DRAFT FINAL

WATER RATE STUDY

BLACK & VEATCH PROJECT NO. 414264

PREPARED FOR

City of Newport Beach, CA

15 SEPTEMBER 2023

BLACK & VEATCH

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Legal Notice

Black & Veatch Management Consulting, LLC (Black & Veatch) has prepared this report for the City of Newport Beach (City), and it is based on information not within the control of Black & Veatch. The City has not requested Black & Veatch to make an independent analysis, verify the information provided to us, or render an independent judgment of the validity of the information provided by others. Because of this, Black & Veatch cannot, and does not, guarantee the accuracy thereof to the extent that such information, data, or opinions were based on information provided by others.

In conducting these analyses and in forming an opinion of the projection of future financial operations summarized in this report, Black & Veatch made certain assumptions on the conditions, events, and circumstances that may occur in the future. The methodology utilized in performing the analyses follows generally accepted practices for such projections. Such assumptions and methodologies are reasonable and appropriate for the purpose for which they are used. While we 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 may include the City's ability to execute the capital improvement program as scheduled and within budget, regional climate and weather conditions affecting water demand, and adverse legislative, regulatory, or legal decisions (including environmental laws and regulations) affecting the City's ability to manage the system and meet water quality requirements.

1.0 Executive Summary

The City of Newport Beach (City) commissioned Black & Veatch Management Consulting, LLC (Black & Veatch) to perform a Water Rate Study (Study) for its Water Utility. The Study included the development of a five-year financial plan, a cost-of-service analysis, and the design of rates. The specific objectives of the Study were to:

- Evaluate the adequacy of projected revenues under existing rates to meet projected revenue requirements.
- Develop a sound financial plan for the Water Utility covering five years for ongoing operations and planned capital improvements.
- Allocate the projected revenue requirements to the various customer types in accordance with their respective service requirements.
- Develop a suitable rate schedule that produces revenues adequate to meet financial needs while recognizing customer costs of service and regulatory considerations such as Proposition 218 and applicable judicial decisions.

1.1 Financial Plan

The City operates the utility as an individual self-supporting enterprise. As such, the utility develops a financial plan that provides sufficient revenues to meet all operation and maintenance (O&M) expenses, water purchases, debt service requirements, capital improvements from current revenues, and other expenditures.

The Study develops a financial plan that projects operating revenue, expenses, and capital financing costs for the utility over a five-year planning period beginning fiscal year (FY) July 1, 2023, and ending June 30, 2028.

The financial plan projects future rate revenues under existing rates, O&M expenses, debt service payments, payment to other City departments for services provided, and capital improvement program (CIP) requirements. In the projection of rate revenues, annual projections of customers and water consumption rely upon the City's historical data and estimates of growth. Additionally, the Water Utility's forecast incorporates efforts to continue meeting the conservation goals established by the State and the City's Water Shortage Contingency Plan.

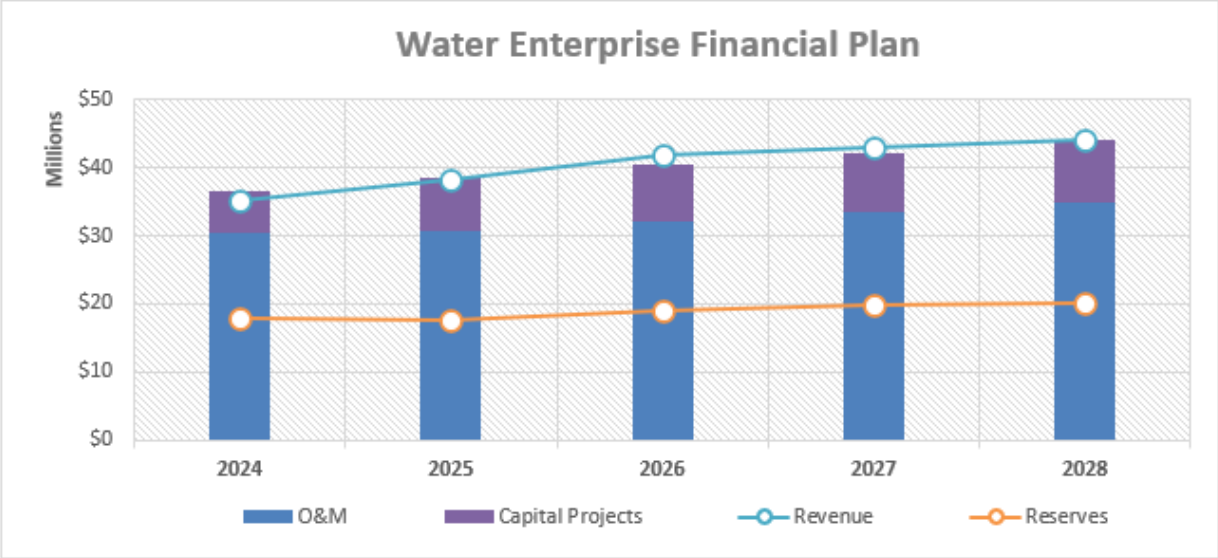
Black & Veatch worked with the City to develop a proposed financial plan to support the Water Utility's O&M and capital needs, while minimizing impacts to customers. The financial plan supports the following activities:

- Operation and Maintenance Expenses: The Water Utility anticipates O&M expenses to increase from $30.4M in FY 2024 to $34.9M in FY 2028. Water production and purchases account for most of this increase, averaging 46% of O&M expenses.
- Debt Service: The Water Utility has no existing debt service, and no future debt is planned.
- Capital Improvements: The Water Utility plans to execute an average of $8.0M annually in capital projects from fiscal year (FY) 2024 to FY 2028.
- Reserves: The Water Utility plans to continue funding the operating fund reserve, capital fund reserve, and rate stabilization fund reserve.

- The operating fund reserve is to help cover fluctuations in day-to-day expenses and to pay for additional imported water purchases if groundwater becomes unavailable. The scheduled target is 120 days of O&M expenses.
- The capital fund reserve is to help maintain enough funds to cover a portion of upcoming annual capital expenditures, smooth out the amount of capital infusion needed each year, and help mitigate unexpected capital costs. The scheduled target is 75% of the annual CIP.
- The rate stabilization fund reserve is to help mitigate future increases during revenue shortfalls that might result from lower-than-expected water sales. The scheduled target was established in FY 2019 to be equal to revenue loss due to a 30% of water use reduction, which equates to Stage 3 in the City's Water Shortage Contingency Plan.

The Water Utility is proposing revenue adjustments to allow the enterprise to meet operating and capital needs and reserve targets, as shown in Figure 1-1.

Figure 1-1 Water Enterprise Fund Financial Plan



1.2 Rate Design

The Right to Vote on Taxes Act, also known as Proposition 218, was passed by California voters in 1996 and added Article XIIIC and Article XIIID to the California Constitution. These articles provide the regulatory framework that guides and informs the rate-setting process. The cost-of-service analyses provide the cost nexus for the proposed rate structures. The regulatory framework helps ensure cost recovery is proportionate to the cost of providing the service.[1]

To minimize impacts, retain simplicity, and ensure the reasonable stability of revenue, Black & Veatch recommends the following rate structure.

- Monthly Fixed Charge: The Water Utility should retain the monthly fixed charge based on meter sizes for all customer types. The monthly fixed charge recovers portions of fixed cost elements such as

[1] Black & Veatch is not a legal firm and interpretations of the legal requirements under Proposition 218 should be reviewed by legal counsel.

operating and capital components, meter maintenance and services, meter reading, issuing bills, and maintenance and capacity costs associated with public fire protection.

- Consumption Charge: The Water Utility should maintain the uniform consumption charge for all customer types. The consumption charge recovers costs associated with the base and extra capacity demands.
- Fire Service Charge: The Water Utility should continue to utilize the fire service charge based on meter size for private fire service connections. The fire service charge will recover maintenance and capacity costs associated with private fire protection costs.

1.3 Proposed Water Rates

Table 1-1 summarizes the Water Utility's recommended five-year rate schedules for water and private fire protection services. Table 1-2 presents the recommended recycled water rates. Rates are effective January 1st of each calendar year. The rates developed in this study focused on FY 2025 through 2028 as rates effective on January 1, 2024, were previously approved by City Council in the 2019 rate case[2].

Table 1-1 Proposed Five-Year Water Rate Schedule

Customer Class	Calendar Year Ending December 31,				
	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028
Effective Date	1/1/2024*	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Monthly Fixed Service Charge					
Water	($/mo)	($/mo)	($/mo)	($/mo)	($/mo)
5/8", 3/4"	27.09	31.59	36.59	41.59	46.59
1"	41.99	50.07	58.30	66.53	74.75
1-1/2"	79.15	96.29	112.59	128.88	145.16
2"	123.76	151.74	177.74	203.71	229.65
3"	328.23	405.92	476.32	546.65	616.89
4"	562.45	697.06	818.33	939.47	1,060.46
6"	1,194.45	1,482.68	1,741.22	1,999.48	2,257.39
8"	2,086.69	2,591.80	3,044.12	3,495.95	3,947.18
Private Fire Service	($/mo)	($/mo)	($/mo)	($/mo)	($/mo)
5/8"	13.87	8.52	9.12	9.66	10.20
1"	14.12	8.96	9.59	10.18	10.75
1-1/2"	14.74	10.15	10.86	11.55	12.23
2"	15.81	12.21	13.06	13.92	14.77
2-1/2"	17.44	15.31	16.36	17.48	18.60
3"	19.67	19.59	20.94	22.43	23.91
4"	26.34	32.33	34.53	37.10	39.68
6"	50.21	78.03	83.29	89.75	96.25
8"	91.43	156.85	167.41	180.56	193.84
10"	153.42	275.42	293.93	317.16	340.62
Usage Charges					
Water	($/HCF)	($/HCF)	($/HCF)	($/HCF)	($/HCF)
All Customers	4.16	4.26	4.36	4.46	4.56

*Previosuly approved in 2019 Rate Case.

[2] City Council Meeting, November 19, 2019.

Table 1-2 Proposed Five-Year Recycled Water Rate Schedule

Description	Calendar Year Ending December 31,				
	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028
Effective Date	1/1/2024*	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Monthly Fixed Service Charge					
Recycled Water Services ($/month)					
5/8", 3/4"	$13.78	$14.66	$15.44	$16.17	$16.89
1"	$19.78	$21.85	$23.06	$24.16	$25.25
1-1/2"	$34.75	$39.84	$42.10	$44.15	$46.16
2"	$52.73	$61.43	$64.95	$68.13	$71.25
3"	$135.12	$160.38	$169.69	$178.05	$186.25
4"	$229.50	$273.72	$289.66	$303.96	$317.97
6"	$484.16	$579.56	$613.40	$643.72	$673.42
8"	$843.69	$1,011.34	$1,070.43	$1,123.38	$1,175.23
Usage Charges ($/HCF)	$2.29	$2.66	$2.74	$2.82	$2.91
Pump Charge ($/HCF)	$0.72	$0.50	$0.52	$0.55	$0.57

*Previosuly approved in 2019 Rate Case.

1.4 Customer Impact

If approved, water rate adjustments will commence on January 1, 2024, and adjust annually on January 1st of each subsequent year. Table 1-3 illustrates the bill change to a typical single-family residential customer with a 5/8" metered connection and consuming 10 hundred cubic feet (HCF) per month.

Table 1-3 Typical Residential Customer Monthly Bill Impacts

Description	Current	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Water Bill (5/8" meter, 10 HCF)	$63.92	$68.69	$74.19	$80.19	$86.19	$92.19
$ Increase		$4.77	$5.50	$6.00	$6.00	$6.00

1.5 Summary

The financial plan described herein reflect a balanced approach by the City to operate the Water Utility in a sustainable manner, while providing high quality services and minimizing customer bill impacts. Black & Veatch used industry standard principles for equitable cost-of-service allocations to calculate the proposed rates. Detailed explanations for these calculations are provided in the remainder of this report.

2.0 Introduction

2.1 Purpose

The purpose of this report is (1) to project the future revenues of the Water Utility under existing rates and charges, project operating expenses and capital financing revenue requirements, and to examine the adequacy of projected revenues to meet these revenue requirements through FY 2028; (2) to allocate these revenue requirements, or costs of service, for a representative test year to the various customer types in accordance with the respective service requirements that each class places on the systems; and (3) to develop a suitable schedule of water rates that will produce revenues adequate to meet the financial needs of the utility on the basis that recognizes customer costs of service and practical bill impact considerations.

2.2 Water System

The Water Utility provides water services to over 26,000 residential and non-residential customers. The City obtains potable water from three primary sources: local groundwater through Orange County Water District (OCWD), imported water from the Colorado River and/or the State Water Project through the Municipal Water District of Orange County (MWDOC), and recycled water purchased from OCWD. The water system infrastructure consists of 302 miles of transmission and distribution mains, four wells, three storage reservoirs with a total capacity of 202 million gallons, and five pump stations. The City relies on approximately 75% groundwater, 22% imported water, and approximately 3% recycled water.

2.3 Methodology

The rate-setting methodology employed by Black & Veatch is consistent with industry guidelines established by AWWA's *Principles of Water Rates, Fees, and Charges, M1* manual (M1 Manual). The manual is nationally recognized and provides recommendations and generally accepted practices in the water industry. The M1 Manual is used by rate practitioners as guidance on rate-making practices that can be used to address the unique circumstances of the communities served. An overview of the methodology is outlined below.

2.3.1 Financial Plan

Financial planning compares the projected revenues of the utility under existing conditions to its projected operating expenses and capital expenditures. This step tests the adequacy of the current rates to recover the utility's forecasted costs. If shortfalls occur, revenue increases are recommended until the utility is financially stable.

Financial Planning
Establish operating and capital financing plans that fully fund activities

Cost of Service Analysis
Perform a cost-of-service analysis to determine if cost allocations are fair and equitable among customer classes

2.3.2 Cost-of-Service Analysis

The cost-of-service analysis builds a link between the utility's cost of service and the proposed rates for each customer type. This process takes individual budget cost items and allocates them based on their function. Organizing the budget in terms of end function allows the creation of a nexus between the budget cost item and the rate.

2.3.3 Rate Design

Rate design involves developing a rate structure that equitably and proportionately recovers costs from the customers. The rate structure should reflect a customer group's demand profile and be resilient and flexible enough to handle changing costs (i.e., operating and/or capital) and demand scenarios (i.e., customers change their demand on the system by contributing less or more flow). Rate equity is inherently built upon each customer's relative use of the system. By designing different rate components, the utility can balance affordability and equity.

2.3.4 Rate Adoption

In California, public utilities must meet procedural requirements for adopting new or increased rates for property-related fees under Proposition 218. Proposition 218 states that the utility must hold a public hearing to consider the proposed rates and provide written notice to all customers at least 45 days before the hearing. Any property owner or tenant directly liable to the public agency for payment of the property-related fees may submit a written protest to the new or increased rates until the close of the public hearing. The City Council may not adopt the proposed new or increased rates if property owners or tenants directly liable for payment submit written protests on behalf of more than 50% of the properties upon which the proposed rates may be imposed.

Water Utility

3.0 Revenue and Revenue Requirements

To meet the costs associated with providing water services to its customers, the Water Utility derive revenue from a variety of sources, including water and recycled water user charges (rates), reimbursements, establishment fee, connection charges, turn-on charges, penalties, interest earned from the investment of available funds, and other miscellaneous revenues. The Water Utility is constantly looking for other sources of revenue, such as grants, to fund infrastructure investments. Black & Veatch has projected the future revenue generated in the Study by analyzing historical and future system growth in terms of the number of accounts and billed water consumption. This section also projects the expenses, or revenue requirements, necessary to operate and maintain the system, invest in capital improvements, make debt service payments, and cover other water systems expenses.

3.1 Customer and Water Consumption

3.1.1 Number of Customers

The City provides potable water services to 26,000 residential and non-residential customers and recycled water services to six customers. All customers connected to the water and recycled water systems do so through metered connections. The City bills customers based on the size of the metered connection and the consumption. Since the City bills customers based on the metered connection, the analysis included a review of historical accounts for customers and anticipated growth within the City. The City has seen a slight decline in population between 2020 and 2023 based on the State of California Department of Finance, E-5 Population and Housing Estimates. The analysis herein projects the total number of accounts to remain steady for the entire study period.

Table 3-1 summarizes the projected number of accounts for the Water Utility.

Table 3-1 Number of Customers by Meter Size

Line No.	Meter Size	Annual Accounts by Service		
		Water (accts)	Recycled Water (accts)	Private Fire Service (accts)
1	5/8", 3/4"	16,110	0	0
2	1"	7,891	0	10
3	1-1/2"	562	0	0
4	2"	1,213	0	11
5	2-1/2"	0	0	3
6	3"	32	2	1
7	4"	49	1	176
8	6"	16	0	157
9	8"	9	1	76
10	10"	0	2	2
11	12"	1	0	0
12	Total	25,883	6	436

3.1.2 Billed Water Consumption

Table 3-2 shows the projected water and recycled water consumption for the Study period. In determining the projected water consumption, Black & Veatch analyzed historical water consumption patterns in conjunction with the 2020 Urban Water Management Plan, future water conservation requirements set by the City's Water Shortage Contingency Plan, the continual requirement of Senate Bill (SB) 7x-7 and mandatory water conservation mandates. In 2016, after years of drought conditions, the State of California mandated cutbacks to all water purveyors to reduce water usage by 25%. This action led to a significant decline in water consumption. In 2017, the State of California formally lifted the water restrictions as it declared the drought over. Yet the mandatory cutback had a lasting effect on water conservation habits, leading to a continued decrease in overall water consumption.

In 2020, California again entered a drought. In 2022, to conserve water, the State of California adopted emergency regulations to increase water conservation and required urban water suppliers to implement Level 2 of their Water Shortage Contingency Plans. Shortly thereafter, the City moved to Level 2. In 2023, after record rainfall and snowpack levels, the State of California eased the drought restriction. Soon after, the City repealed Level 2 resolutions, providing relief to the community while promoting the wise use of water.

Many factors contribute to the City's annual consumption. The City's primary goal is to provide its residents with safe and reliable drinking water and encourage water conservation. Providing recycled water to existing and new customers is important for the City in supplementing potable water use. Overall, customers have done well to increase efficiency in the use of water resources.

Recognizing all the various factors contributing to water demand patterns and understanding the state requirements and water consumption has stabilized, the projected billed water consumption is expected to remain steady for the Study period. The City currently bills water consumption in hundred cubic feet (HCF).

