

TUOLUMNE CITY SANITARY DISTRICT

2026 Sewer Rate Study

Final Report

March 10, 2026



SUSP



**SPECIALIZED UTILITIES SERVICES PROGRAM
ENGINEERING**

**TUOLUMNE CITY SANITARY DISTRICT
2026 SEWER RATE STUDY**

FINAL REPORT

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EXECUTIVE SUMMARY

Study Overview

The Tuolumne City Sanitary District (District) retained Robert D. Niehaus, Inc. (RDN) to develop a comprehensive Sewer Rate (Study), which includes financial planning, revenue requirements, cost of service, and rate-setting analyses. The Study's overall goal is to develop a financial plan to identify necessary revenue to meet the District's financial needs and propose rates and fees, which recover the costs from ratepayers commensurate with their service requirements. RDN collaborated with District staff to evaluate the District's financial stability, given the current and projected future financial conditions. The main focus of the current study includes:

1. Projecting account growth based on historical data and inputs from District staff for the study period (FY 2026 – FY 2030);
2. Developing a 10-year financial plan for the District to ensure financial sufficiency to fund day-to-day operation and maintenance, debt service requirements, and capital improvement and replacement projects while building up reserves to the District's target level, 5-years of which is used for the rate projection;
3. Conducting a Cost of Service analysis to equitably allocate the costs of providing service to customers commensurate with their service requirements;
4. Designing rates based on the results of COS analysis to establish a strong nexus between costs and pricing of rates;
5. Conducting a rate comparison survey to assess how the proposed rates compare with current rates;
6. Developing an administrative record, which effectively communicates the findings of the Study.

Summary of Recommendations

RDN recommends the following changes and modifications to the current rates and fees based on the findings of the Study:

- Adopt the proposed financial plan which will allow the District to maintain reserves and accomplish capital spending targets
- Adjust revenues each year of the study period by 6 percent
- Align the cost allocation for customers based on the Cost of Service analysis.

Current Rates

The District's customers currently pay a fixed annual service charge. The monthly charge is based on each customer's relative number of billing units, called equivalent dwelling units (EDUs). According to District staff, the number of billing units is determined based on the type of customer.¹ The number of EDUs are relative to an average single family residential customer. The current sewer rates as described are displayed in Table 1.

¹ Tuolumne City Sanitary District User Classification Table

Table 1. Current Sewer Rates

Rate Category	Rate per EDU
Monthly	\$52.75
Annual	\$633.00

Proposed Rates

The proposed rates maintain the District’s current rate structure of billing customers based on an EDU basis. The recommended rate adjustments will allow the District to maintain healthy reserve fund balances, maintain planned debt service requirements, and execute necessary capital improvement projects over five-year study period. Proposed annual revenue adjustments presented in this Study are 6.0 percent per year. Table 2 and Table 3 show the proposed revenue adjustments and rates for the study period, respectively.

Table 2. Proposed Revenue Adjustments

	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenue Adjustment	6.0%	6.0%	6.0%	6.0%	6.0%

