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2026 UTILITY RATE STUDY UPDATE

Prepared for:

Chester Public Utility District
Chester, CA

Prepared by:

PACE Engineering, Inc.



Clean Water
State Revolving Fund



2026 UTILITY RATE STUDY UPDATE

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A handwritten signature in blue ink, reading "Paul J. Reuter", is positioned above a horizontal line.

Date: April 9, 2026

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ABBREVIATIONS

The following abbreviations are used in this report:

ACS	American Community Survey
AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
AWWA	American Water Works Association
BOD	Biochemical Oxygen Demand
CADOF	California Department of Finance
CADOT	California Department of Transportation
COS	Cost of Service
CPI	Consumer Price Index
CPUD	Chester Public Utility District
CRWA	California Rural Water Association
CWSRF	Clean Water State Revolving Fund
DFA	Division of Financial Assistance
District	Chester Public Utility District
DWSRF	Drinking Water State Revolving Fund
ENR	Engineering News Record
FY	Fiscal Year
I&I	Infiltration and Inflow
IN	Inches
M1	AWWA Principles of Water Rates, Fees, and Charges Manual of Water Supply Practices Manual 1
MDD	Maximum Day Demand
MHI	Median Household Income
MMP	Mandatory Minimum Penalty
MOP No. 27	Manual of Practice No. 27 Financing and Charges for Wastewater Systems
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
PD	Positive Displacement
PHD	Peak Hourly Demand
SCADA	Supervisory Control and Data Acquisition
SWRCB	California State Water Resources Control Board
TSS	Total Suspended Solids
WEF	Water Environment Federation
WWTP	Wastewater Treatment Plant

CHESTER PUBLIC UTILITY DISTRICT 2026 UTILITY RATE STUDY UPDATE APRIL 2026

1. BACKGROUND

The Chester Public Utility District's (District's or CPUD's) previous water and wastewater utility rate study was completed in 2023 by California Rural Water Association (CRWA) and was titled, "2023 Financial Planning, Revenue Requirements, and Rate Setting Analysis." In that study, water rate adjustments were recommended for fiscal years (FY) 2023-24 through FY 2027-28. No adjustments were recommended for the sewer rates over that period, as the Sewer Fund balance was expected to increase over time.

Operating expenses within both the water and sewer funds have increased more than anticipated in the 2023 study. Therefore, it is necessary to take a fresh look at the revenue requirements within each fund and, possibly, make rate adjustments to reflect the required revenue needs.

To prepare for this 2026 Utility Rate Study Update, financial records, including audited financial statements, water consumption data, and adopted budgets, were obtained from the District. A virtual workshop was held with an ad hoc committee of the board of directors and Bonnie Mullaney, District General Manager, on January 30, 2026. Discussed were preliminary findings and recommendations for moving forward, as well as a preliminary schedule that would allow the District to enact any needed rate adjustments before the beginning of next fiscal year, July 1, 2026. Preliminary findings were presented to the board of directors and the public on March 2, March 16, and March 30, 2026.

Final financial plans for both water and sewer funds, as well as proposed rates, will be presented to the board of directors and the public on April 20, 2026, at which time the board of directors will be asked to approve the contents and recommendations herein and direct staff to proceed with Proposition 218 proceedings, which includes setting a future public hearing date.

This rate study update is intended to be an update to the 2023 Rate Study and therefore follows a similar format and utilizes much of the work and analysis performed in the previous study, including applicable cost of service (COS) analyses and rate allocations to various user classes.

2. RATE STUDY METHODOLOGY

As presented in the 2023 Rate Study, this rate study update also incorporates the methods described in American Water Works Association (AWWA) Principles of Water Rates, Fees, and Charges Manual of Water Supply Practices Manual 1 (M1). The 2023 Rate Study utilized the Base-Extra Capacity Method, described in AWWA M1, which is based on COS principals in which costs are distributed to customers commensurate with their service requirements.

The sewer COS analysis and rates are consistent with the guidelines detailed in the Water Environment Federation (WEF) Manual of Practice No. 27 Financing and Charges for Wastewater Systems (MOP No. 27).

The general rate study approach is summarized by the major steps listed below:

Growth Projection: Project customer growth for the five-year study period, FY 2026-27 through FY 2031, using historical growth records. Forecast revenue for the study period based on the projected growth.

Financial Planning and Revenue Requirements: Develop a five-year financial plan based on the projected revenues and annual costs, which include both operating and capital expenses. The District's target reserve levels are also considered as key elements of the financial plan. From the financial planning effort, revenue requirements are determined for each year of the study period.

COS Analysis: Evaluate the customer classifications and allocate costs based on their service requirements.

Utility Rate Design: Design water and sewer rates to recover the rate revenue requirements for each customer.

3. LEGAL CONSIDERATIONS

As presented in the 2023 Rate Study, below are key considerations surrounding the legal framework for establishing water and sewer rates in the State of California, which are in place to ensure utility rates provide a fair and equitable allocation of costs to different user classes.

California Constitution – Article XIII D, Section 6 (Proposition 218): California voters passed Proposition 218, the “Right to Vote on Taxes Act,” in November 1996. This constitutional amendment is intended to protect taxpayers by limiting the methods by which local governments can create or increase taxes, fees, and charges without taxpayer consent. Between 2002 and 2017, California courts have consistently ruled that fees associated with providing water services are “property-related” and thus fall under the jurisdiction of Proposition 218. The principal requirements for fairness of the fees, as they relate to public water service, are as follows: 1) revenues derived from the fee and charge shall not exceed the funds required to provide the property-related service and 2) revenues derived by the fee and charge shall not be used for any other purpose other than that for which the charge was imposed.

The amount of the fee or charge imposed on any parcel shall not exceed the proportional COS attributable to the parcel. Reliance by an agency on any parcel map, including but not limited to an assessor’s parcel map, may be considered a significant factor in determining whether a fee or charge is imposed as an incident of property ownership for purposes of this article.

The rates developed in this rate study update use a methodology to establish an equitable system of charges that recovers the cost of providing service and fairly apportion costs to each customer as required by Proposition 218.

California Constitution – Article XIII C (Proposition 26): Proposition 26 was passed by California voters in November 2010 and amended Article XIII C of the State Constitution to expand the definition of “tax” to include “any levy, charge, or exaction of any kind imposed by a local government,” with some specific exceptions. Refer to the 2023 Rate Study for a list of exceptions. Proposition 26 also provides that the local government bears the burden of proving by a preponderance of evidence that 1) the levy, charge, or other exaction is not a tax, 2) that the amount is no more than necessary to cover the reasonable costs of the government activity, and 3) that the manner in which those costs are allocated to the payer bear a fair and reasonable relationship to the payer’s burdens on, or benefits received from, the government activity.

Like the proportionality requirements imposed by Proposition 218, assessment of rates under these requirements are supported by the COS approach, in which specific principals for this approach are presented in AWWA Manual M1.

4. KEY ASSUMPTIONS

Test Year: FY 2026-27 was used as a “Test Year” for evaluating costs and associated rates for this study. The District’s fiscal year is July 1 to June 30.

Inflation Factors: Inflation factors on expenses rarely follow common indexes like Consumer Price Index (CPI), California Department of Transportation (CADOT), California Department of Finance (CADO), Engineering News Record (ENR), and others in small rural communities because small changes within the agency can have substantial impacts on operating expenses. For example, a major water main leak and repair can impose a substantial burden on an established budget that is not always accounted for. Staff turnover can also have unforeseen financial impacts. CPUD recently severed ties with its fire protection district, which has had a financial ripple effect throughout the District. For this rate study update, a 3.0% per year annual inflation rate has been assumed on all operating expenses. This tracks slightly higher than the inflation we have been experiencing in California recently. To provide contingency for potential expense volatility, it will be extremely important for the District to fund healthy operating reserves.

Water Meter Ratios: The 2023 Rate Study provided justification for and recommended water meter ratios in accordance with AWWA M1 cost-based factors. AWWA M1 presents two approaches for establishing water meter ratios: 1) Cost-based factors and 2) hydraulic capacity-based factors. Many agencies throughout Northern California utilize the hydraulic capacity-based factors, which apportion fees for larger (greater than 5/8-inch) meters based on hydraulic capacity of the meter. For example, a 2-inch water meter can convey eight times the flow of a 5/8-inch meter; therefore, the meter base rate for a 2-inch meter is eight times that of a 5/8-inch meter. The hydraulic capacity-based meter factors are justified because all water system infrastructure (pipelines, storage tanks, well pumps, etc.) must be sized to accommodate the collective hydraulic capacity of all water meters in the system.

Using the cost-based meter factors, the 2-inch meter is 5.33 times the cost of the 5/8-inch meter, which is substantially less than the hydraulic capacity-based approach. The hydraulic-based meter factors are higher than the cost-based factors, meaning those with larger (greater than 5/8-inch) meters pay a higher meter charge.

The cost-based factors reflect the cost to provide, install, and maintain the various-sized meters and are said to be more in line with the intent of Proposition 218, which is based on the fair apportionment of costs to each customer. Therefore, the District is prudent to utilize the cost-based meter factors. Unfortunately, even though the 2023 Rate Study recommended the cost-based meter factors, the proposed water rates in the study did not follow that approach. Table 1, below, shows the actual meter factors reflected in the District’s current water rates versus the desired cost-based meter factors recommended in the 2023 Rate Study. Under the current rate structure, those with small water meters are subsidizing those with larger water meters. It is recommended, in year one of the study period, all base water rates be adjusted to match the AWWA M1 cost-based meter rates shown in Table 1 below:

Table 1 – Current and Proposed Meter Factors

Water Meter Size, In	Current Meter Factor (Ratio of Meter size to 5/8" Size)	Proposed Cost-Based Meter Factor per AWWA M1 & Recommended in 2023 Rate Study
5/8	1.00	1.00
3/4	1.00	1.00
1	1.43	1.67
1½	2.49	3.33
2	3.77	5.33
3	6.75	10.00
4	11.01	16.67
6	21.67	33.33

Water in Base Meter Rate: For many years, the District has included 6,000 gallons of water per month with its base meter rate. This means that customers do not pay any more for water until they exceed 6,000 gallons per month. This is a somewhat outdated rate structure and most water agencies in Northern California have moved away from including any water in the base meter rates. The primary reason is it is difficult to justify this approach under Proposition 218. When water is included in the base meter rate, a scenario is created where those that use the least amount of water are subsidizing those that use more water. For this reason, we

recommend the District eliminate all water conveyed in the base meter rates. By shifting the 6,000 gallons into the consumption portion of the rate, we can reduce the base rates across the board, as shown in Table 2 below:

Table 2 – Revised FY 2025-26 Base Rates by Eliminating Water in Base Rate

Water Meter Size, In	Current FY 2025-26 Base Meter Rate	FY 2025-25 Base Meter Rate after Removing 6,000 Gallons from Base Rate
5/8	\$30.01	\$27.02
3/4	\$30.01	\$27.02
1	\$42.80	\$38.64
1-1/2	\$74.77	\$67.28
2	\$113.13	\$101.87
3	\$202.64	\$182.39
4	\$330.51	\$297.49
6	\$650.18	\$585.52

Applying the AWWA M1 cost-based meter charges recommended in the 2023 Rate Study would result in the changes to the existing (FY 2025-26) base meter rates shown in Table 3 below:

Table 3 – Revised FY 2025-26 Base Rates by Incorporating the AWWA M1 Factors

Water Meter Size, In	Current FY 2025-26 Base Meter Rate	FY 2025-25 Base Meter Rate after Removing 6,000 Gallons from Base Rate
5/8	\$27.02	\$27.02
3/4	\$27.02	\$27.02
1	\$38.64	\$45.12
1½	\$67.28	\$89.98
2	\$101.87	\$144.02
3	\$182.39	\$270.20
4	\$297.49	\$450.42
6	\$585.52	\$900.58

If the District is to approve the concept of 1) incorporating the AWWA M1 cost-based meter factors as recommended in the 2023 Rate Study and 2) eliminating the 6,000 gallons per month in the base meter rates, the current FY 2025-26 base meter rates would change to those shown in the far right column in Table 3.

