DRAFT FINAL

WATER AND SEWER RATE STUDY

BLACK & VEATCH PROJECT NO. 410918

PREPARED FOR

City of Santa Clara, CA

9 JUNE 2026

BLACK & VEATCH

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Legal Notice

Black & Veatch Corporation (Black & Veatch) has prepared this report for the City of Santa Clara (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 utilities' ability to execute the capital improvement program as scheduled and within budget, regional climate and weather conditions affecting the demand for water, discharge of sewage flow, and adverse legislative, regulatory, or legal decisions (including environmental laws and regulations) affecting the utilities' ability to manage the system and meet water quality requirements.

1.0 Executive Summary

The City of Santa Clara commissioned Black & Veatch Corporation to perform an update of the Water and Sewer Rate Study (Study) for its Water, Recycled Water, and Sewer Utilities. The Study included the development of a three-year financial plan, a cost-of-service analysis, and the design of rates. In addition, a ten-year financial plan was developed to provide the City with a high-level view of each utility's operations. The specific objectives of the Study were to:

- Evaluate the adequacy of projected revenues under existing rates to meet projected revenue requirements.
- Develop sound financial plans for the utilities covering a three and ten-year period for both ongoing operations and planned capital improvements.
- Allocate the utilities' projected revenue requirements to the various customer classes 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 Water System

The Water Utility provides water services to over 26,952 residential, commercial, irrigation, schools, and agricultural customers. The City obtains potable water from three primary sources: local groundwater, surface water from the Santa Clara Valley Water District (Valley Water) and imported water from the Hetch Hetchy watershed through the San Francisco Public Utilities Commission (SFPUC). The water system infrastructure consists of 335 miles of transmission and distribution mains, 7 storage tanks totaling 28.8 million gallons of storage capacity, 26 wells, and 3 booster pump stations.

1.2 Recycled Water System

The Recycled Water Utility, operating since 1989, provides recycled water services to over 292 commercial, irrigation, and industrial customers. The City obtains recycled water from South Bay Water Recycling. The recycled water comes from the San Jose-Santa Clara Regional Wastewater Facility (RWF), an advanced tertiary treatment facility located in San Jose, of which the City is a co-owner. The recycled water infrastructure within the City limit boundary mainly consists of 34 miles of recycled water pipelines. A portion of the recycled water from the RWF supplies the Valley Water's Silicon Valley Advanced Water Purification Center for advanced treatment (microfiltration, reverse osmosis, and advanced oxidation) to create a mix of high-quality recycled water that is blended back into the recycled water system.

1.3 Sewer System

The Sewer Utility provides sewer services to over 26,710 residential, commercial, industrial, and municipal customers. Services include the construction and maintenance of the sewer system and installing sewer lateral clean-outs at the property line. Sanitary sewer flows in the City are collected and transported through more than 288 miles of sewer main by way of six pumping stations to the San Jose-Santa Clara Regional Wastewater Facility. The RWF is a regional treatment facility that receives waste from seven agencies in Santa Clara County and can treat 167 million gallons a day (MGD) of liquid waste.

1.4 Financial Plan

The City operates the utilities as individual self-supporting enterprises. Therefore, the utilities must develop financial plans that provide sufficient revenues to meet all operation and maintenance expenses, water purchases, wastewater treatment, debt service requirements, capital improvements funded from current revenues, and other expenditures.

The Study develops financial plans that project operating revenue, expenses, and capital financing costs for the utilities over a ten-year planning period beginning July 1, 2026 and ending June 30, 2036. This report will focus on a three-year planning period for discussion, beginning July 1, 2026 and ending June 30, 2029. The full ten-year financial plans can be found in Appendix A.

The financial plans project future rate revenues under existing rates, operations, and maintenance (O&M) expenses, principal and interest expense on debt, transfers, 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. In addition, the Water Utility's forecast incorporates efforts to continue to encourage conservation measures of maintaining a 15% voluntary water use reduction and the City's Water Shortage Contingency Plan.

1.4.1 Water Utility

The Water Utility's revenue requirements are summarized below:

- Operation and Maintenance Expenses: The Water Utility anticipates O&M expenses to increase from $75.2M in FY 2027 to $87.7M in FY 2029. Water production and water purchases account for most of this increase, representing an average of 66.8% 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 $5.3M annually in capital projects from FY 2027 to FY 2029.
- Reserves: The Water Utility plans to continue funding the operating reserve, construction fund, and rate stabilization reserve.
    - The operating fund reserve is to help cover fluctuations in day-to-day expenses. The scheduled target is 90 days of O&M expenses.
    - The construction fund reserve is to help maintain enough funds on hand to help mitigate unexpected capital costs. The scheduled target is the average for the following two-year CIP.
    - The rate stabilization fund reserve is to help mitigate future increases in drought-stricken years. The scheduled target is 10% of the prior year's rate revenues.

The Water Utility is proposing revenue adjustments to allow it to operate the enterprise on a revenue-neutral basis and meet reserve targets, as shown in Figure 1-1.

Figure 1-1 Water Operating Cashflow

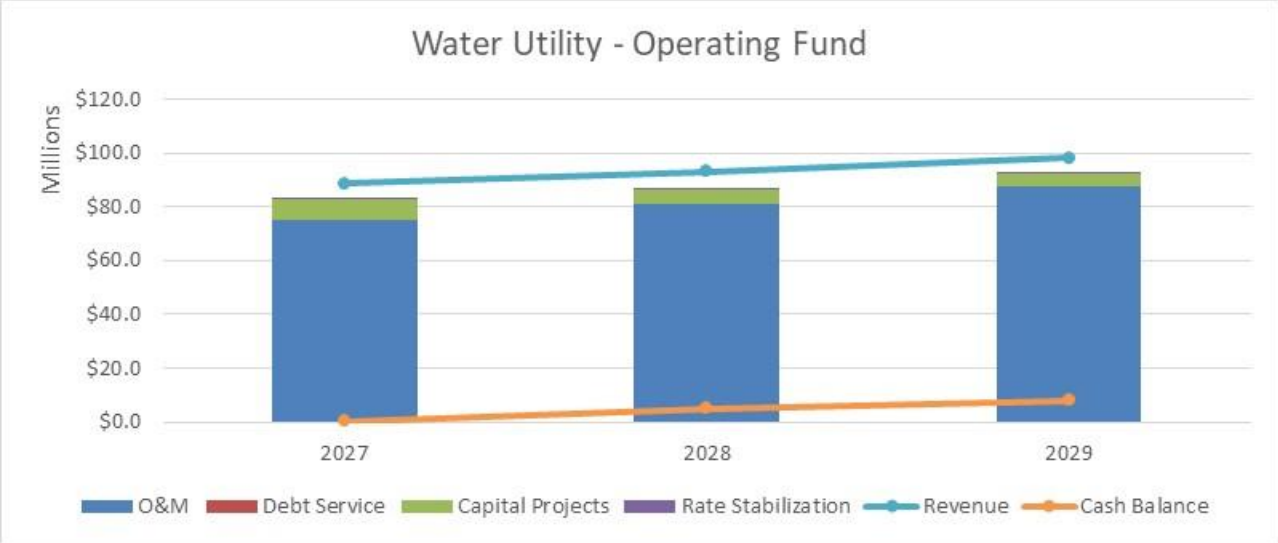
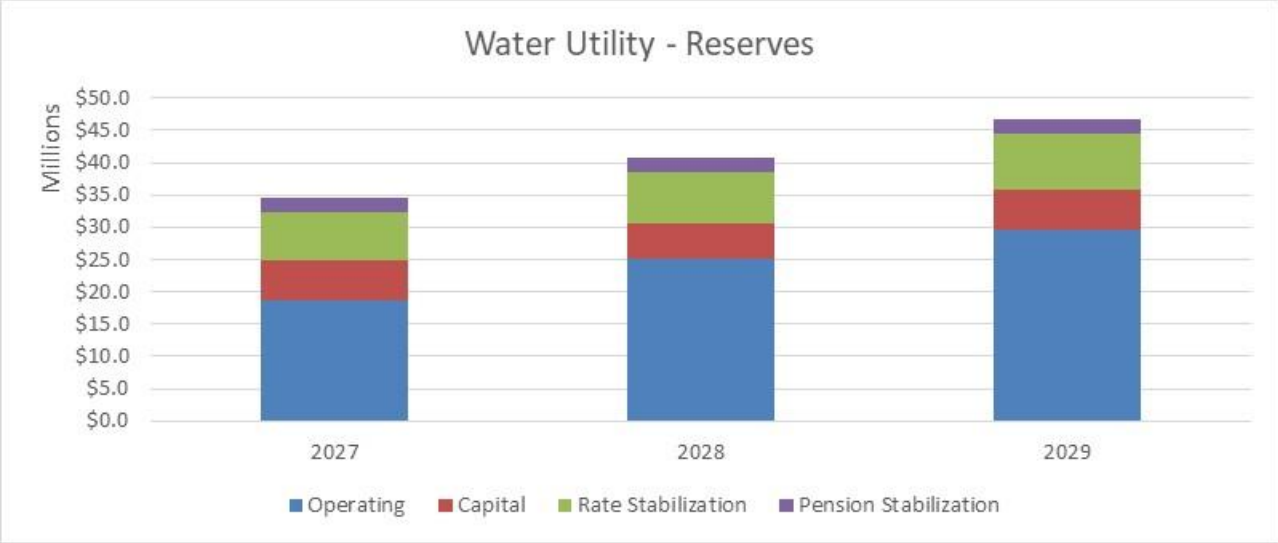


Figure 1-2 Water Reserves



1.4.2 Recycled Water Utility

The Recycled Water Utility's revenue requirements are summarized below:

- Operation and Maintenance Expenses: The Recycled Water Utility anticipates O&M expenses to increase from $12.7M in FY 2027 to $15.3M in FY 2029. Recycled water purchase costs constitute most of the increase, averaging 83.1% of O&M expenses.
- Debt Service: The Recycled Water Utility has no existing debt service, and no future debt is planned.
- Capital Improvements: The Recycled Water Utility plans to execute an average of $53.6k annually in capital projects from FY 2027 to FY 2029.
- Reserves: The City plans to continue funding the operating reserve, construction fund reserve, and rate stabilization reserve.

- The operating reserve is to help cover fluctuations in day-to-day expenses. The scheduled target is 90 days of O&M expenses.
- The construction fund is to help maintain enough funds on hand to help mitigate unexpected capital costs. The scheduled target is the average for the following two-year CIP.
- The rate stabilization fund reserve is to help mitigate future increases in drought-stricken years. The scheduled target is 10% of the prior year's rate revenues.

The Recycled Water Utility is proposing revenue adjustments and drawing down reserves to allow it to operate the enterprise on a revenue-neutral basis and meet reserve targets, as shown in Figure 1-3.

Figure 1-3 Recycled Water Operating Cash Flow

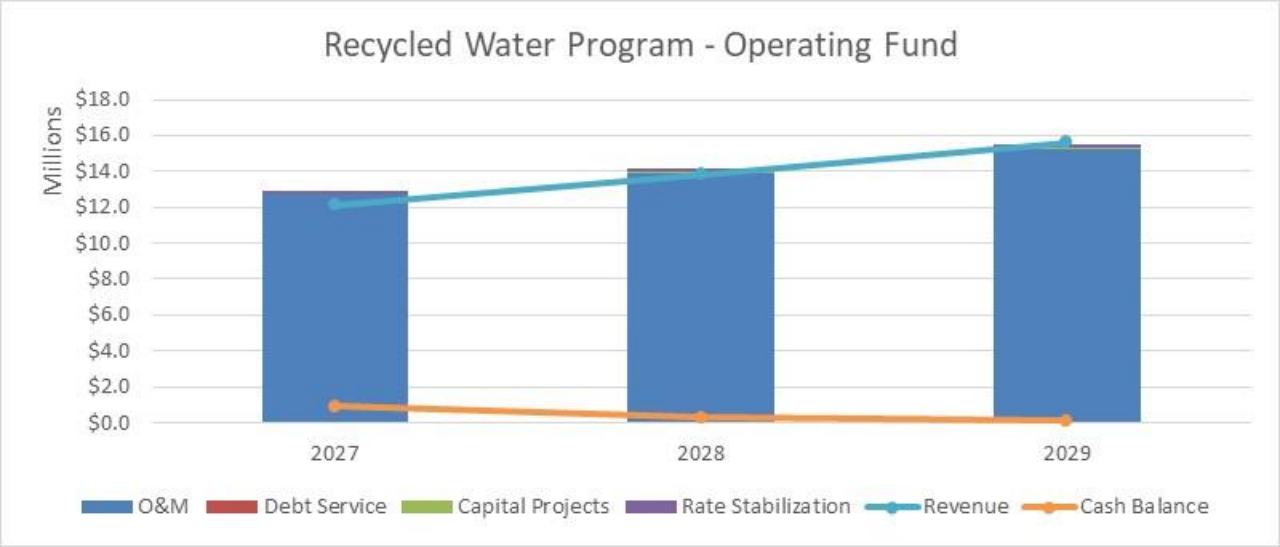
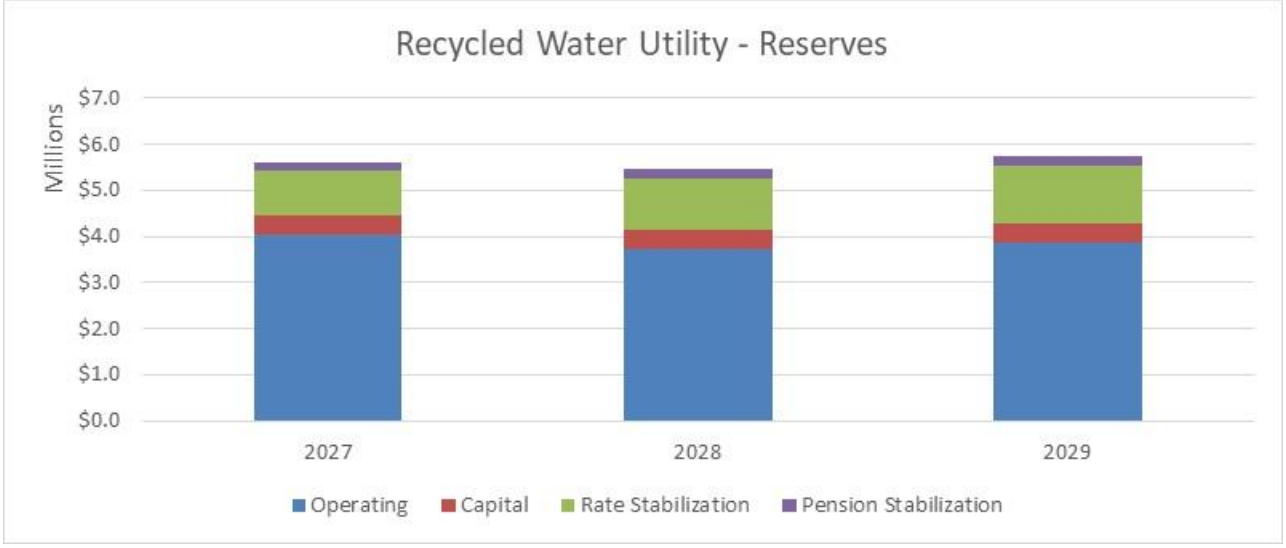


Figure 1-4 Recycled Water Reserves



1.4.3 Sewer Utility

The Sewer Utility's revenue requirements are summarized below:

- Operation and Maintenance Expenses: The Sewer Utility anticipates O&M expenses to increase from $44.2M in FY 2027 to $46.5M in FY 2028. RWF-related costs represent an average of 69.2% of O&M expenses.
- Debt Service: The Sewer Utility anticipates an average debt service payment of $4.8M annually from FY 2027 to FY 2029 associated with existing and proposed debt issuances. The City anticipates a new revenue bond for $15.5M to be issued in 2027 and another for $12.5M in 2029.
- Capital Improvements: The Sewer Utility plans to execute an average of $28.7M annually in capital projects from FY 2027 to FY 2029.
- Reserves: The Sewer Utility plans to continue funding the operating reserve, construction fund, rate stabilization fund reserve, and pension stabilization reserve.
    - The operating reserve is to help cover fluctuations in day-to-day expenses. The scheduled target is 90 days of O&M expenses.
    - The construction fund is to help maintain enough funds on hand to help mitigate unexpected capital costs. The scheduled target is the average for the following two years City CIP.
    - The rate stabilization reserve is to help mitigate future increases in drought-stricken years. The scheduled target is 10% of the prior year's rate revenues.
    - The pension reserve is to pay for the unfunded pension liabilities and the increase in the City's share of pension costs due to factors such as higher CalPERS rates and negotiated pay increases.

The Sewer Utility is proposing revenue adjustments and drawing down on reserves to allow it to operate the enterprise on a revenue-neutral basis and meet reserve targets, as shown in Figure 1-5.

Figure 1-5 Sewer Operating Cash Flow

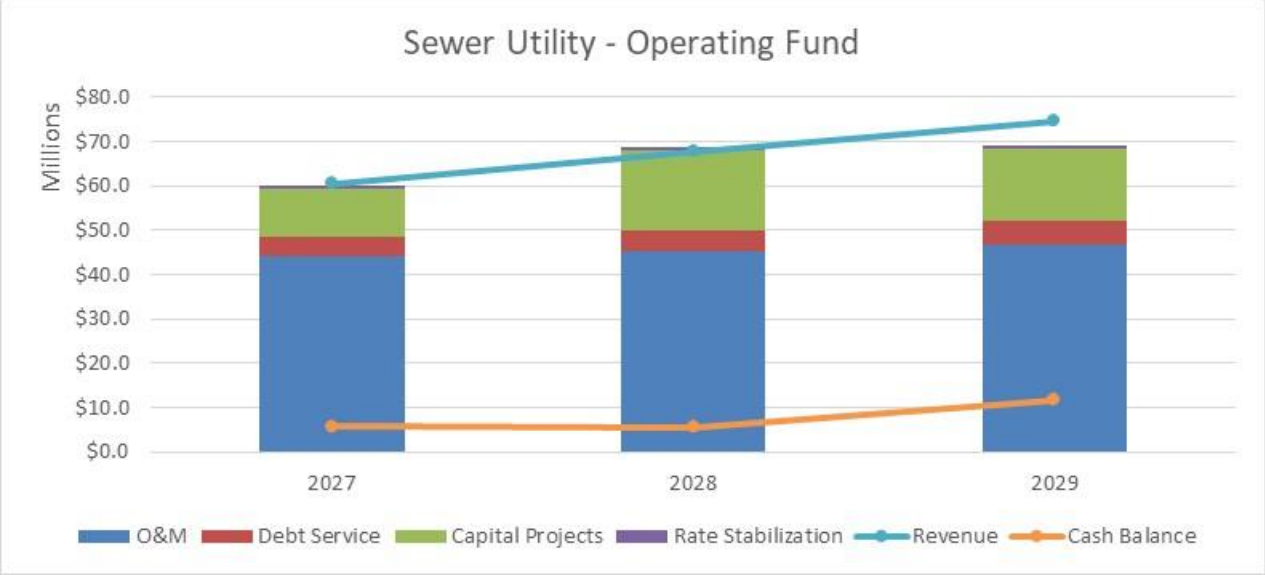
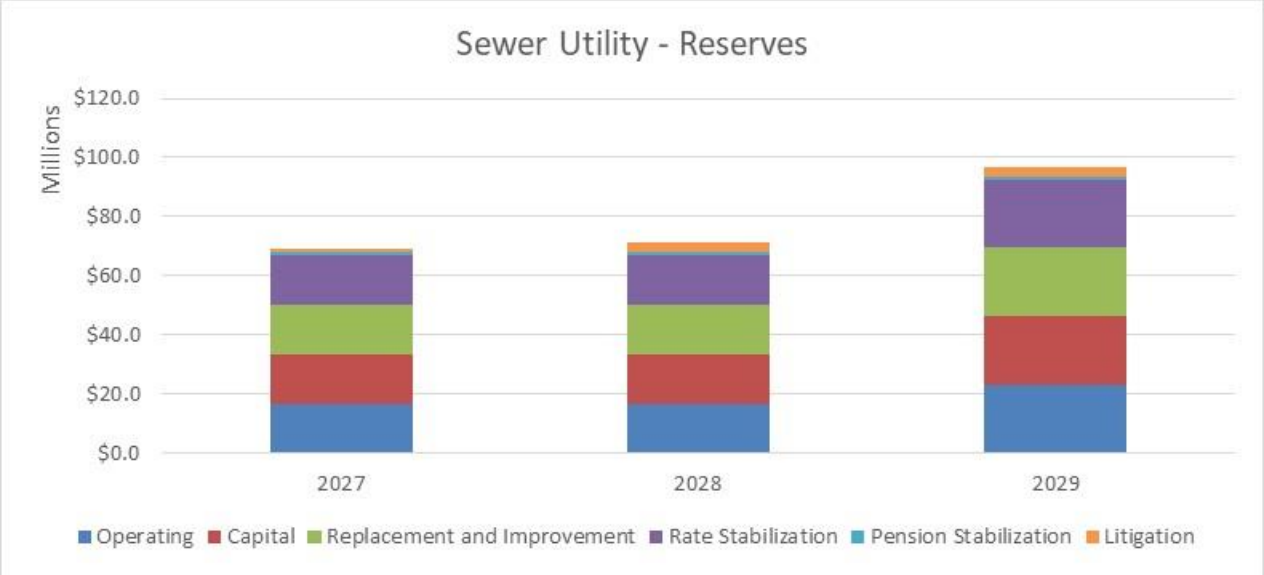


Figure 1-6 Sewer Reserves



1.5 Adequacy of Existing Rates to Meet Costs of Service

Based on the financial plans, Black & Veatch recommends the revenue adjustments shown in Table 1-1 to meet the projected revenue requirements for FY 2027 to FY 2029. These do not represent proposed rate increases for customers. Rather, these represent the overall revenue increases the utilities need to meet their overall obligations and maintain current service levels.

