	00000784	02/14/2020	600	$364,340	$395,243	T&D
279	1060 - New Pipeline/Pipeline Replacement	00000785	02/13/2020	240	$76,481	$74,079	T&D
280	1060 - New Pipeline/Pipeline Replacement	00000786	06/30/2020	600	$640,222	$699,485	T&D
281	1060 - New Pipeline/Pipeline Replacement	00000787	02/29/2020	180	$617,828	$558,526	T&D
282	1060 - New Pipeline/Pipeline Replacement	00000788	05/31/2020	600	$1,350,370	$1,472,755	T&D
283	1060 - New Pipeline/Pipeline Replacement	00000789	05/31/2020	600	$25,370	$27,670	T&D
284	1060 - New Pipeline/Pipeline Replacement	00000803	02/29/2020	180	$25,503	$23,055	T&D
285	1060 - New Pipeline/Pipeline Replacement	00000810	07/01/2020	60	$15,756	$7,325	T&D
286	1060 - New Pipeline/Pipeline Replacement	00000814	10/08/2020	240	$17,738	$17,868	T&D
287	1060 - New Pipeline/Pipeline Replacement	00000815	10/08/2020	240	$1,433	$1,443	T&D
288	1060 - New Pipeline/Pipeline Replacement	00000817	10/02/2020	600	$110,523	$121,610	T&D
289	1060 - New Pipeline/Pipeline Replacement	00000818	10/02/2020	600	$364	$400	T&D
290	1060 - New Pipeline/Pipeline Replacement	00000819	02/08/2021	120	$338	$285	T&D
291	1060 - New Pipeline/Pipeline Replacement	00000820	02/08/2021	120	$85,218	$71,764	T&D
292	1060 - New Pipeline/Pipeline Replacement	00000832	06/30/2022	480	$126,409	$126,281	T&D
293	1060 - New Pipeline/Pipeline Replacement	00000849	02/28/2023	480	$676,839	$671,199	T&D
294	1060 - New Pipeline/Pipeline Replacement	00000850	06/30/2023	480	$1,905,235	$1,905,235	T&D
295	1060 - New Pipeline/Pipeline Replacement	100	09/29/2000	120	$2,809	$0	T&D
296	1060 - New Pipeline/Pipeline Replacement	101	09/29/2000	120	$606	$0	T&D

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
297	1060 - New Pipeline/Pipeline Replacement	102	09/29/2000	120	$224	$0	T&D
298	1060 - New Pipeline/Pipeline Replacement	103	12/29/2000	120	$2,090	$0	T&D
299	1060 - New Pipeline/Pipeline Replacement	104	04/30/2001	120	$2,277	$0	T&D
300	1060 - New Pipeline/Pipeline Replacement	105	04/30/2001	120	$228	$0	T&D
301	1060 - New Pipeline/Pipeline Replacement	11	05/01/1992	120	$475	$0	T&D
302	1060 - New Pipeline/Pipeline Replacement	124	01/01/1999	60	$2,718	$0	T&D
303	1060 - New Pipeline/Pipeline Replacement	126	06/01/2000	60	$1,695	$0	T&D
304	1060 - New Pipeline/Pipeline Replacement	127	07/01/2000	60	$3,219	$0	T&D
305	1060 - New Pipeline/Pipeline Replacement	129	08/01/2000	60	$1,586	$0	T&D
306	1060 - New Pipeline/Pipeline Replacement	130	09/01/2000	60	$2,187	$0	T&D
307	1060 - New Pipeline/Pipeline Replacement	132	11/01/2000	60	$712	$0	T&D
308	1060 - New Pipeline/Pipeline Replacement	150	01/01/1992	360	$568	$0	T&D
309	1060 - New Pipeline/Pipeline Replacement	152	01/01/1991	360	$780	$0	T&D
310	1060 - New Pipeline/Pipeline Replacement	153	01/01/1992	360	$275	$0	T&D
311	1060 - New Pipeline/Pipeline Replacement	154	01/01/1992	360	$202,337	$0	T&D
312	1060 - New Pipeline/Pipeline Replacement	155	01/01/1991	360	$1,532	$0	T&D
313	1060 - New Pipeline/Pipeline Replacement	156	01/01/1991	360	$1,275	$0	T&D
314	1060 - New Pipeline/Pipeline Replacement	157	01/01/1991	360	$125,674	$0	T&D
315	1060 - New Pipeline/Pipeline Replacement	158	01/01/1991	360	$150	$0	T&D
316	1060 - New Pipeline/Pipeline Replacement	160	01/01/1991	360	$131,256	$0	T&D
317	1060 - New Pipeline/Pipeline Replacement	188	01/01/1993	360	$142,863	$0	T&D
318	1060 - New Pipeline/Pipeline Replacement	189	01/01/1993	360	$714	$0	T&D
319	1060 - New Pipeline/Pipeline Replacement	19	06/01/1993	120	$1,190	$0	T&D
