OLIVENHAIN MUNICIPAL WATER DISTRICT

Water Rate Study

FINAL DRAFT / AUGUST 16, 2024

OLIVENHAIN
Municipal Water District

RAFTELIS

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August 16, 2024

Ms. Kimberly A. Thorner
General Manager
Olivenhain Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92029

Subject: 2025 Water Rate Study Report

Dear Ms. Thorner,

Raftelis is pleased to provide this 2025 Water Rate Study Report (Report) to the Olivenhain Municipal Water District (District). The overall goal of the study was to develop updated water rates for the District for FY 2025 that are fair and equitable and in compliance with Proposition 218 requirements.

The major objectives of the study include the following:

- Develop a five-year financial plan through FY 2029 that sufficiently funds the District's operating costs, debt obligations, and necessary capital expenditures
- Review and revise as necessary the current water rate structure
- Perform a cost-of-service analysis to equitably allocate costs across customer classes
- Propose equitable water rates for FY 2025 and rates for the subsequent four years subject to pass-through of water costs and inflation

This Report summarizes the key findings and recommendations related to the development of the financial plan and proposed water rates. It has been a pleasure working with you and we would like to thank Ms. Rainy Selamat, Mr. Jared Graffam, and Ms. Georgeanna Clark for the support provided to Raftelis during this study.

Sincerely,

Sudhir Pardiwala
Executive Vice President

Katelyn Milius
Senior Consultant

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1. Executive Summary

1.1. Study Overview

Olivenhain Municipal Water District (District) provides water service to a population of approximately 86,000 across a 48 square mile service area in northern San Diego County. The District's potable water supply is provided by the San Diego County Water Authority (SDCWA), of which the District has been a member since 1960. The District's potable water system consists of a water treatment plant with 34 MGD of capacity, 13 storage reservoirs, 7 pump stations, and over 400 miles of water pipelines. Additionally, the District operates a water reclamation facility that produces up to 2 MGD of recycled water. The District also purchases recycled water from the City of San Diego, Vallecitos Water District, San Elijo Joint Powers Authority, and Rancho Santa Fe Community Services District. The District's recycled water distribution system includes 5 storage reservoirs, 3 pump stations, and 46 miles of recycled water pipelines that are used to deliver recycled water to non-potable landscape/irrigation water users.

The District engaged Raftelis in 2024 to conduct a comprehensive cost of service water rate study to establish proposed water rates for fiscal years (FY) 2025 to 2029. The District's existing water rate structure consists of the following charges:

1. **OMWD System Access Charge:** This fixed monthly meter charge varies by water meter size and recovers a portion of the District's fixed costs.
2. **SDCWA Infrastructure Access Charge:** All water meters, excluding construction, fire, and recycled water meters, are subject to a monthly SDCWA Infrastructure Access Charge, which varies by water meter size. SDCWA assesses the Infrastructure Access Charge to recover a portion of debt service costs associated with the construction of county-wide water infrastructure projects. The SDCWA Infrastructure Access Charge is treated as a pass-through charge by the District, as charges paid by the District to SDCWA are directly recouped from the District's customers.
3. **Volumetric Rate:** The District assesses volumetric rates per unit (1 unit = 1 hundred cubic feet (HCF)) of water delivered each month. Volumetric water rates vary by customer class and by Water Demand Reduction level. Domestic customers, including single family and multi-family have a four-tier volumetric rate structure, while irrigation customers have a two-tier structure. Agricultural, commercial, construction, and recycled water customers have unique uniform rates.
4. **Fire Meter Charge:** Meters dedicated to automatic fire sprinkler service are not subject to the three charges listed above but are assessed a fixed monthly Fire Service Charge, which varies by meter size. Customers are only assessed this charge if they have a dedicated water meter for automatic fire sprinkler service.

The major objectives of the water rate study include the following:

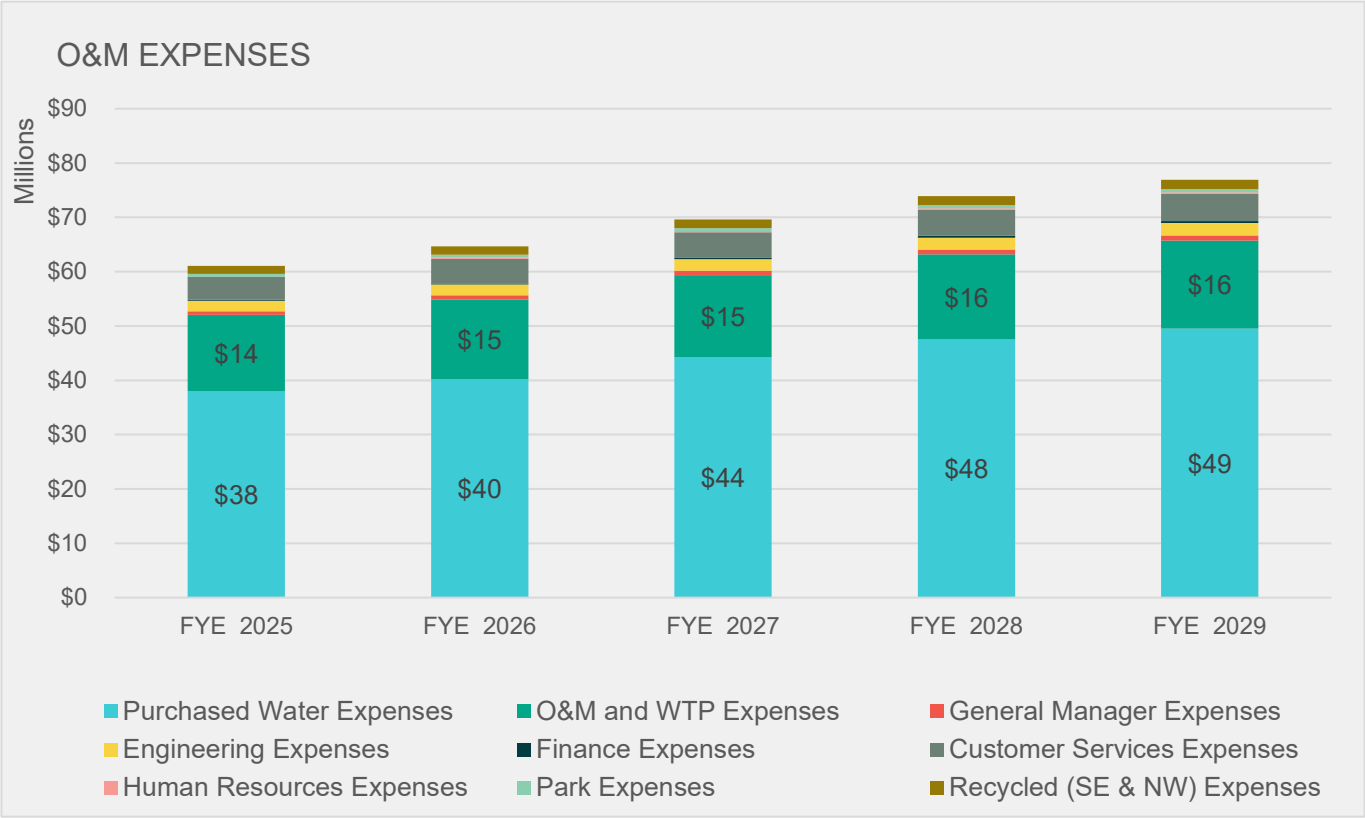
- Develop a five-year financial plan through FY 2029 that generates sufficient revenues to fund the District's operating costs, debt obligations, and necessary capital expenditures
- Review and revise as necessary the current water rate structure
- Perform a cost of service analysis to equitably allocate costs across customer classes in compliance with Proposition 218
- Propose equitable water rates for FY 2025 and for the subsequent four years subject to pass-through increases for water costs and inflation.

1.2. Financial Plan

Before beginning the rate design process, Raftelis first determined the revenue adjustments needed to adequately fund the District's various expenses and to provide fiscal stability over the five-year study period. Raftelis projected the revenue requirements, including operations and maintenance (O&M) expenses, capital improvement plan (CIP) expenditures, debt service costs, and reserve requirements over the study period.

O&M expenses include the cost of purchasing water, operating and maintaining facilities, staff-related costs, and other administrative costs. The O&M projections are based on the District's fiscal year (FY) 2025 budget and are escalated in subsequent years by corresponding inflation factors (except water supply costs which are calculated separately). Water supply costs, which constitute over 60 percent of total O&M expenses, are projected to increase based on anticipated increases in SDCWA rates. A summary of projected O&M expenses is shown below in **Figure 1-1**.

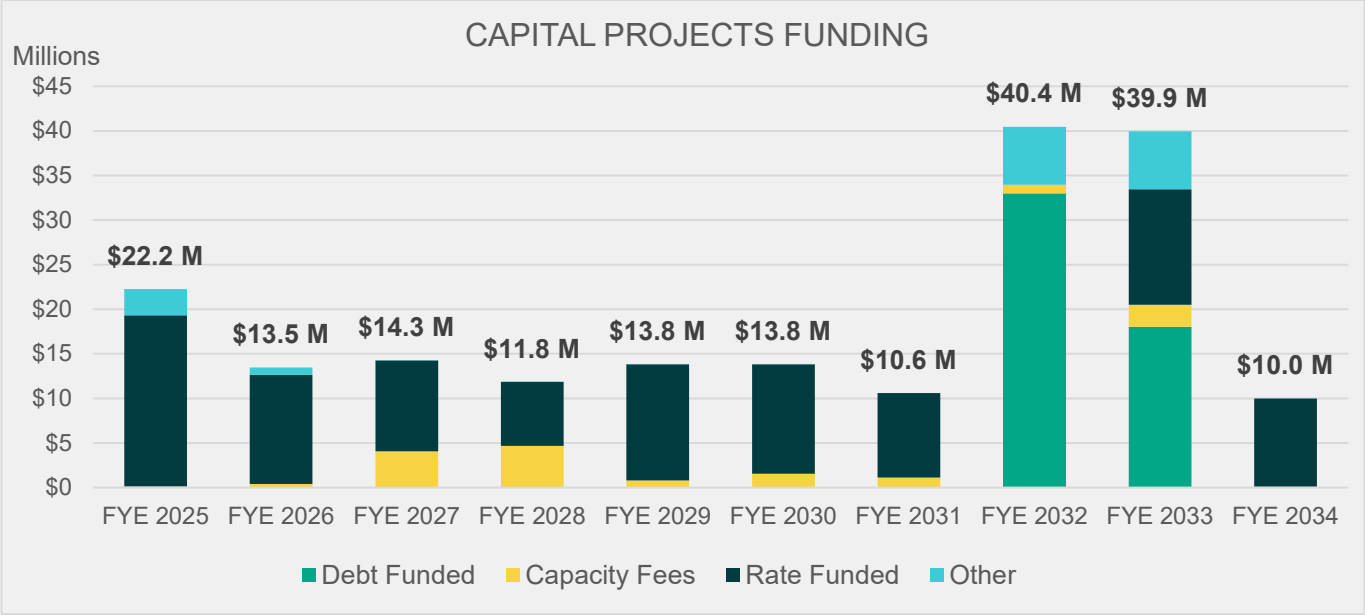
Figure 1-1: Projected O&M Expenses



The District has developed a comprehensive water Capital Improvement Program (CIP) to address current water system needs. The total estimated water CIP for the study period of FY 2025 to FY 2029 is $76.66 million. This study included a 10-year view of the debt and capital project funding, including a $51 million revenue bond issue projected in FY 2032 for the San Dieguito Valley Groundwater Desalination Plant. However, the five-year CIP plan is projected to be funded from rate revenues and capacity fees. The District's existing debt service payments are approximately $5 million annually and are projected to decrease to approximately $2 million in FY 2029. The 10-year CIP by funding source is shown in **Figure 1-2**. Other

revenues include anticipated grant funds, a portion of the property tax revenues, recycled water capacity fee revenues, and proceeds from the sale of the District's parcels.

Figure 1-2: 10-year CIP by Funding Source



The proposed financial plan assumes minimal growth throughout the study period of 50 domestic accounts per year (assumed to be 3/4-inch water meters) and a few larger meters corresponding with planned development in the service area. Per account, water usage is assumed to remain constant over the study period. Under such assumptions, Raftelis proposes the following revenue adjustments[1] over the study period in order to ensure that District exceeds required debt coverage and minimum reserve levels. The proposed revenue adjustment will be effective with water consumption beginning on January 1, 2025. Subsequent years of the study period are estimated revenue adjustments based on expected pass-through rate increases. Actual rate adjustments for FY 2026-2029 will be based on San Diego-Carlsbad Consumer Price Index for All Urban Consumers (CPI) and potable and recycled water supply cost pass-throughs.

[1] A revenue adjustment represents the percent increase in total water rate revenues resulting from a water rate increase.

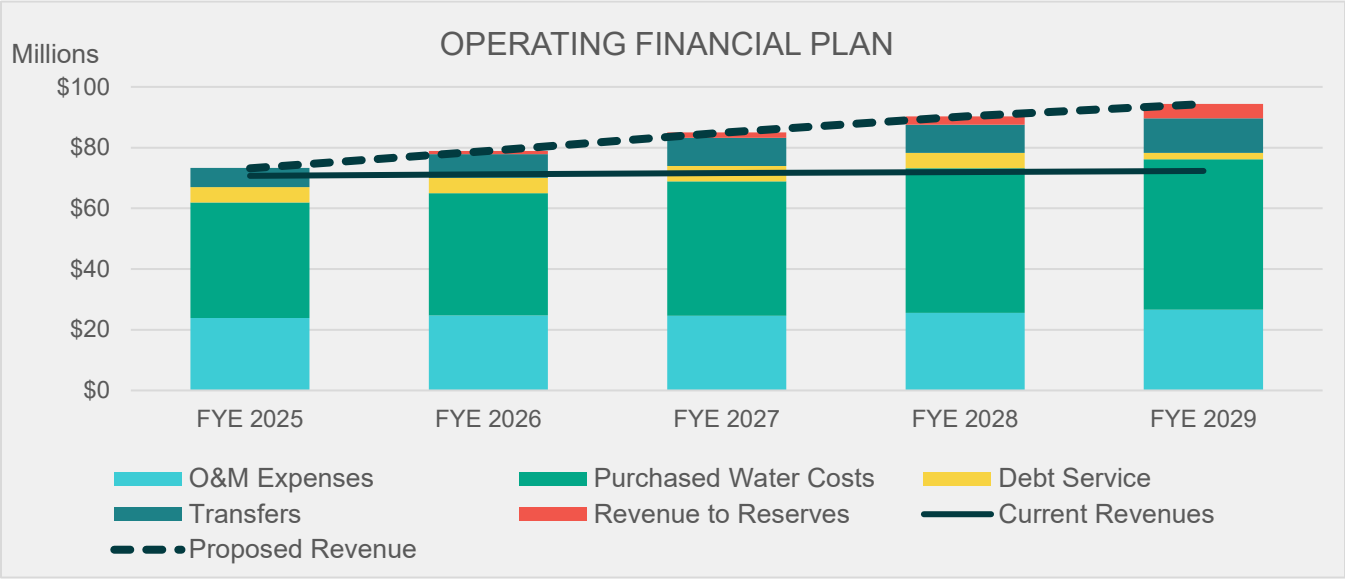
Table 1-1: 5-Year Revenue Adjustments

	FY 2025 Proposed	FY 2026 Estimated	FY 2027 Estimated	FY 2028 Estimated	FY 2029 Estimated
System Access Charges (Inflation/Wholesale Pass-Through)	8.0%	8.0%	8.0%	5.0%	4.0%
Fire Meter Charges	5.0%	6.0%	6.0%	5.0%	4.0%
Commodity Charges including Inflation/Wholesale Pass-Through	8.0%	8.0%	8.0%	5.0%	4.0%
Infrastructure Access Charges SDCWA IAC Pass-Through*	3.2%	8.5%	11.5%	4.0%	4.0%
TOTAL REVENUE ADJUSTMENT	**7.9%**	**8.0%**	**8.1%**	**5.0%**	**4.0%**

*Based on projected increases from SDCWA

Figure 1-3 shows the proposed financial plan that incorporates the proposed revenue adjustments above. Operating Fund revenue requirements are represented by stacked bars. Projected revenues in the absence of any rate increase are represented by the solid line, while projected revenues under the proposed revenue adjustments are represented by the dashed line. **Figure 1-3** demonstrates the need for revenue adjustments, as current rates will not generate sufficient revenues to cover the District's operating revenue requirements.

Figure 1-3: Proposed Financial Plan



1.3. Proposed Water Rates

To calculate fair and equitable rates so that customers pay in proportion to the cost of providing service, Raftelis performed a cost of service analysis in accordance with industry standard principles outlined by the American Water Works Association (AWWA) in its *Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1 Sixth Edition* (M1 Manual). The cost of service analysis considers water usage characteristics of each customer class and tier in order to allocate costs in proportion to the burden each customer class places on the water system.

Raftelis recommends that the District maintains its existing water rate structure. Proposed and estimated system access charges, also called fixed charges, are shown below in **Table 1-2** and proposed volumetric rates are shown in **Table 1-3**. FY 2025 proposed rates were established based on the cost of service analysis. Estimated rates from FY 2026 to FY 2029 were established by increasing the prior fiscal year's proposed or estimated rates by the corresponding revenue adjustment from **Table 1-1**. FY 2026 through FY 2029 are not proposed but estimated because they will ultimately be based on potable and recycled water supply pass-through costs and pass-through costs based on CPI. Fire Meter charges are not dependent on pass-through rates; therefore, they are set from the proposed revenue adjustment. All rates are proposed to become effective with water consumption beginning on January 1 of each year.

Table 1-2: Proposed Monthly Fixed Charges

Effective Date/ Meter Size	Current	January 1, 2025 Proposed	January 1, 2026 Estimated	January 1, 2027 Estimated	January 1, 2028 Estimated	January 1, 2029 Estimated
Monthly OMWD System Access Charge						
5/8"	$34.25	$37.16	$40.14	$43.36	$45.53	$47.36
3/4"	$44.79	$48.53	$52.42	$56.62	$59.46	$61.84
1"	$76.41	$82.64	$89.26	$96.41	$101.24	$105.29
1-1/2"	$118.54	$128.11	$138.36	$149.43	$156.91	$163.19
2"	$185.30	$200.11	$216.12	$233.41	$245.09	$254.90
2-1/2"	$336.33	$363.05	$392.10	$423.47	$444.65	$462.44
3"	$367.94	$397.16	$428.94	$463.26	$486.43	$505.89
4"	$610.30	$658.63	$711.33	$768.24	$806.66	$838.93
6"	$1,274.14	$1,374.83	$1,484.82	$1,603.61	$1,683.80	$1,751.16
8"	$2,292.73	$2,473.76	$2,671.67	$2,885.41	$3,029.69	$3,150.88
Monthly SDCWA Infrastructure Access Charge*						
5/8"	$4.41	$4.55	TBD	TBD	TBD	TBD
3/4"	$4.41	$4.55	TBD	TBD	TBD	TBD
1"	$8.39	$8.65	TBD	TBD	TBD	TBD
1-1/2"	$13.70	$14.11	TBD	TBD	TBD	TBD
2"	$22.09	$22.75	TBD	TBD	TBD	TBD
2-1/2"	$41.10	$42.32	TBD	TBD	TBD	TBD
3"	$45.08	$46.41	TBD	TBD	TBD	TBD
4"	$75.58	$77.81	TBD	TBD	TBD	TBD
6"	$159.10	$163.80	TBD	TBD	TBD	TBD
8"	$287.29	$295.75	TBD	TBD	TBD	TBD
***Note: A fixed charge imposed by SDCWA. Subject to change every year.**						

Effective Date	Current	January 1, 2025 Proposed	January 1, 2026 Proposed	January 1, 2027 Proposed	January 1, 2028 Proposed	January 1, 2029 Proposed
Monthly Fire Meter Charges						
5/8"	$5.85	$6.13	$6.50	$6.89	$7.24	$7.53
3/4"	$5.85	$6.13	$6.50	$6.89	$7.24	$7.53
1"	$6.57	$6.87	$7.29	$7.73	$8.12	$8.45
1-1/2"	$7.54	$7.84	$8.32	$8.82	$9.27	$9.65
2"	$9.08	$9.39	$9.96	$10.56	$11.09	$11.54
2-1/2"	$12.55	$12.89	$13.67	$14.50	$15.23	$15.84
3"	$13.27	$13.62	$14.44	$15.31	$16.08	$16.73
4"	$18.85	$19.24	$20.40	$21.63	$22.72	$23.63
6"	$34.13	$34.63	$36.71	$38.92	$40.87	$42.51
8"	$57.56	$58.23	$61.73	$65.44	$68.72	$71.47

Table 1-3: Proposed Volumetric Rates per Unit

Effective Date	Current	January 1, 2025 Proposed	January 1, 2026 Estimated	January 1, 2027 Estimated	January 1, 2028 Estimated	January 1, 2029 Estimated
Volumetric Rates ($/unit[1])						
Domestic[2]						
Tier 1 (0-6 units)	$4.24	$4.49	$4.85	$5.24	$5.51	$5.74
Tier 2 (7-23 units)	$6.14	$6.53	$7.06	$7.63	$8.02	$8.35
Tier 3 (24-80 units)	$6.85	$7.32	$7.91	$8.55	$8.98	$9.34
Tier 4 (80 + units)	$8.14	$8.27	$8.94	$9.66	$10.15	$10.56
Agriculture	$6.75	$6.97	$7.53	$8.14	$8.55	$8.90
Agriculture w/ Credit[3]	$5.41	$5.62	TBD	TBD	TBD	TBD
Commercial	$5.78	$6.20	$6.70	$7.24	$7.61	$7.92
Irrigation						
Tier 1: "B" Base	$6.50	$6.98	$7.54	$8.15	$8.56	$8.91
Tier 2: "C" Over Base	$6.94	$7.87	$8.50	$9.18	$9.64	$10.03
Construction	$8.21	$8.67	$9.37	$10.12	$10.63	$11.06
Recycled Water	$4.29	$4.68	$5.06	$5.47	$5.75	$5.98

[1] Customers are billed on a per unit of water basis, 1 unit = 1 HCF
[2] Domestic includes single-family and multi-family customers. Multi-family tiers apply per dwelling unit.
[3] Note: Agriculture w/ Credit rate is updated annually by District staff based on SDCWA charges

Combined Agricultural/Domestic customers
First 23 Units per month: Follow Domestic rate structure.
Over 23 Units per month: Follow Agricultural rate structure.

1.4. Water Demand Reduction Rates

Raftelis updated the District's water demand reduction rates as part of this study. Water demand reduction rates are intended to recover reductions in net water revenues resulting from decreased water sales during times of reduced water demand due to drought, water supply emergencies, or other reasons to ensure the District could still collect sufficient water revenues in order to sustain operations, including meeting its financial obligations. Raftelis developed water demand reduction rates for three distinct stages:

- **10 Percent Demand Reduction** below projected FY 2025 water usage
- **20 Percent Demand Reduction** below projected FY 2025 water usage
- **30 Percent Demand Reduction** below projected FY 2025 water usage

In the event that the District activates its Demand Reduction Rates, customers will be notified in advance of implementation. The District's Demand Reduction Rates would only be implemented by the District's Board of Directors' action under the terms of the District's Water Demand Reduction Condition Ordinance and Water Shortage Contingency Plan.

All customers, excluding Recycled Water customers, are subject to a uniform increase in volumetric rates during each of the demand reduction stages that effectively function as a surcharge. **Table 1-4** shows the proposed FY 2025 volumetric rates at each demand reduction stage.

Table 1-4: Proposed FY 2025 Water Demand Reduction Rates per Unit

CUSTOMER TYPE	BASE RATES 1/1/2025	10% DEMAND REDUCTION ($0.30 Surcharge)	20% DEMAND REDUCTION ($0.69 Surcharge)	30% DEMAND REDUCTION ($1.14 Surcharge)
Domestic				
0-6 Units	$4.49	$4.79	$5.18	$5.63
7-23 Units	$6.53	$6.83	$7.22	$7.67
24-80 Units	$7.32	$7.62	$8.01	$8.46
80 + Units	$8.27	$8.57	$8.96	$9.41
Agricultural	$6.97	$7.27	$7.66	$8.11
Agriculture w/ Credit	$5.62	$5.92	$6.31	$6.76
Commercial	$6.20	$6.50	$6.89	$7.34
Irrigation				
Tier 1	$6.98	$7.28	$7.67	$8.12
Tier 2	$7.87	$8.17	$8.56	$9.01
Construction	$8.67	$8.97	$9.36	$9.81
Recycled Water	$4.68	$4.68	$4.68	$4.68

1.5. Rate Reimbursement Credit

A Rate Reimbursement Credit (RRC) has been proposed to directly offset the volumetric rates. SDCWA's refund is given back to ratepayers in the form of a credit on the cost per unit of water used. The current refund is $0.11, but it is proposed to increase to $0.22 to help offset the rate increases proposed. The $0.22 increase would be applied for FY 2025 and decrease to $0.11 in FY 2026. The funding is proposed to be used over the next two fiscal years. The effect on the proposed rates due to the RRC based on the average residential customer using 23 units of water monthly with ¾" meter is shown in **Table 1-5**. The rates assume no changes in the IAC.

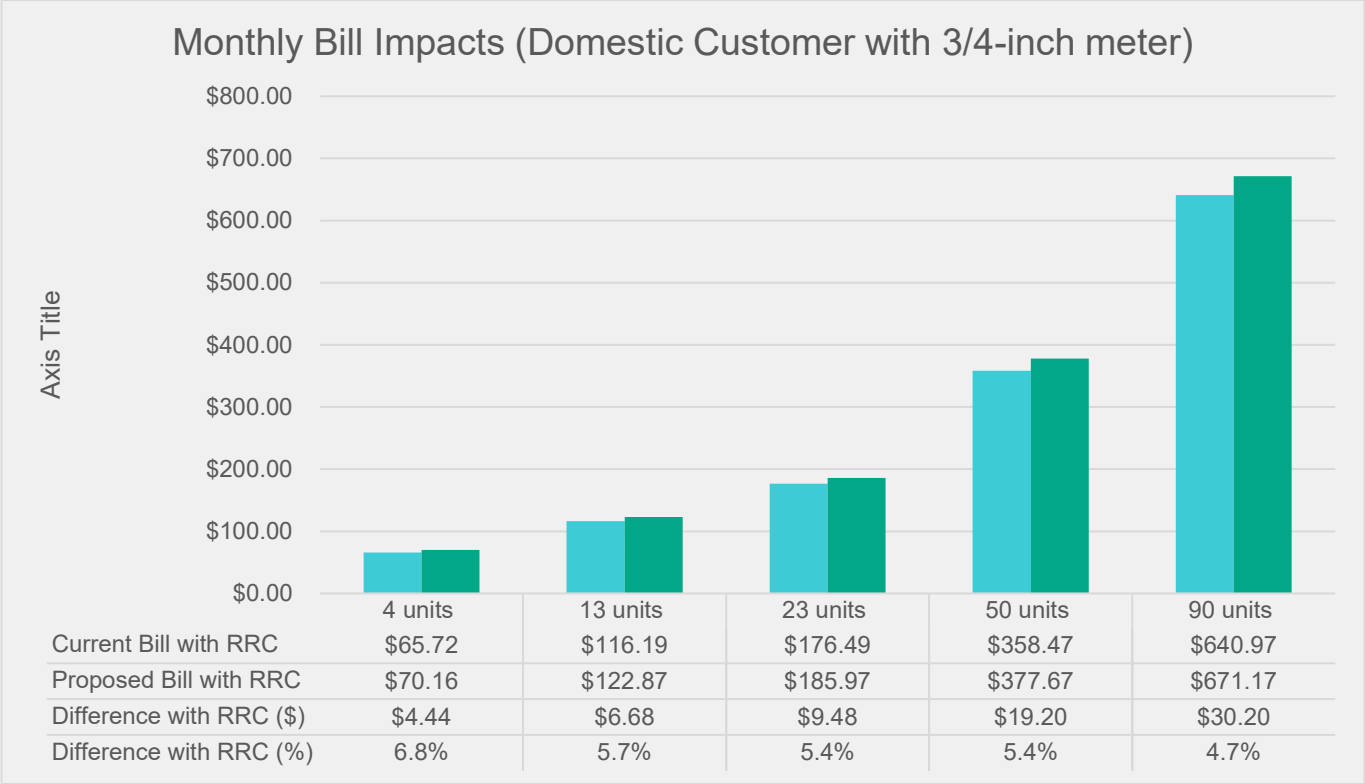
Table 1-5: Projected FY 2025- FY 2027 Average Domestic Bills with RRC

	Current Bill	2025	2026	2027
RRC ($/unit)	$0.11	$0.22	$0.11	$0.00
Average Domestic Bill with RRC	$176.49	$185.97	$203.93	$223.09
Year over Year Difference (%)		*5.4%*	*9.7%*	*9.4%*

1.6. Customer Impacts

Figure 1-4 shows the impacts on a Domestic customer at varying levels of usage, assuming a 3/4" meter. Note that 13 units per month represents the median Domestic monthly usage for FY 2022 and 23 units is the average usage for FY 2022. The bill calculations are shown with the RRC included. The differences listed in the table at the bottom of **Figure 1-4** are between the current and proposed rates.

