



Water and Sewer Rate Study for the Fresno County Waterworks District 40 (Shaver Springs)

**Final Report
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LECHOWICZ + TSENG
MUNICIPAL CONSULTANTS

909 Marina Village Parkway #135
Alameda, CA 94501
(510) 545-3182
www.LTmuniconsultants.com

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SECTION 1: INTRODUCTION AND EXECUTIVE SUMMARY

1.1 Background

The Fresno County Waterworks District 40 (District) was established in 1971 to provide water and sewer (wastewater) service to the Shaver Springs subdivision located east of Tollhouse Road, near the intersection of Tollhouse Road and Shaver Springs Road. The subdivision contains 96 residential lots, of which 69 receive utility service. There is only one class of rate payers, which is single-family residential parcels. The current rate structure was adopted pursuant to Proposition 218 requirements with fees having become effective on March 1, 2007. The District's rate structure consists of a base fee which includes the first 8,000 gallons of monthly water use. Use above the first 8,000 gallons is billed based on a tiered water rate structure charged to each 1,000 gallons.

In recent years, the District has spent down its existing reserves and is not collecting sufficient revenue to fund annual expenses. One goal of this study is to determine a rate plan to cover the District's cost of service for the next five years. The cost of service includes operations, maintenance, and the accumulation of reserves. The County of Fresno received grant funds from the California Department of Water Resources to drill a new water supply well. The proposed new water rates do not account for any costs associated with water treatment at the new well that could be required if Manganese, Uranium, or other constituents exceed allowable levels.

A second goal of this rate study is to revise the rate structure to recover costs more fairly from customers. The current rate structure has little differentiation in price between low and high use customers because a large portion of water use is included in the base fee. The proposed rate structure redefines the District's water usage rates and, if adopted, would bill customers for each 1,000 gallons of consumption. It is proposed that the sewer rate continue to be billed as a fixed monthly fee 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 XIII C and XIII D of the California Constitution. The District must follow the procedural requirements of Proposition 218 for all utility rate increases. These requirements include:

1. **Noticing Requirement** – The District must mail a notice of the proposed rate increases to all affected property owners or ratepayers. 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 District 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 or ratepayers submit 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:

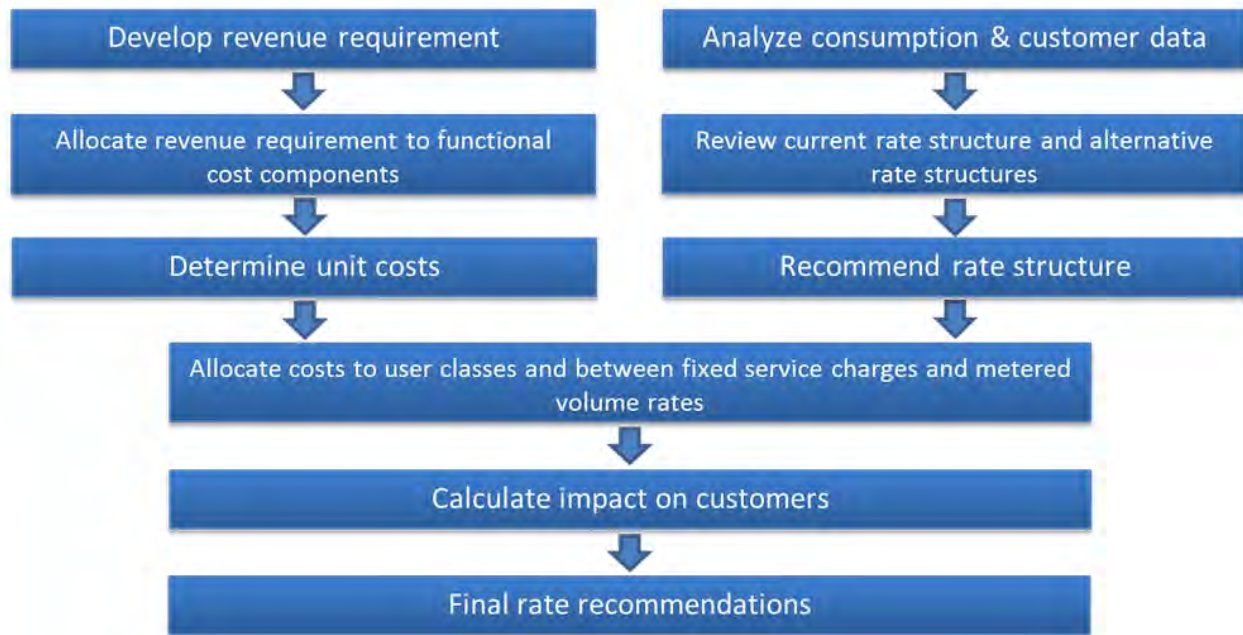
1. **Cost of Service** – Revenues derived from the fee or charge cannot exceed the funds required to provide the service. In essence, fees cannot exceed the “cost of service”.
2. **Intended Purpose** – Revenues derived from the fee or charge can only be used for the purpose for which the fee was imposed.
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.
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.
5. **General Government Services** – No fee or charge may be imposed for general governmental services where the service is available to the public at large.