Table 3. Proposed Sewer Rates

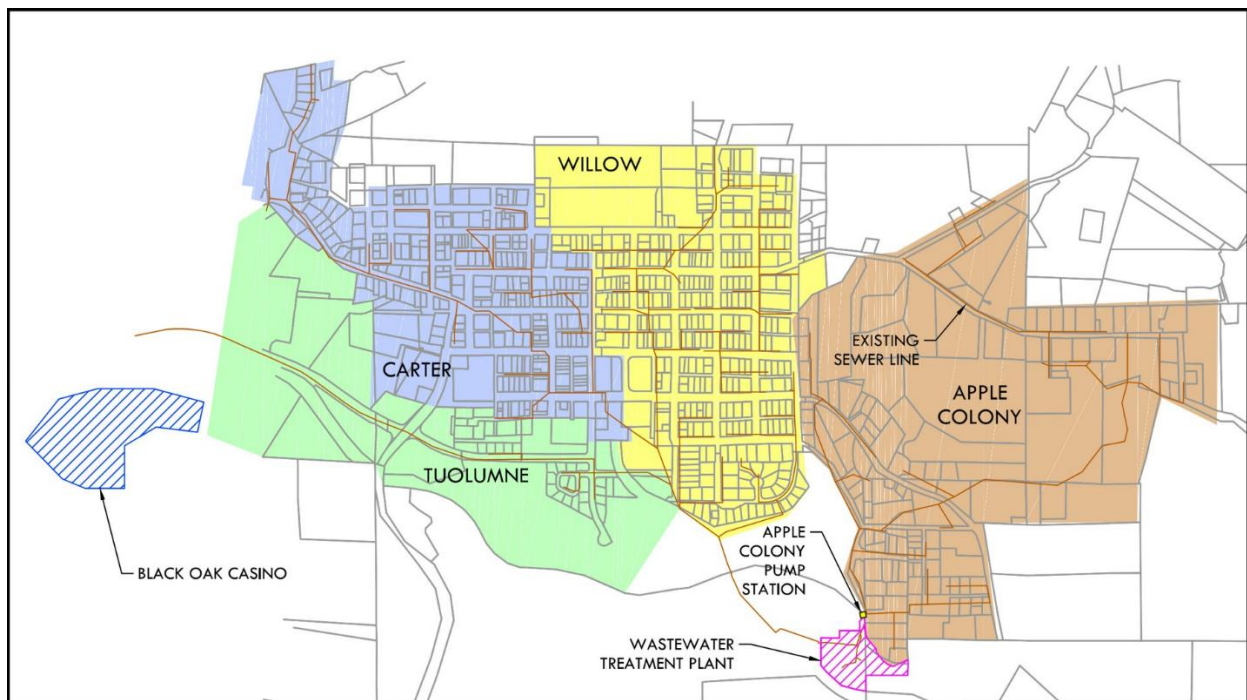
Rate Category	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Monthly	\$55.92	\$59.28	\$62.84	\$66.61	\$70.61
Annual	\$671.04	\$711.36	\$754.08	\$799.32	\$847.32

1 INTRODUCTION

Tuolumne is an unincorporated community of about 1,317 population, located southeast of Sonora in Tuolumne County, at an elevation of about 2,600 feet in the rolling foothills of the Sierra Nevadas. Tourism, retirement and welfare incomes are the principal economic resources of the area. The Tuolumne City Sanitary District (District, TCSD) is a California Special District formed by the Board of Supervisors of Tuolumne County, California, on July 16, 1941, upon petition for formation thereof pursuant to the Sanitary District Act of 1923 as contained in the California Health and Safety Code Section 64000 et seq. The District operates and maintains sewer service for the community of Tuolumne Township and immediate surrounding areas, including the Black Oak Casino Resort. The District operates a single wastewater treatment plant, which underwent a major expansion and upgrade that was completed in 2013.

Figure 1 shows the District service area.

Figure 1. Tuolumne City Sanitary District



1.1 Methodology

The sewer rates formulated in the Study were developed using principles set forth by the Water Environment Federation (WEF). RDN rate-making practices incorporate methods described in the WEF Financing and Charges for Sewer Systems Manual 27². Figure 2 presents the steps taken to develop the District's proposed rates.

² Financing and Charges for Sewer Systems, WEF Manual of Practice Number 27, Water Environment Federation

Figure 2. Rate Study Process



- **Financial Planning and Revenue Requirements:** develop a ten-year financial plan based on the projected revenues and annual costs which include operating, debt service, and capital expenses. The District’s target reserve level should also be considered as part of the financial planning. Based on the financial planning, revenue requirements are determined for each year of the study period.
- **Cost of Service:** evaluate the customer classifications and allocate costs based on their service requirements.
- **Rate Design:** design rates to equitably recover the rate revenue requirements from each customer.

1.2 Legal Framework

The primary goal of this study is to help the District establish rates that achieve the District’s objectives of revenue stability, equitable cost recovery, and ratepayer affordability. This section of the report describes the legal framework considered in developing the rates to ensure that the calculated cost of service rates provide a fair and equitable allocation of costs to the different customer classes.