320	1060 - New Pipeline/Pipeline Replacement	190	01/01/1993	360	$588	$0	T&D
321	1060 - New Pipeline/Pipeline Replacement	191	01/01/1993	360	$140	$0	T&D
322	1060 - New Pipeline/Pipeline Replacement	192	01/01/1993	360	$3,862	$0	T&D
323	1060 - New Pipeline/Pipeline Replacement	194	01/01/1992	360	$300	$0	T&D
324	1060 - New Pipeline/Pipeline Replacement	195	01/01/1992	360	$67	$0	T&D
325	1060 - New Pipeline/Pipeline Replacement	200	01/01/1994	360	$1,922	$79	T&D
326	1060 - New Pipeline/Pipeline Replacement	201	01/01/1994	360	$273,802	$11,246	T&D
327	1060 - New Pipeline/Pipeline Replacement	202	01/01/1994	360	$11,312	$465	T&D
328	1060 - New Pipeline/Pipeline Replacement	203	01/01/1994	360	$32,136	$1,320	T&D
329	1060 - New Pipeline/Pipeline Replacement	204	09/01/1994	360	$1,975	$189	T&D

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330	1060 - New Pipeline/Pipeline Replacement	205	01/01/1995	360	$13,995	$1,705	T&D
331	1060 - New Pipeline/Pipeline Replacement	206	03/01/1995	360	$5,706	$772	T&D
332	1060 - New Pipeline/Pipeline Replacement	207	01/01/1995	360	$14,071	$1,714	T&D
333	1060 - New Pipeline/Pipeline Replacement	209	01/01/1996	360	$180,171	$35,604	T&D
334	1060 - New Pipeline/Pipeline Replacement	21	10/01/1992	120	$110	$0	T&D
335	1060 - New Pipeline/Pipeline Replacement	211	01/01/1997	360	$24,338	$6,495	T&D
336	1060 - New Pipeline/Pipeline Replacement	212	01/01/1997	360	$467,253	$124,698	T&D
337	1060 - New Pipeline/Pipeline Replacement	214	01/01/1998	360	$993	$335	T&D
338	1060 - New Pipeline/Pipeline Replacement	215	01/01/1998	360	$270,577	$91,368	T&D
339	1060 - New Pipeline/Pipeline Replacement	216	01/01/1998	360	$17	$6	T&D
340	1060 - New Pipeline/Pipeline Replacement	22	11/01/1992	120	$67	$0	T&D
341	1060 - New Pipeline/Pipeline Replacement	220	01/01/2000	360	$319	$148	T&D
342	1060 - New Pipeline/Pipeline Replacement	221	01/01/2000	360	$61,047	$28,335	T&D
343	1060 - New Pipeline/Pipeline Replacement	222	01/01/2000	360	$28,635	$13,291	T&D
344	1060 - New Pipeline/Pipeline Replacement	223	01/01/2000	360	$431,945	$200,490	T&D
345	1060 - New Pipeline/Pipeline Replacement	224	01/01/2000	360	$130,742	$60,685	T&D
346	1060 - New Pipeline/Pipeline Replacement	228	01/01/2000	360	$11,119	$5,161	T&D
347	1060 - New Pipeline/Pipeline Replacement	233	01/01/2000	360	$19,700	$9,144	T&D
348	1060 - New Pipeline/Pipeline Replacement	249	07/10/2001	600	$33,850	$39,946	T&D
349	1060 - New Pipeline/Pipeline Replacement	250	03/12/2002	600	$582,387	$682,601	T&D
350	1060 - New Pipeline/Pipeline Replacement	251	11/13/2001	600	$34,139	$40,765	T&D
351	1060 - New Pipeline/Pipeline Replacement	252	03/12/2002	600	$72,573	$85,061	T&D
352	1060 - New Pipeline/Pipeline Replacement	253	04/09/2002	600	$12,799	$15,045	T&D
353	1060 - New Pipeline/Pipeline Replacement	257	01/01/2002	600	$2,001	$2,325	T&D
354	1060 - New Pipeline/Pipeline Replacement	259	01/01/2002	600	$336	$390	T&D
355	1060 - New Pipeline/Pipeline Replacement	260	01/01/2002	600	$512	$595	T&D
356	1060 - New Pipeline/Pipeline Replacement	261	01/01/2002	600	$70	$81	T&D
357	1060 - New Pipeline/Pipeline Replacement	262	01/01/2002	600	$15,536	$18,051	T&D
358	1060 - New Pipeline/Pipeline Replacement	264	01/01/2002	600	$393	$457	T&D
359	1060 - New Pipeline/Pipeline Replacement	265	01/01/2002	120	$5,411	$0	T&D
360	1060 - New Pipeline/Pipeline Replacement	266	01/01/2002	600	$3,708	$4,308	T&D
361	1060 - New Pipeline/Pipeline Replacement	273	01/01/2002	120	$428	$0	T&D