Figure 1-4: Domestic Bill Impacts at Varying Levels of Usage



	4 units	13 units	23 units	50 units	90 units
Current Bill with RRC	$65.72	$116.19	$176.49	$358.47	$640.97
Proposed Bill with RRC	$70.16	$122.87	$185.97	$377.67	$671.17
Difference with RRC ($)	$4.44	$6.68	$9.48	$19.20	$30.20
Difference with RRC (%)	6.8%	5.7%	5.4%	5.4%	4.7%

2. Introduction

2.1. Water System Overview

Olivenhain Municipal Water District (OMWD or District) is a municipal water district organized and operating pursuant to Water Code Sections 71000 et seq., and was incorporated on April 9, 1959, to develop an adequate water supply for landowners and residents. On June 14, 1960, residents of the District voted to become a member of the San Diego County Water Authority (SDCWA), thus becoming eligible to purchase water transported into San Diego County via the massive aqueducts of SDCWA and its wholesaler, Metropolitan Water District of Southern California. With a service area of over 48 square miles, the District currently serves a population of approximately 86,000 residents in northern San Diego County.

The District treats up to 34 million gallons of water per day at its David C. McCollom Water Treatment Plant (DCMWTP), has a storage capacity of nearly 80 million gallons within 17 storage reservoirs, and maintains a water distribution system with over 400 miles of potable water pipelines. In addition, the District's 4S Ranch Water Reclamation Facility produces up to 2 million gallons per day of recycled water, which is distributed through 46 miles of recycled water pipelines throughout the District for non-potable uses such as irrigation.

The District's existing water rate structure consists of the following charges:

1. **OMWD System Access Charge**: This fixed monthly charge varies by water meter size and is assessed per meter to recover a portion of the District's fixed costs.
2. **SDCWA Infrastructure Access Charge**: All meters excluding construction, fire, and recycled water meters are subject to a monthly SDCWA Infrastructure Access Charge which varies by water meter size. SDCWA assesses the Infrastructure Access Charge to recover a portion of debt service costs associated with the construction of county-wide water infrastructure projects.
3. **Volumetric Rate**: The District assesses volumetric rates per unit (1 unit = one hundred cubic feet (hcf)) of water delivered each month. Volumetric water rates vary by customer class and by Water Demand Reduction level. Domestic customers are subject to a four-tier volumetric rate structure, while irrigation customers are subject to a two-tier volumetric rate structure. Agricultural, commercial, construction, and recycled water customers are subject to unique uniform rates.
4. **Fire Meter Charge:** Meters dedicated to automatic fire sprinkler service are not subject to the three charges listed above but are assessed a fixed monthly Fire Meter Charge, which varies by meter size. Customers are only assessed this charge if they have a dedicated water line for automatic fire sprinkler service.

2.2. Study Objectives

The District engaged Raftelis in 2024 to conduct a water rate study to establish proposed water rates that are compliant with Proposition 218 and consistent with Cost of Service principles. The major objectives of the study include the following:

- Develop a five-year financial plan through FY 2029 that sufficiently funds the District's operating costs, debt obligations, and necessary capital expenditures
- Review and revise as necessary the current water rate structure
- Perform a cost of service analysis to equitably allocate costs across customer classes
- Propose are fair and equitable water rates for FY 2025 that and in compliance with Proposition 218

This Report provides a detailed description of the financial plan development, the cost of service analysis, and the development of the proposed FY 2025 rate schedule and estimated rate schedule for FY 2026 through FY 2029. Assumptions, inputs, and calculations are clearly shown in order to provide a thorough and transparent description of how the proposed water rates were determined.

2.3. Legal Requirements and Rate-Setting Methodology

This water rate study was conducted using industry-standard principles outlined by the American Water Works Association's (AWWA) *Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1 Sixth Edition* (M1 Manual). The general principles of rate structure design and the objectives of the Study are described below.

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

After determining a utility's revenue requirements, the next step is determining the cost of service. Utilizing a public agency's approved budget, financial reports, operating data, and capital improvement plans, a cost of service study generally categorizes the operating system costs by function (e.g. supply, treatment, storage, pumping, distribution/collection, etc.). Asset costs are similarly functionalized to determine the cost of service of the CIP.

After the assets and the costs of operating those assets are properly categorized by function, these "functionalized costs" are allocated first to cost causation components, and then to the various customer classes (e.g., single-family residential, multi-family residential, and commercial) by determining the service characteristics of those classes and the contribution of each to incurred costs such as supply costs, base delivery costs, peaking costs.

Rate design is the final part of the rate-making procedure and uses the revenue requirement and cost of service analysis to determine appropriate rates for each customer class. Rates utilize "rate components" that build-up to rates for commodity charges, and fixed charges, for the various customer classes and meter sizes servicing customers. In the case of inclining tier water rates, the rate components define the cost of service *within* each class of customer, effectively treating each tier as a sub-class and determining the cost to serve each tier.

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

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

1. A property-related charge (such as water rates) imposed by a public agency on a parcel shall not exceed the costs required to provide the property related service.
2. Revenues derived by the charge shall not be used for any purpose other than that for which the charge was imposed.
3. The amount of the charge imposed upon any parcel shall not exceed the proportional cost of service attributable to the parcel.
4. No charge may be imposed for a service unless that service is actually used or immediately available to the owner of property.
5. A written notice of the proposed charge shall be mailed to the record owner of each parcel at least 45 days prior to the public hearing when the agency considers all written protests against the charge.

As stated in AWWA's *M1 Manual*, "water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers." Raftelis follows industry standard rate setting methodologies set forth by the AWWA *M1 Manual* to ensure this Study meets Proposition 218 requirements and creates rates that do not exceed the proportionate cost of providing water services on a parcel basis. The methodology in the M1 Manual is a nationally recognized industry ratemaking standard that courts have recognized is consistent with Proposition 218.

Tiered Rates – "Inclining" tier rate structures (which are synonymous with "increasing" tier rate structures and "tiered" rates) when properly designed and differentiated by customer class meet the requirements of Proposition 218 as long as the tiered rates reasonably reflect the proportionate cost of providing service in each tier.

3. Financial Plan

Section 3 details the development of the five-year financial plan for the District's water utility. This includes the determination of annual revenues required from water rates based on annual cash flow projections. Assumptions and inputs related to projected revenues, operating expenses, and capital expenditures are clearly outlined in the following subsections.

3.1. Existing Water Rates

Currently, District customers pay two types of monthly fixed charges: the OMWD System Access Charge and the SDCWA Infrastructure Access Charge. The OMWD System Access Charge is designed to recover a portion of fixed costs incurred by the District to provide water service. Based on SDCWA's IAC ordinance, the SDCWA Infrastructure Access Charge is assessed by SDCWA to recover a portion of debt service costs associated with the construction of county-wide water infrastructure projects, 80% of SDCWA's operations and maintenance expenses established by SDCWA's Board of Director in the annual budget, and payments to member agencies for generation of reclaimed water. Fixed monthly Fire Meter Charges are levied on water meters dedicated for automatic fire sprinkler service. **Table 3-1** below shows the District's existing monthly rates for each type of fixed charge discussed above.

Table 3-1: Existing Monthly Fixed Charges

Meter Size	OMWD System Access Charge	SDCWA Infrastructure Access Charge	Fire Meter Charge
5/8-inch	$34.25	$4.41	$5.85
3/4-inch	$44.79	$4.41	$5.85
1-inch	$76.41	$8.39	$6.57
1.5-inch	$118.54	$13.70	$7.54
2-inch	$185.30	$22.09	$9.08
2.5-inch	$336.33	$41.10	$12.55
3-inch	$367.94	$45.08	$13.27
4-inch	$610.30	$75.58	$18.85
6-inch	$1,274.14	$159.10	$34.13
8-inch	$2,292.73	$287.29	$57.56

The District recovers its variable costs as well as its remaining fixed costs through Volumetric Rates. Volumetric rates vary by customer class and declared Water Demand Reduction level, and are assessed per unit of water delivered. Domestic customers are charged according to a four-tiered inclining block rate structure, under which the volumetric rate increases as monthly water usage exceeds defined thresholds. Irrigation customers are subject to a two-tiered inclining block rate structure, in which Tier 1 allotments increase with meter size. Agricultural, Commercial, Construction and Recycled customers are subject to distinct uniform volumetric rates. Combined Agricultural/Domestic customers are charged based on the Domestic volumetric rate schedule for the first 23 units of water usage per month and the Agricultural rate

schedule for monthly usage above 23 units. **Table 3-2** below shows the District's existing volumetric rates under the five various Water Demand Reduction levels.

Table 3-2: Existing Volumetric Rates per Unit

Customer Class	Base Rates	Watch/ Level 1 Voluntary	Alert/ Level 2 Mandatory	Critical/ Level 3 Mandatory
Domestic				
Tier 1 (0-6 Units)	$4.24	$4.47	$4.74	$5.09
Tier 2 (7-23 Units)	$6.14	$6.37	$6.64	$6.99
Tier 3 (24-80 units)	$6.85	$7.08	$7.35	$7.70
Tier 4 (80 + units)	$8.14	$8.37	$8.64	$8.99
Agricultural	$6.75	$6.98	$7.25	$7.60
Commercial	$5.78	$6.01	$6.28	$6.63
Irrigation				
Tier 1 (See Table 3-3)	$6.50	$6.73	$7.00	$7.35
Tier 2 (See Table 3-3)	$6.94	$7.17	$7.44	$7.79
Construction	$8.21	$8.44	$8.71	$9.06
Recycled	$4.29	$4.29	$4.29	$4.29

Tier 1 monthly allotments vary by meter size for Irrigation customers and are shown below in **Table 3-3**. Any monthly usage by Irrigation customers above the Tier 1 allotment is billed at the Tier 2 Irrigation rate.

Table 3-3: Tier 1 Monthly Allotments for Irrigation Customers in Units

Meter Size	Winter (Nov 1-Apr 30)	Summer (May 1-Oct 31)
5/8-inch	10	15
3/4-inch	20	30
1-inch	35	50
1.5-inch	50	110
2-inch	100	200
3-inch	200	500
4-inch	600	3,500
6-inch	3,100	11,800
8-inch	5,600	21,300

3.2. Assumptions

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

3.2.1. Inflationary Assumptions

The inflationary assumptions are summarized in **Table 3-4**. General inflation reflects longer-term CPI average inflation. The District provided inflated capital costs by year, so an additional inflation factor was not included.

Table 3-4: Expense and Revenue Escalation Assumptions

Inflation	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
O&M Expenses					
General	3.0%	3.0%	2.0%	2.0%	2.0%
Salary	6.0%	6.0%	4.5%	4.5%	4.5%
Benefits	5.0%	5.0%	4.0%	4.0%	4.0%
Chemicals	6.0%	6.0%	5.0%	5.0%	5.0%
Utilities	5.0%	5.0%	5.0%	5.0%	5.0%
Revenue					
Other Operating Revenues	2.0%	2.0%	2.0%	2.0%	2.0%
Property Tax	2.0%	2.0%	2.0%	2.0%	2.0%
Reserve Interest Rate	3.0%	2.0%	2.0%	1.5%	1.5%

3.2.2. Water Account and Usage Assumptions

District staff provided Raftelis with the number of existing water meters differentiated by customer class as of February of FY 2024 (shown below in **Table** 3-5). Over 93 percent of water meters (excluding Fire Meters) served by the District are classified as Domestic.

Table 3-5: Number of Water Meters by Customer Class (FY 2024)

Meter Size	Domestic	Agri-cultural	Combined Ag/ Domestic	Com-mercial	Irrigation	Con-struction	Recycled	Fire
5/8-inch	1,880	0	0	24	9	0	1	401
3/4-inch	16,280	0	7	76	26	0	1	18
1-inch	2,796	2	21	118	105	17	30	5,464
1.5-inch	497	4	11	140	244	1	116	67
2-inch	149	3	9	70	138	0	162	0
2.5-inch	0	0	0	0	0	38	1	1
3-inch	13	1	0	8	2	0	6	0
4-inch	9	0	1	7	1	0	5	0
6-inch	1	0	0	1	1	0	4	1
8-inch	0	0	0	1	0	0	0	0
Total	**21,625**	**10**	**49**	**445**	**526**	**56**	**326**	**5,952**

Over the five-year study period from FY 2025-FY 2029, the District projects 50 new 3/4-inch Domestic water meters per fiscal year to come online. Other growth accounted for in the model, based on the capacity fee schedule, includes one 1-1/2 inch, 2-inch, and 4-inch meter in FY 2027 and one 2-inch and three 6-inch meters in FY 2028. Based on FY 2024 meter counts and assumed growth, Raftelis projected the number of water meters by fixed charge type (shown below in **Table 3-6**). Note that the OMWD System Access Charge is assessed to all water meters excluding Fire lines, while the SDCWA Infrastructure Access Charge is assessed to all water meters except Construction meters, Recycled Water meters, and Fire lines.

Table 3-6: Number of Water Meters

Meter Size	FY 2024 Actual	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected	FY 2028 Projected	FY 2029 Projected
Meters subject to OMWD System Access Charge						
5/8-inch	1,914	1,914	1,914	1,914	1,914	1,914
3/4-inch	16,390	16,440	16,490	16,540	16,590	16,640
1-inch	3,089	3,089	3,089	3,089	3,089	3,089
1.5-inch	1,013	1,013	1,013	1,014	1,014	1,014
2-inch	531	531	531	532	533	533
2.5-inch	39	39	39	39	39	39
3-inch	30	30	30	30	30	30
4-inch	23	23	23	24	24	24
6-inch	7	7	7	7	10	10
8-inch	1	1	1	1	1	1
Total	**23,037**	**23,087**	**23,137**	**23,190**	**23,244**	**23,294**
Meters subject to SDCWA Infrastructure Access Charge						
5/8-inch	1,913	1,913	1,913	1,913	1,913	1,913
3/4-inch	16,389	16,439	16,489	16,539	16,589	16,639
1-inch	3,042	3,042	3,042	3,042	3,042	3,042
1.5-inch	896	896	896	897	897	897
2-inch	369	369	369	370	371	371

Meter Size	FY 2024 Actual	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected	FY 2028 Projected	FY 2029 Projected
2.5-inch	0	0	0	0	0	0
3-inch	24	24	24	24	24	24
4-inch	18	18	18	19	19	19
6-inch	3	3	3	3	6	6
8-inch	1	1	1	1	1	1
Total	**22,655**	**22,705**	**22,755**	**22,808**	**22,862**	**22,912**
Meters subject to Fire Meter Charge						
5/8-inch	401	401	401	401	401	401
3/4-inch	18	18	18	18	18	18
1-inch	5,464	5,464	5,464	5,464	5,464	5,464
1.5-inch	67	67	67	67	67	67
2-inch	0	0	0	0	0	0
2.5-inch	1	1	1	1	1	1
3-inch	0	0	0	0	0	0
4-inch	0	0	0	0	0	0
6-inch	1	1	1	1	1	1
8-inch	0	0	0	0	0	0
Total	**5,952**	**5,952**	**5,952**	**5,952**	**5,952**	**5,952**

Water usage by customer class and tier was projected over the study period based on actual water usage data provided by District staff for FY 2022 and FY 2023. Since 2023 was an unusually wet year, water usage was low. Therefore FY 2025 water usage by customer class was estimated using an average of calendar year (CY) 2022 and CY 2023 consumption data. At the end of the study, FY 2024 actual water usage was available and recorded as a comparison. **Figure 3-1** shows a yearly comparison of water usage. For the purposes of the financial plan, no change in per account water consumption is assumed over the five-year study period. Annual increases in projected water usage shown below in **Table 3-7** are solely due to growth in 3/4-inch Domestic accounts (see **Table 3-6** above). The increase in Domestic water usage over the study period is directly proportional to the increase in total number of Domestic water meters, which is approximately 0.2 percent per fiscal year. Note that any reduction in water sales that might occur over the study period due to a water supply shortage will be accompanied by the activation of Water Demand Reduction rates. This will ensure that any loss in rate revenue resulting from reduced water sales will be offset by higher volumetric rates that increase with each Water Demand Reduction level. Therefore, the water usage projections shown below in **Table 3-7** represent an appropriate baseline scenario for the purposes of the five-year financial plan.

Figure 3-1: Actual and Projected Water Usage in AF

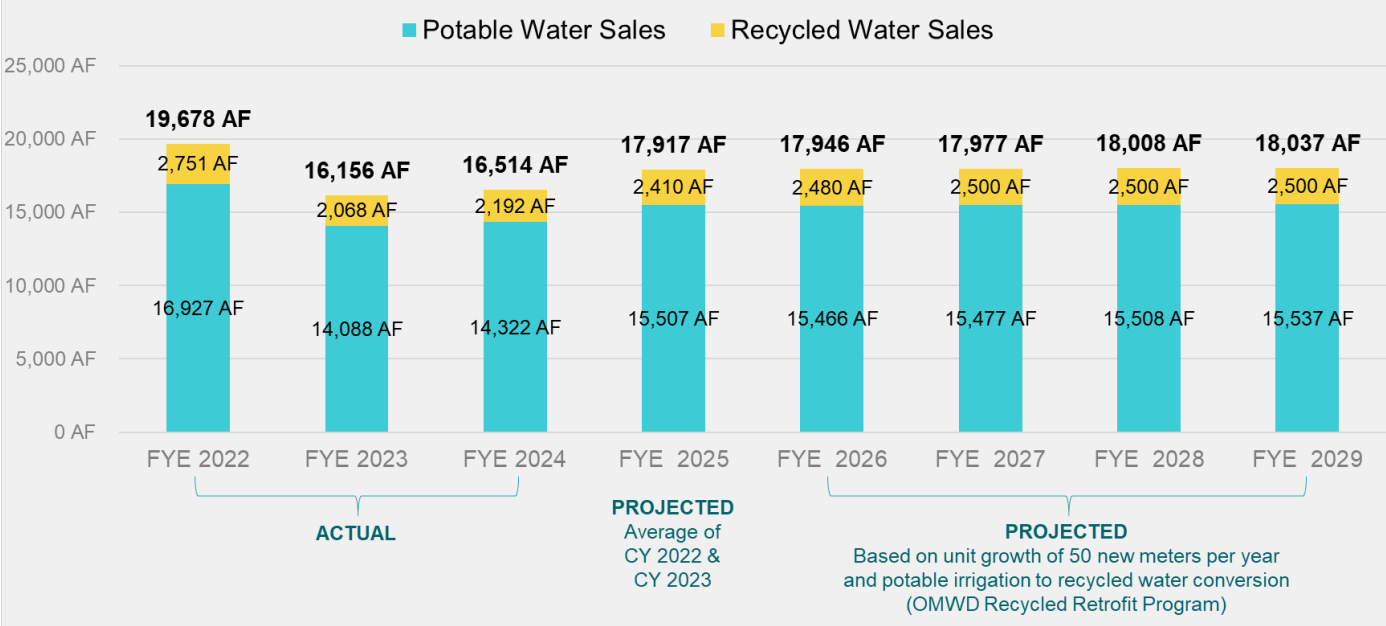


Table 3-7: Projected Water Usage in Units by Customer Class and Accounts[2]

Customer Class	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected	FY 2028 Projected	FY 2029 Projected
Domestic					
Tier 1 (0-6 units/month)	1,664,738	1,668,570	1,672,632	1,676,771	1,680,603
Tier 2 (7-25 units/month)	1,989,260	1,993,828	1,998,671	2,003,605	2,008,173
Tier 3 (26-80 units/month)	1,344,352	1,347,453	1,350,740	1,354,089	1,357,190
Tier 4 (Over 80 units/month)	489,308	490,436	491,633	492,852	493,980
Agricultural	59,071	59,071	59,071	59,071	59,071
Agricultural with Credit	23,332	23,332	23,332	23,332	23,332
Commercial	296,027	296,027	296,027	296,027	296,027
Irrigation					
Tier 1 (See Table 3-3)	456,070	440,824	436,468	436,468	436,468
Tier 2 (See Table 3-3)	391,191	375,945	371,589	371,589	371,589
Construction	41,669	41,669	41,669	41,669	41,669
Recycled	1,049,621	1,080,113	1,088,825	1,088,825	1,088,825
Total	**7,804,637**	**7,817,267**	**7,830,655**	**7,844,296**	**7,856,927**

3.3. Revenues

The District's water revenues consist of operating revenues (i.e. water rate revenues), other operating revenues, non-operating revenues, and capital revenues (from capacity fees assessed to new water connections). Projected water rate revenues under existing rates are calculated for the years FY 2025-FY 2029 by multiplying current rates (from **Table 3-1** and **Table 3-2**) by the corresponding units of service (from **Table 3-6** and **Table 3-7**).[3] Projecting water rate revenues under existing rates is necessary to evaluate the District's projected baseline financial position in the absence of any proposed rate increases. Note that for FY 2024, operating revenues were calculated based on FY 2023 rates for nine months and FY 2024 rates for three months. This is because FY 2024 rates were implemented in March 2024.[4] Revenues under current rates are shown in Table 3-8 and exclude SDCWA Infrastructure Access Charges.

Table 3-8: Projected Operating Revenues Under Existing Water Rates

Operating Revenues	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected	FY 2028 Projected	FY 2029 Projected
Fixed Charges:						
OMWD System Access Charge (Potable)	$14,326,302	$14,987,748	$15,014,622	$15,052,465	$15,127,432	$15,154,306
OMWD System Access Charge (Recycled)	$653,069	$681,991	$681,991	$681,991	$681,991	$681,991
Fire Meter Charges	$452,181	$467,006	$467,006	$467,006	$467,006	$467,006
Volumetric Charges:						
Domestic	$32,447,706	$32,464,313	$32,539,043	$32,618,256	$32,698,964	$32,773,694
Agricultural	$387,924	$398,729	$398,729	$398,729	$398,729	$398,729
Agricultural w/ Credit	$129,963	$126,226	$126,226	$126,226	$126,226	$126,226
Commercial	$1,527,180	$1,711,033	$1,711,033	$1,711,033	$1,711,033	$1,711,033
Irrigation	$5,671,829	$5,679,317	$5,474,411	$5,415,866	$5,415,866	$5,415,866
Construction	$291,851	$342,102	$342,102	$342,102	$342,102	$342,102
Recycled Water	$3,937,754	$4,502,874	$4,633,685	$4,671,059	$4,671,059	$4,671,059
Total	**$59,825,759**	**$61,361,341**	**$61,388,849**	**$61,484,736**	**$61,640,410**	**$61,742,014**

Table 3-9 shows a summary of other operating, non-operating, and capital revenues. SDCWA Infrastructure Access Charges were calculated in the same manner as described previously for operating revenues. Revenues from selling excess treated water to Vallecitos were projected in FY 2025 assuming 2,750 acre-feet per year (AFY) in sales, which is the minimum due to the DCMWTP shutdown. In FY 2026 and after, 3,648 AFY is used, which is the average of FY 2020 and 2021. Investment income was calculated based on projected ending cash balances and an assumed 3 percent annual rate of return in FY 2025, 2 percent annual rate of return FYs 2026-2027 and 1.5 percent annual rate of return in FYs 2028-2029. The majority of other operating and non-operating expenses were projected beyond FY 2025 budgeted amounts by either holding

[2] Note that in all report tables, totals may not add up precisely due to rounding.

[3] Fixed charge revenues = [number of meters assessed] x [monthly rate] x [12 months].
Volumetric charge revenues = [annual usage in CCF] x [volumetric rate per CCF].

[4] The District's fiscal year is from July 1 through June 30. For example, fiscal year 2024 spanned from July 1, 2023 through June 30, 2024.

constant through FY 2029 or by escalating by 2 percent per year. District staff provided five-year estimates for all capital revenues over the study period.

Table 3-9: Projected Other Operating Revenues, Non-Operating Revenues, and Capital Revenues

Description	FY 2024 Estimated	FY 2025 Budget	FY 2026 Projected	FY 2027 Projected	FY 2028 Projected	FY 2029 Projected
Other Operating Revenues						
SDCWA Infrastructure Access Charge	$1,467,000	$1,561,057	$1,563,703	$1,567,685	$1,576,324	$1,578,970
Selling Excess Treated Water to Vallecitos	$1,194,000	$918,300	$1,449,308	$1,602,357	$1,728,670	$1,800,671
Other	$510,000	$530,200	$530,404	$530,612	$530,824	$531,041
Subtotal	**$3,171,000**	**$3,009,557**	**$3,543,414**	**$3,700,654**	**$3,835,818**	**$3,910,682**
Non-Operating Revenues						
Property Tax Revenue	$4,800,000	$4,896,000	$4,993,920	$5,093,798	$5,195,674	$5,299,588
Rental Income	$775,200	$790,704	$806,518	$806,518	$806,518	$806,518
Investment Income	$0	$322,108	$225,238	$228,624	$171,035	$200,728
Other	$0	$320,892	$256,762	$316,376	$279,965	$350,272
Subtotal	**$5,575,200**	**$6,329,704**	**$6,283,438**	**$6,445,316**	**$6,453,192**	**$6,658,106**
Capital Revenues						
Potable Capacity Fee	$115,000	$118,000	$412,000	$4,047,000	$4,687,000	$803,000
Anticipated Grants	$3,404,000	$1,772,000	$817,000	$0	$0	$0
Recycled Capacity Fee	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
Subtotal	**$3,524,000**	**$1,895,000**	**$1,234,000**	**$4,052,000**	**$4,692,000**	**$808,000**

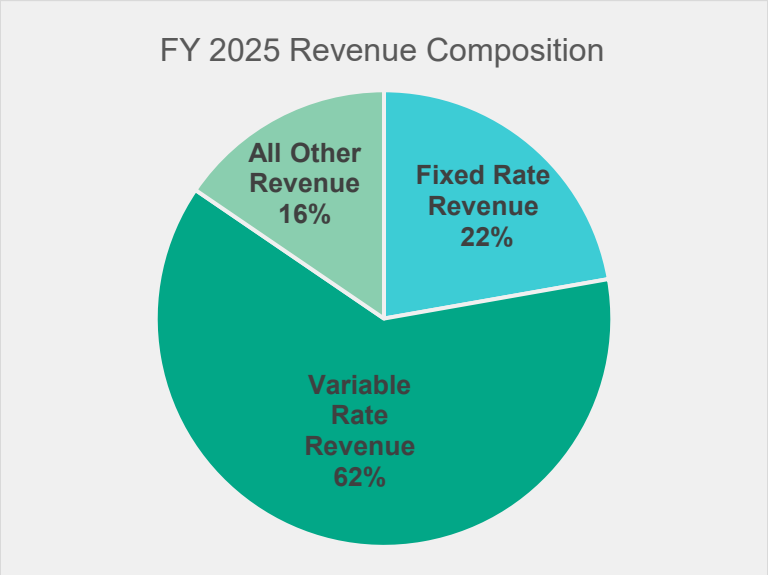
Table 3-10 shows a revenue summary for the study period based on revenues shown previously in **Table 3-8** and **Table 3-9**. Once again, operating revenues shown in this section reflect projected water rate revenues under existing rates in the absence of any rate increases over the study period.

