

Public Hearing
February 12, 2025

*Cost-of-Service
Water Rate Study*



B CONSULTING

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Executive Summary

The Santa Fe Irrigation District (District) periodically reviews its rates to determine if adjustments are required to meet its operational costs, system improvements and to fund reserves based on adopted reserve policies. Historically, the District has hired rate consulting firms to perform an independent third-party review of its rates in three-year increments. IB Consulting completed the most recent study, which concluded with a Public Hearing on March 28, 2023, and set rates for the remainder of Fiscal Year (FY) 2023 through FY 2025. The District rehired IB Consulting to conduct a comprehensive cost-of-service update to its water rates spanning the remainder of Fiscal Year (FY) 2025 through FY 2027.

The District periodically adjusts its rate structure to capture new usage trends, account for changes to its water supplies, and fully fund operations and capital needs while complying with the substantive provisions of the California Constitution. More specifically, the requirements are set forth under Article XIID, section 6 (commonly referred to as Proposition 218) and Article X, section 2.

The District's water rate structure includes bi-monthly fixed charges to all customers that vary based on meter size, reflecting the demand each connected meter places on the system, and variable rates by customer class, with tiered rates for Single-Family Residential accounts. The District reviewed customer usage data and identified trends showing that Single-Family Residential customers cause the District to incur costs differently from other customers, supporting a different rate structure. The District's Single-Family Residential tiered rates have adjusted over the years from a three-tiered rate structure to a five-tiered meter overlay rate structure (i.e., tier breakpoints vary based on meter size) to the current 4-tiered meter overlay rate structure. The current Single-Family Residential 4-tiered meter overlay rate structure connects the usage characteristics of accounts, grouped by meter size, to the annual demands placed on the water system. Each meter size takes up a certain amount of capacity in the system based on the amount of water that can safely flow through the meter. As the meter size increases, the amount of capacity taken in the system increases, and larger meters pay higher fees when they first connect. Therefore, each account's meter is sized based on the amount of water needed to serve the property and its land use type. The current tiered breakpoints, which increase by meter size, account for the increased water needs of the larger-sized meters and reflect how each group of meters' water usage varies throughout the year – from low demands in the winter to high demands in the summer.

Historically, the District's water supplies included local water from Lake Hodges and imported water from the San Diego County Water Authority (SDCWA). However, the City of San Diego (City), who is responsible for the ongoing maintenance and repairs of the Lake Hodges Dam, uncovered water leakage and deterioration within certain sections of the dam in 2022, requiring emergency repairs. The City performed an underwater assessment identifying an exposed cavity in the dam. This discovery concerned the Division of Safety of Dams (DSOD) with the overall integrity of the dam and set a water level maximum elevation restriction of 275 feet. These emergency repairs are critical and require a Consequence and Likelihood of Failure analysis before Lake Hodges may return as a local water source. The required analysis is intended to ensure the dam's integrity is sound and that no potential loss of life would occur when replenishing water back to normal levels. Due to these repairs and ongoing assessment, it is unknown when Lake Hodges may be available again as a local water source for the District and other water agencies.

Therefore, this study assumes that local water will not be available for the foreseeable future. Replacing local water with imported water from the SDCWA significantly increases water supply costs over the rate-setting period.

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

This report provides a proposed financial plan from FY 2025 through FY 2029 (Financial Plan Period) and recommended rates for FY 2025 through FY 2027 (Rate Setting Period) as directed by the District Board. This report, first and foremost, provides a basis for developing and implementing cost-based water rates in compliance with California Constitution Article XIII D, section 6 (Proposition 218) for allocating costs proportionately to each parcel served by the District. This study also uses industry rate-setting principles, including the base-extra capacity methodology outlined in the American Water Works Association (AWWA) M1 Manual (Base-Extra Capacity Methodology). In addition, the District's current rates include a meter-overlay allocation-based rate structure for Single-Family Residential, which allocates additional water in each tier to properties served by larger meters to account for their investment in the water system and usage patterns by meter size. For example, during the winter period, a majority of Single-Family Residential accounts do not incur tier 4 charges as the tiered allotments provide sufficient bandwidth to support the water needs of each meter size. In the summer, there are approximately 1,400 accounts with usage in tier 4: whereas in winter, the total drops down to 148 active accounts. Of those 148 active accounts, 90% are in tier 4 during the highest usage bi-monthly billing period (July – August). Therefore, accounts charged tier 4 rates in the winter are substantially the same accounts that are within tier 4 during the July-August billing period.

The proposed rate structure will maintain the meter-overlay allocation-based rate structure for Single-Family Residential and uniform rates for non-residential customers that reflect their proportionate share of variable costs. Through this study, workshops were held with the District Board to review the proposed financial plan, changes in how SDCWA charges its member agencies, adjustments to the District Capital Improvement Plan (CIP), and internal reserve requirements. SDCWA is going through a rate study requiring significant rate increases over the next three years. In addition, SDCWA is adjusting its rate structure to recover more costs as a fixed charge to its member agencies. The SDCWA rate structure change will have a greater impact on low water users as most of their bi-monthly bills are fixed charges, which are increasing.

The District's capital spending plan was also adjusted by deferring capital projects related to local water and Lake Hodges, given that Lake Hodges is currently offline with an unknown completion date for the required repairs. With these project deferments, the District's capital plan (including capital acquisitions) has reduced from \$88.9M to \$66.1M over the next ten years at an 87.5% annual execution rate. The 87.5% execution rate is based on comparing the District's adopted capital spending plan versus what was processed and actually completed in previous years. Based on this review, the District – on average – can execute its capital spending plan at an 87.5% execution rate. The District's reserve targets were re-evaluated by District staff to determine: 1) if any modification should be made to its reserve levels based on changes to the District's CIP and operating expenses, and 2) if adjustments can be made as a means to minimize rate impacts to its customers from the increased costs that will be incurred from SDCWA.

The District also adopted a Water Shortage Contingency Plan (WSCP) with six different conservation stages reflecting reduced water usage. The District Board may enact water shortage surcharges during water shortage events to maintain appropriate revenue recovery to fund water system operations from a reduced volume of water sold. Therefore, Water Shortage Surcharges are included in Appendix B for each conservation stage.

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

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 District can fully fund its revenue needs through FY 2027 and beyond. As part of reviewing and updating water rates, the first step is to thoroughly check the financial health of the District's water utility to meet its overall multi-year revenue requirements, which include operational and maintenance (O&M), capital improvements, and funding reserves. Based on a financial review of the water utility at current rates and existing reserve policies, the District will still be able to cover the increase in operating expenses and the FY 2025 increases in purchased water from SDCWA, but positive income is limited and is projected to be depleted generating a slight operating deficit in FY 2028. With minimal net operating income to go towards capital repair & replacement, reserves would become the primary funding source, causing the District not to meet its minimum reserve requirement in FY 2028. Therefore, to mitigate the compounding effects of no local water and increased cost in purchase water costs, planned capital has been revised to defer projects associated with treatment upgrades until Lake Hodges Dam repairs are completed. In addition, the District Board approved revisions to its reserve requirements based on staff recommendations, which are discussed in more detail under the **“Reserve”** section herein (Page 26).

The District's water rate structure will remain unchanged but with new water demand projections through FY 2029. FY 2023 and FY 2024 were very wet years, with rainfall well above the historical average. The District does not anticipate that these levels of rainfall will continue in future years. Therefore, the Single-Family Residential tier breakpoints will remain the same as the last rate study, reflecting a more typical year of rain (FY 2021). The District has significant lot size variations within its Single-Family Residential customer class, ranging from track homes in Solana Beach to multi-acre ranches and estates in the Rancho Santa Fe area. With this wide range of lot sizes and types of single-family land uses, meter sizes within the Single-Family Residential customer class span 3/4-inch (3/4”) meters up to 3” meters. The size of the meter correlates to the water needed to serve the parcel.

By adopting the proposed financial plan and approving the proposed rates through FY 2027, the utility will generate positive net income above operating expenses, fully fund the revised CIP, and maintain healthy reserve balances. Our proposed long-term financial plan anticipates revenue adjustments for FY 2028 and beyond, which assumes local water will continue to be unavailable to benefit District customers. Once the Lake Hodges Dam repairs are completed, the timing of when Lake Hodges will be back online and available to store local water will be better understood. As such, the proposed financial plan is intended to be updated with Lake Hodges as a local water source once a date is confirmed.

This Study contemplates that the proposed rates for the remainder of FY 2025 will go into effect on March 1, 2025, with subsequent adjustments occurring each January 1st thereafter (January 1, 2026 for FY 2026 and January 1, 2027 for FY 2027). [Table 1](#) through [Table 4](#) are the proposed fixed charges and [Table 5](#) identifies the proposed variable rates, charged in hundred cubic feet (hcf).¹

¹ 1 hcf = 748.05 gallons

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Table 1: Proposed Bi-Monthly Potable Fixed Charges

Proposed Bi-Monthly Potable Fixed Charge			
Meter Size	FY 2025	FY 2026	FY 2027
5/8" & 3/4"	\$115.80	\$121.59	\$127.67
1"	\$187.54	\$196.92	\$206.77
1 1/2"	\$366.87	\$385.22	\$404.49
2"	\$582.07	\$611.18	\$641.74
3"	\$1,263.54	\$1,326.72	\$1,393.06
4"	\$2,267.80	\$2,381.19	\$2,500.25
6"	\$4,670.87	\$4,904.42	\$5,149.65
8"	\$10,050.87	\$10,553.42	\$11,081.10
10"	\$15,072.20	\$15,825.81	\$16,617.11

Table 2: Proposed Bi-Monthly PSAWR Fixed Charges

Proposed Bi-Monthly PSAWR Fixed Charge			
Meter Size	FY 2025	FY 2026	FY 2027
5/8" & 3/4"	\$83.73	\$87.92	\$92.32
1"	\$134.09	\$140.80	\$147.84
1 1/2"	\$259.97	\$272.97	\$286.62
2"	\$411.03	\$431.59	\$453.17
3"	\$889.39	\$933.86	\$980.56
4"	\$1,594.33	\$1,674.05	\$1,757.76
6"	\$3,281.17	\$3,445.23	\$3,617.50
8"	\$7,057.67	\$7,410.56	\$7,781.09
10"	\$10,582.40	\$11,111.52	\$11,667.10

Table 3: Proposed Bi-Monthly Recycled Water Fixed Charges

Proposed Bi-Monthly Recycled Fixed Charge			
Meter Size	FY 2025	FY 2026	FY 2027
5/8" & 3/4"	\$66.35	\$69.67	\$73.16
1"	\$105.12	\$110.38	\$115.90
1 1/2"	\$202.04	\$212.15	\$222.76
2"	\$318.34	\$334.26	\$350.98
3"	\$686.62	\$720.96	\$757.01
4"	\$1,229.35	\$1,290.82	\$1,355.37
6"	\$2,528.04	\$2,654.45	\$2,787.18
8"	\$5,435.54	\$5,707.32	\$5,992.69
10"	\$8,149.20	\$8,556.66	\$8,984.50

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Table 4: Proposed Bi-Monthly Dedicated Fireline Charges

Proposed Bi-Monthly Dedicated Fireline Fixed Charge			
Connection Size	FY 2025	FY 2026	FY 2027
All connections	\$9.61	\$10.10	\$10.61

Table 5: Proposed Variable Rates (\$/hcf)

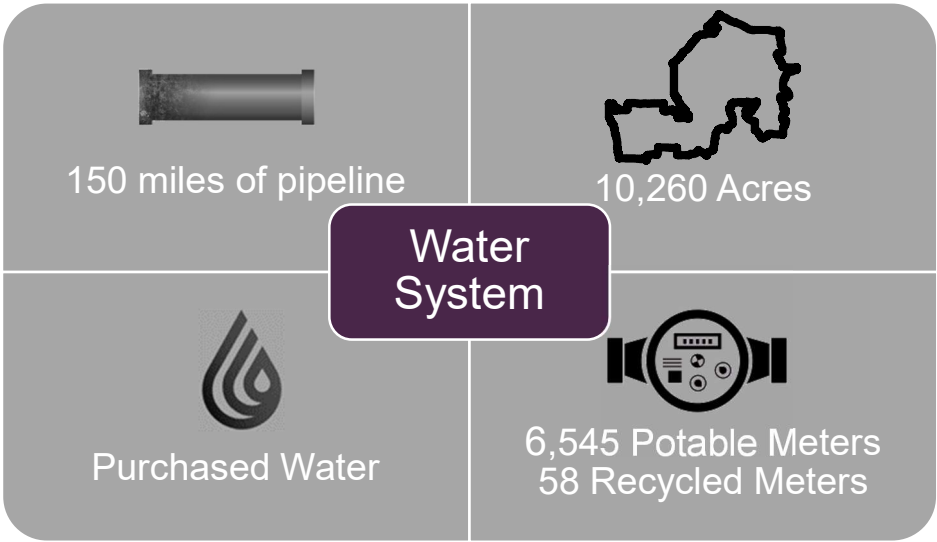
Variable Rates (\$/hcf)			
Customer Class / Tier	FY 2025	FY 2026	FY 2027
Single-Family			
Tier 1	\$5.44	\$5.72	\$6.01
Tier 2	\$6.66	\$7.00	\$7.35
Tier 3	\$6.85	\$7.20	\$7.56
Tier 4	\$7.51	\$7.89	\$8.29
Multi-Family	\$6.03	\$6.34	\$6.66
Non-Residential	\$6.06	\$6.37	\$6.69
Agricultural / Irrigation	\$6.70	\$7.04	\$7.40
PSAWR			
Tier 1	\$5.44	\$5.72	\$6.01
Tier 2	\$6.02	\$6.33	\$6.65
Recycled	\$4.39	\$4.61	\$4.85

Water Utility

Water System

The District provides a safe and reliable supply of water to its customers within the City of Solana Beach (Solana Beach), portions of the City of Del Mar, and the communities of Rancho Santa Fe and Fairbanks Ranch. The District's water service area covers approximately 10,260 acres, of which 2,850 acres are in Solana Beach (and a small portion of Del Mar), 6,490 acres are in Rancho Santa Fe, and 920 acres are in Fairbanks Ranch. The District's water system includes over 150 miles of pipelines, ranging from 8-inch to 36-inch diameter, and a 6 million-gallon treated water storage reservoir. In addition, the District is a joint owner (along with the San Dieguito Water District (SDWD)) of the R.E. Badger Water Filtration Plant (Joint Facilities), with a capacity of 40 million gallons per day (GPD). The District is one of 24 member agencies of the SDCWA, a water supply wholesaler. Historically, the District water supply includes approximately 30% of local water from Lake Hodges with the remainder covered by imported water from SDCWA. However, with the dam offline, the District's water supply for this cost-of-service study is entirely purchased water from SDCWA.

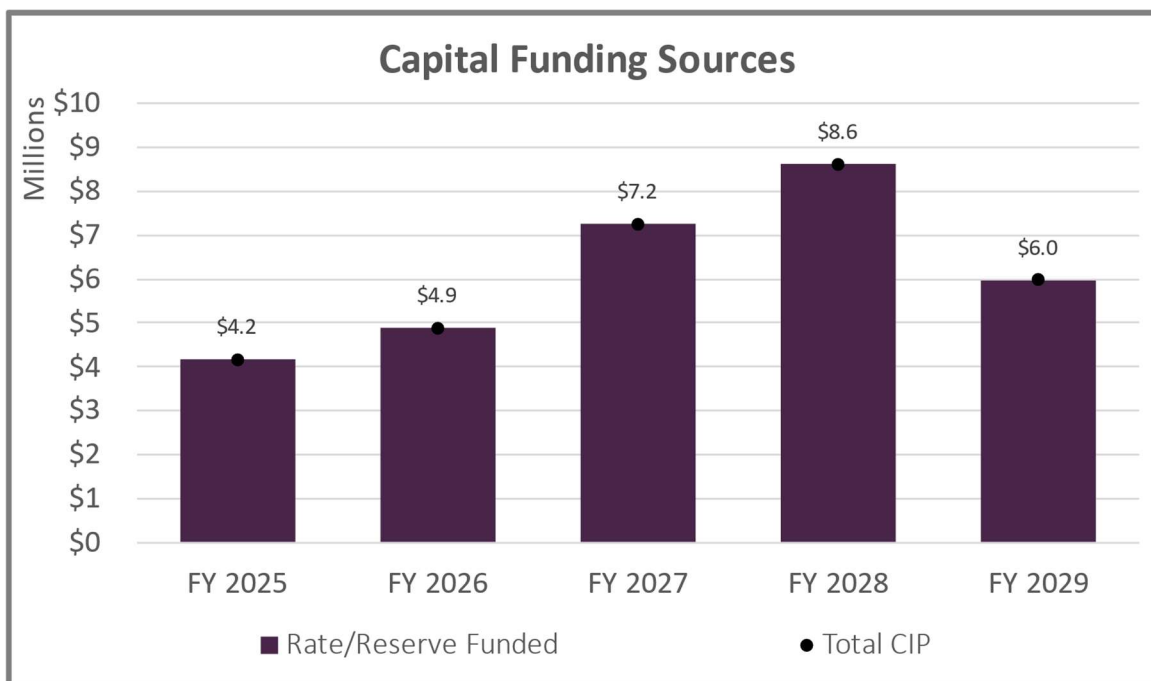
Figure 1: District Water System



The District's revised CIP averages approximately \$6.2M in annual capital spending, indexed for inflation, over the Financial Plan Period. The District's CIP includes two primary categories of capital projects: District Distribution (SFID only) and Joint Facilities. Figure 2 shows the District's CIP through the Financial Plan Period, with funding sources and a detailed listing of the CIP is attached as Appendix A.

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Figure 2: Five-Year Capital Improvement Plan



Existing Accounts

The District serves 6,545 potable meters, 58 recycled meters, and 1,184 dedicated firelines, with over 90% of accounts classified as Residential. Table 6 provides a summary of accounts by meter size and connection size for firelines.

Table 6: Accounts by Meter Size / Connection Size

Accounts by Meter Size / Connection Size									
Meter Size	Single-Family	Multi-Family	Non-Residential	Agricultural / Irrigation	PSAWR	Construction	Potable Accounts	Recycled	Dedicated Fireline
5/8" & 3/4"	3,230	153	163	33	1	0	3,580	0	95
1"	1,595	80	90	37	7	0	1,809	16	899
1 1/2"	635	135	74	36	12	0	892	4	122
2"	64	89	50	32	1	0	236	32	68
3"	2	2	2	1	0	15	22	3	0
4"	0	0	2	2	0	0	4	2	0
6"	0	0	0	2	0	0	2	0	0
8"	0	0	0	0	0	0	0	0	0
10"	0	0	0	0	0	0	0	1	0
Total	5,526	459	381	143	21	15	6,545	58	1,184

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

As previously mentioned, the existing rate structure consists of a bi-monthly fixed meter charge and variable rates that vary by customer class and tier. Current bi-monthly fixed charges are identified in [Table 7](#). [Table 8](#) identifies the fixed charges for Recycled and Dedicated Firelines. The District bills Recycled customers monthly, but for our financial plan, the recycled water fixed charges reflect bi-monthly fixed charges for consistency between all fixed charges when calculating rate revenue. [Table 9](#) identifies the variable rates for potable accounts, and [Table 10](#) identifies variable rates for Recycled.

Table 7: FY 2024 Bi-Monthly Potable Fixed Charges

FY 2024 Bi-Monthly Potable Fixed Charge	
Meter Size	Current Charge
5/8" & 3/4"	\$98.51
1"	\$157.11
1 1/2"	\$303.62
2"	\$479.42
3"	\$1,036.13
4"	\$1,856.55
6"	\$3,819.68
8"	\$8,214.77
10"	\$12,316.85

FY 2024 Bi-Monthly PSAWR Fixed Charge	
Meter Size	Current Charge
5/8" & 3/4"	\$70.47
1"	\$110.38
1 1/2"	\$210.16
2"	\$329.89
3"	\$709.02
4"	\$1,267.75
6"	\$2,604.71
8"	\$5,597.90
10"	\$8,391.51

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Table 8: FY 2024 Bi-Monthly Recycled and Dedicated Fireline Fixed Charges

FY 2024 Bi-Monthly Recycled Fixed Charge	
Meter Size	Current Charge
5/8" & 3/4"	\$62.82
1"	\$97.62
1 1/2"	\$184.64
2"	\$289.06
3"	\$619.72
4"	\$1,107.02
6"	\$2,273.04
8"	\$4,883.54
10"	\$7,320.00
FY 2024 Bi-Monthly Dedicated Fireline Fixed Charge	
Connection Size	Current Charge
5/8" & 3/4"	\$11.87
1"	\$11.87
1 1/2"	\$11.87
2"	\$11.87
3"	\$11.87
4"	\$11.87
6"	\$11.87
8"	\$11.87
10"	\$11.87

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Table 9: FY 2024 Potable Variable Rates (\$/hcf)

FY 2024 Potable Variable Rates (\$/hcf)	
Customer Class / Tier	Current Rate
Single-Family	
Tier 1	\$5.02
Tier 2	\$6.19
Tier 3	\$6.54
Tier 4	\$7.47
Multi-Family	\$5.68
Non-Residential	\$5.75
Agricultural / Irrigation	\$5.80
PSAWR	
Tier 1	\$5.02
Tier 2	\$5.26

Table 10: FY 2024 Recycled Variable Rate (\$/hcf)

FY 2024 Recycled Variable Rates (\$/hcf)	
Customer Class / Tier	Current Rate
Recycled	\$4.39

Financial Plan Overview

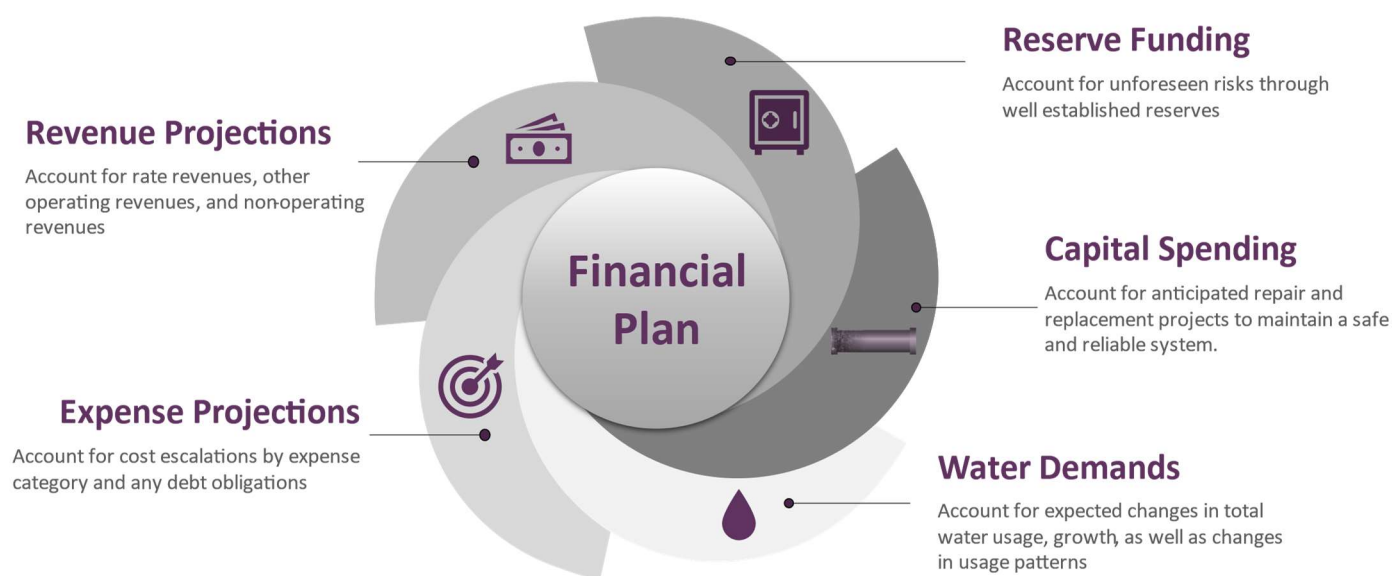
Financial Planning

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, changes to water supplies and 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 usage level for projecting future water demands.
- 2) Operational costs that may change over the planning period because of inflation, unique circumstances of the agency, new expenditures added 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) Reserve funding to meet adopted reserve 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 3 illustrates the key elements when developing a long-term financial plan.

