City Council Agenda Report **Meeting Date: 3/17/2026**

TO: **City Council**

FROM: Brendan Ottoboni, Director of Public Works – Engineering

RE: Sewer Enterprise Study – Sewer Rate Adjustment

REPORT IN BRIEF:

This staff report presents a five-year sewer rate update for the City of Chico's sewer enterprise to address critical financial, regulatory, and infrastructure needs of the Water Pollution Control Plant (WPCP) and collection system. The City's sewer utility faces significant pressures including, but not limited to deferred maintenance, mandated upgrades under the National Pollutant Discharge Elimination System (NPDES) permit, construction cost escalations, and reduced revenues resulting from lower winter water consumption under the current volumetric rate structure. Current annual operating costs are approximately $11 million, while reserves are projected at $4.4 million, less than half of the recommended one-year operating reserve, leaving the system vulnerable to emergencies and regulatory non-compliance.

Using the WPCP Strategic Planning Report, Sanitary Sewer System Master Plan Update, and Sewer Collection System Analysis as the technical basis, the proposed rates are designed to: (1) restore and stabilize Fund 850 (Sewer Fund) and Fund 851 (WPCP Capital Reserve); (2) fund a 5-Year $134.5M Capital Improvement Plan driven by regulatory requirements, asset condition, and system capacity; and (3) gradually build reserves toward a 210-day target within the five-year period. The rate design employs a cost-of-service methodology, including Equivalent Dwelling Units (EDUs) and wastewater strength factors consistent with State Water Resources Control Board guidelines, and rebalances the structure to a 55% fixed / 45% flow-based allocation to align more closely with industry standards and improve legal defensibility under Proposition 218's proportionality requirements.

RECOMMENDATION:

The Director of Public Works – Engineering recommends the City Council approve the Finance Committee recommendation, adopt the proposed sewer rate schedule, and direct staff to initiate the Proposition 218 process, including preparation and distribution of the public hearing notice.

FISCAL IMPACT:

Budgeted: Yes **Supplemental Required:** No

The Sewer Enterprise Study itself is budgeted within Sewer Fund 850. The outcome of the Sewer Enterprise Study may result in a sewer rate adjustment. A sewer rate adjustment will have significant impacts on the financial health of Fund 850 – Sewer and Fund 851 – Water Pollution Control Plant Capital Reserve.

DISCUSSION:

Background

The City of Chico owns and operates a 24-hour, 7-day per week, 365 days per year sewer utility that provides essential sanitation and wastewater treatment services. The City Council serves as the governing board for this enterprise, including adoption of rates for this utility service.

The sewer system consists of approximately 288 miles of pipe, ranging from 4 to 39 inches in diameter, and a Water Pollution Control Plant (WPCP) with a regulated capacity of 8.4 million gallons per day (MGD), expandable to 12 MGD. In the most recent NPDES permit issuance, the WPCP has been de-regulated from 12 MGD to the current 8.4 MGD due to deterioration of the existing system.

At the November 18, 2025, City Council meeting, the Finance Director reported that the Sewer Fund Reserve balance for FY 25/26 was projected at $4.4 million. Less than half of the $11.4 million forecasted. Current system operations cost about $11 million annually, excluding deferred maintenance and regulatory compliance projects. This results in a reserve of approximately five months of operating costs. This is at the low end of the industry standard of three-months to one-year best practice. The shortfall is largely due to the recent Primary Clarifier Rehabilitation Project and the PG&E Sustainable Solutions Turnkey program upgrades.

Previous Sewer Enterprise Study

In 2022, the City updated sewer rates to address immediate deficiencies in Fund 850 (Sewer Fund) and initiate critical infrastructure investments at the WPCP and in the collection system. To reduce customer impacts, rates were adopted to fund roughly 50% of system needs. Consequently, several long-term, condition-based, and regulatory projects were pushed out and remain unfunded. For more than a decade before 2022, Chico maintained the lowest regional sewer rates, which limited opportunities to maintain incremental increases over a longer period of time that would maintain a highly functioning system.

While the sewer rate adjustment in 2022 was modest for residential customers, a system of Equivalent Dwellings Units (EDUs) was introduced to more equitably allocate costs of treatment based on strength characteristics of the wastewater generated by each customer class. Therefore, the 2022 sewer rate adjustment had a proportionally larger impact on customer classes who generate higher strength effluent.

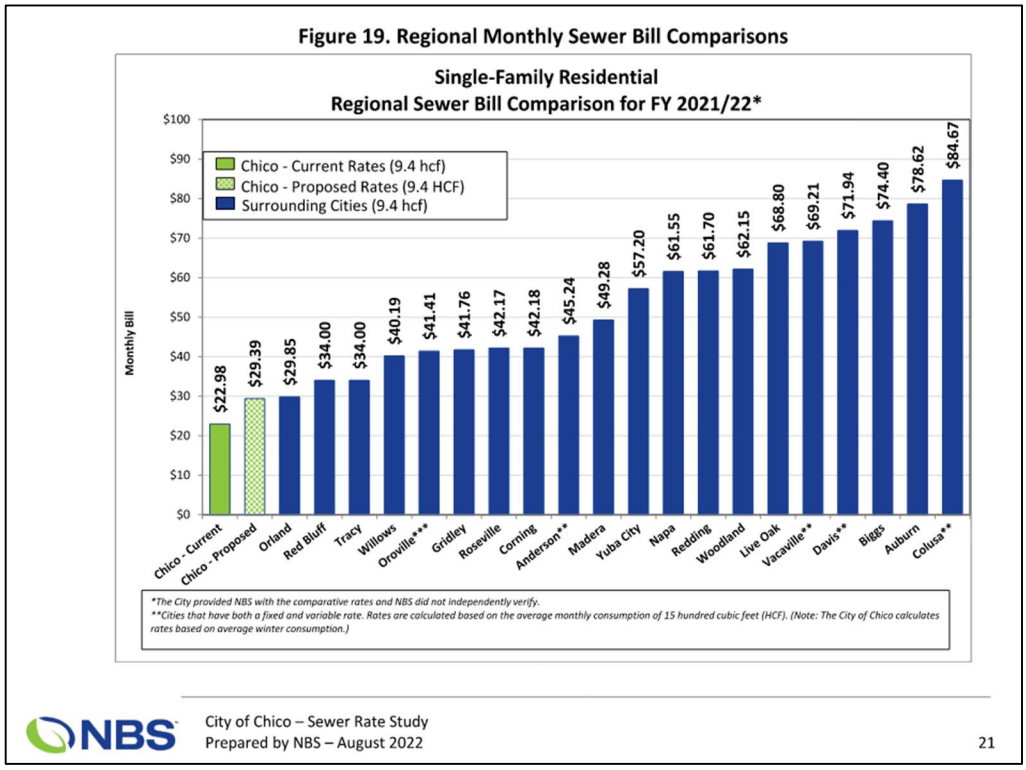

Figure 1 - 2022 Sewer Rate Update Comparison

Planning Documents
Recent planning efforts provide the technical foundation for the current study:

- WPCP Strategic Planning Report (Carollo, 2021): Evaluates plant condition, capacity, and regulatory compliance through 2040 and identifies recommended upgrades.
- Sanitary Sewer System Master Plan Update (Carollo, 2025): Identifies capacity deficiencies and projects required to support General Plan 2030 growth.
- Sewer Collection System Analysis (Ottoboni, 2021): Assesses the age and condition of collection system assets and supports the City's Sewer Main Replacement Program.

Sewer Fund Financial Condition
The sewer utility depends on two primary funds:

- Fund 850 – Sewer Fund: Covers operations, maintenance, and Capital Improvement Projects
- Fund 851 – WPCP Capital Reserve: Provides debt service coverage, cash flow management, and reserve stability.

Both funds face continuing financial pressures from deferred maintenance, regulatory mandates, construction inflation, and unrealized revenue.

Reserve Target
Industry best practice is a one-year operating reserve (~$11M). The City's current reserve is about $4.4M. The rate proposal builds reserves gradually to achieve a 210-day target within the five-year study period, with a goal of 365 days in the next rate cycle.

City of Chico
FY2025-26 Original Projection
Sewer Operating Fund (Fund 850)

	ACTUAL 2022-23	Original Est 2023-24	Original Est 2024-25	Original Est. 2025-26
TOTAL REVENUE	**13,309,399**	**18,169,644**	**20,182,932**	**19,161,388**
EXPENDITURES				
Total Operating Expenditures	8,392,048	9,540,134	10,177,468	11,245,570
Net Operations before Capital Expenditures	**4,917,351**	**8,629,510**	**10,005,464**	**7,915,818**
Capital Improvement Projects	$ 6,752,181	$ 3,668,026	7,700,098	26,030,008
TOTAL EXPENDITURES	**15,144,229**	**13,208,160**	**17,877,566**	**37,275,578**
NET REVENUE OVER/(UNDER) EXPENDITURES BEFORE OTHER SOURCES (USES)	**(1,834,830)**	**4,961,484**	**2,305,366**	**(18,114,190)**
OTHER FINANCING SOURCES (USES)				
Net Transfers To/From Sewer Capital Reserve	(1,433,624)	(434,201)	(10,077,801)	10,581,714
Transfer Out - for Debt Service	(1,806,287)	(1,929,850)	(1,680,624)	(1,899,438)
Transfers Out - to Other Funds	(126,820)	(121,857)	(74,079)	(117,178)
TOTAL OTHER SOURCES (USES)	**(3,366,731)**	**(2,485,908)**	**(11,832,504)**	**8,565,098**
NET REVENUE/(DEFICIT)	**(5,201,561)**	**2,475,576**	**(9,527,138)**	**(9,549,092)**
BEGINNING CASH BALANCE	21,802,215	16,600,654	19,076,230	9,549,092
ENDING CASH BALANCE	$ 16,600,654	$ 19,076,230	$ 9,549,093	$ 0
CAPITAL RESERVE FUND				
TRANSFERS TO/FROM SEWER OPERATING FUND	1,433,624	434,201	10,077,801	(10,581,714)
Interest Income	24,794			
NET REVENUE/(LOSS)	**1,458,418**	**434,201**	**10,077,801**	**(10,581,714)**
BEGINNING FUND BALANCE	10,044,725	11,503,143	11,937,344	22,015,145
ENDING FUND BALANCE	$ 11,503,143	$ 11,937,344	$ 22,015,145	$ 11,433,431

Figure 2 - Fiscal Year 25-26 Fund 850 Revenue Projection (ORIGINAL) as presented at the 11/18/2025 City Council Meeting

City of Chico
FY2025-26 Annual Budget
Sewer Operating Fund (Fund 850)

	ACTUAL 2022-23	ACTUAL 2023-24	ACTUAL 2024-25	PROJECTED 2025-26
TOTAL REVENUE	**13,309,399**	**15,731,256**	**17,396,934**	**16,110,000**
EXPENDITURES				
Total Operating Expenditures	8,392,048	9,540,134	10,177,468	11,245,570
Perecentage Change from prior year		**13.7%**	**6.7%**	**10.5%**
Net Operations before Capital Expenditures	**4,917,351**	**6,191,122**	**7,219,466**	**4,864,430**
Other Expenditure Items:				
Capital Improvement Projects	$ 6,752,181	$ 3,668,026	7,700,098	26,030,008
TOTAL EXPENDITURES	**15,144,229**	**13,208,160**	**17,877,566**	**37,275,578**
NET REVENUE OVER/(UNDER) EXPENDITURES BEFORE OTHER SOURCES (USES)	**(1,834,830)**	**2,523,096**	**(480,632)**	**(21,165,578)**
OTHER FINANCING SOURCES (USES)				
Net Transfers To/From Sewer Capital Reserve	(1,433,624)	(3,770,083)	(5,437,373)	17,553,192
Transfer Out - for Debt Service	(1,806,287)	(1,929,850)	(1,680,624)	(1,899,438)
Transfers Out - to Other Funds	(126,820)	(121,857)	(74,079)	(117,178)
TOTAL OTHER SOURCES (USES)	**(3,366,731)**	**(5,821,790)**	**(7,192,076)**	**15,536,576**
NET REVENUE/(DEFICIT)	**(5,201,561)**	**(3,298,694)**	**(7,672,708)**	**(5,629,002)**
BEGINNING CASH BALANCE	21,802,215	16,600,654	13,301,960	5,629,252
ENDING CASH BALANCE	**$ 16,600,654**	**$ 13,301,960**	**$ 5,629,252**	**$ 250**

CAPITAL RESERVE FUND

TRANSFERS TO/FROM SEWER OPERATING FUND	**1,433,624**	**3,770,083**	**5,437,373**	**(17,553,192)**
Interest Income	**24,794**	**506,356**	**761,254**	
NET REVENUE/(LOSS)	**1,458,418**	**4,276,439**	**6,198,627**	**(17,553,192)**
BEGINNING FUND BALANCE	**10,044,725**	**11,503,143**	**15,779,582**	**21,978,209**
ENDING FUND BALANCE	**$ 11,503,143**	**$ 15,779,582**	**$ 21,978,209**	**$ 4,425,017**

Figure 3 - Fiscal Year 25-26 Fund 850 Revenue Projection (MODIFIED ACTUALS) as presented at the 11/18/2025 City Council Meeting

Key Challenges

Deferred Maintenance
The WPCP facilities were built in the 1970s with upgrades in the early 2000s and now require major condition-based improvements. Prior project deferrals have increased risk of failure and potential emergency costs. As a direct result, the WPCP was de-regulated in capacity in the most recent permit cycle from 12 MGD down to 8.4 MGD. This will impact services to existing residents and potentially limit development within the City of Chico due to inadequate capacity.

Regulatory Compliance
The City's NPDES permit (CA0079081, Order R5-2022-0033) mandates two major improvements by 2032:

- $48M to meet land discharge standards for Biochemical Oxygen Demand (BOD_5), Total Suspended Solids (TSS), and coliform bacteria.
- $9M to address elevated nitrate conditions in groundwater.

Volumetric Rate Impacts
Prior to 2022 the rate structure was mostly fixed, in 2022 it was shifted to 70% fixed / 30% flow-based rates to promote control of billing usage and conservation. However, average winter water use has decreased 24% as a result, reducing revenue and increasing rate instability.

Other Fiscal Pressures

- Sewer Fund (Fund 850) contributions of $0.5–$1.0M annually to support WPCP expansion loan debt as a result of Development Impact Fees (DIF) not generating enough revenue to cover prior debt service payment obligations.
- Construction cost escalation averaging 5.3% annually since 2020, outpacing general inflation (3.6%).
- Customer non-payment rates of 5–10%, equating to $1–$1.8M annually.

Capital Improvement Program (CIP)

Attachment B provides an analysis of sewer system capital needs over the life of this rate study, organized by project driver. The total 5-year cost to address these capital deficiencies equate to **$134,475,191**. The project drivers include the following:

- Regulatory Compliance: Projects required under the City's NPDES permit to avoid penalties and maintain discharge authorization.
    - This represents approximately 48% of the 5-year CIP costs
- Condition-Based: Replacements prioritized by asset risk, probability of failure, consequence of failure, and useful life. Original 1970's infrastructure and primary treatment facilities are top priorities.
    - This represents approximately 49% of the 5-year CIP costs
- Capacity: While the need for a new Secondary Clarifier has been deferred to 2033, future rate studies must plan for this major project.
    - This represents approximately 3% of the 5-year CIP costs

Sewer Rate Structure and Financial Plan

The proposed financial plan incorporates projected expenditures, revenues, reserves, and CIP costs. The cost-of-service analysis applies Equivalent Dwelling Units (EDUs) to allocate costs equitably across users based on flow and strength characteristics, consistent with State guidelines.

To balance financial stability and customer equity, the sewer rates are designed with a 55% fixed / 45% flow-based revenue recovery, more consistent with industry standards and more legally defensible than the prior 70/30 structure.

Financing and Rate Options

Financing options for major CIPs include:

- Cash Funded:
    - Avoids debt interest and does not push the financial burden of today's needs to future users. This approach requires significant near-term rate increases but reduces the impacts of future system demands on rates.
- Debt Financing:
    - Reduces immediate rate impacts but adds long-term obligations and interest costs.

Staff have developed 5 proposed financing options. Options 1 & 2 represent cash funded options and Options 3a, 3b, and 3c represent debt-financing options.

Revenue Requirements
Debt financing will still require a sewer rate adjustment to cover proposed costs, including debt service. Figure 4 shows the overall revenue requirement increases over the 5-year planning period.

Option	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	5-Year Cumulative Revenue Increase	Rate Changes* FY 32-37
1	180%	3%	3%	3%	3%	215.1%	3%-5%
2	70%	35%	30%	30%	30%	404.2%	3%-5%
3a	70%	30%	20%	15%	10%	235.5%	3%-5%
3b	70%	15%	15%	11%	11%	177.0%	21%, 21%, 3-5%
3c	70%	5%	5%	5%	5%	106.6%	50%, 50%, 3%-5%

Figure 4 - 5-Year Cumulative Revenue Increase Requirements**

**Rate changes beyond the proposed 5-Year Rate Adoption Period are illustrative only and intended to demonstrate scale of necessary revenue increase requirements.*
***Customer bill impact will vary by customer class.*

Debt Financing Assumptions
Figure 5 shows the assumptions for each debt financing option.

Option	Loan Amount	Interest Rate	Loan Term (Years)	Annual Debt Service	Total Interest Paid Over Loan Term
3a	$40M	4%	20	$3,194,282	$20,474,307
3b	$65M	4%	20	$5,190,709	$33,270,749
3c	$90M	4%	20	$7,187,135	$46,067,191

Figure 5 - Debt Financing Assumptions

Debt Financing Challenges and Benefits
In addition to the 20-year annual debt service commitment and the total interest paid over the loan term, the largest challenge to debt financing is the rate adjustments necessary beyond Year 5 of this rate study. If debt financing is pursued, additional rate adjustments will be needed for Options 3b and 3c in Years 6-10 of the upcoming decade.

The benefit of debt financing is that it reduces short-term impacts and allows for smoother application of rate adjustments.

