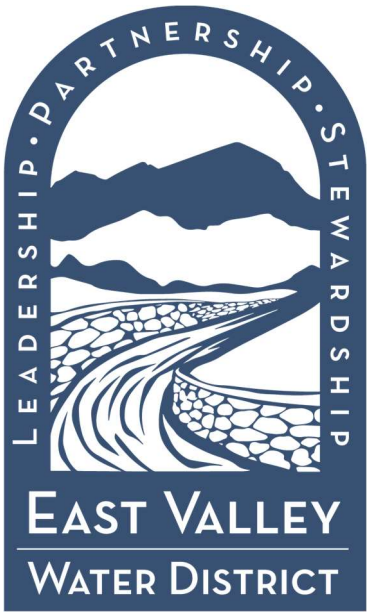
Public Hearing
May 15, 2024

Water, Wastewater, Reclamation Rate Study



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Executive Summary

The East Valley Water District (District) periodically reviews its utilities to determine if adjustments are required to continue meeting its operational costs, system improvements, and adequate reserve funding based on the adopted reserve policies. The last cost-of-service study in 2021 set rates through FY 2024. The District recently opened the new Sterling Natural Resource Center wastewater treatment plant (SNRC) in the first quarter of calendar year 2024. The District hired IB Consulting to conduct a comprehensive cost-of-service analysis for its water, wastewater, and reclamation utilities. This Report sets rates from FY 2025 through FY 2027 (Rate Setting Period).

Water Utility

Updating the water utility's long-term financial plan and performing a comprehensive cost-of-service analysis is a prudent business practice to ensure the utility can fully fund its revenue needs over the next three fiscal years and beyond. As part of reviewing and updating utility rates, the first step is to conduct a thorough review of the financial health of the utility. Based on the 5-year financial plan (Financial Plan Period), revenues from existing rates sufficiently covers operating expenses for the Rate Setting Period; however, the utility has significant capital projects during this time. The major projects within the District's Capital Improvement Plan (CIP) over the next five years include the Canal 3 Zone Reservoir, two new wells, and seismic mainline replacement / upgrades, which collectively totals $38.5M. The District has secured grant funds of $19.5M to fund a majority of the seismic mitigation improvements and $4.3M of capacity fees will go towards funding a portion of the two new wells. However, at existing rates, the additional amount of funding needed to cover the remaining CIP will require revenue increases to ensure the CIP moves forward as scheduled and meet the District's reserve requirements.

The District's water rate structure includes a monthly fixed charge and budget-based commodity rates. Residential customers are on a three-tiered rate structure with budget-based allotments for indoor use and outdoor use. Commercial customers' budget-based rates are tied to a three-year rolling average of historical use. Based on the updated cost-of-service analysis, fixed revenue recovery will remain at approximately 37% of total revenue. The proposed rate structure is similar to the existing budget-based rate structure with a slight adjustment to the residential Tier 1 indoor allotment. Tier 1 will now reflect 47 gallons per capita per day (gpcd), down from 55 gpcd. This adjustment is in-line with State Senate Bill 1157 (SB 1157), establishing new indoor water efficiency standards of 47 gpcd by January 2025. In addition, SB 1157 sets indoor efficiency target to 42 gpcd by 2030 and we recommend that the indoor target continues to adjust, accordingly. The current commercial rate structure will also be revised to reflect a uniform commodity rate instead of a three-tiered budget-based rate structure. The current rate structure sets tier 1 at 90% of historical water usage, with tier 2 set at the remaining 10%, and any excess usage over tier 2 would be charged the tier 3 rate. However, as commercial customers reduce their water usage, each year's updated tier 1 allotment is also reduced. Therefore, commercial customers would constantly need to reduce their water usage in perpetuity.

The proposed rates derived within this report for water includes three years of adjustments, commencing on January 1, 2025, and July 1, 2024 for wastewater and reclamation. With the proposed rates, the utility will continue to generate positive net income above operating, fully fund its capital projects through a combination of cash on hand, grants, capacity fees, and debt, and meet minimum reserve targets by FY 2027. The recommended rates have been incorporated into a notice and mailed to each customer as part of the Proposition 218 noticing requirements. A Public Hearing is scheduled for May 15, 2024, on the proposed rates identified in Table 1 through Table 3.

Table 1: Proposed Water Monthly Fixed Charges

Proposed Monthly Fixed Charges			
Meter Size	FY 2025	FY 2026	FY 2027
5/8"	$27.52	$29.18	$30.94
3/4"	$34.62	$36.70	$38.91
1"	$48.83	$51.76	$54.87
1 1/2"	$84.35	$89.42	$94.79
2"	$126.97	$134.59	$142.67
3"	$368.48	$390.59	$414.03
4"	$901.23	$955.31	$1,012.63
6"	$1,433.98	$1,520.02	$1,611.23
8"	$2,854.65	$3,025.93	$3,207.49
10"	$4,630.48	$4,908.31	$5,202.81
12"	$5,695.98	$6,037.74	$6,400.01

Table 2: Dedicated Fireline Monthly Fixed Charges

Proposed Dedicated Fireline Montly Fixed Charges			
Connection Size	FY 2025	FY 2026	FY 2027
5/8"	$13.75	$14.58	$15.46
3/4"	$13.84	$14.68	$15.57
1"	$14.01	$14.86	$15.76
1 1/2"	$14.36	$15.23	$16.15
2"	$14.71	$15.60	$16.54
3"	$15.41	$16.34	$17.33
4"	$16.11	$17.08	$18.11
6"	$17.51	$18.57	$19.69
8"	$18.91	$20.05	$21.26
10"	$20.31	$21.53	$22.83
12"	$21.71	$23.02	$24.41

Table 3: Proposed Water Commodity Charges[1]

Proposed Commodity Rates ($/hcf)			
Customer Class & Tiers	FY 2025	FY 2026	FY 2027
Budget-Based Customers			
Tier 1	$2.19	$2.33	$2.47
Tier 2	$2.84	$3.02	$3.21
Tier 3	$4.10	$4.35	$4.62
Commercial	$2.39	$2.54	$2.70

[1] 1 hcf = 748.05 gallons.

Wastewater Utility and Reclamation Utility

The wastewater utility previously included the wastewater collection system costs and treatment costs. The District recently opened the SNRC and created a separate utility (enterprise fund) to track revenues and expenses related to treating influent through primary, secondary, and tertiary processes prior to discharge. As such, the wastewater utility tracks revenues and expenses associated only with the wastewater collection system and the reclamation utility tracks revenues and expenses related to the SNRC.

The SNRC construction was financed with low interest State Revolving Fund (SRF) loans with annual debt service payments equal to approximately $7.8M, which are likely to commence in FY 2025, but no later than FY 2026. The loan documents specify that the first payment is due within twelve months after the notice of completion. The SNRC came online in the first quarter of 2024. However, the SNRC requires a slow ramp up of accepting influent to ensure the treatment processes are performing as expected before the total wastewater flows of the District's service area are conveyed to the SNRC.

In addition, the SRF debt requirements include the need to establish a debt service reserve, equal to the annual debt payment, before the first payment is due. The debt service reserve will be funded from reimbursements received from the State for the advancement of funds by the District related to the construction of the SNRC, and a $2M grant from the Edison Self-Generation Incentive Program (SGIP). The SNRC will also produce addition revenue sources including credits for onsite power generation, credits to offset groundwater replenishment charge for producing tertiary treated water that may be used to recharge the basin, bulk recycled water sales, and tipping fees for wastewater discharge by haulers.

The District's existing wastewater collection rate structure consists of monthly fixed charges and flow rates. The proposed rates for the wastewater utility and reclamation utility will commence on July 1, 2024, with future adjustments occurring on July 1st of each subsequent fiscal year. With the proposed rates, the wastewater utility and reclamation utility will fund operating, cover planned capital projects, and meet minimum reserve targets. The recommended rates have been incorporated into the notice and mailed to each customer as part of the Proposition 218 noticing requirements. A Public Hearing is scheduled for May 15, 2024, on the proposed rates identified in Table 4 and Table 5.

Table 4: Proposed Wastewater Rates

Fixed Charges ($/Month)			
Customer Class	FY 2025	FY 2026	FY 2027
Single Family	$16.70	$17.21	$17.73
Multi-Family	$15.48	$15.95	$16.43
Non-Residential			
Low Strength	$10.59	$10.91	$11.24
Medium Strength	$10.59	$10.91	$11.24
High Strength	$10.59	$10.91	$11.24
Schools & Churches	$10.59	$10.91	$11.24
Patton State Hospital	$10.59	$10.91	$11.24

Commodity Rates ($/hcf)			
Customer Class	FY 2025	FY 2026	FY 2027
Non-Residential			
Low Strength	$0.77	$0.80	$0.83
Medium Strength	$0.77	$0.80	$0.83
High Strength	$0.77	$0.80	$0.83
Schools & Churches	$0.45	$0.47	$0.49
Patton State Hospital	$0.44	$0.46	$0.48

Table 5: Proposed Reclamation Rates

Fixed Charges ($/Month)			
Customer Class	FY 2025	FY 2026	FY 2027
Single-Family	$29.79	$32.77	$36.05
Multi-Family	$25.67	$28.24	$31.07
Non-Residential			
Low Strength	$9.16	$10.08	$11.09
Medium Strength	$9.16	$10.08	$11.09
High Strength	$9.16	$10.08	$11.09
Schools & Churches	$9.16	$10.08	$11.09
Patton State Hospital	$9.16	$10.08	$11.09

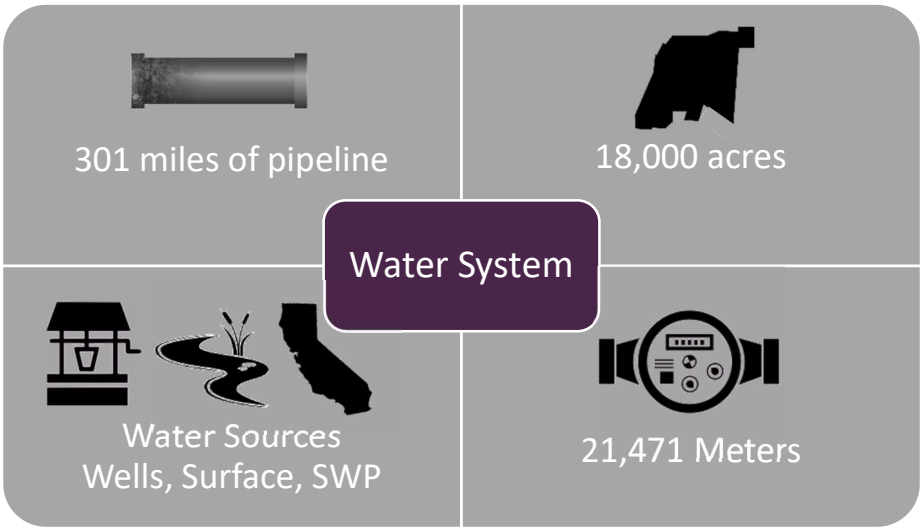
Commodity Rates ($/hcf)			
Customer Class	FY 2025	FY 2026	FY 2027
Non-Residential			
Low Strength	$2.19	$2.41	$2.66
Medium Strength	$2.54	$2.80	$3.08
High Strength	$3.96	$4.36	$4.80
Schools & Churches	$1.29	$1.42	$1.57
Patton State Hospital	$1.46	$1.61	$1.78

Water Utility

Water System

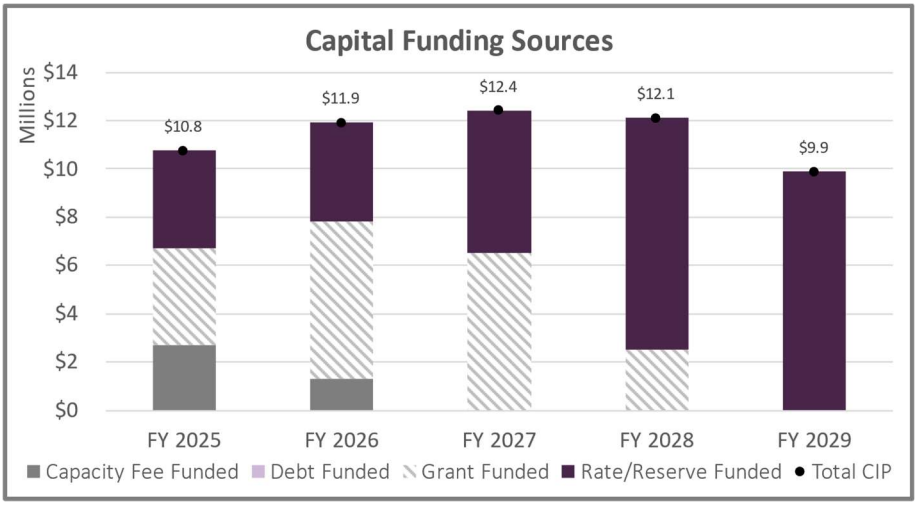
Located in the Inland Empire of San Bernardino County (County), the District consists of the entire City of Highland, portions of the City of San Bernardino, and unincorporated areas of the County. The District spans almost 18,000 acres and currently serves a population of around 107,000 through 21,471 meters. Water sources include groundwater, surface water through North Fork water rights, and State Water Project (SWP). All surface water and SWP is treated at Plant 134.

Figure 1: East Valley Water District Water System



In 2019, a Water Master Plan (Water MP) was completed that identified existing system improvements, near term improvements through FY 2025, and build-out improvements after FY 2025 through FY 2040. Based on the Water MP, the District developed a detailed capital improvement plan through FY 2030. Major projects over the next five years include the Canal 3 Zone Reservoir, two new wells, and seismic mainline replacement / upgrades. The total CIP cost through FY 2030 is $69.4M, of which, $35.1M is scheduled over the Rate Setting Period. The District has secured grant funds of $19.5M to fund the majority of the seismic mitigation improvements and $4.3M of capacity fees will go towards funding a portion of the two new wells. Figure 2 shows the water capital improvement plan through the Financial Plan Period.

Figure 2: Water Utility Capital Improvement Plan



Customers

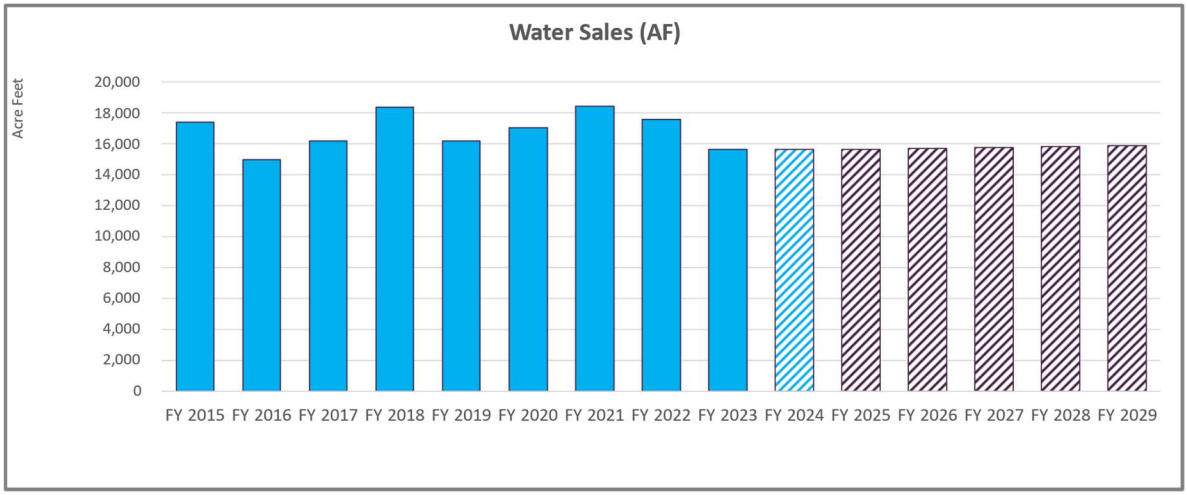
The District serves 21,471 active accounts, with approximately 95% of accounts classified as residential. Table 6 provides a summary of accounts by meter size.

Table 6: Accounts by Meter Size

Meters by Size	
Meter Size	Accounts
5/8"	3,479
3/4"	13,066
1"	4,235
1 1/2"	276
2"	303
3"	63
4"	24
6"	12
8"	13
10"	-
12"	-
Total	**21,471**

Since the State issued mandatory conservation requirements to combat the effects of the prolonged drought on California's water supplies, District customers responded by significantly reducing their water consumption. The elimination of the mandatory conservation have allowed sales to rebound slightly but not to the levels of pre-drought usage. Customers have made permanent changes to reduce their consumption and continue to use water more efficiently through budget-based rates. In addition, FY 2023 was a historical wet winter and FY 2024 is trending to reflect a similar water demand profile as FY 2023. Figure 3 shows both historical water sales and projected water sales in acre-feet. Projected water sales assume a small increase in residential water usage accounting for a modest rebound in usage from the two wet winters and new connections.

Figure 3: Water Sales



As previously mentioned, the existing rate structure consists of a monthly fixed meter charge and a three-tiered budget-based commodity rate structure. Existing monthly fixed charges are identified in Table 7 and Table 8, followed by Table 9 identifying commodity rates by tier.

Table 7: FY 2024 Water Monthly Fixed Charges

Existing Monthly Fixed Charges	
Meter Size	Current Charge
5/8"	$25.49
3/4"	$32.74
1"	$47.24
1 1/2"	$83.50
2"	$127.00
3"	$243.01
4"	$373.52
6"	$736.05
8"	$2,041.16

Table 8: FY 2024 Dedicated Fireline Monthly Fixed Charges

Existing Dedicated Fireline Monthly Fixed Charges	
Connection Size	Current Charge
5/8"	$8.78
3/4"	$8.78
1"	$8.78
1 1/2"	$13.18
2"	$17.57
3"	$26.35
4"	$35.14
6"	$52.70
8"	$70.27
10"	$87.84
12"	$87.84

Table 9: FY 2024 Budget-Based Water Commodity Rates

Existing Commodity Rates ($/hcf)	
Customer Class & Tiers	Current Rates
All Customers	
Tier 1	$2.11
Tier 2	$2.70
Tier 3	$4.18

Financial Plan Overview – Water Utility

Financial Planning

Financial planning incorporates numerous considerations, including projecting revenues and forecasting expected costs using various inflationary adjustments. Utilities also need to account for changes in water demand driven by variations in weather, water availability, state mandates, growth, and economic factors. In addition, system maintenance and reinvestment, reserves, and debt compliance all influence the revenues needed in future years. Therefore, a comprehensive financial plan reviews the following:

1) Historical water sales and consumption patterns to determine an appropriate level of usage for projecting future water use.
2) Operational costs that may change over the planning period as a result of inflation as well as any new expenditures incurred to meet strategic goals, state mandates, or changes in operations.
3) Multi-year system improvement needs, and scheduling based on priority. This review also considers available funding sources to complete projects such as pay-as-you-go (PAYGO), grants, loans, and debt financing.
4) Satisfy debt service coverage ratio requirements based on SRF loans and bond covenants (120%).
5) Reserve funding to meet adopted reserve policies, including any adjustments to the policies. The goal is to generate adequate cash on hand to mitigate financial risks related to operating cashflow needs, unexpected increases in expenses, shortages in system reinvestment, and mitigating potential system failures.

Figure 4 illustrates the key elements when developing a long-term financial plan.

Figure 4: Financial Plan Key Elements

Financial Planning Assumptions

Developing a long-term financial plan requires an understanding of the utility's financial position by evaluating existing revenue streams, ongoing expenses, how those expenses will change over time, existing debt coverage requirements, and reserve policies. With these considerations, certain assumptions are required for projecting revenues, expenses, and expected ending fund balances. Table 10 identifies assumptions used for forecasting revenues. Table 11 details the number of accounts by meter size and the number of firelines by connection size. Table 12 identifies the projected water usage and Table 13 identifies assumptions used for forecasting expenses over the Rate Setting Period.

Table 10: Water Assumptions for Forecasting Revenues

Revenue Forecasting					
Key Assumptions	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Revenue Escalation					
Reserve Interest	2.0%	2.0%	2.0%	2.0%	2.0%
Total Accounts	21,471	21,471	21,471	21,471	21,471
Dedicated Firelines	272	272	272	272	272
Water Sales (hcf)	6,819,427	6,854,377	6,874,703	6,895,130	6,915,659

Table 11: Water Accounts by Meter Size and Firelines by Connection Size

Meters and Firelines					
Customer Accounts	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Meter Size					
5/8"	3,479	3,479	3,479	3,479	3,479
3/4"	13,066	13,066	13,066	13,066	13,066
1"	4,235	4,235	4,235	4,235	4,235
1 1/2"	276	276	276	276	276
2"	303	303	303	303	303
3"	63	63	63	63	63
4"	24	24	24	24	24
6"	12	12	12	12	12
8"	13	13	13	13	13
10"	-	-	-	-	-
12"	-	-	-	-	-
Total Meters	**21,471**	**21,471**	**21,471**	**21,471**	**21,471**
Dedicated Firelines	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Meter Size					
3/4"	1	1	1	1	1
1"	2	2	2	2	2
1 1/2"	1	1	1	1	1
2"	-	-	-	-	-
3"	-	-	-	-	-
4"	49	49	49	49	49
6"	144	144	144	144	144
8"	60	60	60	60	60
10"	15	15	15	15	15
12"	-	-	-	-	-
Total Dedicated Firelines	**272**	**272**	**272**	**272**	**272**

Table 12: Water Projected Consumption[2]

Projected Waer Sales					
Consumption by Customer Class	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Single-Family					
Tier 1	2,143,266	2,153,982	2,164,752	2,175,576	2,186,454
Tier 2	1,417,451	1,424,538	1,431,661	1,438,819	1,446,013
Tier 3	484,096	486,516	488,949	491,394	493,851
Subtotal Single-Family Consumption (hcf)	4,044,813	4,065,036	4,085,362	4,105,789	4,126,318
Multi-Family					
Tier 1	900,608	909,614	909,614	909,614	909,614
Tier 2	282,948	285,777	285,777	285,777	285,777
Tier 3	289,234	292,126	292,126	292,126	292,126
Subtotal Multi-Family Consumption (hcf)	1,472,790	1,487,517	1,487,517	1,487,517	1,487,517
Commercial					
Tier 1	525,910	525,910	525,910	525,910	525,910
Tier 2	37,615	37,615	37,615	37,615	37,615
Tier 3	137,830	137,830	137,830	137,830	137,830
Subtotal Commercial Consumption (hcf)	701,355	701,355	701,355	701,355	701,355
Irrigation					
Tier 1	-	-	-	-	-
Tier 2	406,658	406,658	406,658	406,658	406,658
Tier 3	193,811	193,811	193,811	193,811	193,811
Subtotal Irrigation Consumption (hcf)	600,469	600,469	600,469	600,469	600,469
Total Consumption (hcf)	**6,819,427**	**6,854,377**	**6,874,703**	**6,895,130**	**6,915,659**

Table 13: Water Assumptions for Forecasting Expenses

Expense Forecasting							
Key Assumptions	*Source:*		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Expenditure Escalation							
Benefits			5.0%	5.0%	5.0%	5.0%	5.0%
Capital Construction	*ENR 20-City*	*5-Year Average*	3.9%	3.9%	3.9%	3.9%	3.9%
Energy Costs			7.0%	7.0%	7.0%	7.0%	7.0%
General Costs	*CPI - LA (BLS)*	*5-Year Average*	3.9%	3.9%	3.9%	3.9%	3.9%
Insurance			7.0%	7.0%	7.0%	7.0%	7.0%
Salaries			7.0%	5.0%	5.0%	5.0%	5.0%

[2] 1 Acre Foot (AF) = 435.6 hcf or 325,851 gallons

Current Financial Position

Revenues

Based on the forecasting assumptions, fixed revenues were calculated by multiplying the existing fixed charges (Table 7 and Table 8) by the account data by meter size and firelines by connection size (Table 11) over twelve billing periods. Commodity revenues were calculated using the existing consumption rates (Table 9) and projected total water sales (Table 12). Table 14 shows the calculated rate revenues through the Rate Setting Period. Commodity revenues also considers the percentage of water usage that occurs in the first 6 months of the fiscal year versus the second 6 months because rates are adjusted midyear on January 1st.

Table 15 summarizes calculated rate revenues and other non-rate revenues, with future projections rounded to the nearest thousands. Other Operating Revenues include penalties and service activation fees. Non-Operating revenues include interest earnings and miscellaneous revenue.

Table 14: Water Calculated Rate Revenues

Calculated Rate Revenue					
Fixed Revenue	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Total Water Fixed Charges	$10,052,289	$10,052,289	$10,052,289	$10,052,289	$10,052,289
Dedicated Fireline Charges	$178,608	$178,608	$178,608	$178,608	$178,608
Total Fixed Revenue	**$10,230,897**	**$10,230,897**	**$10,230,897**	**$10,230,897**	**$10,230,897**
Usage Characteristics					
% of usage at prior rate	57.0%	57.0%	57.0%	57.0%	57.0%
% of usage at current rate	43.0%	43.0%	43.0%	43.0%	43.0%
Commodity Revenue	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Single-Family					
Tier 1	$4,522,291	$4,544,902	$4,567,627	$4,590,465	$4,613,418
Tier 2	$3,827,118	$3,846,253	$3,865,485	$3,884,811	$3,904,235
Tier 3	$2,023,521	$2,033,637	$2,043,807	$2,054,027	$2,064,297
Single-Family Variable Revenue	$10,372,930	$10,424,792	$10,476,918	$10,529,304	$10,581,950
Multi-Family					
Tier 1	$1,900,283	$1,919,286	$1,919,286	$1,919,286	$1,919,286
Tier 2	$763,960	$771,598	$771,598	$771,598	$771,598
Tier 3	$1,208,998	$1,221,087	$1,221,087	$1,221,087	$1,221,087
Multi-Family Variable Revenue	$3,873,241	$3,911,970	$3,911,970	$3,911,970	$3,911,970
Commercial					
Tier 1	$1,109,670	$1,109,670	$1,109,670	$1,109,670	$1,109,670
Tier 2	$101,561	$101,561	$101,561	$101,561	$101,561
Tier 3	$576,129	$576,129	$576,129	$576,129	$576,129
Commercial Variable Revenue	$1,787,360	$1,787,360	$1,787,360	$1,787,360	$1,787,360
Irrigation					
Tier 1	$0	$0	$0	$0	$0
Tier 2	$1,097,977	$1,097,977	$1,097,977	$1,097,977	$1,097,977
Tier 3	$810,130	$810,130	$810,130	$810,130	$810,130
Irrigation Variable Revenue	$1,908,107	$1,908,107	$1,908,107	$1,908,107	$1,908,107
Total Commodity Revenue	**$17,941,637**	**$18,032,228**	**$18,084,355**	**$18,136,740**	**$18,189,387**
Total Rate Revenue	**$28,172,534**	**$28,263,125**	**$28,315,252**	**$28,367,637**	**$28,420,284**

Table 15: Water Projected Revenues

Projected Revenues					
Revenue Summary	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Water Sales					
Water Fixed Charges	$10,052,000	$10,052,000	$10,052,000	$10,052,000	$10,052,000
Dedicated Fireline Charges	$179,000	$179,000	$179,000	$179,000	$179,000
Commodity Revenue	$17,942,000	$18,032,000	$18,084,000	$18,137,000	$18,189,000
Subtotal Water Sales	$28,173,000	$28,263,000	$28,315,000	$28,368,000	$28,420,000
Other Operating Revenue					
Penalties	$450,000	$450,000	$450,000	$450,000	$450,000
Initiation of Service	$42,000	$42,000	$42,000	$42,000	$42,000
Subtotal Other Operating Revenue	$492,000	$492,000	$492,000	$492,000	$492,000
Non-Operating Revenue					
Interest Income	$138,000	$124,000	$127,000	$130,000	$134,000
Miscellaneous Revenue	$20,000	$20,000	$20,000	$20,000	$20,000
Subtotal Non-Operating Revenue	$158,000	$144,000	$147,000	$150,000	$154,000
Total Revenues	**$28,823,000**	**$28,899,000**	**$28,954,000**	**$29,010,000**	**$29,066,000**

Expenses

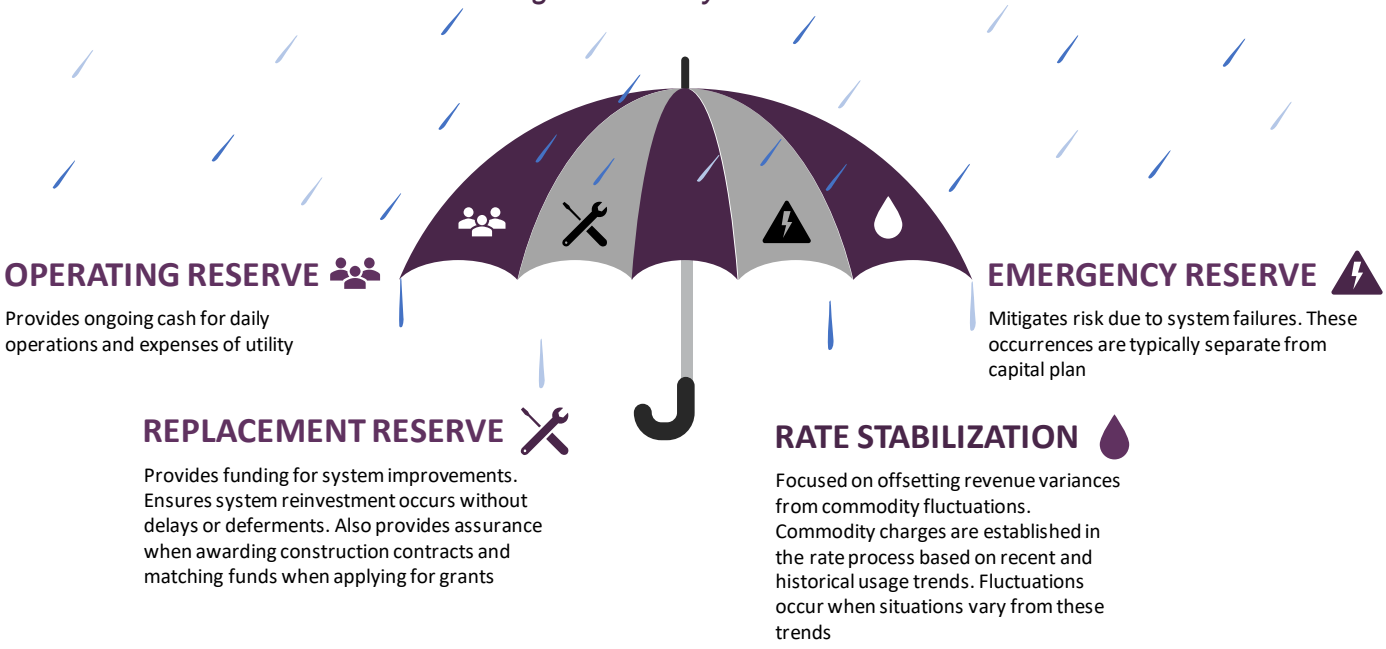
The FY 2024 budget was used as the baseline expenses of the utility and adjusted in subsequent years based on the escalation factors shown in Table 13. Table 16 provides projected Operational & Maintenance (O&M) costs through FY 2029. Each expense category includes detailed line-item expenditures that were discussed with staff to determine the appropriate escalation factor to use for forecasting future cost increases. Detailed calculations of water supply costs are incorporated under Appendix A.