Table 3-10: Revenue Summary

Revenues	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Operating	$59,825,759	$61,361,341	$61,388,849	$61,484,736	$61,640,410	$61,742,014
Other Operating	$3,171,000	$3,009,557	$3,543,414	$3,700,654	$3,835,818	$3,910,682
Non-Operating	$5,575,200	$6,329,704	$6,283,438	$6,445,316	$6,453,192	$6,658,106
Capital	$3,524,000	$1,895,000	$1,234,000	$4,052,000	$4,692,000	$808,000
Total	**$72,095,959**	**$72,595,601**	**$72,449,701**	**$75,682,706**	**$76,621,420**	**$73,118,802**

Figure 3-2 shows FY 2025 revenues broken down into fixed rate revenue (from OMWD System Access Charges and Fire Meter Charges), variable rate revenues (from Volumetric Charges), and all other revenues (including the SDCWA Infrastructure Access Charge). Approximately two-thirds of total revenues are generated by the District's Volumetric Charges.

Figure 3-2: FY 2025 Revenue Composition



3.4. Operations and Maintenance Expenses

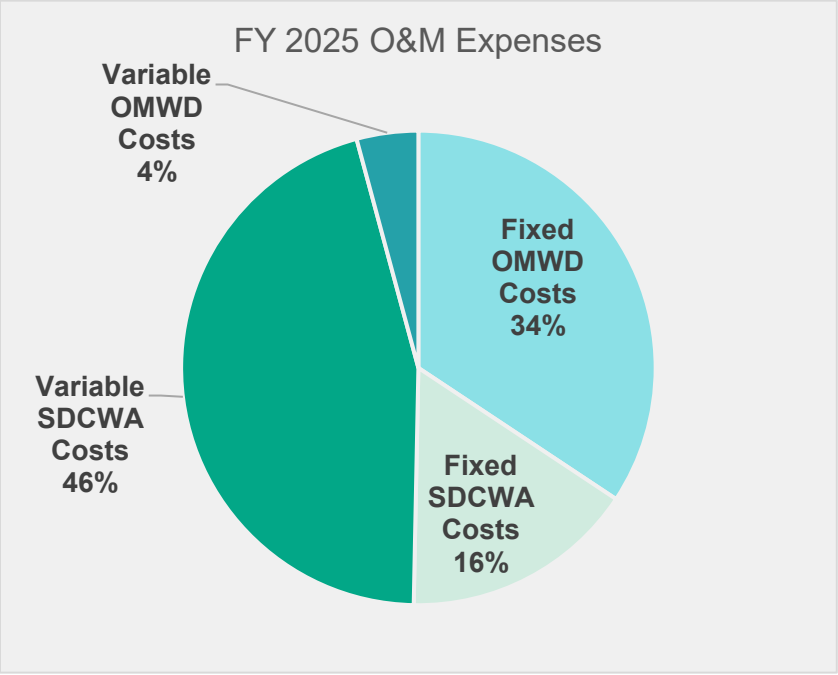
The District's operations and maintenance (O&M) expenses are based on the FY 2025 District budget and projected out through FY 2029. The District's projected purchased water and recycled water expenses were calculated over the study period based on the projected water supply mix and anticipated supply rates from SDCWA and MWD. See Appendix A for detailed calculations of water and recycled water purchase costs over the study period. All other O&M expenses were projected beyond FY 2025 by increasing FY 2025 budgeted expenses by the escalation factors shown in **Table 3-4**. The projected O&M expenses are shown in **Table 3-11**.

Table 3-11: Projected O&M Expenses

O&M Expenses	FY 2024 Estimated	FY 2025 Budget	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected	FY 2029 Projected
Purchased Water Expenses	$33,390,550	$38,004,962	$40,258,159	$44,264,056	$47,602,676	$49,578,639
O&M and WTP Expenses	$13,035,000	$14,028,000	$14,616,000	$15,129,650	$15,663,513	$16,218,444
General Manager Expenses	$485,000	$672,000	$780,000	$828,970	$880,355	$934,265
Engineering Expenses	$2,133,000	$1,944,000	$2,019,000	$2,107,850	$2,200,590	$2,297,391
Finance Expenses	$53,000	$149,000	$190,000	$245,518	$304,316	$366,553
Customer Services Expenses	$4,363,000	$4,232,500	$4,531,000	$4,682,640	$4,839,932	$5,003,101
Human Resources Expenses	$81,300	$30,000	$225,000	$252,205	$280,934	$311,260
Park Expenses	$451,000	$538,000	$510,000	$532,035	$555,020	$578,997
Recycled (SE & NW) Expenses	$1,568,000	$1,490,500	$1,541,000	$1,595,405	$1,651,996	$1,710,867
Total O&M Expenses	**$55,559,850**	**$61,088,962**	**$64,670,159**	**$69,638,328**	**$73,979,333**	**$76,999,517**
Less Depreciation	$802,000	$815,000	$815,000	$831,300	$847,926	$864,885
Total O&M Excluding Depreciation	**$54,757,850**	**$60,273,962**	**$63,855,159**	**$68,807,028**	**$73,131,407**	**$76,134,632**

Figure 3-3 shows FY 2025 O&M expenses broken down as fixed versus variable and District-related (OMWD) versus SDCWA-related. Approximately 62 percent of FY 2025 O&M expenses are projected to be associated with water supply costs from SDCWA, some of which are fixed. Approximately 50 percent of FY 2025 O&M expenses are projected to be fixed in nature. This demonstrates a common challenge faced by municipal water suppliers, in which the majority of O&M expenses are fixed while a majority of revenues are variable (see **Figure 3-2**). This results in susceptibility to revenue instability during periods of reduced water supply/demand.

Figure 3-3: FY 2025 O&M Expenses Composition



3.5. Debt Service

Debt service requirements consist of principal and interest payments on existing and proposed debt. The District currently has debt service obligations associated with the outstanding 2015A Water Revenue Bonds, 2016A Water Revenue Bonds, 2013 State Revolving Fund Loan, and 2021B Wastewater (Sewer) Revenue Bonds. The debt service payments shown for the 2021B Wastewater (Sewer) Revenue Bonds represent the water system's allocated portion of the debt issue. Principal and interest payments associated with each existing debt issue for the water utility are shown below in **Table 3-12**.

Table 3-12: Existing Debt Service Payments

Description	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
2015A Water Revenue Bonds	$2,410,375	$2,413,625	$2,406,875	$2,405,375	$2,403,625	$0
2016A Water Revenue Bonds	$977,000	$978,000	$977,000	$975,000	$978,000	$974,000
2013 State Revolving Fund Loan	$1,070,000	$1,070,000	$1,070,000	$1,070,000	$1,070,000	$1,070,000
2021B Wastewater (Sewer) Revenue Bonds	$610,000	$609,000	$609,000	$609,000	$609,000	$0

The 2015A Water Revenue Bonds and the 2021B Wastewater (Sewer) Revenue Bonds will be paid off in FY 2028. There are no new proposed debt issues in the five-year plan period. Total existing and proposed debt service payments in each year throughout the study period (from **Table 3-12)** are summarized below in **Table 3-13**.

Table 3-13: Total Debt Service

Debt Service	FY 2025	FY 2021	FY 2022	FY 2023	FY 2029
Existing Debt	$5,070,625	$5,062,875	$5,059,375	$5,060,625	$2,044,000
Proposed Debt	$0	$0	$0	$0	$0
Total Debt Service	**$5,070,625**	**$5,062,875**	**$5,059,375**	**$5,060,625**	**$2,044,000**

3.6. Capital Improvement Plan

The District has developed a capital improvement plan (CIP) to address ongoing water system needs in each year throughout the study period. Detailed CIP expenditures in each year are shown at the individual project level for the potable water system in **Table 3-14** and the recycled water system in **Table 3-15**. Inflated project costs in all years throughout the study period were provided by District Engineering staff from the results of the District's Condition Assessment and Pipeline Replacement Assessment studies.

Table 3-14: Potable Water CIP Projects

#	Potable Water CIP	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
1	San Dieguito Valley Groundwater Desalination Plant	$417,000	$344,000	$1,146,000	$1,921,000	$3,098,000
2	PW and RCW Master Plan Update	$117,000	$0	$0	$0	$0
3	EFRR Parking Lot Expansion	$381,000	$909,000	$0	$0	$0
4	Site Asphalt Improvements	$60,000	$50,000	$30,000	$30,000	$30,000
5	Advanced Metering Infrastructure (AMI)	$715,000	$0	$0	$0	$0
6	CIS Infinity System Upgrade	$213,000	$184,000	$0	$0	$0
7	District Wide Scada Upgrades	$127,000	$0	$0	$0	$0
8	District-Wide PLC Replacements (PW/RCW)	$1,237,000	$0	$0	$0	$0
9	District Wide Physical Security Improvements	$52,000	$0	$0	$0	$0
10	Fleet Electrification Project (PW/RCW)	$165,000	$750,000	$1,490,000	$0	$0
11	RSF Unit A North PL Repl	$1,428,000	$0	$0	$0	$0
12	Golem 14" Pipeline Inspection and Rehab	$133,000	$0	$0	$0	$0
13	Dusty Trail PL Replacement	$120,000	$710,000	$350,000	$0	$0
14	Rancho La Cima/Aliso Canyon PL Relocation	$102,000	$150,000	$0	$0	$0
15	Harris Ranch Right-of-Way Acquisition	$0	$150,000	$0	$0	$0
16	Unit B & K Rehab	$327,000	$1,000,000	$580,000	$0	$0
17	Unit B & K EM CCTV Inspect & Rehab Phase 2	$0	$0	$0	$412,000	$1,838,000
18	Encinitas Blvd Pipeline Inspection and Rehab	$271,000	$403,000	$0	$0	$0
19	RSF Rd Pipeline Inspection	$0	$164,000	$524,000	$0	$0
20	Access improvements to pipe below Gano to San Dieguito Road	$20,000	$55,000	$0	$0	$0
21	Tank Safety Improvements	$516,000	$0	$0	$0	$0
22	Palms I and II Reservoirs Replacemt	$194,000	$303,000	$1,212,000	$0	$0
23	Gaty I Reservoir Decommissioning	$0	$0	$0	$398,000	$0
24	Village Park PRS Replacement	$969,000	$0	$0	$0	$0
25	Gardendale PRS Replacement	$984,000	$0	$0	$0	$0
26	Del Lago PRS Replacement	$0	$123,000	$846,000	$0	$0
27	SE #1 PRS Replacement	$0	$0	$0	$0	$135,000
28	DCMWTP 4th Stage Centrifuge Addition	$2,956,000	$0	$0	$0	$0
29	DCMWTP Chlorine Gen Rm Lining Rehab	$123,000	$0	$0	$0	$0
30	DCMWTP 2nd Stage Membrane Train Overhaul	$126,000	$100,000	$100,000	$0	$0
31	DCMWTP 2nd Stage Basin Rehab and Beam Replacement	$577,000	$1,207,000	$0	$0	$0
32	DCMWTP 1st Stage Beam Replacement	$560,000	$980,000	$666,000	$0	$0
33	DCMWTP Inlet Strainer MOV Actuator Replacement	$63,000	$0	$0	$0	$0

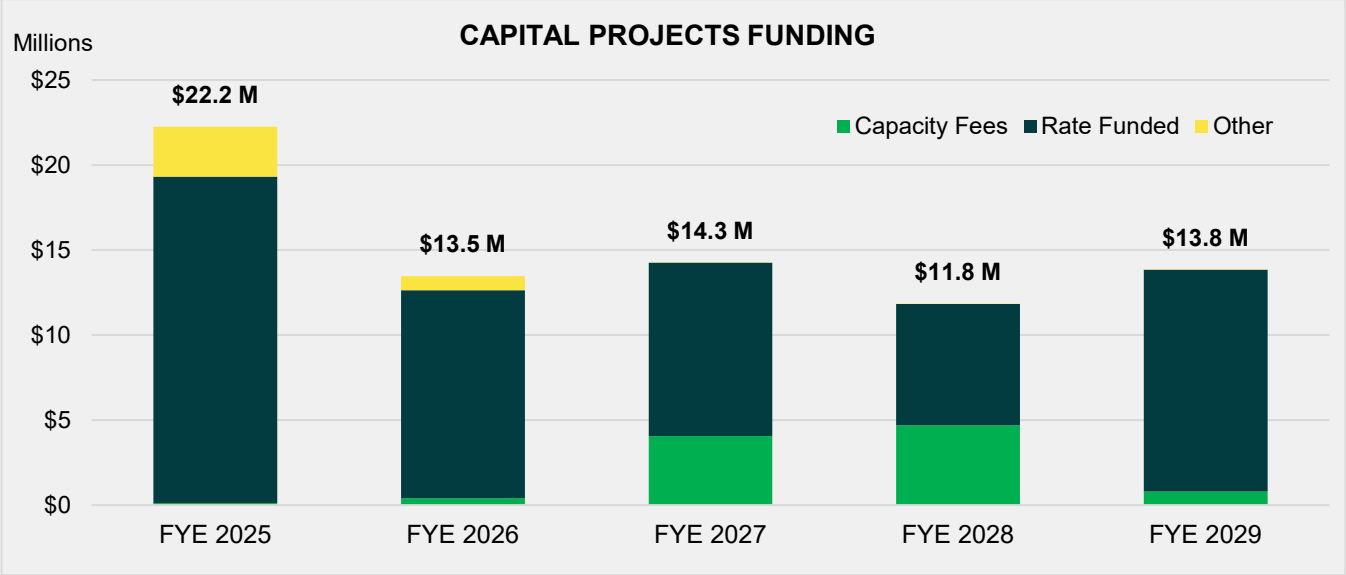
34	DCMWTP Combined Filter Influent & Backwash Pipe Replacement	$180,000	$528,000	$0	$0	$0
35	DCMWTP Raw Water Equal (RWEQ) Tanks Rehab	$668,000	$0	$0	$0	$0
36	DCMWTP Fluoride Room, Permeate Pump Stanchion, Bldg Rehab	$0	$142,000	$0	$0	$0
37	DCMWTP 1st Stage Basins Rehab	$0	$0	$1,295,000	$1,295,000	$1,295,000
38	DCMWTP FCV Actuators Replacement	$0	$0	$310,000	$0	$0
39	DCMWTP BWWEQ Tank Rehab	$0	$0	$596,000	$0	$0
40	DCMWTP Plate Settler Coating Rehab	$0	$0	$0	$123,000	$0
41	DCMWTP Brine Area Rehab	$0	$0	$0	$192,000	$0
42	DCMWTP Sodium Hypochlorite Room Rehab	$0	$0	$0	$0	$98,000
43	DCMWTP HVAC Replacement	$0	$0	$0	$0	$46,000
44	Bridge Crane Rehabilitation and Mods	$65,000	$0	$0	$0	$0
45	Network Security	$100,000	$104,000	$109,000	$114,000	$119,000
46	Replace Pumps and Motors	$175,000	$180,000	$185,000	$191,000	$197,000
47	Replace Potable Meters	$830,000	$927,000	$849,000	$874,000	$900,000
48	Replace Pipelines	$500,000	$515,000	$530,000	$546,000	$562,000
49	Replace Valves	$750,000	$773,000	$796,000	$820,000	$845,000
50	Steel Mains Protection	$304,000	$313,000	$322,000	$332,000	$342,000
51	Replace Meter Anodes	$158,000	$163,000	$168,000	$173,000	$178,000
52	Rehab Concrete Tanks	$25,000	$26,000	$27,000	$28,000	$29,000
53	Replace PRS Valves	$54,000	$56,000	$58,000	$60,000	$62,000
54	Replace DCM WTP Membranes	$936,000	$973,000	$1,012,000	$1,052,000	$1,094,000
55	WTP Misc Equipment and Instrumentation Replacement	$100,000	$106,000	$115,000	$124,000	$134,000
56	WTP Membrane Train Control Wiring Replacement	$35,000	$36,000	$37,000	$38,000	$39,000
57	Impressed current system protection	$0	$0	$74,000	$63,000	$50,000
	Total Potable Water CIP	**$17,833,000**	**$12,424,000**	**$13,427,000**	**$8,786,000**	**$11,091,000**

Table 3-15: Recycled Water CIP Projects

#	Recycled Water CIP	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
1	Manchester Recycled Pipeline Ext.	$3,298,000	$0	$0	$0	$0
2	Calle Barcelona, VP, & Summerhill HOA Exten	$244,000	$0	$0	$0	$0
3	Wanket RW Reservoir Rehabilitation	$157,000	$0	$0	$0	$0
4	Santa Fe Valley RW Reservoir Improvements	$150,000	$0	$0	$0	$0
5	Off-Spec and High Flow Diversion Pipeline	$129,000	$0	$0	$0	$0
6	Upgrade Filter Electrical	$75,000	$439,000	$0	$0	$0
7	Upgrade Flow Equalization Basins	$22,000	$125,000	$0	$0	$0
8	Recycled Water Storage Pond Upgrades	$17,000	$101,000	$0	$0	$0
9	Replace Existing Recycled Water Pump Station VFDs	$0	$0	$37,000	$0	$0
10	Site Paving Improvements	$0	$0	$8,000	$0	$0
11	Replace Main Switchboard S (MSB-S) and Automatic Transfer Switch	$0	$0	$382,000	$2,227,000	$0
12	Replace WRF Electrical Conduits, Enclosures, and Lighting	$0	$0	$0	$390,000	$2,278,000
13	Chemical Area Upgrades	$65,000	$80,000	$100,000	$73,000	$76,000
14	Replace Roll-up doors	$30,000	$41,000	$52,000	$54,000	$56,000
15	Recycled Conversions (formerly Retrofit Potable to Recycled)	$50,000	$52,000	$54,000	$56,000	$58,000
16	Replace Recycled Meters	$75,000	$77,000	$79,000	$81,000	$83,000
17	Replace Recycled Pipeline	$12,000	$12,000	$6,000	$6,000	$6,000
18	Replace Recycled Valves	$80,000	$85,000	$90,000	$96,000	$101,000
19	4S WRF Physical Security Upgrades	$12,000	$12,000	$14,000	$16,000	$18,000
20	Plant A Rehabilitation	$0	$10,000	$20,000	$30,000	$40,000
21	Valve and Gate Replacement Program	$0	$0	$0	$10,000	$16,000
22	Small Pump and Motor Replacement Program	$0	$0	$0	$16,000	$20,000
	Total Recycled Water CIP	**$4,416,000**	**$1,034,000**	**$842,000**	**$3,055,000**	**$2,752,000**

Total CIP expenditures over the study period are shown below in **Figure 3-4**. Potable water capacity fee revenues are anticipated to be available to fund the District's CIP and range from $118,000 in FY 2025 to over $4 million in FY 2028. "Other" funds include anticipated grant funds, recycled water capacity fee revenues, and land sale proceeds. All other CIP during the study period is projected to be funded by water rate revenues, there is no proposed debt funding.

Figure 3-4: CIP by Funding Source



3.7. Financial Policies

3.7.1. Debt Coverage

The District must meet its debt service coverage requirements on its outstanding bond issues. The District's required debt coverage is 125 percent, meaning that the District's net revenues must amount to at least 125 percent of annual debt service. The District is currently rated "AAA" by Fitch Ratings. To get a lower borrowing cost for any debt issuance in the future, it has been the District's goal to maintain at least 2.5 net water system revenue to debt service coverage ratio. The proposed financial plan, therefore, incorporates a debt coverage target of 250 percent. Net revenues include funds from water rates and charges, miscellaneous service charges, revenues received from contracts, and interest income. Annual debt service includes annual principal and interest payments on outstanding debt.

3.7.2. Reserve Policies

The District maintains four separate funds. The Operating Fund is designed to provide working capital and mitigate the impact of fluctuations in O&M expenditures. The Capital Improvement Fund is designed to ensure adequate construction funds are maintained to approve construction contracts. The Rate Stabilization Fund is designed to mitigate the impact of reduced water sales on the District's financial condition and, lastly, the Pension Stabilization Fund is designed to help stabilize pension costs by making additional contributions to its pension plan to minimize fluctuations in District's Unfunded Accrued Liability (UAL). Raftelis recommends that the District maintains its current reserve policies, which define the minimum and maximum reserve balances for each of the three funds. The existing reserve policies are appropriate given industry norms as well as the District's unique attributes. The current reserve targets are:

1. **Operating Fund**
    - Minimum Level: 60 days of annual O&M expenditures *($9.91 million in FY 2025)*
    - Maximum Level: 120 days of annual O&M expenditures *($19.82 million in FY 2025)*

2. **Capital Improvement Fund**
    - Minimum Level: average annual CIP expenditures over the next 10 years *($17.32 million in FY 2025)*
    - Maximum Level: five years of average annual 10-year CIP expenditures *($86.59 million in FY 2025)*
3. **Rate Stabilization Fund**
    - Minimum Level: 25 percent of estimated net water sales[5] in the current fiscal year *($6.84 million in FY 2025)*
    - Maximum Level: 50 percent of estimated net water sales for the next two fiscal years *($13.68 million in FY 2025)*
4. **Pension Stabilization Fund**
    - Minimum Level: 1 year of projected employee retirement (ER) contribution for unfunded accrued liability (UAL) over the next 5 years *($0.96 million in FY 2025)*
    - Maximum Level: 2 years of projected ER contribution for UAL over the next 5 years *($1.91 million in FY 2025)*

3.8. Status Quo Financial Plan

The status quo financial plan illustrates what would occur in the absence of any water rate increases over the study period. Current water rates in effect as of FY 2024 are assumed to remain unchanged over the study period under the status quo. Raftelis and District staff first evaluated the District's cash flow and fund balance over the study period under the status quo before considering any revenue adjustments.

Figure 3-5 shows the projected ending cash balance in each year over the study period under the status quo for all three funds combined (Operating, Capital Improvement, and Rate Stabilization). Under the status quo financial plan, the District's reserves are steadily drawn down over the five-year study period until the minimum reserve balance is no longer met in FY 2028. Furthermore, **Figure 3-6** shows that the District is projected to fail to meet minimum required debt coverage beginning in FY 2028 under the status quo. This clearly demonstrates the need for rate revenue increases over the study period to ensure that the District meets its debt coverage obligations and exceeds the minimum reserve balance as established by District policy. For detailed cash flow and fund balance projections under the status quo, please refer to **Appendix B**.

[5] Net water sales are defined as total annual revenues from rates and charges less annual water purchase expenses.

Figure 3-5: Total Fund Balance Under Status Quo Financial Plan

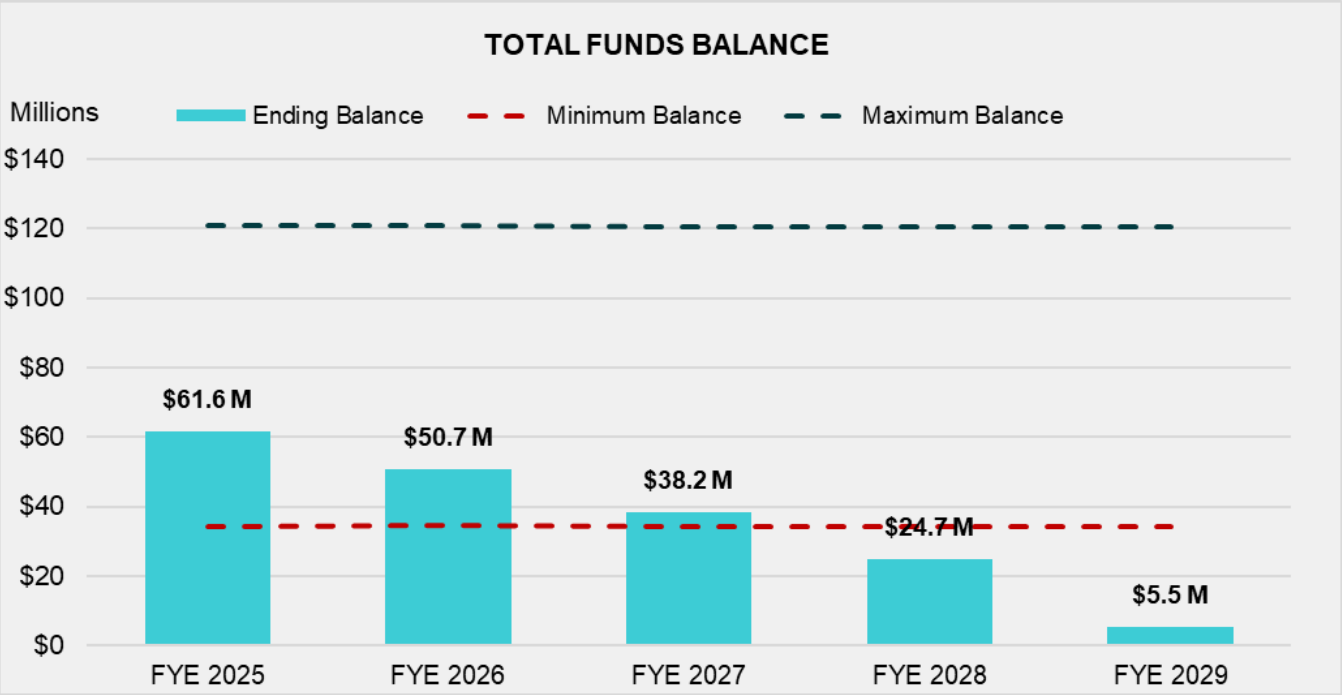
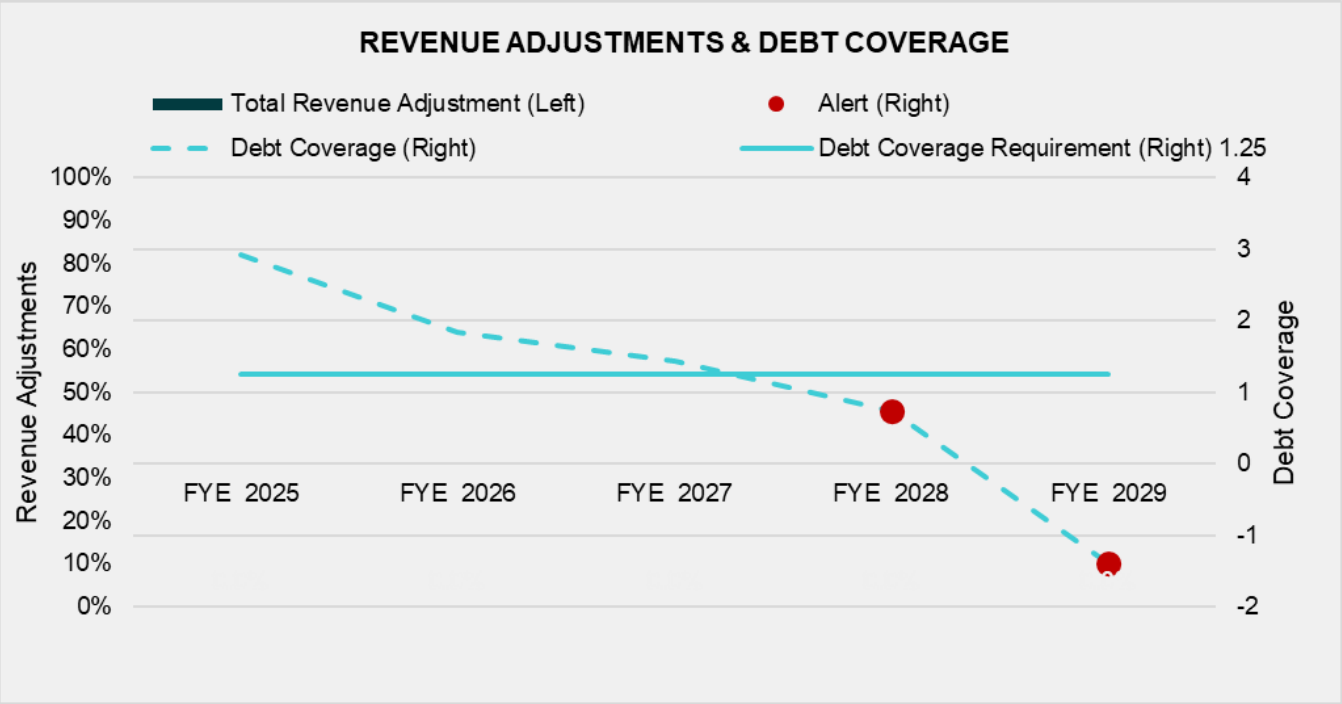


Figure 3-6: Projected Debt Coverage Under Status Quo Financial Plan



3.9. Proposed Financial Plan

The status quo financial plan demonstrates that the District must increase its revenues from water rates over the five-year study period in order to meet required debt coverage and minimum reserve levels. Raftelis therefore proposed annual revenue adjustments in each year through FY 2029 to ensure that the District meets its debt obligations and maintains healthy reserve levels in accordance with District policy. The term "revenue adjustment" specifically refers to a percent increase in water revenues (from Volumetric Charges, OMWD System Access Charges, and Fire Meter Charges) relative to the amount of water rate revenues that would be collected under the prior year's rates. Note that revenue adjustments are used only to project total water rate revenues. Allocation of the total water rate revenue requirement across the various water charges is included in the cost of service analysis in **Section 4**. District staff and the Board of Directors approved the recommendations of the proposed revenue adjustments each year developed by Raftelis. **Table 3-16** shows the proposed revenue adjustments over the study period.

