
WEST COUNTY WASTEWATER DISTRICT



WEST COUNTY
WASTEWATER

SEWER SERVICE CHARGE RATE STUDY REPORT

March 2026



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS



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March 13, 2026

West County Wastewater District
2910 Hilltop Drive
Richmond, CA 94806

Attention: Justin Lovell, Deputy General Manager

Re: Draft Sewer Service Charge Rate Study

Bartle Wells Associates is pleased to submit to West County Wastewater District (the District) the attached *Draft Sewer Service Charge Rate Study*. The study presents BWA's analysis of the operating and non-operating expenses of the District's wastewater funds and provides five-year cash flow projections and recommended rates. The primary purpose of this study was to analyze the District's wastewater enterprise and make recommendations that would achieve its financial sustainability.

This report presents the proposed rates under the pay-as-you-go (PAYGO) scenario, in which the District funds capital and operating expenditures using available revenues rather than issuing debt. The District's Finance and Administration (F&A) Committee recommended proceeding with the PAYGO approach, as it was determined to be the most appropriate funding strategy. By avoiding additional borrowing, the District reduces long-term financing costs, which helps minimize total expenditures and results in lower rates over time compared to a debt-financed approach.

BWA finds that the rates and charges proposed in our report reflect the cost-of-service for each customer, follow generally accepted rate design criteria, and adhere to the substantive requirements of Proposition 218. BWA believes the proposed rates are fair and reasonable to the District's customers.

We enjoyed working with the District on this rate study and appreciate the assistance of Justin, Maria, Abeni and other District staff members throughout the project. Please contact us with any future questions about this study and the rate recommendations.

BARTLE WELLS ASSOCIATES

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1 EXECUTIVE SUMMARY

1.1 Introduction

The District retained Bartle Wells Associates to develop a long-term financial plan and 5-year rate recommendations for the wastewater enterprise.

The revenues from the District's wastewater enterprise are primarily derived from charges for services. The District must establish rates and charges adequate to fund the cost of providing services, which include costs for operations and maintenance, as well as capital improvements needed to keep the District's utility infrastructure in a safe and reliable operating condition.

The District has provided proactive financial stewardship by raising rates to keep revenues in line with the costs of providing wastewater service. Those rate increases have enabled the District to maintain its financial health. The prior rate increases strengthened the financial condition of the wastewater enterprise. However, current rates are not adequate to fund the necessary improvements.

1.2 Rate Study Objectives

Key goals and objectives of this study include developing rates that:

- Recover the costs of providing service, including operating, capital, and debt funding needs;
- Are proportionate, fair, and equitable to all customers;
- Are easy to understand and implement;
- Comply with the substantive requirements of the California Constitution, Article 13D, Section 6 (which was adopted by the voters as Proposition 218 in 1996) and the general mandate of Article 10, Section 2 that prohibits the wasteful use of water;
- Support the long-term operational and financial stability of the District.

BWA worked closely with District staff to incorporate information and input, evaluate alternatives, and develop recommendations. This report summarizes key findings and recommendations for sewer service charges over the next five years.

1.3 Current and Proposed Sewer Service Charges

The following table shows the current and proposed sewer service charges.

Table 1 – Current and Proposed Sewer Service Charges

Proposed Sewer Service Charges	<i>Current</i>		<i>Proposed</i>			
	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
Residential Users - Fixed Annual Rate per Unit						
Single Family	\$815	\$912	\$1,022	\$1,144	\$1,282	\$1,435
Multi-Family	711	800	896	1,003	1,124	1,258
Mobile Home	711	800	896	1,003	1,124	1,258
Commercial Users - per thousand gallons (kgal) of water use						
Minimum Charge	\$815	\$912	\$1,022	\$1,144	\$1,282	\$1,435
Domestic Strength	8.73	9.75	10.92	12.23	13.70	15.34
High Strength	14.70	15.25	17.08	19.13	21.43	24.00
Industrial Users - Volumetric Rates						
Minimum Charge	\$815	\$912	\$1,022	\$1,144	\$1,282	\$1,435
Volume, per kgal	5.61	6.88	7.70	8.63	9.66	10.82
Biochemical Oxygen Demand (BOD), per pound	0.58	0.70	0.79	0.88	0.99	1.10
Suspended Solids (SS), per pound	0.68	0.67	0.75	0.84	0.94	1.05

2 BACKGROUND, OBJECTIVES, AND LEGAL REQUIREMENTS

West County Wastewater District owns, operates, and maintains a wastewater collection system with 249 miles of gravity sewer pipelines, 17 lift stations, 6 miles of pressure force mains, and a Water Quality and Resource Recovery Plant (WQRRP). The WQRRP was originally constructed in 1955, and several expansions and modifications have occurred since then. The WQRRP has a capacity of 12.5 million gallons per day (mgd), average dry weather flow.

The District’s service area encompasses approximately 16.9 square miles, serving the residents of the City of San Pablo, Tara Hills, Richmond (northern subdivisions), East Richmond Heights, the City of Pinole (designated sectors), El Sobrante, Rollingwood, Bayview and parts of the unincorporated county.

Rates were last increased in 2025. Based on a survey of regional wastewater agencies, the District’s rates fall in the middle range within the region.

The District’s wastewater utility is a financially self-supporting enterprise. Revenues are derived primarily from rates. As such, the District’s sewer service charges must be set at adequate levels to fund the costs of providing service and:

- Fund ongoing operating and maintenance expenses
- Address regulatory requirements
- Fund the capital improvement projects, related debt service and associated increased operating costs
- Provide funding for system maintenance and upgrades

The prior rate increases strengthened the financial condition of the enterprise. However, current rates are not adequate to fund the necessary improvements and operating costs.

