

A large, dynamic splash of blue water is positioned on the left side of the page, extending from the top to the bottom. The water is captured in mid-air, with various droplets and streams, creating a sense of movement and freshness. The color is a vibrant, clear blue.

**LAGUNA BEACH
COUNTY WATER DISTRICT**

**2026 RATE STUDY
AND ANALYSIS**

Public Hearing: May 28, 2026

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Executive Summary

This report was prepared by the Laguna Beach County Water District (District) to document a 5-year financial plan, cost of service analysis, and water rate structure for the District. The specific goals of the study were to:

- Evaluate the adequacy of projected revenues under existing bi-monthly water service charges, commodity rates, and private fire line charges to meet projected District revenue requirements.
- Develop a detailed cost of service allocation and distribution methodology to support compliance with proportionate cost of service requirements of Proposition 218 (California Constitution Articles XIII C and XIII D) and ensure greater customer understanding of how rates are developed and set.
- Evaluate current water budget allocation factors to achieve State of California and District water conservation goals.
- Develop a cost of service and rate model for the District covering a five-year study period (Fiscal Year 2027 through Fiscal Year 2031) for both ongoing operations and planned capital improvements.
- Develop suitable adjustments to District water rates to be implemented over a five-year period that produce revenues adequate to meet financial needs of the District while recognizing customer costs of service.
- Develop projected levels of reserves and pay-as-you-go capital reserve balances per District policy and accounting for future operating and capital needs.

District staff projected revenues, costs, and resulting rate revenue requirements for a five-year study period based on a review of historical factors and the water system's operating and capital budgets and financial policies. The study of revenue requirements recognizes projected Operation and Maintenance (O&M) expenses, establishment and/or maintenance of reserve fund levels, and capital funding requirements.

The District's costs of service and revenue requirements were allocated and distributed to customers utilizing a detailed cost causative approach. The detailed methodology produced cost of service allocations recognizing the projected customer service requirements for the water system. The design of proposed rates was in accordance with allocated cost of service and local policy considerations.

Included in this study are the cost-of-service analysis, estimated revenue requirement analyses, and rate calculations, along with a brief description of the assumptions used in the calculations. The estimated annual system revenues to be generated from proposed rates are derived from a comparison of total system revenues and costs, both operating and capital, during this study period.

FINDINGS AND ACTIONS TAKEN

The following lists the findings of this analysis and actions taken by District staff to address the findings:

Finding #1

Water service charge revenues at current levels will not be sufficient over the next five years to meet the increasing cost of District operating and capital expenses without negatively affecting reserve fund levels and potentially affecting District operations. In the absence of rate revenue adjustments, projections show that District reserves would be depleted during the study period. Furthermore, District staff determined that most of the water system's fixed costs that benefit each connected account equally could be collected through the Orange County property tax roll rather than on the customer bills. Collection through the tax roll would provide further revenue stability for District cash flow projections and may enhance the credit quality of the District for future debt financing efforts.

Action Taken:

District staff developed the following customer rates to help ensure sufficient rate revenue is available over the next five years to continue providing reliable, high quality water service to all District customers. Proposed rates and charges will take effect beginning July 1, 2026 with the final, scheduled rate increase occurring July 1, 2030. Current rates and charges are provided for reference.

Bi-Monthly Service Charges

Table 1 – Current and Proposed Bi-Monthly Service Charges

Meter Size	Current Bi-Monthly Service Charges ¹	Bi-Monthly Service Charge FY 27	Bi-Monthly Service Charge FY 28	Bi-Monthly Service Charge FY 29	Bi-Monthly Service Charge FY 30	Bi-Monthly Service Charge FY 31
3/4"	\$51.23	\$23.47	\$25.69	\$28.12	\$30.75	\$33.61
1"	\$61.76	\$39.05	\$42.40	\$46.04	\$49.94	\$54.14
1.5"	\$74.61	\$73.43	\$79.94	\$87.03	\$94.86	\$103.09
2"	\$89.49	\$97.55	\$106.72	\$116.15	\$126.26	\$137.18
3"	\$834.96	\$441.61	\$483.18	\$528.68	\$577.68	\$630.93
6"	\$870.28	\$473.24	\$517.73	\$566.40	\$618.83	\$675.77

1. Current Service Charges effective March 1, 2026.

Commodity Rates

Table 2 – Current and Proposed Commodity Rates

Tiers	Current Commodity Charges/hcf ¹	Commodity Charges/hcf FY 27	Commodity Charges/hcf FY 28	Commodity Charges/hcf FY 29	Commodity Charges/hcf FY 30	Commodity Charges/hcf FY 31
Tier 1	\$8.45	\$8.47	\$9.27	\$10.14	\$11.08	\$12.10
Tier 2	\$11.79	\$10.62	\$11.62	\$12.72	\$13.90	\$15.18

1. Current Commodity Rates effective March 1, 2026.

Fixed Water Cost Charge Collected on Property Tax Roll

Table 3 –Proposed Fixed Water Cost Charge Collected on Property Tax Roll (per connection)

Annual Charge	FY 27	FY 28	FY 29	FY 30	FY 31
Annual Fixed Water Cost Charge per Connection	\$288.76	\$315.75	\$345.22	\$376.99	\$411.48

Bi-Monthly Private Fire Line Charges

Table 4 – Current and Proposed Private Fire Line Charges

Fire Line Size	Current Bi-Monthly Fire Line Charge ¹	FY 27 Bi-Monthly Fire Line Charge	FY 28 Bi-Monthly Fire Line Charge	FY 29 Bi-Monthly Fire Line Charge	FY 30 Bi-Monthly Fire Line Charge	FY 31 Bi-Monthly Fire Line Charge
2"	\$8.97	\$4.84	\$5.29	\$5.79	\$6.33	\$6.91
4"	\$55.50	\$29.94	\$32.76	\$35.85	\$39.17	\$42.79
6"	\$161.22	\$86.97	\$95.17	\$104.13	\$113.79	\$124.29
8"	\$343.57	\$185.34	\$202.80	\$221.91	\$242.50	\$264.86
10"	\$617.85	\$333.31	\$364.70	\$399.07	\$436.09	\$476.32

1. Current Fire Line Charges effective March 1, 2026.

Finding #2

The District’s cost allocation and distribution methodology was updated significantly in FY 22 to reflect current customer water demands, operating and capital cost requirements, District staff workflow activity, operational and engineering standards, and current District technology. District staff recommends continuing with this approach for the FY 27 – FY 31 analysis.

Action Taken:

The District developed a detailed, cost causative allocation and distribution methodology to set District water rates beginning in FY 22. This approach provides a strong nexus between customer rates and the cost of supplying water service to each customer class and continues to be utilized in this FY 27 analysis. This approach is documented in this report.

Finding #3

Water consumption patterns in the District have changed due to State water supply challenges, increased District conservation messaging, and greater use of water efficient appliances and irrigation systems. Furthermore, State standards for household and non-residential use continue to be revised to further encourage

conservation throughout the State. As a result of past modifications and future State conservation standards and mandates, certain factors in the District’s water budget formulas should be modified to reflect the impacts of these changes and future State requirements on cost of service.

Action Taken:

The District updated customer water budget indoor and outdoor formulas with the following changes:

- Reduce per capita indoor use from 55 gallons per capita per day (gpcpd) to 47 gpcpd to reflect current State guidelines for per capita indoor use. This factor applies to single-family and multi-family residential customer water budgets.
 - Continue with the Plant Factor (PF) associated with the outdoor budget formula of 0.7 to reflect ongoing efforts by District customers to transition from high water intensity landscaping, such as cool season turf, to lower water intense landscaping. This reduction also matches the guidelines established by the California Department of Water Resources Model Landscape Ordinance and other related documentation.
 - Utilize updated Evapotranspiration (ETo) data from CIMIS Station No. 241 located in San Clemente, California, and updated rainfall data from Laguna Beach weather stations maintained by Orange County Public Works. These data are used to calculate outdoor water budgets.
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Finding #4

In 2024, the District issued bonds for the first time since 1927. The 2024 Water Revenue Bonds issued by the District helped finance capacity ownership in the Doheny Ocean Desalination Plant, the purchase of property in Fountain Valley to construct and operate a groundwater well over the Santa Ana Basin, and needed capital projects related to water storage and transmission and distribution. The financial planning element of this 2027 rate analysis highlighted the need for additional debt financing to construct the groundwater well and for various capital projects to improve the water system.

Action Taken:

This FY 27 rate analysis assumes a \$15.5 million bond issue with an anticipated bond sale date of mid-FY 27.

Introduction

The analysis described in this report considers operation and maintenance (O&M) costs, reserve levels, and planned capital improvement projects (CIP) of the District. To that end, the study examines the revenues generated by the District and makes recommendations for revenue adjustments, as needed.

BACKGROUND

Since 1925, the Laguna Beach County Water District has provided reliable, safe, and prudently managed retail water service to its customers. Today, the District provides water services to approximately 8,750 customers (mostly residential) within an 8.5 square mile area of Southern Orange County, including a majority of the City of Laguna Beach and portions of unincorporated Orange County (the District provides water service on a contractual basis to the unincorporated community of Emerald Bay).

The District sells approximately 2,900 acre-feet of water annually to its retail connections. The District's current water portfolio includes water imported from the Colorado River and the State Water Project through a wholesale arrangement with the Municipal Water District of Orange County (MWDOC). In 2016, the District activated its groundwater rights in the Santa Ana Groundwater Basin (managed by the Orange County Water District). Through an interruptible wheeling arrangement with the City of Newport Beach, the District was able to access groundwater thus reducing reliance on more expensive imported water. Unfortunately, in late 2020, the City of Newport Beach's wells that pump groundwater to the District went offline for major rehabilitation. As of this FY 27 rate analysis, the City is still not able to transmit groundwater to the District through Newport Beach.

As a result of this situation, the District found and purchased property over the Basin within the City of Fountain Valley, with the intent of constructing a well on this site to pump groundwater to the District as well as to the City of Newport Beach. Through current and future agreements with Fountain Valley and Newport Beach, the District anticipates receiving groundwater from this site in January 2028. The annual groundwater deliveries are anticipated to supply two-thirds of the District's annual water demand and will significantly reduce overall District water purchase costs beginning in 2028.

In addition to groundwater acquisition activity, the District is also partnering with South Coast Water District and Eastern Municipal Water District in the construction and future operation of a 5 million gallon per day (MGD) ocean desalination plant in Dana Point, California (Doheny Ocean Desalination Plant). The goal of this effort is to produce a reliable, local source of water thus reducing reliance on imported water. As of the preparation of this report, the District anticipates receiving approximately 1 MGD of desalinated water, or about one-third of its total demand. While the short-run price per acre foot of desalinated water is projected to be more expensive than imported water from MWDOC, the estimated long-run price per acre foot is lower than the price per acre foot of imported water; these arrangements will benefit

future generations of Laguna Beach residents and businesses in terms of supply reliability and cost savings as compared to being solely reliant on expensive import water.

Financial Planning and Cost-of-Service Enhancement

The long-term financial plan for the District includes revenue and expense projections based on a review of historical factors and the District's current operating and capital budgets and financial policies. The study of revenue requirements recognizes projected operation and maintenance expenses, establishment and maintenance of reserve funds, and capital funding requirements. These capital requirements include capital improvement expenditures met from annual revenues, current and planned bond proceeds, and available pay-as-you-go (PAYGO) reserve funds.

Over the past decade, the District has implemented two key systems (AMI and CMMS) which have not only improved operational efficiency, but have also generated detailed, identifiable data on customer water consumption and staff work activity which have greatly enhanced the cost-of-service-based ratemaking process at the District. In 2016, the District embarked on a District-wide conversion of customer meters to an Advanced Metering Infrastructure (AMI) system. AMI is an integrated system of smart meters, a communications network, and data management system that enables two-way communication between the District and its customers. The system provides several important functions that were not previously possible or had to be performed manually, such as the ability to automatically and remotely measure water use, detect tampering, and identify water leaks. AMI also enables District customers to manage water consumption and resulting costs.

In 2024, the District invested in and implemented a comprehensive asset management and work order management software platform (CMMS). This platform centralizes District maintenance information to help track, plan, and optimize operations, asset maintenance, repairs, and inventory. It streamlines workflows by managing work orders, scheduling preventive maintenance, and reducing downtime, effectively replacing paper-based records. The District's CMMS software provides detailed workflow activity that enhances the District's cost-of-service ratemaking process and methodology and are utilized in this analysis.

The District's costs of service analysis was conducted through the use of cost causative approach that links each operating and capital cost item to a fixed, variable, or fire protection-related component. Within the fixed category are sub-categories based on 1) costs that are attributed to customer accounts/properties regardless of class of customer and meter size associated with each account, and 2) costs that are attributed to the size of each customer's meter. Within the variable category are sub-categories based on 1) costs that are attributed to Tier 1, or base, water use, and 2) costs that are attributed to Tier 2, or above base, water use. Finally, within the fire-protection category, costs are allocated to public fire

protection and private fire protection components. District staff believe that this approach provides a reasonable nexus between customer rates and the costs associated with providing water service to District customers. The proposed rates presented in this report are a product of this cost-of-service allocation methodology and considers District policies and financial needs, such as minimum reserve funding levels and projected capital needs.

OVERVIEW OF LEGAL REQUIREMENTS AND INDUSTRY BEST PRACTICES FOR COST OF SERVICE STUDIES

The State of California considers water services as property-related and, as such, fees or charges for such services are subject to certain state constitutional and statutory requirements. A primary requirement is that agencies imposing property-related charges must demonstrate that the rates for such charges do not exceed the proportional cost of providing the property related service. Presented in the next few sections are brief summaries of the relevant authorities governing retail water rate setting in California.

Proposition 13

Proposition 13 was adopted by the California voters in 1978, and (among other things) added article XIII A, section 4 to the California Constitution. Article XIII A, section 4 requires that all “special taxes” require voter approval. Although Proposition 13 did not define the term “special tax,” the Legislature adopted Government Code Section §50076 in 1979, which provides that “special taxes shall not include any fee which does not exceed the reasonable cost of providing the service or regulatory activity for which the fee is charged.”

Proposition 218

California voters approved Proposition 218 in November 1996. This voter-approved initiative added articles XIII C and D to the California Constitution. Article XII D Section 2(e) defines a “fee” as “any levy other than an ad valorem tax, a special tax, or an assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership, including a user fee or charge for a property related service”. In 2006, the California Supreme Court confirmed in *Bighorn-Desert View Water Agency v. Verjil*, that water service is property-related, and therefore, subject to the requirements of Proposition 218. As such, any addition of a new water service fee or charge, or any increase or extension of an existing water service fee or charge, must comply with the substantive and procedural requirements of Proposition 218. The substantive requirements include:

- Revenues derived from the fee or charge cannot exceed the funds required to provide the property-related service.
- Revenues derived from the fee or charge cannot be used for any other purpose other than for which the fee or charge was imposed for and cannot be used for general governmental services such as public safety or libraries.

- A property-related fee or charge cannot exceed the proportional cost of service attributable to the parcel.
- No property-related fee or charge may be imposed for a service unless the service is used by, or immediately available to, the owner of the property in question.

California Water Code Sections 370-374

California Water Code Sections 370 – 374 provide criteria for establishing allocation-based conservation water pricing in support of California Constitution Article X, Section 2. Article X, Section 2 states that waste or unreasonable use of water shall be prevented. Allocation-based conservation water pricing allows for the design of water budget rate structures. Per AWWA M1, “a water-budget rate structure is a form of increasing block rates where the amount of water within the first block or blocks is based on the estimated, efficient water needs of the individual customer.”

Under the Water Code sections, allocation-based rates can be employed if they meet the following criteria:

- Billing based on metered use.
- A base allocation (water amount) is established based on each customer's needs and property characteristics.
- A basic charge is imposed for all water used within the customer's base allocation.
- A conservation charge is imposed on all excess of the customer's base allocation.