Table 3-16: Proposed 5-Year Revenue Adjustments

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
System Access Charges including Inflation/Wholesale Pass-Through	8.0%	8.0%	8.0%	5.0%	4.0%
Fire Meter Charges	5.0%	6.0%	6.0%	5.0%	4.0%
Commodity Charges including Inflation/Wholesale Pass-Through	8.0%	8.0%	8.0%	5.0%	4.0%
Infrastructure Access Charges SDCWA IAC Pass-Through	3.2%	8.5%	11.5%	4.0%	4.0%
TOTAL REVENUE ADJUSTMENT	**7.9%**	**8.0%**	**8.1%**	**5.0%**	**4.0%**

Table 3-17 shows the proposed five-year financial plan in proforma format. Revenues and expenses were shown previously in **Section 3**. Rate revenue under existing rates is shown in Line 2, while Line 3 represents additional revenue resulting from the proposed revenue adjustments. Other operating revenues in Line 4 include the SDCWA Infrastructure Access Charge, excess treated water sales to Vallecitos, rental income, and other miscellaneous revenues. Non-operating revenue in Line 6 includes property tax and other miscellaneous revenues. Capital Revenues from **Table 3-9** are excluded from the operating cash flow in **Table 3-17** (which excludes capital expenditures and revenues), but are accounted for when projecting total ending balances (**Figure 3-9**). Transfers from the Operating Fund were initiated to ensure that each fund met at least the minimum required reserve level. Net annual cash balance (Line 28) is calculated by subtracting total expenses (Line 15) and total transfers (Line 26) from total revenues (Line 7). Calculated debt coverage is shown in Line 30 and is outlined in greater detail in Appendix C. More detailed cash flow and ending balance projections are also included in Appendix C. The net annual cash balance in FY 2025 is slightly negative, indicating that the District will draw from reserves to meet the Operating Fund revenue requirement. Beginning in FY 2026, the net annual cash balance becomes positive again through the end of the study period.

Table 3-17: Proposed Financial Plan

	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
1	**REVENUES**					
2	Revenues from Current Rates (excludes IAC)	$61,361,341	$61,388,849	$61,484,736	$61,640,410	$61,742,014
3	Revenue Adjustments (excludes IAC)	$2,449,784	$7,548,442	$13,073,657	$17,917,100	$21,522,961
4	Other Operating Revenue	$3,034,335	$3,661,623	$3,988,814	$4,266,381	$4,422,378
5	Investment & Interest Income	$643,000	$483,000	$545,000	$451,000	$552,000
6	Non-Operating Revenue	$5,686,704	$5,800,438	$5,900,316	$6,002,192	$6,106,106
7	**TOTAL REVENUES**	**$73,175,164**	**$78,882,352**	**$84,992,523**	**$90,277,084**	**$94,345,459**
8						
9	**EXPENSES**					
10	O&M Expenses without Depreciation	$22,269,000	$23,597,000	$24,542,973	$25,528,731	$26,555,994
11	Purchased Water (potable & recycled)	$38,004,962	$40,258,159	$44,264,056	$47,602,676	$49,578,639
12	Other Operating Expenses (potable & recycled)	$50,000	$50,000	$50,000	$50,000	$50,000
13	Non-Operating Expenses (potable & recycled)	$1,570,927	$1,043,507	$12,000	$10,000	$10,000
14	Existing Debt Service	$5,070,625	$5,062,875	$5,059,375	$5,060,625	$2,044,000
15	**TOTAL EXPENSES**	**$66,965,515**	**$70,011,541**	**$73,928,403**	**$78,252,032**	**$78,238,632**
16						
17	**TRANSFERS**					
18	Transfer Potable Operating to Potable Capital - PAYGO	$6,000,000	$7,000,000	$7,500,000	$7,500,000	$9,500,000
19	Transfer to Wastewater (Sewer) Fund - 2018/2021B Bonds	($121,800)	($121,800)	($121,800)	($121,800)	$0
20	Transfer to 2012 SRF Reserve	$107,000	$107,000	$0	$0	$0
21	Transfer to/(from) Rate Stabilization Fund	($1,560,927)	($1,033,507)	($2,000)	$0	$0
22	Transfer to/(from) Pension Stabilization Fund	$220,000	$220,000	$220,000	$220,000	$220,000
23	Potable OMWD Option 2 (reduce to CPI)	$0	$0	$0	$0	$0
24	Transfer Recycled Oper. to Recycled Capital	$200,000	$200,000	$200,000	$200,000	$200,000
25	Transfer Recycled Oper. to Potable Capital	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
26	**TOTAL TRANSFERS**	**$6,344,273**	**$7,871,693**	**$9,296,200**	**$9,298,200**	**$11,420,000**
27						
28	**Net Annual Cash Balance**	**($134,624)**	**$999,118**	**$1,767,920**	**$2,726,852**	**$4,686,827**
29						
30	Calculated Debt Coverage	342%	338%	417%	445%	963%
31	Target Debt Coverage	125%	125%	125%	125%	125%

Figure 3-7 summarizes the tabular results from **Table 3-17** in graphical format. O&M expenses, purchased water costs, debt service, transfers, and revenues to (or from) reserves are represented by stacked bars. Revenues under current rates are represented by the solid line, while revenues inclusive of the proposed revenue adjustments are represented by the dashed line. **Figure 3-7** clearly demonstrates although current rates are sufficient to cover operating costs, the proposed revenue adjustments are necessary to provide sufficient funding for transfers from the Operating Fund to cover CIP expenditures and other needs.

Figure 3-7: Proposed Operating Financial Plan

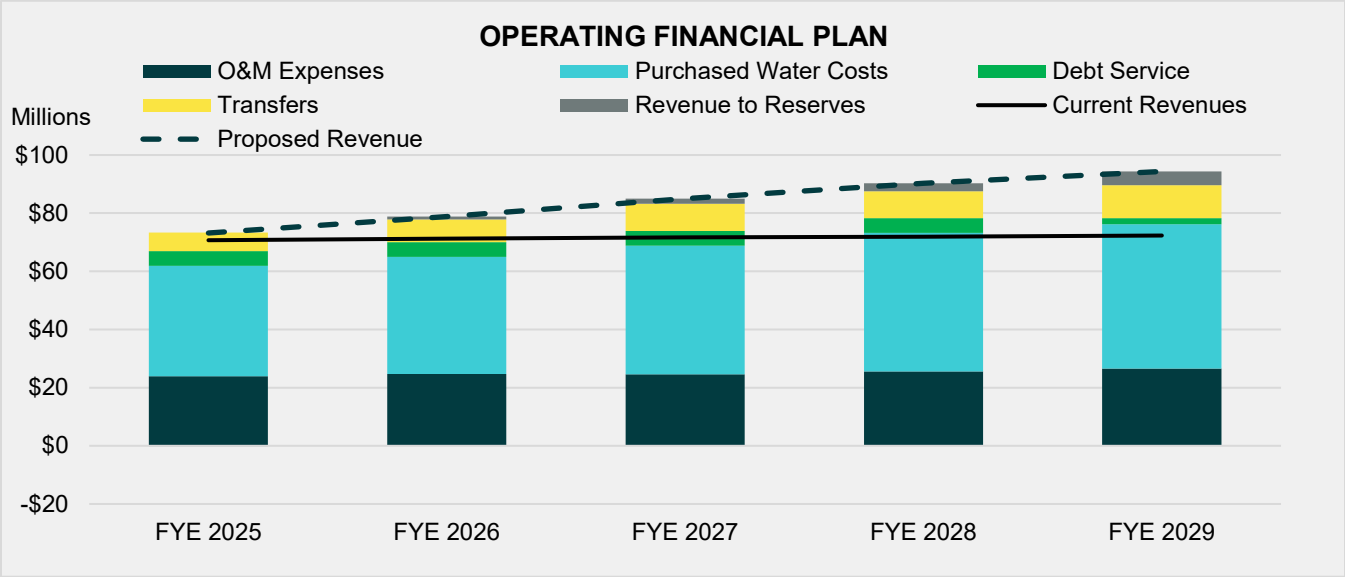


Figure 3-8 illustrates how the proposed revenue adjustments, represented by the bars (left axis), will ensure that the District's projected debt coverage (dashed line) (right axis) exceeds its 125% debt coverage requirement (solid blue line). The District targets robust debt coverage of at least 250 percent to help the District maintain its AAA credit rating by Fitch, which can minimize the costs associated with any future debt issues.

Figure 3-8: Projected Debt Coverage Ratios under Proposed Revenue Adjustments

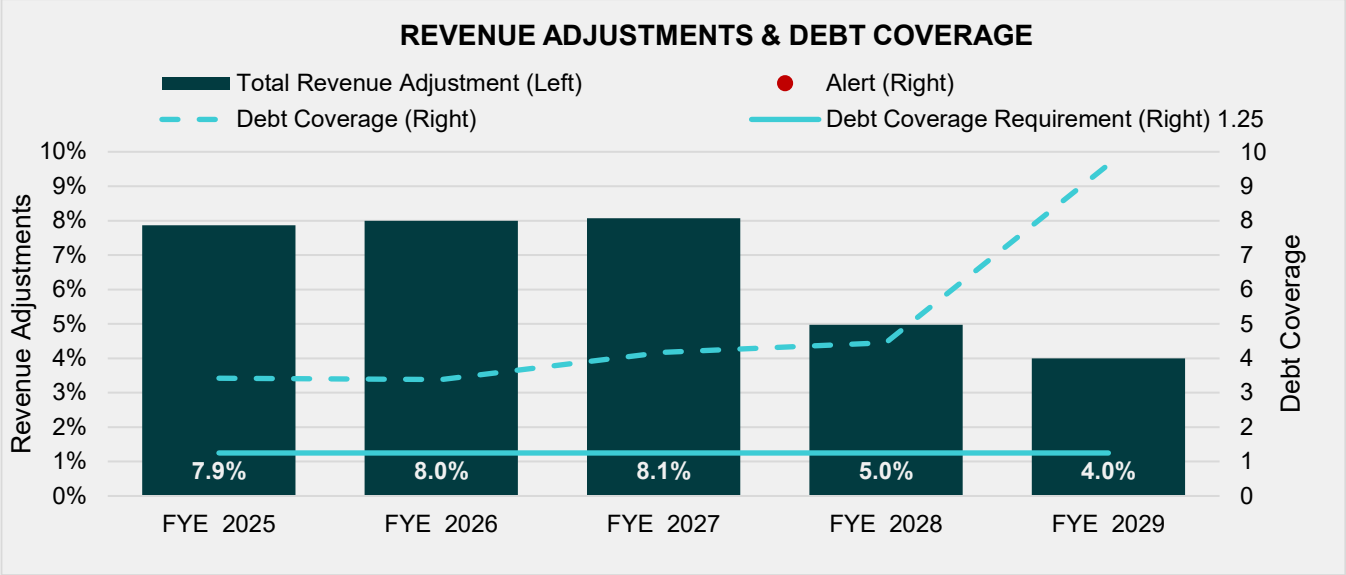
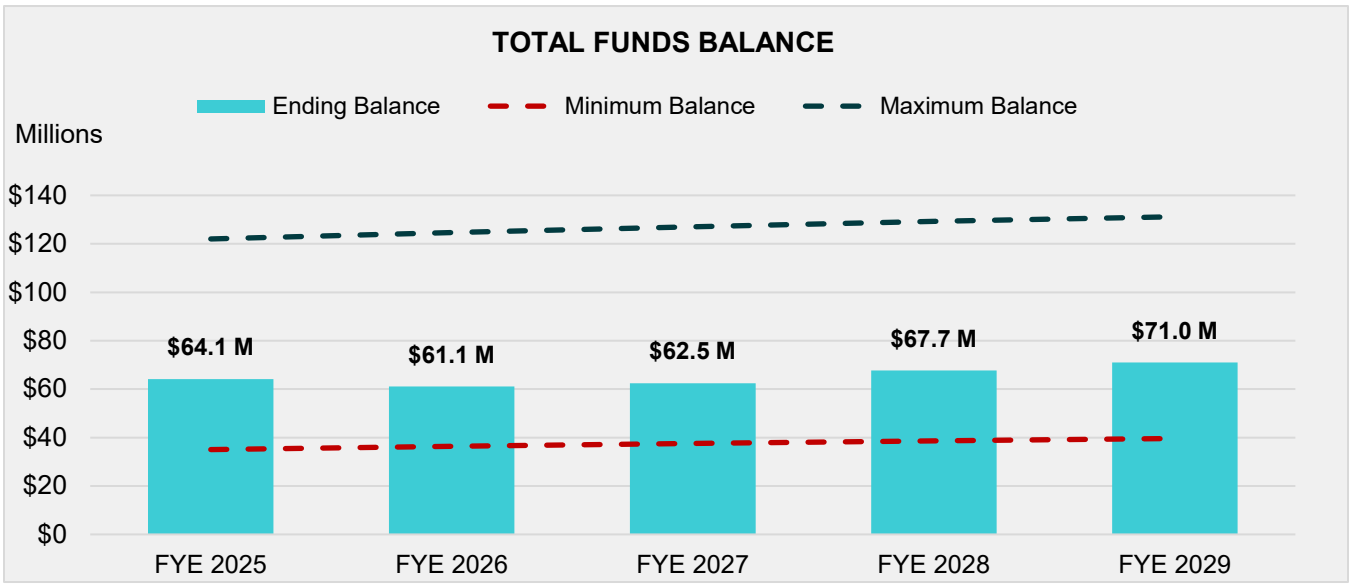


Figure 3-9 demonstrates that the District will exceed the minimum reserve target in all years under the proposed financial plan. Ending Balances and minimum/maximum targets shown below include all three funds combined (Operating, Capital Improvement, and Rate Stabilization). The projected total ending funds balance shown in **Figure 3-9** remain steady over the study period between minimum and maximum reserve targets.

Figure 3-9: Projected Ending Balances Under Proposed Financial Plan



4. Cost of Service

Section 4 of the report provides a detailed description of the cost-of-service (COS) analysis performed for the District's water system. The goal of a COS analysis is to allocate the overall rate revenue requirement to all customer classes and tiers based on their proportion of usage and burden on the system. The numbers shown in this section of the report are rounded. Therefore, hand calculations based on the displayed numbers, such as summing or multiplying, may not equal the exact results shown in this report.

4.1. Process and Approach

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

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

1. **Cost functionalization:** O&M expenses and capital assets are categorized by their system function. Functions include supply, treatment, storage, distribution, customer service, etc.
2. **Cost causation component allocation:** The functionalized costs are then allocated to cost causation components based on their burden on the system. The cost causation components include supply, base delivery, peaking, meter, customer, etc. The revenue requirement is allocated accordingly to the cost causation components, resulting in the total revenue requirement for each cost causation component.
3. **Unit cost development:** the revenue requirement for each cost causation component is divided by the appropriate units of service of each customer class and tier to determine the unit cost for each cost causation component.
4. **Revenue requirement distribution:** the unit cost is utilized to distribute the revenue requirement for each cost causation component to customer classes and tiers based on their individual service units. The District's customer classes include Domestic, Agricultural, Commercial, Irrigation, Construction, and Recycled.

4.2. Revenue Requirement

Table 4-1 shows the revenue requirement, which is equal to the total revenue required from rates for FY 2025 (also referred to as the test year or rate-setting year). The revenue requirement is divided into the Operating and Capital categories (Columns C and D), which are to be later allocated based on O&M expenses and capital assets respectively.

The revenue requirement is calculated using the FY 2025 expenses (Lines 2-6), which includes O&M expenses, purchased water costs, other operating expenses, non-operating expenses, and existing debt service. The revenue offsets (Lines 10-24) include the various miscellaneous, non-rate revenues that are applied as offsets to the revenue requirement. The cash balance adjustment (Line 28) is determined by calculating the negative sum of total transfers (**Table 3-17**, Line 24) and net annual cash balance (**Table 3-17**, Line 26). The final revenue requirement (Line 31) is calculated as follows:

Total revenue required from rates (Line 31) = Revenue requirements (Line 7) - Revenue offsets (Line 25) - Adjustments (Line 30)

Table 4-1: Proposed Revenue Requirement

A	B	C	D	E
Line	Revenue Requirement (FY 2025)	Operating Revenue Requirements	Capital Revenue Requirements	Total Revenue Requirements
1	**Revenue Requirements**			
2	O&M Expenses without Depreciation	$22,269,000	$0	$22,269,000
3	Purchased Water (potable & recycled)	$38,004,962	$0	$38,004,962
4	Other Operating Expenses (potable & recycled)	$0	$50,000	$50,000
5	Non-Operating Expenses (potable & recycled)	$0	$1,570,927	$1,570,927
6	Existing Debt Service	$0	$5,070,625	$5,070,625
7	**Total Revenue Requirements**	**$60,273,962**	**$6,691,552**	**$66,965,515**
8				
9	**Revenue Offsets**			
10	CWA Infrastructure Access Charge	$1,585,835		$1,585,835
11	Selling Excess Treated Water to Vallecitos	$918,300	$0	$918,300
12	Misc. Water Sales	$10,000	$0	$10,000
13	Meter Installations	$15,000	$0	$15,000
14	Hydro-electric Plant Revenues	$110,000	$0	$110,000
15	Turn Off/On Fees and NSF Charges	$20,000	$0	$20,000
16	Delinquency Charges	$120,000	$0	$120,000
17	Transfer Fee	$30,000	$0	$30,000
18	Cross Connection/Inspection	$205,000	$0	$205,000
19	Outside District Boundary Charges	$10,000	$0	$10,000
20	Other operating	$10,200	$0	$10,200
21	Investment Income (Potable)	$0	$322,108	$322,108
22	Property Tax Revenue	$3,056,000	$1,840,000	$4,896,000
23	Rental Income	$0	$790,704	$790,704
24	Investment Income (Recycled)	$0	$320,892	$320,892
25	**Total Revenue Offsets**	**$6,090,335**	**$3,273,704**	**$9,364,039**
26				
27	**Less Adjustments**			
28	Adjustment for Cash Balance	$0	($6,209,649)	($6,209,649)
29	Adjustment for Mid-year Increase	($2,449,784)	$0	($2,449,784)
30	**Total Less Adjustments**	**($2,449,784)**	**($6,209,649)**	**($8,659,432)**
31	**Cost of Service to be Recovered from Rates**	**$56,633,411**	**$9,627,497**	**$66,260,908**

4.3. Functionalization and Allocation of Expenses

After determining the revenue requirement, the next step of the COS analysis is to allocate the O&M expenses and capital assets to the following functions:

- **Supply** – represents costs of procuring water supplies from SDCWA
- **Treatment** – represents costs of water treatment
- **Reservoir** – represents costs of storing water
- **Distribution** – represents costs pertaining to the District's water distribution system
- **Pump Stations** – represents costs of pumping water to customers
- **Meters** – represents costs relating to maintenance and capital costs of water meters as well as a portion of costs related to water system capacity
- **Hydrants** – represents costs of providing capacity for public fire protection
- **Customer** – represents costs of meter reading, billing, and other customer services
- **Recycled Water** – represents costs related to the District's recycled water system
- **General -** represents costs for general operational expenses which cannot be categorized under any of the above

The functionalization of costs allows for the allocation of costs to the cost causation components, which include:

- **Supply** – costs associated with procuring water supplies from SDCWA
- **Base Delivery** – costs associated with providing water under average conditions
- **Peaking** (Max Day and Max Hour) – costs associated with providing water under peak demand conditions
- **Recycled Water** – costs associated with the District's recycled water system
- **Fire Protection** – costs associated with providing capacity for fire protection
- **Meters** – costs associated with purchasing, maintaining, and servicing water meters as well as some costs related to system capacity
- **Customer** – costs associated with customer service and billing
- **General** – costs that do not have any direct cost causation
- **Revenue Offsets** – non-rate revenues (such as property taxes and interest income) with no direct association with specific expenses or services

4.4. Peaking Factors

Peaking costs are divided into maximum day (Max Day) and maximum hour (Max Hour) demand. The Max Day demand is the maximum amount of water used in a single day in a year, and the Max Hour demand is the maximum usage in an hour on the Max Day. Different facilities, such as distribution and storage facilities, are designed to meet customers' peaking demands. Therefore, peaking costs, also known as extra capacity costs, are associated with meeting peak customer demand.

Table 4-2 shows the system-wide peaking factors used to derive the cost component allocation bases for Base Delivery, Max Day, and Max Hour costs. The Base Delivery, or Base use is considered average daily demand over one year, which has been normalized to a factor of 1.00 (Column C, Line 1). The Max Day peaking factor (Column C, Line 2) indicates that the Max Day demand is 1.88 times greater than the average daily demand based on average usage. Similarly, the Max Hour peaking factor (Column C, Line 3) shows that the Max Hour demand is 2.82 times greater than average demand.

The allocation bases (Columns D to F) are calculated using the equations outlined below. Columns are represented in these equations as letters, and rows are represented as numbers. For example, Column D, Line 2 is shown as D2.

The Max Day allocations are calculated as follows:

- Base Delivery: *C1 / C2 x 100% = D2*
- Max Day: *(C2 - C1) / C2 x 100% = E2*

The Max Hour allocations are calculated as follows:

- Base Delivery: *C1 / C3 x 100% = D3*
- Max Day: *(C2 - C1) / C3 x 100% = E3*
- Max Hour: *(C3 - C2) / C3 x 100% = F3*

Table 4-2: System Peaking Factor Allocations

A	B	C	D	E	F	G
Line	Allocation Factor	Peaking Factor	Base	Max Day	Max Hour	Total
1	**Base**	1.00	100.0%	0.0%	0.0%	100.0%
2	**Max Day**	1.88	53.1%	46.9%	0.0%	100.0%
3	**Max Hour**	2.82	35.4%	31.2%	33.3%	100.0%

Table 4-3 shows the peaking factors by customer class. Raftelis used the fiscal year (FY) 2022 water usage data to determine peaking factors, as 2023 was an unusually wet year, driving down usage. Each Max Month factor (Column E) is calculated by dividing FY 2022 maximum monthly usage by FY 2022 average monthly usage. Max Day factors (Column F) peaking factors are estimated by multiplying each tier-specific Max Month factor (Column C) by 1.42, which is the ratio of the system-wide Max Day factor to the system-wide Max Month factor. Max Hour factors (Column E) are calculated by multiplying each tier-specific Max Day factor (Column D) by 1.5, which represents the ratio of the system-wide Max Hour factor to the system-wide Max Day factor. It is noted that the peaking factors relative to each other are important and not the values themselves; therefore, the Max Month factors are a proxy for the Max day and Max Hour peaks. Note that recycled water volumetric rates do not incorporate peaking costs because the recycled water supply and distribution system is separate from the potable water system. Therefore, recycled water usage is excluded from **Table 4-3**.

Table 4-3: Peaking Factors by Customer Class

A Line	B Customer Class	C Max Month Factor	D Max Day Factor	E Max Hour Factor
1	**Domestic**			
2	Tier 1	1.03	1.46	2.19
3	Tier 2	1.26	1.77	2.66
4	Tier 3	1.54	2.17	3.26
5	Tier 4	1.94	2.75	4.13
6	**Agricultural**	1.60	2.27	3.40
7	**Commercial**	1.19	1.69	2.53
8	**Irrigation**			
9	Tier 1	1.60	2.27	3.40
10	Tier 2	2.02	2.87	4.30
11	**Construction**[6]	N/A	3.00	4.50

4.5. Allocation of Functional Categories to Cost Causation Components

Table 4-4 shows the allocation of functional categories to each cost causation component. The percentages shown for each functional category are to be used in the following subsections to allocate O&M expenses and capital assets to the various cost causation components.

Some functional categories are simply allocated 100 percent to the corresponding cost causation component or allocated evenly between two corresponding cost causation components. Others are based on the system peaking factor allocations shown previously in **Table 4-2**. Below is a verbal description of the allocation of functional categories shown in **Table 4-4**:

1. The **Supply** functional category is fully allocated to the **Supply** cost causation component, which is to be applied to the volumetric rates (excluding recycled water) to recover costs associated with procuring water from SDCWA.
2. The **Treatment** functional category is allocated to the cost causation components based on the Max Day allocation in Line 2 of **Table 4-2** (as treatment facilities are generally designed for Max Day demands).
3. The **Reservoir** is designed to meet max day demands plus fire flow, and 10 percent of the reservoir functional category is allocated to the **Fire Protection** cost causation component based on ISO standards with the remaining 90 percent allocated to the cost causation components based on the Max Day allocation in Line 2 of **Table 4-2**.
4. The **Distribution** system is designed to meet peak hour demands plus fire flow, and this functional category is allocated 10 percent to the **Fire Protection** cost causation component, with the remaining 90 percent allocated to the cost causation components based on the Max Hour allocation in Line 3 of **Table 4-2**.

[6] Due to the temporary and variable nature of Construction water usage, the Max Month factor is estimated at 3.00, which is consistent with the value used in the prior water COS study.