2.1 Rate Study Objectives

In 2025, the District retained BWA to develop a cost-of-service based rate study. The District has historically adopted rate increases to keep revenues in line with the escalating costs of providing service. Key goals and objectives of this study include developing rates that:

- Recover the costs of providing service, including operating, capital, and debt funding needs;
- Are proportional to the cost of service attributable to each parcel;
- Are easy to understand and implement;
- Support the long-term operational and financial stability of the District.

2.2 Rate Study Process

The general process used for this cost-of-service rate study is summarized in the following diagram.

Figure 1 – Cost-of-Service Rate Study Process



Key elements of the study include:

- 1) **Project Initiation and Data Collection** – Review financial policies; collect financial and other relevant data; and review rate structures;
- 2) **Demand Analysis** – Analyze past customer demands and customer characteristics to forecast future demands;
- 3) **Financial Plans** – Develop financial projections to evaluate annual revenue requirements from rates and the overall level of rate increases needed to fund the costs of providing service and support long-term financial stability;
- 4) **Cost Allocation** – Group the District’s costs in terms of the function they serve as a basis to proportionally allocate the revenue requirement from rates;
- 5) **Cost-of-Service Rate Design** – Develop rates that proportionately recover costs; and

6) **Prop 218 Process** – Ensure compliance with the substantive and procedural requirements of Proposition 218.

2.3 Constitutional Requirements for Rates

The sewer service charges proposed in this report are designed to comply with two key articles of the California Constitution: Article 13D and Article 10, as explained below.

2.3.1 Article 13D, Section 6

Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges. Article 13D, Section 6 establishes both a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D requires voter approval for new or increased property-related charges but exempts rates for water, wastewater, and garbage service from this voting requirement if rates are adopted by the appropriate procedure and meet the substantive requirements. This report recommends sewer service charges designed to comply with the substantive requirements of Proposition 218.

The substantive requirements of Article 13D, section 6, require property-related charges, such as the District's sewer service charges, to meet the following conditions:

- 1) Revenues derived from the fee or charge shall not exceed the costs required to provide the property-related service.
- 2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- 3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
- 4) No fee or charge may be imposed for a service unless that service is used by, or immediately available to the property in question.
- 5) No fee or charge may be imposed for general governmental services, such as police or fire services, where the service is available to the public at large in substantially the same manner as it is to property owners.

2.4 Statute of Limitations

Pursuant to California Government Code 53759, there is a 120-day statute of limitations for challenging any new, increased, or extended fees. This statute of limitations applies to the sewer service charges proposed in this rate study and is included in the Proposition 218 Notice.

3 WASTEWATER FINANCIAL PLAN

3.1 Wastewater Financial Overview

BWA conducted an independent evaluation of wastewater enterprise finances and concluded the previous rate increases have put the wastewater enterprise in a sound financial position. However, due to aging infrastructure, the District will need to fund a significant number of capital projects. As such, rate increases are projected to be necessary to maintain the District’s financial standing.

The District relies almost entirely on revenues from sewer service charges to fund the costs of providing wastewater service. As such, rates must be set at levels adequate to fund the costs of operating and maintaining the wastewater system, fund necessary capital improvements to keep the wastewater system in good operating condition.

3.2 Key Drivers of Rate Increases

The District is facing several manageable financial challenges that will drive the need for rate increases in upcoming years. Key drivers of future rate increases are summarized below.

Capital Improvement Funding Needs

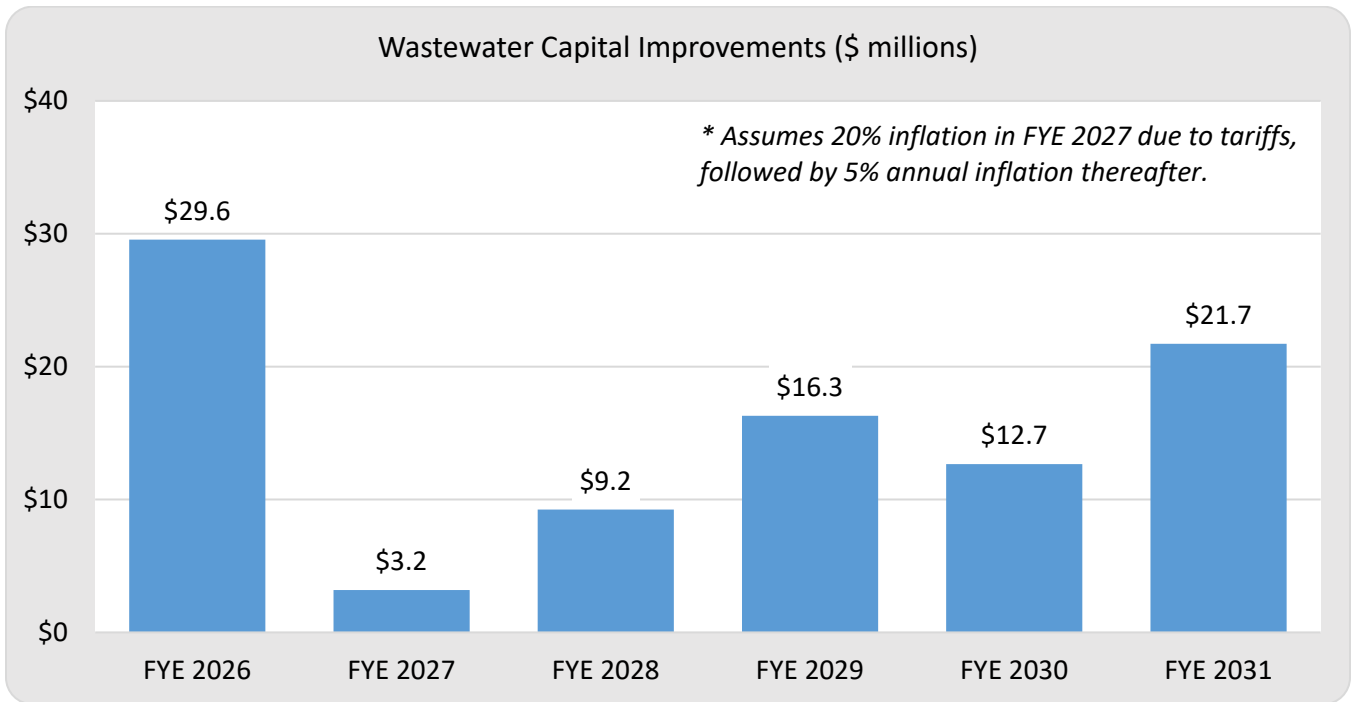
The District takes a proactive approach to maintaining its wastewater treatment plant and collection system, which requires ongoing repair and improvement projects. Accounting for construction cost inflation, the District anticipates funding over \$63 million of capital improvement projects in the next 5 years. The District’s detailed capital improvement costs are shown in the following table.

