



# **Water and Sewer Rate Study for Fresno County Service Area 47 (Quail Lake Estates)**

**Final Report  
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## SECTION 1: INTRODUCTION AND EXECUTIVE SUMMARY

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### 1.1 Background

The Fresno County Service Area 47 (CSA 47) was formed in 1995 to provide community water and sewer services to the Quail Lake Estates Subdivision (Quail Lakes) located between Ashlan and Shaw Avenues, east of McCall Avenue in Fresno County (County). CSA 47, which encompasses approximately 375 acres, includes 708 residential lots, a community clubhouse, an elementary school, and a vacant commercial parcel located at the intersection of Shaw Avenue and Quail Lake Drive. The system is managed by Fresno County. The construction of both the water and wastewater systems was paid for with bond financing.

CSA 47 is the primary administrator of the water recharge facility located within the Red Bank Slough, but the Quail Lake Owners Association (QLOA) and Fresno Irrigation District (FID) also play a role in administering this facility per Agreement 05-068. Per the Agreement, FID is to fill the recharge facility between April 15 and June 1, with the goal of recharging 400 or more acre-feet of water each year, except in the case of a severe drought when the water is unavailable.

CSA 47 last raised rates in November 2020. In recent years, CSA 47 has spent down its existing reserves and is not collecting sufficient revenue to fund annual water and sewer expenses. CSA 47 has been operating in a deficit, and the County has been supplementing revenues to maintain operations. The unpaid charges that CSA 47 owes to the County total about \$1 million. One goal of this study is to determine water and sewer rate plans to cover CSA 47's cost of service for the next five years. The cost of service includes operations, maintenance, capital improvements, the repayment of unpaid charges with the County, and the accumulation of reserves.

A second goal of this rate study is to revise the rate structure to recover costs more fairly from customers. The current water rate structure includes an allotment of 5,000 gallons per month in the Base Fee. Water usage above the first 5,000 gallons is billed at a volume rate of \$2.66 per 1,000 gallons. The proposed water rate structure eliminates the water allotment so that customers are billed a volume rate for all water consumed. For the sewer utility, it is proposed that customers continue to be billed as a fixed monthly fee<sup>1</sup> but at a higher amount to reflect the actual cost of providing service.

### 1.2 Requirements of Proposition 218

The implementation of public agency utility rates in California is governed by the substantive and procedural requirements of Proposition 218 the "Right to Vote on Taxes Act" which is codified as Articles XIIC and XIID of the California Constitution. Fresno County must follow the procedural requirements of Proposition 218 for all utility rate increases. These requirements include:

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<sup>1</sup> The elementary school is billed annually.

1. **Noticing Requirement** – The County must mail a notice of the proposed rate increases to all affected property owners. The notice must specify the amount of the fees, the basis upon which they were calculated, the reason for the fees, and the date/time/location of a public rate hearing at which the proposed rates will be considered/adopted.
2. **Public Hearing** – The County must hold a public hearing prior to adopting the proposed rate increases. The public hearing must be held not less than 45 days after the required notices are mailed.
3. **Rate Increases Subject to Majority Protest** – At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of affected property owners (counted one per parcel) submit timely written protests against the proposed rate increases, the increases cannot be adopted.

Proposition 218 also established substantive requirements that apply to water and sewer rates and charges, including:

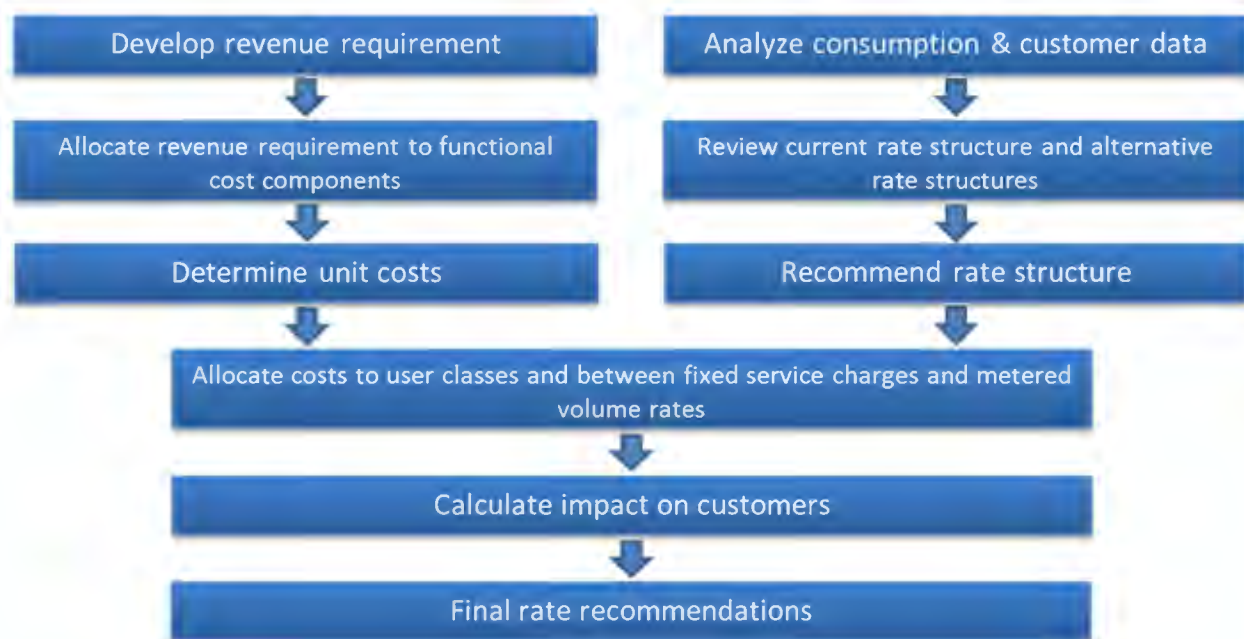
1. **Cost of Service** – Revenues derived from the fee or charge cannot exceed the funds required to provide the service. In essence, fees cannot exceed the “cost of service”.
2. **Intended Purpose** – Revenues derived from the fee or charge can only be used for the purpose for which the fee was imposed.
3. **Proportional Cost Recovery** – The amount of the fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of service attributable to that parcel. Caselaw allows this determination to be made customer class-by-customer class rather than parcel-by-parcel.
4. **Availability of Service** – No fee or charge may be imposed for a service unless that service is used by, or immediately available to, the owner of the property. Standby charges are approved as assessments on real property.
5. **General Government Services** – No property-related fee or charge may be imposed for general governmental services available to the public at large, as police and some fire services are.

Charges for water and sewer service are exempt from additional voting requirements of Proposition 218 for other property-related fees, provided the charges do not exceed the cost of providing service and are adopted pursuant to the procedural requirements of Proposition 218.

### 1.3 Rate Study Process

A summary of the rate study process is provided in Figure 1.