Figure 3: Financial Plan Key Elements



Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Financial Planning Assumptions

Developing a long-term financial plan requires understanding the utility's financial position by evaluating existing revenue streams, ongoing expenses, how those expenses will change over time, water supply costs, existing debt requirements (not applicable), and reserve policies. These considerations require certain assumptions for projecting revenues, expenses, and expected ending fund balances. Through discussions with staff and their understanding of historical budget data and future obligations, **Table 11** identifies assumptions for forecasting revenues over the Financial Plan Period. **Table 12** provides details on the number of potable accounts by meter size. **Table 13** provides details on the number of recycled accounts by meter size and fireline connections by line size. **Table 14** identifies projected usage by customer class and tier. **Table 15** identifies assumptions for forecasting operations and capital expense increases over the Financial Plan Period, including water purchases and expected water loss. For forecasting revenues, our analysis assumes no growth in accounts as a conservative assumption, ensuring projected revenues do not rely on growth to occur. In addition, water sales are constant throughout the Financial Plan Period. This study also derives Water Shortage Surcharges for reductions in water usage to ensure sufficient revenue recovery during each WSCP Stage (Appendix B).

Table 11: Assumptions for Forecasting Revenues

Revenue Forecasting					
Key Assumptions	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Revenue Escalation					
Non-Inflated	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Rate Revenues	2.0%	2.0%	2.0%	2.0%	2.0%
Reserve Interest	5.5%	4.0%	3.0%	2.0%	2.0%
SDWD Local Reimb.	2.0%	2.0%	2.0%	2.0%	2.0%
SDWD Treatment Reimb.	5.0%	5.0%	5.0%	5.0%	5.0%
Account Growth	0.0%	0.0%	0.0%	0.0%	0.0%
Total Potable Meters	6,545	6,545	6,545	6,545	6,545
Total Recycled Meters	58	58	58	58	58
Total Dedicated Firelines	1,184	1,184	1,184	1,184	1,184
Total Potable Consumption (hcf)	3,919,124	3,919,124	3,919,124	3,919,124	3,919,124
Total Recycled Consumption (hcf)	239,903	239,903	239,903	239,903	239,903

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Table 12: Potable Accounts by Meter Size

Potable Accounts	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Single-Family					
Meter Size					
5/8" & 3/4"	3,230	3,230	3,230	3,230	3,230
1"	1,595	1,595	1,595	1,595	1,595
1 1/2"	635	635	635	635	635
2"	64	64	64	64	64
3"	2	2	2	2	2
Subtotal Single-Family	5,526	5,526	5,526	5,526	5,526
Multi-Family					
Meter Size					
5/8" & 3/4"	153	153	153	153	153
1"	80	80	80	80	80
1 1/2"	135	135	135	135	135
2"	89	89	89	89	89
3"	2	2	2	2	2
Subtotal Multi-Family	459	459	459	459	459
Non-Residential					
Meter Size					
5/8" & 3/4"	163	163	163	163	163
1"	90	90	90	90	90
1 1/2"	74	74	74	74	74
2"	50	50	50	50	50
3"	2	2	2	2	2
4"	2	2	2	2	2
Subtotal Non-Residential	381	381	381	381	381
Agricultural / Irrigation					
Meter Size					
5/8" & 3/4"	33	33	33	33	33
1"	37	37	37	37	37
1 1/2"	36	36	36	36	36
2"	32	32	32	32	32
3"	1	1	1	1	1
4"	2	2	2	2	2
6"	2	2	2	2	2
Subtotal Agricultural / Irrigation	143	143	143	143	143
PSAWR					
Meter Size					
5/8" & 3/4"	1	1	1	1	1
1"	7	7	7	7	7
1 1/2"	12	12	12	12	12
2"	1	1	1	1	1
Subtotal PSAWR	21	21	21	21	21
Construction					
Meter Size					
3"	15	15	15	15	15
Subtotal Construction	15	15	15	15	15
Total Potable Meters	6,545	6,545	6,545	6,545	6,545

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Table 13: Recycled Accounts by Meter Size and Fireline Accounts by Connection Size

Recycled Accounts	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Meter Size					
1"	16	16	16	16	16
1 1/2"	4	4	4	4	4
2"	32	32	32	32	32
3"	3	3	3	3	3
4"	2	2	2	2	2
10"	1	1	1	1	1
Total Recycled Accounts	58	58	58	58	58
Dedicated Fireline Accounts	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Connection Size					
5/8" & 3/4"	95	95	95	95	95
1"	899	899	899	899	899
1 1/2"	122	122	122	122	122
2"	68	68	68	68	68
Total Dedicated Firelines	1,184	1,184	1,184	1,184	1,184

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Table 14: Projected Consumption (hcf)

Projected Consumption					
Potable Usage Characteristics					
% of usage at prior rate	60.0%	60.0%	60.0%	60.0%	60.0%
% of usage at current rate	40.0%	40.0%	40.0%	40.0%	40.0%
Potable Consumption	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Single-Family					
Tier 1	1,634,789	1,634,789	1,634,789	1,634,789	1,634,789
Tier 2	604,317	604,317	604,317	604,317	604,317
Tier 3	381,690	381,690	381,690	381,690	381,690
Tier 4	488,022	488,022	488,022	488,022	488,022
Subtotal Single-Family	3,108,818	3,108,818	3,108,818	3,108,818	3,108,818
Multi-Family	303,020	303,020	303,020	303,020	303,020
Non-Residential	224,795	224,795	224,795	224,795	224,795
Agricultural / Irrigation	255,198	255,198	255,198	255,198	255,198
PSAWR					
Tier 1	5,686	5,686	5,686	5,686	5,686
Tier 2	21,607	21,607	21,607	21,607	21,607
Subtotal PSAWR	27,293	27,293	27,293	27,293	27,293
Total Potable Consumption (hcf)	3,919,124	3,919,124	3,919,124	3,919,124	3,919,124
Recycled Consumption	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Recycled Usage Characteristics					
% of usage at prior rate	0.0%	0.0%	0.0%	0.0%	0.0%
% of usage at current rate	100.0%	100.0%	100.0%	100.0%	100.0%
Total Recycled Consumption (hcf)	239,903	239,903	239,903	239,903	239,903

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Table 15: Assumptions for Forecasting Expense Requirements

Expense Forecasting					
Key Inputs / Assumptions	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Escalation Factors					
CalPERS	1.0%	1.0%	1.0%	1.0%	1.0%
Capital	3.0%	3.0%	3.0%	3.0%	3.0%
Energy	5.0%	5.0%	5.0%	5.0%	5.0%
General	3.0%	3.0%	3.0%	3.0%	3.0%
Health / Dental	8.0%	8.0%	8.0%	8.0%	8.0%
Other Fringe	3.0%	3.0%	3.0%	3.0%	3.0%
OPEB	3.0%	3.0%	3.0%	3.0%	3.0%
Salaries	5.3%	3.5%	3.5%	3.5%	3.5%
System/Supply Characteristics					
Water Loss	5.0%	5.0%	5.0%	5.0%	5.0%
Recycled Water Loss	0.0%	0.0%	0.0%	0.0%	0.0%
SDCWA Treated Water Purchases	700 AF	700 AF	700 AF	700 AF	700 AF

Current Financial Position

Revenues

Based on the forecasting assumptions, fixed revenues were calculated using the FY 2024 rates (Table 7 and Table 8), potable accounts listed by meter size (Table 12), and recycled accounts and fireline connection size (Table 13). Variable revenues were calculated using existing variable rates (Table 9 and Table 10) and projected total water sales by customer class and tier (Table 14). Table 16 shows the calculated rate revenues through the Financial Plan Period.

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Table 16: Calculated Rate Revenue

Calculated Rate Revenue					
Fixed Revenue	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Potable Fixed Charge					
Single-Family	\$4,765,990	\$4,765,990	\$4,765,990	\$4,765,990	\$4,765,990
Multi-Family	\$680,221	\$680,221	\$680,221	\$680,221	\$680,221
Non-Residential	\$494,528	\$494,528	\$494,528	\$494,528	\$494,528
Agricultural / Irrigation	\$286,346	\$286,346	\$286,346	\$286,346	\$286,346
PSAWR	\$22,170	\$22,170	\$22,170	\$22,170	\$22,170
Construction	\$66,431	\$66,431	\$66,431	\$66,431	\$66,431
Total Potable Fixed Charge	\$6,315,684	\$6,315,684	\$6,315,684	\$6,315,684	\$6,315,684
Recycled Fixed Charge					
Recycled	\$137,662	\$137,662	\$137,662	\$137,662	\$137,662
Total Recycled Fixed Charge	\$137,662	\$137,662	\$137,662	\$137,662	\$137,662
Dedicated Fireline Charges					
Dedicated Fireline Charges Revenue	\$84,324	\$84,324	\$84,324	\$84,324	\$84,324
Total Fixed Revenue	\$6,537,670	\$6,537,670	\$6,537,670	\$6,537,670	\$6,537,670
Variable Revenue	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Potable Variable Revenue					
Single-Family					
Tier 1	\$8,206,641	\$8,206,641	\$8,206,641	\$8,206,641	\$8,206,641
Tier 2	\$3,740,722	\$3,740,722	\$3,740,722	\$3,740,722	\$3,740,722
Tier 3	\$2,496,253	\$2,496,253	\$2,496,253	\$2,496,253	\$2,496,253
Tier 4	\$3,645,524	\$3,645,524	\$3,645,524	\$3,645,524	\$3,645,524
Total Single-Family	\$18,089,140	\$18,089,140	\$18,089,140	\$18,089,140	\$18,089,140
Multi-Family	\$1,721,154	\$1,721,154	\$1,721,154	\$1,721,154	\$1,721,154
Non-Residential	\$1,292,571	\$1,292,571	\$1,292,571	\$1,292,571	\$1,292,571
Agricultural / Irrigation	\$1,480,148	\$1,480,148	\$1,480,148	\$1,480,148	\$1,480,148
PSAWR					
Tier 1	\$28,544	\$28,544	\$28,544	\$28,544	\$28,544
Tier 2	\$113,653	\$113,653	\$113,653	\$113,653	\$113,653
Total PSAWR	\$142,197	\$142,197	\$142,197	\$142,197	\$142,197
Subtotal Potable Variable Revenue	\$22,725,210	\$22,725,210	\$22,725,210	\$22,725,210	\$22,725,210
Recycled Variable Revenue	\$1,053,174	\$1,053,174	\$1,053,174	\$1,053,174	\$1,053,174
Total Variable Revenue	\$23,778,384	\$23,778,384	\$23,778,384	\$23,778,384	\$23,778,384
Total Rate Revenue	\$30,316,054	\$30,316,054	\$30,316,054	\$30,316,054	\$30,316,054

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Table 17 summarizes calculated rate revenues from Table 16 and other operating and non-rate revenues available through the Financial Plan Period rounded to the nearest thousands.

Table 17: Projected Revenues

Projected Revenues					
Revenue Summary	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
District Rate Revenue					
Potable Fixed Charge	\$6,316,000	\$6,316,000	\$6,316,000	\$6,316,000	\$6,316,000
Recycled Fixed Charge	\$138,000	\$138,000	\$138,000	\$138,000	\$138,000
Dedicated Fireline Charges	\$84,000	\$84,000	\$84,000	\$84,000	\$84,000
Potable Variable Revenue	\$22,725,000	\$22,725,000	\$22,725,000	\$22,725,000	\$22,725,000
Subtotal District Rate Revenue	\$29,263,000	\$29,263,000	\$29,263,000	\$29,263,000	\$29,263,000
Recycled Water					
Recycled Water Sales	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000
Operating Revenues					
SDWD Treatment Reimb	\$2,896,000	\$2,751,000	\$2,839,000	\$2,931,000	\$3,026,000
Misc. Operating Revenue	\$540,000	\$540,000	\$540,000	\$540,000	\$540,000
Subtotal Operating Revenues	\$3,436,000	\$3,291,000	\$3,379,000	\$3,471,000	\$3,566,000
Other Revenues					
Interest Income	\$1,945,000	\$1,945,000	\$1,945,000	\$1,945,000	\$1,945,000
Property Tax	\$3,356,000	\$3,423,000	\$3,492,000	\$3,562,000	\$3,633,000
Misc. Non-Operating Revenue	\$185,000	\$185,000	\$185,000	\$185,000	\$185,000
Subtotal Other Revenues	\$5,486,000	\$5,553,000	\$5,622,000	\$5,692,000	\$5,763,000
Total Revenues	\$39,238,000	\$39,160,000	\$39,317,000	\$39,479,000	\$39,645,000

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Expenses

The FY 2025 budget was used as the baseline expenses and adjusted in subsequent years based on the escalation factors shown in Table 15. Table 18 provides water supply costs and projected O&M expenses through the Financial Plan Period, rounded to the nearest thousands. Water supply costs reflect SDCWA FY 2025 charges for all years, including a new Transportation Fixed Charge established by SDCWA, as pass-throughs will capture any increases/decreases. Each O&M expense category includes detailed line-item expenditures that were discussed with staff to determine the appropriate escalation factor for forecasting how costs will increase over time.

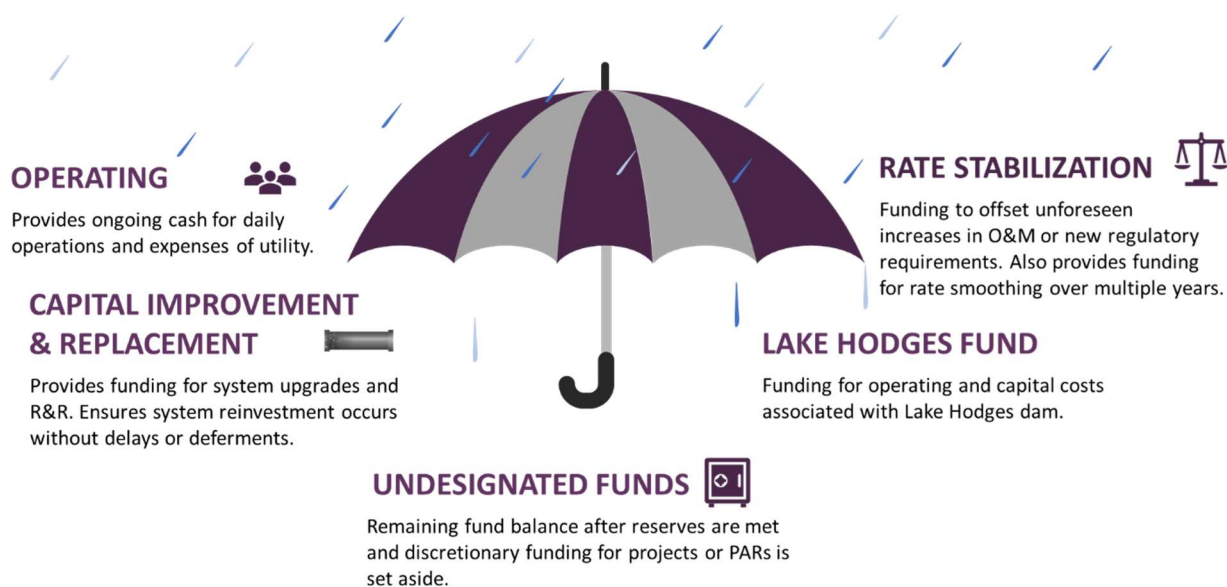
Table 18: Projected Water Supply and O&M Expenses

Projected Expenses					
Water Supply and O&M Expenses	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Water Supply Costs					
Fixed Purchased Water Costs					
MWD Readiness-to-Serve Charge	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000
MWD Capacity Charge	\$221,000	\$221,000	\$221,000	\$221,000	\$221,000
Supply Reliability Charge	\$922,000	\$922,000	\$922,000	\$922,000	\$922,000
Customer Service Charge	\$541,000	\$541,000	\$541,000	\$541,000	\$541,000
Emergency Storage Charge	\$1,232,000	\$1,232,000	\$1,232,000	\$1,232,000	\$1,232,000
Infrastructure Access Charge	\$566,000	\$566,000	\$566,000	\$566,000	\$566,000
Transportation Charge	\$541,000	\$541,000	\$541,000	\$541,000	\$541,000
Subtotal Fixed Purchased Water Costs	\$4,297,000	\$4,297,000	\$4,297,000	\$4,297,000	\$4,297,000
Variable Purchased Water Costs					
SDCWA Treated Water Purchases	\$1,397,000	\$1,397,000	\$1,397,000	\$1,397,000	\$1,397,000
SDCWA Untreated Water Purchases	\$13,121,000	\$13,121,000	\$13,121,000	\$13,121,000	\$13,121,000
PSAWR Water Costs	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000
PSAWR Credit	(\$22,000)	(\$22,000)	(\$22,000)	(\$22,000)	(\$22,000)
Subtotal Variable Purchased Water Costs	\$14,590,000	\$14,590,000	\$14,590,000	\$14,590,000	\$14,590,000
SEJPA Purchased Recycled Costs					
Recycled Water Purchases	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000
Total Water Supply Costs	\$19,940,000	\$19,940,000	\$19,940,000	\$19,940,000	\$19,940,000
Operating Expenses					
Personnel Expenses					
Administration	\$3,680,000	\$3,797,000	\$3,920,000	\$4,047,000	\$4,181,000
Engineering	\$917,000	\$946,000	\$975,000	\$1,006,000	\$1,038,000
Operations	\$2,853,000	\$2,947,000	\$3,044,000	\$3,146,000	\$3,253,000
Joint Facilities	\$3,355,000	\$3,464,000	\$3,579,000	\$3,698,000	\$3,823,000
Subtotal Personnel Expenses	\$10,805,000	\$11,154,000	\$11,518,000	\$11,897,000	\$12,295,000
Non-Personnel Expenses					
Administration	\$1,483,000	\$1,527,000	\$1,573,000	\$1,620,000	\$1,669,000
Engineering	\$184,000	\$189,000	\$195,000	\$201,000	\$207,000
Operations	\$1,835,000	\$1,890,000	\$1,947,000	\$2,005,000	\$2,066,000
Joint Facilities	\$3,661,000	\$3,776,000	\$3,894,000	\$4,015,000	\$4,141,000
Subtotal Non-Personnel Expenses	\$7,163,000	\$7,382,000	\$7,609,000	\$7,841,000	\$8,083,000
Subtotal Operating Expenses	\$17,968,000	\$18,536,000	\$19,127,000	\$19,738,000	\$20,378,000
Total Expenses	\$37,908,000	\$38,476,000	\$39,067,000	\$39,678,000	\$40,318,000

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Reserves

Figure 4: Utility Reserves



Established reserves include Operating, Rate Stabilization, Capital Improvement & Replacement, and the Lake Hodges Fund. The new Lake Hodges Fund was established for the potential obligation to pay for the repairs to the Lake Hodges dam that is owned and operated by the City of San Diego. The Lake Hodges fund does not have a minimum requirement but currently has \$3.7M at the end of FY 2024. The District Board will increase the balance up to \$10.4M in FY 2025 as part of the proposed financial plan. The District also has an Undesignated Fund to deposit any remaining cash on hand after reserves are funded. These reserves help mitigate risks to the utility by ensuring sufficient cash is on hand for daily operations, cover funding for annual system upgrades and replacement, and cover unforeseen increases in water supply costs or O&M. With significant increases in SDCWA water supply costs, District staff recommended adjustments to the existing reserve policies as a means to minimize the impacts. Adjustments were made to the Operating, Rate Stabilization, and Capital Improvement & Replacement reserves as follows:

District Staff Reserve Adjustments:

Operating: The reserve target was reduced from 90 days of operating expenses to 60 days. The reduction to 60 days will mitigate the need to set aside additional funds, which would require higher rate increases.

Rate Stabilization: The reserve target was reduced from 25% of variable water sales to 20%. Water sales over the last two fiscal years have decreased due to the wet winters, and forecasted water demand is set at 9,000 acre-feet, a 500-acre-foot reduction from the last cost-of-service study (5% reduction in water sales). With the conservative assumption in water sales, the 20% target could generate a similar balance that exists today with a rebound in sales.

Capital Improvement & Replacement: The current reserve target requires setting aside funding equal to 100% of planned capital for the upcoming year plus 50% of planned capital for year 2 and 25% of planned capital in year 3. The current policy causes temporary funding spikes in certain years to satisfy the target, which then reduces when significant projects are completed. To mitigate these occurrences, District staff recommends using the 5-year average of planned capital for the minimum and the target. This smooths out reserve requirements while continuing to set aside funding for planned capital over the next five years.

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Table 19 summarizes the existing minimum reserve requirements and ideal funding targets. Table 20 summarizes the revised minimum reserve requirements and ideal funding targets. As of July 1, 2024, the reserve balance equaled approximately \$37.2M.

Table 19: Existing Reserve Requirements and Targets

Existing Reserve Requirements and Targets			
Reserve	Minimum Requirement	Reserve Target	FY 2025 Reserve Target
Operating	60 days of operating	90 days of operating	\$8.6M
Rate Stabilization	25% of Variable Revenues	Minimum + annual debt service	\$5.8M
Capital Improvement & Replacement	100% of current year CIP + 50% of 2 nd year CIP + 25% of 3 rd year CIP	100% of current year CIP + 50% of 2 nd year CIP + 25% of 3 rd year CIP	\$8.4M
Lake Hodges Fund	N/A	N/A	\$3.7M
Undesignated Funds	N/A	N/A	N/A

Table 20: Revised Reserve Requirements and Targets

Revised Reserve Requirements and Targets			
Reserve	Minimum Requirement	Reserve Target	FY 2025 Reserve Target
Operating	60 days of operating	60 days of operating	\$5.8M
Rate Stabilization	20% of Variable Revenues	Minimum + annual debt service	\$4.7M
Capital Improvement & Replacement	100% of 5-Year Avg CIP	100% of 5-Year Avg CIP	\$6.2M
Lake Hodges Fund	N/A	N/A	\$10.4M
Undesignated Funds	N/A	N/A	N/A

Financial Outlook at Existing Rates

Calculating revenue using existing rates and projecting expenses helps determine the current financial health of the utility. Revenues from current rates plus each January pass-through adjustment will cover operating expenses through FY 2027. However, net operating income is limited and reduces each year, with a projected operating deficit occurring in FY 2028 and beyond. In addition, capital spending towards repair & replacement would require the use of reserves as the primary funding source, which is not sustainable. **Table 21** forecasts existing revenues and expenses through the Financial Plan Period. **Table 22** identifies the FY 2025 total starting reserve balances, activity within each reserve, transfers between reserves, annual CIP expenses, and projected ending balances for each fiscal year over the Financial Plan Period.