California Constitution - Article XIII D, Section 6 (Proposition 218)

In November 1996, California voters passed Proposition 218, the “Right to Vote on Taxes Act.” This constitutional amendment protects taxpayers by limiting the methods by which local governments can create or increase taxes, fees, and charges without taxpayer consent. Between 2002 and today, California courts have ruled that fees associated with providing Sewer services are “property-related” and thus under the jurisdiction of Prop 218. The principal requirements for fairness of the fees related to public Sewer service are as follows: Revenues derived from the fee or charge shall not exceed the funds required to provide the property-related service. Revenues derived by the fee or 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 upon any parcel shall not exceed the proportional cost of service 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 Report use a methodology to establish an equitable system of charges that recover the cost of providing service and fairly apportion costs to each customer as required by Proposition 218.

1.3 Key Assumptions

A test year, FY 2026, was selected for which costs are to be analyzed, and rates established for this study. The financial plan was built for the next 10 years, which includes the five-year study period, FY 2027 through FY 2031 with a detailed revenue adjustment plan. The District’s fiscal year starts on July 1 and ends on June 30.

Escalation Factors

The financial plan was built based on an assumption in the projected escalation of revenues and expenses associated with both operations and maintenance (O&M) and capital improvement projects (CIPs). Escalation factors were calculated for eight independent variables using historical Consumer Price Index (CPI) data from the West – Size Class B/C, between the year 2000 and the most current calendar year³, and projections by the Federal Reserve Bank of St. Louis (FRED) Economic Research Division, Quarterly Census of Employment and Wages (QCEW), and Engineering News Record (ENR) Building Cost Index (BCI). All escalation factors were developed by calculating an average rate of change and projecting that rate into future years. Table 4 displays the escalation factors estimated for the District.

Table 4. Estimated Expense Escalation Factors

Category	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Payroll	4.4%	4.4%	4.4%	4.4%	4.4%
Other Employee	4.4%	4.4%	4.4%	4.4%	4.4%
Utilities	6.5%	6.5%	6.5%	6.5%	6.5%
Chemicals	6.1%	6.1%	6.1%	6.1%	6.1%
Fuel/Automobile	3.3%	3.3%	3.3%	3.3%	3.3%
Construction	5.6%	5.6%	4.1%	4.1%	4.1%
Insurance	9.6%	8.8%	6.4%	6.4%	4.3%
Overall	3.1%	3.1%	3.1%	3.1%	3.1%

³ Bureau of Labor Statistics (2025) *Consumer Price Indices West – Size Class B/C, Not Seasonally Adjusted*.

2 FINANCIAL PLAN

RDN built a 10-year financial model for the District’s sewer system to meet the system’s long-term financial goals. The detailed rate analysis was performed for the first five years.

2.1 Billing Units

RDN first projected customer growth based on customer billing units to estimate the District’s revenue generated from rates. RDN utilized the District’s billing records from FY 2025 and the FY 2026 Budget to determine the current billing units and used this as the starting point for the projections. RDN projects that the number EDUs per year throughout the study period will remain stable based on the long-term average of sewer flow and strength. The current and projected billing unit counts are displayed in Table 5.

Table 5. Customer Billing Units

Customer Category	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
EDUs	1,840.36	1,840.36	1,840.36	1,840.36	1,840.36	1,840.36

2.2 Revenues

Based on the projected billing units, RDN conducted a revenue analysis using the current sewer rates. The District currently collects revenues from rates, connection fees, interest income, property taxes and grants. Forecasted revenues by category are shown in Table 6.

Table 6. Projected Status Quo Revenue⁴

Revenue Category	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Fixed Rate Revenue	\$1,164,948	\$1,164,948	\$1,164,948	\$1,164,948	\$1,164,948	\$1,164,948
Connection Fees	\$7,200	\$7,200	\$7,200	\$7,200	\$7,200	\$7,200
Interest Income	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Property Tax Revenues	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Grants	\$1,500,000	\$0	\$0	\$0	\$0	\$0
Transfers	\$286,213	\$0	\$0	\$0	\$0	\$0
Total	\$3,158,361	\$1,372,148	\$1,372,148	\$1,372,148	\$1,372,148	\$1,372,148

2.3 Operating and Maintenance (O&M) Expense

The District’s FY 2026 Budget anticipated approximately \$950,000 in expenses, classified as O&M expenses. The itemized O&M expenses were carefully reviewed by RDN and forecasted over the study period using the escalation factors discussed in the Key Assumptions section. On average overall, O&M Expenses are expected to increase by 4.3 percent annually through the ten year study period. By FY 2031, annual O&M expenses are projected to reach around \$1.2 million. O&M expenses by function are shown in Table 7.