Standby Charges: The 2023 Rate Study recommended reduced standby charges for water meters that are dormant for periods of time throughout the year; however, no standby charges were recommended for sewer services under similar circumstances. No evidence was provided in the 2023 Rate Study as to why standby charges should be less than the full base water meter rate.

Pertaining to water charges, the base meter charges are designed to recover the fixed cost portion for delivering water service to each customer. Variable cost recovery is designed to be recovered in the consumption rate. Therefore, those services, both water and sewer, that are dormant for periods throughout the year should be paying the full base meter charge for water and the fixed charge for sewer to account for the proportional share of fixed cost required to operate the District.

This allows the District to recover the incurred fixed costs for keeping a temporarily dormant service ready for a customer when they desire to use it.

Pertaining to sewer service, one might argue that if no wastewater is being discharged down the sewer lateral, there should be no cost impact to the District. This logic is flawed because, currently, the District has considerable infiltration and inflow (I&I) throughout its collection system. I&I is leakage into the system during wet weather events and has led to a barrage of monetary fines from the Central Valley Regional Water Quality Control Board. Wastewater flows due to excessive I&I have reached four to five times the normal dry weather wastewater flows.

To mitigate this problem, the District is facing multi-million dollar capital improvement projects to its wastewater treatment facilities and collection system. There is considerable industry-wide evidence that suggests up to 80% of I&I into a municipal collection system occurs through private laterals and occurs whether the lateral is active or not. Therefore, it is completely justified that sewer standby customers pay 100% of the monthly base charge to cover their proportional cost of fixed expenses necessary to operate the District.

Customer Growth: Like many small rural communities throughout Northern California, especially those that rely on the timber industry for commerce, growth is not something that is often considered in short-term financial planning. In most cases, these small communities are doing their best to hold on to the businesses and populations they currently serve. That said, it does not mean that growth should never be considered. It must be considered for longer-term planning projects, such as municipal master plans, general plans, etc.

When it comes to short-term financial planning, we do not believe it is prudent to make projections of future growth that may not happen and factor this future uncertain growth into revenue projections to offset expenses that will always exist and escalate. A more conservative approach is to assume no growth over the five-year study period and, should growth occur, any additional revenue will be used to fund badly needed capital improvement reserves. As such, for purpose of this rate study update, zero growth is anticipated over the five-year planning period.

Debt Funding: Currently, the District has no debt obligations in the Water or Sewer Funds. Going forward, depending on the District's success for obtaining grants through the State Revolving Fund, it may need to consider future debt obligations. At this time, the grant climate for sewer projects is more favorable than water projects. The District is in the process of applying for up to \$40M in grant dollars to make improvements to its wastewater treatment facility and sewer collection system. However, the District is not currently eligible for grants to make substantial improvements to its water system and may need to consider long-term, low-interest loans in the future.

5. WATER ENTERPRISE FINANCIAL PLANNING

5.1 OPERATING EXPENSES – WATER

This rate study update projected expenditures for both the Water and Wastewater Enterprise Funds to increase at 3.0% per year from 2026 through 2030. The historical and budgeted expenditures for the Water Enterprise Fund are shown in Figure 1 below.

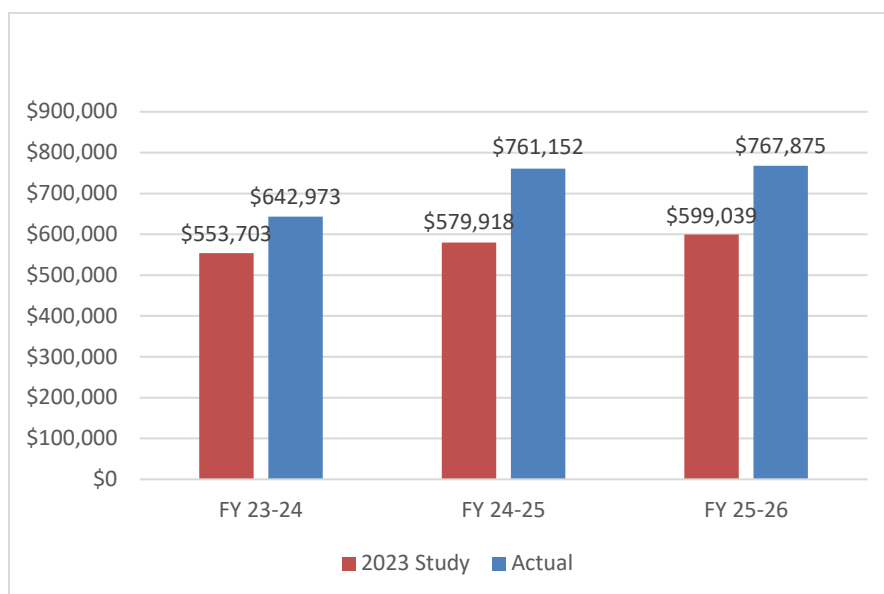


Figure 1 – Historical and Budgeted Water Fund Operating Expenses

The red bars shown in Figure 1 represent the projected operating expenses in the Water Enterprise Fund from the 2023 Rate Study. The blue bars show the actual operating expenses. As indicated, the actual operating expenses were 16% to 31% higher than anticipated. The 2023 Rate Study did not provide a detailed breakdown of projected operating expenses, so it is difficult to determine what expenses led to the higher-than-anticipated overall increases. For FY 2025-26, the anticipated annual operating expenses are approximately \$767,875, which is about 31% higher than projected in the 2023 Rate Study.

Table 5 shows a detailed breakdown of historical and projected operating and capital expenditures through FY 2030-31.

5.2 CAPITAL EXPENSES – WATER

The District has considerable capital replacement needs within its Water Enterprise Fund. In 2022, the District applied for a \$1,812,000 planning grant through the California State Water Resources Control Board (SWRCB) Drinking Water State Revolving Fund (DWSRF) to complete planning and design for \$23.9M worth of improvements to its water system. The work includes improvements to all wells and storage tanks, including re-painting, replacement of 14,000 feet of old water mains, replacement of all water meters with advanced metering infrastructure (AMI) water meters, new supervisory control and data acquisition (SCADA) improvements, and new solar system.

Unfortunately, the application was submitted near the tail-end of the State’s generous grant offering period, and the grant was not funded. Currently, the State is only funding, with grants, water projects that have documented health impacts due to water quality or severe water shortages. As such, in this current funding climate, there is no clear path for the District to obtain grant funds to make substantial improvements to its water infrastructure.

Of the plethora of capital improvement needs within the water system, the following are considered critical and should be considered top priority for the District:

1. Water meter replacement
2. Storage tank re-coating
3. SCADA improvements

Options for funding these improvements going forward are through use of long-term, low-interest loans, maintenance agreements with specific equipment vendors, or self-funding with rate revenue. Of these options, self-funding with rate revenue is the least practical, as rates would need to be increased to exorbitant levels to generate enough cash to make meaningful improvements. Therefore, it is recommended the District consider a long-term loan to replace its water meters and SCADA system and a six-year maintenance agreement with a tank manufacturer to re-paint its storage tanks.

According to DWSRF Division of Financial Assistance (DFA), the District would likely qualify for a 20-year, zero interest loan to replace its water meters and SCADA system because it falls into the “Disadvantaged Community” category based on median household income (MHI); however, at the time of funding agreement execution, the average monthly water rate for single-family residences must be at least 1.5% of the District’s MHI. According to the American Community Survey (ACS), U.S. Census, the District’s current MHI is about \$47,129 per year. At 1.5% of this amount, the District’s average single-family residential water rate needs to be at least \$58.91 per month. Currently, the average monthly water rate is about \$37.83 per month.

The most impactful decision by the District for establishing a five-year financial plan and water rate schedule is establishing the most attractive financing and project delivery approach for replacing its aged water meters. Five options were considered for replacing the existing positive displacement (PD)/turbine-style meters with either 1) AMI meters, 2) automated meter reading (AMR) meters, or 3) similar PD/turbine-style meters. The AMI and AMR meters are radio-style meters. The three meter types are described below:

AMI: AMI meters transmit real-time flow data to a central computer via radio. District staff do not have to go into the field to read these meters. The main advantages of these meters are 1) the ability to receive flow data in real time, which allows District staff to be notified of potential leaks on the customer side of the meter 2) there is considerable savings in labor cost by the District for not having to read the meters, which typically takes two to three days to read manually, 3) the meters have the ability to measure very small flows and are more accurate than PD/turbine-style meters, which translates to more recovered revenue for the District, and 4) the ability to allow the District to read their meters all months of the

year. Additionally, an app is available on one's smart phone or tablet to allow the user to track water use in real time and/or be notified of potential leaks.

The main disadvantage is the net cost to the District is about 43% higher than that of PD/turbine-style meters. The net cost accounts for the savings in operational costs for not having to read the meters manually and estimated additional revenue resulting from the more accurate meters.

AMR: AMR meters have many of the same advantages as the AMI meters, except for the real-time water use data and leak detection. With AMR meters, leaks would only be detected at meter reading – typically once per month. The AMR meters are about 10% more expensive than the PD/turbine-style meters and about 30% less expensive than the AMI meters.

PD/Turbine-Style: PD/Turbine-style meters are traditional meters that have been used by water districts and cities for decades. They rely on moving parts within the unit, which take a certain amount of water energy to function. Therefore, the energy needed to get the meter to function properly is lost revenue to the District, albeit relatively small. These traditional meters are less expensive than the AMI and AMR meters but do not measure low flows accurately or provide real-time leak detection, and, in Chester, they cause the District to only read meters half of the year. Many water districts and cities throughout California have already moved away from or are in the process of moving away from PD/turbine-style meters for water conservation and operational cost savings benefits.

For these three water meter types, five installation options were developed, as described below:

Option 1 – AMI Meters (Fixed) Installed by Public Works Contractor: This option would utilize zero-interest loan funding from DWSRF and public bidding to secure a qualified public works contractor to install a fixed AMI metering system. The DWSRF loan requires loan application services consisting of: Engineering Report, Environmental, 30% design, and loan application. Full construction management and startup would be provided by an engineering consultant, and construction observation would be provided by the District.

Option 2 – AMI Meters (Fixed) Installed by District Resources: This option would utilize the same zero-interest loan from DWSRF and application services, but installation of the AMI metering system would be performed by District-acquired resources – likely part-time labor during the construction season.