Table 16: Water Projected O&M Expenses

Projected Expenses					
O&M Expenses	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Fixed Water Supply Costs					
Surface Water - Assessments	$117,000	$117,000	$117,000	$117,000	$117,000
Variable Water Supply Costs					
Surface Water	$262,000	$262,000	$262,000	$262,000	$262,000
State Water Project	$346,000	$346,000	$346,000	$346,000	$346,000
Groundwater	$2,330,000	$2,348,000	$2,358,000	$2,369,000	$2,379,000
Subtotal Variable Water Supply Costs	$2,938,000	$2,956,000	$2,966,000	$2,977,000	$2,987,000
Water Supply Costs	$3,055,000	$3,073,000	$3,083,000	$3,094,000	$3,104,000
Operating Expenses					
Governing Board	$269,000	$281,000	$294,000	$308,000	$322,000
General Administration	$1,013,000	$1,060,000	$1,109,000	$1,160,000	$1,214,000
Human Resources	$1,815,000	$1,929,000	$2,050,000	$2,180,000	$2,317,000
Public Affairs	$952,000	$995,000	$1,040,000	$1,086,000	$1,136,000
Conservation	$721,000	$752,000	$784,000	$817,000	$852,000
Finance & Accounting	$998,000	$1,047,000	$1,097,000	$1,151,000	$1,207,000
Information Technology	$1,265,000	$1,320,000	$1,378,000	$1,438,000	$1,501,000
Customer Service	$1,375,000	$1,440,000	$1,508,000	$1,579,000	$1,654,000
Meter Services	$311,000	$326,000	$342,000	$359,000	$377,000
Engineering	$1,054,000	$1,102,000	$1,151,000	$1,203,000	$1,258,000
Water Production	$2,254,000	$2,357,000	$2,465,000	$2,577,000	$2,695,000
Groundwater Replenishment	$351,000	$351,000	$351,000	$351,000	$351,000
Utilities - Pumps & Boosters	$762,000	$819,000	$879,000	$944,000	$1,013,000
Water Treatment	$739,000	$774,000	$810,000	$847,000	$887,000
Water Quality	$576,000	$603,000	$631,000	$660,000	$690,000
Maintenance Admin	$445,000	$467,000	$491,000	$516,000	$543,000
Water Maintenance	$3,246,000	$3,396,000	$3,553,000	$3,717,000	$3,889,000
Facilities Maintenance	$1,061,000	$1,110,000	$1,162,000	$1,216,000	$1,273,000
Fleet Maintenance	$641,000	$674,000	$708,000	$745,000	$783,000
Subtotal Operating Expenses	$19,848,000	$20,803,000	$21,803,000	$22,854,000	$23,962,000
Debt Service					
Existing Debt	$2,601,000	$2,192,000	$1,759,000	$1,760,000	$1,759,000
New/Proposed Debt	$0	$0	$0	$0	$0
Subtotal Debt Service	$2,601,000	$2,192,000	$1,759,000	$1,760,000	$1,759,000
Total Expenses	**$25,504,000**	**$26,068,000**	**$26,645,000**	**$27,708,000**	**$28,825,000**

Reserves

Figure 5: Utility Reserves



Established reserves include Operating Reserve, Replacement Reserve, Emergency Reserve, Rate Stabilization Reserve, and Capacity Fee Reserve. Reserves help mitigate risks to the utility by ensuring sufficient cash is on hand for daily operations and to fund annual system improvements. Reserves also help smooth rates and mitigate rate spikes due to emergencies or above-average system costs. As part of this rate study, the District revised its reserve policies by adjusting the capital replacement reserve and emergency reserve minimum and targets requirements, and eliminating the rate stabilization reserve. Funds within the rate stabilization reserve were transferred to the capital replacement reserve. The revised adopted reserve policies identify the function of each reserve and Table 17 summarizes the minimum reserve requirements and the ideal funding targets of each reserve.

Table 17: Water Reserve Requirements and Targets

Reserve	Minimum Requirement	Reserve Target
Operating	90 days of operating costs	120 days of operating costs
Capital Replacement	2 years of 5-year CIP average	5 years of planned capital
Emergency	1.0% of Assets	2.0% of Assets
Rate Stabilization	-	-
Capacity Fee	-	-

The beginning FY 2024 total water reserve balance (July 1, 2023) equaled approximately $17.9M.

Water Financial Outlook at Existing Rates

Calculating revenue using existing rates and projecting expenses helps determine the current financial health of the utility. Revenues from existing rates can cover operating expenses through FY 2029, but with limited net income to go towards capital spending and maintaining healthy reserves. Only a portion of the system's capital replacement needs can be funded with projected net operating income, grants, and capacity fees, resulting in the use of reserves to cover the remaining capital costs, which is not sustainable long-term. Table 18 forecasts existing revenues and expenses through the Rate Setting Period. Table 19 identifies reserve transfers and activity for the Operating, Capital Replacement, Emergency, Rate Stabilization, and Capacity Fee Reserves, with projected FY 2025 starting reserve balances shown for each reserve.

Table 18: Water Financial Plan at Existing Rates

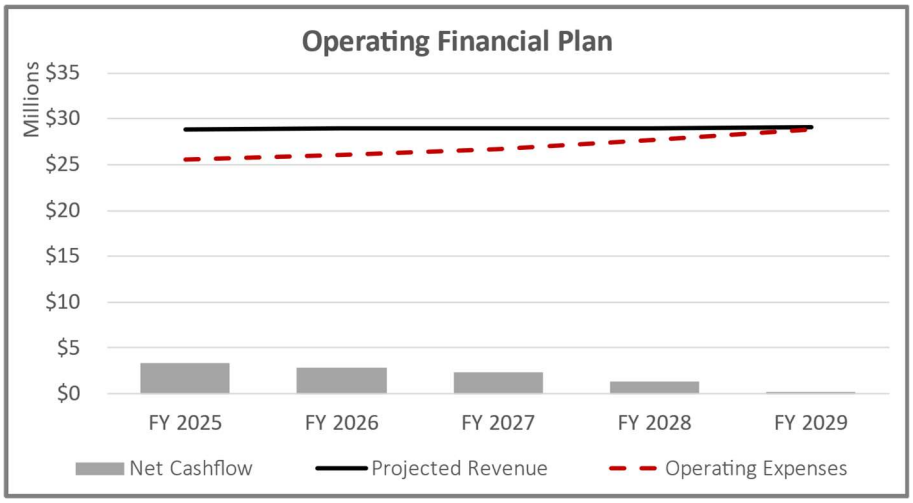
Financial Plan at Existing Rates						
Revenue	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Water Sales						
Water Fixed Charges	Table 15	$10,052,000	$10,052,000	$10,052,000	$10,052,000	$10,052,000
Dedicated Fireline Charges		$179,000	$179,000	$179,000	$179,000	$179,000
Commodity Revenue		$17,942,000	$18,032,000	$18,084,000	$18,137,000	$18,189,000
Total Water Sales		$28,173,000	$28,263,000	$28,315,000	$28,368,000	$28,420,000
Other Operating Revenue						
Penalties	Table 15	$450,000	$450,000	$450,000	$450,000	$450,000
Initiation of Service		$42,000	$42,000	$42,000	$42,000	$42,000
Subtotal Other Operating Revenue		$492,000	$492,000	$492,000	$492,000	$492,000
Non-Operating Revenue						
Interest Income	Table 15	$138,000	$124,000	$127,000	$130,000	$134,000
Miscellaneous Revenue		$20,000	$20,000	$20,000	$20,000	$20,000
Subtotal Non-Operating Revenue		$158,000	$144,000	$147,000	$150,000	$154,000
Total Revenues		**$28,823,000**	**$28,899,000**	**$28,954,000**	**$29,010,000**	**$29,066,000**
O&M Expenses	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Fixed Water Supply Costs						
Surface Water - Assessments	Table 16	$117,000	$117,000	$117,000	$117,000	$117,000
Variable Water Supply Costs						
Surface Water	Table 16	$262,000	$262,000	$262,000	$262,000	$262,000
State Water Project		$346,000	$346,000	$346,000	$346,000	$346,000
Groundwater		$2,330,000	$2,348,000	$2,358,000	$2,369,000	$2,379,000
Subtotal Variable Water Supply Costs		$2,938,000	$2,956,000	$2,966,000	$2,977,000	$2,987,000
Water Supply Costs		$3,055,000	$3,073,000	$3,083,000	$3,094,000	$3,104,000
Operating Expenses						
Governing Board	Table 16	$269,000	$281,000	$294,000	$308,000	$322,000
General Administration		$1,013,000	$1,060,000	$1,109,000	$1,160,000	$1,214,000
Human Resources		$1,815,000	$1,929,000	$2,050,000	$2,180,000	$2,317,000
Public Affairs		$952,000	$995,000	$1,040,000	$1,086,000	$1,136,000
Conservation		$721,000	$752,000	$784,000	$817,000	$852,000
Finance & Accounting		$998,000	$1,047,000	$1,097,000	$1,151,000	$1,207,000
Information Technology		$1,265,000	$1,320,000	$1,378,000	$1,438,000	$1,501,000
Customer Service		$1,375,000	$1,440,000	$1,508,000	$1,579,000	$1,654,000
Meter Services		$311,000	$326,000	$342,000	$359,000	$377,000
Engineering		$1,054,000	$1,102,000	$1,151,000	$1,203,000	$1,258,000
Water Production		$2,254,000	$2,357,000	$2,465,000	$2,577,000	$2,695,000
Groundwater Replenishment		$351,000	$351,000	$351,000	$351,000	$351,000
Utilities - Pumps & Boosters		$762,000	$819,000	$879,000	$944,000	$1,013,000
Water Treatment		$739,000	$774,000	$810,000	$847,000	$887,000
Water Quality		$576,000	$603,000	$631,000	$660,000	$690,000
Maintenance Admin		$445,000	$467,000	$491,000	$516,000	$543,000
Water Maintenance		$3,246,000	$3,396,000	$3,553,000	$3,717,000	$3,889,000
Facilities Maintenance		$1,061,000	$1,110,000	$1,162,000	$1,216,000	$1,273,000
Fleet Maintenance		$641,000	$674,000	$708,000	$745,000	$783,000
Subtotal Operating Expenses		$19,848,000	$20,803,000	$21,803,000	$22,854,000	$23,962,000
Debt Service						
Existing Debt	Table 16	$2,601,000	$2,192,000	$1,759,000	$1,760,000	$1,759,000
Total Expenses		**$25,504,000**	**$26,068,000**	**$26,645,000**	**$27,708,000**	**$28,825,000**
Net Operating		**$3,319,000**	**$2,831,000**	**$2,309,000**	**$1,302,000**	**$241,000**

Table 19: Water Reserve Activity at Existing Rates

Reserves Activity at Existing Rates						
Operating Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$6,150,822	$6,288,658	$6,427,726	$6,570,000	$6,832,110
Net Operating	Table 18	$3,319,000	$2,831,000	$2,309,000	$1,302,000	$241,000
Direct Transfer from/(to) Emergency Reserve		$0	$0	$0	$0	$0
Transfers from/(to) Capital Replacement Reserve		($3,181,164)	($2,691,932)	($2,166,726)	($1,039,890)	$0
Ending Balance		**$6,288,658**	**$6,427,726**	**$6,570,000**	**$6,832,110**	**$7,073,110**
Capital Replacement Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$11,088,387	$10,428,895	$9,201,137	$5,583,350	($2,598,716)
Plus:						
Transfers from/(to) Operating Reserve	*Line 4*	$3,181,164	$2,691,932	$2,166,726	$1,039,890	$0
Reclamation Loan Payments		$0	$0	$0	$375,000	$375,000
New Debt Proceeds		$0	$0	$0	$0	$0
Capacity Fee Funding	*Line 36*	$2,700,000	$1,300,000	$0	$0	$0
Grant Funding		$4,000,000	$6,500,000	$6,500,000	$2,500,000	$0
Less:						
CIP		($10,753,699)	($11,914,046)	($12,430,894)	($12,096,956)	($9,880,996)
Transfers from/(to) Emergency Reserve		$0	$0	$0	$0	$0
Subtotal Capital Replacement Reserve		$10,215,852	$9,006,780	$5,436,969	($2,598,716)	($12,104,711)
Interest Earnings		$213,042	$194,357	$146,381	$0	$0
Ending Balance		**$10,428,895**	**$9,201,137**	**$5,583,350**	**($2,598,716)**	**($12,104,711)**
Emergency Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$695,624	$709,537	$723,728	$738,202	$752,966
Direct Transfers from/(to) Operating Reserve		$0	$0	$0	$0	$0
Transfers from/(to) Capital Replacement Reserve	*Line 18*	$0	$0	$0	$0	$0
Subtotal Emergency Reserve		$695,624	$709,537	$723,728	$738,202	$752,966
Interest Earnings		$13,912	$14,191	$14,475	$14,764	$15,059
Ending Balance		**$709,537**	**$723,728**	**$738,202**	**$752,966**	**$768,025**
Capacity Fee Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$4,097,423	$1,452,371	$168,419	$171,787	$175,223
Capacity Fee Receipts		$0	$0	$0	$0	$0
Transfers (to) Capital Replacement Reserve		($2,700,000)	($1,300,000)	$0	$0	$0
Subtotal Capacity Fee Reserve		$1,397,423	$152,371	$168,419	$171,787	$175,223
Interest Earnings		$54,948	$16,047	$3,368	$3,436	$3,504
Ending Balance		**$1,452,371**	**$168,419**	**$171,787**	**$175,223**	**$178,727**
Total Ending Balance		**$18,879,460**	**$16,521,009**	**$13,063,339**	**$5,161,583**	**($4,084,849)**

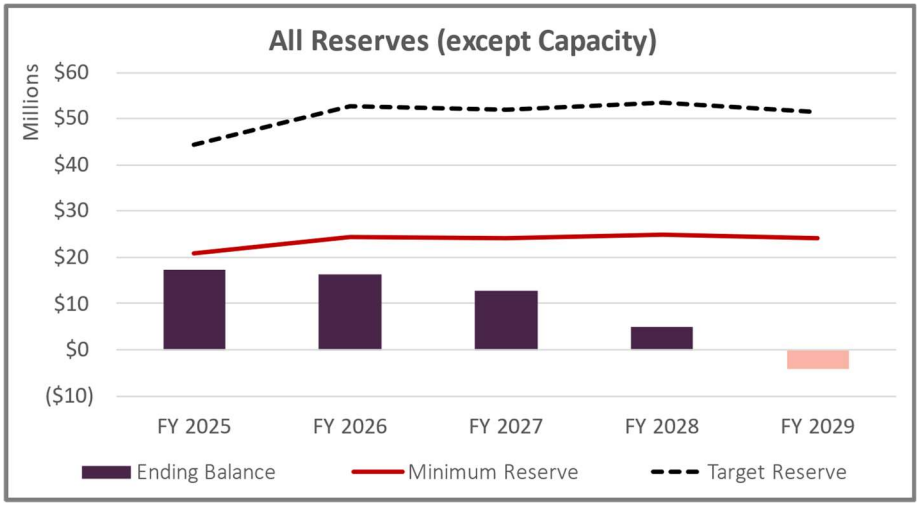
Figure 16 illustrates the operating position of the utility, where O&M expenses are identified with the dashed red trendline and total revenues at existing rates are shown by the horizontal black trendline. The bars represent the amount of net operating income available for capital spending and reserve funding.

Figure 6: Current Water Operating Financial Position



With the capital improvement plan reflecting over $57M in spending over the Financial Plan Period, as shown in Figure 2, reserves will be utilized to cover the remaining capital expenses to ensure necessary projects continue to move forward as scheduled. Figure 7 reflects the projected ending balances of reserves after operating and capital projects are funded. By FY 2029, reserves are depleted, and funding would not be available for ongoing system improvements at existing rates.

Figure 7: Projected Water Ending Reserves at Existing Rates



Proposed Financial Plan – Water Utility

From the financial outlook at existing rates, a proposed financial plan is developed to fund the multi-year revenue requirements, while meeting debt covenants and reserve requirements. Table 20 forecasts existing revenues, ***with annual revenue adjustments***, and expenses through the Financial Plan Period. However, FY 2028 and FY 2029 are not part of the Rate Setting Period and will not be included as part of the proposed rates within the Proposition 218 Notice. In addition, $12M of capital cost is expected to be debt-financed through a bond issue in FY 2027. However, the specific terms of the bonds and timing of issuance will be determined by the District's financial advisor as IB Consulting are not municipal financial advisors. Table 21 identifies the projected FY 2025 total starting balances for the Operating, Capital Replacement, Emergency, and Capacity Fee reserves, activity within each reserve (including net income transfer from Table 20, transfers between reserves, and annual CIP), and projected ending balances for each fiscal year.

Table 20: Proposed Water Financial Plan

Proposed Financial Plan

Revenue	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Water Sales						
Water Fixed Charges	Table 15	$10,052,000	$10,052,000	$10,052,000	$10,052,000	$10,052,000
Dedicated Fireline Charges		$179,000	$179,000	$179,000	$179,000	$179,000
Commodity Revenue		$17,942,000	$18,032,000	$18,084,000	$18,137,000	$18,189,000
Total Water Sales		$28,173,000	$28,263,000	$28,315,000	$28,368,000	$28,420,000
Additional Revenue (from revenue adjustments):						
Fiscal Year / Revenue Adjustment / Effective Month / # of Months Effective						
FY 2025 6.0% January 6		$845,000	$1,695,000	$1,698,000	$1,702,000	$1,705,000
FY 2026 6.0% January 6			$898,000	$1,800,000	$1,804,000	$1,807,000
FY 2027 6.0% January 6				$954,000	$1,912,000	$1,915,000
FY 2028 6.0% January 6					*$1,013,000*	*$2,030,000*
FY 2029 6.0% January 6						*$1,076,000*
Total Additional Revenue		$845,000	$2,593,000	$4,452,000	$6,431,000	$8,533,000
Projected Rate Revenue		**$29,018,000**	**$30,856,000**	**$32,767,000**	**$34,799,000**	**$36,953,000**
Other Operating Revenue						
Penalties	Table 15	$450,000	$450,000	$450,000	$450,000	$450,000
Initiation of Service		$42,000	$42,000	$42,000	$42,000	$42,000
Subtotal Other Operating Revenue		$492,000	$492,000	$492,000	$492,000	$492,000
Non-Operating Revenue						
Interest Income	Table 15	$138,000	$124,000	$127,000	$132,000	$138,000
Miscellaneous Revenue		$20,000	$20,000	$20,000	$20,000	$20,000
Subtotal Non-Operating Revenue		$158,000	$144,000	$147,000	$152,000	$158,000
Total Revenues		**$29,668,000**	**$31,492,000**	**$33,406,000**	**$35,443,000**	**$37,603,000**

O&M Expenses	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Fixed Water Supply Costs						
Surface Water - Assessments	Table 16	$117,000	$117,000	$117,000	$117,000	$117,000
Variable Water Supply Costs						
Surface Water	Table 16	$262,000	$262,000	$262,000	$262,000	$262,000
State Water Project		$346,000	$346,000	$346,000	$346,000	$346,000
Groundwater		$2,330,000	$2,348,000	$2,358,000	$2,369,000	$2,379,000
Subtotal Variable Water Supply Costs		$2,938,000	$2,956,000	$2,966,000	$2,977,000	$2,987,000
Water Supply Costs		$3,055,000	$3,073,000	$3,083,000	$3,094,000	$3,104,000
Operating Expenses						
Governing Board	Table 16	$269,000	$281,000	$294,000	$308,000	$322,000
General Administration		$1,013,000	$1,060,000	$1,109,000	$1,160,000	$1,214,000
Human Resources		$1,815,000	$1,929,000	$2,050,000	$2,180,000	$2,317,000
Public Affairs		$952,000	$995,000	$1,040,000	$1,086,000	$1,136,000
Conservation		$721,000	$752,000	$784,000	$817,000	$852,000
Finance & Accounting		$998,000	$1,047,000	$1,097,000	$1,151,000	$1,207,000
Information Technology		$1,265,000	$1,320,000	$1,378,000	$1,438,000	$1,501,000
Customer Service		$1,375,000	$1,440,000	$1,508,000	$1,579,000	$1,654,000
Meter Services		$311,000	$326,000	$342,000	$359,000	$377,000
Engineering		$1,054,000	$1,102,000	$1,151,000	$1,203,000	$1,258,000
Water Production		$2,254,000	$2,357,000	$2,465,000	$2,577,000	$2,695,000
Groundwater Replenishment		$351,000	$351,000	$351,000	$351,000	$351,000
Utilities - Pumps & Boosters		$762,000	$819,000	$879,000	$944,000	$1,013,000
Water Treatment		$739,000	$774,000	$810,000	$847,000	$887,000
Water Quality		$576,000	$603,000	$631,000	$660,000	$690,000
Maintenance Admin		$445,000	$467,000	$491,000	$516,000	$543,000
Water Maintenance		$3,246,000	$3,396,000	$3,553,000	$3,717,000	$3,889,000
Facilities Maintenance		$1,061,000	$1,110,000	$1,162,000	$1,216,000	$1,273,000
Fleet Maintenance		$641,000	$674,000	$708,000	$745,000	$783,000
Subtotal Operating Expenses		$19,848,000	$20,803,000	$21,803,000	$22,854,000	$23,962,000
Debt Service						
Existing Debt	Table 16	$2,601,000	$2,192,000	$1,759,000	$1,760,000	$1,759,000
Total Expenses		**$25,504,000**	**$26,068,000**	**$27,532,000**	**$28,595,000**	**$29,712,000**
Net Operating		**$4,164,000**	**$5,424,000**	**$5,874,000**	**$6,848,000**	**$7,891,000**

Table 21: Water Reserve Activity at Proposed Rates

Reserves Activity at Proposed Rates						
Operating Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$6,150,822	$6,288,658	$6,427,726	$6,788,712	$7,050,822
Net Operating	Table 20	$4,164,000	$5,424,000	$5,874,000	$6,848,000	$7,891,000
Direct Transfer from/(to) Emergency Reserve		$0	$0	$0	$0	$0
Transfers from/(to) Capital Replacement Reserve		($4,026,164)	($5,284,932)	($5,513,014)	($6,585,890)	($7,615,575)
Ending Balance		**$6,288,658**	**$6,427,726**	**$6,788,712**	**$7,050,822**	**$7,326,247**
Capital Replacement Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$11,088,387	$11,282,345	$12,690,586	$24,164,720	$21,985,588
Plus:						
Transfers from/(to) Operating Reserve	*Line 4*	$4,026,164	$5,284,932	$5,513,014	$6,585,890	$7,615,575
Reclamation Loan Payments		$0	$0	$0	$375,000	$375,000
New Debt Proceeds		$0	$0	$12,000,000	$0	$0
Capacity Fee Funding	*Line 36*	$2,700,000	$1,300,000	$0	$0	$0
Grant Funding		$4,000,000	$6,500,000	$6,500,000	$2,500,000	$0
Less:						
CIP		($10,753,699)	($11,914,046)	($12,430,894)	($12,096,956)	($9,880,996)
Transfers from/(to) Emergency Reserve		$0	$0	($472,890)	$0	$0
Subtotal Capital Replacement Reserve		$11,060,852	$12,453,230	$23,799,816	$21,528,654	$20,095,167
Interest Earnings		$221,492	$237,356	$364,904	$456,934	$420,808
Ending Balance		**$11,282,345**	**$12,690,586**	**$24,164,720**	**$21,985,588**	**$20,515,975**
Emergency Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$695,624	$709,537	$723,728	$1,215,821	$1,240,137
Direct Transfers from/(to) Operating Reserve		$0	$0	$0	$0	$0
Transfers from/(to) Capital Replacement Reserve	*Line 18*	$0	$0	$472,890	$0	$0
Subtotal Emergency Reserve		$695,624	$709,537	$1,196,618	$1,215,821	$1,240,137
Interest Earnings		$13,912	$14,191	$19,203	$24,316	$24,803
Ending Balance		**$709,537**	**$723,728**	**$1,215,821**	**$1,240,137**	**$1,264,940**
Capacity Fee Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$4,097,423	$1,452,371	$168,419	$171,787	$175,223
Capacity Fee Receipts		$0	$0	$0	$0	$0
Transfers (to) Capital Replacement Reserve		($2,700,000)	($1,300,000)	$0	$0	$0
Subtotal Capacity Fee Reserve		$1,397,423	$152,371	$168,419	$171,787	$175,223
Interest Earnings		$54,948	$16,047	$3,368	$3,436	$3,504
Ending Balance		**$1,452,371**	**$168,419**	**$171,787**	**$175,223**	**$178,727**
Total Ending Balance		**$19,732,910**	**$20,010,458**	**$32,341,040**	**$30,451,770**	**$29,285,889**

The proposed financial plan also includes debt financing of $12M to fund a new well and reservoir. The debt issuance offers a means to finance system improvements over the useful life of the assets while providing inter-generational equity between existing customers and future customers that will both benefit from these improvements. Figure 8 identifies the operating position based on the proposed financial plan, and Figure 9 and Figure 10 show the capital plan with funding sources and projected ending reserve balances, respectively.