Figure 1: Rate Study Process



The following is a brief description of the rate study process:

- **Revenue Requirement** – Revenue requirements are analyzed via a cash flow projection based on the best information currently available, such as CSA 47’s historical operating results, budgets, audits, and input from County staff. The cash flow serves as a roadmap for funding future operating costs and capital expenditures while maintaining long-term fiscal stability, all of which is calculated in this study to produce rates that will be necessary to recover only the projected cost of service per parcel under these proposed rates.
- **Cost of Service Allocation** - The cost of service process builds on the revenue requirement analysis and assigns water costs to functional cost components: *metering and customer service*, *base demand*, and *extra demand*. Sewer costs are allocated based on the sewage flow and pollutant strength of a typical single family dwelling.
- **Rate Design** - Rate design involves developing a rate structure that fairly recovers costs from customer classes but does not exceed the proportional cost of the service attributable to each parcel. Final rate recommendations are designed to fund CSA 47’s short- and long-term costs of providing service and fairly allocate costs to all customer classes.

The rates recommended in this report are based on the best available information gathered from CSA 47's budgets, audits, and input from staff and the ratemaking consultant's professional opinion. The cost allocations proposed herein are based on industry standard practice. The proposed rates are based on the reasonable cost of providing service and do not exceed the proportional cost of the service attributable to each parcel.

## 1.4 Proposed Rates

Current and proposed rates are provided in Table 1. It is proposed that the first rate increases go into effect on July 1, 2025 with subsequent rate adjustments effective on July 1 of each year through July 1, 2029. It is proposed that the water base fee will no longer include 5,000 gallons of water consumption so that all water consumption will be charged a single rate per 1,000 gallons of consumption. The sewer rates are proposed to increase and will continue to be billed as a fixed charge. Based on the analysis in this report, the water and sewer service rates do not exceed the proportional cost of the service attributable to each parcel.

**Table 1: Current and Proposed Water and Sewer Rates**

Fee Description	Current	Proposed	PROJECTED - RATE STUDY PERIOD				
			FY2025/26 July 1, 2025	FY2026/27 July 1, 2026	FY2027/28 July 1, 2027	FY2028/29 July 1, 2028	FY2029/30 July 1, 2029
<b>Water Base Fee (monthly)</b>	\$19.53	<b>Water Base Fee (monthly) [1]</b>	\$29.10	\$32.01	\$33.22	\$34.44	\$35.65
<b><u>Water Usage Rate</u></b>	<b><u>Charge per 1,000 gal</u></b>	<b><u>Usage Rate</u></b>			<b><u>Charge per 1,000 gal</u></b>		
0 - 5,000 gallons [2]	\$0.00	All Usage	\$2.16	\$2.27	\$2.40	\$2.53	\$2.68
5,001 and over	\$2.66						
<b><u>Sewer Base Fee</u></b>		<b><u>Sewer Base Fee</u></b>					
Residential (monthly)	\$85.03	Residential (monthly)	\$106.27	\$120.05	\$125.02	\$130.25	\$135.79
Commercial (monthly)	\$85.03	Commercial (monthly)	\$106.27	\$120.05	\$125.02	\$130.25	\$135.79
School (annual)	\$39.11	School (annual)	\$48.88	\$55.22	\$57.50	\$59.91	\$62.46

1 – It is proposed that the elementary school be charged 22 times the base fee.

2 – The first 5,000 gallons of water use are currently included in the base fee.

It should be noted that CSA 47 also incurs about \$13,000 in electricity costs for the Quail Lake Homeowner's Association's (HOA) irrigation system. That cost is passed through and funded by the Quail Lakes HOA. The irrigation account's rate structure was not evaluated in this study.

Table 2 shows the current and proposed monthly bill for July 1, 2025 of a typical customer using 16,000 gallons (average monthly water use). Under the proposed rates, the average bill will increase from \$133.82 to \$169.93, an increase of \$36.11 or about 27%.

**Table 2: Current and Proposed Typical Monthly Bill**

AVERAGE MONTHLY BILL (16,000 gallons)									
CURRENT					PROPOSED July 1, 2025				
Fee Description	Current		# of Units	Total Charges	Fee Description	Proposed		# of Units	Total Charges
<u>Water Base Fee</u>	\$19.53	X	1	\$19.53	<u>Water Base Fee</u>	\$29.10	X	1	\$29.10
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>			
0 - 5,000 gallons	\$0.00	X	5	\$0.00	All Usage	\$2.16	X	16	\$34.56
5,001 and over	\$2.66	X	<u>11</u>	<u>\$29.26</u>					
			16	\$29.26					
<u>Sewer Base Fee</u>	\$85.03	X	1	\$85.03	<u>Sewer Base Fee</u>	\$106.27	X	1	\$106.27
<b>Total Monthly Bill</b>				<b>\$133.82</b>					<b>\$169.93</b>
									<i>Increase</i> \$36.11 27%



## SECTION 2: CUSTOMER BASE AND CURRENT RATE REVENUES

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### 2.1 Current Rates

CSA 47's current water and sewer rates have been in effect since November 2020 as shown in Table 3. For water service, customers are billed a monthly Base Fee of \$19.53 that includes up to the first 5,000 gallons of water usage. Usage above the first 5,000 gallons is billed \$2.66 per 1,000 gallons.

For sewer service, customers are charged a Base Fee of \$85.03. Sewer service provided to the elementary school is charged a flat rate multiplied by the number of students, faculty, and staff at the school, as estimated by Sanger Unified School District (SUSD). SUSD is billed once annually, after the beginning of the school year, when a final count of the students, faculty, and staff occupying the school has been calculated.

**Table 3: Current Monthly Water and Sewer Rates**

Fee Description	Effective Date 11/1/2020	
<b><u>Water Base Fee</u></b>		
All customers	\$19.53	per month
<b><u>Water Usage [1]</u></b>	<b><u>Charge per 1,000 gal</u></b>	
0 - 5,000 gallons	\$0.00	
5,001 and over gallons	\$2.66	
<b><u>Sewer Base Fee</u></b>		
Sewer Residential	\$85.03	per month
Sewer School per student or staff	\$39.11	per year
Sewer Commercial	\$85.03	per month

Note: rates as shown in FY2024/25 budget

1 - The first 5,000 gallons per month is included in the water base fee

### 2.2 Rate Revenues

CSA 47 currently serves 711 parcels made up of 708 residential parcels in addition to the elementary school and commercial parcels. Table 4 provides current customer counts, water usage data, and annual rate revenues. Current water rates generate about \$422,600 annually. Total water consumption is 136,451,000 gallons per year. About 29% of water usage falls within the first 5,000 gallons included in the monthly base fee which is not billed a usage rate. Approximately 39.3% of water rate revenues are collected from the Water Base Fee and 60.7% are collected from the Water Usage Fee. For the sewer utility, current rates generate about \$748,942 annually.

