

County Service Area 18

Country Club Estates

Wastewater Rate Analysis

Prepared By:

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Wastewater Rate Analysis - County Service Area 18 (CSA 18)

Purpose

The purpose of this cost-of-service study is to evaluate the financial requirements for wastewater services. The study assesses revenue requirements for debt service, capital replacement, reserve replenishment, and operations and maintenance of the CSA 18 wastewater system and determines the rate structure to generate that revenue.

Background

CSA 18 is a Board-governed special district responsible for providing sewer service to approximately 450 residential properties within and around the San Luis Obispo Country Club Estates area. In addition to serving residential customers, the system also provides wastewater treatment for Los Ranchos Elementary School and the San Luis Obispo Golf and Country Club.

The sewer treatment facility was originally constructed in 1987 by the Country Club Estates' developer as a condition of his subdivision approval. Since then, CSA 18 has operated the system under a waste discharge permit issued by the Regional Water Quality Control Board (RWQCB). The treatment facility continues to function satisfactorily as designed and meets RWQCB discharge requirements.

The treatment plant generally consists of two aeration ponds, three settling ponds, and a disinfection basin, through which treated effluent flows before being delivered for use in golf course irrigation at the County Club. While the system was designed to efficiently handle wastewater for the community it serves, the infrastructure is now approaching 40 years of age, and the need for ongoing maintenance and capital improvements has become increasingly critical. Aging infrastructure requires consistent upkeep to maintain compliance with regulatory standards, ensure operational reliability, and prevent costly emergency failures.

For nearly two decades, since the fiscal year 2004/2005, CSA 18 has managed to maintain operations without implementing a rate increase. However, over time, operational expenses have continued to rise, and recent inflation has significantly impacted costs at nearly three times the annual escalation factor used in the district's current board-adopted rate ordinance. Affected costs include labor, energy, chemicals, and sludge disposal. For instance, over-time sludge accumulates in the

settling ponds. The liquid sludge is pumped out, transported and disposed of by a hauler. These costs have increased significantly.

With rising costs and aging infrastructure, CSA 18 has reached a point where a rate increase is unavoidable to ensure continued compliance with RWQCB regulations, maintain service reliability, and prevent further system degradation. Without adequate funding, the district risks deferred maintenance, emergency repairs, regulatory penalties, and potential service interruptions. The proposed rate adjustment will provide the necessary resources to maintain the system effectively, implement essential upgrades, and ensure the long-term sustainability of sewer services for the community.

Revenue Requirement Analysis

Operation and Maintenance (O&M)

The cost of operating and maintaining the sewer system has increased significantly due to several factors, including but not limited to:

1. **Labor Costs:** Employee wages and benefits have steadily increased over time, driven by cost-of-living adjustments (COLA), rising healthcare expenses, and competitive labor market pressures.
2. **Regulatory Compliance Requirements:** Compliance with state and federal wastewater discharge requirements necessitates additional monitoring, reporting, and lab tests.
3. **Energy and Material Costs:** The cost of electricity, fuel, chemicals, and treatment supplies has surged, impacting operational expenses. Essential chemicals required for wastewater treatment and disinfection have become more expensive.
4. **Aging Infrastructure Requiring Higher Maintenance Costs:** As the wastewater treatment plant approaches 40 years of service, the cost of ongoing repairs and rehabilitation has increased. Many system components, including aeration and settling ponds, and pumping equipment, require more frequent servicing, part replacements, and upgrades to maintain operational efficiency. Delayed maintenance can lead to catastrophic failures, resulting in emergency repairs that are far more costly than routine maintenance.
5. **Sludge Disposal Expenses:** Over time, sludge accumulates in the settling ponds, requiring removal and disposal to maintain proper treatment efficiency. The process of pumping, transporting, and properly disposing of sludge has become significantly more expensive due to rising contractor costs and stricter environmental disposal regulations.

The average proposed annual increase of 46% per dwelling unit equivalent (DUE) is essential to maintaining a safe, reliable, and compliant sewer system. Without this adjustment, the utility risks service disruptions, environmental non-compliance, and increased long-term costs due to deferred maintenance.

Capital Replacement

Capital improvements are vital to avoid system failures.