Option 3 – AMR Meters Installed by District Resources: This option is similar to Option 2, except that AMR meters would be installed instead of AMI meters.

Option 4 – PD/Turbine-Style Meters Installed by District Resources: This option is similar to Options 2 and 3, except that PD/turbine-style meters would be installed.

Option 5 – PD/Turbine-Style Meters Installed by District Resources: This option is similar to Options 2, 3, and 4, except that instead of zero-interest DWSRF financing, the District would utilize conventional financing with loan terms of 4.865% for twenty years.

Table 4 shows a detailed comparison of the five installation options, including implementation approach, financing assumptions, estimated time for completion, indirect and direct cost components, annual operating costs and savings, and total annual operating costs, reflecting annual savings. The bottom of Table 4 shows the five-year base (5/8-inch and 3/4-inch) water rates required to fund each of the five options.

As indicated, the rates are identical for Options 1 through 4 because the rate increases are driven by the need to reach an average residential water bill of 1.5% of MHI by year three of the planning period to qualify for the zero-interest loan from DWSRF. Rates for Options 1 through 4 in years four and five would not need to increase. The rates for Option 5 can be increased more incrementally over the five-year study period but still require increases each year to stay ahead of projected operating costs and reserve allocations.

In year five, the rates for Options 1 through 4 would be \$2.17 higher than the rates for Option 5. It is worth noting the total interest paid for the conventional financing proposed for Option 5 would be about \$733,300 over the life of the loan, while there would be no interest paid for Options 1 through 4.

Since the water rate ramifications are identical for Options 1 through 4 and only slightly higher than Option 5, it is recommended the District consider rates that afford them the flexibility to consider replacing their existing water meters with AMI or AMR meters, utilizing zero-interest DWSRF loan financing.

Through discussions with a tank rehabilitation contractor, it is estimated a total annual cost of \$130,000 for a six-year tank maintenance agreement would 1) recoat both storage tanks, 2) provide annual coating inspections, and 3) complete tank washouts every three years.

Table 5 lists potential capital replacement projects that were included in the 2022 DWSRF planning grant funding application as well as projects recommended for funding long-term loans and maintenance agreements with vendors.

Table 4 - Water Metering Implementation Option Summary

Metering Option No.:	1	2	3	4	5
Metering Option:	FIXED AMI (Radio)	FIXED AMI (Radio)	AMR (Radio)	PD/Turbine	PD/Turbine
Finance Method:	DWSRF, 0% Interest Loan, 20 Yrs	DWSRF, 0% Interest Loan, 20 Yrs	DWSRF, 0% Interest Loan, 20 Yrs	DWSRF, 0% Interest Loan, 20 Yrs	Conventional Financing, 4.865% Interest Loan, 20 Yrs
Installed by:	Low-Bid Contractor	District Staff/Resources	District Staff/Resources	District Staff/Resources	District Staff/Resources
Funding Application Services:	Yes	Yes	Yes	Yes	No
Requires Rates to be 1.5% x MHI:	Yes	Yes	Yes	Yes	No
Final Design/Construction Management:	Yes	No	No	No	No
Time to Completion:	4-5 Yrs	6-7 Yrs	6-7 Yrs	6-7 Yrs	3-4 Yrs
Funding Application Costs:	\$211,500	\$194,000	\$181,000	\$158,000	\$0
Total Final Engineering/Bidding/CM Costs:	\$388,000	\$172,000	\$142,000	\$88,000	\$0
Total District Implementation Costs:	\$55,000	\$90,000	\$70,000	\$55,000	\$45,000
Total Construction Costs:	\$2,958,900	\$2,451,960	\$2,033,170	\$1,250,270	\$1,250,270
TOTAL FINANCED AMOUNT:	\$3,613,400	\$2,907,960	\$2,426,170	\$1,551,270	\$1,295,270
Annual Operating Costs/(Savings)					
¹ Software Subscription (Adder):	\$3,178	\$3,178	\$0	\$0	\$0
² Field Meter Reading Labor Savings:	(\$20,795)	(\$20,795)	(\$19,730)	\$0	\$0
Admin Staff Savings:	(\$6,693)	(\$6,693)	(\$6,693)	\$0	\$0
Vehicle/Fuel Cost Savings:	(\$65)	(\$65)	\$0	\$0	\$0
³ Financing Costs:	\$198,737	\$159,938	\$133,439	\$85,320	\$113,024
⁴ Increased Revenue to District:	(\$13,148)	(\$13,148)	(\$13,148)	\$0	\$0
Total Annual Operating Costs:	\$161,214	\$122,415	\$93,868	\$85,320	\$113,024
Monthly Water Rate Impacts (5/8" & 3/4" Base)					
FY 2026-27	\$36.01	\$36.01	\$36.01	\$36.01	\$36.01
FY 2027-28	\$42.49	\$42.49	\$42.49	\$42.49	\$39.61
FY 2028-29	\$48.44	\$48.44	\$48.44	\$48.44	\$42.78
FY 2029-30	\$48.44	\$48.44	\$48.44	\$48.44	\$44.49
FY 2030-31	\$48.44	\$48.44	\$48.44	\$48.44	\$46.27

Notes:

1. The District is already paying for the AMR software. The cost for AMI options is an "adder" cost.
2. Based on the average savings between 1) current staff performing the work and 2) temporary staff performing the work.
3. Assumes all costs for planning/engineering; final/construction engineering; District implementation costs; and construction costs are financed by the loan.
4. Assumes there will be a 5% increase in measured average annual water use over the 20-year life of the meter.

Table 5 - Water Fund Budgeted and Projected Operating and Capital Expenditures

Account Code	Account Description	Inflation Factor	Audited (FY 23-24)	Unaudited (FY 24-25)	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
Combined	Wages, Taxes, Benefits	3%	\$299,031	\$314,272	\$302,892	\$311,979	\$321,338	\$330,978	\$340,908	\$351,135
50400	Supplies	3%	\$12,523	\$9,194	\$9,470	\$9,754	\$10,047	\$10,348	\$10,659	\$10,978
50450	Repairs	3%	\$16,388	\$42,033	\$43,294	\$44,593	\$45,931	\$47,309	\$48,728	\$50,190
50500	Maintenance	3%	\$3,912	\$5,209	\$5,365	\$5,526	\$5,692	\$5,862	\$6,038	\$6,220
50660	Annexation Expenses	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
50700	Engineering	3%	\$132	\$650	\$670	\$690	\$710	\$732	\$754	\$776
50800	Utilities - All	3%	\$131,127	\$172,504	\$177,679	\$183,009	\$188,500	\$194,155	\$199,979	\$205,979
New	Street Light Utilities	3%	\$0	\$15,844	\$15,844	\$16,319	\$16,809	\$17,313	\$17,833	\$18,368
60700	Insurance	3%	\$27,518	\$24,603	\$25,341	\$26,101	\$26,884	\$27,691	\$28,522	\$29,377
New	Office Expense	3%	\$84	\$0	\$0	\$0	\$0	\$0	\$0	\$0
60900	Postage	3%	\$4,283	\$6,099	\$6,282	\$6,470	\$6,665	\$6,864	\$7,070	\$7,283
61100	Auto Expense	3%	\$13,987	\$9,236	\$9,513	\$9,798	\$10,092	\$10,395	\$10,707	\$11,028
61200	Equipment	3%	\$14,773	\$34,968	\$36,017	\$37,098	\$38,210	\$39,357	\$40,537	\$41,754
61250	Legal Expense	3%	\$1,507	\$7,203	\$7,419	\$7,642	\$7,871	\$8,107	\$8,350	\$8,601
61300	Professional Services	3%	\$69,628	\$97,707	\$100,638	\$103,657	\$106,767	\$109,970	\$113,269	\$116,667
61700	Dues and Fees	3%	\$10,817	\$17,804	\$18,338	\$18,888	\$19,455	\$20,039	\$20,640	\$21,259
61750	Training and Travel	3%	\$7,067	\$6,326	\$6,516	\$6,711	\$6,913	\$7,120	\$7,334	\$7,554
61800	Other Expenses	3%	\$4,390	-\$4,390	\$650	\$670	\$690	\$710	\$732	\$754
60825	Grants	3%	\$1,339	\$0	\$0	\$0	\$0	\$0	\$0	\$0
61850	Interest Expense	3%	\$0	\$1,890	\$1,947	\$2,005	\$2,065	\$2,127	\$2,191	\$2,257
61900	Depreciation	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
70300	Gain/Loss of Assets	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Inact	Interfund Transfer to Street Lights	3%	\$24,467	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal		\$642,973	\$761,152	\$767,875	\$790,911	\$814,638	\$839,077	\$864,250	\$890,177
CAPITAL PROJECTS-WATER DISTRIBUTION										
	DWSRF Loan Application ¹	\$211,500	\$0	\$0	\$0	\$196,500	\$15,000	\$0	\$0	\$0
	Tank Nos. 1 & 2-Maintenance Agreement ²	\$780,000	\$0	\$0	\$0	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000
	Subtotal-Distribution	\$991,500	\$0	\$0	\$0	\$326,500	\$145,000	\$130,000	\$130,000	\$130,000
CAPITAL PROJECTS-WATER SUPPLY										
	Well No. 1 Improvements	\$738,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Well No. 2 Improvements	\$849,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Well No. 3 Improvements	\$886,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Well No. 5 Improvements	\$290,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Photovoltaic (Solar) Improvements	\$2,109,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal-Water Supply	\$4,872,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Capital Improvements	\$5,863,500	\$0	\$0	\$0	\$326,500	\$145,000	\$130,000	\$130,000	\$130,000
WATER DEBT SERVICING										
	SCADA Improvements-Debt Service ³	\$500,000	\$0	\$0	\$0				\$27,500	\$27,500
	Water Meter Replacements-Debt Service ³	\$3,613,400	\$0	\$0	\$0	\$0	\$0	\$0	\$198,737	\$198,737
	Subtotal-Debt Servicing		\$0	\$0	\$0	\$0	\$0	\$0	\$226,237	\$226,237
	Total Expenditures, Capital and Debt Service		\$642,973	\$761,152	\$767,875	\$1,117,411	\$959,638	\$969,077	\$1,220,487	\$1,246,414

Notes:

1. Cost to prepare engineering report, 30% design, environmental, and funding application for a DWSRF Loan to replace water meters and SCADA infrastructure.

2. Cost for a 6-year tank maintenance agreement with a tank rehabilitation contractor to re-coat and perform ongoing coating maintenance to the District's two storage tanks.

3. Estimated project cost and annual debt service amounts to loan-finance water meter replacements and SCADA infrastructure upgrades (20-year loan @ 0% interest).

5.3 TARGET RESERVES – WATER

It is considered good financial practice to maintain certain reserves within the enterprise funds to assure and maintain financial viability. Below are descriptions of four typical reserves.

Operating Reserve: The Operating Reserve is much like a personal savings account. It provides funds for unforeseen operating expenses and serves to balance revenue volatility, such as during winter months when water use is typically low, as is corresponding revenue. Most municipalities strive for 25% to 50% of annual operating costs to be maintained in reserve. For CPUD, it is recommended a 25% operating reserve be established.