Figure 8: Proposed Water Operating Position

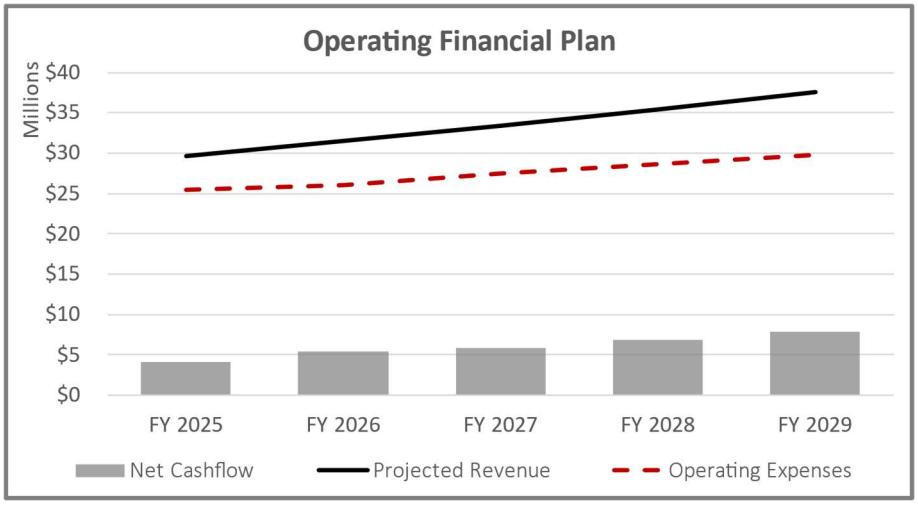


Figure 9: Water Capital Improvement Plan with Funding Sources

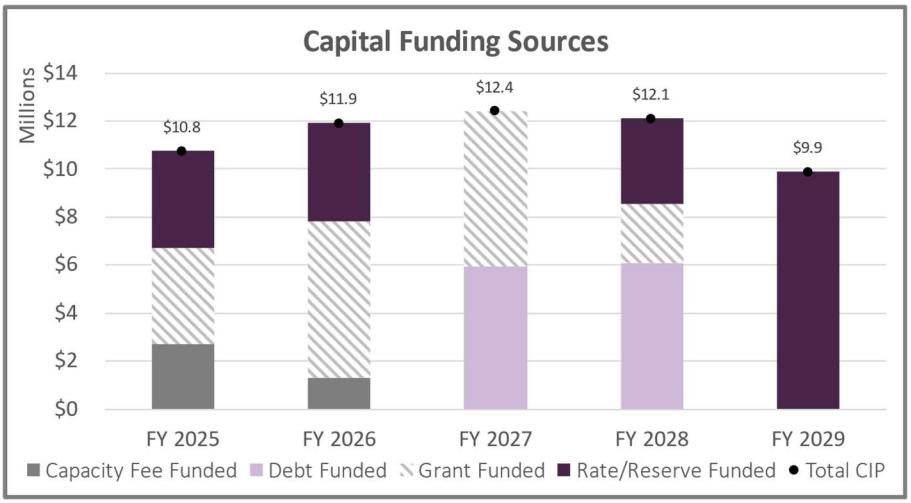
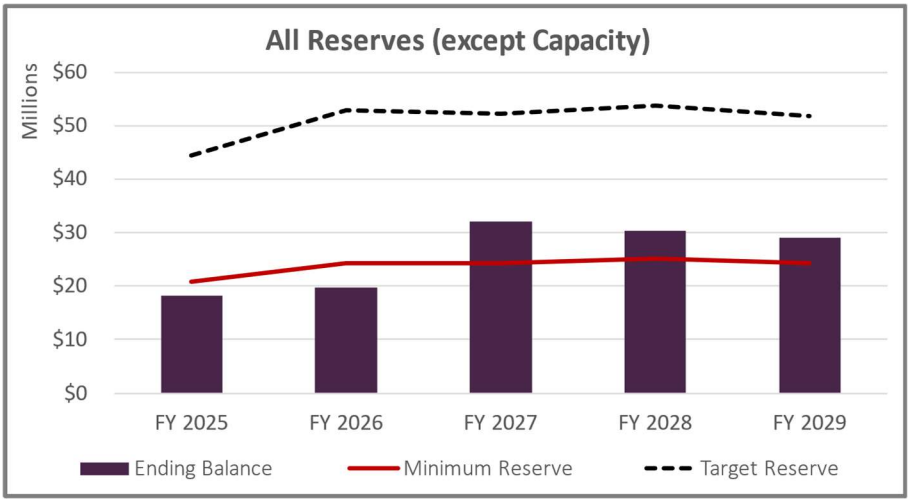


Figure 10: Water Proposed Ending Reserves

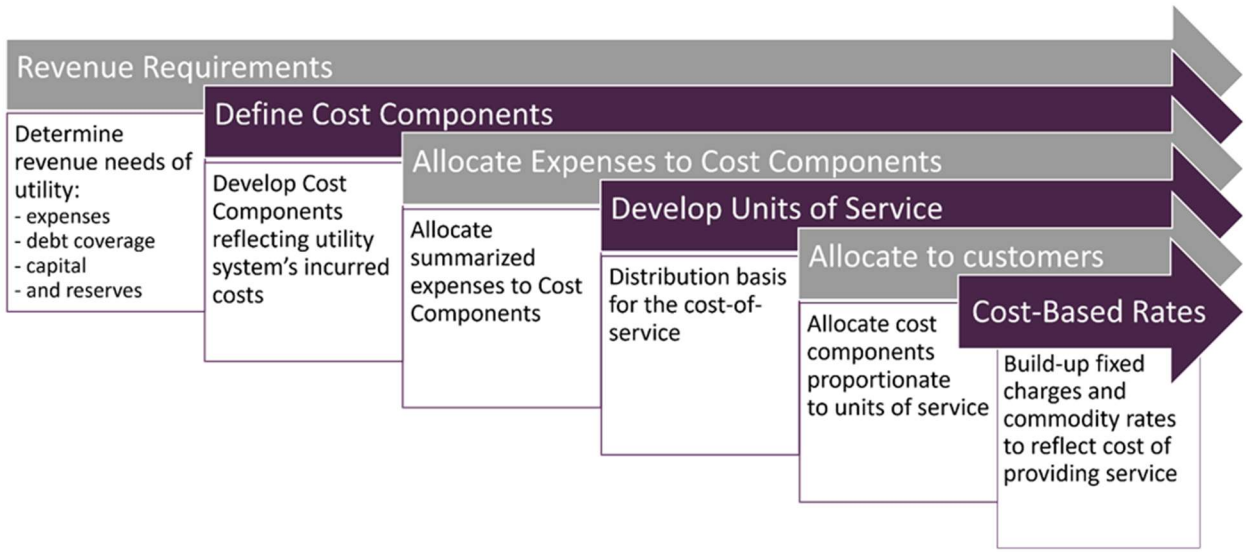


Cost-of-Service Analysis – Water Utility

Cost-of-Service Process

The next step in developing rates is to perform a cost-of-service analysis. It is important to understand **how** costs are incurred to determine the most appropriate way to recover these costs. The following graphic summarizes the cost-of-service process. Through this process, costs incurred are allocated to customers and tiers based on their proportional share. As a result, the proposed rates are cost-based and reflect the costs incurred to provide service to customers.

Figure 11: Cost-of-Service Process



Revenue Requirements

The revenue requirements and proposed rates identified within this report are derived for the Rate Setting Period. With FY 2025 as the first year of the proposed rate schedule, revenue requirements are determined for FY 2025 and used for the cost-of-service. Revenue requirements include O&M expenses, debt service, available offsets from non-rate revenues, annual net income, and any mid-year adjustments if rates are implemented after the start of the fiscal year. The mid-year adjustment annualizes the proposed revenue adjustment to account for the time elapsed before new rates take effect to connect to the annual units of service used within this report for deriving rates. Funding the capital plan and replenishing reserves to meet or exceed the minimum reserve requirement is achieved over the Rate Setting Period. The results of the financial plan analysis are summarized in Table 22 and represent the revenue required from rates for FY 2025 through FY 2027.

Table 22: Water Revenue Requirements (FY 2025 – FY 2027)

Rate Setting Period	FY 2025	FY 2026	FY 2027
Revenue Requirements	Total	Total	Total
Water Supply Costs			
Surface Water - Assessments	$117,000	$117,000	$117,000
Surface Water	$262,000	$262,000	$262,000
State Water Project	$346,000	$346,000	$346,000
Groundwater	$2,330,000	$2,348,000	$2,358,000
Total Water Supply Costs	$3,055,000	$3,073,000	$3,083,000
Operating Expenses			
Governing Board	$269,000	$281,000	$294,000
General Administration	$1,013,000	$1,060,000	$1,109,000
Human Resources	$1,815,000	$1,929,000	$2,050,000
Public Affairs	$952,000	$995,000	$1,040,000
Conservation	$721,000	$752,000	$784,000
Finance & Accounting	$998,000	$1,047,000	$1,097,000
Information Technology	$1,265,000	$1,320,000	$1,378,000
Customer Service	$1,375,000	$1,440,000	$1,508,000
Meter Services	$311,000	$326,000	$342,000
Engineering	$1,054,000	$1,102,000	$1,151,000
Water Production	$2,254,000	$2,357,000	$2,465,000
Groundwater Replenishment	$351,000	$351,000	$351,000
Utilities - Pumps & Boosters	$762,000	$819,000	$879,000
Water Treatment	$739,000	$774,000	$810,000
Water Quality	$576,000	$603,000	$631,000
Maintenance Admin	$445,000	$467,000	$491,000
Water Maintenance	$3,246,000	$3,396,000	$3,553,000
Facilities Maintenance	$1,061,000	$1,110,000	$1,162,000
Fleet Maintenance	$641,000	$674,000	$708,000
Total Operating Expenses	$19,848,000	$20,803,000	$21,803,000
Debt Service			
Existing Debt	$2,601,000	$2,192,000	$1,759,000
New/Proposed Debt	$0	$0	$887,000
Total Debt Service	$2,601,000	$2,192,000	$2,646,000
Other Funding			
Revenue Offsets			
Other Operating Revenue	($492,000)	($492,000)	($492,000)
Non-Operating Revenue	($158,000)	($144,000)	($147,000)
Total Revenue Offsets	($650,000)	($636,000)	($639,000)
Adjustments			
Reserve Funding	$4,164,000	$5,424,000	$5,874,000
Adjustment for Mid-Year Increase	$845,000	$898,000	$954,000
Total Adjustments	$5,009,000	$6,322,000	$6,828,000
Total Other Funding	$4,359,000	$5,686,000	$6,189,000
Revenue Requirement from Rates	**$29,863,000**	**$31,754,000**	**$33,721,000**

Define Cost Components

The utility incurs costs to accommodate total water demand that vary throughout the year. Therefore, to determine the most appropriate way to recover the utility's expenses, cost components are identified to allocate expenses based on how they are incurred. By reviewing the revenue requirements and understanding the utility system, it is appropriate and reasonable to utilize the base-extra capacity methodology outlined in the American Water Works Association M1 Manual. This methodology accounts for utility systems costs to meet revenue needs based on average annual usage and total demand. The cost components shown in Figure 12 reflect the cost components used for this study.

Figure 12: Water Cost Components

Cost Components:

Account Services – Fixed expenses that do not necessarily fluctuate based on usage nor are a function of meter size. Customer call center, billing, and other expenses that are incurred based on having an account.

Meter Capacity – Expenses associated with fixed water supply costs, portion of capital, debt, and administration of the system.

Fire Flow Demand – Portion of Peaking costs to meet fire flow demand inherent to the water system.

Surface Water – Water supply costs from shares in North Folk Water Company.

State Water Project – Water supply costs from the purchase of State Water Project water.

Groundwater – Energy costs associated with pumping groundwater from the District's wells.

Delivery – Operating and capital expenses of the water system associated with serving customers at a constant average use or average daily demand. These costs tend to vary with the total water used.

Peaking – Expenses incurred to meet customer peak demands in excess of average day usage.

Water Efficiency – Expenses associated with education, conservation, and rebate programs.

Allocate Expenses to Cost Components

The analysis herein establishes cost components for developing fixed charges and commodity rates. Total volume and usage patterns of customers and tiers are analyzed to allocate expenses proportionately based on total usage and incremental increases in demands placed on the system in comparison to average usage demands. Peak demand is a function of Max Day Demand (Max Day) and Max Hour Demand (Max Hour) placed on the system in comparison to Average Day Demand (Avg Day). The system is configured with distribution and transmission lines ranging in size from 2" diameter to 36" diameter. This system configuration provides fire flow demand inherent to a utility system and accounts for peak water demands generated by how customers use water in excess of Avg Day. Max Day is the maximum amount of water used on a single day of a calendar year. Max Hour reflects the peak hourly use on the system in comparison to Avg Day.

When allocating expenses to the defined costs components, it is important to have a sound basis as to why an expense was allocated to a certain fixed cost component versus a variable cost component or split between both fixed and variable. The distribution of expenses to the cost components should be straight-forward to ensure the method of apportionment is **understandable** and easily **correlates to how expenses are incurred**. A description of each expense category is identified below.

Expense Categories:

Fixed Water Supply Costs – Fixed costs associated with the North Folk Water Company surface water.

Groundwater – Costs associated with electricity.

Surface Water – Costs associated with treatment expenses, including energy.

State Water Project – Purchased water costs and treatment expenses, including energy.

Board of Directors – Board of Director stipends, benefits, supplies, and contract services.

General Administration – General and overhead costs, including personnel, contract services, memberships, supplies, and utilities.

Human Resources – Oversees personnel related programs. Expenses include personnel, supplies, contract services, utilities, memberships, professional development, and insurance.

Public Affairs – Oversees internal and external communication programs. Expenses include personnel, supplies, utilities, and contract services.

Conservation – Costs associated with sustainable water use, including personnel, supplies, and advertising.

Finance & Accounting – Oversees transparency and oversight of funds. Expenses include personnel, supplies, banking, utilities, and contract service.

Information Technology – Costs associated with maintaining technology and software programs. Expenses include personnel, supplies, utilities, and contract service.

Customer Service – Costs associated with customer relations and billing. Expenses including personnel, supplies, utilities, contract services, and postage.

Meter Service – Oversees monthly meter reading, on-site customer meter-related requests, and customer service assistance. Expenses include personnel, supplies, utilities, and contract service.

Engineering – Costs associated with the engineering department, including personnel, supplies, utilities, contract services, and permits.

Water Production – Costs associated with groundwater production, except for energy costs of the wells which are part of the *Commodity Water Supply Costs.* Costs related to the groundwater replenishment charge and energy costs of pumps & boosters are broken out to allocate those costs separately.

Water Treatment – Cost of treating all water supplies. Expenses include personnel costs, supplies, and contract services.

Water Quality – Costs associated with testing water at sources and within the system.

Maintenance Administration – Overhead expenses for field maintenance. Expenses include personnel, supplies, utilities, and memberships.

Water Maintenance – Oversees the repair and replacement of the water system and all related equipment. Expenses include personnel, supplies, utilities, contract services, and street services.

Facility Maintenance – Costs associated with maintaining facilities.

Fleet Maintenance – Costs associated with the fleet department. Expenses include personnel, rentals, vehicles, tools, fuel, supplies, and contract services.

The District maintains infrastructure and capital improvements that are designed to accommodate total usage and peak demands on the system. This means system facilities are designed and constructed specifically to accommodate peak demand, or to oversize infrastructure to serve both average usage, and peak usage. Constructing such infrastructure, whether specifically dedicated to peak demand or oversized to accommodate peak demand and average use, causes the District to incur additional cost that would not otherwise be incurred if customer usage did not exceed average demand. For example, the treatment plant, storage facilities, and transmission & distribution lines are constructed to not only accommodate average daily demand but also the impacts of peak use on the system.

Proposition 218 requires that the District establish rates that represent the proportionate cost-of-service. In addition, the California Court of Appeal has previously held that tiered rates are an appropriate means to allocate infrastructure costs, so that average or lower-than-average water users do not pay for facilities designed to accommodate peak demand. Peaking characteristics are used as a means of allocating the costs of such facilities proportionately to the usage driving the District to incur those costs.

System peaking characteristics are used to allocate costs to Avg Day (Delivery) and Max Day / Max Hour (collectively, Peaking). Avg Day is assigned a factor of 1.0 signifying no peaking demands. Max Day is the actual usage during the Max Day event of FY 2022[3]. Max Hour takes the Max Day demand and multiplies it by the Max Hour factor from the Water MP, equal to 2.75. A Max Hour peaking factor of 2.75 means that the system delivers 2.75 times the average daily demand during peak hour. To determine the percentage allocations for Avg Day, Max Day, and Max Hour, the following calculations are used:

Avg Day – 10,905 gallons per minute (gpm) based on actual water usage in FY 2022. Average day is calculated by taking the total fiscal year water usage in gallons and converting to usage in gpm, representing no peaking.

Max Day – The Max Day event recorded 17,000 gpm. Therefore, Avg Day makes up 64.1% of the Max Day (10,905 / 17,000 = 0.641) and the incremental increase of demand during Max Day (peaking) is 35.9%.

Max Hour – The Max Hour peak factor is 2.75, resulting in 46,751 gpm (17,000 gpm x 2.75 = 46,751). Therefore, the Avg Day makes up 23.3% of Max Hour (10,905 / 46,751 = 0.233), and the incremental amount related to peaking associated with Max Hour equals 76.7% (100% - 23.3% = 76.7%).

These peaking characteristics and corresponding allocations provide a means to spread costs incurred as a function of serving Max Day and Max Hour proportionately between Delivery and Peaking. Table 23 summarizes the percentage allocations of Delivery and Peaking associated with Avg Day, Max Day, and Max Hour.

[3] FY 2022 consumption was used for this analysis, reflecting a typical year as FY 2023 was a historical wet year.

Table 23: System Demand Allocations Between Delivery and Peaking

System Peak Analysis			
System Peak	System Demand	Delivery	Peaking
	[A]	[B] = A ÷ 10,905	[C] = 100% - B
Average Day	10,905 gpm	100.0%	0.0%
Max Day	17,000 gpm	64.1%	35.9%
Max Hour	46,751 gpm	23.3%	76.7%

In addition to Max Day and Max Hour demand, a water system is configured to also accommodate Fire Flow Demand (FFD) for fire suppression with the sizing of pipes, storage facilities and other appurtenant facilities to meet Max Day and Max Hour demand. FFD can be incorporated into this analysis as a component of Max Day and Max Hour. Based on the District's system requirements within its Water MP, the maximum fire flow needs vary by land use from 1,500 gallons per minute (gpm) for single-family residential up to 3,000 gpm for non-residential. Fire flow requirements were weighted by the corresponding accounts to derive the typical fire flow requirement needed during a probable fire event within the District's service area. Table 24 derives the weighted fire flow requirement and Table 25 identifies the portion of Max Day and Max Hour associated with fire flow demand by using the fire flow requirement derived in Table 24.

Table 24: Fire Flow Requirements within District's Service Area

Fire Flow Demand Assumptions						
FFD by Land Use	FFD	Duration	# of Accounts	% of Accounts	Weighted Avg FFD	Weighted Avg Duration
	[A]	[B]	[C]	[D] = C as %	[E] = A x D	[F] = B x D
Single-Family	1,500 gpm	2 hours	19,916	92.8%	1,391 gpm	1.86 hours
Multi-Family	2,500 gpm	2 hours	484	2.3%	56 gpm	.05 hours
Commercial	3,000 gpm	3 hours	722	3.4%	101 gpm	.10 hours
Irrigation	1,500 gpm	2 hours	349	1.6%	24 gpm	.03 hours
Total			**21,471**	**100.0%**	**1,573 gpm**	**2.03 hours**

Table 25: Fire Flow Demand as Percentage of Max Day and Max Hour

Fire Flow Demand Analysis				
Line #	FFD as a % of System Demand *(Conversions)*	Source	Max Day	Max Hour
1	System Demand			
2	System Demand		17,000 gpm	46,751 gpm
3	× 60 Minutes		60	60
4	× 24 Hours		24	N/A
5	System Demand (gallons)		24,480,684	2,805,078
6	Fire Flow Demand			
7	Weighted Average FFD (gpm)	(**Table 24**, *Column E*)	1,573 gpm	1,573 gpm
8	× 60 Minutes		60	60
9	Weighted Average FFD (gph)		94,379	94,379
10	× Time Duration	(**Table 24**, *Column F*)	2.03	1.00
11	Fire Flow Demand (gallons)		191,932	94,379
12	Total Demand (gallons)	(*Line 5 + Line 11*)	24,672,616	2,899,457
13	**FFD as % of System Demand**	***(Line 11 ÷ Line 12)***	**0.8%**	**3.3%**

Table 26 summarizes the percentage allocations between Delivery and Peaking from Table 23, plus the additional allocations when accounting for FFD from Table 25.

Table 26: System Peaking Factors and Distribution Basis

System Peak Analysis			
System Peak	FFD [A]	Delivery [B]	Peaking [C] = 100% - (A+B)
Average Day	0.0%	100.0%	0.0%
Max Day	0.0%	64.1%	35.9%
Max Hour	0.0%	23.3%	76.7%
Max Day + FFD	0.8%	64.1%	35.1%
Max Hour + FFD	3.3%	23.3%	73.4%

Table 27 summarizes the percent allocation of water supply costs and corresponding dollar amounts to the water supply cost components of Meter Capacity, Groundwater, Surface Water, and State Water Project. Fixed water supply costs are assigned to Meter Capacity. Water supply expenses are not reduced by any revenue offsets or increased for reserve funding.

Table 27: Water Supply Expense Allocation to Cost Components

		Cost Components				
Water Supply Costs	Methodology / Allocation Basis	Meter Capacity	Surface Water	State Water Project	Groundwater	Total
Fixed Water Supply Costs						
Surface Water - Assessme	Specific	100.0%	0.0%	0.0%	0.0%	100.0%
Variable Water Supply Costs						
Surface Water	Specific	0.0%	100.0%	0.0%	0.0%	100.0%
State Water Project	Specific	0.0%	0.0%	100.0%	0.0%	100.0%
Groundwater	Specific	0.0%	0.0%	0.0%	100.0%	100.0%

Water Supply Costs	Methodology / Allocation Basis	Meter Capacity	Surface Water	State Water Project	Groundwater	Total
Fixed Water Supply Costs						
Surface Water - Assessme	Specific	$117,000	$0	$0	$0	$117,000
Variable Water Supply Costs						
Surface Water	Specific	$0	$262,000	$0	$0	$262,000
State Water Project	Specific	$0	$0	$346,000	$0	$346,000
Groundwater	Specific	$0	$0	$0	$2,330,000	$2,330,000
Total Allocation ($)		**$117,000**	**$262,000**	**$346,000**	**$2,330,000**	**$3,055,000**

Table 28 summarizes the percent allocation of O&M Revenue Requirements to the cost components and corresponding expenses in dollars to each cost component. Overhead costs (Human Resources, Public Affairs, Finance & Accounting) and Customer Service were allocated to the fixed components of Account Service and Meter Capacity evenly (50%/50%) as these expenses include general costs incurred for serving total active accounts and costs associated with operating the water system.

Table 28: Water O&M Expense Allocation to Cost Components

Operating Expenses	Methodology / Allocation Basis	Cost Components: Account Service	Meter Capacity	Fire Flow Demand	Delivery	Peaking	Water Efficiency	Total
Governing Board	Specific	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
General Administration	Specific	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Human Resources	Specific	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Public Affairs	Specific	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Conservation	Specific	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Finance & Accounting	Specific	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Information Technology	Specific	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Customer Service	Specific	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Meter Services	Specific	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Engineering	Max Day + FFD	0.0%	0.0%	0.8%	64.1%	35.1%	0.0%	100.0%
Water Production	Max Day + FFD	0.0%	0.0%	0.8%	64.1%	35.1%	0.0%	100.0%
Groundwater Replenishment	Average Day	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Utilities - Pumps & Boosters	Max Hour + FFD	0.0%	0.0%	3.3%	23.3%	73.4%	0.0%	100.0%
Water Treatment	Max Day + FFD	0.0%	0.0%	0.8%	64.1%	35.1%	0.0%	100.0%
Water Quality	Average Day	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Maintenance Admin	Average Day	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Water Maintenance	Max Day + FFD	0.0%	0.0%	0.8%	64.1%	35.1%	0.0%	100.0%
Facilities Maintenance	Max Day + FFD	0.0%	0.0%	0.8%	64.1%	35.1%	0.0%	100.0%
Fleet Maintenance	Average Day	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%

Operating Expenses	Methodology / Allocation Basis	Account Service	Meter Capacity	Fire Flow Demand	Delivery	Peaking	Water Efficiency	Total
Governing Board	Specific	$0	$269,000	$0	$0	$0	$0	$269,000
General Administration	Specific	$0	$1,013,000	$0	$0	$0	$0	$1,013,000
Human Resources	Specific	$907,500	$907,500	$0	$0	$0	$0	$1,815,000
Public Affairs	Specific	$476,000	$476,000	$0	$0	$0	$0	$952,000
Conservation	Specific	$0	$0	$0	$0	$0	$721,000	$721,000
Finance & Accounting	Specific	$499,000	$499,000	$0	$0	$0	$0	$998,000
Information Technology	Specific	$0	$1,265,000	$0	$0	$0	$0	$1,265,000
Customer Service	Specific	$687,500	$687,500	$0	$0	$0	$0	$1,375,000
Meter Services	Specific	$0	$311,000	$0	$0	$0	$0	$311,000
Engineering	Max Day + FFD	$0	$0	$8,199	$676,087	$369,714	$0	$1,054,000
Water Production	Max Day + FFD	$0	$0	$17,534	$1,445,825	$790,640	$0	$2,254,000
Groundwater Replenishment	Average Day	$0	$0	$0	$351,000	$0	$0	$351,000
Utilities - Pumps & Boosters	Max Hour + FFD	$0	$0	$24,804	$177,740	$559,457	$0	$762,000
Water Treatment	Max Day + FFD	$0	$0	$5,749	$474,031	$259,221	$0	$739,000
Water Quality	Average Day	$0	$0	$0	$576,000	$0	$0	$576,000
Maintenance Admin	Average Day	$0	$0	$0	$445,000	$0	$0	$445,000
Water Maintenance	Max Day + FFD	$0	$0	$25,251	$2,082,143	$1,138,606	$0	$3,246,000
Facilities Maintenance	Max Day + FFD	$0	$0	$8,254	$680,577	$372,169	$0	$1,061,000
Fleet Maintenance	Average Day	$0	$0	$0	$641,000	$0	$0	$641,000
Total Allocation ($)		**$2,570,000**	**$5,428,000**	**$89,790**	**$7,549,402**	**$3,489,807**	**$721,000**	**$19,848,000**
Operating Expenses Allocation (%)		*12.9%*	*27.3%*	*0.5%*	*38.0%*	*17.6%*	*3.6%*	*100.0%*

Debt revenue requirements are shown in Table 29 as a separate section to identify the existing debt obligation of the water utility. However, debt service payments are part of the District's operating budget. Therefore, Debt Service is allocated based on the operating expense percentages derived at the bottom of Table 28.

Table 29: Water Debt Expense Allocation to Cost Components

		Cost Components						
Debt Service	Methodology / Allocation Basis	Account Service	Meter Capacity	Fire Flow Demand	Delivery	Peaking	Water Efficiency	Total
Existing Debt	O&M Allocation	12.9%	27.3%	0.5%	38.0%	17.6%	3.6%	100.0%
New/Proposed Debt	O&M Allocation	12.9%	27.3%	0.5%	38.0%	17.6%	3.6%	100.0%

Debt Service	Methodology / Allocation Basis	Account Service	Meter Capacity	Fire Flow Demand	Delivery	Peaking	Water Efficiency	Total
Existing Debt	O&M Allocation	$336,788	$711,317	$11,767	$989,319	$457,325	$94,484	$2,601,000
New/Proposed Debt	O&M Allocation	$0	$0	$0	$0	$0	$0	$0
Total Allocation ($)		**$336,788**	**$711,317**	**$11,767**	**$989,319**	**$457,325**	**$94,484**	**$2,601,000**

Table 30 summarizes the percent allocation of Other Funding to the cost components and corresponding expenses in dollars to each cost component. Other Funding includes revenue offsets from both Other Operating Revenues and Non-Operating Revenues, Capital / Reserve Funding, and Mid-Year Adjustments. All line items were allocated to the cost components proportionately based on O&M percentages derived in Table 28.

Table 30: Water Other Funding to Cost Components

		Cost Components						
Other Funding	Methodology / Allocation Basis	Account Service	Meter Capacity	Fire Flow Demand	Delivery	Peaking	Water Efficiency	Total
Revenue Offsets								
Other Operating Re	O&M Allocation	12.9%	27.3%	0.5%	38.0%	17.6%	3.6%	100.0%
Non-Operating Reve	O&M Allocation	12.9%	27.3%	0.5%	38.0%	17.6%	3.6%	100.0%
Adjustments								
Reserve Funding	O&M Allocation	12.9%	27.3%	0.5%	38.0%	17.6%	3.6%	100.0%
Adjustment for Mid	O&M Allocation	12.9%	27.3%	0.5%	38.0%	17.6%	3.6%	100.0%

Other Funding	Methodology / Allocation Basis	Account Service	Meter Capacity	Fire Flow Demand	Delivery	Peaking	Water Efficiency	Total
Revenue Offsets								
Other Operating Re	O&M Allocation	($63,706)	($134,551)	($2,226)	($187,138)	($86,507)	($17,872)	($492,000)
Non-Operating Reve	O&M Allocation	($20,458)	($43,210)	($715)	($60,097)	($27,781)	($5,740)	($158,000)
Adjustments								
Reserve Funding	O&M Allocation	$539,172	$1,138,764	$18,838	$1,583,823	$732,142	$151,262	$4,164,000
Adjustment for Mid	O&M Allocation	$109,414	$231,089	$3,823	$321,405	$148,574	$30,696	$845,000
Total Allocation ($)		**$564,421**	**$1,192,093**	**$19,720**	**$1,657,993**	**$766,428**	**$158,345**	**$4,359,000**

Table 31 summarizes the total revenue requirement derived in Table 22 by cost component.

Table 31: Water FY 2025 Cost-of-Service Requirements

FY 2025 Revenue Requirements										
Revenue Requirement	Account Service	Meter Capacity	Fire Flow Demand	Surface Water	State Water Project	Groundwater	Delivery	Peaking	Water Efficiency	Total
Water Supply Costs	$0	$117,000	$0	$262,000	$346,000	$2,330,000	$0	$0	$0	$3,055,000
Operating Expenses	$2,570,000	$5,428,000	$89,790	$0	$0	$0	$7,549,402	$3,489,807	$721,000	$19,848,000
Debt Service	$336,788	$711,317	$11,767	$0	$0	$0	$989,319	$457,325	$94,484	$2,601,000
Other Funding	$564,421	$1,192,093	$19,720	$0	$0	$0	$1,657,993	$766,428	$158,345	$4,359,000
COS Requirements	**$3,471,209**	**$7,448,410**	**$121,277**	**$262,000**	**$346,000**	**$2,330,000**	**$10,196,714**	**$4,713,561**	**$973,830**	**$29,863,000**

Rate Design – Water Utility

Develop Units of Service

Unit rates for each cost component are derived by spreading the corresponding revenue requirements over appropriate units of service (distribution basis). This approach provides a clear connection between costs incurred and the proportionate share attributable to each customer class, corresponding tier, and customer account. When designing rates, the most critical component is to connect costs to the proposed rates, resulting in a rate structure that is cost-based and in compliance with Proposition 218. The previous section summarized costs by expense category and then allocated the expenses to cost components based on how each cost is incurred. The next step in designing rates is to allocate each cost component to customers in relation to their use of the system and facilities.

The method of apportionment considers each customer's share of system costs and is reflected by the units of service used to equitably distribute the cost components to each customer account. The distribution basis varies by cost component and includes total accounts, Meter Equivalents (MEs), which reflect demand placed on the system based on meter size, total water sales, usage by tier, and usage weighted by peaking for each customer class and tier. Each meter size was assigned an equivalency factor using the flow characteristics of a 3/4" meter, equal to 30 gpm. The District's meter inventory was reviewed, and the specifications of the meters were provided for determining the safe operating yield (gpm), for each meter size. The safe maximum operating flow capacity for each meter size was divided by the safe operating flow capacity of the 3/4" meter (30 gpm) to determine the equivalent meter ratio. The Capacity Ratio represents the potential flow through each meter size compared to the flow through a 3/4" meter to establish parity between meter sizes. Total MEs are determined by multiplying the number of meters by the Capacity Ratio and then multiplying the result by 12 billing periods. Table 32 summarizes the units of service related to total Accounts and MEs.