Rate Schedule Options 1, 2, 3a, 3b, 3c
Fixed and volumetric rates for all options are detailed in **Attachment A**.

A comprehensive Sewer Cost of Service and Rate Study Report (Carollo) is provided as **Attachment C**.

Anticipated Bill Impacts
The following Figures show anticipated bill impacts based upon the winter water consumption provided for each customer class.

Class	Monthly Usage hcf	Existing Bill	Proposed Bill 2027	Proposed Bill 2028	Proposed Bill 2029	Proposed Bill 2030	Proposed Bill 2031
Residential							
House	7.2	$ 37.83	$ 98.35	$ 101.28	$ 104.34	$ 107.45	$ 110.69
Multi-Family	5.5	$ 23.27	$ 77.17	$ 79.48	$ 81.88	$ 84.32	$ 86.85
Duplex - 2 Meters	5.6	$ 16.50	$ 83.44	$ 85.94	$ 88.53	$ 91.17	$ 93.92
Duplex - 1 Meter	5.6	$ 25.76	$ 83.44	$ 85.94	$ 88.53	$ 91.17	$ 93.92
Commercial							
Bars w/o Dining	23.7	$ 111.23	$ 339.20	$ 349.41	$ 359.80	$ 370.59	$ 381.83
Brewery	51.3	$ 608.54	$ 1,586.52	$ 1,634.04	$ 1,682.93	$ 1,733.19	$ 1,785.01
Car Wash	74.2	$ 242.30	$ 816.48	$ 840.85	$ 866.38	$ 892.32	$ 918.74
Dorms	369.0	$ 1,591.84	$ 4,959.50	$ 5,109.79	$ 5,262.65	$ 5,421.76	$ 5,583.94
Hospital & Convalescent	128.4	$ 550.07	$ 1,720.61	$ 1,771.62	$ 1,824.81	$ 1,878.89	$ 1,935.33
Hotels w/o Dining	206.6	$ 986.16	$ 2,994.32	$ 3,085.02	$ 3,177.28	$ 3,273.17	$ 3,370.94
Hotels with Dining	8.5	$ 75.96	$ 208.32	$ 214.53	$ 220.93	$ 227.53	$ 234.35
Industrial Laundry	575.8	$ 6,002.39	$ 15,838.62	$ 16,315.63	$ 16,806.95	$ 17,312.58	$ 17,834.25
Laundromat	113.4	$ 431.46	$ 1,382.01	$ 1,423.17	$ 1,466.16	$ 1,509.86	$ 1,555.54
Markets/Bakeries	82.4	$ 988.97	$ 2,559.87	$ 2,637.01	$ 2,716.36	$ 2,797.93	$ 2,881.99
Mortuary	12.2	$ 152.04	$ 382.55	$ 393.97	$ 405.84	$ 418.04	$ 430.61
Restaurants	15.0	$ 179.73	$ 464.05	$ 477.94	$ 492.23	$ 506.93	$ 522.08
Restaurants	25.0	$ 299.56	$ 773.41	$ 796.56	$ 820.39	$ 844.89	$ 870.14
Restaurants	71.2	$ 853.14	$ 2,202.67	$ 2,268.61	$ 2,336.47	$ 2,406.24	$ 2,478.16
School	72.4	$ 261.01	$ 853.30	$ 878.99	$ 905.11	$ 932.39	$ 960.18
All Other	18.9	$ 86.07	$ 257.99	$ 265.69	$ 273.71	$ 281.86	$ 290.35

Figure 6 – Cash Funded, large increase Year 1, small increases moving forward

Class	Monthly Usage hcf	Existing Bill	Proposed Bill 2027	Proposed Bill 2028	Proposed Bill 2029	Proposed Bill 2030	Proposed Bill 2031
Residential							
House	7.2	$ 37.83	$ 59.64	$ 80.53	$ 104.72	$ 136.12	$ 176.94
Multi-Family	5.5	$ 23.27	$ 46.81	$ 63.21	$ 82.20	$ 106.84	$ 138.87
Duplex - 2 Meters	5.6	$ 16.50	$ 50.65	$ 68.40	$ 88.95	$ 115.62	$ 150.28
Duplex - 1 Meter	5.6	$ 25.76	$ 50.65	$ 68.40	$ 88.95	$ 115.62	$ 150.28
Commercial							
Bars w/o Dining	23.7	$ 111.23	$ 205.83	$ 277.81	$ 361.24	$ 469.64	$ 610.53
Brewery	51.3	$ 608.54	$ 969.23	$ 1,308.72	$ 1,701.57	$ 2,212.01	$ 2,875.50
Car Wash	74.2	$ 242.30	$ 494.06	$ 666.98	$ 866.81	$ 1,126.64	$ 1,464.35
Dorms	369.0	$ 1,591.84	$ 3,006.33	$ 4,058.00	$ 5,274.91	$ 6,857.07	$ 8,914.29
Hospital & Convalescent	128.4	$ 550.07	$ 1,043.54	$ 1,408.20	$ 1,830.36	$ 2,379.62	$ 3,094.18
Hotels w/o Dining	206.6	$ 986.16	$ 1,818.32	$ 2,455.76	$ 3,192.86	$ 4,151.78	$ 5,397.37
Hotels with Dining	8.5	$ 75.96	$ 127.07	$ 171.58	$ 223.04	$ 289.92	$ 376.91
Industrial Laundry	575.8	$ 6,002.39	$ 9,665.47	$ 13,046.65	$ 16,959.78	$ 22,049.61	$ 28,667.71
Laundromat	113.4	$ 431.46	$ 836.65	$ 1,129.81	$ 1,468.38	$ 1,908.90	$ 2,481.94
Markets/Bakeries	82.4	$ 988.97	$ 1,563.41	$ 2,110.35	$ 2,743.84	$ 3,567.02	$ 4,636.86
Mortuary	12.2	$ 152.04	$ 233.67	$ 315.50	$ 410.15	$ 533.25	$ 693.23
Restaurants	15.0	$ 179.73	$ 283.40	$ 382.67	$ 497.54	$ 646.79	$ 840.79
Restaurants	25.0	$ 299.56	$ 472.33	$ 637.78	$ 829.23	$ 1,077.98	$ 1,401.31
Restaurants	71.2	$ 853.14	$ 1,345.21	$ 1,816.39	$ 2,361.64	$ 3,070.08	$ 3,990.94
School	72.4	$ 261.01	$ 516.31	$ 697.09	$ 906.19	$ 1,178.20	$ 1,531.46
All Other	18.9	$ 86.07	$ 156.44	$ 211.25	$ 274.71	$ 357.07	$ 464.15

Figure 7 – Cash Funded, incremental increases Years 1-5

Class	Monthly Usage hcf	Existing Bill	Proposed Bill 2027	Proposed Bill 2028	Proposed Bill 2029	Proposed Bill 2030	Proposed Bill 2031
Residential							
House	7.2	$ 37.83	$ 59.64	$ 77.56	$ 93.07	$ 107.02	$ 117.70
Multi-Family	5.5	$ 23.27	$ 46.81	$ 60.88	$ 73.05	$ 84.00	$ 92.38
Duplex - 2 Meters	5.6	$ 16.50	$ 50.65	$ 65.87	$ 79.04	$ 90.89	$ 99.96
Duplex - 1 Meter	5.6	$ 25.76	$ 50.65	$ 65.87	$ 79.04	$ 90.89	$ 99.96
Commercial							
Bars w/o Dining	23.7	$ 111.23	$ 205.83	$ 267.69	$ 321.14	$ 369.28	$ 406.29
Brewery	51.3	$ 608.54	$ 969.23	$ 1,260.00	$ 1,512.20	$ 1,738.93	$ 1,912.64
Car Wash	74.2	$ 242.30	$ 494.06	$ 642.27	$ 770.88	$ 886.84	$ 975.31
Dorms	369.0	$ 1,591.84	$ 3,006.33	$ 3,909.34	$ 4,692.68	$ 5,396.22	$ 5,935.52
Hospital & Convalescent	128.4	$ 550.07	$ 1,043.54	$ 1,356.47	$ 1,627.77	$ 1,872.57	$ 2,060.23
Hotels w/o Dining	206.6	$ 986.16	$ 1,818.32	$ 2,363.81	$ 2,836.58	$ 3,262.27	$ 3,588.94
Hotels with Dining	8.5	$ 75.96	$ 127.07	$ 165.19	$ 198.22	$ 227.97	$ 250.73
Industrial Laundry	575.8	$ 6,002.39	$ 9,665.47	$ 12,562.80	$ 15,076.52	$ 17,336.55	$ 19,068.08
Laundromat	113.4	$ 431.46	$ 836.65	$ 1,088.10	$ 1,306.17	$ 1,502.32	$ 1,652.23
Markets/Bakeries	82.4	$ 988.97	$ 1,563.41	$ 2,032.10	$ 2,438.85	$ 2,804.68	$ 3,085.34
Mortuary	12.2	$ 152.04	$ 233.67	$ 303.80	$ 364.51	$ 419.16	$ 461.08
Restaurants	15.0	$ 179.73	$ 283.40	$ 368.42	$ 442.17	$ 508.46	$ 559.25
Restaurants	25.0	$ 299.56	$ 472.33	$ 614.03	$ 736.94	$ 847.43	$ 932.08
Restaurants	71.2	$ 853.14	$ 1,345.21	$ 1,748.77	$ 2,098.81	$ 2,413.49	$ 2,654.58
School	72.4	$ 261.01	$ 516.31	$ 671.06	$ 804.98	$ 925.95	$ 1,018.77
All Other	18.9	$ 86.07	$ 156.44	$ 203.45	$ 244.14	$ 280.74	$ 308.74

Figure 8 - Option 3a: $40M Debt Financing

Class	Monthly Usage hcf	Existing Bill	Proposed Bill 2027	Proposed Bill 2028	Proposed Bill 2029	Proposed Bill 2030	Proposed Bill 2031
Residential							
House	7.2	$ 37.83	$ 59.64	$ 68.56	$ 78.85	$ 87.54	$ 97.16
Multi-Family	5.5	$ 23.27	$ 46.81	$ 53.82	$ 61.89	$ 68.71	$ 76.26
Duplex - 2 Meters	5.6	$ 16.50	$ 50.65	$ 58.24	$ 66.97	$ 74.35	$ 82.52
Duplex - 1 Meter	5.6	$ 25.76	$ 50.65	$ 58.24	$ 66.97	$ 74.35	$ 82.52
Commercial							
Bars w/o Dining	23.7	$ 111.23	$ 205.83	$ 236.64	$ 272.10	$ 302.12	$ 335.27
Brewery	51.3	$ 608.54	$ 969.23	$ 1,114.87	$ 1,282.38	$ 1,423.20	$ 1,579.86
Car Wash	74.2	$ 242.30	$ 494.06	$ 568.16	$ 653.19	$ 725.24	$ 804.85
Dorms	369.0	$ 1,591.84	$ 3,006.33	$ 3,455.99	$ 3,975.63	$ 4,413.40	$ 4,898.30
Hospital & Convalescent	128.4	$ 550.07	$ 1,043.54	$ 1,200.00	$ 1,379.54	$ 1,531.87	$ 1,700.60
Hotels w/o Dining	206.6	$ 986.16	$ 1,818.32	$ 2,092.10	$ 2,405.06	$ 2,669.71	$ 2,964.27
Hotels with Dining	8.5	$ 75.96	$ 127.07	$ 146.13	$ 168.03	$ 186.49	$ 207.02
Industrial Laundry	575.8	$ 6,002.39	$ 9,665.47	$ 11,117.01	$ 12,784.42	$ 14,191.30	$ 15,751.63
Laundromat	113.4	$ 431.46	$ 836.65	$ 961.80	$ 1,106.05	$ 1,227.82	$ 1,363.16
Markets/Bakeries	82.4	$ 988.97	$ 1,563.41	$ 1,798.16	$ 2,068.04	$ 2,295.88	$ 2,548.34
Mortuary	12.2	$ 152.04	$ 233.67	$ 268.67	$ 309.00	$ 342.97	$ 380.72
Restaurants	15.0	$ 179.73	$ 283.40	$ 325.99	$ 374.96	$ 416.14	$ 461.95
Restaurants	25.0	$ 299.56	$ 472.33	$ 543.31	$ 624.94	$ 693.57	$ 769.91
Restaurants	71.2	$ 853.14	$ 1,345.21	$ 1,547.35	$ 1,779.83	$ 1,975.28	$ 2,192.71
School	72.4	$ 261.01	$ 516.31	$ 593.69	$ 682.98	$ 758.24	$ 841.98
All Other	18.9	$ 86.07	$ 156.44	$ 179.85	$ 206.84	$ 229.64	$ 254.86

Figure 9 - Option 3b: $65M Debt Financing

Class	Monthly Usage hcf	Existing Bill	Proposed Bill 2027	Proposed Bill 2028	Proposed Bill 2029	Proposed Bill 2030	Proposed Bill 2031
Residential							
House	7.2	$ 37.83	$ 59.64	$ 62.61	$ 65.75	$ 69.05	$ 72.52
Multi-Family	5.5	$ 23.27	$ 46.81	$ 49.15	$ 51.61	$ 54.19	$ 56.91
Duplex - 2 Meters	5.6	$ 16.50	$ 50.65	$ 53.18	$ 55.84	$ 58.65	$ 61.59
Duplex - 1 Meter	5.6	$ 25.76	$ 50.65	$ 53.18	$ 55.84	$ 58.65	$ 61.59
Commercial							
Bars w/o Dining	23.7	$ 111.23	$ 205.83	$ 216.18	$ 227.08	$ 238.53	$ 250.56
Brewery	51.3	$ 608.54	$ 969.23	$ 1,017.95	$ 1,068.74	$ 1,122.10	$ 1,178.23
Car Wash	74.2	$ 242.30	$ 494.06	$ 518.76	$ 544.94	$ 571.86	$ 600.33
Dorms	369.0	$ 1,591.84	$ 3,006.33	$ 3,154.99	$ 3,311.94	$ 3,477.20	$ 3,651.26
Hospital & Convalescent	128.4	$ 550.07	$ 1,043.54	$ 1,095.27	$ 1,149.88	$ 1,207.38	$ 1,267.95
Hotels w/o Dining	206.6	$ 986.16	$ 1,818.32	$ 1,910.27	$ 2,005.03	$ 2,104.68	$ 2,209.52
Hotels with Dining	8.5	$ 75.96	$ 127.07	$ 133.45	$ 140.11	$ 147.15	$ 154.48
Industrial Laundry	575.8	$ 6,002.39	$ 9,665.47	$ 10,149.32	$ 10,660.09	$ 11,192.03	$ 11,752.60
Laundromat	113.4	$ 431.46	$ 836.65	$ 878.37	$ 922.49	$ 969.02	$ 1,018.09
Markets/Bakeries	82.4	$ 988.97	$ 1,563.41	$ 1,641.66	$ 1,724.06	$ 1,810.61	$ 1,901.58
Mortuary	12.2	$ 152.04	$ 233.67	$ 245.38	$ 257.70	$ 270.64	$ 284.23
Restaurants	15.0	$ 179.73	$ 283.40	$ 297.65	$ 312.50	$ 328.10	$ 344.51
Restaurants	25.0	$ 299.56	$ 472.33	$ 496.08	$ 520.83	$ 546.83	$ 574.18
Restaurants	71.2	$ 853.14	$ 1,345.21	$ 1,412.83	$ 1,483.31	$ 1,557.38	$ 1,635.28
School	72.4	$ 261.01	$ 516.31	$ 542.34	$ 569.16	$ 597.47	$ 627.38
All Other	18.9	$ 86.07	$ 156.44	$ 164.24	$ 172.47	$ 181.12	$ 190.23

Figure 10 - Option 3c: $90M Debt Financing

Benchmarking

Regional comparisons provide context for sewer rates. Below are several important considerations when comparing sewer rates regionally.

- Existing debt service.
- Status of deferred maintenance and regulatory requirements.
- Rates shown are only as adopted, rates may change significantly within the next 5 years.

The following Figures show Options 1, 3a, 3b, and 3c. Option 2 was removed from the benchmarking analysis.

