

CITY OF GLENDALE WATER & POWER

Water Financial Plan & Rate Study

DRAFT REPORT / September 25, 2026

City of Glendale Water & Power

RAFTELIS

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September 25, 2026

Chisom Obegolu
Assistant General Manager of Water Services
Glendale Water and Power
141 N. Glendale Avenue 4th Level
Glendale, CA 91206

Subject: Water Financial Plan & Rate Study Report

Dear Mr. Obegolu,

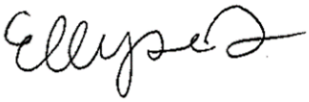
Raftelis is pleased to present this Water Financial Plan & Rate Study Report. The rate study involved a comprehensive review of Glendale Water and Power's (GWP) financial plan, a review of its rate structure, and an allocation of costs to customer classes and tiers using Cost of Service principles. The report provides a brief Executive Summary followed by a detailed discussion regarding study assumptions and an in-depth rate derivation.

It was a pleasure working with you, and we wish to express our thanks for the support from you and your staff. If you have any questions, please call me at 213-262-9308.

Sincerely,



Steve Gagnon
Vice President, PE
Project Manager



Ellyse Ritchie
Senior Consultant



Ky Lewis IV
Senior Consultant

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1. Executive Summary

1.1. Background

In 2025, the City of Glendale Water and Power (GWP) engaged Raftelis to conduct a Water Rate Study (Study) which included a Financial Plan, Cost of Service Analysis, and rate design. This report presents the results of each and the resulting rates recommended for implementation beginning on January 1, 2027.

This Executive Summary summarizes the water financial plan and proposed rates and describes the methodology, results, and recommendations. GWP's last rate adjustment was effective on July 1, 2023. GWP wishes to establish rates that:

- Meet GWP's fiscal needs in terms of operational expenses, reserve goals, debt coverage requirements, and capital investment to maintain the system
- Are fair and equitable and therefore proportionately allocate the costs of providing service in accordance with California Constitution Article XIII D, section 6 (commonly referred to as Proposition 218)
- Result in stable charges over time for customers
- Promote water conservation

1.2. Methodology

The water rates presented in this report were developed using cost of service (COS) principles set forth by the American Water Works Association M1 Manual titled *Principles of Water Rates, Fees and Charges* (AWWA M1 Manual). Cost of service principles endeavor to distribute costs to customer classes in accordance with the cost burden of each class. This methodology is described in detail in Sections 3 and 4 of this report. The Base-Extra Capacity Method of the AWWA M1 Manual was used to distribute costs to customer classes and tiers. This method separates costs into five main components: (1) base (sometimes called delivery costs) (2) extra capacity costs, (3) customer costs, (4) meter maintenance costs and (5) fire service costs. These cost components are the standard components of a cost of service study, however there are often additional cost components as described in Section 3.2. Base costs are associated with meeting average daily demand needs and include operations and maintenance costs and capital costs designed to meet average flow conditions. Extra capacity costs, for this study, are the costs associated with providing water at sufficient flow and pressure to fight fires. Customer costs are costs associated with serving customers, such as meter reading, billing customers and answering customer questions. Meter maintenance costs are costs associated with maintaining and replacing meters.

1.3. Proposed Alternatives, Results and Recommendations

Working with GWP staff, Raftelis created three main rate alternatives, each with a sub-alternative that included issuing bonds to fund capital projects. Table 1-1 shows each alternative, the bond issue amount, projected revenue adjustments, five-year compounding revenue increase, and the average annual capital spending over the study/five year period (2027-2031). The proposed financial plan is Alternative 2b in line 4. The revenue adjustment is the additional amount of revenue collected compared to the amount collected by current rates. Note that revenue increases are not the same as customer bill impacts, because cost allocations made as part of the cost of service analysis and the revised rate structure affect customer bills. Customer bill impacts are discussed in Section 7.

Table 1-1: Proposed Alternatives & Rate Revenue Adjustments

	A	B	C	D	E	F	G	H	I	J
Line No.	Alternative	Description		Revenue Increases					5 Yr Compound Revenue Increase	Average Yearly Capital Spend (Millions)
			Bond Amount (Millions)	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031		
1	1a	Investment	$0.0	105.0%	0.0%	0.0%	0.0%	0.0%	105.0%	$23.0
2	1b	Investment with Bonds	$80.0	64.0%	6.0%	6.0%	6.0%	6.0%	107.0%	$23.0
3	2a	Investment	$0.0	58.0%	15.0%	12.0%	9.0%	6.0%	135.1%	$20.0
4	**2b**	**Investment with Bonds**	**$40.0**	**53.0%**	**11.0%**	**10.0%**	**10.0%**	**7.0%**	**119.9%**	**$20.0**
5	3a	Investment	$0.0	45.0%	12.0%	11.0%	8.0%	5.0%	104.4%	$10.0
6	3b	Investment with Bonds	$20.0	46.0%	7.5%	7.5%	7.5%	7.5%	95.0%	$10.0

1.3.1. FACTORS AFFECTING REVENUE ADJUSTMENTS

The following items affect GWP's revenue requirement and thus the rates. GWP's revenue requirement is the amount of revenue needed to fund Operation and Maintenance (O&M) expenses, capital expenses, debt service and reserve funding.

- **O&M Expenses:** GWP's O&M budget increased by just under 5% from Fiscal Year[1] (FY) 2025 to FY 2026 and is materially unchanged from FY 2026 to FY 2027. These O&M expense increases are not the major driver for rate increases. The following two items are the larger reasons for rate increases.

- **Water Supply Costs:** GWP purchases approximately 72% of its water from the Metropolitan Water District (MWD). MWD increased its volumetric rates by 11% and 9.5% in FY 2025 and FY 2026, respectively and will continue to increase its wholesale charges. It recently added three new fixed charges.

- **Capital Investment:** GWP recently completed a Water Master Plan (WMP). A WMP is a long-range planning document that guides the capital investment in a water system. As identified in the Water Master Plan, GWP will complete significant repair and replacement projects to its

[1] When a Fiscal Year is stated as FY 2025 it represents the Fiscal Year ending in 2025. Sometimes stated as Fiscal Year 2024-2025.

water system totaling approximately $100.1[2] million over the entire study period (or an estimated average of $20.0 million per year). The Water Master Plan suggests additional projects; however, the capital spending plan was selected (Alternative 2b) to balance customer impacts with necessary repair and replacement projects. These projects are required to maintain the reliability of the extensive water delivery system. GWP will use bond financing and cash to fund the projects.

1.4. Current Potable Water Rates

In this report, the terms rate and charge are often used interchangeably. GWP currently charges customers a water fixed meter charge (shown in monthly terms but billed bi-monthly), and a volumetric rate (GWP uses the term variable rate), in dollars per hundred cubic feet ($/HCF). In addition, GWP maintains fixed private fire service charges for customers with private fire lines. All rates and tiers are shown in monthly terms; however, in practice, GWP bills the majority of its customers on a bi-monthly basis (equal to two months' fixed charges and the individual customers' bi-monthly water use charges). GWP also has an adjustment called the Water Adjustment Charge (WAC) that reflects the variations in the costs of purchased water and pumping power compared to the amounts GWP budgeted during the applicable time period. This charge may be positive, increasing customer bills or negative, decreasing customer bills.

[2] For Alternative 2b

1.4.1. MONTHLY POTABLE WATER FIXED METER CHARGES

The water fixed meter charge is designed to recover the costs associated with installing, maintaining, and servicing a customer's meter, as well as the cost for customer service and meter reading and a portion of the fixed costs associated with operating and maintaining the system so that it is ready to serve water (distribution pipelines, storage tanks, etc.). The water fixed meter charge is a monthly fixed charge that varies by meter size. Table 1-2 shows the current water fixed meter charges by meter size.

Table 1-2: Current Monthly Potable Water Fixed Meter Charges

		A
Line No.	Meter Size	Existing Charge
1	5/8-inch	$19.37
2	3/4-inch	$27.02
3	1-inch	$42.37
4	1 1/2-inch	$80.67
5	2-inch	$126.64
6	3-inch	$272.22
7	4-inch	$486.76
8	6-inch	$1,000.11
9	8-inch	$1,842.94
10	10-inch	$2,915.64
11	12-inch	$3,835.10

1.4.2. CURRENT WATER VARIABLE CHARGES

The current existing variable charge is the result of applying a volumetric rate, in $/HCF, to a customer's water use. The rate structure varies by customer class.

- Single-family is an increasing 3-tiered rate structure.
- Multi-family is an increasing 2-tiered rate structure, with the tier allotment multiplied by the number of dwelling units.
- Commercial is a uniform rate. The term uniform means that it is a single rate for all water use.
- Irrigation is a uniform rate.

Table 1-3 shows GWP's current volumetric rates. All values are shown in $/HCF and the tiers are shown in monthly terms. GWP currently charges a drought surcharge of $0.45/HCF to all variable rates that is currently added to the rates shown in column B.

Table 1-3: Current Potable Water Variable Rates ($/HCF)

		A	B
Line No.	Customer Class	Tier Breakpoints	Existing Charge ($ / HCF)
	Single-Family		
1	Tier 1	0-8 HCF	$2.80
2	Tier 2	9-15 HCF	$4.11
3	Tier 3	>15 HCF	$4.28
	Multi-Family		
4	Tier 1	# Of DU[3] * 6 HCF	$2.80
5	Tier 2	All Additional HCF	$4.11
	Commercial		
6	Tier 1	All Units	$4.04
	Irrigation		
7	Tier 1	All Units	$4.19

[3] Dwelling units.

1.4.3. PRIVATE FIRE LINE FIXED CHARGES

Table 1-4 shows GWP's current monthly private fire line fixed charges.

Table 1-4: Current Monthly Private Fire Line Fixed Charges

		A
Line No.	Meter Size	Existing Charge
1	5/8-inch	$4.47
2	3/4-inch	$4.47
3	1-inch	$4.47
4	1 1/2-inch	$5.25
5	2-inch	$6.63
6	3-inch	$11.55
7	4-inch	$20.04
8	6-inch	$50.52
9	8-inch	$103.07
10	10-inch	$182.11
11	12-inch	$291.65

1.5. Current Recycled Water Rates

GWP has separate rates for recycled water customers. GWP currently charges recycled water customers a fixed meter charge (shown in monthly terms but billed bi-monthly), and a variable rate in dollars per hundred cubic feet ($/HCF). All rates are shown in monthly terms; however, in practice, GWP bills the majority of its customers on a bi-monthly basis (equal to two months' fixed charges and the individual customers' bi-monthly water use charges).

1.5.1. MONTHLY RECYCLED WATER FIXED METER CHARGES

The recycled meter charge is a monthly fixed charge that varies by meter size. Table 1-5 shows the current recycled meter charges by meter size.

Table 1-5: Current Monthly Recycled Water Fixed Meter Charges

		A
Line No.	Meter Size	Existing Charge
1	5/8-inch	$13.00
2	3/4-inch	$17.48
3	1-inch	$26.43
4	1 1/2-inch	$48.82
5	2-inch	$75.70
6	3-inch	$160.80
7	4-inch	$286.20
8	6-inch	$586.23
9	8-inch	$1,078.86
10	10-inch	$1,705.85
11	12-inch	$2,243.26
12	14-inch	$2,243.26
13	16-inch	$2,243.26

1.5.2. RECYCLED WATER VARIABLE CHARGES

Table 1-6 shows the current recycled volumetric rates. All values are shown in $/HCF.

Table 1-6: Current Recycled Water Variable Rates ($/HCF)

		A
Line No.	Customer Class	Existing Charge
1	Commercial	$2.84
2	Irrigation	$2.84

1.6. Proposed Potable Water Rates

1.6.1. FIXED METER CHARGES

The proposed monthly fixed meter charge is designed to recover the costs associated with installing, maintaining, and servicing a customer's meter, as well as the cost for customer service and meter reading and a portion of the fixed costs associated with operating and maintaining the system so that it is ready to serve water (distribution pipelines, storage tanks, etc.). The costs are sometimes called ready-to-serve costs. Table 1-7 shows the proposed monthly fixed meter charges by meter size for FY 2027 through FY 2031.

Table 1-7: Proposed Monthly Potable Water Fixed Meter Charges

		A	B	C	D	E
Line No.	Meter Size	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
	All Customers					
1	5/8-inch	$42.00	$46.62	$51.28	$56.41	$60.36
2	3/4-inch	$42.00	$46.62	$51.28	$56.41	$60.36
3	1-inch	$42.00	$46.62	$51.28	$56.41	$60.36
4	1 1/2-inch	$113.37	$125.84	$138.42	$152.26	$162.92
5	2-inch	$174.54	$193.74	$213.11	$234.42	$250.83
6	3-inch	$368.24	$408.75	$449.63	$494.59	$529.21
7	4-inch	$653.70	$725.61	$798.17	$877.99	$939.45
8	6-inch	$1,336.77	$1,483.81	$1,632.19	$1,795.41	$1,921.09
9	8-inch	$2,458.21	$2,728.61	$3,001.47	$3,301.62	$3,532.73
10	10-inch	$3,885.51	$4,312.92	$4,744.21	$5,218.63	$5,583.93
11	12-inch	$5,108.91	$5,670.89	$6,237.98	$6,861.78	$7,342.10

1.6.2. VARIABLE (VOLUMETRIC) RATE

GWP is proposing changes to its volumetric rate structure. GWP is proposing a two-tier rate structure for all customer classes instead of a three-tier structure for the Single Family and Multi-Family classes and uniform rate for the Commercial and Irrigation classes. The basis for two tiers is that GWP has two water sources and the rate in each tier is based on the volume of water from each source to serve customers in that tier. Table 1-8 shows the proposed tier allotments for all potable water customers based on the size of their water meter. The proposed tier breakpoint for the smaller meters (5/8-inch, 3/4-inch and 1-inch) is 10 HCF. These meters have been combined – meaning the ratio for the three smallest meters are the same because in the near future, the 5/8-inch meters will be removed and replaced with either 3/4-inch or 1-inch meters. Additionally, the 3/4-inch meter is the most numerous meter, therefore it is the base meter by which the other ratios are calculated. Recent fire codes affect the sizing of Single-Family meters; often requiring a 1-inch meter when a 3/4-inch meter would suffice for domestic flow. For this reason, many water agencies assign the same capacity to a 3/4-inch and 1-inch meter. According to FY 2023-2024 customer billing data, the average use in March and April (the two months with the combined lowest bimonthly usage) is 10 HCF. The use during this lowest billing cycle is a reasonable estimate for indoor water use and is a common method to set the 1st tier breakpoint. The tier breakpoints for the larger meter sizes are increased by the AWWA hydraulic capacity ratio for each meter size to determine the tier

allotment in tier 1. The 3/4-inch meter is the base because it is the most common meter size and 5/8-inch meters will soon be replaced. Column A shows the hydraulic capacity ratios, which are derived by dividing the capacity for each meter size by the hydraulic capacity for a 3/4-inch meter.

Table 1-8: Proposed Monthly Tier Allotments (HCF)

		A	B	C
Line No.	Meter Size	Hydraulic Capacity Ratio	Tier 1	Tier 2
	All Customers			
1	5/8-inch	1.00	0-10	>10
2	3/4-inch	1.00	0-10	>10
3	1-inch	1.00	0-10	>10
4	1 1/2-inch	3.33	0-33	>33
5	2-inch	5.33	0-53	>53
6	3-inch	11.67	0-117	>117
7	4-inch	21.00	0-210	>210
8	6-inch	43.33	0-433	>433
9	8-inch	80.00	0-800	>800
10	10-inch	126.67	0-1,267	>1,267
11	12-inch	166.67	0-1,667	>1,667

Table 1-9 shows the proposed variable rates for the study period.

Table 1-9: Proposed Potable Water Variable Rates ($/HCF)

		A	B	C	D	E
Line No.	Customer Class	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
	Single Family					
1	Tier 1	$4.09	$4.54	$4.99	$5.49	$5.87
2	Tier 2	$6.92	$7.68	$8.45	$9.30	$9.95
	Multi-Family					
3	Tier 1	$4.09	$4.54	$4.99	$5.49	$5.87
4	Tier 2	$6.92	$7.68	$8.45	$9.30	$9.95
	Commercial					
5	Tier 1	$4.17	$4.63	$5.09	$5.60	$5.99
6	Tier 2	$6.92	$7.68	$8.45	$9.30	$9.95
	Irrigation					
7	Tier 1	$4.17	$4.63	$5.09	$5.60	$5.99
8	Tier 2	$6.92	$7.68	$8.45	$9.30	$9.95

1.7. Proposed Private Fire Line Charges

1.7.1. FIXED CHARGES

The proposed monthly private fire line fixed charge is designed to recover the costs associated with capacity in the water system to provide sufficient pressure and flows to fight fires. The monthly fixed charges vary by connection size; the rates are proportional to the potential flow through each fire line. Table 1-10 shows the proposed private fire line fixed charges by meter size for FY 2027 through FY 2031.

Table 1-10: Proposed Monthly Private Fire Line Fixed Charges

		A	B	C	D	E
Line No.	Meter Size	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
1	5/8-inch	$11.61	$12.89	$14.18	$15.60	$16.69
2	3/4-inch	$11.73	$13.02	$14.32	$15.75	$16.85
3	1-inch	$12.08	$13.41	$14.75	$16.23	$17.37
4	1 1/2-inch	$13.35	$14.82	$16.30	$17.93	$19.19
5	2-inch	$15.54	$17.25	$18.98	$20.88	$22.34
6	3-inch	$23.38	$25.95	$28.55	$31.41	$33.61
7	4-inch	$36.91	$40.97	$45.07	$49.58	$53.05
8	6-inch	$85.48	$94.88	$104.37	$114.81	$122.85
9	8-inch	$169.25	$187.87	$206.66	$227.33	$243.24
10	10-inch	$295.25	$327.73	$360.50	$396.55	$424.31
11	12-inch	$469.88	$521.57	$573.73	$631.10	$675.28

1.8. Proposed Recycled Water Rates

1.8.1. FIXED METER CHARGES

The proposed monthly recycled water fixed meter charge recovers the costs associated with servicing recycled water meters and fixed costs associated with maintaining the recycled water system so that it is ready to serve water. Table 1-11 shows the proposed monthly recycled fixed meter charges by meter size for FY 2027 through FY 2031.