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Table 21: Financial Plan at Existing Rates

Financial Plan at Existing Rates						
Revenue		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
District Rate Revenue						
Potable Fixed Charge	Table 17	\$6,316,000	\$6,316,000	\$6,316,000	\$6,316,000	\$6,316,000
Recycled Fixed Charge		\$138,000	\$138,000	\$138,000	\$138,000	\$138,000
Dedicated Fireline Charges		\$84,000	\$84,000	\$84,000	\$84,000	\$84,000
Potable Variable Revenue		\$22,725,000	\$22,725,000	\$22,725,000	\$22,725,000	\$22,725,000
Total District Rate Revenue		\$29,263,000	\$29,263,000	\$29,263,000	\$29,263,000	\$29,263,000
Recycled Water						
Recycled Water Sales	Table 17	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000
Projected Rate Revenue		\$30,316,000	\$30,316,000	\$30,316,000	\$30,316,000	\$30,316,000
Operating Revenues						
SDWD Treatment Reimb	Table 17	\$2,896,000	\$2,751,000	\$2,839,000	\$2,931,000	\$3,026,000
Misc. Operating Revenue		\$540,000	\$540,000	\$540,000	\$540,000	\$540,000
Subtotal Operating Revenues		\$3,436,000	\$3,291,000	\$3,379,000	\$3,471,000	\$3,566,000
Other Revenues						
Interest Income	Table 17	\$1,945,000	\$1,945,000	\$1,945,000	\$1,945,000	\$1,945,000
Property Tax		\$3,356,000	\$3,423,000	\$3,492,000	\$3,562,000	\$3,633,000
Misc. Non-Operating Revenue		\$185,000	\$185,000	\$185,000	\$185,000	\$185,000
Subtotal Other Revenues		\$5,486,000	\$5,553,000	\$5,622,000	\$5,692,000	\$5,763,000
Total Revenues		\$39,238,000	\$39,160,000	\$39,317,000	\$39,479,000	\$39,645,000
Water Supply and O&M Expenses		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Water Supply Costs						
Fixed Purchased Water Costs						
MWD Readiness-to-Serve Charge	Table 18	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000
MWD Capacity Charge		\$221,000	\$221,000	\$221,000	\$221,000	\$221,000
Supply Reliability Charge		\$922,000	\$922,000	\$922,000	\$922,000	\$922,000
Customer Service Charge		\$541,000	\$541,000	\$541,000	\$541,000	\$541,000
Emergency Storage Charge		\$1,232,000	\$1,232,000	\$1,232,000	\$1,232,000	\$1,232,000
Infrastructure Access Charge		\$566,000	\$566,000	\$566,000	\$566,000	\$566,000
Transportation Charge		\$541,000	\$541,000	\$541,000	\$541,000	\$541,000
Subtotal Fixed Purchased Water Costs		\$4,297,000	\$4,297,000	\$4,297,000	\$4,297,000	\$4,297,000
Variable Purchased Water Costs						
SDCWA Treated Water Purchases	Table 18	\$1,397,000	\$1,397,000	\$1,397,000	\$1,397,000	\$1,397,000
SDCWA Untreated Water Purchases		\$13,121,000	\$13,121,000	\$13,121,000	\$13,121,000	\$13,121,000
PSAWR Water Costs		\$94,000	\$94,000	\$94,000	\$94,000	\$94,000
PSAWR Credit		(\$22,000)	(\$22,000)	(\$22,000)	(\$22,000)	(\$22,000)
Subtotal Variable Purchased Water Costs		\$14,590,000	\$14,590,000	\$14,590,000	\$14,590,000	\$14,590,000
SEJPA Purchased Recycled Costs						
Recycled Water Purchases	Table 18	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000
Subtotal Water Supply Costs		\$19,940,000	\$19,940,000	\$19,940,000	\$19,940,000	\$19,940,000
Operating Expenses						
Personnel Expenses						
Administration	Table 18	\$3,680,000	\$3,797,000	\$3,920,000	\$4,047,000	\$4,181,000
Engineering		\$917,000	\$946,000	\$975,000	\$1,006,000	\$1,038,000
Operations		\$2,853,000	\$2,947,000	\$3,044,000	\$3,146,000	\$3,253,000
Joint Facilities		\$3,355,000	\$3,464,000	\$3,579,000	\$3,698,000	\$3,823,000
Subtotal Personnel Expenses		\$10,805,000	\$11,154,000	\$11,518,000	\$11,897,000	\$12,295,000
Non-Personnel Expenses						
Administration	Table 18	\$1,483,000	\$1,527,000	\$1,573,000	\$1,620,000	\$1,669,000
Engineering		\$184,000	\$189,000	\$195,000	\$201,000	\$207,000
Operations		\$1,835,000	\$1,890,000	\$1,947,000	\$2,005,000	\$2,066,000
Joint Facilities		\$3,661,000	\$3,776,000	\$3,894,000	\$4,015,000	\$4,141,000
Subtotal Non-Personnel Expenses		\$7,163,000	\$7,382,000	\$7,609,000	\$7,841,000	\$8,083,000
Subtotal Operating Expenses		\$17,968,000	\$18,536,000	\$19,127,000	\$19,738,000	\$20,378,000
Total Expenses		\$37,908,000	\$38,476,000	\$39,067,000	\$39,678,000	\$40,318,000
Net Operating Income		\$1,330,000	\$684,000	\$250,000	(\$199,000)	(\$673,000)

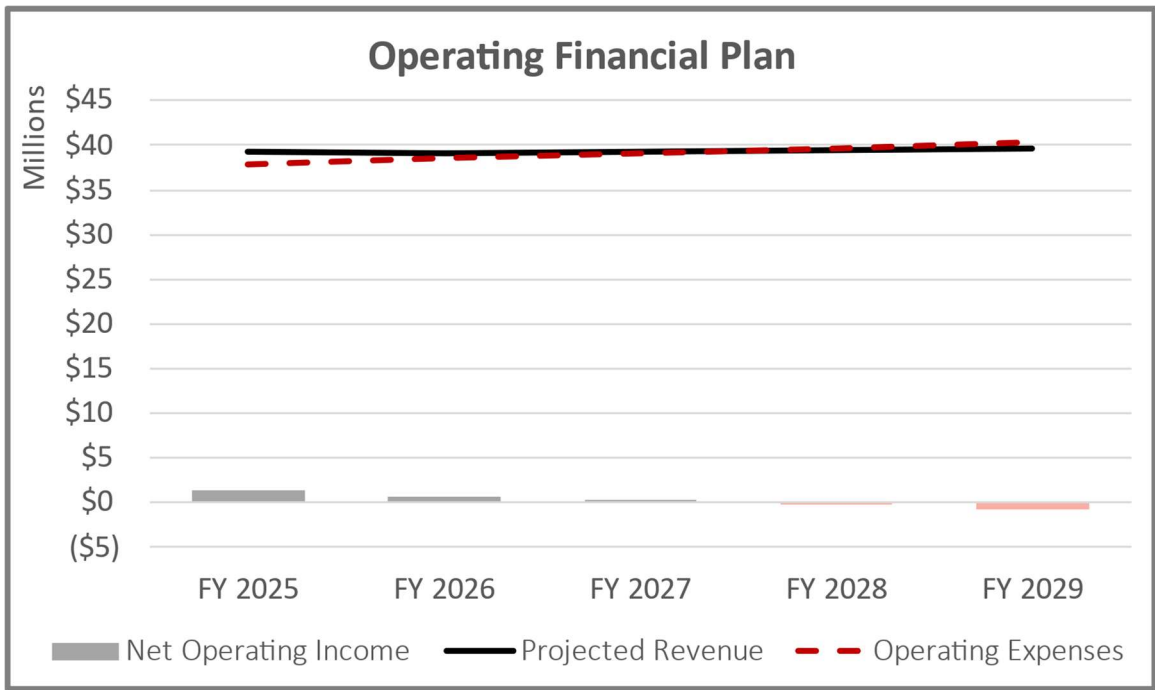
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Table 22: Transfers and Reserve Activity at Existing Rates

Reserve Activity at Existing Rates							
Line #	Operating Fund		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
1	Beginning Balance		\$5,569,360	\$5,755,397	\$6,381,863	\$6,631,863	\$6,432,863
2	Transfers (Net Operating Income)	Table 21	\$1,330,000	\$684,000	\$250,000	(\$199,000)	(\$673,000)
3	Transfers from/(to) Capital Imp. & Repl. Fund		(\$1,143,963)	(\$57,534)	\$0	\$0	\$0
4	Ending Balance		\$5,755,397	\$6,381,863	\$6,631,863	\$6,432,863	\$5,759,863
Capital Imp. & Repl. Fund			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
5	Beginning Balance		\$12,915,786	\$6,702,946	\$5,660,002	(\$1,587,687)	(\$10,205,526)
6	Plus:						
7	Transfers from/(to) Operating Fund	Line 3	\$1,143,963	\$57,534	\$0	\$0	\$0
8	Less:						
9	Capital Acquisitions		(\$813,750)	(\$846,300)	(\$871,689)	(\$897,840)	(\$924,775)
10	CIP		(\$3,347,000)	(\$4,031,000)	(\$6,376,000)	(\$7,720,000)	(\$5,061,000)
11	Transfers from/(to) Rate Stabilization Fund		(\$3,721,128)	\$3,534,411	\$0	\$0	\$0
12	Subtotal Capital Imp. & Repl. Fund		\$6,177,871	\$5,417,592	(\$1,587,687)	(\$10,205,526)	(\$16,191,301)
13	Interest Earnings		\$525,076	\$242,411	\$0	\$0	\$0
14	Ending Balance		\$6,702,946	\$5,660,002	(\$1,587,687)	(\$10,205,526)	(\$16,191,301)
Rate Stabilization Fund			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
15	Beginning Balance		\$4,836,883	\$8,558,011	\$5,023,600	\$5,023,600	\$5,023,600
16	Transfers from/(to) Capital Imp. & Repl. Fund	Line 11	\$3,721,128	(\$3,534,411)	\$0	\$0	\$0
17	Ending Balance		\$8,558,011	\$5,023,600	\$5,023,600	\$5,023,600	\$5,023,600
Lake Hodges Fund			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
18	Beginning Balance		\$3,662,085	\$3,662,085	\$3,662,085	\$3,662,085	\$3,662,085
19	Ending Balance		\$3,662,085	\$3,662,085	\$3,662,085	\$3,662,085	\$3,662,085
Undesignated Funds			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
20	Beginning Balance		\$10,192,763	\$10,192,763	\$10,192,763	\$10,192,763	\$10,192,763
21	Ending Balance		\$10,192,763	\$10,192,763	\$10,192,763	\$10,192,763	\$10,192,763
Summary Information			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
22	Beginning Balance		\$37,176,877	\$34,871,203	\$30,920,313	\$23,922,624	\$15,105,785
23	Total Ending Balance		\$34,871,203	\$30,920,313	\$23,922,624	\$15,105,785	\$8,447,010

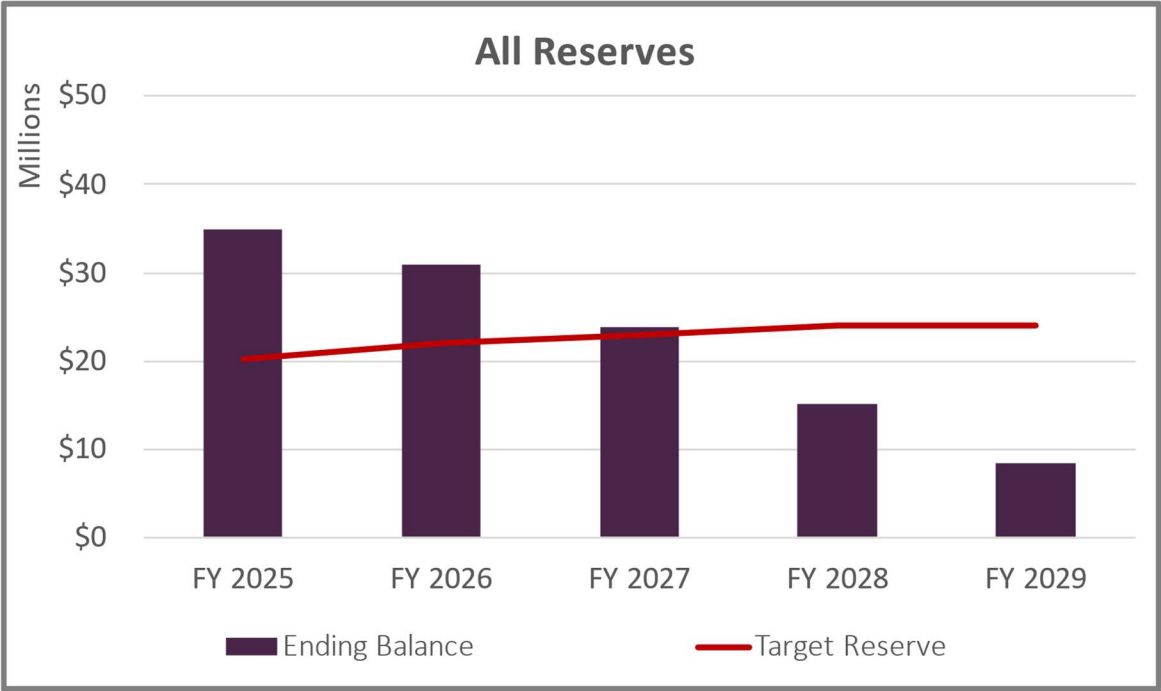
Figure 5 illustrates the operating position of the utility, where O&M expenses are identified with the dashed red trendline, and the horizontal black trendline shows total revenues at existing rates. The bars represent the net operating income, with grey bars reflecting positive net income for capital spending and reserve funding and red bars reflecting an operating deficit absorbed by reserves.

Figure 5: Current Operating Financial Position



Capital spending over the Financial Plan Period is approximately \$30.9, shown in Figure 2. Without increases in rate revenue, the water utility would not meet its reserve target beginning in FY 2028 and will continue to be depleted to cover planned capital spending. Figure 6 reflects the projected ending balances of reserves after funding operating and capital projects.

Figure 6: Projected Ending Reserves at Existing Rates



Proposed Financial Plan

Based on our review of the utility's financial outlook at existing rates, we developed a proposed financial plan to fund the multi-year revenue requirements. The plan generates approximately \$9.4M in additional revenue over the Rate Setting Period, which is needed to generate positive net income each year while funding the CIP, increasing the Lake Hodges fund to \$10.4M, and satisfying reserve requirements. [Table 23](#) forecasts revenues ([Table 17](#)) and expenses ([Table 18](#)) through the Financial Plan Period, with projected revenue adjustment outside the Rate Setting Period greyed out and in red font, as the District will not consider adopting rate increases beyond FY 2027. [Table 24](#) identifies the FY 2025 total starting reserve balances, activity within each reserve (including net income transfer from [Table 23](#)), transfers between reserves, annual CIP expenses, and projected ending balances for each fiscal year over the Financial Plan Period.

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Table 23: Proposed Financial Plan

Financial Plan at Existing Rates						
Revenue		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
District Rate Revenue						
Potable Fixed Charge	Table 17	\$6,316,000	\$6,316,000	\$6,316,000	\$6,316,000	\$6,316,000
Recycled Fixed Charge		\$138,000	\$138,000	\$138,000	\$138,000	\$138,000
Dedicated Fireline Charges		\$84,000	\$84,000	\$84,000	\$84,000	\$84,000
Potable Variable Revenue		\$22,725,000	\$22,725,000	\$22,725,000	\$22,725,000	\$22,725,000
Total District Rate Revenue		\$29,263,000	\$29,263,000	\$29,263,000	\$29,263,000	\$29,263,000
Additional Revenue (from revenue adjustments):						
Fiscal Year	Revenue Adjustment	Effective Month				
FY 2025	9.1%	March	\$884,000	\$2,652,000	\$2,652,000	\$2,652,000
FY 2026	5.0%	January		\$797,000	\$1,595,000	\$1,595,000
FY 2027	5.0%	January			\$837,000	\$1,675,000
FY 2028	5.0%	January				\$879,000
FY 2029	5.0%	January				\$923,000
Total Additional Revenue			\$884,000	\$3,449,000	\$5,084,000	\$6,801,000
Recycled Water						
Recycled Water Sales	Table 17		\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000
Projected Rate Revenue		\$31,200,000	\$33,765,000	\$35,400,000	\$37,117,000	\$38,920,000
Operating Revenues						
SDWD Treatment Reimb	Table 17	\$2,896,000	\$2,751,000	\$2,839,000	\$2,931,000	\$3,026,000
Misc. Operating Revenue		\$540,000	\$540,000	\$540,000	\$540,000	\$540,000
Subtotal Operating Revenues		\$3,436,000	\$3,291,000	\$3,379,000	\$3,471,000	\$3,566,000
Other Revenues						
Interest Income	Table 17	\$1,945,000	\$1,945,000	\$1,945,000	\$1,945,000	\$1,945,000
Property Tax		\$3,356,000	\$3,423,000	\$3,492,000	\$3,562,000	\$3,633,000
Misc. Non-Operating Revenue		\$185,000	\$185,000	\$185,000	\$185,000	\$185,000
Subtotal Other Revenues		\$5,486,000	\$5,553,000	\$5,622,000	\$5,692,000	\$5,763,000
Total Revenues		\$40,122,000	\$42,609,000	\$44,401,000	\$46,280,000	\$48,249,000
Water Supply and O&M Expenses		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Water Supply Costs						
Fixed Purchased Water Costs						
MWD Readiness-to-Serve Charge	Table 18	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000
MWD Capacity Charge		\$221,000	\$221,000	\$221,000	\$221,000	\$221,000
Supply Reliability Charge		\$922,000	\$922,000	\$922,000	\$922,000	\$922,000
Customer Service Charge		\$541,000	\$541,000	\$541,000	\$541,000	\$541,000
Emergency Storage Charge		\$1,232,000	\$1,232,000	\$1,232,000	\$1,232,000	\$1,232,000
Infrastructure Access Charge		\$566,000	\$566,000	\$566,000	\$566,000	\$566,000
Transportation Charge		\$541,000	\$541,000	\$541,000	\$541,000	\$541,000
Subtotal Fixed Purchased Water Costs		\$4,297,000	\$4,297,000	\$4,297,000	\$4,297,000	\$4,297,000
Variable Purchased Water Costs						
SDCWA Treated Water Purchases	Table 18	\$1,397,000	\$1,397,000	\$1,397,000	\$1,397,000	\$1,397,000
SDCWA Untreated Water Purchases		\$13,121,000	\$13,121,000	\$13,121,000	\$13,121,000	\$13,121,000
PSAWR Water Costs		\$94,000	\$94,000	\$94,000	\$94,000	\$94,000
PSAWR Credit		(\$22,000)	(\$22,000)	(\$22,000)	(\$22,000)	(\$22,000)
Subtotal Variable Purchased Water Costs		\$14,590,000	\$14,590,000	\$14,590,000	\$14,590,000	\$14,590,000
SEJPA Purchased Recycled Costs						
Recycled Water Purchases	Table 18	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000	\$1,053,000
Total Water Supply Costs		\$19,940,000	\$19,940,000	\$19,940,000	\$19,940,000	\$19,940,000
Operating Expenses						
Personnel Expenses						
Administration	Table 18	\$3,680,000	\$3,797,000	\$3,920,000	\$4,047,000	\$4,181,000
Engineering		\$917,000	\$946,000	\$975,000	\$1,006,000	\$1,038,000
Operations		\$2,853,000	\$2,947,000	\$3,044,000	\$3,146,000	\$3,253,000
Joint Facilities		\$3,355,000	\$3,464,000	\$3,579,000	\$3,698,000	\$3,823,000
Subtotal Personnel Expenses		\$10,805,000	\$11,154,000	\$11,518,000	\$11,897,000	\$12,295,000
Non-Personnel Expenses						
Administration	Table 18	\$1,483,000	\$1,527,000	\$1,573,000	\$1,620,000	\$1,669,000
Engineering		\$184,000	\$189,000	\$195,000	\$201,000	\$207,000
Operations		\$1,835,000	\$1,890,000	\$1,947,000	\$2,005,000	\$2,066,000
Joint Facilities		\$3,661,000	\$3,776,000	\$3,894,000	\$4,015,000	\$4,141,000
Subtotal Non-Personnel Expenses		\$7,163,000	\$7,382,000	\$7,609,000	\$7,841,000	\$8,083,000
Subtotal Operating Expenses		\$17,968,000	\$18,536,000	\$19,127,000	\$19,738,000	\$20,378,000
Total Expenses		\$37,908,000	\$38,476,000	\$39,067,000	\$39,678,000	\$40,318,000
Net Operating Income		\$2,214,000	\$4,133,000	\$5,334,000	\$6,602,000	\$7,931,000

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Table 24: Proposed Transfers and Reserve Activity

Direct Transfers							
Line #	Direct Transfers (to)/from Reserves		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
1	Net Operating Income	Table 23	\$2,214,000	\$4,133,000	\$5,334,000	\$6,602,000	\$7,931,000
	Transfers						
2	Transfers (to)/from Lake Hodges Fund		(\$6,737,915)	\$0	\$0	\$0	\$0
3	Transfers (to)/from Undesignated Funds		\$6,737,915	\$0	\$500,000	\$2,630,000	(\$1,350,000)
4	Subtotal Transfers		\$0	\$0	\$500,000	\$2,630,000	(\$1,350,000)
5	Net Opearting Income (after direct transfers)		\$2,214,000	\$4,133,000	\$5,834,000	\$9,232,000	\$6,581,000
Reserve Activity at Proposed Rates							
Operating Fund			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
6	Beginning Balance		\$5,569,360	\$5,755,397	\$6,381,863	\$6,670,521	\$6,946,849
7	Transfers (Net Operating Income)	Line 5	\$2,214,000	\$4,133,000	\$5,834,000	\$9,232,000	\$6,581,000
8	Transfers from/(to) Capital Imp. & Repl. Fund		(\$2,027,963)	(\$3,506,534)	(\$5,545,342)	(\$8,955,671)	(\$6,290,863)
9	Ending Balance		\$5,755,397	\$6,381,863	\$6,670,521	\$6,946,849	\$7,236,986
Capital Imp. & Repl. Fund			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
10	Beginning Balance		\$12,915,786	\$6,702,946	\$9,533,265	\$7,618,660	\$8,112,243
11	Plus:						
12	Transfers from/(to) Operating Fund	Line 8	\$2,027,963	\$3,506,534	\$5,545,342	\$8,955,671	\$6,290,863
13	Less:						
14	Capital Acquisitions		(\$813,750)	(\$846,300)	(\$871,689)	(\$897,840)	(\$924,775)
15	CIP		(\$3,347,000)	(\$4,031,000)	(\$6,376,000)	(\$7,720,000)	(\$5,061,000)
16	Transfers from/(to) Rate Stabilization Fund		(\$4,605,128)	\$3,882,728	(\$465,736)	\$0	(\$900,912)
17	Subtotal Capital Imp. & Repl. Fund		\$6,177,871	\$9,214,908	\$7,365,183	\$7,956,491	\$7,516,419
18	Interest Earnings		\$525,076	\$318,357	\$253,477	\$155,752	\$156,287
19	Ending Balance		\$6,702,946	\$9,533,265	\$7,618,660	\$8,112,243	\$7,672,706
Rate Stabilization Fund			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
20	Beginning Balance		\$4,836,883	\$9,442,011	\$5,559,283	\$6,025,019	\$6,025,019
21	Transfers from/(to) Capital Imp. & Repl. Fund	Line 16	\$4,605,128	(\$3,882,728)	\$465,736	\$0	\$900,912
22	Ending Balance		\$9,442,011	\$5,559,283	\$6,025,019	\$6,025,019	\$6,925,931
Lake Hodges Fund			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
23	Beginning Balance		\$3,662,085	\$10,400,000	\$10,400,000	\$10,400,000	\$10,400,000
24	Direct Transfers (from)/to Lake Hodges Fund		\$6,737,915	\$0	\$0	\$0	\$0
25	Ending Balance		\$10,400,000	\$10,400,000	\$10,400,000	\$10,400,000	\$10,400,000
Undesignated Funds			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
26	Beginning Balance		\$10,192,763	\$3,454,848	\$3,454,848	\$2,954,848	\$324,848
27	Direct Transfers (from)/to Undesignated Funds		(\$6,737,915)	\$0	(\$500,000)	(\$2,630,000)	\$1,350,000
28	Ending Balance		\$3,454,848	\$3,454,848	\$2,954,848	\$324,848	\$1,674,848
Summary Information			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
29	Beginning Balance		\$37,176,877	\$35,755,203	\$35,329,260	\$33,669,047	\$31,808,959
30	Total Ending Balance		\$35,755,203	\$35,329,260	\$33,669,047	\$31,808,959	\$33,910,471

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

The operating position based on the proposed financial plan is identified in Figure 7. Figure 8 and Figure 9 show the capital plan with funding sources and projected ending reserve balances, respectively.