Table 2 – 10-Year Capital Improvement Program

Description	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Capital Costs										
Clean & Green Project	\$22,580,899									
Facilities Program	454,274					8,700,000		465,000	10,000,000	4,455,000
Force Main Program	1,685,234	2,875,000	6,172,080	500,000	500,000	4,842,482	500,000	500,000	500,000	500,000
Gravity Sewer Program	200,000		1,774,713		3,555,961	6,723,940	10,539,000	12,297,700	8,908,800	
Lift Station Program				1,350,000	1,672,250	1,450,000	9,495,257	7,163,172		
Plant Process Program	4,641,065	312,500	1,300,000	9,450,000	6,932,615			571,635	1,710,672	16,205,801
Treatment Plant Protection Levy				5,000,000						
Total CIP	29,561,472	3,187,500	9,246,793	16,300,000	12,660,826	21,716,422	20,534,257	20,997,507	21,119,472	21,160,801

The following figure visually depicts the capital improvement costs over the next five years.

Figure 2 – Wastewater Capital Improvements



Ongoing Operating Cost Inflation

The District faces annual cost inflation due to annual increases in a range of expenses including sewage collection, sewage treatment, engineering, and administration, etc. On top of rate increases needed for capital improvements, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. Wastewater cost inflation has historically been higher than the Consumer Price Index (CPI) for consumer goods and services. Historically inflation has typically remained consistently around 3%, but recently inflation has reached forty-year highs with the CPI and ENR CCI exceeding 7% in 2022. It is not expected that inflation will remain at such high levels in the future. For the purposes of this rate study, operating cost inflation is projected to be 4%, in line with the District’s budget inflationary projections.

Wastewater Reserve Funds

Maintaining a prudent minimal level of fund reserves provides a financial cushion for dealing with unanticipated expenses, revenue shortfalls, and non-catastrophic emergency capital repairs. The District’s current reserve policy requires six months of the District’s operating expenses for the Operating Reserve, 7% of operating expenses for the Emergency Reserve, half of the annual capital improvement costs for the Capital Program Reserve, and \$350k for the Equipment Reserve. BWA developed a financial plan designed to maintain prudent reserve levels that are in-line with industry standards.

Debt Service

The District currently has three outstanding debt obligations. In 2015, the District received two State Revolving Fund (SRF) loans: one totaling \$17.8 million for wastewater facility and collection system rehabilitation (issued in three segments) and a second totaling \$30.4 million for recycled water reliability upgrades. Debt service for both

SRF loans extend through FYE 2037. Additionally, the District issued a revenue bond in 2021 of approximately \$79.6 million, with debt service payments scheduled through FYE 2051.

The debt covenants on the outstanding wastewater debt require that the District generate net operating revenues of at least 1.20 times its total annual debt service payments. This is referred to as “debt service coverage.”

Pension Liability

The District also has outstanding pension repayment obligations, with annual payments of approximately \$1.37 million.

3.3 Financial Plan Assumptions

The financial projections incorporate the latest information available and several reasonable and slightly conservative assumptions for planning purposes. Key assumptions include:

Revenue Assumptions

- Sewer service charge revenues are based on estimated revenues for the current fiscal year.
- Rates proposed will be effective on July 1, 2026, with rate adjustments planned to become effective on July 1 of each of the subsequent four years.
- Interest earnings are projected based on the annual beginning fund balance multiplied by the projected interest rate (2.75%). The interest rate projections are based on recent and anticipated interest rates.
- Property tax revenues are projected to increase by 1% annually, biosolids operating revenues by 3% annually, and permit fees by 2.5% annually.

Expense Assumptions

- Operating and maintenance costs are primarily based on the 2025/26 budget.
- Operating costs are projected to escalate at 4% per year to account for cost inflation.
- Debt service projections are based on outstanding debt schedules and projected issuances of new debt.
- Capital improvement costs are based on the most recent engineering cost estimates. Capital costs include 20% inflation in FYE 2027 due to tariffs, followed by 5% annual inflation thereafter.