Also, tiered rates can be employed to pass the “incremental costs” of water service through to those customers causing the agency to incur such incremental costs. Incremental costs include water supply costs, capital costs incurred as a result of excess water use, and costs for implementing water conservation or demand management measures to offset impacts on water supply and reliability from excessive water users, including:

- Conservation best management practices, conservation education, irrigation controls and other conservation devices, and other demand management measures.
- Water system retrofitting, dual plumbing and facilities for production, distribution, and all uses of recycled water and other alternative water supplies.
- Projects and programs for prevention, control, or treatment of the runoff of water from irrigation and other outdoor water uses. Incremental costs shall not include the costs of stormwater management systems and programs.

Proposition 26

California voters approved Proposition 26 in November 2010. Included in the language of proposition, which amended California Constitution Article XIII C, Section 1, is a definition of “tax”. Essentially, as defined by Proposition 26, a tax is

any “levy, charge, or exaction of any kind imposed by a local government” with specifically outlined exceptions. These exceptions are:

- A charge imposed for a specific benefit conferred or a privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege, and
- A charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the service or product.
- Assessments and property-related fees imposed in accordance with the provisions of article XIII D.

Proposition 26 establishes that the “...local government bears the burden of proving by a preponderance of the evidence that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity, and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor’s burdens on, or benefits received from, the governmental activity.”

Retail water service fees and charges (which include provision of water for consumption as opposed to resale) will fall under the third bullet point above. In other words, so long as the fees or charges are adopted in accordance with article XIII D (added as a part of Proposition 218 and described above), they will be exempt from the definition of a tax.

Government Code Section §54999.7

Under this section, rate-setting activities by public agencies are directed to follow cost-of-service principles and states that fees “...for public utility service, other than electricity or gas, shall not exceed the reasonable cost of providing the utility service.” It also provides that these fees will be “established in consideration of service characteristics, demand patterns, and other relevant factors.”

Generally Accepted Rate-Setting Standards

The American Water Works Association (AWWA) is the industry organization tasked with providing guidance on the operation and management of water utilities. AWWA has established a general set of principles used to guide the development of water rates. These principles were developed to provide a consistent approach and minimum standards to rate-setting procedures. It is important to note that AWWA observes that there is no prescribed single approach for establishing cost-based rates. Rather, agencies must exercise judgment to align rates and charges with local conditions and requirements, as well as applicable state law.

District staff considered the guidelines contained in the AWWA documentation and followed the applicable State law, including Proposition 218, to conduct the analysis contained herein.

The projections set forth in this report are intended as “forward-looking statements”. In formulating these projections, District staff have made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. The methodology utilized in performing the analysis follows generally accepted practices for such projections. Such assumptions and methodologies are reasonable and appropriate for the purpose for which they are used. While District staff believe the assumptions are reasonable and the projection methodology valid, actual results may differ materially from those projected, as influenced by the conditions, events, and circumstances that occur. Such factors that may affect the District’s ability to manage the system and meet regulatory or environmental requirements include, but are not limited to, the following: the District’s ability to execute the capital improvement program as scheduled and within budget, drought-induced State water supply restrictions, significant regional and local economic conditions, and adverse legislative, regulatory, or legal decisions (including environmental laws and regulations).

Water Rate Study and Cost of Service Analysis

The rate study/cost of service process followed in this study consists of three elements, with each one answering a specific question:

- Revenue Requirements – This section develops the District’s Financial Plan and answers the question “How much revenue is needed to operate the utility, fund capital improvements, and ensure adequate reserve balances?”
- Cost of Service – This section allocates the different costs for providing water service to customers. The question addressed in this part of the process is “From whom should the money be collected in accordance with cost of service principles?”
- Rate Design – This last part of the process examines potential rate structures to answer the question “How should the District’s services be priced considering revenue requirements and cost of service principles?”

The subsequent sections of this study present the three elements of the analysis conducted by District staff and reviewed by the District’s legal counsel and the District’s Ad Hoc Water Rate Committee.

REVENUE REQUIREMENTS

A review of the District’s revenue requirements is the first step in the rate study process. The review involves an analysis of customer account and consumption pattern data, annual operating revenues under existing customer rates, current and projected non-operating revenues, current and projected operating and maintenance expenses, the District’s planned capital requirements, and projected reserve balances under existing rates and projected financial needs. The projections and cost escalators used in the analysis are based on a combination of historical cost patterns and internal and external information available to District staff at the time of the study. This analysis also considers District financial and reserve fund balance policies.

The following tables (Tables 5 through 7) present current and projected customer account information (metered accounts and private fire line accounts) and current and projected water consumption information during the study period. These datasets are used to determine projected water sales revenues under existing and proposed rates. Account growth and water consumption projections are based on historical growth patterns in the District and current staff assumptions about customer account growth and water use during the study period. Because the District’s service area is relatively developed, projected account growth is assumed to be minimal. Water use projections are more challenging to project due to varying potential rainfall patterns throughout the study period. Based on past multi-year consumption patterns, each year’s rainfall estimates and the effect on water use can vary, but the longer-term outlook for water use during the entire study period will likely be relatively stable.

Table 5 – Estimated and Projected Metered Potable Water Customer Accounts

Description	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
3/4"	6,871	6,860	6,850	6,840	6,830	6,819
1"	1,364	1,377	1,391	1,405	1,419	1,433
1.5"	336	337	339	341	342	344
2"	165	166	166	167	168	169
3"	13	13	13	13	13	13
6"	2	2	2	2	2	2
Total Potable	8,751	8,755	8,761	8,768	8,774	8,780

Table 6 – Estimated and Projected Private Fire Line Customer Accounts

Description	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
Fire Service (by fire main size)						
2"	4	4	4	4	4	4
4"	64	64	64	64	64	64
6"	30	30	30	30	30	30
8"	5	5	5	5	5	5
10"	2	2	2	2	2	2
Total Fire Service	105	105	105	105	105	105

Table 7 – Estimated and Projected Water Consumption by Tiers

Description	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
Total By Tiers						
Tier 1 (hcf)	1,127,329	1,127,329	1,127,329	1,127,329	1,127,329	1,127,329
Tier 2 (hcf)	148,884	148,884	148,884	148,884	148,884	148,884
Total HCF	1,276,213	1,276,213	1,276,213	1,276,213	1,276,213	1,276,213

* 1 unit of water is represented as 1 'hcf'. One hcf of water is approximately 748 gallons.

O&M and Supply Expense Projections

The O&M expense projection analysis considers the anticipated increases in the costs of operating the utility over the 5-year study period. Table 8 presents the study period O&M cost projections utilizing the District’s FY 2025/26 estimated actual expenditures as the baseline annual revenues and expenses of the study. Escalators are applied to each category based on historical cost increases and District staff assessment based on relevant available information (the District rate model provides detailed listings of each escalator).

Table 8 – Estimated and Projected Operating and Maintenance Expenses

Description	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
Summary by Department						
Operations - Source of Supply (51000)	\$ 5,516,280	\$ 6,141,020	\$ 5,556,623	\$ 5,457,630	\$ 7,062,019	\$ 7,383,561
Operations - Pumping (52000)	1,413,300	1,459,530	1,507,320	1,556,710	1,607,740	1,660,480
Operations - Transmission & Distribution (54000)	5,608,600	5,774,090	5,944,470	6,119,870	6,300,450	6,486,350
General Manager's Office (55000)	666,522	686,200	706,460	727,320	748,790	770,900
Administration & Customer Service (56000 & 57000)	2,485,540	2,559,140	2,634,930	2,712,960	2,793,310	2,876,040
Finance (58000)	1,793,885	1,846,810	1,901,300	1,957,400	2,015,160	2,074,620
Engineering (59000)	1,318,630	1,357,540	1,397,600	1,438,840	1,481,290	1,525,000
Total by Department	\$ 18,802,757	\$ 19,824,330	\$ 19,648,703	\$ 19,970,730	\$ 22,008,759	\$ 22,776,951

Table 9 presents the projected water purchase costs over the next five years. The projections are based on assumed customer account growth and water use, as well as water purchase costs from projected water sources. Currently, the District relies solely on wholesale imported water from Metropolitan Water District of Orange County (MWD) through the Metropolitan Water District (MWD). These agencies provide projections on their per acre foot costs of water and related administrative charges.

During the study period, the District anticipates receiving two additional sources of water supply: groundwater through District rights to 2,025 acre feet from the Santa Ana Groundwater Basin managed by the Orange County Water District (OCWD) and desalinated water from the planned Doheny Ocean Desalination Plant. Anticipated water deliveries from these new sources (as they become fully operational) are projected to meet the District's total water demand thus obviating the need to purchase water from MWD/MWDOC in the future.

In partnership with the City of Newport Beach, the District is in the process of constructing a groundwater well over the Santa Ana Basin. Water pumped by this well would be transmitted to the City of Newport Beach and then wheeled from the City to the District. The District anticipates groundwater delivery to begin in January 2028. Projected groundwater purchase costs through OCWD are based on published data by OCWD and District staff estimates of future year increases to groundwater rates. The District anticipates receiving desalinated water from the Doheny plant by the Spring of 2029. South Coast Water District, who is spearheading the Doheny plant project and its construction, has provided the District the projected annual per acre foot cost estimates for desalinated water. Cost estimates for both groundwater and desalinated water are included in this analysis.

Table 9 – Estimated and Projected Water Purchase and Delivery Expenses

Description	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
Water Cost Summary						
Fixed Costs	\$ 593,570	\$ 682,606	\$ 737,214	\$ 810,935	\$ 892,029	\$ 1,043,674
Variable Costs	4,524,580	5,048,534	4,397,429	4,212,255	5,722,731	5,879,417
<i>Total Water Cost</i>	\$ 5,118,150	\$ 5,731,140	\$ 5,134,643	\$ 5,023,190	\$ 6,614,759	\$ 6,923,091
MWD/MWDOC Fixed Charges						
MWD Readiness-to-Serve	374,660	430,859	465,328	511,860	563,047	658,764
MWD Capacity Charges	78,550	90,333	97,559	107,315	118,047	138,114
MWDOC Meter Charges	140,360	161,414	174,327	191,760	210,936	246,795
<i>Total MWD/MWDOC Fixed Charges</i>	593,570	682,606	737,214	810,935	892,029	1,043,674
MWD/MWDOC Variable Charges						
Import Water Purchases	4,524,580	5,048,534	3,471,670	1,560,540	-	-
<i>Total MWD/MWDOC Variable Charges</i>	4,524,580	5,048,534	3,471,670	1,560,540	-	-
Groundwater Variable Charges						
Groundwater Supply	-	-	925,759	1,666,720	1,750,056	1,837,558
Newport Beach Charges	-	-	-	-	-	-
<i>Total Groundwater Variable Charges</i>	-	-	925,759	1,666,720	1,750,056	1,837,558
Desal Water						
Desal Water Purchase	-	-	-	984,996	3,972,675	4,041,859
<i>Total Desal Costs</i>	-	-	-	984,996	3,972,675	4,041,859
Acre Feet By Source						
Import	3,106	3,106	1,925	801	-	-
Groundwater	-	-	1,181	2,025	2,025	2,025
Desalination	-	-	-	280	1,081	1,081
<i>Total Acre Feet</i>	3,106	3,106	3,106	3,106	3,106	3,106

Operating Revenue Projections from Existing Rates and Charges

Operating revenue projections are based on existing customer rates (bi-monthly meter service charge and commodity rates), private fire line service charges, service installation fees, and other miscellaneous administration charges. Escalators are applied to customer account growth, customer water consumption, and miscellaneous revenue categories based on historical data and District staff assessments (the District rate model provides detailed listings of each escalator). Where applicable, some projections may show a decrease in a customer account category, water consumption, or revenue line item. This is the case for the ¾” customer meter size category. The City of Laguna Beach does not allow for new construction to install ¾-inch meters and, in the case of major remodels in the City, any existing ¾-inch metered connection must upsize to a 1-inch meter to meet City fire flow requirements. The result of this City policy and regulation, is that the number of ¾-inch water meters in the District service area is declining; this decline

is reflected in the rate analysis. Nominal growth is projected in the 1-inch to 2-inch meter size categories while no growth is assumed for 3-inch and 6-inch categories.

Service charge revenues are attributable to the bi-monthly meter service charges, consumption revenues are attributable to the commodity rates, and fire service revenues are attributable to private fire line service charges for those customers who have a private fire line connection separate from the potable water metered connection. Other operating revenue includes service installation fees, administrative fees and penalties, engineering/planning fees, overhead and equipment charges, and other miscellaneous revenues. Table 10 presents these estimated and projected figures by year.

Table 10 – Estimated and Projected Operating Revenues under Existing Water Rates and Charges

Description	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
Total Operating Revenue						
Service Charge Revenue	\$ 2,789,799	\$ 2,932,434	\$ 2,934,953	\$ 2,938,052	\$ 2,941,524	\$ 2,944,646
Fire Service Revenue	56,766	68,268	68,268	68,268	68,268	68,268
Consumption Revenue	11,062,098	11,281,272	11,281,272	11,281,272	11,281,272	11,281,272
Other Operating Revenue	209,000	215,270	221,728	228,380	235,231	242,288
<i>Total Operating Revenue</i>	\$ 14,117,662	\$ 14,497,245	\$ 14,506,222	\$ 14,515,973	\$ 14,526,296	\$ 14,536,475

The service charge revenue source is projected by assuming existing rates. When combined with other revenue sources (fire service, consumption, other operating revenues, and non-operating revenues discussed later in this report), a complete baseline of total revenues is formed. This revenue baseline is then compared to the District’s total expense projections to determine the additional rate revenue required from District customers throughout the five-year study period. Total existing revenues and projected new rate revenues are then allocated among different functional revenue categories (fixed and variable) and mechanisms (currently, by customer bills). For this upcoming rate period, the District has decided to collect certain fixed revenue requirements (based on fixed costs) through property tax bills rather than through customer bills. The cost allocation section of this report provides more detail on what is included in the revenue requirements that will be collected on the tax roll.

Capital Expense Projections

While O&M expenses are related to daily operations, the District incurs non-operating, or capital, expenses to construct, install, repair, rehabilitate, or replace water facilities. For planning purposes, the District develops and maintains a long-term Capital Improvement Program (CIP) that identifies future water facility needs. The program of facilities is generated through staff’s current and projected assessment of the water system and detailed capital improvement planning.

The CIP is a constantly evolving program; District staff review all ongoing and future planned projects on a regular basis throughout each year. Consequently, projects

may shift from one year to the next, new projects may be added to the plan, or projects may be removed from the CIP, should new conditions or information provide a basis for the action.

In 2024, the District issued \$10 million in Water Revenue Bonds to finance the groundwater well site acquisition, capacity purchase in the Doheny Ocean Desalination Plant, and needed transmission/distribution and water storage project improvements. In addition, the District plans to issue an additional \$15.5 million in future Water Revenue Bonds in FY 27 for the purposes of groundwater well site construction and other capital project improvements. The annual debt service for the 2024 Bonds is included in rate study cost analysis and the estimated annual debt service for the planned 2027 Bonds is also included. Table 11 presents these expenses as well as the projected 5-year CIP as categorized by major system function.

Table 11 – Estimated and Projected Debt Service and Capital Improvement Projects by Major Functional Category

Description	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
Total Projected CIP Expenses						
Joint Powers Projects	\$ 77,145	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 475,000
Reservoirs & Pump Stations	3,178,515	3,761,817	4,015,000	4,000,000	3,375,000	2,800,000
Transmission & Distribution	1,495,000	1,000,000	881,000	630,000	955,000	1,799,500
Office Equipment	328,000	148,000	40,000	100,000	40,000	190,000
Equipment & Vehicles	340,000	100,000	100,000	100,000	100,000	100,000
Facility Improvements	642,000	100,000	25,000	25,000	25,000	25,000
Water Supply Projects	990,000	5,000,000	5,000,000	-	-	-
Total	\$ 7,050,660	\$ 10,184,817	\$ 10,136,000	\$ 4,930,000	\$ 4,570,000	\$ 5,389,500
Debt Service - 2024 Bonds	575,300	577,300	578,800	579,800	575,300	575,550
Total Debt Service	\$ 575,300	\$ 577,300	\$ 578,800	\$ 579,800	\$ 575,300	\$ 575,550
Estimated Debt Service - 2027 Bonds	-	250,000	946,595	946,595	946,595	946,595
Total Debt Service	\$ -	\$ 250,000	\$ 946,595	\$ 946,595	\$ 946,595	\$ 946,595

Non-Operating Revenue Projections

Table 12 presents the estimated and projected non-operating revenues during the study period. District non-operating revenues are considered unrestricted and can be designated for funding both operating and non-operating expenses; however, they are generally used to fund capital projects; capacity fees are the exception as they are targeted for capital project funding. Any surplus non-operating revenues can be used to fund net operating income losses (if necessary) or can be deposited in the District 'pay-as-you-go' (PAYGO) capital reserve fund to be applied to PAYGO-identified capital projects. The Other Non-Operating Revenues line item increases significantly in FY 2027 due to the proceeds from the anticipated 2027 Water Revenue Bonds issue and decreases to approximately \$400,000 as proceeds from both the 2024 and 2027 bond issues are expended in full (during FY 26 – FY 28).