Table 3-2 Annual Billed Water Consumption

Line No.	Description	Billed Consumption	
		Water	Recycled Water
1	All Customers (HCF)	5,439,576	244,511
2	Total (Acre-Feet)	12,488	561

3.2 Revenue under Existing Rates

Water user rates serve as the Water Utility's primary revenue source. Therefore, the level of future rate revenue is important in developing a long-range financial plan. Future water rate revenues are calculated using the system growth for the number of accounts and billed water consumption multiplied by the applicable existing rates. Since accounts and billed water consumption have no growth, rate revenue is expected to remain constant.

Table 3-3 presents the rates in effect for FY 2024 (effective January 1, 2024), which were approved by City Council on November 19, 2019, as part of the City's 2019 Rate Study. The rates are composed of monthly fixed and uniform consumption charges. The monthly fixed service charge differs for water, recycled water, and private fire service. The consumption charge differs for water and recycled water. In

addition, one recycled water customer pays a pump station charge associated with energy costs from a recycled water pump station that services them.

Table 3-3 FY 2024 Water, Recycled Water, and Private Fire Rates

Description	Service		
	Water	Recycled Water	Private Fire Service
Monthly Fixed Service Charge ($/month)			
5/8", 3/4"	$25.22	$12.83	$12.91
1"	$39.09	$18.41	$13.14
1-1/2"	$73.69	$32.35	$13.72
2"	$115.23	$49.09	$14.72
2-1/2"			$16.23
3"	$305.61	$125.81	$18.31
4"	$523.69	$213.68	$24.52
6"	$1,112.15	$450.80	$46.75
8"	$1,942.91	$785.55	$85.13
10"	$2,912.15		$142.84
12"	$3,673.71		$222.82
Usage Charges ($/HCF)			
All Customers	$3.87	$2.21	
Pump Station Charge		$0.67	

For the period under consideration for this study, the revenues under existing rates reflect the FY 2024 rate schedule, and are calculated as follows for each service:

- Monthly Fixed Service Charge = *# Accounts by Meter Size (Table 3-1) x Current Rate (Table 3-3) x 12*
- Consumption Charge = *Billed Usage (Table 3-2) x Current Rate (Table 3-3)*

Table 3-4 summarizes projected water rate revenue under existing rates. The projected Water Utility revenues under existing rates remains constant at $33.1M for the study period.

Table 3-4 Projected Water Revenue under Existing Rates

Line No.	Description	Service		
		Water	Recycled Water	Private Fire Service
		($)	($)	($)
1	Fixed Charges	13,233,500	27,200	237,200
2	Usage Charges	19,079,200	544,200	
3	Pump Charges		400	
4	Total	$32,312,700	$571,800	$237,200

3.3 Other Revenue

Other sources of operating revenue include reimbursements, establishment fees, connection charges, turn-on charges, penalties, interest earned from the investment of available funds, and other

miscellaneous revenues. Other operating revenues represent 1.8% of the Water Utility's total revenue. The City anticipates these revenues will remain relatively constant for the Study period.

3.4 Operating and Maintenance Expenses

Table 3-6 summarizes the Water Utility's projected O&M expense for the Study period. These expenses include salaries and benefits, maintenance and operations, internal service charges, and capital expenditures. The City anticipates that all O&M expenditures will escalate based on the factors identified in Table 3-5.

Table 3-5 Water O&M Escalation Factors

Description	O&M Escalation Factors				Sources
	2025	2026	2027	2028	
Salaries	3.50%	3.50%	3.00%	3.00%	City MOU
Benefits	3.50%	3.50%	3.00%	3.00%	City MOU
Contract Services	4.00%	4.00%	4.00%	4.00%	CPI Services, City Staff
Chemicals	15.00%	5.00%	5.00%	5.00%	PPI Chemical Manufacturing, City Staff
Utilities	8.00%	5.00%	5.00%	5.00%	Fuels & Utilities CPI, City Staff
Electricity	8.00%	5.00%	5.00%	5.00%	Electricity CPI
Materials & Supplies	7.00%	6.00%	5.00%	5.00%	All Items CPI, City Staff
MWDOC Import	5.50%	5.50%	5.50%	5.50%	City Staff
OCWD GW	6.20%	4.90%	4.60%	4.70%	City Staff
OCWD RW	3.00%	3.00%	3.00%	3.00%	City Staff
Maintenance & Repair	7.00%	6.00%	5.00%	5.00%	Commercial Repair & Maint. PPI, City Staff
Customer Billing	4.00%	4.00%	4.00%	4.00%	All Items CPI
General Admin	4.00%	4.00%	4.00%	4.00%	All Items CPI
Minor Capital Outlay	4.00%	4.00%	4.00%	4.00%	ENR CCI (5-year avg.), City Staff
Internal Services	5.60%	5.60%	5.60%	5.60%	All Items CPI
Insurance	5.60%	5.60%	5.60%	5.60%	City Staff
Weighted Escalation	1.13%	4.45%	4.23%	4.27%	Calculated

The following are subcategories that reside within the four main expense categories:

- **Salaries and Benefits:** These costs represent salaries and benefits for water staff assigned to operating and maintaining the water infrastructure system.
- **Maintenance and Operations**: These costs represent contract services, utilities, supplies and materials, maintenance and repairs, travel & training, and general expenses.

  As part of supplies and materials, water supply costs represent an average of 46% of total costs. The Water Utility has three main sources of water: groundwater through OCWD, recycled water through OCWD, and imported water through MWDOC. The City targets approximately 75% groundwater, 22% imported water, and approximately 3% recycled water.
- **Internal Service Charges and General Expenses:** These costs represent internal costs to the Water Utility from other City departments for specific costs such as Finance Department customer service and billing, capital project admin, vehicle replacement, IT charges, and insurance.
- **Capital Expenditures:** These costs represent small capital expenditures for office equipment, fixtures, and computers.

Table 3-6 Water O&M Expenses

Line No.	Description	Fiscal Year Ending June 30,				
		Budget	Projected			
		FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
		($)	($)	($)	($)	($)
	Operation and Maintenance					
1	Regular Salaries	3,316,355	3,432,400	3,552,500	3,659,100	3,768,900
2	Special Pays	18,120	18,800	19,500	20,100	20,700
3	Benefits	2,169,400	2,245,300	2,323,900	2,393,500	2,465,300
4	Other Pays	283,975	293,900	304,200	313,400	322,800
5	Contract Services	899,352	935,500	973,000	1,011,800	1,052,200
6	Utilities	80,654	87,100	91,500	96,100	100,900
7	Electricity	1,935,185	2,090,000	2,194,500	2,304,200	2,419,400
8	Supplies & Materials	360,604	385,900	409,000	429,500	451,000
9	CS Chemicals	320,000	368,000	386,400	405,700	426,000
10	MWDOC Import	5,000,000	4,635,500	4,887,700	5,153,800	5,434,500
11	OCWD GW	8,500,000	8,342,500	8,666,700	8,986,000	9,327,300
12	OCWD RW	480,726	490,500	505,300	520,400	536,000
13	Maintenance & Repair	1,773,505	1,897,800	2,011,600	2,112,300	2,217,900
14	MR Chemicals	73,000	84,000	88,200	92,600	97,200
15	Travel & Training	34,000	35,400	36,800	38,300	39,800
16	General Expenses	1,329,782	1,383,000	1,438,200	1,495,700	1,555,500
17	Customer Billing	1,172,800	1,219,700	1,268,400	1,319,100	1,371,900
18	Internal Svc Charge	1,344,940	1,420,200	1,499,900	1,583,800	1,672,500
19	Insurance	1,238,950	1,308,400	1,381,700	1,459,100	1,540,800
20	Capital Expenditures	54,154	56,300	58,500	60,800	63,200
21	Total	$ 30,385,502	$ 30,730,200	$ 32,097,500	$ 33,455,300	$ 34,883,800

As shown in Table 3-6, the Water Utility's O&M expenses increased from $30.4M in FY 2024 to $34.9M in FY 2028.

3.5 Capital Improvement Program

The Water Utility annually develops its five-year Capital Improvement Plan to identify water and recycled water system needs, including assessments, inspections, maintenance, and rehabilitation and replacement requirements. In 2019, the City completed its 30-year Water Master Plan, which identified $165.2M in capital projects in 2018 costs. Incorporating cost escalation over the 30 years, the City had planned to spend roughly $7.2M each year. Unfortunately, the City has had to readjust this annual spending by 5% each year due to higher-than-expected inflation. Therefore, the City plans to spend $40.2M over the Study period.

Table 3-7 summarizes the CIP for FY 2024 through FY 2028. The Water Utility is composed of many functions, of which transmission and distribution pipelines are significant elements. Therefore, of the total $40.2M, transmission and distribution pipelines account for 84.2% of the total projects. The City examines the water infrastructure system annually; therefore, CIP might change based on the current need.

Table 3-7 Water Capital Improvement Projects

Line No.	Description	Fiscal Year Ending June 30,				
		FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
		($)	($)	($)	($)	($)
	Capital Improvement Program					
1	Source of Supply	0	0	578,800	607,800	638,100
2	Pumping	0	1,790,500	578,800	607,800	638,100
3	Transmission & Distribution	6,250,000	5,643,700	7,111,100	6,980,400	7,839,900
4	General Plant	0	441,000	0	486,200	0
5	Total	$ 6,250,000	$ 7,875,200	$ 8,268,700	$ 8,682,200	$ 9,116,100

3.6 Transfers within the Fund

The Water Utility will conduct transfers from the operating account and other accounts over the Study period. The other accounts are the Enterprise CIP, Capital, Operating Reserve, and Rate Stabilization (See Section 3.7 for further explanation on Operating Reserve and Rate Stabilization Reserve.) The Enterprise CIP and Capital account transfers represent money to cover planned CIP project expenditures. These transfers do not represent direct operating expenses for either enterprise; therefore, they are treated as "below-the-line" cash flow items and not included as O&M expenses.

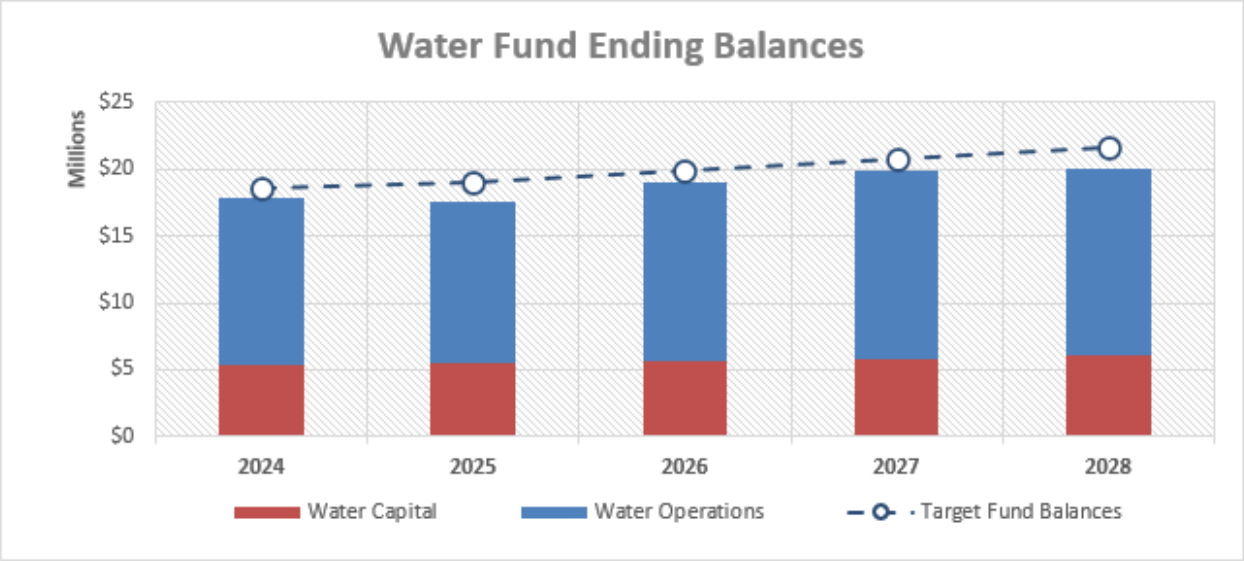
3.7 Reserves

A utility typically establishes reserves for several reasons, such as to cover shortfalls in operating revenues, maintain strong bond ratings, cover day-to-day operating costs, and ease the burden on ratepayers associated with large rate increases. Per the reserve level recommendations, the Water Utility will maintain the following three reserves:

- Operating Reserve represents working capital maintained by the Enterprise Fund to cover day-to-day expenses and maintain enough funds to cover accounts receivables, periods of lower-than-expected water sales, or unforeseen cost increases such as to pay for additional imported water purchases if groundwater becomes unavailable. The reserve will maintain a minimum balance of 120 days of operating expenses once fully funded.
- Capital Reserve represents funds to cover a portion of upcoming annual capital expenditures, smooth out the amount of capital infusion needed each year, and help mitigate unexpected capital costs. Once fully funded, this reserve will maintain a minimum balance of 75% of the annual planned CIP.
- Rate Stabilization Reserve represents funds used to absorb lower-than-expected revenue due to short-term decreases in water sales. This reserve stabilizes water rate revenue and is an effort to avoid wide swings in rates charged to customers over time. When fully funded, the reserve will maintain a minimum balance of 30% of water use reduction.

Appropriate reserve levels help the Water Utility with liquidity, provide operational flexibility, and demonstrate fiscal responsibility to the rating agencies, which allows the City to access lower-cost funds if needed. Figure 3-1 shows the fund balances for all accounts after the recommended rate increases compared to the total target fund balance.

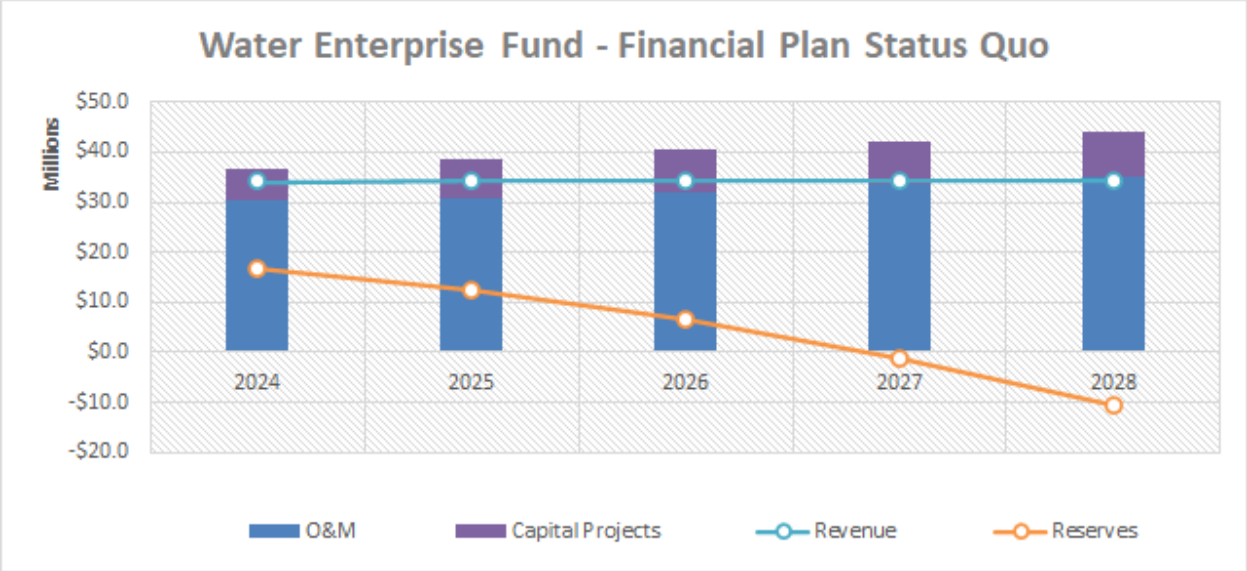
Figure 3-1 Water Fund Ending Balances



3.8 Projected Operating Results

The revenue requirements of the Water Utility consist of O&M expenses, capital expenditures, and reserve requirements. To fully understand the current condition of the Water Utility, it is important to examine the cash flow projections under the status quo scenario. As shown in Figure 3-2, the status quo conditions would project that the Water Utility would operate from an annual deficit position, thus requiring the use of reserves to keep operating. In this scenario, the Water Utility would not impose any revenue increases over the Study Period and continue to incur O&M expenses, pay for the execution of the planned CIP, and transfer to reserves.

Figure 3-2 Status Quo Water Enterprise Fund Cash Flow



The analyses performed for the Study indicate that the City should implement the proposed revenue increases shown in Table 3-8 if it wishes for the user rates to cover expenses and to keep the Water Utility

in a balanced financial condition. The revenue increases represent the total revenue adjustment needed to meet revenue requirements. The revenue adjustment does not represent adjustments to the individual rates but reflects the overall level of revenue needed to meet the Water Utility's obligations.

The suggested revenue increases help the Water Utility meet the following goals:

- Meet budgeted operating obligations in the five FYs.
- Meet planned capital investments in the five FYs.
- Build up the operating reserve, capital reserve, and rate stabilization to reach their targets.

Table 3-8 summarizes the proposed Enterprise Fund for the Study Period. The Enterprise Fund consists of 1) Revenue and 2) Revenue Requirements.

Revenue

- Line 1 is the revenue under existing rates.
- Lines 2 through 6 are the additional revenues generated from the required annual increases. The additional revenue generated directly reflects the number of months the increase is effective for; therefore, the amount might be calculated at less than that stated amount.
- Line 8 is the total revenue generated from user charges.
- Line 11 represents other operating revenues.
- Line 12 represents the total revenues for the enterprise.