Table 1-11: Proposed Monthly Recycled Water Fixed Meter Charges

		A	B	C	D	E
Line No.	Meter Size	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
1	5/8-inch	$26.18	$29.06	$31.97	$35.17	$37.63
2	3/4-inch	$26.18	$29.06	$31.97	$35.17	$37.63
3	1-inch	$26.18	$29.06	$31.97	$35.17	$37.63
4	1 1/2-inch	$60.62	$67.29	$74.02	$81.42	$87.12
5	2-inch	$90.14	$100.06	$110.07	$121.08	$129.56
6	3-inch	$183.63	$203.83	$224.21	$246.63	$263.89
7	4-inch	$321.40	$356.75	$392.43	$431.67	$461.89
8	6-inch	$651.06	$722.68	$794.95	$874.45	$935.66
9	8-inch	$1,192.30	$1,323.45	$1,455.80	$1,601.38	$1,713.48
10	10-inch	$1,881.14	$2,088.07	$2,296.88	$2,526.57	$2,703.43
11	12-inch	$2,471.58	$2,743.45	$3,017.80	$3,319.58	$3,551.95
12	14-inch	$3,701.66	$4,108.84	$4,519.72	$4,971.69	$5,319.71
13	16-inch	$4,931.74	$5,474.23	$6,021.65	$6,623.82	$7,087.49

1.8.2. VARIABLE RATES

The proposed variable recycled rates recover costs to supply recycled water and operate and maintain the system. Table 1-12 shows the proposed variable rates.

Table 1-12: Proposed Recycled Water Variable Rates ($/HCF)

		A	B	C	D	E
Line No.	Tier Allotment	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
1	All Use	$3.91	$4.34	$4.77	$5.25	$5.62

1.9. Proposed Pump Zone Rates

GWP is proposing to implement a pump zone rate. GWP provides water service to customers in different elevation zones. The proposed pump zone rates are designed to recover the costs of pumping (electrical costs) to customers in their respective pump zone. The rate will be applied to the customers' volumetric use. Table 1-13 shows the rate by pump zone for the study period, and its corresponding elevation.

Table 1-13: Proposed Pump Zone Rates ($/HCF)

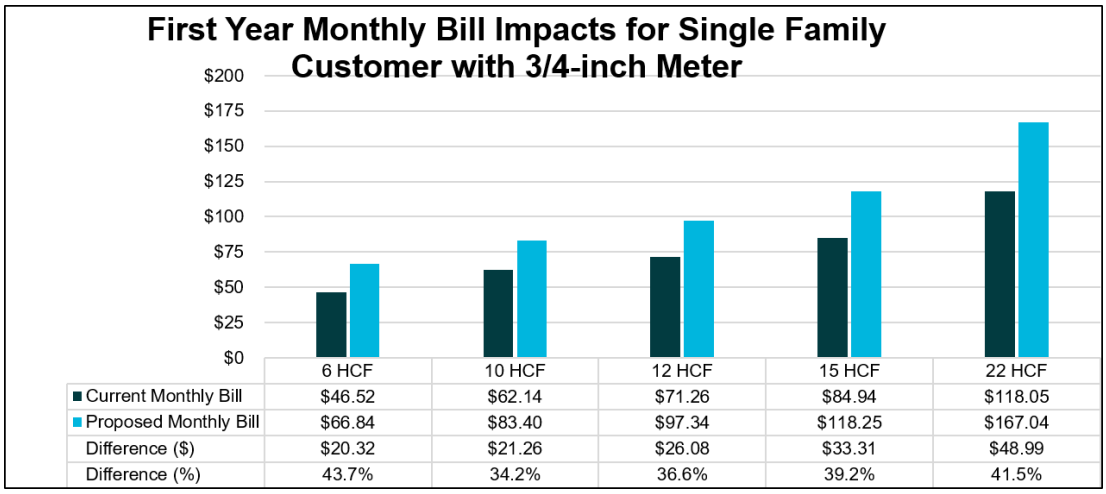
		A	B	C	D	E
Line No.	Pump Zone	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
1	1 (724')	$0.05	$0.06	$0.06	$0.07	$0.07
2	2 (968')	$0.25	$0.28	$0.31	$0.34	$0.36
3	3 (1,290')	$0.84	$0.93	$1.03	$1.13	$1.21
4	4 (1,666')	$1.83	$2.03	$2.23	$2.46	$2.63
5	5 (2,000')	$2.31	$2.56	$2.82	$3.10	$3.32
6	6 (2,400')	$3.42	$3.80	$4.18	$4.59	$4.91
7	7 (2,483')	$5.08	$5.64	$6.20	$6.82	$7.30

1.10. Water Bill Impacts

1.10.1. SINGLE FAMILY RESIDENTIAL BILL IMPACTS

Figure 1-1 shows a Single Family Residential customer with a 3/4-inch (the most common meter size) monthly bill impacts for various use points for the first year of the rate setting period. For Single Family Residential customers, the average monthly use is 12 HCF. The bill impacts shown in Figure 1-1 through Figure 1-6 assume that the customer are in Pump Zone 1. Bill impacts for an average customer by pump zone are shown in Appendix B. The rate impacts for future years are the same as the revenue adjustments stated in Table 1-1. The below bill impacts (for all classes) include the current drought charge of $0.45 per HCF. Including the current drought surcharge, for the average single-family customer using 12 HCF, yields a bill increase of $26.08.

Figure 1-1: Single Family 3/4-inch Monthly Bill Impacts for FY 2027

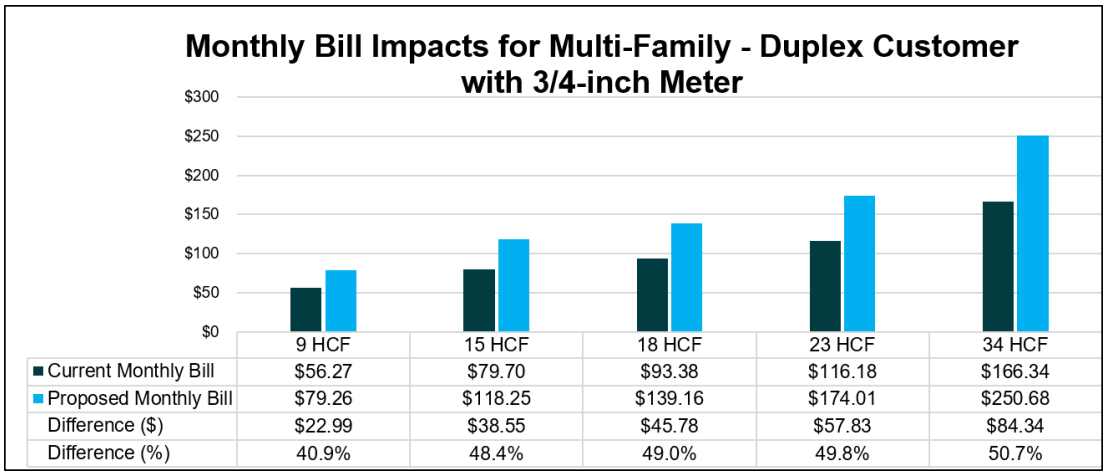


	6 HCF	10 HCF	12 HCF	15 HCF	22 HCF
Current Monthly Bill	$46.52	$62.14	$71.26	$84.94	$118.05
Proposed Monthly Bill	$66.84	$83.40	$97.34	$118.25	$167.04
Difference ($)	$20.32	$21.26	$26.08	$33.31	$48.99
Difference (%)	43.7%	34.2%	36.6%	39.2%	41.5%

1.10.2. MULTI-FAMILY RESIDENTIAL BILL IMPACTS

Figure 1-2 shows the monthly bill impacts for a Multi-Family duplex with a 3/4-inch meter (the most common meter size for two units) at various use points.

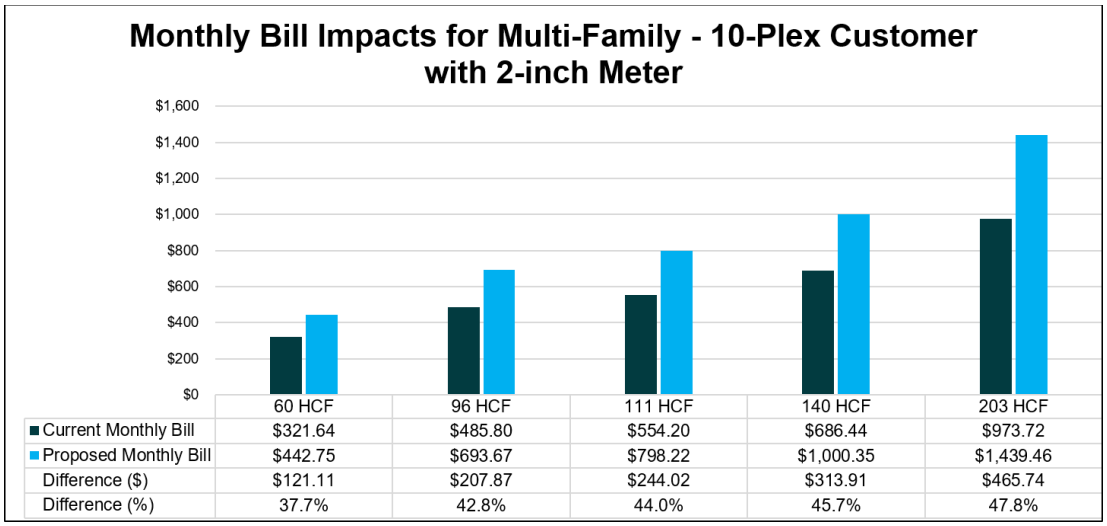
Figure 1-2: Multi-Family 3/4-inch Duplex Monthly Bill Impacts for FY 2027



	9 HCF	15 HCF	18 HCF	23 HCF	34 HCF
Current Monthly Bill	$56.27	$79.70	$93.38	$116.18	$166.34
Proposed Monthly Bill	$79.26	$118.25	$139.16	$174.01	$250.68
Difference ($)	$22.99	$38.55	$45.78	$57.83	$84.34
Difference (%)	40.9%	48.4%	49.0%	49.8%	50.7%

Figure 1-3 shows the monthly bill impacts for Multi-Family customer with ten dwelling units and a 2-inch meter at various use points.

Figure 1-3: Multi-Family 2-inch 10-Plex Monthly Bill Impacts for FY 2027

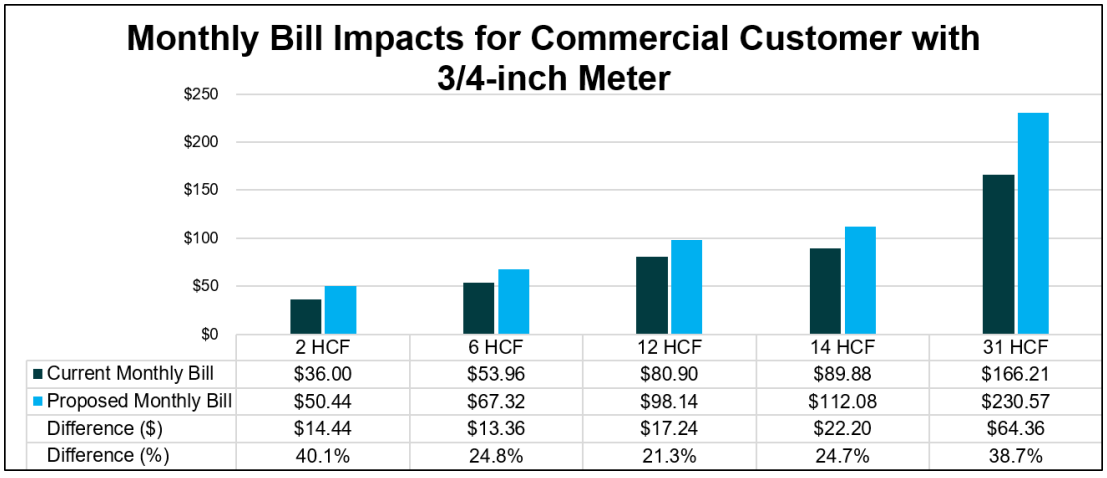


	60 HCF	96 HCF	111 HCF	140 HCF	203 HCF
Current Monthly Bill	$321.64	$485.80	$554.20	$686.44	$973.72
Proposed Monthly Bill	$442.75	$693.67	$798.22	$1,000.35	$1,439.46
Difference ($)	$121.11	$207.87	$244.02	$313.91	$465.74
Difference (%)	37.7%	42.8%	44.0%	45.7%	47.8%

1.10.3. COMMERCIAL BILL IMPACTS

Figure 1-4 shows the monthly bill impacts for Commercial 3/4-inch customers (the most common commercial meter size) at various use points.

Figure 1-4: Commercial 3/4-inch Monthly Bill Impacts for FY 2027

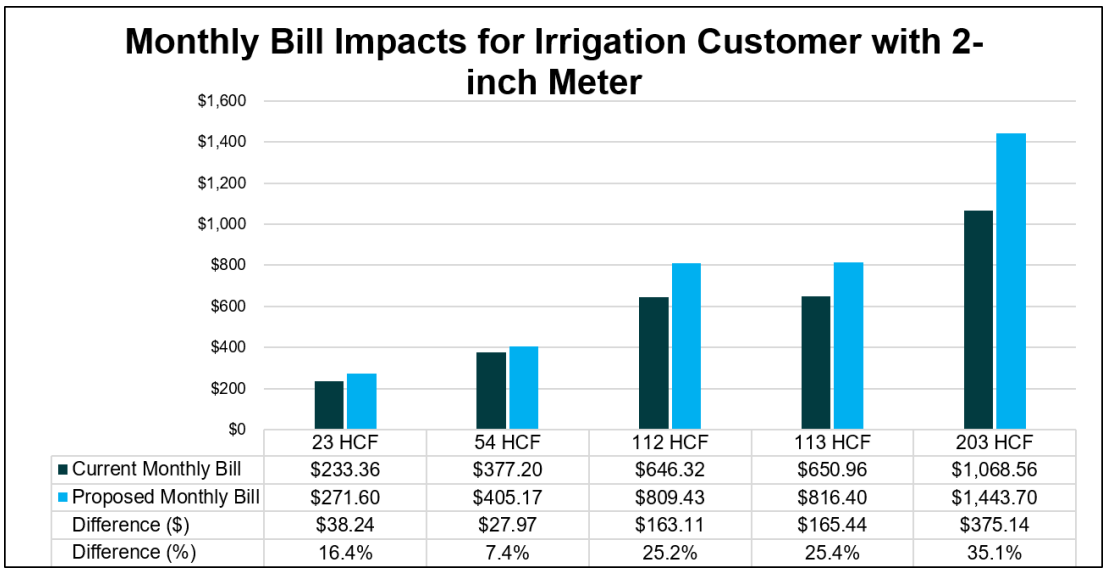


	2 HCF	6 HCF	12 HCF	14 HCF	31 HCF
Current Monthly Bill	$36.00	$53.96	$80.90	$89.88	$166.21
Proposed Monthly Bill	$50.44	$67.32	$98.14	$112.08	$230.57
Difference ($)	$14.44	$13.36	$17.24	$22.20	$64.36
Difference (%)	40.1%	24.8%	21.3%	24.7%	38.7%

1.10.4. IRRIGATION BILL IMPACTS

Figure 1-5 shows the monthly bill impacts for Irrigation 2-inch customers (the most common irrigation meter size) at various use points.

Figure 1-5: Irrigation 2-inch Monthly Bill Impacts for FY 2027

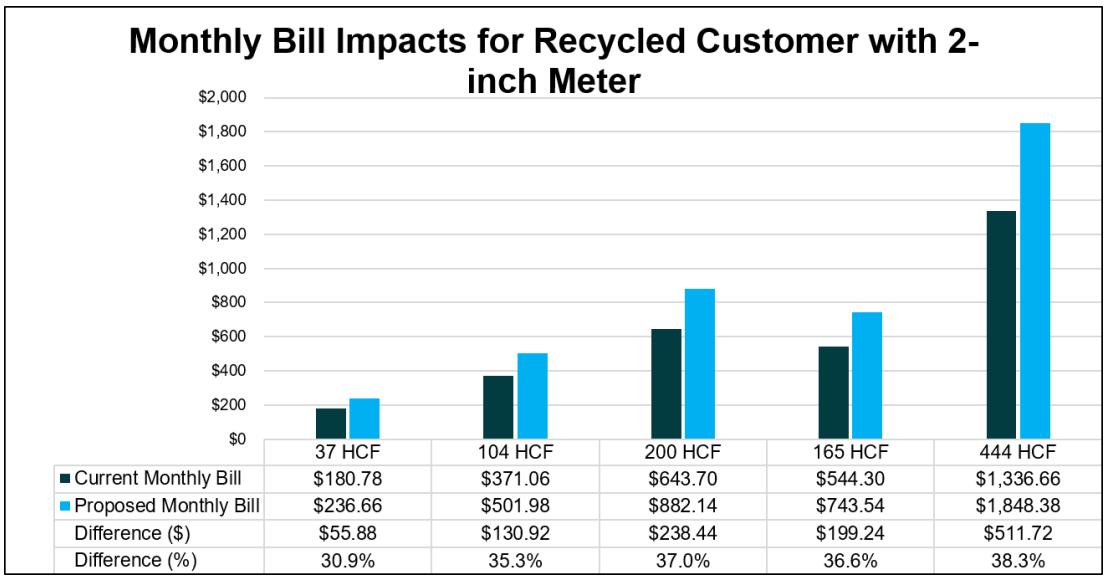


	23 HCF	54 HCF	112 HCF	113 HCF	203 HCF
Current Monthly Bill	$233.36	$377.20	$646.32	$650.96	$1,068.56
Proposed Monthly Bill	$271.60	$405.17	$809.43	$816.40	$1,443.70
Difference ($)	$38.24	$27.97	$163.11	$165.44	$375.14
Difference (%)	16.4%	7.4%	25.2%	25.4%	35.1%

1.10.5. RECYCLED WATER BILL IMPACTS

Figure 1-6 shows the monthly bill impacts for Recycled Water 2-inch customers at various use points.