Table 12 – Estimated and Projected Non-Operating Revenues

Description	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
Total Non-Operating Revenue						
Property Tax	\$ 4,895,000	\$ 5,139,750	\$ 5,396,738	\$ 5,666,574	\$ 5,949,903	\$ 6,247,398
Lease Revenues	547,416	563,838	580,754	598,176	616,122	634,605
Other Non-Operating Revenues	3,637,575	17,386,700	3,028,526	402,982	457,571	462,298
Total	\$ 9,079,991	\$ 23,090,288	\$ 9,006,017	\$ 6,667,732	\$ 7,023,596	\$ 7,344,302

Revenue Requirements Analysis

The components described in this section comprise the foundation of the District revenue requirement analysis. Emphasis was placed on several areas including generating sufficient rate revenues to support the District’s operational and capital needs while considering customer rate impact, determining the amount of funds required to be used from reserves, both PAYGO and other reserves, to fund expenses, and maintaining reserve levels at or near District policy minimum target levels throughout the 5-year rate study period. Should other reserves dip below minimum policy targets, expenses and/or rate revenues should be adjusted to ensure that the minimum targets are re-established.

The resulting revenue requirements analysis presented in Table 13 incorporates rate revenues and other revenues required to meet operating and capital needs. The first line of Table 13, ‘Rate Revenue Required’ includes District revenues derived from existing customer rates in each year (‘Service Charge Revenue’ plus ‘Consumption Revenue’ from Table 10) plus additional rate revenues needed for that year to achieve District operational and capital funding objectives. Additional rate revenues would come from future rate increases as projected in the District’s cost of service and rate model. The ‘Fees and Charges Revenue’ line item in Table 13 represents other operating revenues sources for each year of the rate study period (‘Fire Service Revenue’ plus ‘Other Operating Revenues’ from Table 10). The ‘Total Rates, Fees, and Charges Revenue’ line item in Table 13 is the sum of the ‘Rate Revenue Required’ line and the ‘Other Revenue’ line. The ‘Total Operating Expense’ line item represents operating expenses from each year (from Table 8). Net operating income is total operating revenues less total operating expenses. The figures shown in the line items ‘Total Non-Operating Revenue’ and ‘Total Capital and Debt Service Expenses’ are the District’s projected revenues from non-operating sources such as property taxes and interest income and projected costs from the District’s CIP program and current and projected annual debt service, respectively. Net non-operating income is total non-operating revenues less total non-operating expenses. The final line item in Table 13 is ‘Net Income’ which is the sum of net operating income and net non-operating income for each year. A net gain in any year would be deposited to the PAYGO Capital Reserves balance and a net loss in any year would be addressed through the same reserves balance.

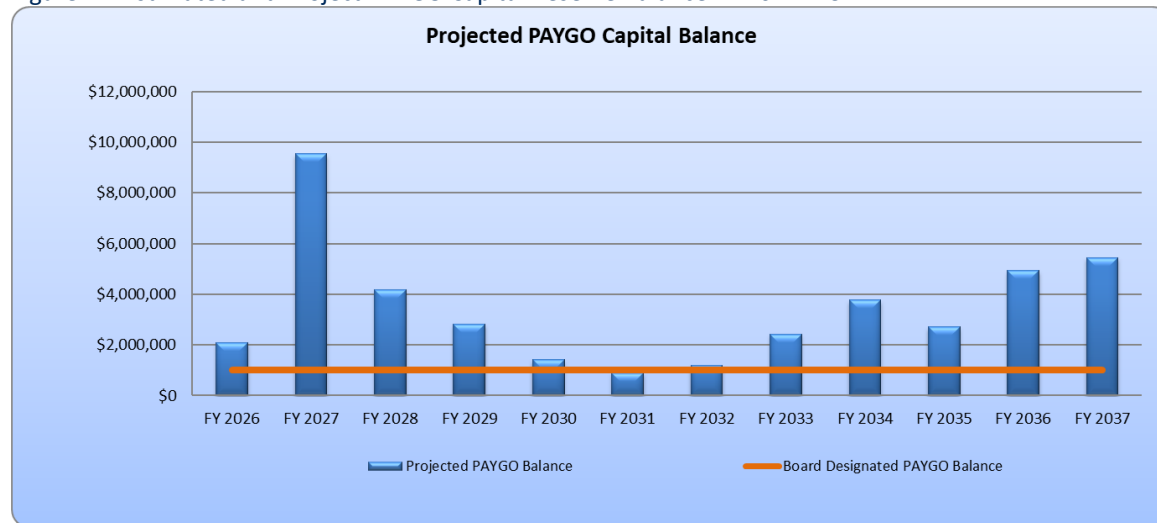
Table 13 – Estimated and Projected District Revenue Requirements and Net Income Analysis

Description	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
Rate Revenue Required	\$ 13,908,662	\$ 15,267,431	\$ 16,705,515	\$ 18,279,799	\$ 19,975,533	\$ 21,818,047
Fees and Charges Revenue	209,000	215,270	221,728	228,380	235,231	242,288
Total Rates, Fees, and Charges Revenue	14,117,662	15,482,701	16,927,244	18,508,179	20,210,764	22,060,335
Total Operating Expenses	18,802,757	19,824,330	19,648,703	19,970,730	22,008,759	22,776,951
Net Operating Income	(4,685,095)	(4,341,629)	(2,721,460)	(1,462,552)	(1,797,995)	(716,616)
Total Non-Operating Revenues	9,079,991	23,090,288	9,006,017	6,667,732	7,023,596	7,344,302
Total Capital and Debt Service Expenses	7,625,960	11,012,117	11,661,395	6,456,395	6,091,895	6,911,645
Net Non-Operating Income	1,454,031	12,078,171	(2,655,378)	211,337	931,701	432,657
Net Income	\$ (3,231,064)	\$ 7,736,543	\$ (5,376,838)	\$ (1,251,214)	\$ (866,295)	\$ (283,959)

Figure 1 presents the resulting effect of these actions on the District’s PAYGO capital reserves and other reserves (the financial plan projections show that the minimum policy target balance for the Other Reserves balance is always met each year of the plan). The ‘PAYGO Capital Reserves’ represents funds available for capital projects each year. Depending on the CIP needs each year, this balance will fluctuate at or above the minimum policy target level of \$1 million annually.

The resulting projected net income losses in all years except FY 27 illustrate the effect of increased District costs and large-scale capital project plans in those years. These losses are mitigated by utilizing PAYGO capital reserves during the study period (recall that PAYGO Capital Reserves funds are unrestricted in their use). Beyond the study period, beginning in FY 32, projected net income is positive through FY 37 due to the cumulative effect of prior year rate increases. Figure 1 illustrates the use of PAYGO reserves as well as the replenishment of the balance in future years.

Figure 1 – Estimated and Project PAYGO Capital Reserve Balance FY 26 – FY 37



COST OF SERVICE ANALYSIS

The principles and methodology of the cost of service-based water rate analysis are summarized in this section. The annual cost of providing water service is distributed among customer classes commensurate with their service requirements and the proportionate costs attributed to those service requirements. This process establishes a nexus between the cost to provide water service to customers and the rates and charges that these customers pay for their water service. This cost of service analysis involved the following activities:

1. List operating and capital cost line items. This step requires listing each line-item cost detail and their related projected costs over the study period. Annual costs are summed and averaged over the 5-year study period.
2. Allocate line-item costs to fixed, variable functional cost components. Cost components include customer accounts connected to the water system (those costs that do not vary according to customer class or meter size), customer meters (those costs that vary by meter size), base water consumption (Tier 1), beyond base water consumption (Tier 2), and fire protection (both public and private).
3. Develop unit costs for each cost component using appropriate units of service for each component.
4. Distribute the cost components. For service charge-related costs, distribute cost components to accounts connected to the water system, and, where applicable, to each meter size per account. For commodity rate-related costs, distribute cost components to projected water consumption at base and beyond base levels. For private fire protection-related costs, distribute cost components to private fire line connection accounts.

Allocation of O&M Expenses

District staff identified all operating expense line items that relate to providing water service to its customers. Costs for each line item for each year of the rate study period (FY 27 – FY 31) were based on actual expenditures from FY 25, budgeted amounts for FY 26, and projections for the remaining years of the study period. Projections were based on historical escalators, published data (when available), and staff experience and estimations. The costs for each expense line item were summed and then averaged over the 5-year period to arrive at an amount per line item to be used for the allocation analysis.

The allocation process began with interviews with District staff regarding allocation mechanisms. During these interviews, each cost line item was reviewed, and it was determined what mechanism (or mechanisms) was (were) available and how it (they) should be applied. The mechanisms identified were staff labor/work effort data, cost data related to water consumption, customer account data, customer meter data, facility operating data and design standards, service/work order data, agenda item records, customer call data, and staff experience and expertise.

For some line items, data and records were not available. In these cases, staff discussed the relationships between the cost items and the fixed, variable, and fire protection functional cost components of the District [customer accounts, meters/meter sizes, base and beyond base water consumption (Tier 1 and Tier 2 water use), and fire protection] and determined if there was a systematic or direct relationship between the item and cost component. For example, pump station operating expenses are directly related to water demand. As demand increases, pumping expenses increase, and vice versa. Therefore, the pumping expense line item is directly related to base, or Tier 1, water consumption and allocated accordingly.

As described earlier, the functional cost components of the District are grouped into three major categories: fixed costs, variable costs, and fire protection costs. Within each of these major categories are sub-categories and the basis of allocation as presented in Table 14. Based on the allocation mechanism, each cost line item was attributed to one or more of these functional cost sub-categories. In many cases, a cost item is related to only one sub-category, yet in others, to two or more categories.

Table 14 – Functional Cost Component Categories

Major Cost Category	Sub-Category	Basis for Allocation
Fixed	Customer Account	Costs allocated uniformly to customer accounts regardless of customer class or meter size
	Meters	Costs related to meter size (meter size is the main determinant of cost of service)
Variable	Tier 1 Consumption	Costs related to base (Tier 1) water use
	Tier 2 Consumption	Costs related to beyond base (Tier 2) water use (i.e. water conservation program costs)
Fixed (Debt Service)	Property with a Water Service Connection	Costs allocated uniformly to properties in District service area with water service connection regardless of customer class or meter size
Fire Protection	Public Fire	Costs related to general, service area-wide fire protection service
	Private Fire	Costs related to specific customer private fire line service

Once this allocation process was completed, the amounts listed for each line item in each sub-category were summed to arrive at a total operating cost allocation by sub-category. Each sub-category total was divided by the sum of all sub-category costs to yield a percentage amount for each sub-category. These percentages were utilized to allocate general support cost line items to each functional cost sub-category.

There are several general support categories that do not directly relate to a specific cost sub-category. These costs include, but are not limited to, insurance costs, information technology, human resources, and so on. These general support costs are typically categorized as indirect costs that support all functions of the District and therefore are allocated based on the percentage figures derived from the direct cost allocation process described above. Table 15 presents the results of this operating cost allocation process. Appendix A includes the detailed line-item cost categories and allocation bases.

Table 15 – Results of Operating Cost Allocation Process

Description	Fixed - Meter Size	Fixed - Uniform	Fire Protection	Variable Tier 1	Variable Tier 2	Total Average Annual Operating Costs
Total Allocated Direct Cost Line Items (a)	\$ 1,765,567	\$ 2,772,857	\$ 607,186	\$ 11,919,144	\$ 522,882	\$ 17,587,637
Direct Cost Line Item Percentages	10.0%	15.8%	3.5%	67.8%	3.0%	100.0%
Total Allocated Indirect/General Support Cost Line Items (b)	247,295	388,381	85,046	1,669,460	73,238	2,463,419
Total Direct and Indirect Allocated Cost Line Items (a + b)	\$ 2,012,862	\$ 3,161,239	\$ 692,232	\$ 13,588,603	\$ 596,120	\$ 20,051,056

Allocation of Capital Expenses

Similar to the process followed for allocation operating expenses, District staff identified all capital project expense line items that relate to providing water service to its customers. Identified capital projects and related costs for each line item for each year of the rate study period (FY 27 – FY 31) were based on engineering and operations staff assessments of projects required during the 5-year study period and available data on conditions of the District facility assets. Similar to the operating and maintenance cost allocation process, the resulting costs for each capital project were summed and then averaged over the 5-year period to arrive at an amount per line item to be used for the allocation analysis.

The allocation process began with interviews with District staff regarding allocation mechanisms. During these interviews, each cost line item was reviewed, and it was determined what mechanism (or mechanisms) was (were) available and how it (they) should be applied. The mechanisms identified were facility design standards, use of each capital asset, and staff experience and expertise. Based on these sources, most capital projects are allocated to base water consumption, fire protection, or a combination of both components. District capital projects are directly related to the storage, transmission, and distribution of water for customer use and for fire protection, if needed. These uses vary with customer demand patterns and other needs and thus allocated as a variable cost. Exceptions to this allocation process are the anticipated Smart Meter Replacement program and the annual debt service on the 2024 Bonds and the anticipated 2027 Bonds. The costs related to the Smart Meter Replacement project are allocated as a fixed cost based on the sizes of the meters replaced and the debt service expenses are allocated as fixed, uniform costs to each account connected to the District water system; the debt service payments help finance major water system assets which benefit all accounts equally, regardless of customer class, meter size, or water consumption patterns.

Once this allocation process was completed, the amounts listed for each line item in were summed to arrive at a total capital cost allocation by base water demand, fire protection, or combination of both components, as well as the aforementioned fixed meter and uniform account components. Each component total was divided by the sum of all capital costs to yield a percentage amount for each component. These percentages were utilized to allocate general capital and capital support cost line items to each functional cost component. Similar to the operating allocation analysis, there are several general capital and support projects that do not directly relate to a specific cost component. These costs include information technology requirements, general facility improvements, equipment and vehicles, and the like.

These general projects support all capital functions of the District and therefore are allocated based on the percentage figures derived from the direct cost allocation process described above. Table 16 presents the results of this capital cost allocation process. Appendix B includes the detailed line item capital cost categories and allocation bases.

Table 16 – Results of Capital Cost Allocation Process

Description	Fixed - Meter Size	Fixed - Uniform	Fire Protection	Variable Base - Tier 1	Variable Base - Tier 2	Total Average Annual Capital Costs
Total Allocated Direct Capital Cost Line Items (a)	\$ 55,600	\$ 1,384,626	\$ 207,630	\$ 5,850,370	\$ -	\$ 7,498,226
Direct Capital Cost Line Item Percentages	0.7%	18.5%	2.8%	78.0%	0.0%	100.0%
Total Allocated General Capital Support Cost Line Items (b)	6,217	154,831	23,218	654,198	-	838,463
Total Allocated Capital Cost Line Items (a + b)	\$ 61,817	\$ 1,539,457	\$ 230,848	\$ 6,504,568	\$ -	\$ 8,336,690

Summary of Operating and Capital Allocations

Table 17 shows the total operating and capital allocations based on the analyses described above and Tables 15 and 16. The final allocation percentages listed at the bottom of Table 17 are then utilized to allocate revenue requirements of the District.

