DRAFT FINAL

WATER AND SEWER RATE STUDY

BLACK & VEATCH PROJECT NO. 410918

PREPARED FOR

City of Santa Clara, CA

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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 26,306 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. The City has a target of obtaining 68% of the 5.8 billion gallons of water that flows to its customers each year from the City's wells.

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 26,785 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, 2025 and ending June 30, 2035. This report will focus on a three-year planning period for discussion, beginning July 1, 2025 and ending June 30, 2028. 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 $66.4M in FY 2026 to $78M in FY 2028. Water production and water purchases account for most of this increase, representing an average of 67% 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 $6.7M annually in capital projects from FY 2026 to FY 2028.
- 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 of the following two-year's 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

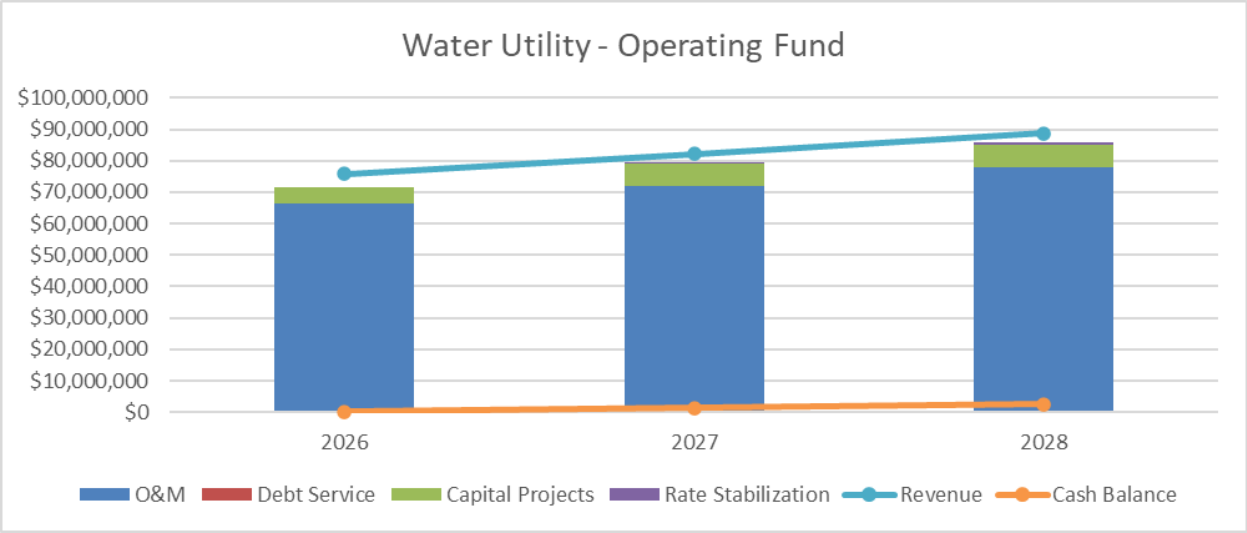
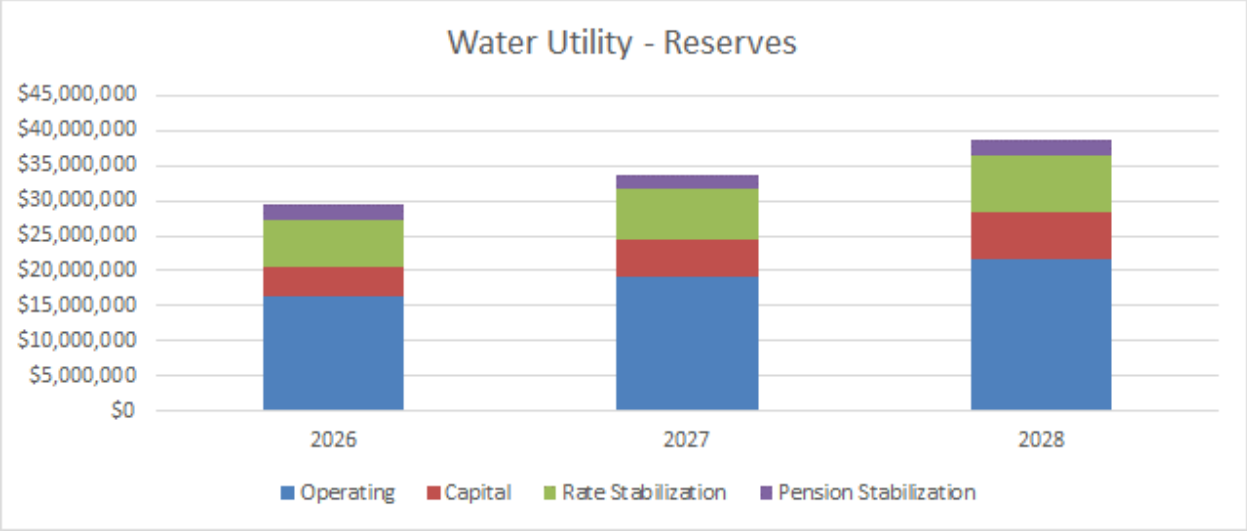


Figure 1-2 Water Reserves



1.4.2 Recycle 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 $10.9M in FY 2026 to $13.3M in FY 2028. Recycled water purchase costs constitute most of the increase, averaging 83% 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 2026 to FY 2028.
- 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 of the following two-year's 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 on reserves to allow it to operate the enterprise on a revenue-neutral basis and meet reserve targets, as shown in Figure 1-2.

Figure 1-3 Recycled Water Operating Cash Flow

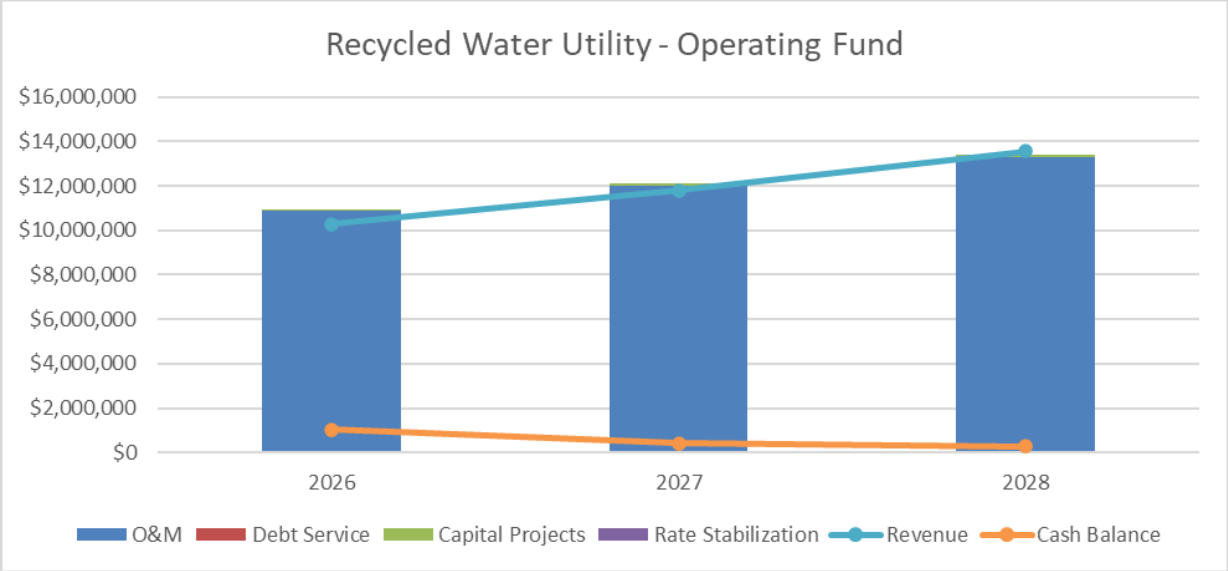
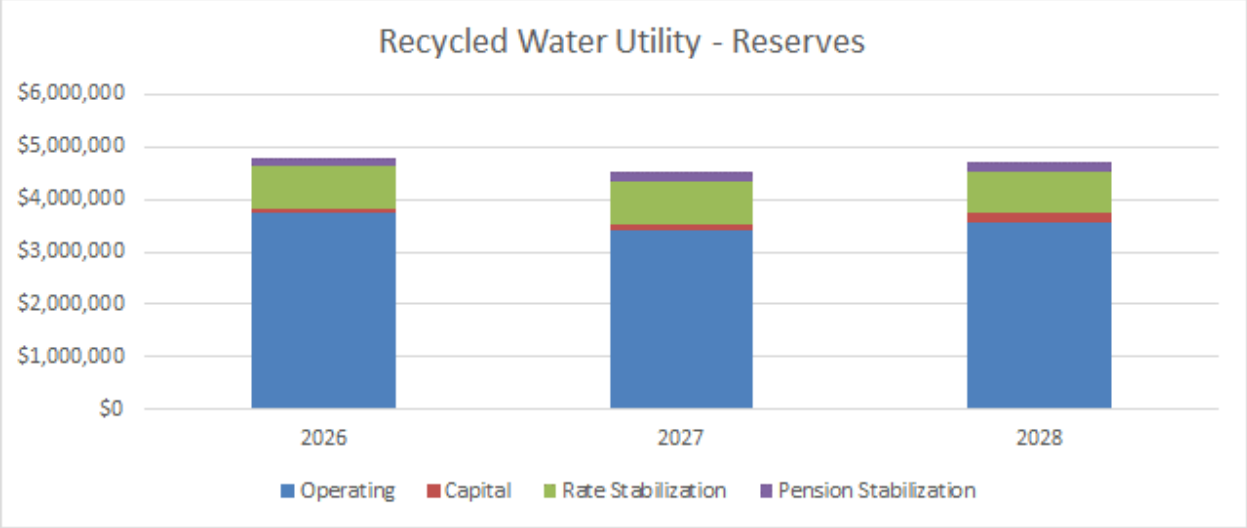


Figure 1-4 Recycled Water Reserves



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 $40.3M in FY 2026 to $43.1M in FY 2028. RWF-related costs represent an average of 70% of O&M expenses.
- Debt Service: The Sewer Utility anticipates an average debt service payment of $3.9M annually from FY 2026 to FY 2028 associated with existing and proposed debt issuances. The City anticipates a new revenue bond for $15M to be issued in 2027.
- Capital Improvements: The Sewer Utility plans to execute an average of $18.6M annually in capital projects from FY 2026 to FY 2028.
- 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 of the following two-year's City CIP and 6-months of the following year's San Jose Santa Clara Regional Wastewater Facility 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

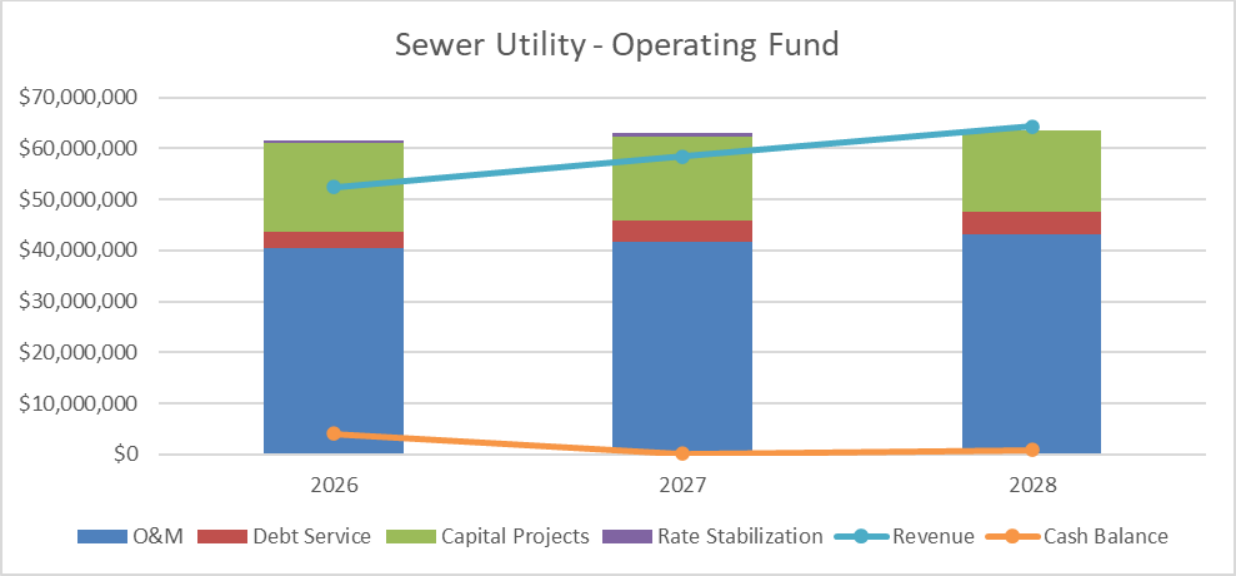
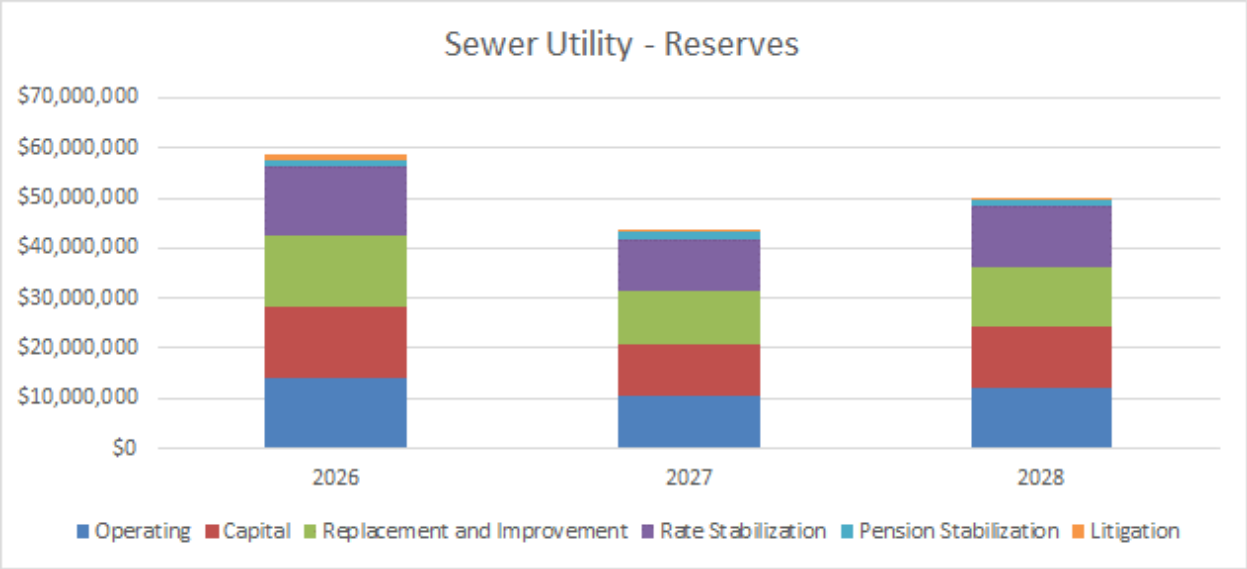