Revenue Requirements

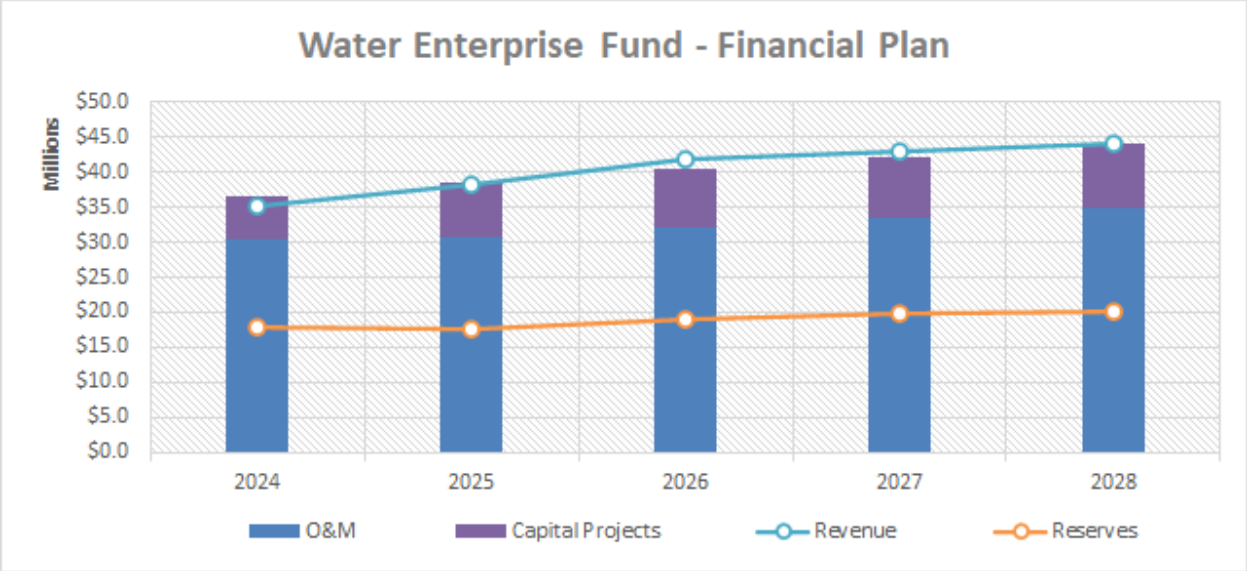
- Line 14 represents O&M expenses. The O&M expenses include water production and water purchase.
- Lines 15 and 16 represent capital expenditures within the capital accounts.
- Line 18 represents the total revenue requirements for the enterprise.
- Line 21 represents the net cumulative reserve balance for the enterprise fund.

Table 3-8 Water Enterprise Fund

Line No.	Description		Fiscal Year Ending June 30, FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
	Revenue						
	Rate Revenue						
1	Revenue from Existing Rates		33,121,700	33,121,700	33,121,700	33,121,700	33,121,700
	Revenue from Prosed Adjustments						
	Year	Months Effective					
2	2024	5	1,021,300	2,451,000	2,451,000	2,451,000	2,451,000
3	2025	5		1,525,200	3,660,400	3,660,400	3,660,400
4	2026	5			1,265,300	1,265,300	1,265,300
5	2027	5				1,215,000	1,215,000
6	2028	5					1,166,200
7	Increased Rev Due to Adj's		1,021,300	3,976,200	7,376,700	8,591,700	9,757,900
8	Subtotal Rate Revenue		$ 34,143,000	$ 37,097,900	$ 40,498,400	$ 41,713,400	$ 42,879,600
	Other Operating Revenue						
9	Other Income		703,000	683,000	683,000	683,000	683,000
10	Interest Income		427,000	555,300	570,000	595,900	608,900
11	Subtotal Other Operating Rev		$ 1,130,000	$ 1,238,300	$ 1,253,000	$ 1,278,900	$ 1,291,900
12	**Total Revenue**		**$ 35,273,000**	**$ 38,336,200**	**$ 41,751,400**	**$ 42,992,300**	**$ 44,171,500**
	Revenue Requirements						
	Operating & Maintenance						
13	O&M Expenses		30,385,500	30,730,200	32,097,500	33,455,300	34,883,800
14	Subtotal O&M		$ 30,385,500	$ 30,730,200	$ 32,097,500	$ 33,455,300	$ 34,883,800
	Capital Expenditures						
15	Water Ent Fund CIP (701-01)		0	441,000	0	486,200	0
16	Water Cap Fund (702-01)		6,250,000	7,434,200	8,268,700	8,195,900	9,116,200
17	Total Capital Expenditures		$ 6,250,000	$ 7,875,200	$ 8,268,700	$ 8,682,100	$ 9,116,200
18	**Total Revenue Requirements**		**$ 36,635,500**	**$ 38,605,400**	**$ 40,366,200**	**$ 42,137,400**	**$ 44,000,000**
19	Net Annual Cash Balance		(1,362,500)	(269,200)	1,385,200	854,900	171,500
20	Beginning Fund Balance		19,242,400	17,879,900	17,610,700	18,995,900	19,850,800
21	Net Working Capital Balance		$ 17,879,900	$ 17,610,700	$ 18,995,900	$ 19,850,800	$ 20,022,300

Figure 3-3 presents the proposed Water Enterprise Financial Plan.

Figure 3-3 Water Enterprise Financial Plan



4.0 Cost-of-Service Analysis

4.1 Cost of Service

The cost-of-service analysis requires recovery of the City's needed revenues from water and recycled water service rates, allocated to customer types according to the service rendered. An equitable rate structure allocates the capture of revenue requirements to customer types based on the quantity of water consumed, peak flows, the number of customer connections, and other relevant factors.

In analyzing the Water Utility's cost of service for allocation to its customer types, Black & Veatch selected the annual revenue requirements for FY 2025 as the test year requirements to demonstrate the development of cost-of-service water rates. FY 2024 rates were already approved in the last rate study. Table 4-1 summarizes the total costs of service that need to be recovered from water user rates for FY 2025.

Table 4-1 Cost of Service Revenue from Rates (FY 2025)

Line No.	Description	Operating Expense	Capital Cost	Total Cost
		($)	($)	($)
	Revenue Requirements			
1	O&M Expenses	30,730,200	0	30,730,200
2	Debt Service	0	0	0
3	Transfers for Capital Projects	(593,200)	7,875,200	7,282,000
4	Subtotal	$ 30,137,000	$ 7,875,200	$ 38,012,200
	Less Revenue Requirements Met from Other Sources			
5	Intergovernmental Revenues	50,000	0	50,000
6	Miscellaneous Revenues	70,000	0	70,000
7	Other Service Fees & Charges	380,000	0	380,000
8	Fines & Penalties	183,000	0	183,000
9	Investment Earnings	0	0	0
10	Non-Operating Source	0	0	0
11	Interest	0	0	0
12	Subtotal	$ 683,000	$ 0	$ 683,000
	Adjustments			
13	Adj for Annual Cash Balance	182,500	48,800	231,300
14	Adj to Annualize Rate Increase	(1,684,700)	(450,500)	(2,135,200)
15	Subtotal	$ (1,502,200)	$ (401,700)	$ (1,903,900)
16	COS to be Recovered from Rates	$ 30,956,200	$ 8,276,900	$ 39,233,100

The total revenue requirement is shown in Line 4. As shown in Line 12, we deduct revenues from other sources to derive the net revenue requirement recovered through rates. Line 13 represents the net annual cash balance during the FY. This number is positive if the enterprise is drawing down funds already in the Enterprise Fund. The number will be negative if the enterprise is replacing funds. In this case, the $231k figure indicates that the forecast is projecting a negative annual cash balance for the year. Line 14 represents the additional revenues generated if the revenue increase was effective for a full year versus only 5 months.

4.2 Functional Cost Components

The first step in conducting a cost-of-service analysis involves analyzing the cost of providing water and recycled water service by system function to allocate the costs to the various customer types properly and, subsequently, design rates. As a basis for allocating costs of service among customer types, the study separates costs into the following five basic functional cost components: (1) Supply, (2) Base, (3) Extra Capacity, (4) Customer, and (5) Direct Assignment, described as follows:

- Supply costs are associated with paying OCWD and MWDOC for groundwater and import water, respectively.
- Base costs represent operating and capital costs of the system associated with service to customers to the extent required under constant or average annual load conditions without the elements necessary to meet water consumption variations or peak demands.
- Extra Capacity costs represent operating and capital costs incurred to meet peaking demands. Peaking demands represent water consumption more than the average rate of use.
- Customer costs are those expenditures that tend to vary in proportion to the number of customers connected to the system. These include meter reading, billing, collecting, accounting, maintenance, and capital costs associated with meters and services.
- Directly assigned costs are specifically identified as those incurred to serve specific customers. These costs include conservation, recycled water supply and pump station, and fire protection.

4.3 Allocation to Cost Components

The next step of the cost-of-service process involves allocating each cost element to functional cost components based on the parameter or parameters having the most significant influence on the magnitude of that cost element. O&M expenses are allocated directly to appropriate cost components. A detailed allocation of related capital investment is used as a proxy for allocating capital and replacement costs. The separation of costs into functional components provides a means for distributing such costs to the various types of customers based on their respective responsibilities for each type of service.

4.3.1 System Base, Max Day, and Max Hour Allocations

The water system consists of various facilities designed and operated to fulfill a given function. For the system to provide adequate service to its customers, it must be capable of meeting the annual volume requirements and the maximum demand rates placed on it. Because not all customers and types of customers exert maximum demand simultaneously, the capacities of the various facilities must meet the maximum coincidental demand of all customers. Each water service facility within the system has an underlying average demand exerted by the customers to whom the base cost component applies. For those facilities designed solely to meet average day demand, 100% of the costs go to the base cost component. Extra capacity requirements associated with coincidental demands more than average use consist of maximum daily and maximum hourly demand subcomponents.

The first step in determining the allocation percentages for volume-related cost allocations is to assign system peaking factors. The base element equals the average daily demand (ADD) and is assigned a value of 1.0. Based on the City's 2019 Water Master Plan, the Water Utility's maximum day (max day) demand is 1.85 times the ADD. The maximum hourly (max hour) demand is 2.6 times the ADD.

The costs associated with facilities required to meet maximum day demand are allocable to base and maximum day extra capacity, as shown below for the Water Utility.

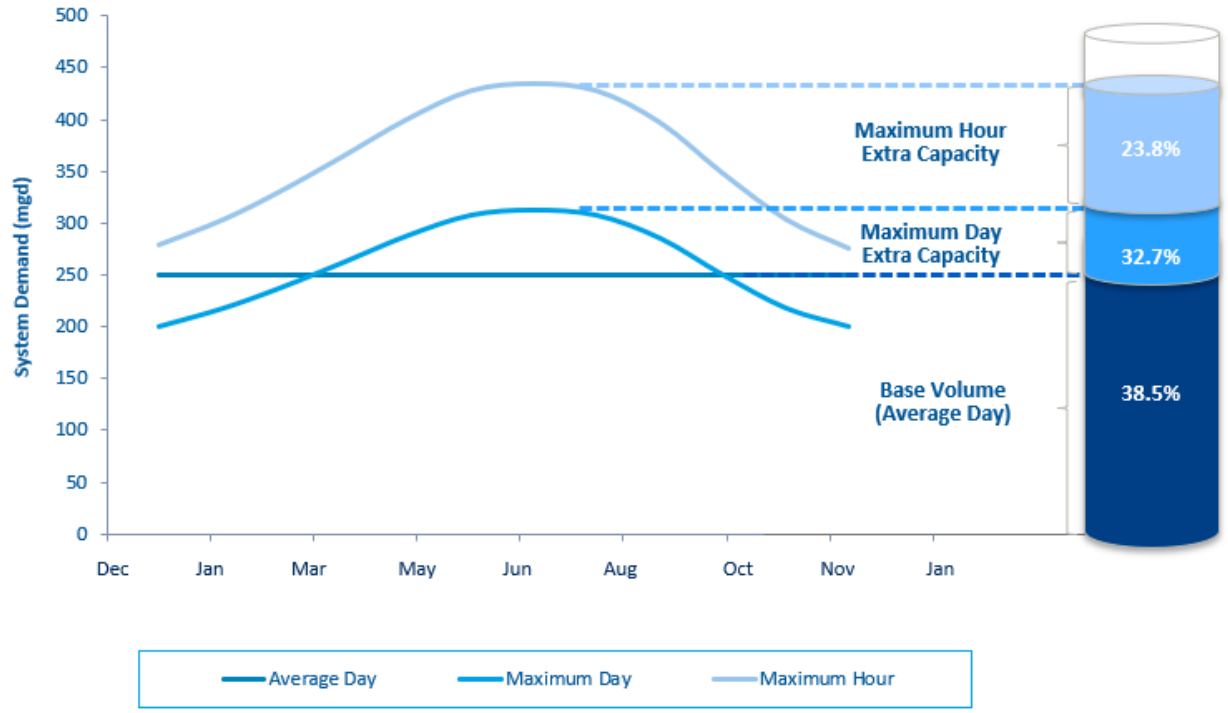
- Base = (1.0/1.85) x 100 = 54.1%
- Max Day = (1.85 – 1.0)/1.85 x 100 = 45.9%

These calculations indicate that the average or base use requires 54.1% of the capacity of facilities designed and generated to meet maximum day demand, and the remaining 45.9% meets maximum day extra capacity requirements.

The costs associated with facilities required to meet maximum hour demand are allocable to base, maximum day extra capacity, and maximum hour extra capacity as follows:

- Base = (1.0/2.6) x 100 = 38.5%
- Max Day = (2.6 – 1.0)/2.6 x 100 = 32.7%
- Max Hour = (2.6 – 1.85)/2.6 x 100 = 28.8%

Figure 4-1 Illustrative Example of Capacity Demands



For this Study, the average day, max day, and max hour factors are based on an average of three years of billing data. The calculated results, which followed the methodology outlined in Appendix A of the M1 Manual, indicate a max day factor of 1.90 (compared to the Master Plan value of 1.85) and a max hour factor of 2.54 (compared to the Master Plan of 2.60).

4.3.2 Allocation of Operating and Maintenance Expenses

When allocating O&M expenses, the M1 Manual refers to functional cost components. Simply put, these cost costs correspond to the activities that the Water Utility undertakes to provide its customers with water: identify the water source, pump it, treat it, distribute it to customers, bill for services, and collect revenues. Where possible, the O&M expenses for FY 2025 are directly allocated to the cost components to the extent possible. For those costs that are not directly allocated to one cost center, Black & Veatch

identified cost elements specific to certain functions and assigned them based on the factors noted in Section 4.1 to allocate the operating expenses to the cost components. Consider, for example, a storage tank. Its purpose is to provide water during peak times. That is, when demand is greater than average, such as on a very hot summer day. The design of the storage tank is based on meeting maximum day needs. Therefore, the O&M costs for this tank are spread out between the base and max day elements.

The elements general to all operations were allocated based on the average of all other costs. The direct assignment represents conservation, recycled water, and fire protection. Table 4-2 shows the allocation basis for operating costs, and Table 4-3 shows the total allocation of operating costs serving water customers.

4.3.3 Allocation of Capital Investments

In allocating the capital investment for FY 2025, the existing fixed assets (which serve as a proxy for the capital investments) and proposed CIP are allocated directly to cost components to the extent possible. The allocation of costs in this manner provides a basis for annual investment in water system facilities. Using the existing fixed assets and CIP, the capital costs can be allocated using the total net system investment distribution across the functional cost components.

Table 4-4 shows the allocation basis for capital expenditures, and Table 4-5 shows the allocation of existing system investment serving water customers. The total net system investment of $116.3M shown on Line 12 for the Water Utility represents the Test Year original cost less accumulated depreciation of the system in service for existing fixed assets and proposed CIP. The total net system investment reflects the Water Utility's fixed asset listing ending June 30, 2022. This value represents the original cost (book value) of the assets.

Table 4-2 Allocation Basis for O&M Expenditures

Line No.	Description	Common to All Customers							Recycled Water		Fire Protection	Allocation Basis
		Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station		
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.					
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
	Operating Expenses											
1	Salaries	0.0%	46.2%	27.6%	4.3%	10.7%	0.0%	5.6%	3.0%	0.3%	2.2%	Average O&M (less CS + RWS)
2	Benefits	0.0%	46.2%	27.6%	4.3%	10.7%	0.0%	5.6%	3.0%	0.3%	2.2%	Average O&M (less CS + RWS)
3	Contract Services	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.8%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
4	Water Conservation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	Conservation
5	Meter Reading	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
6	Utilities	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.8%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
7	Electricity	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
8	Supplies & Materials	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.8%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
9	Chemicals	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Base
10	MWDOC Import Water	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
11	OCWD Groundwater	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
12	OCWD RW	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	Recycled Water
13	Water Conservation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	Conservation
14	Maintenance & Repair	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.8%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
15	Source of Supply	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Base
16	Pump Station	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
17	Treatment	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Treatment
18	T&D	0.0%	36.5%	31.1%	27.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	T&D
19	Meters & Services	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
20	Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	Hydrants
21	RW Pump Station	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	RW - PS
22	Travel & Training	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.8%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
23	General Expenses	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.8%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
24	Customer Billing	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	Customer
25	Internal Svc Charge	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.8%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
26	Insurance	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.8%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
27	Transfers	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.8%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)

Table 4-3 Allocation of O&M Expenditures (FY 2025)

Line No.	Description	Total Costs	Common to All Customers						Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.				
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Operating Expenses											
1	Salaries	3,745,100	0	1,729,600	1,032,400	162,900	402,100	0	209,000	112,400	12,500	84,200
2	Benefits	2,245,300	(100)	1,037,000	619,000	97,600	241,100	0	125,300	67,400	7,500	50,500
3	Contract Services	604,500	0	287,800	171,800	27,100	66,900	0	34,800	0	2,100	14,000
4	Water Conservation	227,000	0	0	0	0	0	0	227,000	0	0	0
5	Meter Reading	104,000	0	0	0	0	104,000	0	0	0	0	0
6	Utilities	87,100	0	41,500	24,800	3,900	9,600	0	5,000	0	300	2,000
7	Electricity	2,090,000	0	1,129,700	960,300	0	0	0	0	0	0	0
8	Supplies & Materials	169,400	0	80,700	48,100	7,600	18,800	0	9,700	0	600	3,900
9	Chemicals	368,000	0	368,000	0	0	0	0	0	0	0	0
10	MWDOC Import Water	4,635,500	4,635,500	0	0	0	0	0	0	0	0	0
11	OCWD Groundwater	8,342,500	8,342,500	0	0	0	0	0	0	0	0	0
12	OCWD RW	490,500	0	0	0	0	0	0	0	490,500	0	0
13	Water Conservation	216,500	0	0	0	0	0	0	216,500	0	0	0
14	Maintenance & Repair	881,000	0	419,500	250,400	39,500	97,500	0	50,700	0	3,000	20,400
15	Source of Supply	181,300	0	181,300	0	0	0	0	0	0	0	0
16	Pump Station	74,300	0	40,200	34,100	0	0	0	0	0	0	0
17	Treatment	84,000	0	45,400	38,600	0	0	0	0	0	0	0
18	Storage	101,000	0	8,100	0	90,900	0	0	0	0	0	2,000
19	T&D	242,600	0	88,700	75,300	66,500	0	0	0	0	0	12,100
20	Meters & Services	329,500	0	0	0	0	329,500	0	0	0	0	0
21	Hydrants	74,900	0	0	0	0	0	0	0	0	0	74,900
22	RW Pump Station	13,200	0	0	0	0	0	0	0	0	13,200	0
23	Travel & Training	35,400	0	16,900	10,100	1,600	3,900	0	2,000	0	100	800
24	General Expenses	1,383,000	0	658,300	393,100	62,000	153,100	0	79,600	0	4,800	32,100
25	Customer Billing	1,219,700	0	0	0	0	0	1,219,700	0	0	0	0
26	Internal Svc Charge	1,420,200	0	676,200	403,600	63,700	157,200	0	81,700	0	4,900	32,900
27	Insurance	1,308,400	0	622,900	371,900	58,700	144,800	0	75,300	0	4,500	30,300
28	Capital Expenditures	56,300	0	17,400	13,200	19,500	3,300	0	0	0	400	2,500
29	Transfers	(593,200)	0	(282,400)	(168,600)	(26,600)	(65,700)	0	(34,100)	0	(2,000)	(13,800)
30	Total O&M Expenses	$ 30,137,000	$ 12,977,900	$ 7,166,800	$ 4,278,100	$ 674,900	$ 1,666,100	$ 1,219,700	$ 1,082,500	$ 670,300	$ 51,900	$ 348,800
	Less Other Revenue											
31	Miscellaneous Revenues	683,000	0	325,200	194,100	30,600	75,600	0	39,300	0	2,400	15,800
32	Other Adjustments	(1,502,200)	0	(715,300)	(426,900)	(67,300)	(166,300)	0	(86,400)	0	(5,200)	(34,800)
33	Net Operating Expenses	$ 30,956,200	$ 12,977,900	$ 7,556,900	$ 4,510,900	$ 711,600	$ 1,756,800	$ 1,219,700	$ 1,129,600	$ 670,300	$ 54,700	$ 367,800