Short-Lived Asset Reserve: Short-lived assets are those assets with relatively short service lives, such as five to twenty years. Examples include computers, vehicles, electrical controls and equipment, pumps and motors, building components (paint, roof), etc. Replacement of short-lived assets is typically not reflected in the agency's annual operating budget. To develop an annual reserve allocation, a list of short-lived assets is prepared along with the useful service life and replacement cost. The replacement cost is divided by the useful service life, and the sum of annual replacement cost represents the amount of annual reserve allocation that should be set aside for replacing these assets. To some extent, the Short-Lived Asset Reserve is intended to fund replacement of a portion of the District's short-term depreciated assets.

A list of short-lived assets for the District's Water Enterprise Fund is shown in Table 6. As indicated, to accumulate the cash needed to replace short-lived assets within the District's Water Enterprise Fund, the District needs to obtain \$137,233 per year through user rates.

Capital Improvements Reserve: The Capital Improvements Reserve is designed to replace the long-term portion of depreciated assets, such as pipelines, tanks, and other infrastructure that have typical service lives exceeding twenty years. To create a Capital Improvements Reserve, a list of specific projects is prepared based on priority, along with total project cost and schedule. Specific projects are identified to be completed during a given fiscal year.

It is very difficult to collect enough revenue from rates to perform substantial capital improvement projects so, oftentimes, the approach may be to collect enough revenue from rates to pay for funding acquisition, planning or design of future capital projects, or to debt service future loans. However, the District could use funds from this reserve to pay for small projects, such as smaller pipeline replacement projects.

Debt Service Reserve: The District has no current debt tied to its utility enterprise, but if it did, it would be required to establish a reserve equivalent to about twelve months of annual loan payments in a restricted reserve as a condition of the loan agreement with a lender.

Should the District decide to take on long-term debt to address some of its more pressing infrastructure replacement needs, a debt service reserve will be required to remain in good financial standing with the lender. The amount of reserve is usually the equivalent of one year of annual principal and interest payments. In addition, lenders typically require a minimum debt coverage ratio of 1.2, meaning the amount of revenue received from rates needs to be at least 20% higher than the amount needed to cover operating expenses.

Table 6 - Water Fund Short-Lived Asset Replacement Schedule

Category	Short-Lived Asset	Replacement Cost	Expected Life, Yrs	Percent Assigned to Water Fund	Estimated Cost	Annual Reserve Allocation
Furniture	Desks, Shelving, Chairs, etc.	\$38,550	15	50%	\$19,275	\$1,285
Appliances	Refrigerators, Microwaves, Toasters, etc.	\$1,940	10	50%	\$970	\$97
Appliances	Furnaces, LPG Heaters, HVAC, etc.	\$74,900	15	50%	\$37,450	\$2,497
Electronics	Computers, Tablets, Printers, etc.	\$19,280	5	50%	\$9,640	\$1,928
Equipment-Small	Compressors, Specialty Equip., etc.	\$56,950	15	50%	\$28,475	\$1,898
Equipment-Large	Backhoe, Trailers, Potholing, etc.	\$133,000	20	50%	\$66,500	\$3,325
Vehicles	F250s, Escape, etc.	\$226,000	20	50%	\$113,000	\$5,650
Equipment	Well No. 1 Pump/Motor Replacement	\$40,000	20	100%	\$40,000	\$2,000
Equipment	Well No. 1 Backup Generator	\$15,000	20	100%	\$15,000	\$750
Equipment	Well No. 1 Electrical Replacement	\$40,000	20	100%	\$40,000	\$2,000
Building and Improvements	Well No. 1 Roof	\$10,000	20	100%	\$10,000	\$500
Building and Improvements	Well No. 1 Painting	\$10,000	10	100%	\$10,000	\$1,000
Equipment	Well No. 2 Pump/Motor Replacement	\$40,000	20	100%	\$40,000	\$2,000
Equipment	Well No. 2 Electrical Replacement	\$40,000	20	100%	\$40,000	\$2,000
Building and Improvements	Well No. 2 Roof	\$10,000	20	100%	\$10,000	\$500
Building and Improvements	Well No. 2 Painting	\$10,000	10	100%	\$10,000	\$1,000
Equipment	Well No. 3 Pump/Motor Replacement	\$80,000	20	100%	\$80,000	\$4,000
Equipment	Well No. 3 Electrical Replacement	\$50,000	20	100%	\$50,000	\$2,500
Building and Improvements	Well No. 3 Roof	\$15,000	20	100%	\$15,000	\$750
Building and Improvements	Well No. 3 Painting	\$10,000	10	100%	\$10,000	\$1,000
Equipment	Well No. 5 Pump/Motor Replacement	\$80,000	20	100%	\$80,000	\$4,000
Equipment	Well No. 5 Electrical Replacement	\$50,000	20	100%	\$50,000	\$2,500
Equipment	Well No. 5 HVAC	\$7,500	10	100%	\$7,500	\$750
Building and Improvements	Well No. 5 Roof	\$15,000	20	100%	\$15,000	\$750
Building and Improvements	Well No. 5 Painting	\$10,000	10	100%	\$10,000	\$1,000
Equipment	Tank No. 1 Instrumentation/Control	\$30,000	15	100%	\$30,000	\$2,000
Equipment	Tank No. 2 Instrumentation/Control	\$30,000	15	100%	\$30,000	\$2,000
Supplies	Fire Hydrant Meters, Breakaways, and Locks	\$20,300	15	100%	\$20,300	\$1,353
Supplies	RPPs	\$18,000	15	100%	\$18,000	\$1,200
Equipment	Water Meter Replacement	\$1,500,000	20	100%	\$1,500,000	\$75,000
Equipment	SCADA Equipment	\$200,000	20	100%	\$200,000	\$10,000
Totals:					\$2,606,110	\$137,233

5.4 REVENUE REQUIREMENTS – WATER

Revenue requirements were developed based on the financial plan elements described above and include operating expenses, capital expenditures, and reserve allocations. The total expense for each year is offset by other operating revenues and non-operating revenues to compute the true portion of revenue requirements to be collected from water rates.

The revenue requirement of \$1,254,644 for the “Test Year,” FY 2026-27, was used to compute cost distribution among distinctive cost components and then allocated to customers equitably in the COS analysis.

5.5 RECOMMENDED FINANCIAL PLAN – WATER

Based on the revenue requirements outlined in the proposed financial plan, annual revenue adjustments of 20% in the test year, 18% in the second year, 14% in the third year, and 0% in each of the fourth and fifth years are proposed for the study period. Under this plan, the District will be able to 1) cover expected annual expenses and establish and maintain a 25% Operating Reserve, 2) make annual allocations to a Short-Lived Asset Reserve, 3) pay for annual payments for a tank maintenance program to re-paint its existing tanks, and 4) cover debt service obligations for a loan to replace water meters and its SCADA system. Table 7 shows the proposed Water Utility Financial Plan with beginning and ending reserve balances for the study period.

Table 7 - Water Fund Five-Year Financial Plan Summary

	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
STARTING RESERVE BALANCES						
Operating Reserve-Checking Acct	\$190,288	\$191,969	\$197,728	\$203,660	\$209,769	\$216,062
Short-Lived Asset Reserve	\$0	\$0	\$137,233	\$274,467	\$411,700	\$548,933
Capital Projects Reserve	\$217,107	\$297,574	\$58,838	\$153,909	\$398,339	\$425,776
REVENUE						
Rates	\$701,522	\$861,026	\$1,029,456	\$1,180,779	\$1,210,511	\$1,210,511
Other	\$141,181	\$153,102	\$160,653	\$168,072	\$172,702	\$176,162
Interest	\$7,370	\$7,590	\$7,819	\$8,053	\$8,294	\$8,458
EXPENSES						
Operating	\$767,875	\$790,911	\$814,638	\$839,077	\$864,250	\$890,177
Short-lived Asset-Annual Contribution	\$0	\$137,233	\$137,233	\$137,233	\$137,233	\$137,233
CAPITAL PROJECTS						
10-year Tank Maintenance Program	\$0	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000
DWSRF Loan Application		\$196,500	\$15,000			
CAPITAL PROJECT-DEBT SERVICE						
Water Meter Replacement	\$0	\$0	\$0	\$0	\$27,500	\$27,500
SCADA System Replacement	\$0	\$0	\$0	\$0	\$198,737	\$198,737
ENDING RESERVE BALANCES						
Operating Reserve-Checking Acct	\$191,969	\$197,728	\$203,660	\$209,769	\$216,062	\$222,544
Short-Lived Asset Reserve	\$0	\$137,233	\$274,467	\$411,700	\$548,933	\$686,167
Capital Projects Reserve	\$297,574	\$58,838	\$153,909	\$398,339	\$425,776	\$430,720
TOTAL RESERVES	\$489,543	\$393,799	\$632,036	\$1,019,808	\$1,190,772	\$1,339,431
Percentage Operating Reserve	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
WATER RATES						
5/8" & 3/4" Base Meter Rate	\$30.01	\$36.01	\$42.49	\$48.44	\$48.44	\$48.44
Residential Consumption Rate, \$/1,000 Gal	\$1.03	\$0.61	\$0.72	\$0.82	\$0.82	\$0.82
Commercial Consumption Rate, \$/1,000 Gal	\$0.61	\$0.61	\$0.72	\$0.82	\$0.82	\$0.82
Percentage of MHI		1.13%	1.33%	1.52%	1.52%	1.52%
Percentage Rate Increases	3.0%	20.0%	18.0%	14.0%	0.0%	0.0%

6. SEWER ENTERPRISE FINANCIAL PLANNING

6.1 OPERATING EXPENSES – SEWER

This rate study update projected expenditures for both the Water and Wastewater Enterprise Funds to increase at 3.0% per year from FY 2026-27 through FY 2030-31. The historical and budgeted expenditures for the Sewer Enterprise Fund are shown in Figure 2 below:

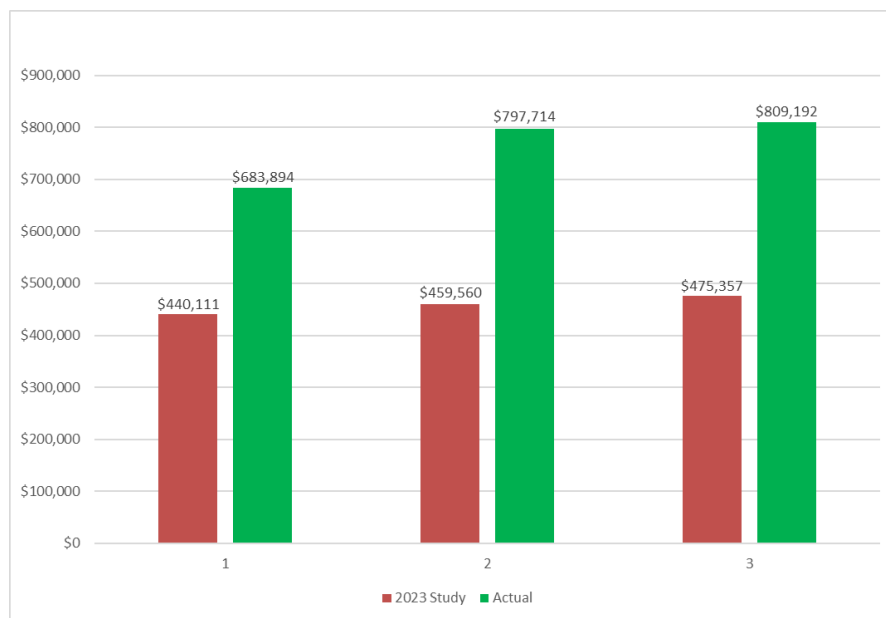


Figure 2 – Historical and Budgeted Sewer Fund Operating Expenses

The red bars shown in Figure 2 represent the projected operating expenses in the Sewer Enterprise Fund from the 2023 Rate Study. The green bars show the actual operating expenses. As indicated, the actual operating expenses were 55% to 70% higher than anticipated. The 2023 Rate Study did not provide a detailed breakdown of projected operating expenses, so it is difficult to determine what expenses led to the higher-than-anticipated overall increases. For FY 2025-26, the anticipated annual operating expenses are approximately \$809,192, which is about 70% higher than projected in the 2023 Rate Study.