Figure 7: Proposed Operating Position

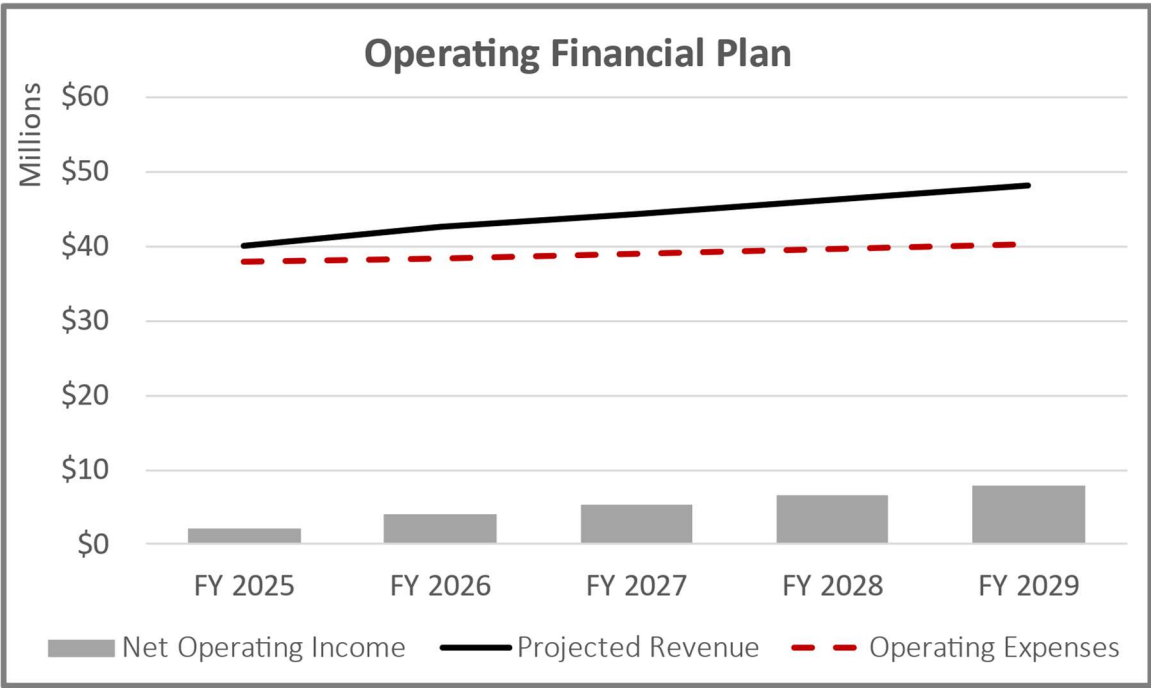


Figure 8: Capital Improvement Plan with Funding Sources

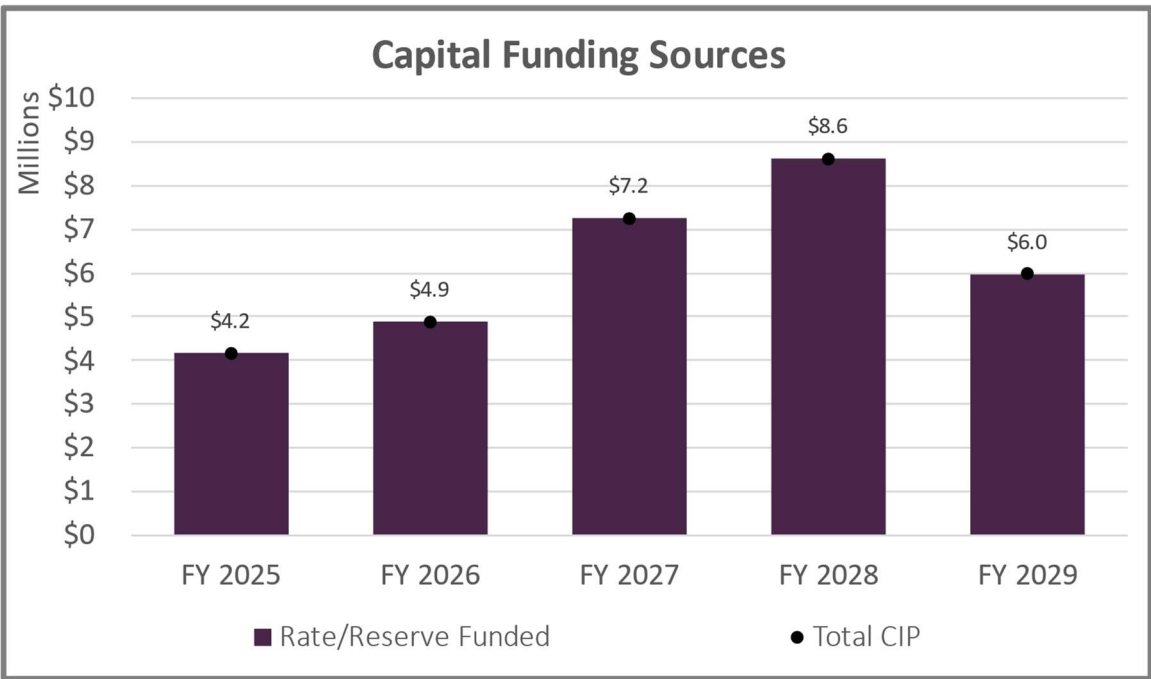
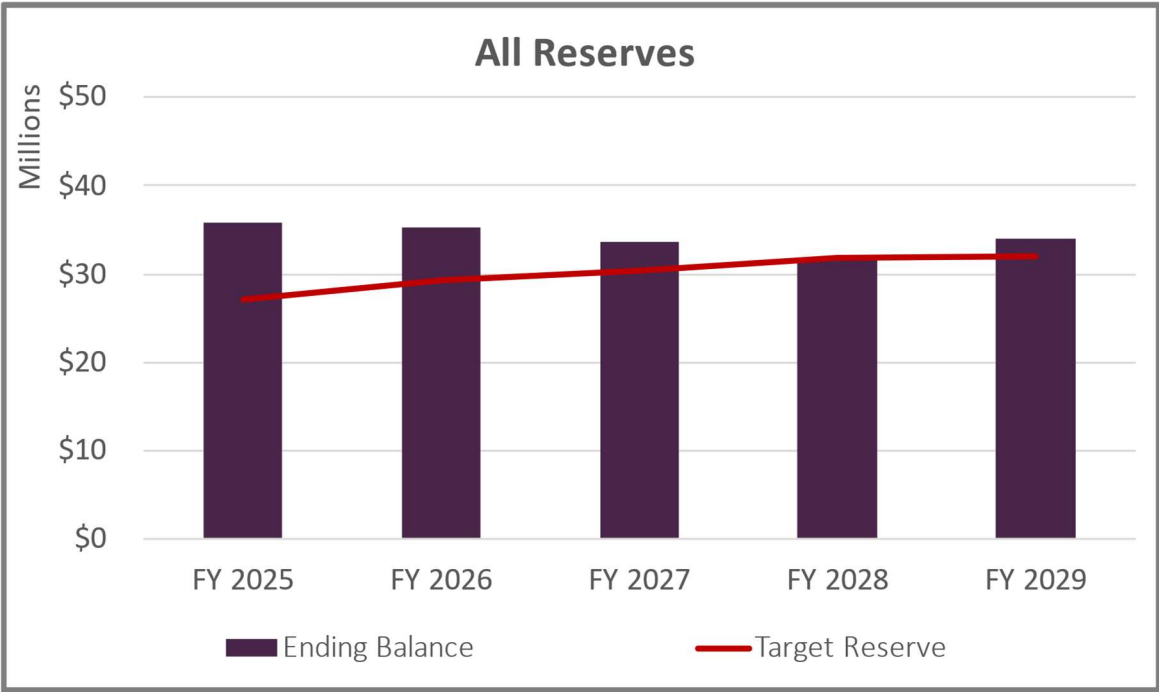


Figure 9: Proposed Ending Reserves



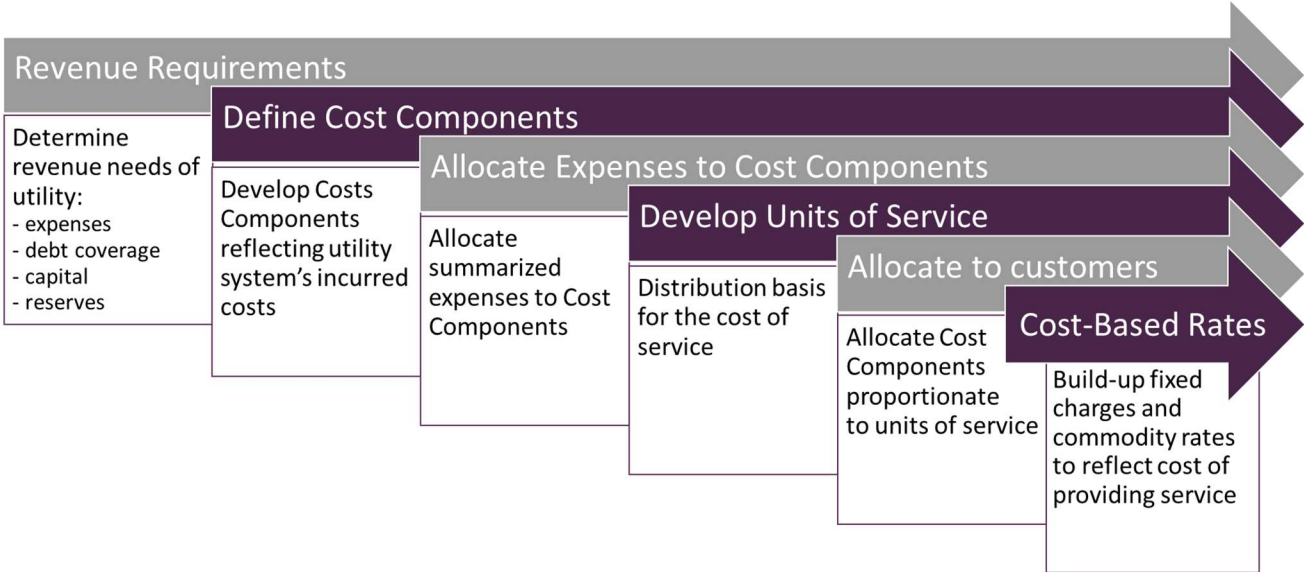
Cost-of-Service Analysis

Cost-of-Service Process

The next step in developing rates is to perform a cost-of-service analysis. This step develops proposed water rates that are cost-based and equitable. Meeting the requirements of Proposition 218 is of paramount importance in developing utility rates. Proposition 218 does not provide a particular methodology for establishing cost-based rates. This study and analysis herein allocate costs proportionately to each parcel served by the District and derive water rates that adhere to the cost-of-service provisions of Proposition 218.

It is important to understand **how** costs are incurred to determine the most appropriate way to recover them. The following graphic summarizes the cost-of-service process. This process allocates costs incurred to customer classes and tiers based on their proportional share. As a result, the proposed rates are cost-based and reflect the costs incurred to deliver water service to all customers.

Figure 10: Cost-of-Service Process



Revenue Requirements

With FY 2025 as the first year of the proposed rate schedule (with an effective date of March 1, 2025), revenue requirements are determined for FY 2025 and used for the cost-of-service. The District Board provided direction on rates and is only considering adopting rate adjustments through FY 2027. Therefore, the revenue requirements and proposed rates are only through the Rate Setting Period. Revenue requirements include water supply costs, O&M expenses, available offsets from other operating and non-operating revenues, annual net income, and mid-year adjustments for when rates are implemented after the start of the fiscal year. The proposed revenue adjustments and corresponding rates collectively accumulate the necessary funding over the Rate Setting Period to fund total revenue requirements, including capital, while meeting minimum reserve requirements. The results of the financial plan analysis are summarized in [Table 25](#) and represent the revenue required from rates.

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Table 25: Revenue Requirements

Rate Setting Period	FY 2025	FY 2026	FY 2027
Revenue Requirements	Total	Total	Total
Water Supply Costs			
MWD Readiness-to-Serve Charge	\$274,000	\$274,000	\$274,000
MWD Capacity Charge	\$221,000	\$221,000	\$221,000
Supply Reliability Charge	\$922,000	\$922,000	\$922,000
Customer Service Charge	\$541,000	\$541,000	\$541,000
Emergency Storage Charge	\$1,232,000	\$1,232,000	\$1,232,000
Infrastructure Access Charge	\$566,000	\$566,000	\$566,000
Transportation Charge	\$541,000	\$541,000	\$541,000
SDCWA Treated Water Purchases	\$1,397,000	\$1,397,000	\$1,397,000
SDCWA Untreated Water Purchases	\$13,121,000	\$13,121,000	\$13,121,000
PSAWR Water Costs	\$94,000	\$94,000	\$94,000
PSAWR Credit	(\$22,000)	(\$22,000)	(\$22,000)
Recycled Water Purchases	\$1,053,000	\$1,053,000	\$1,053,000
Total Water Supply Costs	\$19,940,000	\$19,940,000	\$19,940,000
Operating Expenses			
Personnel Expenses			
Administration	\$3,680,000	\$3,797,000	\$3,920,000
Engineering	\$917,000	\$946,000	\$975,000
Operations	\$2,853,000	\$2,947,000	\$3,044,000
Joint Facilities	\$3,355,000	\$3,464,000	\$3,579,000
Non-Personnel Expenses			
Administration	\$1,483,000	\$1,527,000	\$1,573,000
Engineering	\$184,000	\$189,000	\$195,000
Operations	\$1,835,000	\$1,890,000	\$1,947,000
Joint Facilities	\$3,661,000	\$3,776,000	\$3,894,000
Total Operating Expenses	\$17,968,000	\$18,536,000	\$19,127,000
Other Funding			
<i>Revenue Offsets</i>			
SDWD Treatment Reimb	(\$2,896,000)	(\$2,751,000)	(\$2,839,000)
Misc. Operating Revenue	(\$540,000)	(\$540,000)	(\$540,000)
Interest Income	(\$1,945,000)	(\$1,945,000)	(\$1,945,000)
Property Tax	(\$3,356,000)	(\$3,423,000)	(\$3,492,000)
Misc. Non-Operating Revenue	(\$185,000)	(\$185,000)	(\$185,000)
Total Revenue Offsets	(\$8,922,000)	(\$8,844,000)	(\$9,001,000)
<i>Adjustments</i>			
Reserve Funding	\$2,214,000	\$4,133,000	\$5,334,000
Adjustment for Mid-Year Increase	\$1,768,000	\$797,000	\$837,000
Total Adjustments	\$3,982,000	\$4,930,000	\$6,171,000
Total Other Funding	(\$4,940,000)	(\$3,914,000)	(\$2,830,000)
Revenue Requirement from Rates	\$32,968,000	\$34,562,000	\$36,237,000

Santa Fe Irrigation District – Cost-of-Service Water Rate Study

Define Cost Components

The utility incurs costs to accommodate total water demand and peak demands that vary throughout the year, days, and hours. 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 the utility's costs as a function of meeting total volume and peak use demands. For example, if water customers all consistently used the exact same amount of water (i.e. average use), and never used water in excess of that amount, the water system could be sized solely to accommodate the average demand on the system and all customers could be served with the same size meter. This means that pipes, reservoirs, tanks, water supply, and other costs could be based only on the amount necessary to meet that average, uniform demand pattern. However, if customers use water in amounts that exceed that average demand, a system that is sized to only meet average demand would be insufficient. Therefore, larger infrastructure, pipes, tanks, and reservoirs, among other things, must be constructed to accommodate above-average demand patterns. In addition, customers pay capacity charges when they initially connect to the system based on their meter size to account for the flow capacity required to serve the meter. Customer usage patterns are one direct driver of the District's system's average day demand and max day demand requirements and can be used to allocate related costs fairly. The cost components shown in Figure 11 and Figure 12 reflect the fixed and variable cost components used for this study, respectively. The SDCWA fixed charges of Emergency Storage (ES or Storage) and Supply Reliability (SR or Reliability) were decoupled from the other SDCWA fixed charges and identified as a separate cost component. As part of the PSAWR program, PSAWR customers do not incur these costs because they agreed through the program to be cut off from the water supply during certain drought conditions. As such, when allocating SDCWA Storage & Reliability fixed costs to District customers, PSAWR accounts are not included.

Figure 11: Fixed Cost Components

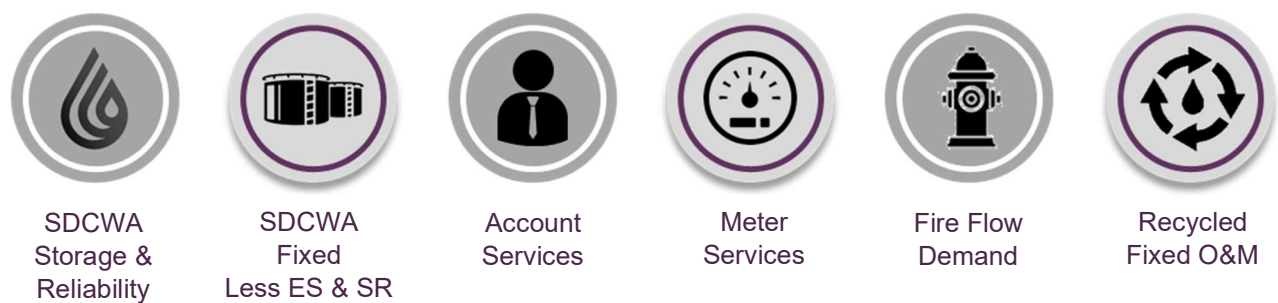
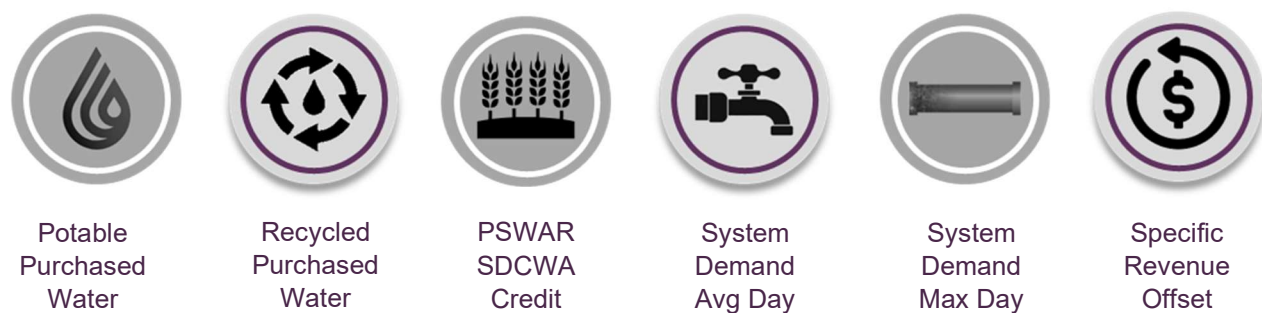


Figure 12: Variable Cost Components



Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Fixed Cost Components:

SDCWA Storage & Reliability: Fixed charges from SDCWA for emergency storage and supply reliability expenses (subject to pass-throughs to capture increases in future years).

SDCWA Fixed less ES & SR: All remaining fixed charges incurred from SDCWA, including a new Transportation Fixed Charge established by SDCWA for FY 2025 (subject to pass-throughs to capture increases in future years).

Account Services: Fixed costs associated with having an account that does not vary based on meter size or usage.

Meter Services: Fixed costs associated with the system demand to be recovered based on meter capacity.

Fire Flow Demand: Fire Flow Demand Inherent in the system as a function of Max Day Demand

Recycled Fixed O&M: Direct staffing cost associated with monitoring & reporting recycled accounts, usage, and backflow.

The variable cost components include Potable Purchased Water, which connects directly to serving the total water demand generated by District customers. System Demand – Average Day establishes a base commodity rate for District operations, and System Demand – Max Day generates a commodity rate above the base commodity rate. The System Demand – Max Day costs, which include fixed and variable expenses, are apportioned to customers based on usage during the District's Max Day event using the District's Advance Meter Infrastructure reporting. This data is used to recover these costs from the variable rate rather than recovering the cost based on meter capacity because it **reflects the actual usage demands placed on the District's system by customers**, instead of each meter's potential maximum capacity. In other words, there is a direct cause and effect connecting the amount of water used, and the need for the District to incur Max Day costs. Recycled Purchased Water and PSAWR SDCWA Credits are based on water usage. Specific Revenue Offset are applied to the variable cost components to reduce the variable rates to all customers.

Variable Cost Components:

Potable Purchased Water: Variable costs related to purchased water from SDCWA, including untreated and treated water (subject to pass-throughs to capture increases in future years).

Recycled Purchased Water: Variable costs related to recycled purchased water from San Dieguito Water District (subject to pass-throughs to capture increases in future years).

PSAWR SDCWA Credit: Credit received from SDCWA for customers that joined the PSAWR program (subject to pass-throughs to capture increases in future years).

System Demand – Avg Day: Costs to provide basic level of service to each customer to meet average day demand. Cost benefits all customers uniformly, do not vary based on max day usage.

System Demand – Max Day: Costs to provide a maximum day level of service to each customer. Costs are apportioned using the actual usage that occurred during the max day event in 2023 using the District's Advanced Meter Infrastructure (AMI) data.