Table 32: Accounts and Meter Equivalents

Fixed Units by Customer Class and Meter Size							
Line #	Meter Size	EVWD Capacity (gpm) [A]	EVWD Ratio [B] = A ÷ 30	Potable Accounts [C]	Dedicated Firelines [D]	Potable + Firelines [E] = C + D	Potable Meter Equivalents [F] = B x C
1	5/8"	20	0.67	3,479	0	3,479	2,319
2	3/4"	30	1.00	13,066	1	13,067	13,066
3	1"	50	1.67	4,235	2	4,237	7,058
4	1 1/2"	100	3.33	276	1	277	920
5	2"	160	5.33	303	0	303	1,616
6	3"	500	16.67	63	0	63	1,050
7	4"	1,250	41.67	24	49	73	1,000
8	6"	2,000	66.67	12	144	156	800
9	8"	4,000	133.33	13	60	73	1,733
10	10"	6,500	216.67	-	15	15	-
11	12"	8,000	266.67	-	-	-	-
12	Total			21,471	272	21,743	29,563
13	Annual Units (Line 12 x 12 billing periods)			257,652	3,264	260,916	354,756

Total usage and peaking factors must be calculated for each customer class and tier to derive the units of service for allocating commodity costs. As part of this rate study and cost-of-service, commercial accounts will be adjusted to a uniform commodity rate instead of budget-based rates based on historical use. The current rate structure sets Tier 1 at 90% of historical water usage, with Tier 2 set at the remaining 10%, and any excess usage over Tier 2 would be charged the Tier 3 rate. However, as commercial customers reduce their water usage, each year's Tier 1 allotment is updated to reflect 90% of the new historical average. As commercial customers achieve reduction in water usage to stay within Tier 1, the updated water budget for each subsequent year would continuously decrease as water efficiency is achieved. Therefore, it is not practical to require commercial customers to continuously reduce their usage in perpetuity. The rate structure for commercial customers should either be adjusted to set water budgets based on unique water efficiency standards for each type of use or switch to a uniform rate and each commercial account pays their fair share of cost based on total water usage.

For budget-based rate customers, each account receives unique water budget allotments for Tier 1 and Tier 2. Tier 1 is associated with indoor use (Indoor Water Budget or IWB) and Tier 2 is associated with irrigable area (Outdoor Water Budget or OWB); the two tiers combined is an account's Total Water Budget (TWB). To determine the peaking factor for each tier, IWB are set to a peak of 1.0 as indoor use is not considered peaking and is within Avg Day. The average use per account for each tier, during the peak month (July), is then compared to the total base water allotment in Tier 1, equal to 8 hcf. Commercial has a uniform rate, and the peaking factor is derived by taking the customer class's usage per account during the max month of July divided by average annual usage per account. Table 33 provides the projected usage for FY 2025, broken out by customer class and tier, and weighted peak for each tier and customer class.

Table 33: Peaking Factor by Customer Class and Tier[4]

Projected Usage by Customer Class and Tier					
Customer Class	Tiers	Projected Usage [A]	Average Usage per Account [B]	Peaking Factor [C] = B ÷ Tier 1	Weighted Peak [D] = A x C
Budget Based Customers					
Tier 1	*IWB*	2,413,489	8.00	1.00	2,413,489
Tier 2	*OWB*	2,544,818	17.61	2.20	5,602,038
Tier 3	*> TWB*	1,159,766	26.50	3.31	3,842,158
Subtotal Budget Based Customers		6,118,072			11,857,685
Commercial					
Uniform	*Uniform*	701,355		1.19	834,476
Subtotal Commercial Consumption (hcf)		701,355			834,476
Total Consumption (hcf)		**6,819,427**			**12,692,160**

[4] Peaking factor for commercial was derived by taking average usage per account in July divided by the average annual usage per account (136.496 ÷ 114.721 = 1.19).

With the units of service shown in Table 32 and Table 33, the distribution basis can be identified for each cost component. Figure 13 identifies the total revenue requirements by cost component from Table 31 and the corresponding units of service.

Figure 13: Water Distribution Basis and Units of Service by Cost Component

Using the FY 2025 revenue requirements, the cost-of-service allocates expenses to customers and tiers based on the service demands that each place on the system (cost causation). This ensures that each customer proportionately shares in the financial obligation of the utility. For the following unit rate computations for each cost component, unit rates were rounded up to the nearest penny.

Fixed Cost Recovery

Account Services

Each customer incurs Account Services costs, including dedicated firelines, regardless of the type of land use, meter size, or total amount of water used in a month. These costs should be spread equally across all accounts. This is achieved by using the distribution basis of Total Bills. Total Bills are determined by multiplying the number of accounts by 12 billing periods (Table 32, Line 13 – Column C). Therefore, the revenue requirement for Account Services is apportioned based on the Total Bills to determine the monthly unit cost-of-service shown in Table 34.

Table 34: Water Account Services Monthly Unit Rate

Account Service Component - Unit Rate	
Revenue Requirement	$3,471,209
÷ Annual Bills	260,916
Monthly Unit Rate	**$13.31**

Meter Capacity

The Meter Capacity Component includes system-wide operations costs and a portion of debt and capital. The revenue requirement for Meter Capacity is apportioned based on meter size. Larger sized meters can generate a greater demand on the system from the amount of potential water flow that may pass through the meter in gallons per minute (gpm). The revenue requirement for Meter Capacity is apportioned to meter size as represented by total MEs (Table 32, Line 13 – Column D) in Table 35.

Table 35: Water Meter Capacity Monthly Unit Rate

Meter Capacity Component Unit Rate	
Revenue Requirement	$7,448,410
÷ Annual ME's (less FL)	354,756
Monthly Unit Rate	**$21.00**

Fire Flow Demand

System fire flow demand revenue requirements are allocated between dedicated firelines and hydrants based on the fire flow demand of all connections. Potable meters recover the portion associated with the fire flow demand of all hydrants for the standby services rendered to all potable accounts for system fire flow capacity. Table 36 identifies all connections by size (in diameter inches) between dedicated firelines and hydrants. The cross-sectional diameter of the line is multiplied by total connections of each size and the result is then raised to the 2.63 power, using the principals of the Hazen-Williams equation for the relative flow potential through pressure conduits, which is a function of the diameter size. Table 37 takes the fire flow demand units of service derived in Table 36 and allocated the FY 2025 cost-of-service fire flow demand revenue requirement between system hydrants and dedicated firelines. Table 38 takes the portion associated with fire flow demand of the water system's connected hydrants and spreads the cost to potable meters based on MEs. The portion related to dedicated firelines is recovered based on the unit rate per diameter inch derived in Table 39.

Table 36: Fire Flow Demand Allocations

Fire Demand Assumptions						
Line #	Dedicate Fire Lines		Connections [A]	Size of Line [B]	Diameter Inches [C] = A × C	Fire Flow Demand [D] = A × (B^2.63)
1	System Fire Flow					**2.63**
2	Public Hydrants					
3	1"		7	1	7	7
4	2"		76	2	152	470
6	4"		483	4	1,932	18,508
7	6"		2,456	6	14,736	273,380
9	12"		3	12	36	2,067
10	Subtotal Public Hydrants		3,025		16,863	294,432
11	Dedicated Fire Lines					
13	3/4"		1	0.75	1	0.5
14	1"		2	1.00	2	2
15	1 1/2"		1	1.50	2	3
18	4"		49	4.00	196	1,878
19	6"		144	6.00	864	16,029
20	8"		60	8.00	480	14,232
21	10"		15	10.00	150	6,399
23	Subtotal Dedicated Fire Lines		272		1,694	38,543
24	Annual Public Hydrants	*Line 10 x 12 of billing periods*	36,300		202,356	3,533,189
25	Annual Dedicated Fire Lines	*Line 23 x 12 of billing periods*	3,264		20,331	462,515
26	**Annual Units**		**39,564**		**222,687**	**3,995,704**

Table 37: Fire Flow Demand Revenue Requirement Allocation

Fire Flow Demand Revenue Requirement Allocation			
Firelines	Fire Flow Demand	% Allocation	Revenue Requirement
	[A] = Table 40	[B] = A as %	[C] = Rev Req x B
Public Hydrants	3,533,189	88.4%	$107,239
Dedicated Firelines	462,515	11.6%	$14,038
Total	**3,995,704**	**100.0%**	**$121,277**

Table 38: Potable Meters Fire Flow Demand Monthly Unit Rate

Public Hydrants Component - Unit Rate	
Revenue Requirement	$107,239
÷ Annual ME's (less FL)	354,756
Monthly Unit Rate	**$0.31**

Table 39: Dedicated Fireline Monthly Unit Rate

Dedicated Firelines Component - Unit Rate	
Revenue Requirement	$14,038
÷ Diameter Inches	20,331
Monthly Unit Rate	**$0.70**

Commodity Cost Recovery

The remaining cost components are recovered through the commodity rates. The proposed rate structure consists of a three-tiered budget-based rate structure for residential customers and irrigation customers[5], with commercial customers adjusting to a uniform rate. A budget-based rate structure is designed to connect the cost of delivering water to the unique water needs of each customer, while encouraging water efficiency. Budget-based tiered allotments define the purpose of each tier and the criteria used to derive each account's water budget. Irrigation accounts do not receive an indoor budget and are provided an outdoor water budget-based for the irrigation account's irrigable area. Table 40 summarizes how water budgets are determined by type of account.

[5] Irrigation accounts do not have a Tier 1 - IWB and only a Tier 2 - OWB.

Table 40: Water Budget Allocations

Account Type	Water Budgets	Water Budget Formulas[6]	Variance (V)	Drought Factor (DF)
Residential	Tier 1 Budget = IWB	$\frac{\text{Household Size x 55 gpcd x Units x Billing Days}}{748.05}$	IWB+VF	-
	Tier 2 Budget = OWB	$\frac{\text{Irrigable SF Area x } ET_0 \text{ x ETAF x 0.623 gallons}}{748.05}$	OWB+VF	(OWB+VF) x DF
Irrigation	Tier 1 Budget	N/A	-	-
	Tier 2 Budget = OWB	$\frac{\text{Irrigable SF Area x } ET_0 \text{ x ETAF x 0.623 gallons}}{748.05}$	OWB+VF	(OWB+VF) x DF

Legend:

Household Size: Number of people per household. The District's policy is to provide adequate water for health and safety needs and minimize customer complaints and requests for variances. As such the default values for a residential household is 4 persons per dwelling. Customers may file a variance request if the Household Size is greater than 4 people.
gpcd: Gallons per Capita per Day.
Units: Residential dwelling units connected to the account.
Billing Days: Number of days between meter reads.
Irrigable SF Area: The irrigable area in square feet served by each account's meter(s).
ET_0: Evapotranspiration is the sum of evaporation of water from the soil surface plus transpiration (water loss) from the plant/crop itself. ETo is the amount of water used by well-irrigated, mowed grass.
ETAF: Evapotranspiration Adjustment Factor is a percentage of ETo based on the amount of water needed for turf during a given month.
VF: Additional Water Budget provided to either IWB or OWD based on unique circumstances, which must be approved by the District. Indoor variances may include, but are not limited to, additional persons per household, medical needs, and livestock. Outdoor variances may include, but are not limited to pools and adjustment to ETAF based on type of crop.
DF: Percent of Water Budgets during drought conditions. Default percentage is set to 100% during non-drought periods.
0.623: Conversion factor to determine volume in cubic feet of one inch of rain over one square foot. (1 inch = 0.0833 ft ➡ 0.0833x1ftx1ft = 0.0833ft^3 ➡ 0.083 ft^3 x 7.48 gallons / ft^3 = 0.623 gallons)

The proposed rate structure is similar to the existing budget-based rate structure with a slight adjustment to the residential tier 1 indoor allotment for residential customers. Tier 1 will now reflect 47 gpcd, reduced down from 55 gpcd. This recommended adjustment is in-line with State SB 1157 efficiency targets to achieve 47 gpcd by January 2025. In addition, the indoor efficiency target is expected to continue to adjust down to 42 gpcd by 2030 and may be slowly incorporated within future rate studies.

[6] The denominator of 748.05 is the number of gallons in one hcf of water.

Water Supply

The District receives water from three different water supply sources. Table 41calculates the unit rate for each source of water based on the revenue requirement and corresponding units of service. For each water supply, the units of service directly correlate to the amount of water production from each source, after accounting for water loss of 8.3%. Detailed calculations of water supply costs are incorporated under Appendix A.

Table 41: Water Supply Unit Rates

Development of Water Supplies - Effective Unit Cost (hcf)						
Water Supplies	Production / Purchases	Water Loss	Net Water Supply	Available Supply (hcf)	Revenue Requirement	Effective Unit Cost
	[A] = Acre Feet	[B]	[C] = A × (1-B)	[D] = C × 435.6	[E]	[F] = E ÷ D
Surface Water	3,950	8.3%	3,622	1,577,809	$262,000	**$0.17**
State Water Project	1,800	8.3%	1,651	719,001	$346,000	**$0.48**
Groundwater	11,322	8.3%	10,383	4,522,617	$2,330,000	**$0.52**

With the three primary water sources of Surface Water, State Water Project, and Groundwater to serve current water demand, a water supply unit rate must be determined for each customer class and tier. Each customer class receives a proportionate share of Surface Water and State Water Project based on their percentage of total water usage. Groundwater is then used to cover the remaining demand of each customer class. **Error! Reference source not found.** summarizes the amount of water - by source - used to serve total water demand for each customer class and tier. For customers on tiered budget-based rates, Tier 1 water demand is more than what can be served by Surface Water and State Water Project. Therefore, Tier 1 is a blended rate of all three water sources, and Tier 2 and Tier 3 are served 100% by groundwater. Commercial customers' water supply rate is a blended rate of all three water supplies, reflecting their pro rata share of each water supply based on percentage of total water usage (10.3%). Table 42 summarizes the water supply costs by customer class and tier, and corresponding unit rates.

Table 42: Water Supply Unit Rate by Customer Class and Tier

Water Supply Allocation to Customer Classes / Tier & Unit Rate Development								
Customer Class & Tier	Projected Usage (hcf)	% Allocation	Surface Water (hcf)	State Water Project (hcf)	Groundwater (hcf)	Projected Usage (hcf)	Revenue Requirement	Unit Rate ($/hcf)
	[A]	[B] = A as %	[C] = AS × B	[D] = AS × B	[E] = AS × B		[F] = Sum of (Unit Rates × AS Usage)	[G] = F ÷ A
Available Supply (AS)			*1,577,809*	*719,001*	*4,522,617*			
Effective Unit Cost ($/hcf)			*$0.17*	*$0.48*	*$0.52*			
Budget Based Customers								
Tier 1	2,413,489		1,415,536	645,055	352,898	2,413,489	$727,278	**$0.31**
Tier 2	2,544,818		-	-	2,544,818	2,544,818	$1,311,061	**$0.52**
Tier 3	1,159,766		-	-	1,159,765	1,159,765	$597,498	**$0.52**
Subtotal Budget Based Customers	6,118,072	89.7%	1,415,536	645,055	4,057,481	6,118,072	$2,635,837	
Commercial								
Uniform	701,355		162,272	73,947	465,136	701,355	$302,163	**$0.44**
Subtotal Commercial	701,355	10.3%	162,272	73,947	465,136	701,355	$302,163	
Total	6,819,427	100.0%	1,577,809	719,001	4,522,617	6,819,427	$2,938,000	

Delivery

Delivery costs are incurred based on the total volume of water produced and delivered to customers at a constant average demand throughout the year. Therefore, the revenue requirement for Delivery is apportioned based on projected total water usage to determine the unit cost-of-service, irrespective of customer class and tier, as shown in Table 43.

Table 43: Water Delivery Unit Rate by Customer Class

Delivery Allocation to Customer Classes				
Customer Class	Projected Usage [A]	% Allocation [B] = A as %	Revenue Requirement [C] = Rev Req x B	Unit Rate [D] = C ÷ A
Budget Based Customers	6,118,072	89.7%	$9,148,016	**$1.50**
Commercial	701,355	10.3%	$1,048,698	**$1.50**
Total	6,819,427	100.0%	$10,196,714	

Peaking

Peaking costs are incurred not only based on the total volume of water produced and delivered but also as a function of the peaking characteristics of tiers. Therefore, the revenue requirement for Peaking is allocated to each customer class and tier based on the Weighted Peaking derived in Table 33. Table 44 allocates the Peaking revenue requirement and derives unit rates for each customer class and tier.

Table 44: Water Peaking Unit Rate by Customer Class and Tier

Peaking Allocation to Customer Class and Tiers					
Customer Class & Tier	Projected Usage [A]	Weighted Peak [B]	% Allocation [C] = B as a %	Revenue Requirement [D] = Rev Req × C	Unit Rate [E] = D ÷ A
Budget Based Customers					
Tier 1	2,413,489	2,413,489	20.4%	$896,311	**$0.38**
Tier 2	2,544,818	5,602,038	47.2%	$2,080,461	**$0.82**
Tier 3	1,159,766	3,842,158	32.4%	$1,426,884	**$1.24**
Subtotal Budget Based Customers	6,118,072	11,857,685	100%	$4,403,657	
Commercial					
Uniform	701,355	834,476	100.0%	$309,904	**$0.45**
Subtotal Commercial	701,355	834,476	100%	$309,904	
Total	6,819,427	12,692,160		$4,713,561	

Water Efficiency

Water Efficiency revenue requirements are recovered over water usage in Tier 3 as water efficiency programs and incentives are aimed to mitigate inefficient water usage in Tier 3. Therefore, as usage in tier 3 reduces, the Water Efficiency revenue requirements adjust accordingly. Table 45 summarizes how Water Efficiency cost allocation to Tier 3 and corresponding unit rate.

Table 45: Water Efficiency Unit Rate by Tier

Water Efficiency Allocation to Tiers					
Customer Class & Tier	Projected Usage [A]	Weighted Usage [C] = A × B	% Allocation [D] = C as a %	Revenue Requirement [E] = Rev Req x D	Unit Rate [F] = E ÷ A
Budget Based Customers					
Tier 1	2,413,489	-	0.0%	$0	**$0.00**
Tier 2	2,544,818	-	0.0%	$0	**$0.00**
Tier 3	1,159,766	1,159,766	100.0%	$973,830	**$0.84**
Subtotal Budget B	6,118,072	1,159,766	100%	$973,830	
Commercial					
Uniform	701,355	-	0.0%	$0	**$0.00**
Total	6,819,427	1,159,766		$973,830	

Cost-Based Rates – Water Utility

Proposed Monthly Fixed Charges

The proposed monthly fixed charges for FY 2025 are shown in Table 46, reflecting the combined charges of Account Services, Meter Capacity, and Fire Flow Demand. Meter Capacity and Fire Flow Demand charges increase with the size of the meter in relation to the Capacity Factors. Table 47 provides the proposed monthly dedicated fireline charge by size of connection.

Table 46: FY 2025 Water Monthly Fixed Charges

Proposed Monthly Fixed Charges					
Meter Size	EVWD Ratio	Account Service	Meter Capacity	Fire Flow Demand	Fixed Charges
	[A]	[B] = $13.31	[C] = A × $21.00	[D] = A × $0.31	[E] = B + C + D
5/8"	0.67	$13.31	$14.00	$0.21	**$27.52**
3/4"	1.00	$13.31	$21.00	$0.31	**$34.62**
1"	1.67	$13.31	$35.00	$0.52	**$48.83**
1 1/2"	3.33	$13.31	$70.00	$1.04	**$84.35**
2"	5.33	$13.31	$112.00	$1.66	**$126.97**
3"	16.67	$13.31	$350.00	$5.17	**$368.48**
4"	41.67	$13.31	$875.00	$12.92	**$901.23**
6"	66.67	$13.31	$1,400.00	$20.67	**$1,433.98**
8"	133.33	$13.31	$2,800.00	$41.34	**$2,854.65**
10"	216.67	$13.31	$4,550.00	$67.17	**$4,630.48**
12"	266.67	$13.31	$5,600.00	$82.67	**$5,695.98**

Table 47: FY 2025 Dedicated Fireline Monthly Fixed Charges

Proposed Dedicated Fireline Montly Fixed Charges					
Connection Size	Size of Line	Account Service	Meter Capacity	Fire Flow Demand	Fireline Charge
	[A]	[B] = $13.31	[C] = N/A	[D] = A × $0.70	[E] = B + C + D
5/8"	0.63	$13.31	$0.00	$0.44	**$13.75**
3/4"	0.75	$13.31	$0.00	$0.53	**$13.84**
1"	1.00	$13.31	$0.00	$0.70	**$14.01**
1 1/2"	1.50	$13.31	$0.00	$1.05	**$14.36**
2"	2.00	$13.31	$0.00	$1.40	**$14.71**
3"	3.00	$13.31	$0.00	$2.10	**$15.41**
4"	4.00	$13.31	$0.00	$2.80	**$16.11**
6"	6.00	$13.31	$0.00	$4.20	**$17.51**
8"	8.00	$13.31	$0.00	$5.60	**$18.91**
10"	10.00	$13.31	$0.00	$7.00	**$20.31**
12"	12.00	$13.31	$0.00	$8.40	**$21.71**

Proposed Commodity Charges by Tier

The proposed commodity rates for FY 2025 are shown in Table 48, reflecting the combined rates of Water Supplies, Delivery, Peaking, and Water Efficiency.

Table 48: FY 2025 Water Commodity Rates

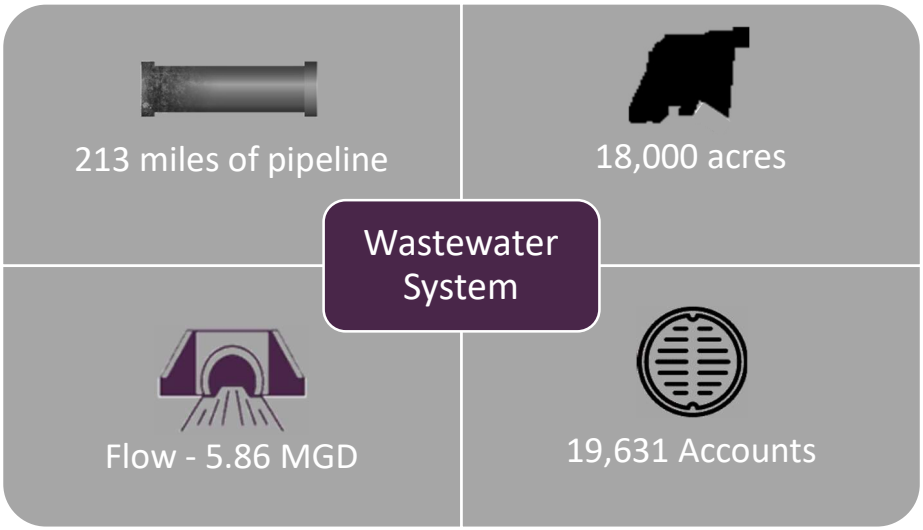
Proposed Commodity Rates ($/hcf)						
Customer Class & Tiers	Tiers	Water Supply [A]	Delivery [B]	Peaking [C]	Water Efficiency [D]	Commodity Rates *E = A + B + C + D*
Budget Based Customers						
Tier 1	*IWB*	$0.31	$1.50	$0.38	$0.00	**$2.19**
Tier 2	*OWB*	$0.52	$1.50	$0.82	$0.00	**$2.84**
Tier 3	*> TWB*	$0.52	$1.50	$1.24	$0.84	**$4.10**
Commercial						
Uniform	*Uniform*	$0.44	$1.50	$0.45	$0.00	**$2.39**

Wastewater Utility

Wastewater System

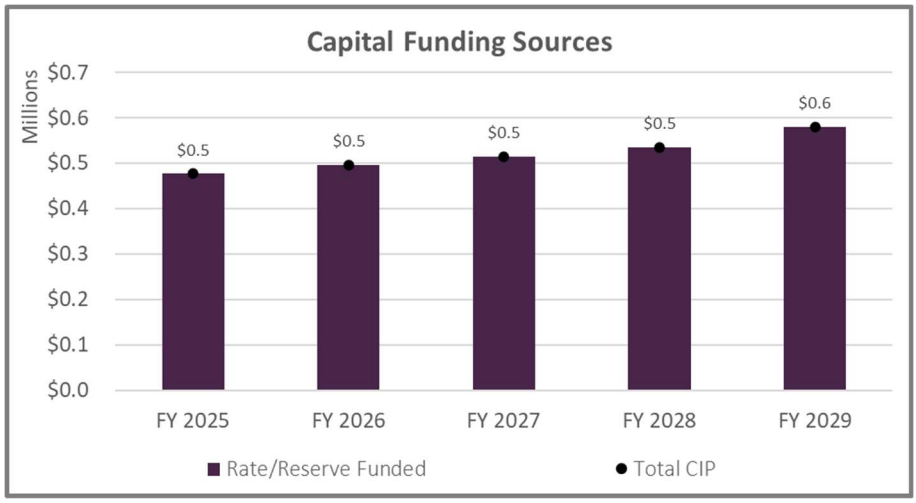
The wastewater system serves an area of almost 18,000 acres, through 213 miles of pipeline, 4,400 manholes, 7 siphons, and 5 diversion structures. The collection system historically conveyed wastewater flows to the City of San Bernardino but has recently transitioned to conveying wastewater flows the new Sterling Natural Resource Center (SNRC). This study includes the projected operational costs of the SNRC as well as an annual capital reinvestment appropriation.

Figure 14: East Valley Water District Wastewater System



In 2019, the District completed a Wastewater Master Plan (Wastewater MP) that identified existing system improvements, near term improvements through FY 2025, and build-out improvements after FY 2025 through FY 2040. Based on the Wastewater MP, the District developed a detailed capital improvement plan through FY 2030. The District has consistently reinvested in its collection system with annual mainline replacement of $200,000 and annual capital outlay of $260,000. Figure 15 shows the District's capital plan through FY 2029, which accounts for inflation in future years.

Figure 15: Wastewater Capital Improvement Plan



Customers

The District serves approximately 30,989 sewer units, which includes total residential dwelling units and non-residential accounts. Table 49 provides a summary of sewer units by customer class.

Table 49: Sewer Units by Customer Class

Annual Fixed Units of Service	
Customer Class	Sewer Units
Single Family	19,428
Multi-Family	10,913
Non-Residential	
Low Strength	413
Medium Strength	73
High Strength	85
Schools & Churches	76
Patton State Hospital	1
Total	30,989

The current wastewater rate structure consists of monthly fixed charges and commodity rates for Non-Residential customers. Existing charges and rates are identified in Table 50.

Table 50: FY 2024 Wastewater Fixed Charges and Commodity Rates

Fixed Charges ($/Month)	
Customer Class	Existing
Single Family	$16.32
Multi-Family	$15.42
Non-Residential	
Low Strength	$11.84
Medium Strength	$11.84
High Strength	$11.84
Schools & Churches	$11.84
Patton State Hospital	$11.84

Commodity Rates ($/hcf)	
Customer Class	Existing
Non-Residential	
Low Strength	$0.41
Medium Strength	$0.54
High Strength	$0.54
Schools & Churches	$0.41
Patton State Hospital	$0.66

Financial Plan Overview – Wastewater Utility

Financial Planning Assumptions

Developing a long-term financial plan requires an understanding of the utility's financial position by evaluating existing revenue streams, ongoing expenses, how those expenses will change over time, existing debt requirements, new strategic objectives, and reserve policies. With these considerations, certain assumptions are required for projecting revenues, expenses, and expected ending fund balances. Table 51 identifies assumptions used for forecasting revenues and Table 52 identifies assumptions used for forecasting increases in expenses through FY 2024.

Table 51: Wastewater Assumptions for Forecasting Revenues

Revenue Forcasting					
Key Assumptions	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Revenue Escalation					
Reserve Interest	2.0%	2.0%	2.0%	2.0%	2.0%
Account Growth					
Single Family	0.0%	0.0%	0.0%	0.0%	0.0%
Multi-Family	1.0%	1.0%	0.0%	0.0%	0.0%
Non-Residential	0.0%	0.0%	0.0%	0.0%	0.0%
Customer Sewer Units	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Customer Class					
Single Family	19,428	19,428	19,428	19,428	19,428
Multi-Family	10,913	11,022	11,022	11,022	11,022
Non-Residential					
Low Strength	413	413	413	413	413
Medium Strength	73	73	73	73	73
High Strength	85	85	85	85	85
Schools & Churches	76	76	76	76	76
Patton State Hospital	1	1	1	1	1
Total Customer Sewer Units	**30,989**	**31,098**	**31,098**	**31,098**	**31,098**
Non-Residential Consumption	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Low Strength	202,777	202,777	202,777	202,777	202,777
Medium Strength	74,000	74,000	74,000	74,000	74,000
High Strength	198,237	198,237	198,237	198,237	198,237
Schools & Churches	150,994	150,994	150,994	150,994	150,994
Patton State Hospital	163,645	163,645	163,645	163,645	163,645
Total Non-Residential Consumption (hcf)	**789,653**	**789,653**	**789,653**	**789,653**	**789,653**

Table 52: Wastewater Assumptions for Forecasting Expenses

Expense Forecasting							
Key Assumptions	*Source:*		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Expenditure Escalation							
Benefits			5.0%	5.0%	5.0%	5.0%	5.0%
Capital Construction	*ENR 20-City*	*5-Year Average*	3.9%	3.9%	3.9%	3.9%	3.9%
Energy Costs			7.0%	7.0%	7.0%	7.0%	7.0%
General Costs	*CPI - LA (BLS)*	*5-Year Average*	3.9%	3.9%	3.9%	3.9%	3.9%
Insurance			7.0%	5.0%	5.0%	5.0%	5.0%
Salaries			7.0%	5.0%	5.0%	5.0%	5.0%

Current Financial Position

Revenues

Based on the revenue forecasting assumptions, fixed revenues were calculated by multiplying existing fixed charges (Table 50) by Sewer Units (Table 51) over twelve billing periods. Commodity revenues were calculated using the commodity rates (Table 50) and non-residential water usage (Table 51). Table 53 shows the calculated revenues for the Financial Plan Period. Table 54 summarizes calculated rate revenues (rounded to thousands) and other non-rate revenues.