⁴ Note that grants and transfers are only projected for the current Fiscal Year, FY 2026, as they are not predictable sources of revenue.

Table 7. Projected Operating Expenses

Operating Expense Category	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Salaries and Benefits	\$361,486	\$377,517	\$394,260	\$411,746	\$430,007	\$449,078
Medical HSA Allowance	\$57,600	\$60,155	\$62,822	\$65,609	\$68,518	\$71,557
CalPERS Contributions	\$27,930	\$29,169	\$30,463	\$31,814	\$33,225	\$34,698
Workmans Compensation	\$19,992	\$20,878	\$21,804	\$22,771	\$23,781	\$24,836
Payroll Taxes	\$21,689	\$22,651	\$23,656	\$24,705	\$25,800	\$26,945
Employee Education	\$2,500	\$2,611	\$2,727	\$2,848	\$2,974	\$3,106
Employee Misc	\$500	\$522	\$545	\$570	\$595	\$621
Office Supplies	\$14,321	\$14,758	\$15,208	\$15,672	\$16,150	\$16,643
General Supplies	\$12,720	\$13,108	\$13,508	\$13,920	\$14,345	\$14,783
Caustic Soda	\$45,000	\$47,723	\$50,610	\$53,672	\$56,920	\$60,364
Pest Control	\$1,200	\$1,237	\$1,274	\$1,313	\$1,353	\$1,395
Safety Equipment	\$2,000	\$2,061	\$2,124	\$2,189	\$2,255	\$2,324
Fuel/Mileage/Generator	\$6,600	\$6,815	\$7,037	\$7,266	\$7,503	\$7,747
Miscellaneous	\$10,000	\$10,305	\$10,620	\$10,944	\$11,277	\$11,621
Garbage	\$1,000	\$1,065	\$1,134	\$1,207	\$1,286	\$1,369
Power	\$83,000	\$88,382	\$94,114	\$100,217	\$106,716	\$113,636
Telephones	\$5,000	\$5,324	\$5,670	\$6,037	\$6,429	\$6,846
SCADA	\$1,250	\$1,288	\$1,327	\$1,368	\$1,410	\$1,453
Water	\$7,700	\$8,199	\$8,731	\$9,297	\$9,900	\$10,542
Propane	\$2,000	\$2,130	\$2,268	\$2,415	\$2,571	\$2,738
Professional Service	\$131,500	\$135,512	\$139,647	\$143,907	\$148,298	\$152,822
Repair and Maintenance	\$33,000	\$34,832	\$36,765	\$38,279	\$39,856	\$41,497
License Permits and Membership Fees	\$69,905	\$72,038	\$74,236	\$76,501	\$78,835	\$81,240
Insurance	\$32,500	\$35,623	\$38,776	\$41,249	\$43,881	\$45,764
Total	\$950,393	\$993,903	\$1,039,324	\$1,085,515	\$1,133,884	\$1,183,624

2.4 Capital Improvement Projects

In addition to the costs associated with daily operation and maintenance, the District estimates rate funded capital project spending needs around \$441,000 per year for the study period based on system depreciation and sludge removal. The District also needs to accomplish major capital projects during the study period such as the Carter Basin Pipeline, the Apple Colony Lift Station, and the Apple Colony Pipeline; however, these projects will only occur if grant funding becomes available. Under the proposed financial plan, rate funded CIP spending levels will increase as revenue becomes available through the rate adjustment plan. The average proposed rate funded CIP spending for the 5-year rate setting period is \$310,000 a year. The projected CIP spending includes \$60,000 a year in sludge removal costs. Table 8 shows the planned annual CIP expenses for the study period.