**Table 4: Current Customer Counts and Rate Revenues**

FY2024/25 Estimate					
Rate Description	Charge		# of Units	Annual Revenue	% of Revenue
<u>Water Base Fee</u>	<u>per month</u>		<u>accounts</u>		
All Customers	\$19.53	x	708	\$165,927	39.3%
<u>Water Usage</u>	<u>per 1,000 gal</u>		<u>1,000 gal</u>		
0 - 5,000 gallons	\$0.00	x	39,962	\$0	0.0%
5,001 and over gallons	\$2.66	x	<u>96,489</u>	<u>\$256,661</u>	60.7%
Overuse Subtotal			136,451	\$256,661	
<b>Total Water Rate Revenues</b>				<b>\$422,588</b>	<b>100.0%</b>
<u>Sewer Base Fee</u>	<u>per month</u>		<u>accounts</u>		
Sewer Residential & Commercial	\$85.03	x	711	\$725,476	96.9%
<u>Sewer Base Fee</u>	<u>per year</u>		<u>accounts</u>		
Sewer School per student or staff	\$39.11	x	600	\$23,466	3.1%
<b>Total Sewer Rate Revenues</b>				<b>\$748,942</b>	<b>100.0%</b>

## 2.3 Typical Bills

Table 5 provides example monthly utility bills for an average customer year-round (average over 12 months) as well as in the winter and summer months. Average annual single family consumption is 16,000 gallons per month. For winter, the average use is 6,000 gallons per month. For summer, the average use is 30,000 gallons per month. The current rate structure includes the first 5,000 gallons of consumption in the Water Base Fee. Customers are only charged the Overuse Rate for any usage above 5,000 gallons. The current monthly bill for the average customer using 16,000 gallons is \$133.82.

**Table 5: Typical Bills Under Current Rates**

<b>AVERAGE MONTHLY BILL (16,000 gallons)</b>				
<b>Fee Description</b>	<b>Current</b>		<b># of Units</b>	<b>Total Charges</b>
<u>Water Base Fee</u>	\$19.53	X	1	\$19.53
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>			
0 - 5,000 gallons	\$0.00	X	5	\$0.00
5,001 and over gallons	\$2.66	X	<u>11</u>	<u>\$29.26</u>
			16	\$29.26
<u>Sewer Base Fee</u>	\$85.03	X	1	\$85.03
<b>Total Monthly Bill</b>				<b>\$133.82</b>
<b>EXAMPLE WINTER MONTHLY BILL (6,000 gallons)</b>				
<b>Fee Description</b>	<b>Current</b>		<b># of Units</b>	<b>Total Charges</b>
<u>Water Base Fee</u>	\$19.53	X	1	\$19.53
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>			
0 - 5,000 gallons	\$0.00	X	5	\$0.00
5,001 and over gallons	\$2.66	X	<u>1</u>	<u>\$2.66</u>
			6	\$2.66
<u>Sewer Base Fee</u>	\$85.03	X	1	\$85.03
<b>Total Monthly Bill</b>				<b>\$107.22</b>
<b>EXAMPLE SUMMER MONTHLY BILL (30,000 gallons)</b>				
<b>Fee Description</b>	<b>Current</b>		<b># of Units</b>	<b>Total Charges</b>
<u>Water Base Fee</u>	\$19.53	X	1	\$19.53
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>			
0 - 5,000 gallons	\$0.00	X	5	\$0.00
5,001 and over gallons	\$2.66	X	<u>25</u>	<u>\$66.50</u>
			30	\$66.50
<u>Sewer Base Fee</u>	\$85.03	X	1	\$85.03
<b>Total Monthly Bill</b>				<b>\$171.06</b>

## SECTION 3: WATER COST OF SERVICE

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This section provides an analysis of water system revenues and expenses to determine the total cost of service to be recovered via water rates. The cost of service is expressed in a cash flow table that illustrates revenue increases needed to keep up with expenses and maintain financial health. Over the five-year rate study period, rate increases are proposed so that CSA 47 can pay for operating costs, fund capital improvements, repay prior unpaid charges to the County, and accumulate reasonable reserves, all of which are calculated in this study to produce rates that will be necessary to recover only the actual cost of the water service per parcel under these proposed water rates.

In recent years, CSA 47 has operated at a deficit meaning that expenses are greater than revenues. Due to deficit spending, CSA 47 has exhausted its reserves and accumulated unpaid charges with the County. These unpaid charges are owed to the County for expenses incurred by CSA 47 that it could not pay. The financial plan recommended in this report includes repayment of these past charges as well as funding future projected costs to produce rates that will be necessary to recover only the actual cost of the water service per parcel under these proposed water rates.

### 3.1 Revenues

The water fund's primary source of revenue is water rates. The current water rates generate about \$422,588 annually (see Table 5). In addition, CSA 47 receives about \$8,000 annually in interest earnings, which is proposed to be allocated 50%/50% between the water and sewer utilities. To be fiscally conservative, it is assumed that CSA 47 will experience no growth in the number of customers over the next five years and interest revenues will remain the same. It is proposed that water rate revenues increase by 25% on July 1, 2025, 7.6% on July 1, 2026, and by 4.7% each year thereafter through July 1, 2029, see Table 6. Not every customer will receive an increase exactly equal to the percentage increases shown below due to proposed rate design changes. In addition, customer bill impacts will vary based on water usage.

Table 6 lists proposed water rate revenues broken down by function: operations and maintenance (O&M) net of interest earnings, accumulation of reserves, repayment of held charges, and capital projects. To mitigate rate impacts, the costs and revenues for each function are amortized over the five years of the proposed rate plan. As an example, the proposed rates generate capital improvement funding each year over the next five years including the first year (FY2025/26). However, the District does not plan to fund any capital improvements that year. The capital funds generated in FY2025/26 (\$11,462) are used for capital expenses in the later years of the rate plan. As shown in the right-most column of Table 6, the total amount of revenues and expenses for each category net to zero over the next five years such that total revenues do not exceed the cost of service.

**Table 6: Proposed Water Rate Revenue**

	<b>FY2025/26</b>	<b>FY2026/27</b>	<b>FY2027/28</b>	<b>FY2028/29</b>	<b>FY2029/30</b>	<b>5-year Total</b>
<b>Rate Revenue Increase</b>	25.0%	7.6%	4.7%	4.7%	4.7%	
<b>Proposed Revenue</b>						
O&M (net of interest)	427,600	447,300	468,200	490,400	514,200	2,347,700
Reserve	40,527	48,429	50,657	52,886	55,001	247,500
Repayment	54,951	65,666	68,687	71,709	74,578	335,600
Capital	<u>11,462</u>	<u>13,697</u>	<u>14,327</u>	<u>14,958</u>	<u>15,556</u>	<u>70,000</u>
Total (Rounded)	534,500	575,100	601,900	630,000	659,300	3,000,800
<b>Expenses</b>						
O&M (net of interest)	(427,600)	(447,300)	(468,200)	(490,400)	(514,200)	(2,347,700)
Reserve Accumulation	0	0	(2,800)	(119,600)	(125,100)	(247,500)
Repayment	(106,900)	(117,800)	(110,900)	0	0	(335,600)
Capital	<u>0</u>	<u>(10,000)</u>	<u>(20,000)</u>	<u>(20,000)</u>	<u>(20,000)</u>	<u>(70,000)</u>
Total (Rounded)	(534,500)	(575,100)	(601,900)	(630,000)	(659,300)	(3,000,800)
<b>Net Cash Flow</b>						
O&M (net of interest)	0	0	0	0	0	0
Reserve	40,527	48,429	47,857	(66,714)	(70,099)	0
Repayment	(51,949)	(52,134)	(42,213)	71,709	74,578	0
Capital	<u>11,462</u>	<u>3,697</u>	<u>(5,673)</u>	<u>(5,042)</u>	<u>(4,444)</u>	<u>0</u>
Total (Rounded)	0	0	0	0	0	0

Note: totals are rounded to the nearest \$100

## 3.2 Expenses

### 3.2.1 Operating Costs

Water operating costs for fiscal year (FY) 2024/25 are projected to total roughly \$413,100, see Table 7. Professional & specialized services is the largest cost, representing about 31% of total expenses. Other expenditures include water purchases from the Fresno Irrigation District (FID) for recharge, maintenance of equipment, maintenance of building & grounds, utilities, and insurance. All operating costs, except for utilities, are increased by 3% per year to account for inflation over the next five years. Utilities costs are projected to increase by 10% each year. On average, water operating costs are projected to increase by approximately 4.7% each year through FY2029/30.