Table 1-1 Proposed Revenue Adjustments

Fiscal Year	Effective Month	Water Utility	Recycled Water	Sewer Utility
FY 2027	July	13.00%	14.00%	8.75%
FY 2028	July	3.00%	14.00%	11.00%
FY 2029	July	3.00%	13.00%	9.00%

1.6 Cost of Service Analysis

The cost-of-service analysis allocates the costs to the various customer classes of service in a fair and equitable manner. The methodologies used in the Study are specific to the respective utility operations. The following is a brief description of the methodologies.

The water and recycled water cost-of-service allocation performed in this Study uses the Base-Extra Capacity Method endorsed by the American Water Works Association (AWWA) Principles of Water Rates, Fees, and Charges, M1 manual. Under cost-of-service principles, costs are allocated to the different customer classes in proportion to their water system use. As recommended by AWWA, Black & Veatch distributed functional costs to the base (average load conditions), extra capacity (peaking), and customer-related parameters. This allocation methodology produces unit costs for allocation to individual customer classes based on the projected customer service requirements.

The sewer cost-of-service allocation performed in this Study follows the Functional Cost Allocation Method endorsed by the Water Environment Federation (WEF) Financing and Charges for Wastewater Systems, Manual of Practice 27 manual. Like the methodology used for water systems, the sewer cost of service analysis allocates costs to the different customer classes in proportion to their use of the sewer system. As recommended by WEF, Black &

Veatch distributed functional costs to volume, strength, and customer-related parameters. This allocation methodology produces unit costs for allocation to individual customer classes based on the projected customer service requirements.

1.7 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.

1.7.1 Water and Recycled Water Utilities

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

- Monthly Service Charge: The Water and Recycled Water Utilities should retain the minimum monthly service charge based on meter sizes for all customer classes. The minimum monthly service charge includes a minimum consumption allowance and recovers portions of fixed cost elements such as operating and capital components, meter maintenance and services, meter reading, issuing bills, and maintenance and capacity costs associated with public fire protection. The minimum consumption allowance accommodates water considered essential for health and safety.
- Consumption Charge: The Water and Recycled Water Utilities should maintain the uniform consumption charge for all customer classes. 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.
- Cross Connection Charge: The Water Utility should continue to utilize the cross-connection charge based on meter size for backflow connections. The cross-connection charge will recover the costs of maintenance associated with backflow devices.

Table 1-2 summarizes the recommended three-year rate schedules for all Water Utility components.

Table 1-2 Proposed Three-Year Water Rate Schedule

Customer Class	Proposed		
	FY 2027	FY 2028	FY 2029
Minimum Monthly Meter Rates ($/Month)	$/month	$/month	$/month
5/8" x 3/4"	29.78	30.12	31.50
1"	46.69	47.16	49.47
1-1/2"	88.97	89.76	94.40
2"	139.71	140.88	148.32
3"	275.01	277.19	292.10
4"	427.23	430.55	453.85
6"	850.05	856.54	903.16
8"	1,357.44	1,367.73	1,442.33
10"	2,033.95	2,049.31	2,161.22
12"	2,858.45	2,879.99	3,037.37
Fire Service ($/Month)	$/month	$/month	$/month
2"	4.09	4.15	4.20
4"	23.16	23.50	23.79
6"	68.13	69.13	69.98
8"	145.11	147.24	149.06
10"	260.92	264.75	268.03
12"	421.70	427.89	433.19
Cross Connection ($/Month)	$/month	$/month	$/month
1"	9.48	9.88	9.89
2"	15.17	15.81	15.82
3"	30.33	31.61	31.64
4"	47.39	49.39	49.44
6"	94.79	98.79	98.89
8"	151.66	158.06	158.22
10"	227.49	237.09	237.33
	$/HCF	$/HCF	$/HCF
Consumption Charges ($/HCF)			
General Customer	11.09	11.43	11.78

Table 1-3 summarizes the recommended three-year rate schedules for all Recycled Water Utility components.

Table 1-3 Proposed Three-Year Recycled Water Rate Schedule

Customer Class	Proposed		
	FY 2027	FY 2028	FY 2029
Minimum Monthly Meter Rates ($/Month)	$/month	$/month	$/month
5/8" x 3/4"	21.48	24.54	27.76
1"	34.91	39.94	45.26
1-1/2"	68.47	78.45	89.01
2"	108.75	124.65	141.52
3"	216.16	247.86	281.52
4"	337.00	386.47	439.02
6"	672.65	771.50	876.54
8"	1,075.44	1,233.53	1,401.55
10"	1,612.49	1,849.58	2,101.57
12"	2,267.02	2,600.38	2,954.72
Recycled Water Utility			
General Customers	6.05	6.90	7.79

1.7.2 Sewer Utility

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

- Monthly Service Charge: The Sewer Utility should retain the monthly service charge based on equivalent dwelling units (EDUs) for all residential customer classes. In addition, the monthly service charge serves as the base amount, or minimum, for all non-residential customer classes.
- Consumption Charge: The Sewer Utility should retain its uniform consumption charges for each non-residential customer class. The recommended rate structure should be based on customer class.
- Major Commercial and Industrial Users: The Sewer Utility should retain the major commercial and industrial user charge for customers with high discharge quantities and/or high strength loadings.

Table 1-4 summarizes the recommended three-year rate schedules for all Sewer Utility components.

Table 1-4 Proposed Three-Year Sewer Rate Schedules

Customer Class	Proposed		
	2027	2028	2029
	$/mo	$/mo	$/mo
Monthly Service Charge ($/EDU)			
Single Family	64.46	70.97	78.36
Multi-Family	58.26	64.32	70.94
Minimum Commercial Bill Charge ($/Month)			
All Customers	64.46	70.97	78.36
Commodity Charge ($/HCF)	$/HCF	$/HCF	$/HCF
Amusement Parks	7.17	8.16	8.71
Auto Dealers & Service Station	9.45	10.39	11.09
Churches	5.71	6.62	6.98
Com/Ind/Misc	6.83	7.79	8.29
Electric & Electronic Equip.	5.71	6.69	7.11
Food and Kindred Products	23.23	24.22	26.19
Hospitals & Convalescent Homes	8.30	9.27	9.91
Industrial Chemical	16.36	17.39	18.72
Laundries	6.99	8.01	8.51
Machinery Manufacturers	12.36	13.25	14.20
Metal Plating	4.08	4.99	5.20
Motels & Hotels	9.19	10.18	10.90
Repair Shops & Car Washes	7.64	8.48	9.00
Restaurants	23.48	24.44	26.46
Schools & Colleges	7.92	8.79	9.41
Major Users			
Operating and Maintenance Cost Recovery			
Volume (per MG)	3,637.30	5,232.79	5,529.11
BOD [2] (per 1,000 lbs)	1,012.99	979.38	1,115.40
SS [3] (per 1,000 lbs)	1,156.19	1,117.90	1,273.11
NH3 [4] (per 1,000 lbs)	9,205.87	8,898.08	10,136.00
Annual Capital Cost Recovery			
Volume (per MGD)	836,642	751,626	780,139
BOD [2] (per 1,000 lbs/day)	192,912	203,528	206,008
SS [3] (per 1,000 lbs/day)	275,578	291,699	295,648
NH3 [4] (per 1,000 lbs/day)	392,517	390,806	385,428

Water and Recycled Water Utilities

2.0 Revenue and Revenue Requirements

To meet the costs associated with providing water services to its customers, the Water and Recycled Water Utilities derive revenue from a variety of sources, including water user charges (rates), developer contributions, solar water heating, interest earned from the investment of available funds, engineering fees, and other miscellaneous revenues. Both utilities are constantly looking for other sources of revenue, such as grants, to fund infrastructure investments. Black & Veatch has projected the level of future revenue generated in the Study through an analysis of historical and future system growth in terms of the number of bills and 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 and recycled water systems expenses.

2.1 Customer and Water Consumption

2.1.1 Customer Classes

The Water Utility's customer base includes both residential and non-residential accounts. The City has three distinct customer classes: General Customer, Fire Service, and Cross Connection.

The Recycled Water Utility's customers are mainly non-residential. The City has two distinct customer classes: General Customer and Industrial Process. The City is working on transitioning Industrial Process to General Customer.

2.1.2 Minimum Bills

The City provides potable water services to 26,952 customers and recycled water services to 292 customers. All customers connected to the water and recycled water systems do so through metered connections. The City bills customers based on water consumption, but several bills do not meet the consumption allowance identified by meter size. Therefore, the City refers to these bills as minimum monthly service bills. Since the City bills customers based on minimum bills generated, the analysis included a review of historical bill patterns for customers and anticipated growth within the City. The projected total number of bills is expected to increase by average of 0.2% for the Water Utility and increase by an average of 1.0% for the Recycled Water Utility.

Table 2-1 summarizes the projected number of minimum bills for the Water and Recycled Water Utilities.

Table 2-1 Minimum Bills

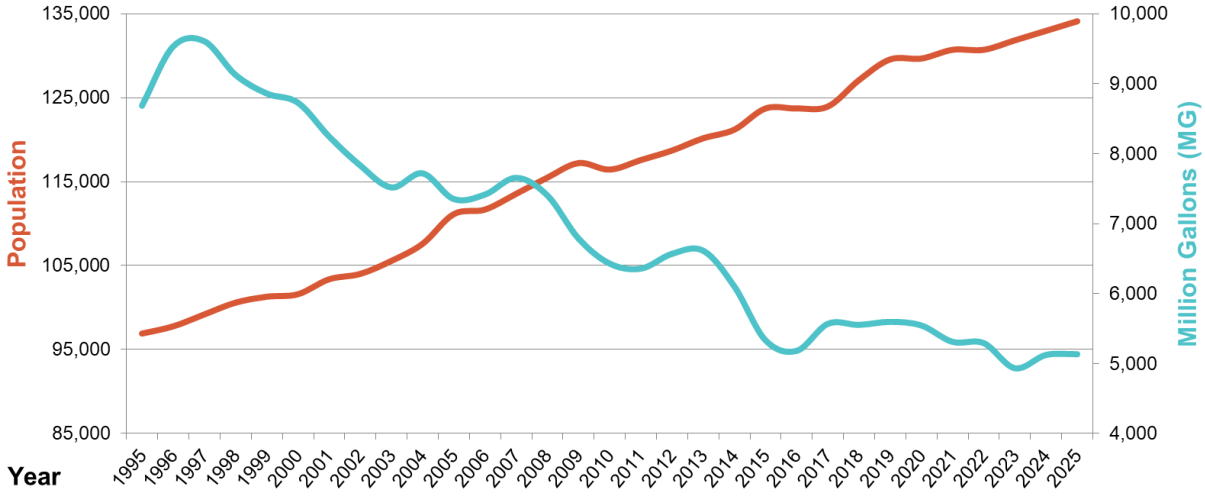
Line No.	Description	Fiscal Year Ending June 30,		
		FY 2027	FY 2028	FY 2029
		(Bills)	(Bills)	(Bills)
	Water Utility			
1	General Customers	51,526	51,654	51,783
2	Total	51,526	51,654	51,783
	Recycled Water Utility			
3	General Customers	813	821	829
4	Total	813	821	829

2.1.3 Water Consumption

Table 2-2 shows the projected water and recycled water consumption for the Study period. In determining the projected water and recycled water consumption, Black & Veatch analyzed historical water consumption patterns in conjunction with future water conservation requirements set by the City's Water Shortage Contingency Plan. In 2017, the State of California formally lifted the water restrictions as it declared the drought over. Unfortunately, in 2022 after another three years of dry weather, Governor Newsom called for local water suppliers to move to Level 2 of their Water Shortage Contingency Plans to drive water conservation. The City then moved to Level 2 in conjunction with Valley Water. In July 2023, after increased rainfall, the City rescinded Level 2 and have returned to normal. Despite operating under normal conditions, the City and Valley Water work together to maintain a 15% voluntary water use reduction as water conditions change.

Figure 2-1 below represents the population growth and a decline in water consumption. Many factors have contributed to the City's steady decline in consumption despite the increase in population. The City's primary conservation goals can be found in the Water Shortage Contingency Plan, and Santa Clara's Council codified the continuing goal to conserve in July of 2017. The City offers incentives to customers and works with Valley Water on other outreach and rebate programs for water conservation. Expanding the use of recycled water to existing and new customers has also been important for the City in supplementing the use of potable water. Overall, customers have done well to increase efficiency in the use of water resources.

Figure 2-1 Water Sales



While recognizing the City's water conservation goals, the City still anticipates consumption to increase by 2.5% annually for the Water Utility and 1.0% annually for the Recycled Water Utility over the Study period. The City is experiencing new development which contribute to the increase in water consumption. The City currently bills water consumption in hundred cubic feet (HCF) and only charges for consumption more than the allowance.

Table 2-2 Billed Water Consumption

Line No.	Description	Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029
		(HCF)	(HCF)	(HCF)
	Water Utility			
1	General Customers	7,071,871	7,248,667	7,429,884
2	Total Usage (HCF)	7,071,871	7,248,667	7,429,884
3	Total Usage (AF)	16,235	16,641	17,057
	Recycled Water Utility			
4	General Customers	1,775,791	1,793,549	1,811,484
5	Total Usage (HCF)	1,775,791	1,793,549	1,811,484
6	Total Usage (AF)	4,077	4,117	4,159

2.2 Revenue under Existing Rates

Water and recycled water user rates serve as the primary source of revenue for the Water and Recycled Water Utilities. Therefore, the level of future rate revenue is important in developing a long-range financial plan. To determine rate revenue, the projected system growth in terms of the number of minimum bills and billed water consumption is multiplied by the applicable rates to determine water and recycled water rate revenue.

Table 2-3 shows the current Water and Recycled Water Utilities rate schedules. It is important to note that the minimum monthly service charge applies to customers that do not exceed the consumption allowance within the meter sizes. Therefore, the minimum monthly service charge serves as a baseline cost that the City needs to recover.

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Table 2-3 Existing Water and Recycled Water Rates

Description	All City FY 2026 Water ($/mo)	All City FY 2026 Recycled Water ($/mo)
Minimum Monthly Meter Rates		
5/8" x 3/4"	26.46	17.80
1"	41.70	29.07
1-1/2"	79.79	57.26
2"	125.50	91.08
3"	247.40	181.27
4"	384.53	282.74
6"	765.46	564.59
8"	1,222.58	902.82
10"	1,832.07	1,353.78
12"	2,574.88	1,903.40

Description	All City FY 2026 ($/HCF)
Consumption Charges	
Water Utility	
General Customers	9.89
Recycled Water Utility	
General Customers	5.43

Fire Service Charges	($/mo)
2"	3.50
4"	19.83
6"	58.33
8"	124.24
10"	223.42
12"	361.08

Cross Connection Charges	($/mo)
1"	7.47
2"	11.95
3"	23.89
4"	37.33
6"	74.66
8"	119.46
10"	179.19

Table 2-4 summarizes projected water and recycled water rate revenue under existing rates. As shown, the revenue generated is projected to increase recycled water over the Study period in conjunction with the increase in the number of minimum bills and water consumption. The projected Water Utility revenues will increase from $75.5M from FY 2027 to $79.1M in FY 2029, while the projected Recycled Water Utility revenue increases from $9.5M in FY 2027 to $9.7M in FY 2029, reflecting an overall increase of 4.7% and 2.0%, respectively over the three-year Study period.

Table 2-4 Projected Revenue under Existing Rates

Line No.	Description	Fiscal Year Ending June 30, FY 2027 ($)	FY 2028 ($)	FY 2029 ($)
	Water Utility			
1	General Customers	72,937,500	74,701,800	76,510,400
2	Fire Service	1,263,800	1,265,000	1,266,300
3	Cross Connection	1,344,800	1,346,200	1,347,500
4	Total	$ 75,546,100	$ 77,313,000	$ 79,124,200
	Recycled Water Utility			
5	General Customers	9,524,600	9,619,900	9,716,000
6	Total	$ 9,524,600	$ 9,619,900	$ 9,716,000

2.3 Other Revenue

Other sources of operating revenue include charges for hydrant flow tests, meter tests, engineering plan review, water installation and relocation, interest on investments, and other miscellaneous revenues. In total, other operating revenues represent an average of 3.6% of the Water Utility's total revenue and an average of 9.5% of the Recycled Water Utility's total revenue. The City anticipates that these revenues will remain relatively constant for the duration of the Study period.

2.4 Operating and Maintenance Expenses

Table 2-5 summarizes the Water and Recycled Water Utilities' projected O&M expense for the Study period. These expenses include costs related to salaries and benefits, materials and supplies, contract and professional services, water supply costs, indirect and direct costs, and routine capital outlay. The City anticipates that all O&M expenditures, excluding water supply costs, will increase on average by 3.7% annually for the Water Utility and an average of 5.8% annually for the Recycled Water Utility from FY 2027.

Water supply costs include water produced and water purchased costs. In the case of the Water Utility, the City has three main sources of water: 1) groundwater pumped from City-owned wells; 2) surface water from the Valley Water and 3) imported water from the Hetch Hetchy watershed from SFPUC. The City operates 26 groundwater wells that tap the underground aquifers, which make up approximately 53% of the City's water supply. The City imports the remainder of its water supplies from the two wholesale water agencies. Based on estimates of groundwater and wholesale rates provided by Valley Water and SFPUC, the City expects water production and purchased water costs to increase by at least 21.3% over the Study period.

Recycled water is a reliable drought-proof source of water that helps offset the use of potable sources, especially in drought-prone years in California. In the case of the Recycled Water Utility, the City has one main source of recycled water: The San Jose-Santa Clara Regional Wastewater Facility. This facility produces highly treated water delivered through separate pipelines. Based on estimates from the facility, the City expects purchased recycled water costs to increase by at least 22.2% over the Study period.

Table 2-5 O&M Expenses

Line No.	Description	Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029
		($)	($)	($)
	Water Utility			
1	Salaries	6,414,200	6,824,800	7,056,800
2	Benefits	4,089,000	4,150,200	4,316,300
3	Materials/Services/Supplies	4,977,221	5,067,966	5,160,230
4	Interfund Services	10,318,400	10,756,400	11,224,400
5	Resource & Production	49,261,800	54,052,200	59,749,800
6	Capital Outlay	156,100	159,200	162,400
7	Total	$ 75,216,721	$ 81,010,766	$ 87,669,930
	Recycled Water Utility			
8	Salaries	889,700	940,500	978,100
9	Benefits	562,300	568,200	589,600
10	Materials/Services/Supplies	40,700	41,500	42,300
11	Interfund Services	727,300	797,100	875,500
12	Resource & Production	10,468,600	11,574,800	12,794,200
13	Capital Outlay	0	0	0
14	Total	$ 12,688,600	$ 13,922,100	$ 15,279,700

As shown in Table 2-5, the Water Utility's O&M expenses increase from $75.2M in FY 2027 to $87.7M in FY 2029, while the Recycled Water Utility's O&M expenses increase from $12.7 in FY 2027 to $15.3M in FY 2029.