362	1060 - New Pipeline/Pipeline Replacement	274	01/01/2003	600	$7,980	$9,373	T&D

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363	1060 - New Pipeline/Pipeline Replacement	279	11/26/2002	120	$1,624	$0	T&D
364	1060 - New Pipeline/Pipeline Replacement	280	01/24/2003	120	$812	$0	T&D
365	1060 - New Pipeline/Pipeline Replacement	282	04/30/2003	120	$1,085	$0	T&D
366	1060 - New Pipeline/Pipeline Replacement	292	01/01/2003	600	$102,993	$120,978	T&D
367	1060 - New Pipeline/Pipeline Replacement	293	01/01/2003	600	$415,523	$488,083	T&D
368	1060 - New Pipeline/Pipeline Replacement	294	01/01/2003	600	$100,613	$118,182	T&D
369	1060 - New Pipeline/Pipeline Replacement	297	01/01/2003	600	$17,916	$21,045	T&D
370	1060 - New Pipeline/Pipeline Replacement	298	01/01/2004	600	$4,211	$4,811	T&D
371	1060 - New Pipeline/Pipeline Replacement	308	09/15/2003	600	$48,125	$57,966	T&D
372	1060 - New Pipeline/Pipeline Replacement	309	01/11/2005	600	$28,000	$31,656	T&D
373	1060 - New Pipeline/Pipeline Replacement	310	05/10/2005	600	$11,800	$13,482	T&D
374	1060 - New Pipeline/Pipeline Replacement	311	06/14/2005	600	$14,100	$16,151	T&D
375	1060 - New Pipeline/Pipeline Replacement	312	06/01/2005	600	$316,134	$361,184	T&D
376	1060 - New Pipeline/Pipeline Replacement	314	12/31/2004	120	$20,753	$0	T&D
377	1060 - New Pipeline/Pipeline Replacement	315	03/08/2005	600	$240,333	$273,147	T&D
378	1060 - New Pipeline/Pipeline Replacement	316	11/16/2004	600	$384,659	$452,714	T&D
379	1060 - New Pipeline/Pipeline Replacement	319	01/31/2004	600	$113,570	$130,118	T&D
380	1060 - New Pipeline/Pipeline Replacement	320	04/01/2004	600	$605,609	$697,629	T&D
381	1060 - New Pipeline/Pipeline Replacement	321	05/01/2004	600	$852,293	$984,457	T&D
382	1060 - New Pipeline/Pipeline Replacement	322	12/31/2004	600	$58,236	$68,721	T&D
383	1060 - New Pipeline/Pipeline Replacement	323	12/31/2004	600	$20,426	$24,104	T&D
384	1060 - New Pipeline/Pipeline Replacement	324	06/01/2005	600	$5,612	$6,412	T&D
385	1060 - New Pipeline/Pipeline Replacement	327	12/31/2004	600	$29,165	$34,416	T&D
386	1060 - New Pipeline/Pipeline Replacement	338	05/02/2006	600	$3,797	$4,298	T&D
387	1060 - New Pipeline/Pipeline Replacement	339	08/02/2005	600	$30,471	$35,086	T&D
388	1060 - New Pipeline/Pipeline Replacement	340	11/15/2005	120	$201,659	$0	T&D
389	1060 - New Pipeline/Pipeline Replacement	342	03/14/2006	600	$1,379,917	$1,554,064	T&D
390	1060 - New Pipeline/Pipeline Replacement	343	12/31/2005	600	$12,338	$14,354	T&D
391	1060 - New Pipeline/Pipeline Replacement	346	07/28/2005	120	$5,612	$0	T&D
392	1060 - New Pipeline/Pipeline Replacement	347	12/31/2005	600	$48,771	$56,739	T&D
393	1060 - New Pipeline/Pipeline Replacement	37	08/01/1994	120	$2,697	$0	T&D
394	1060 - New Pipeline/Pipeline Replacement	370	12/31/2006	600	$1,563	$1,801	T&D
395	1060 - New Pipeline/Pipeline Replacement	379	07/01/2006	600	$439,289	$498,504	T&D

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396	1060 - New Pipeline/Pipeline Replacement	386	09/01/2006	600	$308,593	$351,959	T&D
397	1060 - New Pipeline/Pipeline Replacement	388	03/01/2007	600	$6,500	$7,322	T&D
398	1060 - New Pipeline/Pipeline Replacement	390	07/01/2006	600	$52,910	$60,042	T&D
399	1060 - New Pipeline/Pipeline Replacement	393	05/01/2008	600	$219,937	$245,728	T&D
400	1060 - New Pipeline/Pipeline Replacement	394	12/31/2007	600	$6,337	$7,315	T&D
401	1060 - New Pipeline/Pipeline Replacement	42	12/01/1994	120	$680	$0	T&D