**Table 7: Water Operating Cost Projection**

	Budget FY2024/25	Escalation Factor	PROJECTED				
			FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30
<b>WATER OPERATING COSTS</b>							
Admin & Overhead							
Liability Insurance	\$19,800	3.0%	\$20,400	\$21,000	\$21,600	\$22,200	\$22,900
Memberships	\$200	3.0%	\$200	\$200	\$200	\$200	\$200
Postage	\$5,000	3.0%	\$5,200	\$5,400	\$5,600	\$5,800	\$6,000
Peoplesoft Financials	\$6,000	3.0%	\$6,200	\$6,400	\$6,600	\$6,800	\$7,000
Data Processing Services	<u>\$2,200</u>	3.0%	<u>\$2,300</u>	<u>\$2,400</u>	<u>\$2,500</u>	<u>\$2,600</u>	<u>\$2,700</u>
Subtotal Admin & Overhead	\$33,200		\$34,300	\$35,400	\$36,500	\$37,600	\$38,800
Water Purchases	\$50,000	3.0%	\$51,500	\$53,000	\$54,600	\$56,200	\$57,900
Maintenance Equipment	\$63,700	3.0%	\$65,600	\$67,600	\$69,600	\$71,700	\$73,900
Maintenance Building & Grounds	\$51,300	3.0%	\$52,800	\$54,400	\$56,000	\$57,700	\$59,400
Professional & Specialized Services	\$128,500	3.0%	\$132,400	\$136,400	\$140,500	\$144,700	\$149,000
Utilities	<u>\$86,400</u>	10.0%	<u>\$95,000</u>	<u>\$104,500</u>	<u>\$115,000</u>	<u>\$126,500</u>	<u>\$139,200</u>
<b>Total</b>	<b>\$413,100</b>		<b>\$431,600</b>	<b>\$451,300</b>	<b>\$472,200</b>	<b>\$494,400</b>	<b>\$518,200</b>
Annual Increase %			4.5%	4.6%	4.6%	4.7%	4.8%

It should be noted that CSA 47 also incurs about \$13,000 in electricity costs for the Quail Lake Homeowner's Association's (HOA) irrigation system. That cost is passed through and funded by the Quail Lakes HOA. The irrigation account's rate structure was not evaluated in this study.

### 3.2.2 Capital Improvements

In addition to funding operating costs, CSA 47 intends to fund \$70,000 in capital projects over the next five years consisting of soft start technology for the utility's booster pumps and a new chlorine analyzer, see Table 8. These projects are critical for CSA 47 to continue to provide safe and reliable water service to customers.

**Table 8: Water Capital Improvements**

	PROJECTED					TOTAL
	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	5-Year CIP
Soft Start for Booster Pumps	\$0	\$0	\$20,000	\$20,000	\$20,000	\$60,000
Chlorine Analyzer	<u>\$0</u>	<u>\$10,000</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$10,000</u>
Total Water Projects	\$0	\$10,000	\$20,000	\$20,000	\$20,000	\$70,000

### **3.2.3 Repayment of Unpaid Charges**

It is projected that CSA 47 will owe Fresno County about \$1,006,800 in prior unpaid charges through June 30, 2025. This report allocates about 31.5% of the unpaid charge balance to the water utility (about \$317,500) and 68.5% of the balance to the sewer utility (about \$689,266). The allocation was determined based on analysis of past years' operating results – specifically, a review of water utility revenues compared to water expenses and sewer utility revenues compared to sewer expenses. The analysis determined the relative contribution of each utility to the total negative balance.

Following the proposed rate increase on July 1, 2025, it is projected the water fund will make payments to Fresno County for prior unpaid charges plus interest over three years from FY2025/26 through FY2027/28. For financial planning purposes, the County's internal interest rate is estimated as 2.8% annually. During the payoff period, it is projected that the water utility will accrue about \$18,100 of interest. The total payoff amount is recovered in the base fee and amortized over the five years of the rate plan.

### **3.2.4 Reserves**

The Fresno County Board of Supervisors adopted a policy on November 7, 2006 requiring special districts providing water service and governed by the Fresno County Board of Supervisors to maintain a reserve equal to 50% of a three-year rolling average of annual operating costs (excluding extraordinary infrastructure or fixed asset projects). The water rate plan developed in this report includes the accumulation of about \$247,500 in reserves by the end of FY2029/30 which complies with the County's required reserve target.

## **3.3 Water Cash Flow**

Table 9 provides a five-year cash flow spanning from FY2025/26 to FY2029/30. The first rate revenue increase of 25.0% will go into effect on July 1, 2025. A smaller initial rate increase is not recommended due to the financial difficulties facing the water fund. Following the first rate adjustment, it is proposed that the water rates increase by 7.6% on July 1, 2026, followed by 4.7% rate increases beginning on July 1, 2027 through July 1, 2029. The 4.7% increases are approximately equal to the inflationary cost increases shown in Table 7. With the recommended rate increases, it is projected that the water fund will overcome the operating deficit and will have reimbursed the County for unpaid charges by the end of the five-year period.

**Table 9: Water Cash Flow Projection**

	<b>FY2025/26</b>	<b>FY2026/27</b>	<b>FY2027/28</b>	<b>FY2028/29</b>	<b>FY2029/30</b>
Rate Increase Effective	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028	July 1, 2029
Rate Increase	25.0%	7.6%	4.7%	4.7%	4.7%
<b>BEGINNING FUND BALANCE</b>	\$0	\$0	\$0	\$2,804	\$122,404
<b>REVENUES</b>					
Water Service Charges	534,500	575,100	601,900	630,000	659,300
Interest	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>
<b>Total Revenues</b>	538,500	579,100	605,900	634,000	663,300
<b>EXPENSES</b>					
<b>Services &amp; Supplies</b>					
Admin & Overhead	34,300	35,400	36,500	37,600	38,800
Water Purchases	51,500	53,000	54,600	56,200	57,900
Maintenance Equipment	65,600	67,600	69,600	71,700	73,900
Maintenance Building & Grounds	52,800	54,400	56,000	57,700	59,400
Professional & Specialized Services	132,400	136,400	140,500	144,700	149,000
Utilities	<u>95,000</u>	<u>104,500</u>	<u>115,000</u>	<u>126,500</u>	<u>139,200</u>
Total Operating Expenses	431,600	451,300	472,200	494,400	518,200
<b>Non-Operating Costs</b>					
Capital Projects	0	10,000	20,000	20,000	20,000
Repayment to County	<u>106,900</u>	<u>117,800</u>	<u>110,896</u>	<u>0</u>	<u>0</u>
Subtotal Non-Operating Expenses	106,900	127,800	130,896	20,000	20,000
<b>Total Expenses</b>	538,500	579,100	603,096	514,400	538,200
<b>NET REVENUES</b>	0	0	2,804	119,600	125,100
<b>ENDING FUND BALANCE</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,804</b>	<b>\$122,404</b>	<b>\$247,504</b>
<b>Reserve Funds</b>					
Proposed Reserve Target (50% of O&M) [1]	215,800	220,700	225,900	236,300	247,500
Target Met	<i>no</i>	<i>no</i>	<i>no</i>	<i>no</i>	<i>yes</i>
1 - Board policy adopted November 7, 2006; 3 year rolling average equal to 50% O&M 2 - CSA 47 unpaid charges total \$1.0M; about 31% is allocated to the water utility based on analysis of prior year cash flows					
Beginning Outstanding Balance [2]	(\$317,538)	(\$219,529)	(\$107,876)	(\$0)	(\$0)
Additional Accrual	0	0	0	\$0	\$0
Payments	106,900	117,800	110,896	\$0	\$0
Annual Interest Accrued (2.8%)	<u>(\$8,891)</u>	<u>(\$6,147)</u>	<u>(\$3,021)</u>	<u>(\$0)</u>	<u>(\$0)</u>
Ending Outstanding Balance	(\$219,529)	(\$107,876)	(\$0)	(\$0)	(\$0)