Charges for water and sewer service are exempt from additional voting requirements of Proposition 218, 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 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 actual cost of the water and sewer service per parcel under these proposed water and sewer 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 customers but does not exceed the proportional cost of the service attributable to the parcel. Final rate recommendations are designed to fund the District’s short- and long-term costs of providing service and fairly allocate costs to all customers.

The rates developed in this report are based on the best available information gathered from District budgets, audits, and input from staff. The cost allocations proposed herein are based on American Water Works Association methodologies and 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 the parcel.

1.4 Proposed Rates

Current and proposed rates are provided in Table 1. It is proposed that the new rates go into effect July 1, 2025, and remain in place through June 30, 2030. There will only be one class of ratepayers, which is single-family residential parcels. It is proposed that the base fixed charge will no longer include a base amount of water consumption. The tiered overuse rates are proposed to be eliminated. All water usage is proposed to be charged a single rate per 1,000 gallons of consumption. The sewer rates are proposed to increase but 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 Monthly Water & Sewer Rates

Fee Description	Current	Fee Description	Proposed July 1, 2025
<u>Water Base Fee</u>	\$49.53	<u>Water Base Fee</u>	\$85.54
<u>Overuse Rates</u>	<u>Charge per 1,000 gal</u>	<u>Usage Rates</u>	<u>Charge per 1,000 gal</u>
0 - 8,000 gallons	\$0.00	All Usage	\$23.67
8,001 - 16,000 gallons	\$2.60		
Above 16,000 gallons	\$3.64		
<u>Sewer Service</u>	\$25.53	<u>Sewer Service</u>	\$110.99

Table 2 on the following page provides the current and proposed monthly bill of a typical customer using 4,000 gallons (average monthly water use). Under the proposed rates, the average bill will increase by \$216.15 or about 288%.

Table 2: Current and Proposed Typical Monthly Bill

CURRENT					PROPOSED					
Fee Description	Current		# of Units	Total Charges	Fee Description	Proposed		# of Units	Total Charges	
<u>Water Base Fee</u>	\$49.53	X	1	\$49.53	<u>Water Base Fee</u>	\$85.54	X	1	\$85.54	
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>				
0 - 8,000 gal	\$0.00	X	4	\$0.00	All Usage	\$23.67	X	4	\$94.68	
8,001 - 16,000 gal	\$2.60	X	0	\$0.00						
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>						
			4	\$0.00						
<u>Sewer Service</u>				\$25.53	<u>Sewer Service</u>				\$110.99	
Total Monthly Bill				\$75.06	Total Monthly Bill				\$291.21	Increase \$216.15 288%

SECTION 2: CUSTOMER BASE AND CURRENT RATE REVENUES

2.1 Current Rates

The District's current water and sewer rates are provided in Table 3. The current rate structure was adopted pursuant to Proposition 218 requirements. For water service, customers are billed a base charge of \$49.53 that includes up to the first 8,000 gallons of usage. Usage above the first 8,000 gallons is billed based on a tiered rate structure as shown below. The monthly sewer service charge is \$25.53.

Table 3: Current Monthly Water and Sewer Rates

Fee Description	Current
<u>Water Base Fee</u>	\$49.53
<u>Water Overuse Rate</u>	<u>Charge per 1,000 gal</u>
0 - 8,000 gallons (included in base fee)	\$0.00
8,001 - 16,000 gallons	\$2.60
Above 16,000 gallons	\$3.64
<u>Sewer Base Fee</u>	\$25.53

2.2 Rate Revenues

The District currently serves 69 single family residential customers. Table 4 provides historic customer counts, water usage data, and annual rate revenues. Current water rates generate about \$42,900 annually. Based on a historical review of District customer's bills during FY2018/19 through FY2022/23, about 80% of water consumption occurs in the first tier of up to 8,000 gallons and about 20% of water consumption falls in the upper tiers. Tiered rates generated about \$1,800 in FY 2022/23.