Table 8. Planned Capital Expenditures

Capital Funding Category	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Grants (if available)	\$1,500,000	\$5,000,000	\$13,000,000	\$1,450,000	\$37,450,000	\$1,300,000
Rates	\$258,500	\$260,000	\$285,000	\$310,000	\$335,000	\$360,000
Total	\$1,758,500	\$5,260,000	\$13,285,000	\$1,760,000	\$37,785,000	\$1,660,000

2.5 Debt Service

The District currently has outstanding annual debt service payments of approximately \$180,500 a year. Outstanding debt includes the USDA Installment Payment. Table 9 shows the Sewer utility’s annual debt service payment schedule by loan as well as the total debt service payment.

Table 9. Sewer Debt Service Payment Schedule

Description	Category	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
USDA Installment Payment	Principal	\$105,000	\$110,000	\$110,000	\$115,000	\$115,000	\$120,000
USDA Installment Payment	Interest	\$75,500	\$73,400	\$71,200	\$69,000	\$66,700	\$64,400
Total		\$180,500	\$183,400	\$181,200	\$184,000	\$181,700	\$184,400

2.6 Proposed Reserve Policy

The District must maintain an appropriate reserve balance to ensure that day-to-day operations will continue during emergencies and guarantee the future stability of the system. The District’s only formal reserve policy is to transfer \$60,000 a year into a fund for sludge removal. This amount was included in the capital plan. The District does have the following cash accounts and starting balances (FY 2026):

Cash: Liquid non-reserve funds with a balance of \$2.3 million

Restricted Cash: Restricted funds which include the bond reserve with a balance of \$666,840

Designated Cash: Specific reserve funds with a balance of \$2.0 million

Property Tax: An account which holds the District’s property tax revenues with a balance of \$1.1 million

The financial plan proposed in this study will maintain the District’s cash balance levels.

2.7 Status Quo Financial Proforma

Table 10 shows the status quo financial proforma throughout the study period based on the financial inputs described in the previous sections.

Table 10. Status Quo Financial Proforma

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Cash Position Opening Balance	\$6,115,936	\$6,384,904	\$6,319,749	\$6,186,372	\$5,979,005	\$5,700,569
Revenues						
Sewer Rate Revenue	\$1,164,948	\$1,164,948	\$1,164,948	\$1,164,948	\$1,164,948	\$1,164,948
Non-Operating Revenue	\$493,413	\$207,200	\$207,200	\$207,200	\$207,200	\$207,200
Total Revenues	\$1,658,361	\$1,372,148	\$1,372,148	\$1,372,148	\$1,372,148	\$1,372,148
Expenses						
Operating Expenses	\$950,393	\$993,903	\$1,039,324	\$1,085,515	\$1,133,884	\$1,183,624
Current Debt Service	\$180,500	\$183,400	\$181,200	\$184,000	\$181,700	\$184,400
Total Operating and Debt Service	\$1,130,893	\$1,177,303	\$1,220,524	\$1,269,515	\$1,315,584	\$1,368,024
Net Revenues Before CIP	\$527,468	\$194,845	\$151,623	\$102,633	\$56,564	\$4,124
Capital Expenditure						
Grant Funded (If Available)	\$1,500,000	\$5,000,000	\$13,000,000	\$1,450,000	\$37,450,000	\$1,300,000
Rate Funded	\$258,500	\$260,000	\$285,000	\$310,000	\$335,000	\$360,000
Net Income	\$268,968	-\$65,155	-\$133,377	-\$207,367	-\$278,436	-\$355,876
Ending Balance	\$6,384,904	\$6,319,749	\$6,186,372	\$5,979,005	\$5,700,569	\$5,344,693
Restricted Reserves	\$1,816,840	\$1,916,840	\$2,016,840	\$2,116,840	\$2,216,840	\$2,316,840
Available/Designated Cash	\$4,568,064	\$4,402,909	\$4,169,532	\$3,862,165	\$3,483,729	\$3,027,853
Reserve Target	\$6,115,936	\$6,115,936	\$6,115,936	\$6,115,936	\$6,115,936	\$6,115,936

2.8 Proposed Financial Plan Proforma

Based on the projected total revenue and necessary costs to be recovered during the study period, RDN built a financial plan that will generate sufficient revenues for the day-to-day operation and annual CIP and make appropriate contributions to reserves. The proposed financial plan will generate approximately \$1.1 million more revenue for the District, which will allow for the needed rate funded capital projects while maintaining the current fund balances. Table 11 shows the proposed financial plan through the study period under the proposed rate plan.