2.5 Capital Improvement Program

The Water and Recycled Water Utilities develop five-year Capital Improvement Plans annually to identify water and recycled water system needs, including assessments, inspections, maintenance, and rehabilitation and replacement requirements.

Table 2-6 summarizes the Water and Recycled Water Utilities CIP for FY 2027 through FY 2029. The Water Utility is projecting $15.8M in CIP, and the Recycled Water Utility is projecting $160.9k in CIP over the Study period, which includes both capital and replacement projects. The City has posted the CIP Budget on its website for complete details associated with each CIP project.

Table 2-6 Capital Improvement Projects

Line No.	Description	Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029
		($)	($)	($)
	Water Utility			
1	7005 Buildings and Grounds	103,500	107,200	111,000
2	7054 Distribution System Replacement/Restoration	3,106,100	3,215,900	3,329,600
3	7057 Asset Management Program	0	0	0
4	7058 SCADA Improvements	362,400	268,000	111,000
5	7059 New and Replacement Wells	1,863,700	1,929,600	333,000
6	PW Paving Project Support	310,600	321,600	333,000
7	Total	$ 5,746,300	$ 5,842,300	$ 4,217,600
	Recycled Water Utility			
8	7505 Recycled Water System Mains and Services	51,800	53,600	55,500
9	Total	$ 51,800	$ 53,600	$ 55,500

2.5.1 Capital Improvement Financing Plan

The City funds annual expenditure for the CIP from a combination of available funds on hand, connection charges, developer contributions, and revenues derived from user rates. As shown in Table 2-7 and Table 2-8, the average annual CIP expenditure is $5.3M for the Water Utility and $53.6k for the Recycled Water Utility. There is no planned annual CIP contribution from the Water Utility Operating Fund and Recycled Water Utility over the Study period. The CIP will be funded through funds on hand.

Table 2-7 Construction Fund Financing Plan (Water)

Line No.	Description	Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029
		($)	($)	($)
	Source of Funds			
1	Intra Transfer In - Debt Financing	0	0	0
2	Intra Transfer In - Customer Service Charge	7,900,000	5,200,000	5,000,000
3	Connection Charges	0	0	0
4	Developer Contributions	0	0	0
5	Total Sources	$ 7,900,000	$ 5,200,000	$ 5,000,000
	Use of Funds			
6	Improvements Projects	5,824,000	5,922,700	4,300,800
7	Infrastructure Reserve	3,844,550	(761,600)	(734,950)
8	Total Uses	$ 9,668,550	$ 5,161,100	$ 3,565,850
9	Net Annual Cash Balance	(1,768,550)	38,900	1,434,150
10	Beginning Unrestricted Fund Balance	1,775,000	6,450	45,350
11	Net Cumulative Fund Balance	$ 6,450	$ 45,350	$ 1,479,500
12	Construction + Infrastructure Reserves	$ 5,879,800	$ 5,157,100	$ 5,856,300
13	Minimum Reserves	$ 5,873,350	$ 5,111,750	$ 4,376,800

Table 2-8 Construction Fund Financing Plan (Recycled Water)

Line No.	Description	Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029
		($)	($)	($)
	Source of Funds			
1	Intra Transfer In - Debt Financing	0	0	0
2	Intra Transfer In - Customer Service Charge	50,000	50,000	50,000
3	Connection Charges	0	0	0
4	Developer Contributions	0	0	0
5	Total Sources	$ 50,000	$ 50,000	$ 50,000
	Use of Funds			
6	Improvements Projects	51,800	53,600	55,500
7	Infrastructure Reserve	1,200	1,850	1,950
8	Total Uses	$ 53,000	$ 55,450	$ 57,450
9	Net Annual Cash Balance	(3,000)	(5,450)	(7,450)
10	Beginning Unrestricted Fund Balance	379,900	376,900	371,450
11	Net Cumulative Fund Balance	$ 376,900	$ 371,450	$ 364,000
12	Construction + Infrastructure Reserves	$ 429,600	$ 426,000	$ 420,500
13	Minimum Reserves	$ 52,700	$ 54,550	$ 56,500

2.6 Transfers

The Water and Recycled Water Utilities will each conduct transfers from their respective Operating Funds and other funds and reserves over the Study period. Table 2-9, Lines 18 to 21 for the Water Utility and Table 2-10, Lines 13 to 15 for Recycled Water Utility summarize these associated amounts, respectively. The other funds consist of the Operating Reserve, Rate Stabilization Reserve, and Construction Fund. See Section 2.7 for further explanation on Rate Stabilization Reserve. The Construction Fund transfers represent money to cover planned CIP project expenditures. These transfers do not represent direct operating expenses for either enterprise; therefore, Black & Veatch includes these costs as "below-the-line" cash flow items and does not include them as O&M expenses.

2.7 Reserves

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

- Operating Reserve represents working capital maintained by the Operating Fund to cover day-to-day expenses and maintain enough funds to cover accounts receivable if there are supplier issues, periods of lower-than-expected water sales, or unforeseen cost increases. The reserve will maintain a minimum balance of 90 days of operating expenses once fully funded.
- Construction Reserve represents funds used for unforeseen and unbudgeted capital costs. Once fully funded, this reserve will maintain a minimum balance of the average of the following two-years planned CIP.
- Rate Stabilization Reserve represents funds used to absorb revenue shortfall due to short-term decreases in water sales. This reserve stabilizes water and recycled water rate revenue and is an effort to avoid wide

swings in rates charged to customers over time. The reserve will maintain a minimum balance of 10% of water and recycled water sales revenue when fully funded.

Appropriate reserve levels help the Water and Recycled Water Utilities with liquidity, provide operational flexibility, and demonstrate fiscal responsibility to the rating agencies, which allows the City to access lower-cost funds.

2.8 Projected Operating Results

The revenue requirements of the Water and Recycled Water Utilities consist of O&M expenses, debt service, capital expenditures, and reserve requirements.

To fully understand the current condition of the Water and Recycled Water Utilities, it is important to examine the cash flow projections under the status quo scenario. As shown in Figure 2-2 and Figure 2-3, the status quo conditions would project that both utilities would operate from an annual deficit position, thus requiring the use of reserves to keep operating. In this scenario, the Water and Recycled Water Utilities 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 2-2 Status Quo Operating Cash Flow (Water)

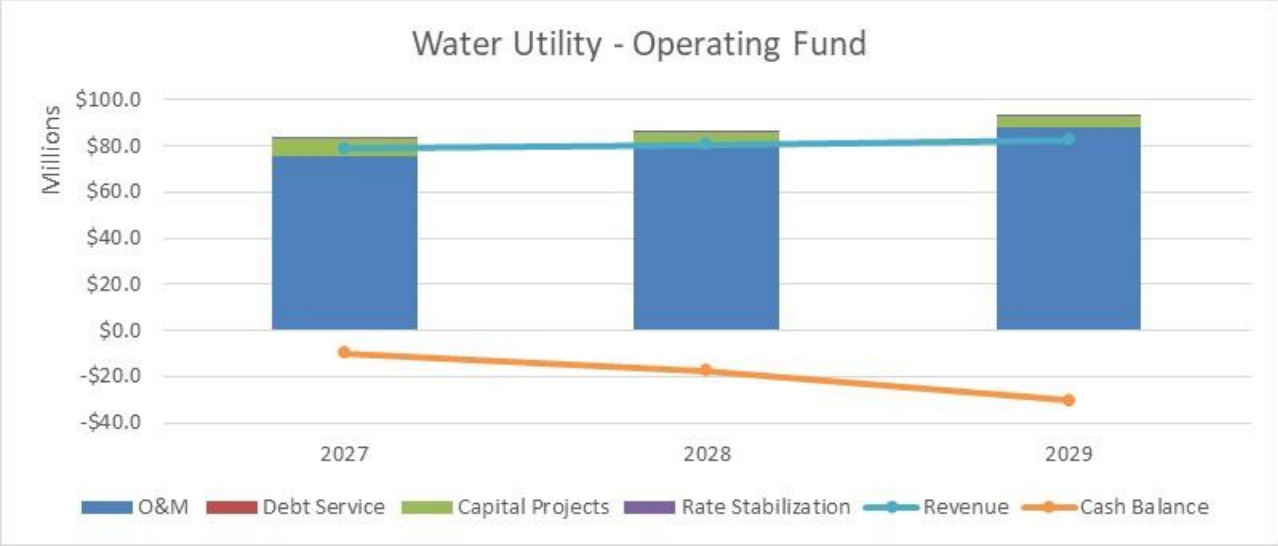
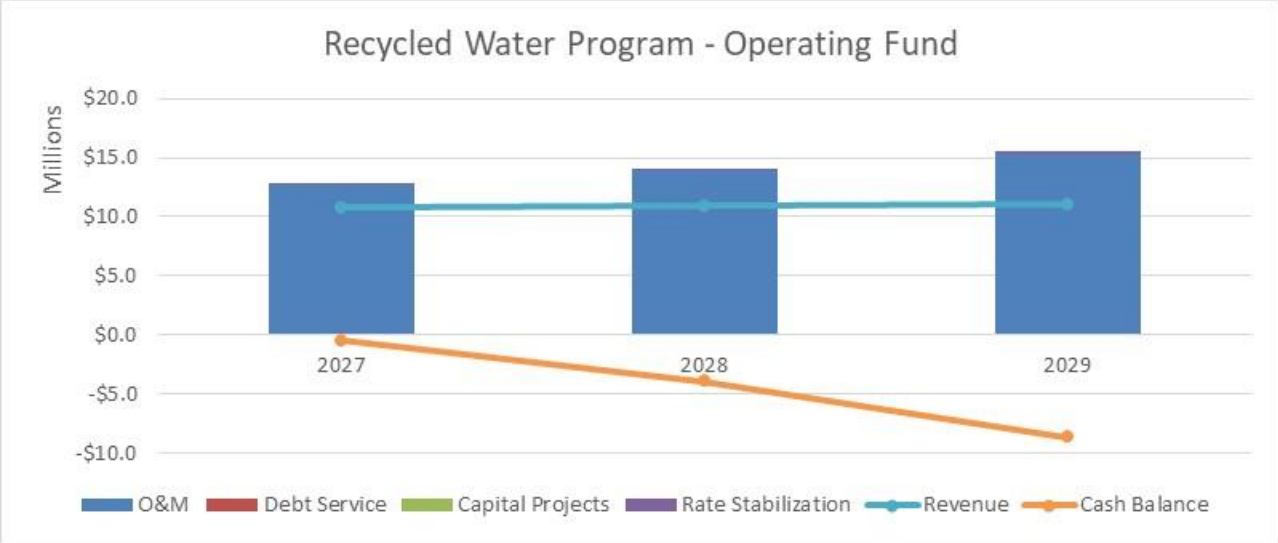


Figure 2-3 Status Quo Operating Cash Flow (Recycled Water)



The analyses performed for the Study indicate that the City should implement the proposed revenue increases shown in Table 2-9 and Table 2-10 if it wishes to keep the Water and Recycled Water Utilities in a balance financial condition. The revenue increases represent the overall 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 and Recycled Water Utilities' obligations.

The suggested revenue increases help the Water and Recycled Water Utilities meet the following goals:

- Meet budgeted operating obligations in the three FYs.
- Meet planned capital investments in the three FYs.
- Maintain an operating reserve of 90 days of operating expenses.
- Increase combined construction and infrastructure reserve to the average of the next two years CIP.
- Continue transfers for the rate stabilization reserve to meet the goal of 10% of rate revenues.

Table 2-9 and Table 2-10 summarize proposed Operating Funds for the Study Period. The Operating Funds consist of 1) Revenue and 2) Revenue Requirements.

Revenue

- Line 1 is the revenue under existing rates.
- Lines 2 through 4 are the additional revenues generated from the required annual revenue increases. The additional revenue generated is a direct reflection of the number of months the increase is effective for, and therefore amount might be calculated at less than that stated amount.
- Line 6 is the total revenue generated from user charges.
- Line 14 for the Water Utility and Line 9 for the Recycled Water Utility represent other operating revenues.
- Line 15 for the Water Utility and Line 10 for the Recycled Water Utility represent total revenues for the enterprises.

Revenue Requirements

- Line 17 for the Water Utility and Line 12 for the Recycled Water Utility represent O&M expenses. The O&M expenses include water production and water purchase.
- Line 22 for the Water Utility and Line 16 for the Recycled Water Utility represent transfers. The transfers include money to the Rate Stabilization Fund, Operating Reserve, and Construction Fund.
- Line 23 for the Water Utility and Line 17 for the Recycled Water Utility represent total revenue requirements for the enterprises.

Line 27 for the Water Utility and Line 21 for the Recycled Water Utility represent the net cumulative cash balance (unrestricted) within the Operating Funds. The net unrestricted plus operating reserve intends to match, to the extent possible, Line 28 for the Water Utility and Line 29 for the Recycled Water Utility. The cash balance reserve is required to ensure the Operation Fund can continue in the event of a supplier interruption, market price fluctuations in critical equipment or supplies, or an abrupt drop in accounts receivable. The reserve target minimum is 90 days of O&M expenses.

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Table 2-9 Operating Fund (Water)

Line No.	Description			Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029
				($)	($)	($)
	Revenue					
	Rate Revenue					
1	Revenue from Existing Rates			75,546,100	77,313,000	79,124,200
	Year	Months Effective	Rate Adj			
2	FY 2027	12	13.00%	9,821,000	10,050,700	10,286,100
3	FY 2028	12	3.00%		2,620,900	2,682,300
4	FY 2029	12	3.00%			2,762,800
5	Increased Revenue Due to Adjustments			9,821,000	12,671,600	15,731,200
6	Subtotal Rate Revenue			$ 85,367,100	$ 89,984,600	$ 94,855,400
	Other Operating Revenue					
7	Solar System Maintenance			89,800	89,800	89,800
8	Water System Maintenance			1,669,700	1,669,700	1,669,700
9	Water Construction			0	0	0
10	Water System Operations			0	0	0
11	Administration Design			1,557,400	1,566,600	1,576,000
12	Water Quality			0	0	0
13	Water Resources			0	0	0
14	Subtotal Other Operating Revenue			$ 3,316,900	$ 3,326,100	$ 3,335,500
15	**Total Revenue**			**$ 88,684,000**	**$ 93,310,700**	**$ 98,190,900**
	Revenue Requirements					
	Operating & Maintenance					
16	O&M Expenses			75,216,700	81,010,800	87,669,900
17	Subtotal O&M			$ 75,216,700	$ 81,010,800	$ 87,669,900
	Transfers					
18	Transfer to Other Funds			346,500	154,500	292,400
19	Transfer to Rate Stabilization Reserve			600,000	725,000	725,000
20	Transfer to Operating Reserve			7,811,000	1,428,700	1,641,900
21	Transfer to Water Construction Fund			7,900,000	5,200,000	5,000,000
22	Total Transfers			$ 16,657,500	$ 7,508,200	$ 7,659,300
23	**Total Revenue Requirements**			**$ 91,874,200**	**$ 88,519,000**	**$ 95,329,200**
24	Net Annual Cash Balance			(3,190,200)	4,791,700	2,861,700
25	Beginning Fund Balance			3,319,700	129,500	4,921,200
26	Net Cumulative Fund Balance			$ 129,500	$ 4,921,200	$ 7,782,900
27	Unrestricted + Operating Reserve			$ 18,676,100	$ 24,896,500	$ 29,400,100
28	Minimum Operating Reserves (90 Days)			$ 18,546,600	$ 19,975,300	$ 21,617,200

Table 2-10 Operating Fund (Recycled Water)

Line No.	Description			Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029
				($)	($)	($)
	Revenue					
	Rate Revenue					
1	Revenue from Existing Rates			9,524,600	9,619,900	9,716,000
	Year	Months Effective	Rate Adj			
2	FY 2027	12	14.00%	1,333,400	1,346,800	1,360,200
3	FY 2028	12	14.00%		1,535,300	1,550,700
4	FY 2029	12	13.00%			1,641,500
5	Increased Revenue Due to Adjustments			1,333,400	2,882,100	4,552,400
6	Subtotal Rate Revenue			$ 10,858,000	$ 12,502,000	$ 14,268,400
	Other Operating Revenue					
7	System Maintenance			102,500	104,600	106,700
8	South Bay Water Recycling System Maintenance			1,162,400	1,204,900	1,248,800
9	Subtotal Other Operating Revenue			$ 1,264,900	$ 1,309,500	$ 1,355,500
10	**Total Revenue**			**$ 12,122,900**	**$ 13,811,500**	**$ 15,623,900**
	Revenue Requirements					
	Operating & Maintenance					
11	O&M Expenses			12,688,600	13,922,100	15,279,700
12	Subtotal O&M			12,688,600	13,922,100	15,279,700
	Transfers					
13	Transfer to Rate Stabilization Reserve			150,000	150,000	150,000
14	Transfer to Operating Reserve			328,700	304,100	334,800
15	Transfer to Recycled Water Const Fund			50,000	50,000	50,000
16	Total Transfers			528,700	504,100	534,800
17	**Total Revenue Requirements**			**$ 13,217,300**	**$ 14,426,200**	**$ 15,814,500**
18	Net Annual Cash Balance			(1,094,400)	(614,700)	(190,600)
19	Beginning Fund Balance			2,005,400	911,000	296,300
20	Net Cumulative Fund Balance			$ 911,000	$ 296,300	$ 105,700
21	Unrestricted + Operating Reserve			$ 4,039,700	$ 3,729,100	$ 3,873,300
22	Minimum Operating Reserves (90 Days)			$ 3,128,700	$ 3,432,800	$ 3,767,600

Table 2-9 presents the proposed Water Utility Operating Fund, and Table 2-10 presents the Recycled Water Utility Operating Fund.