Table 4: Historical Rate Revenues

Rate Description Charge		FY2018/19			FY2019/20			FY2020/21		
		# of Units	Annual Revenue	% of Revenue	# of Units	Annual Revenue	% of Revenue	# of Units	Annual Revenue	% of Revenue
<u>Water Base Fee</u>	<u>per month</u>	<u>accounts</u>			<u>accounts</u>			<u>accounts</u>		
All customers	\$49.53	69	\$41,011	98.1%	70	\$41,605	97.6%	69	\$41,011	98.6%
<u>Overuse Rate</u>	<u>per 1,000 gal</u>	<u>1,000 gal</u>			<u>1,000 gal</u>			<u>1,000 gal</u>		
0 - 8,000 gallons	\$0.00	2,423	\$0	0.0%	2,905	\$0	0.0%	2,640	\$0	0.0%
8,001 - 16,000 gallons	\$2.60	234	\$608	1.5%	317	\$824	1.9%	194	\$504	1.2%
Above 16,000 gallons	\$3.64	47	\$171	0.4%	60	\$218	0.5%	20	\$73	0.2%
		2,704	\$779	1.9%	3,282	\$1,043	2.4%	2,854	\$577	1.4%
Total Water Rate Revenues			\$41,790	100%		\$42,648	100%		\$41,588	100%
<u>Sewer Fee</u>	<u>per month</u>	<u>accounts</u>			<u>accounts</u>			<u>accounts</u>		
	\$25.53	69	\$21,139		70	\$21,445		69	\$21,139	
Rate Description Charge		FY2021/22			FY2022/23					
		# of Units	Annual Revenue	% of Revenue	# of Units	Annual Revenue	% of Revenue			
<u>Water Base Fee</u>		<u>accounts</u>			<u>accounts</u>					
All customers	\$49.53	69	\$41,011	95.9%	69	\$41,011	95.7%			
<u>Overuse Rate</u>	<u>per 1,000 gal</u>	<u>1,000 gal</u>			<u>1,000 gal</u>					
0 - 8,000 gallons	\$0.00	2,926	\$0	0.0%	2,549	\$0	0.0%			
8,001 - 16,000 gallons	\$2.60	471	\$1,225	2.9%	318	\$827	1.9%			
Above 16,000 gallons	\$3.64	143	\$521	1.2%	280	\$1,019	2.4%			
		3,540	\$1,745	4.1%	3,147	\$1,846	4.3%			
Total Water Rate Revenues			\$42,756	100%		\$42,857	100%			
<u>Sewer Fee</u>	<u>per month</u>	<u>accounts</u>			<u>accounts</u>					
	\$25.53	69	\$21,139		69	\$21,139				

2.2.1 Typical Bills

Table 5 provides example monthly utility bills. Average monthly winter use is 2,500 gallons, average monthly summer use is 6,500 gallons, and average use across all months of the year is 4,000 gallons. Each of these averages falls within the water base fee which includes the first 8,000 gallons of monthly usage and results in the same total utility bill of \$75.06 for water and sewer service.

Table 5: Typical Bills Under Current Rates

AVERAGE MONTHLY BILL (4,000 gallons)

Fee Description	Current		# of Units	Total Charges
<u>Water Base Fee</u>	\$49.53	X	1	\$49.53
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>			
0 - 8,000 gal	\$0.00	X	4	\$0.00
8,001 - 16,000 gal	\$2.60	X	0	\$0.00
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>
			4	\$0.00
<u>Sewer Fee</u>	\$25.53	X	1	\$25.53
Total Monthly Bill				\$75.06

EXAMPLE WINTER MONTHLY BILL (2,500 gallons)

Fee Description	Current		# of Units	Total Charges
<u>Base Fee</u>	\$49.53	X	1	\$49.53
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>			
0 - 8,000 gal	\$0.00	X	2.5	\$0.00
8,001 - 16,000 gal	\$2.60	X	0	\$0.00
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>
			2.5	\$0.00
<u>Sewer Fee</u>	\$25.53	X	1	\$25.53
Total Monthly Bill				\$75.06

EXAMPLE SUMMER MONTHLY BILL (6,500 gallons)

Fee Description	Current		# of Units	Total Charges
<u>Base Fee</u>	\$49.53	X	1	\$49.53
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>			
0 - 8,000 gal	\$0.00	X	6.5	\$0.00
8,001 - 16,000 gal	\$2.60	X	0	\$0.00
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>
			6.5	\$0.00
<u>Sewer Fee</u>	\$25.53	X	1	\$25.53
Total Monthly Bill				\$75.06

SECTION 3: WATER COST OF SERVICE

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 the District can pay for operating costs, repay prior unpaid charges to the County, and accumulate reasonable reserves, all of which is 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. The County of Fresno received grant funds from the California Department of Water Resources to drill a new water supply well. The proposed new water rates do not account for any costs associated with water treatment at the new well that could be required if Manganese, Uranium, or other constituents exceed allowable levels.