5. The **Pump Stations** functional category is allocated to the cost causation components based on the Max Hour allocation in Line 3 of **Table 4-2** (as pumping facilities are generally designed to withstand Max Hour demands).
6. The **Meters** functional category is fully allocated to the **Meters** cost causation component, which is to be recovered by the OMWD System Access Charge.
7. The **Hydrants** functional category is fully allocated to the **Fire Protection** cost causation component, which is to be recovered by the OMWD System Access.
8. The SDCWA **Customer** functional category is fully allocated to the **Customer** cost causation component, which is to be recovered by the OMWD System Access Charge.
9. The **Recycled Water** functional category is fully allocated to the **Recycled Water** cost causation component, which is to be recovered by the recycled water volumetric rate.
10. The District **Customer** functional category is allocated 45 percent to the **Customer** cost causation component and 55 percent to the **Meters** cost causation component to recognize the costs associated with meters and customer service.
11. The **General** functional category is fully allocated to the **General** cost causation component, which will later be distributed proportionally to the other cost causation components.

Table 4-4: Allocation of Functional Categories to Cost Causation Components

A	B	C	D	E	F	G	H	I	J	K	L
Line	Functional Category	Supply	Base	Max Day	Max Hour	Recycled Water	Fire Protection	Meters	Customer	General	Total
1	**Supply**	100%									100%
2	**Treatment**		53%	47%							100%
3	**Transmission**		53%	47%							100%
4	**Reservoir**		48%	42%			10%				100%
5	**Distribution**		32%	28%	30%		10%				100%
6	**Pump Stations**		35%	31%	33%						100%
7	**Meters**							100%			100%
8	**Hydrants**						100%				100%
9	**Customer**								100%		100%
10	**Recycled Water**					100%					100%
11	**Customer/Meter**							55%	45%		100%
12	**General**									100%	100%

4.6. O&M Allocation

Table 4-5 shows the allocation of O&M expenses to each cost causation component. O&M expenses are used in subsequent steps of the COS analysis to allocate the Operating revenue requirement. The percentages in Columns D-L of **Table 4-5** are determined by the assigned functional category in Column C and associated allocations shown above in **Table 4-4**. FY 2025 O&M expenses are shown in Column M, Lines 1-20 in millions of dollars. Purchased water expenses are broken down in Lines 1-10 to provide for more precise functionalization in Column C. The remaining O&M expenses less depreciation in Lines 11-20 are based on totals shown for FY 2025 in **Table 3-11**. Note that total O&M expenses in Column M, Line 21 of **Table 4-5** equals total FY 2025 O&M expenses excluding depreciation from **Table 3-11.**

The percentages for each cost causation component (Columns D-L) are multiplied by the FY 2025 O&M costs in Column for each individual line and then summed in Columns D-L of Line 21 to determine the total allocation of O&M expenses to each cost causation component. The proportion of total FY 2025 O&M expenses allocated to each cost causation component in Line 21 is shown in percentages in Line 23. The percentages in Line 23 represent the O&M allocation basis to be used in subsequent steps of the COS analysis. Note that the total O&M cost is equal to the sum of O&M expenses (excluding depreciation) and purchased water expenses from the revenue requirement determination (**Table 4-1**, Column E, Lines 2-3).

Table 4-5: O&M Cost Allocation

A	B	C	D	E	F	G	H	I	J	K	L	M
	O&M Expenses	**Functional Category**	**Supply**	**Base Delivery**	**Max Day**	**Max Hour**	**Recycled Water**	**Fire Protection**	**Meters**	**Customer**	**General**	**Total ($M)**
1	Purchased Water - Potable	*Supply*	100%	0%	0%	0%	0%	0%	0%	0%	0%	**$21.4 M**
2	Treatment Rate	*Treatment*	0%	53%	47%	0%	0%	0%	0%	0%	0%	**$1.1 M**
3	Capacity Reservation Charge	*Meters*	0%	0%	0%	0%	0%	0%	100%	0%	0%	**$0.4 M**
4	Readiness to Serve Charge	*Meters*	0%	0%	0%	0%	0%	0%	100%	0%	0%	**$0.7 M**
5	Infrastructure Access Charge	*Meters*	0%	0%	0%	0%	0%	0%	100%	0%	0%	**$1.5 M**
6	Customer Service Charge	*Customer*	0%	0%	0%	0%	0%	0%	0%	100%	0%	**$1.4 M**
7	Transportation Volumetric Charge	*Trans-mission*	0%	53%	47%	0%	0%	0%	0%	0%	0%	**$2.7 M**
8	Transportation Fixed Charge	*Meters*	0%	0%	0%	0%	0%	0%	100%	0%	0%	**$0.7 M**
9	Storage Charge	*Meters*	0%	0%	0%	0%	0%	0%	100%	0%	0%	**$3.2 M**
10	Supply Reliability Charge	*Meters*	0%	0%	0%	0%	0%	0%	100%	0%	0%	**$2.4 M**
11	Purchased Water - Recycled	*Recycled Water*	0%	0%	0%	0%	100%	0%	0%	0%	0%	**$2.0 M**
12	Operations and Maintenance	*Distribution*	0%	32%	28%	30%	0%	10%	0%	0%	0%	**$13.7 M**
13	General Manager	*General*	0%	0%	0%	0%	0%	0%	0%	0%	100%	**$0.6 M**
14	Engineering	*Capital*	0%	30%	26%	13%	12%	6%	2%	0%	11%	**$1.9 M**
15	Finance	*General*	0%	0%	0%	0%	0%	0%	0%	0%	100%	**$0.0 M**
16	Customer Services	*Customer+Meter*	0%	0%	0%	0%	0%	0%	55%	45%	0%	**$4.1 M**
17	Human Resources	*General*	0%	0%	0%	0%	0%	0%	0%	0%	100%	**$0.0 M**
18	Park	*General*	0%	0%	0%	0%	0%	0%	0%	0%	100%	**$0.5 M**
19	Recycled	*Recycled Water*	0%	0%	0%	0%	100%	0%	0%	0%	0%	**$1.5 M**
20	Lost Revenue (Pass-through)	*Supply*	100%	0%	0%	0%	0%	0%	0%	0%	0%	**$0.4 M**
21	**Total O&M**		**$21.9 M**	**$7.0 M**	**$6.1 M**	**$4.4 M**	**$3.7 M**	**$1.5 M**	**$11.2 M**	**$3.2 M**	**$1.4 M**	**$60.3 M**
22												
23	**O&M Allocation**		***36.3%***	***11.6%***	***10.1%***	***7.2%***	***6.1%***	***2.4%***	***18.6%***	***5.3%***	***2.3%***	**100.0%**

4.7. Capital Allocation

Table 4-6 shows the allocation of capital assets to each cost component. Capital assets are utilized in COS analyses to allocate capital costs because annual capital project costs can fluctuate greatly from year to year. Capital assets remain relatively stable and are more representative of the District's investments in its water system. District staff provided Raftelis with a detailed asset listing that included the Original Cost of each individual fixed asset. Raftelis calculated the Replacement Cost Less Depreciation (RCLD) of each asset based on Original Cost, year purchased, and useful life using the Engineering News-Record's 20-City Average Cost Construction Index (CCI) to account for capital cost inflation. RCLD is often utilized in capital asset analyses because it takes into consideration inflation and depreciation when valuing assets. As part of the capital asset analysis, Raftelis also assigned each individual asset to a functional category. Total asset value (RCLD) by functional category is shown in Column J, Lines 2-15 of **Table 4-6**.

Table 4-6 shows the capital assets allocated to the various cost causation components in a similar manner to the O&M expenses: asset value by functional category (Column J) is allocated to each cost causation component (Columns C-I) based on percentages from **Table 4-4.** Allocation percentages for each cost causation component are multiplied by the capital asset value for each functional category and summed to determine the capital asset value allocated to each cost causation component (Columns C-I, Line 17). The capital allocation in Line 19 represents the proportion of total asset value within each cost causation component and is to be used subsequently in the COS analysis to allocate capital revenue requirements.

Table 4-6: Capital Cost Allocation

A	B	C	D	E	F	G	H	I	J
Line	Functional Category	Base Delivery	Max Day	Max Hour	Recycled Water	Fire Protection	Meters	General	Total
1	**Potable Water Assets**								
2	Treatment	53%	47%	0%	0%	0%	0%	0%	**$85,831,940**
3	Reservoir	48%	42%	0%	0%	10%	0%	0%	**$62,400,509**
4	Distribution	32%	28%	30%	0%	10%	0%	0%	**$202,488,983**
5	Pump Stations	35%	31%	33%	0%	0%	0%	0%	**$11,394,004**
6	Meters	0%	0%	0%	0%	0%	100%	0%	**$7,901,335**
7	General	0%	0%	0%	0%	0%	0%	100%	**$51,606,503**
8									
9	**Recycled Water Assets**								
10	Treatment	0%	0%	0%	0%	100%	0%	0%	**$2,148,771**
11	Reservoir	0%	0%	0%	0%	100%	0%	0%	**$8,074,121**
12	Distribution	0%	0%	0%	0%	100%	0%	0%	**$36,851,765**
13	Pump Stations	0%	0%	0%	0%	100%	0%	0%	**$3,550,980**
14	Meters	0%	0%	0%	0%	100%	0%	0%	**$4,726,955**
15	General	0%	0%	0%	0%	100%	0%	0%	**$3,869,826**
16									
17	**Total Assets**	**$144,822,420**	**$126,259,371**	**$64,544,696**	**$59,222,418**	**$26,488,949**	**$7,901,335**	**$51,606,503**	**$480,845,693**
18									
19	**Capital Allocation**	***30.1%***	***26.3%***	***13.4%***	***12.3%***	***5.5%***	***1.6%***	***10.7%***	**100.0%**

4.8. Revenue Offset Allocation

Table 4-7 shows the revenue offset allocation to each cost causation component. Revenue offsets are miscellaneous, non-rate revenues that are used to offset the revenue requirement. Rather than assigning a functional category to each individual revenue offset, revenue offsets are allocated directly to cost causation components by either the O&M allocation (**Table 4-5**, Line 21), capital allocation (**Table 4-6**, Line 19), or full allocation to the most closely associated cost causation component. The methodology as described previously for the O&M and capital allocations was utilized to determine the amount of revenue offsets allocated to each cost causation component (**Table 4-7**, Line 27) and the final revenue offset allocation percentages to be utilized in the next step of the COS analysis (**Table 4-7**, Line 29).

Some revenues, including investment income and a portion of property taxes, are not directly linked to any service that the District provides to its water customers. These revenues can therefore be allocated to the Revenue Offsets cost causation component (Column M), which can be utilized at the District's discretion to provide offsets to specific customer classes and tiers. The Revenue Offsets cost causation component was not included in the O&M or capital allocations, as it only applies to revenues.

Table 4-7: Revenue Offset Allocation

A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Revenue Offsets	**Rationale**	**Supply**	**Base Delivery**	**Max Day**	**Max Hour**	**Recycle-d Water**	**Fire Protecti-on**	**Meters**	**Custom-er**	**General**	**Revenue Offsets**	**Total**
1	CWA Infrastructure Access Charge	100% Meters	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	$1,585,835
2	Selling Excess Treated Water to Vallecitos	100% Base	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	$918,300
3	Misc. Water Sales	100% Base	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	$10,000
4	Meter Installations	100% Meters	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	$15,000
5	Hydro-electric Plant Revenues	100% Base	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	$110,000
6	Turn Off/On Fees and NSF Charges	100% Customer	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	$20,000
7	Delinquency Charges	100% Customer	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	$120,000
8	Transfer Fee	Capital Allocation	0%	30%	26%	13%	12%	6%	2%	0%	11%	0%	$30,000
9	Cross Connection/In spection	Capital Allocation	0%	30%	26%	13%	12%	6%	2%	0%	11%	0%	$205,000
10	Outside District Boundary Charges	Capital Allocation	0%	30%	26%	13%	12%	6%	2%	0%	11%	0%	$10,000
11	Rental Income	Capital Allocation	0%	30%	26%	13%	12%	6%	2%	0%	11%	0%	$790,704
12	Other operating	O&M Allocation	36%	12%	10%	7%	6%	2%	19%	5%	2%	0%	$10,200
13	Investment Income (Potable)	100% Offsets	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	$322,108
14	Property Tax Revenue	Capital Allocation	0%	11%	10%	5%	5%	2%	1%	0%	4%	62%	$4,896,000

A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Revenue Offsets	**Rationale**	**Supply**	**Base Delivery**	**Max Day**	**Max Hour**	**Recycle-d Water**	**Fire Protecti-on**	**Meters**	**Custom-er**	**General**	**Revenue Offsets**	**Total**
15	Gain on Sale of Fixed Assets	Capital Allocation	0%	30%	26%	13%	12%	6%	2%	0%	11%	0%	$0
16	Other Non-Operating	Capital Allocation	0%	30%	26%	13%	12%	6%	2%	0%	11%	0%	$0
17	Investment Income (Recycled)	100% Recycled	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	$320,892
18	Interest income rec loans	100% Recycled	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	$0
19	Total Revenue Offsets		$3,703	$1,905,599	$756,130	$386,747	$675,694	$158,666	$1,649,984	$140,544	$308,864	$3,378,108	$9,364,039
20													
21	**Revenue Offset Allocation**		**30%**	**15%**	**13%**	**8%**	**7%**	**3%**	**16%**	**4%**	**4%**	**0%**	**100.00%**

4.9. Allocation of Revenue Requirements to Cost Causation Components

Table 4-8 shows the allocation of revenue requirements from **Table 4-1.** The total operating revenue requirement in Column M, Line 1 of **Table 4-8** is equal to the operating revenue requirement (Column C, Line 7) less adjustments (Column C, Line 33) from **Table 4-1**.

The total operating revenue requirement is allocated among the various cost causation components in Columns C-L, Line 1 of **Table 4-8** based on the O&M allocation percentages from Line 23 of **Table 4-5**. The total Capital revenue requirement in Column M, Line 2 of **Table 4-8** is equal to the capital revenue requirement (Column D, Line 7) less operating adjustments (Column D, Line 33) from **Table 4-1**. The total capital revenue requirement is allocated among the various cost causation components in Columns C-L, Line 2 of **Table 4-8** based on the capital allocation percentages from Line 19 of **Table 4-6**. Total revenue offsets in Column M, Line 3 of **Table 4-8** is equal to the revenue offsets in Column E, Line 28 of **Table 4-1**. Total revenue offsets are allocated among the various cost causation components in Columns C-L, Line 3 of **Table 4-8** based on the revenue offset allocation percentages from Line 21 of **Table 4-7**.

Lines 1-3 in **Table 4-8** are summed to determine the preliminary COS allocation to each cost causation component in Line 4. General costs are then proportionally reallocated to all other cost causation components (excluding Revenue Offsets) in Line 6. Line 7 shows the reallocation of 95 percent of Fire Protection costs (Column H, Line 7) to the Meters cost causation component (Column I, Line 7) to account for public fire protection capacity costs. The purpose is to equitably allocate fire protection capacity costs between private fire meters and public fire hydrants proportional to the capacity of each.

Line 10 in **Table 4-8** shows a final adjustment to the cost causation component allocations, in which 5 percent of Max Day costs (Column E, Line 10) and Max Hour costs (Column F, Line 10) are reallocated to the Meters cost causation component (Column I, Line 10). Peaking costs represent the additional costs incurred to provide capacity to meet peak demands and based on the meters therefore, the final adjustment is intended to allocate some of those costs to meter capacity and provide revenue stability for the District by ensuring that approximately 26 percent of rate revenues are from fixed charges (OMWD System Access charges and Fire Meter Charges). This retains the existing fixed versus variable revenue split under current water rates. Line 12 shows the final adjusted COS by cost causation component, which is to be used to develop unit costs in the following subsections.

Table 4-8: Allocation of Revenue Requirement to Cost Causation Components

A	B	C	D	E	F	G	H	I	J	K	L	M
	Description	Supply	Base Delivery	Max Day	Max Hour	Recycled Water	Fire Protection	Meters	Customer	General	Revenue Offsets	Total
1	**Operating**	$22,773,669	$7,295,126	$6,357,996	$4,529,128	$3,820,239	$1,530,098	$11,650,250	$3,346,477	$1,420,763	$0	**$62.7M**
2	**Capital**	$0	$3,885,619	$3,387,568	$1,731,749	$1,588,951	$710,705	$211,995	$0	$1,384,614	$0	**$12.9M**
3	**Revenue Offsets**	($3,703)	($1,905,599)	($756,130)	($386,747)	($675,694)	($158,666)	($1,649,984)	($140,544)	($308,864)	($3,378,108)	**($9.4M)**
4	**Preliminary COS**	**$22,769,966**	**$9,275,147**	**$8,989,434**	**$5,874,130**	**$4,733,496**	**$2,082,136**	**$10,212,261**	**$3,205,933**	**$2,496,513**	**($3,378,108)**	**$66.3M**
5												
6	**Allocation of General Cost**	$846,640	$344,871	$334,248	$218,414	$176,002	$77,419	$379,715	$119,204	($2,496,513)	$0	**$0**
7	**Allocation of Public Fire Costs**	$0	$0	$0	$0	$0	($2,051,577)	$2,051,577	$0	$0	$0	**$0**
8	**Allocated COS**	**$23,616,605**	**$9,620,018**	**$9,323,682**	**$6,092,543**	**$4,909,499**	**$107,978**	**$12,643,553**	**$3,325,137**	**$0**	**($3,378,108)**	**$66.3M**
9												
10	**Final Adjustment – Peaking to Mtrs**	$0	$0	($932,368)	($609,254)	$0	$0	$1,372,717	$0	$0	$168,905	**$0**
11												
12	**Final Adjusted COS**	**$23,616,605**	**$9,620,018**	**$8,391,314**	**$5,483,289**	**$4,909,499**	**$107,978**	**$14,016,270**	**$3,325,137**	**$0**	**($3,209,202)**	**$66.3M**

4.10. Units of Service

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

4.10.1. Equivalent Meters

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

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

Table 4-9 shows the equivalent potable and recycled water meters for the test year FY 2025. The number of meters (Column D) is equal to the projected number of meters subject to the OMWD System Access Charge from (**Table 3-6**). Meter capacity ratios (Column C) were provided by the District's Engineering Department and are consistent with ratios used in the prior water COS study conducted in 2019 and consistent with the demand of each meter size on the water system. The number of meters (Column D) is multiplied by the meter capacity ratios (Column C) to determine the number of equivalent meters (Column E).

Table 4-9: Equivalent Meter Units (FY 2025)

A Line	B Meter Size	C Meter Capacity Ratio	D Number of Water Meters	E = C X D Equivalent Meter Units
1	**5/8"**	0.7	1,914	1,340
2	**3/4"**	1	16,440	16,440
3	**1"**	1.9	3,089	5,869
4	**1-1/2"**	3.1	1,013	3,140
5	**2"**	5	531	2,655
6	**2-1/2"**	9.3	39	363
7	**3"**	10.2	30	306
8	**4"**	17.1	23	393
9	**6"**	36	7	252
10	**8"**	65	1	65
11	**Total**		**23,087**	**30,823**

Table 4-10 shows the determination of equivalent meter units in FY 2025 for fire meters. The number of projected fire meters in FY 2025 was determined previously in **Table 3-5**. Meter capacity ratios match the values used above in **Table 4-9** for potable and recycled water meters with the exception of the 5/8-inch fire meter, which is set equal to 1.00. The actual number of fire meters (Column D) is multiplied by the meter capacity ratios (Column C) to determine the number of equivalent fire meters (Column E).

Table 4-10: Equivalent Fire Meter Units (FY 2025)

A Line	B Meter Size	C Meter Capacity Ratio	D Number of Fire Meters	E = C X D Equivalent Fire Meter Units
1	**5/8"**	1	401	401
2	**3/4"**	1	18	18
3	**1"**	1.9	5,464	10,382
4	**1-1/2"**	3.1	67	208
5	**2"**	5	0	0
6	**2-1/2"**	9.3	1	9
7	**3"**	10.2	0	0
8	**4"**	17.1	0	0
9	**6"**	36	1	36
10	**8"**	65	0	0
11	**Total**		**5,952**	**11,054**

4.10.2. Customer Bills

The number of total projected customer bills in FY 2025 is used as the unit of service for the Customer cost causation component. The sum of total water meters (**Table 4-9**, Column D, Line 11) and total fire meters (**Table 4-10**, Column D, Line 11) is multiplied by twelve monthly billing periods per year to determine total bills in **Table 4-11** Column C, Line 7.

Table 4-11: Projected Annual Customer Bills (FY 2025)

A Line	B Description	C Value	D Notes
1	Number of Water Meters	23,087	
2	Number of Fire Meters	5,952	
3	**Total Meters**	**29,039**	
4			
5	Billing Periods per Year	12	
6			
7	**Total Bills**	**348,468**	= [Line 3] x [Line 5]

Peaking Units of Service

Peaking units of service in units per day are used to develop Max Day and Max Hour unit costs. **Table 4-12** shows the development of total Max Day units (Column G, Line 13). Projected usage by tier and customer class in Column C is divided by 365 days to determine average daily usage in Column D. Average daily usage in Column D is then multiplied by the Max Day factor in Column E (from **Table 4-3**, Column F) to determine Max Day units. Max Day requirements (Column G) in units per day, which is the unit of service for Max Day costs, is determined by subtracting average daily usage in Column D from Max Day units in Column F. Max Hour requirements are similarly calculated in **Table 4-13**. Please note, however, that Max Hour requirements (Column G) are calculated by subtracting Max Day units (**Table 4-12,** Column F) from Max Hour units (**Table 4-13**, Column F).

Table 4-12: Max Day Units of Service

A	B	C	D	E	F	G
	Customer Class	FY 2025 Projected Annual Usage (units)	FY 2025 Average Daily Usage (units)	Max Day Factor	Max Day Units (units/day)	Max Day Requirements (units/day)
1	**Domestic**					
2	Tier 1	1,511,998	4,142	1.46	6,031	1,888
3	Tier 2	1,986,076	5,441	1.79	9,719	4,277
4	Tier 3	1,433,314	3,927	2.19	8,589	4,662
5	Tier 4	556,269	1,524	2.76	4,201	2,677
7	**Agricultural**	82,403	226	2.27	512	286
8	**Commercial**	296,027	811	1.69	1,369	558
9	**Irrigation**					
10	Tier 1	411,926	1,129	2.27	2,561	1,433
11	Tier 2	435,335	1,193	2.87	3,418	2,225
12	**Construction**	41,669	114	3.00	342	228
13	**Total**	**6,755,016**	**18,507**			**18,235**

Table 4-13: Max Hour Units of Service

A	B	C	D	E	F	G
Line	Customer Class	FY 2025 Projected Usage (units)	FY 2025 Average Daily Usage (units)	Max Hour Factor	Max Hour Units (units/day)	Max Hour Requirements (units/day)
1	**Domestic**					
2	Tier 1	1,511,998	4,142	2.18	9,046	3,015
3	Tier 2	1,986,076	5,441	2.68	14,578	4,859
4	Tier 3	1,433,314	3,927	3.28	12,883	4,294
5	Tier 4	556,269	1,524	4.13	6,302	2,101
7	**Agricultural**	82,403	226	3.40	768	256
8	**Commercial**	296,027	811	2.53	2,054	685
9	**Irrigation**					
10	Tier 1	411,926	1,129	3.40	3,842	1,281
11	Tier 2	435,335	1,193	4.30	5,126	1,709
12	**Construction**	41,669	114	4.50	514	171
13	**Total**	**6,755,016**	**18,507**			**18,371**

Table 4-14 shows a summary of the relevant units of service for each cost causation component. Total revenue requirements by cost causation components are divided by the relevant units of service to determine a unit cost for each cost causation component in the following subsection. Fire Protection, Meters, and Customer unit costs are used to develop fixed monthly charges (OMWD System Access Charges and Fire Meter Charges), and are therefore based off number of equivalent meter units or customer bills from **Table 4-9** through **Table 4-11**. Supply, Base Delivery, Max Day, Max Hour, Recycled Water, and Revenue Offsets unit costs are used to develop proposed volumetric rates and, therefore, are based on projected annual water usage or peaking requirements in units per day from **Table 4-12** and **Table 4-13.**

Table 4-14: Summary of Units of Service by Cost Causation Component

A	B	C		D
Line	Cost Causation Component	Units of Service		Basis
1	**Supply**	6,755,016	units	Total projected FY 2025 usage excluding recycled water
2	**Base Delivery**	6,755,016	units	Total projected FY 2025 usage excluding recycled water
3	**Max Day**	18,235	units/day	Projected Max Day requirements in FY 2025
4	**Max Hour**	18,371	units/day	Projected Max Hour requirements in FY 2025
5	**Recycled Water**	1,049,621	units	Projected recycled water usage in FY 2025
7	**Fire Protection**	11,054	EMUs	Equivalent fire meter units
8	**Meters**	30,823	EMUs	Equivalent potable and recycled water meter units
9	**Customer**	312,756	bills	Total annual customer bills
10	**Revenue Offsets**	6,755,016	units	Total projected FY 2025 usage excluding recycled and construction water

4.11. Units Cost Development

Table 4-15 shows the calculation of unit costs for each cost causation component. Unit costs are used in **Section 5** to derive the proposed rates for FY 2025. The unit cost in Column E for each cost causation component is calculated by dividing the FY 2025 revenue requirement in Column C (from **Table 4-8,** Line 12) by the units of service in Column D (from **Table 4-14**, Column C).