Figure 1-6 Sewer Reserves



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 2026 to FY 2028. These do not represent proposed rate increases to 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 2026	July	11.00%	11.00%	8.00%
FY 2027	July	6.00%	15.00%	10.50%
FY 2028	July	6.00%	15.00%	10.00%

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 2026	FY 2027	FY 2028
Minimum Monthly Meter Rates ($/Month)	$/month	$/month	$/month
5/8" x 3/4"	26.46	28.50	29.60
1"	41.70	45.10	46.87
1-1/2"	79.79	86.61	90.05
2"	125.50	136.42	141.87
3"	247.40	269.23	280.05
4"	384.53	418.65	435.49
6"	765.46	833.71	867.30
8"	1,222.58	1,331.77	1,385.46
10"	1,832.07	1,995.86	2,076.34
12"	2,574.88	2,805.22	2,918.35
Fire Service ($/Month)	$/month	$/month	$/month
2"	3.50	3.65	3.81
4"	19.83	20.70	21.57
6"	58.33	60.89	63.45
8"	124.25	129.70	135.15
10"	223.42	233.23	243.02
12"	361.08	376.94	392.76
Cross Connection ($/Month)	$/month	$/month	$/month
1"	7.47	7.52	7.76
2"	11.95	12.03	12.42
3"	23.89	24.06	24.83
4"	37.33	37.59	38.80
6"	74.66	75.17	77.60
8"	119.46	120.28	124.16
10"	179.19	180.41	186.24
Consumption Charges ($/HCF)			
General Customer	9.89	10.49	11.13

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 2026	FY 2027	FY 2028
Minimum Monthly Meter Rates ($/Month)	$/month	$/month	$/month
5/8" x 3/4"	17.80	20.42	23.57
1"	29.07	33.41	38.62
1-1/2"	57.26	65.89	76.23
2"	91.08	104.87	121.37
3"	181.27	208.80	241.72
4"	282.74	325.72	377.13
6"	564.59	650.51	753.24
8"	902.82	1,040.26	1,204.58
10"	1,353.78	1,559.93	1,806.37
12"	1,903.40	2,193.27	2,539.80
Consumption Charges ($/HCF)			
General Customers	5.43	6.24	7.18

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		
	FY 2026	FY 2027	FY 2028
Monthly Service Charge ($/EDU)	$/month	$/month	$/month
Single Family	57.56	64.49	71.88
Multi-Family	53.15	59.51	66.28
Minimum Commercial Bill Charge ($/Month)	$/month	$/month	$/month
All Customers	57.56	64.49	71.88
Commodity Charge ($/HCF)	$/HCF	$/HCF	$/HCF
Amusement Parks	7.22	7.76	8.31
Auto Dealers & Service Station	8.38	9.08	9.82
Churches	6.12	6.56	6.96
Com/Ind/Misc	6.85	7.35	7.85
Electric & Electronic Equip.	6.33	6.74	7.15
Food and Kindred Products	17.53	19.53	21.62
Hospitals & Convalescent Homes	8.00	8.65	9.33
Industrial Chemical	12.69	14.00	15.36
Laundries	7.01	7.52	8.04
Machinery Manufacturers	9.98	10.93	11.91
Metal Plating	4.92	5.19	5.39
Motels & Hotels	8.56	9.28	10.04
Paper	0.00	0.00	0.00
Repair Shops & Car Washes	6.47	6.96	7.44
Restaurants	17.88	19.93	22.07
Schools & Colleges	7.71	8.32	8.97
Major Commercial and Industrial Users			
Operating and Maintenance Cost Recovery			
Volume ($/MG)	3,982.86	4,256.22	4,821.20
BOD ($/1,000 lbs)	751.02	869.93	986.80
SS ($/1,000 lbs)	869.45	1,007.10	1,142.39
NH3 ($/1,000 lbs)	6,630.54	7,680.17	8,710.77
Annual Capital Cost Recovery			
Volume ($/MGD)	1,175,044	1,210,456	1,143,407
BOD ($/1,000 lbs/day)	112,855	124,559	139,957
SS ($/1,000 lbs/day)	98,598	106,931	118,008
NH3 ($/1,000 lbs/day)	516,337	541,495	576,299

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 26,306 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

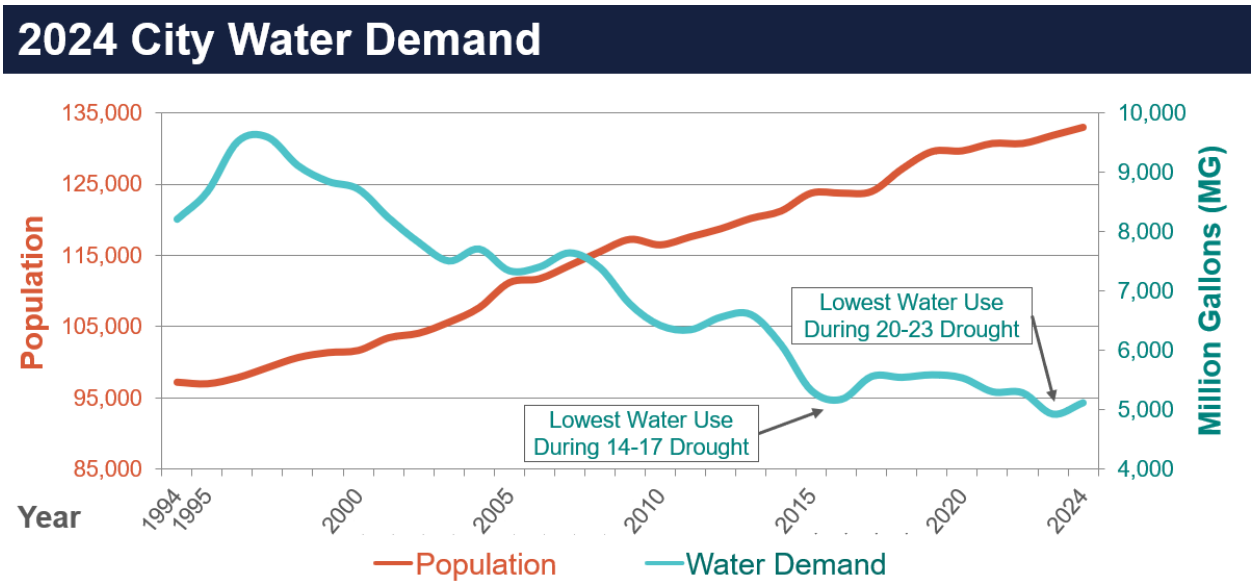
Line No.	Description	Fiscal Year Ending June 30,		
		FY 2026	FY 2027	FY 2028
		(Bills)	(Bills)	(Bills)
	Water Utility			
1	General Customers	53,363	53,496	53,629
2	Total	53,363	53,496	53,629
	Recycled Water Utility			
3	General Customers	801	809	817
4	Total	801	809	817

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 year 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 this, the City and Valley Water work together to maintain a 15% voluntary water use reduction.

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 a rain barrel rebate program and works with the 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



Recognizing that the City's water conservation goals, the City 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 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 2026	FY 2027	FY 2028
		(HCF)	(HCF)	(HCF)
	Water Utility			
1	General Customers	6,806,680	6,976,847	7,151,268
2	Total Usage (HCF)	6,806,680	6,976,847	7,151,268
3	Total Usage (AF)	15,626	16,017	16,417
	Recycled Water Utility			
4	General Customers	1,665,011	1,681,661	1,698,478
5	Total Usage (HCF)	1,665,011	1,681,661	1,698,478
6	Total Usage (AF)	3,822	3,861	3,899

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 2025	All City FY 2025
Minimum Monthly Meter Rates	Water ($/mo)	Recycled Water ($/mo)
5/8" x 3/4"	23.42	17.44
1"	36.67	28.43
1-1/2"	69.78	55.91
2"	109.51	88.88
3"	215.46	176.80
4"	334.66	275.71
6"	665.77	550.46
8"	1,063.09	880.16
10"	1,592.86	1,319.76
12"	2,238.52	1,855.53

Description	All City FY 2025
Consumption Charges	
Water Utility	($/HCF)
General Customers	8.90
Recycled Water Utility	($/HCF)
General Customers	5.06

Fire Service Charges	($/mo)
2"	3.15
4"	17.84
6"	52.48
8"	111.78
10"	201.00
12"	324.85

Cross Connection Charges	($/mo)
1"	8.60
2"	13.76
3"	27.53
4"	43.01
6"	86.02
8"	137.63
10"	206.44

Table 2-4 summarizes projected water and recycled water rate revenue under existing rates. As shown, the revenue generated is projected to increase for 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 $65.9M from FY 2026 to $69M in FY 2028, while the projected Recycled Water Utility revenue increases from $8.2M in FY 2026 to $8.4M in FY 2028, reflecting an overall increase of 4.7% and 2% over the three-year Study period, respectively.

Table 2-4 Projected Revenue under Existing Rates

Line No.	Description	Fiscal Year Ending June 30, FY 2026	FY 2027	FY 2028
		($)	($)	($)
	Water Utility			
1	General Customers	63,229,900	64,757,200	66,322,800
2	Fire Service	1,113,800	1,114,800	1,115,900
3	Cross Connection	1,588,300	1,590,000	1,591,600
4	Total	$ 65,932,000	$ 67,462,000	$ 69,030,300
	Recycled Water Utility			
5	General Customers	8,234,300	8,316,700	8,399,700
6	Total	$ 8,234,300	$ 8,316,700	$ 8,399,700

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 3.3% of the Water Utility's total revenue and an average of 10% 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 3.8% annually for the Water Utility and an average of 5.9% annually for the Recycled Water Utility from the FY 2026.

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 a targeted amount of approximately 60% 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 22.4% 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 24.2% over the Study period.

Table 2-5 O&M Expenses

Line No.	Description	Fiscal Year Ending June 30,		
		FY 2026	FY 2027	FY 2028
		($)	($)	($)
	Water Utility			
1	Salaries	6,071,500	6,460,100	6,679,600
2	Benefits	3,703,200	3,758,400	3,908,700
3	Materials/Services/Supplies	4,173,600	4,248,800	4,325,000
4	Interfund Services	8,699,100	9,081,000	9,488,600
5	Resource & Production	43,629,500	48,269,100	53,422,900
6	Capital Outlay	153,000	156,100	159,200
7	Total	$ 66,429,900	$ 71,973,500	$ 77,984,000
	Recycled Water Utility			
8	Salaries	818,100	864,700	899,300
9	Benefits	499,400	504,800	523,500
10	Materials/Services/Supplies	39,900	40,700	41,500
11	Interfund Services	567,300	627,300	694,600
12	Resource & Production	8,962,100	9,988,000	11,127,100
13	Capital Outlay	0	0	0
14	Total	$ 10,886,800	$ 12,025,500	$ 13,286,000

As shown in Table 2-5, the Water Utility's O&M expenses increase from $66.4M in FY 2026 to $78M in FY 2028, while the Recycled Water Utility's O&M expenses increase from $10.9M in FY 2026 to $13.3M in FY 2028.