In recent years, the District has operated at a deficit meaning that expenses are greater than revenues. Due to deficit spending, the District has exhausted its reserves and accumulated unpaid charges with the County. These unpaid charges are owed to the County for expenses incurred by the District 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 District's revenues consist of water service charges, a portion of tax revenues, and interest earnings. To be fiscally conservative, it is assumed that the District will experience no growth over the next five years and annual taxes and interest revenues will remain the same. Water service charges at current rates generate about \$42,900 annually (see Table 4), while tax revenues and interest that are allocated to the water utility total about \$39,500 annually. A rate increase is proposed to go into effect on July 1, 2025, to fund the costs described in the sections below.

3.2 Expenses

3.2.1 Operating Costs

Based on an analysis of the District's total costs over the past five years, it was determined that 61% of operating expenses and prior unpaid charges should be allocated to the water utility and the remaining 39% should be allocated to the sewer utility for the purposes of this rate study, as shown in Table 6. This allocation of costs between the water and sewer utilities was determined by County staff.

In FY2024/25, the District expects to incur about \$145,800 in expenses to operate and maintain the water system. Operating costs over the course of the rate study period are projected to increase by 3% annually to account for estimated inflation.

Table 6: Allocation to Water and Sewer Service

Allocation	FY2024/25 Total	Water Service 61%	Sewer Service 39%
Estimated Tax Revenues	64,000	39,000	25,000
Operating Costs			
Liability Insurance Risk lgs	3,000	1,800	1,200
Maintenance-Equipment	25,000	15,300	9,800
Maintenance-Buildings	25,000	15,300	9,800
Memberships	500	300	200
Postage	1,500	900	600
Peoplesoft Financials	4,000	2,400	1,600
Professional Services	100,000	61,000	39,000
<u>Utilities</u>	<u>40,000</u>	<u>24,400</u>	<u>15,600</u>
Subtotal Services & Supplies	199,000	121,400	77,800
<u>Prop 218 Staffing Costs</u>	<u>40,000</u>	<u>24,400</u>	<u>15,600</u>
Total Operating Expenses [1]	239,000	145,800	93,400
Debt Owed to County (through FY2023/24)	141,243	86,158	55,085

1 - Does not sum exactly due to rounding.

3.2.2 Repayment of Unpaid Charges

As of July 1, 2024, the District water system owed Fresno County about \$86,200 in prior unpaid charges. In FY2024/25, it is projected that the District will operate in a deficit and accrue an additional \$63,400 of unpaid charges through June 30, 2025. Following the proposed rate increase on July 1, 2025, it is projected the District will make payments to Fresno County for prior unpaid charges plus interest over four years from FY2025/26 through FY2028/29. For financial planning purposes, the County's internal interest rate is estimated as 2.8% annually. Through payoff of the unpaid charges, it is projected that the District will accrue about \$11,300 of interest.

3.2.3 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 rate plan developed in this report includes the accumulation of about \$69,500 in reserves by the end of FY2029/30 which is in-line with the County's target.

3.3 Water Cash Flow

Table 7 provides the five-year cash flow spanning from FY2025/26 to FY2029/30. July 1, 2025, it is proposed that the District implement a 230.1% rate revenue increase. This rate change will increase annual rate revenues from about \$42,900 to \$141,600. The proposed rates are described in more detail in the following section.

Table 7: Water Cash Flow Projection

	Projected FY2024/25	Proposition 218				
		FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30
Revenue Adjustment Rate Increase Effective		230.1% July 1, 2025	0.0% July 1, 2026	0.0% July 1, 2027	0.0% July 1, 2028	0.0% July 1, 2029
BEGINNING FUND BALANCE	\$0	\$0	\$0	\$0	\$0	\$31,697
REVENUES						
Water Service Charges	42,900	141,600	141,600	141,600	141,600	141,600
Estimated Tax Revenues [1]	39,000	39,000	39,000	39,000	39,000	39,000
Interest	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>
Total Revenues	82,400	181,100	181,100	181,100	181,100	181,100
EXPENSES						
Services & Supplies						
Liability Insurance Risk Igs	1,800	1,900	2,000	2,100	2,200	2,300
Maintenance-Equipment	15,300	15,800	16,300	16,800	17,300	17,800
Maintenance-Buildings	15,300	15,800	16,300	16,800	17,300	17,800
Memberships	300	300	300	300	300	300
Postage	900	900	900	900	900	900
Peoplesoft Financials	2,400	2,500	2,600	2,700	2,800	2,900
Professional Services	61,000	64,700	66,600	68,600	70,700	72,800
Utilities	24,400	25,100	25,900	26,700	27,500	28,300
Prop 218 Staffing Costs	<u>24,400</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal Operating Expenses	145,800	127,000	130,900	134,900	139,000	143,100
Non-Operating Costs						
Repayment to County	<u>0</u>	<u>54,100</u>	<u>50,200</u>	<u>46,200</u>	<u>10,403</u>	<u>0</u>
Subtotal Non-Operating Expenses	0	54,100	50,200	46,200	10,403	0
Total Expenses	145,800	181,100	181,100	181,100	149,403	143,100
NET REVENUES	(63,400)	0	0	0	31,697	38,000
ENDING FUND BALANCE	(63,400)	0	0	0	31,697	69,697
Reserve Funds						
Proposed Reserve Target (50% of O&M) [2]	72,900	68,200	67,300	65,500	67,500	69,500
Target Met	no	no	no	no	no	yes