Figure 1-6: Recycled 2-inch Monthly Bill Impacts for FY 2027

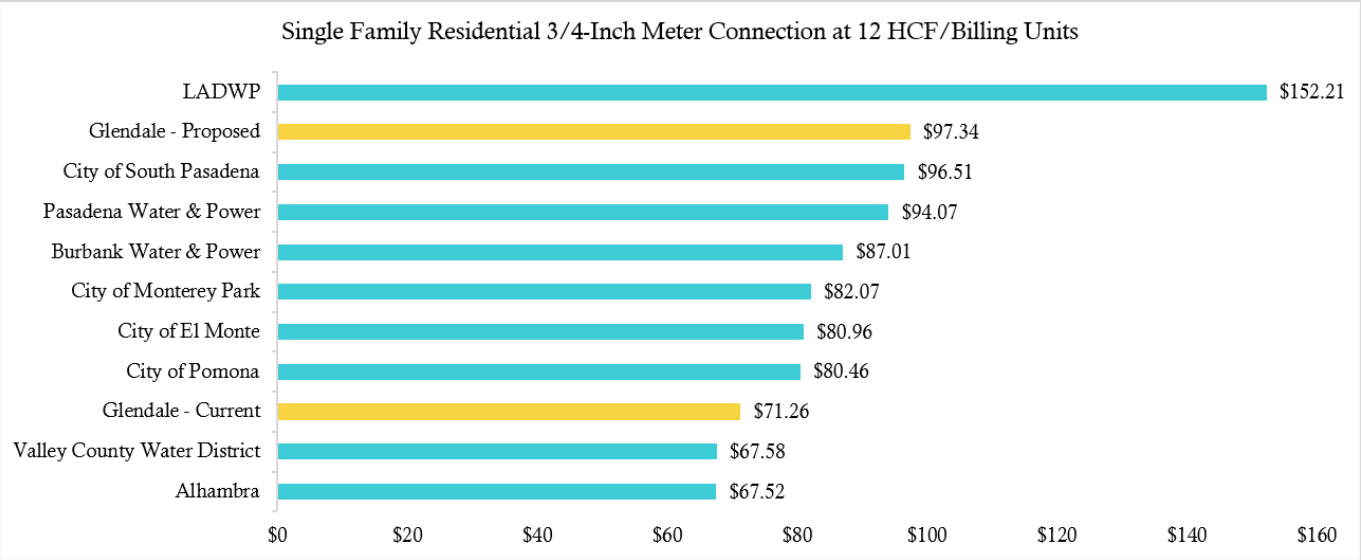


	37 HCF	104 HCF	200 HCF	165 HCF	444 HCF
Current Monthly Bill	$180.78	$371.06	$643.70	$544.30	$1,336.66
Proposed Monthly Bill	$236.66	$501.98	$882.14	$743.54	$1,848.38
Difference ($)	$55.88	$130.92	$238.44	$199.24	$511.72
Difference (%)	30.9%	35.3%	37.0%	36.6%	38.3%

1.10.6. SURROUNDING AGENCY BILL SURVEY

Figure 1-7 shows a monthly[4] water bill comparison for current and proposed GWP rates against nine neighboring agencies. The survey assumes a single-family residential customer using 12 HCF of water per month, with a 3/4-inch metered connection. The current GWP bill below includes the current drought charge of $0.45 per HCF. The bill for GWP proposed rates assumes that the bill is in Pump Zone 1. This survey was conducted in July 2026 and should only be used as a reference point or as a snapshot in time. There are many factors that influence the cost of serving water such as water supply source, size, topography, system age, offsetting revenues from other sources such as tax revenue or interest revenue, and the willingness of the governing body to invest in the system. Therefore, while it is common to compare rates, rates are dependent on each utilities' unique circumstances.

Figure 1-7: Monthly Bill Comparisons for Neighboring Agencies



[4] Agencies with a bi-monthly billing cycle are adjusted to a monthly billing cycle by dividing fixed charges and tier widths in half.

2. Water Enterprise Financial Plan

This section describes the assumptions used in the water Financial Plan, which is used to determine the revenue requirement. The revenue requirement is the yearly revenue required to pay for operating & maintenance expenses (O&M), capital improvement projects (CIP), and maintain adequate debt coverage ratio requirements, and meet reserve targets.

2.1. Water System Background

Located in northern Los Angeles County, the City of Glendale Department of Water & Power (GWP) provides water services to approximately 36,000 residential, commercial, and industrial customers over 25 square miles.

GWP's water system currently consists of approximately 407 miles of transmission and distribution pipeline, 30 reservoirs, 31 pump stations, 15 wells, and two treatment plants. GWP obtains its water through a combination of local groundwater and imported water from the Metropolitan Water District of Southern California.

2.2. Financial Plan Assumptions

Raftelis created a five-year Financial Plan which models anticipated revenue and expenses. This report shows the Financial Plan and assumptions for the next five years (FY 2027 to FY 2031) to correspond with the rate development for these years. This is also known as the study period.

2.2.1. FACTORS AFFECTING THE FINANCIAL PLAN and REVENUE ADJUSTMENTS

The following items affect GWP's revenue requirement and thus the rates. GWP's revenue requirement is the amount of revenue needed to fund Operation and Maintenance (O&M) expenses, capital expenses, debt service and reserve funding.

- **O&M Expenses:** GWP's O&M budget increased by just under 5% from Fiscal Year[5] (FY) 2025 to FY 2026 and is materially unchanged from FY 2026 to FY 2027. These O&M expense increases are not the major driver for rate increases. The below two items are the larger reasons for rate increases.

- **Water Supply Costs:** GWP purchases approximately 72% of its water from the Metropolitan Water District (MWD). MWD increased its volumetric rates by 11% and 9.5% in FY 2025 and FY 2026 respectively and will continue to increase its wholesale charges. It recently added three new fixed charges.

- **Capital Investment:** GWP recently completed a Water Master Plan (WMP). A WMP is a long-range planning document that guides the capital investment in a water system. As identified in

[5] When a Fiscal Year is stated as FY 2025 it represents the Fiscal Year ending in 2025. Sometimes stated as Fiscal Year 2024-2025.

the Water Master Plan, GWP will complete significant repair and replacement projects to its water system totaling approximately $100.1[6] million over the entire study period (or an estimated average of $20.0 million per year). The Water Master Plan suggests additional projects; however the capital spending plan was selected (Alternative 2b) to balance customer impacts with necessary repair and replacement projects. These projects are required to maintain the reliability of the extensive water delivery system. GWP will use bond financing and cash to fund the projects.

2.2.2. POTABLE WATER RATE REVENUE ASSUMPTIONS

2.2.2.1. ACCOUNT AND WATER USE GROWTH ASSUMPTIONS

The revenue calculated for each fiscal year in the Financial Plan is a function of the number of accounts, account growth, water use trends, and existing rates. Due to limited account growth from mostly multi-family projects, the rate study team assumed 0.5% Multi-Family account growth starting in FY 2028.

2.2.2.2. NUMBER OF ACCOUNTS

Table 2-1 shows the number of accounts for the study period by meter size and customer class. The number of accounts is based on data for FY 2024 provided by GWP.

[6] For Alternative 2b

Table 2-1: Projected Accounts by Meter Size

		A	B	C	D	E
Line No.	Description	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
	Single Family					
1	5/8-inch	3,844	3,844	3,844	3,844	3,844
2	3/4-inch	13,875	13,875	13,875	13,875	13,875
3	1-inch	5,390	5,390	5,390	5,390	5,390
4	1 1/2-inch	284	284	284	284	284
5	2-inch	75	75	75	75	75
6	**Subtotal - Single Family**	**23,468**	**23,468**	**23,468**	**23,468**	**23,468**
	Multi-Family					
7	5/8-inch	404	406	408	410	412
8	3/4-inch	2,919	2,934	2,948	2,963	2,978
9	1-inch	2,945	2,960	2,975	2,989	3,004
10	1 1/2-inch	1,258	1,264	1,271	1,277	1,283
11	2-inch	908	913	917	922	926
12	3-inch	44	44	44	45	45
13	4-inch	33	33	33	33	34
14	6-inch	9	9	9	9	9
15	8-inch	3	3	3	3	3
16	**Subtotal - Multi-Family**	**8,523**	**8,566**	**8,608**	**8,651**	**8,695**
	Commercial					
17	5/8-inch	633	633	633	633	633
18	3/4-inch	907	907	907	907	907
19	1-inch	560	560	560	560	560
20	1 1/2-inch	452	452	452	452	452
21	2-inch	713	713	713	713	713
22	3-inch	88	88	88	88	88
23	4-inch	54	54	54	54	54
24	6-inch	28	28	28	28	28
25	8-inch	12	12	12	12	12
26	**Subtotal - Commercial**	**3,447**	**3,447**	**3,447**	**3,447**	**3,447**
	Irrigation					
27	5/8-inch	27	27	27	27	27
28	3/4-inch	93	93	93	93	93
29	1-inch	125	125	125	125	125
30	1 1/2-inch	55	55	55	55	55
31	2-inch	99	99	99	99	99
32	3-inch	5	5	5	5	5
33	4-inch	3	3	3	3	3
34	6-inch	2	2	2	2	2
35	**Subtotal - Irrigation**	**409**	**409**	**409**	**409**	**409**
36	Total Customer	35,847	35,890	35,932	35,975	36,019

Table 2-2 shows the projected Private Fire Accounts by meter size for the study period. The study assumes the same number of private fire accounts for each year in the study period since private fire accounts do not change very much from year to year.

Table 2-2: Projected Private Fire Accounts by Meter Size

		A
Line No.	Description	Study Period
	Private Fire	
1	5/8-inch	0
2	3/4-inch	0
3	1-inch	1
4	1 1/2-inch	0
5	2-inch	58
6	3-inch	4
7	4-inch	884
8	6-inch	288
9	8-inch	100
10	10-inch	1
11	12-inch	3
12	Total - Private Fire	1,339

2.2.2.3. WATER USE

Table 2-3 shows the projected customer water use for the study period under the *current rate* structure by customer class. Raftelis assumed the same customer water use for each year in the study period except for Multi-Family, which increases due to the previously discussed 0.5% increase in Multi-Family accounts each year starting in FY 2028. Water use can vary based on weather and the study team determined FY 2024 was a representative water use year. GWP's current structure is discussed in Section 1.4. Estimates for future variable revenues *under existing rates* are calculated by multiplying the total use for all customers in each tier (as shown in Table 2-3) by the corresponding rate. All values are shown in HCF.

Table 2-3: Projected Water Use by Customer Class (HCF), Existing Structure

		A	B	C	D	E
Line No.	Customer Class	FY 2027 (HCF)	FY 2028 (HCF)	FY 2029 (HCF)	FY 2030 (HCF)	FY 2031 (HCF)
	Single-Family					
1	Tier 1	1,807,346	1,807,346	1,807,346	1,807,346	1,807,346
2	Tier 2	740,106	740,106	740,106	740,106	740,106
3	Tier 3	705,968	705,968	705,968	705,968	705,968
4	**Subtotal - Single-Family**	**3,253,420**	**3,253,420**	**3,253,420**	**3,253,420**	**3,253,420**
	Multi-Family					
5	Tier 1	2,303,109	2,314,624	2,326,198	2,337,829	2,349,518
6	Tier 2	1,247,477	1,253,715	1,259,983	1,266,283	1,272,614
7	**Subtotal - Multi-Family**	**3,550,586**	**3,568,339**	**3,586,181**	**3,604,112**	**3,622,132**
	Commercial					
8	Tier 1	1,560,819	1,560,819	1,560,819	1,560,819	1,560,819
	Irrigation					
9	Tier 1	193,950	193,950	193,950	193,950	193,950
10	**Total - All Use (HCF)**	**8,558,776**	**8,576,528**	**8,594,370**	**8,612,301**	**8,630,322**

2.2.3. RECYCLED WATER RATE REVENUE ASSUMPTIONS

2.2.3.1. ACCOUNT AND WATER USE GROWTH ASSUMPTIONS

The revenue calculated for each fiscal year in the Financial Plan is a function of the number of accounts, account growth, water use trends, and existing rates.

2.2.3.2. RECYCLED NUMBER OF ACCOUNTS

Table 2-4 shows the number of recycled water accounts over the study period by meter size and customer class. Recycled customer counts have remained consistent historically and therefore the Study team assumed no account growth.

Table 2-4: Projected Recycled Accounts by Meter Size

		A
Line No.	Description	Study Period
	Commercial	
1	5/8-inch	0
2	3/4-inch	0
3	1-inch	2
4	1 1/2-inch	5
5	2-inch	20
6	3-inch	5
7	4-inch	5
8	6-inch	5
9	8-inch	1
10	10-inch	0
11	12-inch	0
12	14-inch	0
13	16-inch	0
14	**Subtotal - Commercial**	**43**
	Irrigation	
15	5/8-inch	0
16	3/4-inch	0
17	1-inch	2
18	1 1/2-inch	1
19	2-inch	18
20	3-inch	2
21	4-inch	3
22	6-inch	2
23	8-inch	2
24	10-inch	0
25	12-inch	0
26	14-inch	0
27	16-inch	0
28	**Subtotal - Irrigation**	**30**
29	**Total Customer Accounts**	**73**

2.2.3.3. RECYCLED WATER USE

Table 2-5 shows the recycled water use for the study period. GWP's current structure is discussed in Section 1.5. Due to limited recycled water account growth, the rate study team assumed no account growth and no increase in water use for the rate study period as shown below. Estimates for future variable revenues *under existing rates* are calculated by multiplying the total use for all customers in each tier by the corresponding rate. All values are shown in HCF.

Table 2-5: Projected Recycled Water Use by Customer Class (HCF)

		A
Line No.	Customer Class	Study Period
1	Commercial	346,822
2	Irrigation	163,668
3	**Total - All Use (HCF)**	**510,490**

2.2.4. INFLATIONARY AND WATER PURCHASE COST ASSUMPTIONS

Future O&M costs are reasonably projected using informed assumptions about inflationary factors related to O&M and capital costs. Table 2-6 shows the inflationary categories that were used to escalate GWP's FY 2027 O&M expense budget, which is part of the financial plan. Raftelis assumed the inflationary factors shown in Table 2-6 for the future fiscal years in the rate study. The general inflation factor is in line with the long-term increases in the Consumer Price Index. Utilities inflation was based on the historical increase in electricity for the Los Angeles area from 2020 to 2024. Personnel, Services and Supplies, Equipment, and Internal Services factors were developed in conjunction with GWP staff.

Table 2-6: Inflationary Assumptions

		A
Line No.	Description	Study Period
1	General	3.0%
2	Salary	3.0%
3	Benefits	5.0%
4	Utilities	8.3%
5	Capital	4.0%

GWP buys water from the Metropolitan Water District, which is known as a wholesaler. Table 2-7 shows projected wholesale water purchase cost inflation. Water purchase costs are a function of the volume of water and the wholesale rate escalations shown in Table 2-7. GWP has two potable water sources: groundwater from the San Fernando Basin and Verdugo Basin and purchased imported water from the Metropolitan Water District. GWP has a Water Adjustment Charge that adjusts rates to reflect the variations in the costs of purchased water and pumping power compared to the amounts GWP budgeted during the applicable time period. This WAC will reflect the difference between the assumed water purchase costs and actual water purchase costs.

Table 2-7: Wholesale Water Purchase Cost Inflation

		A	B	C	D	E
Line No.	Description	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
	Water Purchase					
1	MWD Volumetric	As published by MWD	6.6%	8.2%	15.1%	8.3%
2	MWD Capacity	Published Value	11.0%	11.0%	11.0%	11.0%
3	MWD RTS	Published Value	7.7%	7.7%	7.7%	7.7%

Table 2-8 shows the estimated ***production*** in acre feet (AF) for the study period. Note that these values are in AF and must be converted to HCF by multiplying the values shown below by 435.6 before comparing to the total water consumption values shown above in Table 2-3. In addition, water lost in the system results in slightly lower water sold volumes than the volume of water produced.

Table 2-8: Projected Water Supply by Source (AF)

		A	B
Line No.	Description	Study Period	%
1	Groundwater	5,740	27.9%
2	MWD Purchases	14,812	72.1%
3	**Total Water Supply**	**20,552**	**100.0%**

Raftelis used the assumptions shown in Table 2-6 through Table 2-8 to develop GWP's status quo and proposed financial plans which projects revenue and expenses. The financial plan projects annual operating expenses and revenues, capital expenditures, reserve fund balances, and annual debt service coverage ratios to estimate additional rate revenue needed per year. The status quo financial plan highlights GWP's financial condition if it were to spend its operating budget and execute capital projects ***without*** rate increases.

2.2.5. CAPITAL IMPROVEMENT PROGRAM (CIP) PLAN

Table 2-9 shows GWP's proposed CIP[7] for FY 2027 through FY 2031. The study assumes a 50.0% execution factor for FY 2027 which reduces CIP expenses in that year to not only reduce customer bill impacts but also reflect the ambitious number of capital projects that are planned.

[7] The CIP shown accounts for inflation using the inflationary factors shown in Table 2-6.

Table 2-9: Detailed Capital Improvement Program

		A	B	C	D	E
Line No.	Description	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
	Capital Improvement Plan - Inflated					
1	Facility upgrade (pump, reservoir rehab, elec upgrades, valve replacements, bldg & site imp)	$0	$0	$0	$4,369,905	$0
2	Facility upgrade (pump, reservoir rehab, elec upgrades, chlorine dosing)	$0	$0	$14,179,316	$0	$0
3	Facility upgrade (pump, reservoir rehab, elec upgrades, chlorine & ammonia feed system replacement)	$0	$5,962,221	$0	$0	$0
4	Facility upgrade (pump & valve replacement, building repairs, electrical upgrades)	$0	$0	$0	$0	$3,536,016
5	DPR Feasibility Study	$750,000	$0	$0	$0	$0
6	Fire Flow Improvement Program	$1,126,558	$1,634,410	$1,269,271	$3,561,507	$4,094,814
7	Diedrich Reservoir Chemical Storage and Feed Equipment	$0	$0	$0	$1,799,782	$0
8	Glenoaks, Emerald Isle, Cooks Canyon chemical storage, feed equipment, auto-flushers	$0	$0	$0	$0	$5,384,647
9	Permanent Generator Installation	$0	$1,820,349	$3,031,043	$2,249,728	$0
10	Pipeline Replacement Program	$800,000	$7,453,447	$5,374,287	$6,109,702	$9,986,373
11	Pump Station and Pipeline Upgrades (Water's share)	$4,300,000	$0	$0	$0	$0
12	Purple Pipe Extension	$0	$592,800	$0	$0	$0
13	Scholl Canyon Fiber Optic Connection	$70,380	$0	$0	$0	$0
14	GWP Water Scada system Study	$400,000	$0	$0	$0	$0
15	VFD Installation and Upgrades	$0	$0	$0	$281,216	$0
16	AMI System Replacement	$15,300,000	$0	$0	$0	$0
17	FY 2026 CIP Plus Carryover	$12,262,000	$0	$0	$0	$0
18	**Subtotal - All CIP**	**$35,008,938**	**$17,463,227**	**$23,853,917**	**$18,371,841**	**$23,001,850**
19	*CIP Execution Factor*	*50.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*
20	**Total – All CIP After Execution Factor**	**$17,504,469**	**$17,463,227**	**$23,853,917**	**$18,371,841**	**$23,001,850**

2.2.6. DEBT SERVICE

Table 2-10 shows GWP's existing debt service payments.