## SECTION 4: WATER COST ALLOCATION

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The prior section determined the total cost of providing water service to customers. In this section, the cost of service is allocated to rates to fairly recover costs based on how customers use the system, and in any event, not to exceed the proportional cost of the water service attributable to each parcel.

### 4.1 Methodology

The American Water Works Association (AWWA) recommends methods to classify costs among various customers. Using the Base-Extra Capacity Method as recommended by the AWWA, water operating expenses are allocated to the following categories: (a) Base, (b) Extra, (c) Meters and Services, and (d) Customer Service. The Base and Extra categories are intended to recover the costs to deliver water to customers, while the Customer Service and Meters and Services categories are intended to recover expenses related to maintaining infrastructure in the system to supply water at all times under the proposed water service rates in this study. A summary of the cost allocation categories is provided below:

- *Base:* Base costs include the expenses related to providing water under average, “base” demand conditions.
- *Extra:* The extra category includes costs related to providing water above the system average demand (i.e., related to peak, “extra” usage).
- *Meters and Services:* These include costs related to maintaining infrastructure and operating capacity to provide service at any time under the proposed water service fee rates in this study.
- *Customer Service:* This category contains costs associated with serving customers, such as billing and answering customer inquiries.

### 4.2 Proposed Cost Allocation

This section determines the amount of annual revenue to be collected from each rate or charge (consisting of the usage rate and the fixed base fee) based on the actual costs attributable to each rate and establishes that each parcel’s total water bill will not exceed the proportional cost of service for each parcel. It is proposed that the AWWA recommended cost categories of Base and Extra capacity be combined as the proposed usage rate is a single tier applied to all levels of use. The usage rate is proposed to recover utilities and maintenance costs as well as 50% of professional services expenses, see Table 10.

The fixed base fee is proposed to be made up of the AWWA recommended cost categories Meters and Customer Service. The fixed charge will recover expenses for administration, 50% of professional services expenses, and water purchase costs. CSA 47 is obligated to purchase recharge water from the Fresno Irrigation District on an annual basis and the purchase is not directly tied to customer usage patterns. These fixed operating costs are proposed to be recovered in the base fee. In addition, the repayment of unpaid charges, additional accrued interest, and accumulation of \$247,500 in reserves are amortized over 5 years (i.e. the period the new rates will be in effect) and added to the base fee. The costs below correlate the base fee for operations and maintenance with the actual costs regardless of the amount of customers' water use and the usage rate for water delivery with the actual costs of water service at those levels, respectively.

**Table 10: Water Cost Allocation**

Expense	Projected 2025/26	Base Fee	Usage Rate	Base Fee	Usage Rate
Services & Supplies					
Admin & Overhead	34,300	34,300	0	100%	0%
Water Purchases	51,500	51,500	0	100%	0%
Maintenance Equipment	65,600	0	65,600	0%	100%
Maintenance Building & Grounds	52,800	0	52,800	0%	100%
Professional & Specialized Services	132,400	66,200	66,200	50%	50%
Utilities	<u>95,000</u>	<u>0</u>	<u>95,000</u>	<u>0%</u>	<u>100%</u>
Total Services & Supplies	431,600	152,000	279,600	35.2%	64.8%
<b>BASE FEE</b>					
O&M - Base Fee		\$152,000			
Interest earnings		<u>(\$4,000)</u>			
Net O&M - Base Fee		\$148,000			
Reserves (Table 6)		\$40,527			
Repayment of unpaid charges (Table 6)		\$54,951			
Capital (Table 6)		<u>\$11,462</u>			
<b>SUBTOTAL</b>		\$254,940			
<b>USAGE RATES</b>					
O&M - Usage Rates		<u>\$279,600</u>			
<b>SUBTOTAL</b>		\$279,600			
<b>TOTAL FY2025/26 REVENUE REQUIREMENT</b>		\$534,540			

## SECTION 5: WATER RATE DESIGN

### 5.1 Rate Calculation

Table 11 provides the calculation of the base fee and usage rate. The revenue requirement for the base fee is \$255,000 (see Table 10) and is divided by 730 customers then divided by 12 months to equal a monthly fee of \$29.10. It is proposed that each single family dwelling be assigned one equivalent, the commercial customer (Club House) be assigned one equivalent, and the elementary school be assigned 22 equivalents. 22 equivalents were determined to be the school's base level of indoor water demand (see Table 18). The count of equivalents is a proxy for capacity or availability of supply that the school occupies in the water system and thus is an appropriate metric to assign fixed costs.

The usage rate revenue requirement of \$279,600 (from Table 10) is divided by the estimated annual water usage to calculate the rate per 1,000 gallons.

**Table 11: Water Rate Calculation**

	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30
<b>REVENUE REQUIREMENT</b>					
Base Fee	\$254,940	\$280,393	\$291,021	\$301,703	\$312,335
Usage Rate	<u>\$279,600</u>	<u>\$294,700</u>	<u>\$310,850</u>	<u>\$328,250</u>	<u>\$347,000</u>
Total	\$534,540	\$575,093	\$601,871	\$629,953	\$659,335
<b>BASE FEE</b>					
Base Fee Revenue	\$254,940	\$280,393	\$291,021	\$301,703	\$312,335
<u>Number of Equivalents [1]</u>	<u>730</u>	<u>730</u>	<u>730</u>	<u>730</u>	<u>730</u>
Base Fee	\$29.10	\$32.01	\$33.22	\$34.44	\$35.65
<b>USAGE RATE</b>					
Consumption Revenue	\$279,600	\$294,700	\$310,850	\$328,250	\$347,000
Usage (1,000 gallons) [2]	<u>129,628</u>	<u>129,628</u>	<u>129,628</u>	<u>129,628</u>	<u>129,628</u>
Rate (\$/1,000)	\$2.16	\$2.27	\$2.40	\$2.53	\$2.68

1 - The elementary school is proposed to be charged 22 equivalents

2 - 95% of current water consumption is used for rate design to account for a possible reduction in consumption due to the change in rate structure

Table 12 provides the schedule of proposed rates including a break-out of the base fee between operations, repayment of unpaid charges, capital, and reserves, all of which are calculated in this study to produce rates that will be necessary to recover only the actual cost of the water service per parcel under these proposed water rates. If additional connections are built out in CSA 47, then the increased rates for the water services fees in Table 12 will also apply to them.