Table 53: Wastewater Calculated Rate Revenues

Calculated Rate Revenue					
Fixed Revenue	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Collection Fixed Charges					
Single Family	$3,804,780	$3,804,780	$3,804,780	$3,804,780	$3,804,780
Multi-Family	$2,019,342	$2,039,511	$2,039,511	$2,039,511	$2,039,511
Non-Residential					
Low Strength	$58,679	$58,679	$58,679	$58,679	$58,679
Medium Strength	$10,372	$10,372	$10,372	$10,372	$10,372
High Strength	$12,077	$12,077	$12,077	$12,077	$12,077
Schools & Churches	$10,798	$10,798	$10,798	$10,798	$10,798
Patton State Hospital	$142	$142	$142	$142	$142
Total Collection Fixed Charges	$5,916,189	$5,936,358	$5,936,358	$5,936,358	$5,936,358
Total Fixed Revenue	**$5,916,189**	**$5,936,358**	**$5,936,358**	**$5,936,358**	**$5,936,358**
Commodity Revenue	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Collection Commodity Revenue					
Non-Residential					
Low Strength	$83,139	$83,139	$83,139	$83,139	$83,139
Medium Strength	$39,960	$39,960	$39,960	$39,960	$39,960
High Strength	$107,048	$107,048	$107,048	$107,048	$107,048
Schools & Churches	$61,908	$61,908	$61,908	$61,908	$61,908
Patton State Hospital	$108,006	$108,006	$108,006	$108,006	$108,006
Total Collection Commodity Revenue	$400,060	$400,060	$400,060	$400,060	$400,060
Total Commodity Revenue	**$400,060**	**$400,060**	**$400,060**	**$400,060**	**$400,060**
Total Rate Revenue	**$6,316,249**	**$6,336,418**	**$6,336,418**	**$6,336,418**	**$6,336,418**

Table 54: Wastewater Projected Revenues

Projected Revenue					
Revenue Summary	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Rate Revenue					
Collection Fixed Charges	$5,916,000	$5,936,000	$5,936,000	$5,936,000	$5,936,000
Collection Commodity Revenue	$400,000	$400,000	$400,000	$400,000	$400,000
Subtotal Rate Revenue	$6,316,000	$6,336,000	$6,336,000	$6,336,000	$6,336,000
Other Operating Revenue	$60,000	$60,000	$60,000	$60,000	$60,000
Non-Operating Revenue	$31,000	$27,000	$28,000	$29,000	$31,000
Subtotal Wastewater	$6,407,000	$6,423,000	$6,424,000	$6,425,000	$6,427,000
Total Revenues	**$6,407,000**	**$6,423,000**	**$6,424,000**	**$6,425,000**	**$6,427,000**

Expenses

The FY 2024 budget was used as the baseline expenses of the utility and adjusted in subsequent years based on the escalation factors shown in Table 52. Table 55 provides projected Operational & Maintenance (O&M) costs through FY 2029 (rounded to thousands). Each expense category includes detailed line-item expenditures that were discussed with staff to determine the appropriate escalation factor to use for forecasting how costs will increase over time.

Table 55: Wastewater Projected O&M Expenses

Projected Expenses					
O&M Expenses	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Operating Expenses					
Governing Board	$116,000	$121,000	$126,000	$132,000	$138,000
General Administration	$434,000	$454,000	$475,000	$497,000	$520,000
Human Resources	$601,000	$631,000	$661,000	$694,000	$727,000
Public Affairs	$408,000	$427,000	$446,000	$466,000	$487,000
Finance & Accounting	$428,000	$449,000	$471,000	$493,000	$517,000
Information Technology	$503,000	$525,000	$548,000	$573,000	$598,000
Customer Service	$719,000	$752,000	$787,000	$823,000	$861,000
Engineering	$405,000	$424,000	$443,000	$463,000	$485,000
Maintenance Admin	$50,000	$52,000	$55,000	$58,000	$61,000
Wastewater Collection	$837,000	$876,000	$917,000	$960,000	$1,005,000
Facilities Maintenance	$638,000	$667,000	$699,000	$731,000	$766,000
Fleet Maintenance	$161,000	$169,000	$177,000	$187,000	$196,000
Subtotal Operating Expenses	$5,300,000	$5,547,000	$5,805,000	$6,077,000	$6,361,000
Debt Service					
Existing Debt	$271,997	$270,466	$273,500	$271,124	$268,334
Total Expenses	**$5,571,997**	**$5,817,466**	**$6,078,500**	**$6,348,124**	**$6,629,334**

Reserves

The Wastewater utility incorporates similar revised reserves policies as the water utility. These robust reserves help mitigate risks to the utility by ensuring sufficient cash is on hand for daily operations and to fund annual system improvements. In addition, these reserves help smooth rates and mitigate rate spikes due to emergencies or above-average system costs. The most revised reserve policies identify the function of each reserve and Table 56 summarizes the minimum reserve requirements and the ideal funding targets of each reserve.

Table 56: Wastewater Reserve Requirements and Targets

Reserve	Minimum Requirement	Reserve Target
Operating	90 days of operating costs	120 days of operating costs
Capital Replacement	2 years of 5-year CIP average	5 years of planned capital
Emergency	1.0% of Assets	2.0% of Assets
Rate Stabilization	-	-
Capacity Fee		

The beginning FY 2024 reserve balance (July 1, 2023) equaled approximately $1.8M.

Financial Outlook at Existing Rates

Calculating revenue using existing rates and projecting expenses helps determine the current financial health of the utility. Revenues from existing rates are sufficient to fund O&M through FY 2028, but a slight deficit is projected by FY 2029. Only a portion of planned capital spending can be funded with projected net operating income resulting in the use of reserves to cover the remaining capital costs. Table 57 forecasts existing revenues and expenses through the Financial Plan Period. Table 58 identifies reserve transfers and reserves activity, with projected FY 2025 starting reserve balances shown for each reserve.

Table 57: Wastewater Financial Plan at Existing Rates

Financial Plan at Existing Rates						
Revenue	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Rate Revenue						
Collection Fixed Charges	Table 54	$5,916,000	$5,936,000	$5,936,000	$5,936,000	$5,936,000
Collection Commodity Revenue		$400,000	$400,000	$400,000	$400,000	$400,000
Total Rate Revenue		$6,316,000	$6,336,000	$6,336,000	$6,336,000	$6,336,000
Other Operating Revenue	Table 54	$60,000	$60,000	$60,000	$60,000	$60,000
Non-Operating Revenue		$31,000	$27,000	$28,000	$29,000	$31,000
Subtotal Wastewater		$91,000	$87,000	$88,000	$89,000	$91,000
Total Revenues		**$6,407,000**	**$6,423,000**	**$6,424,000**	**$6,425,000**	**$6,427,000**
O&M Expenses	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Operating Expenses						
Governing Board	Table 55	$116,000	$121,000	$126,000	$132,000	$138,000
General Administration		$434,000	$454,000	$475,000	$497,000	$520,000
Human Resources		$601,000	$631,000	$661,000	$694,000	$727,000
Public Affairs		$408,000	$427,000	$446,000	$466,000	$487,000
Finance & Accounting		$428,000	$449,000	$471,000	$493,000	$517,000
Information Technology		$503,000	$525,000	$548,000	$573,000	$598,000
Customer Service		$719,000	$752,000	$787,000	$823,000	$861,000
Engineering		$405,000	$424,000	$443,000	$463,000	$485,000
Maintenance Admin		$50,000	$52,000	$55,000	$58,000	$61,000
Wastewater Collection		$837,000	$876,000	$917,000	$960,000	$1,005,000
Facilities Maintenance		$638,000	$667,000	$699,000	$731,000	$766,000
Fleet Maintenance		$161,000	$169,000	$177,000	$187,000	$196,000
Subtotal Operating Expenses		$5,300,000	$5,547,000	$5,805,000	$6,077,000	$6,361,000
Debt Service						
Existing Debt	Table 55	$271,997	$270,466	$273,500	$271,124	$268,334
Total Expenses		**$5,571,997**	**$5,817,466**	**$6,078,500**	**$6,348,124**	**$6,629,334**
Net Operating		**$835,003**	**$605,535**	**$345,500**	**$76,876**	**($202,334)**

Table 58: Wastewater Reserve Activity at Existing Rates

Reserve Activity						
Operating Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$1,317,273	$1,373,917	$1,434,444	$1,498,808	$1,565,291
Transfers (Net Operating)	Table 57	$835,003	$605,535	$345,500	$76,876	($202,334)
Direct Transfers from/(to) Emergency Reserve		$0	$0	$0	$0	$0
Transfers to Capital Replacement Reserve		($778,359)	($545,008)	($281,135)	($10,393)	$0
Ending Balance		**$1,373,917**	**$1,434,444**	**$1,498,808**	**$1,565,291**	**$1,362,957**
Capital Replacement Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$723,573	$1,041,617	$1,111,672	$897,230	$384,913
Plus:						
Transfers from/(to) Operating Reserve		$778,359	$545,008	$281,135	$10,393	$0
Less:						
CIP		($477,792)	($496,272)	($515,468)	($535,405)	($580,293)
Transfers to Emergency Reserve		$0	$0	$0	$0	$0
Subtotal Capital Replacement Reserve		$1,024,140	$1,090,353	$877,340	$372,218	($195,380)
Interest Earnings		$17,477	$21,320	$19,890	$12,694	$0
Ending Balance		**$1,041,617**	**$1,111,672**	**$897,230**	**$384,913**	**($195,380)**
Emergency Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$0	$0	$0	$0	$0
Direct Transfers from/(to) Operating Reserve		$0	$0	$0	$0	$0
Transfers from Capital Replacement Reserve		$0	$0	$0	$0	$0
Subtotal Emergency Reserve		$0	$0	$0	$0	$0
Interest Earnings		$0	$0	$0	$0	$0
Ending Balance		**$0**	**$0**	**$0**	**$0**	**$0**
Capacity Fee Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$3,169,482	$3,232,871	$3,297,529	$3,363,479	$3,430,749
Capacity Fee Receipts		$0	$0	$0	$0	$0
Transfers (to) Capital Replacement Reserve		$0	$0	$0	$0	$0
Subtotal Capacity Fee Reserve		$3,169,482	$3,232,871	$3,297,529	$3,363,479	$3,430,749
Interest Earnings		$63,390	$64,657	$65,951	$67,270	$68,615
Ending Balance		**$3,232,871**	**$3,297,529**	**$3,363,479**	**$3,430,749**	**$3,499,364**
Ending Balance		**$5,648,405**	**$5,843,645**	**$5,759,518**	**$5,380,952**	**$4,666,941**

Figure 16 illustrates the operating position of the utility, where O&M expenses are identified with the dashed red trendline and total revenues at existing rates are shown by the horizontal black trendline. The bars represent the amount of net operating income available, with grey bars reflecting positive net operating income for capital spending and reserve funding and red bars reflecting an operating deficit absorbed by reserves.

Figure 16: Wastewater Current Operating Financial Position

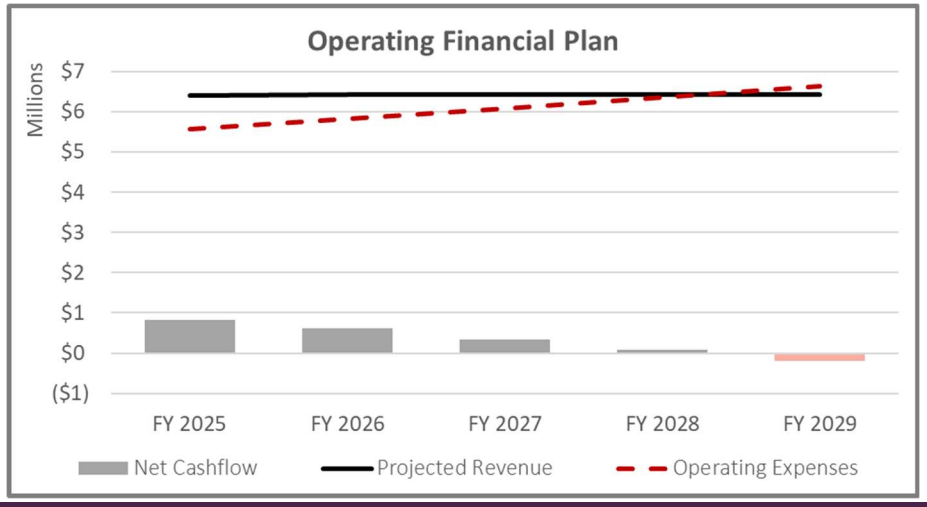
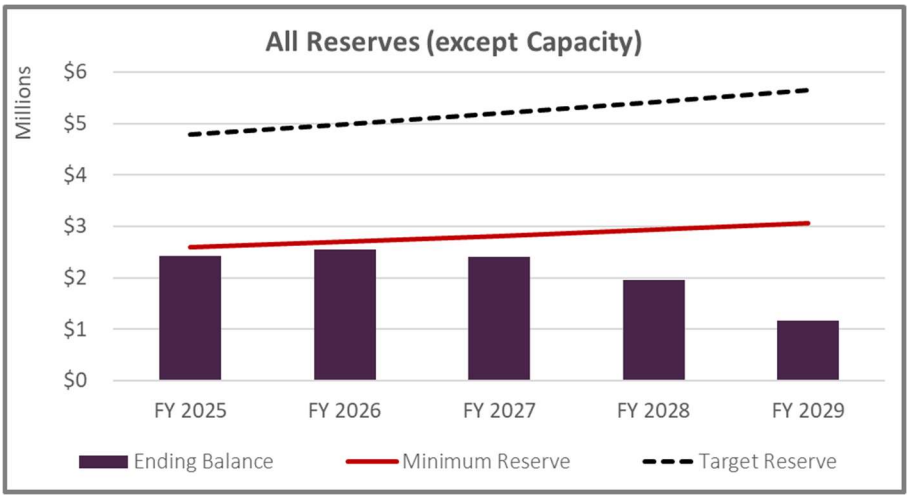


Figure 17 reflects the projected ending balances of reserves after operating and capital projects are funded through FY 2029. Reserves are below the minimum target for each year of the Financial Plan Period.

Figure 17: Wastewater Projected Ending Reserves at Existing Rates



Proposed Financial Plan – Wastewater Utility

From the financial outlook at existing rates, a proposed financial plan is developed to fund the multi-year revenue requirements, while meeting debt covenants and reserve requirements. Table 59 forecasts existing revenues, ***with annual revenue adjustments***, and expenses through the Financial Plan Period. However, FY 2028 and FY 2029 are not part of the Rate Setting Period and will not be included as part of the proposed rates within the Proposition 218 Notice. Table 60 identifies the projected FY 2025 total starting balances for the Operating, Capital, Emergency, and Capacity Fee reserves, activity within each reserve (including net income transfer from Table 59, transfers between reserves, and annual CIP), and projected ending balances for each fiscal year.

Table 59: Wastewater Proposed Financial Plan

Proposed Financial Plan							
Revenue		*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Rate Revenue							
Collection Fixed Charges		Table 54	$5,916,000	$5,936,000	$5,936,000	$5,936,000	$5,936,000
Collection Commodity Revenue			$400,000	$400,000	$400,000	$400,000	$400,000
Total Rate Revenue			$6,316,000	$6,336,000	$6,336,000	$6,336,000	$6,336,000
Additional Revenue (from revenue adjustments):							
Fiscal Year	Revenue Adjustment	Effective Month					
FY 2025	3.0%	July	$189,000	$190,000	$190,000	$190,000	$190,000
FY 2026	3.0%	July		$195,000	$195,000	$195,000	$195,000
FY 2027	3.0%	July			$201,000	$201,000	$201,000
FY 2028	3.0%	July				*$207,000*	*$207,000*
FY 2029	3.0%	July					*$213,000*
Total Additional Revenue			$189,000	$385,000	$586,000	$793,000	$1,006,000
Projected Rate Revenue			**$6,505,000**	**$6,721,000**	**$6,922,000**	**$7,129,000**	**$7,342,000**
Other Operating Revenue		Table 54	$60,000	$60,000	$60,000	$60,000	$60,000
Non-Operating Revenue			$31,000	$27,000	$28,000	$29,000	$31,000
Subtotal Wastewater			$91,000	$87,000	$88,000	$89,000	$91,000
Total Revenues			**$6,596,000**	**$6,808,000**	**$7,010,000**	**$7,218,000**	**$7,433,000**
O&M Expenses		*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Operating Expenses							
Governing Board		Table 55	$116,000	$121,000	$126,000	$132,000	$138,000
General Administration			$434,000	$454,000	$475,000	$497,000	$520,000
Human Resources			$601,000	$631,000	$661,000	$694,000	$727,000
Public Affairs			$408,000	$427,000	$446,000	$466,000	$487,000
Finance & Accounting			$428,000	$449,000	$471,000	$493,000	$517,000
Information Technology			$503,000	$525,000	$548,000	$573,000	$598,000
Customer Service			$719,000	$752,000	$787,000	$823,000	$861,000
Engineering			$405,000	$424,000	$443,000	$463,000	$485,000
Maintenance Admin			$50,000	$52,000	$55,000	$58,000	$61,000
Wastewater Collection			$837,000	$876,000	$917,000	$960,000	$1,005,000
Facilities Maintenance			$638,000	$667,000	$699,000	$731,000	$766,000
Fleet Maintenance			$161,000	$169,000	$177,000	$187,000	$196,000
Subtotal Operating Expenses			$5,300,000	$5,547,000	$5,805,000	$6,077,000	$6,361,000
Debt Service							
Existing Debt		Table 55	$271,997	$270,466	$273,500	$271,124	$268,334
Total Expenses			**$5,571,997**	**$5,817,466**	**$6,078,500**	**$6,348,124**	**$6,629,334**
Net Operating			**$1,024,003**	**$990,535**	**$931,500**	**$869,876**	**$803,666**

Table 60: Wastewater Reserve Activity at Proposed Rates

Reserve Activity						
Operating Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$1,317,273	$1,373,917	$1,434,444	$1,498,808	$1,565,291
Transfers (Net Operating)	Table 59	$1,024,003	$990,535	$931,500	$869,876	$803,666
Direct Transfers from/(to) Emergency Reserve		$0	$0	$0	$0	$0
Transfers to Capital Replacement Reserve		($967,359)	($930,008)	($867,135)	($803,393)	($734,327)
Ending Balance		**$1,373,917**	**$1,434,444**	**$1,498,808**	**$1,565,291**	**$1,634,630**
Capital Replacement Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$723,573	$1,060,837	$1,520,126	$1,905,713	$2,214,496
Plus:						
Transfers from/(to) Operating Reserve		$967,359	$930,008	$867,135	$803,393	$734,327
Less:						
CIP		($477,792)	($496,272)	($515,468)	($535,405)	($580,293)
Transfers to Emergency Reserve		($169,970)	$0	$0	$0	$0
Subtotal Capital Replacement Reserve		$1,043,169	$1,494,572	$1,871,794	$2,173,702	$2,368,529
Interest Earnings		$17,667	$25,554	$33,919	$40,794	$45,830
Ending Balance		**$1,060,837**	**$1,520,126**	**$1,905,713**	**$2,214,496**	**$2,414,360**
Emergency Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$0	$171,670	$175,104	$178,606	$182,178
Direct Transfers from/(to) Operating Reserve		$0	$0	$0	$0	$0
Transfers from Capital Replacement Reserve		$169,970	$0	$0	$0	$0
Subtotal Emergency Reserve		$169,970	$171,670	$175,104	$178,606	$182,178
Interest Earnings		$1,700	$3,433	$3,502	$3,572	$3,644
Ending Balance		**$171,670**	**$175,104**	**$178,606**	**$182,178**	**$185,821**
Capacity Fee Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$3,169,482	$3,232,871	$3,297,529	$3,363,479	$3,430,749
Capacity Fee Receipts		$0	$0	$0	$0	$0
Transfers (to) Capital Replacement Reserve		$0	$0	$0	$0	$0
Subtotal Capacity Fee Reserve		$3,169,482	$3,232,871	$3,297,529	$3,363,479	$3,430,749
Interest Earnings		$63,390	$64,657	$65,951	$67,270	$68,615
Ending Balance		**$3,232,871**	**$3,297,529**	**$3,363,479**	**$3,430,749**	**$3,499,364**
Ending Balance		**$5,839,295**	**$6,427,202**	**$6,946,607**	**$7,392,713**	**$7,734,175**

Figure 18 identifies the operating position based on the proposed financial plan. Figure 19 and Figure 20 show the capital plan with funding sources and projected ending reserve balances, respectively.

Figure 18: Wastewater Proposed Operating Position

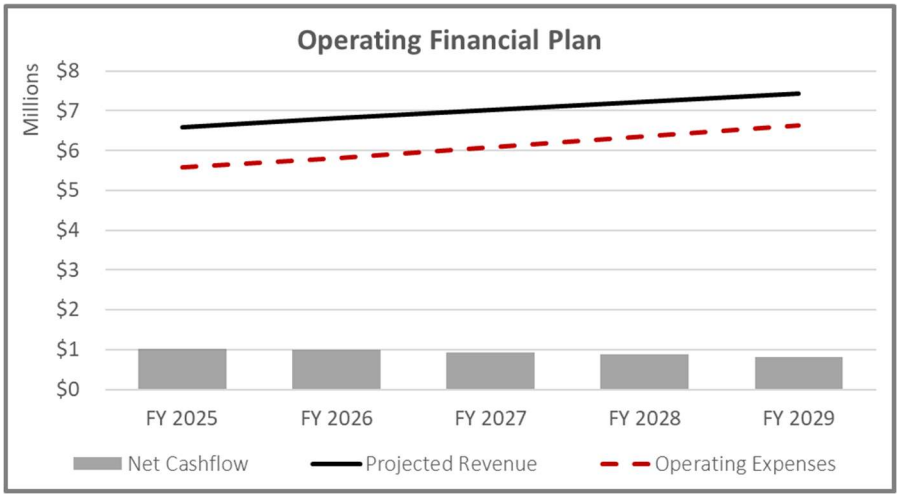


Figure 19: Wastewater Capital Improvement Plan with Funding Sources

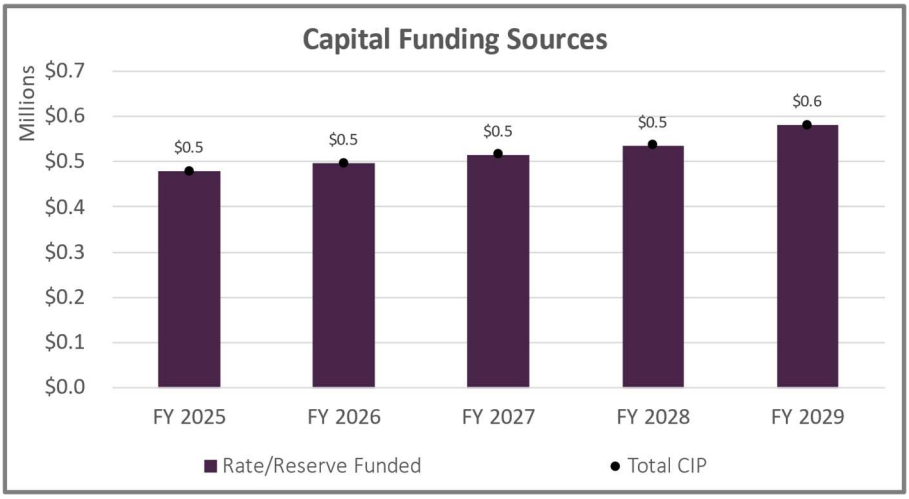
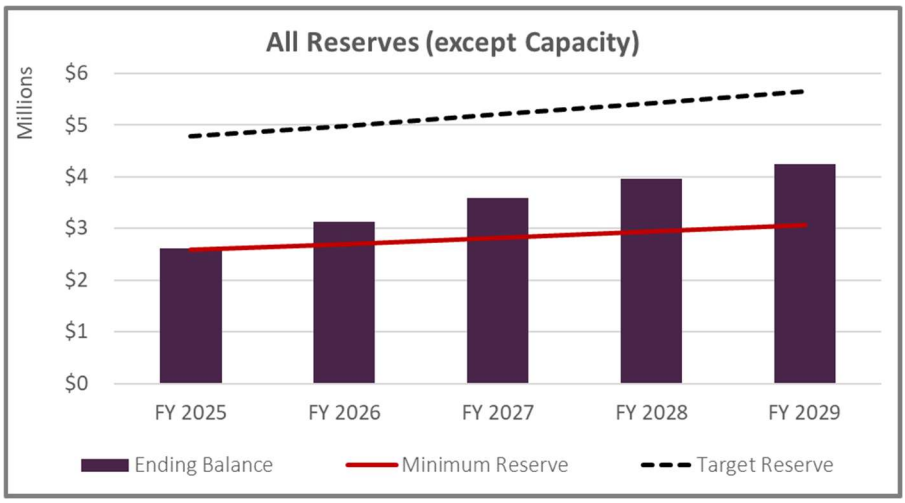


Figure 20: Wastewater Proposed Ending Reserves



Cost-of-Service Analysis – Wastewater Utility

Cost-of-Service Process

Similar to updating water rates, the next step in developing wastewater rates is to perform a cost-of-service analysis. Through this process, costs incurred are allocated to customer classes based on their proportional share. As a result, the proposed rates are cost-based and reflect the costs incurred to provide service to customers.

Revenue Requirements

FY 2025 revenue requirements were used for the cost-of-service analysis. Revenue requirements include O&M expenses, debt service, available revenue offsets, non-rate revenues, annual net income, and any mid-year adjustments if rates are implemented after the start of the fiscal year. The proposed revenue adjustments and corresponding rates accumulate the necessary funding over the Rate Setting Period to fund O&M, capital projects, and comply with minimum reserve requirements. The results of the financial plan analysis are summarized in Table 61 and represent the revenue required from rates.

Table 61: Wastewater Revenue Requirements (FY 2025 – FY 2027)

Rate Setting Period	FY 2025	FY 2026	FY 2027
Revenue Requirements	Total	Total	Total
Operating Expenses			
Governing Board	$116,000	$121,000	$126,000
General Administration	$434,000	$454,000	$475,000
Human Resources	$601,000	$631,000	$661,000
Public Affairs	$408,000	$427,000	$446,000
Finance & Accounting	$428,000	$449,000	$471,000
Information Technology	$503,000	$525,000	$548,000
Customer Service	$719,000	$752,000	$787,000
Engineering	$405,000	$424,000	$443,000
Maintenance Admin	$50,000	$52,000	$55,000
Wastewater Collection	$837,000	$876,000	$917,000
Facilities Maintenance	$638,000	$667,000	$699,000
Fleet Maintenance	$161,000	$169,000	$177,000
Total Operating Expenses	$5,300,000	$5,547,000	$5,805,000
Debt Service			
Existing Debt	$271,997	$270,466	$273,500
Proposed Debt	$0	$0	$0
Total Debt Service	$271,997	$270,466	$273,500
Other Funding			
Revenue Offsets			
Other Operating Revenue	($60,000)	($60,000)	($60,000)
Non-Operating Revenue	($31,000)	($27,000)	($28,000)
Total Revenue Offsets	($91,000)	($87,000)	($88,000)
Adjustments			
Reserve Funding	$1,024,003	$990,535	$931,500
Adjustment for Mid-Year Increase	$0	$0	$0
Total Adjustments	$1,024,003	$990,535	$931,500
Total Other Funding	$933,003	$903,535	$843,500
Revenue Requirement from Rates	**$6,505,000**	**$6,721,000**	**$6,922,000**

Define Cost Components

The District's wastewater costs-of-service requirements were allocated to cost components and then to customers classes utilizing a cost causation approach endorsed by the Water Environment Federation (WEF) rate setting manual Financing and Charges for Wastewater Systems (MOP 27). The utility incurs costs to accommodate total flow demand by different customer classes. Therefore, to determine the most appropriate way to recover the utility's expenses, cost components are identified and used to allocate expenses based on how they are incurred. Through review of the revenue requirements and based on an understanding of the wastewater collection system, the cost-of-service allocation documented in this report is based on total sewer units and flow (volume influent in hcf). Using this approach, revenue requirements are allocated to the different customer classes proportionate to their use of the wastewater collection system. The cost components shown in Figure 21 are used within the cost-of-service analysis.

Figure 21: Wastewater Cost Components

Account Services – Fixed expenses associated with the collection system that do not necessarily fluctuate based on flow. Administration and other overhead costs that are incurred based on having an account. In addition, includes a portion of debt and reserves.
Collection Flow – Expenses associated with the District's collection system related to total flow demand. These costs include Engineering, maintenance costs, a portion of debt and system reinvestment.

Allocate Expenses to Cost Components

When allocating expenses to the defined costs components, it is important to have a sound basis as to why an expense was allocated to a certain fixed cost component versus a variable cost component or split between both fixed and variable. The distribution of expenses to the cost components should be straight-forward to ensure the method of apportionment is **understandable** and easily **correlates to how expenses are incurred**. A description of each expense category is identified below.

Expense Categories:

Governing Board – Board of Director stipends, benefits, supplies, and contract services.

General Administration – General and overhead costs, including personnel, contract services, memberships, supplies, and utilities.

Human Resources – Oversees personnel related programs. Expenses include personnel, supplies, contract services, utilities, memberships, professional development, insurance.

Public Affairs – Oversees internal and external communication programs. Expenses include personnel, supplies, utilities, and contract services.

Finance & Accounting – Oversees transparency and oversight of funds. Expenses include personnel, supplies, banking, utilities, and contract service.

Information Technology – Costs associated with maintaining technology and software programs. Expenses include personnel, supplies, utilities, and contract service.

Customer Service – Costs associated with customer relations and billing. Expenses including personnel, supplies, utilities, contract services, and postage.

Engineering – Costs associated with the engineering department, including personnel, supplies, utilities, contract services, and permits.

Debt – Outstanding loans and debt obligations.

Maintenance Administration – Overhead expenses for field maintenance. Expenses include personnel, supplies, utilities, and memberships.

Wastewater Collection – Oversees the repair and replacement of the collection system and all related equipment. Expenses include personnel, supplies, utilities, and contract services.