1 - 61% allocated to water service and 31% allocated to sewer service

2 - Board policy adopted November 7, 2006; 3-year rolling average equal to 50% O&M

Beginning Unpaid Charges	(\$86,158)	(\$151,971)	(\$102,126)	(\$54,785)	(\$10,119)	\$0
Additional Accrual	(63,400)	0	0	\$0	\$0	\$0
Payments	0	54,100	50,200	\$46,200	\$10,403	\$0
Annual Interest Accrued (2.8%)	<u>(\$2,412)</u>	<u>(\$4,255)</u>	<u>(\$2,860)</u>	<u>(\$1,534)</u>	<u>(\$283)</u>	<u>\$0</u>
Ending Unpaid Charges	(\$151,971)	(\$102,126)	(\$54,785)	(\$10,119)	\$0	\$0

SECTION 4: WATER COST ALLOCATION

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 fee 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 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. The District’s existing tiered usage rates are proposed to be eliminated and replaced with a uniform usage rate for all levels of usage. Since the tiered rates are proposed to be eliminated, it is proposed that the AWWA recommended cost categories of Base and Extra capacity be combined. The usage rate is proposed to recover the FY2029/30 utilities cost, equipment maintenance, and a portion of professional services.

The professional services line item includes expenses such as County staff time to administer the system, outside operator costs, water treatment, and water supply costs. An analysis was conducted to determine which professional services costs that are associated with maintaining available capacity in the system and should be recovered through the base fee vs. water delivery costs that should be recovered through the usage rate. Water treatment and supply costs were allocated to the usage rate and all other administrative costs were allocated to the fixed charge. Based on recorded, actual costs over the past five years, 65.1% of professional services costs were attributable to fixed costs to maintain capacity in the system and 34.9% of professional services costs were attributable to water supply and delivery.

Across all operating costs, it is estimated that about 50.02% of expenses are attributable to water delivery and about 49.98% are attributable to maintaining available capacity. These allocation percentages were applied to the repayment and reserve revenue requirements.

Typically, the Meters and Services category expenses are spread proportionately between large and small meters based on the maximum flow rate of each connection. Waterworks District #40 has only one type of connection – single family residential, each with the same fixed cost of service. Thus, it is proposed that the AWWA recommended cost categories of Meters and Services and Customer Service be combined and recovered from the base (fixed) service fee. The base fee is proposed to recover insurance costs, building maintenance, memberships, postage, financial software costs, and a portion of repayment to the County, and accumulation of reserves.

Table 8: Water Cost Allocation

	Total FY2029/30 O&M	Base Fee	Usage Rates
O&M	Expense [1]	(Non-water delivery O&M)	(water delivery O&M)
Liability Insurance Risk lgs	\$2,300	100.0%	0.0%
Maintenance-Equipment	\$17,800	0.0%	100.0%
Maintenance-Buildings	\$17,800	100.0%	0.0%
Memberships	\$300	100.0%	0.0%
Postage	\$900	100.0%	0.0%
Peoplesoft Financial Charge	\$2,900	100.0%	0.0%
Professional Services	\$72,800	65.1%	34.9%
Utilities	\$28,300	0.0%	100.0%
<u>Rate Study & Prop 218</u>	<u>\$0</u>	<u>100.0%</u>	<u>0.0%</u>
Total O&M	\$143,100	\$71,575	\$71,525
% of total		50.02%	49.98%

Categories	Total	Base Fee	Usage Rates
O&M (from above)	\$143,100	\$71,575 50.02%	\$71,525 49.98%
Repayment	\$32,180	\$16,096 50.02%	\$16,084 49.98%
Reserves	\$5,820	\$2,911 50.02%	\$2,909 49.98%
Tax Revenue & interest	(\$39,500)	(\$19,757) 50.02%	(\$19,743) 49.98%
Total Allocated	\$141,600	\$70,825	\$70,775
Base Fee		\$70,825	50.02%
Usage Rates		<u>\$70,775</u>	<u>49.98%</u>
TOTAL REVENUE REQUIREMENT (Base Fee + Usage Rates)		\$141,600	100.0%

1 - FY2028/29 (5th year of the rate study) was selected as the test year for rate design because the rates are proposed to remain the same over this rate study's 5-year planning period. If an earlier year was selected as the cost basis for the usage rates and non-water delivery O&M base fee (such as year 2 for example), these rates would under collect in later years as costs increase due to inflation (i.e. the costs in year 5 would be greater than the rates set in year 2).