Table 17 – Summary Results of Operating and Capital Cost Allocation Processes

Expenses	Fixed - Meter Size	Fixed - Uniform	Variable - Tier 1	Variable - Tier 2	Fire Protection	Total
O&M Expenses	\$ 2,012,862	\$ 3,161,239	\$ 13,588,603	\$ 596,120	\$ 692,232	\$ 20,051,056
Capital Expenses	61,817	1,539,457	6,504,568	-	230,848	8,336,690
Total Allocation	\$ 2,074,680	\$ 4,700,696	\$ 20,093,171	\$ 596,120	\$ 923,079	\$ 28,387,746
Final Allocation %	7.3%	16.6%	70.8%	2.1%	3.3%	100.0%

Final Cost Allocation of Revenue Requirement

The revenue requirements for each fiscal year of the study period (see Table 13) are then allocated to each fixed, variable, and fire protection category using the final cost allocation percentages derived in Table 17. By multiplying each fiscal year's revenue requirement by the final allocation percentages from Table 17, total revenue recoverable from each category through customer rates is derived as shown in Table 18. These amounts become the basis for developing the bi-monthly service charge (based on meter size), Tier 1 and 2 commodity rates (based on water consumption), private fire line charges (based on private fire line connection size), and the uniform fixed cost charge per active water connection proposed to be placed on the tax roll.

Table 18 – Allocation of Revenue Requirement FY 27 – FY 31

Fiscal Year	Fixed - Meter Size	Fixed - Uniform	Variable - Tier 1	Variable - Tier 2	Fire Protection	Total Rate Revenue Requirements
Final Allocation %	7.3%	16.6%	70.8%	2.1%	3.3%	100.0%
FY 26/27	1,115,799	2,528,117	10,806,462	320,604	496,448	15,267,431
FY 27/28	1,220,900	2,766,248	11,824,355	350,802	543,210	16,705,515
FY 28/29	1,335,954	3,026,932	12,938,650	383,861	594,401	18,279,799
FY 29/30	1,459,885	3,307,727	14,138,910	419,470	649,541	19,975,533
FY 30/31	1,594,542	3,612,827	15,443,063	458,161	709,454	21,818,047
Total	\$ 6,727,080	\$ 15,241,851	\$ 65,151,441	\$ 1,932,898	\$ 2,993,054	\$ 92,046,325

Allocation of Fire Protection to Private and Public

Water systems provide two types of fire protection: public fire protection for firefighting, which is generally visible as hydrants on a street that are installed for the purpose of protecting property served by the District, and private fire protection which provides fire flow to building and other structure sprinkler systems for fire suppression within private improvements. Public fire hydrants are generally constructed in proximity to property served by the District. Public fire hydrants, and the infrastructure necessary to deliver water to such hydrants in sufficient quantities and pressures to fight fire, deliver such water to property served by the District. To determine the share of total fire costs responsible to each, District staff performed an analysis of the public hydrants and private fire lines within the water system.

Table 19 shows the elements of allocating costs between public and private fire protection. Each connection size to a hydrant or to a fire line has a fire flow demand factor like a hydraulic capacity factor of potable meters. The diameter of the connection is raised to the 2.63 power to determine the fire flow demand factor. This exponent is derived from the Hazen-Williams equation, which is frequently used to design pressure pipe systems for water distribution and for estimating necessary capacity for fire flow. The count of connections of a specific size is multiplied by the fire flow demand factor to derive total equivalent connections. Total costs allocated to fire protection (see Table 18) are further allocated based on the percentage share of total equivalent fire connections between public and private shown in Table 19.

The analysis helped staff determine that 92.6 percent of equivalent fire connections relate to public fire protection and will be included and recovered through each District water customer’s bi-monthly service charges. It is appropriate to recover these costs through the service charges because public hydrants provide a property-related water service insofar as they provide water to property served by the District in sufficient quantities and pressures to be used in the event of a fire. The remaining 7.4 percent of equivalent fire connections is attributable to private fire and will be recovered through private fire line charges for those accounts that have a dedicated fire line connection serving their property. The annual fire-related revenue requirements derived in Table 18 are then allocated to public and private

fire protection components based on the equivalent connection figures calculated in Table 19. The results of this analysis are presented in Table 20.

Table 19 – Fire Protection Equivalent Connections Analysis

Fire Allocation Analysis					
Line Connection Size	Demand Factor	Unit Counts	Equivalent Connections	Percent Allocation	Fire Exponent ¹
Public Hydrants					2.63
2.5"	11.13	0	0		
4"	38.32	6	230		
6"	111.31	878	97,731		
10"	426.58	0	0		
Total Public Hydrants²		884	97,961	92.6%	
Private Fire Lines					
2"	6.19	4	25		
4"	38.32	64	2,452		
6"	111.31	30	3,339		
8"	237.21	5	1,186		
10"	426.58	2	853		
Total Private Fire Lines³		105	7,856	7.4%	
Total Fire Connections		989	105,817	100%	

1. Using the principles of the Hazen-Williams equation for flow through pressure conduits, the relative flow potential for various size pipes is dependent on the diameter of the pipe raised to the power of 2.63.
2. The number of public fire hydrants and connection sizes provided by the District's GIS database.
3. The number of private fire lines by size provided by the District's CMMS system and customer billing database.

Table 20 – Allocation of Fire-related Revenue Requirement FY 27 – FY 31

Fiscal Year	Fire Protection Rate		
	Revenue Requirements	Public Fire Protection	Private Fire Protection
	100%	92.6%	7.4%
FY 26/27	496,448	459,593	36,856
FY 27/28	543,210	502,883	40,327
FY 28/29	594,401	550,273	44,128
FY 29/30	649,541	601,320	48,221
FY 30/31	709,454	656,784	52,669
Total	\$ 2,993,054	\$ 2,770,853	\$ 222,201

Distribution of Cost Components to Customer Meters, Customer Accounts, Commodity Tiers, and Private Fire Protection

To allocate costs to different customer accounts, meters, commodity rate tiers, and private fire line accounts, unit costs of service need to be developed for each cost causation component. The unit costs of service are developed by dividing revenue requirements allocated to each component by the total annual service units of the

respective component. The following sections illustrate the annual units of service analysis and the unit costs for each component.

Fixed Charges (Meters and Accounts) Distribution

For FY 27 and beyond, fixed charges will be collected through bi-monthly service charges (via customer bills) and by annual fixed water cost charges (via the property tax roll). The bi-monthly service charge and the fixed water cost charge recover those fixed costs of the water system that do not fluctuate with water demand. Many of the fixed costs recovered through the service charge are based on the size of each customer meter. Public fire protection costs (as related to additional water storage, fire hydrant program maintenance and improvements, heli pod improvements, and water line upsizing to meet fire flow needs) are also recovered through the service charge; however, they are recovered from each account equally, regardless of meter size, as each water connection benefits relatively to the same degree from having a well-maintained and operational District-wide fire protection system in place. The fixed water cost charge is designed to recover all remaining fixed costs of the water system that are not based on meter size, water demand, and fire protection.

Fixed Charges Based on Customer Meter Size and Public Fire Protection

Table 21 presents the account distribution utilizing allocated public fire protection revenue requirements from Table 20, customer account data from Table 5, and the number of billing periods in a year. The results of the public fire protection distribution analysis are shown in the bottom line of Table 21. For example, in FY 27, the fixed uniform account component of the customer bi-monthly service charge is \$8.74. This amount will be one component of the total customer bi-monthly service charge for each fiscal year and, as mentioned above, will be applied uniformly to each customer bill regardless of meter size.

Table 21 – Public Fire Protection Revenue Requirement Distribution for Each Fiscal Year

Public Fire Revenue Requirement					
Distribution by Account per					
Billing Period	FY 27	FY 28	FY 29	FY 30	FY 31
Fixed-Public Fire Protection Revenue Requirement	459,593	502,883	550,273	601,320	656,784
÷ Number of Potable Accounts	8,755	8,761	8,768	8,774	8,780
÷ Number of Billing Periods	6.00	6.00	6.00	6.00	6.00
Fixed-Uniform Amount per Account per Billing Period	\$8.74	\$9.56	\$10.45	\$11.41	\$12.46

For the fixed charges component related to customer meter size, District staff analyzed data related to labor effort, customer contact call, development services, walk-in requests for service, and other service/work order activity for each meter size category. Table 22 presents an overview of the bases for distributing meter services-related revenue requirements. For example, source of supply capacity charges are billed to the District by MWDOC each year. Meter services-related

revenue requirements are allocated based on the percentage of source of supply capacity costs to total operating costs. In this case, source of supply capacity charges represent 5.57 percent of total meter services-related operating costs. Therefore, 5.57 percent of meter services-related revenue requirements will be allocated among all meters in the District. Table 22 lists the percentages and the allocation methods for each of these distribution categories. These percentage allocation figures are derived from District work flow data and presented in tables in Appendix A of this report. Table 23 presents the application of each of the allocation percentages from Table 22 to arrive at the distribution of meter services revenue requirements by distribution category.

Table 22 – Distribution Bases for Meter Services

Meter Size Revenue Requirements Distribution	% Allocation	Allocation Method
Source of Supply - MWDOC Capacity Charges	5.57%	Equivalent Meters
Meter Services - Meter Testing	0.34%	3-inch and 6-inch Meters
Meter Services - Meter Maintenance & Repair	24.25%	Work Activity by Meter Size (3/4-inch to 6-inch Meters)
Customer Service - Service Orders	17.26%	Service Order Calls by Meter Size
Customer service - Customer Affairs	23.02%	Customer Contact by Meter Size
Engineering - Capital Projects	0.22%	Equivalent Meters
Engineering - Development Services	11.69%	Work Activity by Meter Size (1-inch to 6-inch Meters)
Water Quality - Backflow Program	17.66%	Work Activity by Meter Size (3/4-inch to 6-inch Meters)
Total	100.00%	

Table 23 – Meter Services Revenue Requirement Distribution Analysis

Meter Size Revenue Requirements Distribution							Allocation Method
	% Allocations	FY 27	FY 28	FY 29	FY 30	FY 31	
Fixed-Meters Revenue Requirement	100.00%	\$1,115,799	\$1,220,900	\$1,335,954	\$1,459,885	\$1,594,542	
Source of Supply - MWDOC Capacity Charges	5.57%	62,162	68,017	74,427	81,331	88,833	Equivalent Meters
Meter Services - Meter Testing	0.34%	3,741	4,093	4,479	4,895	5,346	3-inch and 6-inch Meters
Meter Services - Meter Maintenance & Repair	24.25%	270,593	296,081	323,983	354,037	386,693	Work Activity by Meter Size (3/4-inch to 6-inch Meters)
Customer Service - Service Orders	17.26%	192,611	210,754	230,615	252,008	275,253	Service Order Calls by Meter Size
Customer service - Customer Affairs	23.02%	256,815	281,005	307,486	336,010	367,004	Customer Contact by Meter Size
Engineering - Capital Projects	0.22%	2,418	2,646	2,895	3,164	3,456	Equivalent Meters
Engineering - Development Services	11.69%	130,443	142,730	156,180	170,668	186,410	Work Activity by Meter Size (1-inch to 6-inch Meters)
Water Quality - Backflow Program	17.66%	197,017	215,574	235,889	257,772	281,548	Work Activity by Meter Size (3/4-inch to 6-inch Meters)

Source of supply capacity charges are billed to the District by MWDOC. The basis for the charges relate to the number of active meters in the District service area and the capacity of flow of these meters as required by the District. Flow ranges of meters differ by meter size, that is, larger flows are associated with larger meters and smaller flows are associated with smaller meters. Safe maximum operating flows for all customer meters were provided by the District’s meter manufacturer, Sensus. The operating flow figures were used to derive equivalent meter ratios for each meter size category with the 3/4” meter size used as the baseline meter size in the District; there are no 5/8” meters in use in the District service area. This approach is consistent with the purpose and intent of the MWDOC capacity charges. Table 24 presents the meter flow ratios and related meter equivalents by meter size for those active meters within the District. Appendix C presents the detailed meter equivalent analysis which provides the number of District equivalent meters found in Table 25.

Table 24 – Meter Flow Capacity and Meter Equivalent Ratios

Meter Size	Meter Flow Capacity ¹	Meter Equivalents
3/4"	35	1.00
1"	55	1.57
1 ½"	150	4.29
2"	200	5.71
3"	400	11.43
4"	800	22.86
6"	1600	45.71

1. Safe maximum operating capacity flows in gallons per minute as provided by the meter manufacturer, Sensus.

Table 25 presents the distribution analysis for the revenue requirements that are directly related to the MWDOC charge costs for the study period. These revenue requirements (from Table 23) are divided by the total number of equivalent meters (found in Appendix C) and then divided by the number of bill periods in a fiscal year to arrive at rate per equivalent meter for each bill period. Table 26 is the culmination of this distribution analysis. The rate per equivalent meter is multiplied by each meter size category’s total number of meter equivalents to arrive at a bi-monthly amount per meter size. This amount will be added to the other distributed meter-related revenue requirements and account charges (as described in this section). The sum of these distributed amounts equals each customer’s proposed bi-monthly service charge.

Table 25 – Revenue Requirement Distribution Related to MWDOC Capacity Charges

MWDOC Capacity Charges Revenue Requirements Distribution	FY 27	FY 28	FY 29	FY 30	FY 31
Revenue Requirement	\$62,162	\$68,017	\$74,427	\$81,331	\$88,833
÷ Number of EMs	11,657	11,677	11,704	11,726	11,751
÷ Number of Bill Periods	6.00	6.00	6.00	6.00	6.00
Capacity Charge/EM/Bill Period	\$0.89	\$0.97	\$1.06	\$1.16	\$1.26

Table 26 – Distribution Rate by Meter Size

Capacity Charge Amount by Meter Size per Bill Period	Meter Equivalents	FY 27	FY 28	FY 29	FY 30	FY 31
3/4"	1.00	\$0.89	\$0.97	\$1.06	\$1.16	\$1.26
1"	1.57	1.40	1.52	1.66	1.82	1.98
1 ½"	4.29	3.81	4.16	4.54	4.95	5.40
2"	5.71	5.08	5.54	6.05	6.60	7.19
3"	11.43	10.15	11.09	12.10	13.20	14.39
6"	45.71	40.60	44.35	48.42	52.81	57.55

The second meter-based services distribution category is related to meter testing. The District routinely tests active 3-inch and 6-inch meters (testing on smaller meters is not performed by the District as it is cost prohibitive relative to the cost of replacing smaller meters). There is a cost associated with this testing function and this cost is the same whether the meter is 3-inch or 6-inch. Based on the cost allocation percentage for this category as listed in Table 23, the revenue requirements associated with meter testing are then distributed to all 3-inch and 6-inch meters in the District service area. The resulting rate per meter per bill period is shown in the last line of Table 27 and becomes a component of the bi-monthly service charge for customers with 3-inch and 6-inch meter sizes.

Table 27 – Revenue Requirement Distribution Related to Meter Testing

Meter Testing Revenue Requirements Distribution	FY 27	FY 28	FY 29	FY 30	FY 31
Revenue Requirement	\$3,741	\$4,093	\$4,479	\$4,895	\$5,346
÷ Number of 3" & 6" Meters	15	15	15	15	15
÷ Number of Bill Periods	6.00	6.00	6.00	6.00	6.00
Meter Testing Charge per Bill Period - 3" & 6" Meters	\$41.54	\$45.45	\$49.73	\$54.34	\$59.36

The third meter-based services distribution category is related to meter maintenance activity conducted by District staff. Work flow data by meter size is presented in Table 28. Based on work flow activity for each meter size category, revenue requirements for this activity are then distributed to each category (Table 29). In Table 30, these revenue requirements are then allocated to each meter size category by the number of customer meters in each category, resulting in a meter maintenance component of the overall bi-monthly service charge for each bill period.

Table 28 – Meter Maintenance Workflow by Meter Size

Description	Meter Work Orders	Meter Work Orders (%)
<i>Operations - Meter Maintenance & Repair</i>		
3/4" Meters	166	76.50%
1" Meters	33	15.21%
1.5" Meters	8	3.69%
2" Meters	3	1.38%
3" & 6" Meters	7	3.23%
Total	217	100%

Source: LBCWD CMMS work order history, FY 2025.