Table 2-10: Existing Water Debt Service

		A	B	C	D	E
Line No.	Description	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
	2012 Bonds					
1	Principal	$720,000	$750,000	$790,000	$820,000	$860,000
2	Interest	$1,026,769	$1,006,069	$983,569	$959,869	$934,244
3	Subtotal	$1,746,769	$1,756,069	$1,773,569	$1,779,869	$1,794,244
	2020 Bonds Refunding Series					
4	Principal	$1,840,000	$1,885,000	$1,945,000	$2,015,000	$2,245,000
5	Interest	$685,250	$630,050	$554,650	$476,850	$396,250
6	Subtotal	$2,525,250	$2,515,050	$2,499,650	$2,491,850	$2,641,250
7	**Total Existing Debt Service**	**$4,272,019**	**$4,271,119**	**$4,273,219**	**$4,271,719**	**$4,435,494**

2.2.7. RESERVE POLICY

The Financial Plan incorporates funding for reasonable reserves. GWP's current total reserve target is $11.3M, however, this study sets rates to achieve the reserve targets below in Table 2-11 that are in line with industry standards for an agency that bills bi-monthly. In total, the proposed reserve policy calls for an average balance of $34.9M over the study period.

Table 2-11: Proposed Reserve Targets

			A	B	C	D	E
Line No.	Target Reserve	Policy Target	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
1	Operating Reserve	180 Days Cash on Hand	$29,600,323	$30,958,836	$33,055,034	$35,501,214	$38,226,053
2	Rate Stabilization Reserve	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
3	**Total Target Reserve**		**$31,100,323**	**$32,458,836**	**$34,555,034**	**$37,001,214**	**$39,726,053**

2.2.8. STATUS QUO FINANCIAL PLAN (NO RATE INCREASES)

Table 2-12 describes each line item in the financial plan which is shown in Table 2-13 without revenue increases. The purpose of showing the financial plan without revenue increases is to show that revenue is not sufficient to cover operating and capital costs as shown by the net cashflow in line 17. Line 17 shows that the yearly net cashflow is negative every year; meaning that reserves would be depleted quickly.

Table 2-12: Description of Line Items in Financial Plan Cashflow

Category	Line(s)	Description
Rate Revenues	1-3	All revenues from current fixed charges and variable rates, assuming no rate increase. Rate revenue from current rates and charges include revenues from the monthly fixed charge and variable rates for potable and recycled water, Private Fire Charges (where applicable), and Drought Surcharges. Rate revenues were calculated using water use and customer account assumptions from Sections 2.2.2 and 2.2.3.
Interest/All Other Revenues	4-5	Additional revenues which lower the revenue required from rate revenue. All Other Revenues include interest revenue, non-operating revenue, intergovernmental revenue, and any other miscellaneous revenues.
Revenue from Rate Increases	NA	Revenue from proposed rate increases are excluded in Table 2-13 (financial plan without rate increases) but are included in Table 2-16 (line 3), the proposed financial plan with increases.
O&M	7-10	Costs associated with maintenance and operations (O&M), as well as water supply costs. The O&M budget is projected using the inflationary factors discussed in Table 2-6. Administration expenses include general, salary, benefits, and utilities administrative costs, as well as water purchase cost and other related recurring expenses.
Debt	12-13	Costs associated with existing debt service and proposed debt service. Annual debt service includes two revenue bonds: • 2012 Bonds • 2020 Bonds – Refunding Series
Rate-Funded CIP	15	Cash-funded capital projects net of debt proceeds
Net Cashflow	17	Total revenues less total expenses (line 6 minus line 16).
Debt Coverage	18	Equal to the net operating revenue (all revenues less O&M) divided by the total debt service payments (line 14)
Target Coverage	19	The target or minimum required debt coverage value for the calculation in line 18. Maintaining target debt coverage helps assure the utility's credit rating and overall financial stability.

Table 2-13 shows that current rate revenue is insufficient and demonstrates the need for the rate increases that are discussed in the next section and shown in Table 2-14.

Table 2-13: Status Quo Financial Plan

		A	B	C	D	E
Line No.	Description	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
1	Rate Revenues	$48,334,133	$48,420,257	$48,506,811	$48,593,798	$48,681,220
2	Recycled Water Rate Revenues	$1,618,159	$1,618,159	$1,618,159	$1,618,159	$1,618,159
3	Drought Surcharge Revenue	$1,925,867	$0	$0	$0	$0
4	Interest Income	$794,976	$433,137	$0	$0	$0
5	All Other Revenues	$2,091,778	$2,092,990	$2,094,208	$2,095,432	$2,096,663
6	**Subtotal - All Revenues**	**$54,764,913**	**$52,564,543**	**$52,219,178**	**$52,307,390**	**$52,396,042**
7	O&M Expenses	$20,091,952	$21,238,703	$22,866,332	$24,076,279	$25,334,901
8	Purchased Water	$25,000,000	$26,067,588	$28,129,328	$31,296,752	$34,957,980
9	Salaries & Benefits	$14,859,061	$15,396,610	$15,954,874	$16,534,704	$17,136,989
10	Capital Outlay	$71,865	$74,740	$77,729	$80,838	$84,072
11	**Subtotal - O&M**	**$60,022,878**	**$62,777,640**	**$67,028,263**	**$71,988,573**	**$77,513,941**
12	Existing Debt Service	$4,272,019	$4,271,119	$4,273,219	$4,271,719	$4,435,494
13	Proposed Debt Service	$0	$0	$0	$0	$0
14	**Subtotal - Debt Service**	**$4,272,019**	**$4,271,119**	**$4,273,219**	**$4,271,719**	**$4,435,494**
15	**Rate Funded CIP**	**$17,504,469**	**$17,463,227**	**$19,621,613**	**$18,371,841**	**$23,001,850**
16	**Subtotal – All Expenses**	**$81,799,366**	**$84,511,986**	**$90,923,096**	**$94,632,133**	**$104,951,285**
17	**Net Cashflow**	($27,034,453)	($31,947,443)	($38,703,917)	($42,324,743)	($52,555,243)
18	Calculated Debt Coverage	-1.23	-2.39	-3.47	-4.61	-5.66
19	Target Coverage	1.10	1.10	1.10	1.10	1.10

2.2.9. PROPOSED FINANCIAL PLAN AND REVENUE ADJUSTMENTS

Table 2-14 shows the proposed revenue adjustments for the Study period assuming Alternative 2b. The proposed financial plan incorporates the revenue adjustments on January 1 of each fiscal year beginning in FY 2027. The revenue increases are not the same as customer bill impacts, though they approximate them. Customer bill impacts are discussed in Section 7.

Table 2-14: Proposed Revenue Adjustments

		A	B	C	D	E
Line No.	Description	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
1	Effective Date	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
2	Revenue Adjustment	53.0%	11.0%	10.0%	10.0%	7.0%

Table 2-15 shows GWP's proposed debt issuances and annual payments for the study period under Alternative 2b. The proposed debt funds a significant portion of capital projects in the first two years and lowers customer bill increases by allowing GWP to pay for capital over 30 years. Proposed debt service is also shown in line 14 of Table 2-16.

Table 2-15: Proposed Additional Debt and Debt Service

		A	B	C	D	E
Line No.	Description	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
1	Proposed Debt Issuances	$40,000,000	$0	$0	$0	$0
2	Debt Service	$2,602,057	$2,602,057	$2,602,057	$2,602,057	$2,602,057

The revenue from these increases is shown in line 3 of Table 2-16. Positive cashflows in line 18 are years for which GWP funds reserves and negative cashflows are years that deplete reserves. The net cashflow in line 18 produces the ending reserve balances shown in Figure 2-3. The revenue adjustments are designed to reach the reserve targets discussed in Section 2.2.7, shown as a blue line in Figure 2-3. Under the proposed financial plan and rate increases, GWP is projected to meet its debt coverage requirement in all study years as shown in line 19.

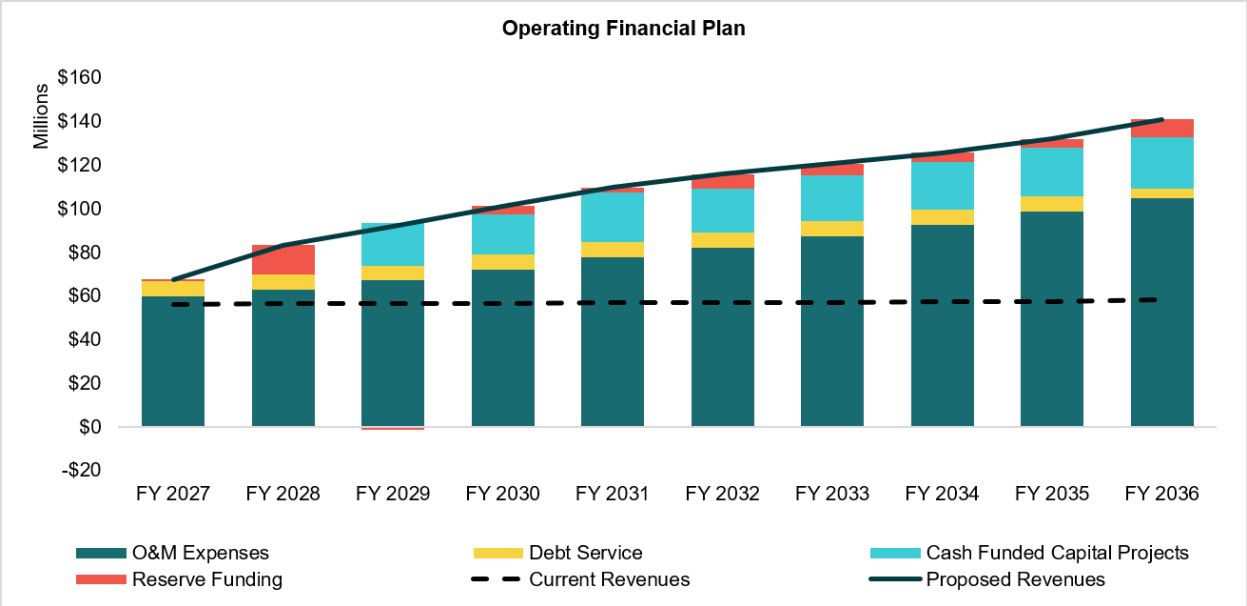
Table 2-16: Proposed Financial Plan

		A	B	C	D	E
Line No.	Description	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
1	Rate Revenues	$48,334,133	$48,420,257	$48,506,811	$48,593,798	$48,681,220
2	Recycled Water Rate Revenues	$1,618,159	$1,618,159	$1,618,159	$1,618,159	$1,618,159
3	Revenue from Rate Increases	$13,237,357	$30,731,093	$39,258,628	$48,280,630	$56,680,661
4	Drought Surcharge Revenue	$1,925,867	$0	$0	$0	$0
5	Interest Income	$345,461	$463,744	$551,427	$565,924	$607,605
6	All Other Revenues	$2,091,778	$2,092,990	$2,094,208	$2,095,432	$2,096,663
7	**Subtotal - All Revenues**	**$67,552,755**	**$83,326,243**	**$92,029,234**	**$101,153,944**	**$109,684,308**
8	O&M	$20,091,952	$21,238,703	$22,866,332	$24,076,279	$25,334,901
9	Purchased Water	$25,000,000	$26,067,588	$28,129,328	$31,296,752	$34,957,980
10	Salaries & Benefits	$14,859,061	$15,396,610	$15,954,874	$16,534,704	$17,136,989
11	Capital Outlay	$71,865	$74,740	$77,729	$80,838	$84,072
12	**Subtotal - O&M**	**$60,022,878**	**$62,777,640**	**$67,028,263**	**$71,988,573**	**$77,513,941**
13	Existing Debt Service	$4,272,019	$4,271,119	$4,273,219	$4,271,719	$4,435,494
14	Proposed Debt Service	$2,602,057	$2,602,057	$2,602,057	$2,602,057	$2,602,057
15	**Subtotal - Debt Service**	**$6,874,076**	**$6,873,176**	**$6,875,276**	**$6,873,776**	**$7,037,551**
16	**Rate Funded CIP**	**$0**	**$0**	**$19,621,613**	**$18,371,841**	**$23,001,850**
17	**Subtotal – All Expenses**	**$66,896,954**	**$69,650,817**	**$93,525,153**	**$97,234,190**	**$107,553,342**
18	**Net Cashflow**	**$655,801**	**$13,675,427**	**($1,495,919)**	**$3,919,754**	**$2,130,965**
19	Calculated Debt Coverage	1.10	2.99	3.64	4.24	4.57
20	Target Coverage	1.10	1.10	1.10	1.10	1.10

2.2.10. FINANCIAL PLAN SHOWN GRAPHICALLY

Figure 2-1 shows the proposed Financial Plan from Table 2-16 in a graphical format. The red area of the bar shows if reserves are being depleted or funded in a particular year. If the red area is below the x axis, such as in FY 2029, it signifies a drawdown of reserves because expenses exceed revenue.

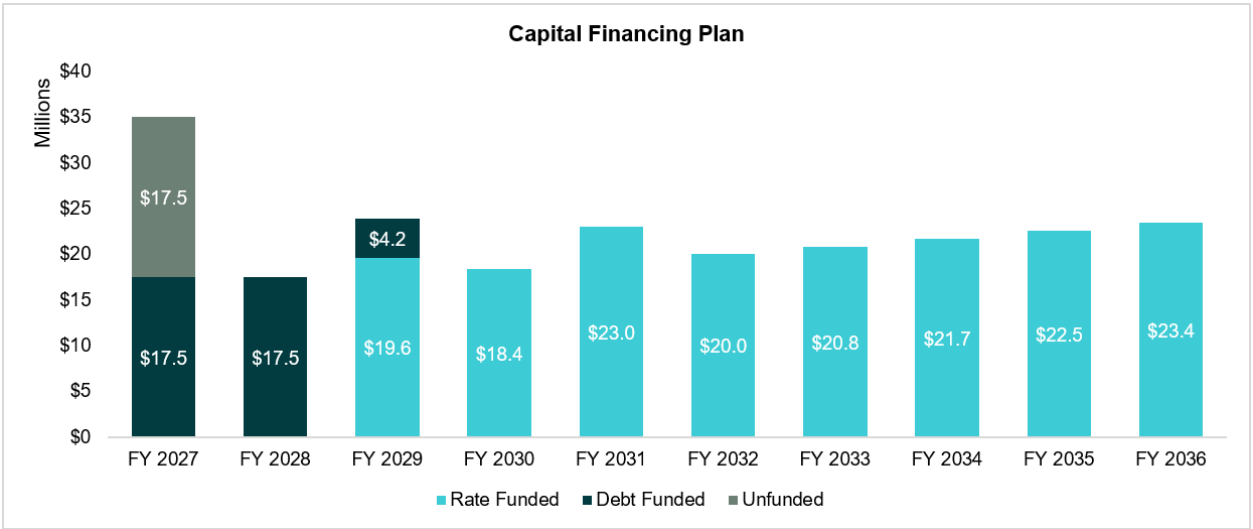
Figure 2-1: Financial Plan



2.2.11. CAPITAL FINANCING PLAN

Figure 2-2 shows the capital financing plan. Light blue bars indicate rate-funded capital projects; dark green bars indicate bond-funded capital projects; gray bars indicate unfunded capital projects.

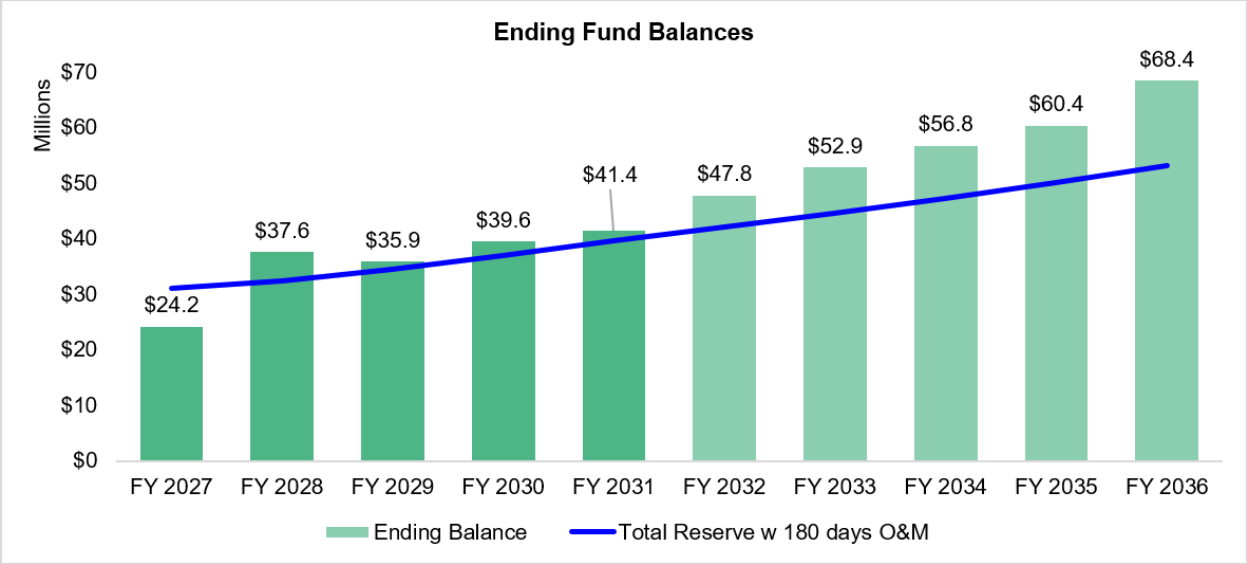
Figure 2-2: Capital Financing Plan



2.2.12. FISCAL YEAR ENDING RESERVE BALANCES

The reserve targets were described in Section 2.2.7. The revenue increases that were incorporated into the financial plan shown in Table 2-16 produce the reserve balances shown in Figure 2-3. The revenue increases were selected so that the ending reserve balances (green bars) reach the reserve target shown by the blue line in Figure 2-3.