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 2026 through FY 2028. The Water Utility is projecting $20.2M 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 2026	FY 2027	FY 2028
		($)	($)	($)
	Water Utility			
1	7005 Buildings and Grounds	2,847,200	53,600	55,500
2	7054 Distribution System Replacement/Restoration	4,659,100	3,215,900	3,329,600
3	7057 Asset Management Program	0	0	0
4	7058 SCADA Improvements	336,500	375,200	277,500
5	7059 New and Replacement Wells	621,200	1,929,600	1,997,800
6	PW Paving Project Support	517,700	0	0
7	Total	$ 8,981,700	$ 5,574,300	$ 5,660,400
	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 expenditures 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 $6.7M 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 2026	FY 2027	FY 2028
		($)	($)	($)
	Source of Funds			
1	Intra Transfer In - Debt Financing	0	0	0
2	Intra Transfer In - Customer Service Charge	5,000,000	7,000,000	7,000,000
3	Connection Charges	0	0	0
4	Developer Contributions	0	0	0
5	Total Sources	$ 5,000,000	$ 7,000,000	$ 7,000,000
	Use of Funds			
6	Improvements Projects	8,981,700	5,574,300	5,660,400
7	Infrastructure Reserve	6,249,200	(1,660,650)	(804,900)
8	Total Uses	$ 15,230,900	$ 5,574,300	$ 5,660,400
9	Net Annual Cash Balance	(10,230,900)	1,425,700	1,339,600
10	Beginning Unrestricted Fund Balance	6,604,600	(3,626,300)	(539,950)
11	Net Cumulative Fund Balance	$ (3,626,300)	$ (2,200,600)	$ 799,650
12	Construction + Infrastructure Reserves	$ 3,651,700	$ 3,416,750	$ 5,612,100
13	Minimum Reserves	$ 7,278,000	$ 5,617,350	$ 4,812,450

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

Line No.	Description	Fiscal Year Ending June 30, FY 2026	FY 2027	FY 2028
		($)	($)	($)
	Source of Funds			
1	Intra Transfer In - Debt Financing	0	0	0
2	Intra Transfer In - Customer Service Charge	50,000	100,000	100,000
3	Connection Charges	0	0	0
4	Developer Contributions	0	0	0
5	Total Sources	$ 50,000	$ 100,000	$ 100,000
	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)	44,550	42,550
10	Beginning Unrestricted Fund Balance	41,100	38,100	82,650
11	Net Cumulative Fund Balance	$ 38,100	$ 82,650	$ 125,200
12	Construction + Infrastructure Reserves	$ 90,800	$ 137,200	$ 181,700
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 receivables 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-year’s 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)

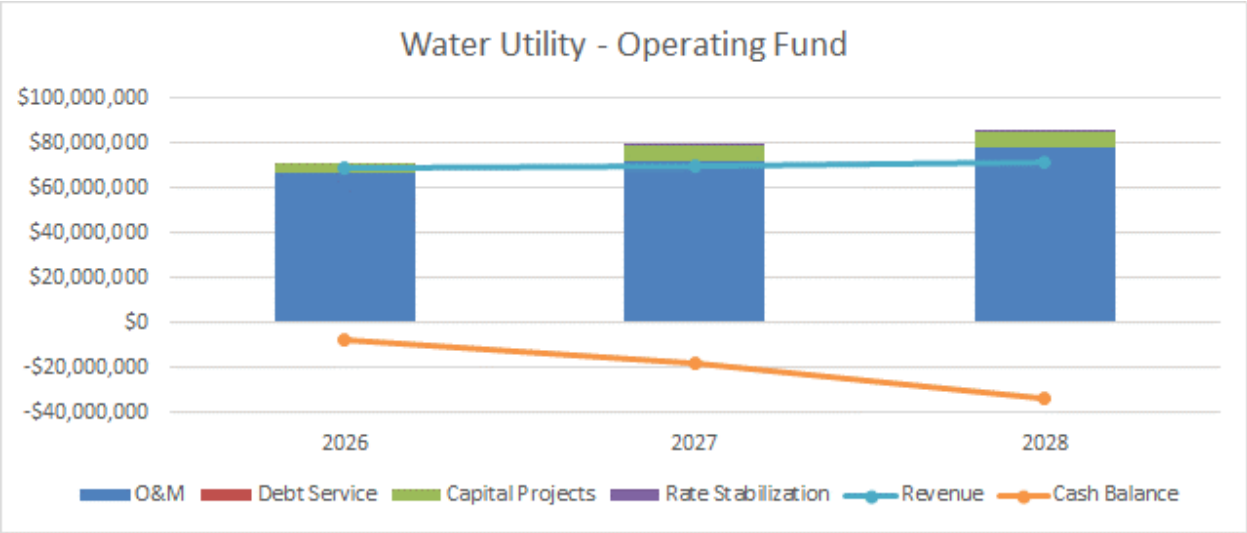
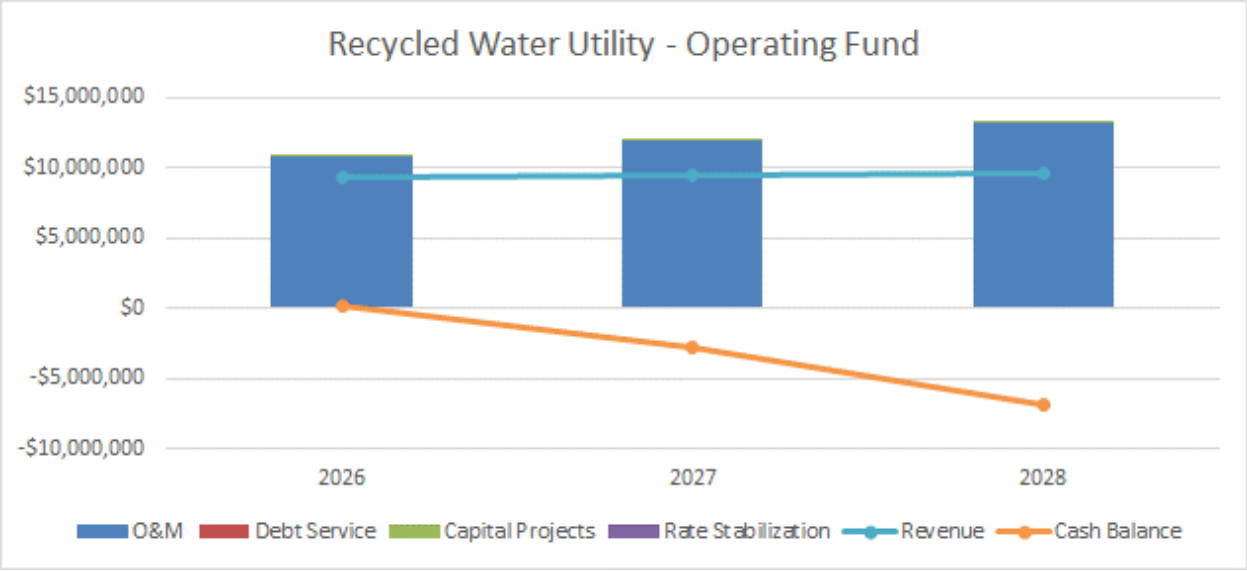


Figure 2-3 Status Quo Operating Cash Flow (Recycled Water)



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-year's 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 calculate 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 of critical equipment or supplies, or an abrupt drop in account receivables. 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 2026	FY 2027	FY 2028
				($)	($)	($)
	Revenue					
	Rate Revenue					
1	Revenue from Existing Rates			65,932,000	67,462,000	69,030,300
	Year	Months Effective	Rate Adj			
2	FY 2026	12	11.00%	7,252,500	7,420,800	7,593,300
3	FY 2027	12	6.00%		4,493,000	4,597,400
4	FY 2028	12	6.00%			4,873,300
5	Increased Revenue Due to Adjustments			7,252,500	11,913,800	17,064,000
6	Subtotal Rate Revenue			$ 73,184,500	$ 79,375,800	$ 86,094,300
	Other Operating Revenue					
7	Solar System Maintenance			88,000	88,000	88,000
8	Water System Maintenance			1,135,600	1,135,600	1,135,600
9	Water Construction			0	0	0
10	Water System Operations			0	0	0
11	Administration Design			1,484,000	1,492,200	1,500,500
12	Water Quality			0	0	0
13	Water Resources			0	0	0
14	Subtotal Other Operating Revenue			$ 2,707,600	$ 2,715,800	$ 2,724,100
15	**Total Revenue**			**$ 75,892,100**	**$ 82,091,600**	**$ 88,818,400**
	Revenue Requirements					
	Operating & Maintenance					
16	O&M Expenses			66,429,900	71,973,500	77,984,000
17	Subtotal O&M			$ 66,429,900	$ 71,973,500	$ 77,984,000
	Transfers					
18	Transfer to Other Funds			346,500	154,500	292,400
19	Transfer to Rate Stabilization Reserve			0	351,100	888,700
20	Transfer to Operating Reserve			8,944,400	1,366,900	1,482,000
21	Transfer to Water Construction Fund			5,000,000	7,000,000	7,000,000
22	Total Transfers			$ 14,290,900	$ 8,872,500	$ 9,663,100
23	**Total Revenue Requirements**			**$ 80,720,800**	**$ 80,846,000**	**$ 87,647,100**
24	Net Annual Cash Balance			(4,828,700)	1,245,600	1,171,300
25	Beginning Fund Balance			4,933,700	105,000	1,350,600
26	Net Cumulative Fund Balance			$ 105,000	$ 1,350,600	$ 2,521,900
27	Unrestricted + Operating Reserve			$ 16,485,000	$ 19,097,500	$ 21,750,800
28	Minimum Operating Reserves (90 Days)			$ 16,380,000	$ 17,746,900	$ 19,228,900

Table 2-10 Operating Fund (Recycled Water)

Line No.	Description			Fiscal Year Ending June 30, FY 2026	FY 2027	FY 2028
				($)	($)	($)
	Revenue					
	Rate Revenue					
1	Revenue from Existing Rates			8,234,300	8,316,700	8,399,700
	Year	Months Effective	Rate Adj			
2	FY 2026	12	11.00%	905,800	914,800	924,000
3	FY 2027	12	15.00%		1,384,700	1,398,600
4	FY 2028	12	15.00%			1,608,300
5	Increased Revenue Due to Adjustments			905,800	2,299,500	3,930,900
6	Subtotal Rate Revenue			$ 9,140,100	$ 10,616,200	$ 12,330,600
	Other Operating Revenue					
7	System Maintenance			100,500	102,500	104,600
8	South Bay Water Recycling System Maintenance			1,034,600	1,073,800	1,114,100
9	Subtotal Other Operating Revenue			$ 1,135,100	$ 1,176,300	$ 1,218,700
10	**Total Revenue**			**$ 10,275,200**	**$ 11,792,500**	**$ 13,549,300**
	Revenue Requirements					
	Operating & Maintenance					
11	O&M Expenses			10,886,800	12,025,500	13,286,000
12	Subtotal O&M			10,886,800	12,025,500	13,286,000
	Transfers					
13	Transfer to Rate Stabilization Reserve			0	0	0
14	Transfer to Operating Reserve			(115,600)	280,800	310,800
15	Transfer to Recycled Water Const Fund			50,000	100,000	100,000
16	Total Transfers			(65,600)	380,800	410,800
17	**Total Revenue Requirements**			**$ 10,821,200**	**$ 12,406,300**	**$ 13,696,800**
18	Net Annual Cash Balance			(546,000)	(613,800)	(147,500)
19	Beginning Fund Balance			1,590,200	1,044,200	430,400
20	Net Cumulative Fund Balance			$ 1,044,200	$ 430,400	$ 282,900
21	Unrestricted + Operating Reserve			$ 3,728,600	$ 3,395,600	$ 3,558,900
22	Minimum Operating Reserves (90 Days)			$ 2,684,400	$ 2,965,200	$ 3,276,000

Figure 2-4 presents the proposed Water Utility Operating Fund, and Figure 2-5 presents the Recycled Water Utility Operating Fund.