402	1060 - New Pipeline/Pipeline Replacement	427	07/01/2007	600	$795,508	$904,994	T&D
403	1060 - New Pipeline/Pipeline Replacement	429	12/31/2008	360	$5,123	$4,245	T&D
404	1060 - New Pipeline/Pipeline Replacement	43	02/01/1995	120	$111	$0	T&D
405	1060 - New Pipeline/Pipeline Replacement	44	03/01/1995	120	$324	$0	T&D
406	1060 - New Pipeline/Pipeline Replacement	451	04/15/2009	600	$1,618,920	$1,804,239	T&D
407	1060 - New Pipeline/Pipeline Replacement	454	12/09/2008	600	$5,907,607	$6,726,689	T&D
408	1060 - New Pipeline/Pipeline Replacement	458	12/08/2009	600	$128,619	$146,008	T&D
409	1060 - New Pipeline/Pipeline Replacement	477	12/31/2009	600	$32,447	$36,833	T&D
410	1060 - New Pipeline/Pipeline Replacement	482	12/31/2010	600	$11,005	$12,502	T&D
411	1060 - New Pipeline/Pipeline Replacement	508	03/08/2011	600	$93,592	$103,827	T&D
412	1060 - New Pipeline/Pipeline Replacement	509	03/08/2011	600	$25,839	$28,665	T&D
413	1060 - New Pipeline/Pipeline Replacement	51	09/01/1995	120	$41	$0	T&D
414	1060 - New Pipeline/Pipeline Replacement	510	05/10/2011	600	$24,771	$27,601	T&D
415	1060 - New Pipeline/Pipeline Replacement	516	12/31/2011	600	$2,421	$2,740	T&D
416	1060 - New Pipeline/Pipeline Replacement	526	02/14/2012	600	$38,780	$42,939	T&D
417	1060 - New Pipeline/Pipeline Replacement	527	12/11/2011	600	$107,536	$121,666	T&D
418	1060 - New Pipeline/Pipeline Replacement	53	02/01/1996	120	$130	$0	T&D
419	1060 - New Pipeline/Pipeline Replacement	532	03/12/2013	600	$162,580	$180,427	T&D
420	1060 - New Pipeline/Pipeline Replacement	533	04/19/2013	600	$552,411	$614,334	T&D
421	1060 - New Pipeline/Pipeline Replacement	54	05/01/1996	120	$575	$0	T&D
422	1060 - New Pipeline/Pipeline Replacement	55	12/01/1996	120	$500	$0	T&D
423	1060 - New Pipeline/Pipeline Replacement	563	09/10/2013	600	$133,576	$150,103	T&D
424	1060 - New Pipeline/Pipeline Replacement	565	12/10/2013	600	$32,764	$37,046	T&D
425	1060 - New Pipeline/Pipeline Replacement	566	04/08/2014	600	$350,245	$388,738	T&D
426	1060 - New Pipeline/Pipeline Replacement	568	07/01/2014	120	$221,672	$30,127	T&D
427	1060 - New Pipeline/Pipeline Replacement	570	07/01/2014	600	$97,723	$108,906	T&D
428	1060 - New Pipeline/Pipeline Replacement	575	07/01/2014	600	$29,414	$32,780	T&D

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429	1060 - New Pipeline/Pipeline Replacement	579	07/01/2014	600	$344,656	$384,096	T&D
430	1060 - New Pipeline/Pipeline Replacement	580	07/01/2014	600	$1,150	$1,282	T&D
431	1060 - New Pipeline/Pipeline Replacement	583	07/01/2014	120	$139,511	$18,960	T&D
432	1060 - New Pipeline/Pipeline Replacement	589	07/01/2014	600	$151,724	$169,087	T&D
433	1060 - New Pipeline/Pipeline Replacement	590	07/01/2014	600	$34,489	$38,436	T&D
434	1060 - New Pipeline/Pipeline Replacement	6	04/05/1998	360	$11,418	$4,141	T&D
435	1060 - New Pipeline/Pipeline Replacement	66	01/01/1998	120	$271	$0	T&D
436	1060 - New Pipeline/Pipeline Replacement	67	01/01/1998	120	$325	$0	T&D
437	1060 - New Pipeline/Pipeline Replacement	68	01/01/1998	120	$223	$0	T&D
438	1060 - New Pipeline/Pipeline Replacement	69	01/01/1998	120	$257	$0	T&D
439	1060 - New Pipeline/Pipeline Replacement	72	01/01/1998	120	$567	$0	T&D
440	1060 - New Pipeline/Pipeline Replacement	75	01/01/1999	120	$3,149	$0	T&D
441	1060 - New Pipeline/Pipeline Replacement	79	03/01/1999	120	$262	$0	T&D
442	1060 - New Pipeline/Pipeline Replacement	80	10/01/1999	120	$125	$0	T&D
443	1060 - New Pipeline/Pipeline Replacement	81	01/01/2000	120	$123	$0	T&D