1. **Lift Stations 1 & 2:** Repairs to these sewers lift stations are necessary to ensure worker safety and system longevity. The lift station hatches, and pump guide rails are severely corroded. The hatch covers are losing structural integrity. Installing new pump guide rails and covers will sustain ongoing maintenance efforts.
2. **Lift Station 3:** Installing pump guide rails are essential for effective pump maintenance. Also, the seals on the power and control panel are failing to prevent sewage gases from entering, which is causing corrosion and necessitating replacement. An emergency generator is also needed at this key lift station to ensure reliable power during outages.
3. **Sewer Rehabilitation Projects:** Flow monitoring indicates that the sewer system suffers from infiltration and inflow, which increases flows in wet weather, leading to higher pumping and treatment costs. Planned smoke testing will be conducted to identify locations of infiltration, allowing for targeted repairs to the damaged structure.



*Figure 1: Lift Station 2 w/
Hatch Covers & Pump
Guide Rails*

The average annual increase of 36% for Capital Replacement/Debt Service, is the amortized loan payment for the capital repairs listed above in items 1 – 3 per DUE. This amount is the calculated payment on a \$2,000,000 loan with a term of 10 years at an interest rate of 4%.

Reserves

Reserves are a critical component of financial stability for CSA 18, ensuring that the sewer system can continue operating effectively during emergencies, unexpected repairs, and unanticipated projects. Without adequate reserves, CSA 18 will struggle to respond to urgent infrastructure failures, regulatory requirements, or unforeseen cost increases, which could lead to service disruptions or costly emergency repairs. The accepted industry standard for operational reserves is 50% of the current annual operational costs. Currently, because of the steep increase in costs, reserves are

projected to be nearly spent by year-end. The average annual increase of \$18%/DUE will contribute to restoring financial stability.

Rate Breakdown Revenue and Expenses

Table 1 presents an actual history of revenue and expenditure for CSA 18 since FY21/22. This shows that system costs have consistently outpaced revenues, requiring the district to withdraw funds from its reserves to offset the shortfall. This practice is unsustainable in the long term, as reserves have steadily declined and are projected to be depleted by year-end if corrective action is not taken. Without an increase in revenue, CSA 18 will lack the financial flexibility to handle emergencies, unanticipated repairs, or critical infrastructure investments, potentially jeopardizing service reliability.

Rate Structure Dwelling Unit Equivalents

Table 2 presents the DUE allocations for each customer category based on wastewater usage. Single-family residences are assigned 1 DUE, Accessory Dwelling Units receive 0.75 DUEs, Los Ranchos Elementary School is allocated 11 DUEs, and the San Luis Obispo Golf and Country Club Clubhouse is designated 21.5 DUEs to reflect their respective wastewater demands¹.

Rate Calculation

Table 3 provides a summary of the proposed changes to the annual Sewer Service Charge based on a five-year financial planning period. The calculation begins with the determination of the total revenue requirement necessary to fund system operations, capital improvements, and reserve targets. The calculation accounts for projected other revenue sources, operational expenditures, debt service obligations, and capital improvement needs, while also incorporating beginning and ending reserve balances to ensure compliance with the utility's reserve standards and support long-term financial sustainability. Once the total annual revenue requirement is established, it is allocated across the projected number of DUEs to determine the annual charge per DUE. This methodology ensures that the rate structure is cost-based, revenue-sufficient, and equitably distributed among users.

¹ Basis for modified values: San Luis Obispo Country Club County Service Area 18 Wastewater Treatment System Capacity Analysis, May 2005

To ensure a balanced and manageable implementation, the originally identified initial increase of 67% in FY2025/26 is being phased in over time. In FY2025/26 and 2026/27, a 35% annual increase is proposed to address immediate revenue needs, replenish reserves to 50% of annual operating costs, and support capital improvements. For Fiscal Years 2027/28 through 2029/30, annual rate adjustments will be calculated based on the prior year's rate, increased by the Consumer Price Index (CPI) plus 1%. This approach reflects inflationary cost increases and supports predictable, moderate revenue growth. For planning purposes, CPI has been estimated at 3% annually, resulting in a total projected increase of 4% per year during that period.

Proposed Service Charge

Table 4 presents the current and proposed annual sewer service rates over a five-year period. The proposed rate structure begins with an initial annual increase of \$596.13 per DUE in FY 2025/26, followed by an increase of \$804.78 in FY 2026/27. These increases aim to achieve the industry-standard reserve target of 50% of annual operating expenses and address critical financial priorities such as reserve restoration, capital improvements, and ongoing operational needs. From FY 2027/28 through 2029/30, the service charge will be adjusted annually based on the Consumer Price Index (CPI) plus 1%, subject to changes in actual inflation trends. Wastewater service charges are calculated annually and applied as a distinct line item on property tax bills or billed manually as needed.