Table 4-4 Allocation Basis for Capital Costs

Line No.	Description	Common to All Customers							Recycled Water		Fire Protection	Allocation Basis
		Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station		
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.					
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
	Plant Assets											
1	Land	2.3%	28.8%	23.4%	34.6%	5.9%	0.0%	0.0%	0.0%	0.7%	4.4%	Average Net Plant
2	Source of Supply	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
3	Pumping	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
4	Storage	0.0%	8.0%	0.0%	90.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	Storage
5	Treatment	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Treatment
6	Transmission & Distribution	0.0%	36.5%	31.1%	27.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	T&D
7	Meters & Services	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
8	Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	Hydrants
9	Recycled Water	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	Recycled Water
10	Recycled Water - PS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	RW - PS
11	General Plant	2.3%	28.8%	23.4%	34.6%	5.9%	0.0%	0.0%	0.0%	0.7%	4.4%	Average Net Plant

Table 4-5 Allocation of Capital Costs (FY 2025)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.				
	Plant Assets											
1	Land	2,219,500	51,000	639,200	518,600	767,000	131,700	0	0	0	15,100	96,900
2	Source of Supply	2,594,200	2,594,200	0	0	0	0	0	0	0	0	0
3	Pumping	2,361,200	0	1,276,300	1,084,900	0	0	0	0	0	0	0
4	Storage	18,550,000	0	1,484,000	0	16,695,000	0	0	0	0	0	371,000
5	Treatment	0	0	0	0	0	0	0	0	0	0	0
6	Transmission & Distribution	81,424,100	100	29,751,100	25,288,400	22,313,300	0	0	0	0	0	4,071,200
7	Meters & Services	6,700,200	0	0	0	0	6,700,200	0	0	0	0	0
8	Hydrants	485,700	0	0	0	0	0	0	0	0	0	485,700
9	Recycled Water	0	0	0	0	0	0	0	0	0	0	0
10	Recycled Water - PS	765,900	0	0	0	0	0	0	0	0	765,900	0
11	General Plant	1,168,200	26,900	336,500	272,900	403,700	69,300	0	0	0	7,900	51,000
12	Total Plant Assets	$116,269,000	$2,672,200	$33,487,100	$27,164,800	$40,179,000	$6,901,200	$0	$0	$0	$788,900	$5,075,800
13	Capital Costs	$7,875,200	$2,449,300	$2,268,200	$1,839,900	$2,721,400	$467,400	$0	$0	$0	$53,400	$343,800
	Less Other Revenue											
14	Miscellaneous Revenues	0	0	0	0	0	0	0	0	0	0	0
15	Other Adjustments	(401,700)	(9,300)	(115,700)	(93,900)	(138,800)	(23,800)	0	0	0	(2,700)	(17,500)
16	Net Capital Expenses	$8,276,900	$2,458,600	$2,383,900	$1,933,800	$2,860,200	$491,200	$0	$0	$0	$56,100	$361,300

4.4 Units of Service

After allocating O&M and capital costs to the functional cost categories, the next step is identifying the billing determinants associated with the cost categories. The billing determinant for costs with a volume component (e.g., purchased water) will be HCF or HCF/day. Billing costs will use the number of bills. Meter costs use an equivalent meter basis, and fire protection is based on equivalent hydrants.

To properly recognize the cost of service, each customer class receives its share of base, maximum day, peak hour, and customer costs. Following the allocation of costs, the total cost responsibility for each customer class is developed using unit costs of service for each cost function and subsequently assigning those costs to the customer types based on the respective service requirements of each. The number of units of service required by each customer class provides a means for the proportionate distribution of costs previously allocated to respective cost categories. The derivation of the units of service for FY 2025 is as follows:

- Supply and base costs vary with the volume of water consumed and distributed to the customers on that basis.

Type	Annual Water Consumption	Average Daily Water Consumption
	(HCF) [1]	(HCF/day) [2]=[1]/365
Water	5,439,576	14,903
Recycled Water	244,511	670

- Extra Capacity costs are those associated with meeting peak demand rates of water use and distributed to the customers based on the respective class capacity requirements more than average rates of use. The analysis followed the capacity factor methodology outlined in Appendix A of the AWWA M1 Manual to derive peak consumption information from the monthly consumption records in the City's Customer Information System, which helps estimate the maximum day and peak hour ratios.

Line No.	Description	Water
[1]	FY 2025 Annual Consumption	5,439,576 HCF
[2]=[1]/365	Average Daily Consumption	14,903 HCF/day
[3]	Max Day Factor	1.9
[4]=[2]x[3]	Max Day Total Daily Capacity	28,316 HCF/day
[5]=[4]-[2]	Extra Max Day Capacity	13,413
[6]	Max Hour Factor	2.55
[7]=[2]x[6]	Max Hour Total Daily Capacity	38,003 HCF/day
[8]=[7]-[4]	Extra Max Hour Capacity	9,687 HCF/day

Note: The water max day factor of 1.90 and max hour factor of 2.55 are derived from historical consumption.

The methodology in AWWA M1 was used to determine the max day and max hour capacities for fire services. It was assumed that fire protection requires flows for two simultaneous fires: (1) 3,000 gallons per minute (gpm) for a minimum of 3 hours for a commercial customer and (2) 1,000 gpm for 2 hours for a single-family residential customer. These are fire demand requirements put forth by the 2019 Water Master Plan.

Fire Protection Capacity Demand	Fire #1	Fire #2	Weighted Combined	Notes
	[1]	[2]	[3]=[1]+[2]	
Fire Flow (gpm)	3,000	1,000		
Duration (hr)	3	2		
Max Day Demand (HCF/day)	722	160	882	HCF/day = gpm x hr x 60 min/hr / 748 gallons/HCF
Max Hour Demand (HCF/day)	5,775	1,925	7,700	HCF/day = gpm x 24 hr x 60 min/hr / 748 gallons/HCF – less max day demand

Note: The max day and max hour demand for public fire is 87.5% of [3], and for private fire is 12.5% of [3], as shown below in private fire.

- Meter & service costs are those associated with operating and maintaining the water meters. Meter & service costs are distributed based on the estimated number of equivalent meters for each customer, which relies on the total number of meters serving respective types and the hydraulic capacity ratio of the meters to the ¾" inch meter. The equivalent meter ratios adopted in this analysis are consistent with City meter types and the AWWA M1 Manual.

Meter Size	Number of Connections		Meter Hydraulic Capacity	Meter Hydraulic Ratio	Equivalent Meters	
	Water	Recycled Water	(gpm)		Water	Recycled Water
	[1]	[2]	[3]	[4]=[3]/30	[5]=[1]x[4]	[6]=[1]x[4]
5/8", ¾"	16,110	0	30	1	16,110	0
1"	7,891	0	50	1.67	13,152	0
1-1/2"	562	0	100	3.33	1,873	0
2"	1,213	0	160	5.33	6,469	0
3"	32	2	435	14.5	464	11
4"	49	1	750	25	1,225	15
6"	16	0	1,600	53.33	853	0
8"	9	1	2,800	93.33	840	53
10"	0	2	4,200	140	0	187
12"	1	0	5,300	176.67	177	0
Total	**25,883**	**6**			**41,163**	**265**

- Customer billing costs are distributed based on the number of bills for each customer.

Meter Size	Number of Connections		Number of Monthly Bills (see note)	
	Water	Recycled Water	Water	Recycled Water
5/8", ¾"	16,110	0	193,320	0
1"	7,891	0	94,692	0
1-1/2"	562	0	6,744	0
2"	1,213	0	14,556	0
3"	32	2	384	24
4"	49	1	588	12
6"	16	0	192	0
8"	9	1	108	12
10"	0	2	0	24
12"	1	0	12	0
Total	**25,883**	**6**	**310,596**	**72**

Note: The City has monthly and bi-monthly customers; therefore, the connections are multiplied by 12 or 6.

- Conservation costs vary with the volume of water consumed and distributed to the customers on that basis. The consumption is noted in the supply and base section above.
- Recycled water costs vary with the recycled water consumed and distributed to the customers on that basis.

Type	Annual Water Consumption	Average Day Water Consumption
	(HCF) [1]	(HCF/day) [2]=[1]/365
Recycled Water	244,511	670
Recycled Water through the Pump Station	222,559	610

- Private fire-protection cost allocations use equivalent fire hydrants. A standard equivalent hydrant represents the fire flow through a 6" fire hydrant. Fire demand factors are derived based on the diameter of the connection raised to the 2.63 power.

Meter Size	Number of Connections		Number of Monthly Bills (see note)		Fire Demand Factor	Equivalent Hydrants	
	Public Fire [1]	Private Fire [2]	Public Fire [3]	Private Fire [4]	[5]	Public Fire [6]=[1]x[5]	Private Fire [7]=[1]x[5]
5/8"		0		0	0.29		0
1"		10		120	1		10
1-1/2"		0		0	2.9		0
2"		11		132	6.19		68
2-1/2"		3		36	11.13		33
3"		1		12	17.98		18
4"		176		2,112	38.22		6,744
6"	2,723	157	0	1,884	111.31	303,100	17,476
8"		76		912	237.21		18,028
10"		2		24	426.58		853
Total	**2,723**	**436**	**0**	**5,232**		**303,100**	**43,230**
Split						**87.50%**	**12.50%**

Note: The City has monthly and bi-monthly customers; therefore, the connections are multiplied by 12 or 6.

Table 4-6 summarizes the FY 2025 units of service for the various customer types.

4.5 Cost of Service Allocations

The Study applies the unit costs of service to each customer class's respective service requirements to determine the cost of service for each customer class. The total unit costs of service applied to the respective requirements for each customer class results in the total cost of service for each customer class.

4.5.1 Units Costs of Service

The FY 2025 unit cost of service for each functional cost component is simply the total cost divided by the applicable units of service, as shown in Table 4-7. On Line 3, the total costs represent the cost that rates need to recover, as demonstrated in Table 4-1, Line 16. The net O&M cost includes O&M (including water purchase) less revenue from other sources and adjustments. Line 5 represents the unit costs for the entire water system regardless of customer type. After that, the unit costs are used to allocate the costs to the specific customer types.

4.5.2 Distribution of Costs of Service to Customer Types

Applying the unit costs to the units for each customer class produces the customer class costs. This process is illustrated in Table 4-8, in which unit costs are applied to the customer class units of service for FY 2025. The costs attributable to each customer class reflect the functional cost components described in Section 4.1. Each customer class places a burden on the system in different ways; thus, the allocation of the units is representative of this burden.

An example of the application of unit costs is shown below for illustrative purposes.

Line No.	Description	Supply Component	Units
1	Unit Cost (Table 4-7, Line 5)	$2.42	per HCF
2	Total Consumption (Table 4-8, Line 1)	5,439,576	HCF
3	Total Allocated Cost	$13,163,774	

Note: The numbers in the tables are rounded to the nearest hundred, but calculations are performed based on non-rounded values. Differences are due to rounding.

Table 4-6 Units of Service (FY 2025)

Line No.	Description	Consumption		Maximum Day			Maximum Day			Meters	Customer	Fire Protection
		Annual	Avg. Day	Factor	Total	Extra	Factor	Total	Extra			
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Units of Measure	(HCF)	(HCF/day)		(HCF/day)	(HCF/day)		(HCF/day)	(HCF/day)	(EMs)	(bills)	(EHs)
	Water											
1	All Customers	5,439,576	14,903	190%	28,316	13,413	255%	38,003	9,687	41,163	310,596	
2	Subtotal	5,439,576	14,903		28,316	13,413		38,003	9,687	41,163	310,596	
	Recycled Water											
3	All Customers	244,511	670							265	72	
4	Subtotal	244,511	670							265	72	
	Fire Service											
5	Public Fire				772	772		6,739	5,967			303,100
6	Private Fire Service				110	110		961	851	436	5,232	43,230
7	Subtotal				882	882		7,700	6,818	436	5,232	346,330
8	Total Water System	5,684,088	15,573		29,198	14,295		45,703	16,505	41,865	315,900	346,330

Note: Recycled water consumption is 222,559 HCF through the Pump Station. City recycled water does not go through the pump station.

Table 4-7 Units Cost of Service (FY 2025)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.				
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Water Utility											
1	Net Operating Expense	30,956,200	12,977,900	7,556,900	4,510,900	711,600	1,756,800	1,219,700	1,129,600	670,300	54,700	367,800
2	Capital Costs	8,276,900	190,400	2,383,900	1,933,800	2,860,200	491,200	0	0	0	56,100	361,300
3	Total Cost of Service	$39,233,100	$13,168,300	$9,940,800	$6,444,700	$3,571,800	$2,248,000	$1,219,700	$1,129,600	$670,300	$110,800	$729,100
4	Units of Service (Total)		5,439,576	5,439,576	14,295	16,505	41,865	315,900	5,439,576	244,511	222,559	346,330
	Units of Measure		HCF	HCF	HCF/day	HCF/day	EM	Bill	HCF	HCF	HCF	EH
5	Cost per Unit		$2.42	$1.83	$450.85	$216.41	$53.70	$3.86	$0.21	$2.74	$0.50	$2.11
	Units of Measure		per HCF	per HCF	per HCF/day	per HCF/day	per EM	per Bill	per HCF	per HCF	per HCF	per EH

Table 4-8 Distribution of Costs to Customer Types (FY 2025)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
			Base		Max. Day	Max. Hour	Meters	Cust/Bill.				
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
1	Cost per Unit		$ 2.42 per HCF	$ 1.83 per HCF	$ 450.85 per HCF/day	$ 216.41 per HCF/day	$ 53.70 per EM	$ 3.86 per Bill	$ 0.21 per HCF	$ 2.74 per HCF	$ 0.50 per HCF	$ 2.11 per EH
	Water											
	All Customers											
2	Units		5,439,576	5,439,576	13,413	9,687	41,163	310,596	5,439,576			
3	Allocation of costs of service	35,791,700	13,168,300	9,940,800	6,047,100	2,096,300	2,210,400	1,199,200	1,129,600			
	Recycled Water											
	All Customers											
4	Units						265	72		244,511	222,559	
5	Allocation of costs of service	795,600					14,200	300		670,300	110,800	
	Fire Service											
	Public Fire											
6	Units				772	5,967						303,100
7	Allocation of costs of service	2,277,400			348,000	1,291,300						638,100
	Private Fire Service											
8	Units				110	851	436	5,232				43,230
9	Allocation of costs of service	368,400			49,600	184,200	23,400	20,200				91,000
10	TOTAL COSTS OF SERVICE	$ 39,233,100	$ 13,168,300	$ 9,940,800	$ 6,444,700	$ 3,571,800	$ 2,248,000	$ 1,219,700	$ 1,129,600	$ 670,300	$ 110,800	$ 729,100

5.0 Rate Design

The initial consideration in deriving rate schedules for water service is establishing equitable charges to the customers commensurate with the cost of providing that service. While the cost-of-service allocations to customer types should not be construed as literal or exact determinations, they offer a guide to the necessity and extent of rate adjustments. Practical considerations sometimes modify rate adjustments by considering additional factors such as the extent of bill impacts, existing contracts, and historical local policies and practices.

5.1 Existing Rates

The existing rates of the Water Utility consist of a fixed component in the form of a monthly fixed service charge and a variable component in the form of a consumption charge. The monthly fixed service charge is based on meter size and applied regardless of consumption. The consumption charge is based on units of consumption (1 unit = 1 HCF = 748 gallons). The City has separate fixed charges for recycled water and private fire services. Table 3-3, presented earlier in this report, summarizes the existing water rates.

5.2 Proposed Rates

The cost-of-service analysis described in the preceding sections of this report provides a basis for the design of water rates.

5.2.1 Monthly Fixed Service Charge

The Water Utility provides water service to approximately 25,800 water service accounts and six recycled water accounts. These customers have dedicated water and recycled water line connections to the water systems. Therefore, water charges include capacity, water supply, public fire service costs, meter maintenance, and the cost of issuing bills. The following is a derivation of the different cost components that comprise the total charge. ***The numbers within the tables are rounded, but the calculations are based on non-rounded values. Differences are due to rounding.***

5.2.1.1 Water Monthly Fixed Charge

- Capacity Cost: The water system is designed to meet peak consumption demands plus fire demand requirements. Therefore, the water system will have extra capacity when handling average flow demands. To distribute the capacity costs, meter ratios based on maximum operating capacities by meter size were used, as shown in AWWA M1, Table B-1. Using meter ratios, we recognize that as meter size increases, so does the capacity. For example, customers with a 4" meter expect to be able to use more water (at a higher flow capacity) than customers with a ¾" meter. Consequently, the City's water system must maintain assets sized accordingly and capable of providing customers the level of service expected from their meter connection when the tap turns on.

