County Service Area 7A Oak Shores Wastewater Rate Analysis

Prepared By:

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Wastewater Rate Analysis - County Service Area 7A (CSA 7A)

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, and operations and maintenance of the CSA 7A wastewater system and determines the rate structure to generate that revenue.

Background

The CSA 7A wastewater system has been in operation for over 50 years, serving as a vital infrastructure for wastewater collection and treatment in the Oak Shores service area. This system supports approximately 658 homes and businesses, ensuring the safe and efficient management of wastewater. Originally established in 1973 by a private company known as Resource Development Corporation (RDC), the system was taken over by the County of San Luis Obispo Department of Public Works (County) in 1976 following RDC's bankruptcy. To manage and sustain the wastewater system, the County formed CSA 7A, marking the beginning of its public oversight and operation.

Over the years, the system has faced increasing challenges due to its aging infrastructure and the rising costs of operation, maintenance, and regulatory compliance. The last approved service charge increase in 2020 implemented a 3% annual increase; however, these modest adjustments have not been sufficient to keep pace with the actual costs of providing wastewater services in a safe, reliable, and compliant manner. This is further exacerbated by recent inflationary pressures, which have significantly impacted key operational expenses. Many costs have escalated at a rate nearly tripling the inflation rate considered in the current rate ordinance, which is set to expire this year. Some of the most affected costs include energy consumption, chemical treatments, and sludge disposal, all of which are essential for the continued function of the wastewater system.

Additionally, new regulatory requirements have placed further financial strain on the system. A recently issued discharge permit from the Regional

Water Quality Control Board (RWQCB) has introduced more extensive laboratory testing requirements, increasing the overall cost burden on the system. Compliance with these regulations is critical to ensuring continued service and environmental protection, but it also necessitates additional funding to meet these mandates effectively.

Given that the wastewater system is now over five decades old, major maintenance and system upgrades are urgently required. Some of these necessary improvements have been deferred for several years due to financial constraints, leading to increased wear and tear on critical infrastructure. Essential capital improvement projects include repairs and enhancements to lift stations, as well as the completion of ongoing capital projects, such as those supported by American Rescue Plan Act (ARPA) funding. Additionally, because of the 2023 storms, an essential drainage repair project is being submitted for reimbursement funding to the Federal Emergency Management Agency (FEMA) and California Office of Emergency Services (Cal-OES). For this drainage repair project, if obligated under the FEMA and Cal-OES reimbursement programs, FEMA would pay 75% and Cal-OES would pay 18.75% of the eligible repair costs. Therefore, CSA 7A would be responsible for the remaining costs, which would be 6.25% of eligible project costs and all of the non-eligible project costs.

Beyond these immediate repair and upgrade needs, it is also crucial to rebuild and replenish the system's operating and capital reserves. These reserves have been substantially depleted due to prior infrastructure investments and expenditures related to unforeseen catastrophic events. Without sufficient reserves, the system is vulnerable to unexpected failures and emergency repairs, which can lead to higher long-term costs and potential service disruptions.

To maintain a safe, compliant, and reliable wastewater system for Oak Shores, it is imperative to address these financial and infrastructure challenges now. Sustainable funding strategies, including necessary rate adjustments, will be essential to ensure that CSA 7A can continue to provide effective wastewater collection and treatment services for the community—both now and into the future.

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.
- 4. Aging Infrastructure Requiring Higher Maintenance Costs: As the wastewater treatment plant has reached over 50 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 will lead to catastrophic failures, resulting in emergency repairs that are far more costly than routine upkeep.
- 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. Fortunately, some of the cost of removing sludge from the CSA 7A polishing pond has been accomplished through ARPA funding, however another pond is reaching maximum operational capacity and will soon need to be emptied.

The proposed annual increase of \$174.42 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, violations fines, and increased long-term costs due to deferred maintenance.

Capital Replacement

Capital improvements are vital to avoid system failures. Many of the wastewater system components, including pump stations, generators, and

more, are aging and require major capital replacements to maintain reliability. Without adequate funding for planned upgrades, the risk of system failures, emergency repairs, and regulatory violations increases significantly. Emergency breakdowns often result in higher costs, service disruptions, and potential environmental hazards, making proactive capital investment a more cost-effective approach. For example, capital improvements planned include upgrading the five smaller lift stations in the collection system. These facilities have received few improvements in several years. Another capital project to improve the pavement between the treatment plant and lift station no. 3 and a short section of road near the entrance gate to the wastewater facilities. Access road maintenance is sorely needed, since the poor condition of these roads results in challenges to access critical facilities. Potholes and ruts in these road segments are nearing a critical point. The annual increase of \$50,000 or \$75.99/DUE will provide funding for these and other critical capital improvements.

Operational & Capital Reserves

Reserves are a critical component of financial stability for CSA 7A, ensuring that the sewer system can continue operating effectively during emergencies, unexpected repairs, and unanticipated projects. Without adequate reserves, CSA 7A will struggle to respond to urgent infrastructure failures, regulatory requirements, or unforeseen inflation, which will lead to service disruptions or costly emergency repairs.

The accepted industry standard for operational reserves is 50% of the current annual operational costs. Capital reserves are necessary for funding major future projects, such as the projects mentioned above. Currently, because of the steep incline in costs and efforts to repair damages that were caused by storms, reserves are nearly empty, and projections indicate that operational reserves will be depleted by the end of 2025. The annual increase of \$44.56/DUE will contribute to restoring and potentially sustaining financial stability over the course of this rate ordinance.

Rate Breakdown Revenue and Expenses

Table 1 presents the actual of revenue and expenditures for CSA 7A for FY21/22 – FY23/24. This shows that system costs have been increasing, along with efforts to repair damage from flooding, 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 7A will lack the financial flexibility to handle emergencies, unanticipated repairs, or critical infrastructure investments, potentially jeopardizing service reliability.