Figure 2-4 Water Operating Cash Flow

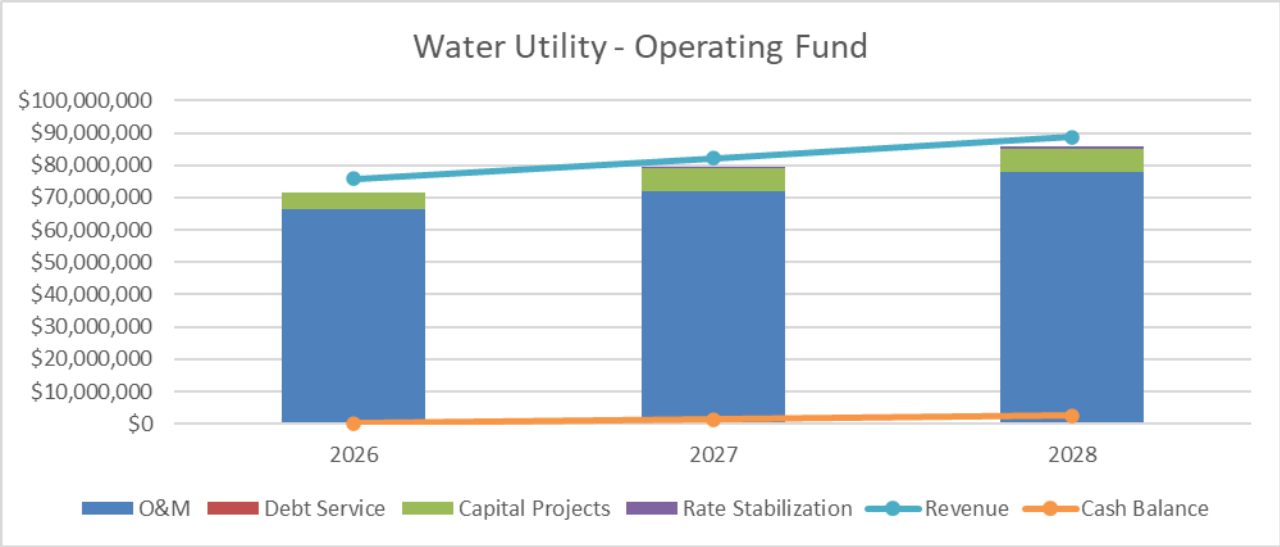
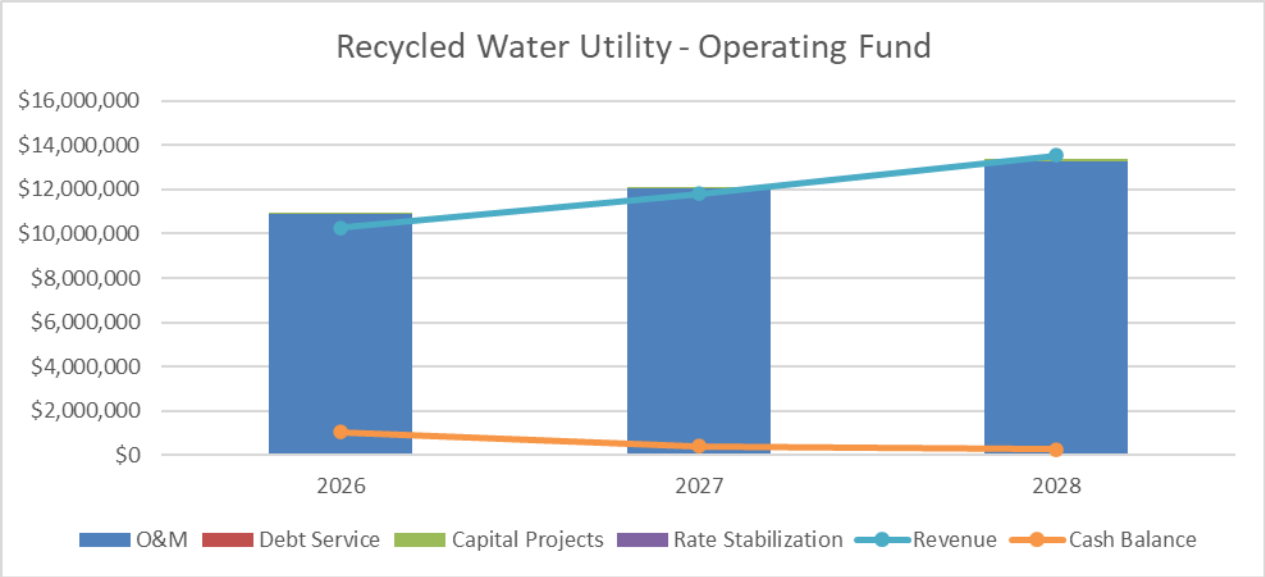


Figure 2-5 Recycled Water Operating Cash Flow



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 2026 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 2026.

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	66,429,900	0	66,429,900
2	Debt Service	0	0	0
3	Transfers	9,290,900	5,000,000	14,290,900
4	Subtotal	75,720,800	5,000,000	80,720,800
	Less Revenue Requirements Met from Other Sources			
5	Solar System Maintenance	88,000	0	88,000
6	Water System Maintenance	1,135,600	0	1,135,600
7	Water Construction	0	0	0
8	Water System Operations	0	0	0
9	Administration Design	1,484,000	0	1,484,000
10	Water Quality	0	0	0
11	Water Resources	0	0	0
12	Subtotal	2,707,600	0	2,707,600
	Adjustments			
13	Adjustment for Annual Cash Balance	4,828,700	0	4,828,700
14	Subtotal	4,828,700	0	4,828,700
15	Cost of Service to be Recovered from Rates	$ 68,184,500	$ 5,000,000	$ 73,184,500

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	10,886,800	0	10,886,800
2	Debt Service	0	0	0
3	Transfers	(115,600)	50,000	(65,600)
4	Subtotal	10,771,200	50,000	10,821,200
	Less Revenue Requirements Met from Other Sources			
5	System Maintenance	100,500	0	100,500
6	South Bay Water Recycling System Maintenance	1,034,600	0	1,034,600
7	Subtotal	1,135,100	0	1,135,100
	Adjustments			
8	Adjustment for Annual Cash Balance	546,000	0	546,000
9	Subtotal	546,000	0	546,000
10	Cost of Service to be Recovered from Rates	$ 9,090,100	$ 50,000	$ 9,140,100

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 $4.8M figure indicates that the forecast is projecting a negative cash balance for the year. In the case of the Recycled Water Utility, the $546.0k figure indicates that the forecast is projecting 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 to 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 systems 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 assigned 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 2026, 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)

			Common to All Customers						
			Base	Extra Capacity		Customer		Fire	Cross
Line No.	Description	Total Costs	Base	Max. Day	Max. Hour	Meters	Cust/Bill.	Protection	Connection
		($)	($)	($)	($)	($)	($)	($)	($)
	Water Utility								
	Operating Expenses								
	1532 Solar System Maintenance	287,300	0	0	0	287,300	0	0	0
1	1422 Water System Maintenance								
2	Customer Service	394,100	0	0	0	0	394,100	0	0
3	Backflow Prevention	1,023,300	0	0	0	0	0	0	1,023,300
4	All Other	834,800	456,100	231,300	139,100	0	0	8,300	0
	1423 Water Construction	4,192,400	2,290,000	1,161,800	698,700	0	0	41,900	0
5	1424 Water System Operations								
6	Generation & Pumping	1,395,400	917,300	464,100	0	0	0	14,000	0
7	Customer Billing & Meter Reading	811,200	0	0	0	0	811,200	0	0
8	Meters	381,700	0	0	0	381,700	0	0	0
	Hydrants	1,529,400	0	0	0	0	0	1,529,400	0
9	All Other	7,649,100	4,177,900	2,119,800	1,274,900	0	0	76,500	0
10	1411 Administration Design	4,412,900	3,066,200	283,000	150,300	605,000	85,800	149,800	72,800
11	1412 Water Quality	659,100	533,900	0	0	118,600	0	6,600	0
12	1413 Water Resources								
	Water Purchase	42,234,100	34,209,700	0	0	7,602,100	0	422,300	0
13	All Other	625,100	506,300	0	0	112,500	0	6,300	0
14	Transfers	9,290,900	6,455,600	595,800	316,500	1,273,700	180,600	315,400	153,300
15	Total O&M Expenses	$ 75,720,800	$ 52,613,000	$ 4,855,800	$ 2,579,500	$ 10,380,900	$ 1,471,700	$ 2,570,500	$ 1,249,400
	Less Other Revenue								
16	Miscellaneous Revenues	2,707,600	1,881,400	173,600	92,200	371,200	52,600	91,900	44,700
17	Other Adjustments	4,828,700	3,355,100	309,700	164,500	662,000	93,800	163,900	79,700
18	Net Operating Expenses	$ 68,184,500	$ 47,376,500	$ 4,372,500	$ 2,322,800	$ 9,347,700	$ 1,325,300	$ 2,314,700	$ 1,125,000

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

			Common to All Customers				
			Base	Extra Capacity		Customer	
Line No.	Description	Total Costs	Base	Max. Day	Max. Hour	Meters	Cust/Bill.
		($)	($)	($)	($)	($)	($)
	Recycled Water Utility						
	Operating Expenses						
1	1522 System Maintenance						
2	Water Purchase	8,962,100	8,962,100	0	0	0	0
3	Customer Billing & Meter Reading	3,700	0	0	0	0	3,700
4	Meters	623,000	0	0	0	623,000	0
5	All Other	283,400	119,000	83,400	81,000	0	0
6	1525 South Bay Water Recycling System	1,014,600	596,800	417,800	0	0	0
7	Transfers	(115,600)	(102,800)	(5,300)	(900)	(6,600)	0
8	Total O&M Expenses	$ 10,771,200	$ 9,575,100	$ 495,900	$ 80,100	$ 616,400	$ 3,700
	Less Other Revenue						
9	Miscellaneous Revenues	1,135,100	1,009,000	52,300	8,400	65,000	400
10	Other Adjustments	546,000	485,400	25,100	4,100	31,200	200
11	Net Operating Expenses	$ 9,090,100	$ 8,080,700	$ 418,500	$ 67,600	$ 520,200	$ 3,100

3.2.3 Allocation of Capital Investments

In allocating the capital investment for TY 2026, 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 $59.5 M shown on Line 11 for the Water Utility and $1.1M 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, 2024. 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	18,406,300	14,909,100	0	0	3,313,100	0	184,100	0
2	Pumping	2,705,900	1,778,900	899,900	0	0	0	27,100	0
3	Treatment	1,745,100	1,147,300	580,300	0	0	0	17,500	0
4	Transmission & Distribution	27,911,800	15,245,500	7,735,200	4,652,000	0	0	279,100	0
5	Meters & Services	6,409,400	0	0	0	6,409,400	0	0	0
6	Fire Hydrants	572,500	0	0	0	0	0	572,500	0
7	General Plant	1,727,300	989,500	275,600	139,100	290,800	0	32,300	0
8	Total Plant Assets	$ 59,478,300	$ 34,070,300	$ 9,491,000	$ 4,791,100	$ 10,013,300	$ 0	$ 1,112,600	$ 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	$ 59,478,300	$ 34,070,300	$ 9,491,000	$ 4,791,100	$ 10,013,300	$ 0	$ 1,112,600	$ 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	1,047,400	440,000	308,100	299,300	0	0
5	Meters	0	0	0	0	0	0
6	Total Plant Assets	$ 1,047,400	$ 440,000	$ 308,100	$ 299,300	$ 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	$ 1,047,400	$ 440,000	$ 308,100	$ 299,300	$ 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 2026 units of service for the 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's 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 2026 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 2026. 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)	$ 7.31	per HCF
General Customer Consumption (Table 3-9, Line 1)	6,871,457	HCF
Total Allocated Cost	$ 50,240,500	

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	6,871,457	18,826	166%	31,251	12,425	249%	46,877	15,626	45,530	315,666	0	0
2	Subtotal	6,871,457	18,826		31,251	12,425		46,877	15,626	45,530	315,666		
	Fire Service												
3	Public Fire	0	0		556	556		4,445	3,890	0	0	3,437	0
4	Private Fire	0	0		287	287		2,293	2,006	0	15,445	1,773	0
5	Subtotal	0	0		842	842		6,738	5,896	0	15,445	5,210	0
	Cross Connection												
6	Cross Connection										36,446	0	8,765
7	Subtotal	0	0		0	0		0	0	0	36,446	0	8,765
8	Total Water System	6,871,457	18,826		32,093	13,267		53,614	21,521	45,530	367,557	5,210	8,765
	Recycled Water Utility												
9	General Customer	1,665,011	4,562	130%	5,930	1,369	195%	8,895	2,965	2,563	3,503	0	0
10	Subtotal	1,665,011	4,562		5,930	1,369		8,895	2,965	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	68,184,500	47,376,500	4,372,500	2,322,800	9,347,700	1,325,300	2,314,700	1,125,000
2	Debt Service	0	0	0	0	0	0	0	0
3	Capital Costs	5,000,000	2,864,000	797,900	402,800	841,800	0	93,500	0
4	Total Cost of Service	$ 73,184,500	$ 50,240,500	$ 5,170,400	$ 2,725,600	$ 10,189,500	$ 1,325,300	$ 2,408,200	$ 1,125,000
5	Units of Service (Total)		6,871,457	13,267	21,521	45,530	367,557	5,210	8,765
			HCF	HCF/Day	HCF/Day	Eq. Meters	Bills	Eq. Hydrants	Eq. Meters
6	Cost per Unit		$ 7.31	$ 389.71	$ 126.65	$ 223.80	$ 3.61	$ 462.25	$ 128.36
			per HCF	per HCF/Day	per HCF/Day	per Eq. Meter	per Bill	per Eq. Hydrant	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		6,871,457	12,425	15,626	45,530	315,666	0	0
2	Allocation of costs of service	68,389,300	50,240,500	4,842,200	1,978,900	10,189,500	1,138,200	0	0
	Public Fire								
3	Units		0	556	3,890	0	0	3,437	0
4	Allocation of costs of service	2,297,900	0	216,500	492,600	0	0	1,588,800	0
	Private Fire								
5	Units		0	287	2,006	0	15,445	1,773	0
6	Allocation of costs of service	1,240,900	0	111,700	254,100	0	55,700	819,400	0
	Cross Connection								
7	Units		0	0	0	0	36,446	0	8,765
8	Allocation of costs of service	1,256,400	0	0	0	0	131,400	0	1,125,000
7	TOTAL COSTS OF SERVICE	$ 73,184,500	$ 50,240,500	$ 5,170,400	$ 2,725,600	$ 10,189,500	$ 1,325,300	$ 2,408,200	$ 1,125,000