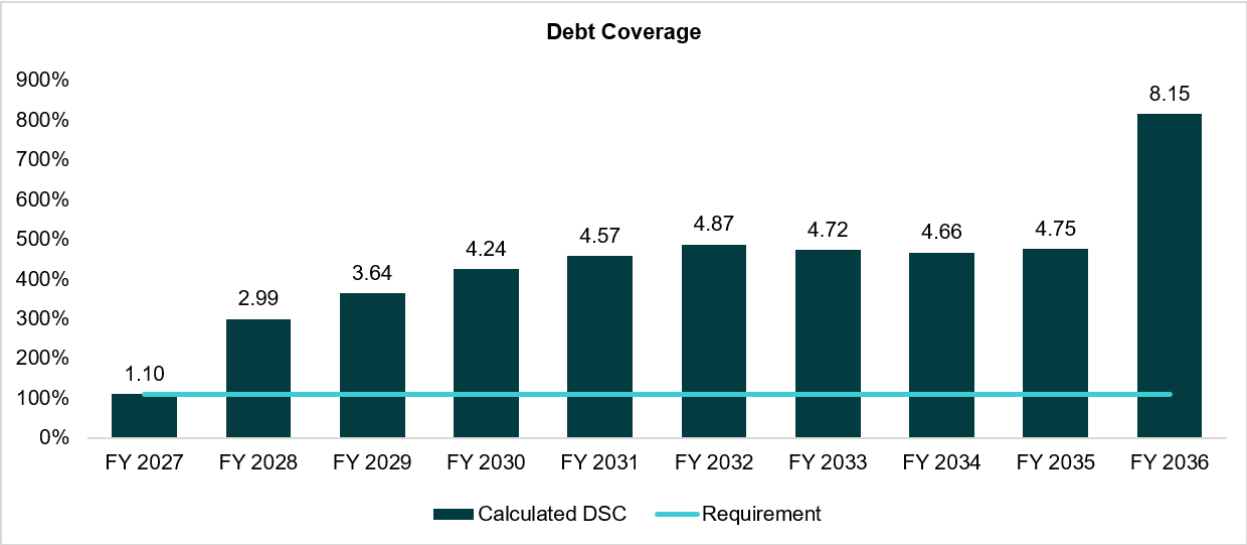
Figure 2-3: FY Ending Reserve Balance



2.2.13. DEBT COVERAGE

As discussed in Section 2.2.9, the proposed financial plan includes a $40M debt issuance. Issuing debt means that GWP will have to meet a debt coverage ratio of 1.10. Figure 2-4 shows the projected debt coverage. The first-year revenue increase of 53% is needed to reach the minimum debt coverage of 1.10.

Figure 2-4: Debt Coverage



3. Water Cost of Service Analysis

3.1. Functionalization of Operating Expenses

A cost of service analysis distributes a utility's revenue requirement (yearly revenue needed to cover operating and capital costs) to each customer class. The first step to do so in a cost of service analysis is to functionalize O&M expenses. Appendix A shows the functionalization of GWP's O&M expenses.

3.2. Allocation of O&M to Cost Components

After the expenses are functionalized, the second step is to allocate the functionalized O&M expenses to the **cost causation components**. The cost causation components are defined in Table 3-1.

Table 3-1: Description of Cost Causation Components

Line	Category	Description
1	Purchased Water	Cost associated with purchasing water from MWD
2	Supply	Costs associated with obtaining water such as operating and maintaining wells
3	Base	Costs associated with serving water under average daily demand. This includes O&M for transmission, distribution and distribution storage facilities.
4	Max Day	Costs associated with serving water during peak water flows which involves the infrastructure required to meet system max day demand (e.g., storage tanks, pumping stations, distribution pipeline size, etc.). Note that Max Day and Max Hour costs were analyzed solely to assess costs associated with providing water at sufficient flows and pressure to fight fires.
5	Max Hour	Costs associated with serving water during peak water flows which involves the infrastructure required to meet system max hour demand (e.g., storage tanks, pumping stations, distribution pipeline size, etc.). Note that Max Day and Max Hour costs were analyzed solely to assess costs associated with providing water at sufficient flows and pressure to fight fires.
6	Meter	Costs associated with, meter installation and maintenance, and other meter-related costs
7	Conservation	Costs associated with customer conservation outreach and other conservation programs.
8	Customer	Costs associated with meter reading, customer billing and customer service.
9	Fire Protection	Costs associated with the capacity to fight fires through public fire hydrants and private fire connections. It can include the maintenance of fire hydrants
10	Recycled Water	Costs associated with providing recycled water service.
11	Pump Zone	Costs associated with pumping water to different elevation zones.
12	General	Costs associated with general administrative expenses.

The cost components are consistent with the AWWA M1 Manual which is widely used in the water industry to perform cost of service analyses.

3.3. Allocation of O&M and Capital to Cost Components

To allocate the O&M expenses (and subsequently the revenue requirement), we must define the base, max day and max hour allocation bases. Table 3-2 shows the system-wide peaking factors. The system-wide peaking factors, taken from GWP's recent Water Master Plan, are used to derive the cost component allocation bases (i.e., percentages) and used in Table 3-3 and Table 3-4. To understand the interpretation of the percentages, we first establish that base costs are costs incurred to meet average daily demand during the year – which is assigned an allocation basis of 1. If the base allocation basis is used to allocate an expense, the costs associated with that expense are to meet average daily demand (base) related costs. Expenses that are allocated to the cost causation components using the max day bases attribute 66.7% (1.00/1.50) of the demand (and therefore costs) to base (average daily demand) use and the remaining 33.3% to maximum day (peaking) use. The formulas to obtain max day and max hour allocations shown in Table 3-2 are as follows:

- Base = 1.00
- Max Day = (1.50-1.00)/2.30
- Max Hour = (2.30-1.50)/2.30

Table 3-2: System-Wide Peaking Factors

		A	B	C	D
Line No.	System Peaking	Factor	Base	Max Day	Max Hour
1	Base	1.00	100.0%		
2	Max Day	1.50	66.7%	33.3%	
3	Max Hour	2.30	43.5%	21.7%	34.8%

Max Day and Max Hour costs (collectively known as extra capacity) were analyzed to assess costs associated with providing water at sufficient flow and pressure to fight fires only. In other words, peaking costs were not used to differentiate costs between customer classes or tiers.

Table 3-3 shows the allocation of the GWP's functionalized O&M expenses to the cost causation components. The percentages shown in lines 1 through 14 are used to allocate the functionalized costs, shown in the lower portion of the table, to each cost causation component. The percentages are based on the allocation basis shown in column A. The allocation basis is selected based on the type of cost for each line item and the proportion of those costs associated with each cost causation component (max day, supply, general, customer, etc.). For example, Transmission & Distribution (line 20) is allocated using the max hour basis; this component of the O&M is therefore allocated in proportion to max hour allocations identified in Table 3-2 and shown in line 6 and 20 of Table 3-3. This is because the transmission and distribution system must be sized and operated to meet max hour demands. Certain cost bases are identical to the cost causation components – such as Meter Maintenance/Meter – and are easily allocated to the cost component with the same (or similar) name. Line 27 shows the result of the allocation of all expenses to the appropriate cost causation components. The operating portion of the revenue requirement is later allocated to the cost causation components using the allocation shown in line 28.

Table 3-3: Allocation of Functionalized FY 2027 O&M Costs to Cost Components

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Line No.	Function	Allocation Basis	Purchased Water	Supply Related	Base	Max Day	Max Hour	Conservation	Customer Service & Billing	Meter Service & Capacity	Fire Protection	Revenue Offset	Recycled Water	Pump Zone	General	Total
1	Purchased Water	Pur. Water	100.0%													**100.0%**
2	Supply Related	Supply		100.0%												**100.0%**
3	Treatment	Max Day			66.7%	33.3%										**100.0%**
4	Pumping	Max Day			66.7%	33.3%										**100.0%**
5	Elevational Pumping	Pumping												100.0%		**100.0%**
6	Trans & Dist	Max Hour			43.5%	21.7%	34.8%									**100.0%**
7	Storage	Max Day			66.7%	33.3%										**100.0%**
8	Customer Service	Billing							100.0%							**100.0%**
9	Meter Maintenance	Meters								100.0%						**100.0%**
10	Conservation	Conservation						100.0%								**100.0%**
11	General/Admin	General													100.0%	**100.0%**
12	Revenue Offset	General										100.0%				**100.0%**
13	Recycled	Recycled											100.0%			**100.0%**
14	Fire Protection	Fire									100.0%					**100.0%**
	Function	Allocation Basis	Purchased Water	Supply Related	Base	Max Day	Max Hour	Conservation	Customer Service & Billing	Meter Service & Capacity	Fire Protection	Revenue Offset	Recycled Water	Pump Zone	General	Total
15	Purchased Water Costs	Pur. Water	$25,667,876													**$25,667,876**
16	Supply Related Costs	Supply		$355,283												**$355,283**
17	Treatment	Max Day			$919,124	$459,562										**$1,378,686**
18	Pumping	Max Day			$1,092,185	$546,093										**$1,638,278**
19	Elevational Pumping	Pumping												$2,328,512		**$2,328,512**
20	Transmission & Distribution	Max Hour			$2,626,167	$1,313,084	$2,100,934									**$6,040,185**
21	Storage	Max Day			$1,317,542	$658,771										**$1,976,314**
22	Customer Service	Billing							$3,445,183							**$3,445,183**
23	Meter Maintenance	Meters								$1,441,280						**$1,441,280**
24	Conservation	Conservation						$166,844								**$166,844**
25	General & Admin	General													$14,304,310	**$14,304,310**
26	Recycled	Recycled											$1,280,127			**$1,280,127**
27	**Total O&M Expenses**		**$25,667,876**	**$355,283**	**$5,955,019**	**$2,977,510**	**$2,100,934**	**$166,844**	**$3,445,183**	**$1,441,280**	**$0**	**$0**	**$1,280,127**	**$2,328,512**	**$14,304,310**	**$60,022,878**
28	Final Operating Allocation		42.8%	0.6%	9.9%	5.0%	3.5%	0.3%	5.7%	2.4%	0.0%	0.0%	2.1%	3.9%	23.8%	

GWP's functionalized assets are also allocated to the same cost components as the O&M expenses as shown in Table 3-4. Capital costs are allocated to the cost components in proportion to the functionalized assets to recognize that all assets need to be refurbished and replaced over time. The allocation basis for each function is based on the operation and sizing of the asset. For example, transmission and distribution assets are sized and operated to meet max hour demand and therefore allocated using the max hour bases. The resulting capital allocation (line 22) is used to allocate the capital portion of the revenue requirement to the cost causation components later in Table 3-13.

Table 3-4: Allocation of Assets to Cost Components

		A	B	C	D	E	F	G	H	I	J	K	L	M	N
Line No.	Assets	Allocation Basis	Supply Related	Base	Max Day	Max Hour	Conservation	Customer Service & Billing	Meter Service & Capacity	Fire Protection	Revenue Offset	Recycled Water	Pump Zone	General	Total
1	Land	General/Adm												100.0%	**100.0%**
2	Supply Related Costs	Supply	100.0%												**100.0%**
3	Treatment	Treatment		66.7%	33.3%										**100.0%**
4	Pumping	Pumping		66.7%	33.3%										**100.0%**
5	Transmission & Distribution	Trans & Dist		43.5%	21.7%	34.8%									**100.0%**
6	Storage	Storage		66.7%	33.3%										**100.0%**
7	Meter Maintenance	Meter							100.0%						**100.0%**
8	General & Admin	General/Adm												100.0%	**100.0%**
9	Fire Protection	Fire								100.0%					**100.0%**
10	Recycled	Recycled										100.0%			**100.0%**
	Assets	Allocation Basis	Supply Related	Base	Max Day	Max Hour	Conservation	Customer Service & Billing	Meter Service & Capacity	Fire Protection	Revenue Offset	Recycled Water	Pump Zone	General	Total
11	Land	General/Adm												$2,543,981	**$2,543,981**
12	Supply Related Costs	Supply	$6,605,182												**$6,605,182**
13	Treatment	Treatment		$7,193,285	$3,596,642										**$10,789,927**
14	Pumping	Pumping		$3,440,276	$1,720,138										**$5,160,414**
15	Transmission & Distribution	Trans & Dist		$75,289,404	$37,644,702	$60,231,523									**$173,165,629**
16	Storage	Storage		$42,219,567	$21,109,784										**$63,329,351**
17	Meter Maintenance	Meter							$2,739,339						**$2,739,339**
18	General & Admin	General/Adm												$16,539,700	**$16,539,700**
19	Fire Protection	Fire								$2,931,644					**$2,931,644**
20	Recycled	Recycled										$8,247,732			**$8,247,732**
21	**Total**		**$6,605,182**	**$128,142,532**	**$64,071,266**	**$60,231,523**	**$0**	**$0**	**$2,739,339**	**$2,931,644**	**$0**	**$8,247,732**	**$0**	**$19,083,681**	**$292,052,899**
22	Capital Allocation (w/o General)		2.4%	46.9%	23.5%	22.1%	0.0%	0.0%	1.0%	1.1%	0.0%	3.0%	0.0%	0.0%	100.0%

Table 3-5 shows the revenue requirement determination for FY 2027, or the rate-setting test year. Line 15 shows the revenue required ***from rates*** – which is the total amount that rates are calculated to collect in Section 4. The revenue requirement is calculated by subtracting revenue offsets (line 11) and adding adjustments (line 14) from the *total* revenue requirements (line 5). The *total* revenue requirement, shown in line 5, includes operating and maintenance (O&M) costs, water purchase costs, existing and proposed debt service and rate funded CIP, however, in this case it is zero because the CIP is being funded by debt proceeds ($17M) instead of cash in the test year. Lines 6-11 show the revenue offsets from non-rate revenues. The adjustment shown in line 13 is to annualize the revenue requirement because the rates cover a fiscal year. The adjustment in line 12 ensures the revenue requirement accounts for the annual cash balances and that the impending rate adjustment will take place mid-way through the fiscal year.

Table 3-5: Revenue Requirement Determination for FY 2027

		A	B	C
Line No.	Description	Operating	Capital	Total
	Revenue Requirements			
1	O&M Expenses	$35,022,878		$35,022,878
2	Purchased Water	$25,000,000		$25,000,000
3	Debt Service		$6,874,076	$6,874,076
4	Rate Funded CIP		$0	$0
5	**Total - Revenue Requirements**	**$60,022,878**	**$6,874,076**	**$66,896,954**
	Less Revenue Offsets			
6	Drought Surcharge Revenue	$1,925,867		$1,925,867
7	Miscellaneous Revenue	$1,849,372		$1,849,372
8	Rental Income	$242,406		$242,406
9	Non-Operating Revenues		$0	$0
10	Interest Income		$345,461	$345,461
11	**Total Revenue Offsets**	**$4,017,645**	**$345,461**	**$4,363,106**
	Plus Adjustments			
12	Adjustment for Cash Balance		$655,801	$655,801
13	Adjustment to Annualize Rate Increase	$13,237,357		$13,237,357
14	**Total Adjustments**	**$13,237,357**	**$655,801**	**$13,893,158**
15	**Total Revenue to be Recovered from Rates**	**$69,242,590**	**$7,184,416**	**$76,427,006**

3.4. Equivalent Meters

The concept of equivalent meters is used to allocate meter-related and capacity related costs to customers based on meter size. By using equivalent meters instead of a total meter count, costs are allocated based on meter size. Larger meters impose greater demands on the system and are more expensive to install, maintain, and replace than smaller meters. Equivalent meters are used in calculating a portion of the monthly fixed meter charge known as meter maintenance and capacity.

The total number of equivalent meters is calculated based on AWWA published hydraulic capacities for each meter size as shown in Table 3-6. Equivalent meters represent the potential demand on the water system in terms of the base meter size. A ratio of hydraulic capacity is calculated by dividing large meter capacities by the base meter capacity. The capacity ratio is calculated using the meter capacity in gallons per minute (gpm) provided in the AWWA M1 Manual Principles of Water Rates, Fees, and Charges (7th Edition).

The base meter is the most common smallest meter, in this case, a 3/4-inch meter. The capacity ratio (in column B of Table 3-6) is proportional to the potential flow through each meter size as established by the AWWA hydraulic capacity for each meter size. For example, the potential flow through a 4-inch meter (630 gpm) is 21 times that of a 3/4-inch meter (30 gpm), and therefore, the meter capacity component of the fixed meter charge is 21 times that of the 3/4-inch meter. The ratio for the three smallest meters are the same because in the near future, the 5/8-inch meters will be removed and replaced with either 3/4-inch or 1-inch meters. Additionally, the 3/4-inch meter is the most numerous meter, therefore it is the base meter by which the other ratios are calculated. Recent fire codes affect the sizing of Single-Family meters; often requiring a 1-inch meter for Single-Family when a 3/4-inch meter would suffice for domestic purposes. For this reason, many water agencies have chosen to make the 1-inch meter the same ratio as the 3/4-inch meter. Table 3-6 shows the total equivalent meters (column C), calculated by taking the number of meters by size (column A) and multiplied by the corresponding capacity ratio (column B).

Table 3-6: All Customers Equivalent Meters

		A	B	C
Line No.	Meter Size	Customer Counts by Meter Size	3/4" Base Factor Capacity Ratio	Equivalent Meters
	All Customers			
1	5/8-inch	4,908	1.00	4,908
2	3/4-inch	17,794	1.00	17,794
3	1-inch	9,020	1.00	9,020
4	1 1/2-inch	2,049	3.33	6,830
5	2-inch	1,795	5.33	9,573
6	3-inch	137	11.67	1,598
7	4-inch	90	21.00	1,890
8	6-inch	39	43.33	1,690
9	8-inch	15	80.00	1,213
10	10-inch	0	126.67	0
11	12-inch	0	166.67	0
12	**Total**	**35,847**		**54,517**

3.5. Allocation of Private Fire Line Costs

Water systems provide water at sufficient flows and pressure to fight fires. There are two types of fire service: private fire protection that provides water for fires to private buildings and sprinkler systems and public fire protection for firefighting, visible as hydrants on the street. The potential flow through private fire lines and public hydrants is used to determine the share of total fire service costs for each.