Table 8 shows a detailed breakdown of historical and projected operating and capital expenditures through FY 2030-31.

Table 8 - Sewer Fund Budgeted and Projected Operating and Capital Expenditures

Account Code	Account Description	Inflation Factor	Audited (FY 23-24)	Unaudited (FY 24-25)	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
Combined	Wages, Taxes, Benefits	3%	\$299,816	\$327,965	\$310,863	\$320,189	\$329,795	\$339,688	\$349,879	\$360,375
Combined	WWTP-Wages, Taxes, Benefits	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$117,000	\$120,510
50400	Supplies	3%	\$33,439	\$35,987	\$37,066	\$38,178	\$39,323	\$40,503	\$41,718	\$42,970
50450	Repairs	3%	\$44,685	\$98,215	\$101,162	\$104,197	\$107,323	\$110,542	\$113,859	\$117,274
50500	Maintenance	3%	\$1,369	\$6,656	\$6,856	\$7,062	\$7,274	\$7,492	\$7,716	\$7,948
50500	WWTP-Maintenance	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$39,000	\$40,170
50660	Annexation Expenses	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
50700	Engineering	3%	\$1,137	\$66	\$68	\$70	\$72	\$74	\$77	\$79
50800	Utilities-All	3%	\$76,390	\$65,353	\$67,313	\$69,332	\$71,412	\$73,555	\$75,761	\$78,034
50800	WWTP-Additional Electrical Power	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$62,000	\$63,860
New	Street Lights Utilities	3%	\$0	\$15,844	\$15,844	\$16,319	\$16,809	\$17,313	\$17,833	\$18,368
60700	Insurance	3%	\$27,517	\$24,603	\$25,341	\$26,101	\$26,884	\$27,691	\$28,522	\$29,377
New	Office Expense	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
60825	Grants-Collection ¹	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
60900	Postage	3%	\$3,647	\$3,795	\$3,909	\$4,026	\$4,147	\$4,271	\$4,400	\$4,532
61100	Auto Expense	3%	\$13,834	\$9,220	\$9,497	\$9,782	\$10,075	\$10,378	\$10,689	\$11,010
61200	Equipment	3%	\$22,851	\$31,565	\$32,512	\$33,487	\$34,492	\$35,527	\$36,593	\$37,690
61250	Legal Expense	3%	\$1,522	\$7,273	\$7,491	\$7,716	\$7,947	\$8,186	\$8,431	\$8,684
61300	Professional Services	3%	\$108,079	\$155,890	\$160,567	\$165,384	\$170,346	\$175,456	\$180,720	\$186,141
61700	Dues & Fees	3%	\$30,466	\$23,206	\$23,902	\$24,619	\$25,358	\$26,118	\$26,902	\$27,709
61750	Training & Travel	3%	\$3,907	\$4,082	\$4,204	\$4,330	\$4,460	\$4,594	\$4,732	\$4,874
61800	Other Expenses	3%	\$13,896	-\$13,896	\$650	\$670	\$690	\$710	\$732	\$754
61900	Depreciation ²	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
70300	Gain Loss of Assets	3%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
61850	Interest Expense	3%	\$1,339	\$1,890	\$1,947	\$2,005	\$2,066	\$2,128	\$2,191	\$2,257
	Subtotal		\$683,894	\$797,714	\$809,192	\$833,468	\$858,472	\$884,226	\$1,128,753	\$1,162,615
CAPITAL PROJECTS-COLLECTION										
			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal-Collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CAPITAL PROJECTS-TREATMENT AND DISPOSAL										
			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal-Treatment & Disposal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Capital Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WASTEWATER DEBT SERVICING										
			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal-Debt Servicing		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Expenditures, Capital and Debt Service		\$683,894	\$797,714	\$809,192	\$833,468	\$858,472	\$884,226	\$1,128,753	\$1,162,615

Notes:

1. Grant expenditures are pre-paid expenses that were, or will be, reimbursed by grant funds. Therefore, they are zeroed out for financial projections.

2. Depreciation is not accounted for in "Cash Needs" financial projections for municipal water enterprises in accordance with AWWA Manual M1.

6.2 CAPITAL EXPENSES – SEWER

The District has been successful with obtaining planning grants through the SWRCB Clean Water State Revolving Fund (CWSRF) in recent years to complete planning, design, and construction funding applications to make improvements to its 1) wastewater treatment plant (WWTP) and disposal facilities and 2) collections system.

Currently, the District has been struggling with meeting disinfection requirements when discharging to the constructed wetlands and/or Lake Almanor. High flows generated from excessive I&I in the collection system during high rainfall and/or snow-melt periods have exacerbated the problem. The high wintertime flows have also made it impossible to achieve the 80% removal of biochemical oxygen demand (BOD) and total settleable solids (TSS) that is written into its discharge permit.

Consequently, the District has been facing mandatory minimum penalties (MMPs) from the SWRCB. Based on recent discussions with the SWRCB CWSRF DFA, the District is expected to be awarded a \$19.07M grant to make significant improvements to its WWTP to help facilitate compliance with its National Pollution Discharge Elimination System (NPDES) permit. The grant is expected to be awarded during the second quarter of 2026. However, without substantial improvements to reduce leakage in the collection system, the WWTP will be only partly effective.

According to CWSRF DFA staff, the District is in solid position to obtain a sizable grant to replace its most leak-prone collection system infrastructure. The expected timing for this collection system grant is late 2026.

With these expected sizable grants, there are no plans to fund capital improvements using revenue from sewer rates. However, once the new WWTP improvements are online in three to four years, there will be an increase in operations and maintenance (O&M) costs to account for increased power consumption, equipment maintenance, and operations staff. These additional costs are reflected in the proposed financial plan.

6.3 TARGET RESERVES – SEWER

It is considered good financial practice to maintain certain reserves within the enterprise funds to assure and maintain financial viability. Below are descriptions of four potential reserves:

Operating Reserve: The Operating Reserve is much like a personal savings account. It provides funds for unforeseen operating expenses and serves to balance revenue volatility, such as during winter months when water use is typically low, as is corresponding revenue. Most municipalities strive for 25% to 50% of annual operating costs to be maintained in reserve. For CPUD, it is recommended a 25% operating reserve be established.

Short-Lived Asset Reserve: Short-lived assets are those assets with relatively short service lives, such as five to twenty years. Examples include computers, vehicles, electrical controls and equipment, pumps and motors, building components (paint, roof), etc. Replacement of short-lived assets are typically not reflected in the agency's annual operating budget. To develop an annual reserve allocation, a list of short-lived assets is prepared, along with the useful service life and replacement cost. The replacement cost is divided by the useful service life, and the sum of annual replacement cost represents the amount of annual reserve allocation that should be set aside for replacing these assets. To some extent, the Short-Lived Asset Reserve is intended to fund replacement of a portion of the District's depreciated assets.

A list of short-lived assets for the District's Sewer Enterprise Fund is shown in Table 9. As indicated, to accumulate the cash needed to replace short-lived assets within the District's Sewer Enterprise Fund, the District needs to obtain \$71,903 per year through user rates.

Capital Improvements Reserve: The Capital Improvements Reserve is designed to replace the long-term portion of depreciated assets, such as collection sewers, laterals, manholes, and other infrastructure that have typical service lives exceeding twenty years. To create a Capital Improvements Reserve, a list of specific projects is prepared based on priority, along with total project cost. Specific projects are identified to be completed during a given fiscal year.

Table 9 - Sewer Fund Short-Lived Asset Replacement Schedule

Category	Equipment	Replacement Cost	Expected Life, Yrs	Percent to Sewer	Estimated Cost	Annual Reserve Allocation
Furniture	Desks, Shelving, Chairs, etc.	\$38,550	15	50%	\$19,275	\$1,285
Appliances	Refrigerators, Microwaves, Toasters, etc.	\$1,940	10	50%	\$970	\$97
Appliances	Furnaces, LPG Heaters, HVAC, etc.	\$74,900	15	50%	\$37,450	\$2,497
Electronics	Computers, Tablets, Printers, etc.	\$19,280	5	50%	\$9,640	\$1,928
Equipment-Small	Compressors, Specialty Equipment, etc.	\$56,950	15	50%	\$28,475	\$1,898
Equipment-Large	Backhoe, Trailers, Potholing, etc.	\$133,000	20	50%	\$66,500	\$3,325
Vehicles	F250s, Escape, etc.	\$226,000	20	50%	\$113,000	\$5,650
Equipment	4th Ave. LS Submersible Pumps/Motors	\$40,000	20	100%	\$40,000	\$2,000
Equipment	Backup Generator 4th Ave. Lift Station - Automatic	\$25,000	20	100%	\$25,000	\$1,250
Equipment	4th Ave. LS Electrical and Controls	\$50,000	20	100%	\$50,000	\$2,500
Building and Improvements	4th Ave. Bldg Roof and Paint	\$30,000	20	100%	\$30,000	\$1,500
Equipment	1st Ave. LS Submersible Pumps/Motors	\$40,000	20	100%	\$40,000	\$2,000
Equipment	1st Ave. LS Electrical and Controls	\$50,000	20	100%	\$50,000	\$2,500
Building and Improvements	1st Ave. Bldg Roof and Paint	\$30,000	20	100%	\$30,000	\$1,500
Equipment	Feather River Dr. LS Submersible Pumps/Motors	\$40,000	20	100%	\$40,000	\$2,000
Equipment	Feather River Dr. LS Electrical and Controls	\$50,000	20	100%	\$50,000	\$2,500
Equipment	Settlers Rd. LS Submersible Pumps/Motors	\$40,000	20	100%	\$40,000	\$2,000
Equipment	Settlers Rd. LS Electrical and Controls	\$50,000	20	100%	\$50,000	\$2,500
Equipment	Rod Machine "Big Shake"	\$6,000	20	100%	\$6,000	\$300
Equipment	Backup Jetter Hose	\$1,800	20	100%	\$1,800	\$90
Equipment	Jetting Machine O'Brien 2010 Cummings 500 gal	\$30,000	20	100%	\$30,000	\$1,500
Building and Improvements	WWTP - Control Bldg Roof	\$20,000	20	100%	\$20,000	\$1,000
Equipment	Chlorination Equipment	\$60,000	20	100%	\$60,000	\$3,000
Equipment	Chlorine Analyzer	\$20,000	15	100%	\$20,000	\$1,333
Equipment	Blowers	\$75,000	20	100%	\$75,000	\$3,750
Equipment	Emergency Generator/ATS	\$150,000	20	100%	\$150,000	\$7,500
Equipment	WWTP Controls/Telemetry	\$100,000	15	100%	\$100,000	\$6,667
Equipment	Flowmetering Equipment	\$20,000	15	100%	\$20,000	\$1,333
Equipment	Headworks Screen	\$70,000	20	100%	\$70,000	\$3,500
Equipment	Headworks Screen Brushes	\$5,000	5	100%	\$5,000	\$1,000
Equipment	Workstation/Printer	\$4,000	8	100%	\$4,000	\$500
Equipment	Composite Sampler	\$10,000	10	100%	\$10,000	\$1,000
Equipment	Testing Equipment	\$5,000	10	100%	\$5,000	\$500
				Total Annual Short-Lived Assets:		\$71,903

It is very difficult to collect enough revenue from rates to perform substantial capital improvement projects so, oftentimes, the approach may be to collect enough revenue from rates to pay for funding acquisition, planning or design of future capital projects, or to debt service future loans. However, the District could use funds from this reserve to pay for small projects, such as small pipeline replacement projects.