Specific Revenue Offset: Portion of the property tax revenue used to specifically offset certain variable rates.

The analysis herein establishes cost components for developing fixed charges and variable 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. The system is configured with distribution and transmission lines ranging in size from 1" diameter to 24" diameter. This system configuration provides fire flow demand inherent to a utility system and accounts for increased demands generated by customers using water above the average daily usage. Max day usage is the maximum amount of water used in a single day of a calendar year.

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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 straightforward to ensure the method of apportionment is understandable and easily correlates to how expenses are incurred.

Water Supply Expense Categories:

MWD Readiness-to-Serve Charge: Fixed expenses from Metropolitan Water District (MWD) that SDCWA passes through to the District. This charge supports MWD's system capital costs for emergency and standby storage facilities.

MWD Capacity Charge: Fixed expenses from Metropolitan Water District (MWD) that SDCWA passes through to the District. This charge is to provide peaking capacity within MWD's distribution system.

Supply Reliability Charge: SDCWA Fixed expense to cover a portion of the Carlsbad Desalination Plant and the Imperial Irrigation District transfer water costs.

Customer Service Charge: SDCWA Fixed expense to support functions of the agency, develop policies, and implement system-wide programs.

Emergency Storage Charge: SDCWA fixed expenses associated with its Emergency Storage Program and Carryover Storage Program.

Infrastructure Access Charge: SDCWA fixed expense associated with the distribution system to ensure a minimum of 25% fixed cost recovery.

Transportation Charge: SDCWA fixed expense to recover approximately 40% of capital, operating, and maintenance costs of the Water Authority's water delivery facilities including all facilities used to physically transport the water to member agencies. The remaining 60% is recovered through the Transportation Variable rate.

Treated Water Costs: Commodity rate (in Acre Feet) for the purchase of treated water from SDCWA.

Untreated Water Costs: Commodity rate (in Acre Feet) for the purchase of untreated water from SDCWA.

PSAWR Water Costs: Purchased water costs tracked by the District for purposes of the PSAWR program.

PSAWR Credit/Discount: Credits provided by SDCWA for PSAWR water usage in excess of 44 hcf during a bi-monthly period, which is tracked and reported by the District.

Recycled Water Purchases: Direct commodity charges for recycled water from San Dieguito Water District that is charged directly to recycled water customers.

O&M Expense Categories:

Personnel Expenses

Administration: Staffing for centralized District-wide functions, such as customer service, human resources, finance, IT, and board management, among others.

Engineering: Staffing for development and review of any capital project, preservation of District assets, and system demand planning/monitoring, among others.

Operations: Construction and distribution staff that ensures the continued reliability in potable water transmission throughout the District.

Joint Facilities: Treatment of raw water sources for both the District and San Dieguito Water District. This includes the treatment plant, reservoirs, and pump stations.

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Non-Personnel Expenses

Administration Expenses: Non-personal expenses, including insurance, office supplies, IT, and contract service.

Engineering: Contract services and departmental expenses for development and review of any capital project, drafting & mapping, among others.

Operations: Non-personnel expenses associated with operations, facility maintenance, safety, and meter & backflow services to protect water quality.

Joint Facilities: Non-Personnel expenses and contract services related to Joint Facilities.

System Demand Characteristics

The District's water system is sized to provide sufficient capacity to the District's water users (plus fire flow demand) that places the highest levels of demand on the system. To accommodate water users that place higher demands on the District's water system, the District must construct infrastructure and expand capacity to serve such users. As such, specific system costs for operating infrastructure would not be incurred but for customers who place high demand on the water system. For example, transmission lines, pump stations, reservoirs, and the District's treatment plant and other joint facilities are constructed to serve not only the average day demand of customers but also the increased demands during the max day. Most of these costs would be unnecessary if customer usage patterns were constant and reflected the average day or the lowest period of average winter usage.

Proposition 218 requires the District only to charge rates for water service that reflect the proportional cost-of-service to each parcel. To meet this requirement and reasonably allocate the costs of such demands on the customers driving the District to incur such costs, we analyzed the system's water production characteristics to allocate costs between Avg Day Demand (Avg Day) and Max Day Demand (Max Day). Avg Day corresponds to the average daily water demand the District's system experiences across an entire fiscal year. The related costs are apportioned over all potable usage, generating a uniform unit rate per hcf to all customers.

Max Day corresponds to the amount of water used on the highest water use day over a 12-month period (Max Day Event). For this study, the Avg Day (6,693,382 gallons) and Max Day (12,647,948 gallons) shown in **Table 26** are from FY 2023, based on the District's water use data. During Max Day, the system accommodated nearly double the average daily demand ($12,647,948 \div 6,693,382 = 1.9$). Analyzing the usage characteristics of District customers throughout the year, including the increase in usage up to the system's Max Day demand is a critical component in a cost-of-service rate study to fairly apportion variable costs to each customer class and tier. Certain system improvements must be sized to not only accommodate the Avg Day usage but also to adequately serve the increase in usage above average usage throughout the year. The relationship between Avg Day versus Max Day provides a sound basis for allocating certain system costs as a function of these water demand characteristics. Based on our detailed consumption analysis, certain costs are separated between base costs (System Demand – Avg Day) and extra capacity costs (System Demand – Max Day). The cost allocation between System Demand – Avg Day and System Demand – Max Day varies between water systems and should reflect the demand characteristics of each water district's system. Our consumption analysis analyzed the actual account usage during the Max Day event to determine the appropriate allocations between customer classes and tiers.

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AMI meters provide the District with the ability to review daily usage at the account level, which was not previously possible. With AMI technology, usage data at the account level during the Max Day event can be analyzed and incorporated into our cost-of-service analysis. This data provides water usage information for each customer class and account during the Max Day event, which provides a direct correlation between these costs and actual usage of the system. As such, this study uses annual usage and max day usage at the account level to fairly apportion system costs to customers. This study's System Demand – Max Day costs include Joint Facilities and Non-Personnel Engineering expenses. Joint Facilities represent the District's Personnel and O&M expenses related to its treatment plant, which is a function of accommodating usage up to Max Day. Non-Personnel Engineering includes contract services related to Joint Facilities and system planning.

To determine the percent allocations of Avg Day and Max Day, the following calculations are used:

Avg Day – 100% to System Demand – Avg Day

Max Day – The percent allocation of Max Day demand reflects the increase in demand when compared to Avg Day demand. The average day accounts for 52.9% of the max day event, and the remaining 47.1% is the percentage of demand above average demand.

Table 26 summarizes the percentage between Avg Day and Max Day, which directly correspond to the Cost Components of System Demand – Avg Day and System Demand – Max Day.

Table 26: System Demand Characteristics

System Peak Analysis				
System Peak	System Demand (gpd)	System Demand (gpm)	Average Day	Max Day
	[A]	[B] = A ÷ 24 ÷ 60	[C] = Average Day ÷ B; (4,648 ÷ B)	[D] = 100% - C
Average Day	6,693,382	4,648	100.0%	0.0%
Max Day	12,647,948	8,783	52.9%	47.1%

In addition to the Max Day Demand allocation shown in Table 26, a water system is also configured to accommodate Fire Flow Demand (FFD) with the sizing of pipes, storage facilities and other appurtenant facilities to meet Max Day demand. FFD can be incorporated into this analysis as a component of Max Day. Based on the fire flow requirements of the District (1,500 gpm), Table 27 identifies FFD as a percentage of Max Day by introducing a typical fire event occurring during Max Day and comparing the instantaneous impact in gallons per minute (gpm). Therefore, any costs that are allocated based on Max Day Demand will account for the percentage of FFD derived in Table 26. Table 28 identifies the final Max Day Demand allocation with the inclusion of FFD.

Table 27: Fire Flow Demand as Percentage of Max Day

Fire Flow Demand Analysis		
Demand	Gallons (7/17/2023)	Max Day Demand
	[A]	[B] = A ÷ 1,440 minutes
System Max Day Demand	12,647,948	8,783 gpm
Fire Flow Demand	-	1,500 gpm
Total (Max Day plus FFD)		10,283 gpm
Fire Flow Demand % (FFD ÷ Total)		14.6%

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Table 28: Max Day Demand with Fire Flow Demand

Max Day Demand with Fire Flow Demand			
System Demand Characteristics	Fire Flow Demand [A] = Table 27	Average Day [B] = [(1-A)*Avg Day]	Max Day [C] = [(1-A)*Max Day]
Max Day + FFD	14.6%	45.2%	40.2%

Table 29 summarizes the percent allocation of water supply costs, including SDCWA fixed costs, SDCWA variable costs, and recycled water purchases to the cost components, and Table 30 uses the percent allocations in Table 29 to allocate expenses in dollars to each cost component. These expenses are allocated 100% to the respective cost component that ties specifically to the expense and are not adjusted by revenue offsets or reserve funding.

Table 29: Water Supply Expense Allocation to Cost Components (%)

Water Supply Costs	Methodology / Allocation Basis	Cost Components					Total
		SDCWA Storage & Reliability	SDCWA Fixed Less ES & SR	Potable Purchased Water	Recycled Purchased Water	PSAWR SDCWA Credit	
MWD Readiness-to-Serve Charge	Specific	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
MWD Capacity Charge	Specific	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply Reliability Charge	Specific	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Customer Service Charge	Specific	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Emergency Storage Charge	Specific	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Infrastructure Access Charge	Specific	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transportation Charge	Specific	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
SDCWA Treated Water Purchases	Specific	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
SDCWA Untreated Water Purchases	Specific	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
PSAWR Water Costs	Specific	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
PSAWR Credit	Specific	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Recycled Water Purchases	Specific	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

Table 30: Water Supply Expense Allocation to Cost Components (\$)

Water Supply Costs	Methodology / Allocation Basis	Cost Components					Total
		SDCWA Storage & Reliability	SDCWA Fixed Less ES & SR	Potable Purchased Water	Recycled Purchased Water	PSAWR SDCWA Credit	
MWD Readiness-to-Serve Charge	Specific	\$0	\$274,000	\$0	\$0	\$0	\$274,000
MWD Capacity Charge	Specific	\$0	\$221,000	\$0	\$0	\$0	\$221,000
Supply Reliability Charge	Specific	\$922,000	\$0	\$0	\$0	\$0	\$922,000
Customer Service Charge	Specific	\$0	\$541,000	\$0	\$0	\$0	\$541,000
Emergency Storage Charge	Specific	\$1,232,000	\$0	\$0	\$0	\$0	\$1,232,000
Infrastructure Access Charge	Specific	\$0	\$566,000	\$0	\$0	\$0	\$566,000
Transportation Charge	Specific	\$0	\$541,000	\$0	\$0	\$0	\$541,000
SDCWA Treated Water Purchases	Specific	\$0	\$0	\$1,397,000	\$0	\$0	\$1,397,000
SDCWA Untreated Water Purchases	Specific	\$0	\$0	\$13,121,000	\$0	\$0	\$13,121,000
PSAWR Water Costs	Specific	\$0	\$0	\$94,000	\$0	\$0	\$94,000
PSAWR Credit	Specific	\$0	\$0	\$0	\$0	(\$22,000)	(\$22,000)
Recycled Water Purchases	Specific	\$0	\$0	\$0	\$1,053,000	\$0	\$1,053,000
Total Allocation (\$)		\$2,154,000	\$2,143,000	\$14,612,000	\$1,053,000	(\$22,000)	\$19,940,000

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Table 31 summarizes the percent allocation of O&M revenue requirements to the cost components, and Table 32 uses the percent allocations in Table 31 to allocate expenses in dollars to each cost component. Administration is recovered as a fixed component with 30% allocated to Account Service and 70% to Meter Services. The 30% to Account Services includes the District's customer service positions two Full-Time Equivalents (FTEs), Human Resource Manager, a portion of IT, and financial reporting, which are costs incurred with serving active accounts. The remaining 70% under meter capacity accounts for the fixed personnel costs of the General Manager and the executive team, responsible for overseeing the overall operations and long-term planning of the District's facilities to serve total demand. District Operations include one FTE that primarily works on the recycled water system, and these costs are specifically allocated to the Recycled Fixed O&M cost component, which is 2% of the total Operations expense. Joint Facilities are the personnel costs and O&M expenses associated with the District's treatment plant, which is a function of Max Day Demand and, therefore, allocated using the Max Day Demand + FFD allocation derived in Table 28. The treatment plant is a function of Max Day because it includes costs for staffing and personnel that are all based on maximum demand loads. In other words, the treatment plant must be staffed to ensure the ability to serve fluctuations in usage throughout the year. As usage increases, more energy and chemicals are needed to operate the treatment plant, including more wear and tear on the Joint Facilities.

Table 31: O&M Expense Allocation to Cost Components (%)

Operating Expenses	Methodology / Allocation Basis	Cost Components						Total
		Account Services	Meter Services	Fire Flow Demand	Recycled Fixed O&M	System Demand (Avg Day)	System Demand (Max Day)	
Personnel Expenses								
Administration	Specific	30.0%	70.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Engineering	Average Day	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Operations	Specific	0.0%	0.0%	0.0%	2.0%	98.0%	0.0%	100.0%
Joint Facilities	Max Day + FFD	0.0%	0.0%	14.6%	0.0%	45.2%	40.2%	100.0%
Non-Personnel Expenses								
Administration	Average Day	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Engineering	Max Day + FFD	0.0%	0.0%	14.6%	0.0%	45.2%	40.2%	100.0%
Operations	Average Day	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Joint Facilities	Max Day + FFD	0.0%	0.0%	14.6%	0.0%	45.2%	40.2%	100.0%

Table 32: O&M Expense Allocation to Cost Components (\$)

Operating Expenses	Methodology / Allocation Basis	Cost Components						Total
		Account Services	Meter Services	Fire Flow Demand	Recycled Fixed O&M	System Demand (Avg Day)	System Demand (Max Day)	
Personnel Expenses								
Administration	Specific	\$1,104,000	\$2,576,000	\$0	\$0	\$0	\$0	\$3,680,000
Engineering	Average Day	\$0	\$0	\$0	\$0	\$917,000	\$0	\$917,000
Operations	Specific	\$0	\$0	\$0	\$57,060	\$2,795,940	\$0	\$2,853,000
Joint Facilities	Max Day + FFD	\$0	\$0	\$489,386	\$0	\$1,516,503	\$1,349,111	\$3,355,000
Non-Personnel Expenses								
Administration	Average Day	\$0	\$0	\$0	\$0	\$1,483,000	\$0	\$1,483,000
Engineering	Max Day + FFD	\$0	\$0	\$26,840	\$0	\$83,170	\$73,990	\$184,000
Operations	Average Day	\$0	\$0	\$0	\$0	\$1,835,000	\$0	\$1,835,000
Joint Facilities	Max Day + FFD	\$0	\$0	\$534,021	\$0	\$1,654,819	\$1,472,160	\$3,661,000
Total Allocation (\$)		\$1,104,000	\$2,576,000	\$1,050,247	\$57,060	\$10,285,432	\$2,895,261	\$17,968,000
<i>O&M Allocation</i>		6.1%	14.3%	5.8%	0.3%	57.2%	16.1%	100.0%

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Other Funding includes revenue offsets related to other operating and non-operating revenues, reserve funding, and mid-year adjustment when proposed 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 for deriving rates. A majority of the Other Funding line items are allocated based on O&M percentages derived in [Table 32](#) to allocate revenue offsets and reserve funding proportionately to each O&M cost component. However, San Dieguito Water District (SDWD) reimbursements to the District are associated with their use of the treatment plant. Therefore, the SDWD reimbursements are allocated in the same manner as how Joint Facilities expenses were allocated using the Max Day Demand allocation. The non-rate revenue of Interest Income, Property Tax, and Misc. Non-Operating Revenue are all unrestricted revenue sources and may be used by the District for any legal purpose. The District has determined to use such revenues to offset the cost of providing water service and, therefore, reduce the total amount that must be collected from rates. These revenues were specifically allocated with 30% split evenly between the fixed components of Account Services and Meter Services (15% each), and the remainder to offset variable expenses. The remaining revenue offset from property tax, equal to 70%, is allocated to a separate Revenue Offset cost component, which will be used for specific offsets to certain variable rates after proportionately applying the Revenue Offset to each customer class based on their percentage of total water usage. [Table 33](#) summarizes the percent allocation to the cost components, and [Table 34](#) uses the percent allocations in [Table 33](#) to allocate expenses in dollars to each cost component. [Table 35](#) summarizes the cost-of-service requirements by fixed cost components, and [Table 36](#) summarizes the cost-of-service requirements by variable cost components.

Table 33: Other Funding to Cost Components (%)

Other Funding	Methodology / Allocation Basis	Account Services	Meter Services	Fire Flow Demand	Recycled Fixed O&M	System Demand (Avg Day)	System Demand (Max Day)	Specific Revenue Offset	Total
<i>Revenue Offsets</i>									
SDWD Treatment Reimb	Max Day + FFD	0.0%	0.0%	14.6%	0.0%	45.2%	40.2%	0.0%	100.0%
Misc. Operating Revenue	O&M Allocation	6.1%	14.3%	5.8%	0.3%	57.2%	16.1%	0.0%	100.0%
Interest Income	Specific	17.0%	17.0%	0.0%	0.0%	66.0%	0.0%	0.0%	100.0%
Property Tax	Specific	17.0%	17.0%	0.0%	0.0%	0.0%	0.0%	66.0%	100.0%
Misc. Non-Operating Revenue	Specific	17.0%	17.0%	0.0%	0.0%	66.0%	0.0%	0.0%	100.0%
<i>Adjustments</i>									
Reserve Funding	O&M Allocation	6.1%	14.3%	5.8%	0.3%	57.2%	16.1%	0.0%	100.0%
Adjustment for Mid-Year Increase	O&M Allocation	6.1%	14.3%	5.8%	0.3%	57.2%	16.1%	0.0%	100.0%

Table 34: Other Funding Allocation to Cost Components (\$)

Other Funding	Methodology / Allocation Basis	Account Services	Meter Services	Fire Flow Demand	Recycled Fixed O&M	System Demand (Avg Day)	System Demand (Max Day)	Specific Revenue Offset	Total
<i>Revenue Offsets</i>									
SDWD Treatment Reimb	Max Day + FFD	\$0	\$0	(\$422,433)	\$0	(\$1,309,029)	(\$1,164,538)	\$0	(\$2,896,000)
Misc. Operating Revenue	O&M Allocation	(\$33,179)	(\$77,418)	(\$31,564)	(\$1,715)	(\$309,113)	(\$87,013)	\$0	(\$540,000)
Interest Income	Specific	(\$330,650)	(\$330,650)	\$0	\$0	(\$1,283,700)	\$0	\$0	(\$1,945,000)
Property Tax	Specific	(\$570,520)	(\$570,520)	\$0	\$0	\$0	\$0	(\$2,214,960)	(\$3,356,000)
Misc. Non-Operating Revenue	Specific	(\$31,450)	(\$31,450)	\$0	\$0	(\$122,100)	\$0	\$0	(\$185,000)
<i>Adjustments</i>									
Reserve Funding	O&M Allocation	\$136,034	\$317,412	\$129,410	\$7,031	\$1,267,361	\$356,751	\$0	\$2,214,000
Adjustment for Mid-Year Increase	O&M Allocation	\$108,630	\$253,471	\$103,341	\$5,615	\$1,012,057	\$284,885	\$0	\$1,768,000
Total Allocation (\$)		(\$721,135)	(\$439,154)	(\$221,244)	\$10,931	(\$744,523)	(\$609,914)	(\$2,214,960)	(\$4,940,000)

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Table 35: FY 2025 Cost-of-Service Revenue Requirements by Fixed Cost Components

Revenue Requirement	Fixed Components						Fixed Total
	SDCWA Storage & Reliability	SDCWA Fixed Less ES & SR	Account Services	Meter Services	Fire Flow Demand	Recycled Fixed O&M	
Water Supply Costs	\$2,154,000	\$2,143,000	\$0	\$0	\$0	\$0	\$4,297,000
Operating Expenses	\$0	\$0	\$1,104,000	\$2,576,000	\$1,050,247	\$57,060	\$4,787,307
Other Funding	\$0	\$0	(\$721,135)	(\$439,154)	(\$221,244)	\$10,931	(\$1,370,603)
COS Requirements	\$2,154,000	\$2,143,000	\$382,865	\$2,136,846	\$829,002	\$67,991	\$7,713,704

Table 36: FY 2025 Cost-of-Service Revenue Requirements by Variable Cost Components

Revenue Requirement	Variable Components						Variable Total
	Potable Purchased Water	Recycled Purchased Water	PSAWR SDCWA Credit	System Demand (Avg Day)	System Demand (Max Day)	Specific Revenue Offset	
Water Supply Costs	\$14,612,000	\$1,053,000	(\$22,000)	\$0	\$0	\$0	\$15,643,000
Operating Expenses	\$0	\$0	\$0	\$10,285,432	\$2,895,261	\$0	\$13,180,693
Other Funding	\$0	\$0	\$0	(\$744,523)	(\$609,914)	(\$2,214,960)	(\$3,569,397)
COS Requirements	\$14,612,000	\$1,053,000	(\$22,000)	\$9,540,909	\$2,285,347	(\$2,214,960)	\$25,254,296

Rate Design

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 connecting costs to the proposed rates, resulting in a cost-based rate structure that complies with Proposition 218. The previous section summarized costs by expense category and then 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. The method of apportionment considers each customer's share of system costs and is reflected by the units of service used to distribute the cost components to each customer account equitably. 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 by class and tier during the Max Day event.

Fixed Units of Service

Each meter size was assigned an equivalency factor based on the flow characteristics of a 3/4" meter. District staff confirmed the safe maximum operating flow capacity by meter type, as identified in the AWWA M1 Manual, 6th Edition, Table B-2, are reflective of the District's installed meters. The safe maximum operating flow capacity for each meter was divided by the base meters safe operating flow capacity of 30 gallons per minute (gpm) (3/4") to determine the equivalent meter ratio. In other words, the calculations convert all larger-sized meters to an equivalent number of 3/4" meters based on the 3/4" safe operating flow capacity of 30 gpm. The Capacity Ratios represent 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 the billing periods in a year. [Table 37](#) and [Table 38](#) summarize the units of service related to total Accounts and MEs by customer class, respectively, including PSAWR. Certain SDCWA fixed costs (Emergency Storage and Supply Reliability) are not incurred by PSAWR accounts per the program.