444	1060 - New Pipeline/Pipeline Replacement	82	01/01/2000	120	$220	$0	T&D
445	1060 - New Pipeline/Pipeline Replacement	83	05/01/2000	120	$1,693	$0	T&D
446	1060 - New Pipeline/Pipeline Replacement	84	06/01/2000	120	$247	$0	T&D
447	1060 - New Pipeline/Pipeline Replacement	85	06/01/2000	120	$1,031	$0	T&D
448	1060 - New Pipeline/Pipeline Replacement	86	07/01/1999	120	$701	$0	T&D
449	1060 - New Pipeline/Pipeline Replacement	87	08/01/1999	120	$97	$0	T&D
450	1060 - New Pipeline/Pipeline Replacement	88	10/01/1999	120	$1,630	$0	T&D
451	1060 - New Pipeline/Pipeline Replacement	89	05/01/1999	120	$10,906	$0	T&D
452	1060 - New Pipeline/Pipeline Replacement	91	06/01/1999	120	$1,594	$0	T&D
453	1060 - New Pipeline/Pipeline Replacement	99	08/31/2000	120	$167	$0	T&D
454	1061 - Transmission and Distribution	00000684	12/31/2017	360	$12,501	$12,672	T&D
455	1061 - Transmission and Distribution	00000685	06/27/2018	360	$16,175	$16,239	T&D
456	1061 - Transmission and Distribution	00000701	02/27/2018	600	$13,138	$14,140	T&D
457	1061 - Transmission and Distribution	00000703	01/31/2018	600	$220,330	$236,687	T&D
458	1061 - Transmission and Distribution	00000711	04/25/2018	600	$11,339	$12,249	T&D
459	1061 - Transmission and Distribution	00000712	12/05/2017	600	$226,898	$250,651	T&D
460	1061 - Transmission and Distribution	00000713	12/05/2017	600	$9,183	$10,145	T&D
461	1061 - Transmission and Distribution	00000716	03/31/2018	600	$2,376,375	$2,562,340	T&D

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462	1061 - Transmission and Distribution	00000717	03/31/2018	360	$326,592	$324,607	T&D
463	1061 - Transmission and Distribution	00000723	07/01/2017	60	$166,807	$0	T&D
464	1061 - Transmission and Distribution	00000725	07/01/2017	600	$23,472	$25,638	T&D
465	1061 - Transmission and Distribution	00000760	05/31/2019	360	$20,791	$21,218	T&D
466	1061 - Transmission and Distribution	00000800	06/30/2020	360	$11,683	$12,221	T&D
467	1061 - Transmission and Distribution	00000801	06/30/2020	360	$27,321	$28,580	T&D
468	1062 - Non-Complex Pipeline	455	02/10/2009	600	$35,000	$38,825	T&D
469	1062 - Non-Complex Pipeline	456	06/09/2009	600	$17,826	$19,959	T&D
470	1062 - Non-Complex Pipeline	461	09/08/2009	600	$275,760	$310,900	T&D
471	1062 - Non-Complex Pipeline	462	04/13/2010	600	$46,475	$51,855	T&D
472	1062 - Non-Complex Pipeline	513	07/13/2010	600	$57,334	$64,405	T&D
473	1062 - Non-Complex Pipeline	514	10/12/2010	600	$5,000	$5,655	T&D
474	1062 - Non-Complex Pipeline	515	04/12/2011	600	$4,000	$4,447	T&D
475	1062 - Non-Complex Pipeline	518	05/25/2012	600	$4,648	$5,179	T&D
476	1062 - Non-Complex Pipeline	543	08/27/2012	600	$5,000	$5,608	T&D
477	1064 - Meters/Hydrants	00000613	04/13/2016	240	$149	$123	Meters
478	1064 - Meters/Hydrants	00000622	06/24/2016	240	$3,331	$2,792	Meters
479	1064 - Meters/Hydrants	00000633	09/30/2015	240	$7,323	$5,957	Meters
480	1064 - Meters/Hydrants	00000634	10/31/2015	240	$5,863	$4,802	Meters
481	1064 - Meters/Hydrants	00000635	11/30/2015	240	$9,130	$7,527	Meters
482	1064 - Meters/Hydrants	00000636	12/31/2015	240	$8,670	$7,196	Meters
483	1064 - Meters/Hydrants	00000637	01/31/2016	240	$7,655	$6,208	Meters
484	1064 - Meters/Hydrants	00000638	02/29/2016	240	$6,380	$5,209	Meters
485	1064 - Meters/Hydrants	00000639	03/31/2016	240	$7,924	$6,512	Meters
486	1064 - Meters/Hydrants	00000640	08/31/2015	240	$17,113	$13,825	Fire
487	1064 - Meters/Hydrants	00000659	06/30/2017	240	$23,600	$20,505	Fire