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	9,090,100	8,080,700	418,500	67,600	520,200	3,100
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	$ 9,140,100	$ 8,101,700	$ 433,200	$ 81,900	$ 520,200	$ 3,100
5	Units of Service (Total)		1,665,011	1,369	2,965	2,563	3,503
			HCF	HCF/Day	HCF/Day	Eq. Meters	Bills
6	Cost per Unit		$ 4.87	$ 316.55	$ 27.62	$ 202.93	$ 0.88
			per HCF	per HCF/Day	per HCF/Day	per Eq. Meter	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		1,665,011	1,369	2,965	2,563	3,503
2	Allocation of costs of service	9,140,100	8,101,700	433,200	81,900	520,200	3,100
3	TOTAL COSTS OF SERVICE	$ 9,140,100	$ 8,101,700	$ 433,200	$ 81,900	$ 520,200	$ 3,100

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 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 2026 (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"	18.65	4.21	1.00	22.86	3.61	1.00	3.61	26.46
1"	18.65	4.21	1.67	38.09	3.61	1.00	3.61	41.70
1-1/2"	18.65	4.21	3.33	76.19	3.61	1.00	3.61	79.79
2"	18.65	4.21	5.33	121.90	3.61	1.00	3.61	125.50
3"	18.65	4.21	10.67	243.79	3.61	1.00	3.61	247.40
4"	18.65	4.21	16.67	380.93	3.61	1.00	3.61	384.53
6"	18.65	4.21	33.33	761.86	3.61	1.00	3.61	765.46
8"	18.65	4.21	53.33	1,218.97	3.61	1.00	3.61	1,222.58
10"	18.65	4.21	80.00	1,828.46	3.61	1.00	3.61	1,832.07
12"	18.65	4.21	112.50	2,571.27	3.61	1.00	3.61	2,574.88

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

Customer Class	Proposed		
	FY 2026	FY 2027	FY 2028
Minimum Monthly Meter Rates ($/Month)	$/month	$/month	$/month
5/8" x 3/4"	26.46	28.50	29.60
1"	41.70	45.10	46.87
1-1/2"	79.79	86.61	90.05
2"	125.50	136.42	141.87
3"	247.40	269.23	280.05
4"	384.53	418.65	435.49
6"	765.46	833.71	867.30
8"	1,222.58	1,331.77	1,385.46
10"	1,832.07	1,995.86	2,076.34
12"	2,574.88	2,805.22	2,918.35

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

Table 4-3 Costs within the Minimum Monthly Service Charge for FY 2025 (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"	16.91	1.00	16.91	0.88	1.00	0.88	17.80
1"	16.91	1.67	28.19	0.88	1.00	0.88	29.07
1-1/2"	16.91	3.33	56.37	0.88	1.00	0.88	57.26
2"	16.91	5.33	90.19	0.88	1.00	0.88	91.08
3"	16.91	10.67	180.39	0.88	1.00	0.88	181.27
4"	16.91	16.67	281.85	0.88	1.00	0.88	282.74
6"	16.91	33.33	563.71	0.88	1.00	0.88	564.59
8"	16.91	53.33	901.93	0.88	1.00	0.88	902.82
10"	16.91	80.00	1,352.90	0.88	1.00	0.88	1,353.78
12"	16.91	112.50	1,902.51	0.88	1.00	0.88	1,903.40

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

Customer Class	Proposed		
	FY 2026	FY 2027	FY 2028
Minimum Monthly Meter Rates ($/Month)	$/month	$/month	$/month
5/8" x 3/4"	17.80	20.42	23.57
1"	29.07	33.41	38.62
1-1/2"	57.26	65.89	76.23
2"	91.08	104.87	121.37
3"	181.27	208.80	241.72
4"	282.74	325.72	377.13
6"	564.59	650.51	753.24
8"	902.82	1,040.26	1,204.58
10"	1,353.78	1,559.93	1,806.37
12"	1,903.40	2,193.27	2,539.80

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 2026

Meter Size	Private Fire Protection			Total Service Charge
	Unit Cost	Meter Ratio	Adjusted Unit Cost	
	per EH			$/Month
2"	58.33	0.06	3.50	3.50
4"	58.33	0.34	19.83	19.83
6"	58.33	1.00	58.33	58.33
8"	58.33	2.13	124.25	124.25
10"	58.33	3.83	223.42	223.42
12"	58.33	6.19	361.08	361.08

Table 4-6 Proposed Fire Service Charge

Customer Class	Proposed		
	FY 2026	FY 2027	FY 2028
Fire Service ($/Month)	$/month	$/month	$/month
2"	3.50	3.65	3.81
4"	19.83	20.70	21.57
6"	58.33	60.89	63.45
8"	124.25	129.70	135.15
10"	223.42	233.23	243.02
12"	361.08	376.94	392.76

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 2026

Meter Size	Cross Connection			Total Service Charge
	Unit Cost	Meter Ratio	Adjusted Unit Cost	
	per EM			$/Month
1"	11.95	0.63	7.47	7.47
2"	11.95	1.00	11.95	11.95
3"	11.95	2.00	23.89	23.89
4"	11.95	3.13	37.33	37.33
6"	11.95	6.25	74.66	74.66
8"	11.95	10.00	119.46	119.46
10"	11.95	15.00	179.19	179.19

Table 4-8 Proposed Cross Connection Charge

Customer Class	Proposed		
	FY 2026	FY 2027	FY 2028
Cross Connection ($/Month)	$/month	$/month	$/month
1"	7.47	7.52	7.76
2"	11.95	12.03	12.42
3"	23.89	24.06	24.83
4"	37.33	37.59	38.80
6"	74.66	75.17	77.60
8"	119.46	120.28	124.16
10"	179.19	180.41	186.24

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 2026	FY 2027	FY 2028
Consumption Charges ($/HCF)			
General Customer	9.89	10.49	11.13
Recycled Water Utility			
General Customers	5.43	6.24	7.18

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 2025 Existing Rates	FY 2026 Proposed Rates
	(HCF)	($)	($)
Water Utility			
General Customer	0	$23.42	$26.46
	3	$23.42	$26.46
	5	$44.50	$49.46
	10	$89.00	$98.93
	12	$106.80	$118.71
	20	$178.00	$197.86
	30	$267.00	$296.78
	40	$356.00	$395.71
	50	$445.00	$494.64

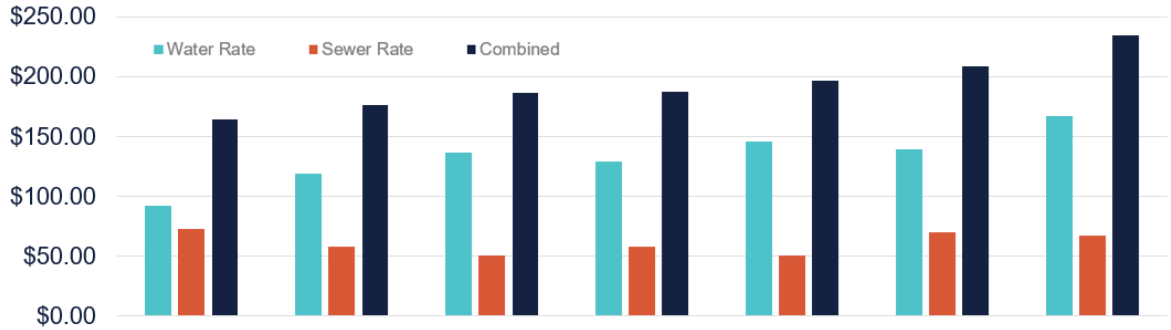
Table 4-11 Typical Monthly Bill (Recycled Water)

Customer Class	Typical Monthly Usage	FY 2025 Existing Rates	FY 2026 Proposed Rates
	(HCF)	($)	($)
Recycled Water Utility			
General Customer	0	$17.44	$17.80
	3	$17.44	$17.80
	5	$25.30	$27.14
	10	$50.60	$54.28
	12	$60.72	$65.13
	20	$101.20	$108.56
	30	$151.80	$162.84
	40	$202.40	$217.12
	50	$253.00	$271.39

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 2025.

Figure 4-1 Comparison to Neighboring Water Utilities



	Sunnyvale	**Santa Clara**	SJWC	Mountain View	San Jose (Muni)	Milpitas	Palo Alto
Water Rate 12 HCF	$91.69	$118.68	$136.31	$129.01	$145.73	$139.14	$166.89
Sewer Rate	$72.70	$57.55	$50.42	$57.75	$50.42	$69.46	$67.11
Combined	**$164.39**	**$176.23**	**$186.73**	**$186.76**	**$196.15**	**$208.90**	**$234.00**

*All rates are proposed for FY25-26

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 26,785 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 0.2% 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.

[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>

Table 5-1 EDUs

Line No.	Description	Fiscal Year Ending June 30, FY 2026 (EDUs)	FY 2027 (EDUs)	FY 2028 (EDUs)
1	Single Family	261,459	262,113	262,768
2	Multi Family	336,890	337,732	338,576
3	Total	598,349	599,845	601,344

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 2026 (Bills)	FY 2027 (Bills)	FY 2028 (Bills)
1	Amusement Parks	116	119	122
2	Auto Dealers & Service Station	409	419	429
3	Churches	292	299	306
4	Commercial/Industrial/Miscellaneous	10,969	11,243	11,524
5	Electric & Electronic Equip.	473	485	497
6	Food and Kindred Products	36	37	38
7	Hospitals & Convalescent Homes	347	356	365
8	Industrial Chemical	40	41	42
9	Laundries	155	159	163
10	Machinery Manufacturers	791	811	831
11	Metal Plating	99	101	104
12	Motels & Hotels	66	68	70
13	Paper	13	13	13
14	Repair Shops & Car Washes	491	503	516
15	Restaurants	282	289	296
16	Schools & Colleges	580	595	610
17	Total	15,159	15,538	15,926

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 2026	FY 2027	FY 2028
		(HCF)	(HCF)	(HCF)
1	Amusement Parks	74,820	76,691	78,608
2	Auto Dealers & Service Station	32,816	33,636	34,477
3	Churches	13,777	14,121	14,474
4	Commercial/Industrial/Miscellaneous	1,342,064	1,375,616	1,410,006
5	Electric & Electronic Equip.	450,931	462,204	473,759
6	Food and Kindred Products	17,656	18,097	18,550
7	Hospitals & Convalescent Homes	95,334	97,717	100,160
8	Industrial Chemical	15,943	16,341	16,749
9	Laundries	24,552	25,166	25,795
10	Machinery Manufacturers	37,081	38,008	38,958
11	Metal Plating	6,204	6,359	6,518
12	Motels & Hotels	99,626	102,117	104,670
13	Paper	27	28	29
14	Repair Shops & Car Washes	13,556	13,895	14,242
15	Restaurants	70,062	71,814	73,609
16	Schools & Colleges	46,602	47,767	48,961
17	Total (HCF)	2,341,051	2,399,577	2,459,565
18	Total (AF)	5,374	5,509	5,646

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 the 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 2025
Residential	($/EDU)
Single Family	52.37
Multi-Family	49.31
Non-Residential*	($/HCF)
Amusement Parks	6.93
Auto Dealers & Service Station	7.80
Churches	6.12
Com/Ind/Misc	6.61
Electric & Electronic Equip.	6.18
Food and Kindred Products	15.74
Hospitals & Convalescent Homes	7.60
Industrial Chemical	11.58
Laundries	6.80
Machinery Manufacturers	9.33
Metal Plating	5.05
Motels & Hotels	8.09
Paper	4.44
Repair Shops & Car Washes	5.90
Restaurants	16.01
Schools & Colleges	7.31

Description	Existing FY 2025
Major Commercial and Industrial Users	
Annual Capital Cost Recovery	
Volume (per MGD)	1,306,599
BOD [2] (per 1,000 lbs/day)	124,262
SS [3] (per 1,000 lbs/day)	114,880
NH3 [4] (per 1,000 lbs/day)	538,093
Operating and Maintenance Cost Recovery	
Volume (per MG)	3,671.11
BOD [2] (per 1,000 lbs)	561.28
SS [3] (per 1,000 lbs)	651.81
NH3 [4] (per 1,000 lbs)	4,980.00

*In no case shall the minimum charge be less than $52.37 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 $47.4M in FY 2026 to $48.4M in FY 2028.