Line No.		Total Costs	Notes
[1]	Total Capacity Costs	$18,084,200	Table 4-8, Row 3, Column 3,4,5
[2]	Capacity costs allocated to Fixed Charge	50.90%	
[3]	Total Capacity Costs Recovered through Fixed Charge	$9,208,700	[3]=[1]x[2]
[4]	Equivalent Meters (EM)	41,163	[4] See Section 4.3
[5]	Unit Cost (per EM)	$18.64	[5]=[3]/[4]

- Meter & Services Cost: The water system incurs direct operating and maintenance costs associated with meter servicing and maintenance of the entire water system. The total meter & service costs are split by equivalent meters to determine the costs for water service.

Line No.		Equivalent Meters	Total Costs	Notes
		[a]	[b]	[c]
[1]	Total Meter & Services Costs		$2,248,000	Table 4-7, Row 3, Column 6
[2]	Water	41,163 (98.33%)	$2,210,400	[b2]=[b1]x[a2] [a2] See Section 4.3
[3]	Unit Cost (per EM)		$4.47	[b3]=[b2]/[a2]/12

- Public Fire Costs: The water system incurs annual direct operating and maintenance costs associated with fire protection for items such as servicing fire laterals and fire hydrants. The total direct fire protection costs are split between public and private based on equivalent hydrants. In addition, the water system is also designed to meet peak consumption demands and fire demand requirements. To determine fire protection demands for public fire service, the total demand is determined and split between public and private based on equivalent hydrants.

Line No.		Cost Allocation	Equivalent Meters	Total Costs	Notes
		[a]	[b]	[c]	[d]
[1]	Total Direct Fire Costs			$729,100	Table 4-7, Row 3, Column 11
[2]	Public Fire Service	87.50%		$638,100	[c2]=[c1]x[a2] [a2] See Section 4.3
[3]	Total Capacity Costs			$10,016,500	Table 4-7, Row 3, Column 4,5
[4]	Public Fire Service			$1,639,300	Table 4-8, Row 7, Column 4,5
[5]	Water		41,163		[b5] See Section 4.3
[6]	Unit Cost (per EM)			$4.61	[c6]=([c2]+[c4])/[b5]

- Customer Billing Cost: The water system incurs direct operating costs associated with customer billing, such as meter reading, customer bills, customer service, etc. To determine the costs for water service, the total customer costs are split by bills generated.

Line No.		Total Bills	Total Costs	Notes
		[a]	[b]	[c]
[1]	Total Customer Costs		$1,219,700	Table 4-7, Row 3, Column 7
[2]	Water	310,596 (98.32%)	$1,199,200	[b2]=[b1]x[a2] [a2] See Section 4.3
[3]	Unit Cost (per Bill)		$3.86	[b3]=[b2]/[a2]

Table 5-1 and Table 5-3 demonstrate the cost elements incorporated into the monthly service charge for FY 2025. Table 5-2 and Table 5-4 shows the five-year fixed service charge rate schedule. FYs 2026 to 2028 are derived using the same methodology described for FY 2025.

5.2.1.2 Recycled Water Monthly Fixed Charge

- Recycled Water Supply Cost: The recycled water system purchases recycled water from OCWD. The total recycled water supply costs are allocated by consumption.

Line No.		Total Costs	Notes
[1]	Total Recycled Water Supply Costs	$670,300	Table 4-7, Row 3, Column 9
[2]	Allocated to Fixed Charge	3.00%	
[3]	Fixed Charge Recycled Water Supply Costs	$20,100	[3]=[1]x[2]
[4]	Equivalent Meters (EM)	265	[4] See Section 4.3
[5]	Unit Cost (per EM)	$6.32	[5]=[3]/[4]/12

- Meter & Services Cost: The recycled water system incurs direct operating and maintenance costs associated with meter servicing and maintenance of the entire water system. To determine the costs for recycled water service, the total meter & service costs are split by equivalent meters.

Line No.		Equivalent Meters	Total Costs	Notes
		[a]	[b]	[c]
[1]	Total Meter & Services Costs		$2,248,000	Table 4-7, Row 3, Column 6
[2]	Recycled Water	265 (0.63%)	$14,200	[b2]=[b1]x[a2] [a2] See Section 4.3
[3]	Unit Cost (per EM)		$4.47	[b3]=[b2]/[a2]/12

- Customer Billing Cost: The recycled water system incurs direct operating costs associated with customer billing, such as meter reading, customer bills, customer service, etc. To determine the costs for recycled water, the total customer costs are split by bills generated.

Line No.		Total Bills	Total Costs	Notes
		[a]	[b]	[c]
[1]	Total Customer Costs		$1,219,600	Table 4-7, Row 3, Column 7
[2]	Recycled Water	72 (0.02%)	$300	[b2]=[b1]x[a2] [a2] See Section 4.3
[3]	Unit Cost (per Bill)		$3.86	[b3]=[b2]/[a2]

5.2.2 Monthly Private Fire Service

The Water Utility provides public fire protection services to everyone in the City of Newport Beach. In addition, the Water Utility provides fire service to 436 private fire service accounts. These customers have a dedicated water line connection to the water system specifically for fire protection. Circumstances where a private fire service account may be requested include commercial buildings with insurance requirements. The private fire service charge includes capacity costs, direct costs, the cost of meter maintenance, and the cost of issuing bills. The following is a derivation of the different cost components that comprise the total charge.

- Capacity Cost: The water system is designed to meet peak consumption demands plus fire demand requirements. To determine fire protection demands for private fire service, the total demand is determined and split between public and private based on equivalent hydrants.

Line No.		Equivalent Hydrants	Total Costs	Notes
[1]	Total Capacity Costs		$10,016,500	Table 4-7, Row 3, Column 4,5
[2]	Private Fire Service		$233,800	Table 4-8, Row 9, Column 4,5
[3]	Equivalent Hydrants (EH)	43,230		See Section 4.3
[4]	Unit Cost (per EH)		$0.45	[4]=[2]/[3]/12

- Private Fire Cost: The water system incurs annual direct operating and maintenance costs associated with fire protection, such as servicing fire laterals and fire hydrants. To determine direct fire protection costs for private fire service, the total direct fire protection costs are split between public and private based on equivalent hydrants.

Line No.		Cost Allocation	Equivalent Hydrants	Total Costs	Notes
		[a]	[b]	[c]	[d]
[1]	Total Direct Fire Costs			$729,100	Table 4-7, Row 3, Column 11
[2]	Private Fire Service	12.50%		$91,000	[b2]=[b1]x[a2] [a2] See Section 4.3
[3]	Equivalent Hydrants (EH)		43,230		[b3] See Section 4.3
[4]	Unit Cost (per EH)			$0.18	[c4]=[c2]/b3]/12

- Meter & Services Cost: The water system incurs direct operating and maintenance costs associated with meter servicing and maintenance of the entire water system. To determine direct fire protection costs for private fire service, the total meter & service costs are split by equivalent meters.

Line No.		Equivalent Meters	Total Bills	Total Costs	Notes
		[a]	[b]	[c]	[d]
[1]	Total Meter & Services Costs			$2,248,000	Table 4-7, Row 3, Column 6
[2]	Private Fire Service	436 (1.04%)		$23,400	[c2]=[c1]x[a2] [a2] See Section 4.3
[3]	Total Bills		5,232 (1.66%)		[b3] See Section 4.3
[4]	Unit Cost (per Bill)			$4.47	[c4]=[c2]/[b3]

- Customer Billing Cost: The water system incurs direct operating costs associated with customer billing, such as meter reading, customer bills, customer service, etc. To determine direct fire protection costs for private fire service, the total customer costs are split by bills generated.

Line No.		Total Bills	Total Costs	Notes
		[a]	[b]	[c]
[1]	Total Customer Costs		$1,219,600	Table 4-7, Row 3, Column 7
[2]	Private Fire Service	5,232 (1.66%)	$20,200	[b2]=[b1]x[a2] [a2] See Section 4.3
[3]	Unit Cost (per Bill)		$3.86	[b3]=[b2]/[a2]

Table 5-5 demonstrates the costs incorporated into the private fire service charge for FY 2025, and Table 5-6 shows the five-year rate schedule based on unit costs in future years. FYs 2026 to 2028 are derived using the same methodology described for FY 2025.

Table 5-1 Costs within the Water Monthly Fixed Charge (FY 2025)

Meter Size	Capacity, Meters & Svcs, Public Fire Service					Customer Billing			Total Service Charge
	Capacity Unit Cost	Mtrs & Svcs Unit Cost	Public Fire Unit Cost	Meter Ratio	Adjusted Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM	per EM	per EM		$	per Bill		$	$/Month
5/8", 3/4"	18.64	4.47	4.61	1.00	27.73	3.86	1.00	3.86	31.59
1"	18.64	4.47	4.61	1.67	46.21	3.86	1.00	3.86	50.07
1-1/2"	18.64	4.47	4.61	3.33	92.43	3.86	1.00	3.86	96.29
2"	18.64	4.47	4.61	5.33	147.88	3.86	1.00	3.86	151.74
3"	18.64	4.47	4.61	14.50	402.05	3.86	1.00	3.86	405.92
4"	18.64	4.47	4.61	25.00	693.20	3.86	1.00	3.86	697.06
6"	18.64	4.47	4.61	53.33	1,478.82	3.86	1.00	3.86	1,482.68
8"	18.64	4.47	4.61	93.33	2,587.94	3.86	1.00	3.86	2,591.80
*EM = Equivalent Meter									
Fixed Svc Charge Revenue	$ 9,208,700	$ 2,210,400	$ 2,277,400			$ 1,199,300			$ 14,895,800

Table 5-2 Proposed Water Monthly Fixed Charge

Customer Class	Calendar Year Ending December 31,				
	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028
Effective Date	1/1/2024*	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Monthly Fixed Service Charge					
Water	($/mo)	($/mo)	($/mo)	($/mo)	($/mo)
5/8", 3/4"	27.09	31.59	36.59	41.59	46.59
1"	41.99	50.07	58.30	66.53	74.75
1-1/2"	79.15	96.29	112.59	128.88	145.16
2"	123.76	151.74	177.74	203.71	229.65
3"	328.23	405.92	476.32	546.65	616.89
4"	562.45	697.06	818.33	939.47	1,060.46
6"	1,194.45	1,482.68	1,741.22	1,999.48	2,257.39
8"	2,086.69	2,591.80	3,044.12	3,495.95	3,947.18

*Previosuly approved in 2019 Rate Case.

Table 5-3 Costs within the Recycled Water Monthly Fixed Charge (FY 2025)

Meter Size	Water Supply, Meters & Svcs				Customer Billing			Total Service Charge
	Water Supply Unit Cost	Mtrs & Svcs Unit Cost	Meter Ratio	Adjusted Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM	per EM		$	per Bill		$	$/Month
5/8", 3/4"	6.32	4.47	1.00	10.79	3.86	1.00	3.86	14.66
1"	6.32	4.47	1.67	17.99	3.86	1.00	3.86	21.85
1-1/2"	6.32	4.47	3.33	35.98	3.86	1.00	3.86	39.84
2"	6.32	4.47	5.33	57.57	3.86	1.00	3.86	61.43
3"	6.32	4.47	14.50	156.52	3.86	1.00	3.86	160.38
4"	6.32	4.47	25.00	269.86	3.86	1.00	3.86	273.72
6"	6.32	4.47	53.33	575.70	3.86	1.00	3.86	579.56
8"	6.32	4.47	93.33	1,007.47	3.86	1.00	3.86	1,011.34
*EM = Equivalent Meter								
Fixed Svc Charge Revenue	$ 20,100	$ 14,200			$ 300			$ 34,600

Table 5-4 Proposed Recycled Water Monthly Fixed Charge

Customer Class	Calendar Year Ending December 31,				
	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028
Effective Date	1/1/2024*	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Monthly Fixed Service Charge					
Recycled Water	($/mo)	($/mo)	($/mo)	($/mo)	($/mo)
5/8", 3/4"	13.78	14.66	15.44	16.17	16.89
1"	19.78	21.85	23.06	24.16	25.25
1-1/2"	34.75	39.84	42.10	44.15	46.16
2"	52.73	61.43	64.95	68.13	71.25
3"	135.12	160.38	169.69	178.05	186.25
4"	229.50	273.72	289.66	303.96	317.97
6"	484.16	579.56	613.40	643.72	673.42
8"	843.69	1,011.34	1,070.43	1,123.38	1,175.23

*Previosuly approved in 2019 Rate Case.

Table 5-5 Costs within the Fire Service Charge (FY 2025)

Meter Size	Capacity, Private Fire Service				Meters & Services, Customer Billing				Total Service Charge
	Capacity Unit Cost	Private Fire Unit Cost	Meter Ratio	Adjusted Unit Cost	Mtrs & Svcs Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EH	per EH		$	per Bill	per Bill		$	$/Month
5/8"	0.45	0.18	0.29	0.18	4.47	3.86	1.00	8.34	8.52
1"	0.45	0.18	1.00	0.63	4.47	3.86	1.00	8.34	8.96
1-1/2"	0.45	0.18	2.90	1.82	4.47	3.86	1.00	8.34	10.15
2"	0.45	0.18	6.19	3.88	4.47	3.86	1.00	8.34	12.21
2-1/2"	0.45	0.18	11.13	6.97	4.47	3.86	1.00	8.34	15.31
3"	0.45	0.18	17.98	11.26	4.47	3.86	1.00	8.34	19.59
4"	0.45	0.18	38.32	23.99	4.47	3.86	1.00	8.34	32.33
6"	0.45	0.18	111.31	69.69	4.47	3.86	1.00	8.34	78.03
8"	0.45	0.18	237.21	148.52	4.47	3.86	1.00	8.34	156.85
10"	0.45	0.18	426.58	267.08	4.47	3.86	1.00	8.34	275.42
12"	0.45	0.18	689.04	431.41	4.47	3.86	1.00	8.34	439.75
*EH = Equivalent Hydrant									
Fixed Svc Charge Revenue	$ 233,800	$ 91,000			$ 23,400	$ 20,200			$ 368,400

Table 5-6 Proposed Fire Service Charge

Customer Class	Calendar Year Ending December 31,				
	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028
Effective Date	1/1/2024*	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Monthly Fixed Service Charge					
Private Fire Service	($/mo)	($/mo)	($/mo)	($/mo)	($/mo)
5/8"	13.87	8.52	9.12	9.66	10.20
1"	14.12	8.96	9.59	10.18	10.75
1-1/2"	14.74	10.15	10.86	11.55	12.23
2"	15.81	12.21	13.06	13.92	14.77
2-1/2"	17.44	15.31	16.36	17.48	18.60
3"	19.67	19.59	20.94	22.43	23.91
4"	26.34	32.33	34.53	37.10	39.68
6"	50.21	78.03	83.29	89.75	96.25
8"	91.43	156.85	167.41	180.56	193.84
10"	153.42	275.42	293.93	317.16	340.62
12"	239.31	439.75	469.29	506.48	544.06

*Previosuly approved in 2019 Rate Case.

5.2.3 Consumption Charge

This consumption charge is designed to recover costs associated with water supply, base, and extra capacity demands. These include fixed and variable costs incurred by the water system while providing the average annual usage and peaking demands. While most costs are fixed, such as personnel and direct and indirect charges, variable costs represent most of the costs through water production and purchase.

Table 5-7 Water Consumption Charge (FY 2025)

Line No.	Description	Capacity Cost Allocated to Cons Charge	Water Costs	Reference
1	Water Supply Costs		$ 13,168,300	(Table 4-8, Line 3, Col 2)
2	Capacity Costs	49.1%	8,875,500	(Table 4-8, Line 3, Col 3,4,5)
3	Conservation Costs		1,129,600	(Table 4-8, Line 3, Col 8)
4	Total Water Costs		$ 23,173,400	
5	Units of Service (HCF)		5,439,576	(Table 4-6, Line 1, Col 1)
6	Unit Cost of Service		$ 4.26	

Table 5-8 Recycled Water Consumption Charge (FY 2025)

Line No.	Description	Supply Cost Allocated to Cons Charge	Recycled Water Costs	Reference
1	Recycled Water Supply Costs	97.0%	$ 650,191	(Table 4-8, Line 5, Col 9)
2	Units of Service (HCF)		244,511	(Table 4-6, Line 3, Col 1)
3	Unit Cost of Service		$ 2.66	

Table 5-9 Recycled Water Pump Charge (FY 2025)

Line No.	Description	RW Pump Station Costs	Reference
1	RW Pump Costs	$ 110,800	(Table 4-8, Line 5, Col 10)
2	Units of Service (HCF)	222,559	(Table 4-6, Note)
3	Unit Cost of Service	$ 0.50	

Table 5-10 shows the five-year rate schedule for both water and recycled water. FYs 2026 to 2028 are derived using the same methodology described for FY 2025.

Table 5-10 Proposed Consumption Charges

Customer Class	Calendar Year Ending December 31,				
	CY 2025	CY 2026	CY 2027	CY 2028	CY 2029
Effective Date	1/1/2024*	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Usage Charges					
Water	($/HCF)	($/HCF)	($/HCF)	($/HCF)	($/HCF)
All Customers	4.16	4.26	4.36	4.46	4.56
Recycled Water					
All Customers	2.29	2.66	2.74	2.82	2.91
Pump Charge	0.72	0.50	0.52	0.55	0.57

*Previosuly approved in 2019 Rate Case.

5.3 Typical Monthly Costs under Proposed Charges

Table 5-11 compares typical monthly costs under approved rates in FY 2024 and the proposed schedule of water user rates in FY 2025 derived in this study for residential customers. The typical single-family residential uses 10 units of water.

Table 5-11 Typical Water Monthly Bill (FY 2025)

Monthly Usage	CY 2024 Existing Rates	CY 2025 Proposed Rates	Difference
(HCF)	($)	($)	($)
Typical Bill Single Family Residential by Consumption			
Meter Size 5/8", 3/4"			
0	$27.09	$31.59	$4.50
5	$47.89	$52.89	$5.00
10	$68.69	$74.19	$5.50
15	$89.49	$95.49	$6.00
20	$110.29	$116.79	$6.50

5.4 Summary of Rate Study

This rate study proposes adjustments to the City's water rates. A summary of actions and projections are as follows:

- Maintain the fixed service charge to reflect the nature of fixed costs associated with providing 24/7 water service and investments in infrastructure through the capital improvement program.
- Maintain the consumption charge to reflect the variable costs associated with operating costs, such as purchased water from wholesalers.
- Project water sales to remain flat in accordance with historical water demands and compliance with state water conservation targets.
- Operating Reserve. Strive to meet the fiscal policy of maintaining 33% of operating costs.
- Capital Reserves. Strive to maintain the minimum level of 75% of $7.5M capital costs.
- Rate Stabilization Reserve. Strive to meet the 30% of water use reduction target.
- Increase the annual investment in Capital Improvements from $7.5M to $10.2M by the end of the 5-year study period to reflect increased capital costs due to inflation.
- Maintain a comparable cost of delivering potable drinking water amongst neighboring water providers.