3.4 Cash Flow Projections

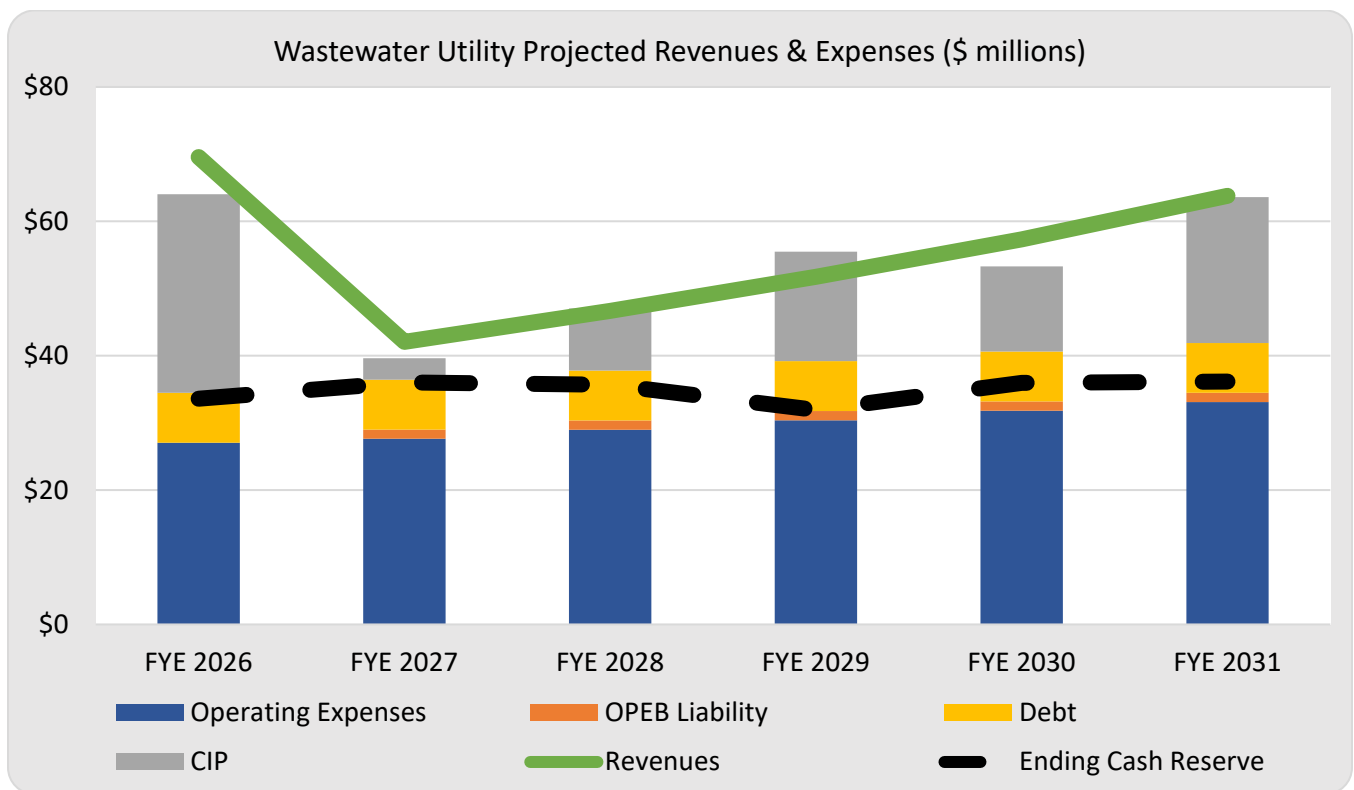
Cash flow projections were developed based on assumptions and key drivers of future rate increases described above. The projections were used to determine the wastewater utility’s annual revenue requirements and project required rate revenue increases. The cash flow projections incorporate the latest information available from the District’s budget, annual reports, capital spending projections, metered water demand data, as well as several reasonable assumptions developed with input from the District. The overall rate revenue increases shown for each of the following scenarios are designed to fund the District’s cost of providing service, maintain balanced budgets, maintain healthy debt service coverage, and maintain prudent reserves. The projections indicate the

need for increases for rate revenues for each of the next five fiscal years. Actual impacts on customers’ wastewater bills will vary in the first year based on strength category and water use, due to the outcome of the updated cost-of-service analysis and change in rate structure.

In future years, the District can re-evaluate its finances and revenue requirements and adjust rates as needed based on updated projections. However, while the District always has the flexibility to implement rate adjustments that are lower than adopted pursuant to Proposition 218, future rates cannot exceed adopted increases without going through the Proposition 218 process again. Rates adopted pursuant to Proposition 218 are essentially future rate caps.

The following figure visually depicts the cash flow projections with the proposed rate increases for the next five years. Projected expenses are summarized into key categories. The figure also shows the projected fund reserves at the end of each fiscal year.

Figure 3 – Projected Cash Flow Graph



Detailed, long-term, cash flow projections for this scenario are shown in the following table.