Table 37: Number of Potable Accounts

Annual Fixed Units of Service								
Line #	Meter Size	Single-Family	Multi-Family	Non-Residential	Agricultural / Irrigation	PSAWR	Construction	Potable Accounts
1	5/8" & 3/4"	3,230	153	163	33	1	0	3,580
2	1"	1,595	80	90	37	7	0	1,809
3	1 1/2"	635	135	74	36	12	0	892
4	2"	64	89	50	32	1	0	236
5	3"	2	2	2	1	0	15	22
6	4"	0	0	2	2	0	0	4
7	6"	0	0	0	2	0	0	2
8	8"	0	0	0	0	0	0	0
9	10"	0	0	0	0	0	0	0
10	Total	5,526	459	381	143	21	15	6,545
11	Annual Units <i>(Line 10 × 6 Billing Periods)</i>	33,156	2,754	2,286	858	126	90	39,270

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Table 38: Number of Potable Meter Equivalents (MEs)

Annual Fixed Units of Service										
Line #	Meter Size	AWWA Capacity (gpm)	AWWA Capacity Ratio	Single-Family	Multi-Family	Non-Residential	Agricultural / Irrigation	PSAWR	Construction	Potable ME's
Line #		[A]	[B] = A ÷ 30	[C] = Accounts × B	[D] = Accounts × B	[E] = Accounts × B	[F] = Accounts × B	[G] = Accounts × B	[H] = Accounts × B	[I] = Sum (C-H)
1	5/8" & 3/4"	30	1.00	3,230	153	163	33	1	0	3,580
2	1"	50	1.67	2,658	133	150	62	12	0	3,015
3	1 1/2"	100	3.33	2,117	450	247	120	40	0	2,973
4	2"	160	5.33	341	475	267	171	5	0	1,259
5	3"	350	11.67	23	23	23	12	0	175	257
6	4"	630	21.00	0	0	42	42	0	0	84
7	6"	1,300	43.33	0	0	0	87	0	0	87
8	8"	2,800	93.33	0	0	0	0	0	0	0
9	10"	4,200	140.00	0	0	0	0	0	0	0
10	Total			8,370	1,234	892	526	58	175	11,254
11	Annual Units (Line 10 × 6 Billing Periods)			50,218	7,406	5,350	3,154	348	1,050	67,526

The District also serves 55 accounts with recycled water and Table 39 provides total accounts (potable accounts and recycled accounts) and total MEs (potable MEs and recycled MEs).

Table 39: Number of Potable and Recycled Accounts/MEs

Annual Fixed Units of Service									
Line #	Meter Size	AWWA Capacity (gpm)	AWWA Capacity Ratio	Potable Accounts	Recycled Accounts	Total Accounts	Potable ME's	Recycled ME's	Total ME's
Line #		[A]	[B] = A ÷ 30	[C]	[D]	[E] = C + D	[F] = B × C	[G] = B × D	[H] = F + G
1	5/8" & 3/4"	30	1.00	3,580	0	3,580	3,580	0	3,580
2	1"	50	1.67	1,809	16	1,825	3,015	27	3,042
3	1 1/2"	100	3.33	892	4	896	2,973	13	2,987
4	2"	160	5.33	236	32	268	1,259	171	1,429
5	3"	350	11.67	22	3	25	257	35	292
6	4"	630	21.00	4	2	6	84	42	126
7	6"	1,300	43.33	2	0	2	87	0	87
8	8"	2,800	93.33	0	0	0	0	0	0
9	10"	4,200	140.00	0	1	1	0	140	140
10	Total			6,545	58	6,603	11,254	428	11,682
11	Annual Units (Line 10 × 6 Billing Periods)			39,270	348	39,618	67,526	2,566	70,092

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Variable Units of Services

The District's service area experiences lower than average rainfall when compared to the rest of the country. In 2021 precipitation reported by the California Irrigation Management Information System (CMIS) for the two weather stations near the District (Escondido – Station 153 and Torrey Pines – Station 173) was 4.3 inches and 14.1 inches, respectively. In 2022, precipitation reported was 4.7 inches and 10.3 inches, respectively. Most of the precipitation occurs during the winter, creating a mild wet season and a very dry season in the summer. As a result, the District typically experiences two very different water consumption patterns, one during the wet season (low usage) and another during the dry season (peak usage), when outdoor watering use significantly increases in response to little or no rainfall. In addition, the Max Day Event occurred during the summer peak period. Our analysis incorporates water usage data during Max Day for apportioning costs associated with the System Demand – Max Day cost component to customer classes and tiers.

Table 40 provides the projected annual usage (in hcf) and the Max Day usage (in cubic feet or cf) for each customer class to derive the units of service for allocating variable costs. Max Day usage is reported in cubic feet; therefore, our analysis maintains the cubic feet units to determine the percentage of usage by customer class and by tier. PSAWR usage is included as part of the usage within Irrigation / Agricultural and as separate columns to identify the amount of PSAWR usage that receives the credit from SDCWA. Lastly, Recycled usage is also identified separately, as certain costs are only allocated to Recycled accounts.

Table 40: Usage Characteristics by Customer Class (hcf)

Variable Units of Service					
Customer Class	All Usage	Potable Usage	PSAWR Credit Usage	Max Day Usage	Recycled Usage
	(hcf)	(hcf)	(hcf)	(hcf)	(hcf)
Single-Family	3,108,818	3,108,818	0	1,290,953	0
Multi-Family	303,020	303,020	0	94,778	0
Non-Residential	224,795	224,795	0	75,363	0
Agricultural / Irrigation	282,491	282,491	21,607	229,695	0
Recycled	239,903	0	0	0	239,903
Total Usage	4,159,027	3,919,124	21,607	1,690,789	239,903

Using the fixed and variable units of service in Table 39 and Table 40, respectively, provides a means to proportionately allocate the total revenue requirements, by cost component, to each customer class. The fixed cost components are recovered over either total accounts or meter size. Variable cost components are first allocated to each customer class based on their total potable usage or max day usage. Allocating variable costs first to each customer class ensures each class recovers its proportional share. Then each customer class's variable costs are allocated to accounts within that customer class. Therefore, if one customer class's variable rates are tiered and another is not, the total proportional cost allocated to each customer class (in the first step) does not change.

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Single-Family Residential water needs include indoor usage and outdoor usage. However, water usage trends vary by account throughout the year as bigger-sized lots, ranches, and estates tend to have more demand for outdoor irrigation. As the size of the properties increases, typically, the size of the meter also increases to serve the property’s water needs. Therefore, the proposed rate structure of Single-Family Residential is unchanged using meter-overlay tiered rates. The remaining customer classes are not tiered due to the wide spectrum of how water is used, which is not as homogenous as Single-Family Residential. The variable costs allocated in the first step are recovered as uniform rates to ensure equity between accounts within each respective remaining customer class.

The Single-Family Residential rate structure recognizes that larger meters require more capacity in the system and use more water when compared to a 3/4” meter. When meters initially connect to the water system, the applicant must pay capacity fees in relation to the capacity that the meter may use in the water system and treatment plant. Larger meters pay more in capacity fees because of the additional capacity each takes compared to the base 3/4” meter. Therefore, applying meter-overlay allocations to all tiers account for each property’s water needs by meter size. The proposed tiers and corresponding meter-overlay allocations are the same as the previous cost-of-service study because the last two fiscal years (FY 2023 and FY 2024) were very wet seasons that are atypical compared to historical trends. Therefore, the tiered breakpoints remain the same. Tier 1 reflects the average winter usage of Single-Family Residential customers grouped by meter size to determine a basic use allocation when water needs are at their lowest (average of the two lowest billing periods). Tier 2 equals the average annual usage by meter size, which takes the total fiscal year usage divided by the total corresponding meters and 6 billing periods (i.e., bi-monthly average usage). Tier 3 equals the average Max Day usage by meter size, converted from cf to hcf and extrapolated over a 60-day billing period. Tier 4 captures any usage above Tier 3. As water needs fluctuate throughout the year, the tiered rate structure provides adequate tier allotments to ensure proportionality as the meter size increases. Each meter size pays a proportional share of fixed costs, with larger meters paying more based on the capacity taken of the system. An account’s usage shouldn’t reach the highest tier during the low water use period. In cases where an account’s usage reaches the higher tiers, the meter may be undersized, not recovering their fair share of fixed costs, and; instead, are paying more in variable rates. Table 41 provides the usage characteristics of Single-Family Residential by meter size.

Table 41: Single-Family Residential Bi-Monthly Usage Characteristics by Meter Size

Single-Family Bi-Monthly Usage by Meter Size (hcf)					
Basis	5/8" & 3/4"	1"	1 1/2"	2"	3"
Single-Family					
Average Winter Usage	29	82	143	212	878
Average Usage	45	142	274	450	2,004
Max Day	61	211	445	892	3,172

With the information derived in Table 41, the tier allotments for each meter size can be developed as shown in Table 42, with tier 1 as the basic use allocation based on the meter-overlay winter average. Table 43 provides the annual tiered usage for Single-Family Residential based on the meter-overlay allocations in Table 42.

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Table 42: Single-Family Residential Tiers by Meter Size

Single-Family Tiers by Meter Size					
Single-Family Tiers	5/8" & 3/4"	1"	1 1/2"	2"	3"
Single-Family					
Tier 1 Breakpoint	0-29 hcf	0-82 hcf	0-143 hcf	0-212 hcf	0-878 hcf
Tier 2 Breakpoint	30-45 hcf	83-142 hcf	144-274 hcf	213-450 hcf	879-2004 hcf
Tier 3 Breakpoint	46-61 hcf	143-211 hcf	275-445 hcf	451-892 hcf	2005-3172 hcf
Tier 4 Breakpoint	>61 hcf	>211 hcf	>445 hcf	>892 hcf	>3172 hcf

Table 43: Single-Family Residential Usage by Tier

Detailed Consumption Analysis	
Customer Class/Tier	Projected Usage
	(hcf)
Potable Consumption	
Single-Family	
Tier 1	1,634,789
Tier 2	604,317
Tier 3	381,690
Tier 4	488,022
Subtotal Single-Family	3,108,818

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With the units of service derived in Table 37 through Table 40, and Table 43, we can select the appropriate distribution basis for each cost component to allocate the corresponding costs to customers proportionately. Figure 13 identifies the fixed revenue requirements from Table 35 with the corresponding units of service, and Figure 14 identifies the variable revenue requirements with the corresponding units of service.

Figure 13: Fixed Revenue Requirements - Distribution Basis and Units of Service

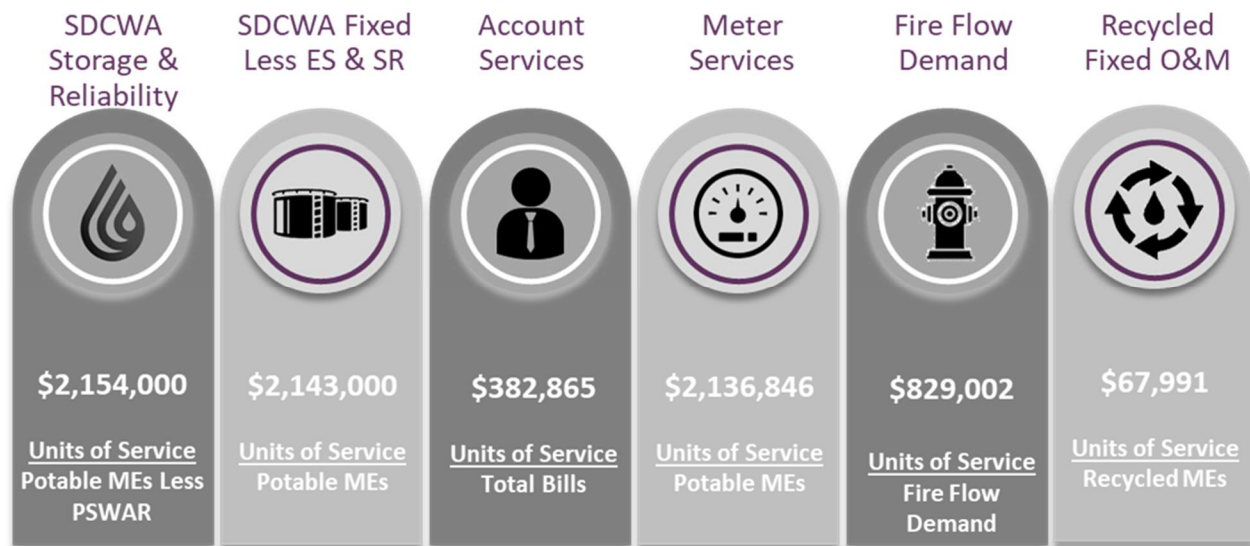
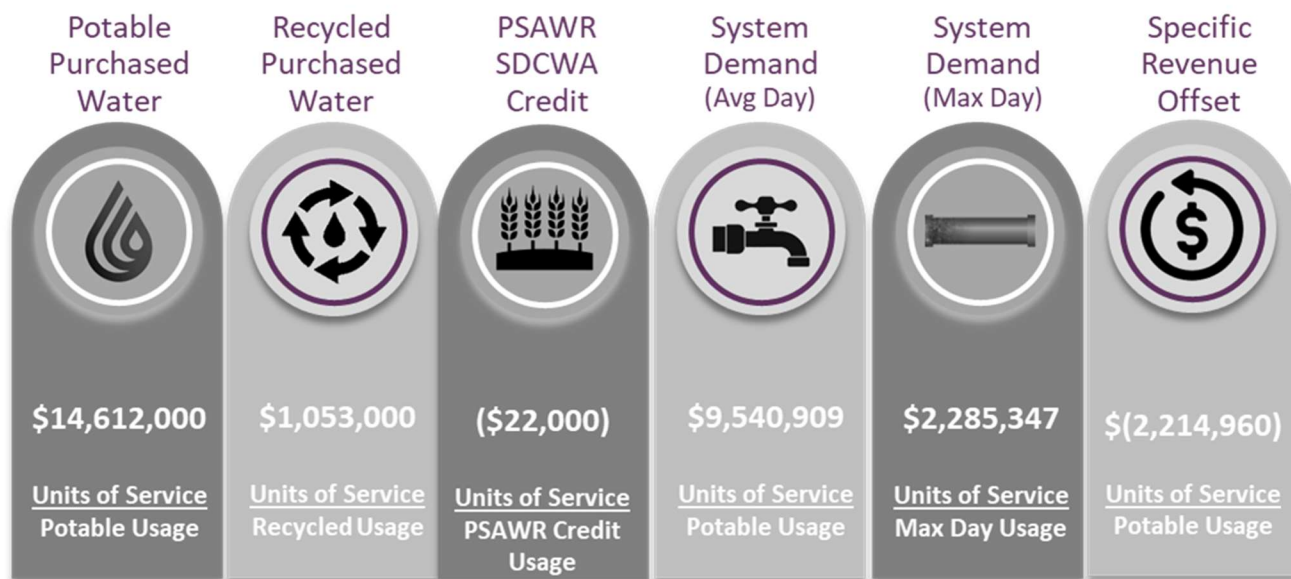


Figure 14: Variable Revenue Requirements - Distribution Basis and Units of Service



Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Using the FY 2025 revenue requirements, the cost-of-service allocates expenses to customers based on the service demands that each place on the system (cost causation). This approach 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

SDCWA Storage and Reliability

The SDCWA Storage and Reliability cost component includes the SDCWA fixed charges related to Emergency Storage and Supply Reliability. Based on the PSAWR program, SDCWA does not charge these two fixed charges to PSAWR customers. Therefore, the units of service for spreading the costs associated with SDCWA Emergency & Reliability exclude PSAWR. These costs are spread based on meter size of all potable meters, except PSAWR customers, similar to how the costs are incurred by the District. Table 44 identifies the revenue requirement for SDCWA Emergency & Reliability, which is apportioned based on meter size as represented by total Potable MEs less PSAWR MEs (Table 38, Column H - Line 9 less Column G - Line 9).

Table 44: FY 2025 SDCWA Emergency & Reliability Bi-Monthly Unit Rate

SDCWA Storage & Reliability Component - Unit Rate	
Revenue Requirement	\$2,154,000
÷ Potable ME's (less PSAWR)	67,178
Bi-Monthly Unit Rate	\$32.07

SDCWA Fixed less ES & SR

The SDCWA Fixed less ES & SR cost component includes all SDCWA fixed charges except for Emergency Storage and Supply Reliability. The SDCWA fixed charges related to Emergency Storage and Supply Reliability are accounted for as its own separate cost component to ensure PSAWR customers are not charged for these two fixed charges. Therefore, SDCWA Fixed less ES & SR costs are spread to all potable meters, including PSAWR, based on meter size similar to how the costs are incurred by the District. Table 45 identifies the revenue requirement for SDCWA Fixed less ES & SR, which is apportioned based on meter size as represented by total Potable MEs (Table 38, Column H - Line 9).

Table 45: FY 2025 SDCWA Fixed less ES & SR Bi-Monthly Unit Rate

SDCWA Fixed Less ES & SR Component - Unit Rate	
Revenue Requirement	\$2,143,000
÷ Potable ME's	67,526
Bi-Monthly Unit Rate	\$31.74

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Account Services

Each customer incurs Account Services costs regardless of the type of land use, meter size, or total amount of water used. These costs should be spread equally across all accounts. This is achieved by using the distribution basis of Total Bills, which includes all potable, recycled and fireline connections. Total Bills are determined by multiplying the total accounts by the number of billing periods over the fiscal year (6 billing periods). Therefore, the revenue requirement for Account Services is apportioned to all accounts based on the Total Bills to determine the bi-monthly unit cost-of-service shown in Table 46.

Table 46: FY 2025 Account Services Bi-Monthly Unit Rate

Account Services Component - Unit Rate	
Revenue Requirement	\$382,865
÷ Total Bills	46,722
Bi-Monthly Unit Rate	\$8.20

Meter Services

The Meter Services cost component includes staffing costs associated with conservation, the treatment plant, planning and reporting, and a portion of system-wide capital / reserve funding. The revenue requirement for Meter Services is apportioned based on meter size. Larger-sized meters generate a greater demand on the system from the amount of potential water flow that may pass through the meter in gpm. Table 47 identifies the revenue requirement for Meter Services which is apportioned to all annual Potable Meter Equivalents less firelines.

Table 47: FY 2025 Meter Services Bi-Monthly Unit Rate

Meter Services Component - Unit Rate	
Revenue Requirement	\$2,136,846
÷ Potable ME's	67,526
Bi-Monthly Unit Rate	\$31.65

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Fire Flow Demand

System fire flow revenue requirements are allocated between dedicated firelines and hydrants based on fire flow demand of all connections. Potable meters recover the portion associated with the fire flow demand of all hydrants to quantify the standby services rendered to all potable accounts for system fire flow capacity. Table 48 identifies all connections by size (in diameter inches) and annual fire flow demand units of service. 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 49 allocates the fire flow demand revenue requirement from Table 35 between hydrant and dedicated firelines based on the units of service derived in Table 48. Table 50 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 dedicated firelines is recovered as a flat bi-monthly standby charge to all fireline connections, as shown in Table 51.

Table 48: FY 2025 Fire Flow Demand Units of Service

Fire Flow Demand Units of Service				
	Bills / Connections	Size of Line	Diameter Inches	Fire Flow Demand Equivalents
Line #	[A]	[B]	[C] = A x B	[D] = A x B ^{2.63}
1	System Fire Flow			2.63
2	Public Hydrants			
3	2"	9	2	18
4	4"	10	4	40
5	6"	1,265	6	7,590
6	8"	0	8	0
7	Subtotal Public Hydrants			141,247
8	Dedicated Firelines			
9	5/8" & 3/4"	97	0.75	72.75
10	1"	846	1	846.00
11	1 1/2"	121	1.5	181.50
12	2"	65	2	130.00
18	Subtotal Dedicated Firelines			1,645
19	Annual Public Hydrants	Line 7 x 6 billing periods		
		7,704	45,888	847,483
20	Annual Dedicated Firelines	Line 18 x 6 billing periods		
		6,774	7,382	9,872
21	Annual Units			857,356
		14,478	53,270	

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Table 49: FY 2025 Fire Flow Demand Allocation to Connections

Fire Flow Demand Revenue Requirement Allocation			
Firelines	Fire Flow Demand [A]	% Allocation [B] = A as %	Revenue Requirement [C] = Rev Req x B
Public Hydrants	847,483	98.8%	\$819,457
Dedicated Firelines	9,872	1.2%	\$9,546
Total	857,356	100.0%	\$829,002

Table 50: FY 2025 Potable Meters – Fire Flow Demand Bi-Monthly Unit Rate

Public Hydrants Component - Unit Rate	
Revenue Requirement	\$819,457
÷ Potable ME's	67,526
Bi-Monthly Unit Rate	\$12.14

Table 51: FY 2025 Dedicated Firelines – Fire Flow Demand Bi-Monthly Unit Rate

Dedicated Firelines Component - Unit Rate	
Revenue Requirement	\$9,546
÷ Bills / Connections	6,774
Bi-Monthly Unit Rate	\$1.41

Recycled Fixed O&M

The revenue requirement for Recycled Fixed O&M recovered from recycled customers based on their Meter Equivalent identified in Table 39. Table 52 identifies the revenue requirement for Recycled Fixed O&M which is apportioned to all Recycled Meter Equivalents.

Table 52: FY 2025 Recycled Fixed O&M Bi-Monthly Unit Rate

Recycled Fixed O&M Component - Unit Rate	
Revenue Requirement	\$67,991
÷ Recycled ME's	2,566
Bi-Monthly Unit Rate	\$26.50

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Variable Cost Recovery

The remaining cost components are recovered through the variable rates. The proposed variable rate structure includes tiers for Single-Family Residential and uniform rates for Multi-Family, Non-Residential, Irrigation / Agricultural, and Recycled.

Purchased Water

The District purchases all its water from SDCWA. Table 53 allocates the revenue requirement of Purchased Water over all potable usage to derive the unit rate per hcf.

Table 53: FY 2025 Purchased Water Cost Unit Rate per hcf

Potable Purchased Water Component - Unit Rate	
Revenue Requirement	\$14,612,000
÷ Potable Usage	3,919,124
Unit Rate (\$/hcf)	\$3.73

Recycled Purchased Water

The District purchases recycled water from SDWD which is recovered over recycled customers. Table 54 allocates the Recycled Purchases expense over all recycled usage to derive the unit rate per hcf.

Table 54: FY 2025 Recycled Purchased Water Unit Rate per hcf

Recycled Purchased Water Component - Unit Rate	
Revenue Requirement	\$1,053,000
÷ Recycled Usage	239,903
Unit Rate (\$/hcf)	\$4.39

PSAWR SDCWA Credit

The District has a handful of customers that are part of the SDCWA PSAWR program, all of which are residential PSAWR accounts. For PSAWR residential accounts, SDCWA provides variable credits against water usage over 44 hcf during a 60-day bi-monthly billing period. The 44 hcf is usage per bi-monthly billing that SDCWA assumes is for residential purposes and not for agricultural production. Therefore, Table 55 allocates the credit over the PSAWR annual usage that exceeds the 44 hcf bi-monthly allotment to derive the unit rate per hcf.

Table 55: FY 2025 PSAWR SDCWA Credit Unit Rate per hcf

PSAWR SDCWA Credit Component - Unit Rate	
Revenue Requirement	(\$22,000)
÷ PSAWR Credit Usage	21,607
Unit Rate (\$/hcf)	(\$1.02)

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

System Demand – Avg Day

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 System Demand – Avg Day is apportioned based on the projected total potable usage identified in Table 40 to determine the unit rate per hcf, irrespective of tier, as shown in Table 56.