Table 4-15: Calculation of Unit Costs by Cost Causation Component

A	B	C	D		E = C / D
Line	Cost Causation Component	FY 2025 Revenue Requirement	FY 2025 Units of Service		Unit Cost
1	**Supply**	$23,616,605	6,755,016	units	$3.50
2	**Base Delivery**	$9,620,018	6,755,016	units	$1.42
3	**Max Day**	$8,391,314	18,235	units/day	$460.18
4	**Max Hour**	$5,483,289	18,371	units/day	$298.48
5	**Recycled Water**	$4,909,499	1,049,621	units	$4.68
7	**Fire Protection**	$107,978	11,054	EMUs (Monthly)	$0.81
8	**Meters**	$14,016,270	30,823	EMUs (Monthly)	$37.89
9	**Customer**	$3,325,137	312,756	bills	$10.63
10	**Revenue Offsets**	($3,209,202)	6,755,016	units	($0.48)

4.12. Cost of Service by Customer Class

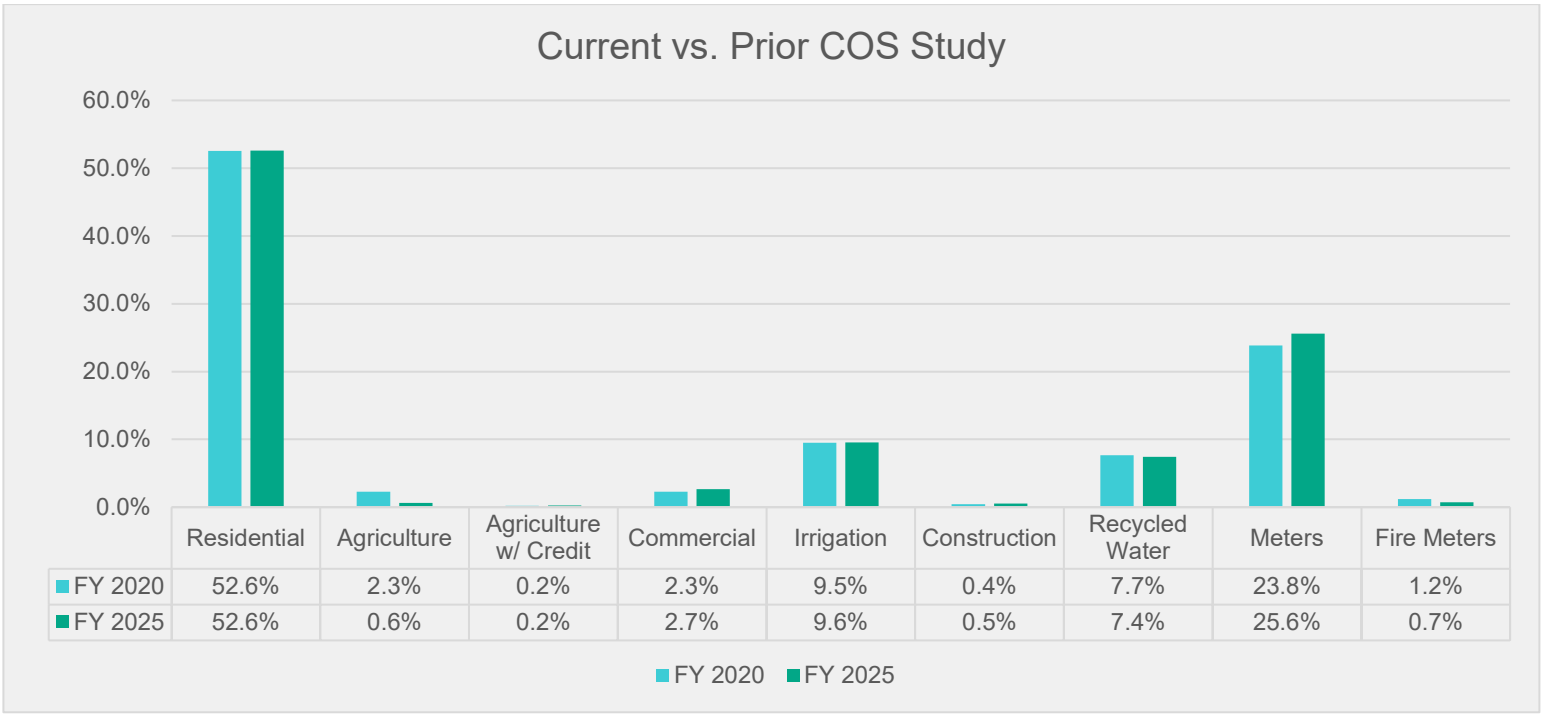
Table 4-16 shows the distribution of each cost causation component's revenue requirement to volumetric rates by customer class and to each fixed charge. The dollar amount attributed to each customer class for each cost causation component is determined by multiplying the unit costs (from **Table 4-15)** by the relevant units of service for each customer class (from **Table 4-9** through **Table 4-13**). **Figure 4-1** shows a comparison of the distribution of costs to each customer class from the current COS analysis presented in this study and the prior

COS analysis conducted in 2019. The changes shown are a result of changes in water usage patterns by customer class, O&M cost structure, capital needs, and other factors.

Table 4-16: Proposed Cost of Service by Customer Class

A	B	C	D	E	F	G	H	I	J	K	L
	Description	**Supply**	**Base**	**Max Day**	**Max Hour**	**Recycled Water**	**Fire Protect-ion**	**Meters**	**Customer**	**Revenue Offsets**	**Total**
1	Volumetric Rates										
2	Domestic	$19,185,717	$7,815,134	$6,214,564	$4,259,170	$0	$0	$0	$0	($2,623,282)	$34,851,304
3	Agriculture	$288,094	$117,353	$131,632	$76,381	$0	$0	$0	$0	($39,391)	$574,069
4	Commercial	$1,034,956	$421,580	$256,797	$204,318	$0	$0	$0	$0	($141,510)	$1,776,141
5	Irrigation	$2,962,157	$1,206,609	$1,683,249	$892,308	$0	$0	$0	$0	($405,019)	$6,339,304
6	Construction	$145,681	$59,342	$105,070	$51,112	$0	$0	$0	$0	$0	$361,206
7	Recycled Water	$0	$0	$0	$0	$4,909,499	$0	$0	$0	$0	$4,909,499
8											
9	Fixed Charges										
10	OMWD System Access Charges	$0	$0	$0	$0	$0	$0	$14,016,270	$2,945,457	$0	$16,961,727
11	Fire Meter Charges	$0	$0	$0	$0	$0	$107,978	$0	$379,680	$0	$487,658
12											
13	**Total**	**$23,616,605**	**$9,620,018**	**$8,391,314**	**$5,483,289**	**$4,909,499**	**$107,978**	**$14,016,270**	**$3,325,137**	**($3,209,202)**	**$66,260,908**

Figure 4-1: Cost of Service Comparison: Current and Prior Studies



	Residential	Agriculture	Agriculture w/ Credit	Commercial	Irrigation	Construction	Recycled Water	Meters	Fire Meters
FY 2020	52.6%	2.3%	0.2%	2.3%	9.5%	0.4%	7.7%	23.8%	1.2%
FY 2025	52.6%	0.6%	0.2%	2.7%	9.6%	0.5%	7.4%	25.6%	0.7%

5. Rate Design

This section of the report details the calculation of the proposed water rates for FY 2025. All rates shown in this section are rounded up to the nearest cent. Other numbers shown in the tables in this section of the report are also rounded. Therefore, hand calculations based on the displayed numbers, such as summing or multiplying, may not equal the exact results shown. Note that the SDCWA Infrastructure Access Charge shown in this section was not developed by Raftelis but rather represents a direct pass-through of the CY 2025 rate established by SDCWA.

5.1. Rate Structure Overview

Based on discussions with District staff as well as evaluation of water usage characteristics by customer class, Raftelis recommends that the District maintain its existing water rate structure. Below is a summary of the District's existing rate structure by charge and customer class:

- **Monthly Fixed Charges:**
  - **OMWD System Access Charge** which varies by meter size
  - **Fire Meter Charge** which varies by fire meter size
  - **SDCWA Infrastructure Access Charge** which varies by meter size
- **Volumetric Rates** per unit of water delivered, which varies by the following customer classes/tiers
  - **Domestic**: four tier structure with defined monthly tier allotments
  - **Agricultural**: uniform rate per unit
  - **Combined Agricultural/Domestic:** follows the Domestic rate structure for monthly usage up to the Domestic Tier 2 limit and the Agricultural rate structure for monthly usage in excess of the Domestic Tier 2 limit.
  - **Commercial:** uniform rate per unit
  - **Irrigation:** two tier structure with defined monthly tier allotments that vary by both meter size and season (November 1-April 30 and May 1-October 31)
  - **Construction:** uniform rate per unit
  - **Recycled:** uniform rate per unit

Raftelis proposes to maintain the current Irrigation tier definitions, which vary by meter size and season. For Irrigation customers, all monthly water usage more than the Tier 1 allotment is charged at the Irrigation Tier 2 rate, as shown in **Table 5-1**.

Table 5-1: Irrigation Tier Definitions

Meter Size	Winter Tier 1 Allotment (Nov 1-Apr 30)	Summer Tier 1 Allotment (May 1-Oct 31)
5/8"	10 Units	15 Units
3/4"	20 Units	30 Units
1"	35 Units	50 Units
1-1/2"	50 Units	110 Units
2"	100 Units	200 Units
3"	200 Units	500 Units
4"	600 Units	3,500 Units
6"	3,100 Units	11,800 Units
8"	5,600 Units	21,300 Units

5.2. OMWD System Access Charge Calculation

Table 5-2 shows the calculation of proposed FY 2025 monthly OMWD System Access Charges, which are comprised of the Meters and Customer unit costs previously developed in **Table 4-15**. The Meter unit cost (**Table 4-15**, Column E, Line 8) is multiplied by the capacity ratio for each meter size (Column C) to determine the Meter component of the OMWD System Access Charge for each meter size (Column D). The Customer component of the charge is equal to the Customer unit cost (**Table 4-15**, Column E, Line 9) and is the same for all meter sizes, as customer service-related costs are not dependent on meter size. The proposed OMWD System Access Charge (Column F) is equal to the sum of the Meter and Customer components of the charge (Columns D and E) for each meter size.

Table 5-2: Monthly OMWD System Access Charge Calculation

A	B	C	D = C x $37.89	E	F = D + E	G	H = F - G
Line	Meter Size	Capacity Ratio	Meter	Customer	Proposed Charge	Current Charge	Difference
1	5/8"	0.7	$26.53	$10.63	**$37.16**	$34.25	$2.91
2	3/4"	1.0	$37.89	$10.63	**$48.53**	$44.79	$3.74
3	1"	1.9	$72.00	$10.63	**$82.64**	$76.41	$6.23
4	1-1/2"	3.1	$117.47	$10.63	**$128.11**	$118.54	$9.57
5	2"	5.0	$189.47	$10.63	**$200.11**	$185.30	$14.81
6	2-1/2"	9.3	$352.42	$10.63	**$363.05**	$336.33	$26.72
7	3"	10.2	$386.52	$10.63	**$397.16**	$367.94	$29.22
8	4"	17.1	$647.99	$10.63	**$658.63**	$610.30	$48.33
9	6"	36.0	$1,364.19	$10.63	**$1,374.83**	$1,274.14	$100.69
10	8"	65.0	$2,463.13	$10.63	**$2,473.76**	$2,292.73	$181.03

5.3. Fire Meter Charge Calculation

Table 5-3 shows the calculation of proposed FY 2025 Fire Meter Charges, which are comprised of the Fire Protection and Customer unit costs previously developed in **Table 4-15**. The Fire Protection unit cost (**Table 4-15**, Column E, Line 7) is multiplied by the capacity ratio for each meter size (Column C) to determine the

Fire Protection component for each meter size (Column D). The Customer component of the charge is equal to one-half of the Customer unit cost (**Table 4-15**, Column E, Line 9) and is the same for all meter sizes, as customer service-related costs are not dependent on meter size. Based on feedback from District staff, Raftelis recommends that Fire Meter Charges are subject to half of the Customer unit cost since these charges are billed on the same water bill and require significantly less customer service support than regular meters. The proposed Fire Meter Charge (Column F) is equal to the sum of the Fire Protection and Customer components (Columns D and E) for each meter size.

Table 5-3: Monthly Fire Meter Charge Calculation

A Line	B Meter Size	C Capacity Ratio	D = C x $0.81 Fire Protection	E Customer	F = D + E Proposed Charge	G Current Charge	H = F - G Difference
1	5/8"	1.0	$0.81	$5.32	**$6.13**	$5.85	$0.28
2	3/4"	1.0	$0.81	$5.32	**$6.13**	$5.85	$0.28
3	1"	1.9	$1.55	$5.32	**$6.87**	$6.57	$0.30
4	1-1/2"	3.1	$2.52	$5.32	**$7.84**	$7.54	$0.30
5	2"	5.0	$4.07	$5.32	**$9.39**	$9.08	$0.31
6	2-1/2"	9.3	$7.57	$5.32	**$12.89**	$12.55	$0.34
7	3"	10.2	$8.30	$5.32	**$13.62**	$13.27	$0.35
8	4"	17.1	$13.92	$5.32	**$19.24**	$18.85	$0.39
9	6"	36.0	$29.31	$5.32	**$34.63**	$34.13	$0.50
10	8"	65.0	$52.91	$5.32	**$58.23**	$57.56	$0.67

5.4. SDCWA Infrastructure Access Charges

Table 5-4 shows the SDCWA Infrastructure Access Charges that will go into effect on January 1, 2025. The SDCWA Infrastructure Access Charge per meter equivalent is developed by SDCWA and passed through by the District to its customers. SDCWA has proposed to increase the SDCWA Infrastructure Access Charge from $4.41 to $4.55 per meter equivalent for CY 2025. **Table 5-4** shows the calculation of CY 2025 SDCWA Infrastructure Access Charges, which are determined by multiplying the $4.55 rate per meter equivalent by the capacity ratio (Column C) for each meter size.

Table 5-4: Monthly SDCWA Infrastructure Access Charge

A Line	B Meter Size	C Capacity Ratio	D Charge per Meter Equivalent	E = C x D Proposed Charge	F Current Charge	G Difference
1	5/8"	1.0	$4.55	**$4.55**	$4.41	$0.14
2	3/4"	1.0	$4.55	**$4.55**	$4.41	$0.14
3	1"	1.9	$4.55	**$8.65**	$8.39	$0.26
4	1-1/2"	3.1	$4.55	**$14.11**	$13.70	$0.41
5	2"	5.0	$4.55	**$22.75**	$22.09	$0.66
6	2-1/2"	9.3	$4.55	**$42.32**	$41.10	$1.22
7	3"	10.2	$4.55	**$46.41**	$45.08	$1.33
8	4"	17.1	$4.55	**$77.81**	$75.58	$2.23
9	6"	36.0	$4.55	**$163.80**	$159.10	$4.70
10	8"	65.0	$4.55	**$295.75**	$287.29	$8.46

5.5. Volumetric Rate Calculations

Proposed volumetric rates are comprised of unit costs for the Supply, Base Delivery, Max Day, Max Hour, Recycled Water, and Revenue Offsets cost causation components. The Recycled volumetric rate is comprised solely of the Recycled Water unit cost, while all other volumetric rates are comprised of the other cost causation component unit costs listed above. Unit costs from **Table 4-15** are used to provide the basis for the calculation of volumetric rates. However, peaking unit rates and Revenue Offset unit rates must first be differentiated by customer class, as these unit costs are not applied uniformly to each customer class and tier.

5.5.1. Peaking Unit Rates

Peaking unit costs, which vary by customer class and tier, must first be converted from units per day peaking requirements into unit rates per unit. The Max Day unit rate calculations are shown in **Table 5-5**. Max Day requirements in Column C (from **Table 4-12,** Column G) are multiplied by the Max Day unit cost in units per day in Column D (from **Table 4-15**, Column E, Line 3) to determine the Max Day revenue requirement by customer class and tier. This result in Column E is then divided by projected FY 2025 usage by class and tier in Column F (from **Table 4-12,** Column C) to determine the Max Day unit rate by customer class in Column G.

The Max Day unit rates are utilized to differentiate volumetric rates for each customer class and tier based on specific water usage characteristics.

Table 5-5: Max Day Unit Rates by Customer Class

A Line	B Customer Class	C Max Day Requirements (Units/day)	D Max Day Unit Cost (Units/day)	E = C x D Max Day Revenue Requirement	F FY 2025 Projected Usage (Units)	G = E / F Max Day Unit Rate ($/unit)
1	Domestic					
2	Tier 1	1,888	$460.18	$868,934	1,511,998	$0.57
3	Tier 2	4,277	$460.18	$1,968,429	1,986,076	$0.99
4	Tier 3	4,662	$460.18	$2,145,204	1,433,314	$1.50
5	Tier 4	2,677	$460.18	$1,231,997	556,269	$2.21
7	Agricultural	286	$460.18	$131,632	82,403	$1.60
8	Commercial	558	$460.18	$256,797	296,027	$0.87
9	Irrigation					
10	Tier 1	1,433	$460.18	$659,388	411,926	$1.60
11	Tier 2	2,225	$460.18	$1,023,862	435,335	$2.35
12	Construction	228	$460.18	$105,070	41,669	$2.52
13	**Total**	**18,235**		**$8,391,314**	**6,755,016**	

Max Hour unit rates by customer class are calculated in **Table 5-6** in the same manner as described above for Max Day unit rates. Max Hour requirements in Column C (from **Table 4-13,** Column G) are multiplied by the Max Hour unit cost in units per day in Column D (from **Table 4-15**, Column E, Line 4) to determine the Max Hour revenue requirement by customer class and tier. This result in Column E is then divided by projected FY 2025 usage by class and tier in Column F (from **Table 4-13,** Column C) to determine the Max Hour unit rate by customer class in Column G.

Table 5-6: Max Hour Unit Rates by Customer Class

A Line	B Customer Class	C Max Hour Requirements (Units/day)	D Max Hour Unit Cost (Units/day)	E = C x D Max Hour Revenue Requirement	F FY 2025 Projected Usage (Units)	G = E / F Max Hour Unit Rate ($/unit)
1	Domestic					
2	Tier 1	3,015	$298.48	$900,016	1,511,998	$0.60
3	Tier 2	4,859	$298.48	$1,450,425	1,986,076	$0.73
4	Tier 3	4,294	$298.48	$1,281,744	1,433,314	$0.89
5	Tier 4	2,101	$298.48	$626,986	556,269	$1.13
7	Agricultural	256	$298.48	$76,381	82,403	$0.93
8	Commercial	685	$298.48	$204,318	296,027	$0.69
9	Irrigation					
10	Tier 1	1,281	$298.48	$382,268	411,926	$0.93
11	Tier 2	1,709	$298.48	$510,040	435,335	$1.17
12	Construction	171	$298.48	$51,112	41,669	$1.23
13	**Total**	**18,371**		**5,483,289**	**6,755,016**	

5.5.2. Revenue Offsets

Non-rate revenue sources that are not directly related to any specific District function or expense may be utilized at the District's discretion to offset various rates. These revenues are included within the Revenue Offsets cost causation component. **Table 4-15** shows the Revenue Offsets unit rate of $0.48 if applied evenly to each unit of water usage (excluding Construction and Recycled usage). To provide for affordability for essential water use by Domestic customers, Raftelis recommends that the majority ($1.60) of revenue offsets allocated to the Domestic customer class (**Table 4-16**, Column K, Line 2) be applied to Domestic Tier 1 water usage (**Table 4-12,** Column C, Line 2), and $0.11 of revenue offsets be allocated to Tier 2 to minimize customer impacts from the large increases in SDCWA water rates. All residential users will benefit from the Tier 1 rates since they all have to use water in Tier 1.

Table 5-7 shows a summary of Revenue Offset unit rates per unit by customer class and tier. In an effort to have equitable rate increases across classes, some of the revenue offset from classes with little increase were redirected to classes that had a disproportional increase. Irrigation Tier 2 had additional revenue offset applied and volumetric rates are still increasing by 13 percent, the most of any class. **Table 4-15** shows the revenue offsets applied by class and **Table 5-8** shows the resulting differences between the proposed and current rates.

Table 5-7: Revenue Offsets by Customer Class and Tier

A Line	B Customer Class	C Revenue Offset Unit Rate ($/unit)
1	Domestic	
2	Tier 1	($1.60)
3	Tier 2	($0.11)
4	Tier 3	$0.00
5	Tier 4	$0.00
7	Agricultural	($0.48)
8	Agricultural with Credit	($0.24)
9	Commercial	($0.28)
10	Irrigation	
11	Tier 1	($0.48)
12	Tier 2	($0.58)

5.5.3. Proposed FY 2025 Volumetric Rates

Table 5-8 shows the calculation of proposed FY 2025 volumetric rates per unit by customer class and tier. Supply (Column C), Base Delivery (Column D), and Recycled Water (Column G) unit rates are directly from **Table 4-15**. Max Day (Column E), Max Hour (Column F), and Revenue Offset (Column H) unit rates were established in **Table 5-5**, **Table 5-6,** and **Table 5-7** respectively. The Recycled Water volumetric rate consists solely of the Recycled Water unit rate in Column G. The difference between the proposed FY 2025 and current volumetric rates is shown in Column L.

Table 5-8: Calculation of Proposed FY 2025 Volumetric Rates per Unit

A	B	C	D	E	F	G	H	I	J	K	L
Line	Customer Class	Supply Unit Rate	Base Unit Rate	Max Day Unit Rate	Max Hour Unit Rate	Recycled Water Unit Rate	Revenue Offsets Unit Rate	Ag Credit Unit Rate	Proposed Base Rate	Current Base Rate	Difference ($)
1	Domestic										
2	Tier 1 (0-6 units)	$3.50	$1.42	$0.57	$0.60	N/A	($1.60)	N/A	**$4.49**	$4.24	$0.25
3	Tier 2 (7-23 units)	$3.50	$1.42	$0.99	$0.73	N/A	($0.11)	N/A	**$6.53**	$6.14	$0.39
4	Tier 3 (24-80 units)	$3.50	$1.42	$1.50	$0.89	N/A	$0.00	N/A	**$7.32**	$6.85	$0.47
5	Tier 4 (80 + units)	$3.50	$1.42	$2.21	$1.13	N/A	$0.00	N/A	**$8.27**	$8.14	$0.13
6											
7	Agriculture	$3.50	$1.42	$1.60	$0.93	N/A	($0.48)	N/A	**$6.97**	$6.75	$0.22
8	Agriculture w/ Credit	$3.50	$1.42	$1.60	$0.93	N/A	($0.24)	($1.59)	**$5.62**	$5.41	$0.21
9	Commercial	$3.50	$1.42	$0.87	$0.69	N/A	($0.28)	N/A	**$6.20**	$5.78	$0.42
10	Irrigation										
11	Tier 1: “B” Base	$3.50	$1.42	$1.60	$0.93	N/A	($0.48)	N/A	**$6.98**	$6.50	$0.48
12	Tier 2: “C” Over Base	$3.50	$1.42	$2.35	$1.17	N/A	($0.58)	N/A	**$7.87**	$6.94	$0.93
13											
14	Construction	$3.50	$1.42	$2.52	$1.23	N/A	N/A	N/A	**$8.67**	$8.21	$0.46
15	Recycled Water	N/A	N/A	N/A	N/A	$4.68	N/A	N/A	**$4.68**	$4.29	$0.39

5.6. Proposed Water Rates

Proposed monthly fixed charges and volumetric rates through FY 2029 are shown in **Table 5-9** and **Table 5-10** respectively. Proposed FY 2025 rates proposed to become effective on January 1, 2025, were developed previously in **Table 5-2, Table 5-3,** and **Table 5-8**. All rates and charges shown beyond FY 2025 are increased by the percentages of the estimated revenue adjustments shown in **Table 3-16,** and are rounded up to the nearest cent. The charges shown from January 1, 2026, through January 1, 2029, are estimated and will ultimately be determined by pass-through adjustments to the rates based on increases in, among other things, wholesale water supply costs and CPI.

Table 5-9: Proposed Monthly Fixed Charges

Effective Date/ Meter Size	Current	January 1, 2025 Proposed	January 1, 2026 Estimated	January 1, 2027 Estimated	January 1, 2028 Estimated	January 1, 2029 Estimated
Monthly OMWD System Access Charge						
5/8"	$34.25	$37.16	$40.14	$43.36	$45.53	$47.36
3/4"	$44.79	$48.53	$52.42	$56.62	$59.46	$61.84
1"	$76.41	$82.64	$89.26	$96.41	$101.24	$105.29
1-1/2"	$118.54	$128.11	$138.36	$149.43	$156.91	$163.19
2"	$185.30	$200.11	$216.12	$233.41	$245.09	$254.90
2-1/2"	$336.33	$363.05	$392.10	$423.47	$444.65	$462.44
3"	$367.94	$397.16	$428.94	$463.26	$486.43	$505.89
4"	$610.30	$658.63	$711.33	$768.24	$806.66	$838.93
6"	$1,274.14	$1,374.83	$1,484.82	$1,603.61	$1,683.80	$1,751.16
8"	$2,292.73	$2,473.76	$2,671.67	$2,885.41	$3,029.69	$3,150.88
Monthly SDCWA Infrastructure Access Charge*						
5/8"	$4.41	$4.55	TBD	TBD	TBD	TBD
3/4"	$4.41	$4.55	TBD	TBD	TBD	TBD
1"	$8.39	$8.65	TBD	TBD	TBD	TBD
1-1/2"	$13.70	$14.11	TBD	TBD	TBD	TBD
2"	$22.09	$22.75	TBD	TBD	TBD	TBD
2-1/2"	$41.10	$42.32	TBD	TBD	TBD	TBD
3"	$45.08	$46.41	TBD	TBD	TBD	TBD
4"	$75.58	$77.81	TBD	TBD	TBD	TBD
6"	$159.10	$163.80	TBD	TBD	TBD	TBD
8"	$287.29	$295.75	TBD	TBD	TBD	TBD

Effective Date	Current	January 1, 2025 Proposed	January 1, 2026 Proposed	January 1, 2027 Proposed	January 1, 2028 Proposed	January 1, 2029 Proposed
Monthly Fire Meter Charges						
5/8"	$5.85	$6.13	$6.50	$6.89	$7.24	$7.53
3/4"	$5.85	$6.13	$6.50	$6.89	$7.24	$7.53
1"	$6.57	$6.87	$7.29	$7.73	$8.12	$8.45
1-1/2"	$7.54	$7.84	$8.32	$8.82	$9.27	$9.65
2"	$9.08	$9.39	$9.96	$10.56	$11.09	$11.54
2-1/2"	$12.55	$12.89	$13.67	$14.50	$15.23	$15.84
3"	$13.27	$13.62	$14.44	$15.31	$16.08	$16.73
4"	$18.85	$19.24	$20.40	$21.63	$22.72	$23.63
6"	$34.13	$34.63	$36.71	$38.92	$40.87	$42.51
8"	$57.56	$58.23	$61.73	$65.44	$68.72	$71.47

***Note: A fixed charge imposed by SDCWA. Subject to change every year.**

Table 5-10: Proposed Volumetric Rates per Unit

Effective Date	Current	January 1, 2025 Proposed	January 1, 2026 Estimated	January 1, 2027 Estimated	January 1, 2028 Estimated	January 1, 2029 Estimated
Volumetric Rates ($/unit[1])						
Domestic[2]						
Tier 1 (0-6 units)	$4.24	$4.49	$4.85	$5.24	$5.51	$5.74
Tier 2 (7-23 units)	$6.14	$6.53	$7.06	$7.63	$8.02	$8.35
Tier 3 (24-80 units)	$6.85	$7.32	$7.91	$8.55	$8.98	$9.34
Tier 4 (80 + units)	$8.14	$8.27	$8.94	$9.66	$10.15	$10.56
Agriculture	$6.75	$6.97	$7.53	$8.14	$8.55	$8.90
Agriculture w/ Credit[3]	$5.41	$5.62	TBD	TBD	TBD	TBD
Commercial	$5.78	$6.20	$6.70	$7.24	$7.61	$7.92
Irrigation						
Tier 1: "B" Base	$6.50	$6.98	$7.54	$8.15	$8.56	$8.91
Tier 2: "C" Over Base	$6.94	$7.87	$8.50	$9.18	$9.64	$10.03
Construction	$8.21	$8.67	$9.37	$10.12	$10.63	$11.06
Recycled Water	$4.29	$4.68	$5.06	$5.47	$5.75	$5.98

[1] Customers are billed on a per unit of water basis, 1 unit = 1 HCF
[2] Domestic includes single-family and multi-family customers. Multi-family tiers apply per dwelling unit.
[3] Note: Agriculture w/ Credit rate is updated annually by District staff based on SDCWA charges

Combined Agricultural/Domestic customers
First 23 Units per month: Follow Domestic rate structure.
Over 23 Units per month: Follow Agricultural rate structure.

5.7. Rate Reimbursement Credit

To minimize rate impacts on customers due to large increases in water purchase costs from SDCWA, a rate reimbursement credit (RRC) has been proposed to offset volumetric rates directly. SDCWA credited its member agencies for the funds it received from litigation with MWD. SDCWA's refund is given back to ratepayers in the form of a credit per unit of water used. The current refund is $0.11, but is proposed to increase to $0.22 to help offset the rate increases proposed by SDCWA. The $0.22 increase would be applied for FY 2025 and decrease to $0.11 in FY 2026. The funding is proposed to be used over the next two fiscal years. The effect on the proposed rates due to the RRC is shown in **Table 5-11** for an average customer with a ¾" meter using 23 units monthly.

Table 5-11: Projected FY 2025- FY 2027 Average Domestic Bills with RRC

	Current Bill	2025	2026	2027
RRC ($/unit)	$0.11	$0.22	$0.11	$0.00
Average Domestic Bill with RRC	$176.49	$185.97	$203.93	$223.09
Year over Year Difference (%)		*5.4%*	*9.7%*	*9.4%*

5.8. Water Rates for Largest Users

Recent regulatory changes detailed in AB 755 passed in 2023 and codified in Water Code, §§ 390 & 390.1 require us to identify the costs to serve the largest 10 percent of the users in the District. Proposition 218 requires rates that allocate costs of service proportionately, not special rates for the top 10% of consumers regardless of other factors.