Table 11. Proposed Financial Plan Pro Forma

Proposed Rate Adjustment	0.0%	6.0%	6.0%	6.0%	6.0%	6.0%
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Cash Position Opening Balance	\$6,115,936	\$6,384,904	\$6,389,646	\$6,400,257	\$6,415,413	\$6,442,749
Revenues						
Sewer Rate Revenue	\$1,164,948	\$1,164,948	\$1,164,948	\$1,164,948	\$1,164,948	\$1,164,948
Adjusted Sewer Rate Revenue	\$0	\$69,897	\$143,988	\$222,524	\$305,772	\$394,015
Non-Operating Revenue	\$493,413	\$207,200	\$207,200	\$207,200	\$207,200	\$207,200
Total Revenues	\$1,658,361	\$1,442,045	\$1,516,135	\$1,594,672	\$1,677,920	\$1,766,163
Expenses						
Operating Expenses	\$950,393	\$993,903	\$1,039,324	\$1,085,515	\$1,133,884	\$1,183,624
Current Debt Service	\$180,500	\$183,400	\$181,200	\$184,000	\$181,700	\$184,400
Total Operating and Debt Service	\$1,130,893	\$1,177,303	\$1,220,524	\$1,269,515	\$1,315,584	\$1,368,024
Net Revenues Before CIP	\$527,468	\$264,742	\$295,611	\$325,156	\$362,336	\$398,139
Capital Expenditure						
Grant Funded (If Available)	\$1,500,000	\$5,000,000	\$13,000,000	\$1,450,000	\$37,450,000	\$1,300,000
Rate Funded	\$258,500	\$260,000	\$285,000	\$310,000	\$335,000	\$360,000
Net Income	\$268,968	\$4,742	\$10,611	\$15,156	\$27,336	\$38,139
Ending Balance	\$6,384,904	\$6,389,646	\$6,400,257	\$6,415,413	\$6,442,749	\$6,480,888
Restricted Reserves	\$1,816,840	\$1,916,840	\$2,016,840	\$2,116,840	\$2,216,840	\$2,316,840
Available/Designated Cash	\$4,568,064	\$4,472,806	\$4,383,417	\$4,298,573	\$4,225,909	\$4,164,048
Reserve Target	\$6,115,936	\$6,115,936	\$6,115,936	\$6,115,936	\$6,115,936	\$6,115,936

2.9 Revenue Requirements

Table 12 displays the District’s revenue requirements for FY 2027. The total expense for operating, capital, and debt service is offset by non-operating revenues to compute the revenue requirements that need to be recovered from customers’ rates. RDN proposes annual revenue adjustments of 6.0 percent per year for FY 2027 through FY 2031 to reach the financial goals set by the District. The recommended adjustments will balance the budget, maintain cash balances, and fund debt service requirements through the study period.

Table 12. Revenue Requirements for the Cost of Service Analysis

Revenue Requirements	FY 2027
O&M Expenses	\$993,903
Debt Service	\$183,400
Capital Expenditures (CIP)	\$260,000
Non-Operating Revenue	-\$207,200
Net Balance From Operations	-\$65,155
Rate Revenue Requirement	\$1,164,948

3 COST OF SERVICE AND RATE DESIGN

The purpose of a Cost of Service (COS) analysis is to allocate costs among customers commensurate with their service requirements. The Sewer system’s COS analysis utilizes a three-step approach to allocate costs equitably among customers. These steps include 1) functionalization of costs, 2) cost classification, and 3) cost allocation to customers. Provided below is a detailed discussion of the Sewer COS analysis conducted for the District and the specific steps taken for the analysis.

3.1 Functionalization of Costs

The functions included in a Sewer study are:

- **Customer Service** – costs to provide billing and customer service
- **Sewer Operations** – costs associated with the transmission and treatment of sewer flow
- **Administrative and General** – costs not directly related to the other operating functions

RDN carefully distributed each of the O&M expenses and the asset items into the District’s sewer system functions. Table 13 and Table 14 show the allocation of the operating budget and the District’s sewer assets to the standard sewer functions, respectively.