The District entered the current FY 2025-26 year with about \$1.295M in Capital Projects Reserve funds. As discussed hereinafter, it is recommended the District utilize some of these funds to fully fund the Operating and Short-Lived Asset Reserve, which will dampen the need for larger rate increases.

Debt Service Reserve: The District has no current debt tied to its utility enterprise but, if it did, it would be required to establish a reserve equivalent to about twelve months of annual loan payments in a restricted reserve as a condition of the loan agreement with a lender.

Should the District decide to take on long-term debt to address some of its more pressing infrastructure replacement needs, a debt service reserve will be required to remain in good financial standing with the lender. The amount of reserve is usually the equivalent of one year of annual principal and interest payments. In addition, lenders typically require a minimum debt coverage ratio of 1.2, meaning the amount of revenue received from rates needs to be at least 20% higher than the amount needed to cover operating expenses.

6.4 REVENUE REQUIREMENTS – SEWER

Revenue requirements were developed based on the financial plan elements described above and include operating expenses, capital expenditures, and reserve allocations. The total expense for each year is offset by other operating revenues and non-operating revenues to compute the pure portion of revenue requirements to be collected from water rates.

The revenue requirement of \$925,573 for the “Test Year,” FY 2026-27, was used to compute cost distribution among distinctive cost components and then allocated to customers equitably in the COS analysis.

6.5 RECOMMENDED FINANCIAL PLAN – SEWER

Based on the revenue requirements outlined in the proposed financial plan, annual revenue adjustments of 8% in the test year and 8% in each of the subsequent four years. Under this plan, the District will be able to 1) cover expected annual expenses and establish and maintain a 25% Operating Reserve and 2) make annual allocations to a Short-Lived Asset Reserve. Use of Capital Projects Reserve funds will be used to fund, in part, the 25% Operating Reserve and the annual allocation to the Short-Lived Asset Reserve over the five-year study period. Table 10 shows the proposed Sewer Utility Financial Plan with beginning and ending reserve balances for the study period.

7. WATER ENTERPRISE COST OF SERVICE ANALYSIS

7.1 METHODOLOGY – WATER

The purpose of a COS analysis is to allocate costs among customers commensurate with their service requirements. The District has been utilizing the “base-extra capacity” COS method outlined in AWWA’s Manual M1, whereby costs are first allocated to individual functions, which are typically industry standard activities, then the costs of each function are distributed to appropriate cost causative components, which are defined by the cost-driving elements. The results of the COS form a reasonable, equitable basis for designing rates.

7.2 COST COMPONENTS – WATER

Operating costs are functionalized based on input from District staff with expertise on the utility system and industry knowledge. Total system asset value was utilized in the analysis to distribute the necessary costs to repair/rehabilitate system assets. The functions of the water system for both operating and capital expenses include:

- Water Supply – costs associated with source of water supply, including treatment if applicable
- Pumping – costs associated with general pumping and energy use
- Transmission and Distribution – costs associated with transmitting and distributing water to customers
- Customer Accounts – costs associated with billing and customer services
- Administrative and General – costs associated with administrative and general functions
- Fire – costs associated with water service for fire protection provided to property and structures

Table 10 - Sewer Fund Five-Year Financial Plan Summary

	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
STARTING RESERVE BALANCES						
Operating Reserve-Checking Acct	\$33,250	\$202,298	\$208,367	\$214,618	\$221,056	\$236,170
Short-Lived Asset Reserve	\$0	\$0	\$71,903	\$143,807	\$215,710	\$287,613
Capital Projects Reserve	\$1,295,210	\$1,080,770	\$1,094,886	\$1,181,658	\$1,317,140	\$1,273,237
REVENUE						
Rates	\$596,907	\$757,561	\$848,779	\$916,682	\$990,016	\$1,069,218
Other	\$136,694	\$140,794	\$145,018	\$149,369	\$153,850	\$158,465
Interest	\$30,200	\$27,217	\$29,618	\$32,018	\$28,019	\$28,019
EXPENSES						
Operating	\$809,192	\$833,468	\$858,472	\$884,226	\$1,128,753	\$1,162,615
Short-Lived Asset-Annual Contribution	\$0	\$0	\$0	\$0	\$0	\$0
CAPITAL PROJECTS						
	\$0	\$0	\$0	\$0	\$0	\$0
CAPITAL PROJECT-DEBT SERVICE						
	\$0	\$0	\$0	\$0	\$0	\$0
TRANSFERS FROM CAPITAL PROJECTS RESERVE						
To Operating Reserve	\$244,640	\$0	\$0	\$0	\$0	\$0
To Short-Lived Asset Reserve	\$0	\$71,903	\$71,903	\$71,903	\$71,903	\$71,903
ENDING RESERVE BALANCES						
Operating Reserve-Checking Acct	\$202,298	\$208,367	\$214,618	\$221,056	\$236,170	\$290,654
Short-Lived Asset Reserve	\$0	\$71,903	\$143,807	\$215,710	\$287,613	\$359,517
Capital Projects Reserve	\$1,080,770	\$1,094,886	\$1,181,658	\$1,317,140	\$1,273,237	\$1,239,917
TOTAL RESERVES	\$1,283,069	\$1,447,060	\$1,611,986	\$1,825,810	\$1,868,923	\$1,961,991
Percentage Operating Reserve	25.0%	25.0%	25.0%	25.0%	20.9%	25.0%
SEWER RATES						
Residential Flat Rate	\$38.05	\$41.09	\$44.38	\$47.93	\$51.77	\$55.91
Percentage Rate Increases	0.0%	8.0%	8.0%	8.0%	8.0%	8.0%

7.3 COST OF SERVICE ALLOCATION – WATER

For the water system to provide adequate service to its customers at all times, it must be capable of meeting not only the annual volume requirements but also the peak demand – the maximum rate at which water is consumed. Therefore, the capacities of the various facilities must meet the maximum coincidental demand of all customers.

Each water service facility within the system has an underlying average demand exerted by the customers for whom the base cost component applies. For those facilities designed solely to meet average daily demand, 100% of the cost should go to the base cost component. Extra capacity requirements associated with the demand in excess of the average use consist of maximum day demand (MDD) and peak hourly demand (PHD). Peaking factors of 1.5 (recommended by the State Board’s Division of Drinking Water) were used to compute MDD and PHD from the District’s average annual water consumption data. Calculations used to determine percentage allocation of costs to causation components are shown in Table 11.

Table 11 – System-Wide Peaking Factors and Allocation to Cost Components

Line	Usage Criteria	Peaking Factors	Base	Max Day	Max Hour
		A	B	C	D
1	Base	1.00	100%	0%	0%
2	Max Day	2.30	39%	51%	0%
3	Max Hour	3.40	25%	33%	28%
4	Peak Usage Average (Max Day + Max Hour / 2)		32%	42%	14%

Base = (1 – Fire Protection) x (Base/Max Day)

Max Day = (1 – Fire Protection) x ((Max Day – Base) / (Max Day))

Max Hour = (1 – Fire Protection) x ((Max Hour – Max Day) / Max Hour)

Where,

Max Day Fire Protection = 10%

Max Hour Fire Protection = 15%

The number of bills in one year (number of accounts multiplied by 12) serves as the basis for distributing costs accordingly. The costs associated with the functions which do not require extra capacity include service billing and customer service costs associated with meter reading, customer billing and collection, and other customer service costs. The number of equivalent meters is used to measure meter-related service costs. The cost causative components therefore include the following:

- Base – delivering water to customers under average demand conditions
- MDD – the costs of delivering water to customers on the day with the highest demand
- PHD – the costs of delivering water to customers on the hour with the highest demand on the highest day
- Meters – the costs of servicing meters
- Customer Service – billing and other customer service-related costs
- Direct Fire Protection Service – the costs of providing water service for public and private fire protection services

The result of the COS analysis determines how the total revenue requirements should be allocated to each of the cost components, which are categorized and grouped based on similar cost-driving elements.

Table 12 shows the allocation of functionalized O&M and capital expenses to cost causation components for the test year, FY 2026-27.

8. SEWER ENTERPRISE COST OF SERVICE ANALYSIS

8.1 METHODOLOGY – SEWER

The District's current sewer rates appear to utilize a flat residential sewer rate based on an approximate wintertime water use of about 6,000 gallons per month. However, non-residential accounts pay a monthly consumption rate for water consumption exceeding 32,800 gallons per month. It is unclear how this tier amount was determined and on what it is based.

Table 12 - Water Fund Allocation of Functionalized O and Capital Expenses to Cost Causation Components

	O&M Functions	Allocation Basis	Supply	Base	Max Day	Max Hour	Fire	Meter	Customer	General	Conservation	Total
Line		A	B	C	D	E	Fire	G	H	I	J	K
1	General and Administrative							5%	24%	68%	3%	100%
2	Distribution	Max Day		39%	51%	0%	10%					100%
3	Water Supply	Supply	100%									100%
4	Utilities	Max Hour		25%	33%	28%	15%					100%
	O&M Allocation											
5	General and Administrative		\$0	\$0	\$0	\$0	\$0	\$29,264	\$140,466	\$397,986	\$17,558	\$585,274
6	Distribution		\$0	\$18,569	\$24,140	\$0	\$4,745	\$0	\$0	\$0	\$0	\$47,455
7	Water Supply		\$39,546	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,546
8	Utilities		\$0	\$29,659	\$38,557	\$32,625	\$17,795	\$0	\$0	\$0	\$0	\$118,637
9	Total O&M Expenses		\$39,546	\$48,228	\$62,697	\$32,625	\$22,541	\$29,264	\$140,466	\$397,986	\$17,558	\$790,911
10	% Allocation		5%	6%	8%	4%	3%	4%	18%	50%	2%	100%
	Reserve Allocation		Supply	Base	Max Day	Max Hour	Fire	Meter	Customer	General	Conservation	Total
11	Functionalized Percentages		5%	6%	8%	4%	3%	4%	18%	50%	2%	100%
12	Operating Reserve		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13												
14	Functionalized Percentages		0%	70%	10%	5%	15%	0%	0%	0%	0%	100%
15	Capital Projects/SLA Reserve		\$0	\$96,063	\$13,723	\$6,862	\$20,585	\$0	\$0	\$0	\$0	\$137,233
	Capital Allocation		Supply	Base	Max Day	Max Hour	Fire	Meter	Customer	General	Conservation	Total
16	Functionalized Asset Percentages		0%	70%	10%	5%	15%	0%	0%	0%	0%	100%
17	Rate Funded Capital Projects		\$0	\$228,550	\$32,650	\$16,325	\$48,975	\$0	\$0	\$0	\$0	\$326,500
18	Allocated by Functional Assets		\$0	\$228,550	\$32,650	\$16,325	\$48,975	\$0	\$0	\$0	\$0	\$326,500
	Total Allocation		Supply	Base	Max Day	Max Hour	Fire	Meter	Customer	General	Conservation	Total
19	O&M Allocated Expenses		\$39,546	\$48,228	\$62,697	\$32,625	\$22,541	\$29,264	\$140,466	\$397,986	\$17,558	\$790,911
20	Reserve Allocated Expenses		\$0	\$96,063	\$13,723	\$6,862	\$20,585	\$0	\$0	\$0	\$0	\$137,233
21	Capital Allocated Expenses		\$0	\$228,550	\$32,650	\$16,325	\$48,975	\$0	\$0	\$0	\$0	\$326,500

Going forward, it is recommended the District decrease the tier amount from 32,800 to 6,000 gallons per month, which tracks closely to the average residential wintertime water use throughout the District. This approach is supported by the COS principles described in WEF Manual of Practice No. 27.