The District currently has 22,761 accounts; the top 10% of users represent 2,276 accounts and 45% of total water use. These large users are primarily domestic and irrigation customers. The District sells water purchased from SDCWA. These large customers all have higher peaking factors, and their rates reflect the cost they impose on the system. Based on the preceding factors, it is our professional judgment that the rates proposed in **Table 5-10** are the most efficient and fairest way to allocate the District's costs among those who create those costs, consistent with Proposition 218.

5.9. Proposed Potable Water Demand Reduction Rates

Raftelis updated the District's water demand reduction rates as part of this study. Water demand reduction rates are intended to recover reductions in net revenues resulting from decreased water sales during times of reduced water demand due to drought or demand reduction emergencies, or other reasons. Raftelis developed water demand reduction rates for three distinct stages:

- **10 Percent Demand Reduction** below projected FY 2025 water usage
- **20 Percent Demand Reduction** below projected FY 2025 water usage
- **30 Percent Demand Reduction** below projected FY 2025 water usage

In the event that the District activates its water demand reduction rates, the District would notify customers before implementation. The District's water demand reduction rates would only be implemented by General Manager after District Board action under the terms of the District's Water Demand Reduction Condition Ordinance. Such action by the District is generally triggered by SDCWA and/or Metropolitan Water District of Southern California's (MWD) declaration of a specific level of water shortage.

Table 5-12 shows the estimated water usage (excluding Recycled customers) for each demand reduction stage. To estimate water usage at the customer class and tiered level, Raftelis assumed that not all customer classes reduce their usage equally. Typically, customers have greater flexibility to cut irrigation use, which is considered nonessential. Therefore, single family residential use and irrigation use bear higher burdens to cut back use during drought phases. For customer classes with uniform rates, this results in a percentage reduction equal to the overall reduction (i.e. 10%/20%/30%). For Domestic and Agricultural customers with

tiered rates however, a disproportional amount of the overall customer class water usage reduction typically occurs within the higher tiers. Raftelis analyzed FY 2022 account level water usage data by billing period to estimate the percent reduction by tier for Domestic (Lines 1-4) and Irrigation customers (Lines 8-9) if total customer class water usage was to decrease by 10 percent, 20 percent, and 30 percent.

Table 5-12: Percent Reduction in Water Usage by Customer Class and Tier

A Line	B Description	C 10% Demand Reduction	D 20% Demand Reduction	E 30% Demand Reduction
1	Domestic Tier 1	2.5%	2.7%	6.9%
2	Domestic Tier 2	10.0%	19.0%	29.7%
3	Domestic Tier 3	15.8%	29.9%	42.3%
4	Domestic Tier 4	26.3%	49.1%	63.4%
5	Agriculture	5.0%	8.0%	25.0%
6	Agriculture w/ Credit	4.0%	8.0%	25.0%
7	Commercial	3.5%	8.0%	15.0%
8	Irrigation Tier 1	2.0%	8.2%	10.1%
9	Irrigation Tier 2	9.7%	36.7%	57.8%
10	Construction	0.0%	10.0%	30.0%
11	**Total Reduction**	**10.0%**	**20.0%**	**30.0%**

Table 5-13 shows FY 2025 volumetric base rates (previously determined in **Table 5-10**) in Column C and assumed FY 2025 water usage at each demand reduction stage in Columns D-G. Projected usage by customer class and tier in Columns E-G, Lines 1-10 is determined by reducing the base demand in Column D by the percentage reduction at each stage from **Table 5-12**, Columns C-E, Lines 1-10.

Table 5-13: Projected Water Usage by Stage

Line	B Description	C FY 2025 Proposed Base Rates	D FY 2025 Base Demand	E 10% Demand Reduction	F 20% Demand Reduction	G 30% Demand Reduction
1	Domestic Tier 1	$4.49	1,511,998 hcf	1,474,707 hcf	1,471,692 hcf	1,407,297 hcf
2	Domestic Tier 2	$6.53	1,986,076 hcf	1,786,790 hcf	1,608,193 hcf	1,397,015 hcf
3	Domestic Tier 3	$7.32	1,433,314 hcf	1,206,372 hcf	1,004,124 hcf	827,420 hcf
4	Domestic Tier 4	$8.27	556,269 hcf	409,776 hcf	283,014 hcf	203,700 hcf
5	Agriculture	$6.97	59,071 hcf	56,117 hcf	54,345 hcf	44,303 hcf
6	Agriculture w/ Credit	$5.62	23,332 hcf	22,399 hcf	21,465 hcf	17,499 hcf
7	Commercial	$6.20	296,027 hcf	285,666 hcf	272,344 hcf	251,623 hcf
8	Irrigation Tier 1	$6.98	411,926 hcf	403,497 hcf	378,306 hcf	370,231 hcf
9	Irrigation Tier 2	$7.87	435,335 hcf	392,928 hcf	275,612 hcf	183,557 hcf
10	Construction	$8.67	41,669 hcf	41,668 hcf	37,502 hcf	29,168 hcf
11	**Total**		**6,755,016 hcf**	**6,079,920 hcf**	**5,406,599 hcf**	**4,731,813 hcf**

Table 5-14 shows the determination of the uniform surcharge to be added to all potable volumetric rates (excluding Recycled Water) during each demand reduction stage for FY 2025. Projected volumetric rate revenues at each demand reduction stage (Line 2) is determined by multiplying projected water usage for each customer class and tier (**Table 5-13**, Columns D-G, Lines 1-10) by the FY 2025 proposed base rates (**Table**

5-13, Column C, Lines 1-10), and then summing across all customer classes and tiers. Line 3 shows the reduction in rate revenues relative to baseline (Column C, Line 2). Avoided water supply costs at each demand reduction stage are then calculated in Lines 5-12. Projected water usage (excluding Recycled) at each stage in Line 6 was determined previously in **Table 5-13**, Columns D-G, Line 11. The required water supply in units is shown in Line 8, assuming a 6.5 percent water loss (Line 7). Required water supply is shown in Line 9 by converting Line 8 to AF[7]. Line 10 shows the reduction in required water purchases relative to baseline (Column C, Line 9), which is then multiplied by the FY 2025 Untreated M&I rate per AF (Line 11) to estimate avoided water supply costs (Line 12). Net revenue loss in Line 14 is calculated by subtracting avoided water supply costs (Line 12) from the total rate revenue reduction (Line 3). The net revenue loss is then divided by projected potable water demand at each demand reduction level (Line 6) to determine the uniform surcharges at each stage (Line 16).

Table 5-14: Calculation of Water Demand Reduction Rate Surcharges

A	B	C	D	E	F
	Description	**Base Demand**	**10% Demand Reduction**	**20% Demand Reduction**	**30% Demand Reduction**
1	**Reduction in Rate Revenues**				
2	Projected Volumetric Rate Revenue	$43,890,959	$39,066,822	$34,122,859	$29,431,477
3	**Total Rate Revenue Reduction**	**N/A**	**$4,824,136**	**$9,768,100**	**$14,459,482**
4					
5	**Avoided Water Supply Costs**				
6	Projected FY 2025 Water Usage	6,755,016	6,079,920	5,406,599	4,731,813
7	Assumed Water Loss	6.50%	6.50%	6.50%	6.50%
8	Required Water Purchases (units)	7,224,616	6,502,588	5,782,459	5,060,762
9	Required Water Purchases (AF)	16,585	14,928	13,275	11,618
10	Reduction in Required Water Purchases (AF)	N/A	1,658	3,311	4,968
11	FY 2025 Untreated M&I Rate ($/AF)	$1,834	$1,834	$1,834	$1,834
12	**Total Avoided Water Supply Costs**	**N/A**	**$3,040,423**	**$6,072,852**	**$9,111,881**
13					
14	**Net Revenue Loss**	**N/A**	**$1,783,713**	**$3,695,248**	**$5,347,601**
15					
16	**$/Unit Surcharge**	**N/A**	**$0.30**	**$0.69**	**$1.14**

Table 5-15 shows FY 2025 volumetric rates under each demand reduction stage. Base volumetric rates were determined previously in **Table 5-11**. The effective rate at each of the three demand reduction stages is determined by simply adding the corresponding surcharge (**Table 5-14**, Line 16) to the FY 2025 base rate for customer class and tier. Note that Recycled Water customers are not subject to any rate increases during the three demand reduction stages which are targeted to potable water and there is little impact on wastewater generated and recycled water production. Water demand reduction rates for reductions in usage that are in between those shown above may be prorated. For example, the demand reduction rate for a 14% reduction in use would be 0.30+ 0.4*(0.69-0.30) = $0.46 per unit.

[7] One AF = 435.6 Units.

Table 5-15: Proposed FY 2025 Water Demand Reduction Rates

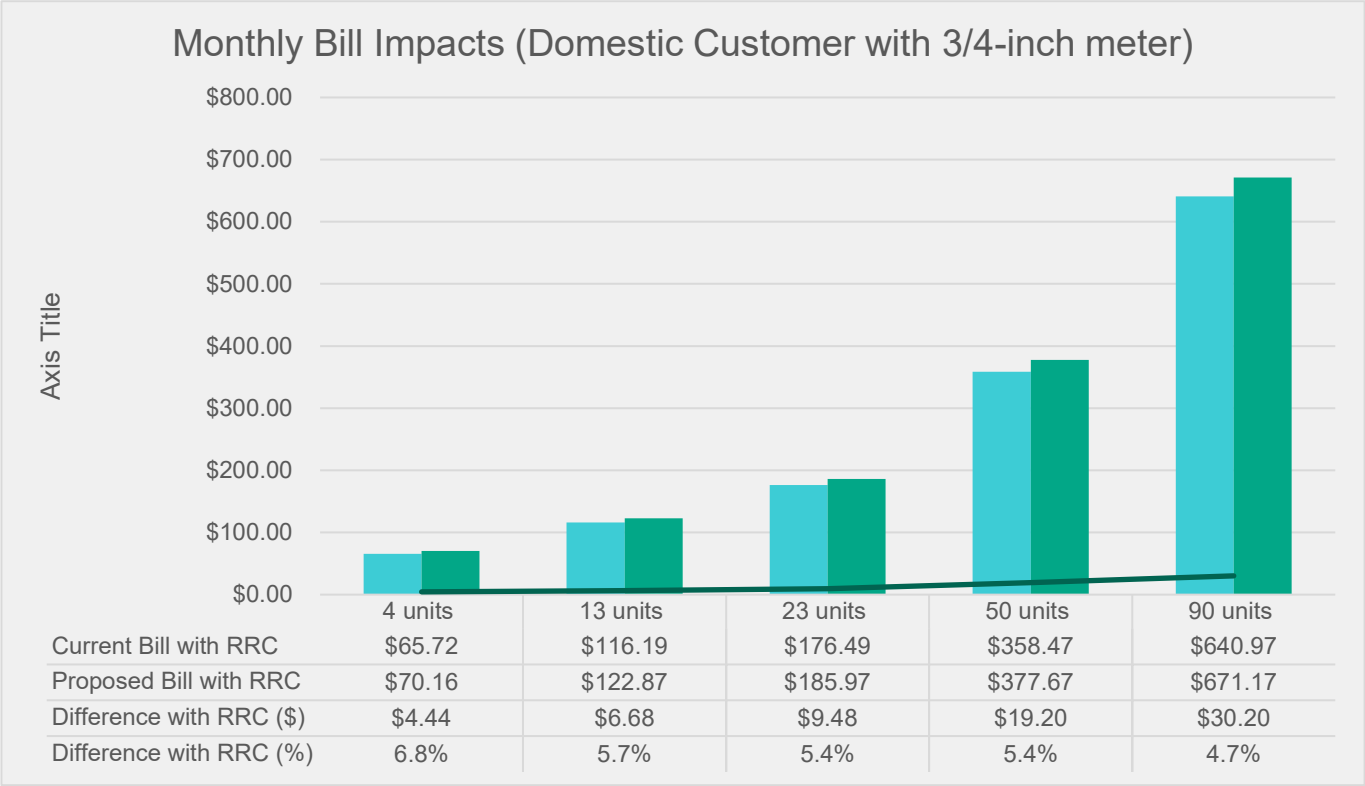
CUSTOMER TYPE	BASE RATES 1/1/2025	10% DEMAND REDUCTION ($0.30 Surcharge)	20% DEMAND REDUCTION ($0.69 Surcharge)	30% DEMAND REDUCTION ($1.14 Surcharge)
Domestic				
0-6 Units	$4.49	$4.79	$5.18	$5.63
7-23 Units	$6.53	$6.83	$7.22	$7.67
24-80 Units	$7.32	$7.62	$8.01	$8.46
80 + Units	$8.27	$8.57	$8.96	$9.41
Agricultural	$6.97	$7.27	$7.66	$8.11
Agriculture w/ Credit	$5.62	$5.92	$6.31	$6.76
Commercial	$6.20	$6.50	$6.89	$7.34
Irrigation				
Tier 1	$6.98	$7.28	$7.67	$8.12
Tier 2	$7.87	$8.17	$8.56	$9.01
Construction	$8.67	$8.97	$9.36	$9.81
Recycled Water	$4.68	$4.68	$4.68	$4.68

6. Customer Impacts

6.1. Monthly Bill Impacts

Figure 6-1 shows estimated monthly bills under current rates and proposed FY 2025 rates for Domestic customers with a ¾-inch water meter at varying levels of monthly water usage. **Table 6-1** shows the bill impacts both with and without the RRC included. The base rate comparison with no RRC applied is shown in Columns A-D. The current RRC of $0.11 is applied to the bills in Column E and the proposed RRC of $0.22 is applied in Column F. Note that 13 units and 23 units per month, respectively, represent the median and average Domestic monthly water usage in FY 2022. High-use customers see a smaller percentage increase in monthly bills under the proposed FY 2025 rates due to the decreased differentiation in peaking costs between lower and higher Domestic tiers relative to the prior water rate study in 2019. The monthly bill impacts **with the RRC** included are shown graphically in **Figure 6-1**.

Figure 6-1: Domestic Bill Impacts at Varying Levels of Usage



	4 units	13 units	23 units	50 units	90 units
Current Bill with RRC	$65.72	$116.19	$176.49	$358.47	$640.97
Proposed Bill with RRC	$70.16	$122.87	$185.97	$377.67	$671.17
Difference with RRC ($)	$4.44	$6.68	$9.48	$19.20	$30.20
Difference with RRC (%)	6.8%	5.7%	5.4%	5.4%	4.7%

Table 6-1: Domestic Monthly Bill Impacts at Varying Levels of Usage

Usage Level	Monthly Usage (Units)	A Current Bill: Base Rate	B Difference ($)	C Difference (%)	D Current Bill with RRC	E Proposed Bill with RRC	F Difference with RRC ($)	G Difference with RRC (%)
Very Low	4	$66.16	$4.88	7.4%	$65.72	$70.16	$4.44	6.8%
Low	13	$117.62	$8.11	6.9%	$116.19	$122.87	$6.68	5.7%
Average	23	$179.02	$12.01	6.7%	$176.49	$185.97	$9.48	5.4%
High	50	$363.97	$24.70	6.8%	$358.47	$377.67	$19.20	5.4%
Very High	90	$650.87	$40.10	6.2%	$640.97	$671.17	$30.20	4.7%

Table 6-2 This table shows estimated monthly bills under current rates and proposed FY 2025 rates for Commercial customers with a 1-inch water meter and varying monthly water usage. **Table 6-3** shows estimated monthly bills under current rates and proposed FY 2025 rates for Irrigation customers with a 1.5-inch water meter at varying levels of monthly water usage during the winter and summer (due to different tier allotment definitions and usage patterns during the winter and summer periods for Irrigation customers).

Table 6-2: Commercial Monthly Bill Impacts at Varying Levels of Usage (1" Meter Size)

Usage Level	Monthly Usage (Units)	Current Bill: with RRC	Proposed Bill: with RRC	Difference ($)	Difference (%)
Low	30	$254.90	$270.69	$15.79	6.2%
Average	60	$425.00	$450.09	$25.09	5.9%
High	90	$595.10	$629.49	$34.39	5.8%

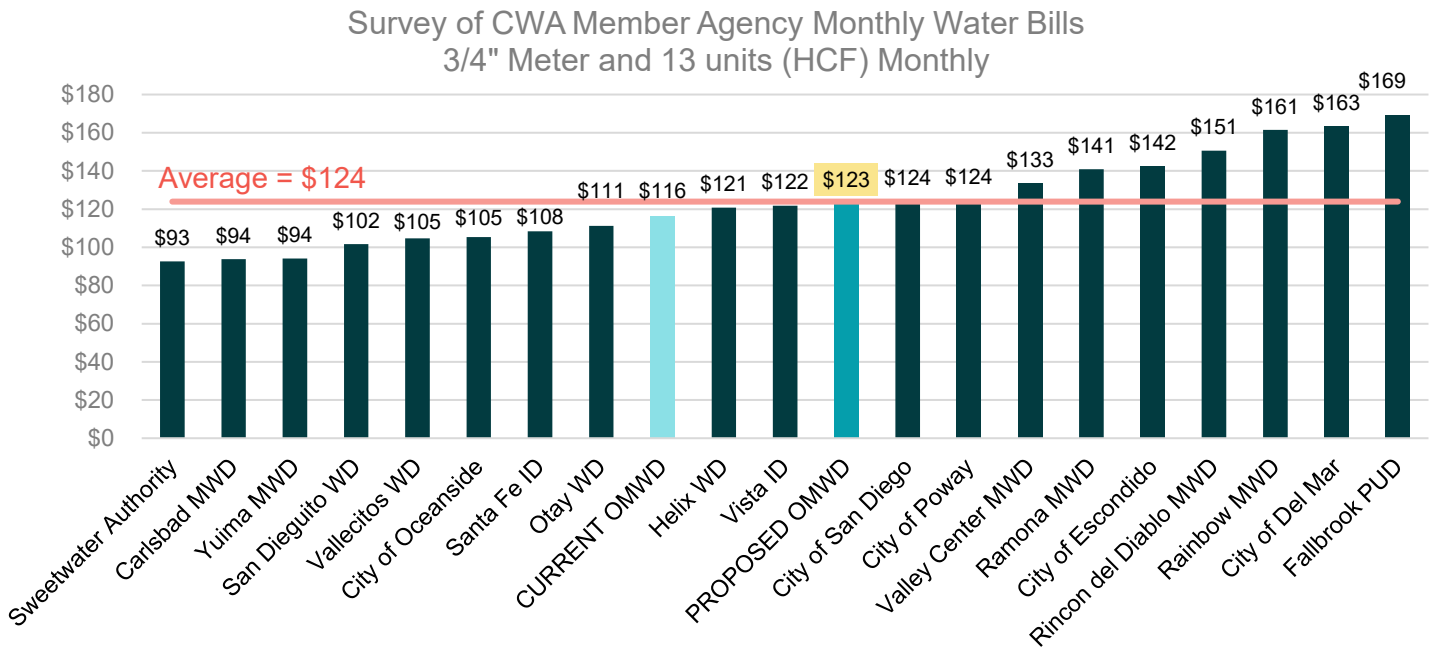
Table 6-3: Irrigation Monthly Bill Impacts at Varying Levels of Usage (1-1/2" Meter Size)

Usage Level	Monthly Usage (Units)	Current Bill: with RRC	Proposed Bill: with RRC	Difference ($)	Difference (%)
Low - Winter	51	$458.57	$487.87	$29.30	6.4%
Avg - Winter	102	$806.90	$878.02	$71.12	8.8%
High - Winter	153	$1,155.23	$1,268.17	$112.94	9.8%
Low - Summer	89	$700.95	$743.86	$42.91	6.1%
Avg - Summer	178	$1,299.58	$1,406.02	$106.44	8.2%
High - Summer	266	$1,907.45	$2,086.87	$179.42	9.4%

6.2. Monthly Bill Comparison

Figure 6-2 shows a comparison of the District's current and FY 2025 proposed Domestic bills to neighboring water utilities assuming a ¾-inch water meter and median Domestic monthly water usage (13 units). A District customer's bill under current rates is represented by the light blue bar and under proposed FY 2025 rates by the teal bar. The current and proposed bills include the RRC. The District's proposed FY 2025 rates result in a monthly bill that is approximately equal to the overall average across all agencies shown. While such comparisons can provide insights into a water utility's pricing policies, please also note that differences in water rates and bills are heavily influenced by factors such as geographic location, customer usage characteristics, source of water supply, water treatment, grant funding, and the age of system infrastructure.

Figure 6-2: Domestic Monthly Bill Comparison



Survey of posted rates as of May 2024
Does not include all 24 SDCWA member agencies for comparative purpose.

APPENDIX A:

Water Purchase Expenses

Table A-1: Recycled Water Purchase Expenses

Calculated Recycled Water Purchases Expenses	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Recycled Water from Vallecitos	$705,979	$557,100.00	$585,000	$614,250	$644,963	$677,211
Recycled Water from SEJPA	$291,690	$333,225	$354,825	$369,018	$383,779	$399,130
Recycled Water from City of SD	$337,089	$328,967	$342,126	$355,811	$370,043	$384,845
Recycled Water from RSFCSD	$192,107	$207,873	$225,481	$243,520	$259,208	$270,904
Recycled Water from SEJPA - Take or Pay	$0	$500,000	$0	$0	$0	$0
Total Calculated Recycled Water Purchases Expenses	**$1,526,865**	**$1,927,165**	**$1,507,432**	**$1,582,598**	**$1,657,992**	**$1,732,089**

Table A-2: Potable Water Purchase Expenses

Purchased Potable Water Expenses	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Tier 1 Melded Untreated M&I Supply Rate	$19,657,805	$21,436,675	$23,883,767	$26,304,995	$28,347,236	$29,536,245
Tier 2 Untreated Supply Rate Surcharge	$0	$0	$0	$0	$0	$0
Treatment Rate	$258,089	$1,119,517	$344,892	$379,856	$409,346	$426,516
Capacity Reservation Charge	$360,000	$441,000	$510,000	$561,000	$604,000	$628,000
Readiness to Serve Charge (FY Basis)	$617,000	$664,382	$720,854	$803,753	$835,903	$869,339
Infrastructure Access Charge	$1,475,000	$1,530,000	$1,647,161	$1,816,992	$1,958,693	$2,041,680
Customer Service Charge	$1,265,000	$1,380,000	$1,498,000	$1,648,000	$1,773,000	$1,843,000
Transportation Charge (Volume)	$3,114,278	$2,736,597	$2,431,488	$2,677,981	$2,885,892	$3,006,939
Transportation Charge (Fixed)	$0	$718,000	$1,498,000	$1,648,000	$1,773,000	$1,843,000
Storage Charge	$3,033,000	$3,176,000	$3,395,000	$3,736,000	$4,018,000	$4,179,000
Supply Reliability Charge	$2,050,000	$2,391,000	$2,777,000	$3,056,000	$3,287,000	$3,418,000
IAWP/SAWR Credit	$33,512	$37,098	$44,564	$48,881	$52,614	$54,830
Recycled Water	$1,526,865	$1,927,165	$1,507,432	$1,582,598	$1,657,992	$1,732,089
Recycled Credit	$0	$0	$0	$0	$0	$0
Lost Revenue From >9% Increase	$0	$447,530	$0	$0	$0	$0
Total Purchased Water Expenses	**$33,390,550**	**$38,004,962**	**$40,258,159**	**$44,264,056**	**$47,602,676**	**$49,578,639**

APPENDIX B:

Status Quo Financial Plan Cash Flow

Operating Cash Flow						
	Description	**FYE 2025**	**FYE 2026**	**FYE 2027**	**FYE 2028**	**FYE 2029**
	REVENUE					
	Revenue Under Existing Rates					
	System Access Charge Revenue Under Existing Rates	$15,669,739	$15,696,613	$15,734,457	$15,809,423	$15,836,297
	Fire Meter Charge Under Existing Rates	$467,006	$467,006	$467,006	$467,006	$467,006
	Commodity Charge Revenue Under Existing Rates	$45,224,595	$45,225,230	$45,283,273	$45,363,981	$45,438,710
	Infrastructure Access Charge Revenue Under Existing Rates	$1,561,057	$1,563,703	$1,567,685	$1,576,324	$1,578,970
	Total Rate Revenue Under Existing Rates	$62,922,397	$62,952,551	$63,052,421	$63,216,734	$63,320,984
	Revenue Summary					
	Total Rate Revenue (incl. revenue adjustments)	$61,361,341	$61,388,849	$61,484,736	$61,640,410	$61,742,014
	Other Operating Revenue	$3,009,557	$3,543,414	$3,700,654	$3,835,818	$3,910,682
	Investment & Interest Income	$569,000	$278,000	$70,000	$0	$0
	Non-Operating Revenue	$5,686,704	$5,800,438	$5,900,316	$6,002,192	$6,106,106
	TOTAL REVENUE	**$70,626,601**	**$71,010,701**	**$71,155,706**	**$71,478,420**	**$71,758,802**
	EXPENSES					
	O&M Expenses without Depreciation	$22,269,000	$23,597,000	$24,542,973	$25,528,731	$26,555,994
	Purchased Water (potable & recycled)	$38,004,962	$40,249,486	$44,237,344	$47,560,276	$49,524,543
	Other Operating Expenses (potable & recycled)	$50,000	$50,000	$50,000	$50,000	$50,000
	Non-Operating Expenses (potable & recycled)	$1,570,927	$1,043,507	$12,000	$10,000	$10,000
	Existing Debt Service	$5,070,625	$5,062,875	$5,059,375	$5,060,625	$2,044,000
	Proposed SRF Loan Payment	$0	$0	$0	$0	$0
	Proposed Debt Service	$0	$0	$0	$0	$0
	TOTAL EXPENSES	**$66,965,515**	**$70,002,867**	**$73,901,692**	**$78,209,632**	**$78,184,536**

TRANSFERS						
Transfer Potable Oper. to Potable Capital - PAYGO	$6,000,000	$7,000,000	$7,500,000	$7,500,000	$9,500,000
Transfer for Equipment Replc.	$500,000	$500,000	$500,000	$500,000	$500,000
Transfer for Future Infrastructure Replc.	$5,500,000	$6,500,000	$7,000,000	$7,000,000	$9,000,000
Transfer from Wastewater (Sewer) Fund - 2018/2021B Bonds	($121,800)	($121,800)	($121,800)	($121,800)	$0
Transfer to 2012 SRF Reserve	$107,000	$107,000	$0	$0	$0
Transfer to/(from) Rate Stabilization Fund	($1,560,927)	($1,033,507)	($2,000)	$0	$0
Transfer to/(from) Pension Stabilization Fund	$220,000	$220,000	$220,000	$220,000	$220,000
Potable OMWD Option 2 (reduce to CPI)	$0	$0	$0	$0	$0
Transfer Recycled Oper. to Recycled Capital	$200,000	$200,000	$200,000	$200,000	$200,000
Transfer Recycled Oper. to Potable Capital	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
LESS TRANSFERS	**$6,344,273**	**$7,871,693**	**$9,296,200**	**$9,298,200**	**$11,420,000**
Net Annual Cash Balance	**($2,683,186)**	**($6,863,860)**	**($12,042,186)**	**($16,029,411)**	**($17,845,735)**
Calculated Debt Coverage	292.0%	183.1%	144.1%	74.5%	-139.3%
Required Debt Coverage	125.0%	125.0%	125.0%	125.0%	125.0%
Fund Balances					
Reserve Interest Rate	3.0%	2.0%	2.0%	1.5%	1.5%
Operating Fund (Potable & Recycled)	**FYE 2025**	**FYE 2026**	**FYE 2027**	**FYE 2028**	**FYE 2029**
Beginning Balance	$15,874,000	$13,190,814	$6,326,954	($5,715,232)	($21,744,643)
Net Annual Cash Balance	($2,683,186)	($6,863,860)	($12,042,186)	($16,029,411)	($17,845,735)
Ending Balance - Operating Fund (Potable & Recycled)	**$13,190,814**	**$6,326,954**	**($5,715,232)**	**($21,744,643)**	**($39,590,378)**
Minimum Target Balance	*$9,908,049*	*$10,495,313*	*$11,306,353*	*$12,014,631*	*$12,506,390*
Maximum Target Balance	*$19,816,097*	*$20,990,626*	*$22,612,707*	*$24,029,263*	*$25,012,779*
Interest Income	*$569,000*	*$278,000*	*$70,000*	*$0*	*$0*