Table 29 – Revenue Requirement Distribution Related to Meter Maintenance

Meter Maintenance & Repair Revenue Requirements Distribution	% Allocations based on Work Activity	FY 27	FY 28	FY 29	FY 30	FY 31
Revenue Requirement		\$270,593	\$296,081	\$323,983	\$354,037	\$386,693
<i>Meter Size</i>						
3/4"	76.50%	206,997	226,495	247,839	270,830	295,811
1"	15.21%	41,150	45,026	49,269	53,840	58,806
1 ½"	3.69%	9,976	10,915	11,944	13,052	14,256
2"	1.38%	3,741	4,093	4,479	4,895	5,346
3" & 6" Meters	3.23%	8,729	9,551	10,451	11,421	12,474

Table 30 – Revenue Requirement Distribution Related to Meter Maintenance

Meter Maintenance Charge per Billing Period	FY 27	FY 28	FY 29	FY 30	FY 31
<i>Meter Size</i>					
3/4"	\$5.03	\$5.51	\$6.03	\$6.60	\$7.22
1"	4.98	5.39	5.84	6.32	6.83
1 ½"	4.93	5.36	5.83	6.36	6.90
2"	3.75	4.11	4.47	4.85	5.27
3" & 6" Meters	96.92	106.04	116.04	126.80	138.50

The fourth meter-based services distribution category is related to customer service order requests. The District receives numerous service order requests throughout each fiscal year. There are costs associated with these service order requests that are part of the general services of the District and should be allocated through customer rates. Based on documented service order requests by meter size, Table 30 presents the number of service requests by meter size and the percentage of total service orders attributed to each meter size category. These percentages are applied to the revenue requirements associated with customer service orders to arrive at the distributed revenue requirements associated with each meter size as

shown in Table 31. The resulting rate per meter per bill period is shown Table 32 and becomes a component of the bi-monthly service charge for customers based on their account’s meter size.

Table 28 – Customer Service - Service Orders by Meter Size

Description	Amount	% of Service Orders
<i>Customer Service - Service Orders</i>		
3/4" Meters	1,609	78.64%
1" Meters	242	11.83%
1.5" Meters	105	5.13%
2" Meters	71	3.47%
3" & 6" Meters	19	0.93%
Total	2,046	100%

Source: LBCWD CMMS work order history, FY 2025.

Table 31 – Revenue Requirement Distribution Related to Service Orders

Customer Service - Service Orders Revenue Requirements Distribution	% Allocations based on Work Activity	FY 27	FY 28	FY 29	FY 30	FY 31
Fixed-Service Orders Revenue Requirement	100.00%	\$192,611	\$210,754	\$230,615	\$252,008	\$275,253
<i>Meter Size</i>						
3/4"	78.64%	151,472	165,740	181,358	198,182	216,462
1"	11.83%	22,782	24,928	27,277	29,807	32,557
1 ½"	5.13%	9,885	10,816	11,835	12,933	14,126
2"	3.47%	6,684	7,314	8,003	8,745	9,552
3" & 6" Meters	0.93%	1,789	1,957	2,142	2,340	2,556

Table 29 – Service Order Distribution per Meter Size per Bill Period

Service Orders Cost per Billing Period	FY 27	FY 28	FY 29	FY 30	FY 31
<i>Meter Size</i>					
3/4"	\$3.68	\$4.03	\$4.42	\$4.83	\$5.29
1"	2.76	2.98	3.23	3.50	3.78
1 ½"	4.88	5.31	5.78	6.30	6.84
2"	6.71	7.34	7.98	8.67	9.41
3" & 6" Meters	19.86	21.73	23.78	25.98	28.38

The fifth meter-based services distribution category is related to customer affairs requests. These requests are submitted by customers by phone or on a walk-in basis. The District receives many customer-related phone calls and walk-in requests for information and service throughout each fiscal year. There are costs associated with these customer affairs requests that are part of the general services of the District and should be allocated through customer rates. Based on documented

customer phone calls and walk-ins to the District main office by meter size, Table 33 presents the number of customer affairs requests by meter size and the percentage of requests attributed to each meter size category. These percentages are applied to the revenue requirements associated with customer affairs to arrive at the distributed revenue requirements associated with each meter size as shown in Table 34. The resulting rate per meter per bill period is shown Table 35 and becomes a component of the bi-monthly service charge for each customer based on account meter size.

Table 303 – Customer Affairs by Meter Size

Description	Amount	% of Calls/Walk-ins
<i>Customer Service - Customer Affairs (Calls & Walk-Ins)</i>		
3/4" Meters	7,810	72.55%
1" Meters	1,699	15.78%
1.5" Meters	713	6.62%
2" Meters	406	3.77%
3" & 6" Meters	137	1.27%
Total	10,765	100.00%

Source: LBCWD CMMS work order history, FY 2025.

Table 314 – Revenue Requirement Distribution Related to Customer Affairs

Customer Service - Customer Affairs Cost Distribution	% Allocations	FY 27	FY 28	FY 29	FY 30	FY 31
Fixed-Customer Affairs Revenue Requirement	100.00%	\$256,815	\$281,005	\$307,486	\$336,010	\$367,004
<i>Meter Size</i>						
3/4"	72.55%	186,319	203,869	223,081	243,775	266,261
1"	15.78%	40,532	44,350	48,529	53,031	57,923
1 ½"	6.62%	17,010	18,612	20,366	22,255	24,308
2"	3.77%	9,686	10,598	11,597	12,673	13,841
3" & 6" Meters	1.27%	3,268	3,576	3,913	4,276	4,671

Table 325 – Rates Related to Customer Affairs Distribution per Meter Size per Bill Period

Customer Affairs Cost per Account per Billing Period	FY 27	FY 28	FY 29	FY 30	FY 31
<i>Meter Size</i>					
3/4"	\$4.52	\$4.96	\$5.43	\$5.94	\$6.50
1"	4.90	5.31	5.75	6.22	6.73
1 ½"	8.41	9.14	9.95	10.84	11.77
2"	9.72	10.63	11.57	12.56	13.64
3" & 6" Meters	36.29	39.71	43.45	47.48	51.86

The sixth meter-based services distribution category is related to development services-related requests. The District’s Engineering Department routinely processes general development services as they relate to water service. There are costs associated with these requests that are part of the general services of the District that are not recovered through individual user fees; cost recovery for complex requests that involve plan check services are handled through plan check fees charged to the applicant and are not included in this analysis. District staff work flow related to general development services was determined by the meter size associated with the services. Table 36 presents the percentage of District service activity attributed to each meter size category. Development service activity within the District is relatively stable from year to year. Therefore, the percentages presented in Table 36 based on meter size are similar from year to year. These percentages are applied to the revenue requirements associated with general development services to arrive at the distributed revenue requirements associated with each meter size as shown in Table 37. The resulting rate per meter per bill period is shown Table 38 and becomes a component of the bi-monthly service charge for customers based on their account’s meter size.

Table 336 – General Development Services Activity by Meter Size

Description	% of Effort
<i>Engineering - Development Services</i>	
1" Meters	40%
1.5" Meters	30%
2" Meters	25%
3" & 6" Meters	5%
Total	100%

Source: FY 25 workload activity provided by Engineering Department.

Table 347 – Revenue Requirement Distribution Related to Development Services

Engineering - Development Services Revenue Requirements Distribution						
Distribution	% Allocations	FY 27	FY 28	FY 29	FY 30	FY 31
<i>Fixed-Development Services</i>						
Revenue Requirement	100.00%	\$130,443	\$142,730	\$156,180	\$170,668	\$186,410
<i>Meter Size</i>						
1"	40.00%	52,177	57,092	62,472	68,267	74,564
1 ½"	30.00%	39,133	42,819	46,854	51,200	55,923
2"	25.00%	32,611	35,682	39,045	42,667	46,603
3" & 6"	5.00%	6,522	7,136	7,809	8,533	9,321

Table 358 – Rates Related to Development Services Distribution per Meter Size per Bill Period

Engineering - Development Services Cost per Account per Billing Period					
Billing Period	FY 27	FY 28	FY 29	FY 30	FY 31
<i>Meter Size</i>					
1"	\$6.31	\$6.84	\$7.41	\$8.01	\$8.67
1 ½"	19.34	21.04	22.88	24.93	27.07
2"	32.72	35.80	38.94	42.30	45.93
3" & 6"	72.41	79.24	86.70	94.75	103.48

The seventh meter-based services distribution category is related to water quality and backflow program services. There are costs associated with processing this activity that are part of the general services of the District and should be allocated through customer rates. District staff work flow related to this service was determined by the meter size associated with backflow testing services. Table 39 presents the percentage of District work flow activity attributed to each meter size category. These percentages are applied to the revenue requirements associated with water quality backflow program services to arrive at the distributed revenue requirements associated with each meter size as shown in Table 40. The resulting rate per meter per bill period is shown Table 4 and becomes a component of the bi-monthly service charge for customers based on their account's meter size.

Table 39– Backflow Program Services by Meter Size

Description	% of Effort
<i>Engineering - Backflow Program</i>	
3/4" Meters	12.0%
1" Meters	41.6%
1.5" Meters	23.8%
2" Meters	15.5%
3" & 6" Meters	7.1%
Total	100%

Source: LBCWD Engineering Backflow Program Work Activity, FY 2025.

Table 40 – Revenue Requirement Distribution Related to Backflow Program Services

Water Quality - Backflow Program Revenue Requirement						
Distribution	% Allocations	FY 27	FY 28	FY 29	FY 30	FY 31
Fixed-Backflow Program Revenue Requirement	100.00%	\$197,017	\$215,574	\$235,889	\$257,772	\$281,548
<i>Meter Size</i>						
3/4"	12.00%	23,642	25,869	28,307	30,933	33,786
1"	41.60%	81,959	89,679	98,130	107,233	117,124
1 ½"	23.80%	46,890	51,307	56,142	61,350	67,008
2"	15.50%	30,538	33,414	36,563	39,955	43,640
3" & 6"	7.10%	13,988	15,306	16,748	18,302	19,990

Table 41 – Rates Related to Backflow Program Services Distribution per Meter Size per Bill Period

Water Quality - Backflow Program Cost per Account per Billing Period					
Billing Period	FY 27	FY 28	FY 29	FY 30	FY 31
<i>Meter Size</i>					
3/4"	\$0.57	\$0.63	\$0.69	\$0.75	\$0.83
1"	9.91	10.74	11.63	12.59	13.61
1 ½"	23.17	25.21	27.42	29.88	32.44
2"	30.64	33.52	36.46	39.61	43.01
3" & 6"	155.31	169.94	185.95	203.20	221.95

The final meter-based services distribution category is related to District management of the capital project program. While this program activity is relatively small compared to the other service described in this section, these are costs that are part of the general services of the District and should be allocated through customer rates. The distributed revenue requirements associated with each meter size are shown in Table 42. The resulting rate per meter per bill period is shown

Table 43 and becomes a component of the bi-monthly service charge for customers based on their account's meter size.

Table 362 – Revenue Requirement Distribution Related to Capital Project Management

Engineering - Capital Projects Revenue Requirements					
Distribution	FY 27	FY 28	FY 29	FY 30	FY 31
Revenue Requirement	\$2,418	\$2,646	\$2,895	\$3,164	\$3,456
÷ Number of EMs	11,657	11,677	11,704	11,726	11,751
÷ Number of Bill Periods	6.00	6.00	6.00	6.00	6.00
Capacity Charge/EM/Bill Period	\$0.03	\$0.04	\$0.04	\$0.04	\$0.05

Table 373 – Rates Related to Capital Project Management Distribution per Meter Size per Bill Period

Engineering - Capital Projects Amount by Meter Size per Bill Period						
Period	Meter Equivalents	FY 27	FY 28	FY 29	FY 30	FY 31
3/4"	1.00	\$0.03	\$0.04	\$0.04	\$0.04	\$0.05
1"	1.57	0.05	0.06	0.06	0.07	0.08
1 ½"	4.29	0.15	0.16	0.18	0.19	0.21
2"	5.71	0.20	0.22	0.24	0.26	0.28
3"	11.43	0.39	0.43	0.47	0.51	0.56
6"	45.71	1.58	1.73	1.88	2.05	2.24

The culmination of these calculations is the proposed bi-monthly service charge for each meter size category. All components developed above are summed to derive the FY 27 bi-monthly customer service charge by meter size as presented in Table 44 below. Each of these components are described above and are the result of a detailed cost of service allocation and distribution analysis. The total service charge components for FY 28 through FY 31 are presented in Appendix D.

Table 44 – Meter Services Cost Components and Total FY 27 Bi-Monthly Service Charge

FY 27 Service Charge Calculation (Bi-Monthly)	Account Component	MWD/OC		Meter Maintenance & Repair Component		Customer Affairs Component	Engineering - Capital Projects Component	Engineering - Development Services Component	Water Quality - Backflow Program Component	Total FY 27
		Capacity Charge Component	Meter Testing Component	Repair Component	Service Orders Component					
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
3/4"	8.74	0.89	-	5.03	3.68	4.52	0.03	-	0.57	23.47
1"	8.74	1.40	-	4.98	2.76	4.90	0.05	6.31	9.91	39.05
1.5"	8.74	3.81	-	4.93	4.88	8.41	0.15	19.34	23.17	73.43
2"	8.74	5.08	-	3.75	6.71	9.72	0.20	32.72	30.64	97.55
3"	8.74	10.15	41.54	96.92	19.86	36.29	0.39	72.41	155.31	441.61
6"	8.74	40.60	41.54	96.92	19.86	36.29	1.58	72.41	155.31	473.24

Fixed Water Cost Charge Collected on Property Tax Roll

As mentioned earlier, for FY 27 and beyond, the District proposes to move some of the fixed charge components to the property tax roll. The revenue requirements and cost allocation analyses derived a fixed cost charge per active connection that recovers fixed costs of operating the water system that do not vary with water consumption and do not have a cost causal relationship with an account's meter

size. Table 45 below presents the revenue requirement amounts attributed to these fixed uniform components and shows the allocation of those amounts equally among all current and projected connections within the District service area.

Table 385 – Fixed-Uniform Revenue Requirements Allocated by Active Water Connections/Accounts

Fixed-Uniform Revenue Requirements - Distribution to Active Water Connections	FY 27	FY 28	FY 29	FY 30	FY 31
Fixed -Uniform Revenue Requirement	\$2,528,117	\$2,766,248	\$3,026,932	\$3,307,727	\$3,612,827
÷ # of Active Connections to Water System	8,755	8,761	8,768	8,774	8,780
Annual Fixed Water Cost Charge per Connection	\$288.76	\$315.75	\$345.22	\$376.99	\$411.48

Variable Charges (Commodity Rates and Tiers) Distribution

The variable commodity rates are comprised of water supply, purchase, delivery, and conservation program cost components. Proposition 218 does not specify the type of rate structure that should be used to develop rates; however, the rates must reflect the proportionate cost of serving customers. Because the District has two water supply sources (imported water and groundwater) and two, tiered rate levels, supply, purchase, and delivery costs are recovered evenly from both tier levels. However, the Tier 2 (beyond base or conservation use) rate is higher than the Tier 1 (base use) rate to account for conservation program costs.¹ The goal of the conservation component is to increase water supply and reliability, and such costs are shifted to tier 2 water users because excessive water use causes the District to incur such costs, such as increased staff time involved in customer water use and conservation education seminars and messaging directed toward District customers, increased purchases of water conservation devices for customer use, and promoting conservation events and sponsorships. Tier 1 water use is deemed to be basic, or efficient, use and therefore water billed in this tier does not include a conservation component. Table 46 presents the calculation of Tier 1 rates based on Tier 1 projected use and supply and delivery revenue requirements shown in Table 18. Table 47 shows the calculation of the Tier 2 *increment* related to conservation (water use efficiency) revenue requirements. The Tier 2 cost component is added to

¹ The District bills commodity rates based on one unit of water consumed and is represented by one hundred cubic feet of water, or ‘hcf’. A unit of water, or one hcf, is equal to 748.05 gallons.

the Tier 1 cost component to derive the full Tier 2 commodity rate to be presented in the next section on Rate Design.