Conclusion

The study supports an updated rate to cover rising operational and maintenance expenses, capital replacement needs and reserve replenishment. Raising wastewater rates is essential to fund critical infrastructure replacements and prevent unexpected failures that could lead to expensive emergency repairs, regulatory fines, and degraded service quality. Costs for materials, labor, and compliance with evolving environmental regulations continue to rise, outpacing current revenue levels. By adjusting rates to include funding for increased operation and maintenance, capital improvements and reserves, communities can ensure a stable, compliant, and sustainable wastewater system that serves both current and future needs without sudden financial strain.

Table 1

CSA18 - Revenues and Expenses			
FISCAL YEAR	2021/22 Actual	2022/23 Actual	2023/24 Actual
WASTEWATER SERVICE CHARGES	734,929	756,976	782,991
SYSTEM CONNECTION CHARGES	0	2,500	2,500
WASTEWATER STANDBY CHARGES	491	480	1,080
INTEREST	3,560	8,812	8,800
MISC. REVENUE	9	59	82
TOTAL REVENUE	738,989	768,827	795,453
MAINTENANCE	445,613	465,136	506,098
HYDRO ENGINEERING	106,930	116,020	144,810
WATER QUALITY LAB	136,233	155,584	171,866
ACCOUNTING & ADMIN	20,079	19,461	22,459
UTILITIES	68,631	85,106	113,865
MISC. EXPENSES	-12,795	8,344	12,934
PERMIT FEES	23,261	16,987	32,569
OPERATION & MAINTENANCE	787,952	866,638	1,004,601
CAPITAL/ SMALL EQUIPMENT	31,315	5,991	5,275
TOTAL EXPENSES	819,267	872,629	1,009,876
NET	-80,278	-103,802	-214,423

Table 2

DUE BY CUSTOMER TYPE			
Customer Type	DUE/ UNIT	Current Units	Total DUEs
Single Family Residents	1	445	445
Accessory Dwelling Units	0.75	3	2.25
Los Ranchos Elementary School	11	1	11
San Luis Obispo Golf and Country Club Clubhouse	21.5	1	21.5
TOTAL			479.75

Table 3

Fiscal Year	CSA18 Projected: Proposition 218					
	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Service Charges (Revenue Requirement)	\$806,479	\$1,103,118	\$1,489,210	\$1,548,778	\$1,610,729	\$1,675,158
Other Revenue	\$5,150	\$0	\$27,856	\$24,230	\$21,386	\$18,641
Debt Proceeds	\$0	\$2,000,000	\$0	\$0	\$0	\$0
Total Revenue	\$811,629	\$3,103,118	\$1,517,065	\$1,573,008	\$1,632,115	\$1,693,799
Less Operational Expenditures	-\$1,006,350	-\$1,084,126	-\$1,102,100	-\$1,135,163	-\$1,169,218	-\$1,204,294
Less Debt Service	\$0	-\$246,582	-\$246,582	-\$246,582	-\$246,582	-\$246,582
Less Capital Expenditures	\$0	-\$750,000	-\$350,000	-\$255,000	-\$345,000	-\$300,000
Total Expenditures	-\$1,006,350	-\$1,084,126	-\$1,102,100	-\$1,135,163	-\$1,169,218	-\$1,204,294
Net Gain (Loss)	-\$194,720	\$1,022,410	-\$181,617	-\$63,737	-\$128,684	-\$57,077
<i>Reserve Balance</i>	<i>\$10,853</i>	<i>\$1,033,263</i>	<i>\$851,647</i>	<i>\$787,910</i>	<i>\$659,225</i>	<i>\$602,148</i>
Service Charges	\$806,479	\$1,103,118	\$1,489,210	\$1,548,778	\$1,610,729	\$1,675,158
Customers	473.50	479.75	479.75	479.75	479.75	479.75
Service Charge Per DUE	\$1,703.23	\$2,299.36	\$3,104.14	3,228.30*	3,357.43*	3,491.73*
Estimated Increase		35%	35%	4%*	4%*	4%*

*The rate will increase annually by the Consumer Price Index (CPI) plus 1%, applied to the prior year's rate. For planning purposes, CPI is estimated at 3%

Table 4

Fiscal Year	Rate	Annual \$ Increase	Description
2024/25	\$1,703.23	—	Current Rate
2025/26	\$2,299.36	\$596.13	Phase 1 of 2-year catch-up increase Actual
2026/27	\$3,104.14	\$804.78	Phase 2 of 2-year catch-up increase Actual
2027/28	\$3,228.30	\$124.16	CPI + 1% Estimate
2028/29	\$3,357.43	\$129.13	CPI + 1% Estimate
2029/30	\$3,491.73	\$134.30	CPI + 1% Estimate

County Service Area 18 – Vicinity Map