Figure 2-4 Water Operating Cash Flow

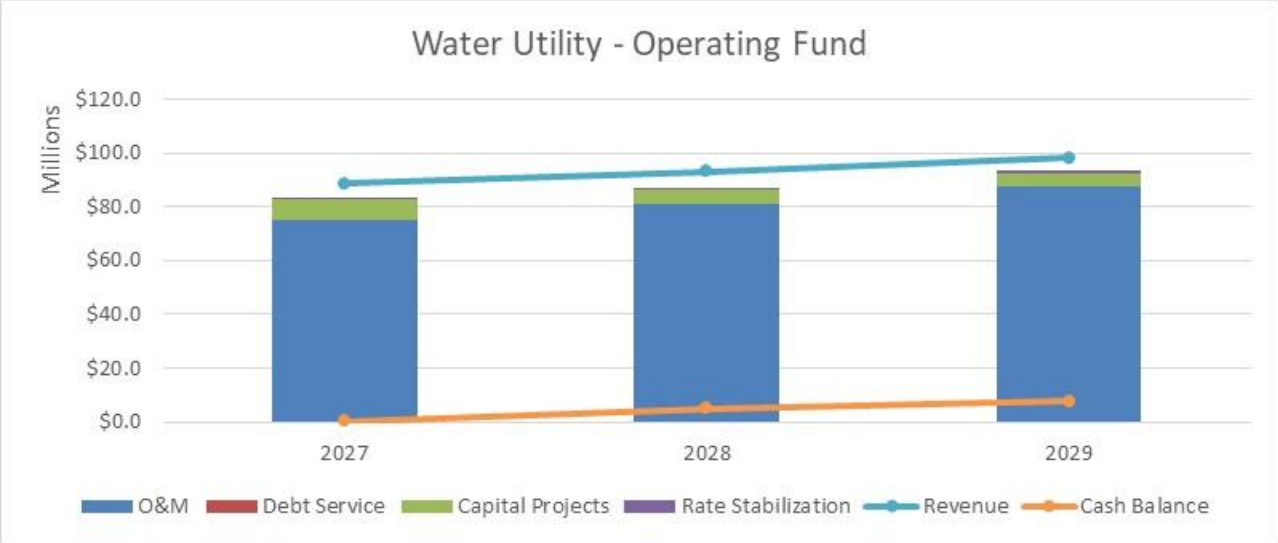
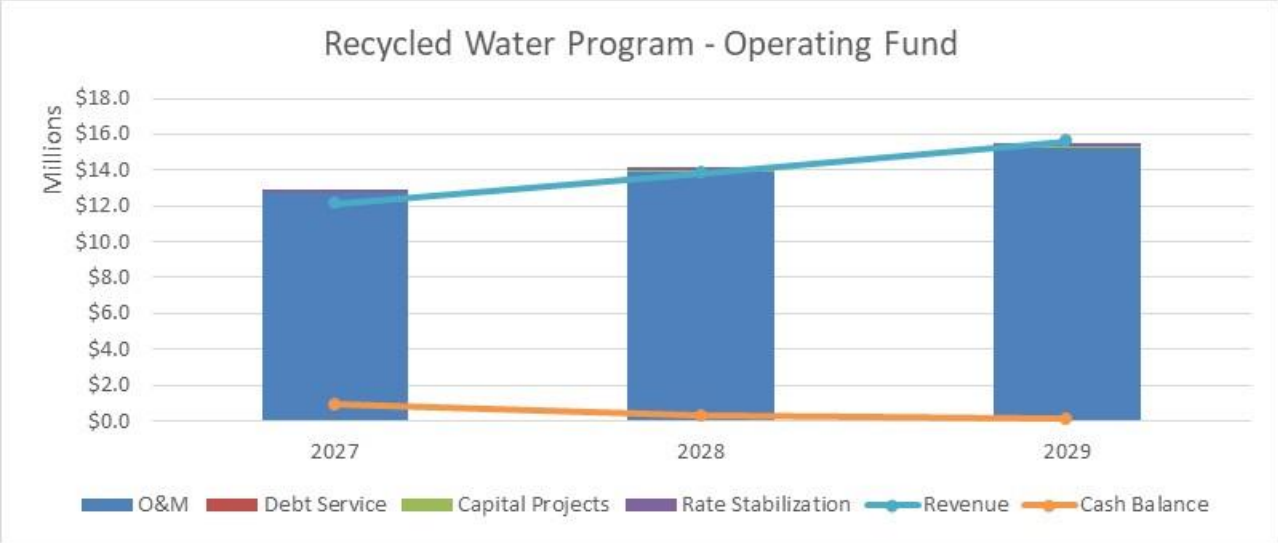


Figure 2-5 Recycled Water Operating Cash Flow



3.0 Cost of Service Analysis

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

In analyzing the Water and Recycled Water Utilities' cost of service for allocation to its customer classes, Black & Veatch selected the annual revenue requirements for FY 2027 as the Test Year (TY) requirements to demonstrate the development of cost-of-service water and recycled water rates.

Table 3-1 summarizes the total costs of service that need to be recovered from water user rates. Table 3-2 summarizes the total costs of service that need to be recovered from recycled water user rates. Both tables represent TY 2027.

Table 3-1 Cost of Service Revenue from Rates (Water)

Line No.	Description	Operating Expense	Capital Cost	Total Cost
		($)	($)	($)
	Revenue Requirements			
1	O&M Expenses	75,216,700	0	75,216,700
2	Debt Service	0	0	0
3	Transfers	8,757,500	7,900,000	16,657,500
4	Subtotal	83,974,200	7,900,000	91,874,200
	Less Revenue Requirements Met from Other Sources			
5	Solar System Maintenance	89,800	0	89,800
6	Water System Maintenance	1,669,700	0	1,669,700
7	Water Construction	0	0	0
8	Water System Operations	0	0	0
9	Administration Design	1,557,400	0	1,557,400
10	Water Quality	0	0	0
11	Water Resources	0	0	0
12	Subtotal	3,316,900	0	3,316,900
	Adjustments			
13	Adjustment for Annual Cash Balance	3,190,200	0	3,190,200
14	Subtotal	3,190,200	0	3,190,200
15	Cost of Service to be Recovered from Rates	$ 77,467,100	$ 7,900,000	$ 85,367,100

Table 3-2 Cost of Service Revenue from Rates (Recycled Water)

Line No.	Description	Operating Expense	Capital Cost	Total Cost
		($)	($)	($)
	Revenue Requirements			
1	O&M Expenses	12,688,600	0	12,688,600
2	Debt Service	0	0	0
3	Transfers	478,700	50,000	528,700
4	Subtotal	13,167,300	50,000	13,217,300
	Less Revenue Requirements Met from Other Sources			
5	System Maintenance	102,500	0	102,500
6	South Bay Water Recycling System Maintenance	1,162,400	0	1,162,400
7	Subtotal	1,264,900	0	1,264,900
	Adjustments			
8	Adjustment for Annual Cash Balance	1,094,400	0	1,094,400
9	Subtotal	1,094,400	0	1,094,400
10	Cost of Service to be Recovered from Rates	$ 10,808,000	$ 50,000	$ 10,858,000

The total revenue requirement is shown in Line 4, which corresponds with Table 2-9, Line 23, and Table 2-10, Line 17. As shown in Line 12 for the Water Utility and Line 7 for the Recycled Water Utility, we deduct revenues from other sources to derive the net revenue requirement recovered through rates, which correspond with Table 2-9, Line 14 and Table 2-10, Line 9, respectively.

Line 13 for the Water Utility and Line 8 for the Recycled Water Utility represent the net annual cash balance during the TY. If the enterprise is drawing down funds already in the Operating Fund, this number is positive. The number will be negative if the enterprise is replacing funds. In the case of the Water Utility, the $3.2M figure indicates that the forecast projects a negative cash balance for the year. In the case of the Recycled Water Utility, the $1.1M figure indicates that the forecast projects a negative cash balance for the year.

3.1 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 properly allocate the costs to the various customer classes and, subsequently, design rates. As a basis for allocating costs of service among customer classes, the study separates costs into the following four basic functional cost components: (1) Base; (2) Extra Capacity; (3) Customer; and (4) Direct Assignment, described as follows:

- 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 those operating and capital costs incurred in meeting 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 fire protection and cross-connections for the Water Utility. The Recycled Water Utility has no direct assigned categories.

3.2 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 classes of customers based on their respective responsibilities for each type of service.

3.2.1 System Base, Max Day, and Max Hour Allocations

The water and recycled water systems consist of various facilities designed and operated to fulfill a given function. For the systems to provide adequate service for its customers, it must be capable of meeting the annual volume requirements and the maximum demand rates placed on the system. Because not all customers and types of customers exert maximum demand at the same time, the capacities of the various facilities must meet the maximum coincidental demand of all classes of customers. Each water and recycled water service facility within the system has an underlying average demand exerted by the customers for 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 is equal to the average daily demand (ADD) and is assigned to a value of 1.0. Based on the City's 2002 Water Master Plan, the Water Utility's maximum day (max day) demand is 1.5 times the ADD. The maximum hourly (max hour) demand is 1.8 times the ADD. Based on the City's 2014 Strategic and Master Planning Report, 2002 Water Master Plan, the Recycled Water Utility's max day demand is 1.7 times the ADD. The max hour demand is 2.38 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. Recycled Water Utility would use a similar allocation based on its respective max day and max hour ratios.

- Base = (1.0/1.5) x 100 = 66.7%
- Max Day = (1.5 – 1.0)/1.5 x 100 = 33.3%

These calculations indicate that the average or base use requires 66.7% of the capacity of facilities designed and generated to meet maximum day demand, and the remaining 33.3% 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 = (1.0/1.8) x 100 = 55.6%
- Max Day = (1.5 – 1.0)/1.8 x 100 = 27.7%
- Max Hour = (1.8 – 1.5)/1.8 x 100 = 16.7%

3.2.2 Allocation of Operating and Maintenance Expenses

In allocating O&M expenses for TY 2027, costs are directly allocated to the cost components to the extent possible. The Water and Recycled Water Utilities book operating costs by functional categories. Therefore, Black & Veatch used the factors noted in Section 3.1 to allocate the operating expenses to the cost components. The study based the allocation of Administration and Transfer cost elements on the average of all other costs. The direct assignment represents fire protection and cross-connections for the Water Utility.

Table 3-3 and Table 3-4 represent the allocation of O&M to the cost components. Next, revenues are subtracted from other sources as shown in Table 3-1, Lines 12 and 14 and Table 3-2, Lines 7 and 9. The analysis deducts any drawdown of available cash balances and normalizes the rate adjustments for a full year to determine the net O&M costs for each utility.

Table 3-3 Allocation of O&M Expenditures (Water)

Line No.	Description	Total Costs	Common to All Customers					Fire Protection	Cross Connection
			Base	Extra Capacity		Customer			
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.		
		($)	($)	($)	($)	($)	($)	($)	($)
	Water Utility								
	Operating Expenses								
	1532 Solar System Maintenance	129,900	0	0	0	129,900	0	0	0
1	1422 Water System Maintenance								
2	Customer Service	522,600	0	0	0	0	522,600	0	0
3	Backflow Prevention	1,356,700	0	0	0	0	0	0	1,356,700
4	All Other	1,106,700	604,400	306,700	184,500	0	0	11,100	0
	1423 Water Construction	4,684,000	2,558,400	1,298,100	780,700	0	0	46,800	0
5	1424 Water System Operations								
6	Generation & Pumping	1,500,100	986,200	498,900	0	0	0	15,000	0
7	Customer Billing & Meter Reading	984,500	0	0	0	0	984,500	0	0
8	Meters	463,400	0	0	0	463,400	0	0	0
	Hydrants	1,750,100	0	0	0	0	0	1,750,100	0
9	All Other	8,766,500	4,788,200	2,429,500	1,461,100	0	0	87,700	0
10	1411 Administration Design	4,847,100	3,355,400	312,200	167,100	649,700	103,800	165,400	93,500
11	1412 Water Quality	695,400	563,200	0	0	125,200	0	7,000	0
12	1413 Water Resources								
	Water Purchase	47,761,700	38,687,000	0	0	8,597,100	0	477,600	0
13	All Other	648,000	524,900	0	0	116,600	0	6,500	0
14	Transfers	8,757,500	6,062,200	564,200	302,000	1,173,800	187,600	298,900	168,800
15	Total O&M Expenses	$ 83,974,200	$ 58,129,900	$ 5,409,600	$ 2,895,400	$ 11,255,700	$ 1,798,500	$ 2,866,100	$ 1,619,000
	Less Other Revenue								
16	Miscellaneous Revenues	3,316,900	2,296,100	213,700	114,400	444,600	71,000	113,200	63,900
17	Other Adjustments	3,190,200	2,208,400	205,500	110,000	427,600	68,300	108,900	61,500
18	Net Operating Expenses	$ 77,467,100	$ 53,625,400	$ 4,990,400	$ 2,671,000	$ 10,383,500	$ 1,659,200	$ 2,644,000	$ 1,493,600

Table 3-4 Allocation of O&M Expenditures (Recycled Water)

Line No.	Description	Total Costs	Common to All Customers				
			Base	Extra Capacity		Customer	
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.
		($)	($)	($)	($)	($)	($)
	Recycled Water Utility						
	Operating Expenses						
1	1522 System Maintenance						
2	Water Purchase	10,468,600	10,468,600	0	0	0	0
3	Customer Billing & Meter Reading	5,600	0	0	0	0	5,600
4	Meters	727,800	0	0	0	727,800	0
5	All Other	331,700	139,300	97,600	94,800	0	0
6	1525 South Bay Water Recycling System	1,101,600	648,000	453,600	0	0	0
7	Transfers	478,700	426,400	20,900	3,600	27,600	200
8	Total O&M Expenses	$ 13,114,000	$ 11,682,300	$ 572,100	$ 98,400	$ 755,400	$ 5,800
	Less Other Revenue						
9	Miscellaneous Revenues	1,264,900	1,126,700	55,200	9,500	72,900	600
10	Other Adjustments	1,094,400	975,000	47,700	8,200	63,000	500
11	Net Operating Expenses	$ 10,754,700	$ 9,580,600	$ 469,200	$ 80,700	$ 619,500	$ 4,700

3.2.3 Allocation of Capital Investments

In allocating capital investment for TY 2027, the existing fixed assets (which serve as a proxy for the current capital investments) 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 and recycled water system facilities. Plan capital costs can be allocated using the distribution of total net system investment across the functional cost components.

Table 3-5 and Table 3-6 show the total allocation of existing system investment serving water and recycled water customers. The total net system investment of $64.5M shown on Line 11 for the Water Utility and $1.0M on Line 9 for the Recycled Water Utility represents the Test Year original cost less accumulated depreciation of the system in service. The total net system investment reflects the Water and Recycled Water Utilities fixed asset listing ending June 30, 2025. This value represents the original cost (book value) of the assets.

Table 3-5 Allocation of Capital Costs (Water)

Line No.	Description	Total Costs	Common to All Customers					Fire Protection	Cross Connection
			Base	Extra Capacity		Customer			
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.		
		($)	($)	($)	($)	($)	($)	($)	($)
	Water Utility								
	Plant Assets								
1	Water Production	18,082,700	14,647,000	0	0	3,254,900	0	180,800	0
2	Pumping	2,788,400	1,833,200	927,300	0	0	0	27,900	0
3	Treatment	1,699,900	1,117,600	565,300	0	0	0	17,000	0
4	Transmission & Distribution	33,388,400	18,236,800	9,253,000	5,564,700	0	0	333,900	0
5	Meters & Services	6,214,700	0	0	0	6,214,700	0	0	0
6	Fire Hydrants	684,900	0	0	0	0	0	684,900	0
7	General Plant	1,609,600	917,500	275,200	142,500	242,500	0	31,900	0
8	Total Plant Assets	$ 64,468,600	$ 36,752,100	$ 11,020,800	$ 5,707,200	$ 9,712,100	$ 0	$ 1,276,400	$ 0
	Less Other Revenue								
9	Miscellaneous Revenues	0	0	0	0	0	0	0	0
10	Other Adjustments	0	0	0	0	0	0	0	0
11	Net Capital Expenses	$ 64,468,600	$ 36,752,100	$ 11,020,800	$ 5,707,200	$ 9,712,100	$ 0	$ 1,276,400	$ 0

Table 3-6 Allocation of Capital Costs (Recycled Water)

Line No.	Description	Total Costs	Common to All Customers				
			Base	Extra Capacity		Customer	
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.
		($)	($)	($)	($)	($)	($)
	Recycled Water Utility						
	Plant Assets						
1	Water Production	0	0	0	0	0	0
2	Pumping	0	0	0	0	0	0
3	Treatment	0	0	0	0	0	0
4	Transmission & Distribution	1,022,300	429,500	300,700	292,100	0	0
5	Meters	0	0	0	0	0	0
6	Total Plant Assets	$ 1,022,300	$ 429,500	$ 300,700	$ 292,100	$ 0	$ 0
	Less Other Revenue						
7	Miscellaneous Revenues	0	0	0	0	0	0
8	Other Adjustments	0	0	0	0	0	0
9	Net Capital Expenses	$ 1,022,300	$ 429,500	$ 300,700	$ 292,100	$ 0	$ 0

3.3 Units of Service

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 classes 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.

Table 3-7 summarizes the estimated TY 2027 units of service for various customers. Base costs vary with the volume of water consumed and distributed to the customers on that basis. 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. Black & Veatch 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 provide the basis for estimating maximum day and peak hour ratios. The number of bills for each customer serves as the basis for distributing customer billing requirements. Customer meter requirements are allocated on an equivalent meter basis for each customer. The estimated number of equivalent meters for each customer relies on the total number of meters serving respective classes and the hydraulic capacity ratio of the meters to the 5/8 x 3/4-inch meter. The equivalent meter ratios adopted in this analysis are consistent with the AWWA M1 Manual. Private fire-protection costs allocations use equivalent fire hydrants.

3.4 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.

3.4.1 Units Costs of Service

The TY 2027 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 3-8 and Table 3-10. On Line 4, the total costs represent the cost that rates need to recover, as demonstrated in Table 3-1, Line 16 for the Water Utility, and Table 3-2, Line 11 for the Recycled Water Utility. The net O&M cost includes O&M (including water purchase), less revenue from other sources and adjustments. The total capital cost includes debt service payments and transfers to the Construction Fund. Line 6 represents the unit costs for the entire water and recycled water systems regardless of customer classes. After that, the unit costs are used to allocate the costs to the specific customer classes.

3.4.2 Distribution of Costs of Service to Customer Classes

Applying the unit costs to the units for each customer class produces the customer class costs. This process is illustrated in Table 3-9 and Table 3-11, in which unit costs are applied to the customer class units of service for TY 2027. The costs attributable to each customer class reflect the functional cost components described in Section 3.1. Each customer class places a burden on the system in different ways, and 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.

	Base Component	
Unit Cost (Table 3-8, Line 6)	$ 8.13	per HCF
General Customer Consumption (Table 3-9, Line 1)	7,148,088	HCF
Total Allocated Cost	$ 58,129,000	

Please note that the numbers within the tables are rounded, yet the calculations are done based on non-rounded values; therefore, results might vary.

Table 3-7 Units of Service (Water and Recycled Water)

Line No.	Description	Consumption		Maximum Day			Maximum Day			Meters	Cust/Bills	Fire Protection	Cross Connection
		Annual	Avg. Day	Factor	Total	Extra	Factor	Total	Extra				
	Column Reference	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Units of Measure	(HCF)	(HCF/day)		(HCF/day)	(HCF/day)		(HCF/day)	(HCF/day)	(EMs)	(bills)	(EHs)	(EMs)
	Water Utility												
1	General Customer	7,148,088	19,584	166%	32,509	12,925	249%	48,764	16,255	46,815	323,423	0	0
2	Subtotal	7,148,088	19,584		32,509	12,925		48,764	16,255	46,815	323,423		
	Fire Service												
3	Public Fire	0	0		552	552		4,417	3,865	0	0	3,437	0
4	Private Fire	0	0		290	290		2,321	2,030	0	15,669	1,805	0
5	Subtotal	0	0		842	842		6,738	5,896	0	15,669	5,242	0
	Cross Connection												
6	Cross Connection										37,490	0	9,115
7	Subtotal	0	0		0	0		0	0	0	37,490	0	9,115
8	Total Water System	7,148,088	19,584		33,351	13,768		55,502	22,150	46,815	376,582	5,242	9,115
	Recycled Water Utility												
9	General Customer	1,775,791	4,865	130%	6,325	1,460	195%	9,487	3,162	2,563	3,503	0	0
10	Subtotal	1,775,791	4,865		6,325	1,460		9,487	3,162	2,563	3,503	0	0

Table 3-8 Units Cost of Service (Water)

Line No.	Description	Total Costs	Common to All Customers					Fire Protection	Cross Connection
			Base	Extra Capacity		Customer			
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.		
		($)	($)	($)	($)	($)	($)	($)	
	Water Utility								
1	Net Operating Expense	77,467,100	53,625,400	4,990,400	2,671,000	10,383,500	1,659,200	2,644,000	1,493,600
2	Debt Service	0	0	0	0	0	0	0	0
3	Capital Costs	7,900,000	4,503,600	1,350,500	699,400	1,190,100	0	156,400	0
4	Total Cost of Service	$ 85,367,100	$ 58,129,000	$ 6,340,900	$ 3,370,400	$ 11,573,600	$ 1,659,200	$ 2,800,400	$ 1,493,600
5	Units of Service (Total)		7,148,088 HCF	13,768 HCF/Day	22,150 HCF/Day	46,815 Eq. Meters	376,582 Bills	5,242 Eq. Hydrants	9,115 Eq. Meters
6	Cost per Unit		$ 8.13 per HCF	$ 460.57 per HCF/Day	$ 152.16 per HCF/Day	$ 247.22 per Eq. Meter	$ 4.41 per Bill	$ 534.18 per Eq. Hydrant	$ 163.87 per Eq. Meter

Table 3-9 Distribution of Costs to Customer Classes (Water)

Line No.	Description	Total Costs	Common to All Customers					Fire Protection	Cross Connection
			Base	Extra Capacity		Customer			
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.		
		($)	($)	($)	($)	($)	($)	($)	
	Water Utility								
	General Customer								
1	Units		7,148,088	12,925	16,255	46,815	323,423	0	0
2	Allocation of costs of service	79,553,900	58,129,000	5,953,000	2,473,300	11,573,600	1,425,000	0	0
	Public Fire								
3	Units		0	552	3,865	0	0	3,437	0
4	Allocation of costs of service	2,678,400	0	254,300	588,100	0	0	1,836,000	0
	Private Fire								
5	Units		0	290	2,030	0	15,669	1,805	0
6	Allocation of costs of service	1,476,000	0	133,600	309,000	0	69,000	964,400	0
	Cross Connection								
7	Units		0	0	0	0	37,490	0	9,115
8	Allocation of costs of service	1,658,800	0	0	0	0	165,200	0	1,493,600
7	TOTAL COSTS OF SERVICE	$ 85,367,100	$ 58,129,000	$ 6,340,900	$ 3,370,400	$ 11,573,600	$ 1,659,200	$ 2,800,400	$ 1,493,600

Table 3-10 Units Cost of Service (Recycled Water)

Line No.	Description	Total Costs	Common to All Customers				
			Base	Extra Capacity		Customer	
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.
		($)	($)	($)	($)	($)	($)
	Recycled Water Utility						
1	Net Operating Expense	10,808,000	9,633,900	469,200	80,700	619,500	4,700
2	Debt Service	0	0	0	0	0	0
3	Capital Costs	50,000	21,000	14,700	14,300	0	0
4	Total Cost of Service	$ 10,858,000	$ 9,654,900	$ 483,900	$ 95,000	$ 619,500	$ 4,700
5	Units of Service (Total)		1,775,791 HCF	1,460 HCF/Day	3,162 HCF/Day	2,563 Eq. Meters	3,503 Bills
6	Cost per Unit		$ 5.44 per HCF	$ 331.54 per HCF/Day	$ 30.04 per HCF/Day	$ 241.67 per Eq. Meter	$ 1.34 per Bill

Table 3-11 Distribution of Costs to Customer Classes (Recycled Water)

Line No.	Description	Total Costs	Common to All Customers				
			Base	Extra Capacity		Customer	
			Base	Max. Day	Max. Hour	Meters	Cust/Bill.
		($)	($)	($)	($)	($)	($)
	Recycled Water Utility						
	General Customer						
1	Units		1,775,791	1,460	3,162	2,563	3,503
2	Allocation of costs of service	10,858,000	9,654,900	483,900	95,000	619,500	4,700
3	TOTAL COSTS OF SERVICE	$ 10,858,000	$ 9,654,900	$ 483,900	$ 95,000	$ 619,500	$ 4,700

4.0 Rate Design

The initial consideration in the derivation of rate schedules for water and recycled 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 classes should not be construed as literal or exact determinations, they offer a guide to the necessity for, and the 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.