Table 13. Percentage of Operating Costs Allocated to Standard Functions⁵

O&M Expense	Cost	Percent
Customer Service	\$5,000	0.5%
Operations	\$305,450	32.1%
Admin and General	\$639,943	67.3%
Total	\$950,393	100.0%

Table 14. Percentage of Assets Allocated to Standard Functions

Asset Value	Value	Percent
Customer Service	\$0	0.0%
Operations	\$8,395,276	99.9%
Admin and General	\$12,021	0.1%
Total	\$8,407,297	100.0%

Once costs were functionalized, RDN further classified costs into service categories (cost causative components). The cost causative components include:

- **Customer Service** – costs to provide billing and customer service
- **Operations** - costs associated with the transmission and treatment of sewer flow

Table 15 and Table 16 show the percentage of the functionalized operating costs and asset values allocated to cost causative components, respectively. Administrative and general costs are allocated based on the percentage of costs allocated to each component based on the total cost of the other categories.

⁵ Costs are allocated based on an analysis of individual budget and asset line items

Table 15. Percent of Operating Costs Allocated to Cost Causative Components

Function	Total	Operations	Customer Service
Customer Service	\$5,000	0.0%	100.0%
Operations	\$305,450	100.0%	0.0%
Admin and General	\$639,943	98.4%	1.6%
Total	\$950,393	98.4%	1.6%

Table 16. Percent of Asset Values Allocated to Cost Causative Components

Function	Total	Operations	Customer Service
Customer Service	\$0	0.0%	100.0%
Operations	\$8,395,276	100.0%	0.0%
Admin and General	\$12,021	100.0%	0.0%
Total	\$8,407,297	100.0%	0.0%

Table 17 shows the results of the cost of service analysis. The total rate revenue requirements are allocated to cost components that will be used to complete the rate design.

Table 17. Total Cost of Service Allocated to Cost Components

Category	Total	Operations	Customer Service
O&M Revenue Requirements	\$993,903	\$977,896	\$16,007
Non-Operating Revenue Requirements	\$443,400	\$443,400	\$0
Total	\$1,437,303	\$1,421,296	\$16,007
		99%	1%
Other Operating Revenue	\$0	\$0	\$0
Non-Operating Revenue	-\$207,200	-\$204,892	-\$2,308
Net Balance From Operations	-\$65,155	-\$64,430	-\$726
Rate Revenue Requirement	\$1,164,948	\$1,151,974	\$12,974

3.2 Rate Derivation

District engineering staff has determined the relative EDU value of 42 different customer categories⁶. The ratio of each customer category is shown in Table 18. To calculate the individual annual bill for each customer, the number of EDUs applicable to that customer is summed then multiplied by the proposed cost per EDU. For residential customers, the number of EDUs is 1.00.

⁶ Tuolumne City Sanitary District – Exhibit A – User Classification Table

Table 18. EDU Multiplier Calculation

Customer Category	Multiplier	Unit	Customer Category	Multiplier	Unit
Single Family Residence	1.00		Bowling Alley	0.46	Alley
Accessory Dwelling Unit	1.00		Theater	0.02	Seat
Apartment/Mobile Home	1.00		Laundry	0.50	Machine
Motels	0.25	Room	Cleaners+	0.70	Machine
Rooming House	0.25		Plant w/office	0.07	Employee
Campground			Fire station	1.00	
Overnight Trailer/Dumping Facility	0.20	Space	Professional Offices	1.00	
RV individual Hookup	0.50	Space	Physician/Dentist	1.00	Office
Barber Shop	1.00		Retail Store	2.00	
Beauty Shop	2.00		Public Pool	1.00	
Service Station			Car Wash	2.80	Stall
W/Public Restroom	2.60		Food Market+	2.00	
Self Service	1.00		W/Grinder	1.00	Grinder
Rec Vehicle Dump Station	1.00	Dump Station	Fairgrounds	4.00	
Auto Repair Shop	1.00		Public Buildings	1.00	
Mortuary	1.00		Hospital	0.80	Bed
Bakeries	1.00		Schools	0.07	ADA
Restaurant			Meeting Halls	1.00	
Walk in	0.08	Seat	Public Restroom+	1.16	Toilet
24 hour	0.19	Seat	Wash Basin	0.47	Basin
w/banquet	0.05	Seat	Long-term Care Facilities	0.42	Bed
Drive-in	1.00		Industrial Bldg	0.70	Employee
Bars/Taverns	0.09	Seat			

Table 19 shows the test year cost of service based fixed charge for each unit.