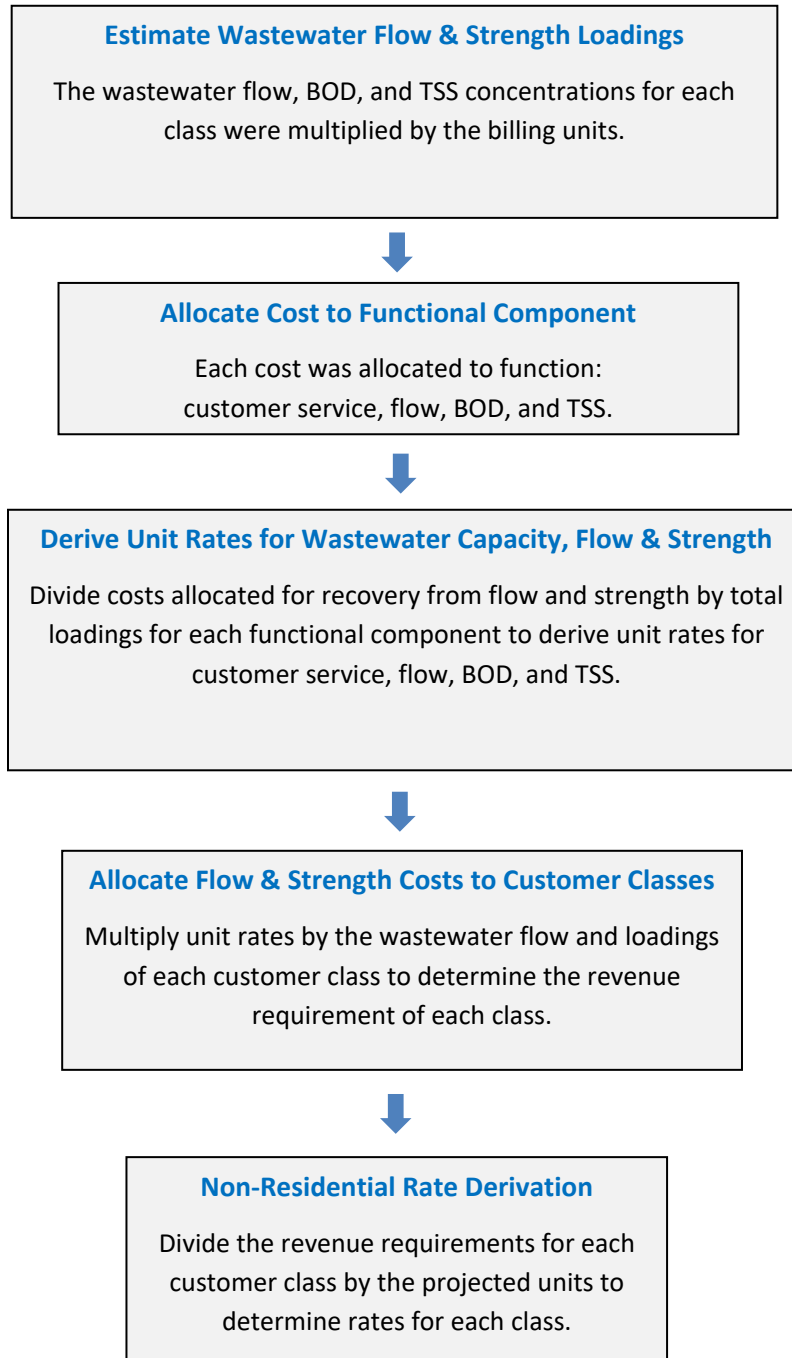
Table 3 – Detailed Cash Flow Projections

Operating Fund	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
	<i>Budgeted</i>	<i>Projection</i>				
Beginning Fund Balance	\$28,067,133	\$33,591,387	\$36,031,592	\$35,666,725	\$31,924,304	\$35,965,269
Revenue Escalation						
<i>Rate Revenue Increase</i>		<i>12.0%</i>	<i>12.0%</i>	<i>12.0%</i>	<i>12.0%</i>	<i>12.0%</i>
Revenues						
Sewer Rate Revenue						
Total Rate Revenue	33,377,438	37,382,730	41,868,658	46,892,897	52,520,045	58,822,450
Non-Rate Revenue						
Property Tax	1,571,328	1,587,041	1,602,911	1,618,941	1,635,130	1,651,481
Interest Earnings	771,846	923,763	990,869	980,835	877,918	989,045
Capacity Charges	300,000	300,000	300,000	300,000	300,000	300,000
Bond Proceeds	29,874,118	-	-	-	-	-
Grants	1,852,750	-	-	-	-	-
Other Revenues	<u>1,817,622</u>	<u>1,870,038</u>	<u>1,909,294</u>	<u>1,949,673</u>	<u>1,991,208</u>	<u>2,033,933</u>
<i>Total Revenues</i>	<i>69,565,102</i>	<i>42,063,572</i>	<i>46,671,732</i>	<i>51,742,345</i>	<i>57,324,301</i>	<i>63,796,909</i>
Expenses						
Operating Expenses						
Salaries	11,931,546	12,034,694	12,516,082	13,016,725	13,537,394	14,078,890
Benefits	4,033,753	4,722,631	4,911,536	5,107,998	5,312,318	5,524,810
Additional Staffing	-	125,000	375,000	625,000	875,000	910,000
Financial Management	10,000	10,000	10,400	10,816	11,249	11,699
Information Technology	1,508,954	1,307,543	1,359,845	1,414,239	1,470,808	1,529,640
Insurance & Risk Management	461,700	475,551	494,573	514,356	534,930	556,327
Legal	650,000	650,000	676,000	703,040	731,162	760,408
Professional & Technical Services	2,404,427	2,567,282	2,669,973	2,776,772	2,887,843	3,003,357
Professional Development	536,048	539,300	560,872	583,307	606,639	630,905
Supplies & Materials	1,262,016	1,301,405	1,353,461	1,407,600	1,463,904	1,522,460
Utilities	1,927,373	1,447,631	1,505,536	1,565,758	1,628,388	1,693,524
Wastewater Treatment	2,127,373	2,249,444	2,339,422	2,432,999	2,530,319	2,631,531
Biosolids Hauling	<u>200,000</u>	<u>208,000</u>	<u>216,320</u>	<u>224,973</u>	<u>233,972</u>	<u>243,331</u>
<i>Total Operating Expenses</i>	<i>27,053,190</i>	<i>27,638,481</i>	<i>28,989,020</i>	<i>30,383,581</i>	<i>31,823,924</i>	<i>33,096,881</i>
Non-Operating Expenses						
OPEB Liability	-	1,375,200	1,375,200	1,375,200	1,375,200	1,375,200
Debt Service	7,426,186	7,422,186	7,425,586	7,425,986	7,423,386	7,422,786
CIP	<u>29,561,472</u>	<u>3,187,500</u>	<u>9,246,793</u>	<u>16,300,000</u>	<u>12,660,826</u>	<u>21,716,422</u>
<i>Total Non-Operating Expenses</i>	<i>36,987,658</i>	<i>11,984,886</i>	<i>18,047,579</i>	<i>25,101,186</i>	<i>21,459,412</i>	<i>30,514,408</i>
<i>Total Expenses</i>	<i>64,040,848</i>	<i>39,623,367</i>	<i>47,036,599</i>	<i>55,484,767</i>	<i>53,283,336</i>	<i>63,611,289</i>
Net Revenues	5,524,254	2,440,205	(364,867)	(3,742,421)	4,040,965	185,620
Ending Fund Balance	33,591,387	36,031,592	35,666,725	31,924,304	35,965,269	36,150,888
Reserve Target (6 Months O&M, 7% O&M, 1/2 of CIP, \$350k Equip. Reserve)						
Target Met?	Yes	Yes	Yes	Yes	Yes	Yes
Debt Coverage Ratio (Min. 1.30)	1.45	1.94	2.38	2.88	3.44	4.14