4.1 Existing Rates

The existing rates of the Water and Recycled Water Utilities consist of a fixed component in the form of a minimum monthly service charge and a variable component in the form of a consumption charge. The minimum monthly service charge is based on meter size and applied when consumption does not exceed the consumption allowance. The consumption charge is based on units of consumption (1 unit = 1 HCF = 748 gallons). The City has separate fixed charges for fire services and cross-connections. Table 2-3, presented earlier in this report, summarizes the existing water and recycled water rates.

4.2 Proposed Rates

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

4.2.1 Monthly Service Charge

Black & Veatch used meter ratios based on maximum operating capacities by meter size as shown in AWWA M1, Table B-1, which recognizes that as meter size increases, so does the capacity. For example, customers with a 4" meter expects 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 with the level of service expected from their meter connection when the tap turns on. The minimum monthly service charge recovers a portion of the costs associated with wholesale water purchase, meter maintenance and services, meter reading, bill issuance, and maintenance and capacity costs associated with public fire protection regardless of the level of water consumed.

Table 4-1 demonstrates the water cost elements incorporated into the minimum monthly service charge for FY 2026. Table 4-2 shows the Water Utility three-year fixed service charge rate schedule.

Table 4-1 Costs within the Minimum Monthly Service Charge for FY 2027 (Water)

Meter Size	Meter & Public Fire Protection				Billing			Total Service Charge
	Mtr Unit Cost	FP Unit Cost	Meter Ratio	Adjusted Unit Cost	Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM	per EM		$	per Bill		$	$/Month
5/8" x 3/4"	20.60	4.77	1.00	25.37	4.41	1.00	4.41	29.78
1"	20.60	4.77	1.67	42.28	4.41	1.00	4.41	46.69
1-1/2"	20.60	4.77	3.33	84.56	4.41	1.00	4.41	88.97
2"	20.60	4.77	5.33	135.30	4.41	1.00	4.41	139.71
3"	20.60	4.77	10.67	270.61	4.41	1.00	4.41	275.01
4"	20.60	4.77	16.67	422.82	4.41	1.00	4.41	427.23
6"	20.60	4.77	33.33	845.64	4.41	1.00	4.41	850.05
8"	20.60	4.77	53.33	1,353.03	4.41	1.00	4.41	1,357.44
10"	20.60	4.77	80.00	2,029.55	4.41	1.00	4.41	2,033.95
12"	20.60	4.77	112.50	2,854.05	4.41	1.00	4.41	2,858.45

Table 4-2 Proposed Minimum Monthly Service Charge (Water)

Customer Class	Proposed		
	FY 2027	FY 2028	FY 2029
Minimum Monthly Meter Rates ($/Month)	$/month	$/month	$/month
5/8" x 3/4"	29.78	30.12	31.50
1"	46.69	47.16	49.47
1-1/2"	88.97	89.76	94.40
2"	139.71	140.88	148.32
3"	275.01	277.19	292.10
4"	427.23	430.55	453.85
6"	850.05	856.53	903.16
8"	1,357.44	1,367.72	1,442.34
10"	2,033.95	2,049.30	2,161.24
12"	2,858.45	2,879.97	3,037.39

Table 4-3 demonstrates the recycled water cost elements incorporated into the minimum monthly service charge for FY 2026. Table 4-5 shows the Recycled Water Utility three-year fixed service charge rate schedule.

Table 4-3 Costs within the Minimum Monthly Service Charge for FY 2027 (Recycled Water)

Meter Size	Meter Services			Billing			Total Service Charge
	Mtr Unit Cost	Meter Ratio	Adjusted Unit Cost	Unit Cost	Bill Ratio	Adjusted Unit Cost	
	per EM		$	per Bill		$	$/Month
5/8" x 3/4"	20.14	1.00	20.14	1.34	1.00	1.34	21.48
1"	20.14	1.67	33.57	1.34	1.00	1.34	34.91
1-1/2"	20.14	3.33	67.13	1.34	1.00	1.34	68.47
2"	20.14	5.33	107.41	1.34	1.00	1.34	108.75
3"	20.14	10.67	214.82	1.34	1.00	1.34	216.16
4"	20.14	16.67	335.66	1.34	1.00	1.34	337.00
6"	20.14	33.33	671.31	1.34	1.00	1.34	672.65
8"	20.14	53.33	1,074.10	1.34	1.00	1.34	1,075.44
10"	20.14	80.00	1,611.15	1.34	1.00	1.34	1,612.49
12"	20.14	112.50	2,265.68	1.34	1.00	1.34	2,267.02

Table 4-4 Proposed Minimum Monthly Service Charge (Recycled Water)

Customer Class	Proposed		
	FY 2027	FY 2028	FY 2029
Minimum Monthly Meter Rates ($/Month)	$/month	$/month	$/month
5/8" x 3/4"	21.48	24.54	27.76
1"	34.91	39.94	45.26
1-1/2"	68.47	78.45	89.01
2"	108.75	124.65	141.52
3"	216.16	247.86	281.52
4"	337.00	386.47	439.02
6"	672.65	771.50	876.54
8"	1,075.44	1,233.53	1,401.55
10"	1,612.49	1,849.58	2,101.57
12"	2,267.02	2,600.38	2,954.72

4.2.2 Fire Service

The fire service charge includes costs of issuing bills and maintenance and capacity costs associated with private fire protection. The fire service charge increases as pipeline diameter size increases. The Water Utility provides fire service to approximately 1,287 private fire service accounts. These customers have a water line connection to the water system specifically for fire protection. The Water Utility must design, operate, and maintain a water system that can meet peak fire demand requirements to meet fire protection demands. The Water Utility charges these accounts a fire service charge based on the diameter of the line that connects their fire protection system to the water system.

Table 4-5 demonstrates the costs incorporated into the fire service charge, and Table 4-6 shows the three-year rate schedule based on unit costs in future years.

Table 4-5 Costs within the Fire Service Charge for FY 2027

Meter Size	Private Fire Protection			Total Service Charge
	Unit Cost	Meter Ratio	Adjusted Unit Cost	
	per EH			$/Month
2"	68.13	0.06	4.09	4.09
4"	68.13	0.34	23.16	23.16
6"	68.13	1.00	68.13	68.13
8"	68.13	2.13	145.11	145.11
10"	68.13	3.83	260.92	260.92
12"	68.13	6.19	421.70	421.70

Table 4-6 Proposed Fire Service Charge

Customer Class	Proposed		
	FY 2027	FY 2028	FY 2029
Fire Service ($/Month)	$/month	$/month	$/month
2"	4.09	4.15	4.20
4"	23.16	23.50	23.79
6"	68.13	69.13	69.98
8"	145.11	147.24	149.06
10"	260.92	264.75	268.03
12"	421.70	427.89	433.19

4.2.3 Cross Connection

The cross-connection charge includes costs of issuing bills and maintenance and replacement costs associated with backflow devices. The cross-connection charge increases as pipeline diameter size increases. The Water Utility provides backflow services to approximately 3,037 accounts. These customers have a backflow device that prevents possible contaminated water from entering the water system. The Water Utility maintains and replaces the devices accordingly to ensure that the devices are working properly. The Water Utility charges the accounts a cross-connection charge based on the diameter of the line that connects their service to the water system.

Table 4-7 demonstrates the costs incorporated into the cross-connection charge, and Table 4-8 shows the three-year rate schedule.

Table 4-7 Costs within the Cross-Connection Charge for FY 2027

Meter Size	Cross Connection			Total Service Charge
	Unit Cost	Meter Ratio	Adjusted Unit Cost	
	per EM			$/Month
1"	15.17	0.63	9.48	9.48
2"	15.17	1.00	15.17	15.17
3"	15.17	2.00	30.33	30.33
4"	15.17	3.13	47.39	47.39
6"	15.17	6.25	94.79	94.79
8"	15.17	10.00	151.66	151.66
10"	15.17	15.00	227.49	227.49

Table 4-8 Proposed Cross Connection Charge

Customer Class	Proposed		
	FY 2027	FY 2028	FY 2029
Cross Connection ($/Month)	$/month	$/month	$/month
1"	9.48	9.88	9.89
2"	15.17	15.81	15.82
3"	30.33	31.61	31.64
4"	47.39	49.40	49.44
6"	94.79	98.79	98.89
8"	151.66	158.07	158.22
10"	227.49	237.10	237.33

4.2.4 Consumption Charge

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

Table 4-9 shows the three-year rate schedule for both the Water and Recycled Water Utilities. For the Recycled Water Utility, the industrial process is part of general customers.

Table 4-9 Proposed Consumption Charges

Customer Class	Proposed		
	FY 2027	FY 2028	FY 2029
	$/HCF	$/HCF	$/HCF
Consumption Charges ($/HCF)			
Water Utility			
General Customer	11.09	11.43	11.78
Recycled Water Utility			
General Customers	6.05	6.90	7.79

4.3 Typical Monthly Costs under Proposed Charges

Table 4-10 and Table 4-11 compare typical monthly costs under existing rates and the proposed schedule of water and recycled water user rates derived in this study.

Table 4-10 Typical Monthly Bill (Water)

Customer Class	Typical Monthly Usage	FY 2026 Existing Rates	FY 2027 Proposed Rates
	(HCF)	($)	($)
Water Utility			
General Customer	0	$26.46	$29.78
	3	$26.46	$29.78
	5	$49.45	$55.46
	10	$98.90	$110.93
	12	$118.68	$133.11
	20	$197.80	$221.86
	30	$296.70	$332.79
	40	$395.60	$443.71
	50	$494.50	$554.64

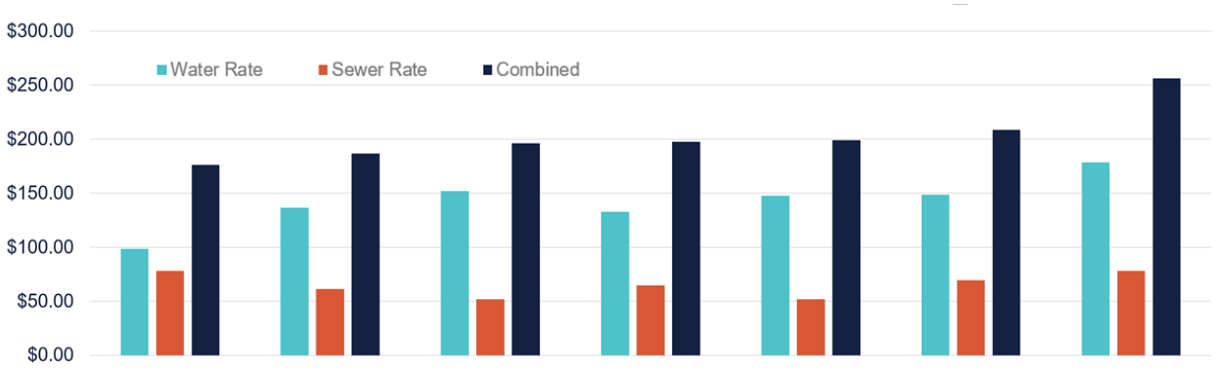
Table 4-11 Typical Monthly Bill (Recycled Water)

Customer Class	Typical Monthly Usage	FY 2026 Existing Rates	FY 2027 Proposed Rates
	(HCF)	($)	($)
Recycled Water Utility			
General Customer	0	$17.80	$21.48
	3	$17.80	$21.48
	5	$27.15	$30.25
	10	$54.30	$60.50
	12	$65.16	$72.60
	20	$108.60	$121.00
	30	$162.90	$181.50
	40	$217.20	$241.99
	50	$271.50	$302.49

4.4 Neighboring Water Utilities

Presented in Figure 4-1 are the proposed rates compared to rates of neighboring cities for a single-family residential customer with a 5/8" x ¾" meter consuming 12 units of water. Based on the comparison, the City is currently one of the lowest water providers in the area. With the proposed rate increases, the City remains the lowest water provider of the surveyed communities. All surveyed community rates are current as of May 2026.

Figure 4-1 Comparison to Neighboring Water Utilities



	Sunnyvale	Mountain View	San Jose (Muni)	**Santa Clara**	SJWC	Milpitas	Palo Alto
Water Rate (12 HCF)	$98.57	$136.75	$151.90	$133.08	$147.48	$148.36	$178.60
Sewer Rate	$77.79	$61.50	$51.73	$64.46	$51.73	$69.46	$77.84
Combined	**$176.36**	**$186.76**	**$196.15**	**$197.54**	**$199.21**	**$208.90**	**$256.44**

*All rates are proposed for FY26-27

Sewer Utility

5.0 Revenue and Revenue Requirements

To meet the costs associated with providing sewer services to its customers, the Sewer Utility derives revenue from a variety of sources, including sewer user charges (rates), outlet charges, conveyance fees, connection charges, interest earned from the investment of available funds, engineering fees, and other miscellaneous revenues. The Sewer Utility is constantly looking for other sources of revenue, such as loans, bonds, and grants. Black & Veatch has projected the level of future revenue generated in the Study through an analysis of historical and future system growth in terms of the number of EDUs, bills, and contributed sewage flow. 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 sewer system expenses.

5.1 Customer and Water Consumption Projections

5.1.1 Customer Classes

The Sewer Utility's customers include both residential and non-residential customers. The City has the following customer classes:

- Residential: Single-family residential and multi-family residential.
- Non-Residential: Amusement Parks; Auto Dealers & Service Stations; Churches; Electric & Electronic Equipment; Food & Kindred Products; Hospitals & Convalescent Homes; Industrial Chemical; Industrial Water Treatment; Laundries; Machinery Manufacturers; Metal Plating; Motels & Hotels; Paper; Repair Shops & Car Washes; Restaurants; Schools & Colleges; and Commercial/Industrial/Miscellaneous (catch-all for remainder of non-residential customers).
- Major Users: Major Users customer class is composed of major commercial and industrial users who are identified based on the following:[1]
  - Have a sewage discharge of at least 25,000 gallons per day; or
  - Have a daily discharge that is intermittent or irregular in strength, amount, or nature.

5.1.2 Equivalent Dwelling Units

The City provides sewer services to over 26,710 customers. All customers generating sewage flow connect to the sewer system. Since the City bills residential customers based on EDUs, a review of historical EDUs patterns for customers, and anticipated growth within the City, the projected total number of EDUs is expected to grow at 0.3% annually over the Study period. An EDU represents a single-family residential customer equivalent with a flow of 245 gallons per day and strengths of 250 mg/L of Biological Oxygen Demand (BOD), 250 mg/L of Total Suspended Solids (TSS), and 35 mg/L of Ammonia (NH3).

Table 5-1 summarizes the projected number of EDUs for the Sewer Utility.

Table 5-1 EDUs

[1] City Website, Schedule S-16 Monthly Sewer Service Charges, <http://www.santaclaraca.gov/government/departments/water-sewer-utilities/water-sewer-and-recycled-water-rates/sewer-rates>

Line No.	Description	Fiscal Year Ending June 30,		
		FY 2027	FY 2028	FY 2029
		(EDUs)	(EDUs)	(EDUs)
1	Single Family	261,597	262,251	262,907
2	Multi Family	351,961	352,841	353,723
3	Total	613,558	615,092	616,630

5.1.3 Minimum Bills

The City bills non-residential customers primarily on contributed sewage flow and imposes a minimum bill on those whose flow charges do not exceed the included volume allowance within the monthly service charge. The City refers to these bills as minimum monthly service bills. Therefore, a review of historical minimum bills patterns for non-residential customers and anticipated growth within the City, the projected total number of minimum bills is expected to increase 2.5% annually over the Study period.

Table 5-2 summarizes the projected number of minimum monthly service bills for the Sewer Utility.

Table 5-2 Minimum Monthly Service Bills

Line No.	Description	Fiscal Year Ending June 30,		
		FY 2027	FY 2028	FY 2029
		(Bills)	(Bills)	(Bills)
1	Amusement Parks	112	115	118
2	Auto Dealers & Service Station	415	425	436
3	Churches	301	309	317
4	Commercial/Industrial/Miscellaneous	11,127	11,405	11,690
5	Electric & Electronic Equip.	500	513	526
6	Food and Kindred Products	40	41	42
7	Hospitals & Convalescent Homes	364	373	382
8	Industrial Chemical	42	43	44
9	Laundries	157	161	165
10	Machinery Manufacturers	803	823	844
11	Metal Plating	100	103	106
12	Motels & Hotels	67	69	71
13	Repair Shops & Car Washes	486	498	510
14	Restaurants	279	286	293
15	Schools & Colleges	591	606	621
16	Total	15,384	15,770	16,165

5.1.4 Contributed Sewage Flow

The City charges all its non-residential customers based on contributed sewage flow, which is determined by multiplying water consumption by a return factor. In determining the projected sewage flow, Black & Veatch analyzed historical sewage flow patterns in conjunction with a projected estimate of future water consumption. In conjunction with water consumption, contributed sewage flow has fluctuated based on drought conditions in the state. In addition, the City's Water Shortage Contingency Plan remains in effect, and customers have made conservation a way of life. Therefore, the City projects that sewage flow will increase 2.5% annually over the Study period.

Table 5-3 shows the projected sewage flow generated for the Study period. The City contributed sewage flow in units of HCF for non-residential customers.