Table 3-7 shows the equivalent potential demand from *private* fire lines. Each fire connection size has a potential fire flow demand factor similar to, but not the same as, the hydraulic capacity factor of a water meter[8]. The Hazen-Williams equation is used to calculate the potential demand by raising the pipeline's diameter (column A) to the power of 2.63[9] and is shown in column B. The potential demand is compared to that of a 6-inch line as shown in column D. Column D is then multiplied by the total number of private fire lines of each size (column C) to yield the total potential demand for each connection size (column E). The private fire potential demand is compared to public potential demand in Table 3-9, through 6-inch fire hydrants, to allocate total fire protection costs.

Table 3-7: Private Fire Line Connection Potential Demand

		A	B	C	D	E
Line No.	Meter Size	Diameter	Demand Factor	No. of Private Fire Connections	Fire Ratio Compared to 6" Diameter	Potential Demand
	Private Fire					
1	5/8-inch	0.625	0.29	0	0.00	0
2	3/4-inch	0.75	0.47	0	0.00	0
3	1-inch	1	1.00	1	0.01	0.01
4	1 1/2-inch	1.5	2.90	0	0.03	0.00
5	2-inch	2	6.19	58	0.06	3.23
6	3-inch	3	17.98	4	0.16	0.65
7	4-inch	4	38.32	884	0.34	304.32
8	6-inch	6	111.31	288	1.00	288.00
9	8-inch	8	237.21	100	2.13	213.10
10	10-inch	10	426.58	1	3.83	3.83
11	12-inch	12	689.04	3	6.19	18.57
12	**Total**			**1,339**		**832**

Table 3-8 shows the potential demand from *public* fire hydrants. The Hazen-Williams equation is used to calculate potential demand by raising the pipeline's diameter (column B) to the power of 2.63[10]. The potential demand in proportion to a 6-inch line (column D) is then multiplied by the total number of hydrants of each

[8] Total demand for fire connections is based on line diameter and is not the same as potential demand based on meter size.

[9] Hazen-Williams equation, per AWWA M1 Manual.

[10] Hazen-Williams equation, per AWWA M1 Manual.

connection size (column A) to yield the total potential demand (column E). The public potential fire capacity is compared to the private fire capacity to allocate fire protection costs as shown in Table 3-9.

Table 3-8: Public Fire Hydrant Potential Demand

		A	B	C	D	E
Line No.	Meter Size	No. of Hydrant Connections	Diameter	Demand Factor	Fire Ratio Compared to 6" Diameter	Equivalent Potential Demand
	Public Fire					
1	4-inch	1	4.00	38.32	0.34	0.34
2	6-inch	3,138	6.00	111.31	1.00	3,138.00
3	**Total**	**3,139**				**3,138.34**

Table 3-9 summarizes the potential demand through private fire connections (Table 3-7) and public hydrants (Table 3-8). The potential fire demand and therefore cost allocation to public and private fire (column A), is calculated by dividing the equivalent potential demand (line 1 and line 2, column A) by the total potential demand (line 3, column A). Approximately seventy-nine percent of fire capacity, and therefore costs relate to public fire and will be recovered through the monthly fixed meter charges. The remaining twenty-one percent is attributable to private fire service and will be recovered through private fire service charges.

Table 3-9: Allocation of Fire Protection Costs

		A
Line No.	Description	Potential Demand per Connection
1	Total Private Fire Demand	832
2	Total Public Fire Demand	3,138
3	**Total Potential Fire Demand**	**3,970**
4	Percent Allocated to Private Fire Protection	**20.9%**
5	Percent Allocated to Public Fire Protection	**79.1%**

3.6. Projected Water Use under Proposed Rate Structure

Table 3-10 shows the projected water use for FY 2027. Raftelis obtained water use data from FY 2024.

Table 3-10: Projected Water Use by Customer Class (HCF), Proposed Structure

		A
Line No.	Class/Tier	FY 2027 (Test Year)
	Potable Water	
1	**Single Family**	
2	Tier 1	2,083,602
3	Tier 2	1,169,818
4	**Single Family Subtotal**	**3,253,420**
5	**Multi Family**	
6	Tier 1	1,872,498
7	Tier 2	1,678,088
8	**Multi-Family Subtotal**	**3,550,586**
9	**Commercial**	
10	Tier 1	1,054,356
11	Tier 2	506,463
12	**Commercial Subtotal**	**1,560,819**
13	**Irrigation**	
14	Tier 1	68,875
15	Tier 2	125,075
16	**Irrigation Subtotal**	**193,950**
17	**Potable Sales Subtotal**	**8,558,776**
18	**Recycled Water**	
19	**Commercial**	346,822
20	**Irrigation**	163,668
21	**Recycled Sales Subtotal**	**510,490**
22	**Total Retail Sales/All Use (HCF)**	**9,069,266**

3.7. Units of Service

The end goal of a cost-of-service analysis is to distribute the revenue requirement to each customer class and to do so Raftelis must calculate unit costs by cost component, which requires the calculation of the units of service. The distribution of the revenue requirement will use the percentages shown at the bottom of Table 3-3 and Table 3-4.

Table 3-11 shows the derivation of the units of service which are used in calculating unit costs. Note that the derivation of the max day and max hour units (columns D and G) are solely calculated to assess costs associated with firefighting capacity.

Projected FY 2027 water use by customer class and tier (column A) was divided by 365 days to determine daily use (column B). Max day capacity (column D) was determined by multiplying the average daily use by the corresponding max day peaking factors shown in column C. The peaking factors were obtained from GWP's Water Master Plan. Extra capacity in column E is the difference between max day capacity (column D) and average daily use (column B). Max hour total capacity (column G) is average daily use multiplied by the peaking factors in column F. The extra capacity in column H is the difference between max hour total capacity (column G) and max day total capacity (column D). The total number of equivalent meters and fire lines (columns I and J, calculated earlier in Table 3-6 and Table 3-7) are also restated. Column K shows the number of customers. The units of service, shown in lines 6 and 7 for potable and recycled water respectively, are used to calculate unit costs which are used to derive rates.

Table 3-11: Derivation of FY 2027 Units of Service

		A	B	C	D	E	F	G	H	I	J	K
Line No.	Customer Class	Annual Use (HCF)	Average Daily Use (HCF/day)	Peaking Factor	Max Day Total Capacity (HCF/day)	Extra Capacity (HCF/day)	Peaking Factor	Max Hour Total Capacity (HCF/day)	Extra Capacity (HCF/day)	Number of Equiv. Meters	Number of Equiv. Fire Lines	Number of Customers
1	Single Family	3,253,420	8,913	1.50	13,370	4,457	2.30	20,501	7,131	24,469	-	23,468
2	Multi-Family	3,550,586	9,728	1.50	14,591	4,864	2.30	22,374	7,782	17,140	-	8,523
3	Commercial	1,560,819	4,276	1.50	6,414	2,138	2.30	9,835	3,421	11,743	-	3,447
4	Irrigation	193,950	531	1.50	797	266	2.30	1,222	425	1,164	-	409
5	Private Fire	-	-	-	-	-	-	-	-	-	832	1,339
6	**Subtotal Potable Water**	**8,558,776**	**23,449**	**-**	**35,173**	**11,724**	**-**	**53,932**	**18,759**	**54,517**	**832**	**37,186**
7	**Recycled Water**	**510,490**	**1,399**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
8	Commercial	346,822	950	-	-	-	-	-	-	585	-	43
9	Irrigation	163,668	448	-	-	-	-	-	-	434	-	30
10	**Total**	**9,069,266**	**24,847**	**-**	**-**	**-**	**-**	**-**	**-**	**55,537**	**832**	**37,259**

3.8. Fire Line Service Capacity

Table 3-12 shows the assumptions used to estimate the total capacity to fight fires in HCF / day in line 9. It is derived by assuming the duration and flows shown for three fires. Column A, lines 1, 2, 3, 4, 5 and 6 show the fire flow assumptions for three fires. The first fire is assumed to last 3 hours and have a maximum flow rate of 2,500 gpm. The second fire is assumed to last 4 hours and have a flow rate of 3,000 gpm. The third fire is assumed to last 4 hours and have a maximum flow rate of 4,000 gpm. The first fire is the flow and duration associated with a single family home fire and other two fires are the flow and duration for commercial/industrial type fires. These assumptions are used to calculate the fire capacity shown in line 9. Max day capacity demanded by fire protection is determined by converting the total hours and flows in line 7 and 8, to HCF per day (line 9). Column B line 9 is the Max Hour fire demand in excess of Max Day and the units are in HCF per day. Lines 11, 12 and 13 are the extra capacity for each type of service as shown. Line 14 shows total extra capacity for fire and potable demands. Dividing lines 11, 12, and 13 into line 14, yields line 15, 16, and 17 which are the proportions of extra capacity for public and private firefighting and potable demands. These proportions are used to assign costs to public and private fire service.

Table 3-12: Calculation of Fire Line Service Capacity

		A	B
Line No.	Fire Capacity Calculations	Max Day Extra Capacity	Max Hour Demand in Excess of Max Day
1	Hours for Fire #1	3	
2	Gallons/Minute	2,500	2,500
3	Hours for Fire #2	4	
4	Gallons/Minute	3,000	3,000
5	Hours for Fire #3	4	
6	Gallons/Minute	4,000	4,000
7	**Total Hours**	**11**	
8	**Total Flows (Gallons/Minute)**	**9,500**	**9,500**
9	**Capacity Demanded for Fire (HCF/day)**	**8,382**	**9,906**
10	Allocation of Fire Capacity to Public Fire	79.1%	79.1%
	System Capacity		
11	Public Fire Capacity	6,626	7,831
12	Private Fire Capacity	1,756	2,075
13	Potable Demand Capacity	11,724	18,759
14	**Total**	**20,107**	**28,665**
	Proportion of System Capacity		
15	Public Fire Capacity	33.0%	27.3%
16	Private Fire Capacity	8.7%	7.2%
17	Potable Demand Capacity	58.3%	65.4%
18	**Total**	**100.0%**	**100.0%**

3.9. Allocation of Revenue Requirement to Cost Components and Calculation of Unit Costs

Table 3-13 shows the initial revenue requirement allocation to cost components. Lines 1-3 show the allocation of FY 2027 operating and capital revenue requirements from Table 3-5 to the cost components using the O&M and capital allocations determined earlier in Table 3-3 and Table 3-4, respectively. Lines 5-6 in Table 3-13 show the following reallocations to public and private fire capacity, respectively. The reallocations in lines 5-6 are as follows:

- Line 5 in Table 3-13 allocates public fire capacity from the Max Day and Max Hour cost components to the Meter Service & Capacity component (column H) which is recovered through the fixed charge (derived in the following section). The amounts in column D and E, line 5 are based on the fire calculations in section 3.8. The percentages in line 15 of Table 3-12 are multiplied by the Max Day and Max Hour values shown in line 4 of Table 3-13. This total is reallocated to column H ($2.8M).
- Line 6 in Table 3-13 allocates private fire protection costs to the private fire cost component in column N. The calculations are very similar to the public fire protection allocation above. The percentages in line 16 of Table 3-12 are multiplied by column D, line 6 and column E, line 6 in Table 3-13. This yields the cost for private fire protection shown in column N, line 6.

After the fire reallocations, we reallocate the general costs ($16.5M) across the other cost components. Line 8 shows each cost components percent of the total costs excluding general costs (column M) and private fire capacity (column N). To allocate the general costs, the $16.5M general costs are multiplied by the percentages for each cost component, resulting in line 9. Line 9 is then added to line 7 to reach the total initial adjusted cost of service for each cost component in line 10.

Table 3-13: Initial Allocation of FY 2027 Revenue Requirement to Cost Components

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Line No.	Description	Purchased Water	Supply Related	Base	Max Day	Max Hour	Conservation	Customer Service & Billing	Meter Service & Capacity	Direct Public Fire Protection	Revenue Offset	Recycled Water	Pump Zone	General	Private Fire Capacity	Total
1	Operating Revenue Requirement	$29,714,207	$411,290	$6,893,780	$3,446,890	$2,432,129	$193,146	$3,988,289	$1,668,486	$0	$0	$1,481,929	$2,695,583	$16,559,268	$0	$69,484,996
2	Capital Revenue Requirement	$0	$173,845	$3,372,649	$1,686,324	$1,585,264	$0	$0	$72,098	$77,159	$0	$217,076	$0	$0	$0	$7,184,416
3	Revenue Offsets	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$242,406	$0	$0	$0	$0	-$242,406
4	**Total - Cost of Service**	**$29,714,207**	**$585,135**	**$10,266,428**	**$5,133,214**	**$4,017,393**	**$193,146**	**$3,988,289**	**$1,740,584**	**$77,159**	**-$242,406**	**$1,699,005**	**$2,695,583**	**$16,559,268**	**$0**	**$76,427,006**
5	Public Fire Capacity Collected Via Meter Charge	$0	$0	$0	-$1,691,682	-$1,097,508	$0	$0	$2,789,190	$0	$0	$0	$0	$0	$0	$0
6	Private Fire Capacity Via Private Fire Charge	$0	$0	$0	-$448,321	-$290,856	$0	$0	$0	$0	$0	$0	$0	$0	$739,177	$0
7	**Total After Fire Reallocations**	**$29,714,207**	**$585,135**	**$10,266,428**	**$2,993,211**	**$2,629,029**	**$193,146**	**$3,988,289**	**$4,529,775**	**$77,159**	**-$242,406**	**$1,699,005**	**$2,695,583**	**$16,559,268**	**$739,177**	**$76,427,006**
8	Percent of Cost Component to Total Costs	50.3%	1.0%	17.4%	5.1%	4.4%	0.3%	6.7%	7.7%	0.1%	-0.4%	2.9%	4.6%			
9	Allocation of General Costs	$8,321,622	$163,870	$2,875,168	$838,265	$736,274	$54,092	$1,116,941	$1,268,588	$21,609	-$67,887	$475,815	$754,912	-$16,559,268	$0	$0
10	**Total - Adjusted Cost of Service**	**$38,035,829**	**$749,005**	**$13,141,596**	**$3,831,475**	**$3,365,303**	**$247,237**	**$5,105,230**	**$5,798,362**	**$98,768**	**-$310,293**	**$2,174,820**	**$3,450,495**	**$0**	**$739,177**	**$76,427,006**

After the initial allocation to cost components as shown in Table 3-13, a few final adjustments are made. The adjustments below are to allocate a proportion of fixed costs to the meter maintenance and capacity component so that they may be collected by the fixed monthly meter charges. These adjustments are to recognize the fixed costs to operate and maintain the system so that it is ready to serve water upon demand. These are sometimes called Ready to Serve costs collected through a Ready to Serve charge. GWP calls it the monthly fixed meter charge. The adjustments are as follows:

- Base: 80% of base costs are allocated to the Meter Maintenance & Capacity (a fixed charge component).
- Max Day: 50% of Max Day costs are allocated to the Meter Maintenance & Capacity (a fixed charge component).
- Max Hour: 50% of Max Hour costs are allocated to the Meter Maintenance & Capacity (a fixed charge component).

These reallocations are presented below in Table 3-14. The reallocation maintains the current proportion of revenue that is collected through fixed charges; approximately 35%.

Table 3-14: Final Allocation of FY 2027 Revenue Requirement to Cost Components

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Line No.	Cost Components	Cost of Service	Purchased Water	Supply Related	Base	Max Day	Max Hour	Conservation	Customer Service & Billing	Meter Maintenance & Capacity	Revenue Offset	Recycled Water	Pump Zone	General	Private Fire Capacity	Total
1	Purchased Water	$38,035,829	100%													100%
2	Supply Related	$749,005		100%												100%
3	Base	$13,141,596			20%					80%						100%
4	Max Day	$3,831,475			50%	0%				50%						100%
5	Max Hour	$3,365,303			50%		0%			50%						100%
6	Conservation	$247,237						100%								100%
7	Customer Service & Billing	$5,105,230							100%							100%
8	Meter Service & Capacity	$5,798,362								100%						100%
9	Direct Fire Protection	$98,768								100%						100%
10	Revenue Offset	-$310,293									100%					100%
11	Recycled Water	$2,174,820										100%				100%
12	Pump Zone	$3,450,495											100%			100%
13	General	$0												100%		100%
14	Private Fire	$739,177													100%	100%
15	**Total**	**$76,427,006**	**$38,035,829**	**$749,005**	**$6,226,708**	**$0**	**$0**	**$247,237**	**$5,105,230**	**$20,008,797**	**-$310,293**	**$2,174,820**	**$3,450,495**	**$0**	**$739,177**	**$76,427,006**

These reallocations result in the final derivation of cost of service below in line 1 of Table 3-15 below. GWP will collect roughly the same proportion of revenue through the fixed monthly meter charge as it does currently (approximately 35%). The unit costs in line 3 are derived by dividing the cost of service in line 1 by the units of service in line 2. These unit costs are used to derive the rates in Section 4.

Table 3-15: Derivation of Unit Cost

		A	B	C	D	E	F	G	H	I	J	K	L	M
Line No.	Description	Purchased Water	Supply Related	Base	Max Day	Max Hour	Conservation	Customer Service & Billing	Meter Maintenance & Capacity	Revenue Offset	Recycled Water	Pump Zone	Private Fire Capacity	Total
1	Cost of Service	$38,035,829	$749,005	$6,226,708	$0	$0	$247,237	$5,105,230	$20,008,797	-$310,293	$2,174,820	$3,450,495	$739,177	**$76,427,006**
2	Units of Service	8,558,776	8,558,776	8,558,776	11,724	18,759	8,558,776	37,259	54,517	3,956,100	510,490	8,558,776	832	
3	**Unit Cost**	**$4.44**	**$0.09**	**$0.73**	**$0.00**	**$0.00**	**$0.03**	**$137.02**	**$367.02**	**-$0.08**	**$4.26**	**$0.40**	**$888.75**	
4	Unit	HCF	HCF	HCF	HCF	HCF	HCF	Potable & Recycled Customers	Annual potable equiv. meters	Residential Tier 1 Use	HCF	HCF	Equiv. Private Fire Lines	

4. Water Rate Derivation

4.1. Existing Monthly Potable Water Fixed Meter Charges

GWP currently bills its potable water customers a fixed meter charge as shown in Table 4-1.