Facility Maintenance – Costs associated with maintaining facilities.

Fleet Maintenance – Costs associated with the fleet department. Expenses include personnel, rentals, vehicles, tools, fuel, supplies, and contract services.

Table 62 summarizes the percent allocation of O&M expenses to the cost components and corresponding dollar amounts.

Table 62: Wastewater O&M Allocation to Cost Components

Operating Expenses	Methodology / Allocation Basis	Cost Components: Account Services	Cost Components: Flow	Total
Governing Board	Fixed	100.0%	0.0%	100.0%
General Administration	Fixed	100.0%	0.0%	100.0%
Human Resources	Fixed	100.0%	0.0%	100.0%
Public Affairs	Fixed	100.0%	0.0%	100.0%
Finance & Accounting	Fixed	100.0%	0.0%	100.0%
Information Technology	Fixed	100.0%	0.0%	100.0%
Customer Service	Fixed	100.0%	0.0%	100.0%
Engineering	Variable	0.0%	100.0%	100.0%
Maintenance Admin	Variable	0.0%	100.0%	100.0%
Wastewater Collection	Variable	0.0%	100.0%	100.0%
Facilities Maintenance	Variable	0.0%	100.0%	100.0%
Fleet Maintenance	Variable	0.0%	100.0%	100.0%

Operating Expenses	Methodology / Allocation Basis	Account Services	Flow	Total
Governing Board	*Fixed*	$116,000	$0	$116,000
General Administration	*Fixed*	$434,000	$0	$434,000
Human Resources	*Fixed*	$601,000	$0	$601,000
Public Affairs	*Fixed*	$408,000	$0	$408,000
Finance & Accounting	*Fixed*	$428,000	$0	$428,000
Information Technology	*Fixed*	$503,000	$0	$503,000
Customer Service	*Fixed*	$719,000	$0	$719,000
Engineering	*Variable*	$0	$405,000	$405,000
Maintenance Admin	*Variable*	$0	$50,000	$50,000
Wastewater Collection	*Variable*	$0	$837,000	$837,000
Facilities Maintenance	*Variable*	$0	$638,000	$638,000
Fleet Maintenance	*Variable*	$0	$161,000	$161,000
Total Allocation ($)		**$3,209,000**	**$2,091,000**	**$5,300,000**
Operating Expenses Allocation (%)		*60.5%*	*39.5%*	*100.0%*

The Debt Service revenue requirements are shown as a separate section to identify the existing debt obligation of wastewater – collections; however, debt service payments are part of the District's operating budget. Therefore, Debt Service is allocated based on the operating expense percentages derived at the bottom of Table 62. Table 63 identifies the percent allocation of the debt expense to the cost components, and corresponding debt expense in dollars.

Table 63: Wastewater Debt Allocation to Cost Components

		Cost Components		
Debt Service	Methodology / Allocation Basis	Account Services	Flow	Total
Existing Debt	O&M Allocation	60.5%	39.5%	100.0%
Proposed Debt	O&M Allocation	60.5%	39.5%	100.0%

Debt Service	Methodology / Allocation Basis	ccount Service	Flow	Total
Existing Debt	*O&M Allocation*	$164,686	$107,310	$271,997
Proposed Debt	*O&M Allocation*	$0	$0	$0
Total Allocation ($)		**$164,686**	**$107,310**	**$271,997**

Other Funding includes other operating revenues, non-operating reserves, and reserve funding. All items under "Other Funding" are allocated based on O&M percentages derived in Table 62. Table 64 summarizes the percent allocation to the cost components and the corresponding amounts in dollars.

Table 64: Wastewater Other Funding Allocation to Cost Components

		Cost Components		
Other Funding	Methodology / Allocation Basis	Account Services	Flow	Total
Revenue Offsets				
Other Operating Revenue	O&M Allocation	60.5%	39.5%	100.0%
Non-Operating Revenue	O&M Allocation	60.5%	39.5%	100.0%
Adjustments				
Reserve Funding	O&M Allocation	60.5%	39.5%	100.0%

Other Funding	Methodology / Allocation Basis	Account Services	Flow	Total
Revenue Offsets				
Other Operating Revenue	*O&M Allocation*	($36,328)	($23,672)	($60,000)
Non-Operating Revenue	*O&M Allocation*	($18,770)	($12,230)	($31,000)
Adjustments				
Reserve Funding	*O&M Allocation*	$620,005	$403,998	$1,024,003
Total Allocation ($)		**$564,907**	**$368,096**	**$933,003**

Table 65 summarizes the wastewater revenue requirements for FY 2025.

Table 65: Wastewater FY 2025 Cost-of-Service Requirements

FY 2025 Revenue Requirements			
Revenue Requirement	Account Services	Flow	Total
Operating Expenses	$3,209,000	$2,091,000	$5,300,000
Debt Service	$164,686	$107,310	$271,997
Other Funding	$564,907	$368,096	$933,003
COS Requirements	**$3,938,593**	**$2,566,407**	**$6,505,000**

Rate Design – Wastewater Utility

Develop Units of Service

Residential customer flows were projected using expected indoor use for Single-Family and Multi-Family based on a gpcd basis. Single-Family pph are based on the Department of Finance E-5 report for 2023, reflecting 3.34 pph and Multi-Family was set 80% or 2.67 pph to account for the smaller dwellings and average household size. Treated flows for the most recently completed fiscal year (FY 2023) was used to determine the amount of flow generated by residential customers and non-residential customers. Residential projected flows were based on 47 gpcd for indoor use. Taking the product of the average household size, 47 gpcd, and the number of residential units, results in total projected flows of 1.49M hcf and 0.66M hcf for Single-Family and Multi-Family, respectively, as shown in Table 66.

Table 66: Residential Projected Flows

Residential Flow Projections	
Single-Family	**FY 2023 Assumptions**
Gallons per capita per day (GPCD)	47
Proejcted indoor return factor	100.0%
Net Flow GPCD	47
× People per household (Residential)	3.34
× Number of Dwelling Units	19,428
Projected Residential Flow	**3,049,733 GPD**
Annual Residential Flow in gallons (× 365)	1,113,152,418
Converted to HCF (÷ 748.05)	**1,488,072**

Multi-Family	**FY 2023 Assumptions**
Gallons per capita per day (GPCD)	47
Proejcted indoor return factor	100.0%
Net Flow GPCD	47
× People per household (Multi-Family)	2.67
× Number of Dwelling Units	10,805
Projected Residential Flow	**1,356,902 GPD**
Annual Residential Flow in gallons (× 365)	495,269,173
Converted to HCF (÷ 748.05)	**662,080**

Non-residential customer flows were determined by estimating flow return factors for non-residential customers. To determine the appropriate flow return factors, we used the amount of total influent treated at the Wastewater Plant for FY 2023 and reduced the total treated flow by the projected amount from residential, less infiltration/inflow (known as I/I, which is a measure of the amount of water that enters the collection system that is not sewage, such as stormwater or groundwater that infiltrates into the collection system). The remainder is the estimated amount generated by non-residential customers. However, Patton Hospital (Patton) has a flow meter which allows us to determine a specific return factor for Patton by comparing the metered flow as a percentage of their water usage (Patton return factor = 45.9%).

In addition, Schools & Churches do not have all their landscape areas and fields on separate irrigation meters. As a result, from our review of their average winter water use versus the average monthly water use over 12 months, a return factor of 47% was derived for Schools & Churches. The 2023 winter was a very wet season, limiting the need to irrigate, and primarily reflects indoor water usage. The calculated return factor for Schools & Churches means a significant amount of these account's water usage is associated with outdoor needs, such as fields, which do not contribute as influent to the treatment plant.

For the remaining non-residential customers, the return factor was determined by taking the total treated flow less I/I, less projected residential flows, less Patton, and less Schools & Churches, and comparing the result to their total water usage. Table 67 provides the calculations used to derive the amount of projected flow expected to be generated by non-residential customers.

Table 67: Non-Residential Flow Return Factor

Line #	Plant Flow Analysis		
	Flow Assumptions (HCF)		**FY 2023**
1	Total Flow		2,859,293
2	Less: Inflow and Infiltration (I&I)	5.0%	(142,965)
3	Flow from Customers		2,716,329
4	Less Projected Single Family Flow		(1,488,072)
5	Less Projected Multi-Family Flow		(662,080)
6	Less Projected Schools & Churches Flow		(70,967)
7	Less Patton Metered Flows		(75,080)
8	**Projected Non-Residential Flows**		**420,129**
9			
10	**Non-Residential Return Factor Calculation**		**FY 2023**
11	FY 2023 Non-Residential Water Usage		525,726
12	**Return Factor (Line 8 ÷ Line 11)**		**79.9%**

With the return factor calculated in Table 67, projected wastewater flows for FY 2025 can be derived for each non-residential customer class by applying the calculated return factors to their respective water usage. Applying the return factors to the non-residential water usage, generates a total projected flow of 525,650 hcf as shown in Table 68.

Table 68: FY 2025 Projected Non-Residential Flows

Flows with Return Factors			
Customer Class	Return Factor	FY 2025 Non-Residential Water Usage (hcf)	FY 2025 Projected Flow (hcf)
	[A]	[B]	[C] = (A×B)
Non-Residential			
Low Strength	79.9%	202,777	162,047
Medium Strength	79.9%	74,000	59,136
High Strength	79.9%	198,237	158,419
Schools & Churches	47.0%	150,994	70,967
Patton State Hospital	45.9%	163,645	75,080
Subtotal Non-Residential		**789,653**	**525,650**

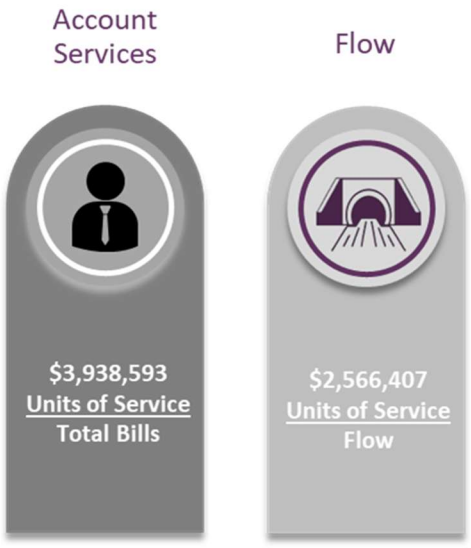
Unit rates for the cost components are derived by identifying the units of service for each cost component (distribution basis). The distribution basis varies by cost component and includes total sewer units and projected flow. Table 69 summarizes the fixed and commodity units of service.

Table 69: Wastewater Units of Service

Annual Units of Service				
Customer Class	Sewer Units	Annual Sewer Units	FY 2025 Non-Residential Water Usage	Projected Flow (hcf)
Single Family	19,428	233,136		1,488,072
Multi-Family	10,913	130,956		668,698
Subtotal Residential	30,341	364,092		2,156,770
Non-Residential				
Low Strength	413	4,956	202,777	162,047
Medium Strength	73	876	74,000	59,136
High Strength	85	1,020	198,237	158,419
Schools & Churches	76	912	150,994	70,967
Patton State Hospital	1	12	163,645	75,080
Subtotal Non-Residential	648	7,776	789,653	525,650
Total	**30,989**	**371,868**	**789,653**	**2,682,420**

With the units of service shown in Table 69, the distribution basis can be identified for each cost component. Figure 22 identifies the total revenue requirements by cost component from Table 65 and the corresponding units of service.

Figure 22: Wastewater Units of Service by Cost Component



Allocate to Customer Class

Using the FY 2025 revenue requirements, the cost-of-service allocates expenses to customer classes based on the service demands that each place on the system (cost causation). Using this approach provides a clear connection between costs incurred and the proportionate share attributable to each customer class. When designing rates, the most critical component is to connect costs to the proposed rates, resulting in a rate structure that is cost-based and in compliance with Proposition 218. In the previous section, costs were summarized by expense category and allocated to cost components based on how each cost is incurred. The next step in designing rates is to allocate each cost component to customers in relation to their use of the system and facilities. This ensures that each customer proportionately shares in the financial obligation of the wastewater utility. For the following unit rate computations for each cost component.

Fixed Cost Recovery

Account Services

Account Services costs are spread equally across all accounts / dwelling units. This is achieved by using the distribution basis of Annual Sewer Units. Therefore, the revenue requirement for Account Services is apportioned based on the Annual Sewer Units to determine the monthly unit cost-of-service shown in Table 70.

Table 70: Wastewater Account Service Allocation to Customer Classes

Account Services Allocation to Customer Classes				
Customer Class	Annual Sewer Units [A]	% Allocation [B] = A as a %	Revenue Requirement [C] = A x B	Unit Rate [D] = C x A
Single Family	233,136	62.7%	$2,469,231	$10.60
Multi-Family	130,956	35.2%	$1,387,004	$10.60
Non-Residential				
Low Strength	4,956	1.3%	$52,491	$10.60
Medium Strength	876	0.2%	$9,278	$10.60
High Strength	1,020	0.3%	$10,803	$10.60
Schools & Churches	912	0.2%	$9,659	$10.60
Patton State Hospital	12	0.0%	$127	$10.60
Total	**371,868**	**100.0%**	**$3,938,593**	

Flow

The cost associated with maintenance of the collection system and a portion of capital reinvestment and reserve funding. Flow is a function of total volume conveyed through the collection system and does not vary based on the type or strength concentration of influent. Therefore, the revenue requirement for Flow is apportioned to each customer class based on their percentage of total projected flow as summarized within Table 71.

Table 71: Wastewater Flow Allocation by Customer Class

Flow Allocation to Customer Classes			
Customer Class	Projected Flow (hcf) [A]	% Allocation [B] = A as a %	Revenue Requirement [C] = A x B
Single Family	1,488,072	55.5%	$1,423,714
Multi-Family	668,698	24.9%	$639,777
Non-Residential			
Low Strength	162,047	6.0%	$155,039
Medium Strength	59,136	2.2%	$56,579
High Strength	158,419	5.9%	$151,568
Schools & Churches	70,967	2.6%	$67,898
Patton State Hospital	75,080	2.8%	$71,833
Total	**2,682,420**	**100.0%**	**$2,566,407**

Collectively, the total allocation of costs associated with Account Services and Flow (Total Revenue Requirement) derives the cost of providing service to each customer class. However, given that residential customers exhibit a fairly constant amount of wastewater flows per month, the total residential Revenue Requirement may be recovered as flat monthly charges. For non-residential customer classes, commodity rates are derived for the flow component by dividing the total allocated cost by total water usage as wastewater commodity costs are recovered over metered water usage because flows are not metered (except for Patton). Table 72 summarizes the combined Revenue Requirement by customer class. Table 73 and Table 74 derives the monthly flat rates for residential customer classes and fixed monthly charges for non-residential customers, respectively. Table 75 derives the commodity rates for Non-Residential customer classes.

Table 72: Wastewater Revenue Requirement by Customer Class

Allocated Revenue Requirements			
Customer Class	Account Services	Flow	Total
Single Family	$2,469,231	$1,423,714	$3,892,944
Multi-Family	$1,387,004	$639,777	$2,026,781
Non-Residential			
Low Strength	$52,491	$155,039	$207,530
Medium Strength	$9,278	$56,579	$65,857
High Strength	$10,803	$151,568	$162,371
Schools & Churches	$9,659	$67,898	$77,557
Patton State Hospital	$127	$71,833	$71,960
Total	**$3,938,593**	**$2,566,407**	**$6,505,000**

Table 73: Wastewater FY 2025 Residential Flat Monthly Charges

Proposed Monthly Flat Charges					
Customer Class	Annual Sewer Units [A]	Account Services [B]	Flow [C]	Total Revenue Requirement [D] = B + C	Total Monthly Flat Charge [E] = D ÷ A
Single Family	233,136	$2,469,231	$1,423,714	$3,892,944	**$16.70**
Multi-Family	130,956	$1,387,004	$639,777	$2,026,781	**$15.48**

Table 74: Wastewater FY 2025 Non-Residential Fixed Monthly Charges

Proposed Monthly Fixed Charges			
Customer Class	Annual Billing Units [A]	Account Services [B]	Total Monthly Fixed Charge [C] = B ÷ A
Non-Residential			
Low Strength	4,956	$52,491	**$10.59**
Medium Strength	876	$9,278	**$10.59**
High Strength	1,020	$10,803	**$10.59**
Schools & Churches	912	$9,659	**$10.59**
Patton State Hospital	12	$127	**$10.59**

Table 75: Wastewater FY 2025 Non-Residential Commodity Rates

Proposed Commodity Rates ($/hcf)			
Customer Class	Non-Residential Water Usage (hcf) [A]	Flow [B]	Total Commodity Rates ($/hcf) [C] = B ÷ A
Non-Residential			
Low Strength	202,777	$155,039	**$0.77**
Medium Strength	74,000	$56,579	**$0.77**
High Strength	198,237	$151,568	**$0.77**
Schools & Churches	150,994	$67,898	**$0.45**
Patton State Hospital	163,645	$71,833	**$0.44**

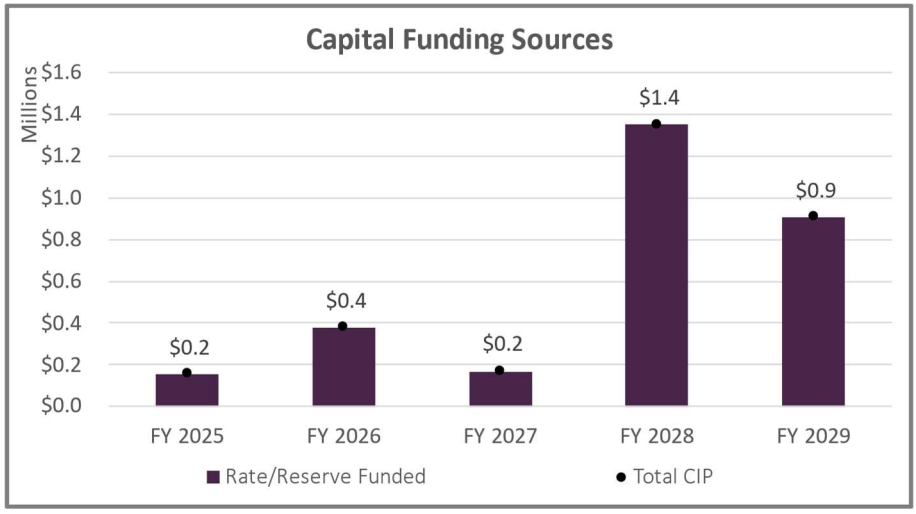
Reclamation Utility

Reclamation System

The SNRC construction was financed with low interest State Revolving Fund (SRF) loans with annual debt service payments equal to approximately $7.8M, which are likely to commence in FY 2025, but no later than FY 2026. The loan documents specify that the first payment is due within twelve months after the notice of completion. The SNRC came online in the first quarter of 2024. However, the SNRC requires a slow ramp up of accepting influent to ensure the treatment processes are performing as expected before the total wastewater flows of the District's service area are conveyed to the SNRC over the next few months.

The District developed a detailed capital improvement plan through FY 2030 for its Reclamation utility. Given that the SNRC is a new treatment plant, the CIP includes minor annual equipment and capital outlay needs and the periodic replacement of Diffusers and UV Lamps (scheduled in FY 2028). Figure 23 shows the District's capital plan through FY 2029, which accounts for inflation in future years.

Figure 23: Reclamation Capital Improvement Plan



Customers

As mentioned within the Wastewater section of this report, the District serves approximately 30,989 sewer units, which includes total residential dwelling units and non-residential accounts. Table 76 provides a summary of sewer units by customer class.

Table 76: Reclamation Sewer Units by Customer Class

Annual Fixed Units of Service	
Customer Class	Sewer Units
Single Family	19,428
Multi-Family	10,913
Non-Residential	
Low Strength	413
Medium Strength	73
High Strength	85
Schools & Churches	76
Patton State Hospital	1
Total	30,989

The current wastewater rate structure consists of monthly fixed charges and commodity rates for non-residential customers. Existing charges and rates are identified in Table 77.

Table 77: FY 2024 Reclamation Fixed Charges and Commodity Rates

Fixed Charges ($/Month)	
Customer Class	Existing
Single-Family	$26.77
Multi-Family	$23.90
Non-Residential	
Low Strength	$12.41
Medium Strength	$12.41
High Strength	$12.41
Schools & Churches	$12.41
Patton State Hospital	$12.41

Commodity Rates ($/hcf)	
Customer Class	Existing
Non-Residential	
Low Strength	$1.11
Medium Strength	$1.76
High Strength	$3.92
Schools & Churches	$1.11
Patton State Hospital	$2.06

Financial Plan Overview – Reclamation Utility

Financial Planning Assumptions

Developing a long-term financial plan requires an understanding of the utility's financial position by evaluating existing revenue streams, ongoing expenses, how those expenses will change over time, existing debt requirements, new strategic objectives, and reserve policies. With these considerations, certain assumptions are required for projecting revenues, expenses, and expected ending fund balances. Table 78 identifies assumptions used for forecasting revenues and Table 79 identifies assumptions used for forecasting increases in expenses through FY 2029.

Table 78: Reclamation Assumptions for Forecasting Revenues

Revenue Forcasting					
Key Assumptions	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Revenue Escalation					
Reserve Interest	2.0%	2.0%	2.0%	2.0%	2.0%
Account Growth					
Single Family	0.0%	0.0%	0.0%	0.0%	0.0%
Multi-Family	1.0%	1.0%	0.0%	0.0%	0.0%
Non-Residential	0.0%	0.0%	0.0%	0.0%	0.0%
Customer Sewer Units	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Customer Class					
Single Family	19,428	19,428	19,428	19,428	19,428
Multi-Family	10,913	11,022	11,022	11,022	11,022
Non-Residential					
Low Strength	413	413	413	413	413
Medium Strength	73	73	73	73	73
High Strength	85	85	85	85	85
Schools & Churches	76	76	76	76	76
Patton State Hospital	1	1	1	1	1
Total Customer Sewer Units	**30,989**	**31,098**	**31,098**	**31,098**	**31,098**
Non-Residential Consumption	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Low Strength	202,777	202,777	202,777	202,777	202,777
Medium Strength	74,000	74,000	74,000	74,000	74,000
High Strength	198,237	198,237	198,237	198,237	198,237
Schools & Churches	150,994	150,994	150,994	150,994	150,994
Patton State Hospital	163,645	163,645	163,645	163,645	163,645
Total Non-Residential Consumption (hcf)	**789,653**	**789,653**	**789,653**	**789,653**	**789,653**

Table 79: Reclamation Assumptions for Forecasting Expenses

Expense Forecasting							
Key Assumptions	*Source:*		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Expenditure Escalation							
Benefits			5.0%	5.0%	5.0%	5.0%	5.0%
Capital Construction	*ENR 20-City*	*5-Year Average*	3.9%	3.9%	3.9%	3.9%	3.9%
Energy Costs			7.0%	7.0%	7.0%	7.0%	7.0%
General Costs	*CPI - LA (BLS)*	*5-Year Average*	3.9%	3.9%	3.9%	3.9%	3.9%
Insurance			7.0%	5.0%	5.0%	5.0%	5.0%
Salaries			7.0%	5.0%	5.0%	5.0%	5.0%

Current Financial Position

Revenues

Based on the revenue forecasting assumptions, fixed revenues were calculated by multiplying Sewer Units (Table 76) by existing fixed charges (Table 77) over twelve billing periods. Commodity revenues were calculated using the commodity rates (Table 77) and non-residential water usage (Table 78). Table 80 shows the calculated revenues for the Financial Plan Period. Table 81 summarizes calculated rate revenues (rounded to thousands) and other operating and non-operating revenues. The SNRC will produce recycled water that the District will use to recharge the water basin, which will generate credits to offset the groundwater replenishment assessment expense within the Water Utility. In addition, the District plans to sell recycled water in bulk to West Valley Water Basin for recharge and generate tipping fees from haulers disposing of septage and commercial discharge (such as restaurants).

Table 80: Reclamation Calculated Rate Revenues

Calculated Rate Revenue					
Fixed Revenue	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Treatment Fixed Charge					
Single-Family	$6,241,051	$6,241,051	$6,241,051	$6,241,051	$6,241,051
Multi-Family	$3,129,848	$3,161,110	$3,161,110	$3,161,110	$3,161,110
Non-Residential					
Low Strength	$61,504	$61,504	$61,504	$61,504	$61,504
Medium Strength	$10,871	$10,871	$10,871	$10,871	$10,871
High Strength	$12,658	$12,658	$12,658	$12,658	$12,658
Schools & Churches	$11,318	$11,318	$11,318	$11,318	$11,318
Patton State Hospital	$149	$149	$149	$149	$149
Total Treatment Fixed Charge	$9,467,399	$9,498,660	$9,498,660	$9,498,660	$9,498,660
Total Fixed Revenue	**$9,467,399**	**$9,498,660**	**$9,498,660**	**$9,498,660**	**$9,498,660**
Commodity Revenue	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Treatment Commodity Rate					
Non-Residential					
Low Strength	$225,082	$225,082	$225,082	$225,082	$225,082
Medium Strength	$130,240	$130,240	$130,240	$130,240	$130,240
High Strength	$777,089	$777,089	$777,089	$777,089	$777,089
Schools & Churches	$167,603	$167,603	$167,603	$167,603	$167,603
Patton State Hospital	$337,109	$337,109	$337,109	$337,109	$337,109
Total Treatment Commodity Rate	$1,637,124	$1,637,124	$1,637,124	$1,637,124	$1,637,124
Total Commodity Revenue	**$1,637,124**	**$1,637,124**	**$1,637,124**	**$1,637,124**	**$1,637,124**
Total Rate Revenue	**$11,104,523**	**$11,135,784**	**$11,135,784**	**$11,135,784**	**$11,135,784**

Table 81: Reclamation Projected Revenues

Projected Revenue					
Revenue Summary	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Rate Revenue					
Treatment Fixed Charge	$9,467,000	$9,499,000	$9,499,000	$9,499,000	$9,499,000
Treatment Commodity Rate	$1,637,000	$1,637,000	$1,637,000	$1,637,000	$1,637,000
Subtotal Rate Revenue	$11,104,000	$11,136,000	$11,136,000	$11,136,000	$11,136,000
Other Revenue					
Bulk / Sales to SB	$1,038,000	$1,038,000	$1,038,000	$1,038,000	$1,038,000
Other Operating Revenue	$2,183,000	$2,724,000	$2,724,000	$2,724,000	$2,724,000
Non-Operating Revenue	$111,000	$201,000	$239,000	$224,000	$156,000
Subtotal Bulk / Sales to SB	$3,332,000	$3,963,000	$4,001,000	$3,986,000	$3,918,000
Total Revenues	**$14,436,000**	**$15,099,000**	**$15,137,000**	**$15,122,000**	**$15,054,000**

Expenses

The FY 2024 budget was used as the baseline expenses of the utility and adjusted in subsequent years based on the escalation factors shown in Table 79. Table 82 provides projected Operational & Maintenance (O&M) costs through FY 2029 (rounded to thousands). Each expense category includes detailed line-item expenditures that were discussed with staff to determine the appropriate escalation factor to use for forecasting how costs will increase over time. Expenses include the SRF debt used to construct the SNRC, with the first payment due in FY 2026, equal to $7.8M annually.

Table 82: Reclamation Projected O&M Expenses

Projected Expenses					
O&M Expenses	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Operating Expenses					
Human Resources - Reclamation	$600,000	$624,000	$648,000	$673,000	$699,000
Water Reclamation					
Labor and Benefits	$1,520,000	$1,596,000	$1,676,000	$1,759,000	$1,847,000
Materials and Supplies	$1,597,000	$1,660,000	$1,724,000	$1,791,000	$1,861,000
Treatment	$2,885,000	$2,998,000	$3,114,000	$3,235,000	$3,361,000
Utilities	$1,879,000	$2,011,000	$2,152,000	$2,302,000	$2,463,000
SB Detachment Costs	$700,000	$700,000	$700,000	$700,000	$700,000
Facilities Maintenance - Reclamation	$608,000	$637,000	$666,000	$697,000	$730,000
Subtotal Operating Expenses	$9,789,000	$10,226,000	$10,680,000	$11,157,000	$11,661,000
Debt Service					
Existing Debt	$0	$7,800,000	$7,800,000	$7,800,000	$7,800,000
Interfund Loans	$0	$0	$0	$375,000	$375,000
Subtotal Debt Service	$0	$7,800,000	$7,800,000	$8,175,000	$8,175,000
Total Expenses	**$9,789,000**	**$18,026,000**	**$18,480,000**	**$19,332,000**	**$19,836,000**

Reserves

The Reclamation utility incorporates similar revised reserve policies as the water utility and wastewater utility. However, the SRF loans require a debt reserve to be established, equal to the annual debt payment, before the first payment is due. The District will fund the debt reserve through reimbursements from previously advanced funding for the construction of the SNRC and grant funds from the SCE SGIP ($2M). These robust reserves help mitigate risks to the utility by ensuring sufficient cash is on hand for daily operations and to fund annual system improvements. In addition, these reserves help smooth rates and mitigate rate spikes due to emergencies or above-average system costs. The revised reserve policies identify the function of each reserve and Table 83 summarizes the minimum reserve requirements and the ideal funding targets of each reserve.

Table 83: Reclamation Reserve Requirements and Targets

Reserve	Minimum Requirement	Reserve Target
Operating	90 days of operating costs	120 days of operating costs
Replacement	2 years of 5-year CIP average	5 years of planned capital
Emergency	1.0% of Assets	2.0% of Assets
Debt Reserve	$7.8M	$7.8M
Rate Stabilization	-	-

The beginning FY 2024 reserve balance (July 1, 2023) equaled approximately $50,000.