**Table 12: Proposed Monthly Water Rates**

Fee Description	Current	Proposed	PROJECTED - RATE STUDY PERIOD				
			FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30
			July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028	July 1, 2029
Water Base Fee	\$19.53	O&M Base	\$16.89	\$17.42	\$17.96	\$18.51	\$19.09
		Reserve	\$4.63	\$5.53	\$5.78	\$6.04	\$6.28
		Repayment	\$6.27	\$7.50	\$7.84	\$8.19	\$8.51
		Capital	<u>\$1.31</u>	<u>\$1.56</u>	<u>\$1.64</u>	<u>\$1.71</u>	<u>\$1.78</u>
		Total Base Fee [1]	\$29.10	\$32.01	\$33.22	\$34.44	\$35.65
<u>Overuse Rate</u> 0 - 5,000 gallons 5,001 and over	<u>Charge per 1,000 gal</u>	<u>Usage Rate</u>	<u>Charge per 1,000 gal</u>				
	\$0.00 \$2.66	All Usage	\$2.16	\$2.27	\$2.40	\$2.53	\$2.68

1 – Totals may not sum exactly due to rounding

## 5.2 Bill Impacts

Table 13 provides sample bill impacts for the typical average residential monthly bill, winter bill, and summer bill under the proposed rates. As shown in the table, bill impacts for the typical customer will vary throughout the year as water consumption varies seasonally.

**Table 13: Water Bill Impacts**

<b>AVERAGE MONTHLY BILL (16,000 gallons)</b>									
<b>CURRENT</b>					<b>PROPOSED July 1, 2025</b>				
<b>Fee Description</b>	<b>Current</b>		<b># of Units</b>	<b>Total Charges</b>	<b>Fee Description</b>	<b>Proposed</b>		<b># of Units</b>	<b>Total Charges</b>
<u>Water Base Fee</u>	\$19.53	X	1	\$19.53	<u>Water Base Fee</u>	\$29.10	X	1	\$29.10
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>			
0 - 5,000 gallons	\$0.00	X	5	\$0.00	All Usage	\$2.16	X	16	\$34.56
5,001 and over	\$2.66	X	<u>11</u>	<u>\$29.26</u>					
			16	\$29.26					
Total Monthly Bill				\$48.79					Increase \$63.66 \$14.87 30%

<b>EXAMPLE WINTER MONTHLY BILL (6,000 gallons)</b>									
<b>CURRENT</b>					<b>PROPOSED July 1, 2025</b>				
<b>Fee Description</b>	<b>Current</b>		<b># of Units</b>	<b>Total Charges</b>	<b>Fee Description</b>	<b>Current</b>		<b># of Units</b>	<b>Total Charges</b>
<u>Base Fee</u>	\$19.53	X	1	\$19.53	<u>Water Base Fee</u>	\$29.10	X	1	\$29.10
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>			
0 - 5,000 gallons	\$0.00	X	5	\$0.00	All Usage	\$2.16	X	6	\$12.96
5,001 and over	\$2.66	X	<u>1</u>	<u>\$2.66</u>					
			6	\$2.66					
Total Monthly Bill				\$22.19					Increase \$42.06 \$19.87 90%

<b>EXAMPLE SUMMER MONTHLY BILL (30,000 gallons)</b>									
<b>CURRENT</b>					<b>PROPOSED July 1, 2025</b>				
<b>Fee Description</b>	<b>Current</b>		<b># of Units</b>	<b>Total Charges</b>	<b>Fee Description</b>	<b>Current</b>		<b># of Units</b>	<b>Total Charges</b>
<u>Water Base Fee</u>	\$19.53	X	1	\$19.53	<u>Water Base Fee</u>	\$29.10	X	1	\$29.10
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>			
0 - 5,000 gallons	\$0.00	X	5	\$0.00	All Usage	\$2.16	X	30	\$64.80
5,001 and over	\$2.66	X	<u>25</u>	<u>\$66.50</u>					
			30	\$66.50					
Total Monthly Bill				\$86.03					Increase \$93.90 \$7.87 9%

## SECTION 6: SEWER COST OF SERVICE

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This section provides an analysis of sewer revenues and expenses to determine the total cost of service to be recovered via sewer rates. The cost of service is expressed in a cash flow table that illustrates revenue increases needed to keep up with expenses and maintain financial health. Over the five-year rate study period, rate increases are proposed so that CSA 47 can fund operating costs, repay prior unpaid charges to the County, fund capital improvements, and accumulate reasonable reserves, all of which are calculated in this study to produce rates that will be necessary to recover only the actual cost of the sewer service per parcel under these proposed sewer rates.

### 6.1 Revenues

CSA 47's sewer utility revenues consist of sewer service charges and \$4,000 of annual interest earnings. It is proposed that CSA 47 implement a series of sewer rate increases concurrently with the water rate increases to fund operating costs, accumulate reserves, repay prior unpaid charges, and fund capital improvements, see Table 14. Using the same approach that is proposed for water rate design (i.e. the average cost approach), sewer costs are amortized over five years to mitigate rate impacts. As an example, it is proposed that CSA 47 include a capital fee in its base fee for each of the five years of the rate plan. However, capital projects are only funded in years 2 through 5 (i.e. FY2026/27 to FY2029/30). Capital project revenues of \$41,915 that are collected in year 1 (FY2025/26) are used to fund projects later in the rate plan which mitigates rate spikes.

**Table 14: Proposed Sewer Rate Revenue**

	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	5-year Total
<b>Rate Revenue Increase</b>	25.0%	13.0%	4.1%	4.2%	4.2%	
<b>Proposed Revenue</b>						
O&M (net of interest)	733,700	764,000	796,000	829,900	865,700	3,989,300
Reserve	58,262	84,479	87,858	91,373	95,328	417,300
Repayment	102,177	148,157	154,083	160,247	166,657	731,300
Capital	<u>41,915</u>	<u>60,776</u>	<u>63,208</u>	<u>65,736</u>	<u>68,365</u>	<u>300,000</u>
Total (Rounded)	936,100	1,057,400	1,101,100	1,147,300	1,196,000	5,437,900
<b>Expenses</b>						
O&M (net of interest)	(733,700)	(764,000)	(796,000)	(829,900)	(865,700)	(3,989,300)
Reserve Accumulation	0	0	0	(187,000)	(230,300)	(417,300)
Repayment	(202,400)	(243,400)	(255,100)	(30,421)	0	(731,300)
Capital	<u>0</u>	<u>(50,000)</u>	<u>(50,000)</u>	<u>(100,000)</u>	<u>(100,000)</u>	<u>(300,000)</u>
Total (Rounded)	(936,100)	(1,057,400)	(1,101,100)	(1,147,300)	(1,196,000)	(5,437,900)
<b>Net Cash Flow</b>						
O&M (net of interest)	0	0	0	0	0	0
Reserve	58,262	84,479	87,858	(95,627)	(134,972)	0
Repayment	(100,223)	(95,243)	(101,017)	129,826	166,657	0
Capital	<u>41,915</u>	<u>10,776</u>	<u>13,208</u>	<u>(34,264)</u>	<u>(31,635)</u>	<u>0</u>
Total (Rounded)	0	0	0	0	0	0

## 6.2 Expenses

### 6.2.1 Operating Costs

In FY2024/25, CSA 47 expects to incur about \$709,000 in expenses to operate and maintain the sewer system (see Table 15). Most operating costs are projected to increase by 3% annually during the rate study period due to inflation, except for utilities which are projected to increase by 10% annually. The average operating cost increase across all expenses is about 4.1% annually.