6.0 Appendix A – Cost of Service Analysis and Rate Tables

The following tables represent the cost-of-service analysis and rate design tables for FY 2026 to FY 2028 using the methodology described in Sections 4.0 and 5.0.

6.1 Fiscal Year 2026

Table 6-1 Allocation Basis for O&M Expenditures

		Common to All Customers							Recycled Water			
		Water	Base	Extra Capacity		Customer					Fire	Allocation
Line No.	Description	Supply	Base	Max. Day	Max. Hour	Meters	Cust/Bill.	Conservation	Water Supply	Pump Station	Protection	Basis
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
	Operating Expenses											
1	Salaries	0.0%	46.2%	27.6%	4.4%	10.8%	0.0%	5.5%	3.0%	0.3%	2.3%	Average O&M (less CS + RWS)
2	Benefits	0.0%	46.2%	27.6%	4.4%	10.8%	0.0%	5.5%	3.0%	0.3%	2.3%	Average O&M (less CS + RWS)
3	Contract Services	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.7%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
4	Water Conservation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	Conservation
5	Meter Reading	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
6	Utilities	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.7%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
7	Electricity	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
8	Supplies & Materials	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.7%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
9	Chemicals	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Base
10	MWDOC Import Water	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
11	OCWD Groundwater	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
12	OCWD RW	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	Recycled Water
13	Water Conservation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	Conservation
14	Maintenance & Repair	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.7%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
15	Source of Supply	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Base
16	Pump Station	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
17	Treatment	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Treatment
18	T&D	0.0%	36.5%	31.1%	27.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	T&D
19	Meters & Services	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
20	Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	Hydrants
21	RW Pump Station	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	RW - PS
22	Travel & Training	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.7%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
23	General Expenses	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.7%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
24	Customer Billing	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	Customer
25	Internal Svc Charge	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.7%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
26	Insurance	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.7%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
27	Transfers	0.0%	47.6%	28.4%	4.5%	11.1%	0.0%	5.7%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)

Table 6-2 Allocation of O&M Expenditures (FY 2026)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.					
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Operating Expenses											
1	Salaries	3,876,200	100	1,790,400	1,068,200	169,100	417,400	0	213,900	116,300	13,000	87,800
2	Benefits	2,323,900	0	1,073,400	640,400	101,400	250,300	0	128,300	69,700	7,800	52,600
3	Contract Services	628,700	0	299,300	178,600	28,300	69,800	0	35,800	0	2,200	14,700
4	Water Conservation	236,100	0	0	0	0	0	0	236,100	0	0	0
5	Meter Reading	108,200	0	0	0	0	108,200	0	0	0	0	0
6	Utilities	91,500	0	43,600	26,000	4,100	10,200	0	5,200	0	300	2,100
7	Electricity	2,194,500	0	1,186,200	1,008,300	0	0	0	0	0	0	0
8	Supplies & Materials	179,500	0	85,500	51,000	8,100	19,900	0	10,200	0	600	4,200
9	Chemicals	386,400	0	386,400	0	0	0	0	0	0	0	0
10	MWDOC Import Water	4,887,700	4,887,700	0	0	0	0	0	0	0	0	0
11	OCWD Groundwater	8,666,700	8,666,700	0	0	0	0	0	0	0	0	0
12	OCWD RW	505,300	0	0	0	0	0	0	0	505,300	0	0
13	Water Conservation	229,500	0	0	0	0	0	0	229,500	0	0	0
14	Maintenance & Repair	933,700	0	444,600	265,300	42,000	103,700	0	53,100	0	3,200	21,800
15	Source of Supply	192,200	0	192,200	0	0	0	0	0	0	0	0
16	Pump Station	78,800	0	42,600	36,200	0	0	0	0	0	0	0
17	Treatment	88,200	0	47,700	40,500	0	0	0	0	0	0	0
18	Storage	107,100	0	8,600	0	96,400	0	0	0	0	0	2,100
19	T&D	257,200	0	93,900	79,900	70,500	0	0	0	0	0	12,900
20	Meters & Services	349,200	0	0	0	0	349,200	0	0	0	0	0
21	Hydrants	79,400	0	0	0	0	0	0	0	0	0	79,400
22	RW Pump Station	14,000	0	0	0	0	0	0	0	0	14,000	0
23	Travel & Training	36,800	0	17,400	10,500	1,700	4,100	0	2,100	0	100	900
24	General Expenses	1,438,200	0	684,800	408,600	64,700	159,700	0	81,800	0	5,000	33,600
25	Customer Billing	1,268,400	0	0	0	0	0	1,268,400	0	0	0	0
26	Internal Svc Charge	1,499,900	0	714,400	426,100	67,400	166,500	0	85,300	0	5,200	35,000
27	Insurance	1,381,700	0	657,900	392,600	62,100	153,400	0	78,600	0	4,800	32,300
28	Capital Expenditures	58,500	0	18,500	14,100	19,700	3,300	0	0	0	400	2,500
29	Transfers	451,700	0	215,200	128,300	20,300	50,100	0	25,700	0	1,600	10,500
30	Total O&M Expenses	$ 32,549,200	$ 13,554,500	$ 8,002,600	$ 4,774,600	$ 755,800	$ 1,865,800	$ 1,268,400	$ 1,185,600	$ 691,300	$ 58,200	$ 392,400
	Less Other Revenue											
31	Miscellaneous Revenues	683,000	0	325,300	194,000	30,700	75,800	0	38,900	0	2,400	15,900
32	Other Adjustments	(1,695,100)	0	(807,200)	(481,600)	(76,200)	(188,200)	0	(96,400)	0	(5,900)	(39,600)
33	Net Operating Expenses	$ 33,561,300	$ 13,554,500	$ 8,484,500	$ 5,062,200	$ 801,300	$ 1,978,200	$ 1,268,400	$ 1,243,100	$ 691,300	$ 61,700	$ 416,100

Table 6-3 Allocation Basis for Capital Costs

Line No.	Description	Common to All Customers							Recycled Water		Fire Protection	Allocation Basis
		Water Supply	Base	Extra Capacity		Customer						
		Base		Max. Day	Max. Hour	Meters	Cust/Bill.	Conservation	Water Supply	Pump Station		
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
	Plant Assets											
1	Land	2.2%	29.5%	24.1%	33.7%	5.6%	0.0%	0.0%	0.0%	0.6%	4.3%	Average Net Plant
2	Source of Supply	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
3	Pumping	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
4	Storage	0.0%	8.0%	0.0%	90.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	Storage
5	Treatment	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Treatment
6	Transmission & Distribution	0.0%	36.5%	31.1%	27.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	T&D
7	Meters & Services	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
8	Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	Hydrants
9	Recycled Water	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	Recycled Water
10	Recycled Water - PS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	RW - PS
11	General Plant	2.2%	29.5%	24.1%	33.7%	5.6%	0.0%	0.0%	0.0%	0.6%	4.3%	Average Net Plant

Table 6-4 Allocation of Capital Costs (FY 2026)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
			Base		Max. Day	Max. Hour	Meters	Cust/Bill.				
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Plant Assets											
1	Land	2,219,500	48,000	655,800	534,200	747,000	124,300	0	0	0	14,000	96,200
2	Source of Supply	2,564,900	2,564,900	0	0	0	0	0	0	0	0	0
3	Pumping	4,109,900	0	2,221,600	1,888,300	0	0	0	0	0	0	0
4	Storage	18,191,700	100	1,455,300	0	16,372,500	0	0	0	0	0	363,800
5	Treatment	0	0	0	0	0	0	0	0	0	0	0
6	Transmission & Distribution	85,713,900	0	31,318,500	26,620,800	23,488,900	0	0	0	0	0	4,285,700
7	Meters & Services	6,631,600	0	0	0	0	6,631,600	0	0	0	0	0
8	Hydrants	483,800	0	0	0	0	0	0	0	0	0	483,800
9	Recycled Water	0	0	0	0	0	0	0	0	0	0	0
10	Recycled Water - PS	747,300	0	0	0	0	0	0	0	0	747,300	0
11	General Plant	1,467,300	31,700	433,500	353,200	493,800	82,200	0	0	0	9,300	63,600
12	Total Plant Assets	$122,129,900	$ 2,644,700	$ 36,084,700	$ 29,396,500	$ 41,102,200	$ 6,838,100	$ 0	$ 0	$ 0	$ 770,600	$ 5,293,100
13	Capital Costs	$ 8,268,700	$ 2,622,000	$ 2,443,100	$ 1,990,300	$ 2,782,800	$ 463,000	$ 0	$ 0	$ 0	$ 52,200	$ 358,400
	Less Other Revenue											
14	Miscellaneous Revenues	0	0	0	0	0	0	0	0	0	0	0
15	Other Adjustments	(439,800)	(9,500)	(129,900)	(105,900)	(148,000)	(24,600)	0	0	0	(2,800)	(19,100)
16	Net Capital Expenses	$ 8,708,500	$ 2,631,500	$ 2,573,000	$ 2,096,200	$ 2,930,800	$ 487,600	$ 0	$ 0	$ 0	$ 55,000	$ 377,500

Table 6-5 Units of Service (FY 2026)

Line No.	Description	Consumption		Maximum Day			Maximum Day			Meters	Customer	Fire Protection
		Annual	Avg. Day	Factor	Total	Extra	Factor	Total	Extra			
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Units of Measure	(HCF)	(HCF/day)		(HCF/day)	(HCF/day)		(HCF/day)	(HCF/day)	(EMs)	(bills)	(EHs)
	Water											
1	All Customers	5,439,576	14,903	190%	28,316	13,413	255%	38,003	9,687	41,163	310,596	
2	Subtotal	5,439,576	14,903		28,316	13,413		38,003	9,687	41,163	310,596	
	Recycled Water											
3	All Customers	244,511	670							265	72	
4	Subtotal	244,511	670							265	72	
	Fire Service											
5	Public Fire				772	772		6,739	5,967			303,100
6	Private Fire Service				110	110		961	851	436	5,232	43,230
7	Subtotal				882	882		7,700	6,818	436	5,232	346,330
8	Total Water System	5,684,088	15,573		29,198	14,295		45,703	16,505	41,865	315,900	346,330

Note: Recycled water consumption is 222,559 HCF through the Pump Station. City recycled water does not go through the pump station.

Table 6-6 Units Cost of Service (FY 2026)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.				
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Water Utility											
1	Net Operating Expense	33,561,300	13,554,500	8,484,500	5,062,200	801,300	1,978,200	1,268,400	1,243,100	691,300	61,700	416,100
2	Capital Costs	8,708,500	188,400	2,573,000	2,096,200	2,930,800	487,600	0	0	0	55,000	377,500
3	Total Cost of Service	$ 42,269,800	$ 13,742,900	$ 11,057,500	$ 7,158,400	$ 3,732,100	$ 2,465,800	$ 1,268,400	$ 1,243,100	$ 691,300	$ 116,700	$ 793,600
4	Units of Service (Total)		5,439,576 HCF	5,439,576 HCF	14,295 HCF/day	16,505 HCF/day	41,865 EM	315,900 Bill	5,439,576 HCF	244,511 HCF	222,559 HCF	346,330 EH
5	Cost per Unit		$ 2.53 per HCF	$ 2.03 per HCF	$ 500.77 per HCF/day	$ 226.12 per HCF/day	$ 58.90 per EM	$ 4.02 per Bill	$ 0.23 per HCF	$ 2.83 per HCF	$ 0.52 per HCF	$ 2.29 per EH

Table 6-7 Distribution of Costs to Customer Types (FY 2026)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation			
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.		Water Supply	Pump Station	
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
1	Cost per Unit		$ 2.53 per HCF	$ 2.03 per HCF	$ 500.77 per HCF/day	$ 226.12 per HCF/day	$ 58.90 per EM	$ 4.02 per Bill	$ 0.23 per HCF	$ 2.83 per HCF	$ 0.52 per HCF	$ 2.29 per EH
	Water											
	All Customers											
2	Units		5,439,576	5,439,576	13,413	9,687	41,163	310,596	5,439,576			
3	Allocation of costs of service	38,622,100	13,742,900	11,057,500	6,716,600	2,190,500	2,424,500	1,247,000	1,243,100			
					8,729,853							
	Recycled Water											
	All Customers											
4	Units						265	72		244,511	222,559	
5	Allocation of costs of service	823,900					15,600	300		691,300	116,700	
	Fire Service											
	Public Fire											
6	Units				772	5,967						303,100
7	Allocation of costs of service	2,430,300			386,600	1,349,200						694,500
	Private Fire Service											
8	Units				110	851	436	5,232				43,230
9	Allocation of costs of service	393,400			55,200	192,400	25,700	21,100				99,000
10	TOTAL COSTS OF SERVICE	$ 42,269,800	$ 13,742,900	$ 11,057,500	$ 7,158,400	$ 3,732,100	$ 2,465,800	$ 1,268,400	$ 1,243,100	$ 691,300	$ 116,700	$ 793,600

Table 6-8 Costs within the Water Monthly Fixed Charge (FY 2026)

Meter Size	Capacity, Meters & Svcs, Public Fire Service					Customer Billing			Total Service Charge
	Capacity Unit Cost	Mtrs & Svcs Unit Cost	Public Fire Unit Cost	Meter Ratio	Adjusted Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM	per EM	per EM		$	per Bill		$	$/Month
5/8", 3/4"	22.74	4.91	4.92	1.00	32.57	4.02	1.00	4.02	36.59
1"	22.74	4.91	4.92	1.67	54.29	4.02	1.00	4.02	58.30
1-1/2"	22.74	4.91	4.92	3.33	108.58	4.02	1.00	4.02	112.59
2"	22.74	4.91	4.92	5.33	173.72	4.02	1.00	4.02	177.74
3"	22.74	4.91	4.92	14.50	472.30	4.02	1.00	4.02	476.32
4"	22.74	4.91	4.92	25.00	814.31	4.02	1.00	4.02	818.33
6"	22.74	4.91	4.92	53.33	1,737.20	4.02	1.00	4.02	1,741.22
8"	22.74	4.91	4.92	93.33	3,040.11	4.02	1.00	4.02	3,044.12
*EM = Equivalent Meter									
Fixed Svc Charge Revenue	$ 11,234,700	$ 2,424,500	$ 2,430,300			$ 1,247,100			$ 17,336,600

Table 6-9 Costs within the Recycled Water Monthly Fixed Charge (FY 2026)

Meter Size	Water Supply, Meters & Svcs				Customer Billing			Total Service Charge
	Water Supply Unit Cost	Mtrs & Svcs Unit Cost	Meter Ratio	Adjusted Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM	per EM		$	per Bill		$	$/Month
5/8", 3/4"	6.52	4.91	1.00	11.43	4.02	1.00	4.02	15.44
1"	6.52	4.91	1.67	19.04	4.02	1.00	4.02	23.06
1-1/2"	6.52	4.91	3.33	38.09	4.02	1.00	4.02	42.10
2"	6.52	4.91	5.33	60.94	4.02	1.00	4.02	64.95
3"	6.52	4.91	14.50	165.68	4.02	1.00	4.02	169.69
4"	6.52	4.91	25.00	285.65	4.02	1.00	4.02	289.66
6"	6.52	4.91	53.33	609.38	4.02	1.00	4.02	613.40
8"	6.52	4.91	93.33	1,066.42	4.02	1.00	4.02	1,070.43
*EM = Equivalent Meter								
Fixed Svc Charge Revenue	$ 20,700	$ 15,600			$ 300			$ 36,600

Table 6-10 Costs within the Fire Service Charge (FY 2026)

Meter Size	Capacity, Private Fire Service				Meters & Services, Customer Billing				Total Service Charge
	Capacity Unit Cost	Private Fire Unit Cost	Meter Ratio	Adjusted Unit Cost	Mtrs & Svcs Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EH	per EH		$	per Bill	per Bill		$	$/Month
5/8"	0.48	0.19	0.29	0.19	4.91	4.02	1.00	8.92	9.12
1"	0.48	0.19	1.00	0.67	4.91	4.02	1.00	8.92	9.59
1-1/2"	0.48	0.19	2.90	1.94	4.91	4.02	1.00	8.92	10.86
2"	0.48	0.19	6.19	4.14	4.91	4.02	1.00	8.92	13.06
2-1/2"	0.48	0.19	11.13	7.44	4.91	4.02	1.00	8.92	16.36
3"	0.48	0.19	17.98	12.01	4.91	4.02	1.00	8.92	20.94
4"	0.48	0.19	38.32	25.60	4.91	4.02	1.00	8.92	34.53
6"	0.48	0.19	111.31	74.37	4.91	4.02	1.00	8.92	83.29
8"	0.48	0.19	237.21	158.48	4.91	4.02	1.00	8.92	167.41
10"	0.48	0.19	426.58	285.01	4.91	4.02	1.00	8.92	293.93
12"	0.48	0.19	689.04	460.37	4.91	4.02	1.00	8.92	469.29
*EH = Equivalent Hydrant									
Fixed Svc Charge Revenue	$ 247,600	$ 99,000			$ 25,700	$ 21,100			$ 393,400

Table 6-11 Water Consumption Charge (FY 2026)

Line No.	Description	Capacity Cost Allocated to Cons Charge	Water Costs	Reference
1	Water Supply Costs		$ 13,742,900	(Table 6-7, Line 3, Col 2)
2	Capacity Costs	43.7%	8,729,900	(Table 6-7, Line 3, Col 3,4,5)
3	Conservation Costs		1,243,100	(Table 6-7, Line 3, Col 8)
4	Total Water Costs		$ 23,715,900	
5	Units of Service (HCF)		5,439,576	(Table 6-5, Line 1, Col 1)
6	Unit Cost of Service		$ 4.36	

Table 6-12 Recycled Water Consumption Charge (FY 2026)

Line No.	Description	Supply Cost Allocated to Cons Charge	Recycled Water Costs	Reference
1	Recycled Water Supply Costs	97.0%	$ 670,561	(Table 6-7, Line 5, Col 9)
2	Units of Service (HCF)		244,511	(Table 6-5, Line 3, Col 1)
3	Unit Cost of Service		$ 2.74	