Table 5-3 Contributed Sewage Flow

Line No.	Description	Fiscal Year Ending June 30,		
		FY 2027	FY 2028	FY 2029
		(HCF)	(HCF)	(HCF)
1	Amusement Parks	83,071	85,148	87,277
2	Auto Dealers & Service Station	37,838	38,784	39,754
3	Churches	12,214	12,519	12,832
4	Commercial/Industrial/Miscellaneous	1,615,113	1,655,491	1,696,878
5	Electric & Electronic Equip.	455,270	466,652	478,318
6	Food and Kindred Products	19,156	19,635	20,126
7	Hospitals & Convalescent Homes	95,849	98,245	100,701
8	Industrial Chemical	80,453	82,464	84,526
9	Laundries	23,935	24,533	25,146
10	Machinery Manufacturers	36,753	37,672	38,614
11	Metal Plating	5,706	5,849	5,995
12	Motels & Hotels	99,700	102,193	104,748
13	Repair Shops & Car Washes	17,044	17,470	17,907
14	Restaurants	69,773	71,517	73,305
15	Schools & Colleges	45,191	46,321	47,479
16	Total (HCF)	2,697,066	2,764,493	2,833,606
17	Total (AF)	6,192	6,346	6,505

5.1.5 Major Users

The City charges major commercial and industrial sewer customers based on contributed sewage flow and strength loadings. Major users are identified individually, as each customer places different burdens on the sewer system. In 2023, the City's last major user customer left the City, therefore there are no major users for the duration of the Study period.

5.2 Revenue under Existing Rates

Sewer user rates serve as the primary source of revenue for the Sewer Utility. Therefore, the level of future rate revenue is important in developing a long-range financial plan. Rate revenue is determined by multiplying the projected system growth in terms of the number of EDUs, minimum monthly service bills, contributed sewage flow, and major user flow and loadings by the applicable rates to determine sewer rate revenue.

Table 5-4 shows the Sewer Utility's current schedule of charges. It is important to note that the minimum monthly service charge applies to non-residential customers that do not exceed the base amount. Therefore, the minimum monthly service charge serves as a baseline cost that the City needs to recover. The City maintains a separate schedule of rates based on the customer classes identified in Section 5.1.

Table 5-4 Existing Sewer Rates

Description	Existing FY 2026
Residential	($/EDU)
Single Family	57.56
Multi-Family	53.15
Non-Residential*	($/HCF)
Amusement Parks	7.22
Auto Dealers & Service Station	8.38
Churches	6.12
Com/Ind/Misc	6.85
Electric & Electronic Equip.	6.33
Food and Kindred Products	17.53
Hospitals & Convalescent Homes	8.00
Industrial Chemical	12.69
Laundries	7.01
Machinery Manufacturers	9.98
Metal Plating	4.92
Motels & Hotels	8.56
Repair Shops & Car Washes	6.47
Restaurants	17.88
Schools & Colleges	7.31

Description	Existing FY 2026
Major Commercial and Industrial Users	
Annual Capital Cost Recovery	
Volume (per MGD)	1,147,617
BOD [2] (per 1,000 lbs/day)	85,145
SS [3] (per 1,000 lbs/day)	77,042
NH3 [4] (per 1,000 lbs/day)	466,740
Operating and Maintenance Cost Recovery	
Volume (per MG)	3,315.00
BOD [2] (per 1,000 lbs)	502.00
SS [3] (per 1,000 lbs)	625.00
NH3 [4] (per 1,000 lbs)	5,125.00

*In no case shall the minimum charge be less than $57.56 per month.

Table 5-5 summarizes projected sewer rate revenue under existing rates. As shown, the revenue generated stays relatively flat over the Study period in conjunction with the number of EDUs, minimum bills, billed sewage flow, and major user volume and loadings. The projected Sewer Utility revenues increase from $54.5M in FY 2027 to $55.7M in FY 2029.

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Table 5-5 Projected Revenue under Existing Rates

Line No.	Description	Fiscal Year Ending June 30,		
		FY 2027	FY 2028	FY 2029
		($)	($)	($)
1	Single Family	15,078,200	15,115,900	15,153,700
2	Multi-Family	18,535,400	18,581,800	18,628,200
3	Amusement Parks	600,700	615,700	631,100
4	Auto Dealers & Service Station	337,900	346,200	355,000
5	Churches	91,300	93,500	95,900
6	Com/Ind/Misc	11,596,600	11,886,400	12,183,600
7	Electric & Electronic Equip.	2,883,900	2,956,100	3,030,000
8	Food and Kindred Products	335,000	343,300	352,000
9	Hospitals & Convalescent Homes	780,600	800,000	820,000
10	Industrial Chemical	1,014,000	1,039,400	1,065,300
11	Laundries	175,200	179,600	184,100
12	Machinery Manufacturers	409,200	419,400	429,900
13	Metal Plating	33,500	34,400	35,200
14	Motels & Hotels	849,400	870,600	892,400
15	Repair Shops & Car Washes	137,000	140,400	143,900
16	Restaurants	1,252,000	1,283,300	1,315,400
17	Schools & Colleges	378,900	388,500	398,100
18	Major Users - Customer 1	0	0	0
19	Total	$ 54,488,800	$ 55,094,500	$ 55,713,800

5.3 Other Revenue

Other operating sources include charges for revenue from other agencies served by Santa Clara, sewer lateral video inspections, sewer clean-out installations, interest on investments, and other miscellaneous revenues. In total, other operating revenues represent an average of 1.9% of the Sewer Utility's total revenue. The City anticipates that these revenues will remain relatively constant for the duration of the Study period.

5.4 Operating and Maintenance Expenses

Table 5-6 summarizes the Sewer Utility's projected O&M expenses for the Study Period. These expenses include costs related to salaries and benefits, materials and supplies, contract and professional services, RWF costs, indirect and direct costs, and routine capital outlay. The City anticipates that all O&M expenditures, excluding Water Pollution Control Plant costs, will increase on average by 4.2% annually from FY 2027.

The Sewer Utility receives treatment services from the RWF operated and maintained by the City of San Jose. While the City has an ownership stake in the RWF, the City must still pay for O&M associated with operating the facility. Based on the City of San Jose estimates, the City expects RWF O&M costs to increase by approximately 2.0% annually over the Study period.

Table 5-6 O&M Expenses

Line No.	Description	Fiscal Year Ending June 30,		
		FY 2027	FY 2028	FY 2029
		($)	($)	($)
1	Salaries	3,643,300	3,861,800	4,004,800
2	Benefits	2,312,000	2,346,200	2,446,400
3	Materials/Services/Supplies	781,321	797,666	814,330
4	Interfund Services	6,666,300	6,960,900	7,275,500
5	Resource & Production	30,763,700	31,379,000	32,006,600
6	Capital Outlay	0	0	0
7	Total	$ 44,166,621	$ 45,345,566	$ 46,547,630

As shown in Table 5-6, the Sewer Utility's O&M expenses increase from $44.2M in FY 2027 to $46.5M in FY 2029.

5.5 Debt Service Requirements

Table 5-7 represents the Sewer Utility's existing and proposed debt service obligations. This table shows the combined principal and interest requirements on the existing debt over the Study period. It is common practice for utilities to debt finance large capital improvement projects, such as in the case of Trimble Road sewer trunk line replacement in Santa Clara. By financing the cost of the projects, the City can fund large projects immediately and spread the payment over a specified time frame, thereby helping to offset the impact on ratepayers.

Table 5-7 Long-Term Debt Service

Line No.	Description	Fiscal Year Ending June 30,		
		FY 2027	FY 2028	FY 2029
		($)	($)	($)
1	Existing Short and Long-Term Loan	3,298,300	3,297,800	3,300,300
2	Proposed Short-Term and Rev Bonds	1,203,200	1,203,200	2,173,500
3	Total	$ 4,501,500	$ 4,501,000	$ 5,473,800

5.6 Capital Improvement Program

The Sewer Utility annually develops a five-year Capital Improvement Plan to identify sewer system needs, including ongoing assessments, maintenance, and renewal and replacement requirements.

Table 5-9Table 5-8 summarizes the Sewer Utility's CIP for FY 2027 through FY 2029. The Sewer Utility is projecting $86.0M in CIP over the Study period, including capital and replacement projects. The City has posted the CIP Budget on its website for complete details associated with each CIP project.

Table 5-8 Capital Improvement Projects

Line No.	Description	Fiscal Year Ending June 30, FY 2027 ($)	FY 2028 ($)	FY 2029 ($)
1	1908 SJ-SC Regional Wastewater Facility	21,861,800	23,438,500	18,272,500
2	1909 Sanitary Sewer Capacity Improvements	5,176,800	2,358,300	1,664,800
3	1911 Sanitary Sewer System Condition Assessment	1,035,400	1,072,000	1,109,900
4	1912 Sanitary Sewer System Improvements	2,070,700	2,143,900	2,219,800
5	1919 Sanitary Sewer Hydraulic Modeling As Needed Support	409,300	426,100	221,600
6	PW Paving Project Support	310,600	321,600	333,000
7	Total	$ 31,358,700	$ 30,290,100	$ 24,390,900

5.6.1 Capital Improvement Financing Plan

The City funds annual expenditure for the CIP from a combination of available funds on hand, outlet charges, conveyance fees, debt financing, connection charges, developer contributions, and revenues derived from user rates. As shown in Table 5-9, the average annual CIP expenditure is $28.7M for the Sewer Utility. The planned average annual CIP contribution from the Sewer Utility Operating Fund is $15.5M annually over the Study period.

Table 5-9 Construction Fund Financing Plan

Line No.	Description	Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029
	Source of Funds			
1	Sanitary Outlet Charge	0	0	0
2	Sewer Conveyance Fee	0	0	0
3	Intra Transfer In - Debt Financing	15,500,000	0	12,500,000
4	Intra Transfer In - Customer Service Charge	15,500,000	15,500,000	15,500,000
5	Refund from San Jose/Cupertino	0	0	0
6	Total Sources	$ 31,000,000	$ 15,500,000	$ 28,000,000
	Use of Funds			
7	Improvements Projects	26,181,900	27,931,800	22,726,100
8	Infrastructure Reserve	(882,300)	66,750	10,600
9	Total Uses	$ 25,299,600	$ 27,998,550	$ 22,736,700
10	Net Annual Cash Balance	5,700,400	(12,498,550)	5,263,300
11	Beginning Unrestricted Fund Balance	11,716,032	17,416,432	4,917,882
12	Net Cumulative Fund Balance	$ 17,416,432	$ 4,917,882	$ 10,181,182
13	Construction + Infrastructure Reserves	$ 21,823,132	$ 9,391,332	$ 14,665,232
14	Minimum Reserves	$ 4,406,700	$ 4,473,450	$ 4,484,050

5.7 Transfers

The Sewer Utility will perform transfers over the Study period from the Operating Fund and other funds and reserves. The other funds consist of the Operating Reserve, Rate Stabilization Reserve, Pension Stabilization Reserve and Construction Fund. See Section 5.8 for further explanation on Rate Stabilization Reserve. The Construction Fund transfers represent money to cover planned CIP project expenditures. All these transfers do not represent direct operating expenses for the enterprise. Therefore Black & Veatch includes these costs as "below-the-line" cash flow items and not included as O&M expenses. Table 5-10, Lines 19 to 23 for the Sewer Utility reflect these associated amounts.

5.8 Reserves

A utility typically establishes reserves for several reasons, such as covering shortfalls in operating revenues, maintaining strong bond ratings, covering day-to-day operating costs, and easing the burden on ratepayers associated with large rate increases. Per the reserve policy, the Sewer Utility will maintain the following four reserves:

- Operating Reserve represents working capital maintained by the Operating Fund to cover day-to-day expenses and maintain enough funds to cover accounts receivable if there are supplier issues, periods of lower-than-expected sewer revenues, or unforeseen cost increases. The reserve will maintain a minimum balance of 90 days of operating expenses once fully funded.
- Construction Reserve represents funds used for unforeseen and unbudgeted capital costs. Once fully funded, this reserve will maintain a minimum balance of 12-months of the following year's planned City CIP and 6-months of the following year's planned RWF CIP.
- Rate Stabilization Reserve represents funds used to absorb revenue shortfalls due to short-term decreases in sewer sales. This reserve is designed to stabilize sewer rate revenue and avoid wide swings in rates charged to customers over time. The reserve will maintain a minimum balance of 10% of sewer rate revenue when fully funded.
- Pension Stabilization Reserve represents funds used to pay for the unfunded pension liabilities and the increase in the City's share of pension costs due to factors such as higher CalPERS rates and negotiated pay increases. The reserve target is $1.2M for the Sewer Utility.

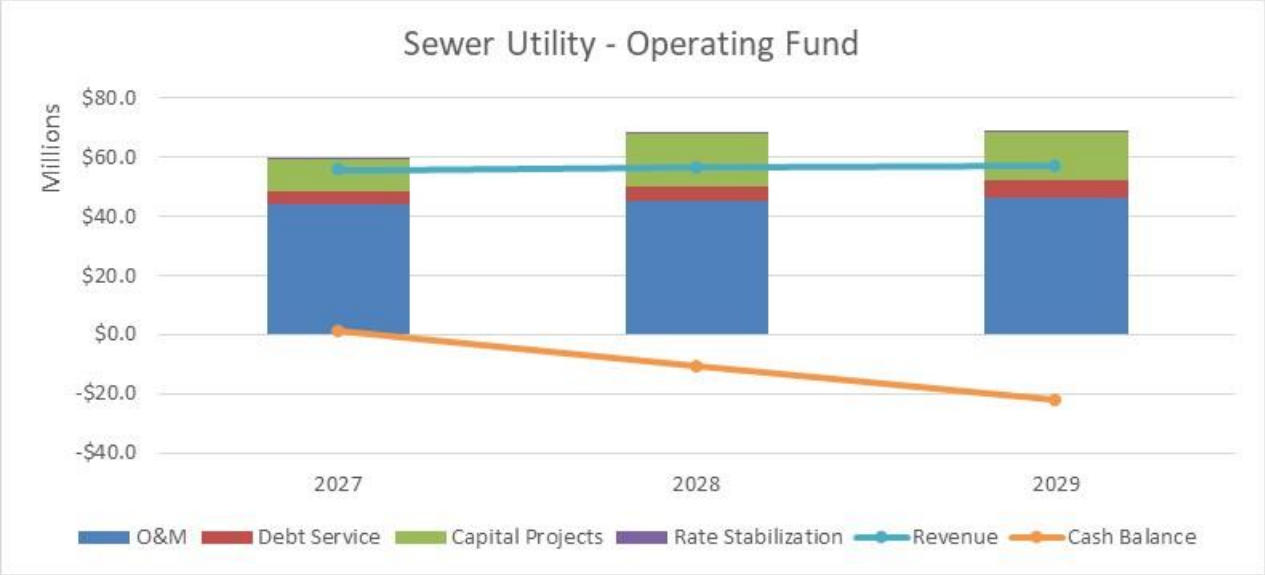
Appropriate reserve levels help the Sewer Utility maintain liquidity and demonstrate to the rating agencies that the City's financial policies and practices are focused on maintaining a balanced financial position.

5.9 Projected Operating Results

The revenue requirements of the Sewer Utility consist of O&M expenses, debt service, capital expenditure, and reserve requirements.

It is important to examine the cash flow projections under the status quo scenario to fully understand the current condition of the Sewer Utility and the need for revenue adjustments. As shown in Figure 5-1, the status quo conditions would project that the Sewer Utility would operate from an annual deficit position, thus tapping into its reserves. In this scenario, the Sewer 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 5-1 Status Quo Operating Cash Flow



The Sewer Utility will fall into a deficit position if the City does not implement the revenue increases, as shown in Figure 5-1. The revenue increases represent the overall 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 Sewer Utility's obligations.

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

- Meet budgeted operating obligations in the three FYs.
- Meet planned capital investments in the three FYs.
- Maintain an operating reserve of 90 days of operating expenses.
- Maintain construction and infrastructure reserve to the average of the next two years CIP for City and RWF projects.
- Continue to fund the rate stabilization reserve to reach its goal of 10% of rate revenues.
- Continue to transfer into the pension stabilization reserve to meet the target goal.

Shown in Table 5-10 is a summary of the proposed Operating Fund for the Study Period. The Operating Fund consists of 1) Revenue and 2) Revenue Requirements.

Revenue

- Line 1 is the revenue under existing rates.
- Lines 2 through 4 are the additional revenue generated from the required annual revenue increases. The additional revenue generated is a direct reflection of the number of months the increase is effective for, and therefore amount might be calculated at less than that stated amount.
- Line 6 is the total revenue generated from user charges.
- Line 12 represents other operating revenues.
- Line 13 represents total revenues for the enterprise.

Revenue Requirements

- Line 15 represents O&M expenses. The O&M expenses include RWF costs.
- Line 18 represents debt service payments.
- Line 24 represents transfers. The transfers include money to the reserves and other funds.
- Line 25 represents total revenue requirements.

Line 28 represents the net cumulative cash balance (unrestricted) within the Operating Fund. The net unrestricted cash balance plus the operating reserve intends to match, to the extent possible, Line 30. The cash balance reserve is required to ensure the Operation Fund can continue in the event of supplier interruption, market price fluctuations of critical equipment or supplies or an abrupt drop in account receivables. The reserve target minimum is 90 days of O&M expenses. Line 31 represents debt service coverage. The operating cash flow is set up to achieve a debt service coverage of 1.25x requirement in all years. The lending financial institution sets the debt service coverage ratio via a rate covenant that will also obligate the City to increase revenues as needed to meet the minimum debt service coverage requirement.

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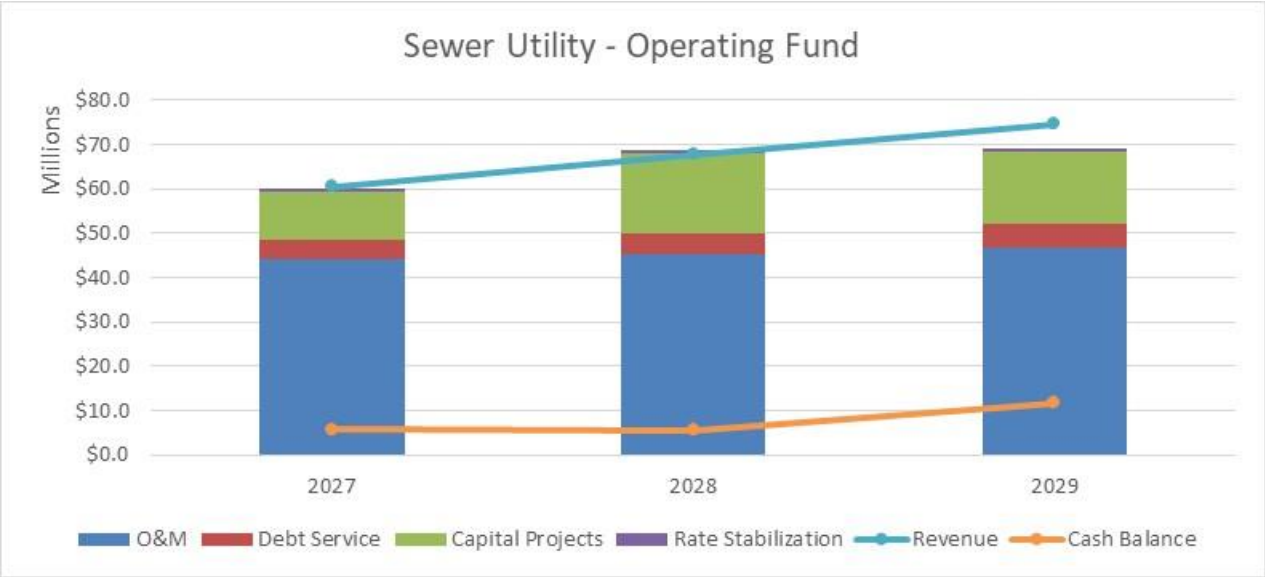
Table 5-10 Operating Fund (Sewer)

Line No.	Description			Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029
	Revenue					
	Rate Revenue					
1	Revenue from Existing Rates			54,488,800	55,094,500	55,713,800
	Year	Months Effective	Rate Adj			
2	2027	12	8.75%	4,767,800	4,820,800	4,875,000
3	2028	12	11.00%		6,590,700	6,664,800
4	2029	12	9.00%			6,052,800
5	Increased Revenue Due to Adjustments			4,767,800	11,411,500	17,592,600
6	Subtotal Rate Revenue			$ 59,256,600	$ 66,506,000	$ 73,306,400
	Other Operating Revenue					
7	System Administration (Interest Income)			663,600	676,000	688,600
8	System Maintenance			20,400	20,400	20,400
9	Operations			560,000	560,000	560,000
10	SJ SC Water Pollution Control Plant			0	0	0
11	Storm Pump Maintenance			0	0	0
12	Subtotal Other Operating Revenue			$ 1,244,000	$ 1,256,400	$ 1,269,000
13	**Total Revenue**			**$ 60,500,600**	**$ 67,762,400**	**$ 74,575,400**
	Revenue Requirements					
	Operating & Maintenance					
14	O&M Expenses			44,166,600	45,345,600	46,547,600
15	Subtotal O&M			$ 44,166,600	$ 45,345,600	$ 46,547,600
	Debt Service					
16	Existing Loans/Bonds			3,298,300	3,297,800	3,300,300
17	Proposed Loans/Bonds			1,203,200	1,203,200	2,173,500
18	Total Debt Service			$ 4,501,500	$ 4,501,000	$ 5,473,800
	Transfers					
19	Transfer to Other Fund			6,900	47,100	47,100
20	Transfer to Rate Stabilization Reserve			600,000	600,000	600,000
21	Transfer to Pension Stabilization Reserve			0	0	0
22	Transfer to Operating Reserve			(5,457,900)	290,700	296,400
23	Transfer to Sewer Construction Fund			15,500,000	15,500,000	15,500,000
24	Total Transfers			$ 10,649,000	$ 18,180,100	$ 16,443,500
25	**Total Revenue Requirements**			**$ 59,317,100**	**$ 68,026,700**	**$ 68,464,900**
26	Net Annual Cash Balance			1,183,500	(264,300)	6,110,500
27	Beginning Fund Balance			4,622,368	5,805,868	5,541,568
28	Net Cumulative Fund Balance			$ 5,805,868	$ 5,541,568	$ 11,652,068
29	Unrestricted + Operating Reserve			$ 16,696,268	$ 16,722,668	$ 23,129,568
30	Minimum Operating Reserves (90 Days)			$ 10,890,400	$ 11,181,100	$ 11,477,500
31	Debt Service Coverage (Min 1.25)			3.63	4.98	5.12

Figure 5-2 presents the proposed Operating Fund.