**Table 15: Sewer Operating Cost Projection**

	Budget FY2024/25	Escalation Factor	PROJECTED				
			FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30
<b>SEWER OPERATING COSTS</b>							
Admin & Overhead							
Liability Insurance	\$6,600	3.0%	\$6,800	\$7,000	\$7,200	\$7,400	\$7,600
Memberships	\$0	3.0%	\$0	\$0	\$0	\$0	\$0
Postage	\$0	3.0%	\$0	\$0	\$0	\$0	\$0
Peoplesoft Financials	\$0	3.0%	\$0	\$0	\$0	\$0	\$0
Data Processing Services	<u>\$0</u>	3.0%	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Subtotal Admin & Overhead	\$6,600		\$6,800	\$7,000	\$7,200	\$7,400	\$7,600
Maintenance Equipment	\$161,300	3.0%	\$166,100	\$171,100	\$176,200	\$181,500	\$186,900
Maintenance Building & Grounds	\$268,700	3.0%	\$276,800	\$285,100	\$293,700	\$302,500	\$311,600
Professional & Specialized Services	\$166,400	3.0%	\$171,400	\$176,500	\$181,800	\$187,300	\$192,900
Utilities	<u>\$106,000</u>	10.0%	<u>\$116,600</u>	<u>\$128,300</u>	<u>\$141,100</u>	<u>\$155,200</u>	<u>\$170,700</u>
<b>Total</b>	<b>\$709,000</b>		<b>\$737,700</b>	<b>\$768,000</b>	<b>\$800,000</b>	<b>\$833,900</b>	<b>\$869,700</b>
			4.0%	4.1%	4.2%	4.2%	4.3%

## 6.2.2 Capital Improvements

In addition to funding operating costs, CSA 47 intends to fund about \$300,000 in capital projects over the next five years consisting of barrel screens and trickling filters, see Table 16.

**Table 16: Sewer Capital Improvements**

	PROJECTED					TOTAL
	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	5-Year CIP
Barrel Screens	\$0	\$0	\$0	\$50,000	\$50,000	\$100,000
Trickling Filters	<u>\$0</u>	<u>\$50,000</u>	<u>\$50,000</u>	<u>\$50,000</u>	<u>\$50,000</u>	<u>\$200,000</u>
Total Sewer Projects	\$0	\$50,000	\$50,000	\$100,000	\$100,000	\$300,000

## 6.2.3 Repayment of Unpaid Charges

The sewer utility's share of prior unpaid charges to the County is about \$689,300. Over the next four years, it is projected that the County will pay off this amount plus accrued interest of about \$42,000. For financial planning purposes, the County's internal interest rate is estimated as 2.8% annually.

## 6.2.4 Reserves

As with the water utility, the sewer utility must accumulate a reserve equal to 50% of a three-year rolling average of annual operating costs (excluding extraordinary infrastructure or fixed asset projects). The rate plan developed in this report includes the accumulation of about \$417,300 in reserves by the end of FY2029/30 which is in line with the County's target.



## 6.3 Cash Flow

The five-year cash flow spanning from FY2025/26 to FY2029/30 is provided in Table 17.

**Table 17: Sewer Cash Flow Projection**

	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30
Rate Increase Effective	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028	July 1, 2029
Rate Increase	25.0%	13.0%	4.1%	4.2%	4.2%
<b>BEGINNING FUND BALANCE</b>	\$0	\$0	\$0	\$0	\$187,000
<b>REVENUES</b>					
Sewer Service Charges	936,100	1,057,400	1,101,100	1,147,300	1,196,000
Interest	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>	<u>4,000</u>
<b>Total Revenues</b>	940,100	1,061,400	1,105,100	1,151,300	1,200,000
<b>EXPENSES</b>					
<b>Services &amp; Supplies</b>					
Admin & Overhead	6,800	7,000	7,200	7,400	7,600
Maintenance Equipment	166,100	171,100	176,200	181,500	186,900
Maintenance Building & Grounds	276,800	285,100	293,700	302,500	311,600
Professional & Specialized Services	171,400	176,500	181,800	187,300	192,900
Utilities	<u>116,600</u>	<u>128,300</u>	<u>141,100</u>	<u>155,200</u>	<u>170,700</u>
Total Operating Expenses	737,700	768,000	800,000	833,900	869,700
<b>Non-Operating Costs</b>					
Capital Projects	0	50,000	50,000	100,000	100,000
Repayment to County	<u>202,400</u>	<u>243,400</u>	<u>255,100</u>	<u>30,421</u>	<u>0</u>
Subtotal Non-Operating Expenses	202,400	293,400	305,100	130,421	100,000
<b>Total Expenses</b>	940,100	1,061,400	1,105,100	964,300	969,700
<b>NET REVENUES</b>	0	0	0	187,000	230,300
<b>ENDING FUND BALANCE</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$187,000</b>	<b>\$417,300</b>
<b>Reserve Funds</b>					
Proposed Reserve Target (50% of O&M) [1]	368,900	376,400	384,300	400,300	417,300
Target Met	no	no	no	no	yes
1 - Board policy adopted November 7, 2006; 3 year rolling average equal to 50% O&M 2 - CSA 47 unpaid charges total \$1.0M; about 69% is allocated to the sewer utility based on analysis of prior year cash flows					
Beginning Outstanding Balance [2]	(\$689,266)	(\$506,166)	(\$276,938)	(\$29,593)	\$0
Additional Accrual	0	0	0	0	0
Payments	202,400	243,400	255,100	30,421	0
Annual Interest Accrued (2.8%)	<u>(19,299)</u>	<u>(14,173)</u>	<u>(7,754)</u>	<u>(829)</u>	<u>0</u>
Ending Outstanding Balance	(\$506,166)	(\$276,938)	(\$29,593)	\$0	\$0

## SECTION 7: PROPOSED SEWER RATES & COMBINED BILLS

### 7.1 Proposed Sewer Rates

The sewer rate revenues shown in Table 14 and Table 17 are proposed to be recovered from residential customers and the Club House as a fixed monthly charge and from the school as a fixed annual fee. Table 18 apportions the service charges between residential, commercial, and school customers based on estimated sewer flows. The average single family customer uses 6,000 gallons per month during the winter period which equates to about 200 gallons of daily flow. It is assumed that all water use during the winter is discharged into the sewer system and no water use is consumed for outdoor irrigation. Industry typical wastewater discharge estimates for schools range from 5 to 15 gallons per day per student or staff member. CSA 47's current rate structure is based on flow of about 7.5 gallons per day per student/staff member which is reasonable. It is proposed that this billing method continue. Each student or staff member is assigned a billing equivalent of 0.038 (calculated as about 7.5 gallons per day per student divided by 200 gallons per day average residential flow). The total sewer billing equivalents across all customers is 734.