Table 6-13 Recycled Water Pump Charge (FY 2026)

Line No.	Description	RW Pump Station Costs	Reference
1	RW Pump Costs	$ 116,700	(Table 6-7, Line 5, Col 10)
2	Units of Service (HCF)	222,559	(Table 6-5, Note)
3	Unit Cost of Service	$ 0.52	

6.2 Fiscal Year 2027

Table 6-14 Allocation Basis for O&M Expenditures

Line No.	Description	Common to All Customers							Recycled Water		Fire Protection	Allocation Basis
		Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station		
		Base		Max. Day	Max. Hour	Meters	Cust/Bill.					
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
	Operating Expenses											
1	Salaries	0.0%	46.2%	27.6%	4.4%	10.7%	0.0%	5.5%	3.0%	0.3%	2.3%	Average O&M (less CS + RWS)
2	Benefits	0.0%	46.2%	27.6%	4.4%	10.7%	0.0%	5.5%	3.0%	0.3%	2.3%	Average O&M (less CS + RWS)
3	Contract Services	0.0%	47.7%	28.4%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
4	Water Conservation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	Conservation
5	Meter Reading	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
6	Utilities	0.0%	47.7%	28.4%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
7	Electricity	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
8	Supplies & Materials	0.0%	47.7%	28.4%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
9	Chemicals	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Base
10	MWDOC Import Water	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
11	OCWD Groundwater	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
12	OCWD RW	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	Recycled Water
13	Water Conservation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	Conservation
14	Maintenance & Repair	0.0%	47.7%	28.4%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
15	Source of Supply	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Base
16	Pump Station	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
17	Treatment	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Treatment
18	T&D	0.0%	36.5%	31.1%	27.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	T&D
19	Meters & Services	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
20	Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	Hydrants
21	RW Pump Station	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	RW - PS
22	Travel & Training	0.0%	47.7%	28.4%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
23	General Expenses	0.0%	47.7%	28.4%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
24	Customer Billing	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	Customer
25	Internal Svc Charge	0.0%	47.7%	28.4%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
26	Insurance	0.0%	47.7%	28.4%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
27	Transfers	0.0%	47.7%	28.4%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)

Table 6-15 Allocation of O&M Expenditures (FY 2027)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.					
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Operating Expenses											
1	Salaries	3,992,600	0	1,846,100	1,101,400	173,700	429,200	0	218,400	119,800	13,400	90,600
2	Benefits	2,393,500	(100)	1,106,700	660,300	104,200	257,300	0	130,900	71,800	8,100	54,300
3	Contract Services	653,800	0	311,600	185,900	29,300	72,500	0	36,900	0	2,300	15,300
4	Water Conservation	245,500	0	0	0	0	0	0	245,500	0	0	0
5	Meter Reading	112,500	0	0	0	0	112,500	0	0	0	0	0
6	Utilities	96,100	0	46,000	27,300	4,300	10,600	0	5,400	0	300	2,200
7	Electricity	2,304,200	0	1,245,500	1,058,700	0	0	0	0	0	0	0
8	Supplies & Materials	188,500	0	89,800	53,600	8,500	20,900	0	10,600	0	700	4,400
9	Chemicals	405,700	0	405,700	0	0	0	0	0	0	0	0
10	MWDOC Import Water	5,153,800	5,153,800	0	0	0	0	0	0	0	0	0
11	OCWD Groundwater	8,986,000	8,986,000	0	0	0	0	0	0	0	0	0
12	OCWD RW	520,400	0	0	0	0	0	0	0	520,400	0	0
13	Water Conservation	241,000	0	0	0	0	0	0	241,000	0	0	0
14	Maintenance & Repair	980,400	0	467,400	278,800	44,000	108,600	0	55,300	0	3,400	22,900
15	Source of Supply	201,900	0	201,900	0	0	0	0	0	0	0	0
16	Pump Station	82,700	0	44,700	38,000	0	0	0	0	0	0	0
17	Treatment	92,600	0	50,100	42,500	0	0	0	0	0	0	0
18	Storage	112,500	0	8,900	0	101,300	0	0	0	0	0	2,300
19	T&D	270,000	0	98,600	83,900	74,000	0	0	0	0	0	13,500
20	Meters & Services	366,700	0	0	0	0	366,700	0	0	0	0	0
21	Hydrants	83,400	0	0	0	0	0	0	0	0	0	83,400
22	RW Pump Station	14,700	0	0	0	0	0	0	0	0	14,700	0
23	Travel & Training	38,300	0	18,300	10,900	1,700	4,200	0	2,200	0	100	900
24	General Expenses	1,495,700	0	712,900	425,400	67,100	165,700	0	84,400	0	5,200	35,000
25	Customer Billing	1,319,100	0	0	0	0	0	1,319,100	0	0	0	0
26	Internal Svc Charge	1,583,800	0	755,000	450,400	71,100	175,500	0	89,300	0	5,500	37,000
27	Insurance	1,459,100	0	695,400	415,000	65,500	161,700	0	82,300	0	5,100	34,100
28	Capital Expenditures	60,800	0	19,700	14,900	20,000	3,200	0	0	0	400	2,600
29	Transfers	105,900	0	50,400	30,100	4,800	11,700	0	6,000	0	400	2,500
30	Total O&M Expenses	$ 33,561,200	$ 14,139,700	$ 8,174,700	$ 4,877,100	$ 769,500	$ 1,900,300	$ 1,319,100	$ 1,208,200	$ 712,000	$ 59,600	$ 401,000
	Less Other Revenue											
31	Miscellaneous Revenues	683,000	0	325,600	194,200	30,600	75,700	0	38,500	0	2,400	16,000
32	Other Adjustments	(2,968,900)	0	(1,415,300)	(844,300)	(133,200)	(329,000)	0	(167,400)	0	(10,300)	(69,400)
33	Net Operating Expenses	$ 35,847,100	$ 14,139,700	$ 9,264,400	$ 5,527,200	$ 872,100	$ 2,153,600	$ 1,319,100	$ 1,337,100	$ 712,000	$ 67,500	$ 454,400

Table 6-16 Allocation Basis for Capital Costs

Line No.	Description	Common to All Customers							Recycled Water		Fire Protection	Allocation Basis
		Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station		
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.					
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
	Plant Assets											
1	Land	2.5%	29.9%	24.5%	33.0%	5.3%	0.0%	0.0%	0.0%	0.6%	4.3%	Average Net Plant
2	Source of Supply	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
3	Pumping	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
4	Storage	0.0%	8.0%	0.0%	90.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	Storage
5	Treatment	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Treatment
6	Transmission & Distribution	0.0%	36.5%	31.1%	27.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	T&D
7	Meters & Services	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
8	Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	Hydrants
9	Recycled Water	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	Recycled Water
10	Recycled Water - PS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	RW - PS
11	General Plant	2.5%	29.9%	24.5%	33.0%	5.3%	0.0%	0.0%	0.0%	0.6%	4.3%	Average Net Plant

Table 6-17 Allocation of Capital Costs (FY 2027)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.				
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Plant Assets											
1	Land	2,219,500	55,500	663,900	542,800	731,300	116,800	0	0	0	13,000	96,200
2	Source of Supply	3,114,400	3,114,400	0	0	0	0	0	0	0	0	0
3	Pumping	4,611,100	0	2,492,500	2,118,600	0	0	0	0	0	0	0
4	Storage	17,833,400	(100)	1,426,700	0	16,050,100	0	0	0	0	0	356,700
5	Treatment	0	0	0	0	0	0	0	0	0	0	0
6	Transmission & Distribution	91,352,200	0	33,378,700	28,371,900	25,034,000	0	0	0	0	0	4,567,600
7	Meters & Services	6,563,000	0	0	0	0	6,563,000	0	0	0	0	0
8	Hydrants	481,900	0	0	0	0	0	0	0	0	0	481,900
9	Recycled Water	0	0	0	0	0	0	0	0	0	0	0
10	Recycled Water - PS	728,700	0	0	0	0	0	0	0	0	728,700	0
11	General Plant	1,303,400	32,600	389,900	318,700	429,500	68,600	0	0	0	7,600	56,500
12	Total Plant Assets	$128,207,600	$ 3,202,400	$ 38,351,700	$ 31,352,000	$ 42,244,900	$ 6,748,400	$ 0	$ 0	$ 0	$ 749,300	$ 5,558,900
13	Capital Costs	$ 8,682,100	$ 2,814,100	$ 2,597,100	$ 2,123,100	$ 2,860,800	$ 457,000	$ 0	$ 0	$ 0	$ 50,700	$ 376,400
	Less Other Revenue											
14	Miscellaneous Revenues	0	0	0	0	0	0	0	0	0	0	0
15	Other Adjustments	(784,000)	(19,600)	(234,500)	(191,700)	(258,300)	(41,300)	0	0	0	(4,600)	(34,000)
16	Net Capital Expenses	$ 9,466,100	$ 2,833,700	$ 2,831,600	$ 2,314,800	$ 3,119,100	$ 498,300	$ 0	$ 0	$ 0	$ 55,300	$ 410,400

Table 6-18 Units of Service (FY 2027)

Line No.	Description	Consumption		Maximum Day			Maximum Day			Meters	Customer	Fire Protection
		Annual	Avg. Day	Factor	Total	Extra	Factor	Total	Extra			
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Units of Measure	(HCF)	(HCF/day)		(HCF/day)	(HCF/day)		(HCF/day)	(HCF/day)	(EMs)	(bills)	(EHs)
	Water											
1	All Customers	5,439,576	14,903	190%	28,316	13,413	255%	38,003	9,687	41,163	310,596	
2	Subtotal	5,439,576	14,903		28,316	13,413		38,003	9,687	41,163	310,596	
	Recycled Water											
3	All Customers	244,511	670							265	72	
4	Subtotal	244,511	670							265	72	
	Fire Service											
5	Public Fire				772	772		6,739	5,967			303,100
6	Private Fire Service				110	110		961	851	436	5,232	43,230
7	Subtotal				882	882		7,700	6,818	436	5,232	346,330
8	Total Water System	5,684,088	15,573		29,198	14,295		45,703	16,505	41,865	315,900	346,330

Note: Recycled water consumption is 222,559 HCF through the Pump Station. City recycled water does not go through the pump station.

Table 6-19 Units Cost of Service (FY 2027)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.				
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Water Utility											
1	Net Operating Expense	35,847,100	14,139,700	9,264,400	5,527,200	872,100	2,153,600	1,319,100	1,337,100	712,000	67,500	454,400
2	Capital Costs	9,466,100	236,600	2,831,600	2,314,800	3,119,100	498,300	0	0	0	55,300	410,400
3	Total Cost of Service	$ 45,313,200	$ 14,376,300	$ 12,096,000	$ 7,842,000	$ 3,991,200	$ 2,651,900	$ 1,319,100	$ 1,337,100	$ 712,000	$ 122,800	$ 864,800
4	Units of Service (Total)		5,439,576 HCF	5,439,576 HCF	14,295 HCF/day	16,505 HCF/day	41,865 EM	315,900 Bill	5,439,576 HCF	244,511 HCF	222,559 HCF	346,330 EH
5	Cost per Unit		$ 2.64 per HCF	$ 2.22 per HCF	$ 548.60 per HCF/day	$ 241.82 per HCF/day	$ 63.34 per EM	$ 4.18 per Bill	$ 0.25 per HCF	$ 2.91 per HCF	$ 0.55 per HCF	$ 2.50 per EH

Table 6-20 Distribution of Costs to Customer Types (FY 2027)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation			
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.		Water Supply	Pump Station	
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
1	Cost per Unit		$ 2.64 per HCF	$ 2.22 per HCF	$ 548.60 per HCF/day	$ 241.82 per HCF/day	$ 63.34 per EM	$ 4.18 per Bill	$ 0.25 per HCF	$ 2.91 per HCF	$ 0.55 per HCF	$ 2.50 per EH
	Water											
	All Customers											
2	Units		5,439,576	5,439,576	13,413	9,687	41,163	310,596	5,439,576			
3	Allocation of costs of service	41,414,400	14,376,300	12,096,000	7,358,100	2,342,500	2,607,500	1,296,900	1,337,100			
					8,547,420							
	Recycled Water											
	All Customers											
4	Units						265	72		244,511	222,559	
5	Allocation of costs of service	851,900					16,800	300		712,000	122,800	
	Fire Service											
	Public Fire											
6	Units				772	5,967						303,100
7	Allocation of costs of service	2,623,300			423,500	1,442,900						756,900
	Private Fire Service											
8	Units				110	851	436	5,232				43,230
9	Allocation of costs of service	423,700			60,400	205,800	27,600	21,900				108,000
10	TOTAL COSTS OF SERVICE	$ 45,313,200	$ 14,376,300	$ 12,096,000	$ 7,842,000	$ 3,991,200	$ 2,651,900	$ 1,319,100	$ 1,337,100	$ 712,000	$ 122,800	$ 864,800

Table 6-21 Costs within the Water Monthly Fixed Charge (FY 2027)

Meter Size	Capacity, Meters & Svcs, Public Fire Service					Customer Billing			Total Service Charge
	Capacity Unit Cost	Mtrs & Svcs Unit Cost	Public Fire Unit Cost	Meter Ratio	Adjusted Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM	per EM	per EM		$	per Bill		$	$/Month
5/8", 3/4"	26.82	5.28	5.31	1.00	37.41	4.18	1.00	4.18	41.59
1"	26.82	5.28	5.31	1.67	62.35	4.18	1.00	4.18	66.53
1-1/2"	26.82	5.28	5.31	3.33	124.71	4.18	1.00	4.18	128.88
2"	26.82	5.28	5.31	5.33	199.53	4.18	1.00	4.18	203.71
3"	26.82	5.28	5.31	14.50	542.47	4.18	1.00	4.18	546.65
4"	26.82	5.28	5.31	25.00	935.30	4.18	1.00	4.18	939.47
6"	26.82	5.28	5.31	53.33	1,995.30	4.18	1.00	4.18	1,999.48
8"	26.82	5.28	5.31	93.33	3,491.77	4.18	1.00	4.18	3,495.95
*EM = Equivalent Meter									
Fixed Svc Charge Revenue	$ 13,249,200	$ 2,607,500	$ 2,623,300			$ 1,296,900			$ 19,776,900

Table 6-22 Costs within the Recycled Water Monthly Fixed Charge (FY 2027)

Meter Size	Water Supply, Meters & Svcs				Customer Billing			Total Service Charge
	Water Supply Unit Cost	Mtrs & Svcs Unit Cost	Meter Ratio	Adjusted Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM	per EM		$	per Bill		$	$/Month
5/8", 3/4"	6.71	5.28	1.00	11.99	4.18	1.00	4.18	16.17
1"	6.71	5.28	1.67	19.99	4.18	1.00	4.18	24.16
1-1/2"	6.71	5.28	3.33	39.97	4.18	1.00	4.18	44.15
2"	6.71	5.28	5.33	63.95	4.18	1.00	4.18	68.13
3"	6.71	5.28	14.50	173.88	4.18	1.00	4.18	178.05
4"	6.71	5.28	25.00	299.79	4.18	1.00	4.18	303.96
6"	6.71	5.28	53.33	639.55	4.18	1.00	4.18	643.72
8"	6.71	5.28	93.33	1,119.21	4.18	1.00	4.18	1,123.38
*EM = Equivalent Meter								
Fixed Svc Charge Revenue	$ 21,400	$ 16,800			$ 300			$ 38,500

Table 6-23 Costs within the Fire Service Charge (FY 2027)

Meter Size	Capacity, Private Fire Service				Meters & Services, Customer Billing				Total Service Charge
	Capacity Unit Cost	Private Fire Unit Cost	Meter Ratio	Adjusted Unit Cost	Mtrs & Svcs Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EH	per EH		$	per Bill	per Bill		$	$/Month
5/8"	0.51	0.21	0.29	0.21	5.28	4.18	1.00	9.45	9.66
1"	0.51	0.21	1.00	0.72	5.28	4.18	1.00	9.45	10.18
1-1/2"	0.51	0.21	2.90	2.10	5.28	4.18	1.00	9.45	11.55
2"	0.51	0.21	6.19	4.47	5.28	4.18	1.00	9.45	13.92
2-1/2"	0.51	0.21	11.13	8.03	5.28	4.18	1.00	9.45	17.48
3"	0.51	0.21	17.98	12.97	5.28	4.18	1.00	9.45	22.43
4"	0.51	0.21	38.32	27.64	5.28	4.18	1.00	9.45	37.10
6"	0.51	0.21	111.31	80.29	5.28	4.18	1.00	9.45	89.75
8"	0.51	0.21	237.21	171.10	5.28	4.18	1.00	9.45	180.56
10"	0.51	0.21	426.58	307.70	5.28	4.18	1.00	9.45	317.16
12"	0.51	0.21	689.04	497.03	5.28	4.18	1.00	9.45	506.48
*EH = Equivalent Hydrant									
Fixed Svc Charge Revenue	$ 266,200	$ 108,000			$ 27,600	$ 21,900			$ 423,700

Table 6-24 Water Consumption Charge (FY 2027)

Line No.	Description	Capacity Cost Allocated to Cons Charge	Water Costs	Reference
1	Water Supply Costs		$ 14,376,300	(Table 6-20, Line 3, Col 2)
2	Capacity Costs	39.2%	8,547,400	(Table 6-20, Line 3, Col 3,4,5)
3	Conservation Costs		1,337,100	(Table 6-20, Line 3, Col 8)
4	Total Water Costs		$ 24,260,800	
5	Units of Service (HCF)		5,439,576	(Table 6-18, Line 1, Col 1)
6	Unit Cost of Service		$ 4.46	

Table 6-25 Recycled Water Consumption Charge (FY 2027)

Line No.	Description	Supply Cost Allocated to Cons Charge	Recycled Water Costs	Reference
1	Recycled Water Supply Costs	97.0%	$ 690,640	(Table 6-20, Line 5, Col 9)
2	Units of Service (HCF)		244,511	(Table 6-18, Line 3, Col 1)
3	Unit Cost of Service		$ 2.82	

Table 6-26 Recycled Water Pump Charge (FY 2027)

Line No.	Description	RW Pump Station Costs	Reference
1	RW Pump Costs	$ 122,800	(Table 6-20, Line 5, Col 10)
2	Units of Service (HCF)	222,559	(Table 6-18, Note)
3	Unit Cost of Service	$ 0.55	