Capital Improvement Fund (Potable & Recycled)	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Beginning Balance	$47,736,000	$36,854,000	$33,434,000	$32,601,000	$34,710,000
Plus:					
Interest Income	$1,073,000	$656,000	$639,000	$513,000	$486,000
Transfer from Potable Operating Fund to Potable Capital	$6,000,000	$7,000,000	$7,500,000	$7,500,000	$9,500,000
Transfer from Recycled Operating Fund to Recycled Capital	$200,000	$200,000	$200,000	$200,000	$200,000
Transfer from Recycled Capital Fund to Potable Capital	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
Capacity Fee Revenues	$118,000	$412,000	$4,047,000	$4,687,000	$803,000
Anticipated Grant Funds	$1,772,000	$817,000	$0	$0	$0
Recyled Capacity Fee Revenues	$5,000	$5,000	$5,000	$5,000	$5,000
Land Sales Proceeds	$1,150,000	$0	$0	$0	$0
New Loan - State Revolving Fund (SRF) Proceeds	$0	$0	$0	$0	$0
New Bond Proceeds	$0	$0	$0	$0	$0
Less:					
Capital Item Purchases - Water Potable	$372,000	$473,000	$400,000	$400,000	$400,000
Capital Item Purchases - Water Recycled	$49,000	$49,000	$25,000	$25,000	$25,000
Capital Projects	$22,249,000	$13,458,000	$14,269,000	$11,841,000	$13,843,000
Other Expenditures - Water Potable	$25,000	$25,000	$25,000	$25,000	$25,000
Other Expenditures - Water Recycled	$5,000	$5,000	$5,000	$5,000	$5,000
Ending Balance - Capital Improvement Fund (Potable & Recycled)	**$36,854,000**	**$33,434,000**	**$32,601,000**	**$34,710,000**	**$32,906,000**
Minimum Target Balance	*$17,317,818*	*$17,317,818*	*$17,317,818*	*$17,317,818*	*$17,317,818*
Maximum Target Balance	*$86,589,091*	*$86,589,091*	*$86,589,091*	*$86,589,091*	*$86,589,091*
Net capital Expense	$10,882,000				

Rate Stabilization Fund (Potable)	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Beginning Balance	$11,840,000	$10,587,073	$9,744,566	$9,937,418	$10,086,479
Interest Income	$308,000	$191,000	$194,851	$149,061	$151,297
Transfer (to)/from Operating Fund	($1,560,927)	($1,033,507)	($2,000)	$0	$0
Ending Balance - Rate Stabilization Fund (Potable)	**$10,587,073**	**$9,744,566**	**$9,937,418**	**$10,086,479**	**$10,237,776**
Minimum Target Balance	*$6,229,359*	*$5,675,766*	*$4,703,769*	*$3,914,114*	*$3,449,110*
Maximum Target Balance	*$12,458,717*	*$11,351,533*	*$9,407,538*	*$7,828,229*	*$6,898,221*

Pension Stabilization Fund (Potable)	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Beginning Balance	$676,055	$923,055	$1,166,055	$1,413,776	$1,658,283
Interest Income	$27,000	$23,000	$27,721	$24,507	$28,174
Transfer (to)/from Operating Fund	$220,000	$220,000	$220,000	$220,000	$220,000
Ending Balance - Pension Stabilization Fund (Potable)	**$923,055**	**$1,166,055**	**$1,413,776**	**$1,658,283**	**$1,906,457**
Minimum Target Balance	*$956,562*	*$956,562*	*$956,562*	*$956,562*	*$956,562*
Maximum Target Balance	*$1,913,124*	*$1,913,124*	*$1,913,124*	*$1,913,124*	*$1,913,124*

Debt Coverage Calculation

Description	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Revenue Applicable for Debt Coverage Calculation					
Total Service Charge Revenue	$61,361,341	$61,388,849	$61,484,736	$61,640,410	$61,742,014
Other Operating Revenue	$3,009,557	$3,543,414	$3,700,654	$3,835,818	$3,910,682
Interest Income	$1,977,000	$1,148,000	$931,572	$686,568	$665,471
Non-Operating Revenue	$5,686,704	$5,800,438	$5,900,316	$6,002,192	$6,106,106
Capacity Fee Revenues	$118,000	$412,000	$4,047,000	$4,687,000	$803,000
Anticipated Grant Funds	$1,772,000	$817,000	$0	$0	$0
Recyled Capacity Fee Revenues	$5,000	$5,000	$5,000	$5,000	$5,000
Land Sales Proceeds	$1,150,000	$0	$0	$0	$0
Total Revenue	**$75,079,601**	**$73,114,701**	**$76,069,278**	**$76,856,988**	**$73,232,273**
Expenses					
O&M Expenses	$22,269,000	$23,597,000	$24,542,973	$25,528,731	$26,555,994
Purchased Water Expenses (potable & recycled)	$38,004,962	$40,249,486	$44,237,344	$47,560,276	$49,524,543
Total Expenses	**$60,273,962**	**$63,846,486**	**$68,780,317**	**$73,089,007**	**$76,080,536**
Total Funds Available for Debt Service	$14,805,639	$9,268,215	$7,288,962	$3,767,981	($2,848,263)
Total Debt Service	$5,070,625	$5,062,875	$5,059,375	$5,060,625	$2,044,000
Revenue to Debt Service Coverage Ratio	292.0%	183.1%	144.1%	74.5%	-139.3%

Recycled Water Operating Cash Flow

Description	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Recycled Water Revenue	$5,184,865	$5,315,676	$5,353,051	$5,353,051	$5,353,051
Recycled Water Additional Revenue	($128,633)	($132,038)	($133,094)	($133,480)	($133,483)
Recycled Water Interest Income	$283,962	$171,648	$70,000	$0	$0
Recycled Water Expenses	$3,417,665	$3,039,759	$3,151,292	$3,267,588	$3,388,861
Recycled Water Transfers	$1,700,000	$1,700,000	$1,700,000	$1,700,000	$1,700,000
Net Cash Flow	**$222,531**	**$615,528**	**$438,665**	**$251,983**	**$130,706**
Beginning Balance	$7,922,000	$8,144,531	$8,760,058	$9,198,723	$9,450,706
Net Cash Flow	$222,531	$615,528	$438,665	$251,983	$130,706
Ending Balance	**$8,144,531**	**$8,760,058**	**$9,198,723**	**$9,450,706**	**$9,581,412**
Interest Income	*$287,000*	*$205,768*	*$216,574*	*$167,261*	*$169,221*

Interest Allocation between Potable Water and Recycled Water operations					
Description	**FYE 2025**	**FYE 2026**	**FYE 2027**	**FYE 2028**	**FYE 2029**
Beginning Fund Balance					
Potable Water Operations	50.1%	38.3%	0.0%	261.0%	143.5%
Recycled Water Operations	49.9%	61.7%	100.0%	-161.0%	-43.5%
Total Beginning Fund Balance	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Interest Allocation					
Potable Water Operations	$285,038	$106,352	$0	$0	$0
Recycled Water Operations	$283,962	$171,648	$70,000	$0	$0
Total Interest Allocation	**$569,000**	**$278,000**	**$70,000**	**$0**	**$0**

APPENDIX C:

Proposed Financial Plan Cash Flow

Operating Cash Flow

Description	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
REVENUE					
Revenue Under Existing Rates					
System Access Charge Revenue Under Existing Rates	$15,669,739	$15,696,613	$15,734,457	$15,809,423	$15,836,297
Fire Meter Charge Under Existing Rates	$467,006	$467,006	$467,006	$467,006	$467,006
Commodity Charge Revenue Under Existing Rates	$45,224,595	$45,225,230	$45,283,273	$45,363,981	$45,438,710
Infrastructure Access Charge Revenue Under Existing Rates	$1,561,057	$1,563,703	$1,567,685	$1,576,324	$1,578,970
Total Rate Revenue Under Existing Rates	$62,922,397	$62,952,551	$63,052,421	$63,216,734	$63,320,984
Revenue Adjustments					
System Access Charge Revenue Adjustment	$626,790	$1,933,823	$3,352,320	$4,603,780	$5,529,268
Fire Meter Charge Revenue Adjustments	$14,010	$42,871	$73,464	$103,111	$128,697
Commodity Charge Revenue Adjustments	$1,808,984	$5,571,748	$9,647,873	$13,210,209	$15,864,996
Infrastructure Access Charge Revenue Adjustments	$24,779	$118,208	$288,160	$430,564	$511,697
Total Revenue Adjustments	$2,474,562	$7,666,651	$13,361,817	$18,347,664	$22,034,657
Revenue Summary					
Total Rate Revenue (incl. revenue adjustments)	$63,811,124	$68,937,291	$74,558,393	$79,557,510	$83,264,975
Other Operating Revenue	$3,034,335	$3,661,623	$3,988,814	$4,266,381	$4,422,378
Investment & Interest Income	$643,000	$483,000	$545,000	$451,000	$552,000
Non-Operating Revenue	$5,686,704	$5,800,438	$5,900,316	$6,002,192	$6,106,106
TOTAL REVENUE	**$73,175,164**	**$78,882,352**	**$84,992,523**	**$90,277,084**	**$94,345,459**
EXPENSES					
O&M Expenses without Depreciation	$22,269,000	$23,597,000	$24,542,973	$25,528,731	$26,555,994
Purchased Water (potable & recycled)	$38,004,962	$40,258,159	$44,264,056	$47,602,676	$49,578,639
Other Operating Expenses (potable & recycled)	$50,000	$50,000	$50,000	$50,000	$50,000
Non-Operating Expenses (potable & recycled)	$1,570,927	$1,043,507	$12,000	$10,000	$10,000
Existing Debt Service	$5,070,625	$5,062,875	$5,059,375	$5,060,625	$2,044,000
Proposed SRF Loan Payment	$0	$0	$0	$0	$0
Proposed Debt Service	$0	$0	$0	$0	$0
TOTAL EXPENSES	**$66,965,515**	**$70,011,541**	**$73,928,403**	**$78,252,032**	**$78,238,632**

TRANSFERS						
Transfer Potable Oper. to Potable Capital - PAYGO	$6,000,000	$7,000,000	$7,500,000	$7,500,000	$9,500,000
Transfer for Equipment Replc.	$500,000	$500,000	$500,000	$500,000	$500,000
Transfer for Future Infrastructure Replc.	$5,500,000	$6,500,000	$7,000,000	$7,000,000	$9,000,000
Transfer from Wastewater (Sewer) Fund - 2018/2021B Bonds	($121,800)	($121,800)	($121,800)	($121,800)	$0
Transfer to 2012 SRF Reserve	$107,000	$107,000	$0	$0	$0
Transfer to/(from) Rate Stabilization Fund	($1,560,927)	($1,033,507)	($2,000)	$0	$0
Transfer to/(from) Pension Stabilization Fund	$220,000	$220,000	$220,000	$220,000	$220,000
Potable OMWD Option 2 (reduce to CPI)	$0	$0	$0	$0	$0
Transfer Recycled Oper. to Recycled Capital	$200,000	$200,000	$200,000	$200,000	$200,000
Transfer Recycled Oper. to Potable Capital	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
LESS TRANSFERS	**$6,344,273**	**$7,871,693**	**$9,296,200**	**$9,298,200**	**$11,420,000**
Net Annual Cash Balance	**($134,624)**	**$999,118**	**$1,767,920**	**$2,726,852**	**$4,686,827**
Calculated Debt Coverage	342.2%	338.4%	417.0%	445.1%	963.0%
Required Debt Coverage	125.0%	125.0%	125.0%	125.0%	125.0%

Fund Balances					
Reserve Interest Rate	3.0%	2.0%	2.0%	1.5%	1.5%
Operating Fund (Potable & Recycled)	**FYE 2025**	**FYE 2026**	**FYE 2027**	**FYE 2028**	**FYE 2029**
Beginning Balance	$15,874,000	$15,739,376	$16,738,494	$18,506,414	$21,233,266
Net Annual Cash Balance	($134,624)	$999,118	$1,767,920	$2,726,852	$4,686,827
Ending Balance - Operating Fund (Potable & Recycled)	**$15,739,376**	**$16,738,494**	**$18,506,414**	**$21,233,266**	**$25,920,092**
Minimum Target Balance	*$9,908,049*	*$10,496,738*	*$11,310,744*	*$12,021,601*	*$12,515,282*
Maximum Target Balance	*$19,816,097*	*$20,993,477*	*$22,621,489*	*$24,043,202*	*$25,030,564*
Interest Income	*$643,000*	*$483,000*	*$545,000*	*$451,000*	*$552,000*
Capital Improvement Fund (Potable & Recycled)	**FYE 2025**	**FYE 2026**	**FYE 2027**	**FYE 2028**	**FYE 2029**
Beginning Balance	$47,736,000	$36,854,000	$33,434,000	$32,601,000	$34,710,000
Plus:					
Interest Income	$1,073,000	$656,000	$639,000	$513,000	$486,000
Transfer from Potable Operating Fund to Potable Capital	$6,000,000	$7,000,000	$7,500,000	$7,500,000	$9,500,000
Transfer from Recycled Operating Fund to Recycled Capital	$200,000	$200,000	$200,000	$200,000	$200,000
Transfer from Recycled Capital Fund to Potable Capital	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
Capacity Fee Revenues	$118,000	$412,000	$4,047,000	$4,687,000	$803,000
Anticipated Grant Funds	$1,772,000	$817,000	$0	$0	$0
Recyled Capacity Fee Revenues	$5,000	$5,000	$5,000	$5,000	$5,000
Land Sales Proceeds	$1,150,000	$0	$0	$0	$0
New Loan - State Revolving Fund (SRF) Proceeds	$0	$0	$0	$0	$0
New Bond Proceeds	$0	$0	$0	$0	$0
Less:					
Capital Item Purchases - Water Potable	$372,000	$473,000	$400,000	$400,000	$400,000
Capital Item Purchases - Water Recycled	$49,000	$49,000	$25,000	$25,000	$25,000
Capital Projects	$22,249,000	$13,458,000	$14,269,000	$11,841,000	$13,843,000
Other Expenditures - Water Potable	$25,000	$25,000	$25,000	$25,000	$25,000
Other Expenditures - Water Recycled	$5,000	$5,000	$5,000	$5,000	$5,000
Ending Balance - Capital Improvement Fund (Potable & Recycled)	**$36,854,000**	**$33,434,000**	**$32,601,000**	**$34,710,000**	**$32,906,000**
Minimum Target Balance	*$17,317,818*	*$17,317,818*	*$17,317,818*	*$17,317,818*	*$17,317,818*
Maximum Target Balance	*$86,589,091*	*$86,589,091*	*$86,589,091*	*$86,589,091*	*$86,589,091*

Pension Stabilization Fund (Potable)	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Beginning Balance	$676,055	$923,055	$1,166,055	$1,413,776	$1,658,283
Interest Income	$27,000	$23,000	$27,721	$24,507	$28,174
Transfer (to)/from Operating Fund	$220,000	$220,000	$220,000	$220,000	$220,000
Ending Balance - Pension Stabilization Fund (Potable)	**$923,055**	**$1,166,055**	**$1,413,776**	**$1,658,283**	**$1,906,457**
Minimum Target Balance	*$956,562*	*$956,562*	*$956,562*	*$956,562*	*$956,562*
Maximum Target Balance	*$1,913,124*	*$1,913,124*	*$1,913,124*	*$1,913,124*	*$1,913,124*

Debt Coverage Calculation

Description	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Revenue Applicable for Debt Coverage Calculation					
Total Service Charge Revenue	$63,811,124	$68,937,291	$74,558,393	$79,557,510	$83,264,975
Other Operating Revenue	$3,034,335	$3,661,623	$3,988,814	$4,266,381	$4,422,378
Interest Income	$2,051,000	$1,353,000	$1,406,572	$1,137,568	$1,217,471
Non-Operating Revenue	$5,686,704	$5,800,438	$5,900,316	$6,002,192	$6,106,106
Capacity Fee Revenues	$118,000	$412,000	$4,047,000	$4,687,000	$803,000
Anticipated Grant Funds	$1,772,000	$817,000	$0	$0	$0
Recyled Capacity Fee Revenues	$5,000	$5,000	$5,000	$5,000	$5,000
Land Sales Proceeds	$1,150,000	$0	$0	$0	$0
Total Revenue	**$77,628,164**	**$80,986,352**	**$89,906,096**	**$95,655,652**	**$95,818,931**
Expenses					
O&M Expenses	$22,269,000	$23,597,000	$24,542,973	$25,528,731	$26,555,994
Purchased Water Expenses (potable & recycled)	$38,004,962	$40,258,159	$44,264,056	$47,602,676	$49,578,639
Total Expenses	**$60,273,962**	**$63,855,159**	**$68,807,028**	**$73,131,407**	**$76,134,632**
Total Funds Available for Debt Service	$17,354,201	$17,131,193	$21,099,067	$22,524,245	$19,684,298
Total Debt Service	$5,070,625	$5,062,875	$5,059,375	$5,060,625	$2,044,000
Revenue to Debt Service Coverage Ratio	342.2%	338.4%	417.0%	445.1%	963.0%

Recycled Water Operating Cash Flow						
	Description	**FYE 2025**	**FYE 2026**	**FYE 2027**	**FYE 2028**	**FYE 2029**
	Recycled Water Revenue	$5,184,865	$5,315,676	$5,353,051	$5,353,051	$5,353,051
	Recycled Water Additional Revenue	$73,232	$505,348	$976,839	$1,383,700	$1,686,032
	Recycled Water Interest Income	$320,892	$257,262	$316,258	$279,799	$350,644
	Recycled Water Expenses	$3,417,665	$3,048,432	$3,178,003	$3,309,988	$3,442,957
	Recycled Water Transfers	$1,700,000	$1,700,000	$1,700,000	$1,700,000	$1,700,000
	Net Cash Flow	**$461,325**	**$1,329,854**	**$1,768,144**	**$2,006,562**	**$2,246,769**
	Beginning Balance	$7,922,000	$8,383,325	$9,713,180	$11,481,324	$13,487,885
	Net Cash Flow	$461,325	$1,329,854	$1,768,144	$2,006,562	$2,246,769
	Ending Balance	**$8,383,325**	**$9,713,180**	**$11,481,324**	**$13,487,885**	**$15,734,654**
	Interest Income	*$293,000*	*$223,118*	*$257,301*	*$223,621*	*$256,260*

Interest Allocation between Potable Water and Recycled Water operations						
	Description	**FYE 2025**	**FYE 2026**	**FYE 2027**	**FYE 2028**	**FYE 2029**
	Beginning Fund Balance					
	Potable Water Operations	50.1%	46.7%	42.0%	38.0%	36.5%
	Recycled Water Operations	49.9%	53.3%	58.0%	62.0%	63.5%
	Total Beginning Fund Balance	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
	Interest Allocation					
	Potable Water Operations	$322,108	$225,738	$228,742	$171,201	$201,356
	Recycled Water Operations	$320,892	$257,262	$316,258	$279,799	$350,644
	Total Interest Allocation	**$643,000**	**$483,000**	**$545,000**	**$451,000**	**$552,000**

APPENDIX D:

Revised Water Consumption Charge with Adopted SDCWA Rates

Revised Water Consumption Charge

The water supply component has been updated to reflect the CY 2025 rates and charges adopted by SDCWA at their board meeting that occurred after completion of this Study.

The Melded Supply Rate in the model was set to the original rate of $1,385 per AF based on the best information available at the time. The SDCWA Board instead adopted a Melded Supply Rate of $1,355 per AF, which is $30 per AF less than what was modeled. To account for this decrease, the $30 per AF decrease was converted to units, and that discount was applied directly to the cost per unit of water for potable water customers. The full breakdown is shown in **Table D-1**. The reduction of $0.07 per unit of water is shown in Column C.

The revised rate table is shown in **Table D-2**.

With the change in supply cost, the drought rates also had to be adjusted to properly reflect costs and revenue loss during drought. **Table D-3** shows the calculation for the surcharge in commodity rates at each drought stage, and **Table D-4** shows the corresponding demand reduction shortage rates at each stage.

Table D-1. Breakdown of the Volumetric Charge Components

A	B	C	D	E	F	G	H	I	J	K	L
Customer Class	**Supply Unit Rate**	**Change in Supply based on Adopted SDCWA Rates**	**Base Unit Rate**	**Max Day Unit Rate**	**Max Hour Unit Rate**	**Recycled Water Unit Rate**	**Revenue Offsets Unit Rate**	**Ag Credit Unit Rate**	**Revised Proposed Base Rate**	**Current FY 2024 Base Rate**	**Difference ($)**
Domestic											
Tier 1 (0-6 units)	$3.50	($0.07)	$1.42	$0.57	$0.60	N/A	($1.60)	N/A	**$4.43**	$4.24	$0.19
Tier 2 (7-23 units)	$3.50	($0.07)	$1.42	$0.99	$0.73	N/A	($0.11)	N/A	**$6.47**	$6.14	$0.33
Tier 3 (24-80 units)	$3.50	($0.07)	$1.42	$1.50	$0.89	N/A	$0.00	N/A	**$7.25**	$6.85	$0.40
Tier 4 (80 + units)	$3.50	($0.07)	$1.42	$2.21	$1.13	N/A	$0.00	N/A	**$8.20**	$8.14	$0.06
Agriculture	$3.50	($0.07)	$1.42	$1.60	$0.93	N/A	($0.48)	N/A	**$6.90**	$6.75	$0.15
Agriculture w/ Credit	$3.50	($0.07)	$1.42	$1.60	$0.93	N/A	($0.24)	($1.59)	**$5.55**	$5.41	$0.14
Commercial	$3.50	($0.07)	$1.42	$0.87	$0.69	N/A	($0.28)	N/A	**$6.14**	$5.78	$0.36
Irrigation											
Tier 1: “B” Base	$3.50	($0.07)	$1.42	$1.60	$0.93	N/A	($0.48)	N/A	**$6.91**	$6.50	$0.41
Tier 2: “C” Over Base	$3.50	($0.07)	$1.42	$2.35	$1.17	N/A	($0.58)	N/A	**$7.80**	$6.94	$0.86
Construction	$3.50	($0.07)	$1.42	$2.52	$1.23	N/A	N/A	N/A	**$8.60**	$8.21	$0.39
Recycled Water	N/A	N/A	N/A	N/A	N/A	$4.68	N/A	N/A	**$4.68**	$4.29	$0.39

Table D-2: Revised Proposed Volumetric Rates

Effective Date	Current FY 2024	January 1, 2025 Proposed	January 1, 2026 Estimated	January 1, 2027 Estimated	January 1, 2028 Estimated	January 1, 2029 Estimated
Volumetric Rates ($/unit[1])						
Domestic[2]						
Tier 1 (0-6 units)	$4.24	$4.43	$4.79	$5.18	$5.44	$5.66
Tier 2 (7-23 units)	$6.14	$6.47	$6.99	$7.55	$7.93	$8.25
Tier 3 (24-80 units)	$6.85	$7.25	$7.83	$8.46	$8.89	$9.25
Tier 4 (80 + units)	$8.14	$8.20	$8.86	$9.57	$10.05	$10.46
Agriculture	$6.75	$6.90	$7.46	$8.06	$8.47	$8.81
Agriculture w/ Credit[3]	$5.41	$5.55	TBD	TBD	TBD	TBD
Commercial	$5.78	$6.14	$6.64	$7.18	$7.54	$7.85
Irrigation						
Tier 1: "B" Base	$6.50	$6.91	$7.47	$8.07	$8.48	$8.82
Tier 2: "C" Over Base	$6.94	$7.80	$8.43	$9.11	$9.57	$9.96
Construction	$8.21	$8.60	$9.29	$10.04	$10.55	$10.98
Recycled Water	$4.29	$4.68	$5.06	$5.47	$5.75	$5.98

[1] Customers are billed on a per unit of water basis, 1 unit = 1 HCF
[2] Domestic includes single-family and multi-family customers. Multi-family tiers apply per dwelling unit.
[3] Note: Agriculture w/ Credit rate is updated annually by District staff based on SDCWA charges

Combined Agricultural/Domestic customers
First 23 Units per month: Follow Domestic rate structure.
Over 23 Units per month: Follow Agricultural rate structure.

Table D-3: FY 2025 Water Demand Reduction Rates Calculation

A	B	C	D	E	F
Line	Description	Base Demand	10% Demand Reduction	20% Demand Reduction	30% Demand Reduction
1	**Reduction in Rate Revenues**				
2	Projected Volumetric Rate Revenue	$43,456,049	$38,676,700	$33,777,920	$29,130,810
3	**Total Rate Revenue Reduction**	**N/A**	**$4,779,349**	**$9,678,129**	**$14,325,239**
4	**Avoided Water Supply Costs**				
5	Projected FY 2025 Water Usage	6,755,016	6,079,920	5,406,599	4,731,813
6	Assumed Water Loss	6.50%	6.50%	6.50%	6.50%
7	Required Water Purchases (units)	7,224,616	6,502,588	5,782,459	5,060,762
8	Required Water Purchases (AF)	16,585	14,928	13,275	11,618
9	Reduction in Required Water Purchases (AF)	N/A	1,658	3,311	4,968
10	FY 2025 Untreated M&I Rate ($/AF)	$1,819	$1,819	$1,819	$1,819
11	**Total Avoided Water Supply Costs**	**N/A**	**$3,015,560**	**$6,023,191**	**$9,037,368**
12	**Net Revenue Loss**	**N/A**	**$1,763,789**	**$3,654,939**	**$5,287,872**
13	**$/Unit Surcharge**	**N/A**	**$0.30**	**$0.68**	**$1.12**

Table D-4: Revised Proposed FY 2025 Water Demand Reduction Rates

Volumetric Rates ($/Unit)	FY 2025 Proposed Base Rate	10% Demand Reduction ($0.30 Surcharge)	20% Demand Reduction ($0.68 Surcharge)	30% Demand Reduction ($1.12 Surcharge)
Domestic				
Tier 1 (0-6 units)	$4.43	$4.73	$5.11	$5.55
Tier 2 (7-23 units)	$6.47	$6.77	$7.15	$7.59
Tier 3 (24-80 units)	$7.25	$7.55	$7.93	$8.37
Tier 4 (80+ units)	$8.20	$8.50	$8.88	$9.32
Agriculture	$6.90	$7.20	$7.58	$8.02
Agriculture w/ Credit	$5.55	$5.85	$6.23	$6.67
Commercial	$6.14	$6.44	$6.82	$7.26
Irrigation				
Tier 1 ("B" Base)	$6.91	$7.21	$7.59	$8.03
Tier 2 ("C" Over Base)	$7.80	$8.10	$8.48	$8.92
Construction	$8.60	$8.90	$9.28	$9.72
Recycled Water	$4.68	$4.68	$4.68	$4.68