SECTION 5: RATE DESIGN

5.1 Rate Calculation

Table 9 provides the calculation of the base fee and usage rate. The revenue requirement for the base fee is \$70,825 (see Table 8) and is divided by 69 customers then divided by 12 months to equal a monthly fee of \$85.54. The usage rate revenue requirement of \$70,775 (from Table 8) is divided by the estimated annual water usage (2,990,000 gallons) to calculate the rate per 1,000 gallons.

Table 9: Water Rate Calculation

REVENUE REQUIREMENT	
Base Fee	\$70,825
<u>Usage Rate</u>	<u>\$70,775</u>
Total	\$141,600
BASE FEE	
Base Fee Revenue	\$70,825
<u>Number of Meters</u>	<u>69</u>
Base Fee	\$85.54
USAGE RATE	
Consumption Revenue	\$70,775
Usage (1,000 gal) [1]	<u>2,990</u>
Rate (\$/1,000)	\$23.67

1 - 95% of current. Due to rate structure changes and the increased cost of water, customers are likely to reduce consumption.

Table 10 provides the schedule of proposed rates including a break-out of the base fee between operations, repayment of unpaid charges, and reserves, all of which is 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.

It is proposed that the new rates go into effect July 1, 2025, and remain in place through June 30, 2030. If additional connections are built out in the District, then the increased rates for the water services fees in Table 10 will also apply to them.

Table 10: Proposed Monthly Water Rates

Fee Description	Current	Fee Description	Proposed July 1, 2025
Base Fee	\$49.53	Non-water delivery O&M	\$62.58
		Repayment	\$19.44
		<u>Reserves</u>	<u>\$3.52</u>
		Base Fee	\$85.54
<u>Overuse Rates</u>	<u>Charge per 1,000 gal</u>	<u>Usage Rates</u>	<u>Charge per 1,000 gal</u>
0 - 8,000 gal	\$0.00	All Usage	\$23.67
8,001 - 16,000 gal	\$2.60		
Above 16,000 gal	\$3.64		

5.2 Bill Impacts

Table 11 provides sample bill impacts for the typical average 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 11: Water Bill Impacts

AVERAGE MONTHLY BILL (4,000 gallons)

Fee Description	Current		# of Units	Total Charges	Fee Description	Proposed		# of Units	Total Charges	
<u>Base Fee</u>	\$49.53	X	1	\$49.53	<u>Base Fee</u>	\$85.54	X	1	\$85.54	
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>				
0 - 8,000 gal	\$0.00	X	4	\$0.00	All Usage	\$23.67	X	4	\$94.68	
8,001 - 16,000 gal	\$2.60	X	0	\$0.00						
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>						
			4	\$0.00						
Monthly Equivalent				\$49.53					\$180.22	Increase \$130.69 264%

EXAMPLE WINTER MONTHLY BILL (2,500 gallons)

Fee Description	Current		# of Units	Total Charges	Fee Description	Proposed		# of Units	Total Charges	
<u>Base Fee</u>	\$49.53	X	1	\$49.53	<u>Base Fee</u>	\$85.54	X	1	\$85.54	
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rates</u>	<u>\$/1,000 gal</u>				
0 - 8,000 gal	\$0.00	X	2.5	\$0.00	All Usage	\$23.67	X	2.5	\$59.18	
8,001 - 16,000 gal	\$2.60	X	0	\$0.00						
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>						
			2.5	\$0.00						
Monthly Equivalent				\$49.53					\$144.72	Increase \$95.19 192%

EXAMPLE SUMMER MONTHLY BILL (6,500 gallons)

Fee Description	Current		# of Units	Total Charges	Fee Description	Proposed		# of Units	Total Charges	
<u>Base Fee</u>	\$49.53	X	1	\$49.53	<u>Base Fee</u>	\$85.54	X	1	\$85.54	
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rates</u>	<u>\$/1,000 gal</u>				
0 - 8,000 gal	\$0.00	X	6.5	\$0.00	All Usage	\$23.67	X	6.5	\$153.86	
8,001 - 16,000 gal	\$2.60	X	0	\$0.00						
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>						
			6.5	\$0.00						
Monthly Equivalent				\$49.53					\$239.40	Increase \$189.87 383%

SECTION 6: SEWER COST OF SERVICE

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 the District can pay for operating costs, 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 sewer service per parcel under these proposed sewer rates.