Figure 5-2 Sewer Operating Cash Flow



6.0 Cost of Service Analysis

The cost-of-service analysis requires that the utility recovers needed revenues from rates for sewer service, which are allocated to customer classes according to the service rendered. An equitable rate structure allocates the capture of revenue requirements to customer classes based on contributed sewage volume, strengths, number of customer connections, and other relevant factors.

In analyzing the Sewer Utility's cost of service for allocation to its customer classes, Black & Veatch selected the annual revenue requirements for FY 2027 as the Test Year requirements to demonstrate the development of cost-of-service sewer rates. Table 6-1 summarizes the total costs of service that need to be recovered from sewer user rates. The table represents TY 2027.

Table 6-1 Cost of Service Revenue from Rates

Line No.	Description	Operating Expense	Capital Cost	Total Cost
		($)	($)	($)
	Revenue Requirements			
1	O&M Expense	44,166,600	0	44,166,600
2	Debt Service Requirements	0	4,501,500	4,501,500
3	Transfers	(4,851,000)	15,500,000	10,649,000
4	Subtotal	$ 39,315,600	$ 20,001,500	$ 59,317,100
	Less Revenue Requirements Met from Other Sources			
5	System Administration	663,600	0	663,600
6	System Maintenance	20,400	0	20,400
7	Operations	560,000	0	560,000
8	SJ SC Water Pollution Control Plant	0	0	0
9	Storm Pump Maintenance	0	0	0
10	Subtotal	$ 1,244,000	$ 0	$ 1,244,000
	Adjustments			
11	Adjustment for Annual Cash Balance	(1,183,500)	0	(1,183,500)
12	Subtotal	$ (1,183,500)	$ 0	$ (1,183,500)
13	Cost of Service to be Recovered from Rates	$ 39,255,100	$ 20,001,500	$ 59,256,600

To derive the net revenue requirement recovered through rates, it is necessary to deduct revenues from other sources as shown in Line 10 which corresponds with Table 5-10, Line 12. Shown in Line 4 is the total revenue requirement that corresponds with Table 5-10, Line 25. Line 11 represents the net annual cash balance during TY. If the enterprise is drawing down funds already in the Operating Fund, this number is positive. The number will be negative if the enterprise is replacing funds. In the case of the Sewer Utility, the $1.2M figure indicates that the forecast projects a positive cash balance for the year.

6.1 Functional Cost Components

The first step in conducting a cost-of-service analysis involves analyzing the cost of providing sewer service by system function to properly allocate the costs to the various customer classes and, subsequently, design rates. As a basis for allocating costs of service among customer classes, costs are separated into the following four basic functional cost components: (1) Base; (2) Strength; (3) Customer; and (4) Direct Assignment, described as follows:

- Base costs represent operating and capital costs of the system associated with collection. The collection costs vary directly with the quantity of sewage flow.
- Strength costs represent those operating and capital costs associated with treatment. The treatment costs are specifically related to strength parameters such as Biological Oxygen Demand, Total Suspended Solids, and Ammonia.
- 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. The Sewer Utility has no directly assigned categories.

6.2 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 element of cost. O&M expense items 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 classes of customers based on their respective responsibilities for each type of service.

6.2.1 Volume and Strength Allocations

The sewer 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 not only the annual volume requirements but also the strength loading demands placed on the system. Because not all customers and types of customers exert volume and strength loading demands similarly, the capacities of the various facilities must be designed to accommodate the demands of all classes of customers. Each sewer service facility within the system has an underlying volume demand exerted by all customers for whom the base cost component applies. For those facilities designed solely to meet volume demand, 100% of the costs go to the base cost component. For facilities designed to meet strength loading demands, the percentage of the costs is allocated to the different strength cost components based on their specific function.

6.2.2 Allocation of Operating and Maintenance Expenses

The Sewer Utility books operating costs by functional categories. Therefore, Black & Veatch used the factors noted in Section 5.1 to allocate the operating expenses to the cost components. In allocating O&M expenses for TY 2027, the costs are directly allocated to the cost components to the extent possible. The allocation of Administration and Transfer cost elements is based on the average of all other costs.

Table 6-2 represents the allocation of O&M to the cost components. Revenues are subtracted from other sources as shown in Table 6-1, Lines 10, and any drawdown of the cash balance is deducted and normalized for partial rate adjustments as shown in Line 13 to determine the net O&M costs.

Table 6-2 Allocation of O&M Expenditures

Line No.	Description	Total Cost	Common to All Customers				
			Volume	BOD	TSS	NH3	Customer
		($)	($)	($)	($)	($)	($)
	Operation & Maintenance						
1	1511 System Administration	6,437,200	2,970,900	1,116,400	1,129,400	1,142,900	77,600
2	1512 System Maintenance	2,947,600	2,947,600	0	0	0	0
3	1514 Operations	2,417,900	2,417,900	0	0	0	0
4	1515 SJ SC Water Pollution Control Plant						
5	Treatment	30,200,000	10,338,400	6,543,400	6,619,500	6,698,700	0
6	Customer Billing & Meter Reading	454,700	0	0	0	0	454,700
7	All Other	1,517,500	1,517,500	0	0	0	0
8	1516 Storm Pump Maintenance	191,700	191,700	0	0	0	0
9	Transfers	600,000	276,900	104,100	105,300	106,500	7,200
10	Total O&M Expenses	$ 44,766,600	$ 20,660,900	$ 7,763,900	$ 7,854,200	$ 7,948,100	$ 539,500
	Less Other Revenue						
11	Miscellaneous Revenues	1,244,000	574,100	215,700	218,300	220,900	15,000
12	Other Adjustments	(1,183,500)	(546,200)	(205,300)	(207,600)	(210,100)	(14,300)
13	Net Operating Expenses	$ 44,706,100	$ 20,633,000	$ 7,753,500	$ 7,843,500	$ 7,937,300	$ 538,800

6.2.3 Allocation of Capital Investments

In allocating capital investment for TY 2027, the existing fixed assets (which serve as a proxy for the current capital investments) are allocated directly to cost components to the extent possible. Plan capital costs can be allocated using the distribution of total net system investment across the functional cost components. The allocation of costs in this manner provides a basis for annual investment in sewer system facilities. Table 6-3 shows the total allocation of existing system investment serving sewer customers for the TY 2027. The total net system investment of $42.8M shown on Line 7 represents the Test Year original cost less accumulated depreciation of the system in service. The total net system investment reflects the Sewer Utility's fixed asset listing ending June 30, 2025. This value represents the original cost (book value) of the assets.

Table 6-3 Allocation of Capital Costs

Line No.	Description	Total Cost	Common to All Customers				
			Volume	BOD	TSS	NH3	Customer
		($)	($)	($)	($)	($)	($)
	Plant Assets						
1	Collection	38,077,700	38,077,700	0	0	0	0
2	Lift Station	4,235,500	4,235,500	0	0	0	0
3	General Plant	570,800	570,800	0	0	0	0
4	Total Plant Assets	$ 42,884,000	$ 42,884,000	$ 0	$ 0	$ 0	$ 0
	Less Other Revenue						
5	Miscellaneous Revenues	0	0	0	0	0	0
6	Other Adjustments	0	0	0	0	0	0
7	Net Operating Expenses	$ 42,884,000	$ 42,884,000	$ 0	$ 0	$ 0	$ 0

6.3 Units of Service

To properly recognize the cost of service, each customer class receives its share of base, strength, 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 classes 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.

Table 6-4 summarizes the estimated Test Year units of service for the various customer classes. Base costs vary with the volume of sewage flow produced and distributed to customer classes on that basis. Black & Veatch derived sewage flow information from the monthly water consumption records in the City's CIS multiplied by a return factor. Strength costs are those associated with pollutant characteristics, and the Study allocated these costs to

customer classes based on loadings. The pollutant loadings for each customer class come from recommendations of the State Water Resources Control Board, Revenue Program Guidelines, Appendix G, and the City of San Jose. The City's commercial and industrial class consists of 17 distinct types of businesses such as retail, offices, restaurants, and hospitals. Since sampling is not an immediate possibility, the City has relied on industry standards used by the State of California. The number of bills for each customer class serves as the basis for distributing customer billing requirements.

6.4 Cost of Service Allocations

Unit costs of service are applied 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.

6.4.1 Units Costs of Service

The TY 2027 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 6-5. The capital costs on Line 3 and 4 are associated with City projects and RWF projects. These costs have been separated to determine the collection and treatment costs independently. On Line 5, the total costs represent the cost that rates need to recover, as demonstrated in Table 6-1, Line 14. The net O&M cost includes O&M (including the RWF) less revenue from other sources and adjustments. The total capital cost includes debt service payments and transfers to the Construction Fund. Line 6 represents the unit costs for the entire sewer system regardless of customer classes. After that, these unit costs are applied in allocating the costs to the specific customer classes.

6.4.2 Distribution of Costs of Service to Customer Classes

Applying the unit costs to the units for each customer class produces the customer class costs. This process is illustrated in Table 6-6, in which the study applies the unit costs to the customer class units of service. The costs attributable to each customer class are based on the functional cost components described in Section 6.1. Each customer class places a burden on the system in different ways, and 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.

	Vol Component	
Unit Cost (Table 6-5, Line 7)	$ 4.27	per HCF
Amusement Park Consumption (Table 6-6, Line 6)	83,071	HCF
Total Allocated Cost	$ 354,800	

Please note that the numbers within the tables are rounded, yet the calculations are done based on non-rounded values; therefore, results might vary.

Table 6-4 Units of Service

Line No.	Description	Contributed Units	Contributed Volume	BOD Loadings Factor	BOD Loadings Loading	TSS Loadings Factor	TSS Loadings Loading	NH3 Loadings Factor	NH3 Loadings Loading	Bills
	Units of Measure	(EDUs/M Bills)	(HCF)	(mg/L)	(lbs)	(mg/L)	(lbs)	(mg/L)	(lbs)	(bills)
1	Single Family	265,312	1,371,984	250	2,139,900	250	2,139,900	35	299,600	258,410
2	Multi-Family	351,973	1,708,782	250	2,665,200	250	2,665,200	35	373,100	29,033
3	Amusement Parks	112	83,071	130	67,400	80	41,500	11	5,700	273
4	Auto Dealers & Service Station	415	37,838	180	42,500	280	66,100	11	2,600	753
5	Churches	301	12,214	130	9,900	80	6,100	11	800	609
6	Com/Ind/Misc	11,127	1,615,113	130	1,309,900	80	806,100	11	110,800	21,961
7	Electric & Electronic Equip.	500	455,270	30	85,200	15	42,600	15	42,600	1,576
8	Food and Kindred Products	40	19,156	1,120	133,900	690	82,500	0	0	189
9	Hospitals & Convalescent Homes	364	95,849	230	137,500	85	50,800	15	9,000	838
10	Industrial Chemical	42	80,453	360	180,700	720	361,400	0	0	129
11	Laundries	157	23,935	150	22,400	110	16,400	5	700	365
12	Machinery Manufacturers	803	36,753	290	66,500	550	126,100	0	0	1,729
13	Metal Plating	100	5,706	10	400	60	2,100	1	0	202
14	Motels & Hotels	67	99,700	310	192,800	121	75,300	7	4,400	536
15	Repair Shops & Car Washes	486	17,044	180	19,100	280	29,800	0	0	675
16	Restaurants	279	69,773	1,250	544,100	560	243,800	10	4,400	2,084
17	Schools & Colleges	591	45,191	130	36,700	100	28,200	30	8,500	1,157
18	Major Users - Customer 1		0		0		0		0	0
19	Total		5,777,832		7,654,100		6,783,900		862,200	320,519

Table 6-5 Units Cost of Service

Line No.	Description	Total Cost	Common to All Customers				
			Volume	BOD	TSS	NH3	Customer
1	Net Operating Expense	39,255,100	15,182,000	7,753,500	7,843,500	7,937,300	538,800
2	Debt Service	3,298,300	1,129,100	714,600	723,000	731,600	0
3	Capital Costs (City)	4,694,100	4,694,100	0	0	0	0
4	Capital Costs (SJSC)	10,805,900	3,674,600	2,997,100	3,958,200	176,000	0
5	Total Cost of Service	$ 58,053,400	$ 24,679,800	$ 11,465,200	$ 12,524,700	$ 8,844,900	$ 538,800
6	Units of Service		5,777,832 HCF	7,654,100 lbs	6,783,900 lbs	862,200 lbs	320,519 bills
7	Cost per Unit		$ 4.27 per HCF	$ 1.50 per lbs	$ 1.85 per lbs	$ 10.26 per lbs	$ 1.68 per bill

Table 6-6 Distribution of Costs to Customer Classes

Line No.	Description	Total Cost	Common to All Customers				
			Volume	BOD	TSS	NH3	Customer
1	Cost per Unit		$ 4.27 per HCF	$ 1.50 per lbs	$ 1.85 per lbs	$ 10.26 per lbs	$ 1.68 per bill
	Single Family						
2	Units		1,371,984	2,139,900	2,139,900	299,600	258,410
3	Allocation of costs of service	16,861,300	5,957,700	3,298,800	4,089,800	3,080,400	434,600
	Multi-Family						
4	Units		1,708,782	2,665,200	2,665,200	373,100	29,033
5	Allocation of costs of service	20,506,800	7,420,000	4,108,400	5,093,700	3,835,900	48,800
	Amusement Parks						
6	Units		83,071	67,400	41,500	5,700	273
7	Allocation of costs of service	603,000	360,700	103,900	79,300	58,600	500
	Auto Dealers & Service Station						
8	Units		37,838	42,500	66,100	2,600	753
9	Allocation of costs of service	384,100	164,300	65,500	126,300	26,700	1,300
	Churches						
10	Units		12,214	9,900	6,100	800	609
11	Allocation of costs of service	89,200	53,000	15,300	11,700	8,200	1,000
	Com/Ind/Misc						
12	Units		1,615,113	1,309,900	806,100	110,800	21,961
13	Allocation of costs of service	11,749,200	7,013,300	2,019,200	1,540,600	1,139,200	36,900
	Electric & Electronic Equip.						
14	Units		455,270	85,200	42,600	42,600	1,576
15	Allocation of costs of service	2,630,200	1,976,900	131,300	81,400	438,000	2,600
	Food and Kindred Products						
16	Units		19,156	133,900	82,500	0	189
17	Allocation of costs of service	447,600	83,200	206,400	157,700	0	300
	Hospitals & Convalescent Homes						
18	Units		95,849	137,500	50,800	9,000	838
19	Allocation of costs of service	819,200	416,200	212,000	97,100	92,500	1,400

Table 6-6 Distribution of Costs to Customer Classes (Con't)

Line No.	Description	Total Cost	Common to All Customers				
			Volume	BOD	TSS	NH3	Customer
1	Cost per Unit		$ 4.27 per HCF	$ 1.50 per lbs	$ 1.85 per lbs	$ 10.26 per lbs	$ 1.68 per bill
	Industrial Chemical						
20	Units		80,453	180,700	361,400	0	129
21	Allocation of costs of service	1,318,800	349,300	278,600	690,700	0	200
	Laundries						
22	Units		23,935	22,400	16,400	700	365
23	Allocation of costs of service	177,500	103,900	34,500	31,300	7,200	600
	Machinery Manufacturers						
24	Units		36,753	66,500	126,100	0	1,729
25	Allocation of costs of service	506,000	159,600	102,500	241,000	0	2,900
	Metal Plating						
26	Units		5,706	400	2,100	0	202
27	Allocation of costs of service	29,700	24,800	600	4,000	0	300
	Motels & Hotels						
28	Units		99,700	192,800	75,300	4,400	536
29	Allocation of costs of service	920,100	432,900	297,200	143,900	45,200	900
	Repair Shops & Car Washes						
30	Units		17,044	19,100	29,800	0	675
31	Allocation of costs of service	161,500	74,000	29,400	57,000	0	1,100
	Restaurants						
32	Units		69,773	544,100	243,800	4,400	2,084
33	Allocation of costs of service	1,656,400	303,000	838,700	466,000	45,200	3,500
	Schools & Colleges						
34	Units		45,191	36,700	28,200	8,500	1,157
35	Allocation of costs of service	396,000	196,200	56,600	53,900	87,400	1,900
36	TOTAL COSTS OF SERVICE	$ 59,256,600	$ 25,089,000	$ 11,798,900	$ 12,965,400	$ 8,864,500	$ 538,800

7.0 Rate Design

The initial consideration in the derivation of rate schedules for sewer service is establishing equitable charges to the customers commensurate with the cost of providing that service. While the cost-of-service allocations to customer classes should not be construed as literal or exact determinations, they offer a guide to the necessity for, and the 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.

7.1 Existing Rates

The Sewer Utility's existing rates consist of a fixed component in the form of a monthly service charge and a variable component in the form of a consumption charge. The monthly service charge is a flat fee based on EDUs and is applied to residential customers. The monthly service charge also is a minimum for non-residential customers and applies when the consumption charge is less than the monthly service charge. Non-residential customers also have a consumption charge based on units of water consumption (1 unit = 1 HCF = 748 gallons) multiplied by a return factor. The City has separate charges for major users consisting of O&M and capital components. Table 5-5, presented earlier in this report, summarizes the current sewer rates.

7.2 Proposed Rates

The costs of service analysis described in the preceding sections of this report provide a basis for designing sewer rates.

7.2.1 Monthly Service Charge

The monthly service charge is designed to recover residential costs associated with contributed sewage flow, strength loadings, billing, collecting, accounting, and maintenance and capital costs. The charge is a flat monthly fee based on EDUs. An EDU is defined in Section 5.1.

The monthly service charge also serves as the minimum monthly service charge for non-residential customers. The minimum service charge will recover non-residential costs associated with volume, strength, meter reading, billing, collecting, accounting, and maintenance and capital costs. The minimum monthly service charge incorporates an allowance for sewage flow. Once a customer exceeds the allowance, the minimum monthly service charge goes away.

Table 7-1 shows the forecasted proposed three-year monthly service charge schedule.

Table 7-1 Proposed Monthly Service Charge

Line No.	Customer Class	Proposed		
		FY 2027	FY 2028	FY 2029
	Monthly Service Charge ($/EDU)	$/month	$/month	$/month
1	Single Family	64.46	70.97	78.36
2	Multi-Family	58.26	64.32	70.94
	Minimum Commercial Bill Charge ($/Month	$/month	$/month	$/month
3	All Customers	64.46	70.97	78.36

7.2.2 Consumption Charge

The consumption charges are designed to recover the remainder of the cost component costs not recovered through the monthly service charge for non-residential customers. Table 7-2 shows the forecasted proposed three-year rate

schedule for the Sewer Utility. All customers that were classified as Paper are now under Commercial/Industrial/Misc.