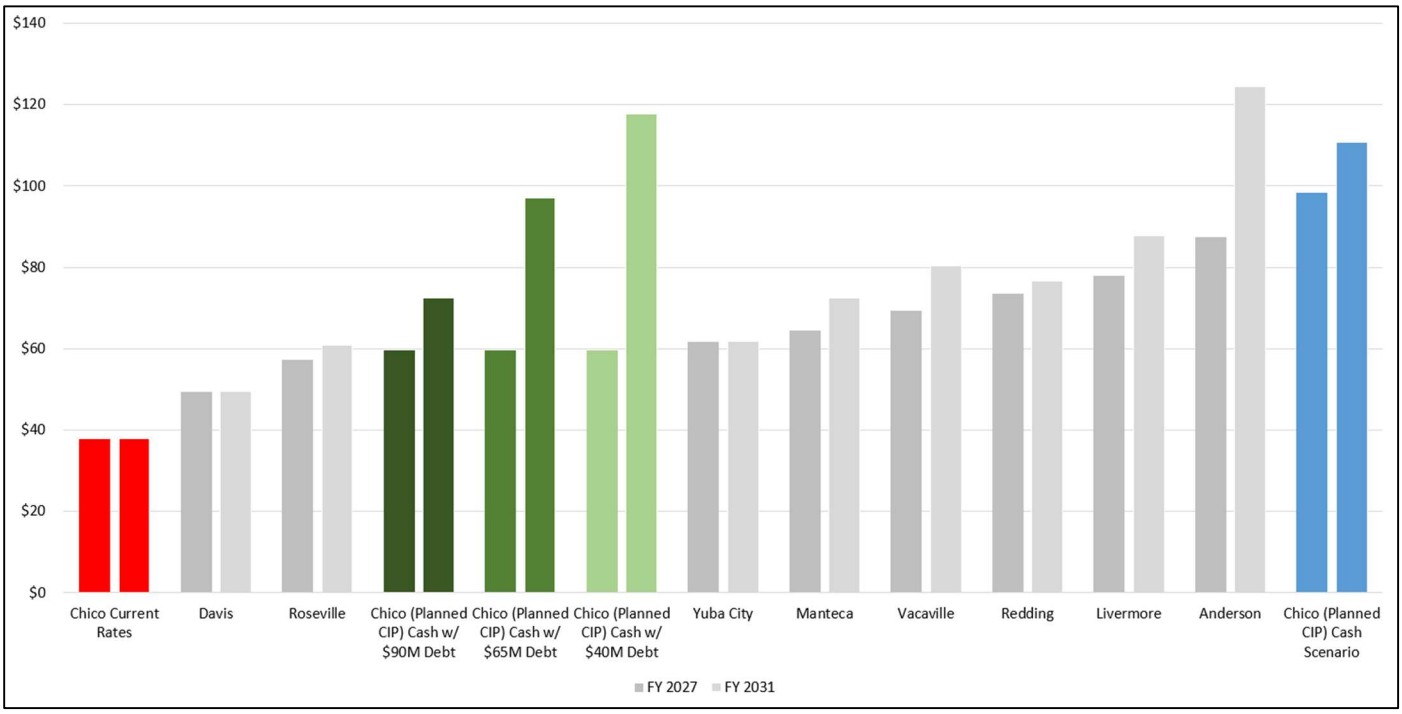

Figure 11 - Residential Bill Impact FY 27 & FY 31

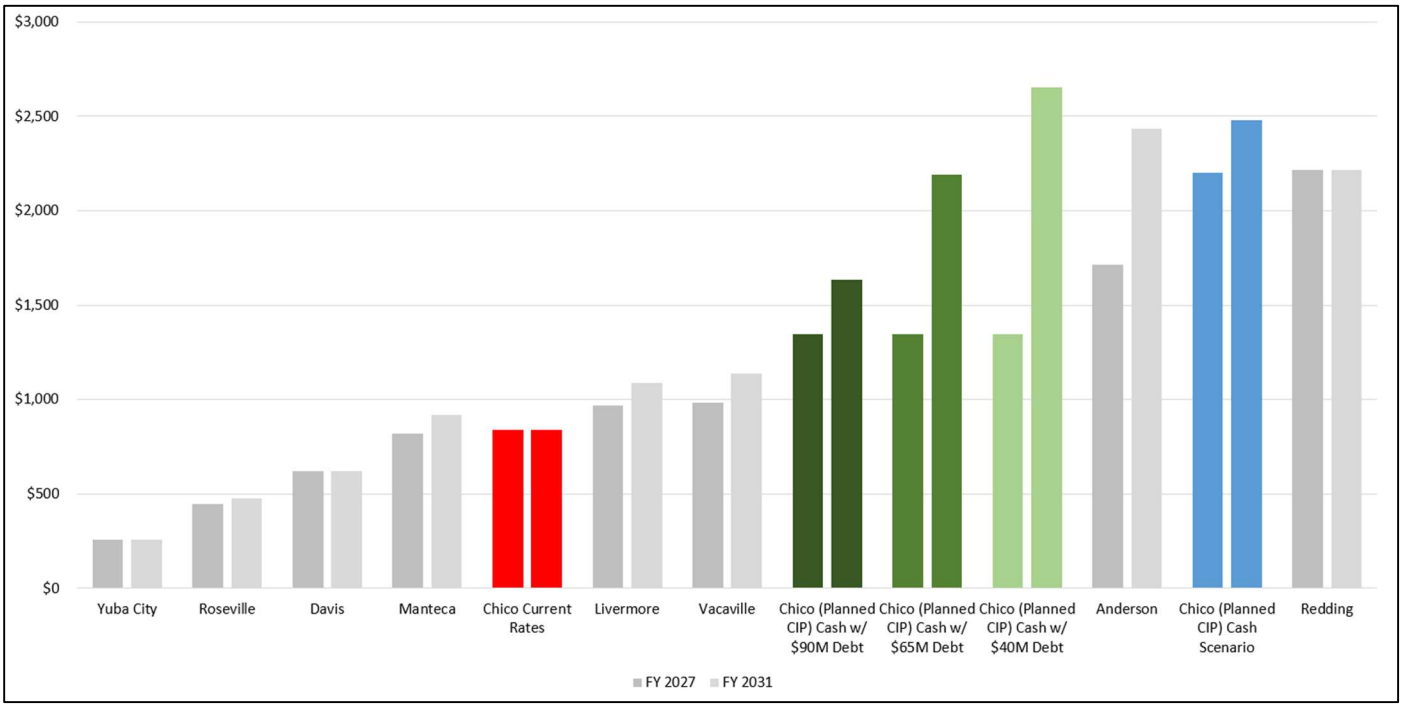

Figure 12 - Restaurant Bill Impact FY 27 & FY 31 (High Consumption / High Strength)

Finance Committee
At the February 18, 2026, meeting, the Finance Committee received a presentation on the results of the Sewer Enterprise Study. Options 1 and 2 were presented as cash-funded options. Direction was given to staff to return to the Finance Committee with additional financing options, including a variety of debt financing options.

At the March 5, 2026, meeting, the Finance Committee received a presentation of Options 3a, 3b, and 3c as debt financing options.

Finance Committee Recommendation
After a review of cash-funded and debt financing options, the Finance Committee recommends (2-1 vote) the City Council adopt Option 1 (Cash Funded, large increase Year 1, small increases moving forward) as a financing strategy.

Next Steps
If the City Council approves a sewer rate schedule and directs staff to initiate the Proposition 218, including the public hearing notice document today, the proposed timeline is:

- March 2026: Council approval of rate schedule and initiation of Proposition 218 process
- April–June 2026: Proposition 218 noticing and public hearing
- July 2026: Council adoption of amended fee schedule
- August 2026: New rates take effect

ATTACHMENTS:

Attachment A: Sewer Rate Schedule Options 1, 2, 3a, 3b, 3c

Attachment B: 5-Year Capital Improvement Plan (CIP)

Attachment C: Sewer Cost of Service and Rate Study Report (Carollo)

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
FIXED MONTHLY CHARGE						
Sewer Residential (Per Unit)						
Single Family	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Multi-Family	$ 16.12	$ 45.60	$ 46.97	$ 48.38	$ 49.83	$ 51.32
Duplex - 2 Meters	$ 9.22	$ 51.30	$ 52.84	$ 54.43	$ 56.06	$ 57.74
Duplex - 1 Meter	$ 18.48	$ 51.30	$ 52.84	$ 54.43	$ 56.06	$ 57.74
Sewer Commercial (Per EDU)						
Bars Without dining	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Brewery	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Car Wash	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Dorms	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Hospital & Convalescent	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Hotels w/o Dining	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Hotels with Dining	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Industrial Laundry	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Laundromat	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Markets Bakeries	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Mortuary	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
Restaurants	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
School	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
All Other	$ 28.47	$ 57.00	$ 58.71	$ 60.47	$ 62.28	$ 64.15
VOLUMETRIC CHARGES PER HCF						
Sewer Residential (Per HCF)						
Single Family	$ 1.30	$ 5.74	$ 5.91	$ 6.09	$ 6.27	$ 6.46
Multi-Family	$ 1.30	$ 5.74	$ 5.91	$ 6.09	$ 6.27	$ 6.46
Duplex - 2 Meters	$ 1.30	$ 5.74	$ 5.91	$ 6.09	$ 6.27	$ 6.46
Duplex - 1 Meter	$ 1.30	$ 5.74	$ 5.91	$ 6.09	$ 6.27	$ 6.46
Sewer Commercial (Per HCF)						
Bars Without dining	$ 0.88	$ 5.95	$ 6.13	$ 6.31	$ 6.50	$ 6.70
Brewery	$ 2.06	$ 11.72	$ 12.07	$ 12.43	$ 12.80	$ 13.18
Car Wash	$ 0.60	$ 4.72	$ 4.86	$ 5.01	$ 5.16	$ 5.31
Dorms	$ 0.75	$ 5.53	$ 5.70	$ 5.87	$ 6.05	$ 6.23
Hospital & Convalescent	$ 0.72	$ 5.49	$ 5.65	$ 5.82	$ 5.99	$ 6.17
Hotels w/o Dining	$ 0.81	$ 5.86	$ 6.04	$ 6.22	$ 6.41	$ 6.60
Hotels with Dining	$ 1.63	$ 9.82	$ 10.11	$ 10.41	$ 10.72	$ 11.04
Industrial Laundry	$ 1.87	$ 10.56	$ 10.88	$ 11.21	$ 11.55	$ 11.90
Laundromat	$ 0.69	$ 5.09	$ 5.24	$ 5.40	$ 5.56	$ 5.73
Markets Bakeries	$ 2.20	$ 11.86	$ 12.22	$ 12.59	$ 12.97	$ 13.36
Mortuary	$ 2.66	$ 12.15	$ 12.51	$ 12.89	$ 13.28	$ 13.68
Restaurants	$ 2.18	$ 11.73	$ 12.08	$ 12.44	$ 12.81	$ 13.19
School	$ 0.64	$ 4.96	$ 5.11	$ 5.26	$ 5.42	$ 5.58
All Other	$ 0.99	$ 5.74	$ 5.91	$ 6.09	$ 6.27	$ 6.46

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
FIXED MONTHLY CHARGE						
Sewer Residential (Per Unit)						
Single Family	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Multi-Family	$ 16.12	$ 28.00	$ 37.80	$ 49.14	$ 63.88	$ 83.04
Duplex - 2 Meters	$ 9.22	$ 31.50	$ 42.53	$ 55.29	$ 71.88	$ 93.44
Duplex - 1 Meter	$ 18.48	$ 31.50	$ 42.53	$ 55.29	$ 71.88	$ 93.44
Sewer Commercial (Per EDU)						
Bars Without dining	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Brewery	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Car Wash	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Dorms	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Hospital & Convalescent	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Hotels w/o Dining	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Hotels with Dining	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Industrial Laundry	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Laundromat	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Markets Bakeries	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Mortuary	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
Restaurants	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
School	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
All Other	$ 28.47	$ 35.00	$ 47.25	$ 61.43	$ 79.86	$ 103.82
VOLUMETRIC CHARGES PER HCF						
Sewer Residential (Per HCF)						
Single Family	$ 1.30	$ 3.42	$ 4.62	$ 6.01	$ 7.81	$ 10.15
Multi-Family	$ 1.30	$ 3.42	$ 4.62	$ 6.01	$ 7.81	$ 10.15
Duplex - 2 Meters	$ 1.30	$ 3.42	$ 4.62	$ 6.01	$ 7.81	$ 10.15
Duplex - 1 Meter	$ 1.30	$ 3.42	$ 4.62	$ 6.01	$ 7.81	$ 10.15
Sewer Commercial (Per HCF)						
Bars Without dining	$ 0.88	$ 3.55	$ 4.79	$ 6.23	$ 8.10	$ 10.53
Brewery	$ 2.06	$ 7.10	$ 9.59	$ 12.47	$ 16.21	$ 21.07
Car Wash	$ 0.60	$ 2.80	$ 3.78	$ 4.91	$ 6.38	$ 8.29
Dorms	$ 0.75	$ 3.29	$ 4.44	$ 5.77	$ 7.50	$ 9.75
Hospital & Convalescent	$ 0.72	$ 3.27	$ 4.41	$ 5.73	$ 7.45	$ 9.69
Hotels w/o Dining	$ 0.81	$ 3.50	$ 4.73	$ 6.15	$ 8.00	$ 10.40
Hotels with Dining	$ 1.63	$ 5.93	$ 8.01	$ 10.41	$ 13.53	$ 17.59
Industrial Laundry	$ 1.87	$ 6.38	$ 8.61	$ 11.19	$ 14.55	$ 18.92
Laundromat	$ 0.69	$ 3.02	$ 4.08	$ 5.30	$ 6.89	$ 8.96
Markets Bakeries	$ 2.20	$ 7.18	$ 9.69	$ 12.60	$ 16.38	$ 21.29
Mortuary	$ 2.66	$ 7.36	$ 9.94	$ 12.92	$ 16.80	$ 21.84
Restaurants	$ 2.18	$ 7.10	$ 9.59	$ 12.47	$ 16.21	$ 21.07
School	$ 0.64	$ 2.94	$ 3.97	$ 5.16	$ 6.71	$ 8.72
All Other	$ 0.99	$ 3.42	$ 4.62	$ 6.01	$ 7.81	$ 10.15

OPTION 3A
$40M DEBT FINANCING

ATTACHMENT A

CITY COUNCIL MEETING
3/17/2026

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
FIXED MONTHLY CHARGE						
Sewer Residential (Per Unit)						
Single Family	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Multi-Family	$ 16.12	$ 28.00	$ 36.40	$ 43.68	$ 50.23	$ 55.25
Duplex - 2 Meters	$ 9.22	$ 31.50	$ 40.95	$ 49.14	$ 56.51	$ 62.16
Duplex - 1 Meter	$ 18.48	$ 31.50	$ 40.95	$ 49.14	$ 56.51	$ 62.16
Sewer Commercial (Per EDU)						
Bars Without dining	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Brewery	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Car Wash	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Dorms	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Hospital & Convalescent	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Hotels w/o Dining	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Hotels with Dining	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Industrial Laundry	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Laundromat	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Markets Bakeries	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Mortuary	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
Restaurants	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
School	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
All Other	$ 28.47	$ 35.00	$ 45.50	$ 54.60	$ 62.79	$ 69.07
VOLUMETRIC CHARGES PER HCF						
Sewer Residential (Per HCF)						
Single Family	$ 1.30	$ 3.42	$ 4.45	$ 5.34	$ 6.14	$ 6.75
Multi-Family	$ 1.30	$ 3.42	$ 4.45	$ 5.34	$ 6.14	$ 6.75
Duplex - 2 Meters	$ 1.30	$ 3.42	$ 4.45	$ 5.34	$ 6.14	$ 6.75
Duplex - 1 Meter	$ 1.30	$ 3.42	$ 4.45	$ 5.34	$ 6.14	$ 6.75
Sewer Commercial (Per HCF)						
Bars Without dining	$ 0.88	$ 3.55	$ 4.62	$ 5.54	$ 6.37	$ 7.01
Brewery	$ 2.06	$ 7.10	$ 9.23	$ 11.08	$ 12.74	$ 14.01
Car Wash	$ 0.60	$ 2.80	$ 3.64	$ 4.37	$ 5.03	$ 5.53
Dorms	$ 0.75	$ 3.29	$ 4.28	$ 5.14	$ 5.91	$ 6.50
Hospital & Convalescent	$ 0.72	$ 3.27	$ 4.25	$ 5.10	$ 5.87	$ 6.46
Hotels w/o Dining	$ 0.81	$ 3.50	$ 4.55	$ 5.46	$ 6.28	$ 6.91
Hotels with Dining	$ 1.63	$ 5.93	$ 7.71	$ 9.25	$ 10.64	$ 11.70
Industrial Laundry	$ 1.87	$ 6.38	$ 8.29	$ 9.95	$ 11.44	$ 12.58
Laundromat	$ 0.69	$ 3.02	$ 3.93	$ 4.72	$ 5.43	$ 5.97
Markets Bakeries	$ 2.20	$ 7.18	$ 9.33	$ 11.20	$ 12.88	$ 14.17
Mortuary	$ 2.66	$ 7.36	$ 9.57	$ 11.48	$ 13.20	$ 14.52
Restaurants	$ 2.18	$ 7.10	$ 9.23	$ 11.08	$ 12.74	$ 14.01
School	$ 0.64	$ 2.94	$ 3.82	$ 4.58	$ 5.27	$ 5.80
All Other	$ 0.99	$ 3.42	$ 4.45	$ 5.34	$ 6.14	$ 6.75

OPTION 3B
$65M DEBT FINANCING

ATTACHMENT A

CITY COUNCIL MEETING
3/17/2026

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
FIXED MONTHLY CHARGE						
Sewer Residential (Per Unit)						
Single Family	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Multi-Family	$ 16.12	$ 28.00	$ 32.20	$ 37.03	$ 41.10	$ 45.62
Duplex - 2 Meters	$ 9.22	$ 31.50	$ 36.23	$ 41.66	$ 46.24	$ 51.33
Duplex - 1 Meter	$ 18.48	$ 31.50	$ 36.23	$ 41.66	$ 46.24	$ 51.33
Sewer Commercial (Per EDU)						
Bars Without dining	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Brewery	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Car Wash	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Dorms	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Hospital & Convalescent	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Hotels w/o Dining	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Hotels with Dining	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Industrial Laundry	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Laundromat	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Markets Bakeries	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Mortuary	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
Restaurants	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
School	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
All Other	$ 28.47	$ 35.00	$ 40.25	$ 46.29	$ 51.38	$ 57.03
VOLUMETRIC CHARGES PER HCF						
Sewer Residential (Per HCF)						
Single Family	$ 1.30	$ 3.42	$ 3.93	$ 4.52	$ 5.02	$ 5.57
Multi-Family	$ 1.30	$ 3.42	$ 3.93	$ 4.52	$ 5.02	$ 5.57
Duplex - 2 Meters	$ 1.30	$ 3.42	$ 3.93	$ 4.52	$ 5.02	$ 5.57
Duplex - 1 Meter	$ 1.30	$ 3.42	$ 3.93	$ 4.52	$ 5.02	$ 5.57
Sewer Commercial (Per HCF)						
Bars Without dining	$ 0.88	$ 3.55	$ 4.08	$ 4.69	$ 5.21	$ 5.78
Brewery	$ 2.06	$ 7.10	$ 8.17	$ 9.40	$ 10.43	$ 11.58
Car Wash	$ 0.60	$ 2.80	$ 3.22	$ 3.70	$ 4.11	$ 4.56
Dorms	$ 0.75	$ 3.29	$ 3.78	$ 4.35	$ 4.83	$ 5.36
Hospital & Convalescent	$ 0.72	$ 3.27	$ 3.76	$ 4.32	$ 4.80	$ 5.33
Hotels w/o Dining	$ 0.81	$ 3.50	$ 4.03	$ 4.63	$ 5.14	$ 5.71
Hotels with Dining	$ 1.63	$ 5.93	$ 6.82	$ 7.84	$ 8.70	$ 9.66
Industrial Laundry	$ 1.87	$ 6.38	$ 7.34	$ 8.44	$ 9.37	$ 10.40
Laundromat	$ 0.69	$ 3.02	$ 3.47	$ 3.99	$ 4.43	$ 4.92
Markets Bakeries	$ 2.20	$ 7.18	$ 8.26	$ 9.50	$ 10.55	$ 11.71
Mortuary	$ 2.66	$ 7.36	$ 8.46	$ 9.73	$ 10.80	$ 11.99
Restaurants	$ 2.18	$ 7.10	$ 8.17	$ 9.40	$ 10.43	$ 11.58
School	$ 0.64	$ 2.94	$ 3.38	$ 3.89	$ 4.32	$ 4.80
All Other	$ 0.99	$ 3.42	$ 3.93	$ 4.52	$ 5.02	$ 5.57