Table 396 – Tier 1 (Base Use) Cost Component – Unit Rate per HCF

Tier 1 Development	FY 27	FY 28	FY 29	FY 30	FY 31
Revenue Requirement	\$10,806,462	\$11,824,355	\$12,938,650	\$14,138,910	\$15,443,063
÷ Total Consumption	1,276,213	1,276,213	1,276,213	1,276,213	1,276,213
Basic Use (Tier 1) Rate	\$8.47	\$9.27	\$10.14	\$11.08	\$12.10

Table 407 – Tier 2 (Beyond Base - Conservation) Incremental Cost Component & Rate per HCF

Tier 2 Development	FY 27	FY 28	FY 29	FY 30	FY 31
Conservation Revenue Requirements	\$320,604	\$350,802	\$383,861	\$419,470	\$458,161
÷ Marginal (Tier 2) Consumption	148,884	148,884	148,884	148,884	148,884
Conservation (Tier 2) Rate Component - <i>Marginal Rate Added to Tier 1</i>	\$2.15	\$2.36	\$2.58	\$2.82	\$3.08
Conservation (Tier 2) Rate	\$10.62	\$11.62	\$12.72	\$13.90	\$15.18

Private Fire Line Distribution

For customers who have a private fire line account, Table 48 presents the calculation of the per equivalent connection fire line charge on a bi-monthly basis. The private fire protection revenue requirements are divided by the equivalent connections for each year to arrive at a private fire line charge related to each account's equivalent connections.

Table 48 – Private Fire Line Cost Component – Unit Rate per Equivalent Connection

Private Fire Services Component	FY 27	FY 28	FY 29	FY 30	FY 31
Revenue Requirement	\$36,856	\$40,327	\$44,128	\$48,221	\$52,669
÷ Number of ECs ¹	7,856	7,856	7,856	7,856	7,856
÷ Number of Bill Periods	6.00	6.00	6.00	6.00	6.00
Charge/EC/Period	\$0.78	\$0.85	\$0.94	\$1.02	\$1.12

1. 'ECs' is Equivalent Fire Line Connections. Analysis assumes no growth in Private Fire Lines.

RATE DESIGN

The final step of the rate study is the design of the water rates and charges to collect the required level of rate revenue determined in the revenue requirement analysis. For FY 27 and beyond, the District water rate structure will consist of three components: a bi-monthly meter service charge, a two-tiered commodity rate, and a fixed water cost charge per active connection that will be placed on the property tax

roll. Those accounts with private fire line connections incur an additional private fire line charge that appears on the bi-monthly customer bill.

The cost allocation and revenue requirement distribution calculations of each rate structure component were presented in the previous sections of this report. The bi-monthly meter service charge is applied in a straightforward manner in which fixed meter and account related costs are applied to each meter size category. For the commodity rate, the District employs a unique type of inclining tier commodity rate structure called a water allocation budget rate structure. According to the 7th edition of the American Water Works Association M1 Manual of Water Supply Practices, Principles of Water Rates, Fees, and Charges (2017), a water budget rate structure is a form of increasing block (tier) rates where the amount of water within the first block, or blocks, is based on the estimated efficient, or base, water needs of the individual customer. Subsequent blocks above the base use or efficient block consider water use to be more discretionary. Rates within each block correspond to the incremental costs of providing water service, meaning that increased rates in higher tiers are established to cover the increased costs of providing water service. The fixed water cost charge proposed for placement on the property tax bills is derived in a straightforward manner dividing the uniform fixed cost revenue requirements by the total number of active connections in the system.

As an added layer of complexity, water rate setting in California includes more stringent requirements than found in other states. There are strict substantive and procedural requirements of the California Constitution (Articles XIII C and XIII D, or commonly known as Proposition 218) that apply to water rate setting not found in any other state. Therefore, California public agencies that set water rates incur a burden to demonstrate and document that a customer class's water rate is proportional to the cost to provide water service to that customer class.

Bi-Monthly Meter Service Charge

Tables from the previous section and Appendices C and D present the final calculation of the bi-monthly service charge for the study period. The fixed components attributed to customer meter size and public fire protection are summed to form the FY 27 through FY 31 bi-monthly service charges. Table 45 presents the current service charges and all proposed service charges for the study period.

Table 49 illustrates that the bi-monthly service charges are decreasing in FY 27 from current levels due to the allocation of certain revenue requirements to the property tax roll charge as previously discussed. The charges after FY 27 increase as the costs of providing water service are projected to increase in the future years of the study period.

Table 419 – Current and Proposed Bi-Monthly Service Charges

Meter Size	Current Bi-Monthly Service Charges ¹	Bi-Monthly Service Charge FY 27	Bi-Monthly Service Charge FY 28	Bi-Monthly Service Charge FY 29	Bi-Monthly Service Charge FY 30	Bi-Monthly Service Charge FY 31
3/4"	\$51.23	\$23.47	\$25.69	\$28.12	\$30.75	\$33.61
1"	\$61.76	\$39.05	\$42.40	\$46.04	\$49.94	\$54.14
1.5"	\$74.61	\$73.43	\$79.94	\$87.03	\$94.86	\$103.09
2"	\$89.49	\$97.55	\$106.72	\$116.15	\$126.26	\$137.18
3"	\$834.96	\$441.61	\$483.18	\$528.68	\$577.68	\$630.93
6"	\$870.28	\$473.24	\$517.73	\$566.40	\$618.83	\$675.77

1. Current Service Charges effective March 1, 2026.

Fixed Water Cost Charges Collected on the Property Tax Roll

As discussed in this report, the fixed cost charges collected on the property tax roll are designed to recover those water system costs that are fixed and allocated uniformly across all connections to the water system. Table 50 presents the proposed fixed cost charges per connection for FY 27 through FY 31.

Table 42 – Proposed Annual Fixed Water Cost Charges per Connection

Annual Charge	FY 27	FY 28	FY 29	FY 30	FY 31
Annual Fixed Water Cost Charge per Connection	\$288.76	\$315.75	\$345.22	\$376.99	\$411.48

Commodity Charges

The Tier 1 and Tier 2 commodity charges incorporate the variable-related cost components as described in this report. Table 51 presents the results for the proposed tiered rates as well as the current rates for comparison purposes. As described earlier, the difference between Tiers 1 and 2 are the revenue requirements related to funding the District’s conservation, or water use efficiency, program services. The conservation program provides a valuable service by helping to maintain water reliability in the service area, therefore protecting water resources and availability of water for all customers. The need for conservation programs is driven by beyond basic or excessive water use. District conservation program requirements include staff expenses for conservation-based personnel, conservation-oriented programs and rebates, conservation-based outreach efforts and events conducted by the District, and water-saving devices and materials distributed to customers.

Table 51 – Current and Proposed Commodity Charges

Tiers	Current Commodity Charges/hcf ¹	Commodity Charges/hcf FY 27	Commodity Charges/hcf FY 28	Commodity Charges/hcf FY 29	Commodity Charges/hcf FY 30	Commodity Charges/hcf FY 31
Tier 1	\$8.45	\$8.47	\$9.27	\$10.14	\$11.08	\$12.10
Tier 2	\$11.79	\$10.62	\$11.62	\$12.72	\$13.90	\$15.18

1. Current Commodity Rates effective March 1, 2026.

Wholesale Water Purchase Cost Pass-Through Provision

Many California water agencies have enacted a wholesale water cost pass-through provision as part of their rate program. These provisions afford water agencies the ability to generate adequate rate revenue to help cover unanticipated increases in water purchase costs from wholesale suppliers. As part of this rate study effort and implementation, the District would institute a wholesale water cost pass-through provision in the District’s FY 27 – FY 31 rate resolution to pass on wholesale water costs from MWDOC and OCWD to District customers should those costs be above those projected and documented in this rate study. This approach will help to ensure District rate revenues meet unanticipated increases in wholesale water expenses without delay. Any pass-throughs of unanticipated wholesale water purchase costs would be applied to the customer Tier 1 commodity rate.

Water Budget Formulas

To better allocate water costs of service based on the particular needs of each customer, promote conservation and sustain financial sufficiency from rate revenues, a policy for determining water budget allocation for each customer and a policy to define the tiers for each user classification are necessary. For purposes of the water budget analysis for this rate study, customer classes are grouped into four categories:

- Single-family and Multi-family Residences
- Hotel/Motel
- Commercial, Education, Dual Usage, Other
- Irrigation

A water budget allocation should be objectively and impartially based on each customer’s unique demands placed on the water system. After reviewing and analyzing other water budget structures in existence in Southern California and a thorough research effort of available District parcel and account consumption history data, the District adopted the four previously identified customer groupings in 2010 based on the following water allocation policies:

- Single-family Residences – Water budget allocation based on indoor and outdoor allocations

- Hotel/Motel – Water budget allocation based on per hotel room per day consumption allocation
- Multi-family Residences, Commercial, Schools, Dual Usage, Other - Water budget allocation based on 3-year moving average
- Irrigation – Water budget allocation based on outdoor allocations

However, beginning in FY 22, the District groups Multi-family Residences with Single-family Residences because District staff maintain a complete dataset of total number of multi-family dwelling units in which to apply indoor/outdoor budget calculations on a per dwelling unit basis.

Single-family Residential and Multi-family Residential Customers

For single-family and multi-family residential customers, the bi-monthly indoor allocation is determined by the number of persons per dwelling unit or account, the efficient water usage per person per day, and the number of days in the billing cycle. According to the latest California Department of Finance population and housing estimates (*Report E-5 City/County Population and Housing Estimates*), the average household size in the City of Laguna Beach is approximately 2.13 persons. In past rate structures, the District rounds this data point up to 3 persons per household; this report proposes to continue this practice.

For the past rate studies, the District utilized study data from the AWWA Research Foundation (AWWARF) to apply a gallons per capita per day (GPCPD) figure to water budget formulas. AWWARF's survey data of approximately 1,200 households throughout the Southwest and Florida demonstrated that a typical residence consumed 60 GPCPD. The FY 22 rate study lowered this figure to 55 GPCPD to match then current State standards. For this study, State standards have become more stringent and a 47 GPCPD figure is now required. This new standard is consistent with current District residential per capita use based on District consumption data. Therefore, for this rate analysis, the District utilized the 47 GPCPD standard to establish the indoor allocation amount.

The product of these factors is then divided by 748 gallons to convert the figure to hundred cubic feet (hcf), the measuring unit of water utilized by the District. The result of this equation is an indoor allocation of approximately 11.3 hcf per two-month billing period. In the past, the District rounds up the indoor allocation figure in consideration of its billing software parameters. Therefore, the indoor allocation for a 3-person household is rounded up to 11.5 hcf for a two-month billing period.

The outdoor allocation is determined by employing the following factors:

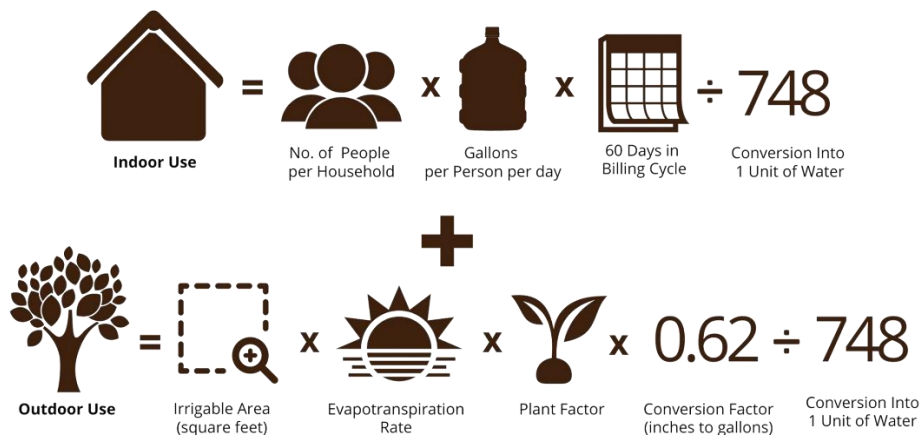
- Total square footage of the SFR property adjusted by an area factor to estimate irrigable area of a parcel. As part of the original 2010 analysis, the District adopted an outdoor allocation area factor (AF) set at 60 percent of total parcel area. Using City of Laguna Beach GIS data, this figure was based on estimating the ratio of building square footage to parcel area and allows for some

impervious areas such as driveways, sidewalks, decking and other hardscape. Many water budget studies utilize an AF of 45 percent. A higher AF allows for more outdoor water allocations. To further encourage conservation in outdoor water use, the District reduced the AF to 50 percent.

- Evapotranspiration data from the closest CIMIS (California Irrigation Management Information System) weather station (Station #241 located in San Clement). Evapotranspiration is evaporation and plant transpiration that travels from the Earth’s surface to the atmosphere. It can be affected by many variables including, but not limited to, temperature, relative humidity, wind and air movement, and type of plant. For purposes of this analysis, evapotranspiration represents the amount of water required for the plant material, or reference crop, typically found in the Laguna Beach area.
- Weather data from the Orange County Public Works Department Laguna Beach weather stations (Woodland and Laguna Canyon Repeater) to measure bi-monthly rainfall averages. These rainfall data are reduced by 25 percent and deducted from the bi-monthly evapotranspiration data to arrive at a net evapotranspiration amount to be applied in the outdoor water budget formula. Only 75 percent of the rainfall averages are used to account for runoff of a portion of rainfall that does not get absorbed by plant material. This is a reasonable amount considering that natural ground cover can generate about 10 percent of runoff in a typical rainfall event whereas 90 percent of rainfall can be absorbed or processed by evapotranspiration (Vermont Agency of Natural Resources).
- Landscape/Plant factor to account for water use intensity of established landscaping in typical Laguna Beach residences. The current California Model Water Efficient Landscape Ordinance suggests a 70 percent plant factor (high water needs landscaping) to apply to outdoor budget formulas.

The indoor and outdoor formulas are illustrated in Figure 2. Note that the 0.62 conversion factor included in the outdoor use formula is used to convert inches per year to gallons per square foot per year.

Figure 2 – Illustration of Indoor and Outdoor Water Budget Formulas



Hotel/Motel Customers

Hotel/Motel accounts are allotted water on a bi-monthly basis based on the number of rooms of each hotel account. There are a variety of studies that demonstrate the typical water use of a hotel room for occupant use, cleaning, laundry and restaurant use. Most studies utilized a specific hotel or chain of hotels to arrive at their conclusions. One of the more comprehensive studies on this subject was generated by the Cornell University School of Hotel Administration. The School's most recent survey data indicate that a typical hotel utilizes 137 gallons of water per day for typical hotel use. The District considers this figure to be a reasonable amount to use for the District's update water budget analysis.

Commercial, Education, Dual Usage, Other

For these customer classes, allocations for water use are based on 3-year historical averages for each customer. These data are maintained on a bi-monthly basis by District staff to determine averages for each billing period.

Irrigation Customers

For this customer group, the District applies the outdoor allocation formula utilized for residential customers; however, a 100% irrigable area factor is applied to these accounts due to the nature of their outdoor use (outdoor irrigated areas within the District's service area typically do not include hardscape areas).

Private Fire Line Charges

Using the unit rate per equivalent connection figures, bi-monthly fire line charges for FY 27 through FY 31 were developed. FY 27 and beyond charges are noticeably less than current charges. This is due to the cost allocation analysis being updated with new costs for the FY 27 – FY 31 period and the increase in private fire line connections since the last study was conducted (93 to 105) thus spreading allocated revenue requirements over more connections. Table 52 presents the current and proposed bi-monthly private fire line charges.