Financial Outlook at Existing Rates

Calculating revenue using existing rates and projecting expenses helps determine the current financial health of the utility. Revenues from existing rates are sufficient to fund O&M through FY 2025, but a significant deficit is projected by FY 2026 as the SRF loan payments commence. There is limited net income to cover planned capital spending resulting in the use of reserves to cover the remaining capital costs. However, the District will receive additional reimbursements from the State for the advancement of funds for the construction of the SNRC, as well as grant reimbursements. Table 84 forecasts existing revenues and expenses through the Financial Plan Period.

Table 85 identifies reserve transfers and activity, with projected FY 2025 starting reserve balances shown for each reserve.

Table 84: Reclamation Financial Plan at Existing Rates

Financial Plan at Existing Rates						
Revenue	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Rate Revenue						
Treatment Fixed Charge	Table 81	$9,467,000	$9,499,000	$9,499,000	$9,499,000	$9,499,000
Treatment Commodity Rate		$1,637,000	$1,637,000	$1,637,000	$1,637,000	$1,637,000
Total Rate Revenue		$11,104,000	$11,136,000	$11,136,000	$11,136,000	$11,136,000
Bulk / Sales to SB	Table 81	$1,038,000	$1,038,000	$1,038,000	$1,038,000	$1,038,000
Other Operating Revenue		$2,183,000	$2,724,000	$2,724,000	$2,724,000	$2,724,000
Non-Operating Revenue		$111,000	$201,000	$239,000	$224,000	$156,000
Subtotal Bulk / Sales to SB		$3,332,000	$3,963,000	$4,001,000	$3,986,000	$3,918,000
Total Revenues		**$14,436,000**	**$15,099,000**	**$15,137,000**	**$15,122,000**	**$15,054,000**
O&M Expenses	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Operating Expenses						
Human Resources - Reclamation	Table 82	$600,000	$624,000	$648,000	$673,000	$699,000
Water Reclamation						
Labor and Benefits		$1,520,000	$1,596,000	$1,676,000	$1,759,000	$1,847,000
Materials and Supplies		$1,597,000	$1,660,000	$1,724,000	$1,791,000	$1,861,000
Treatment		$2,885,000	$2,998,000	$3,114,000	$3,235,000	$3,361,000
Utilities		$1,879,000	$2,011,000	$2,152,000	$2,302,000	$2,463,000
SB Detachment Costs		$700,000	$700,000	$700,000	$700,000	$700,000
Facilities Maintenance - Reclamation		$608,000	$637,000	$666,000	$697,000	$730,000
Subtotal Operating Expenses		$9,789,000	$10,226,000	$10,680,000	$11,157,000	$11,661,000
Debt Service						
Existing Debt	Table 82	$0	$7,800,000	$7,800,000	$7,800,000	$7,800,000
Interfund Loans		$0	$0	$0	$375,000	$375,000
Subtotal Debt Service		$0	$7,800,000	$7,800,000	$8,175,000	$8,175,000
Total Expenses		**$9,789,000**	**$18,026,000**	**$18,480,000**	**$19,332,000**	**$19,836,000**
Net Operating		**$4,647,000**	**($2,927,000)**	**($3,343,000)**	**($4,210,000)**	**($4,782,000)**

Table 85: Reclamation Reserve Activity at Existing Rates

Reserve Activity at Existing Rates						
Operating Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$3,913,644	$3,218,301	$5,084,301	$1,741,301	($2,468,699)
Transfers (Net Operating)	Table 84	$4,647,000	($2,927,000)	($3,343,000)	($4,210,000)	($4,782,000)
SRF Reimbursements		$0	$4,793,000	$0	$0	$0
Direct Transfers from/(to) Emergency Reserve		$0	$0	$0	$0	$0
Direct Transfers from/(to) Debt Service Reserve		($2,660,000)	$0	$0	$0	$0
Transfers to Capital Replacement Reserve		($2,682,342)	$0	$0	$0	$0
Ending Balance		**$3,218,301**	**$5,084,301**	**$1,741,301**	**($2,468,699)**	**($7,250,699)**
Capital Replacement Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$817,583	$1,713,859	$1,366,761	$1,224,328	($125,824)
Plus:						
Transfers from/(to) Operating Fund		$2,682,342	$0	$0	$0	$0
Less:						
CIP		($155,802)	($377,599)	($168,087)	($1,350,152)	($906,707)
Transfers to Emergency Reserve		($1,655,329)	$0	$0	$0	$0
Subtotal Capital Replacement Reserve		$1,688,795	$1,336,260	$1,198,674	($125,824)	($1,032,531)
Interest Earnings		$25,064	$30,501	$25,654	$0	$0
Ending Balance		**$1,713,859**	**$1,366,761**	**$1,224,328**	**($125,824)**	**($1,032,531)**
Emergency Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$0	$1,671,882	$1,705,320	$1,739,426	$1,774,215
Direct Transfers from/(to) Operating Reserve		$0	$0	$0	$0	$0
Transfers from Capital Replacement Reserve		$1,655,329	$0	$0	$0	$0
Subtotal Emergency Reserve		$1,655,329	$1,671,882	$1,705,320	$1,739,426	$1,774,215
Interest Earnings		$16,553	$33,438	$34,106	$34,789	$35,484
Ending Balance		**$1,671,882**	**$1,705,320**	**$1,739,426**	**$1,774,215**	**$1,809,699**
Capacity Fee Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$31,954	$32,593	$33,245	$33,910	$34,588
Capacity Fee Receipts		$0	$0	$0	$0	$0
Transfers (to) Capital Replacement Reserve		$0	$0	$0	$0	$0
Transfers (to) Debt Service Reserve		$0	$0	$0	$0	$0
Subtotal Capacity Fee Reserve		$31,954	$32,593	$33,245	$33,910	$34,588
Interest Earnings		$639	$652	$665	$678	$692
Ending Balance		**$32,593**	**$33,245**	**$33,910**	**$34,588**	**$35,280**
Debt Service Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$5,148,000	$7,808,000	$7,808,000	$7,808,000	$7,808,000
Direct Transfers from/(to) Operating Reserve		$2,660,000	$0	$0	$0	$0
Transfers from/(to) Capacity Fee Reserve		$0	$0	$0	$0	$0
Ending Balance		**$7,808,000**	**$7,808,000**	**$7,808,000**	**$7,808,000**	**$7,808,000**
Ending Balance		**$14,444,636**	**$15,997,628**	**$12,546,966**	**$7,022,281**	**$1,369,749**

Figure 24 illustrates the operating position of the utility, where O&M expenses are identified with the dashed red trendline and total revenues at existing rates are shown by the horizontal black trendline. The bars represent the amount of net operating income available, with grey bars reflecting positive net operating income for capital spending and reserve funding and red bars reflecting an operating deficit absorbed by reserves.

Figure 24: Reclamation Current Operating Financial Position

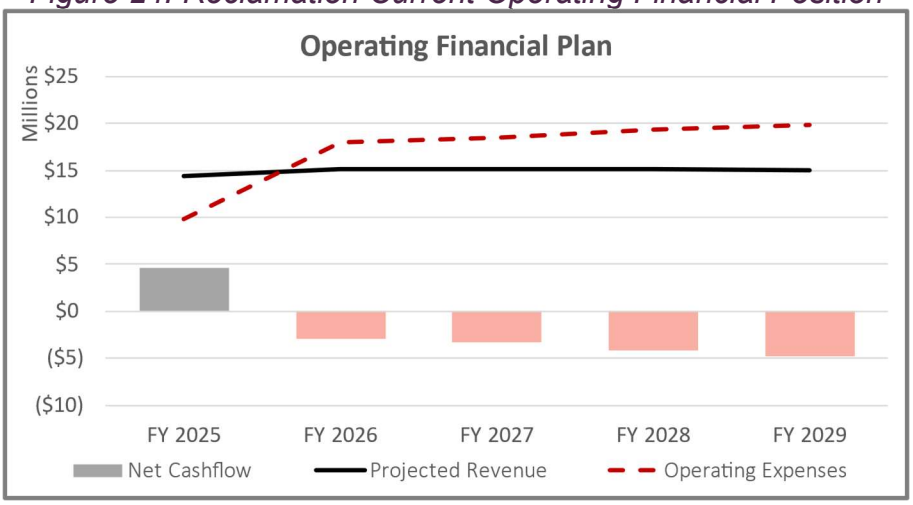
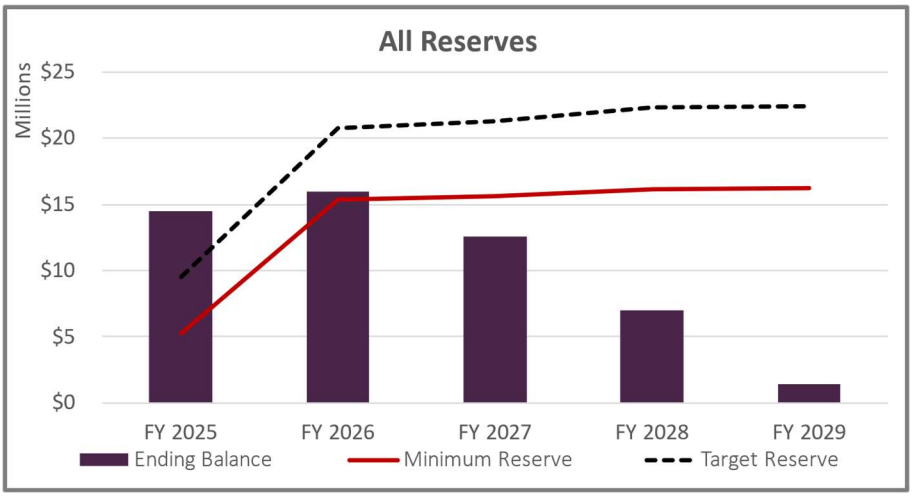


Figure 17 reflects the projected ending balances of reserves after operating and capital projects are funded through FY 2029. Reserves are below the minimum target for each year of the Financial Plan Period.

Figure 25: Reclamation Projected Ending Reserves at Existing Rates



Proposed Financial Plan – Reclamation Utility

From the financial outlook at existing rates, a proposed financial plan is developed to fund the multi-year revenue requirements, while meeting debt covenants and reserve requirements. Table 86 forecasts existing revenues, ***with annual revenue adjustments***, and expenses through the Financial Plan Period. However, FY 2028 and FY 2029 are not part of the Rate Setting Period and will not be included as part of the proposed rates within the Proposition 218 Notice. Table 87 identifies the reserve transfers and activity within each reserve, and projected ending balances for each fiscal year.

Table 86: Reclamation Proposed Financial Plan

Proposed Financial Plan							
Revenue		*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Rate Revenue							
Treatment Fixed Charge		Table 81	$9,467,000	$9,499,000	$9,499,000	$9,499,000	$9,499,000
Treatment Commodity Rate			$1,637,000	$1,637,000	$1,637,000	$1,637,000	$1,637,000
Total Rate Revenue			$11,104,000	$11,136,000	$11,136,000	$11,136,000	$11,136,000
Additional Revenue (from revenue adjustments):							
Fiscal Year	Revenue Adjustment	Effective Month					
FY 2025	10.0%	July	$1,110,000	$1,113,000	$1,113,000	$1,113,000	$1,113,000
FY 2026	10.0%	July		$1,224,000	$1,224,000	$1,224,000	$1,224,000
FY 2027	10.0%	July			$1,347,000	$1,347,000	$1,347,000
FY 2028	8.0%	July				*$1,185,000*	*$1,185,000*
FY 2029	8.0%	July					*$1,280,000*
Total Additional Revenue			$1,110,000	$2,337,000	$3,684,000	$4,869,000	$6,149,000
Projected Rate Revenue			**$12,214,000**	**$13,473,000**	**$14,820,000**	**$16,005,000**	**$17,285,000**
Bulk / Sales to SB		Table 81	$1,038,000	$1,038,000	$1,038,000	$1,038,000	$1,038,000
Other Operating Revenue			$2,183,000	$2,724,000	$2,724,000	$2,724,000	$2,724,000
Non-Operating Revenue			$111,000	$201,000	$248,000	$276,000	$280,000
Subtotal Bulk / Sales to SB			$3,332,000	$3,963,000	$4,010,000	$4,038,000	$4,042,000
Total Revenues			**$15,546,000**	**$17,436,000**	**$18,830,000**	**$20,043,000**	**$21,327,000**
O&M Expenses		*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Operating Expenses							
Human Resources - Reclamation		Table 82	$600,000	$624,000	$648,000	$673,000	$699,000
Water Reclamation							
Labor and Benefits			$1,520,000	$1,596,000	$1,676,000	$1,759,000	$1,847,000
Materials and Supplies			$1,597,000	$1,660,000	$1,724,000	$1,791,000	$1,861,000
Treatment			$2,885,000	$2,998,000	$3,114,000	$3,235,000	$3,361,000
Utilities			$1,879,000	$2,011,000	$2,152,000	$2,302,000	$2,463,000
SB Detachment Costs			$700,000	$700,000	$700,000	$700,000	$700,000
Facilities Maintenance - Reclamation			$608,000	$637,000	$666,000	$697,000	$730,000
Subtotal Operating Expenses			$9,789,000	$10,226,000	$10,680,000	$11,157,000	$11,661,000
Debt Service							
Existing Debt		Table 82	$0	$7,800,000	$7,800,000	$7,800,000	$7,800,000
Interfund Loans			$0	$0	$0	$375,000	$375,000
Subtotal Debt Service			$0	$7,800,000	$7,800,000	$8,175,000	$8,175,000
Total Expenses			**$9,789,000**	**$18,026,000**	**$18,480,000**	**$19,332,000**	**$19,836,000**
Net Operating			**$5,757,000**	**($590,000)**	**$350,000**	**$711,000**	**$1,491,000**

Table 87: Reclamation Reserve Activity at Proposed Rates

Reserve Activity at Proposed Rates						
Operating Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$3,913,644	$3,218,301	$5,926,356	$6,075,616	$6,355,726
Transfers (Net Operating)	Table 86	$5,757,000	($590,000)	$350,000	$711,000	$1,491,000
SRF Reimbursements		$0	$4,793,000	$0	$0	$0
Direct Transfers from/(to) Emergency Reserve		$0	$0	$0	$0	$0
Direct Transfers from/(to) Debt Service Reserv		($2,660,000)	$0	$0	$0	$0
Transfers to Capital Replacement Reserve		($3,792,342)	($1,494,945)	($200,740)	($430,890)	($1,325,301)
Ending Balance		**$3,218,301**	**$5,926,356**	**$6,075,616**	**$6,355,726**	**$6,521,425**
Capital Replacement Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$817,583	$2,834,959	$4,020,178	$4,133,561	$3,287,777
Plus:						
Transfers from/(to) Operating Fund		$3,792,342	$1,494,945	$200,740	$430,890	$1,325,301
Less:						
CIP		($155,802)	($377,599)	($168,087)	($1,350,152)	($906,707)
Transfers to Emergency Reserve		($1,655,329)	$0	$0	$0	$0
Subtotal Capital Replacement Reserve		$2,798,795	$3,952,305	$4,052,830	$3,214,299	$3,706,371
Interest Earnings		$36,164	$67,873	$80,730	$73,479	$69,941
Ending Balance		**$2,834,959**	**$4,020,178**	**$4,133,561**	**$3,287,777**	**$3,776,313**
Emergency Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$0	$1,671,882	$1,705,320	$1,739,426	$1,774,215
Direct Transfers from/(to) Operating Reserve		$0	$0	$0	$0	$0
Transfers from Capital Replacement Reserve		$1,655,329	$0	$0	$0	$0
Subtotal Emergency Reserve		$1,655,329	$1,671,882	$1,705,320	$1,739,426	$1,774,215
Interest Earnings		$16,553	$33,438	$34,106	$34,789	$35,484
Ending Balance		**$1,671,882**	**$1,705,320**	**$1,739,426**	**$1,774,215**	**$1,809,699**
Capacity Fee Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$31,954	$32,593	$33,245	$33,910	$34,588
Capacity Fee Receipts		$0	$0	$0	$0	$0
Transfers (to) Capital Replacement Reserve		$0	$0	$0	$0	$0
Transfers (to) Debt Service Reserve		$0	$0	$0	$0	$0
Subtotal Capacity Fee Reserve		$31,954	$32,593	$33,245	$33,910	$34,588
Interest Earnings		$639	$652	$665	$678	$692
Ending Balance		**$32,593**	**$33,245**	**$33,910**	**$34,588**	**$35,280**
Debt Service Reserve	*Report Source*	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Beginning Balance		$5,148,000	$7,808,000	$7,808,000	$7,808,000	$7,808,000
Direct Transfers from/(to) Operating Reserve		$2,660,000	$0	$0	$0	$0
Transfers from/(to) Capacity Fee Reserve		$0	$0	$0	$0	$0
Ending Balance		**$7,808,000**	**$7,808,000**	**$7,808,000**	**$7,808,000**	**$7,808,000**
Ending Balance		**$15,565,736**	**$19,493,099**	**$19,790,513**	**$19,260,306**	**$19,950,716**

Figure 18 identifies the operating position based on the proposed financial plan. Figure 19 and Figure 20 show the capital plan with funding sources and projected ending reserve balances, respectively.

Figure 26: Reclamation Proposed Operating Position

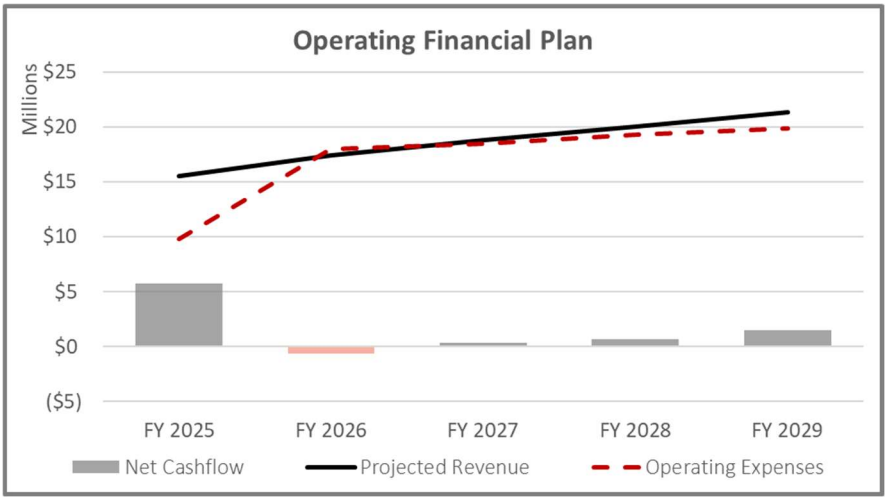


Figure 27: Reclamation Capital Improvement Plan with Funding Sources

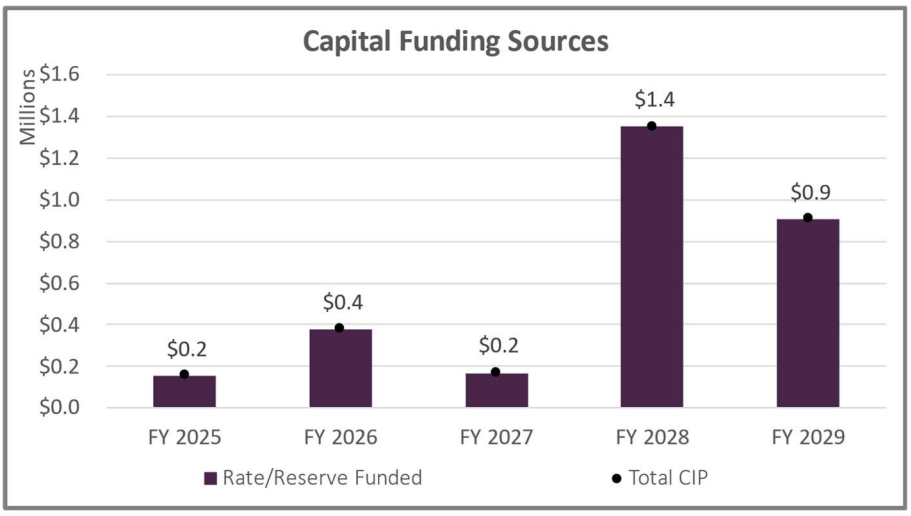
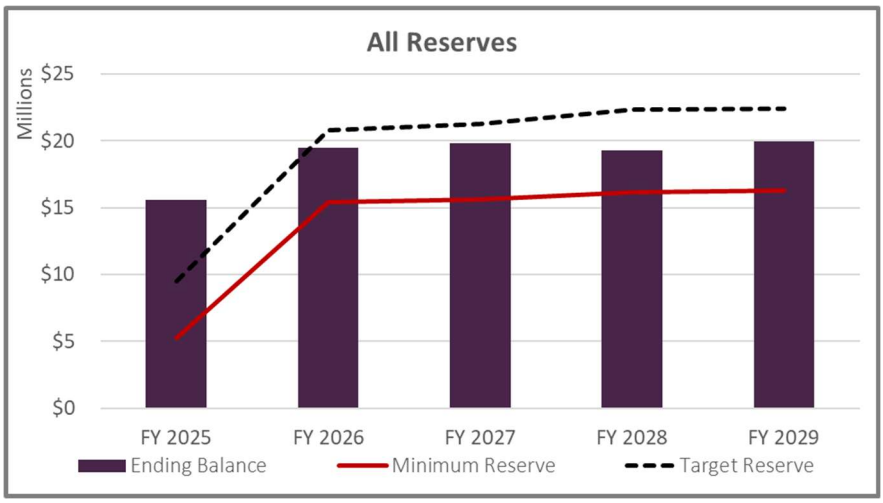


Figure 28: Reclamation Proposed Ending Reserves



Cost-of-Service Analysis – Reclamation Utility

Cost-of-Service Process

Similar to updating water and wastewater rates, the next step in developing reclamation rates is to perform a cost-of-service analysis. Through this process, costs incurred are allocated to customer classes based on their proportional share. As a result, the proposed rates are cost-based and reflect the costs incurred to provide service to customers.

Revenue Requirements

FY 2025 revenue requirements were used for the cost-of-service analysis. Revenue requirements include O&M expenses, debt service, available revenue offsets, non-rate revenues, annual net income, and any mid-year adjustments if rates are implemented after the start of the fiscal year. The proposed revenue adjustments and corresponding rates accumulate the necessary funding over the Rate Setting Period to fund O&M, capital projects, and comply with minimum reserve requirements. The results of the financial plan analysis are summarized in Table 88 and represent the revenue required from rates.

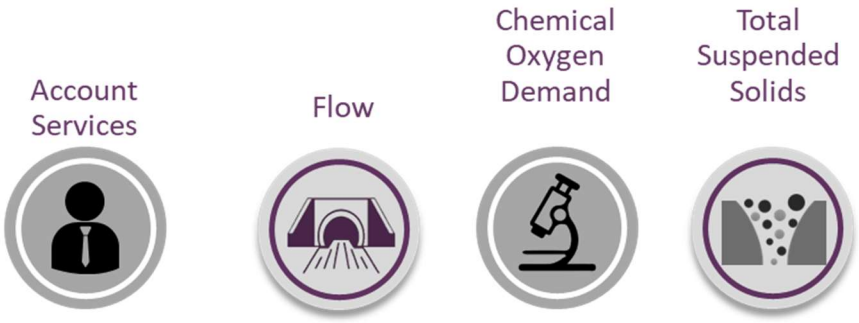
Table 88: Reclamation Revenue Requirements (FY 2025 – FY 2027)

Rate Setting Period	FY 2025	FY 2026	FY 2027
Revenue Requirements	Total	Total	Total
Operating Expenses			
Human Resources - Reclamation	$600,000	$624,000	$648,000
Water Reclamation			
Labor and Benefits	$1,520,000	$1,596,000	$1,676,000
Materials and Supplies	$1,597,000	$1,660,000	$1,724,000
Treatment	$2,885,000	$2,998,000	$3,114,000
Utilities	$1,879,000	$2,011,000	$2,152,000
SB Detachment Costs	$700,000	$700,000	$700,000
Facilities Maintenance - Reclamation	$608,000	$637,000	$666,000
Total Operating Expenses	$9,789,000	$10,226,000	$10,680,000
Debt Service			
Existing Debt	$0	$7,800,000	$7,800,000
Interfund Loans	$0	$0	$0
Total Debt Service	$0	$7,800,000	$7,800,000
Other Funding			
Revenue Offsets			
Bulk / Sales to SB	($1,038,000)	($1,038,000)	($1,038,000)
Other Operating Revenue	($2,183,000)	($2,724,000)	($2,724,000)
Non-Operating Revenue	($111,000)	($201,000)	($248,000)
Total Revenue Offsets	($3,332,000)	($3,963,000)	($4,010,000)
Adjustments			
Reserve Funding	$5,757,000	($590,000)	$350,000
Adjustment for Mid-Year Increase	$0	$0	$0
Total Adjustments	$5,757,000	($590,000)	$350,000
Total Other Funding	$2,425,000	($4,553,000)	($3,660,000)
Revenue Requirement from Rates	**$12,214,000**	**$13,473,000**	**$14,820,000**

Define Cost Components

The District's reclamation costs-of-service requirements were allocated to cost components and then to customers classes utilizing a cost causation approach endorsed by the Water Environment Federation (WEF) rate setting manual Financing and Charges for Wastewater Systems (MOP 27). The utility incurs costs to accommodate total flow demand and various strength concentrations of influent generated by different customer classes. Therefore, to determine the most appropriate way to recover the utility's expenses, cost components are identified and used to allocate expenses based on how they are incurred. Through review of the revenue requirements and based on an understanding of the new SNRC, the cost-of-service allocation documented in this report is based on total accounts, flow (volume influent in hcf), and the strength characteristics of the District's customer classes. Strength loading factors for chemical oxygen demand (COD) and total suspended solids (TSS) are identified by customer class[7]. Using this approach, revenue requirements are allocated to the different customer classes proportionate to their use of the reclamation treatment facilities.

Figure 29: Reclamation Cost Components



Account Services – Fixed expenses that do not necessarily fluctuate based on flow or strength concentrations associated with the new SNRC. These costs include personnel costs, departmental expenses, and facility maintenance.
Flow – Expenses associated with the total volume of influent treated at the SNRC. These costs include treatment, utilities, and materials.
COD – Expenses incurred to treat COD related processes at the SNRC.
TSS – Expenses incurred to treat TSS at the SNRC.

Allocate Expenses to Cost Components

When allocating expenses to the defined costs components, it is important to have a sound basis as to why an expense was allocated to a certain fixed cost component versus a variable cost component or split between both fixed and variable. The distribution of expenses to the cost components should be straight-forward to ensure the method of apportionment is **understandable** and easily **correlates to how expenses are incurred**. A description of each expense category is identified below.

[7] Based on the LACSD 2007 update sampling

Expense Categories:

Human Resources – Insurance for the SNRC.

Labor and Benefits – Personnel costs associated with the operations of the SNRC.

Materials and Supplies – Materials and supplies related the SNRC, including chemicals.

Treatment – Costs related to contract services for operating the SNRC as part of treatment plant coming online in 2024.

Utilities – Energy Costs associated with operating the SNRC and appurtenant facilities.

SB Detachment Costs – Costs related to the detaching from the City of San Bernardino treatment facility.

Facility Maintenance – Costs associated with maintaining the SNRC facilities.

Table 89 summarizes the percent allocation of O&M expenses to the cost components and corresponding dollar amounts. The percentages identified for the "Treatment" allocation were based on discussions with District staff. Based on the District Engineer's experience and direct knowledge with the SNRC construction, the treatment plant and associated costs are primarily a function of treating COD and TSS. Based on the treatment plant processes, 20% of cost incurred is to move flow and 80% is associated with the actual treatment processes. Therefore, 20% is assigned to flow with 40% to both COD and TSS

Table 89: Reclamation O&M Allocation to Cost Components

		Cost Components				
Operating Expenses	Methodology / Allocation Basis	Account Services	Flow	COD	TSS	Total
Human Resources - Reclamation	Fixed	100.0%	0.0%	0.0%	0.0%	100.0%
Water Reclamation						
Labor and Benefits	Fixed	100.0%	0.0%	0.0%	0.0%	100.0%
Materials and Supplies	Treatment	0.0%	20.0%	40.0%	40.0%	100.0%
Treatment	Treatment	0.0%	20.0%	40.0%	40.0%	100.0%
Utilities	Specific	0.0%	100.0%	0.0%	0.0%	100.0%
SB Detachment Costs	Treatment	0.0%	20.0%	40.0%	40.0%	100.0%
Facilities Maintenance - Reclamation	Fixed	100.0%	0.0%	0.0%	0.0%	100.0%
Capital Outlay - Reclamation	Fixed	100.0%	0.0%	0.0%	0.0%	100.0%

Operating Expenses	Methodology / Allocation Basis	Account Services	Flow	COD	TSS	Total
Human Resources - Reclamation	*Fixed*	$600,000	$0	$0	$0	$600,000
Water Reclamation						
Labor and Benefits	*Fixed*	$1,520,000	$0	$0	$0	$1,520,000
Materials and Supplies	*Treatment*	$0	$319,400	$638,800	$638,800	$1,597,000
Treatment	*Treatment*	$0	$577,000	$1,154,000	$1,154,000	$2,885,000
Utilities	*Specific*	$0	$1,879,000	$0	$0	$1,879,000
SB Detachment Costs	*Treatment*	$0	$140,000	$280,000	$280,000	$700,000
Facilities Maintenance - Reclamation	*Fixed*	$608,000	$0	$0	$0	$608,000
Total Allocation ($)		**$2,728,000**	**$2,915,400**	**$2,072,800**	**$2,072,800**	**$9,789,000**
Operating Expenses Allocation (%)		*27.9%*	*29.8%*	*21.2%*	*21.2%*	*100.0%*

Other Funding includes other operating revenues, non-operating reserves, and reserve funding. All items under "Other Funding" are allocated based on O&M percentages derived in Table 89. Table 90 summarizes the percent allocation to the cost components and the corresponding amounts in dollars.