OPTION 3C
$90M DEBT FINANCING

ATTACHMENT A

CITY COUNCIL MEETING
3/17/2026

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
FIXED MONTHLY CHARGE						
Sewer Residential (Per Unit)						
Single Family	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Multi-Family	$ 16.12	$ 28.00	$ 29.40	$ 30.87	$ 32.41	$ 34.03
Duplex - 2 Meters	$ 9.22	$ 31.50	$ 33.08	$ 34.73	$ 36.47	$ 38.29
Duplex - 1 Meter	$ 18.48	$ 31.50	$ 33.08	$ 34.73	$ 36.47	$ 38.29
Sewer Commercial (Per EDU)						
Bars Without dining	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Brewery	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Car Wash	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Dorms	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Hospital & Convalescent	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Hotels w/o Dining	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Hotels with Dining	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Industrial Laundry	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Laundromat	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Markets Bakeries	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Mortuary	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
Restaurants	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
School	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
All Other	$ 28.47	$ 35.00	$ 36.75	$ 38.59	$ 40.52	$ 42.55
VOLUMETRIC CHARGES PER HCF						
Sewer Residential (Per HCF)						
Single Family	$ 1.30	$ 3.42	$ 3.59	$ 3.77	$ 3.96	$ 4.16
Multi-Family	$ 1.30	$ 3.42	$ 3.59	$ 3.77	$ 3.96	$ 4.16
Duplex - 2 Meters	$ 1.30	$ 3.42	$ 3.59	$ 3.77	$ 3.96	$ 4.16
Duplex - 1 Meter	$ 1.30	$ 3.42	$ 3.59	$ 3.77	$ 3.96	$ 4.16
Sewer Commercial (Per HCF)						
Bars Without dining	$ 0.88	$ 3.55	$ 3.73	$ 3.92	$ 4.12	$ 4.33
Brewery	$ 2.06	$ 7.10	$ 7.46	$ 7.83	$ 8.22	$ 8.63
Car Wash	$ 0.60	$ 2.80	$ 2.94	$ 3.09	$ 3.24	$ 3.40
Dorms	$ 0.75	$ 3.29	$ 3.45	$ 3.62	$ 3.80	$ 3.99
Hospital & Convalescent	$ 0.72	$ 3.27	$ 3.43	$ 3.60	$ 3.78	$ 3.97
Hotels w/o Dining	$ 0.81	$ 3.50	$ 3.68	$ 3.86	$ 4.05	$ 4.25
Hotels with Dining	$ 1.63	$ 5.93	$ 6.23	$ 6.54	$ 6.87	$ 7.21
Industrial Laundry	$ 1.87	$ 6.38	$ 6.70	$ 7.04	$ 7.39	$ 7.76
Laundromat	$ 0.69	$ 3.02	$ 3.17	$ 3.33	$ 3.50	$ 3.68
Markets Bakeries	$ 2.20	$ 7.18	$ 7.54	$ 7.92	$ 8.32	$ 8.74
Mortuary	$ 2.66	$ 7.36	$ 7.73	$ 8.12	$ 8.53	$ 8.96
Restaurants	$ 2.18	$ 7.10	$ 7.46	$ 7.83	$ 8.22	$ 8.63
School	$ 0.64	$ 2.94	$ 3.09	$ 3.24	$ 3.40	$ 3.57
All Other	$ 0.99	$ 3.42	$ 3.59	$ 3.77	$ 3.96	$ 4.16

		5-Year Rate Adoption Period (FY)								
		2027	2028	2029	2030	2031	5-Year Total	5-Year Total By Driver	5-Year % By Driver	2032	2033	2034	2035
Regulatory	Effluent Diversion and Northeast Pond Upgrades: Design	$ -	$ -	$ 4,936,285	$ -	$ -	$ 4,936,285			$ -	$ -	$ -	$ -
	Effluent Diversion and Northeast Pond Upgrades	$ -	$ -	$ -	$ -	$ 42,737,345	$ 42,737,345			$ -	$ -	$ -	$ -
	Modified MLE Process Upgrades: Design	$ -	$ -	$ 1,047,856	$ -	$ -	$ 1,047,856			$ -	$ -	$ -	$ -
	Modified MLE Process Upgrades	$ -	$ -	$ -	$ -	$ 7,645,343	$ 7,645,343			$ -	$ -	$ -	$ -
	Cybersecurity Upgrades	$ -	$ -	$ -	$ 2,000,000	$ -	$ 2,000,000			$ -	$ -	$ -	$ -
	Remove abandoned outfall, if required by State Lands Commission	$ -	$ -	$ -	$ 2,770,494	$ -	$ 2,770,494	$ 64,709,439	48%	$ -	$ -	$ -	$ -
	Sewer Enterprise Study	$ -	$ -	$ -	$ -	$ 358,216	$ 358,216			$ -	$ -	$ -	$ -
	WPCP NPDES Permit Requirements	$ 163,035	$ 167,926	$ 172,964	$ 178,153	$ 183,497	$ 865,574			$ 189,002	$ 194,672	$ 200,512	$ 206,528
	General Plan Implementation	$ 17,141	$ 17,655	$ 18,185	$ 18,730	$ 19,292	$ 91,004			$ 19,871	$ 20,467	$ 21,081	$ 21,714
	WPCP Strategic Plan Update	$ -	$ -	$ 850,653	$ -	$ -	$ 850,653			$ -	$ -	$ -	$ -
	Stormwater Management Program (MS4)	$ 159,135	$ 163,909	$ 168,826	$ 173,891	$ 179,108	$ 844,869			$ 184,481	$ 190,016	$ 195,716	$ 201,587
	Tertiary Filtration Upgrades (Planning/Design)	$ -	$ -	$ -	$ -	$ 561,800	$ 561,800			$ -	$ -	$ -	$ 4,973,989
Condition	2027 Sewer Pipe Replacement Project	$ 4,243,600	$ -	$ -	$ -	$ -	$ 4,243,600			$ -	$ -	$ -	$ -
	2028 Sewer Pipe Replacement Project	$ 1,060,900	$ 4,370,908	$ -	$ -	$ -	$ 5,431,808			$ -	$ -	$ -	$ -
	2029 Sewer Pipe Replacement Project	$ -	$ 1,092,727	$ 4,502,035	$ -	$ -	$ 5,594,762			$ -	$ -	$ -	$ -
	2030 Sewer Pipe Replacement Project	$ -	$ -	$ 1,125,509	$ 4,637,096	$ -	$ 5,762,605			$ -	$ -	$ -	$ -
	2031 Sewer Pipe Replacement Project	$ -	$ -	$ -	$ 1,159,274	$ 4,776,209	$ 5,935,483			$ -	$ -	$ -	$ -
	Annual WPCP Improvements	$ 327,818	$ 337,653	$ 347,782	$ 358,216	$ 368,962	$ 1,740,431			$ 380,031	$ 391,432	$ 403,175	$ 415,270
	Annual Sewer Maintenance	$ 218,545	$ 225,102	$ 231,855	$ 238,810	$ 245,975	$ 1,160,287			$ 253,354	$ 260,955	$ 268,783	$ 276,847
	Predictive Control Upgrades for Aeration Tank No. 6	$ 545,668	$ -	$ -	$ -	$ -	$ 545,668			$ -	$ -	$ -	$ -
	WPCP Roofs	$ 205,433	$ -	$ -	$ -	$ -	$ 205,433			$ -	$ -	$ -	$ -
	Chlorine Testing	$ -	$ 160,888	$ -	$ -	$ -	$ 160,888			$ -	$ -	$ -	$ -
	Aeration System Upgrades	$ -	$ -	$ 2,369,795	$ -	$ -	$ 2,369,795			$ -	$ -	$ -	$ -
	Disinfection, Chemical Building, Solids Thickening and Dewatering, & Plant Power Systems Upgrades	$ -	$ -	$ 3,445,847	$ -	$ -	$ 3,445,847	$ 65,175,296	48%	$ -	$ -	$ -	$ -
	Solids Digestion Upgrades	$ -	$ -	$ -	$ 3,248,052	$ -	$ 3,248,052			$ -	$ -	$ -	$ -
	Secondary Treatment, Disinfection, 3W, Solids Dewatering, and Miscellaneous Plant Upgrades	$ -	$ -	$ -	$ 13,355,859	$ -	$ 13,355,859			$ -	$ -	$ -	$ -
	WPCP Administration, Maintenance, and Shop Building Improvements	$ -	$ -	$ -	$ -	$ 3,065,565	$ 3,065,565			$ -	$ -	$ -	$ -
	Disinfection, Solids Digestion, and Solids Mixing Upgrades	$ -	$ -	$ -	$ -	$ 8,909,212	$ 8,909,212			$ -	$ -	$ -	$ -
	DEHP, Lead, and Zinc Treatment Evaluation	$ -	$ -	$ -	$ -	$ -	$ -			$ 625,414	$ -	$ -	$ -
	Headworks, Chemical Building, Solids Dewatering, and Electrical Systems Upgrades	$ -	$ -	$ -	$ -	$ -	$ -			$ 12,536,988	$ -	$ -	$ -
	Primary Treatment, Aeration, Solids Upgrades	$ -	$ -	$ -	$ -	$ -	$ -			$ -	$ 11,044,416	$ -	$ -
	Future Treatment Plant Project	$ -	$ -	$ -	$ -	$ -	$ -			$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000
	Future Sewer Pipe Replacement Projects	$ -	$ -	$ -	$ -	$ -	$ -			$ 6,149,369	$ 6,333,850	$ 6,523,866	$ 6,719,582
Capacity	Sanitary Sewer Master Plan (SSMP) Update	$ 53,045	$ 54,636	$ 56,275	$ 57,964	$ 59,703	$ 281,623			$ 61,494	$ 63,339	$ 65,239	$ 67,196
	Sanitary Sewer System Master Plan Projects - Existing User Contribution	$ 811,589	$ 835,936	$ 861,014	$ 886,845	$ 913,450	$ 4,308,834	$ 4,590,457	3%	$ 940,854	$ 969,079	$ 998,151	$ 1,028,096
	New 100-ft Secondary Clarifier	$ -	$ -	$ -	$ -	$ -	$ -			$ -	$ 24,304,889	$ -	$ -
	Total Escalated CIP Projects	**$ 7,805,909**	**$ 7,427,341**	**$ 20,134,880**	**$ 29,083,384**	**$ 70,023,678**				**$ 25,340,858**	**$ 47,773,115**	**$ 12,676,524**	**$ 17,910,808**
	Total 5-Year CIP						**$ 134,475,191**					*excludes 2036*	**$ 103,701,304**

CITY of CHICO
A safe place to raise a family, an ideal location for business, and a premier place to live.

2026 Sewer Rate Study

2026 Sewer Cost of Service and Rate Study Report

February 2026 / DRAFT

carollo

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Abbreviations

BOD	biochemical oxygen demand
Carollo	Carollo Engineers
CIP	Capital Improvements Plan
City	City of Chico
COS	Cost of Service
DSCR	debt service coverage ratios
EDU	Equivalent dwelling unit. For City of Chico, one (1) Wastewater EDU is assumed as 7.2 HCF per month, 3.46 pounds of BOD per month, and 5.25 pounds of TSS per month.
FY	fiscal year
HCF	hundred cubic feet
I&I	inflow and infiltration
lbs/yr	pounds per year
mgd	million gallons per day
mg/L	milligrams per liter
MOP 27	Manual of Practice 27: Financial and Charges for Wastewater Systems
O&M	operations and maintenance
R&R	repair and replace
SFR	single family residential
Study	Sewer Rate Study
SWRCB	State Water Resources Control Board
TSS	total suspended solids
WEF	Water Environment Practice
WPCP	water pollution control plant

SECTION 1 INTRODUCTION

The City of Chico (City or Chico) provides wastewater collection, treatment, and disposal service for the residential, industrial, and commercial customers within its service area in Northern Sacramento Valley of California in Butte County. The Chico 2030 General Plan defined the 39.5 square-mile boundary which the latest 2025 Sanitary Sewer Master Plan and 2021 Water Pollution Control Plant (WPCP) Strategic Plan used for planning purposes. The City currently manages and maintains approximately 288 miles of gravity sewer pipes, approximately 4.9 miles of force main pipes, and 18 lift stations. All wastewater that is generated within its service area – approximately 6.38 million gallons per day (mgd) of average dry weather flow and 22.26 mgd of peak wet weather flow – is conveyed to the 8.4 MGD WPCP on Chico River Road.

1.1 Study Background

User rates are intended to collect the necessary revenue to cover operations and maintenance (O&M) costs and pay down debt for capital improvement projects for repair and replacement (R&R), meeting increasing treatment regulation stringency, and supporting capacity expansion. Over the past several years, the City retained Carollo Engineers, Inc. (Carollo) to prepare the 2025 Sanitary Sewer Master Plan and 2021 Water Pollution Control Plant (WPCP) Strategic Plan. Those plans included condition assessments and capacity evaluations, as well as a review of the capital improvement plan (CIP) projects. One of the outcomes of the Sanitary Sewer Master Plan determined that the collection system's capacity is insufficient at meeting the maximum flow-depth criteria under peak wet weather flow conditions at City buildout, which can create bottlenecks in the system and potentially cause sanitary sewer overflows. The WPCP Strategic Planning Report has provided the City with information needed to effectively budget for current and future capital and operational expenditures directly related to the City's WPCP and ensure long-term reliability of the WPCP. In 2021 the City performed a Sewer Collection System Analysis (Ottoboni) that identified the financial need to replace aging collection system infrastructure past its useful life. The Sewer Collection System Analysis document was critical in establishing the City's Sewer Main Replacement Program.

In August 2025, the City retained Carollo to perform a comprehensive and defensible Sewer Rate Study (Study), inclusive of a financial plan and cost of service analysis. This Study's deliverables were to:

- Recommend sewer user rates for five fiscal years (FY), 2027 through 2031;
- Present the findings in this final report;
- Prepare and conduct a Proposition 218 process, including mailing and a public hearing to adopt a new sewer rate at or before the March 2027 City Council meeting.

This Study was performed as a routine five-year update to the last rate study, conducted by a third-party consultant (NBS) in August 2022, which developed rate recommendations through June 30, FY 2027. The previous study resulted in the following adopted changes:

- Defined the average single family residential (SFR) equivalent dwelling unit (EDU) based on flow, pounds of biochemical oxygen demand (BOD), and pounds of total suspended solids (TSS) under average monthly consumption during winter months;

- Determined that multi-family and duplex accounts are less than one EDU and, as a result, should have a lower fixed monthly charge than SFR customers;
- Methodology to calculate the number of EDUs for all commercial customers;
- Methodology to calculate volumetric rates based on standard effluent strength factors that follow State Water Resources Control Board guidelines and vary by customer class;
- Transitioned the residential rate structure from a flat monthly rate to a fixed monthly charge and volumetric rate;
- Maintained the commercial rate structure of fixed monthly charges based on calculated EDU and volumetric rates based on standard commercial strength factors.

1.1.1 Rate Update History

Prior to the 2022 update, the City had not increased sewer rates in over 10 years. That delay produced insufficient cash flow and reserves to sustain the repair, replacement, and infrastructure improvement programs necessary to maintain the system and support future customers. This challenge is particularly acute given the age of the infrastructure: many of the City's sewer lines are 50 to 70 years old and, in some cases, more than 100 years old and the City's WPCP is approaching 50 years old. Furthermore, costs for O&M activities increase under economic uncertainty, rising power and chemical costs, and inflation. While these expenditures increased, the collected sewer revenue remained largely unchanged, resulting in a net annual loss in cash reserves, which have been drawn down to cover necessary system improvements.

1.1.2 2026 Rate Study Purpose and Structure

To develop updated user rates, Carollo reviewed and updated, as necessary, the previous 2022 study changes and assumptions while maintaining a similar rate structure and calculation approach. This Study included a comprehensive review of the utility's revenue needs, CIP projects, customer usage characteristics, and additional future drivers of service costs and revenue. The City has significantly drawn down Capital Reserves to fund necessary CIP projects. Therefore, this process included in-depth discussions with City engineers, finance and utility staff to strategically build and maintain reserves to avoid recreating the constraints which limited the utility's ability to meaningfully address systemwide infrastructure concerns.

Based on these analyses, Carollo recommended updates to the City's sewer rates to adequately recover costs and maintain reserves. This report is organized to:

- Discuss the methodology and assumptions driving the financial plan (Section 1.2);
- Identify any financial inadequacy of the City's existing rate schedule through the Revenue Requirements analysis (Section 2);
- Determine the costs each system function and customer class place on the utility in the Cost-of-Service analysis (Section 3);
- Present rate recommendations for FY 2027 through 2031 to adequately recover costs through the rate-setting period (Section 4);
- Identify resulting customer impacts under the recommended rates (Section 5).

1.2 Rate Setting Process

Rate analyses are typically performed every five years so that revenues from rates adequately fund utility operations, maintenance, and capital investments. Additionally, in California, wastewater rates must adhere to the cost-of-service requirements imposed by California Constitution article XIII D, section 6 (commonly referred to as Proposition 218) and Article X, section 2. Proposition 218 requires that property related fees and charges, including wastewater Service Fees and charges, do not exceed the reasonable and proportional cost of providing the service. In addition to Proposition 218 requirements, Article X, section 2 of the State Constitution, establishes the need to preserve the State's water supplies and discourage the wasteful or unreasonable use of water.