In recent years, the District has operated at a deficit meaning that expenses are greater than revenues. Due to deficit spending, the District has exhausted its reserves and accumulated unpaid charges with the County. These unpaid charges are owed to the County for expenses incurred by the District 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 sewer service per parcel under these proposed sewer rates.

6.1 Revenues

The District's revenues consist of sewer service charges and a portion of tax revenues. To be fiscally conservative, it is assumed that the District will experience no growth over the next five years and non-rate revenues will remain the same. Currently, sewer service charges generate about \$21,100 annually and tax revenues total about \$25,000 annually. July 1, 2025, a rate increase is proposed to go into effect to fund the costs described below.

6.2 Expenses

6.2.1 Operating Costs

In FY2024/25, the District expects to incur about \$93,400 in expenses to operate and maintain the sewer system (Table 6). Compared to projected revenues of only \$46,100, operating expenses are greater than revenues and the sewer utility is projected to operate in a deficit of about \$47,300 in FY2024/25. Operating costs are projected to increase by 3% annually during the rate study period due to inflation.

6.2.2 Repayment of Unpaid Charges

As of July 1, 2024, the District's sewer system owed Fresno County \$55,085 in prior unpaid charges. It is projected that the District will operate in a deficit during FY2024/25 and accrue an additional \$47,300 of unpaid charges through June 30, 2025. The combined payments to Fresno County for prior unpaid charges plus interest are projected to be made over four years from FY2025/26 through FY2028/29. For financial planning purposes, the County's internal interest rate is estimated as 2.8% annually.

6.2.3 Reserves

The Fresno County Board of Supervisors adopted a policy on November 7, 2006, requiring special districts providing sewer 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 rate plan developed in this report includes the accumulation of about \$44,200 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 12. July 1, 2025, it is proposed that the District implement a rate revenue increase. This rate change will increase annual rate revenues to \$91,900. The proposed rates are described in more detail in the following section.

Table 12: Sewer Cash Flow Projection

	Projected FY2024/25	Proposition 218				
		FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30
Revenue Adjustment Rate Increase Effective		335.55% July 1, 2025	0% July 1, 2026	0% July 1, 2027	0% July 1, 2028	0.0% July 1, 2029
BEGINNING FUND BALANCE	\$0	\$0	\$0	\$0	\$0	\$18,483
REVENUES						
Sewer Service Charges	21,100	91,900	91,900	91,900	91,900	91,900
Estimated Tax Revenues [1]	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>
Total Revenues	46,100	116,900	116,900	116,900	116,900	116,900
EXPENSES						
Services & Supplies						
Liability Insurance Risk Igs	1,200	1,200	1,200	1,200	1,200	1,200
Maintenance-Equipment	9,800	10,100	10,400	10,700	11,000	11,300
Maintenance-Buildings	9,800	10,100	10,400	10,700	11,000	11,300
Memberships	200	200	200	200	200	200
Postage	600	600	600	600	600	600
Peoplesoft Financials	1,600	1,600	1,600	1,600	1,600	1,600
Professional Services	39,000	41,300	42,500	43,800	45,100	46,500
Utilities	15,600	16,100	16,600	17,100	17,600	18,100
Prop 218 Staffing Costs	<u>15,600</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal Operating Expenses	93,400	81,200	83,500	85,900	88,300	90,800
Non-Operating Costs						
Repayment to County	<u>0</u>	<u>35,700</u>	<u>33,400</u>	<u>31,000</u>	<u>10,117</u>	<u>0</u>
Subtotal Non-Operating Expenses	0	35,700	33,400	31,000	10,117	0
Total Expenses	93,400	116,900	116,900	116,900	98,417	90,800
NET REVENUES	(47,300)	0	0	0	18,483	26,100
ENDING FUND BALANCE	(47,300)	0	0	0	18,483	44,583
Reserve Funds						
Proposed Reserve Target (50% of O&M) [2]	46,700	43,700	43,300	41,800	43,000	44,200
Target Met	no	no	no	no	no	yes

1 - 61% allocated to water service and 31% allocated to sewer service

2 - Board policy adopted November 7, 2006; 3-year rolling average equal to 50% O&M