488	1064 - Meters/Hydrants	00000674	06/30/2017	240	$24,660	$21,426	Fire
489	1064 - Meters/Hydrants	00000676	06/30/2017	240	$296	$257	Fire
490	1064 - Meters/Hydrants	00000678	06/30/2017	240	$70,038	$60,853	Meters
491	1064 - Meters/Hydrants	00000714	06/30/2018	360	$43,884	$44,058	Fire
492	1064 - Meters/Hydrants	00000718	10/06/2017	240	$1,234,251	$1,097,919	Meters
493	1064 - Meters/Hydrants	00000719	06/30/2018	240	$309	$279	Meters
494	1064 - Meters/Hydrants	00000720	06/30/2018	240	$82,259	$74,326	Meters

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
495	1064 - Meters/Hydrants	00000721	06/30/2018	240	$732,499	$661,861	Meters
496	1064 - Meters/Hydrants	00000756	06/30/2019	240	$265,949	$251,347	Meters
497	1064 - Meters/Hydrants	00000757	06/30/2019	240	$218,651	$206,645	Fire
498	1064 - Meters/Hydrants	00000790	06/30/2020	240	$158,033	$156,130	Fire
499	1064 - Meters/Hydrants	00000799	06/30/2020	180	$37,880	$35,222	Meters
500	1064 - Meters/Hydrants	00000823	06/30/2021	180	$13,577	$12,925	Meters
501	1064 - Meters/Hydrants	00000824	06/30/2021	240	$56,915	$56,264	Fire
502	1064 - Meters/Hydrants	00000841	06/30/2022	240	$161,374	$157,077	Fire
503	1064 - Meters/Hydrants	00000852	06/30/2023	180	$24,929	$24,929	Meters
504	1064 - Meters/Hydrants	00000853	06/30/2023	240	$44,023	$44,023	Fire
505	1064 - Meters/Hydrants	149	01/01/1992	360	$3,193	$0	Fire
506	1064 - Meters/Hydrants	231	10/01/1999	360	$50	$23	Fire
507	1064 - Meters/Hydrants	569	07/01/2014	180	$121,892	$66,264	Fire
508	1064 - Meters/Hydrants	571	05/27/2015	180	$18,612	$11,397	Meters
509	1064 - Meters/Hydrants	572	06/25/2015	180	$7,521	$4,661	Meters
510	1064 - Meters/Hydrants	573	07/01/2014	180	$171,907	$93,453	Meters
511	1065 - Buildings/Structures	00000641	10/31/2015	120	$9,889	$3,064	General
512	1065 - Buildings/Structures	00000642	07/01/2015	240	$687,956	$548,185	General
513	1065 - Buildings/Structures	00000675	03/04/2017	120	$8,610	$4,008	General
514	1065 - Buildings/Structures	00000770	06/30/2020	120	$12,650	$10,292	General
515	1065 - Buildings/Structures	00000771	10/16/2019	120	$5,676	$4,247	General
516	1065 - Buildings/Structures	00000772	06/17/2020	120	$4,550	$3,702	General
517	1065 - Buildings/Structures	00000773	06/30/2020	240	$154,073	$152,218	General
518	1065 - Buildings/Structures	00000774	11/14/2019	60	$9,950	$3,330	General
519	1065 - Buildings/Structures	00000802	06/30/2020	240	$10,266	$10,142	General
520	1065 - Buildings/Structures	00000825	09/30/2020	180	$18,335	$17,404	General
521	1065 - Buildings/Structures	00000826	10/31/2020	120	$23,420	$19,962	General
522	1065 - Buildings/Structures	00000833	02/16/2022	120	$163,432	$145,126	General
523	1065 - Buildings/Structures	198	01/01/1993	360	$1,100	$0	General
524	1065 - Buildings/Structures	3	06/30/1991	360	$144,177	$0	General
525	1065 - Buildings/Structures	301	04/29/2004	600	$9,470	$10,939	General
526	1065 - Buildings/Structures	397	11/30/2007	120	$7,580	$0	General
527	1065 - Buildings/Structures	463	01/26/2010	180	$11,688	$1,869	General

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
528	1065 - Buildings/Structures	591	07/01/2014	60	$135,470	$0	General
529	1066 - Vehicles	00000655	10/31/2016	60	$30,483	$0	Maintenance
530	1066 - Vehicles	00000656	09/14/2016	120	$14,661	$6,142	Maintenance
531	1066 - Vehicles	00000657	11/15/2016	60	$22,528	$0	Maintenance
532	1066 - Vehicles	00000686	10/31/2017	120	$213,772	$114,980	Maintenance
533	1066 - Vehicles	00000687	04/12/2018	60	$29,161	$0	Maintenance