Table 56: FY 2025 System Demand – Avg Day Cost Unit Rate per hcf

System Demand (Avg Day) Component - Unit Rate	
Revenue Requirement	\$9,540,909
÷ Potable Usage	3,919,124
Unit Rate (\$/hcf)	\$2.44

System Demand – Max Day

System Demand – Max Day costs are incurred based not only on the total volume of water produced and delivered but also as a function of the increase in usage during the peak summer period – up to and including Max Day. Typically, these costs are apportioned between customer classes by comparing the billing period with the maximum usage versus average usage. However, with the District's AMI meters, more detailed usage data is available during the Max Day event that can be analyzed at the account level. Therefore, the revenue requirement for System Demand – Max Day from Table 36 (\$2,285,347) is first allocated to each customer class based on their percentage of Max Day usage (Table 40). The costs assigned to Max Day in Table 31 include personnel and operational costs to run the treatment plant and non-personnel engineering expenses. In addition, a portion of revenue offsets is applied to the Max Day cost component plus a pro-rata share of capital repair & replacement and reserve funding. These costs are associated with the joint facilities treatment plant and apportioning the costs based on the usage of customers during Max Day using the AMI data provides a direct connection to the cost incurred and actual demands of customers instead of the potential demand of customers using meter capacity.

Table 57 identifies each customer class's share of the System Demand – Max Day revenue requirement based on Max Day usage as the distribution basis for allocating the cost proportionately. Table 57 also provides total water usage by customer class to illustrate each customer class's demand placed on the system during Max Day. For example, Agricultural / Irrigation represents 7.2% of total potable water usage but 13.6% of Max Day demand. Therefore, apportioning Max Day costs based on the percentage of Max Day usage provides a direct correlation with operating the District's Joint Facilities.

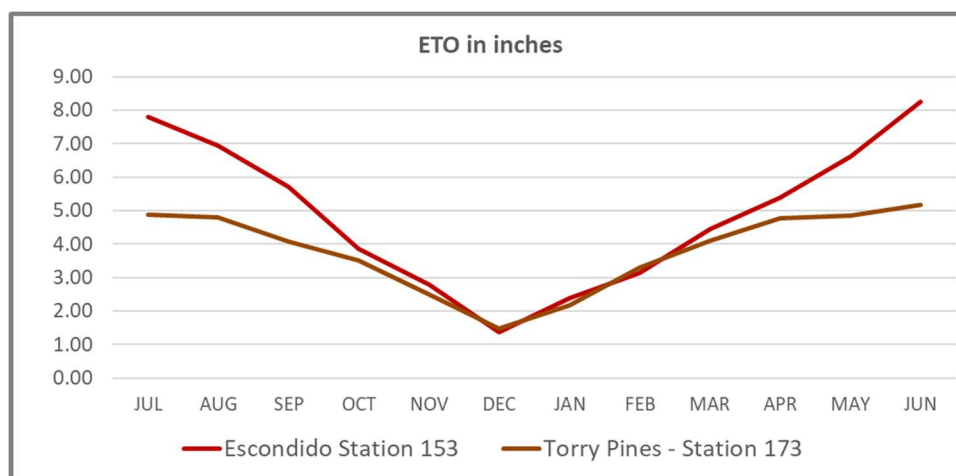
Table 57: FY 2025 System Demand – Max Day Allocation to Customer Classes

System Demand (Max Day) Allocation to Customer Classes					
Tier Class	Total Potable Usage	% of Potable Usage	Max Day Usage	% Allocation	Revenue Requirement
	[A] = Usage in hcf	[B] = A as %	[C] = Usage in cf	[D] = C as %	[E] = Rev Req x D
Single-Family	3,108,818	79.3%	1,290,953	76.4%	\$1,744,910
Multi-Family	303,020	7.7%	94,778	5.6%	\$128,107
Non-Residential	224,795	5.7%	75,363	4.5%	\$101,864
Agricultural / Irrigation	282,491	7.2%	229,695	13.6%	\$310,466
Total	3,919,124	100.0%	1,690,789	100.0%	\$2,285,347

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

The System Demand – Max Day costs allocated to Single-Family Residential (\$1,744,910) is further apportioned to the corresponding tiers based on the usage that falls within each tier during Max Day. A customer must use water through the lower tiers to reach Max Day usage. Therefore, Max Day costs are included within all tiers as the lower tiers are a subset of Max Day, and tier 4 usage is over the average Max Day usage of each meter size. In addition, Max Day usage isn't an abrupt phenomenon but rather a gradual increase throughout the year up to Max Day as outdoor water needs increase during the year. The increase in outdoor water needs can be identified through a review of Evapotranspiration (ET) data. ET is the sum of evaporation of water from the soil surface plus transpiration (water loss) from the plant, and ETo is the amount of water required to maintain a well-irrigated, mowed lawn. In other the words, ETo provides information on water loss, and the corresponding need to supplement that water loss with irrigation (i.e., as ETo increases, irrigation tends to increase). Figure 15 identifies the ETo data of the two local weather stations for FY 2022².

Figure 15: Escondido and Torrey Pines Weather Station FY 2022 ETO



Therefore, all customer classes and tiers should contribute to the Joint Facilities operations, which reflects how the service requirements fluctuate as water demand varies throughout the fiscal year. Based on the meter-overlay tiers identified in Table 42, the winter average usage, average day usage, and max day usage are converted to a daily tier allotment in cubic feet to determine the amount of usage during Max Day (hcf in Table 42 ÷ 100 ÷ 60 = daily cubic feet). Table 58 identifies the daily tiered allotments by meter size in cf that were used in our analysis.

Table 58: Single-Family Tier Allotments Converted to Daily Usage in Cubic Feet (cf)

Single-Family Daily Usage Tier Allotments by Meter Size					
Single-Family Tiers	5/8" & 3/4"	1"	1 1/2"	2"	3"
	(cf)	(cf)	(cf)	(cf)	(cf)
Single-Family					
Tier 1 Breakpoint	0-48 cf	0-136 cf	0-238 cf	0-354 cf	0-1463 cf
Tier 2 Breakpoint	49-74 cf	137-237 cf	239-457 cf	355-751 cf	1464-3340 cf
Tier 3 Breakpoint	75-102 cf	238-351 cf	458-741 cf	752-1487 cf	3341-5287 cf
Tier 4 Breakpoint	>102 cf	>351 cf	>741 cf	>1487 cf	>5287 cf

² FY 2022 is a more typical weather year for reviewing ET

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Table 59 identifies the usage of each Single-Family Residential tier during Max Day in cf and percentage of total. The max day usage by tier is used to further apportion the revenue requirement allocated to Single-Family Residential to each respective tier.

Table 59: Single-Family Residential Max Day Usage by Tier

System Demand (Max Day) Allocation to Tiers			
Customer Class & Tiers	Projected Usage	Max Day Usage	% Allocation
	[A] = Usage in hcf	[B] = Usage in cf	[C] = B as % of Subtotals
Potable Consumption			
Single-Family			
Tier 1	1,634,789	400,387	31.0%
Tier 2	604,317	216,278	16.8%
Tier 3	381,690	190,988	14.8%
Tier 4	488,022	483,300	37.4%
Subtotal Single-Family	3,108,818	1,290,953	100.0%

Once the System Demand – Max Day revenue requirement is apportioned to customer class and tiers in relation to Max Day usage, each customer class will recover their proportionate share of costs. The next step is to determine the means for recovering the revenue requirements to derive unit rates. Recovering these costs requires considering the District's billing system capabilities and how rates are charged. As such, the allocated cost to each customer class and tier is spread over the corresponding annual water usage. This approach does not overcharge any customer for usage outside of the Max Day event but rather recovers the ~\$2.3M over the course of the entire fiscal year (6 billing periods) from each respective tier as demand increases from low winter usage up to Max Day. Irrespective of how the revenue requirement is recovered, the total amount to recover does not change and the allocation of cost to each customer class reflects the proportionate share of Max Day usage. If Max Day costs were only recovered in the month that the Max Day event occurred, the base unit rate would be \$135.16 per hcf and the \$2.3M in Max Day costs would be recovered over one billing period, which wouldn't be practical or palatable to customers. In reviewing Single-Family Residential accounts that fall into tier 4 during the winter period, there were 158 accounts. Ten were no longer active during the highest usage bi-monthly billing period (July – August). 133 were also in Tier 4 during the July – August billing period, or 90% ($133 \div 148 = 90\%$). Therefore, recovering the costs over the usage in tier 4 throughout the year essentially charges the same accounts. In addition, as previously stated, if an account is always in tier 4 during the winter, its meter may need to be upsized to reflect its actual usage and water needs and to ensure appropriate investment in the system through capacity fees and meter capacity charges. Table 60 identifies the System Demand – Max Day revenue requirement by customer class and tier, and corresponding variable rates. The District Joint Facilities do not provide recycled water as recycled water is purchased from San Dieguito Water District. Therefore, Recycled does not receive an allocation of Max Day costs.

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Table 60: FY 2025 System Demand – Max Day Unit Rate by Customer Class and Tier (hcf)

System Demand (Max Day) Allocation to Tiers					
Customer Class & Tiers	Projected Usage [A] = Usage in hcf	Max Day Usage [B] = Usage in cf	% Allocation [C] = B as % of Subtotals	Revenue Requirement [D] = Customer Class Rev Req x C	Unit Rate [E] = D ÷ A
Potable Consumption					
Single-Family					
Tier 1	1,634,789	400,387	31.0%	\$541,181	\$0.34
Tier 2	604,317	216,278	16.8%	\$292,331	\$0.49
Tier 3	381,690	190,988	14.8%	\$258,148	\$0.68
Tier 4	488,022	483,300	37.4%	\$653,250	\$1.34
Subtotal Single-Family	3,108,818	1,290,953	100.0%	\$1,744,910	
Multi-Family	303,020	94,778	100.0%	\$128,107	\$0.43
Non-Residential	224,795	75,363	100.0%	\$101,864	\$0.46
Agricultural / Irrigation	282,491	229,695	100.0%	\$310,466	\$1.10
Total Potable	3,919,124	1,690,789		\$2,285,347	
Recycled	239,903	0	N/A	\$0	\$0.00
Total All Classes	4,159,027	1,690,789		\$2,285,347	

Revenue Offset

The District is using a portion of property tax to specifically offset variable rates. Before credits are applied to directly offset variable rates, the property taxes allocated to the Revenue Offset cost component are first proportionately allocated to each customer class based on total potable usage to ensure each customer class receives a fair share amount of the Revenue Offset. The entire Single Family Residential's revenue offset is allocated to Tier 1 to ensure all customers benefit from the revenue offset. Not all Single Family Residential's customers have usage within the upper tiers and assigning revenue offsets to the high tiers would cause certain customers to not receive the benefit. However, conversely, all customers that typically use water within the higher tiers must use their entire Tier 1 meter-overlay allocation and receive the full benefit of the offset. PSAWR revenue offset was assigned primarily to its Tier 1 to bring down the final PSAWR rate, so it is equivalent to the Single-Family Residential Tier 1 rate, with the remainder going to Tier 2. Table 61 identifies each customer class's share of the Revenue Offset and how each respective offset is used to offset the customer class's variable rates.

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Table 61: FY 2025 Revenue Offset Unit Rate per hcf

Specific Revenue Offset Allocation to Customer Classes						
Customer Class	Potable Usage	% Allocation	Revenue Requirement			
	[A] = Usage in hcf	[B] = A as %	[C] = Rev Req x B			
Single-Family	3,108,818	79.3%	(\$1,757,002)			
Multi-Family	303,020	7.7%	(\$171,257)			
Non-Residential	224,795	5.7%	(\$127,047)			
Agricultural / Irrigation	255,198	6.5%	(\$144,230)			
PSAWR	27,293	0.7%	(\$15,425)			
Total	3,919,124	100.0%	(\$2,214,960)			
Specific Revenue Offset Allocation to Tiers						
Customer Class & Tiers	Projected Usage	Allocation Factor	Weighted Usage	% Allocation	Revenue Requirement	Unit Rate
	[D]	[E]	[F]	[G] = F as %	[H] = C x G	[I] = H ÷ D
Potable Consumption						
Single-Family						
Tier 1	1,634,789	1.00	1,634,789	100.0%	(\$1,757,002)	(\$1.07)
Tier 2	604,317	0.00	0	0.0%	\$0	\$0.00
Tier 3	381,690	0.00	0	0.0%	\$0	\$0.00
Tier 4	488,022	0.00	0	0.0%	\$0	\$0.00
Subtotal Single-Family	3,108,818		1,634,789	100.0%	(\$1,757,002)	
Multi-Family	303,020	1.00	303,020	100.0%	(\$171,257)	(\$0.57)
Non-Residential	224,795	1.00	224,795	100.0%	(\$127,047)	(\$0.57)
Agricultural / Irrigation	255,198	1.00	255,198	100.0%	(\$144,230)	(\$0.57)
PSAWR						
Tier 1	5,686	7.84	44,574	67.4%	(\$10,389)	(\$1.83)
Tier 2	21,607	1.00	21,607	32.6%	(\$5,036)	(\$0.23)
Subtotal PSAWR	27,293		66,181	100.0%	(\$15,425)	
Total Potable	3,919,124		2,483,983		(\$2,214,960)	
Recycled	239,903	0.00	0	100.0%	\$0	\$0.00
Total All Classes	4,159,027		2,483,983		(\$2,214,960)	

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FY 2025 Cost-of-Service Rates

Proposed FY 2025 Fixed Charges

Table 62 through Table 64 reflect the combined charges of the District's proposed fixed charge for Potable Meters (including PSAWR Meters), Recycled Meters, and Dedicated Firelines, respectively. Unit rates for all cost components, except for Account Services, were derived based on Meter Equivalents. Therefore, the unit rate is multiplied by the corresponding Capacity Ratios of each meter size in Column A to derive the FY 2025 fixed charges. Account Services unit rate was determined based on Total Bills and constant across all meter sizes. PSAWR meters are not charged the Emergency Storage & Supply Reliability fixed charge and the District does not incur such charges from SDCWA for PSAWR meters. The District does not incur SDCWA fixed charges for Recycled meters. Therefore, Recycled meters are not charged SDCWA fixed charges. In addition, Recycled meters are not charged Fire Flow Demand because it is captured as part of the parcel's potable meter. Dedicated Firelines are charged a uniform bi-monthly standby charge, which includes Account Services and their share of Fire Flow Demand.

Table 62: FY 2025 Bi-Monthly Potable Fixed Charges by Meter Size

Proposed Bi-Monthly Potable Fixed Charge									
Meter Size	Capacity Ratio	Potable Meters (less PSAWR)	SDCWA Storage & Reliability	SDCWA Fixed Less ES & SR	Account Services	Meter Services	Fire Flow Demand	Recycled Fixed O&M	Proposed Potable Meter Charge
	[A]		[B] = \$32.07 x A	[C] = \$31.74 x A	[D] = \$8.20	[E] = \$31.65 x A	[F] = \$12.14 x A		[G] = Sum (B-F)
5/8" & 3/4"	1.00	3,579	\$32.07	\$31.74	\$8.20	\$31.65	\$12.14	N/A	\$115.80
1"	1.67	1,802	\$53.45	\$52.90	\$8.20	\$52.75	\$20.24	N/A	\$187.54
1 1/2"	3.33	880	\$106.90	\$105.80	\$8.20	\$105.50	\$40.47	N/A	\$366.87
2"	5.33	235	\$171.04	\$169.28	\$8.20	\$168.80	\$64.75	N/A	\$582.07
3"	11.67	22	\$374.15	\$370.30	\$8.20	\$369.25	\$141.64	N/A	\$1,263.54
4"	21.00	4	\$673.47	\$666.54	\$8.20	\$664.65	\$254.94	N/A	\$2,267.80
6"	43.33	2	\$1,389.70	\$1,375.40	\$8.20	\$1,371.50	\$526.07	N/A	\$4,670.87
8"	93.33	0	\$2,993.20	\$2,962.40	\$8.20	\$2,954.00	\$1,133.07	N/A	\$10,050.87
10"	140.00	0	\$4,489.80	\$4,443.60	\$8.20	\$4,431.00	\$1,699.60	N/A	\$15,072.20

Proposed Bi-Monthly PSAWR Fixed Charge									
Meter Size	Capacity Ratio	PSAWR Meters	SDCWA Storage & Reliability	SDCWA Fixed Less ES & SR	Account Services	Meter Services	Fire Flow Demand	Recycled Fixed O&M	Proposed PSAWR Meter Charge
	[A]		[B]	[C] = \$31.74 x A	[D] = \$8.20	[E] = \$31.65 x A	[F] = \$12.14 x A		[G] = Sum (B-F)
5/8" & 3/4"	1.00	1	N/A	\$31.74	\$8.20	\$31.65	\$12.14	N/A	\$83.73
1"	1.67	7	N/A	\$52.90	\$8.20	\$52.75	\$20.24	N/A	\$134.09
1 1/2"	3.33	12	N/A	\$105.80	\$8.20	\$105.50	\$40.47	N/A	\$259.97
2"	5.33	1	N/A	\$169.28	\$8.20	\$168.80	\$64.75	N/A	\$411.03
3"	11.67	0	N/A	\$370.30	\$8.20	\$369.25	\$141.64	N/A	\$889.39
4"	21.00	0	N/A	\$666.54	\$8.20	\$664.65	\$254.94	N/A	\$1,594.33
6"	43.33	0	N/A	\$1,375.40	\$8.20	\$1,371.50	\$526.07	N/A	\$3,281.17
8"	93.33	0	N/A	\$2,962.40	\$8.20	\$2,954.00	\$1,133.07	N/A	\$7,057.67
10"	140.00	0	N/A	\$4,443.60	\$8.20	\$4,431.00	\$1,699.60	N/A	\$10,582.40

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Table 63: FY 2025 Bi-Monthly Recycled Fixed Charges by Meter Size

Proposed Bi-Monthly Recycled Fixed Charge									
Meter Size	Capacity Ratio	Recycled Meters	SDCWA Storage & Reliability	SDCWA Fixed Less ES & SR	Account Services	Meter Services	Fire Flow Demand	Recycled Fixed O&M	Proposed Recycled Meter Charge
	[A]				[B] = \$8.20	[C] = \$31.65 x A		[D] = \$26.50 x A	[E] = Sum (B:D)
5/8" & 3/4"	1.00	0	N/A	N/A	\$8.20	\$31.65	N/A	\$26.50	\$66.35
1"	1.67	16	N/A	N/A	\$8.20	\$52.75	N/A	\$44.17	\$105.12
1 1/2"	3.33	4	N/A	N/A	\$8.20	\$105.50	N/A	\$88.34	\$202.04
2"	5.33	32	N/A	N/A	\$8.20	\$168.80	N/A	\$141.34	\$318.34
3"	11.67	3	N/A	N/A	\$8.20	\$369.25	N/A	\$309.17	\$686.62
4"	21.00	2	N/A	N/A	\$8.20	\$664.65	N/A	\$556.50	\$1,229.35
6"	43.33	0	N/A	N/A	\$8.20	\$1,371.50	N/A	\$1,148.34	\$2,528.04
8"	93.33	0	N/A	N/A	\$8.20	\$2,954.00	N/A	\$2,473.34	\$5,435.54
10"	140.00	1	N/A	N/A	\$8.20	\$4,431.00	N/A	\$3,710.00	\$8,149.20

Table 64: FY 2025 Bi-Monthly Dedicated Fireline Fixed Charges

Proposed Bi-Monthly Dedicated Fireline Fixed Charge									
Connection Size	Capacity Ratio	Dedicated Firelines	SDCWA Storage & Reliability	SDCWA Fixed Less ES & SR	Account Services	Meter Services	Fire Flow Demand	Recycled Fixed O&M	Proposed Dedicated Fireline Meter Charge
	[A]				[B] = \$8.20		[C] = \$1.41		[D] = Sum (A:C)
5/8" & 3/4"	1.00	95	N/A	N/A	\$8.20	N/A	\$1.41	N/A	\$9.61
1"	1.67	899	N/A	N/A	\$8.20	N/A	\$1.41	N/A	\$9.61
1 1/2"	3.33	122	N/A	N/A	\$8.20	N/A	\$1.41	N/A	\$9.61
2"	5.33	68	N/A	N/A	\$8.20	N/A	\$1.41	N/A	\$9.61
3"	11.67	0	N/A	N/A	\$8.20	N/A	\$1.41	N/A	\$9.61
4"	21.00	0	N/A	N/A	\$8.20	N/A	\$1.41	N/A	\$9.61
6"	43.33	0	N/A	N/A	\$8.20	N/A	\$1.41	N/A	\$9.61
8"	93.33	0	N/A	N/A	\$8.20	N/A	\$1.41	N/A	\$9.61
10"	140.00	0	N/A	N/A	\$8.20	N/A	\$1.41	N/A	\$9.61

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Proposed FY 2025 Variable Rates

The proposed variable rates for FY 2025 are shown in Table 65 for each customer class and tier, reflecting the combined variable rate components. PSAWR is part of Irrigation / Agricultural but shown separately to account for the additional credit these customers receive from SDCWA for usage over 44 hcf for a bi-monthly bill (identified as Tier 2).

Table 65: FY 2023 Variable Rates by Customer Class and Tier (hcf)

Variable Revenue Components (hcf)							
Customer Class / Tier	Potable Purchased Water	Recycled Purchased Water	PSAWR SDCWA Credit	System Demand (Avg Day)	System Demand (Max Day)	Specific Revenue Offset	Proposed Variable Rates
	[A]	[B]	[C]	[D]	[E]	[F]	[G] = Sum (A-F)
Single-Family							
Tier 1	\$3.73	\$0.00	\$0.00	\$2.44	\$0.34	(\$1.07)	\$5.44
Tier 2	\$3.73	\$0.00	\$0.00	\$2.44	\$0.49	\$0.00	\$6.66
Tier 3	\$3.73	\$0.00	\$0.00	\$2.44	\$0.68	\$0.00	\$6.85
Tier 4	\$3.73	\$0.00	\$0.00	\$2.44	\$1.34	\$0.00	\$7.51
Multi-Family	\$3.73	\$0.00	\$0.00	\$2.44	\$0.43	(\$0.57)	\$6.03
Non-Residential	\$3.73	\$0.00	\$0.00	\$2.44	\$0.46	(\$0.57)	\$6.06
Agricultural / Irrigation	\$3.73	\$0.00	\$0.00	\$2.44	\$1.10	(\$0.57)	\$6.70
PSAWR							
Tier 1	\$3.73	\$0.00	\$0.00	\$2.44	\$1.10	(\$1.83)	\$5.44
Tier 2	\$3.73	\$0.00	(\$1.02)	\$2.44	\$1.10	(\$0.23)	\$6.02
Recycled	\$0.00	\$4.39	\$0.00	\$0.00	\$0.00	\$0.00	\$4.39

Cost-Based Rates

Cost-of-Service and Rate Summary

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 and wastewater fixed charges and variable rates. Proposition 218 requires the following conditions:

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

The long-term financial plan identifies the District's revenue requirements, 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 utility is set up as a business enterprise to track revenues and expenses and does not fund other services outside of those necessary for the provision of water to property.

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 variable rates reflect each customer's proportionate share of water costs. Through this update, each account is paying for the cost of providing service to the parcel.

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

The proposed fixed charges and variable rates connect directly to the District's budget and projected future revenue requirements and are recovered equitably from all active accounts receiving service.

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 before the February 12, 2025, Public Hearing.

The proposed water rate schedules for FY 2025 through FY 2027 are shown in the following section. If a majority protest does not exist at the February 12th Public Hearing, the District Board may adopt the rates with an effective date of March 1, 2025, for FY 2025 and each January 1 thereafter through FY 2027.

Multi-Year Rate Schedules

Table 66 through Table 70 provide the rate schedule through FY 2027 for fixed charges and variable rates, 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 as account growth and usage characteristics are projected to remain constant for financial planning.