Rate Structure

Table 2 presents the DUE allocations for each customer category based on wastewater usage. Single-family residences/ businesses are assigned 1 DUE, and Accessory Dwelling Units receive 0.75 DUEs to reflect their respective wastewater demands.

Rate Calculation

Table 3 presents a summary of the proposed changes to the annual Sewer Service charge. The rate calculation starts with determining the total revenue requirement needed to maintain sewer services, which amounts to \$1,056,619. This total is then distributed across the current number of DUEs to derive the cost per DUE. This approach ensures that the rate adjustment fairly reflects the financial needs of the sewer system while maintaining equitable cost distribution among users.

Proposed Service Charge

Table 4 shows the current and proposed annual sewer service rate. The proposed service charge includes an annual increase of \$294.97 per DUE. This increase is allocated across three key areas to address critical financial needs.

- Reserve Replenishment: A total of \$44.56, accounting for 15% of the proposed increase, is specifically designated to restore CSA 7A's reserve balance, which is expected to be depleted in the near future. Maintaining an adequate reserve is essential for financial stability and future contingencies.
- **Capital Replacement:** Approximately \$75.99, or 26% of the total increase, is allocated towards funding debt for necessary capital replacements. This ensures that infrastructure remains functional and meets regulatory standards.
- **Operations and Maintenance Costs:** The remaining \$174.42, making up 59% of the increase, is dedicated to covering the County's ongoing operational and maintenance expenses for wastewater services.

These costs include routine system upkeep, staffing, and other essential functions.

Wastewater service charges are calculated annually and are applied as a distinct line item on property tax bills.

Conclusion

The study supports an updated rate to cover rising operational expenses and capital replacement needs. 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

CSA7A - Revenues and Expenses					
FY	2021-22	2022-23	2023-24		
ACTUAL/PROJECTED	Actual	Actual	Actual		
PROPERTY TAX REVENUE	(271,529)	(295,021)	(310,290)		
INTEREST	(3,779)	(13,416)	(9,044)		
HOMEOWNER PROPERTY TAX RELIEF	(1,429)	(1,445)	(1,443)		
WASTEWATER SYSTEM SERVICE CHARGES	(489,125)	(503,304)	(517,625)		
WASTEWATER SYSTEM STANDBY CHARGES	(15,720)	(15,120)	(15,060)		
SYSTEM CONNECTION FEES	(4,150)	-	-		
OPERATING TRANSFER IN	(50,000)	-	(50,000)		
OTHER REVENUE	(1,350)	(1,372)	(1,375)		
TOTAL REVENUE	(837,082)	(829,678)	(904,837)		
MAINTENANCE	425,751	417,372	530,609		
HYDRO ENGINEERING	76,248	79,548	184,876		
WATER QUALITY LAB	40,436	56,040	66,162		
ACCOUNTING & ADMIN	23,155	20,897	33,899		
UTILITIES	48,075	47,700	71,008		
MISC. EXPENSES	35,258	(3,377)	5,005		
COUNTY WIDE OVERHEAD	13,869	15,877	15,870		
LEASE PAYMENTS	6,995	6,995	6,995		
PERMIT FEES/ EFFORTS	40,803	6,640	34,174		
OPERATION & MAINTENANCE	710,590	647,692	948,598		
SMALL EQUIPMENT	11,793	20,660	26,083		
TOTAL EXPENSES	722,383	668,352	974,681		
NET OPERATING INCOME	(114,699)	(161,326)	69,844		
ARPA REVENUE	(32,854)	(72,257)	(854,991)		
TOTAL NON-OPERATING REVENUE	(32,854)	(72,257)	(854,991)		
STORM REPAIR EFFORTS	-	263,812	358,457		
INTERCEPTOR DESIGN	25,387	30,202	181,936		
POLISHING POND & EFFLUENT PUMP ST.	7,467	18,299	528,261		
LIFT STATION NO. 3 REHAB	-	23,756	144,794		
TOTAL CAPITAL/ SPECIAL PROJECTS	32,854	336,069	1,213,448		
NET NON-OPERATING INCOME	-	263,812	358,457		
NET INCOME	(114,699)	102,486	428,301		

Table 2

DUE BY CUSTOMER TYPE						
Customer Type	DUE/ UNIT	Current Units	Total DUEs			
Single Family Residents/Businesses	1	658	658			
Accessory Dwelling Units	0.75	0	0			
TOTAL	658					

Table 3

CSA 7A - Sewer Rate Calculation				
Revenue Components:				
Property Tax	\$	(313,518)		
Sewer Service Availability	\$	(15,060)		
Total Revenue	\$	(328,578)		
Expense Components:				
Operation & Maintenance Charge	\$	977,300		
Capital Replacement / Debt Service Charge	\$	50,000		
Reserve Fund Charge	\$	29,319		
Total Expense	\$	1,056,619		
Total Revenue Requirement	\$	728,041		
Customers (DUE)		658		
Charge per DUE	\$	1,106.45		

Table 4

CSA 7A - Annual Charge for Sewer Service							
Components	Current Rate		New Rate		Increase		
CSA 7A Operation and Maintenance Charge	\$	811.48	\$	985.90	\$	174.42	
CSA 7A Capital Replacement / Debt Service Charge	\$	-	\$	75.99	\$	75.99	
CSA 7A Reserve Fund Charge	\$	-	\$	44.56	\$	44.56	
Total Wastewater Service Charge	\$	811.48	\$	1,106.45	\$	294.97	

County Service Area 7A – Vicinity Map