534	1066 - Vehicles	00000688	04/12/2018	60	$27,856	$0	Maintenance
535	1066 - Vehicles	00000689	01/16/2018	60	$28,844	$0	Maintenance
536	1066 - Vehicles	00000761	12/17/2018	60	$27,925	$3,364	Maintenance
537	1066 - Vehicles	00000762	12/05/2018	60	$25,755	$3,103	Maintenance
538	1066 - Vehicles	00000763	12/05/2018	60	$25,755	$3,103	Maintenance
539	1066 - Vehicles	00000764	05/07/2019	60	$5,626	$1,219	Maintenance
540	1066 - Vehicles	00000791	10/15/2019	180	$157,846	$140,892	Maintenance
541	1066 - Vehicles	00000792	01/10/2020	60	$25,995	$9,568	Maintenance
542	1066 - Vehicles	00000793	01/10/2020	60	$25,945	$9,549	Maintenance
543	1066 - Vehicles	00000794	01/10/2020	60	$29,812	$10,973	Maintenance
544	1066 - Vehicles	00000804	10/15/2019	180	$15,000	$13,389	Maintenance
545	1066 - Vehicles	00000834	08/01/2021	120	$225,495	$200,213	Maintenance
546	1066 - Vehicles	00000839	08/01/2021	60	$187,209	$126,807	Maintenance
547	1066 - Vehicles	00000856	06/15/2023	60	$70,109	$70,109	Maintenance
548	1066 - Vehicles	00000857	11/22/2022	60	$34,476	$31,203	Maintenance
549	1066 - Vehicles	367	04/26/2006	120	$14,056	$0	Maintenance
550	1066 - Vehicles	411	12/26/2007	60	$61,296	$0	Maintenance
551	1066 - Vehicles	536	11/26/2012	60	$135,986	$0	Maintenance
552	1066 - Vehicles	597	11/25/2014	120	$19,059	$3,670	Maintenance
553	1067 - Software/Telemetry/Mapping/Communications	00000623	06/30/2016	120	$41,250	$15,953	General
554	1067 - Software/Telemetry/Mapping/Communications	00000625	06/30/2016	120	$39,170	$15,149	General
555	1067 - Software/Telemetry/Mapping/Communications	00000643	06/30/2016	120	$100,090	$38,709	General
556	1067 - Software/Telemetry/Mapping/Communications	00000644	06/30/2016	120	$148,073	$57,266	General
557	1067 - Software/Telemetry/Mapping/Communications	00000661	06/30/2017	120	$131,558	$65,317	General
558	1067 - Software/Telemetry/Mapping/Communications	00000690	06/30/2018	60	$13,267	$0	General
559	1067 - Software/Telemetry/Mapping/Communications	00000715	09/25/2017	120	$30,693	$16,191	General
560	1067 - Software/Telemetry/Mapping/Communications	00000766	06/30/2019	60	$30,891	$7,299	General

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
561	1067 - Software/Telemetry/Mapping/Communications	00000795	05/21/2020	120	$125,060	$100,539	General
562	1067 - Software/Telemetry/Mapping/Communications	00000822	05/31/2021	120	$24,807	$21,572	General
563	1067 - Software/Telemetry/Mapping/Communications	00000835	06/30/2022	120	$44,575	$41,105	General
564	1067 - Software/Telemetry/Mapping/Communications	00000838	02/28/2022	60	$162,531	$122,122	General
565	1067 - Software/Telemetry/Mapping/Communications	00000855	06/30/2023	60	$27,987	$27,987	General
566	1067 - Software/Telemetry/Mapping/Communications	00000858	06/30/2023	60	$36,890	$36,890	General
567	1067 - Software/Telemetry/Mapping/Communications	476	01/26/2010	120	$10,506	$0	General
568	1067 - Software/Telemetry/Mapping/Communications	504	08/26/2010	120	$2,501	$0	General
569	1067 - Software/Telemetry/Mapping/Communications	505	05/26/2011	120	$1,981	$0	General
570	1067 - Software/Telemetry/Mapping/Communications	585	07/01/2014	180	$414,313	$225,231	General
571	1067 - Software/Telemetry/Mapping/Communications	598	07/01/2014	180	$226,638	$123,206	General
572	1067 - Software/Telemetry/Mapping/Communications	607	07/01/2014	60	$33,706	$0	General
573	1068 - General Office	00000645	11/30/2015	120	$3,988	$1,280	General
574	1068 - General Office	00000647	04/30/2016	36	$2,988	$0	General