The consumption rate for non-residential accounts will be determined by dividing the residential monthly flat rate by 6,000 gallons and multiplying by 1,000 to obtain a cost per 1,000 gallons for any wintertime water use above 6,000 gallons per month.

9. RATE SETTING

The last step of the rate study is the rate design step. Water and sewer rates must be designed to equitably recover the rate revenue requirements from each customer given the projected customer demand identified as a result of the COS analysis. The following criteria was used to establish utility rate recommendations:

- 1) Revenue Sufficiency: Rates should recover the annual COS and provide revenue stability.
- 2) Rate Impacts: While rates are calculated to generate sufficient revenue to cover all costs, they should be designed to minimize, as much as possible, the impacts on ratepayers.
- 3) Equitability: Rates should be fairly allocated among all customers based on their estimated demand characteristics.
- 4) Practicality: Rates should be simple in form and therefore adaptable to changing conditions, easy to administer, and easy to understand.

10. RECOMMENDATIONS

This utility rate study update evaluated the current water and sewer rates and financial conditions of both enterprise funds. Revenue adjustments were determined for the five-year study period, FY 2026-27 to FY 2030-31. Working with District staff, considerable analyses were performed to evaluate the most effective and equitable approach for recovering necessary revenue from customers' rates, including scenarios for funding needed capital improvements through grants, loans, and special agreements with vendors. The following adjustments are recommended to the District's utility rates.

Water Rates:

- Eliminate the 6,000 gallons currently included in the fixed water meter rates. Going forward, the District will charge a consumption rate (\$/1,000 gallons) for all water consumed.
- Change the meter ratios to the AWWA standard depicted in Table 6 of the 2023 Rate Study.
- Establish a standby charge equivalent to the fixed meter charge for inactive customers. This is justified given the District's fixed expenses are recovered from the fixed meter charges and do not change based on a water service being inactive for portions of the year.
- Fire service customers are those who have dedicated water services to fire sprinklers or other fire infrastructure and have no other use. Fire service customers are charged based on the rationale described hereinafter.

Sewer Rates:

- Establish 6,000 gallons per month as the average wintertime water use for a typical single-family residence in Chester, California. The monthly base sewer charge is based on discharging 6,000 gallons per month.
- Eliminate the 32,800 gallons per month tier used to charge "Commercial" customers.
- All customers shall pay a sewer consumption charge equivalent to the base monthly charge divided by 6,000 gallons for average wintertime water consumption greater than 6,000 gallons. The consumption charge will be levied in \$/1,000 gallons.
- Wintertime water consumption is defined as the average monthly water consumption for December, January, and February of the year. Until the District replaces its water meters and has the ability to read meters through the winter, the average wintertime water use shall be the six-month monthly average between November and April.
- Establish a standby charge equivalent to a monthly base sewer charge, using the rationale described for the Water Service Standby Charge.
- Establish an "Adjustments Policy" that affords District staff discretion to evaluate wintertime water use for those customers who use excessive amounts of water during the winter and adjust the sewer bill to reflect, as close as practical, the amount of wastewater being discharged to the sewer.

11. PROPOSED RATES

11.1 WATER RATES

It is estimated that approximately 82% of the water utility's O&M costs are fixed, while about 18% are variable. To better align revenue into the District with actual expenses, it is recommended the fixed monthly service charges align, as close as possible, with the percentage of fixed expenses. The proposed rates are intended to accomplish this.

The proposed monthly fixed charges will be based on the size of the meter that serves the customer. To determine individual customer fixed charges, the total fixed revenue requirement is divided by the number of equivalent meters within the system. The 5/8-inch and 3/4-inch meters are the basis for the equivalent meter calculations. Using the cost-based AWWA meter factors shown in Table 1, meters larger than 3/4-inch are multiplied by their appropriate meter factor to determine the relative cost allocation that should be applied to that particular meter size.

The monthly service charge for one equivalent meter per month is \$36.01 for FY 2026-27. The billed fixed charge for the larger meters reflects the cost and capacity needed to serve the larger connection. A total of \$695,523 is needed in revenue to pay for the fixed portion of the customer's fixed charges.

Consumptions charges make up the balance of the 18% variable expense component. Based on District-wide water consumption between October 2024 and September 2025, the consumption rate for FY 2026-27 is set at \$0.61 per 1,000 gallons.

Table 13 shows the proposed water rates for the five-year study period, FY 2026-27 through FY 2030-31.

11.2 FIRE SERVICE WATER RATES

Fire services are those services dedicated to providing fire suppression service to a facility in the form of fire sprinklers, fire hydrant, or fire department connection. No domestic use is allowed through these services so they are treated differently than other connections. Under Proposition 218, it is not appropriate to factor these services into the customer classes utilized to spread functionalized costs in a normal COS analysis. In the COS described hereinbefore, fire

protection was assumed to represent about 15% of the total cost used for allocating cost components. Therefore, it is appropriate to establish fire service rates equivalent to 15% of the base water meter rate for that particular meter or fire service size.

Table 13 – Water Fund Five-Year Rate Schedule

Fixed Charge	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
5/8 in	\$30.01	\$36.01	\$42.49	\$48.44	\$48.44	\$48.44
3/4 in	\$30.01	\$36.01	\$42.49	\$48.44	\$48.44	\$48.44
1 in	\$42.80	\$60.14	\$70.97	\$80.90	\$80.90	\$80.90
1½ in	\$74.77	\$119.92	\$141.51	\$161.32	\$161.32	\$161.32
2 in	\$113.13	\$191.94	\$226.49	\$258.20	\$258.20	\$258.20
3 in	\$202.64	\$360.12	\$424.94	\$484.43	\$484.43	\$484.43
4 in	\$330.51	\$600.32	\$708.38	\$807.55	\$807.55	\$807.55
6 in	\$650.18	\$1,200.28	\$1,416.33	\$1,614.62	\$1,614.62	\$1,614.62
Variable Charge	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
Residential						
Tier 1	\$0.00	\$0.61	\$0.72	\$0.82	\$0.82	\$0.82
Tier 2	\$1.03					
Commercial						
Tier 1	\$0.61	\$0.61	\$0.72	\$0.82	\$0.82	\$0.82
Tier 2	\$0.00					
Notes: 1. Beginning July 1, 2026, no water will be included with the base meter rate. 2. Beginning July 1, 2026, there will be no distinction between Residential and Commercial tiered rates. All water accounts will pay the same tiered rate. 3. Tiered rate is per 1,000 gallons/month. 4. Dedicated fire service connections shall be charged a monthly rate of 15% of the noted Fixed Charge coincident with the size of the fire service.						

11.3 SEWER RATES

The base sewer rate for FY 2026-27 is \$41.09 and is established based on the average wintertime water use for a typical residence in Chester, which is about 6,000 gallons per month. To arrive at the appropriate sewer bill per customer, the wintertime water use for all accounts will be reviewed. Currently, water bills are not read between November and April. Therefore, the wintertime water use will be determined by taking the May consumption reading divided by six months. Once the

District replaces its water meters and is able to read meters all months of the year, the months December, January, and February will be used to determine wintertime water use.

After wintertime water use is determined, the monthly bill for each account will be determined and charged to the customer for the next twelve months. To account for customers discharging more than 6,000 gallons per month, a consumption charge of \$6.85 per 1,000 gallons will be added to the monthly bill.

Table 14 shows the proposed sewer rates for the five-year study period, FY 2026-27 through FY 2030-31.

Table 14 – Sewer Fund Five-Year Rate Schedule

Customer Class	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
Fixed Charge						
Residential	\$38.05	\$41.09	\$44.38	\$47.93	\$51.77	\$55.91
Non-Residential	\$38.05	\$41.09	\$44.38	\$47.93	\$51.77	\$55.91
Variable Charge						
Non-Residential, \$/1,000 Gallons ¹	\$1.16	\$6.85	\$7.40	\$7.99	\$8.63	\$9.32
Notes:						
1. The Variable Charge applies to wintertime water consumption in excess of 6,000 gallons per month.						

12. UTILITY BILL IMPACTS AND COMPARISON

Changes to both the water and sewer bill rate structure will have substantial impacts on some customers. Below is a general discussion of potential impacts to water and sewer customers.

Water Accounts: Eliminating the water from the base meter rates will cause bills for those that have small meters and use less than 6,000 gallons per month to decrease. Changing the meter factors to AWWA-recognized cost-based factors will cause monthly bills for those with 1-inch and larger meters to increase. The larger the meter, the higher the increase. The cost increases from these structural rate changes will be dampened to some degree by the general increase in base rates and decrease in consumption rates, intended to drive more revenue into the fixed category. In general, those customers that have large meters and use lot of water will see substantial water bill increases.

Sewer Accounts: Accounts that use 6,000 gallons per month or less during the winter will see monthly sewer bill increases equivalent to the percentage increases in the tables herein. Those that use more water will see bills increase more than by the rates shown in the tables. Some non-residential accounts will see substantial sewer bill increases due to the decrease in monthly water use tier from 32,800 gallons to 6,000 gallons. In addition, the consumption rate is increasing substantially to reflect a more equitable distribution of charges to those that contribute more wastewater.

There are several non-residential accounts that use an exorbitant amount of water during all months of the year. It is highly recommended the District reach out to these accounts to try to better understand how the wintertime water is used and determine, to some extent, how much of that water is being discharged to the sewer. It may be necessary for some of these accounts to better separate their water use through additional meters and/or plumbing modifications so they are not overcharged for sewer. The District also intends to develop an “Adjustments Policy” that would establish criteria by which District staff can evaluate wintertime water use for any account and make adjustments as required so the sewer reflects, to the extent possible, the true impact to the system.