**Table 18: Sewer Equivalent Calculation**

Customer Category	Count	Billing unit	EDUs per billing unit	EDUs
Sewer Residential & Commercial	711	accounts	1.000	711
Sewer School per student or staff	600	students/staff	0.038	<u>23</u>
				734
	Annual Cost Under			
	Current Rates		Ratio	
Sewer Residential & Commercial	\$1,020.36		1.000	
Sewer School per student or staff	\$39.11		0.038	

EDU – equivalent dwelling unit

Note: the current assignment of 0.038 EDUs per student is reasonable. Most public agencies use a student/staff flow generation rate between 5 to 15 gallons per day. Compared to single family flow of 200 gallons per day, the assumed student flow is about 7.5 gallons per day.

Table 19 divides the revenue requirement from Table 14 by 734 billing equivalents to calculate the proposed sewer rates. The rates are broken down by operating costs, accumulation of reserves, repayment of unpaid charges, and capital funding.

**Table 19: Sewer Rate Calculation**

	<b>FY2025/26</b>	<b>FY2026/27</b>	<b>FY2027/28</b>	<b>FY2028/29</b>	<b>FY2029/30</b>	<b>Total</b>
O&M	\$733,700	\$764,000	\$796,000	\$829,900	\$865,700	
Reserve	\$58,262	\$84,479	\$87,858	\$91,373	\$95,328	\$417,300
Repayment	\$102,177	\$148,157	\$154,083	\$160,247	\$166,657	\$731,321
Capital	<u>\$41,915</u>	<u>\$60,776</u>	<u>\$63,208</u>	<u>\$65,736</u>	<u>\$68,365</u>	\$300,000
Total	\$936,054	\$1,057,413	\$1,101,149	\$1,147,255	\$1,196,050	
EDUs	734	734	734	734	734	
O&M	\$83.30	\$86.74	\$90.37	\$94.22	\$98.29	
Reserve	\$6.61	\$9.59	\$9.97	\$10.37	\$10.82	
Repayment	\$11.60	\$16.82	\$17.49	\$18.19	\$18.92	
Capital	<u>\$4.76</u>	<u>\$6.90</u>	<u>\$7.18</u>	<u>\$7.46</u>	<u>\$7.76</u>	
Monthly Sewer Base Fee [1]	\$106.27	\$120.05	\$125.02	\$130.25	\$135.79	
School Fee (\$/year per student/staff)	\$48.88	\$55.22	\$57.50	\$59.91	\$62.46	

1 – Totals may not sum exactly due to rounding

## 7.2 Proposed 5-Year Rate Plan

The proposed rate plan for the next five years is provided in Table 20. It is proposed that new rates go into effect July 1 of each year to correspond with the fiscal year budgeting cycle.

**Table 20: 5-year Rate Plan**

Fee Description	Current	Proposed	PROJECTED - RATE STUDY PERIOD				
			FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30
			July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028	July 1, 2029
<b>Water Base Fee (monthly)</b>	\$19.53	<b>Water Base Fee (monthly) [1]</b>	\$29.10	\$32.01	\$33.22	\$34.44	\$35.65
<b><u>Water Usage Rate</u></b>	<b><u>Charge per 1,000 gal</u></b>	<b><u>Usage Rate</u></b>			<b><u>Charge per 1,000 gal</u></b>		
0 - 5,000 gallons [2]	\$0.00	All Usage	\$2.16	\$2.27	\$2.40	\$2.53	\$2.68
5,001 and over	\$2.66						
<b><u>Sewer Base Fee</u></b>		<b><u>Sewer Base Fee</u></b>					
Residential (monthly)	\$85.03	Residential (monthly)	\$106.27	\$120.05	\$125.02	\$130.25	\$135.79
Commercial (monthly)	\$85.03	Commercial (monthly)	\$106.27	\$120.05	\$125.02	\$130.25	\$135.79
School (annual)	\$39.11	School (annual)	\$48.88	\$55.22	\$57.50	\$59.91	\$62.46

1 – It is proposed that the elementary school be charged 22 times the base fee.

2 – The first 5,000 gallons of water use are currently included in the base fee.

### 7.3 Combined Water and Sewer Monthly Utility Bills

Table 21 provides examples of the combined water and sewer monthly bills at various levels of water use under the current and proposed July 1, 2025 rates.

**Table 21: Current and Proposed Monthly Utility Bills**

AVERAGE MONTHLY BILL (16,000 gallons)							
CURRENT				PROPOSED July 1, 2025			
Fee Description	Current	# of Units	Total Charges	Fee Description	Proposed	# of Units	Total Charges
<u>Water Base Fee</u>	\$19.53	X 1	\$19.53	<u>Water Base Fee</u>	\$29.10	X 1	\$29.10
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>			<u>Usage Rate</u>	<u>\$/1,000 gal</u>		
0 - 5,000 gallons	\$0.00	X 5	\$0.00	All Usage	\$2.16	X 16	\$34.56
5,001 and over	\$2.66	X <u>11</u>	<u>\$29.26</u>				
		16	\$29.26				
<u>Sewer Base Fee</u>	\$85.03	X 1	\$85.03	<u>Sewer Base Fee</u>	\$106.27	X 1	\$106.27
Total Monthly Bill			\$133.82				\$169.93
							Increase \$36.11 27%

EXAMPLE WINTER MONTHLY BILL (6,000 gallons)							
CURRENT				PROPOSED July 1, 2025			
Fee Description	Current	# of Units	Total Charges	Fee Description	Current	# of Units	Total Charges
<u>Base Fee</u>	\$19.53	X 1	\$19.53	<u>Water Base Fee</u>	\$29.10	X 1	\$29.10
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>			<u>Usage Rate</u>	<u>\$/1,000 gal</u>		
0 - 5,000 gallons	\$0.00	X 5	\$0.00	All Usage	\$2.16	X 6	\$12.96
5,001 and over	\$2.66	X <u>1</u>	<u>\$2.66</u>				
		6	\$2.66				
<u>Sewer Base Fee</u>	\$85.03	X 1	\$85.03	<u>Sewer Base Fee</u>	\$106.27	X 1	\$106.27
Total Monthly Bill			\$107.22				\$148.33
							Increase \$41.11 38%

Table is continued on the following page.

EXAMPLE SUMMER MONTHLY BILL (30,000 gallons)								
CURRENT					PROPOSED July 1, 2025			
Fee Description	Current		# of Units	Total Charges	Fee Description	Current	# of Units	Total Charges
<u>Water Base Fee</u>	\$19.53	X	1	\$19.53	<u>Water Base Fee</u>	\$29.10	X	\$29.10
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>		
0 - 5,000 gallons	\$0.00	X	5	\$0.00	All Usage	\$2.16	X	\$64.80
5,001 and over	\$2.66	X	<u>25</u>	<u>\$66.50</u>				
			30	\$66.50				
<u>Sewer Base Fee</u>	\$85.03	X	1	\$85.03	<u>Sewer Base Fee</u>	\$106.27	X	\$106.27
Total Monthly Bill				\$171.06				\$200.17
								Increase \$29.11 17%