In addition to adhering to state requirements, Carollo's rate-setting methodology is consistent with industry guidelines described in the Water Environment Federation's (WEF) *Manual of Practice 27: Financial and Charges for Wastewater Systems* (MOP 27).

The cost-of-service analysis presented within this report consists of the following three interconnected processes shown in the figure on the right: Revenue Requirement Analysis, Cost-of-Service Analysis, and the Rate Design Analysis.

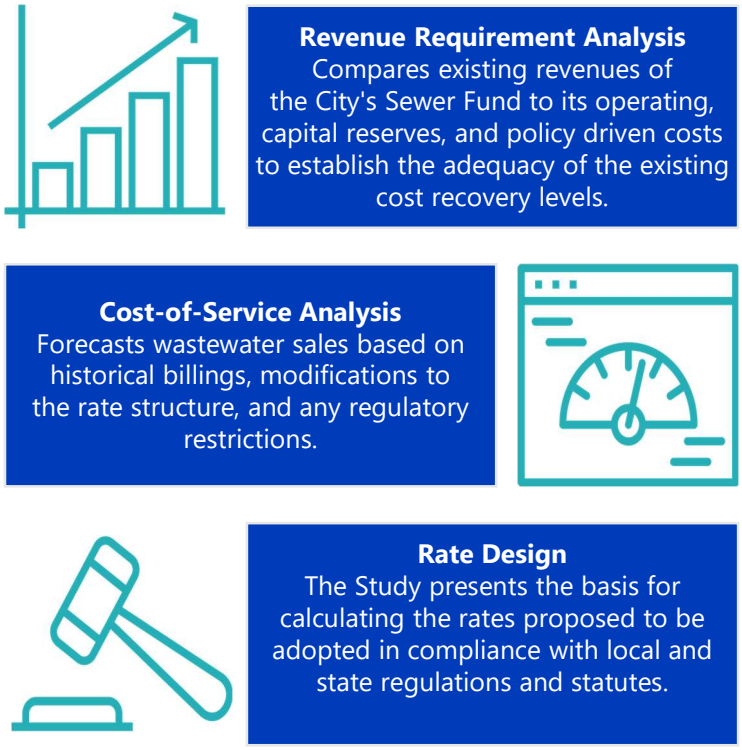

Figure 1 Conceptual Overview of the Rate-Setting Process

While the process is described in a linear step by step approach, it is better understood as an iterative process where the ultimate objective is to balance revenues with costs in an equitable manner for customers. These three processes will form the basis for the rate analyses presented within this report.

1.2.1 Revenue Requirements Component

Revenue requirements are the summation of expenses or costs for handling sewage to return regulatory approved water to the environment. They are determined on an annual basis, and they include:

- **Operations & Maintenance**: Salaries and benefits, chemicals, power, vehicles, equipment, supplies, etc. Some costs vary by the volume of treatment such as chemicals and power, but other costs are fixed and independent of volume such as salaries and vehicles.

- **Capital Improvements and Financing**: Design and construction of new and replacement infrastructure, including labor for City employees and fees for consultants and contractors that perform this work, along with debt service payments, bond issuance costs, etc. including debt coverage requirements.
- **Financial Policies:** Maintenance of financial policies, such as minimum reserve balances, which are supported by user rates.

1.2.2 Revenue Requirement Analysis

There are three sufficiency tests that can be used to define the annual revenue requirement: (1) operating income, (2) debt coverage, and (3) reserves. These sufficiency tests are commonly used to determine the amount of annual revenue that must be generated from an utility's rates.

- **Cash Flow Sufficiency Test:** Assesses whether revenues exceed expenses and looks for a net positive cash flow at the end of each fiscal year. When there is a cash flow deficit, this test recommends additional revenue. When utilities build and maintain a capital reserve that can be drawn down to delay rate increases, the utility may operate in an annual cash flow deficit so long it remains compliant with other financial targets. Thus, meeting the cash flow sufficiency test does not drive rate revenue increases for the City.
- **Debt Service Coverage Test:** Assesses a utility's ability to meet their annual debt service payments. Bond issuances regularly include covenants requiring the agency to maintain sufficient cash flows to meet annual debt service payments plus an additional amount. Typical debt service coverage ratios (DSCR) range from 1.25 times to 1.50 times annual debt service, depending on the terms of debt instrument issued. The City's current DSCR target is 1.25 times (1.25x).
- **Reserve Sufficiency Test:** Measures the ability of the rates to meet the City's minimum and target operating reserve balance based on the reserve policies adopted by the City Council. This reserve target ranges by utility, depending on capital needs and service demands. Prior to this Study, the City did not have a mandated operating reserve target and mitigated some of the need for recent rate increases by drawing down its reserve to fund necessary CIP projects. To prepare for necessary upcoming CIP projects and provide financial security, Carollo recommended the City incrementally increase its operating reserve target to 205 days of O&M expenses by the end of this rate setting period. To minimize rate increase spikes, Carollo proposes a target of 60 days in FY 2027 and FY 2028, 90 days in FY 2029, 180 days in FY 2030, and 205 days in FY 2031 and beyond.

1.2.3 Cost-of-Service Analysis

This step builds a link between the City's cost of sewer service and the proposed rates for each customer. After determining the revenue requirement, this step outlines the cost to collect and treat each unit of sewage to serve each customer.

This process takes each item in the system's budget and allocates the items based on what function is served. For example, some cost items support the ability to treat heavier contamination, while other costs are incurred to provide customer service or to fund infrastructure maintenance. Organizing the budget in terms of end function creates a nexus between the budget item and the rate. This organization bridges the costs incurred by the City and the unique and varied benefits delivered to each customer.

This Study's cost of service analysis uses a three-part allocation process:

1. **Functionalization**: Annual costs are allocated by utility functions, such as flow, BOD strength, TSS strength, fixed costs that do not change in relation to the volume of effluent generated, and customer service costs such as billing administration.
2. **Rate Components**: Utility facilities are designed and sized to meet cost drivers, such as average treatment demands and the number of connections to the system. These services are the basis for allocating the functionalized costs to cost components.
3. **Customer Class**: Cost components are distributed to customer classes in proportion to their burden on the wastewater system. The City measures this by the EDU per unit (for residential customers) or per account (for commercial customers). Customer classes are determined by utilizing the State Water Resources Control Board Revenue Program Guidelines Strength Characteristics.

1.2.4 Rate Design and Calculation

The rate design involves developing a rate structure that proportionately recovers costs from customers. This structure must be resilient enough to handle changing cost and demand scenarios, and flexible enough to meet other unique criteria. By collecting different cost drivers from different rate components, the utility can ideally balance these goals.

The rate calculation is intended to quantify the nexus between the Revenue Requirements and the final rate that customers are charged. This process establishes rates to match the estimated revenue generation with expenditures.

1.3 Forward-Looking Statement

The calculations and forecasts of this analysis are based upon the reasonable projection of existing service costs, customer demands, system operational needs, existing legal agreements, and other similar data provided by the City, as well as Carollo's best understanding of the City's system.

If significant changes occur to any of those or the other factors used in this analysis, the City may need to revisit the analysis. These changes could include unexpected inflation, changes to California law, deviation from the projected wastewater demands, or further regulatory actions by the Governor, Legislature, or the State Water Resources Control Board (SWRCB).

1.4 Existing Rate Structure

Prior to the previous rate study in 2022, the City had not updated rates for 10 years and charged a fully fixed bill for residential customers and fully volumetric bill for commercial customers. The previous rate study updated the rate structure to assess both a fixed and volumetric charge component to each customer. This is the basis to the existing rate schedule shown below:

Table 1 Existing Rate Schedule FY25/26

Customer Class	Fixed Monthly Charges[1]	Volumetric Charges (per HCF[2])
Residential		
House	$28.47	$1.30
Multi-Family[3]	16.12	1.30
Duplex - 2 Meters	9.22	1.30
Duplex - 1 Meter	18.48	1.30
Commercial		
Bars without Dining	$28.47	$0.88
Brewery	28.47	2.06
Car Wash	28.47	0.60
Dorms	28.47	0.75
Hospital & Convalescent	28.47	0.72
Hotels w/o Dining	28.47	0.81
Hotels with Dining	28.47	1.63
Industrial Laundry	28.47	1.87
Laundromat	28.47	0.69
Markets/Bakeries	28.47	2.20
Mortuary	28.47	2.66
Restaurants	28.47	2.18
School	28.47	0.64
All Other	28.47	0.99

Notes:
(1) Residential fixed monthly charge is assessed as dollar per unit per month. Commercial fixed monthly charge is assessed as dollar per EDU per month.
(2) Hundred cubic feet (HCF) is equivalent to 748 gallons of water based on average winter water use (December through March) as reported by CalWater. If the property is not metered by CalWater, or lacks sufficient metered data, then the average consumption for the applicable classification will be used to calculate the volumetric portion of the rate.
(3) Multi-family is defined as structures with adjoining, or common walls. All others shall be single-family (except duplexes).
(4) One EDU is equal to the average wastewater strength and flow from a typical residential home.

1.5 Growth and Inflation Assumptions

The City currently projects that its number of sanitary sewer accounts will increase by approximately 0.5 percent annually throughout the duration of the five-year study period (FY 2027 through FY 2031), a cumulative increase of 2.53 percent. City staff provided baseline revenue and expense data which was escalated by the type of expense. Based on current knowledge of the market, O&M expenses reflect an annual 3.0 percent inflation factor through the Study duration.

SECTION 2 REVENUE REQUIREMENTS

The revenue requirement analysis is a comprehensive test of a utility's fiscal health, scrutinizing the adequacy of current revenues and setting the basis for rate planning. It reviews the utility's revenues, expenses, debts, and reserve policies, assessing the viability of each metric going forward. Where cash flow and balances are insufficient, the revenue requirement analysis determines the additional cash flow needed to meet all funding goals.

The revenue requirement forecast is derived from the City's financial budget, including major cost components, production costs, personnel costs, O&M, and rate supported debt service requirements and capital outlay. Policy requirements are also considered and used to assess revenue sufficiency.

The City provided budgeted revenues and expenditures for FY 2026 along with actual revenues and expenditures for FY 2025. Other financial information included detailed cost projections and allocations for general and administrative and support costs, actual and projected fund balances, and other pertinent financial information.

Based on the financial sufficiency tests described in section 1.2.2, the revenue requirement analysis determines if the City must increase system revenues to meet its ongoing obligations. If revenues are found to be insufficient to meet debt obligation (debt service coverage test) and/or reserve policies (reserve sufficiency test), revenues must be increased to achieve the higher of the needs.

The revenue requirement recommendations presented within this report are based on best available information as of the writing of this report.

2.1 Capital Improvement Projects

Along with funding day-to-day operations, the City must continually invest in the utility's infrastructure to maintain the system's efficiency, reliability, and ability to meet regulatory requirements, and add capacity to support future customers. The CIP includes a variety of capital projects that are required for necessary R&R to existing system assets, meeting regulatory requirements, or adding capacity. Table 2 presents the escalated CIP for the rate-setting period, resulting in an approximate $134.5 million 5-year CIP.

Table 2 Escalated CIP ($ thousands)

Project	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
WPCP Roofs	$205.4	$-	$-	$-	$-
2030 Sewer Pipe Replacement Project	-	-	1,125.5	4,637.1	-
2029 Sewer Pipe Replacement Project	-	1,092.7	4,502.0	-	-
2028 Sewer Pipe Replacement Project	1,060.9	4,370.9	-	-	-
2027 Sewer Pipe Replacement Project	4,243.6	-	-	-	-
2031 Sewer Pipe Replacement Project	-	-	-	1,159.3	4,776.2
Sanitary Sewer Master Plan (SSMP) Update	53.0	54.6	56.3	58.0	59.7
Sewer Enterprise Study	-	-	-	-	358.2
WPCP NPDES Permit Requirements	163.0	167.9	173.0	178.2	183.5

Project	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Stormwater Management Program	159.1	163.9	168.8	173.9	179.1
Annual WPCP Improvements	327.8	337.7	347.8	358.2	369.0
Annual Sewer Maintenance	218.5	225.1	231.9	238.8	246.0
General Plan Implementation	17.1	17.7	18.2	18.7	19.3
Sanitary Sewer System Master Plan Projects - Existing User Contribution	811.6	835.9	861.0	886.8	913.5
Aeration System Upgrades	-	-	2,369.8	-	-
Disinfection, Chemical Building, Solids Thickening and Dewatering, & Plant Power Systems Upgrades	-	-	3,445.8	-	-
Solids Digestion Condition-Driven Upgrades	-	-	-	3,248.1	-
Secondary Treatment, Disinfection, 3W, Solids Dewatering, and Miscellaneous Plant Upgrades	-	-	-	13,355.9	-
WPCP Administration, Maintenance, and Shop Building Improvements	-	-	-	-	3,065.6
Disinfection, Solids Digestion, and Solids Mixing Upgrades	-	-	-	-	8,909.2
Predictive Control Upgrades for Aeration Tank No. 6	545.7	-	-	-	-
Chlorine Testing	-	160.9	-	-	-
WPCP Strategic Plan Update	-	-	850.7	-	-
Effluent Diversion and Northeast Pond Upgrades: Design	-	-	4,936.3	-	-
Modified MLE Process Upgrades: Design	-	-	1,047.9	-	-
Remove abandoned outfall, if required by State Lands Commission	-	-	-	2,770.5	-
Cybersecurity	-	-	-	2,000.0	-
Effluent Diversion and Northeast Pond Upgrades	-	-	-	-	42,737.3
Modified MLE Process Upgrades	-	-	-	-	7,645.3
Tertiary Filtration Upgrades (Planning/Design)	-	-	-	-	561.8
TOTAL ESCALATED CIP	**$7,805.9**	**$7,427.3**	**$20,134.9**	**$29,083.4**	**$70,023.7**

Notes:
(1) Totals may not tie due to rounding.

2.1.1 Financing

To fund these necessary R&R and capacity projects, Carollo recommends that the City use rate revenue, also known as PAYGO, rather than issuing new debt. Table 3 presents the funding sources for this CIP. Carollo modeled the funding strategy to first draw down available cash in the WPCP Capital Reserve Fund 851 while maintaining its reserve target. Next, capital projects are paid by any remaining proceeds from issued debt. Since there are no remaining proceeds from the existing debt, this line is zero. Lastly, any remaining unfunded capital projects are paid by rates.

Table 3 CIP Funding Sources ($ thousands)

Component	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Capital Reserve Fund 851	$-	$7,427.3	$20,134.9	$29,083.4	$68,213.1
Revenue Bonds (Debt)	-	-	-	-	-
Rate-Funded Capital (PAYGO)	7,805.9	-	-	-	1,810.6
TOTAL FUNDED CIP	**$7,805.9**	**$7,427.3**	**$20,134.9**	**$29,083.4**	**$70,023.7**

Notes:
(1) Totals may not tie due to rounding.

2.2 Debt Obligations

The City's current outstanding debt obligation is the 2020 Series Revenue Bond, whose last payment is in FY 2029. The 2020 Bond provided proceeds for project funding throughout the City's utilities, approximately 34.5 percent of which funded wastewater capital projects. The following table summarizes the remaining payments for this bond series.

Table 4 Existing Debt Summary ($ thousands)

Component	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Interest	$136.2	$99.6	$61.1	$20.7	$-
Principal	714.2	750.4	788.3	828.0	-
TOTAL EXISTING DEBT	**$850.3**	**$850.0**	**$849.4**	**$848.7**	**$-**

2.3 Financial Targets

2.3.1 Reserve Policy

The City currently maintains only one reserve fund, Capital Reserve Fund 851, for the wastewater utility. The City has recently drawn this fund down significantly to mitigate rate increases when funding necessary CIP projects. To rebuild this fund for significant upcoming CIP projects and establish financial stability for emergencies, Carollo proposes an incremental adjustment to the reserve target, beginning at 60 days of O&M expenses, to reach 205 days in reserves by the end of the rate setting period in FY 2031.

The reserve balance forecast under the existing rate schedule is outlined in the table below.

Table 5 Reserve Balance Forecast Under Existing Rate Schedule ($ thousands)

Component	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Fund Target (days of O&M)	60 Days	60 Days	90 Days	180 Days	205 Days
Fund Target ($)	$2,149.2	$2,227.1	$3,462.1	$7,176.5	$8,471.7
Beginning Balance	$(1,815.1)	$(7,301.7)	$(13,497.1)	$(32,690.1)	$(60,138.3)
Cash Flow	(5,486.6)	(6,195.4)	(19,193.0)	(27,448.1)	(67,864.4)
Ending Balance	**$(7,301.7)**	**$(13,497.1)**	**$(32,690.1)**	**$(60,138.3)**	**$(128,002.7)**
Surplus/(Deficit) ($)	(9,450.9)	(15,724.2)	(36,152.3)	(67,314.8)	(136,474.4)
Surplus/(Deficit) (days of O&M)	-204 Days	-364 Days	-850 Days	-1,508 Days	-3,097 Days

Notes:
(1) Totals may not tie due to rounding.

As shown, the existing rates are insufficient to meet the reserve target throughout the rate-setting period. The City falls below this target beginning in FY 2027. As this deficit is larger than the debt coverage deficit discussed in section 2.3.2, it drives the proposed rate revenue increase. Following the proposed rate revenue adjustments, the City is expected to meet its reserve targets throughout the duration of the rate-setting period.

Table 6 Reserve Balance Forecast After Proposed Rate Revenue Adjustments ($ thousands)

Component	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenue Adjustments	180.0%	3.0%	3.0%	3.0%	3.0%
Beginning Balance	$(1,815.1)	$(7,301.7)	$17,391.7	$30,916.9	$38,100.2
Cash Flow	19,948.8	26,134.9	15,027.7	8,749.5	(29,599.9)
Ending Balance	**$18,133.7**	**$18,833.2**	**$32,419.4**	**$39,666.4**	**$8,500.3**
Surplus/(Deficit) ($)	15,984.5	16,606.1	28,957.3	32,489.9	28.6
Surplus/(Deficit) (days of O&M)	506 Days	507 Days	843 Days	995 Days	206 Days

Notes:
(1) Totals may not tie due to rounding.