Table 7-2 Proposed Consumption Charges

Line No.	Customer Class	Proposed		
		FY 2027	FY 2028	FY 2029
	Commodity Charge ($/HCF)	$/HCF	$/HCF	$/HCF
1	Amusement Parks	7.17	8.16	8.71
2	Auto Dealers & Service Station	9.45	10.39	11.09
3	Churches	5.71	6.62	6.98
4	Com/Ind/Misc	6.83	7.79	8.29
5	Electric & Electronic Equip.	5.71	6.69	7.11
6	Food and Kindred Products	23.23	24.22	26.19
7	Hospitals & Convalescent Homes	8.30	9.27	9.91
8	Industrial Chemical	16.36	17.39	18.72
9	Laundries	6.99	8.01	8.51
10	Machinery Manufacturers	12.36	13.25	14.20
11	Metal Plating	4.08	4.99	5.20
12	Motels & Hotels	9.19	10.18	10.90
13	Repair Shops & Car Washes	7.64	8.48	9.00
14	Restaurants	23.48	24.44	26.46
15	Schools & Colleges	7.92	8.79	9.41

7.2.3 Major Users

The major commercial and industrial user charge is designed to recover the costs associated with O&M and capital for major users. Major users are classified based on requirements in Section 5.1. These customers are monitored monthly for volume and strength loadings. Major users are charged the unit charges identified in Table 6-5, Line 7. Note that the major user charges are specifically identified O&M and capital components. Charges for all other customers incorporate these charges, but the City has combined them into a single rate for simplicity. The City does not have any major users left within the City; therefore, these rates will be for any future customer.

Table 7-3 shows the three-year rate schedule based on unit costs in future years. The City does not have any major users left within the City; therefore, these rates will be for any future customer.

Table 7-3 Proposed Major User Charges

Line No.	Customer Class	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
	Major Commercial and Industrial Users			
	Operating and Maintenance Cost Recovery			
1	Volume ($/MG)	3,637.30	5,232.79	5,529.11
2	BOD ($/1,000 lbs)	1,012.99	979.38	1,115.40
3	SS ($/1,000 lbs)	1,156.19	1,117.90	1,273.11
4	NH3 ($/1,000 lbs)	9,205.87	8,898.08	10,136.00
	Annual Capital Cost Recovery			
5	Volume ($/MGD)	836,642	751,626	780,139
6	BOD ($/1,000 lbs/day)	192,912	203,528	206,008
7	SS ($/1,000 lbs/day)	275,578	291,699	295,648
8	NH3 ($/1,000 lbs/day)	392,517	390,806	385,428

7.3 Typical Monthly Costs under Proposed Charges

Table 7-4 compares typical monthly costs under existing rates and the proposed schedule of sewer user rates derived in this study for residential and non-residential customers.

Table 7-4 Typical Monthly Bill

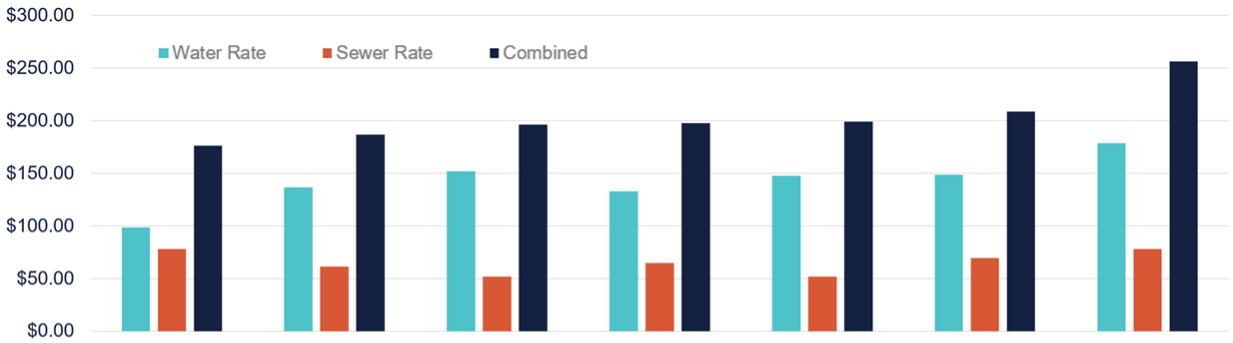
Customer Class	Typical Monthly Usage (HCF)	FY 2026 Existing Rates ($)	FY 2027 Proposed Rates ($)
Residential		$57.56	$64.46
Commercial	0	$57.56	$64.46
	10	$77.40	$81.16
	20	$154.80	$162.31
	30	$232.20	$243.47
	40	$309.60	$324.63
	50	$387.00	$405.78
	100	$774.00	$811.57
	250	$1,934.99	$2,028.92

7.4 Neighboring Sewer Utilities

Presented in

Figure 7-1 is the proposed rates compared to rates of neighboring jurisdictions, for a single-family residential customer. Based on the comparison, the City is currently a medium cost sewer provider in the area. With the proposed rate increases, the City remains one of the medium sewer providers of the surveyed communities. All surveyed community rates are best estimates as of May 2026.

Figure 7-1 Comparison to Neighboring Sewer Utilities



	Sunnyvale	Mountain View	San Jose (Muni)	**Santa Clara**	SJWC	Milpitas	Palo Alto
Water Rate (12 HCF)	$98.57	$136.75	$151.90	$133.08	$147.48	$148.36	$178.60
Sewer Rate	$77.79	$61.50	$51.73	$64.46	$51.73	$69.46	$77.84
Combined	**$176.36**	**$186.76**	**$196.15**	**$197.54**	**$199.21**	**$208.90**	**$256.44**

*All rates are proposed for FY26-27

Appendix A – Ten-Year Financial Plan

Water Utility

Line No.	Description	Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Revenue										
	Rate Revenue										
1	Revenue from Existing Rates	75,546,100	77,313,000	79,124,200	79,317,700	79,511,900	79,706,900	79,901,900	80,097,500	80,293,800	80,490,200
2	Increased Revenue Due to Adjustments	9,821,000	12,671,600	15,731,200	18,622,300	21,613,300	27,748,700	34,279,600	40,086,800	46,208,900	52,662,500
3	Subtotal Rate Revenue	$ 85,367,100	$ 89,984,600	$ 94,855,400	$ 97,940,000	$ 101,125,200	$ 107,455,600	$ 114,181,500	$ 120,184,300	$ 126,502,700	$ 133,152,700
	Other Operating Revenue										
4	Solar System Maintenance	89,800	89,800	89,800	89,800	89,800	89,800	89,800	89,800	89,800	89,800
5	Water System Maintenance	1,669,700	1,669,700	1,669,700	1,669,700	1,669,700	1,669,700	1,669,700	1,669,700	1,669,700	1,669,700
6	Water Construction	0	0	0	0	0	0	0	0	0	0
7	Water System Operations	0	0	0	0	0	0	0	0	0	0
8	Administration Design	1,557,400	1,566,600	1,576,000	1,585,600	1,595,300	1,605,200	1,615,300	1,625,600	1,636,100	1,646,900
9	Water Quality	0	0	0	0	0	0	0	0	0	0
10	Water Resources	0	0	0	0	0	0	0	0	0	0
11	Subtotal Other Operating Revenue	$ 3,316,900	$ 3,326,100	$ 3,335,500	$ 3,345,100	$ 3,354,800	$ 3,364,700	$ 3,374,800	$ 3,385,100	$ 3,395,600	$ 3,406,400
12	**Total Revenue**	**$ 88,684,000**	**$ 93,310,700**	**$ 98,190,900**	**$ 101,285,100**	**$ 104,480,000**	**$ 110,820,300**	**$ 117,556,300**	**$ 123,569,400**	**$ 129,898,300**	**$ 136,559,100**
	Revenue Requirements										
	Operating & Maintenance										
13	O&M Expenses	75,216,700	81,010,800	87,669,900	93,987,400	99,255,200	104,837,400	110,696,700	116,990,700	123,484,900	130,430,100
14	Subtotal O&M	$ 75,216,700	$ 81,010,800	$ 87,669,900	$ 93,987,400	$ 99,255,200	$ 104,837,400	$ 110,696,700	$ 116,990,700	$ 123,484,900	$ 130,430,100
	Debt Service										
15	Existing Loans/Bonds	0	0	0	0	0	0	0	0	0	0
16	Proposed Loans/Bonds	0	0	0	0	0	0	0	0	0	0
17	Total Debt Service	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Transfers										
18	Transfer to Other Funds	346,500	154,500	292,400	154,200	154,200	154,200	154,200	154,200	154,200	154,200
19	Transfer to Rate Stabilization Reserve	600,000	725,000	725,000	725,000	725,000	550,000	500,000	500,000	500,000	500,000
21	Transfer to Operating Reserve	7,811,000	1,428,700	1,641,900	1,557,800	1,298,900	1,376,400	1,444,800	1,551,900	1,601,300	1,712,500
22	Transfer to Water Construction Fund	7,900,000	5,200,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
23	Total Transfers	$ 16,657,500	$ 7,508,200	$ 7,659,300	$ 7,437,000	$ 7,178,100	$ 7,080,600	$ 7,099,000	$ 7,206,100	$ 7,255,500	$ 7,366,700
24	**Total Revenue Requirements**	**$ 91,874,200**	**$ 88,519,000**	**$ 95,329,200**	**$ 101,424,400**	**$ 106,433,300**	**$ 111,918,000**	**$ 117,795,700**	**$ 124,196,800**	**$ 130,740,400**	**$ 137,796,800**
25	Net Annual Cash Balance	(3,190,200)	4,791,700	2,861,700	(139,300)	(1,953,300)	(1,097,700)	(239,400)	(627,400)	(842,100)	(1,237,700)
26	Beginning Fund Balance	3,319,700	129,500	4,921,200	7,782,900	7,643,600	5,690,300	4,592,600	4,353,200	3,725,800	2,883,700
27	Net Cumulative Fund Balance	$ 129,500	$ 4,921,200	$ 7,782,900	$ 7,643,600	$ 5,690,300	$ 4,592,600	$ 4,353,200	$ 3,725,800	$ 2,883,700	$ 1,646,000
28	Unrestricted + Operating Reserve	$ 18,676,100	$ 24,896,500	$ 29,400,100	$ 30,818,600	$ 30,164,200	$ 30,442,900	$ 31,648,300	$ 32,572,800	$ 33,332,000	$ 33,806,800
29	Minimum Operating Reserves (90 Days)	$ 18,546,600	$ 19,975,300	$ 21,617,200	$ 23,175,000	$ 24,473,900	$ 25,850,300	$ 27,295,100	$ 28,847,000	$ 30,448,300	$ 32,160,800

Recycled Water Utility

Line No.	Description	Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Revenue										
	Rate Revenue										
1	Revenue from Existing Rates	9,524,600	9,619,900	9,716,000	9,813,300	9,911,400	10,010,500	10,110,700	10,211,800	10,314,000	10,417,100
2	Increased Revenue Due to Adjustments	1,333,400	2,882,100	4,552,400	6,471,500	7,687,500	9,008,600	10,443,600	12,001,200	13,243,000	14,565,100
3	Subtotal Rate Revenue	$ 10,858,000	$ 12,502,000	$ 14,268,400	$ 16,284,800	$ 17,598,900	$ 19,019,100	$ 20,554,300	$ 22,213,000	$ 23,557,000	$ 24,982,200
	Other Operating Revenue										
4	System Maintenance	102,500	104,600	106,700	108,800	111,000	113,200	115,500	117,800	120,200	122,600
5	South Bay Water Recycling System Mainten	1,162,400	1,204,900	1,248,800	1,302,700	1,345,400	1,389,800	1,422,800	1,473,300	1,511,500	1,553,600
6	Subtotal Other Operating Revenue	$ 1,264,900	$ 1,309,500	$ 1,355,500	$ 1,411,500	$ 1,456,400	$ 1,503,000	$ 1,538,300	$ 1,591,100	$ 1,631,700	$ 1,676,200
	Transfers From										
7	RW Capital Fund	0	0	0	0	0	0	0	0	0	0
8	Subtotal Transfers From	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
9	**Total Revenue**	**$ 12,122,900**	**$ 13,811,500**	**$ 15,623,900**	**$ 17,696,300**	**$ 19,055,300**	**$ 20,522,100**	**$ 22,092,600**	**$ 23,804,100**	**$ 25,188,700**	**$ 26,658,400**
	Revenue Requirements										
	Operating & Maintenance										
10	O&M Expenses	12,688,600	13,922,100	15,279,700	16,788,500	18,179,800	19,691,000	21,248,100	22,955,100	24,740,100	26,675,700
11	Subtotal O&M	12,688,600	13,922,100	15,279,700	16,788,500	18,179,800	19,691,000	21,248,100	22,955,100	24,740,100	26,675,700
	Debt Service										
12	Existing Loans/Bonds	0	0	0	0	0	0	0	0	0	0
13	Proposed Loans/Bonds	0	0	0	0	0	0	0	0	0	0
14	Total Debt Service	0	0	0	0	0	0	0	0	0	0
	Transfers										
15	Transfer to Rate Stabilization Reserve	150,000	150,000	150,000	200,000	200,000	150,000	150,000	150,000	150,000	100,000
16	Transfer to Operating Reserve	328,700	304,100	334,800	372,000	343,100	372,600	384,000	420,900	440,100	477,300
17	Transfer to Recycled Water Const Fund	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
18	Total Transfers	528,700	504,100	534,800	622,000	593,100	572,600	584,000	620,900	640,100	627,300
19	**Total Revenue Requirements**	**$ 13,217,300**	**$ 14,426,200**	**$ 15,814,500**	**$ 17,410,500**	**$ 18,772,900**	**$ 20,263,600**	**$ 21,832,100**	**$ 23,576,000**	**$ 25,380,200**	**$ 27,303,000**
20	Net Annual Cash Balance	(1,094,400)	(614,700)	(190,600)	285,800	282,400	258,500	260,500	228,100	(191,500)	(644,600)
21	Beginning Fund Balance	2,005,400	911,000	296,300	105,700	391,500	673,900	932,400	1,192,900	1,421,000	1,229,500
22	Net Cumulative Fund Balance	$ 911,000	$ 296,300	$ 105,700	$ 391,500	$ 673,900	$ 932,400	$ 1,192,900	$ 1,421,000	$ 1,229,500	$ 584,900
23	Unrestricted + Operating Reserve	$ 4,039,700	$ 3,729,100	$ 3,873,300	$ 4,531,100	$ 5,156,600	$ 5,787,700	$ 6,432,200	$ 7,081,200	$ 7,329,800	$ 7,162,500
24	Minimum Operating Reserves (90 Days)	$ 3,128,700	$ 3,432,800	$ 3,767,600	$ 4,139,600	$ 4,482,700	$ 4,855,300	$ 5,239,300	$ 5,660,200	$ 6,100,300	$ 6,577,600

Sewer Utility

Line No.	Description	Fiscal Year Ending June 30, FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
	Revenue										
	Rate Revenue										
1	Revenue from Existing Rates	54,488,800	55,094,500	55,713,800	55,852,600	55,992,400	56,132,500	56,272,300	56,413,200	56,554,300	56,695,500
2	Increased Revenue Due to Adjustments	4,767,800	11,411,500	17,592,600	21,310,900	25,231,900	25,295,200	25,358,200	25,421,600	25,485,100	25,548,900
3	Subtotal Rate Revenue	$ 59,256,600	$ 66,506,000	$ 73,306,400	$ 77,163,500	$ 81,224,300	$ 81,427,700	$ 81,630,500	$ 81,834,800	$ 82,039,400	$ 82,244,400
	Other Operating Revenue										
4	System Administration (Interest Income)	663,600	676,000	688,600	701,500	714,600	728,000	741,600	755,500	769,700	784,200
5	System Maintenance	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400
6	Operations	560,000	560,000	560,000	560,000	560,000	560,000	560,000	560,000	560,000	560,000
7	SJ SC Water Pollution Control Plant	0	0	0	0	0	0	0	0	0	0
8	Storm Pump Maintenance	0	0	0	0	0	0	0	0	0	0
9	Subtotal Other Operating Revenue	$ 1,244,000	$ 1,256,400	$ 1,269,000	$ 1,281,900	$ 1,295,000	$ 1,308,400	$ 1,322,000	$ 1,335,900	$ 1,350,100	$ 1,364,600
10	**Total Revenue**	**$ 60,500,600**	**$ 67,762,400**	**$ 74,575,400**	**$ 78,445,400**	**$ 82,519,300**	**$ 82,736,100**	**$ 82,952,500**	**$ 83,170,700**	**$ 83,389,500**	**$ 83,609,000**
	Revenue Requirements										
	Operating & Maintenance										
11	O&M Expenses	44,166,600	45,345,600	46,547,600	47,693,900	48,785,600	49,843,500	50,869,500	52,000,800	53,134,800	54,315,000
12	Subtotal O&M	$ 44,166,600	$ 45,345,600	$ 46,547,600	$ 47,693,900	$ 48,785,600	$ 49,843,500	$ 50,869,500	$ 52,000,800	$ 53,134,800	$ 54,315,000
	Debt Service										
13	Existing Loans/Bonds	3,298,300	3,297,800	3,300,300	3,300,500	3,298,500	2,361,800	2,360,100	2,360,800	2,358,800	2,359,100
14	Proposed Loans/Bonds	1,203,200	1,203,200	2,173,500	2,173,500	4,502,200	4,502,200	4,502,200	4,502,200	4,502,200	4,502,200
15	Total Debt Service	$ 4,501,500	$ 4,501,000	$ 5,473,800	$ 5,474,000	$ 7,800,700	$ 6,864,000	$ 6,862,300	$ 6,863,000	$ 6,861,000	$ 6,861,300
	Transfers										
16	Transfer to Other Fund	6,900	47,100	47,100	47,100	47,100	47,100	47,100	47,100	47,100	47,100
17	Transfer to Rate Stabilization Reserve	600,000	600,000	600,000	600,000	600,000	600,000	200,000	50,000	50,000	50,000
18	Transfer to Pension Stabilization Reserve	0	0	0	0	0	0	0	0	0	0
19	Transfer to Operating Reserve	(5,457,900)	290,700	296,400	282,600	269,200	260,900	253,000	278,900	279,600	291,000
20	Transfer to Sewer Construction Fund	15,500,000	15,500,000	15,500,000	15,500,000	40,500,000	15,500,000	13,500,000	13,500,000	10,500,000	10,500,000
21	Total Transfers	$ 10,649,000	$ 16,437,800	$ 16,443,500	$ 16,429,700	$ 41,416,300	$ 16,408,000	$ 14,000,100	$ 13,876,000	$ 10,876,700	$ 10,888,100
22	**Total Revenue Requirements**	**$ 59,317,100**	**$ 66,284,400**	**$ 68,464,900**	**$ 69,597,600**	**$ 98,002,600**	**$ 73,115,500**	**$ 71,731,900**	**$ 72,739,800**	**$ 70,872,500**	**$ 72,064,400**
23	Net Annual Cash Balance	1,183,500	1,478,000	6,110,500	8,847,800	(15,483,300)	9,620,600	11,220,600	10,430,900	12,517,000	11,544,600
24	Beginning Fund Balance	4,622,368	5,805,868	5,541,568	11,652,068	20,499,868	5,016,568	14,637,168	25,857,768	36,288,668	48,805,668
25	Net Cumulative Fund Balance	$ 5,805,868	$ 7,283,868	$ 11,652,068	$ 20,499,868	$ 5,016,568	$ 14,637,168	$ 25,857,768	$ 36,288,668	$ 48,805,668	$ 60,350,268
26	Unrestricted + Operating Reserve	16,696,268	18,464,968	23,129,568	32,259,968	17,045,868	26,927,368	38,400,968	49,110,768	61,907,368	73,742,968
27	Minimum Operating Reserves (90 Days)	10,890,400	11,181,100	11,477,500	11,760,100	12,029,300	12,290,200	12,543,200	12,822,100	13,101,700	13,392,700
28	Debt Service Coverage (Min 1.25)	3.63	4.98	5.12	5.62	4.32	4.79	4.68	4.54	4.41	4.27