Table 90: Reclamation Other Funding Allocation to Cost Components

Other Funding	Methodology / Allocation Basis	Cost Components: Account Services	Flow	COD	TSS	Total
Revenue Offsets						
Bulk / Sales to SB	O&M Allocation	27.9%	29.8%	21.2%	21.2%	100.0%
Other Operating Revenue	O&M Allocation	27.9%	29.8%	21.2%	21.2%	100.0%
Non-Operating Revenue	O&M Allocation	27.9%	29.8%	21.2%	21.2%	100.0%
Adjustments						
Reserve Funding	O&M Allocation	27.9%	29.8%	21.2%	21.2%	100.0%
Adjustment for Mid-Year Increase	O&M Allocation	27.9%	29.8%	21.2%	21.2%	100.0%

Other Funding	Methodology / Allocation Basis	Account Services	Flow	COD	TSS	Total
Revenue Offsets						
Bulk / Sales to SB	O&M Allocation	($289,270)	($309,141)	($219,794)	($219,794)	($1,038,000)
Other Operating Revenue	O&M Allocation	($608,359)	($650,150)	($462,246)	($462,246)	($2,183,000)
Non-Operating Revenue	O&M Allocation	($30,655)	($32,761)	($23,292)	($23,292)	($110,000)
Adjustments						
Reserve Funding	O&M Allocation	$1,604,083	$1,714,275	$1,218,821	$1,218,821	$5,756,000
Total Allocation ($)		**$675,799**	**$722,223**	**$513,489**	**$513,489**	**$2,425,000**

Table 91 summarizes the reclamation revenue requirements for FY 2025.

Table 91: Reclamation FY 2025 Cost-of-Service Requirements

FY 2025 Revenue Requirements					
Revenue Requirement	Account Services	Flow	COD	TSS	Total
Operating Expenses	$2,728,000	$2,915,400	$2,072,800	$2,072,800	$9,789,000
Other Funding	$675,799	$722,223	$513,489	$513,489	$2,425,000
COS Requirements	**$3,403,799**	**$3,637,623**	**$2,586,289**	**$2,586,289**	**$12,214,000**

Rate Design – Reclamation Utility

Develop Units of Service

Wastewater flows for each customer class were derived within the Wastewater section of this report. However, with costs associated with treatment plant operations and processes, the strength of discharge from the various customer classes should also be considered.

Unit rates for the cost components are derived by identifying the units of service for each cost component (distribution basis). The distribution basis varies by cost component and includes sewer units, projected flow, weighted COD and weighted TSS, and non-residential water usage for deriving the final commodity unit rates per hcf. Table 92 derives the commodity units of service for each cost component. Strength concentrations are weighted by total flow in Million Gallons (MG) to develop COD units of service (Weighted COD) and TSS units of service (Weighted TSS). Table 93 summarizes all units of service, including sewer units, water usage, projected flow, Weighted COD, and Weighted TSS.

Table 92: Reclamation Commodity Units of Service

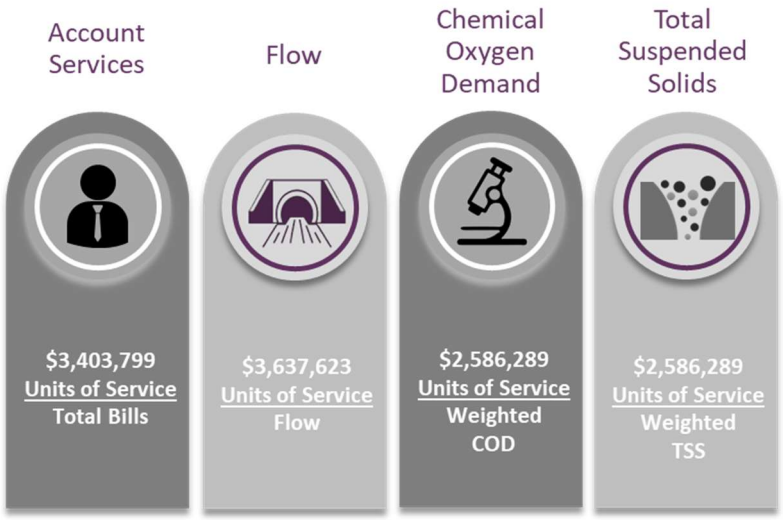
Variable Units of Service (Flow, Weighted COD, Weighted TSS)						
Customer Class	FY 2025 Projected Flow (hcf)	Conversion Factor (HCF to MG)	COD (ppm)	TSS (ppm)	Weighted COD	Weighted TSS
	[A] = Table 69	[B]	[C]	[D]	[E] = (AxBxC)	[E] = (AxBxD)
Single-Family	1,488,072	0.075%	562	272	625,884	302,682
Multi-Family	668,698	0.075%	562	272	281,255	136,017
Subtotal Residential	2,156,770				907,139	438,698
Non-Residential						
Low Strength	162,047	0.075%	513	150	62,184	18,183
Medium Strength	59,136	0.075%	515	271	22,787	11,982
High Strength	158,419	0.075%	1,258	434	149,101	51,404
Schools & Churches	70,967	0.075%	513	150	27,233	7,963
Patton State Hospital	75,080	0.075%	518	268	29,073	15,075
Subtotal Non-Residential	525,650				290,378	104,608
Total	**2,682,420**				**1,197,517**	**543,306**

Table 93: Reclamation Units of Service

Reclamantion Units of Service					
Customer Class	Annual Sewer Units	FY 2025 Non-Residential Water Usage (hcf)	FY 2025 Projected Flow (hcf)	Weighted COD	Weighted TSS
	[A]	[B]	[C]	[D]	[E]
Single-Family	233,136		1,488,072	625,884	302,682
Multi-Family	130,956		668,698	281,255	136,017
Non-Residential					
Low Strength	4,956	202,777	162,047	62,184	18,183
Medium Strength	876	74,000	59,136	22,787	11,982
High Strength	1,020	198,237	158,419	149,101	51,404
Schools & Churches	912	150,994	70,967	27,233	7,963
Patton State Hospital	12	163,645	75,080	29,073	15,075
Total	**371,868**	**789,653**	**2,682,420**	**1,197,517**	**543,306**

With the units of service shown in Table 93, the distribution basis can be identified for each cost component. Figure 30 identifies the total revenue requirements by cost component from Table 91 and the corresponding units of service.

Figure 30: Reclamation Units of Service by Cost Component



Allocate to Customer Class

Using the FY 2025 revenue requirements, the cost-of-service allocates expenses to customer classes based on the service demands that each place on the system (cost causation). Using this approach provides a clear connection between costs incurred and the proportionate share attributable to each customer class. When designing rates, the most critical component is to connect costs to the proposed rates, resulting in a rate structure that is cost-based and in compliance with Proposition 218. In the previous section, costs were summarized by expense category and allocated to cost components based on how each cost is incurred. The next step in designing rates is to allocate each cost component to customers in relation to their use of the system and SNRC. This ensures that each customer proportionately shares in the financial obligation of the Reclamation utility. For the following unit rate computations for each cost component, unit rates were rounded up to the nearest penny.

Fixed Cost Recovery

Account Services

Account Services costs are spread equally across all accounts / dwelling units. This is achieved by using the distribution basis of Annual Sewer Units. Therefore, the revenue requirement for Account Services is apportioned based on the Annual Sewer Units to determine the monthly unit cost-of-service shown in Table 94.

Table 94: Reclamation Account Service Allocation to Customer Classes

Account Services Allocation to Customer Classes				
Customer Class	Annual Sewer Units [A]	% Allocation [B] = A as %	Revenue Requirement [C] = Rev Req x B	Unit Rate [D] = C ÷ A
Single-Family	233,136	62.7%	$2,133,951	$9.16
Multi-Family	130,956	35.2%	$1,198,673	$9.16
Non-Residential				
Low Strength	4,956	1.3%	$45,363	$9.16
Medium Strength	876	0.2%	$8,018	$9.16
High Strength	1,020	0.3%	$9,336	$9.16
Schools & Churches	912	0.2%	$8,348	$9.16
Patton State Hospital	12	0.0%	$110	$9.16
Total	**371,868**	**100.0%**	**$3,403,799**	

Flow

The cost associated with processing the total volume of influent conveyed to the SNRC, including utility expenses, and portions of treatment, materials, and SB detachment costs. Therefore, the revenue requirement for Flow is apportioned to each customer class based on their percentage of total projected flow as summarized within Table 95.

Table 95: Reclamation Flow Allocation to Customer Classes

Flow Allocation to Customer Classes			
Customer Class	FY 2025 Projected Flow (hcf) [A]	% Allocation [B] = A as a %	Revenue Requirement [C] = Rev Req x B
Single-Family	1,488,072	55.5%	$2,017,971
Multi-Family	668,698	24.9%	$906,820
Non-Residential			
Low Strength	162,047	6.0%	$219,752
Medium Strength	59,136	2.2%	$80,195
High Strength	158,419	5.9%	$214,832
Schools & Churches	70,967	2.6%	$96,238
Patton State Hospital	75,080	2.8%	$101,816
Total	**2,682,420**	**100.0%**	**$3,637,623**

COD

COD costs relate to the treatment process of breaking down organic material in wastewater. Higher COD strengths require increased costs and longer periods of treatment time prior to discharging effluent into waterways. Therefore, the revenue requirement for COD is apportioned based on Weighted COD for each customer class as shown in Table 96.

Table 96: COD Allocation to Customer Classes

COD Allocation to Customer Classes			
Customer Class	Weighted COD [A]	% Allocation [B] = A as a %	Revenue Requirement [C] = Rev Req x B
Single-Family	625,884	52.3%	$1,351,728
Multi-Family	281,255	23.5%	$607,429
Non-Residential			
Low Strength	62,184	5.2%	$134,299
Medium Strength	22,787	1.9%	$49,213
High Strength	149,101	12.5%	$322,015
Schools & Churches	27,233	2.3%	$58,815
Patton State Hospital	29,073	2.4%	$62,789
Total	**1,197,517**	**100.0%**	**$2,586,289**

TSS

TSS costs relate to the treatment process of removing solids from wastewater through settling, screening, and filtering. Higher TSS strengths require increased costs and additional filtration to treat and remove the high levels of TSS prior to discharging effluent into waterways. Therefore, the revenue requirement for TSS is apportioned based on Weighted TSS for each customer class as shown in Table 97.

Table 97: TSS Allocation to Customer Classes

TSS Allocation to Customer Classes			
Customer Class	Weighted TSS [A]	% Allocation [B] = A as a %	Revenue Requirement [C] = Rev Req x B
Single-Family	302,682	55.7%	$1,440,850
Multi-Family	136,017	25.0%	$647,478
Non-Residential			
Low Strength	18,183	3.3%	$86,556
Medium Strength	11,982	2.2%	$57,039
High Strength	51,404	9.5%	$244,699
Schools & Churches	7,963	1.5%	$37,906
Patton State Hospital	15,075	2.8%	$71,761
Total	**543,306**	**100.0%**	**$2,586,289**

Collectively, the total allocation of costs associated with Account Services, Flow, COD, and TSS (Total Reclamation Revenue Requirement) derives the cost of providing service to each customer class. Similar to Wastewater, the total residential revenue requirement is recovered as flat monthly charges. For non-residential customer classes, commodity rates are derived for the flow, COD, and TSS components by dividing the total allocated cost of each commodity cost component by total water usage. Non-residential customers are not being overcharged by being billed based on water usage. All commodity costs were apportioned proportionately as a function of projected flow. Using water usage to recover the allocated cost reduces the unit rate because there are more units of water to charge versus flow, which is not metered. Table 98 summarizes the combined Revenue Requirement by customer class. Table 99 and Table 100 derives the monthly flat rates for residential customer classes and fixed monthly charges for non-residential customers, respectively. Table 101 derives the commodity rates for non-residential customer classes.

Table 98: Reclamation Revenue Requirement by Customer Class

Allocated Revenue Requirements					
Customer Class	Account Services	Flow	COD	TSS	Total
Single-Family	$2,133,951	$2,017,971	$1,351,728	$1,440,850	$6,944,500
Multi-Family	$1,198,673	$906,820	$607,429	$647,478	$3,360,399
Non-Residential					
Low Strength	$45,363	$219,752	$134,299	$86,556	$485,971
Medium Strength	$8,018	$80,195	$49,213	$57,039	$194,465
High Strength	$9,336	$214,832	$322,015	$244,699	$790,882
Schools & Churches	$8,348	$96,238	$58,815	$37,906	$201,308
Patton State Hospital	$110	$101,816	$62,789	$71,761	$236,476
Total	**$3,403,799**	**$3,637,623**	**$2,586,289**	**$2,586,289**	**$12,214,000**

Table 99: Reclamation FY 2025 Residential Flat Monthly Charges

Proposed Monthly Fixed Charges							
Customer Class	Annual Sewer Units	Account Services	Flow	COD	TSS	Total Revenue Requirement	Total Monthly Fixed Charge
	[A]	[B]	[C]	[D]	[E]	[F] = B+C+D+E	[G] = F ÷ A
Single-Family	233,136	$2,133,951	$2,017,971	$1,351,728	$1,440,850	$6,944,500	**$29.79**
Multi-Family	130,956	$1,198,673	$906,820	$607,429	$647,478	$3,360,399	**$25.67**

Table 100: Reclamation FY 2025 Non-Residential Fixed Monthly Charges

Proposed Monthly Fixed Charges			
Customer Class	Annual Billing Units	Account Services	Total Monthly
Non-Residential			
Low Strength	4,956	$45,363	**$9.16**
Medium Strength	876	$8,018	**$9.16**
High Strength	1,020	$9,336	**$9.16**
Schools & Churches	912	$8,348	**$9.16**
Patton State Hospital	12	$110	**$9.16**

Table 101: Reclamation FY 2025 Non-Residential Commodity Rates

Proposed Variable Rates ($/hcf)								
Customer Class	Non-Residential Water Usage (hcf)	Flow	COD	TSS	Flow	COD	TSS	Total Variable Rates ($/hcf)
	[A]	[B]	[C]	[D]	[E] = B ÷ A	[F] = C ÷ A	[G] = D ÷ A	[H] = E + F + G
Non-Residential								
Low Strength	202,777	$219,752	$134,299	$86,556	$1.09	$0.67	$0.43	**$2.19**
Medium Strength	74,000	$80,195	$49,213	$57,039	$1.09	$0.67	$0.78	**$2.54**
High Strength	198,237	$214,832	$322,015	$244,699	$1.09	$1.63	$1.24	**$3.96**
Schools & Churches	150,994	$96,238	$58,815	$37,906	$0.64	$0.39	$0.26	**$1.29**
Patton State Hospital	163,645	$101,816	$62,789	$71,761	$0.63	$0.39	$0.44	**$1.46**

Cost-Based Rate Schedules

Cost-of-Service and Proposed Rate Schedules

The comprehensive cost-of-service analysis and rate development meet the requirements of Proposition 218 and identify the cost components that make up the proposed water, wastewater, and reclamation fixed charges and commodity rates. Proposition 218 requires the following conditions:

1. An agency cannot collect revenue beyond what is necessary to provide service.

   Each long-term financial plan identifies the District's revenue requirements for the respective utility, including operating expenses, capital improvement programs, debt, and reserves.

2. Revenues derived by the charge shall not be used for any other purpose other than that for which the charge was imposed.

   The District's water, wastewater – collections, and reclamation utilities are analyzed as separate business enterprises to track revenues and expenses and do not fund services other than those necessary for the provision of water, wastewater – collections, and treatment at SNRC, respectively.

3. The amount of the fee may not exceed the proportional cost-of-service for the parcel.

   The comprehensive cost-of-service analysis, updated fixed charges, and commodity rates reflect each customer's fair share of water, wastewater – collections, and reclamation costs, respectively. Through this updated analysis, each customer will pay the proportional cost of providing service to that parcel.

4. No charge may be imposed for a service unless that service is actually used or immediately available to the owner of the property.

   Only properties that are actually receiving utility service or have service immediately available to them are required to pay the fixed and commodity charges described in this study.

5. A written notice of the proposed charge shall be mailed to the record owner of each parcel at least 45 days prior to the public hearing.

   Notices were mailed to each affected parcel at least 45 days prior to the May 15, 2024, Public Hearing.

The proposed rate schedules for FY 2025 through FY 2027 are shown in the following section. If a majority protest does not exist at the May 15th Public Hearing, the Board may adopt the rates. The Water utility first rate adjustment will occur on January 1, 2025, and every January 1st thereafter for each subsequent fiscal year. The Wastewater and Reclamation utilities first rate adjustments will occur on July 1, 2024, and every July 1st thereafter for each subsequent fiscal year.

Multi-Year Rate Schedules

Water

Table 102 through Table 103 provide the three-year fixed charge schedule over the Rate Setting Period for monthly fixed charges, dedicated firelines, and commodity rates. For FY 2026 and FY 2027, the revenue adjustments are applied across-the-board to the cost-of-service rates derived for FY 2025 (rounded up to the next whole penny) to maintain the proportionality of the cost allocations between customers derived within this updated cost-of-service analysis.

Table 102: Proposed Water Monthly Fixed Charges (FY 2025 – FY 2027)

Revenue Adjustment:		6.0%	6.0%
Proposed Monthly Fixed Charges			
Meter Size	FY 2025	FY 2026	FY 2027
5/8"	$27.52	$29.18	$30.94
3/4"	$34.62	$36.70	$38.91
1"	$48.83	$51.76	$54.87
1 1/2"	$84.35	$89.42	$94.79
2"	$126.97	$134.59	$142.67
3"	$368.48	$390.59	$414.03
4"	$901.23	$955.31	$1,012.63
6"	$1,433.98	$1,520.02	$1,611.23
8"	$2,854.65	$3,025.93	$3,207.49
10"	$4,630.48	$4,908.31	$5,202.81
12"	$5,695.98	$6,037.74	$6,400.01

Table 103: Proposed Dedicated Fireline Monthly Charges (FY 2025 – FY 2027)

Revenue Adjustment		6.0%	6.0%
Proposed Dedicated Fireline Montly Fixed Charges			
Connection Size	FY 2025	FY 2026	FY 2027
5/8"	$13.75	$14.58	$15.46
3/4"	$13.84	$14.68	$15.57
1"	$14.01	$14.86	$15.76
1 1/2"	$14.36	$15.23	$16.15
2"	$14.71	$15.60	$16.54
3"	$15.41	$16.34	$17.33
4"	$16.11	$17.08	$18.11
6"	$17.51	$18.57	$19.69
8"	$18.91	$20.05	$21.26
10"	$20.31	$21.53	$22.83
12"	$21.71	$23.02	$24.41

Table 104: Proposed Water Commodity Charges (FY 2025 – FY 2027)

Revenue Adjustment		6.0%	6.0%
Proposed Commodity Rates ($/hcf)			
Customer Class & Tiers	**FY 2025**	**FY 2026**	**FY 2027**
All Customers			
Tier 1	$2.19	$2.33	$2.47
Tier 2	$2.84	$3.02	$3.21
Tier 3	$4.10	$4.35	$4.62
Commercial	$2.39	$2.54	$2.70

Wastewater

Table 105 through Table 106 provide the three-year fixed charge schedule and commodity rates over the Rate Setting Period, respectively. For FY 2026 and FY 2027, the revenue adjustments are applied across-the-board to the cost-of-service rates derived for FY 2025 (rounded up to the next whole penny) to maintain the proportionality of the cost allocations between customers derived within this updated cost-of-service analysis.

Table 105: Proposed Wastewater Monthly Fixed Charges (FY 2025 – FY 2027)

Revenue Adjustment:		3.0%	3.0%
Fixed Charges ($/Month)			
Customer Class	**FY 2025**	**FY 2026**	**FY 2027**
Single Family	$16.70	$17.21	$17.73
Multi-Family	$15.48	$15.95	$16.43
Non-Residential			
Low Strength	$10.59	$10.91	$11.24
Medium Strength	$10.59	$10.91	$11.24
High Strength	$10.59	$10.91	$11.24
Schools & Churches	$10.59	$10.91	$11.24
Patton State Hospital	$10.59	$10.91	$11.24

Table 106: Proposed Wastewater Commodity Rates (FY 2025 – FY 2027)

Revenue Adjustment:		3.0%	3.0%
Commodity Rates ($/hcf)			
Customer Class	**FY 2025**	**FY 2026**	**FY 2027**
Non-Residential			
Low Strength	$0.77	$0.80	$0.83
Medium Strength	$0.77	$0.80	$0.83
High Strength	$0.77	$0.80	$0.83
Schools & Churches	$0.45	$0.47	$0.49
Patton State Hospital	$0.44	$0.46	$0.48

Reclamation

Table 107 through Table 108 provide the three-year fixed charge schedule and commodity rates over the Rate Setting Period, respectively. For FY 2026 and FY 2027, the revenue adjustments are applied across-the-board to the cost-of-service rates derived for FY 2025 (rounded up to the next whole penny) to maintain the proportionality of the cost allocations between customers derived within this updated cost-of-service analysis.

Table 107: Proposed Reclamation Monthly Fixed Charges (FY 2025 – FY 2027)

Revenue Adjustment:	10.0%	10.0%	10.0%
Fixed Charges ($/Month)			
Customer Class	**FY 2025**	**FY 2026**	**FY 2027**
Single-Family	$29.79	$32.77	$36.05
Multi-Family	$25.67	$28.24	$31.07
Non-Residential			
Low Strength	$9.16	$10.08	$11.09
Medium Strength	$9.16	$10.08	$11.09
High Strength	$9.16	$10.08	$11.09
Schools & Churches	$9.16	$10.08	$11.09
Patton State Hospital	$9.16	$10.08	$11.09

Table 108: Proposed Reclamation Commodity Rates (FY 2025 – FY 2027)

Revenue Adjustment:	10.0%	10.0%	10.0%
Commodity Rates ($/hcf)			
Customer Class	**FY 2025**	**FY 2026**	**FY 2027**
Non-Residential			
Low Strength	$2.19	$2.41	$2.66
Medium Strength	$2.54	$2.80	$3.08
High Strength	$3.96	$4.36	$4.80
Schools & Churches	$1.29	$1.42	$1.57
Patton State Hospital	$1.46	$1.61	$1.78

Appendix A – Water Supply Cost Analysis

Water supply costs were calculated through the following analysis. The surface water assessment was set as an annual fixed cost. The unit costs of each water supply ($/hcf) were identified for each water supply, with rates held constant as any increases to the unit rates would be captured through the pass-through of the Government Code. The water loss percentage, equal to 8.3%, was applied to the water billings/sales to derive the total amount of water needed to meet customer demand.

The amount of each water supply needed to meet the total demand was determined by first using the lowest cost water supply (Surface Water), followed by State Water Project, and Groundwater covering the remainder of demand. The District expects to have access to 3,950 AF of surface water annually over the Rate Setting Period and 1,800 AF of State Water Project. In order to calculate the total variable purchase water costs for each fiscal year, the total volumes of each water supply (AF) were multiplied by the corresponding commodity unit rates ($/AF). Table 109 summarizes water supply costs over the Financial Plan Period

Table 109: Water Supply Costs (FY 2025 – FY 2029)

Calculated Water Supply Costs					
Fixed Water Costs	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Fixed Water Supply Costs					
Surface Water - Assessments	$117,000	$117,000	$117,000	$117,000	$117,000
Water Supply Rates ($/AF)	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Variable Rates ($/AF)					
Surface Water	$66	$66	$66	$66	$66
State Water Project	$192	$192	$192	$192	$192
Groundwater	$206	$206	$206	$206	$206
Source of Water Supplies (AF)	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Water Sales (AF)	15,655 AF	15,735 AF	15,782 AF	15,829 AF	15,876 AF
Water Loss %	8.3%	8.3%	8.3%	8.3%	8.3%
Water Demand/Production	17,072 AF	17,160 AF	17,211 AF	17,262 AF	17,313 AF
Surface Water	3,950 AF	3,950 AF	3,950 AF	3,950 AF	3,950 AF
State Water Project	1,800 AF	1,800 AF	1,800 AF	1,800 AF	1,800 AF
Groundwater	11,322 AF	11,410 AF	11,461 AF	11,512 AF	11,563 AF
Variable Water Supply Costs	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Variable Water Supply Costs					
Surface Water	$262,417	$262,417	$262,417	$262,417	$262,417
State Water Project	$346,383	$346,383	$346,383	$346,383	$346,383
Groundwater	$2,329,579	$2,347,582	$2,358,052	$2,368,574	$2,379,148
Subtotal Variable Water Supply Costs	**$2,938,379**	**$2,956,382**	**$2,966,852**	**$2,977,374**	**$2,987,948**
Water Supply Summary					
Water Supply Costs	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Fixed Water Supply Costs					
Surface Water - Assessments	$117,000	$117,000	$117,000	$117,000	$117,000
Variable Water Supply Costs					
Surface Water	$262,000	$262,000	$262,000	$262,000	$262,000
State Water Project	$346,000	$346,000	$346,000	$346,000	$346,000
Groundwater	$2,330,000	$2,348,000	$2,358,000	$2,369,000	$2,379,000
Subtotal Variable Water Supply Costs	$2,938,000	$2,956,000	$2,966,000	$2,977,000	$2,987,000
Total Water Supply Costs	**$3,055,000**	**$3,073,000**	**$3,083,000**	**$3,094,000**	**$3,104,000**

Appendix B – Capital Improvement Plans

The Detailed Capital Improvement Plans for each utility are identified in Table 110 through Table 112.

Table 110: Water Capital Improvement Plan (FY 2025 – FY 2029)

Key Assumptions					
Inflation	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Capital Inflation	3.9%	3.9%	3.9%	3.9%	3.9%
Cumulative Inflationary Factor	103.9%	107.9%	112.1%	116.4%	120.9%

Water Capital Improvement Plan					
Project Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Water System					
Canal 3 Zone Reservoir	$0	$0	$0	$1,000,000	$5,000,000
New Well 01 - Lower/Inter/Upper	$2,700,000	$1,300,000	$0	$0	$0
New Well 02 - Lower/Inter/Upper	$0	$500,000	$2,500,000	$3,000,000	$0
Reservoir Rehabilitation	$650,000	$650,000	$0	$1,000,000	$1,100,000
Main Replace - Seismic Mitigation	$5,000,000	$5,000,000	$5,000,000	$0	$0
AMI Meter Upgrades	$0	$200,000	$200,000	$0	$0
Plant 134 Membranes	$0	$320,000	$320,000	$320,000	$0
Plant 134 Process Improvements	$130,000	$0	$0	$0	$0
Seismic Upgrades	$0	$2,500,000	$2,500,000	$2,500,000	$0
Subtotal Water System	$9,780,000	$10,470,000	$11,520,000	$10,820,000	$9,100,000
Equipment					
Control Valve Replacements	$25,000	$25,000	$25,000	$25,000	$25,000
Switch Gear Replacements	$50,000	$50,000	$50,000	$50,000	$50,000
SCADA Upgrades	$30,000	$30,000	$30,000	$30,000	$30,000
Well Rehabiliation, Repairs, Inspections	$220,000	$220,000	$220,000	$220,000	$220,000
Replace booster pumps	$30,000	$30,000	$30,000	$30,000	$30,000
Replace Pick Up Trucks	$126,000	$126,000	$126,000	$126,000	$126,000
Dump Trucks	$16,000	$16,000	$16,000	$16,000	$16,000
Water Truck	$7,500	$7,500	$7,500	$7,500	$7,500
Hydro Excavator	$42,000	$42,000	$42,000	$42,000	$42,000
Misc. Equipment, tools, supplies	$300,000	$300,000	$300,000	$300,000	$300,000
Headquarters Equipment	$300,000	$300,000	$300,000	$300,000	$300,000
Subtotal Equipment	$1,146,500	$1,146,500	$1,146,500	$1,146,500	$1,146,500
Subtotal Water CIP	**$10,353,250**	**$11,043,250**	**$11,093,250**	**$10,393,250**	**$8,173,250**
Water CIP Total Costs with Inflation	**$10,753,699**	**$11,914,046**	**$12,430,894**	**$12,096,956**	**$9,880,996**

Table 111: Wastewater Capital Improvement Plan (FY 2025 – FY 2029)

Key Assumptions					
Inflation	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Capital Inflation	3.9%	3.9%	3.9%	3.9%	3.9%
Cumulative Inflationary Factor	103.9%	107.9%	112.1%	116.4%	120.9%

Wastewater Capital Improvement Plan					
Project Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Wastewater Collection					
Wastewater Main Rehab	$200,000	$200,000	$200,000	$200,000	$200,000
Capital Outlay	$260,000	$260,000	$260,000	$260,000	$280,000
Placeholder	$0	$0	$0	$0	$0
CIP from Budget	$0	$0	$0	$0	$0
Carryforward	$0	$0	$0	$0	$0
Subtotal Wastewater CIP	$460,000	$460,000	$460,000	$460,000	$480,000
Wastewater CIP Total Costs with Inflation	**$477,792**	**$496,272**	**$515,468**	**$535,405**	**$580,293**

Table 112: Reclamation Capital Improvement Plan (FY 2025 – FY 2029)

Key Assumptions					
Inflation	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Capital Inflation	3.9%	3.9%	3.9%	3.9%	3.9%
Cumulative Inflationary Factor	103.9%	107.9%	112.1%	116.4%	120.9%

Reclamation Capital Improvement Plan					
Project Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Treatment Plant					
SNRC - Construction	$0	$0	$0	$0	$0
Aeration Basin Diffusers	$0	$0	$0	$500,000	$500,000
UV Lamps	$0	$0	$0	$150,000	$0
CoGen Engines (2)	$0	$0	$0	$250,000	$250,000
Equipment					
GAC Median Changeouts	$0	$200,000	$0	$200,000	$0
Replace Pick Up Trucks	$0	$0	$0	$60,000	$0
Capital Outlay	$150,000	$150,000	$150,000	$0	$0
Subtotal Reclamation CIP	$150,000	$350,000	$150,000	$1,160,000	$750,000
Reclamation CIP Total Costs with Inflation	**$155,802**	**$377,599**	**$168,087**	**$1,350,152**	**$906,707**