2.3.2 Debt Coverage

The debt coverage test is stipulated in the official statement for each bond series that the City issues. The City's stipulated debt coverage is 1.25x, meaning that revenues minus operating expenditures must be 25 percent greater than the debt service due in that fiscal year.

Not all revenues are allowed in the debt coverage test. For the City, all sewer service charge and capacity charge revenues are included in the calculation. Some non-operating revenues, such as bond proceeds, are not permitted.

The overview of revenues and expenditures included in this test are outlined in the table below. The revenues outlined in the analysis are following the revenue adjustments shown in Table 6, under the assumption that needed increases are reserve-driven and not debt driven. Based on this assumption, the City is projected to exceed its debt coverage ratio requirements.

Table 7 Reserve Balance Forecast After Proposed Rate Revenue Adjustments ($ thousands)

Component	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Eligible Revenues[1]	$17,243.8	$47,519.0	$49,550.3	$51,667.8	$53,875.0
Operating Expenditures	13,074.1	13,548.3	14,040.8	14,552.4	15,083.8
Debt Service	2,464.8	2,463.6	2,462.1	2,460.0	-
1.25x Debt Coverage	616.2	615.9	615.5	615.0	-
Debt Service Coverage Target	**$16,155.1**	**$16,627.8**	**$17,118.5**	**$17,627.4**	**$15,083.8**
Debt Coverage Surplus/(Deficit)	1,088.7	30,891.2	32,431.9	34,040.4	38,791.2
DSCR Before Increase	1.69 x	13.79 x	14.42 x	15.09 x	no debt
Additional Revenues from Increase	$30,522.5	$32,330.3	$34,220.8	$36,197.6	$38,264.5
Less: Rate Increase Delay	(5,087.1)	-	-	-	-
DSCR After Increase	**11.61 x**	**13.97 x**	**14.63 x**	**15.72 x**	**no debt**

Notes:
(1) Eligible revenues exclude $1 million transfer out to Fund 850 for additional debt coverage by other enterprises.
(2) Totals may not tie due to rounding.

2.3.3 Cash Flow

The cash flow test provides the most immediate and straightforward test of financial performance, answering the question "Do revenues exceed expenses?" This offers a quick glance at the long-term viability of the funding plan.

In the City's case, the cash flow test serves as a diagnostic but is not used for rate modeling purposes. Carollo and the City determined that rebuilding reserves is the top priority and will be the primary driver of revenue increases. As a result, negative cash flows do not dictate rate increases in the financial modeling for the City.

However, the results of the cash flow test will still be shown in the Revenue Requirements analysis as an additional piece of information. Negative cash flow can be supported by excess reserves for a single year or even several years, but long term, positive cash flow should be pursued. It provides credit rating agencies a strong signal of the City's financial health and could result in a higher credit rating for potential future debt issuances. Furthermore, it provides cushion to deal with emergency repairs and unanticipated capital expenses. Therefore, this Study looked closely at cash flow and placed significant weight on its forecast but did not use it as a primary driver of rate increases.

2.3.3.1 Uncollectable Debt

A substantial expense that the City must account for is the uncollectable debt from existing unpaying customers. Approximately 10 percent of rate revenue is under-collected. The City's billing is currently contracted to an external company with limited ability to collect debt. In FY 2028, the City anticipates it will begin performing in-house billing and will have the flexibility to increase enforceability, such as utilizing liens or tax roll collection processes. Until then, this uncollectable debt increases the revenue deficit that rate payers must recover.

The following table presents the cash flow prior to proposed rate revenue adjustments.

Table 8 Cash Flow Forecast Under Existing Rate Schedule ($ thousands)

Component	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
REVENUES					
Operating Revenues					
Rate Revenues	$16,957.0	$17,160.4	$17,366.4	$17,574.8	$17,785.7
Other Operating Revenues	2,000.0	-	-	-	-
Non-Operating Revenues					
Fees	$172.0	$174.1	$176.2	$178.3	$180.4
Rental Lease Income	20.0	20.0	20.0	20.0	20.0
Bond Proceeds	-	27,000.0	-	80,000.0	-
Transfers to Fund 850	(1,209.5)	(1,209.5)	(1,209.5)	(209.5)	(209.5)
Uncollectable Debt	(1,695.7)	(514.8)	(521.0)	(527.2)	(533.6)
Total Revenues	**$16,243.8**	**$15,630.2**	**$15,832.1**	**$17,036.3**	**$17,243.0**
EXPENDITURES					
Operating Expenditures					
Salaries & Employee Benefits	$4,974.6	$5,205.7	$5,448.0	$5,701.7	$5,967.6
Materials & Supplies	2,012.3	2,072.7	2,134.8	2,198.9	2,264.9
Purchased Services	2,832.0	2,917.0	3,004.5	3,094.6	3,187.5
Other Expenses	254.8	262.5	270.3	278.5	286.8
Allocations	3,000.4	3,090.4	3,183.1	3,278.6	3,377.0
Non-Operating Expenditures					
Cash Funded Capital (PAYGO)	$7,805.9	$7,427.3	$20,134.9	$29,083.4	$70,023.7
Existing Debt Service	850.3	850.0	849.4	848.7	-
Future Debt Service	-	-	-	-	-
Total Expenditures	**$21,730.4**	**$21,825.6**	**$35,025.1**	**$44,484.5**	**$85,107.5**
Annual Cash Flow Surplus/(Deficit)	**(5,486.6)**	**(6,195.4)**	**(19,193.0)**	**(27,448.1)**	**(67,864.4)**

Notes:
(1) Totals may not tie due to rounding.

Under the proposed rate revenue adjustments, the City sustains an annual cash flow surplus in FY 2027 through FY 2030. In FY 2031, there are significant CIP-driven expenditures which are primarily financed by drawing down the City's Capital Reserve Fund 851. Despite that year's annual cash flow deficit, FY 2031's ending cash balance remains in surplus.

Table 9 Cash Flow Forecast After Proposed Rate Revenue Adjustments ($ thousands)

Component	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenue Adjustments	180.0%	3.0%	3.0%	3.0%	3.0%
Rate Revenues Before Rate Adjustments	$16,957.0	$17,160.4	$17,366.4	$17,574.8	$17,785.7
Rate Revenues from Rate Adjustments	30,522.5	32,330.3	34,220.8	36,197.6	38,264.5
Other Operating Revenue	2,000.0	-	-	-	-
Non-Operating Revenues	(2,713.2)	(1,530.2)	(1,534.3)	(538.4)	(542.6)
Less: Rate Increase Delay[1]	(5,087.1)	-	-	-	-
Less: Expenditures	(21,730.4)	(21,825.6)	(35,025.1)	(44,484.5)	(85,107.5)
Resulting Annual Cash Flow Surplus/(Deficit)	**$19,948.8**	**$26,134.9**	**$15,027.7**	**$8,749.5**	**$(29,599.9)**

Notes:
(1) If accepted, rate recommendations are not anticipated to go into effect until September 1, 2027. Due to the delay, there are two months of revenue that would be collected at the existing rates. The difference is deducted from projected cash flow.
(2) Totals may not tie due to rounding.

SECTION 3 COST-OF-SERVICE ANALYSIS

The Cost-of-Service (COS) analysis takes the revenue requirements outlined in the prior section and allocates them first to City functions and then to customer classes based on usage of the City's system. This approach is based on the proportionality requirements of California's Proposition 218. The goal is to provide a method of allocating costs that is fair and equitable and establishes a clear nexus between the wastewater discharge generated by different customers and the fees they are charged by the City to convey and treat that wastewater.

The City's budget is divided into operating or capital expenses, and those expenses have specific functions as their goal. Those functions are driven by the demands and needs of the City's service area and its customers. For instance, expenses related to chemicals, landfill, and biosolids are allocated among BOD and TSS, whereas costs of testing are allocated to flow, BOD, TSS, fixed costs, and customer service.

Using the industry standard methodology outlined in MOP 27, this analysis took the following steps to perform the cost-of-service allocation:

1. Allocate costs to functional categories (e.g., chemicals, power, maintenance, salaries).
2. Allocate functionalized costs to rate components: flow, BOD treatment, TSS treatment, fixed costs, and customer service.
3. Allocate costs to customer classes using rate component unit costs.

This adjusted cost of service by customer class and their respective units become the basis for designing rates in the final step.

3.1 Rate Component Allocation

Carollo maintained the allocations determined under the previous study to allocate sewer expenses, with slight adjustments. For example, rather than recreating the process of estimating time allocations between the WPCP and the collection system for every individual staff member, the City engineers estimated that 60 percent of WPCP staff time is dedicated to volumetric components and 40 percent to fixed components including customer service. Furthermore, this Study excluded stormwater expenses, as their costs would not be recovered through sewer rates.
After allocating sewer expenses, Carollo applied the resulting total expenditure allocation to the offsetting non-rate revenues to determine the net revenue requirements allocation to rate components, summarized in

Table 10.

Table 10 Sewer Expenditures Allocation Factors and Summary (FY 2027) ($ thousands)

Budget Categories	FY 2027 Budget	Flow	BOD Strength	TSS Strength	Fixed	Fixed - Customer
Salaries - WPCP	$4,577.2	40.0%	10.0%	10.0%	35.0%	5.0%
Salaries - Collection	1,311.1	35.0%	0.0%	0.0%	60.0%	5.0%
Chemicals, Landfill, Biosolids	1,854.1	0.0%	50.0%	50.0%	0.0%	0.0%
Testing, Lab, Weed Control	71.7	55.0%	10.0%	10.0%	20.0%	5.0%
Power	1,179.8	75.0%	10.0%	10.0%	5.0%	0.0%
Maintenance - WPCP	4,063.4	55.0%	10.0%	10.0%	20.0%	5.0%
Maintenance - Collection/Storm	16.9	25.0%	0.0%	0.0%	75.0%	0.0%
Debt	850.3	55.0%	10.0%	10.0%	25.0%	0.0%
Capital Expenditures	7,805.9	40.0%	10.0%	10.0%	40.0%	0.0%
Total Expenditures Allocation	**$21,730.4**	**$9,043.2**	**$2,781.9**	**$2,781.9**	**$6,622.3**	**$501.2**
Less: Non-Rate Revenues	25,749.1	10,047.9	3,352.4	3,352.4	8,356.5	640.0
NET Revenue Requirements Allocation	**$47,479.5**	**$19,091.1**	**$6,134.2**	**$6,134.2**	**$14,978.8**	**$1,141.1**
Allocation (%)	100.0%	40.2%	12.9%	12.9%	31.5%	2.4%
Fixed/Volumetric Percentages	Fixed					**34.0%**
	Volumetric			**66.0%**		

Notes:
(1) Totals may not tie due to rounding.

The City adopted the previous Study's recommendation which transitioned the rate structure from 100 percent of the revenue from fixed charges for residential customers to a combination of 70 percent fixed and 30 percent variable charges, similar to the structure for commercial customers. Of these billing processes, Flow, BOD, and TSS are all variable unit costs. Based on the City's projected costs using FY 2027 as the test year basis for determining allocations, the cost-of-service analysis in this Study resulted in a distribution that is approximately 66 percent fixed and 34 percent variable.

3.2 Customer Class Allocation

Establishing the unit costs for each billing process the City provides is the nexus between total cost of service and customer class costs of service. To calculate system unit costs and allocate costs of service to each customer group, all customer groups need units established for each of the cost components. The total cost of service is multiplied by each class's portion of units for Flow in hundred cubic feet per year (hcf/yr), BOD in pounds per year (lbs/yr), TSS in lbs/yr, Fixed Costs per EDU, and Customer Service Fixed Costs per Account to determine their unique costs of service.

3.2.1 Flow

All accounts are charged based on their average winter water consumption. Each customer's winter consumption is calculated using the combined total of water consumed during the winter months – December, January, February, and March as provided by the water utility. These months reflect the historic months during which outdoor usage is at its lowest and, consequently, water consumption during this period will more accurately reflect water usage that is disposed to the wastewater system over the course of the entire year. Once established, this average wastewater flow remains effective for the following fiscal year, July through June, until it is recalculated after the following winter.

Equation 1 Billed Winter Water Consumption Formula

$$Billed\ Consumption\ (hcf/month) = \frac{Dec\ Flow + Jan\ Flow + Feb\ Flow + March\ Flow\ (HCF)}{4\ months}$$

This winter consumption is annualized when multiplied by three, as shown in Equation 2, which results in the assumed wastewater flow for the year per class.

Equation 2 Annualized Winter Water Consumption Formula

$$Annualized\ Winter\ Water\ Consumption\ (hcf) = (Dec\ Flow + Jan\ Flow + Feb\ Flow + March\ Flow)\ \times 3$$

A flow adjustment factor is applied to the annualized winter consumption based on the actual flow measured at the plant to establish the annual volume for each customer tied to the actual flow received at the plant, which includes inflow and infiltration (I&I). This adjusted flow is only used for COS allocations, not billing purposes. This factor is calculated by dividing the plant's annual actual flow received by the annualized winter consumption billed, as shown in Equation 3.

Equation 3 Flow Adjustment Factor Formula

$$Flow\ Adjustment\ Factor = \frac{Actual\ Annual\ Plant\ Flow\ Received\ (HCF)}{Calculated\ Annualized\ Winter\ Water\ Consumption\ (HCF)}$$

Carollo calculated this factor as 1.06 for 2025, based on the plant's actual 2025 measured flow of 3,401,711 HCF and the calculated annualized winter consumption of 3,198,449 HCF. The summary of average winter water consumption, annualized winter water consumption, and plant-adjusted annual volume are shown in the table below.

Table 11 Flow Summary by Customer Class

Class	2024/2025 Winter Consumption[1]	Annualized Winter Water Consumption	Adjusted Annual Volume
Residential			
Single Family	506,864	1,520,591	1,617,225
Multi-Family	302,057	906,170	963,757
Duplex – 2 Meters	3,093	9,280	9,869
Duplex – 1 Meter	40,574	121,722	129,457
Commercial			
Bars without Dining	95	284	302
Brewery	615	1,846	1,963
Car Wash	3,266	9,798	10,420
Dorms	11,807	35,422	37,673
Hospital & Convalescent	28,754	86,262	91,744
Hotels w/o Dining	7,438	22,314	23,732
Hotels with Dining	34	102	108
Industrial Laundry	4,606	13,819	14,697
Laundromat	2,722	8,166	8,685
Markets/Bakeries	11,865	35,595	37,857
Mortuary	97	292	311
Restaurants	31,815	95,445	101,511
School	19,970	59,910	63,717
All Other	90,477	271,431	288,681
TOTAL FLOW (HCF)	**1,066,150**	**3,198,449**	**3,401,711**
Actual Plant (HCF)			3,401,711
Calculated Adjustment Factor			1.06

Note:
(1) Winter consumption determined from data provided by CalWater of the December 2024 through March 2025 average flow.

3.2.2 Strength Loadings

Customer classes are determined by combining customers with similar flow and strength characteristics into customer classes. The most recent wastewater billing data was used to estimate the amount of sanitary sewer flows that go to the WPCP. For non-residential customers that do not have typical (i.e., residential) effluent strengths, volumetric rates reflect non-residential effluent strengths following the SWRCB Revenue Program Guidelines, measured in milligrams per liter (mg/L):

Table 12 Assumed Strength Factors by Customer Class

Class	BOD Average Strength Factor (mg/L)	TSS Average Strength Factor (mg/L)
Residential[1]	175	175
Commercial		
Bars without Dining	200	200
Brewery	1,000	600
Car Wash	20	150
Dorms	175	175
Hospital & Convalescent	250	100
Hotels w/o Dining	310	120
Hotels with Dining	500	600
Industrial Laundry	670	680
Laundromat	150	110
Markets/Bakeries	800	800
Mortuary	800	800
Restaurants	1,000	600
School	130	100
All Other	175	175

Notes:
(1) Single family, multi-family, and duplexes.

These concentration assumptions can be converted to loading pounds using the following equation.

Equation 4 BOD and TSS Pounds Formula

$$Pounds\ (lbs) = Flow\ (gpd) \times Concentration\ (mg/L) \times 8.345 \times 10^{-6}$$

The Study converts BOD and TSS into pounds using the adjusted flow determined in

Table 11. Similar to the adjustment required to tie assumptions to actual flow readings at the plant, BOD and TSS adjustment factors are calculated and applied to these loadings as well based on the modified adjustment factor formula shown below.

Equation 5 BOD Adjustment Factor Formula

$$BOD\ Adjustment\ Factor = \frac{Actual\ Annual\ Plant\ BOD\ Received\ (lbs)}{Calculated\ BOD\ using\ Annualized\ Water\ Consumption\ (lbs)}$$

Equation 6 TSS Adjustment Factor Formula

$$TSS\ Adjustment\ Factor = \frac{Actual\ Annual\ Plant\ TSS\ Received\ (lbs)}{Calculated\ TSS\ using\ Annualized\ Water\ Consumption\ (lbs)}$$

Carollo calculated the BOD adjustment factor as 0.44, which is in line with the previous Study's determination of 0.50, and the TSS adjustment factor as 0.67, which is also similar to the previous Study's 0.61.