Beginning Unpaid Charges	(\$55,085)	(\$103,927)	(\$71,137)	(\$39,729)	(\$9,841)	\$0
Additional Accrual	(47,300)	0	0	0	0	0
Payments	0	35,700	33,400	31,000	10,117	0
Annual Interest Accrued (2.8%)	<u>(\$1,542)</u>	<u>(\$2,910)</u>	<u>(\$1,992)</u>	<u>(\$1,112)</u>	<u>(\$276)</u>	<u>\$0</u>
Ending Unpaid Charges	(\$103,927)	(\$71,137)	(\$39,729)	(\$9,841)	\$0	\$0

SECTION 7: PROPOSED SEWER RATES & COMBINED BILLS

7.1 Proposed Sewer Rates

A summary of the proposed monthly rates for the next five years is provided below in Table 13. Similar to the current rate, the proposed monthly rate is a fixed fee per dwelling unit per month. Included in the table is a break-out of the proposed monthly rate between operations and maintenance, repayment of unpaid charges, and the accumulation of reserves. The break-out is used to show that the proposed rates will be necessary to recover only the actual proportional cost of sewer service attributable to each parcel.

The proposed rates were calculated by dividing the total annual sewer service charge revenue requirement (from Table 12) by 69 customers then dividing that by 12 months to generate a monthly rate. As described in Section 6.3, the total sewer rate revenue requirement is \$91,900 annually which equates to a proposed monthly rate of \$110.99 for each customer.

It is proposed that the new rates go into effect July 1, 2025 and remain in place through June 30, 2030. Under the proposed rates, the monthly sewer bill will increase by \$85.46 from the current monthly fee of \$25.53. If additional connections are built out in the District, then the increased rates for the sewer services fees calculated in this study will also apply to them.

Table 13: Proposed Monthly Sewer Rates

Current		Proposed July 1, 2025	
		O&M	\$79.47
		Repayment	\$26.63
		<u>Reserves</u>	<u>\$4.89</u>
Total Monthly Fee	\$25.53	Total Monthly Fee	\$110.99

7.2 Combined Water and Sewer Monthly Utility Bills

Table 14 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 14: Current and Proposed Monthly Utility Bills

AVERAGE MONTHLY BILL (4,000 gallons)

Fee Description	Current		# of Units	Total Charges	Fee Description	Proposed		# of Units	Total Charges	
<u>Water Base Fee</u>	\$49.53	X	1	\$49.53	<u>Water Base Fee</u>	\$85.54	X	1	\$85.54	
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>				
0 - 8,000 gal	\$0.00	X	4	\$0.00	All Usage	\$23.67	X	4	\$94.68	
8,001 - 16,000 gal	\$2.60	X	0	\$0.00						
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>						
			4	\$0.00						
<u>Sewer Service</u>	\$25.53	X	1	\$25.53	<u>Sewer Service</u>	\$110.99	X	1	\$110.99	
Monthly Equivalent				\$75.06	Monthly Equivalent				\$291.21	Increase \$216.15 288%

EXAMPLE WINTER MONTHLY BILL (2,500 gallons)

Fee Description	Current		# of Units	Total Charges	Fee Description	Proposed		# of Units	Total Charges	
<u>Water Base Fee</u>	\$49.53	X	1	\$49.53	<u>Water Base Fee</u>	\$85.54	X	1	\$85.54	
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>				
0 - 8,000 gal	\$0.00	X	2.5	\$0.00	All Usage	\$23.67	X	2.5	\$59.18	
8,001 - 16,000 gal	\$2.60	X	0	\$0.00						
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>						
			2.5	\$0.00						
<u>Sewer Service</u>	\$25.53	X	1	\$25.53	<u>Sewer Service</u>	\$110.99	X	1	\$110.99	
Monthly Equivalent				\$75.06	Monthly Equivalent				\$255.71	Increase \$180.65 241%

EXAMPLE SUMMER MONTHLY BILL (6,500 gallons)

Fee Description	Current		# of Units	Total Charges	Fee Description	Proposed		# of Units	Total Charges	
<u>Water Base Fee</u>	\$49.53	X	1	\$49.53	<u>Water Base Fee</u>	\$85.54	X	1	\$85.54	
<u>Overuse Rate</u>	<u>\$/1,000 gal</u>				<u>Usage Rate</u>	<u>\$/1,000 gal</u>				
0 - 8,000 gal	\$0.00	X	6.5	\$0.00	All Usage	\$23.67	X	6.5	\$153.86	
8,001 - 16,000 gal	\$2.60	X	0	\$0.00						
Above 16,000 gal	\$3.64	X	<u>0</u>	<u>\$0.00</u>						
			6.5	\$0.00						
<u>Sewer Service</u>	\$25.53	X	1	\$25.53	<u>Sewer Service</u>	\$110.99	X	1	\$110.99	
Monthly Equivalent				\$75.06	Monthly Equivalent				\$350.39	Increase \$275.33 367%