Table 66: Proposed Potable Bi-Monthly Fixed Charge (FY 2025 – FY 2027)

Revenue Adjustments		5.0%	5.0%
Proposed Bi-Monthly Potable Fixed Charge			
Meter Size	FY 2025	FY 2026	FY 2027
5/8" & 3/4"	\$115.80	\$121.59	\$127.67
1"	\$187.54	\$196.92	\$206.77
1 1/2"	\$366.87	\$385.22	\$404.49
2"	\$582.07	\$611.18	\$641.74
3"	\$1,263.54	\$1,326.72	\$1,393.06
4"	\$2,267.80	\$2,381.19	\$2,500.25
6"	\$4,670.87	\$4,904.42	\$5,149.65
8"	\$10,050.87	\$10,553.42	\$11,081.10
10"	\$15,072.20	\$15,825.81	\$16,617.11

Table 67: Proposed PSAWR Bi-Monthly Fixed Charge (FY 2025 – FY 2027)

Revenue Adjustments		5.0%	5.0%
Proposed Bi-Monthly PSAWR Fixed Charge			
Meter Size	FY 2025	FY 2026	FY 2027
5/8" & 3/4"	\$83.73	\$87.92	\$92.32
1"	\$134.09	\$140.80	\$147.84
1 1/2"	\$259.97	\$272.97	\$286.62
2"	\$411.03	\$431.59	\$453.17
3"	\$889.39	\$933.86	\$980.56
4"	\$1,594.33	\$1,674.05	\$1,757.76
6"	\$3,281.17	\$3,445.23	\$3,617.50
8"	\$7,057.67	\$7,410.56	\$7,781.09
10"	\$10,582.40	\$11,111.52	\$11,667.10

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Table 68: Proposed Recycled Bi-Monthly Fixed Charge (FY 2025 – FY 2027)

Revenue Adjustments	5.0%	5.0%	
Proposed Bi-Monthly Recycled Fixed Charge			
Meter Size	FY 2025	FY 2026	FY 2027
5/8" & 3/4"	\$66.35	\$69.67	\$73.16
1"	\$105.12	\$110.38	\$115.90
1 1/2"	\$202.04	\$212.15	\$222.76
2"	\$318.34	\$334.26	\$350.98
3"	\$686.62	\$720.96	\$757.01
4"	\$1,229.35	\$1,290.82	\$1,355.37
6"	\$2,528.04	\$2,654.45	\$2,787.18
8"	\$5,435.54	\$5,707.32	\$5,992.69
10"	\$8,149.20	\$8,556.66	\$8,984.50

Table 69: Proposed Dedicated Fireline Bi-Monthly Fixed Charge (FY 2025 – FY 2027)

Revenue Adjustments	5.0%	5.0%	
Proposed Bi-Monthly Dedicated Fireline Fixed Charge			
Connection Size	FY 2025	FY 2026	FY 2027
All connections	\$9.61	\$10.10	\$10.61

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Table 70: Proposed Variable Rates (FY 2025 – FY 2027)

Revenue Adjustments	5.0%	5.0%	
Variable Rates (\$/hcf)			
Customer Class / Tier	FY 2025	FY 2026	FY 2027
Single-Family			
Tier 1	\$5.44	\$5.72	\$6.01
Tier 2	\$6.66	\$7.00	\$7.35
Tier 3	\$6.85	\$7.20	\$7.56
Tier 4	\$7.51	\$7.89	\$8.29
Multi-Family	\$6.03	\$6.34	\$6.66
Non-Residential	\$6.06	\$6.37	\$6.69
Agricultural / Irrigation	\$6.70	\$7.04	\$7.40
PSAWR			
Tier 1	\$5.44	\$5.72	\$6.01
Tier 2	\$6.02	\$6.33	\$6.65
Recycled	\$4.39	\$4.61	\$4.85

Santa Fe Irrigation District – *Cost-of-Service Water Rate Study*

Appendix A – Capital Improvement Plan

Project Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	
District Projects						
District Yard Small-Scale Solar Array	\$396,803	\$0	\$0	\$0	\$0	
El Camino Real Widening - City SD	\$152,589	\$613,411	\$0	\$0	\$0	
La Granada Pipeline Replacement and PRS Elimination Project	\$500,000	\$1,000,000	\$1,652,000	\$0	\$0	
Larrick Reservoir and Pump Station Upgrades Project	\$475,935	\$1,285,065	\$2,000,000	\$1,000,000	\$0	
24-inch Pipeline Realignment and Replacement Beltween El Camino Real and Santa Luisa	\$0	\$579,672	\$1,000,000	\$1,577,611	\$0	
Group A: Lago Lindo, Castro St, San Elijo, Linea Del Cielo, Via Del Alba, and El Arco Iris	\$0	\$0	\$107,245	\$965,208	\$0	
PRS Replacement 406-A2 and A3	\$0	\$0	\$188,692	\$1,630,838	\$0	
Southlane to Sun Valley Cross Country Pipeline Upgrades Project	\$0	\$0	\$0	\$390,296	\$3,373,274	
PRS Replacement 202-2 and 202-3	\$0	\$0	\$0	\$0	\$188,692	
Lago Lindo Pipeline Relocation Project	\$0	\$0	\$0	\$0	\$319,835	
Isolation Valve Replacement Project Group 1	\$0	\$0	\$0	\$0	\$0	
El Montevideo at San Elijo Ave isolation Improvement Project	\$0	\$0	\$0	\$0	\$0	
Zone 406 Consolidation and Las Planideras Pipeline Upgrade Project	\$0	\$0	\$0	\$0	\$0	
Isolation Valve Replacement Project Group 2	\$0	\$0	\$0	\$0	\$0	
Subtotal District Projects	\$1,525,326	\$3,478,149	\$4,947,937	\$5,563,953	\$3,881,801	
District Share of Joint Facilities Projects						
Anode Bed Replacement	\$137,500	\$0	\$0	\$0	\$0	
San Dieguito Dam Repair	\$172,000	\$0	\$0	\$0	\$0	
Rehabilitation of 15-inch SDPS 30-inch	\$82,500	\$340,450	\$1,273,250	\$2,191,750	\$0	
Clearwell Solar	\$711,563	\$474,375	\$0	\$0	\$0	
R.E. Badger Septic Tank and Leach Field	\$269,500	\$0	\$0	\$0	\$0	
Filter Surface Washwater Header	\$814,831	\$0	\$0	\$0	\$0	
Flocculator Replacement Project	\$0	\$53,130	\$463,870	\$0	\$0	
Filter Washwater Solids Removal & Return	\$0	\$0	\$0	\$121,756	\$1,055,244	
San Dieguito Reservoir Inlet Channel Improvements	\$0	\$0	\$0	\$0	\$92,849	
Subtotal District Share of Joint Facilities Projects	\$2,187,893	\$867,955	\$1,737,120	\$2,313,506	\$1,148,092	
Scenario 3 - Revised CIP Total Costs	(inflated)	\$3,825,000	\$4,607,000	\$7,287,000	\$8,823,000	\$5,784,000
Project Execution Rate @ 87.5 %						
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	
District Projects	87.5%	\$1,334,661	\$3,043,380	\$4,329,445	\$4,868,459	\$3,396,576
District Share of Joint Facilities Projects	87.5%	\$1,914,406	\$759,461	\$1,519,980	\$2,024,318	\$1,004,581
Subtotal Scenario 4 - 87.5% of Revised		\$3,249,067	\$3,802,841	\$5,849,425	\$6,892,777	\$4,401,157
Scenario 4 - 87.5% of Revised Total Costs	(inflated)	\$3,347,000	\$4,031,000	\$6,376,000	\$7,720,000	\$5,061,000
Summary Capital Acquisitions						
	Include?	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Capital Acquisitions						
District CAP		\$525,000	\$546,000	\$562,380	\$579,251	\$596,629
SFID Share of JF		\$288,750	\$300,300	\$309,309	\$318,588	\$328,146
Total Capital Acquisitions		\$813,750	\$846,300	\$871,689	\$897,840	\$924,775

Appendix B – Water Shortage Surcharges

The District adopted a Water Shortage Contingency Plan (WSCP) with six conservation stages reflecting reduced water usage. When conservation stages are enacted, and the conservation measures realize reductions in water usage, revenues will also decrease, causing the utility not to meet its revenue requirements. As such, the District may implement Water Shortage Surcharges to recover projected lost revenues from each conservation stage. Stage 1 assumes a 10% reduction, with each subsequent stage projecting an additional 10% reduction in water usage up to a 60% reduction in stage 6.

The District Board may enact Water Shortage Surcharges during water shortage events to recover the appropriate revenue to fund water system operations from a reduced volume of water sold. Therefore, Water Shortage Surcharges are higher than the proposed variable rates identified in [Table 70](#) and increase for each stage.

The proposed Water Shortage Surcharges are shown by stage for FY 2025 through FY 2027. Water use reductions were first applied to Single-Family Residential – Tier 4. Single-Family Residential - Tier 4 usage has the highest potential for cuts and the greatest revenue loss to recover for developing Water Shortage Surcharges. As water usage continues to reduce through the conservation stages, reductions are then applied pro-rata to Single-Family Residential – Tier 3, Irrigation / Agricultural, and PSAWR – Tier 2, followed by pro-rata reductions to Single-Family Residential Tier 2, Multi-Family Residential, and Non-Residential. The final cuts in water usage are applied pro-rata to both Single-Family Residential – Tier 1 and PSAWR – Tier 1. [Table 71](#) identifies the total reduction in hcf needed to achieve each conservation stage, and [Table 72](#) summarizes where the reductions are assumed to occur from customer classes and tiers.

Table 71: Total Usage Reductions by Conservation Stage

Usage Reduction by Conservation Stage						
Baseline Usage (hcf)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
	10.0%	20.0%	30.0%	40.0%	50.0%	60.0%
3,919,124	391,912	783,825	1,175,737	1,567,650	1,959,562	2,351,474

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Table 72: Usage Reductions by Customer Class and Tier

Usage Reductions by Customer Class & Tier								
% Reduction								
Customer Class	Baseline Usage (hcf)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Revenue Sufficiency Priority
Single-Family								
Tier 1	1,634,789	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	4th Reduction
Tier 2	604,317	0.0%	0.0%	2.6%	37.2%	71.8%	100.0%	3rd Reduction
Tier 3	381,690	0.0%	44.9%	100.0%	100.0%	100.0%	100.0%	2nd Reduction
Tier 4	488,022	80.3%	100.0%	100.0%	100.0%	100.0%	100.0%	1st Reduction
Multi-Family	303,020	0.0%	0.0%	2.6%	37.2%	71.8%	100.0%	3rd Reduction
Non-Residential	224,795	0.0%	0.0%	2.6%	37.2%	71.8%	100.0%	3rd Reduction
Agricultural / Irrigation	255,198	0.0%	44.9%	100.0%	100.0%	100.0%	100.0%	2nd Reduction
PSAWR								
Tier 1	5,686	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	4th Reduction
Tier 2	21,607	0.0%	44.9%	100.0%	100.0%	100.0%	100.0%	2nd Reduction
Total	3,919,124							
Usage Reduction (hcf)								
Customer Class	Baseline Usage (hcf)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	
Single-Family								
Tier 1	1,634,789	-	-	-	-	-	72,573	
Tier 2	604,317	-	-	15,597	224,795	433,993	604,317	
Tier 3	381,690	-	171,459	381,690	381,690	381,690	381,690	
Tier 4	488,022	391,912	488,022	488,022	488,022	488,022	488,022	
Multi-Family	303,020	-	-	7,821	112,718	217,615	303,020	
Non-Residential	224,795	-	-	5,802	83,620	161,437	224,795	
Agricultural / Irrigation	255,198	-	114,638	255,198	255,198	255,198	255,198	
PSAWR								
Tier 1	5,686	-	-	-	-	-	252	
Tier 2	21,607	-	9,706	21,607	21,607	21,607	21,607	
Projected Usage Reduction		391,912	783,825	1,175,737	1,567,650	1,959,562	2,351,474	

With reductions identified in Table 72, the remaining usage is summarized in Table 73. The corresponding reduced revenue for FY 2025 is shown in Table 74 by taking the usage in Table 73 and multiplying it by the proposed FY 2025 variable rates.

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Table 73: Remaining Usage by Conservation Stage

Remaining Usage by Conservation Stage							
Customer Class	Baseline Usage (hcf)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Single-Family							
Tier 1	1,634,789	1,634,789	1,634,789	1,634,789	1,634,789	1,634,789	1,562,216
Tier 2	604,317	604,317	604,317	588,720	379,522	170,324	-
Tier 3	381,690	381,690	210,231	-	-	-	-
Tier 4	488,022	96,110	-	-	-	-	-
Multi-Family	303,020	303,020	303,020	295,199	190,302	85,405	-
Non-Residential	224,795	224,795	224,795	218,993	141,175	63,358	-
Agricultural / Irrigation	255,198	255,198	140,560	-	-	-	-
PSAWR							
Tier 1	5,686	5,686	5,686	5,686	5,686	5,686	5,434
Tier 2	21,607	21,607	11,901	-	-	-	-
Projected Water Sales	3,919,124	3,527,212	3,135,299	2,743,387	2,351,474	1,959,562	1,567,650

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Table 74: FY 2025 Projected Revenue and Potential Revenue Loss

Projected Revenue & Potential Revenue Loss							
Variable Rates (\$/hcf)							
Customer Class	FY 2025	FY 2026	FY 2027	FY 2025 Selected			
Single-Family							
Tier 1	\$5.44	\$5.72	\$6.01				\$5.44
Tier 2	\$6.66	\$7.00	\$7.35				\$6.66
Tier 3	\$6.85	\$7.20	\$7.56				\$6.85
Tier 4	\$7.51	\$7.89	\$8.29				\$7.51
Multi-Family	\$6.03	\$6.34	\$6.66				\$6.03
Non-Residential	\$6.06	\$6.37	\$6.69				\$6.06
Agricultural / Irrigation	\$6.70	\$7.04	\$7.40				\$6.70
PSAWR							
Tier 1	\$5.44	\$5.72	\$6.01				\$5.44
Tier 2	\$6.02	\$6.33	\$6.65				\$6.02
Projected Commodity Revenue		FY 2025					
Customer Class	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
	[A]	[B]	[C]	[D]	[E]	[F]	[G]
Single-Family							
Tier 1	\$8,893,252	\$8,893,252	\$8,893,252	\$8,893,252	\$8,893,252	\$8,893,252	\$8,498,455
Tier 2	\$4,024,751	\$4,024,751	\$4,024,751	\$3,920,873	\$2,527,617	\$1,134,360	\$0
Tier 3	\$2,614,577	\$2,614,577	\$1,440,082	\$0	\$0	\$0	\$0
Tier 4	\$3,665,045	\$721,783	\$0	\$0	\$0	\$0	\$0
Multi-Family	\$1,827,211	\$1,827,211	\$1,827,211	\$1,780,050	\$1,147,521	\$514,992	\$0
Non-Residential	\$1,362,258	\$1,362,258	\$1,362,258	\$1,327,098	\$855,523	\$383,947	\$0
Agricultural / Irrigation	\$1,709,827	\$1,709,827	\$941,755	\$0	\$0	\$0	\$0
PSAWR							
Tier 1	\$30,932	\$30,932	\$30,932	\$30,932	\$30,932	\$30,932	\$29,559
Tier 2	\$130,074	\$130,074	\$71,643	\$0	\$0	\$0	\$0
Projected Variable Revenue	\$24,257,926	\$21,314,664	\$18,591,883	\$15,952,205	\$13,454,845	\$10,957,484	\$8,528,014
Projected Loss (Baseline Revenue - Stage Revenue)		\$2,943,262	\$5,666,043	\$8,305,721	\$10,803,081	\$13,300,442	\$15,729,912

In addition to revenue losses, the District will also reduce certain expenses, generating cost savings. Table 75 calculates the cost savings from reduced water loss, and Table 76 reflects the FY 2025 net impact of revenue loss to be recovered from Water Shortage Surcharges for each stage.

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Table 75: FY 2025 Water Loss Expense – Cost Savings

Water Loss Expense - Cost Savings				
Variable Water Costs	FY 2025	FY 2026	FY 2027	FY 2025 Selected
SDCWA Treated Water Purchases	\$1,397,000	\$1,397,000	\$1,397,000	\$1,397,000
SDCWA Untreated Water Purchases	\$13,121,000	\$13,121,000	\$13,121,000	\$13,121,000
Total Variable Water Costs	\$14,518,000	\$14,518,000	\$14,518,000	\$14,518,000

Variable Water Unit Costs

Variable Water Costs \$14,518,000

÷ Baseline Usage (hcf) 3,919,124

Variable Water Unit Cost (\$/hcf) \$3.71

Variable Water Cost Savings		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Reduction in Usage	Table 72	391,912	783,825	1,175,737	1,567,650	1,959,562	2,351,474
x Variable Water Unit Cost		\$3.71	\$3.71	\$3.71	\$3.71	\$3.71	\$3.71
Variable Water Cost Savings		\$1,453,995	\$2,907,990	\$4,361,985	\$5,815,980	\$7,269,975	\$8,723,970

Table 76: FY 2025 Net Impact from Conservation Stages

Net Impact from Conservation Stages							
Net Impact from WSCP Stages	Source	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Lost Revenue	Table 74	(\$2,943,262)	(\$5,666,043)	(\$8,305,721)	(\$10,803,081)	(\$13,300,442)	(\$15,729,912)
Plus Cost Savings	Table 75	\$1,453,995	\$2,907,990	\$4,361,985	\$5,815,980	\$7,269,975	\$8,723,970
Net Revenue Loss		(\$1,489,267)	(\$2,758,053)	(\$3,943,736)	(\$4,987,101)	(\$6,030,467)	(\$7,005,942)

Table 77 takes the net revenue loss in Table 76 and recovers it from the remaining usage from Table 73 as a percent increase surcharge across all variable rates, maintaining the cost-of-service analysis developed for the District's base variable rates. The percentage surcharges of each stage for FY 2025 are calculated by taking the revenue loss to recover as a percentage of the Projected Commodity Revenue in Table 74. Table 78 and Table 79 identify the Water Shortage Surcharges for FY 2026 and FY 2027, respectively, using the same approach shown for FY 2025.

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Table 77: FY 2025 Water Shortage Surcharges

Water Shortage Surcharges							
% Increase		WSCP Stages					
FY 2025		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Net Revenue Loss		\$1,489,267	\$2,758,053	\$3,943,736	\$4,987,101	\$6,030,467	\$7,005,942
Projected Commodity Revenue		\$21,314,664	\$18,591,883	\$15,952,205	\$13,454,845	\$10,957,484	\$8,528,014
Net Revenue Loss / Projected Commodity Revenue		6.99%	14.83%	24.72%	37.07%	55.04%	82.15%

		FY 2025					
Customer Class	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Single-Family							
Tier 1	\$5.44	\$0.39	\$0.81	\$1.35	\$2.02	\$3.00	\$4.47
Tier 2	\$6.66	\$0.47	\$0.99	\$1.65	\$2.47	\$3.67	\$5.48
Tier 3	\$6.85	\$0.48	\$1.02	\$1.70	\$2.54	\$3.77	\$5.63
Tier 4	\$7.51	\$0.53	\$1.12	\$1.86	\$2.79	\$4.14	\$6.17
Multi-Family	\$6.03	\$0.43	\$0.90	\$1.50	\$2.24	\$3.32	\$4.96
Non-Residential	\$6.06	\$0.43	\$0.90	\$1.50	\$2.25	\$3.34	\$4.98
Agricultural / Irrigation	\$6.70	\$0.47	\$1.00	\$1.66	\$2.49	\$3.69	\$5.51
PSAWR							
Tier 1	\$5.44	\$0.39	\$0.81	\$1.35	\$2.02	\$3.00	\$4.47
Tier 2	\$6.02	\$0.43	\$0.90	\$1.49	\$2.24	\$3.32	\$4.95

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Table 78: FY 2026 Water Shortage Surcharges

Water Shortage Surcharges							
% Increase		WSCP Stages					
FY 2026		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Net Revenue Loss		\$1,638,194	\$3,045,497	\$4,365,767	\$5,536,902	\$6,708,036	\$7,807,929
Projected Commodity Revenue		\$22,406,666	\$19,545,367	\$16,771,103	\$14,145,973	\$11,520,843	\$8,966,956
Net Revenue Loss / Projected Commodity Revenue		7.31%	15.58%	26.03%	39.14%	58.23%	87.07%

FY 2026							
Customer Class	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Single-Family							
Tier 1	\$5.72	\$0.42	\$0.90	\$1.49	\$2.24	\$3.34	\$4.99
Tier 2	\$7.00	\$0.52	\$1.10	\$1.83	\$2.74	\$4.08	\$6.10
Tier 3	\$7.20	\$0.53	\$1.13	\$1.88	\$2.82	\$4.20	\$6.27
Tier 4	\$7.89	\$0.58	\$1.23	\$2.06	\$3.09	\$4.60	\$6.88
Multi-Family	\$6.34	\$0.47	\$0.99	\$1.66	\$2.49	\$3.70	\$5.53
Non-Residential	\$6.37	\$0.47	\$1.00	\$1.66	\$2.50	\$3.71	\$5.55
Agricultural / Irrigation	\$7.04	\$0.52	\$1.10	\$1.84	\$2.76	\$4.10	\$6.14
PSAWR							
Tier 1	\$5.72	\$0.42	\$0.90	\$1.49	\$2.24	\$3.34	\$4.99
Tier 2	\$6.33	\$0.47	\$0.99	\$1.65	\$2.48	\$3.69	\$5.52

Table 79: FY 2027 Water Shortage Surcharges

Water Shortage Surcharges							
% Increase		WSCP Stages					
FY 2027		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Net Revenue Loss		\$1,794,959	\$3,346,807	\$4,806,988	\$6,109,811	\$7,412,633	\$8,640,863
Projected Commodity Revenue		\$23,537,453	\$20,531,610	\$17,617,434	\$14,860,616	\$12,103,799	\$9,421,574
Net Revenue Loss / Projected Commodity Revenue		7.63%	16.30%	27.29%	41.11%	61.24%	91.71%

FY 2027							
Customer Class	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Single-Family							
Tier 1	\$6.01	\$0.46	\$0.98	\$1.64	\$2.48	\$3.69	\$5.52
Tier 2	\$7.35	\$0.57	\$1.20	\$2.01	\$3.03	\$4.51	\$6.75
Tier 3	\$7.56	\$0.58	\$1.24	\$2.07	\$3.11	\$4.63	\$6.94
Tier 4	\$8.29	\$0.64	\$1.36	\$2.27	\$3.41	\$5.08	\$7.61
Multi-Family	\$6.66	\$0.51	\$1.09	\$1.82	\$2.74	\$4.08	\$6.11
Non-Residential	\$6.69	\$0.52	\$1.10	\$1.83	\$2.76	\$4.10	\$6.14
Agricultural / Irrigation	\$7.40	\$0.57	\$1.21	\$2.02	\$3.05	\$4.54	\$6.79
PSAWR							
Tier 1	\$6.01	\$0.46	\$0.98	\$1.64	\$2.48	\$3.69	\$5.52
Tier 2	\$6.65	\$0.51	\$1.09	\$1.82	\$2.74	\$4.08	\$6.10