4 WASTEWATER COST OF SERVICE ANALYSIS AND RATE DERIVATION

BWA derived updated sewer service charges that account for both a) the overall rate increases identified in the financial projections, and b) the proposed rate structure modifications. The proposed rates are designed to equitably apportion and recover costs from the District’s customer base. The basic methodology used to develop new rates includes the following steps:

Figure 4 – Wastewater Cost of Service Analysis and Rate Derivation Process



4.1 Customer Summary

The table below summarizes the District’s historical and current customer characteristics, including customer count for residential users, water consumption for commercial users, and strength for significant industrial users.

Table 4 – Customer Summary

Customer Characteristics	FYE 2024	FYE 2025	FYE 2026
	<i>Actual</i>	<i>Actual</i>	<i>Projected</i>
Residential Units			
Single Family	21,776	21,761	21,792
Multi-Family	11,467	11,502	11,520
Mobile Home	720	747	747
Commercial Use (kgal)			
Domestic Commercial - Minimum Charge Flow	26,493	43,654	42,010
Domestic Strength Flow	287,544	303,038	339,687
High Commercial - Minimum Charge Flow	831	1,386	1,441
High Strength Flow	50,098	41,938	73,837
Industrial Units			
Volume (kgal)	334,277	295,645	295,508
BOD (pounds)	46,941	39,767	39,717
SS (pounds)	1,344,756	1,142,065	1,140,402

4.2 Flows and Loadings

The following tables estimate the flows and loadings of each customer class based on the following information:

- Residential flows per unit are based on West County Wastewater’s service area’s census data, assuming 55 gallons per day per capita.
- Residential wastewater strength concentrations are based on estimates previously published by the State Water Resources Control Board (SWRCB). Residential wastewater strength concentrations have increased over the past decade as the volume of wastewater flow has decreased due to transition to low-flow toilets, water-efficient appliances, and other water conservation and efficiency measures.
- Commercial wastewater flows are estimated based on projected water use and the estimated flow returning to the sewer system. Wastewater strength assignments for commercial customer classes are largely based on strength estimates previously published by the SWRCB.
 - Commercial customers were classified between domestic and high strength.

The resulting flow and strength projections for each class are shown in the following tables and provide the basis for allocating costs and deriving equitable sewer service charges for each customer class.

Table 5 – Wastewater Flows

	EDUs ¹	Est. Mo Flow ² <i>(kgal per EDU)</i>	Projected Water Use <i>(kgal)³</i>	Flow Factor ⁴ <i>(%)</i>	<u>Projected Wastewater Flow</u>		
					KGAL	MG ⁵	GPD ⁶
Residential Users							
Single Family	21,792	4.87	1,272,653	100%	1,272,653	1,273	2,608,248
Multi Family / Mobile Home	<u>12,267</u>	3.95	582,069	100%	<u>582,069</u>	<u>582</u>	<u>1,192,926</u>
Total Residential	34,059				1,854,722	1,855	3,801,174
Commercial Users							
Domestic			381,698	90%	343,528	344	704,046
High			75,278	90%	67,751	68	138,852
Industrial Users							
Industrial			295,508	100%	<u>295,508</u>	<u>296</u>	<u>605,631</u>
Total Non-Residential					706,786	707	1,448,528
Total					2,561,508	2,562	5,249,702

¹ "EDU" stands for equivalent dwelling unit.

² Residential flow is based on a summary of West County's service area's census data, assuming 55 gallons per day per capita

³ "KGAL" stands for thousand gallons.

⁴ Flow factor based on estimated flow returning to sewer.

⁵ "MG" stands for 1,000,000 gallons.

⁶ "GPD" stands for gallons per day.

Table 6 – Wastewater Loadings

	EDUs ¹	<u>Strength (mg/l)</u> ⁴		<u>Loadings (lbs)</u>		Annual Bills
		BOD ² (mg/l)	TSS ³ (mg/l)	BOD (lbs)	TSS (lbs)	
Residential Users						
Single Family	21,792	300	300	3,186,785	3,186,785	21,792
Multi Family / Mobile Home	<u>12,267</u>	300	300	1,457,530	1,457,530	12,267
Total Residential	34,059			4,644,314	4,644,314	34,059
Commercial Users						
Domestic		300	300	860,211	860,211	623
High		850	850	480,677	480,677	89
Industrial Users						
Industrial				<u>39,717</u>	<u>1,140,402</u>	<u>42</u>
Total Non-Residential				1,380,605	2,481,289	754
Total				6,024,919	7,125,603	34,813

¹ "EDU" stands for equivalent dwelling unit.

² "BOD" stands for biochemical oxygen demand.

³ "TSS" stands for total suspended solids.

⁴ Based on the State Water Resource Control Board (SWRCB) Guidelines for Wastewater Agencies.