Table 52 – Current and Proposed Private Fire Line Charges

Fire Line Size	Current Bi-Monthly Fire Line Charge ¹	FY 27 Bi-Monthly Fire Line Charge	FY 28 Bi-Monthly Fire Line Charge	FY 29 Bi-Monthly Fire Line Charge	FY 30 Bi-Monthly Fire Line Charge	FY 31 Bi-Monthly Fire Line Charge
2"	\$8.97	\$4.84	\$5.29	\$5.79	\$6.33	\$6.91
4"	\$55.50	\$29.94	\$32.76	\$35.85	\$39.17	\$42.79
6"	\$161.22	\$86.97	\$95.17	\$104.13	\$113.79	\$124.29
8"	\$343.57	\$185.34	\$202.80	\$221.91	\$242.50	\$264.86
10"	\$617.85	\$333.31	\$364.70	\$399.07	\$436.09	\$476.32

1. Current Fire Line Charges effective March 1, 2026.

Appendix A

Table A-1 –Operating Cost Allocation Line Items – Projected and 5-Year Annual Average

Cost Line Title by GL Account	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	5-Year Average
Source of Supply - CSL (51200)	127,660	131,430	135,310	139,310	143,420	135,426
Source of Supply - ATM (51300)	270,470	278,450	286,670	295,130	303,840	286,912
Source of Supply - Water Purchases (51500)	4,524,580	5,048,534	4,397,429	4,212,255	5,722,731	4,781,106
Source of Supply - Capacity/Fixed Charges (51500)	78,550	90,333	97,559	107,315	118,047	98,361
Source of Supply - Uniform/Fixed Charges (51500)	515,020	592,273	639,655	703,620	773,982	644,910
Pumping Expense (52100)	981,300	1,010,250	1,040,060	1,070,750	1,102,340	1,040,940
Pumping Power (52200)	432,000	449,280	467,260	485,960	505,400	467,980
Reservoir Expense (54100)	1,497,980	1,542,180	1,587,680	1,634,520	1,682,740	1,589,020
Mainline Expense (54200)	2,618,090	2,695,330	2,774,850	2,856,710	2,940,990	2,777,194
Meter Expense (54300)						
Meter Testing (1.2%) - 3" and 6" meters only	5,580	5,745	5,914	6,089	6,269	5,919
Meter Repair & Maintenance (98.8%)	403,630	415,545	427,806	440,431	453,431	428,169
Valve, Vault, Fire Hydrant Expense (54400)	620,200	638,500	657,340	676,740	696,710	657,898
Paving Expense (54500)	162,000	166,780	171,710	176,780	182,000	171,854
General Plant-Building (54700)	247,360	254,660	262,180	269,920	277,890	262,402
SCADA Expense (54800)	53,760	55,350	56,990	58,680	60,420	57,040
General Manager's Expense (55100)	519,710	535,050	550,840	567,090	583,820	551,302
Commission/Board (55400)	43,700	44,990	46,320	47,690	49,100	46,360
Legal (55500)	76,800	79,070	81,410	83,820	86,300	81,480
Audit (55600)	26,312	27,090	27,890	28,720	29,570	27,916
Administration Expense (56100)	328,980	338,690	348,690	358,980	369,570	348,982
Data Management (56200)	234,420	241,340	248,460	255,790	263,340	248,670
Public Information (56400)	124,020	127,680	131,450	135,330	139,330	131,562
Risk & Resiliency (56500)	327,720	337,390	347,350	357,600	368,150	347,642
District Recognition (56800)	20,280	20,880	21,500	22,140	22,800	21,520
Customer Service (57200)						
Billing/Collections (20%)	191,542	197,194	203,012	209,002	215,168	203,184
Service Orders (30%)	287,313	295,791	304,518	313,503	322,752	304,775
Payment Processing (10%)	95,771	98,597	101,506	104,501	107,584	101,592
Customer Affairs (40%)	383,084	394,388	406,024	418,004	430,336	406,367

Cost Line Time by GL Account	Estimated FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	5-Year Average
WUE - Office Expense (57510)	306,410	315,610	325,080	334,840	344,890	325,366
WUE - Programs/Rebates (57520)	76,000	78,280	80,630	83,050	85,550	80,702
WUE - Outreach/Events/Sponsorships (57530)	95,000	97,850	100,790	103,820	106,940	100,880
WUE - Devices/Materials (57540)	15,000	15,450	15,920	16,400	16,900	15,934
Finance Expense (58100)	1,071,965	1,103,590	1,136,150	1,169,670	1,204,180	1,137,111
General Office Expense (58200) (cumulative O&M)	158,920	163,610	168,440	173,410	178,530	168,582
Insurance (58300) (cumulative O&M)	563,000	579,610	596,710	614,320	632,450	597,218
Engineering Expense (59100)						
Capital Projects (50%)	486,445	500,800	515,575	530,785	546,445	516,010
Development Services (20%)	194,578	200,320	206,230	212,314	218,578	206,404
Operations Support (25%)	243,223	250,400	257,788	265,393	273,223	258,005
Regulatory Reporting (5%)	48,645	50,080	51,558	53,079	54,645	51,601
Water Quality Expense (59200)						
Backflow Program (85%)	293,879	302,549	311,483	320,680	330,140	311,746
Sampling (5%)	17,287	17,797	18,323	18,864	19,420	18,338
Other Regulatory - CCR (10%)	34,574	35,594	36,645	37,727	38,840	36,676
Total by Detailed Department Expenses	\$ 18,802,757	\$ 19,824,330	\$ 19,648,703	\$ 19,970,730	\$ 22,008,759	\$ 20,051,056

Table A-2 – Operating Cost Allocation Bases and Percentages

Cost Line Time by GL Account	Fixed - Meter Size	Fixed - Uniform	Fire Protection	Variable - T1	Variable - T2	Basis for Allocation
Source of Supply - CSL (51200)	0.0%	0.0%	0.0%	100.0%	0.0%	CSL work activity and costs vary directly with levels of production or consumption.
Source of Supply - ATM (51300)	0.0%	0.0%	0.0%	100.0%	0.0%	ATM work activity and costs vary directly with levels of production or consumption.
Source of Supply - Water Purchases (51500)	0.0%	0.0%	0.0%	100.0%	0.0%	Water purchase costs vary directly with levels of production or consumption.
Source of Supply - Capacity/Fixed Charges (51500)	100.0%	0.0%	0.0%	0.0%	0.0%	MWD charges based on capacity of system allocated by number of meters in a system. There is a direct relationship between larger meters and the need for more system capacity.
Source of Supply - Uniform/Fixed Charges (51500)	0.0%	100.0%	0.0%	0.0%	0.0%	MWDOC charges based solely on number of meters in a system regardless of meter size.
Pumping Expense (52100)	0.0%	0.0%	0.0%	100.0%	0.0%	Pumping operations directly related to daily consumption demands.
Pumping Power (52200)	0.0%	0.0%	0.0%	100.0%	0.0%	Pumping operations directly related to daily consumption demands.
Reservoir Expense (54100)	0.0%	0.0%	8.2%	91.8%	0.0%	Reservoir capacity is based on storage capacity needs as well as fire flow requirements. Per District master plan, 2.73MG is related to fire flow capacity and 33.27MG is the existing storage capacity. Therefore, 8.2% (2.73 / 33.27 = 8.2%) of storage capacity (is related to fire flow capacity).
Mainline Expense (54200)	0.0%	0.0%	8.2%	91.8%	0.0%	Mainline O&M allocation similar to Reservoir due to customer consumption demands and required capacity to meet fire flow demands.
Meter Expense (54300)						
Meter Testing (1.2%) - 3" and 6" meters only	100.0%	0.0%	0.0%	0.0%	0.0%	Per Operations Manager, testing effort only occurs for 3" and 6" meters.
Meter Repair & Maintenance (98.8%)	100.0%	0.0%	0.0%	0.0%	0.0%	Based on CMMS work flow data, over 98% of meter service activity is due to maintenance work requests, while 1.2% of meter service activity is related to meter testing. Meter maintenance work activity varies by meter size.
Valve, Vault, Fire Hydrant Expense (54400)	0.0%	0.0%	21.4%	78.6%	0.0%	The VVH program is based on flow/consumption and fire protection needs. Based on CMMS work flow data, District activity on the VVH program is allocated 21.4% Hydrants and 78.6% on valves, air vacs, and PRVs.
Paving Expense (54500)	0.0%	96.1%	0.3%	3.6%	0.0%	Based on CMMS work flow data, paving activity is allocated to customer accounts and reservoirs. The portion for customer accounts is allocated to fixed-uniform, while the reservoir activity percentage is allocated to variable-T1 and fire protection based on the reservoir category allocation.
General Plant-Building (54700)						A support expense category allocated based on total allocation of all direct service expenses since this GL expense supports all functions and operations of the District.
SCADA Expense (54800)	0.0%	0.0%	8.2%	91.8%	0.0%	SCADA system largely supports Reservoirs, RMS, and Flow Control therefore similar allocation to Reservoirs.
General Manager's Expense (55100)	0.0%	75.0%	3.6%	21.4%	0.0%	GM allocation based on content of agenda items for FY 25.
Commission/Board (55400)	0.0%	75.0%	3.6%	21.4%	0.0%	Based on GM allocation as these expenses are directly related to GM activity and content of agenda items for FY 25.
Legal (55500)	0.0%	75.0%	3.6%	21.4%	0.0%	Based on GM allocation as these expenses are directly related to GM activity and content of agenda items for FY 25.
Audit (55600)						A support expense category allocated based on total allocation of all direct service expenses since this GL expense supports all functions and operations of the District.
Administration Expense (56100)	0.0%	75.0%	3.6%	21.4%	0.0%	Based on GM allocation as these expenses are directly related to GM activity and content of agenda items for FY 25.
Data Management (56200)						A support expense category allocated based on total allocation of all direct service expenses since this GL expense supports all functions and operations of the District.
Public Information (56400)	0.0%	100.0%	0.0%	0.0%	0.0%	Per Asst General Manager, public information services activity is directly related to customer accounts.
Risk & Resiliency (56500)	0.0%	85.0%	15.0%	0.0%	0.0%	Per Asst General Manager, risk and resiliency expense and work activity are related to customer accounts (85%) and fire mitigation and prevention (15%; (Facility and site inspection; camera installation and maintenance/management)
District Recognition (56800)						A support expense category allocated based on total allocation of all direct service expenses since this GL expense supports all functions and operations of the District.
Customer Service (57200)						
Billing/Collections (20%)	0.0%	100.0%	0.0%	0.0%	0.0%	Per Customer Service Supervisor, 20% of Customer Service functions are related to Billing/Collections services. Costs are uniform to each account as amount of effort and cost are similar per bill.
Service Orders (30%)	100.0%	0.0%	0.0%	0.0%	0.0%	Per Customer Service Supervisor, 30% of Customer Service functions are related to Service Orders services. Costs are based on meter size based on CMMS data for number of service orders per meter size in FY 25.
Payment Processing (10%)	0.0%	100.0%	0.0%	0.0%	0.0%	Per Customer Service Supervisor, 10% of Customer Service functions are related to Payment Processing services. Costs are uniform to each account as amount of effort and cost are similar per payment processing function per account.
Customer Affairs (40%)	100.0%	0.0%	0.0%	0.0%	0.0%	Per Customer Service Supervisor, 40% of Customer Service functions are related to Customer Affairs services. Costs are based on meter size based on CMMS data for number of customer contacts per meter size in FY 25.

Cost Line Title by GL Account	Fixed - Meter Size	Fixed - Uniform	Fire Protection	Variable - T1	Variable - T2	Basis for Allocation
WUE - Office Expense (57510)	0.0%	0.0%	0.0%	0.0%	100.0%	WUE services are directly related to the District's conservation program efforts.
WUE - Programs/Rebates (57520)	0.0%	0.0%	0.0%	0.0%	100.0%	WUE services are directly related to the District's conservation program efforts.
WUE - Outreach/Events/Sponsorships (57530)	0.0%	0.0%	0.0%	0.0%	100.0%	WUE services are directly related to the District's conservation program efforts.
WUE - Devices/Materials (57540)	0.0%	0.0%	0.0%	0.0%	100.0%	WUE services are directly related to the District's conservation program efforts.
Finance Expense (58100)						A support expense category allocated based on total allocation of all direct service expenses since this GL expense supports all functions and operations of the District.
General Office Expense (58200) (cumulative O&M)						A support expense category allocated based on total allocation of all direct service expenses since this GL expense supports all functions and operations of the District.
Insurance (58300) (cumulative O&M)						A support expense category allocated based on total allocation of all direct service expenses since this GL expense supports all functions and operations of the District.
Engineering Expense (59100)						
Capital Projects (50%)	0.7%	18.5%	2.8%	78.0%	0.0%	Engineering functions are related to supporting the capital program of the District. Engineering department capital project operations are allocated based on District CIP percentage allocations.
Development Services (20%)	100.0%	0.0%	0.0%	0.0%	0.0%	Engineering staff process some development services. There is systematic relationship between these services and effort by meter size, with a larger proportionate share being spent on 1-inch meter connections as that meter size group is the most active in terms of new connections and upsizeactivity from 3/4-inch meters.
Operations Support (25%)	0.0%	100.0%	0.0%	0.0%	0.0%	Some engineering functions are related to supporting the technical and field service operations of the District. Costs are uniform to each account as amount of effort and cost are not distinguishable by meter size nor is there a systematic relationship to water consumption.
Regulatory Reporting (5%)	0.0%	100.0%	0.0%	0.0%	0.0%	A small amount of Engineering functions are related to supporting regulatory reporting efforts required of the District by outside agencies. Costs are uniform to each account as amount of effort and cost are not distinguishable by meter size nor amount of water consumption. These services directly affect each District customer uniformly.
Water Quality Expense (59200)						
Backflow Program (85%)	100.0%	0.0%	0.0%	0.0%	0.0%	A significant majority of Water Quality functions are related to Backflow program services. There is systematic relationship between these services and effort by meter size, with a larger proportionate share being spent on 1-inch meter connections.
Sampling (5%)	0.0%	100.0%	0.0%	0.0%	0.0%	A small amount of Water Quality program functions are related to Sampling services of the District (most sampling activity is now handled by the Operations Department). Costs are uniform to each account as amount of effort and cost are not distinguishable by meter size nor is there a systematic relationship to water consumption.
Other Regulatory - CCR (10%)	0.0%	100.0%	0.0%	0.0%	0.0%	Some Water Quality program functions are related to regulatory services of the District. Costs are uniform to each account as amount of effort and cost are not distinguishable by meter size nor is there a systematic relationship to water consumption.