6.3 Fiscal Year 2028

Table 6-27 Allocation Basis for O&M Expenditures

Line No.	Description	Common to All Customers							Recycled Water		Fire Protection	Allocation Basis
		Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station		
		Base		Max. Day	Max. Hour	Meters	Cust/Bill.					
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
	Operating Expenses											
1	Salaries	0.0%	46.3%	27.6%	4.3%	10.7%	0.0%	5.4%	3.0%	0.3%	2.3%	Average O&M (less CS + RWS)
2	Benefits	0.0%	46.3%	27.6%	4.3%	10.7%	0.0%	5.4%	3.0%	0.3%	2.3%	Average O&M (less CS + RWS)
3	Contract Services	0.0%	47.7%	28.5%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
4	Water Conservation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	Conservation
5	Meter Reading	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
6	Utilities	0.0%	47.7%	28.5%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
7	Electricity	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
8	Supplies & Materials	0.0%	47.7%	28.5%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
9	Chemicals	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Base
10	MWDOC Import Water	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
11	OCWD Groundwater	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
12	OCWD RW	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	Recycled Water
13	Water Conservation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	Conservation
14	Maintenance & Repair	0.0%	47.7%	28.5%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
15	Source of Supply	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Base
16	Pump Station	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
17	Treatment	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Treatment
18	T&D	0.0%	36.5%	31.1%	27.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	T&D
19	Meters & Services	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
20	Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	Hydrants
21	RW Pump Station	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	RW - PS
22	Travel & Training	0.0%	47.7%	28.5%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
23	General Expenses	0.0%	47.7%	28.5%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
24	Customer Billing	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	Customer
25	Internal Svc Charge	0.0%	47.7%	28.5%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
26	Insurance	0.0%	47.7%	28.5%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)
27	Transfers	0.0%	47.7%	28.5%	4.5%	11.1%	0.0%	5.6%	0.0%	0.3%	2.3%	Average O&M (less WS,CS)

Table 6-28 Allocation of O&M Expenditures (FY 2028)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.					
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Operating Expenses											
1	Salaries	4,112,400	0	1,903,600	1,135,500	178,600	441,200	0	223,000	123,400	13,700	93,400
2	Benefits	2,465,300	0	1,141,200	680,700	107,000	264,500	0	133,700	74,000	8,200	56,000
3	Contract Services	679,900	0	324,600	193,500	30,400	75,200	0	38,000	0	2,300	15,900
4	Water Conservation	255,300	0	0	0	0	0	0	255,300	0	0	0
5	Meter Reading	117,000	0	0	0	0	117,000	0	0	0	0	0
6	Utilities	100,900	0	48,200	28,700	4,500	11,200	0	5,600	0	300	2,400
7	Electricity	2,419,400	0	1,307,800	1,111,600	0	0	0	0	0	0	0
8	Supplies & Materials	197,900	0	94,400	56,300	8,900	21,900	0	11,100	0	700	4,600
9	Chemicals	426,000	0	426,000	0	0	0	0	0	0	0	0
10	MWDOC Import Water	5,434,500	5,434,500	0	0	0	0	0	0	0	0	0
11	OCWD Groundwater	9,327,300	9,327,300	0	0	0	0	0	0	0	0	0
12	OCWD RW	536,000	0	0	0	0	0	0	0	536,000	0	0
13	Water Conservation	253,100	0	0	0	0	0	0	253,100	0	0	0
14	Maintenance & Repair	1,029,500	0	491,200	293,100	46,100	113,900	0	57,600	0	3,500	24,100
15	Source of Supply	212,000	0	212,000	0	0	0	0	0	0	0	0
16	Pump Station	86,800	0	46,900	39,900	0	0	0	0	0	0	0
17	Treatment	97,200	0	52,500	44,700	0	0	0	0	0	0	0
18	Storage	118,100	0	9,400	0	106,300	0	0	0	0	0	2,400
19	T&D	283,500	0	103,600	88,000	77,700	0	0	0	0	0	14,200
20	Meters & Services	385,000	0	0	0	0	385,000	0	0	0	0	0
21	Hydrants	87,600	0	0	0	0	0	0	0	0	0	87,600
22	RW Pump Station	15,400	0	0	0	0	0	0	0	0	15,400	0
23	Travel & Training	39,800	0	19,100	11,300	1,800	4,400	0	2,200	0	100	900
24	General Expenses	1,555,500	0	742,300	442,800	69,600	172,100	0	87,000	0	5,300	36,400
25	Customer Billing	1,371,900	0	0	0	0	0	1,371,900	0	0	0	0
26	Internal Svc Charge	1,672,500	0	798,000	476,100	74,900	185,000	0	93,500	0	5,800	39,200
27	Insurance	1,540,800	0	735,300	438,600	69,000	170,400	0	86,100	0	5,300	36,100
28	Capital Expenditures	63,200	0	21,000	15,700	20,400	3,100	0	0	0	300	2,700
29	Transfers	(435,800)	0	(207,900)	(124,100)	(19,500)	(48,200)	0	(24,400)	0	(1,500)	(10,200)
30	Total O&M Expenses	$ 34,448,000	$ 14,761,800	$ 8,269,200	$ 4,932,400	$ 775,700	$ 1,916,700	$ 1,371,900	$ 1,221,800	$ 733,400	$ 59,400	$ 405,700
	Less Other Revenue											
31	Miscellaneous Revenues	683,000	0	326,000	194,400	30,600	75,500	0	38,200	0	2,300	16,000
32	Other Adjustments	(4,309,100)	0	(2,056,400)	(1,226,600)	(192,900)	(476,600)	0	(240,900)	0	(14,800)	(100,900)
33	Net Operating Expenses	$ 38,074,100	$ 14,761,800	$ 9,999,600	$ 5,964,600	$ 938,000	$ 2,317,800	$ 1,371,900	$ 1,424,500	$ 733,400	$ 71,900	$ 490,600

Table 6-29 Allocation Basis for Capital Costs

Line No.	Description	Common to All Customers							Recycled Water		Fire Protection	Allocation Basis
		Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station		
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.					
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
	Plant Assets											
1	Land	2.8%	30.2%	24.8%	32.3%	5.0%	0.0%	0.0%	0.0%	0.5%	4.3%	Average Net Plant
2	Source of Supply	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Water Supply
3	Pumping	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Pumping
4	Storage	0.0%	8.0%	0.0%	90.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	Storage
5	Treatment	0.0%	54.1%	45.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Treatment
6	Transmission & Distribution	0.0%	36.5%	31.1%	27.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	T&D
7	Meters & Services	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Meters & Services
8	Hydrants	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	Hydrants
9	Recycled Water	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	Recycled Water
10	Recycled Water - PS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	RW - PS
11	General Plant	2.8%	30.2%	24.8%	32.3%	5.0%	0.0%	0.0%	0.0%	0.5%	4.3%	Average Net Plant

Table 6-30 Allocation of Capital Costs (FY 2028)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.				
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Plant Assets											
1	Land	2,219,500	62,700	670,800	550,000	717,400	110,300	0	0	0	12,100	96,200
2	Source of Supply	3,687,100	3,687,100	0	0	0	0	0	0	0	0	0
3	Pumping	5,093,900	0	2,753,500	2,340,400	0	0	0	0	0	0	0
4	Storage	17,475,100	0	1,398,000	0	15,727,600	0	0	0	0	0	349,500
5	Treatment	0	0	0	0	0	0	0	0	0	0	0
6	Transmission & Distribution	96,732,200	0	35,344,500	30,042,800	26,508,300	0	0	0	0	0	4,836,600
7	Meters & Services	6,494,400	0	0	0	0	6,494,400	0	0	0	0	0
8	Hydrants	480,000	0	0	0	0	0	0	0	0	0	480,000
9	Recycled Water	0	0	0	0	0	0	0	0	0	0	0
10	Recycled Water - PS	710,100	0	0	0	0	0	0	0	0	710,100	0
11	General Plant	1,603,600	45,300	484,700	397,400	518,300	79,700	0	0	0	8,700	69,500
12	Total Plant Assets	$134,495,900	$ 3,795,100	$ 40,651,500	$ 33,330,600	$ 43,471,600	$ 6,684,400	$ 0	$ 0	$ 0	$ 730,900	$ 5,831,800
13	Capital Costs	$ 9,116,200	$ 3,012,600	$ 2,755,400	$ 2,259,200	$ 2,946,500	$ 453,100	$ 0	$ 0	$ 0	$ 49,500	$ 395,300
	Less Other Revenue											
14	Miscellaneous Revenues	0	0	0	0	0	0	0	0	0	0	0
15	Other Adjustments	(1,163,400)	(33,000)	(351,600)	(288,300)	(376,000)	(57,800)	0	0	0	(6,300)	(50,400)
16	Net Capital Expenses	$ 10,279,600	$ 3,045,600	$ 3,107,000	$ 2,547,500	$ 3,322,500	$ 510,900	$ 0	$ 0	$ 0	$ 55,800	$ 445,700

Table 6-31 Units of Service (FY 2028)

Line No.	Description	Consumption		Maximum Day			Maximum Day			Meters	Customer	Fire Protection
		Annual	Avg. Day	Factor	Total	Extra	Factor	Total	Extra			
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Units of Measure	(HCF)	(HCF/day)		(HCF/day)	(HCF/day)		(HCF/day)	(HCF/day)	(EMs)	(bills)	(EHs)
	Water											
1	All Customers	5,439,576	14,903	190%	28,316	13,413	255%	38,003	9,687	41,163	310,596	
2	Subtotal	5,439,576	14,903		28,316	13,413		38,003	9,687	41,163	310,596	
	Recycled Water											
3	All Customers	244,511	670							265	72	
4	Subtotal	244,511	670							265	72	
	Fire Service											
5	Public Fire				772	772		6,739	5,967			303,100
6	Private Fire Service				110	110		961	851	436	5,232	43,230
7	Subtotal				882	882		7,700	6,818	436	5,232	346,330
8	Total Water System	5,684,088	15,573		29,198	14,295		45,703	16,505	41,865	315,900	346,330

Note: Recycled water consumption is 222,559 HCF through the Pump Station. City recycled water does not go through the pump station.

Table 6-32 Units Cost of Service (FY 2028)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation	Water Supply	Pump Station	
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.				
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Water Utility											
1	Net Operating Expense	38,074,100	14,761,800	9,999,600	5,964,600	938,000	2,317,800	1,371,900	1,424,500	733,400	71,900	490,600
2	Capital Costs	10,279,600	290,200	3,107,000	2,547,500	3,322,500	510,900	0	0	0	55,800	445,700
3	Total Cost of Service	$ 48,353,700	$ 15,052,000	$ 13,106,600	$ 8,512,100	$ 4,260,500	$ 2,828,700	$ 1,371,900	$ 1,424,500	$ 733,400	$ 127,700	$ 936,300
4	Units of Service (Total)		5,439,576 HCF	5,439,576 HCF	14,295 HCF/day	16,505 HCF/day	41,865 EM	315,900 Bill	5,439,576 HCF	244,511 HCF	222,559 HCF	346,330 EH
5	Cost per Unit		$ 2.77 per HCF	$ 2.41 per HCF	$ 595.47 per HCF/day	$ 258.14 per HCF/day	$ 67.57 per EM	$ 4.34 per Bill	$ 0.26 per HCF	$ 3.00 per HCF	$ 0.57 per HCF	$ 2.70 per EH

Table 6-33 Distribution of Costs to Customer Types (FY 2028)

Line No.	Description	Total Costs	Common to All Customers							Recycled Water		Fire Protection
			Water Supply	Base	Extra Capacity		Customer		Conservation			
				Base	Max. Day	Max. Hour	Meters	Cust/Bill.		Water Supply	Pump Station	
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
1	Cost per Unit		$ 2.77 per HCF	$ 2.41 per HCF	$ 595.47 per HCF/day	$ 258.14 per HCF/day	$ 67.57 per EM	$ 4.34 per Bill	$ 0.26 per HCF	$ 3.00 per HCF	$ 0.57 per HCF	$ 2.70 per EH
	Water											
	All Customers											
2	Units		5,439,576	5,439,576	13,413	9,687	41,163	310,596	5,439,576			
3	Allocation of costs of service	44,200,800	15,052,000	13,106,600	7,987,000	2,500,500	2,781,300	1,348,900	1,424,500			
					8,327,558							
	Recycled Water											
	All Customers											
4	Units						265	72		244,511	222,559	
5	Allocation of costs of service	879,300					17,900	300		733,400	127,700	
	Fire Service											
	Public Fire											
6	Units				772	5,967						303,100
7	Allocation of costs of service	2,819,300			459,600	1,540,300						819,400
	Private Fire Service											
8	Units				110	851	436	5,232				43,230
9	Allocation of costs of service	454,300			65,500	219,700	29,500	22,700				116,900
10	TOTAL COSTS OF SERVICE	$ 48,353,700	$ 15,052,000	$ 13,106,600	$ 8,512,100	$ 4,260,500	$ 2,828,700	$ 1,371,900	$ 1,424,500	$ 733,400	$ 127,700	$ 936,300

Table 6-34 Costs within the Water Monthly Fixed Charge (FY 2028)

Meter Size	Capacity, Meters & Svcs, Public Fire Service					Customer Billing			Total Service Charge
	Capacity Unit Cost	Mtrs & Svcs Unit Cost	Public Fire Unit Cost	Meter Ratio	Adjusted Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM	per EM	per EM		$	per Bill		$	$/Month
5/8", 3/4"	30.91	5.63	5.71	1.00	42.24	4.34	1.00	4.34	46.59
1"	30.91	5.63	5.71	1.67	70.41	4.34	1.00	4.34	74.75
1-1/2"	30.91	5.63	5.71	3.33	140.82	4.34	1.00	4.34	145.16
2"	30.91	5.63	5.71	5.33	225.30	4.34	1.00	4.34	229.65
3"	30.91	5.63	5.71	14.50	612.55	4.34	1.00	4.34	616.89
4"	30.91	5.63	5.71	25.00	1,056.12	4.34	1.00	4.34	1,060.46
6"	30.91	5.63	5.71	53.33	2,253.05	4.34	1.00	4.34	2,257.39
8"	30.91	5.63	5.71	93.33	3,942.83	4.34	1.00	4.34	3,947.18
*EM = Equivalent Meter									
Fixed Svc Charge Revenue	$ 15,266,600	$ 2,781,400	$ 2,819,300			$ 1,348,900			$ 22,216,200

Table 6-35 Costs within the Recycled Water Monthly Fixed Charge (FY 2028)

Meter Size	Water Supply, Meters & Svcs				Customer Billing			Total Service Charge
	Water Supply Unit Cost	Mtrs & Svcs Unit Cost	Meter Ratio	Adjusted Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM	per EM		$	per Bill		$	$/Month
5/8", 3/4"	6.91	5.63	1.00	12.55	4.34	1.00	4.34	16.89
1"	6.91	5.63	1.67	20.91	4.34	1.00	4.34	25.25
1-1/2"	6.91	5.63	3.33	41.82	4.34	1.00	4.34	46.16
2"	6.91	5.63	5.33	66.91	4.34	1.00	4.34	71.25
3"	6.91	5.63	14.50	181.91	4.34	1.00	4.34	186.25
4"	6.91	5.63	25.00	313.63	4.34	1.00	4.34	317.97
6"	6.91	5.63	53.33	669.08	4.34	1.00	4.34	673.42
8"	6.91	5.63	93.33	1,170.88	4.34	1.00	4.34	1,175.23
*EM = Equivalent Meter								
Fixed Svc Charge Revenue	$ 22,000	$ 17,900			$ 300			$ 40,200

Table 6-36 Costs within the Fire Service Charge (FY 2028)

Meter Size	Capacity, Private Fire Service				Meters & Services, Customer Billing				Total Service Charge
	Capacity Unit Cost	Private Fire Unit Cost	Meter Ratio	Adjusted Unit Cost	Mtrs & Svcs Unit Cost	Cust Billing Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EH	per EH		$	per Bill	per Bill		$	$/Month
5/8"	0.55	0.23	0.29	0.23	5.63	4.34	1.00	9.97	10.20
1"	0.55	0.23	1.00	0.78	5.63	4.34	1.00	9.97	10.75
1-1/2"	0.55	0.23	2.90	2.25	5.63	4.34	1.00	9.97	12.23
2"	0.55	0.23	6.19	4.80	5.63	4.34	1.00	9.97	14.77
2-1/2"	0.55	0.23	11.13	8.63	5.63	4.34	1.00	9.97	18.60
3"	0.55	0.23	17.98	13.94	5.63	4.34	1.00	9.97	23.91
4"	0.55	0.23	38.32	29.70	5.63	4.34	1.00	9.97	39.68
6"	0.55	0.23	111.31	86.28	5.63	4.34	1.00	9.97	96.25
8"	0.55	0.23	237.21	183.86	5.63	4.34	1.00	9.97	193.84
10"	0.55	0.23	426.58	330.65	5.63	4.34	1.00	9.97	340.62
12"	0.55	0.23	689.04	534.09	5.63	4.34	1.00	9.97	544.06
*EH = Equivalent Hydrant									
Fixed Svc Charge Revenue	$ 285,200	$ 116,900			$ 29,500	$ 22,700			$ 454,300

Table 6-37 Water Consumption Charge (FY 2028)

Line No.	Description	Capacity Cost Allocated to Cons Charge	Water Costs	Reference
1	Water Supply Costs		$ 15,052,000	(Table 6-33, Line 3, Col 2)
2	Capacity Costs	35.3%	8,327,600	(Table 6-33, Line 3, Col 3,4,5)
3	Conservation Costs		1,424,500	(Table 6-33, Line 3, Col 8)
4	Total Water Costs		$ 24,804,100	
5	Units of Service (HCF)		5,439,576	(Table 6-31, Line 1, Col 1)
6	Unit Cost of Service		$ 4.56	

Table 6-38 Recycled Water Consumption Charge (FY 2028)

Line No.	Description	Supply Cost Allocated to Cons Charge	Recycled Water Costs	Reference
1	Recycled Water Supply Costs	97.0%	$ 711,398	(Table 6-33, Line 5, Col 9)
2	Units of Service (HCF)		244,511	(Table 6-31, Line 3, Col 1)
3	Unit Cost of Service		$ 2.91	

Table 6-39 Recycled Water Pump Charge (FY 2028)

Line No.	Description	RW Pump Station Costs	Reference
1	RW Pump Costs	$ 127,700	(Table 6-33, Line 5, Col 10)
2	Units of Service (HCF)	222,559	(Table 6-31, Note)
3	Unit Cost of Service	$ 0.57	