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Table 5-5 Projected Revenue under Existing Rates

Line No.	Description	Fiscal Year Ending June 30,		
		FY 2026	FY 2027	FY 2028
		($)	($)	($)
1	Single Family	13,706,500	13,740,800	13,775,100
2	Multi-Family	16,454,000	16,495,100	16,536,300
3	Amusement Parks	519,600	532,600	545,900
4	Auto Dealers & Service Station	274,700	281,600	288,700
5	Churches	98,600	101,100	103,600
6	Com/Ind/Misc	9,355,400	9,589,300	9,829,000
7	Electric & Electronic Equip.	2,784,700	2,854,400	2,925,700
8	Food and Kindred Products	277,200	284,100	291,200
9	Hospitals & Convalescent Homes	735,600	754,100	772,900
10	Industrial Chemical	184,900	189,500	194,300
11	Laundries	173,400	177,700	182,200
12	Machinery Manufacturers	383,700	393,300	403,100
13	Metal Plating	36,100	37,000	38,000
14	Motels & Hotels	801,700	821,700	842,300
15	Paper	800	800	800
16	Repair Shops & Car Washes	104,700	107,300	110,000
17	Restaurants	1,125,600	1,153,800	1,182,600
18	Schools & Colleges	367,500	376,700	386,100
19	Major Users - Customer 1	0	0	0
20	Total	$ 47,384,700	$ 47,890,900	$ 48,407,800

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 2.1% 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 the FY 2026.

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 3% annually over the Study period.

Table 5-6 O&M Expenses

Line No.	Description	Fiscal Year Ending June 30,		
		FY 2026	FY 2027	FY 2028
		($)	($)	($)
1	Salaries	3,444,500	3,651,100	3,786,100
2	Benefits	2,101,200	2,132,400	2,223,700
3	Materials/Services/Supplies	615,800	628,000	640,400
4	Interfund Services	5,725,600	5,984,700	6,261,600
5	Resource & Production	28,459,146	29,312,800	30,192,200
6	Capital Outlay	0	0	0
7	Total	$ 40,346,246	$ 41,709,000	$ 43,104,000

As shown in Table 5-6, the Sewer Utility's O&M expenses increase from $40.3M in FY 2026 to $43.1M in FY 2028.

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 2026	FY 2027	FY 2028
		($)	($)	($)
1	Existing Short and Long-Term Loan	3,296,800	3,298,300	3,297,800
2	Proposed Short-Term and Rev Bonds	0	810,300	1,126,500
3	Total	$ 3,296,800	$ 4,108,600	$ 4,424,300

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 5-8 summarizes the Sewer Utility's CIP for FY 2026 through FY 2028. The Sewer Utility is projecting $55.9M 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 2026 ($)	FY 2027 ($)	FY 2028 ($)
1	1908 SJ-SC Regional Wastewater Facility	8,289,300	9,615,000	27,269,200
2	1909 Sanitary Sewer Capacity Improvements	0	0	0
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	160,100	169,600	179,600
6	PW Paving Project Support	517,700	0	0
7	Total	$ 12,073,200	$ 13,000,500	$ 30,778,500

5.6.1 Capital Improvement Financing Plan

The City funds annual expenditures 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 $18.6M for the Sewer Utility. The planned average annual CIP contribution from the Sewer Utility Operating Fund is $15.3M annually over the Study period.

Table 5-9 Construction Fund Financing Plan

Line No.	Description	Fiscal Year Ending June 30, FY 2026	FY 2027	FY 2028
	Source of Funds			
1	Sanitary Outlet Charge	0	0	0
2	Sewer Conveyance Fee	0	0	0
3	Intra Transfer In - Debt Financing	0	15,000,000	0
4	Intra Transfer In - Customer Service Charge	15,000,000	15,500,000	15,500,000
5	Refund from San Jose/Cupertino	0	0	0
6	Total Sources	$ 15,000,000	$ 30,500,000	$ 15,500,000
	Use of Funds			
7	Improvements Projects	12,073,200	13,000,500	30,778,500
8	Infrastructure Reserve	1,475,225	4,676,325	(790,750)
9	Total Uses	$ 13,548,425	$ 17,676,825	$ 29,987,750
10	Net Annual Cash Balance	1,451,575	12,823,175	(14,487,750)
11	Beginning Unrestricted Fund Balance	5,842,709	7,294,284	20,117,459
12	Net Cumulative Fund Balance	$ 7,294,284	$ 20,117,459	$ 5,629,709
13	Construction + Infrastructure Reserves	$ 13,562,709	$ 31,062,209	$ 15,783,709
14	Minimum Reserves	$ 6,268,425	$ 10,944,750	$ 10,154,000

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 receivables 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 by FY 2030.

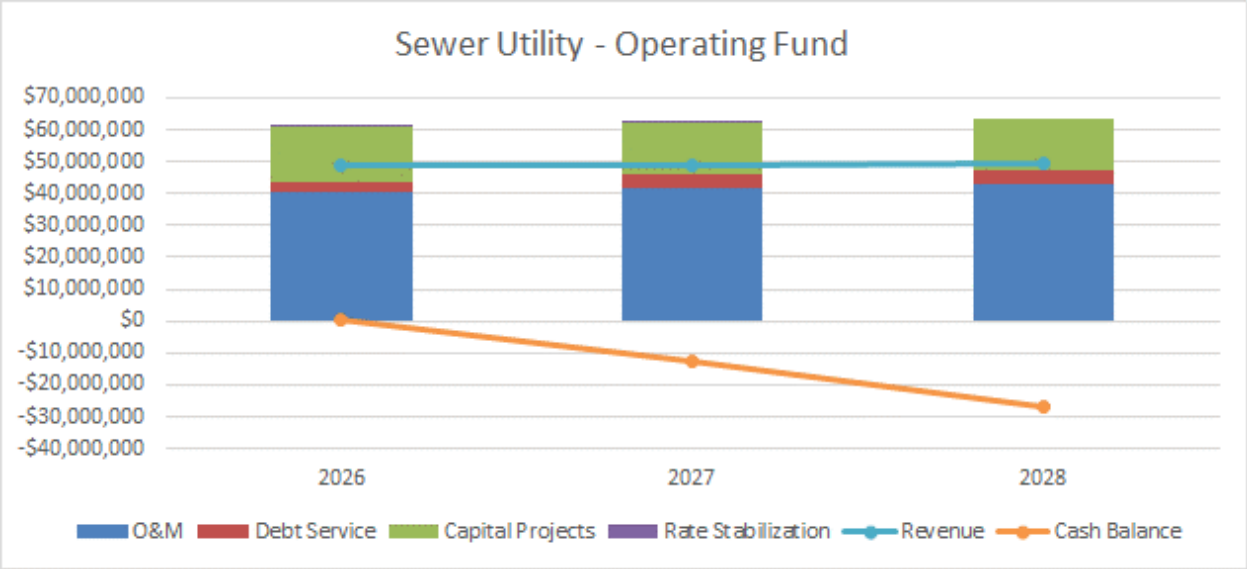
Appropriate reserve levels help the Sewer Utility maintain liquidity and demonstrate to the rating agencies that the City's financial policies and practices are focused on maintaining a balanced financial position.

5.9 Projected Operating Results

The revenue requirements of the Sewer Utility consist of O&M expenses, debt service, capital expenditures, 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-year's CIP for City and RWF projects.
- Continue to fund the rate stabilization reserve to reach its goal of 10% of rate revenues.
- Continue transfers for the pension stabilization reserve to meet the FY 2030 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 calculate 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 a 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 the 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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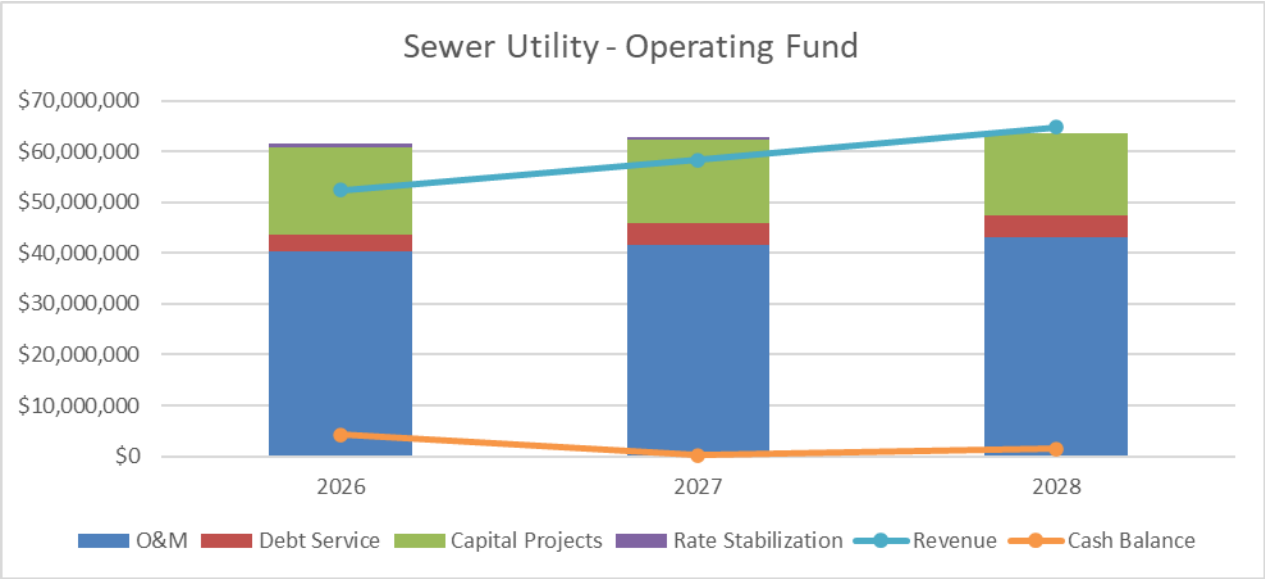
Table 5-10 Operating Fund (Sewer)

Line No.	Description				Fiscal Year Ending June 30, FY 2026	FY 2027	FY 2028
	Revenue						
	Rate Revenue						
1	Revenue from Existing Rates				47,384,700	47,890,900	48,407,800
	Year	Months Effective	Rate Adj				
2	2026	12	8.00%		3,790,800	3,831,300	3,872,600
3	2027	12	10.50%			5,430,800	5,489,400
4	2028	12	10.00%				5,777,000
5	Increased Revenue Due to Adjustments				3,790,800	9,262,100	15,139,000
6	Subtotal Rate Revenue				$ 51,175,500	$ 57,153,000	$ 63,546,800
	Other Operating Revenue						
7	System Administration (Interest Income)				651,500	663,600	676,000
8	System Maintenance				20,000	20,000	20,000
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				$ 1,231,500	$ 1,243,600	$ 1,256,000
13	**Total Revenue**				**$ 52,407,000**	**$ 58,396,600**	**$ 64,802,800**
	Revenue Requirements						
	Operating & Maintenance						
14	O&M Expenses				40,346,200	41,709,000	43,104,000
15	Subtotal O&M				$ 40,346,200	$ 41,709,000	$ 43,104,000
	Debt Service						
16	Existing Loans/Bonds				3,296,800	3,298,300	3,297,800
17	Proposed Loans/Bonds				0	810,300	1,126,500
18	Total Debt Service				$ 3,296,800	$ 4,108,600	$ 4,424,300
	Transfers						
19	Transfer to Other Fund				6,900	47,100	47,100
20	Transfer to Rate Stabilization Reserve				602,400	600,100	0
21	Transfer to Pension Stabilization Reserve				78,200	78,200	78,200
22	Transfer to Operating Reserve				1,600,100	336,000	344,000
23	Transfer to Sewer Construction Fund				15,000,000	15,500,000	15,500,000
24	Total Transfers				$ 17,287,600	$ 16,561,400	$ 15,969,300
25	**Total Revenue Requirements**				**$ 60,930,600**	**$ 62,379,000**	**$ 63,497,600**
26	Net Annual Cash Balance				(8,523,600)	(3,982,400)	1,305,200
27	Beginning Fund Balance				12,700,928	4,177,328	194,928
28	Net Cumulative Fund Balance				$ 4,177,328	$ 194,928	$ 1,500,128
29	Unrestricted + Operating Reserve				$ 14,125,728	$ 10,479,328	$ 12,128,528
30	Minimum Operating Reserves (90 Days)				$ 9,948,400	$ 10,284,400	$ 10,628,400
31	Debt Service Coverage (Min 1.25)				3.66	4.06	4.90

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 recover 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 2026 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 2026.