575	1068 - General Office	00000662	12/14/2016	240	$11,400	$9,920	General
576	1068 - General Office	00000691	03/23/2018	36	$9,734	$0	General
577	1068 - General Office	00000796	10/18/2019	60	$11,765	$3,706	General
578	1068 - General Office	00000797	10/24/2019	36	$23,322	$0	General
579	1068 - General Office	00000798	04/30/2020	36	$27,510	$0	General
580	1068 - General Office	00000840	06/01/2022	60	$22,897	$18,377	General
581	1068 - General Office	10	05/01/1992	120	$637	$0	General
582	1068 - General Office	593	12/23/2014	60	$980	$0	General
583	1068 - General Office	596	07/01/2014	60	$5,573	$0	General
584	1069 - Shop	00000648	02/29/2016	60	$9,208	$0	General
585	1069 - Shop	272	01/01/2002	120	$4,401	$0	General
586	1069 - Shop	286	02/28/2003	120	$5,650	$0	General
587	1069 - Shop	287	03/31/2003	120	$1,873	$0	General
588	1069 - Shop	305	11/25/2003	120	$2,101	$0	General
589	1069 - Shop	328	12/31/2004	120	$661	$0	General
590	1069 - Shop	364	02/09/2006	120	$1,116	$0	General
591	1069 - Shop	365	06/27/2006	120	$7,089	$0	General
592	1069 - Shop	374	07/26/2006	60	$380	$0	General
593	1069 - Shop	385	06/01/2007	120	$51,296	$0	General

Line	Department	Asset ID	Acquired Date	Asset Life (Months)	Original Cost	RCLD	Cost Function
594	1069 - Shop	401	12/26/2007	60	$3,566	$0	General
595	1069 - Shop	405	07/26/2007	60	$8,119	$0	General
596	1069 - Shop	406	08/28/2007	60	$3,011	$0	General
597	1069 - Shop	407	09/25/2007	60	$2,590	$0	General
598	1069 - Shop	408	09/25/2007	60	$4,171	$0	General
599	1069 - Shop	410	10/25/2007	60	$2,566	$0	General
600	1069 - Shop	428	01/31/2003	120	$2,490	$0	General
601	1069 - Shop	481	06/30/2010	60	$2,512	$0	General
602	1069 - Shop	57	08/01/1996	120	$4,054	$0	General
603	1069 - Shop	71	01/01/1998	120	$1,911	$0	General
604	1115 - Treatment Plants (not specified)	134	07/01/1991	360	$2,613	$0	Treatment
605	1115 - Treatment Plants (not specified)	135	09/01/1991	360	$928	$0	Treatment
606	1115 - Treatment Plants (not specified)	136	01/01/1991	360	$463	$0	Treatment
607	1115 - Treatment Plants (not specified)	137	01/01/1991	360	$13,931	$0	Treatment
608	1115 - Treatment Plants (not specified)	138	01/01/1991	360	$2,276	$0	Treatment
609	1115 - Treatment Plants (not specified)	139	01/01/1991	360	$1,105	$0	Treatment
610	1115 - Treatment Plants (not specified)	140	01/01/1991	360	$1,548	$0	Treatment
611	1115 - Treatment Plants (not specified)	141	01/01/1991	360	$792	$0	Treatment
612	1115 - Treatment Plants (not specified)	142	01/01/1991	360	$24,951	$0	Treatment
613	1115 - Treatment Plants (not specified)	143	01/01/1992	360	$381	$0	Treatment
614	1115 - Treatment Plants (not specified)	144	01/01/1992	360	$4,050	$0	Treatment
615	1115 - Treatment Plants (not specified)	145	01/01/1992	360	$3,109	$0	Treatment
616	1115 - Treatment Plants (not specified)	146	01/01/1992	360	$4,770	$0	Treatment
617	1112 - Land	00000827	12/15/2020	0	$413,761	$480,916	General
618	1112 - Land	1	06/30/1991	0	$136,922	$377,406	General
619	1112 - Land	2	08/15/1996	0	$23,690	$56,177	General
620	1113 - Easements	00000842	05/31/2022	0	$76,860	$78,751	General
621	1113 - Easements	00000844	06/30/2022	0	$62,465	$64,002	General
622	1113 - Easements	00000851	06/30/2023	0	$19,000	$19,000	General
623	1113 - Easements	479	01/08/2010	0	$2,053	$3,109	General
624	1112 - Land		01/01/2020	0	$1,886,000	$2,192,109	Local Supply
625	**Total - Capital Assets**				**$98,105,352**	**$86,879,063**	

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