Table 13 Calculated and Adjusted BOD and TSS by Customer Class (lbs/year)

Class	Unadjusted BOD	Adjusted BOD	Unadjusted TSS	Adjusted TSS
Residential				
Single Family	1,766,716	777,357	1,766,716	1,178,819
Multi-Family	1,052,844	463,252	1,052,844	702,497
Duplex – 2 Meters	10,782	4,744	10,782	7,194
Duplex – 1 Meter	141,424	62,227	141,424	94,363
Commercial				
Bars without Dining	377	166	377	252
Brewery	12,256	5,393	7,353	4,906
Car Wash	1,301	572	9,757	6,511
Dorms	41,155	18,108	41,155	27,460
Hospital & Convalescent	143,178	62,998	57,271	38,213
Hotels w/o Dining	45,926	20,207	17,778	11,862
Hotels with Dining	339	149	406	271
Industrial Laundry	61,470	27,047	62,388	41,628
Laundromat	8,132	3,578	5,964	3,979
Markets/Bakeries	189,055	83,185	189,055	126,145
Mortuary	1,551	682	1,551	1,035
Restaurants	633,680	278,820	380,208	253,689
School	51,708	22,752	39,775	26,540
All Other	315,366	138,761	315,366	210,424
TOTAL (lbs/year)	**4,477,259**	**1,969,999**	**4,100,171**	**2,735,787**
Actual Plant (lbs/year)		1,969,999		2,735,787

Class	Unadjusted BOD	Adjusted BOD	Unadjusted TSS	Adjusted TSS
Adjustment Factor		0.44		0.67

3.2.2.1 Restaurants

The COS analysis prior to the 2022 rate study relied on out-of-date strength loadings assumptions. As the basis for historical rates assessed to restaurant customers, this caused an imbalance between the costs recovered from restaurants and their proportional demand of the system. After this history of underpaying, the 2022 rate study remedied the issue by updating the loadings assumptions which realigned restaurants with their system impact. This Study maintains those updated loadings assumptions.

3.2.3 EDU Calculation

An EDU is the average SFR flow, pounds of BOD, and pounds of TSS in an average monthly sewer contribution, as determined by winter flow. Industry standards acknowledge that multi-family customers contribute slightly less than the average SFR customer. Therefore, multi-family residential customers are assumed to have 0.8 EDU and duplex customers are assumed to have 0.9 EDU. Since Commercial customers have varying flow and strength factors, Chico calculates an EDU for each Commercial customer based on its proportion of flow, BOD, and TSS compared to a single SFR customer using the following formula:

Equation 7 Commercial EDU Calculation Formula

$$EDU = \left(\frac{Annualized\ Water\ Consumption\ (HCF)\ /\ 12}{SFR\ Monthly\ Flow\ (HCF)} \times 60\%\right) + \left(\frac{Adjusted\ Annual\ BOD\ (lbs)\ /\ 12}{SFR\ Monthly\ BOD\ (lbs)} \times 20\%\right) + \left(\frac{Adjusted\ Annual\ TSS\ (lbs)\ /\ 12}{SFR\ Monthly\ TSS\ (lbs)\ /\ 12} \times 20\%\right)$$

The monthly flow and loadings assumptions for a single SFR customer are calculated by dividing the adjusted annual volume (hcf), BOD (lbs), or TSS (lbs) by the total number of SFR accounts. These are converted into a monthly figure after dividing by 12. The result is shown in Table 14 and used as the EDU basis for all Commercial EDU calculations.

Table 14 One EDU Flow and Loadings Calculation (2025)

Formula Component	Flow (HCF)	BOD (lbs)	TSS (lbs)
SFR Annual Adjusted Amount	1,617,225	777,357	1,178,819
SFR Accounts	18,708	18,708	18,708
Months	12	12	12
Amount per Month per EDU	7.20 (HCF/month)	3.46 (lbs/month)	5.25 (lbs/month)

3.2.3.1 EDU Calculation Example

It can be helpful to understand the EDU calculation using an example customer. Assume a restaurant with a relative medium flow contribution of 25.0 HCF per month (equivalent to 18,701 gallons per month). All restaurants are assumed to have a 1,000 mg/L BOD and 600 mg/L TSS concentration of sewer returns, as presented in

Table 12. Using Equation 4 (modified to include the adjustment factor), the calculated BOD and TSS in pounds contributed by this customer per month are shown below:

Equation 8 Example Commercial Calculation: Adjusted BOD (lbs/month)

$$68.63\ BOD\ lbs/month = 18{,}701 gpd\ \times 1{,}000\ mg/L\ \times 8.345 \times 10^{-6}\ \times 0.44\ BOD\ Adjustment\ Factor$$

Equation 9 Example Commercial Customer Calculation: Adjusted TSS (lbs/month)

$$62.44\ TSS\ lbs/month = 18{,}701 gpd\ \times 600\ mg/L\ \times 8.345 \times 10^{-6}\ \times 0.66\ BOD\ Adjustment\ Factor$$

These loadings are used in the EDU formula to calculate the customer-specific EDU for billing purposes:

Equation 10 Example Commercial Customer EDU Calculation Formula

$$8.42\ EDU = \left(\frac{25\ HCF}{SFR\ 7.20\ HCF} \times 60\%\right) + \left(\frac{68.63\ BOD\ lbs/month}{SFR\ 3.46\ BOD\ lbs/month} \times 20\%\right) + \left(\frac{62.44\ TSS\ lbs/month}{SFR\ 5.25\ TSS\ lbs/month} \times 20\%\right)$$

3.2.4 Class Units Summary

The following table summarizes the resulting units, converted as necessary, for each class:

Table 15 Units Summary by Class

Class	Adjusted Annual Volume (HCF)	BOD (lbs)	TSS (lbs)	EDU	Accounts
Residential					
Single Family	1,617,225	777,357	1,178,819	18,712	18,708
Multi-Family	963,757	463,252	702,497	10,749	1,673
Duplex – 2 Meters	9,869	4,744	7,194	110	138
Duplex – 1 Meter	129,457	62,227	94,363	1,444	899
Commercial					
Bars without Dining	302	166	252	4	1
Brewery	1,963	5,393	4,906	54	3
Car Wash	10,420	572	6,511	91	11
Dorms	37,673	18,108	27,460	420	8
Hospital & Convalescent	91,744	62,998	38,213	1,023	56
Hotels w/o Dining	23,732	20,207	11,862	290	9
Hotels with Dining	108	149	271	2	1
Industrial Laundry	14,697	27,047	41,628	358	2
Laundromat	8,685	3,578	3,979	87	6
Markets/Bakeries	37,857	83,185	126,145	1,048	36
Mortuary	311	682	1,035	9	2
Restaurants	101,511	278,820	253,689	2,810	185
School	63,717	22,752	26,540	610	69
All Other	288,681	138,761	210,424	3,220	1,199
Total System Units	**3,401,711**	**1,969,999**	**2,735,787**	**41,040**	**23,006**

3.2.5 Customer Class Allocation Summary

Once the units have been determined and converted, as necessary, the revenue requirements can be allocated to each customer class. The following table summarizes the class allocation, and further calculation details are provided in the appendix.

Table 16 Functional Costs Allocated by Class ($ thousands)

Class	Flow Costs	BOD Costs	TSS Costs	Fixed Costs	Fixed - Customer Costs
Revenue Requirements	**$9,293.0**	**$710.4**	**$11,332.2**	**$3,745.6**	**$3,745.6**
Residential					
Single Family	4,237.1	577.7	5,387.5	1,478.0	1,614.0
Multi-Family	2,434.0	51.7	3,210.6	880.8	961.8
Duplex – 2 Meters	24.9	4.3	32.9	9.0	9.8
Duplex – 1 Meter	326.9	27.8	431.3	118.3	129.2
Commercial					
Bars without Dining	0.8	0.0	1.0	0.3	0.3
Brewery	12.3	0.1	6.5	10.3	6.7
Car Wash	20.7	0.3	34.7	1.1	8.9
Dorms	95.1	0.2	125.5	34.4	37.6
Hospital & Convalescent	231.7	1.7	305.6	119.8	52.3
Hotels w/o Dining	65.6	0.3	79.1	38.4	16.2
Hotels with Dining	0.5	0.0	0.4	0.3	0.4
Industrial Laundry	81.1	0.1	49.0	51.4	57.0
Laundromat	19.6	0.2	28.9	6.8	5.4
Markets/Bakeries	237.3	1.1	126.1	158.2	172.7
Mortuary	1.9	0.1	1.0	1.3	1.4
Restaurants	636.2	5.7	338.2	530.1	347.3
School	138.0	2.1	212.3	43.3	36.3
All Other	729.1	37.0	961.7	263.8	288.1

SECTION 4 RATE DESIGN

The wastewater rate design analysis determines how the costs allocated to each class are recovered from each customer through specified wastewater rates. The focus of this process is to achieve full cost recovery and substantiate that customers are paying their fair and proportionate share of system costs.

Once costs have been equitably allocated to each functional component, rates can be designed to cover those costs. In determining the appropriate rate level and structure, Carollo discussed rate objectives and utility implications with City staff. Along with appropriately allocating costs between customer classes and to individual customers, staff conveyed the need to continue to collect a similar level of fixed revenue in recognition of fixed costs. As such, the City elected to maintain the existing rate structure, updated to recover 60 percent through fixed charges to cover fixed costs and 40 percent through volumetric rates for system demands.

4.1 Fixed Monthly Charges

A monthly fixed charge is a cost recovery mechanism that is generally included in the ratee structure to recover the utility's fixed expenditures, such as metering, testing, and customer related costs. These costs also include a portion of the capacity-related cost to provide a stable source of revenue independent of monthly wastewater flows. The proposed fixed charge primarily recovers the customer service and other fixed cost components of the revenue requirements. It is assessed to Residential customers (single family, multi-family, and duplex) on a per unit basis and to Commercial customers on a per EDU basis. The remaining residential customers are charged proportionately to their EDU, which is 0.80 EDU for multi-family and 0.90 EDU for duplex.

Carollo determined the fixed charge to be $57.00 (per unit or per EDU, depending on class), which recovers 60 percent of revenue through fixed charges. This cost recovery percentage is distinct from the cost allocation shown in Table 10. The following table presents the existing and recommended monthly fixed charge. It also includes a calculation of the projected revenue under these charges by multiplying the number of units or EDUs by the monthly fixed charge for each month (12).

Table 17 Recommended Monthly Fixed Charges

Customer Class	Number of Units or EDUs	Recommended Monthly Fixed Charge	Projected Revenue from Fixed Charges[1]
Residential			
Single Family	18,712	$57.00/Unit	$12,799.1
Multi-Family	13,724	$45.60/Unit	7,509.8
Duplex – 2 Meters	138	$51.30/Unit	85.0
Duplex – 1 Meter	1,811	$51.30/Unit	1,114.6
Commercial			
Bars without Dining	4	$57.00/EDU	2.4
Brewery	54	$57.00/EDU	37.2
Car Wash	91	$57.00/EDU	62.5
Dorms	420	$57.00/EDU	287.4
Hospital & Convalescent	1,023	$57.00/EDU	699.9
Hotels w/o Dining	290	$57.00/EDU	198.2
Hotels with Dining	2	$57.00/EDU	1.6
Industrial Laundry	358	$57.00/EDU	245.0
Laundromat	87	$57.00/EDU	59.2
Markets/Bakeries	1,048	$57.00/EDU	716.7
Mortuary	9	$57.00/EDU	5.9
Restaurants	2,810	$57.00/EDU	1,921.8
School	610	$57.00/EDU	416.9
All Other	3,220	$57.00/EDU	2,202.3
TOTAL REVENUE			**$28,365.6**

Notes:
(1) $ thousands

4.2 Volumetric Rates

The recommended fixed charges presented in

Table 17 are projected to recover $28.4 million of its revenue requirements through fixed charges in FY 2027. The remaining $21.0 million, therefore, must be recovered through volumetric rates. For each customer class, Carollo divided the remaining revenue requirements unrecovered from fixed charges by their respective annualized winter consumption, and rounded up to the nearest cent. The annualized winter consumption is used instead of the adjusted annual volume presented in Table 15 because it is more closely linked to billed system use.

This Study considered all Residential customers together and summed their respective units and revenue requirements. The results are summarized in the table below:

Table 18 Recommended FY 2027 Volumetric Rates

Customer Class	Annualized Winter Consumption (HCF)	Remaining Revenue Requirements[1,2]	Recommended Volumetric Rate ($/HCF)
Residential	2,557,763	$9,098.2	$5.74
Commercial			
Bars without Dining	284	$1.7	$5.95
Brewery	1,846	21.6	$11.72
Car Wash	9,798	46.2	$4.72
Dorms	35,422	195.8	$5.53
Hospital & Convalescent	86,262	473.1	$5.49
Hotels w/o Dining	22,314	130.7	$5.86
Hotels with Dining	102	1.0	$9.82
Industrial Laundry	13,819	145.8	$10.56
Laundromat	8,166	41.5	$5.09
Markets/Bakeries	35,595	421.7	$11.86
Mortuary	292	3.5	$12.15
Restaurants	95,445	1,119.3	$11.73
School	59,910	296.9	$4.96
All Other	271,431	1,556.4	$5.74
TOTAL	**3,198,449**	**$20,984.8**	

Notes:
(1) Recoverable through volumetric rates.
(2) $ thousands.

4.3 Rate Summary

This report presented the revenue requirements and resulting rates for a scenario that issues no debt to cover the planned CIP for necessary R&R system improvements, regulatory requirements, and capacity upgrades. While there is a significant Year 1 increase required under this scenario, the remaining years are recommended to increase annually by 3 percent to adjust for inflation and maintain reserves to fund other system improvements and emergencies. Since these recommended rates are calculated based on a revenue requirement that considers inflation, Carollo does not recommend any additional annual adjustment. Table 19 and

Table 20 present the rate schedules recommended under this modeled revenue increase for the following five years of the rate-setting period.

Table 19 Existing and Recommended Monthly Fixed Charge ($/Unit or $/EDU) (2026-2031)

Customer Class	Existing	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenue Adjustments		*180.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*
Residential						
Single Family	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Multi-Family	$16.12	$45.60	$46.97	$48.38	$49.83	$51.32
Duplex – 2 Meters	$9.22	$51.30	$52.84	$54.43	$56.06	$57.74
Duplex – 1 Meter	$18.48	$51.30	$52.84	$54.43	$56.06	$57.74
Commercial						
Bars without Dining	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Brewery	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Car Wash	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Dorms	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Hospital & Convalescent	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Hotels w/o Dining	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Hotels with Dining	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Industrial Laundry	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Laundromat	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Markets/Bakeries	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Mortuary	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
Restaurants	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
School	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15
All Other	$28.47	$57.00	$58.71	$60.47	$62.28	$64.15

Table 20 Existing and Recommended Volumetric Rates ($/HCF) (2026-2031)

Customer Class	Existing	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenue Adjustments		*180.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*
Residential						
Single Family	$1.30	$5.74	$5.91	$6.09	$6.27	$6.46
Multi-Family	$1.30	$5.74	$5.91	$6.09	$6.27	$6.46
Duplex – 2 Meters	$1.30	$5.74	$5.91	$6.09	$6.27	$6.46
Duplex – 1 Meter	$1.30	$5.74	$5.91	$6.09	$6.27	$6.46
Commercial						
Bars without Dining	$0.88	$5.95	$6.13	$6.31	$6.50	$6.70
Brewery	$2.06	$11.72	$12.07	$12.43	$12.80	$13.18
Car Wash	$0.60	$4.72	$4.86	$5.01	$5.16	$5.31
Dorms	$0.75	$5.53	$5.70	$5.87	$6.05	$6.23
Hospital & Convalescent	$0.72	$5.49	$5.65	$5.82	$5.99	$6.17
Hotels w/o Dining	$0.81	$5.86	$6.04	$6.22	$6.41	$6.60
Hotels with Dining	$1.63	$9.82	$10.11	$10.41	$10.72	$11.04
Industrial Laundry	$1.87	$10.56	$10.88	$11.21	$11.55	$11.90
Laundromat	$0.69	$5.09	$5.24	$5.40	$5.56	$5.73
Markets/Bakeries	$2.20	$11.86	$12.22	$12.59	$12.97	$13.36
Mortuary	$2.66	$12.15	$12.51	$12.89	$13.28	$13.68
Restaurants	$2.18	$11.73	$12.08	$12.44	$12.81	$13.19
School	$0.64	$4.96	$5.11	$5.26	$5.42	$5.58
All Other	$0.99	$5.74	$5.91	$6.09	$6.27	$6.46

SECTION 5 BILL IMPACTS

The City recognizes how the revenue requirements of maintaining and expanding the utility's system impacts its customers. The City requested that this Study include a review of the bill impact on the average customer in each class and, for restaurants, a range of customers by high, medium, and low flow assumptions. Table 21 summarizes the calculated bill under existing and recommended FY 2027 rates. FY 2027 is shown as the first recommended rate year under this proposed structure.

Table 21 Bill Impacts Under Existing and Proposed Rates ($/HCF) (2026-2027)

Customer Class	Monthly HCF	EDU[1]	Existing Bill	FY 2027 Bill	Change ($)	Change (%)
Residential						
Single Family	7.2		$37.83	$98.28	$60.44	↑ 159.75%
Multi-Family	5.5		$23.27	$77.13	$53.86	↑ 231.41%
Duplex – 2 Meters	5.6		$16.50	$83.41	$66.90	↑ 405.36%
Duplex – 1 Meter	5.6		$25.76	$83.40	$57.64	↑ 223.73%
Commercial						
Bars without Dining	23.7	3.5 / 3.2	$111.10	$338.54	$227.44	↑ 204.72%
Brewery	51.3	17.3 / 17.7	$608.29	$1,585.34	$977.05	↑ 160.62%
Car Wash	74.2	8.2 / 6.9	$242.39	$816.77	$574.37	↑ 236.96%
Dorms	369.0	51.2 / 46.2	$1,591.78	$4,959.27	$3,367.49	↑ 211.55%
Hospital & Convalescent	128.4	17.8 / 16.1	$549.94	$1,718.89	$1,168.96	↑ 212.56%
Hotels w/o Dining	206.6	31.3 / 28.8	$986.24	$2,994.54	$2,008.30	↑ 203.63%
Hotels with Dining	8.5	2.2 / 2.2	$75.97	$208.24	$132.27	↑ 174.12%
Industrial Laundry	575.8	171.2 / 173	$6,002.56	$15,833.08	$9,830.52	↑ 163.77%
Laundromat	113.4	14.1 / 12.4	$431.54	$1,381.12	$949.58	↑ 220.04%
Markets/Bakeries	82.4	27.8 / 28.4	$988.95	$2,558.96	$1,570.01	↑ 158.75%
Mortuary	12.2	4.1 / 4.2	$151.61	$381.34	$229.73	↑ 151.53%
Restaurants (Low)	15.0	5.1 / 5.2	$179.74	$464.06	$284.32	↑ 158.18%
Restaurants (Med)	25.0	8.4 / 8.6	$299.57	$773.43	$473.86	↑ 158.18%
Restaurants (High)	71.2	24 / 24.5	$853.18	$2,202.74	$1,349.56	↑ 158.18%
School	72.4	8.7 / 7.5	$260.85	$852.78	$591.93	↑ 226.92%
All Other	18.9	2.6 / 2.4	$85.91	$257.33	$171.42	↑ 199.53%

Note:
(1) Commercial EDUs are shown as Current Study / Previous Study.