Appendix B

Projects by Functional Category	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031	5-Year Average
Joint Powers Projects						
Annual Surveys of ATM/CSL Pipeline (LBCWD Costs)	50,000	50,000	50,000	50,000	50,000	50,000
ATM Rectifier Replacement (LBCWD Costs)	25,000	25,000	25,000	25,000	25,000	25,000
Condition Assessments of ATM/CSL Pipelines (LBCWD Costs)	-	-	-	-	200,000	40,000
ATM/CSL Transmission Main Improvements (LBCWD Costs)	-	-	-	-	200,000	40,000
(Open)	-	-	-	-	-	-
Pump Stations & Reservoirs						
Water Master Plan Update	474,317	-	-	-	-	94,863
Ridge Pump Station Flow Meter Installation	250,000	-	-	-	-	50,000
Moorhead Reservoir Roof Repair	500,000	500,000	-	-	-	200,000
RMS Installation - Zitnik	750,000	-	-	-	-	150,000
Summit/Hastie Pump Station P1/P2 Safety & Electrical Upgrades	500,000	500,000	-	-	-	200,000
As-needed Construction Management Services	100,000	100,000	100,000	100,000	100,000	100,000
As-needed Professional Engineering Design Services	75,000	75,000	75,000	75,000	75,000	75,000
As-needed Geotechnical Engineering Services	50,000	50,000	50,000	50,000	50,000	50,000
On-Call Contracts - SCADA/Electrical	100,000	100,000	100,000	100,000	100,000	100,000
Platz and Ridge Reservoir Ladder/Stairway Project	187,500	-	-	-	-	37,500
Oak Street Rehabilitation - Pump Station	250,000	500,000	500,000	-	-	250,000
Oak Street Reservoir - Roof, Overflow & Valving Rehabilitation	-	365,000	825,000	1,000,000	-	438,000
Tia Juana Lower Pump Station - Electrical Upgrades	-	75,000	300,000	-	-	75,000
Tia Juana Upper Pump Station - Electrical Upgrades	75,000	300,000	-	-	-	75,000
Bluebird Reservoir Valve Replacements	150,000	-	-	-	-	30,000
Oak Street Reservoir - Lining	-	350,000	-	-	-	70,000
Temple Hills 600 Rehabilitation	-	-	-	-	175,000	35,000
RMS Installation - Moorhead	-	350,000	850,000	-	-	240,000
RMS Installation - Rimel	-	-	350,000	750,000	-	220,000
Viejo Altitude Valve Rehabilitation	-	250,000	-	-	-	50,000
Tia Juana Upper and Lower Pump Station - Electrical Upgrades	-	75,000	300,000	-	-	75,000
Sycamore Pump Station - Electrical Upgrades	-	125,000	500,000	-	-	125,000
Alta Laguna Pump Station - Elec Upgrades & Roof Rehabilitation	-	-	-	250,000	1,000,000	250,000
Platz Pump Station - Pump Replacement	-	-	-	-	250,000	50,000
Annual Reservoir Inspections Program	50,000	50,000	50,000	50,000	50,000	50,000
Anticipated capital needs for Reservoirs/Pump Stations; unknown specific project detail at time of rate study	250,000	250,000	-	750,000	1,000,000	450,000

Projects by Functional Category	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031	5-Year Average
Transmission & Distribution						
Valve Replacement Program	50,000	100,000	-	100,000	-	50,000
Hydrant Replacement Program	100,000	-	100,000	-	100,000	60,000
New Hydrant Installation	100,000	100,000	100,000	100,000	100,000	100,000
Smart Meter Replacements (2-in & Larger)	175,000	81,000	5,000	5,000	12,000	55,600
On-Call Construction Contracts	175,000	175,000	175,000	175,000	175,000	175,000
Helo Pod Improvements	150,000	-	-	-	-	30,000
Temple Terrace (2-inch upsized)	-	75,000	250,000	-	-	65,000
PCH Pipeline Replacement - Phase 2 (2-inch upsized)	-	-	-	100,000	400,000	100,000
PCH - Cress Street (6-inch upsized)	-	-	-	-	-	-
Poplar Cast Iron Replacement	-	-	-	-	-	-
Dumond Drive Improvement	-	-	-	-	-	-
Morro Campground (33-inch replacement)	-	-	-	-	-	-
Hillcrest Drive (27-inch replacement)	-	-	-	-	-	-
San Joaquin Pipeline Replacement (to Zitnik)	-	-	-	-	262,500	52,500
Fire Hydrant Flow Improvements - Type B (2 FH) (TBD)	-	-	-	-	-	-
Fire Hydrant Flow Improvements - Type C (8 FH)	-	-	-	-	-	-
Sweeney Pipeline Improvements (TBD)	-	-	-	-	-	-
PRV Replacements	-	100,000	-	100,000	-	40,000
Park Avenue Pressure Zone Conversion	-	-	-	175,000	750,000	185,000
Anticipated capital needs for Transmission & Distribution; unknown specific project detail at time of rate study	250,000	250,000	-	-	-	100,000
Water Supply						
Groundwater Reliability/Well Construction (1 to 2 wells)	5,000,000	5,000,000	-	-	-	2,000,000
Office Network & Cybersecurity Improvements						
Network Infrastructure Replacements & Upgrades (2 copiers added for FY 26)	40,000	40,000	100,000	40,000	40,000	52,000
Cybersecurity Infrastructure Improvements	100,000	-	-	-	-	20,000
Network - District HQ Data Connection Improvements	8,000	-	-	-	-	1,600
Anticipated capital needs for Office Network & Cybersecurity; unknown specific project detail at time of rate study	-	-	-	-	150,000	30,000
Equipment & Vehicles						
Anticipated future Replacement of Vehicles & Heavy Equipment	100,000	100,000	100,000	100,000	100,000	100,000
Debt Service						
Annual Debt Service	827,300	1,525,395	1,526,395	1,521,895	1,522,145	1,384,626
Facility Improvements						
Anticipated capital needs for Facility Improvements; unknown specific project detail at time of rate study	100,000	25,000	25,000	25,000	25,000	40,000
Total	\$ 11,012,117	\$ 11,661,395	\$ 6,456,395	\$ 5,641,895	\$ 6,911,645	\$ 8,336,690

Projects by Functional Category	Fixed - Meter Size	Fixed - Uniform	Fire Protection	Variable - T1	Variable - T2	Basis for Allocation
Joint Powers Projects						
Annual Surveys of ATM/CSL Pipeline (LBCWD Costs)	0%	0%	0%	100%	0%	Direct relationship to water supply transmission
ATM Rectifier Replacement (LBCWD Costs)	0%	0%	0%	100%	0%	Direct relationship to water supply transmission
Condition Assessments of ATM/CSL Pipelines (LBCWD Costs)	0%	0%	0%	100%	0%	Direct relationship to water supply transmission
ATM/CSL Transmission Main Improvements (LBCWD Costs)	0%	0%	0%	100%	0%	Direct relationship to water supply transmission
(Open)	0%	0%	0%	100%	0%	Direct relationship to water supply transmission
Pump Stations & Reservoirs						
Water Master Plan Update						Support project for all facility assets so allocated based on composite percentages of direct relationship projects.
Ridge Pump Station Flow Meter Installation	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Moorhead Reservoir Roof Repair	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
RMS Installation - Zitnik	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Summit/Hastie Pump Station P1/P2 Safety & Electrical Upgrades	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
As-needed Construction Management Services						Support project for all facility assets so allocated based on composite percentages of direct relationship projects.
As-needed Professional Engineering Design Services						Support project for all facility assets so allocated based on composite percentages of direct relationship projects.
As-needed Geotechnical Engineering Services						Support project for all facility assets so allocated based on composite percentages of direct relationship projects.
On-Call Contracts - SCADA/Electrical						Support project for all facility assets so allocated based on composite percentages of direct relationship projects.
Platz and Ridge Reservoir Ladder/Stairway Project	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Oak Street Rehabilitation - Pump Station	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Oak Street Reservoir - Roof, Overflow & Valving Rehabilitation	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Tia Juana Lower Pump Station - Electrical Upgrades	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Tia Juana Upper Pump Station - Electrical Upgrades	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Bluebird Reservoir Valve Replacements	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Oak Street Reservoir - Lining	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Temple Hills 600 Rehabilitation	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
RMS Installation - Moorhead	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
RMS Installation - Rimel	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Viejo Altitude Valve Rehabilitation	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Tia Juana Upper and Lower Pump Station - Electrical Upgrades	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Sycamore Pump Station - Electrical Upgrades	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Alta Laguna Pump Station - Elec Upgrades & Roof Rehabilitation	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Platz Pump Station - Pump Replacement	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Annual Reservoir Inspections Program	0%	0%	8.2%	91.8%	0%	Reservoir capacity is based on storage capacity needs as well as fire flow requirements. Per District master plan, 2.73MG is related to fire flow capacity and 33.27MG is the existing storage capacity. Therefore, 8.2% (2.73 / 33.27 = 8.2%) of storage capacity (is related to fire flow capacity).
Anticipated capital needs for Reservoirs/Pump Stations; unknown specific project detail at time of rate study	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption

Projects by Functional Category	Fixed - Meter Size	Fixed - Uniform	Fire Protection	Variable - T1	Variable - T2	Basis for Allocation
Transmission & Distribution						
Valve Replacement Program	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Hydrant Replacement Program	0%	0%	100%	0%	0%	In kind replacement directly related to fire flow and protection
New Hydrant Installation	0%	0%	100%	0%	0%	Directly related to fire flow and protection
Smart Meter Replacements (2-in & Larger)	100%	0%	0%	0%	0%	Based on meter sizes as cost increases with increase meter size
On-Call Construction Contracts						Support project for all facility assets so allocated based on composite percentages of direct relationship projects.
Helo Pod Improvements	0%	0%	100%	0%	0%	Directly related to fire flow and protection
Temple Terrace (2-inch upsized)	0%	0%	8.2%	91.8%	0%	Upsizes needed for fire flow and protection and water delivery and consumption; use Reservoir % allocation as reasonable proxy
PCH Pipeline Replacement - Phase 2 (2-inch upsized)	0%	0%	8.2%	91.8%	0%	Upsizes needed for fire flow and protection and water delivery and consumption; use Reservoir % allocation as reasonable proxy
PCH - Cress Street (6-inch upsized)	0%	0%	8.2%	91.8%	0%	Upsizes needed for fire flow and protection and water delivery and consumption; use Reservoir % allocation as reasonable proxy
Poplar Cast Iron Replacement	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Dumond Drive Improvement	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Morro Campground (33-inch replacement)	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Hillcrest Drive (27-inch replacement)	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
San Joaquin Pipeline Replacement (to Zitnik)	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Fire Hydrant Flow Improvements - Type B (2 FH) (TBD)	0%	0%	100%	0%	0%	Directly related to fire flow and protection
Fire Hydrant Flow Improvements - Type C (8 FH)	0%	0%	100%	0%	0%	Directly related to fire flow and protection
Sweeney Pipeline Improvements (TBD)	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
PRV Replacements	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Park Avenue Pressure Zone Conversion	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Anticipated capital needs for Transmission & Distribution; unknown specific project detail at time of rate study	0%	0%	0%	100%	0%	In kind replacement of asset directly related to water consumption
Water Supply						
Groundwater Reliability/Well Construction (1 to 2 wells)	0%	0%	0%	100%	0%	Direct relationship to water supply and consumption
Office Network & Cybersecurity Improvements						
Network Infrastructure Replacements & Upgrades (2 copiers added for FY 26)						Network/cybersecurity improvements support both O&M and capital projects; allocation based on composite of O&M and CIP allocations.
Cybersecurity Infrastructure Improvements						Network/cybersecurity improvements support both O&M and capital projects; allocation based on composite of O&M and CIP allocations.
Network - District HQ Data Connection Improvements						Network/cybersecurity improvements support both O&M and capital projects; allocation based on composite of O&M and CIP allocations.
Anticipated capital needs for Office Network & Cybersecurity; unknown specific project detail at time of rate study						Network/cybersecurity improvements support both O&M and capital projects; allocation based on composite of O&M and CIP allocations.
Equipment & Vehicles						
Anticipated future Replacement of Vehicles & Heavy Equipment						Equipment and vehicles support both O&M and capital projects; allocation based on composite of O&M and CIP allocations.
Debt Service						
Annual Debt Service	0%	100%	0%	0%	0%	Debt service is a fixed cost, regardless of water consumption. Bonds issued for non-capacity producing asset acquisition, construction, and replacement-reservoirs, groundwater supply, T&D benefitting entire District in a uniform manner and spreading capital costs and investment across generational periods; replacement projects are not upsizing for additional capacity, e.g. 4-inch pipe to 6-inch pipe.
Facility Improvements						
Anticipated capital needs for Facility Improvements; unknown specific project detail at time of rate study						Facility improvements support both O&M and capital projects; allocation based on composite of O&M and CIP allocations.

Appendix C

Meter Size	Meter Equivalents	# of Meters FY 27	# of Meters FY 28	# of Meters FY 29	# of Meters FY 30	# of Meters FY 31	# of EMs FY 27 ¹	# of EMs FY 28	# of EMs FY 29	# of EMs FY 30	# of EMs FY 31
	A	B	C	D	E	F	A x B	A x C	A x D	A x E	A x F
3/4"	1.00	6,860	6,850	6,840	6,830	6,819	6,860	6,850	6,840	6,830	6,819
1"	1.57	1,377	1,391	1,405	1,419	1,433	2,164	2,186	2,208	2,230	2,252
1.5"	4.29	337	339	341	342	344	1,444	1,453	1,461	1,466	1,474
2"	5.71	166	166	167	168	169	949	949	954	960	966
3"	11.43	13	13	13	13	13	149	149	149	149	149
4"	22.86	0	0	0	0	0	0	0	0	0	0
6"	45.71	2	2	2	2	2	91	91	91	91	91
Total		8,755	8,761	8,768	8,774	8,780	11,657	11,677	11,704	11,726	11,751

1. 'EMs' represents Equivalent Meters.

Appendix D

FY 28 Service Charge Calculation (Bi-Monthly)	Account Component	MWDOC		Meter Maintenance & Repair		Service Orders Component	Customer Affairs Component	Engineering - Capital Projects Component	Engineering - Development Services Component	Water Quality - Backflow Program Component	Total FY 28
		Capacity Charge Component	Meter Testing Component	Component	Component						
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
3/4"	9.56	0.97	-	5.51	4.03	4.96	0.04	-	0.63	25.69	
1"	9.56	1.52	-	5.39	2.98	5.31	0.06	6.84	10.74	42.40	
1.5"	9.56	4.16	-	5.36	5.31	9.14	0.16	21.04	25.21	79.94	
2"	9.56	5.54	-	4.11	7.34	10.63	0.22	35.80	33.52	106.72	
3"	9.56	11.09	45.45	106.04	21.73	39.71	0.43	79.24	169.94	483.18	
6"	9.56	44.35	45.45	106.04	21.73	39.71	1.73	79.24	169.94	517.73	

FY 29 Service Charge Calculation (Bi-Monthly)	Account Component	MWDOC		Meter Maintenance & Repair		Service Orders Component	Customer Affairs Component	Engineering - Capital Projects Component	Engineering - Development Services Component	Water Quality - Backflow Program Component	Total FY 29
		Capacity Charge Component	Meter Testing Component	Component	Component						
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
3/4"	10.45	1.06	-	6.03	4.42	5.43	0.04	-	0.69	28.12	
1"	10.45	1.66	-	5.84	3.23	5.75	0.06	7.41	11.63	46.04	
1.5"	10.45	4.54	-	5.83	5.78	9.95	0.18	22.88	27.42	87.03	
2"	10.45	6.05	-	4.47	7.98	11.57	0.24	38.94	36.46	116.15	
3"	10.45	12.10	49.73	116.04	23.78	43.45	0.47	86.70	185.95	528.68	
6"	10.45	48.42	49.73	116.04	23.78	43.45	1.88	86.70	185.95	566.40	

FY 30 Service Charge Calculation (Bi-Monthly)	Account Component	MWDOC		Meter Maintenance & Repair			Customer Affairs Component	Engineering - Capital Projects Component	Engineering - Development Services Component	Water Quality - Backflow Program Component	Total FY 30
		Capacity Charge Component	Meter Testing Component	Repair Component	Service Orders Component	Component					
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
3/4"	11.41	1.16	-	6.60	4.83	5.94	0.04	-	0.75	30.75	
1"	11.41	1.82	-	6.32	3.50	6.22	0.07	8.01	12.59	49.94	
1.5"	11.41	4.95	-	6.36	6.30	10.84	0.19	24.93	29.88	94.86	
2"	11.41	6.60	-	4.85	8.67	12.56	0.26	42.30	39.61	126.26	
3"	11.41	13.20	54.34	126.80	25.98	47.48	0.51	94.75	203.20	577.68	
6"	11.41	52.81	54.34	126.80	25.98	47.48	2.05	94.75	203.20	618.83	

FY 31 Service Charge Calculation (Bi-Monthly)	Account Component	MWDOC		Meter Maintenance & Repair			Customer Affairs Component	Engineering - Capital Projects Component	Engineering - Development Services Component	Water Quality - Backflow Program Component	Total FY 31
		Capacity Charge Component	Meter Testing Component	Repair Component	Service Orders Component	Component					
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
3/4"	12.46	1.26	-	7.22	5.29	6.50	0.05	-	0.83	33.61	
1"	12.46	1.98	-	6.83	3.78	6.73	0.08	8.67	13.61	54.14	
1.5"	12.46	5.40	-	6.90	6.84	11.77	0.21	27.07	32.44	103.09	
2"	12.46	7.19	-	5.27	9.41	13.64	0.28	45.93	43.01	137.18	
3"	12.46	14.39	59.36	138.50	28.38	51.86	0.56	103.48	221.95	630.93	
6"	12.46	57.55	59.36	138.50	28.38	51.86	2.24	103.48	221.95	675.77	