12.1 STANDBY CHARGES

As discussed hereinbefore, it is appropriate and recommended that standby charges be levied to all water and sewer accounts who have requested their services be temporarily put on hold. The standby charge should be equivalent to their base meter charge for water and the base sewer rate for sewer. These charges are designed to collect the fixed portion of revenue needed to offset the fixed expenses in both utility funds. Fixed expenses, incurred by the District, do not change based on the temporary nature of any given water or sewer service.

12.2 UTILITY BILL COMPARISON

Both current and future water and sewer bills were compared to other local agencies throughout Northern California, including other agencies that reside in Plumas County. The average monthly water use for a single-family residence in Chester, California, is about 13,600 gallons per month. Applying this water consumption to the rate structures of other similar agencies provides a

reasonable apples-to-apples comparison of how Chester's current and projected utility rates stack up against other agencies.

Figure 3 shows a comparison of CPUD's current average water rate versus other agencies. Also shown is the projected FY 2030-31 water rate. Note that by FY 2030-31, water rates for all the other agencies shown in the figure will likely increase at similar inflationary levels.

Figure 4 shows a comparison of CPUD's current and FY 2030-31 base sewer rates versus other agencies residing in Northern California and Plumas County.

13. CONCLUSIONS

13.1 WATER SYSTEM

As described throughout this report, below is a summary of conclusions and recommendations pertaining to the Water Fund financial plan and proposed future water rates:

- Create and maintain a 25% operating reserve.
- Fund an annual contribution to a Short-Lived Asset Reserve.
- Enter into a multi-year maintenance agreement with the tank vendor to recoat the two existing water storage tanks.
- Consider directing a consultant to proceed with preparing documents to complete a construction funding application seeking 100% loan funds to 1) replace all water meters within the District and 2) make substantial improvements to the existing SCADA system.
- Eliminate all water included in the base meter rates.
- Employ the AWWA cost-based meter factors, as recommended in the 2023 Rate Study.
- Adjust base meter and consumption rates such that approximately 82% of the revenue generated from rates is derived from the base meter rates, with the remaining 18% coming from the consumption rate.
- Enact a standby charge for all accounts who request temporary inactive status equivalent to the full base meter charge for that account.
- Fire services used strictly for fire protection shall pay a monthly fee equivalent to 15% of the base meter rate for the size of meter or fire service to the property.

Figure 3 - Water Rate Comparison

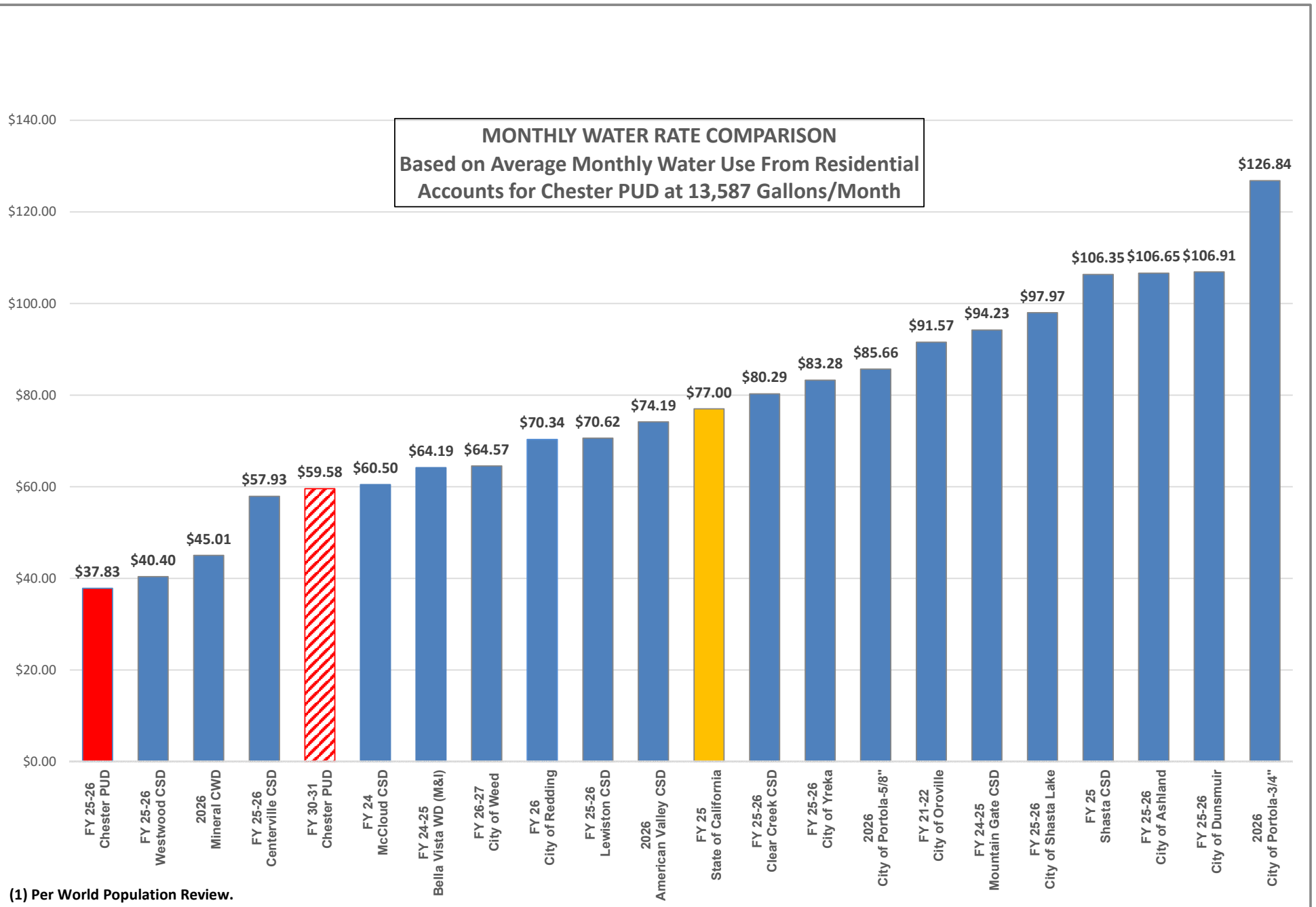
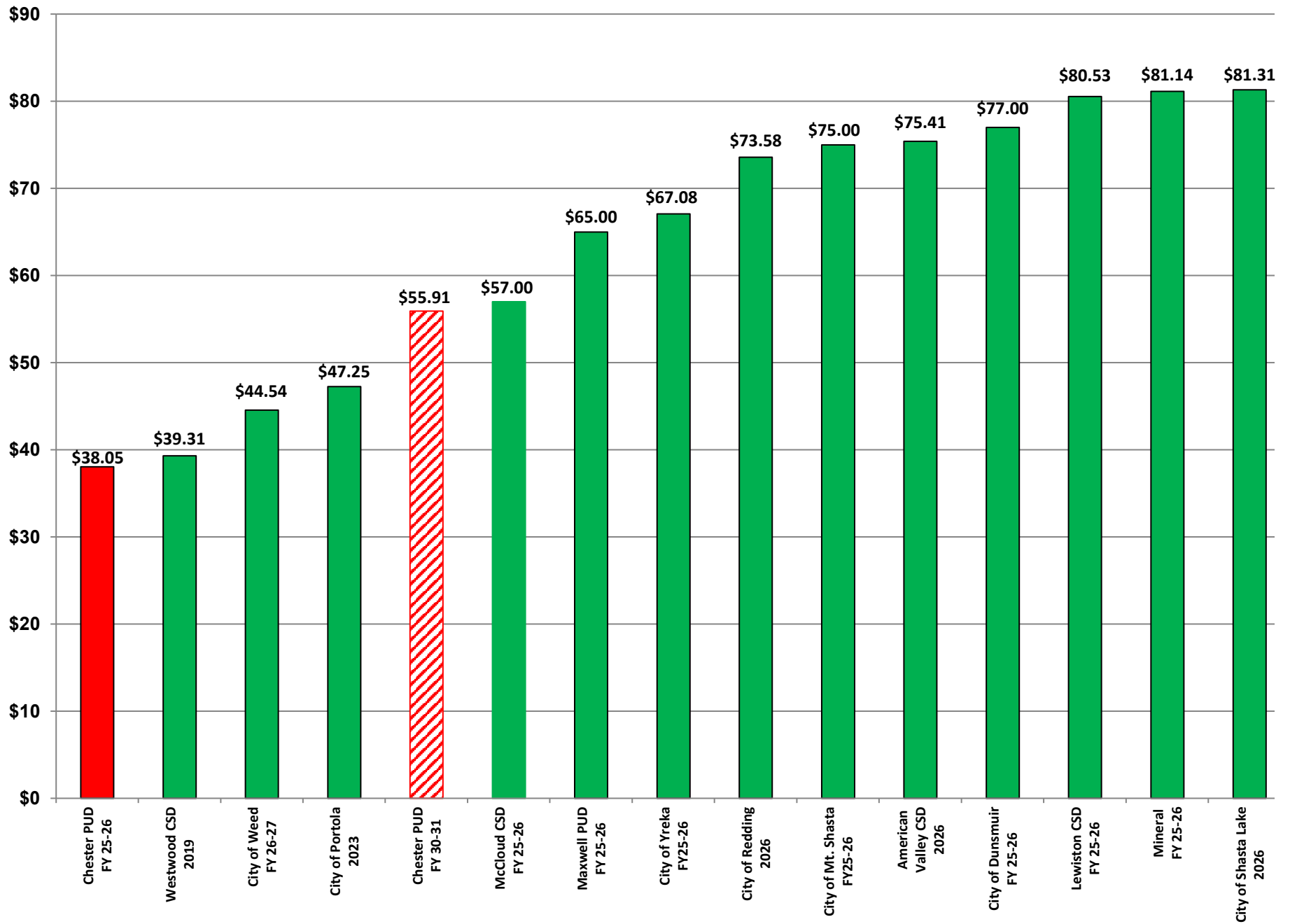


Figure 4 - Monthly Sewer Bill Comparison



13.2 SEWER SYSTEM

As described throughout this report, below is a summary of conclusions and recommendations pertaining to the Sewer Fund financial plan and proposed future water rates:

- Create and maintain a 25% operating reserve.
- Fund an annual contribution to a Short-Lived Asset Reserve.
- Utilize the \$1M+ Capital Projects Reserve to make sure the operating reserve is maintained at 25% (of annual expenses) and the annual contribution to short-lived assets is funded.
- Budget for increased labor and O&M costs for the new WWTP improvements, anticipated in years four and five of the financial plan.
- Evaluate average wintertime water use (December, January, and February) as the basis for establishing sewer rates for all customers. Until the District obtains the ability to read meters during the winter, utilize the six-month average between November and April.
- Each base sewer rate shall include 6,000 gallons of wintertime water use. For average wintertime water usage exceeding 6,000 gallons per month, the customer will be charged a variable fee equivalent to the fixed charge divided by 6,000 gallons and multiplied times 1,000 gallons. The charge will be levied in \$/1,000 gallons.
- Eliminate the 32,800-gallon tier for “Commercial” customers.
- Enact a standby charge for all accounts who request temporary inactive status equivalent to the full fixed charge for that account.
- Develop an “Adjustments Policy” that allows the District to evaluate and make adjustments to wintertime water use for accounts who consume large quantities of wintertime water. It is believed that a substantial amount of wintertime water use for some non-residential accounts is not discharged to the sewer.

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