Table 6-1 Cost of Service Revenue from Rates

Line No.	Description	Operating Expense	Capital Cost	Total Cost
		($)	($)	($)
	Revenue Requirements			
1	O&M Expense	40,346,200	0	40,346,200
2	Debt Service Requirements	0	3,296,800	3,296,800
3	Transfers	2,287,600	15,000,000	17,287,600
4	Subtotal	$ 42,633,800	$ 18,296,800	$ 60,930,600
	Less Revenue Requirements Met from Other Sources			
5	System Administration	651,500	0	651,500
6	System Maintenance	20,000	0	20,000
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	$ 1,231,500	$ 0	$ 1,231,500
	Adjustments			
11	Adjustment for Annual Cash Balance	8,523,600	0	8,523,600
12	Subtotal	$ 8,523,600	$ 0	$ 8,523,600
13	Cost of Service to be Recovered from Rates	$ 32,878,700	$ 18,296,800	$ 51,175,500

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 5-11, Line 12. Shown in Line 4 is the total revenue requirement that corresponds with Table 5-11, Line 25. Line 11 represents 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 Sewer Utility, the $8.5M figure indicates that the forecast is projecting a negative 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 2026, 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	5,893,300	2,691,000	1,033,800	1,044,500	1,059,600	64,400
2	1512 System Maintenance	2,613,100	2,613,100	0	0	0	0
3	1514 Operations	2,107,900	2,107,900	0	0	0	0
4	1515 SJ SC Water Pollution Control Plant						
5	Treatment	27,901,000	9,556,400	6,043,600	6,106,400	6,194,600	0
6	Customer Billing & Meter Reading	376,300	0	0	0	0	376,300
7	All Other	1,271,100	1,271,100	0	0	0	0
8	1516 Storm Pump Maintenance	183,500	183,500	0	0	0	0
9	Transfers	680,600	310,800	119,400	120,600	122,400	7,400
10	Total O&M Expenses	$ 41,026,800	$ 18,733,800	$ 7,196,800	$ 7,271,500	$ 7,376,600	$ 448,100
	Less Other Revenue						
11	Miscellaneous Revenues	1,231,500	562,300	216,000	218,300	221,400	13,500
12	Other Adjustments	8,523,600	3,892,100	1,495,200	1,510,700	1,532,500	93,100
13	Net Operating Expenses	$ 31,271,700	$ 14,279,400	$ 5,485,600	$ 5,542,500	$ 5,622,700	$ 341,500

6.2.3 Allocation of Capital Investments

In allocating the capital investment for TY 2026, 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 2026. The total net system investment of $1.3M 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, 2024. 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	956,600	956,600	0	0	0	0
2	Lift Station	275,800	275,800	0	0	0	0
3	General Plant	101,100	101,100	0	0	0	0
4	Total Plant Assets	$ 1,333,500	$ 1,333,500	$ 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	$ 1,333,500	$ 1,333,500	$ 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 2026 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)	$	5.32	per HCF
Amusement Park Consumption (Table 6-6, Line 6)		74,820	HCF
Total Allocated Cost	$	398,400	

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	265,174	1,405,334	250	2,191,900	250	2,191,900	35	306,900	259,125
2	Multi-Family	336,902	1,700,349	250	2,652,000	250	2,652,000	35	371,300	29,011
3	Amusement Parks	116	74,820	130	60,700	80	37,300	11	5,100	275
4	Auto Dealers & Service Station	409	32,816	180	36,900	280	57,300	11	2,300	752
5	Churches	292	13,777	130	11,200	80	6,900	11	900	616
6	Com/Ind/Misc	10,982	1,342,091	130	1,088,500	80	669,800	11	92,100	22,061
7	Electric & Electronic Equip.	473	450,931	30	84,400	15	42,200	15	42,200	1,603
8	Food and Kindred Products	36	17,656	1,120	123,400	690	76,000	0	0	174
9	Hospitals & Convalescent Homes	347	95,334	230	136,800	85	50,600	15	8,900	828
10	Industrial Chemical	40	15,943	360	35,800	720	71,600	0	0	114
11	Laundries	155	24,552	150	23,000	110	16,800	5	800	371
12	Machinery Manufacturers	791	37,081	290	67,100	550	127,200	0	0	1,741
13	Metal Plating	99	6,204	10	400	60	2,300	1	0	203
14	Motels & Hotels	66	99,626	310	192,700	121	75,200	7	4,400	538
15	Paper	0	0	1,250	0	560	0	10	0	40
16	Repair Shops & Car Washes	491	13,556	180	15,200	280	23,700	0	0	683
17	Restaurants	282	70,062	1,250	546,400	560	244,800	10	4,400	2,118
18	Schools & Colleges	580	46,602	130	37,800	100	29,100	30	8,700	1,147
19	Major Users - Customer 1		0		0		0		0	0
20	Total		5,446,734		7,304,200		6,374,700		848,000	321,400

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	32,878,700	15,886,400	5,485,600	5,542,500	5,622,700	341,500
2	Debt Service	3,296,800	1,129,200	714,100	721,500	732,000	0
3	Capital Costs (City)	4,701,200	4,701,200	0	0	0	0
4	Capital Costs (SJSC)	10,298,800	7,286,400	1,544,300	1,000,500	467,600	0
5	Total Cost of Service	$ 51,175,500	$ 29,003,200	$ 7,744,000	$ 7,264,500	$ 6,822,300	$ 341,500
6	Units of Service		5,446,734 HCF	7,304,200 lbs	6,374,700 lbs	848,000 lbs	321,400 bills
7	Cost per Unit		$ 5.32 per HCF	$ 1.06 per lbs	$ 1.14 per lbs	$ 8.05 per lbs	$ 1.06 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		$ 5.32 per HCF	$ 1.06 per lbs	$ 1.14 per lbs	$ 8.05 per lbs	$ 1.06 per bill
	Single Family						
2	Units		1,405,334	2,191,900	2,191,900	306,900	259,125
3	Allocation of costs of service	15,049,200	7,483,100	2,323,900	2,497,700	2,469,100	275,400
	Multi-Family						
4	Units		1,700,349	2,652,000	2,652,000	371,300	29,011
5	Allocation of costs of service	17,906,100	9,054,200	2,811,700	3,022,200	2,987,200	30,800
	Amusement Parks						
6	Units		74,820	60,700	37,300	5,100	275
7	Allocation of costs of service	546,600	398,400	64,400	42,500	41,000	300
	Auto Dealers & Service Station						
8	Units		32,816	36,900	57,300	2,300	752
9	Allocation of costs of service	298,400	174,700	39,100	65,300	18,500	800
	Churches						
10	Units		13,777	11,200	6,900	900	616
11	Allocation of costs of service	101,100	73,400	11,900	7,900	7,200	700
	Com/Ind/Misc						
12	Units		1,342,091	1,088,500	669,800	92,100	22,061
13	Allocation of costs of service	9,828,200	7,146,500	1,154,000	763,300	741,000	23,400
	Electric & Electronic Equip.						
14	Units		450,931	84,400	42,200	42,200	1,603
15	Allocation of costs of service	2,880,000	2,401,200	89,500	48,100	339,500	1,700
	Food and Kindred Products						
16	Units		17,656	123,400	76,000	0	174
17	Allocation of costs of service	311,600	94,000	130,800	86,600	0	200
	Hospitals & Convalescent Homes						
18	Units		95,334	136,800	50,600	8,900	828
19	Allocation of costs of service	782,800	507,600	145,000	57,700	71,600	900

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		$ 5.32 per HCF	$ 1.06 per lbs	$ 1.14 per lbs	$ 8.05 per lbs	$ 1.06 per bill
	Industrial Chemical						
20	Units		15,943	35,800	71,600	0	114
21	Allocation of costs of service	204,600	84,900	38,000	81,600	0	100
	Laundries						
22	Units		24,552	23,000	16,800	800	371
23	Allocation of costs of service	181,000	130,700	24,400	19,100	6,400	400
	Machinery Manufacturers						
24	Units		37,081	67,100	127,200	0	1,741
25	Allocation of costs of service	415,400	197,500	71,100	145,000	0	1,800
	Metal Plating						
26	Units		6,204	400	2,300	0	203
27	Allocation of costs of service	36,200	33,000	400	2,600	0	200
	Motels & Hotels						
28	Units		99,626	192,700	75,200	4,400	538
29	Allocation of costs of service	856,500	530,500	204,300	85,700	35,400	600
	Repair Shops & Car Washes						
30	Units		13,556	15,200	23,700	0	683
31	Allocation of costs of service	116,000	72,200	16,100	27,000	0	700
	Restaurants						
32	Units		70,062	546,400	244,800	4,400	2,118
33	Allocation of costs of service	1,269,100	373,100	579,300	279,000	35,400	2,300
	Schools & Colleges						
34	Units		46,602	37,800	29,100	8,700	1,147
35	Allocation of costs of service	392,700	248,200	40,100	33,200	70,000	1,200
36	TOTAL COSTS OF SERVICE	$ 51,175,500	$ 29,003,200	$ 7,744,000	$ 7,264,500	$ 6,822,300	$ 341,500

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. In FY 2023, the multi-family rate was separated from single-family and became a stand-alone customer class.

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 rate schedule.

Table 7-1 Proposed Monthly Service Charge

Line No.	Customer Class	Proposed		
		FY 2026	FY 2027	FY 2028
	Monthly Service Charge ($/EDU)	$/month	$/month	$/month
1	Single Family	57.56	64.49	71.88
2	Multi-Family	53.15	59.51	66.28
	Minimum Commercial Bill Charge ($/Month)	$/month	$/month	$/month
3	All Customers	57.56	64.49	71.88

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. Starting FY 2026, the Paper category is being removed. 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 2026	FY 2027	FY 2028
	Commodity Charge ($/HCF)	$/HCF	$/HCF	$/HCF
1	Amusement Parks	7.22	7.76	8.31
2	Auto Dealers & Service Station	8.38	9.08	9.82
3	Churches	6.12	6.56	6.96
4	Com/Ind/Misc	6.85	7.35	7.85
5	Electric & Electronic Equip.	6.33	6.74	7.15
6	Food and Kindred Products	17.53	19.53	21.62
7	Hospitals & Convalescent Homes	8.00	8.65	9.33
8	Industrial Chemical	12.69	14.00	15.36
9	Laundries	7.01	7.52	8.04
10	Machinery Manufacturers	9.98	10.93	11.91
11	Metal Plating	4.92	5.19	5.39
12	Motels & Hotels	8.56	9.28	10.04
	Paper	0.00	0.00	0.00
13	Repair Shops & Car Washes	6.47	6.96	7.44
14	Restaurants	17.88	19.93	22.07
15	Schools & Colleges	7.71	8.32	8.97

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. 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 2026	Proposed FY 2027	Proposed FY 2028
	Major Commercial and Industrial Users			
	Operating and Maintenance Cost Recovery			
1	Volume ($/MG)	3,982.86	4,256.22	4,821.20
2	BOD ($/1,000 lbs)	751.02	869.93	986.80
3	SS ($/1,000 lbs)	869.45	1,007.10	1,142.39
4	NH3 ($/1,000 lbs)	6,630.54	7,680.17	8,710.77
	Annual Capital Cost Recovery			
5	Volume ($/MGD)	1,175,044	1,210,456	1,143,407
6	BOD ($/1,000 lbs/day)	112,855	124,559	139,957
7	SS ($/1,000 lbs/day)	98,598	106,931	118,008
8	NH3 ($/1,000 lbs/day)	516,337	541,495	576,299

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.

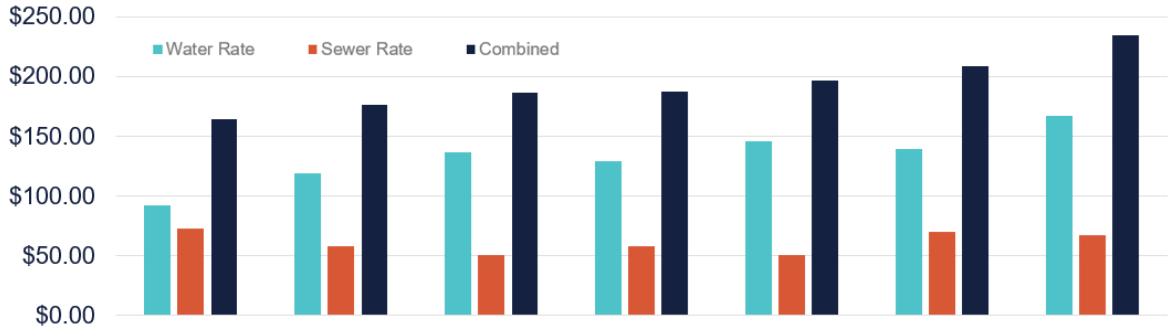
Table 7-4 Typical Monthly Bill

Customer Class	Typical Monthly Usage (HCF)	FY 2025 Existing Rates ($)	FY 2026 Proposed Rates ($)
Residential		$52.37	$57.56
Commercial	0	$52.37	$57.56
	10	$73.57	$77.83
	20	$147.15	$155.66
	30	$220.72	$233.49
	40	$294.30	$311.32
	50	$367.87	$389.15
	100	$735.75	$778.29
	250	$1,839.37	$1,945.73

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 2025.