Table 19. Cost of Service Fixed Charge Derivation

Customer Category	Unit	Rate	Customer Category	Unit	Rate
Single Family Residence		\$633.00	Bowling Alley	Alley	\$291.18
Accessory Dwelling Unit		\$633.00	Theater	Seat	\$12.66
Apartment/Mobile Home		\$633.00	Laundry	Machine	\$316.50
Motels	Room	\$158.25	Cleaners+	Machine	\$443.10
Rooming House		\$158.25	Plant w/office	Employee	\$44.31
Campground			Fire station		\$633.00
Overnight Trailer/Dumping Facility	Space	\$126.60	Professional Offices		\$633.00
RV individual Hookup	Space	\$316.50	Physician/Dentist	Office	\$633.00
Barber Shop		\$633.00	Retail Store		\$1,266.00
Beauty Shop		\$1,266.00	Public Pool		\$633.00
Service Station			Car Wash	Stall	\$1,772.40
W/Public Restroom		\$1,645.80	Food Market+		\$1,266.00
Self Service		\$633.00	W/Grinder	Grinder	\$633.00
Rec Vehicle Dump Station	Dump Station	\$633.00	Fairgrounds		\$2,532.00
Auto Repair Shop		\$633.00	Public Buildings		\$633.00
Mortuary		\$633.00	Hospital	Bed	\$506.40
Bakeries		\$633.00	Schools	ADA	\$44.31
Restaurant			Meeting Halls		\$633.00
Walk in	Seat	\$50.64	Public Restroom+	Toilet	\$734.28
24 hour	Seat	\$120.27	Wash Basin	Basin	\$297.51
w/banquet	Seat	\$31.65	Long-term Care Facilities	Bed	\$265.86
Drive-in		\$633.00	Industrial Bldg	Employee	\$443.10
Bars/Taverns	Seat	\$56.97			

To produce the proposed rate structure, the cost of service based rates are multiplied by the proposed annual revenue adjustment. Table 20 shows the proposed fixed charges for the study period. The proposed Fixed charges for FY 2027 should be implemented July 1, 2026.

Table 20. Proposed Fixed Charges

Rate Category	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Monthly	\$55.92	\$59.28	\$62.84	\$66.61	\$70.61
Annual	\$671.04	\$711.36	\$754.08	\$799.32	\$847.32

3.3 Bill Impact and Comparison

To assess the impacts on District customers, RDN performed a bill impact analysis.

Customers Bill Impact

This analysis compares the rate per billing unit under current and proposed rates. In FY 2027, District residential customers will see an increase of \$3.17 a month, or \$38.04 per year in their sewer bill. Figure 3 shows the proposed monthly rate increases for the next five years compared to other local agencies. Adopted rate increases which have been approved through the Proposition 218 process for each agency are shown in the figure as well. Under the proposed rate schedule, TCSD will remain the lowest cost sewer service in the region of the agencies surveyed.

Figure 3. Current vs. Proposed Rates for Residential Customers with 1 Unit



4 CONCLUSION

RDN recommends the following changes and modifications to the current rates and fees based on the findings of the Study:

- Adopt the proposed financial plan which will allow the District to maintain reserves and accomplish capital spending targets
- Adjust revenues each year of the study period by 6 percent
- Align the cost allocation for customers based on the Cost of Service analysis.

Proposed Sewer Rates

Table 21 and Table 22 show the proposed revenue adjustments and rates for the study period, respectively.

Table 21. Proposed Revenue Adjustments

	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenue Adjustment	6.0%	6.0%	6.0%	6.0%	6.0%

Table 22. Proposed Sewer Rates

Rate Category	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Monthly	\$55.92	\$59.28	\$62.84	\$66.61	\$70.61
Annual	\$671.04	\$711.36	\$754.08	\$799.32	\$847.32