4.3 Functional Allocation

The next step in the cost-of-service analysis is to assign wastewater system costs in each allocation category for revenue recovery via the functional cost components of customer service, flow, BOD (biochemical oxygen demand), and TSS (total suspended solids). While there is no single correct approach for cost allocation, BWA believes that costs should be allocated within a reasonable range that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified. This process is intended to proportionately allocate costs to each functional component to determine the revenue requirement for each component. The allocations to each functional component were based on input from District staff.

The functional cost components are described as follows:

- **Customer Service** reflects costs associated with administration and serving the District’s customers.
- **Flow** reflects costs associated with the volume of wastewater collected and treated.
- **BOD** reflects costs associated with treating BOD.
- **TSS** reflects costs associated with treating TSS.

Administrative and general operating costs, including salaries, benefits, additional staffing, financial management, and information technology, are allocated 50% to Customer Service, 40% to Flow, and 5% each to BOD and TSS to reflect their primary support of customer-related and collection system functions, with a smaller portion attributable to treatment. OPEB liability is allocated consistently with overall personnel costs (20% Customer Service, 70% Flow, 5% BOD, 5% TSS).

Insurance, supplies, and materials are allocated 20% to Customer Service, 70% to Flow, and 5% each to BOD and TSS, as these costs are largely driven by operation and maintenance of the collection system.

Legal, professional and technical services, and professional development are allocated 10% to Customer Service, 60% to Flow, and 15% each to BOD and TSS, reflecting their support of regulatory compliance, engineering, and operational functions across both conveyance and treatment.

Utilities are allocated 10% to Customer Service, 30% to Flow, 20% to BOD, and 40% to TSS, as energy use is driven by flow and treatment intensity.

Wastewater treatment costs are allocated 40% to Flow, 25% to BOD, and 35% to TSS to reflect the combined influence of flow and strength on plant operations. Biosolids hauling is allocated 5% to Flow and 95% to TSS, as these costs are primarily driven by solids production.

Capital-related costs, including debt service and CIP, are allocated 20% to Customer Service, 50% to Flow, and 15% each to BOD and TSS to reflect a blend of customer, collection, and treatment system investments.

The following tables show a breakdown of the wastewater utility's expenses, how they are allocated between the flows and loadings, and the revenue requirement for flow, BOD and TSS.

Table 7 – Functional Cost Allocation

Budget Line Items	5-Year Average	Customer Service	Flow	BOD	TSS
Operating Costs	<i>(FYE 2026 - FYE 2030)</i>				
Salaries	\$12,607,288	50%	40%	5%	5%
Benefits	4,817,647	50%	40%	5%	5%
Additional Staffing	500,000	50%	40%	5%	5%
Financial Management	10,493	50%	40%	5%	5%
Information Technology	1,412,278	50%	40%	5%	5%
Insurance & Risk Management	496,222	20%	70%	5%	5%
Legal	682,040	10%	60%	15%	15%
Professional & Technical Services	2,661,260	10%	60%	15%	15%
Professional Development	565,233	10%	60%	15%	15%
Supplies & Materials	1,357,677	20%	70%	5%	5%
Utilities	1,614,937	10%	30%	20%	40%
Wastewater Treatment	2,335,911		40%	25%	35%
Biosolids Hauling	216,653		5%		95%
Non-Operating Costs					
OPEB Liability	1,100,160	20%	70%	5%	5%
Debt Service	7,424,666	20%	50%	15%	15%
CIP	14,191,318	20%	50%	15%	15%
Total:	\$51,993,783				

Table 8 – Functional Cost Allocation Revenue Requirement

Budget Line Items	5-Year Average	Customer Service	Flow	BOD	TSS
Operating Costs	<i>(FYE 2026 - FYE 2030)</i>				
Salaries	\$12,607,288	\$6,303,644	\$5,042,915	\$630,364	\$630,364
Benefits	4,817,647	2,408,824	1,927,059	240,882	240,882
Additional Staffing	500,000	250,000	200,000	25,000	25,000
Financial Management	10,493	5,246	4,197	525	525
Information Technology	1,412,278	706,139	564,911	70,614	70,614
Insurance & Risk Management	496,222	99,244	347,355	24,811	24,811
Legal	682,040	68,204	409,224	102,306	102,306
Professional & Technical Services	2,661,260	266,126	1,596,756	399,189	399,189
Professional Development	565,233	56,523	339,140	84,785	84,785
Supplies & Materials	1,357,677	271,535	950,374	67,884	67,884
Utilities	1,614,937	161,494	484,481	322,987	645,975
Wastewater Treatment	2,335,911		934,364	583,978	817,569
Biosolids Hauling	216,653		10,833		205,820
Non-Operating Costs					
OPEB Liability	1,100,160	220,032	770,112	55,008	55,008
Debt Service	7,424,666	1,484,933	3,712,333	1,113,700	1,113,700
CIP	14,191,318	2,838,264	7,095,659	2,128,698	2,128,698
Total:	\$51,993,783	\$15,140,209	\$24,389,714	\$5,850,731	\$6,613,130
<i>Allocation %</i>		<i>29.12%</i>	<i>46.91%</i>	<i>11.25%</i>	<i>12.72%</i>

4.4 Flow and Strength Revenue Requirement by Class

The table below calculates the unit rates per unit of flow, BOD, and TSS, as well as a unit customer service cost. The rate revenue requirements from the prior table for each functional component are divided by the units related to each function. The ratio of flow, BOD, and TSS for industrial users was used to proportionally allocate the customer service revenue requirement among the three cost components. Revenue requirements for each customer class are then calculated by multiplying the unit rates for customer costs, flow, BOD and TSS from the volume of wastewater flow and loadings and annual bills associated with each class.