Table 4-1: Current Monthly Potable Water Fixed Meter Charges

Line No.	Description	Current Charges
	Fixed Meter (All Customers)	
1	5/8-inch	$19.37
2	3/4-inch	$27.02
3	1-inch	$42.37
4	1 1/2-inch	$80.67
5	2-inch	$126.64
6	3-inch	$272.22
7	4-inch	$486.76
8	6-inch	$1,000.11
9	8-inch	$1,842.94
10	10-inch	$2,915.64
11	12-inch	$3,835.10

4.2. Existing Monthly Private Fire Line Fixed Charges

Private fire line fixed charges recover costs associated with operating and maintaining a system that is ready to provide water at certain pressures and flows to fight fires. These costs are proportional to the diameter of the fire line. Table 4-2 shows the current fire service fixed charges.

Table 4-2: Current Monthly Private Fire Line Fixed Charges

Line No.	Description	Current Charges
	Private Fire Line Service	
1	5/8-inch	$4.47
2	3/4-inch	$4.47
3	1-inch	$4.47
4	1 1/2-inch	$5.25
5	2-inch	$6.63
6	3-inch	$11.55
7	4-inch	$20.04
8	6-inch	$50.52
9	8-inch	$103.07
10	10-inch	$182.11
11	12-inch	$291.65

4.3. Existing Potable Water Variable Charges ($/HCF)

Table 4-3 shows the current volumetric rates, their tier allotment and rates by customer class and tier. All values are volumetric in $/HCF. GWP also currently charges a drought surcharge of $0.45/HCF to all volumetric rates to all classes.

Table 4-3: Current Potable Water Variable Rates ($/HCF)

Line No.	Description	Allotment (HCF)	Current Rates
	Variable Rates ($/HCF)		
	Single Family		
1	Tier 1	0 - 8	$2.80
2	Tier 2	9 - 15	$4.11
3	Tier 3	> 15	$4.28
	Multi-Family		
4	Tier 1	Number of dwelling units X 6 (HCF)	$2.80
5	Tier 2	All additional HCF	$4.11
	Commercial		
6	Tier 1	All units	$4.04
	Irrigation		
7	Tier 1	All units	$4.19

4.4. Proposed Potable Water Fixed Meter Charges

There are three cost components that comprise the monthly fixed meter charge: meter maintenance & capacity, public fire protection, and customer service. A description of each component of the fixed charge and the calculation of the monthly fixed service charge for each meter size is shown below.

4.4.1. METER CAPACITY COMPONENT

The meter service & capacity component recovers costs associated with maintaining and servicing meters as well as fixed costs associated with having a water system ready to deliver water. These costs increase as the meter size increases and are proportional to the AWWA hydraulic capacity ratios shown in column B of Table 3-6. The capacity ratios, which are a function of a meter's safe maximum flow rate, are used to increase the meter service component for larger capacity meters as shown in column C of Table 4-4. This assumes that the potential capacity demanded is proportional to the potential flow through each meter size as established by the AWWA hydraulic capacity ratios. The ratios shown in column B of Table 4-4 show the ratio of potential flow through each meter size compared to the flow through a 3/4-inch meter. The 3/4-inch meter is used as the base since it is the most common meter size. The unit rates derived in line 3, column H of Table 3-15, is multiplied by the corresponding capacity ratio in column B of Table 4-4 and divided by 12 months to derive the meter component of the monthly fixed charge for at each meter size.

4.4.2. CUSTOMER SERVICE COMPONENT

The unit rate for customer costs was derived earlier in column G of Table 3-15. Unlike meter and public fire costs, this component is not dependent on meter size because the costs to bill are the same regardless of meter size. The unit cost is shown in line 3, column G of Table 3-15.

4.4.3. PROPOSED FY 2027 MONTHLY POTABLE WATER FIXED METER CHARGES

Table 4-4 shows the derivation of the monthly water fixed meter charge. The total fixed meter charge is calculated by summing the meter and customer components for each meter size (columns C and D). The proposed rates (which include the 53% rate revenue increase shown for FY 2027 in Table 2-14) are shown in column E. A main reason for the larger increase for the smaller meters is the increase in the customer service charge, which is applied equally to all meter sizes, therefore redistributing costs to the smaller meters.

Table 4-4: Derivation of Monthly Potable Water Fixed Meter Charges by Meter Size

		A	B	C	D	E	F	G	H
Line No.	Meter Size	Number of Meters	Capacity Ratio	Meter Capacity	Monthly Customer Service	Proposed Monthly Charge	Current Monthly Charge	Difference ($)	Difference (%)
1	5/8-inch	4,908	1.00	$30.58	$11.42	**$42.00**	$19.37	$22.63	116.8%
2	3/4-inch	17,794	1.00	$30.58	$11.42	**$42.00**	$27.02	$14.98	55.5%
3	1-inch	9,020	1.00	$30.58	$11.42	**$42.00**	$42.37	-$0.37	-0.9%
4	1 1/2-inch	2,049	3.33	$101.95	$11.42	**$113.37**	$80.67	$32.70	40.5%
5	2-inch	1,795	5.33	$163.12	$11.42	**$174.54**	$126.64	$47.90	37.8%
6	3-inch	137	11.67	$356.82	$11.42	**$368.24**	$272.22	$96.02	35.3%
7	4-inch	90	21.00	$642.28	$11.42	**$653.70**	$486.76	$166.94	34.3%
8	6-inch	39	43.33	$1,325.35	$11.42	**$1,336.77**	$1,000.11	$336.66	33.7%
9	8-inch	15	80.00	$2,446.80	$11.42	**$2,458.21**	$1,842.94	$615.27	33.4%
10	10-inch	-	126.67	$3,874.09	$11.42	**$3,885.51**	$2,915.64	$969.87	33.3%
11	12-inch	-	166.67	$5,097.49	$11.42	**$5,108.91**	$3,835.10	$1,273.81	33.2%
12	**Total**	**35,847**							

4.5. Proposed Private Fire Line Fixed Charges

Table 4-5 shows the derivation of private fire line fixed charges. The unit rate per equivalent private fire meter, per year was calculated in Table 3-15, column L, line 3. This unit rate is divided by twelve billing periods to get a unit rate per month. For a 6-inch fire connection, the rate is shown in column C, line 8. The resulting rate is multiplied by the fire capacity ratios (normalized to a 6-inch meter) shown in column B below. The resulting rate is shown in column C. The customer service charge is added to the private capacity charge to calculate the FY 2027 proposed monthly private fire line fixed charge shown in column E of Table 4-5.

Table 4-5: Derivation of Private Fire Line Monthly Fixed Charges by Meter Size

		A	B	C	D	E	F	G	H
Line No.	Fire Line Size	Number of Meters	Fire Capacity Ratio Compared to 6"	Private Fire Capacity Charge	Customer Service	Proposed Monthly Charge	Current Monthly Charge	Difference ($)	Difference (%)
1	5/8-inch	-	0.00	$0.19	$11.42	**$11.61**	$4.47	$7.14	159.7%
2	3/4-inch	-	0.00	$0.31	$11.42	**$11.73**	$4.47	$7.26	162.4%
3	1-inch	1	0.01	$0.67	$11.42	**$12.08**	$4.47	$7.61	170.2%
4	1 1/2-inch	-	0.03	$1.93	$11.42	**$13.35**	$5.25	$8.10	154.3%
5	2-inch	58	0.06	$4.12	$11.42	**$15.54**	$6.63	$8.91	134.4%
6	3-inch	4	0.16	$11.96	$11.42	**$23.38**	$11.55	$11.83	102.4%
7	4-inch	884	0.34	$25.50	$11.42	**$36.91**	$20.04	$16.87	84.2%
8	6-inch	288	1.00	$74.06	$11.42	**$85.48**	$50.52	$34.96	69.2%
9	8-inch	100	2.13	$157.83	$11.42	**$169.25**	$103.07	$66.18	64.2%
10	10-inch	1	3.83	$283.83	$11.42	**$295.25**	$182.11	$113.14	62.1%
11	12-inch	3	6.19	$458.46	$11.42	**$469.88**	$291.65	$178.23	61.1%
12	**Total**	**1,339**							

4.6. Proposed Potable Water Variable Rates

4.6.1. TIER DEFINITIONS

Currently, only Single family and Multi-Family customers are tiered, with Single Family customers having three tiers and Multi-Family customers having two tiers. GWP proposes to implement a two-tier rate structure for all customer classes with the tiers proportional to meter size. The proposed tier breakpoint for the smaller meters (5/8-inch, 3/4-inch, and 1-inch) is ten HCF. The ratio for the three smallest meters are the same because in the near future, the 5/8-inch meters will be removed and replaced with either 3/4-inch or 1-inch meters. Additionally, the 3/4-inch meter is the most numerous meter, therefore it is the base meter by which the other ratios are calculated. Recent fire codes affect the sizing of Single-Family meters; often requiring a 1-inch meter for fire flow. For this reason, the 3/4-inch and 1-inch meters have the same capacity ratio. According to FY 2023-2024 customer billing data, the average use in March and April (the two months with the combined lowest bimonthly usage) is 10 HCF. Average winter use is a reasonable estimate for indoor water use and is a common method to set the 1st tier breakpoint. The tier breakpoints for the larger meter sizes are increased by the AWWA hydraulic capacity ratio for each meter size to determine the tier allotment in tier 1. The base meter is the 3/4-inch meter with a hydraulic capacity of 30 gpm. The hydraulic capacity for a 3-inch meter is 350 gpm. Thus, the AWWA hydraulic capacity factor for a 3-inch meter is 350 divided by 30, which results in 11.67. To calculate the tier 1 breakpoint for a 3-inch meter, we multiply ten HCF by 11.67, which results in 117 HCF tier 1 breakpoint. Tier 2 is any use greater than tier 1. The resulting tier allocations are shown below in Table 4-6.

Table 4-6: Proposed Monthly Tier Allotments (HCF)

		A	B	C
Line No.	Meter Size	Hydraulic Capacity Ratio	Tier 1 Allotment (HCF)	Tier 2 Allotment (HCF)
1	5/8-inch	1.00	10	>10
2	3/4-inch	1.00	10	>10
3	1-inch	1.00	10	>10
4	1 1/2-inch	3.33	33	>33
5	2-inch	5.33	53	>53
6	3-inch	11.67	117	>117
7	4-inch	21.00	210	>210
8	6-inch	43.33	433	>433
9	8-inch	80.00	800	>800
10	10-inch	126.67	1,267	>1,267
11	12-inch	166.67	1,667	>1,667

4.6.2. VOLUMETRIC RATE DERIVATION

The variable rate recovers the following cost components: supply costs, base costs (costs to serve average demand), conservation costs and a revenue offset. Earlier, in Table 3-14, lines 4 and 5, a portion of max day and max hour costs were reallocated to the base cost component to be collected through the volumetric rate. The unit rate for each of the above cost components was derived in Table 3-15, line 3. The variable rate is described and calculated in the sections below.

4.6.3. SUPPLY RATES

Table 4-7 derives the unit cost of the supply rates by source. GWP obtains groundwater from the San Fernando Basin and Verdugo Basin and imports water from MWD. The unit rate for each source is calculated as the supply cost (line 4), divided by the estimated volume for each source (line 3). The water supply cost (line 4) for groundwater and MWD water was derived in the COS section in Table 3-14 (columns B and C, line 15), and shown in line 4, columns A and B in Table 4-7.

Table 4-7: Derivation of Unit Rates for Supply Costs by Source ($/HCF)

		A	B	C
Line No.	Differentiated Water Supply Calculation	Groundwater	MWD	Total
1	Supply by Source (AF)	5,740	14,812	20,552
2	Percent from Source	28%	72%	100%
3	Estimated Volume Sold (HCF)	2,390,258	6,168,518	8,558,776
4	Total Water Supply Costs	$749,005	$38,035,829	$38,784,835
5	**Unit Cost ($ / HCF)**	**$0.31**	**$6.17**	**$4.53**

4.6.4. SUPPLY RATES BY TIER

Table 4-8 derives the supply rate by tier. The rate by tier is shown in column H. It is derived by dividing the total cost of water by tier (column G) by the total volume sold in each tier (column D). As shown in column B, the demand in tier 1 is served by groundwater. There is not enough groundwater to meet the full demand of tier 1 customers, and therefore the remaining demand is met by MWD water as shown in column C, line 2. The total cost to serve water to tier 1 customers is derived in columns E and F. It is the unit rate for each source, shown in green and derived in Table 4-7, multiplied by the volume from each source in columns B and C. The cost to serve tier 2 customers is derived in the same way as tier 1 customers, however the source for tier 2 water is MWD, as shown in column C, line 3. Therefore, the supply rate for tier 2 is higher than tier 1 as shown in column H.

Table 4-8: Derivation of Supply Rate by Tier

		A	B	C	D	E	F	G	H
Line No.	Customer Class	Annual Use (HCF)	Groundwater	MWD	Total Use	Groundwater Cost	MWD Cost	Total Cost	Supply Unit Cost
						E=B x $0.31	F=C x $6.17		H=G/D
1	**All Classes**	**8,558,776**	**2,390,258**	**6,168,518**	**8,558,776**	**$749,005**	**$38,035,829**	**$38,784,835**	**$4.53**
2	Tier 1	5,079,331	2,390,258	2,689,073	5,079,331	$749,005	$16,581,153	$17,330,158	$3.41
3	Tier 2	3,479,444	-	3,479,444	3,479,444	$0	$21,454,677	$21,454,677	$6.17

4.6.5. BASE RATE

The base unit rate was developed previously in line 3, column C of Table 3-15. Table 4-9 shows the calculation of the base rate. Base costs include a portion of the reallocated Max Day and Max Hour costs. The cost of service for the base component (column B) is divided by the potable use (column C) to derive the base rate in column D. The costs in column B are the same as those in column D, line 15 of Table 3-14.

Table 4-9: Derivation of Base Unit Rate

	A	B	C	D
Line No.	Cost Component	Cost of Service	Unit of Service (HCF)	Unit Cost ($/HCF)
1	Base	$6,226,708	8,558,776	**$0.73**

4.6.6. CONSERVATION RATE

Table 4-10 shows the calculation of the conservation rate. Conservation rates recover costs associated with conservation programs. The cost of service for conservation (column B) is divided by the potable use (column C) to derive the conservation rate in column D. The cost in column B is equal to the conservation cost in column G, line 15 of Table 3-14.

Table 4-10: Derivation of Conservation Unit Rate

	A	B	C	D
Line No.	Cost Component	Cost of Service	Unit of Service (HCF)	Unit Cost ($/HCF)
1	Conservation	$247,237	8,558,776	**$0.03**

4.6.7. REVENUE OFFSET

Table 4-11 shows the calculation of the revenue offset rate. The revenue offset rate was derived in column I of Table 3-15. The revenue offset is rental income that is applied to tier 1. The cost of service for the revenue offset (column B) is divided by the total residential tier 1 usage (column C) to derive the revenue offset rate in column D.

Table 4-11: Derivation of Revenue Offset Unit Rate

	A	B	C	D
Line No.	Cost Component	Cost of Service	Unit of Service (HCF)	Unit Rate ($/HCF)
1	Revenue Offset	-$310,293	3,956,100	**-$0.08**

4.6.8. FINAL POTABLE RATE DERIVATION

Table 4-12 shows the final rate derivation, for the FY 2027 test year, by customer class and tier. Proposed rates were calculated by summing the various components (from Section 4.6) listed in columns A through D of Table 4-12. Proposed variable rates are shown in column E; current rates and the dollar difference to proposed rates are shown in columns F and G, respectively. All values shown below are in $/HCF and reflect the 53% revenue increase for FY 2027 from Table 2-14.

Table 4-12: Final Derivation of Variable Rates by Customer Class/Tier ($/HCF)

		A	B	C	D	E	F	G	H
Line No.	Description	Supply	Base	Conservation	Revenue Offset (Rental Income)	Proposed Charge	Current Charge	Difference ($)	Difference (%)
1	**Single Family**								
2	Tier 1	$3.41	$0.73	$0.03	-$0.08	**$4.09**	$2.80	$1.29	46.1%
3	Tier 2	$6.17	$0.73	$0.03	$0.00	**$6.92**	$4.11	$2.81	68.4%
4	Tier 3						$4.28	N/A	N/A
5	**Multi-Family**								
6	Tier 1	$3.41	$0.73	$0.03	-$0.08	**$4.09**	$2.80	$1.29	46.1%
7	Tier 2	$6.17	$0.73	$0.03	$0.00	**$6.92**	$4.11	$2.81	68.4%
8	**Commercial**								
9	Tier 1	$3.41	$0.73	$0.03	$0.00	**$4.17**	$4.04	$0.13	3.2%
10	Tier 2	$6.17	$0.73	$0.03	$0.00	**$6.92**	$4.04	$2.88	71.3%
11	**Irrigation**								
12	Tier 1	$3.41	$0.73	$0.03	$0.00	**$4.17**	$4.19	-$0.02	-0.5%
13	Tier 2	$6.17	$0.73	$0.03	$0.00	**$6.92**	$4.19	$2.73	65.2%

4.7. Proposed Pump Zone Rates

The proposed pump zone rates, derived in Table 4-13, are designed to recover costs to pump water to customers in different elevations zones. GWP provided the pumping costs by zone shown in column C.

Table 4-13 shows the derivation of the pump zone rates in column D. It is the total cost to pump to each zone in column C, divided by the total water use billed in that zone plus water use that passes through that zone shown in column B. The total pumping rate for each zone is the sum of the rate for that zone plus any zones below it. In other words, it is cumulative. The final cumulative rate for each zone is shown in column E. For example, a customer in pump zone 1 will pay just the pump zone 1 rate, while a customer in pump zone 7 will pay the pump zone rate in each zone as shown column E, line 7.

Table 4-13: Derivation of Pump Zone Rates

		A	B	C	D	E	F
Line No.	Pump Zone	Use by Pump Zone	Total Use Billed in Zone + Use That Passes Through It (HCF)	Test Year (2027) Total Pumping Costs	Pumping Rate $/HCF	Total Pumping Rate	Revenue
1	1 (724')	5,368,147	8,558,776	$426,723	$0.05	$0.05	$268,407
2	2 (968')	1,246,501	3,190,629	$622,418	$0.20	$0.25	$311,625
3	3 (1,290')	1,060,879	1,944,127	$1,156,378	$0.59	$0.84	$891,139
4	4 (1,666')	519,357	883,248	$877,846	$0.99	$1.83	$950,424
5	5 (2,000')	204,020	363,891	$174,452	$0.48	$2.31	$471,285
6	6 (2,400')	150,511	159,871	$177,186	$1.11	$3.42	$514,749
7	7 (2,483')	9,360	9,360	$15,492	$1.66	$5.08	$47,547
8	**Total - Use (HCF)**	**8,558,776**	**15,109,901**	**$3,450,495**			**$3,455,176**

5. Recycled Water Rate Derivation

5.1. Existing Recycled Water Fixed Meter Charges

GWP currently bills its recycled water customers a fixed meter charge as shown in Table 5-1.