Figure 7-1 Comparison to Neighboring Sewer Utilities



	Sunnyvale	**Santa Clara**	SJWC	Mountain View	San Jose (Muni)	Milpitas	Palo Alto
Water Rate 12 HCF	$91.69	$118.68	$136.31	$129.01	$145.73	$139.14	$166.89
Sewer Rate	$72.70	$57.55	$50.42	$57.75	$50.42	$69.46	$67.11
Combined	**$164.39**	**$176.23**	**$186.73**	**$186.76**	**$196.15**	**$208.90**	**$234.00**

*All rates are proposed for FY25-26

Appendix A – Ten-Year Financial Plan

Water Utility

Line No.	Description	Fiscal Year Ending June 30,									
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Revenue										
	Rate Revenue										
1	Revenue from Existing Rates	65,932,000	67,462,000	69,030,300	69,198,400	69,367,200	69,536,400	69,705,900	69,875,800	70,046,100	70,217,100
2	Increased Revenue Due to Adjustments	7,252,500	11,913,800	17,064,000	21,852,200	27,382,100	33,267,800	39,532,200	46,198,800	53,293,200	60,841,600
3	Subtotal Rate Revenue	$ 73,184,500	$ 79,375,800	$ 86,094,300	$ 91,050,600	$ 96,749,300	$ 102,804,200	$ 109,238,100	$ 116,074,600	$ 123,339,300	$ 131,058,700
	Other Operating Revenue										
4	Solar System Maintenance	88,000	88,000	88,000	88,000	88,000	88,000	88,000	88,000	88,000	88,000
5	Water System Maintenance	1,135,600	1,135,600	1,135,600	1,135,600	1,135,600	1,135,600	1,135,600	1,135,600	1,135,600	1,135,600
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	1,484,000	1,492,200	1,500,500	1,509,000	1,517,700	1,526,500	1,535,500	1,544,700	1,554,100	1,563,700
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	$ 2,707,600	$ 2,715,800	$ 2,724,100	$ 2,732,600	$ 2,741,300	$ 2,750,100	$ 2,759,100	$ 2,768,300	$ 2,777,700	$ 2,787,300
12	**Total Revenue**	**$ 75,892,100**	**$ 82,091,600**	**$ 88,818,400**	**$ 93,783,200**	**$ 99,490,600**	**$ 105,554,300**	**$ 111,997,200**	**$ 118,842,900**	**$ 126,117,000**	**$ 133,846,000**
	Revenue Requirements										
	Operating & Maintenance										
13	O&M Expenses	66,429,900	71,973,500	77,984,000	83,506,400	89,369,500	95,719,000	102,551,100	110,037,600	118,001,300	124,538,900
14	Subtotal O&M	$ 66,429,900	$ 71,973,500	$ 77,984,000	$ 83,506,400	$ 89,369,500	$ 95,719,000	$ 102,551,100	$ 110,037,600	$ 118,001,300	$ 124,538,900
	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	0	351,100	888,700	564,300	520,800	500,000	800,000	600,000	600,000	600,000
21	Transfer to Operating Reserve	8,944,400	1,366,900	1,482,000	1,361,700	1,445,700	1,565,600	1,684,700	1,846,000	1,963,600	1,612,000
22	Transfer to Water Construction Fund	5,000,000	7,000,000	7,000,000	5,000,000	5,000,000	5,000,000	6,000,000	6,000,000	6,000,000	6,000,000
23	Total Transfers	$ 14,290,900	$ 8,872,500	$ 9,663,100	$ 7,080,200	$ 7,120,700	$ 7,219,800	$ 8,638,900	$ 8,600,200	$ 8,717,800	$ 8,366,200
24	**Total Revenue Requirements**	**$ 80,720,800**	**$ 80,846,000**	**$ 87,647,100**	**$ 90,586,600**	**$ 96,490,200**	**$ 102,938,800**	**$ 111,190,000**	**$ 118,637,800**	**$ 126,719,100**	**$ 132,905,100**
25	Net Annual Cash Balance	(4,828,700)	1,245,600	1,171,300	3,196,600	3,000,400	2,615,500	807,200	205,100	(602,100)	940,900
26	Beginning Fund Balance	4,933,700	105,000	1,350,600	2,521,900	5,718,500	8,718,900	11,334,400	12,141,600	12,346,700	11,744,600
27	Net Cumulative Fund Balance	$ 105,000	$ 1,350,600	$ 2,521,900	$ 5,718,500	$ 8,718,900	$ 11,334,400	$ 12,141,600	$ 12,346,700	$ 11,744,600	$ 12,685,500
28	Unrestricted + Operating Reserve	$ 16,485,000	$ 19,097,500	$ 21,750,800	$ 26,309,100	$ 30,755,200	$ 34,936,300	$ 37,428,200	$ 39,479,300	$ 40,840,800	$ 43,393,700
29	Minimum Operating Reserves (90 Days)	$ 16,380,000	$ 17,746,900	$ 19,228,900	$ 20,590,600	$ 22,036,300	$ 23,601,900	$ 25,286,600	$ 27,132,600	$ 29,096,200	$ 30,708,200

Recycled Water Utility

Line No.	Description	Fiscal Year Ending June 30,									
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035
		($)	($)	($)	($)	($)	($)	($)	($)	($)	($)
	Revenue										
	Rate Revenue										
1	Revenue from Existing Rates	8,234,300	8,316,700	8,399,700	8,483,600	8,568,400	8,653,900	8,740,500	8,827,900	8,916,100	9,005,200
2	Increased Revenue Due to Adjustments	905,800	2,299,500	3,930,900	5,589,100	7,492,600	9,676,300	11,439,400	12,572,900	13,779,100	15,063,000
3	Subtotal Rate Revenue	$ 9,140,100	$ 10,616,200	$ 12,330,600	$ 14,072,700	$ 16,061,000	$ 18,330,200	$ 20,179,900	$ 21,400,800	$ 22,695,200	$ 24,068,200
	Other Operating Revenue										
4	System Maintenance	100,500	102,500	104,600	106,700	108,800	111,000	113,200	115,500	117,800	120,200
5	South Bay Water Recycling System Maintena	1,034,600	1,073,800	1,114,100	1,163,600	1,202,900	1,243,700	1,274,100	1,320,400	1,355,500	1,394,000
6	Subtotal Other Operating Revenue	$ 1,135,100	$ 1,176,300	$ 1,218,700	$ 1,270,300	$ 1,311,700	$ 1,354,700	$ 1,387,300	$ 1,435,900	$ 1,473,300	$ 1,514,200
	Transfers From										
7	RW Capital Fund	0	0	0	0	0	0	0	0	0	0
8	Subtotal Transfers From	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
9	**Total Revenue**	**$ 10,275,200**	**$ 11,792,500**	**$ 13,549,300**	**$ 15,343,000**	**$ 17,372,700**	**$ 19,684,900**	**$ 21,567,200**	**$ 22,836,700**	**$ 24,168,500**	**$ 25,582,400**
	Revenue Requirements										
	Operating & Maintenance										
10	O&M Expenses	10,886,800	12,025,500	13,286,000	14,696,100	16,241,600	17,955,400	19,781,000	21,821,600	24,024,300	25,835,000
11	Subtotal O&M	10,886,800	12,025,500	13,286,000	14,696,100	16,241,600	17,955,400	19,781,000	21,821,600	24,024,300	25,835,000
	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 Fund	0	0	0	0	681,200	194,900	101,700	200,000	200,000	200,000
16	Transfer to Operating Reserve Fund	(115,600)	280,800	310,800	347,700	381,100	422,600	450,100	503,200	543,100	446,500
17	Transfer to Recycled Water Const Fund	50,000	100,000	100,000	100,000	200,000	200,000	200,000	200,000	200,000	200,000
18	Total Transfers	(65,600)	380,800	410,800	447,700	1,262,300	817,500	751,800	903,200	943,100	846,500
19	**Total Revenue Requirements**	**$ 10,821,200**	**$ 12,406,300**	**$ 13,696,800**	**$ 15,143,800**	**$ 17,503,900**	**$ 18,772,900**	**$ 20,532,800**	**$ 22,724,800**	**$ 24,967,400**	**$ 26,681,500**
20	Net Annual Cash Balance	(546,000)	(613,800)	(147,500)	199,200	(131,200)	912,000	1,034,400	111,900	(798,900)	(1,099,100)
21	Beginning Fund Balance	1,590,200	1,044,200	430,400	282,900	482,100	350,900	1,262,900	2,297,300	2,409,200	1,610,300
22	Net Cumulative Fund Balance	$ 1,044,200	$ 430,400	$ 282,900	$ 482,100	$ 350,900	$ 1,262,900	$ 2,297,300	$ 2,409,200	$ 1,610,300	$ 511,200
23	Unrestricted + Operating Reserve	$ 3,728,600	$ 3,395,600	$ 3,558,900	$ 4,105,800	$ 4,355,700	$ 5,690,300	$ 7,174,800	$ 7,789,900	$ 7,534,100	$ 6,881,500
24	Minimum Operating Reserves (90 Days)	$ 2,684,400	$ 2,965,200	$ 3,276,000	$ 3,623,700	$ 4,004,800	$ 4,427,400	$ 4,877,500	$ 5,380,700	$ 5,923,800	$ 6,370,300

Sewer Utility

Line No.	Description	Fiscal Year Ending June 30, FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035
	Revenue										
	Rate Revenue										
1	Revenue from Existing Rates	47,384,700	47,890,900	48,407,800	48,528,600	48,649,900	48,771,400	48,893,300	49,015,300	49,138,100	49,260,500
2	Increased Revenue Due to Adjustments	3,790,800	9,262,100	15,139,000	17,088,000	19,104,100	19,151,800	19,199,700	19,247,500	19,295,800	19,343,800
3	Subtotal Rate Revenue	$ 51,175,500	$ 57,153,000	$ 63,546,800	$ 65,616,600	$ 67,754,000	$ 67,923,200	$ 68,093,000	$ 68,262,800	$ 68,433,900	$ 68,604,300
	Other Operating Revenue										
4	System Administration (Interest Income)	651,500	663,600	676,000	688,600	701,500	714,600	728,000	741,600	755,500	769,700
5	System Maintenance	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
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	$ 1,231,500	$ 1,243,600	$ 1,256,000	$ 1,268,600	$ 1,281,500	$ 1,294,600	$ 1,308,000	$ 1,321,600	$ 1,335,500	$ 1,349,700
10	**Total Revenue**	**$ 52,407,000**	**$ 58,396,600**	**$ 64,802,800**	**$ 66,885,200**	**$ 69,035,500**	**$ 69,217,800**	**$ 69,401,000**	**$ 69,584,400**	**$ 69,769,400**	**$ 69,954,000**
	Revenue Requirements										
	Operating & Maintenance										
11	O&M Expenses	40,346,200	41,709,000	43,104,000	44,612,700	46,095,800	47,574,400	49,051,000	50,651,900	52,285,000	53,992,400
12	Subtotal O&M	$ 40,346,200	$ 41,709,000	$ 43,104,000	$ 44,612,700	$ 46,095,800	$ 47,574,400	$ 49,051,000	$ 50,651,900	$ 52,285,000	$ 53,992,400
	Debt Service										
13	Existing Loans/Bonds	3,296,800	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
14	Proposed Loans/Bonds	0	810,300	1,126,500	2,002,700	2,628,500	2,628,500	2,628,500	2,628,500	2,628,500	2,628,500
15	Total Debt Service	$ 3,296,800	$ 4,108,600	$ 4,424,300	$ 5,303,000	$ 5,929,000	$ 5,927,000	$ 4,990,300	$ 4,988,600	$ 4,989,300	$ 4,987,300
	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	602,400	600,100	0	500,000	500,000	500,000	0	0	0	0
18	Transfer to Pension Stabilization Reserve	78,200	78,200	78,200	78,200	78,200	78,200	78,200	78,200	78,200	78,200
19	Transfer to Operating Reserve	1,600,100	336,000	344,000	372,000	365,700	364,600	364,100	394,700	402,700	421,000
20	Transfer to Sewer Construction Fund	15,000,000	15,500,000	15,500,000	15,500,000	15,500,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000
21	Total Transfers	$ 17,287,600	$ 16,561,400	$ 15,969,300	$ 16,497,300	$ 16,491,000	$ 9,989,900	$ 9,489,400	$ 9,520,000	$ 9,528,000	$ 9,546,300
22	**Total Revenue Requirements**	**$ 60,930,600**	**$ 62,379,000**	**$ 63,497,600**	**$ 66,413,000**	**$ 68,515,800**	**$ 63,491,300**	**$ 63,530,700**	**$ 65,160,500**	**$ 66,802,300**	**$ 68,526,000**
23	Net Annual Cash Balance	(8,523,600)	(3,982,400)	1,305,200	472,200	519,700	5,726,500	5,870,300	4,423,900	2,967,100	1,428,000
24	Beginning Fund Balance	12,700,928	4,177,328	194,928	1,500,128	1,972,328	2,492,028	8,218,528	14,088,828	18,512,728	21,479,828
25	Net Cumulative Fund Balance	$ 4,177,328	$ 194,928	$ 1,500,128	$ 1,972,328	$ 2,492,028	$ 8,218,528	$ 14,088,828	$ 18,512,728	$ 21,479,828	$ 22,907,828
26	Unrestricted + Operating Reserve	14,125,728	10,479,328	12,128,528	12,972,728	13,858,128	19,949,228	26,183,628	31,002,228	34,372,028	36,221,028
27	Minimum Operating Reserves (90 Days)	9,948,400	10,284,400	10,628,400	11,000,400	11,366,100	11,730,700	12,094,800	12,489,500	12,892,200	13,313,200
28	Debt Service Coverage (Min 1.25)	3.66	4.06	4.90	4.20	3.87	3.65	4.08	3.80	3.50	3.20