Table 9 – Revenue Requirement by Class

Allocation Units	Customer Service <i>(bills)</i>	Flow <i>(kgal)</i>	BOD <i>(lbs)</i>	TSS <i>(lbs)</i>	
Total FYE 2026 Revenue Requirement:	\$33,377,438				
<i>Allocation %</i>	29.12%	46.91%	11.25%	12.72%	
Revenue Requirement	\$9,719,265	\$15,656,990	\$3,755,880	\$4,245,302	
Demand Units	34,813	2,561,508	6,024,919	7,125,603	
Unit Rate	\$279.18	\$6.11	\$0.62	\$0.60	

Class	Customer Service <i>(bills)</i>	Flow <i>(kgal)</i>	BOD <i>(lbs)</i>	TSS <i>(lbs)</i>	Revenue Requirement <i>(\$)</i>
Residential Users					
Single Family	21,792	1,272,653	3,186,785	3,186,785	\$17,748,215
Multi Family / Mobile Home	12,267	582,069	1,457,530	1,457,530	8,759,587
Commercial Users					
Domestic Strength	623	343,528	860,211	860,211	3,322,461
High Strength	89	67,751	480,677	480,677	1,024,994
Industrial Users					
Customer Service	42				11,726
Flow		295,508			1,806,265
BOD			39,717		24,759
TSS				1,140,402	679,430
<i>Industrial Flow/BOD/TSS Allocation (%)</i>		71.95%	0.99%	27.06%	
Customer Service Allocation (\$)		8,437	116	3,173	
Total (\$)		1,814,701	24,875	682,604	

4.5 Rate Derivation

Rates are derived by dividing the total amount of costs designated rate recovery per customer class by the total number of fixed billing units for such customer class.

Table 10 – Rate Derivation

Class	Revenue Requirement	Units	Units	Reallocated FYE 2026 Rate
	(\$)			(\$ per unit)
Residential Users (Annual Rate)				
Single Family	\$17,748,215	21,792	Customers	\$814
Multi Family / Mobile Home	8,759,587	12,267	Customers	\$714
Commercial Users				
Domestic Strength	3,322,461	381,698	kgal	\$8.70
High Strength	1,024,994	75,278	kgal	\$13.62
Industrial Users				
Flow (per thousand gallons)	1,814,701	295,508	kgal	\$6.14
BOD (per pound)	24,875	39,717	lbs	\$0.63
TSS (per pound)	682,604	1,140,402	lbs	\$0.60

The re-derived rates differ from the District’s current rates because the cost-of-service analysis updated the allocation of system costs among customer classes based on current wastewater flows and loadings and the District’s projected costs over the five-year study period evaluated in this report. As a result, each customer class’s share of costs differs from the existing rate structure. The proposed rates are based on the re-derived rates and adjusted to meet the District’s overall revenue requirement. In the first year, the proposed rates reflect the application of the projected rate increase while maintaining the cost-of-service relationships identified in the analysis.

The recalculated cost-of-service results are based on the District’s projected costs, flows, and customer characteristics over the five-year study period evaluated in this report. Differences between the recalculated results and the District’s current rates reflect the updated cost allocation and the forward-looking assumptions used in the study period analysis.

It is industry standard practice for utilities to revisit and update their cost of service periodically, typically every four to five years, to ensure that rates continue to reflect current system conditions and cost drivers. For this reason, the results of this analysis should be viewed as an updated snapshot of the District’s cost of service based on projected conditions during the study period. We recommend that the District update the cost-of-service analysis again as part of its next comprehensive rate study to maintain alignment between rates and the proportional cost of providing service.

4.6 Proposed Sewer Service Charges

The following table shows a 5-year schedule of proposed sewer service charges. The first rate increase will be effective on July 1, 2026. The rates are designed to recover the District’s costs of providing wastewater service while achieving roughly balanced budgets in upcoming years.

Table 11 – Proposed Sewer Service Charges

Proposed Sewer Service Charges	<i>Current</i>	<i>Proposed</i>				
	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
Residential Users - Fixed Annual Rate per Unit						
Single Family	\$815	\$912	\$1,022	\$1,144	\$1,282	\$1,435
Multi-Family	711	800	896	1,003	1,124	1,258
Mobile Home	711	800	896	1,003	1,124	1,258
Commercial Users - per thousand gallons (kgal) of water use						
Minimum Charge	\$815	\$912	\$1,022	\$1,144	\$1,282	\$1,435
Domestic Strength	8.73	9.75	10.92	12.23	13.70	15.34
High Strength	14.70	15.25	17.08	19.13	21.43	24.00
Industrial Users - Volumetric Rates						
Minimum Charge	\$815	\$912	\$1,022	\$1,144	\$1,282	\$1,435
Volume, per kgal	5.61	6.88	7.70	8.63	9.66	10.82
Biochemical Oxygen Demand (BOD), per pound	0.58	0.70	0.79	0.88	0.99	1.10
Suspended Solids (SS), per pound	0.68	0.67	0.75	0.84	0.94	1.05

4.7 Bill Impacts

The following table presents the monthly bill impacts for residential customers under existing rates and the proposed rates.

Table 12 – Residential Bill Impacts

Residential Monthly Bill Impacts	<i>Current</i>		<i>Proposed</i>			
	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031
Monthly Residential (\$/month)						
Single Family	\$67.92	\$76.00	\$85.17	\$95.33	\$106.83	\$119.58
<i>\$ Increase</i>		8.08	9.17	10.17	11.50	12.75
Multi-Family	\$59.25	\$66.67	\$74.67	\$83.58	\$93.67	\$104.83
<i>\$ Increase</i>		7.42	8.00	8.92	10.08	11.17

4.8 Regional Sewer Service Charge Survey

The following charts compare the wastewater monthly bills for a typical single-family home to those of other regional agencies.

Figure 5 – Monthly Residential Sewer Service Charge Survey (Average Monthly Water Use 6 CCF)