The bill change percentage becomes most relevant when reflecting on the 180 percent rate revenue increase determined in the revenue requirement analysis for FY 2027. Single family residential customers and a significant portion of commercial customers are projected to have a bill increase less than the overall revenue increase required. Other than Duplex – 2 Meters, whose increase is driven by a change in billing structure which standardizes how all Duplex customers are billed, the largest impact is to multi-family and car wash customers.

Due to the varying demands each customer class places on the system as reflected in the COS analysis, bill impacts vary by customer class. Therefore, despite the overall 180 percent revenue increase requirement for FY 2027, the median bill increase is 201.58 percent.

Figure 2 illustrates the bill impact over the duration of the rate-setting period on average for single family and multi-family customers as well as high, medium, and low flow restaurants using the HCF assumptions listed in Table 21.

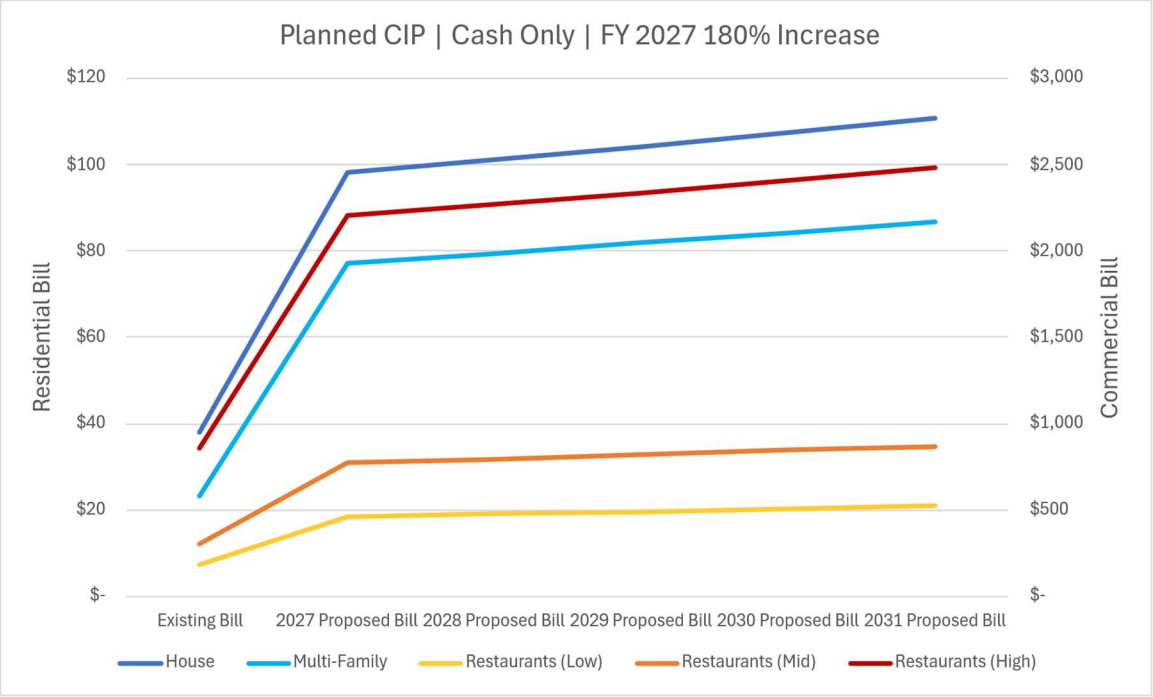

Figure 2 Bill Impact for Average Residential and Restaurant Customers

SECTION 6 ALTERNATIVE SCENARIO

This report details a scenario where CIP and other expenditures are recovered using a rate schedule that front-loads the required rate revenue increase in such a way that the remaining rate-setting period only requires a revenue increase to account for inflation. However, this approach is not the only option for recovering necessary revenue. For example, some utilities choose to perform incremental increases over the rate setting period, or issue debt to cover significant CIP costs, which helps mitigate upfront costs, smooths rates, and insulates customers from extreme rate fluctuations.

6.1 Alternative Revenue Requirement

By request, Carollo modeled a scenario that smooths rate revenue increases incrementally across the rate-setting period without issuing additional debt. Under this alternative proposed rate revenue adjustments, the City still sustains a cash flow surplus and meets its debt coverage and reserve targets throughout the rate-setting period.

Table 22 Cash Flow Forecast After Incremental Proposed Rate Revenue Adjustments ($ thousands)

Component	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenue Adjustments	70.0%	35.0%	30.0%	30.0%	30.0%
Rate Revenues Before Rate Adjustments	$16,957.0	$17,160.4	$17,366.4	$17,574.8	$17,785.7
Rate Revenues from Rate Adjustments	11,869.9	22,222.8	34,446.2	50,589.8	71,891.7
Other Operating Revenue	2,000.0	-	-	-	-
Non-Operating Revenues	(2,713.2)	(1,530.2)	(1,534.3)	(538.4)	(542.6)
Less: Rate Increase Delay[1]	(1,978.3)	-	-	-	-
Less: Expenditures	(21,730.4)	(21,825.6)	(35,025.1)	(44,484.5)	(85,107.5)
Resulting Annual Cash Flow Surplus/(Deficit)	**$4,405.0**	**$16,027.4**	**$15,253.1**	**$23,141.7**	**$4,027.3**
Ending Cash Balance Surplus/(Deficit)	$2,589.8	$8,725.7	$13,768.4	$24,953.3	$13,250.3
DSCR	5.30 x	9.87 x	14.72 x	21.57 x	no debt
Days of O&M	72 Days	235 Days	358 Days	626 Days	321 Days

Notes:
(1) If accepted, rate recommendations are not anticipated to go into effect until September 1, 2027. Due to the delay, there are two months of revenue that would be collected at the existing rates. The difference is deducted from projected cash flow.
(2) Totals may not tie due to rounding.

6.2 Alternative Cost of Service

This alternative rate revenue increase schedule only has a slight impact on the cost-of-service analysis, since it takes cash flow into consideration. The resulting fixed and volumetric percentage split are within a percentage of the original result. No other changes are made to the cost-of-service analysis or calculation approach.

6.3 Alternative Rate Schedule

The alternative rate schedule maintains the same methodology and calculation approach as discussed in Section 4. However, since the revenue requirement for FY 2027 is reduced, so are the rates. The following table summarizes the net revenue requirements by customer class under this scenario and the resulting calculated monthly fixed charges and volumetric rates.

Table 23 Alternative Recommended Rates and Charges Schedule (FY 2027)

Customer Class	Net Revenue Requirements[1]	Alternative Monthly Fixed Charge	Alternative Volumetric Rate ($/hcf)
Residential			
Single Family	$13,294.3	$35.00/Unit	$3.42
Multi-Family	7,538.8	$28.00/Unit	
Duplex – 2 Meters	80.9	$31.50/Unit	$3.55
Duplex – 1 Meter	1,033.5	$31.50/Unit	$7.10
Commercial			$2.80
Bars without Dining	$2.5	$35.00/Unit	$3.29
Brewery	35.9	$35.00/Unit	$3.27
Car Wash	65.8	$35.00/Unit	$3.50
Dorms	292.9	$35.00/Unit	$5.93
Hospital & Convalescent	711.2	$35.00/Unit	$6.38
Hotels w/o Dining	199.6	$35.00/Unit	$3.02
Hotels with Dining	1.6	$35.00/Unit	$7.18
Industrial Laundry	238.6	$35.00/Unit	$7.36
Laundromat	61.0	$35.00/Unit	$7.10
Markets/Bakeries	695.4	$35.00/Unit	$2.94
Mortuary	5.8	$35.00/Unit	$3.42
Restaurants	1,857.6	$35.00/Unit	$3.42
School	432.0	$35.00/Unit	
All Other	2,279.7	$35.00/Unit	$3.55
TOTAL REVENUE REQUIREMENTS	**$28,826.8**		

Notes:
(1) $ thousands

The calculated alternative rates and charges schedule for the full rate-setting period is shown in Table 24 and Table 25 tables below.

Table 24 Existing and Alternative Recommended Monthly Fixed Charge ($/Unit or $/EDU) (2026-2031)

Customer Class	Existing	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenue Adjustments		*70.0%*	*35.0%*	*30.0%*	*30.0%*	*30.0%*
Residential						
Single Family	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Multi-Family	$16.12	$28.00	$37.80	$49.14	$63.88	$83.04
Duplex – 2 Meters	$9.22	$31.50	$42.53	$55.29	$71.88	$93.44
Duplex – 1 Meter	$18.48	$31.50	$42.53	$55.29	$71.88	$93.44
Commercial						
Bars without Dining	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Brewery	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Car Wash	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Dorms	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Hospital & Convalescent	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Hotels w/o Dining	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Hotels with Dining	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Industrial Laundry	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Laundromat	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Markets/Bakeries	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Mortuary	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
Restaurants	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
School	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82
All Other	$28.47	$35.00	$47.25	$61.43	$79.86	$103.82

Table 25 Existing and Alternative Recommended Volumetric Rates ($/HCF) (2026-2031)

Customer Class	Existing	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenue Adjustments		*70.0%*	*35.0%*	*30.0%*	*30.0%*	*30.0%*
Residential						
Single Family	$1.30	$3.42	$4.62	$6.01	$7.81	$10.15
Multi-Family	$1.30	$3.42	$4.62	$6.01	$7.81	$10.15
Duplex – 2 Meters	$1.30	$3.42	$4.62	$6.01	$7.81	$10.15
Duplex – 1 Meter	$1.30	$3.42	$4.62	$6.01	$7.81	$10.15
Commercial						
Bars without Dining	$0.88	$3.55	$4.79	$6.23	$8.10	$10.53
Brewery	$2.06	$7.10	$9.59	$12.47	$16.21	$21.07
Car Wash	$0.60	$2.80	$3.78	$4.91	$6.38	$8.29
Dorms	$0.75	$3.29	$4.44	$5.77	$7.50	$9.75
Hospital & Convalescent	$0.72	$3.27	$4.41	$5.73	$7.45	$9.69
Hotels w/o Dining	$0.81	$3.50	$4.73	$6.15	$8.00	$10.40
Hotels with Dining	$1.63	$5.93	$8.01	$10.41	$13.53	$17.59
Industrial Laundry	$1.87	$6.38	$8.61	$11.19	$14.55	$18.92
Laundromat	$0.69	$3.02	$4.08	$5.30	$6.89	$8.96
Markets/Bakeries	$2.20	$7.18	$9.69	$12.60	$16.38	$21.29
Mortuary	$2.66	$7.36	$9.94	$12.92	$16.80	$21.84
Restaurants	$2.18	$7.10	$9.59	$12.47	$16.21	$21.07
School	$0.64	$2.94	$3.97	$5.16	$6.71	$8.72
All Other	$0.99	$3.42	$4.62	$6.01	$7.81	$10.15

6.4 Alternative Bill Impact

Figure 3 illustrates the bill impact under the alternative incremental revenue increase schedule over the duration of the rate-setting period. It is calculated using the same assumptions in Figure 3 for average single family and multi-family customers as well as high, medium, and low flow restaurants.

Table 26 Bill Impacts Under Existing and Proposed Incremental Rates ($/HCF) (2026-2031)

Customer Class	Existing Bill	FY 2027 Bill	FY 2028 Bill	FY 2029 Bill	FY 2030 Bill	FY 2031 Bill
Residential						
Single Family	$37.83	$59.64	$80.53	$104.72	$136.12	$176.94
Multi-Family	$23.27	$46.82	$63.22	$82.21	$106.85	$138.89
Duplex – 2 Meters	$16.50	$50.66	$68.42	$88.97	$115.64	$150.32
Duplex – 1 Meter	$25.76	$50.66	$68.41	$88.96	$115.63	$150.30
Commercial						
Bars without Dining	$111.10	$205.57	$277.46	$360.79	$469.05	$609.77
Brewery	$608.29	$968.82	$1,308.17	$1,700.85	$2,211.08	$2,874.28
Car Wash	$242.39	$494.23	$667.21	$867.12	$1,127.04	$1,464.87
Dorms	$1,591.78	$3,006.20	$4,057.82	$5,274.68	$6,856.76	$8,913.90
Hospital & Convalescent	$549.94	$1,043.28	$1,407.85	$1,829.91	$2,379.02	$3,093.41
Hotels w/o Dining	$986.24	$1,818.45	$2,455.94	$3,193.09	$4,152.08	$5,397.76
Hotels with Dining	$75.97	$127.07	$171.58	$223.04	$289.93	$376.92
Industrial Laundry	$6,002.56	$9,665.60	$13,046.83	$16,960.01	$22,049.91	$28,668.10
Laundromat	$431.54	$836.79	$1,130.01	$1,468.63	$1,909.24	$2,482.38
Markets/Bakeries	$988.95	$1,563.36	$2,110.29	$2,743.76	$3,566.91	$4,636.71
Mortuary	$151.61	$233.01	$314.61	$408.99	$531.74	$691.27
Restaurants (Low)	$179.74	$283.41	$382.68	$497.55	$646.81	$840.82
Restaurants (Med)	$299.57	$472.35	$637.80	$829.25	$1,078.01	$1,401.36
Restaurants (High)	$853.18	$1,345.25	$1,816.45	$2,361.71	$3,070.18	$3,991.07
School	$260.85	$516.00	$696.67	$905.64	$1,177.49	$1,530.53
All Other	$85.91	$156.15	$210.86	$274.21	$356.42	$463.30

Note:
(1) Commercial EDUs are shown as Current Study / Previous Study.

When revenue adjustments are spread over multiple years rather than front-loaded in Year 1, the cumulative effect can be a significantly higher rate by the end of Year 5. Rate structures that absorb the adjustment earlier and then stabilize to keep pace with inflation minimize long-term impacts, while substantial incremental increases compound over time and result in a higher customer bill in Year 5.

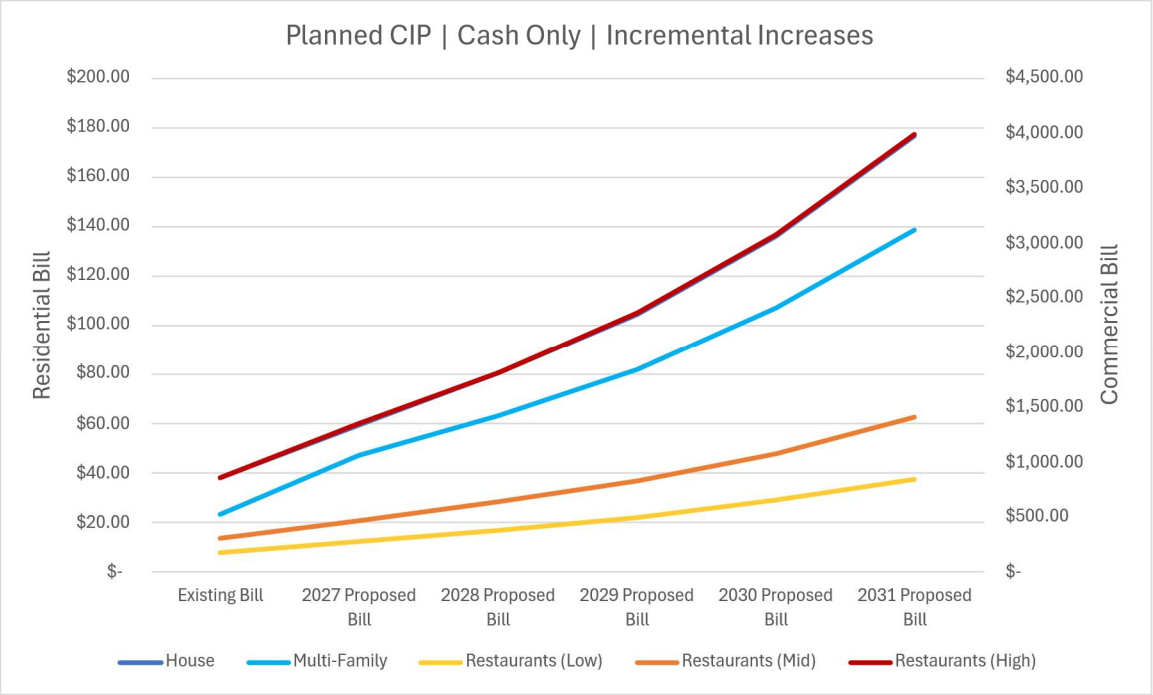

Figure 3 Bill Impact for Average Residential and Restaurant Customers (Incremental Rates)

SECTION 7 CONCLUSION

The City should implement the rates and charges proposed for FY 2027 through FY 2031 that are detailed in the main body of this report, under a 180 percent rate revenue increase in FY 2027. The increased revenues generated by the rates will allow the City to meet its financial commitments, achieve necessary capital funding objectives, and react to the large inflationary increases in costs that have occurred in the last several years. Furthermore, despite a higher Year 1 rate increase, the cumulative rate increase over five years is still lower than the alternative rate schedule.

Note that the recommended rates were calculated under the assumptions presented in this report to generate sufficient revenue for the City's needs. Projected rate revenue is based on rates be implemented on September 1st in FY 2027 and then July 1 of each year thereafter. Regulatory requirements, economic conditions, weather events, system emergencies, and other factors can influence the revenue recovered and/or required for sufficiently maintaining the utility. Therefore, these projections should be revisited annually and updated as necessary as conditions change.