Table 5-1: Current Monthly Recycled Water Fixed Meter Charges

		A
Line No.	Meter Size	Current Charges
1	5/8-inch	$13.00
2	3/4-inch	$17.48
3	1-inch	$26.43
4	1 1/2-inch	$48.82
5	2-inch	$75.70
6	3-inch	$160.80
7	4-inch	$286.20
8	6-inch	$586.23
9	8-inch	$1,078.86
10	10-inch	$1,705.85
11	12-inch	$2,243.26
12	14-inch	$2,243.26
13	16-inch	$2,243.26

5.2. Existing Recycled Water Variable Charges ($/HCF)

Table 5-2 shows the current volumetric rate. All values are volumetric in $/HCF.

Table 5-2: Current Recycled Water Variable Rates ($/HCF)

Line No.	Description	Allotment (HCF)	Current Rate
1	Recycled Customers	All units	$2.84

5.3. Proposed Recycled Water Rates

Table 5-3 shows that approximately 87% of recycled water expenses are O&M related and 13% are capital related. The allocation of the recycled revenue requirement in column C is in proportion to the O&M and capital expenses shown in column A. The recycled revenue requirement (From Table 3-15, column J, line 1) is multiplied by the allocations in column B to determine the recycled revenue requirement for O&M and capital in column C.

Table 5-3: Derivation of Recycled Water Revenue Requirement Allocation

		A	B	C
Line No.	Description	Recycled Expenses	% of Expenses	Allocated Recycled Revenue Requirement
1	**Total Recycled Expenses**			**$2,174,820**
2	O&M	$1,481,929	87.2%	$1,896,951
3	Capital	$217,076	12.8%	$277,870
4	**Total**	**$1,699,005**	**100.0%**	**$2,174,820**

Table 5-4 shows the derivation of the meter charge for the small meters (5/8-inch, 3/4-inch and 1-inch) for the recycled water monthly service charge. GWP proposes to collect sixty-five percent of capital expenses through the meter charge in proportion to meter size. Sixty-five percent is multiplied by the capital recycled revenue requirement from Table 5-3, column C, line 3 to yield the revenue requirement for the meter charge as shown in column B. The capital expense in column B is divided by the equivalent meters in column C to calculate the yearly meter charge in column D. The yearly meter charge is divided by twelve months to calculate the monthly fixed meter charge in column E.

Table 5-4: Derivation of Monthly Recycled Water Fixed Meter Charge

	A	B	C	D	E
Line No.	% of Capital Included in Meter Charge	Capital Expense Recovered Through Meter Charge	Equivalent Meters	Yearly Fixed Meter Charge	Monthly Fixed Meter Charge
1	65%	$180,615	1,020	$177.13	$14.76

Table 5-5 shows the derivation of the monthly recycled water fixed meter charge by meter size. The monthly recycled meter charge, as calculated in Table 5-4, column E, line 1 is multiplied by the meter capacity ratio in column B to yield the monthly meter charge shown in column C. The proposed monthly fixed meter charge (column E) is the sum of the meter charge in column C and the annual customer service and billing charge in column D. The customer service and billing charge (column D) is the same as that for potable water.

Table 5-5: Derivation of Monthly Recycled Water Fixed Meter Charges

		A	B	C	D	E	F	G	H
Line No.	Meter Size	Number of Meters	Capacity Ratio	Meter	Monthly Customer Service & Billing	Proposed Monthly Charge	Current Monthly Charge	Difference ($)	Difference (%)
1	5/8-inch	-	1.00	$14.76	$11.42	**$26.18**	$13.00	$13.18	101%
2	3/4-inch	-	1.00	$14.76	$11.42	**$26.18**	$17.48	$8.70	50%
3	1-inch	4	1.00	$14.76	$11.42	**$26.18**	$26.43	-$0.25	-1%
4	1 1/2-inch	6	3.33	$49.20	$11.42	**$60.62**	$48.82	$11.80	24%
5	2-inch	38	5.33	$78.73	$11.42	**$90.14**	$75.70	$14.44	19%
6	3-inch	7	11.67	$172.21	$11.42	**$183.63**	$160.80	$22.83	14%
7	4-inch	8	21.00	$309.98	$11.42	**$321.40**	$286.20	$35.20	12%
8	6-inch	7	43.33	$639.64	$11.42	**$651.06**	$586.23	$64.83	11%
9	8-inch	3	80.00	$1,180.88	$11.42	**$1,192.30**	$1,078.86	$113.44	11%
10	10-inch	-	126.67	$1,869.72	$11.42	**$1,881.14**	$1,705.85	$175.29	10%
11	12-inch	-	166.67	$2,460.16	$11.42	**$2,471.58**	$2,243.26	$228.32	10%
12	**Total**	**73**							

5.4. Proposed Recycled Water Variable Rates

Table 5-6 shows the volumetric revenue requirement for the recycled water rates. The Meter Charge Revenue Requirement from Table 5-4 is subtracted from the Recycled Water Total Revenue Requirement to calculate the Recycled Water Variable Revenue Requirement.

Table 5-6: Derivation of Recycled Water Variable Revenue Requirement

	A	B	C
Line No.	Total Revenue Requirement	Meter Charge Revenue	Variable Revenue Requirement
1	$2,174,820	$180,615	**$1,994,205**

Table 5-7Table 5-7 shows the derivation of the recycled water variable rate. The variable revenue requirement from Table 5-6 (column C) is divided by the recycled water usage (column A) to calculate the proposed rate (column C).

Table 5-7: Derivation of Recycled Water Volumetric Rates

		A	B	C	D	E	F
Line No.	Description	Usage (HCF)	Variable Revenue Requirement	Proposed Rate ($/ HCF)	Current Charge	Difference ($)	Difference (%)
1	**Recycled Water Rate**	510,490	$1,994,205	**$3.91**	$2.84	$1.07	37.7%

6. Proposed Five-Year Rates

6.1. Proposed Monthly Potable Water Fixed Meter Charges

Table 6-1 shows the proposed monthly water fixed meter charges by meter size for FY 2027 through FY 2031. The Fixed Charge for FY 2027 was derived in Section 4.4. The charges for the out years are derived by escalating the FY 2027 charge by the revenue increases shown in Table 2-14.

Table 6-1: Proposed Monthly Potable Water Fixed Meter Charges

Monthly Potable Water Fixed Meter Charges	Proposed	Proposed	Proposed	Proposed	Proposed
Meter Size	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
5/8-inch	$42.00	$46.62	$51.28	$56.41	$60.36
3/4-inch	$42.00	$46.62	$51.28	$56.41	$60.36
1-inch	$42.00	$46.62	$51.28	$56.41	$60.36
1 1/2-inch	$113.37	$125.84	$138.42	$152.26	$162.92
2-inch	$174.54	$193.74	$213.11	$234.42	$250.83
3-inch	$368.24	$408.75	$449.63	$494.59	$529.21
4-inch	$653.70	$725.61	$798.17	$877.99	$939.45
6-inch	$1,336.77	$1,483.81	$1,632.19	$1,795.41	$1,921.09
8-inch	$2,458.21	$2,728.61	$3,001.47	$3,301.62	$3,532.73
10-inch	$3,885.51	$4,312.92	$4,744.21	$5,218.63	$5,583.93
12-inch	$5,108.91	$5,670.89	$6,237.98	$6,861.78	$7,342.10

6.2. Proposed Monthly Private Fire Line Fixed Charges

Table 6-2 shows the proposed monthly private fire line fixed charges for FY 2027 through FY 2031. The private fire line fixed charges for FY 2027 were derived in Section 4.5. The out-year charges are derived by escalating the FY 2027 charges by the revenue increases shown in Table 2-14.

Table 6-2: Proposed Monthly Private Fire Line Fixed Charges

Monthly Private Fire Line Fixed Charges	Proposed	Proposed	Proposed	Proposed	Proposed
Meter Size	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
5/8-inch	$11.61	$12.89	$14.18	$15.60	$16.69
3/4-inch	$11.73	$13.02	$14.32	$15.75	$16.85
1-inch	$12.08	$13.41	$14.75	$16.23	$17.37
1 1/2-inch	$13.35	$14.82	$16.30	$17.93	$19.19
2-inch	$15.54	$17.25	$18.98	$20.88	$22.34
3-inch	$23.38	$25.95	$28.55	$31.41	$33.61
4-inch	$36.91	$40.97	$45.07	$49.58	$53.05
6-inch	$85.48	$94.88	$104.37	$114.81	$122.85
8-inch	$169.25	$187.87	$206.66	$227.33	$243.24
10-inch	$295.25	$327.73	$360.50	$396.55	$424.31
12-inch	$469.88	$521.57	$573.73	$631.10	$675.28

6.3. Proposed Potable Water Variable Rates

Table 6-3 shows the potable water variable rates for FY 2027 through FY 2031. The variable rates for FY 2027 were derived in Section 4.6. The rates for the out-years are derived by escalating the FY 2027 rates by the revenue increases shown in Table 2-14.

Table 6-3: Proposed Potable Water Variable Rates ($/HCF) for All Classes

Potable Water	Proposed	Proposed	Proposed	Proposed	Proposed
Volumetric Rates	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
Single Family					
Tier 1	$4.09	$4.54	$4.99	$5.49	$5.87
Tier 2	$6.92	$7.68	$8.45	$9.30	$9.95
Multi-Family					
Tier 1	$4.09	$4.54	$4.99	$5.49	$5.87
Tier 2	$6.92	$7.68	$8.45	$9.30	$9.95
Commercial					
Tier 1	$4.17	$4.63	$5.09	$5.60	$5.99
Tier 2	$6.92	$7.68	$8.45	$9.30	$9.95
Irrigation					
Tier 1	$4.17	$4.63	$5.09	$5.60	$5.99
Tier 2	$6.92	$7.68	$8.45	$9.30	$9.95

6.4. Proposed Pump Zone Rates

Table 6-4 shows the proposed pump zone rates. The pump zone rates were derived in Section 4.7. The out-year rates are derived by escalating the FY 2027 rates by the revenue increase shown in Table 2-14.

Table 6-4: Proposed Pump Zone Rates ($/HCF)

Pump Zone Rates	Proposed	Proposed	Proposed	Proposed	Proposed
Pump Zone	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
1 (724')	$0.05	$0.06	$0.06	$0.07	$0.07
2 (968')	$0.25	$0.28	$0.31	$0.34	$0.36
3 (1,290')	$0.84	$0.93	$1.03	$1.13	$1.21
4 (1,666')	$1.83	$2.03	$2.23	$2.46	$2.63
5 (2,000')	$2.31	$2.56	$2.82	$3.10	$3.32
6 (2,400')	$3.42	$3.80	$4.18	$4.59	$4.91
7 (2,483')	$5.08	$5.64	$6.20	$6.82	$7.30

6.5. Proposed Monthly Recycled Water Fixed Meter Charges

Table 6-5 shows the proposed monthly recycled water fixed meter charges for FY 2027 through FY 2031. The recycled water fixed meter charges for FY 2027 were derived in Section 5.3. The charges for the out-years are derived by escalating the FY 2027 rates by the revenue increases shown in Table 2-14.

Table 6-5: Proposed Monthly Recycled Water Fixed Meter Charges

Monthly Recycled Water Fixed Meter Charges	Proposed	Proposed	Proposed	Proposed	Proposed
Meter Size	Jan 1, 2027	Jan 1, 2028	Jan 1, 2029	Jan 1, 2030	Jan 1, 2031
5/8-inch	$26.18	$29.06	$31.97	$35.17	$37.63
3/4-inch	$26.18	$29.06	$31.97	$35.17	$37.63
1-inch	$26.18	$29.06	$31.97	$35.17	$37.63
1 1/2-inch	$60.62	$67.29	$74.02	$81.42	$87.12
2-inch	$90.14	$100.06	$110.07	$121.08	$129.56
3-inch	$183.63	$203.83	$224.21	$246.63	$263.89
4-inch	$321.40	$356.75	$392.43	$431.67	$461.89
6-inch	$651.06	$722.68	$794.95	$874.45	$935.66
8-inch	$1,192.30	$1,323.45	$1,455.80	$1,601.38	$1,713.48
10-inch	$1,881.14	$2,088.07	$2,296.88	$2,526.57	$2,703.43
12-inch	$2,471.58	$2,743.45	$3,017.80	$3,319.58	$3,551.95
14-inch	$3,701.66	$4,108.84	$4,519.72	$4,971.69	$5,319.71
16-inch	$4,931.74	$5,474.23	$6,021.65	$6,623.82	$7,087.49

6.6. Proposed Recycled Water Variable Rates

Table 6-6 shows the proposed recycled water variable rates for FY 2027 through 2031. The recycled water variable charges for FY 2027 were derived in Section 5.4. The out-year rates were derived by escalating the FY 2027 rates by the revenue increases shown in Table 2-14.

Table 6-6: Proposed Recycled Water Variable Rates ($/HCF)

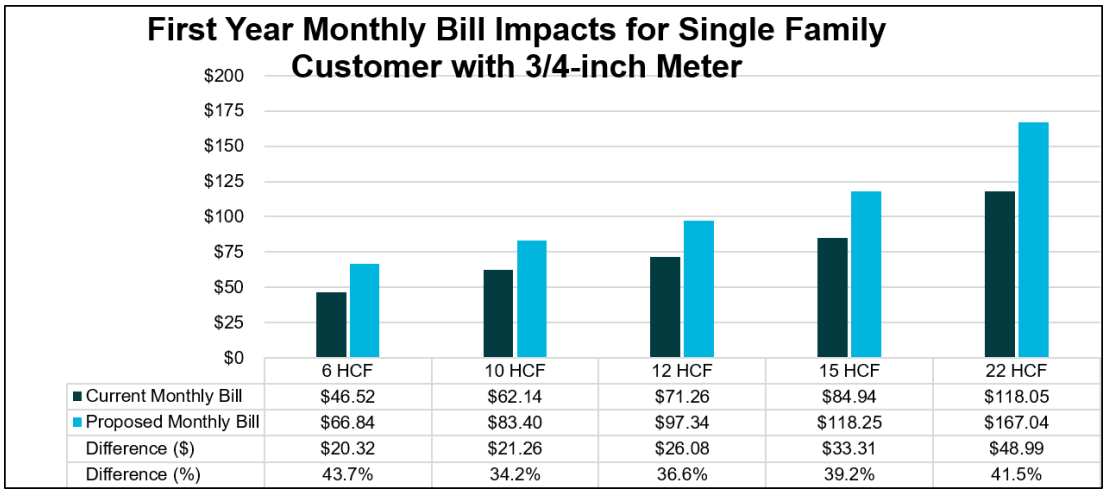
Recycled Water Volumetric Charges	Proposed Jan 1, 2027	Proposed Jan 1, 2028	Proposed Jan 1, 2029	Proposed Jan 1, 2030	Proposed Jan 1, 2031
Recycled Water	$3.91	$4.34	$4.77	$5.25	$5.62

7. Water Bill Impacts

7.1. Single Family Residential Bill Impacts

Figure 7-1 shows a Single Family Residential customer with a 3/4-inch (the most common meter size) monthly bill impacts for various use points for the first year of the rate setting period. For Single Family Residential customers, the average monthly use is 12 HCF. The bill impacts shown in Figure 7-1 through Figure 7-6, assume that the customers are in Pump Zone 1. Bill impacts for an average customer by pump zone are shown in Appendix B. The rate impacts for future years are the same as the revenue adjustments stated in Table 2-14. The below bill impacts (for all classes) include the current drought charge of $0.45 per HCF. Including the current drought surcharge, for the average single-family customer using 12 HCF, yields a bill increase of $26.08.

Figure 7-1: Single Family 3/4-inch Monthly Bill Impacts for FY 2027

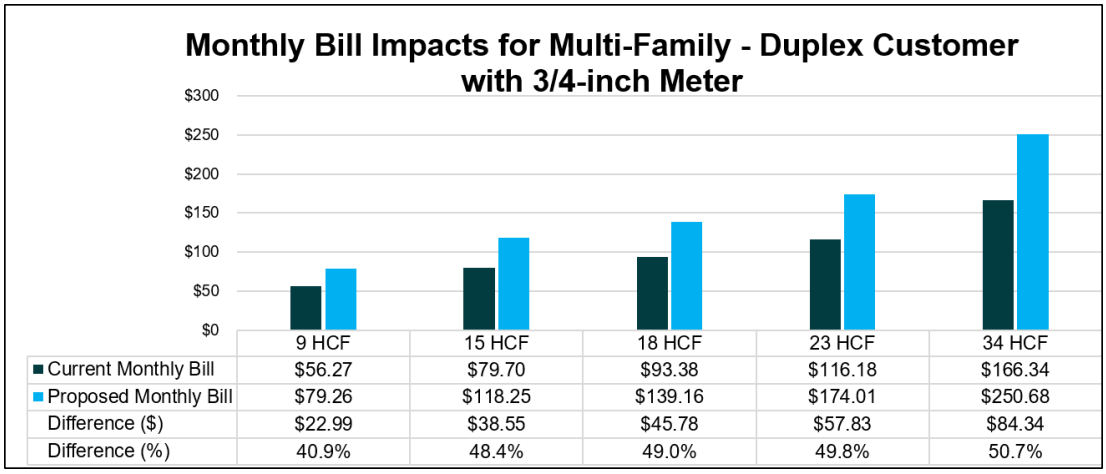


	6 HCF	10 HCF	12 HCF	15 HCF	22 HCF
Current Monthly Bill	$46.52	$62.14	$71.26	$84.94	$118.05
Proposed Monthly Bill	$66.84	$83.40	$97.34	$118.25	$167.04
Difference ($)	$20.32	$21.26	$26.08	$33.31	$48.99
Difference (%)	43.7%	34.2%	36.6%	39.2%	41.5%

7.2. Multi-Family Residential Bill Impacts

Figure 7-2 shows the monthly bill impacts for a Multi-Family duplex with a 3/4-inch meter (the most common meter size for two units) at various use points.

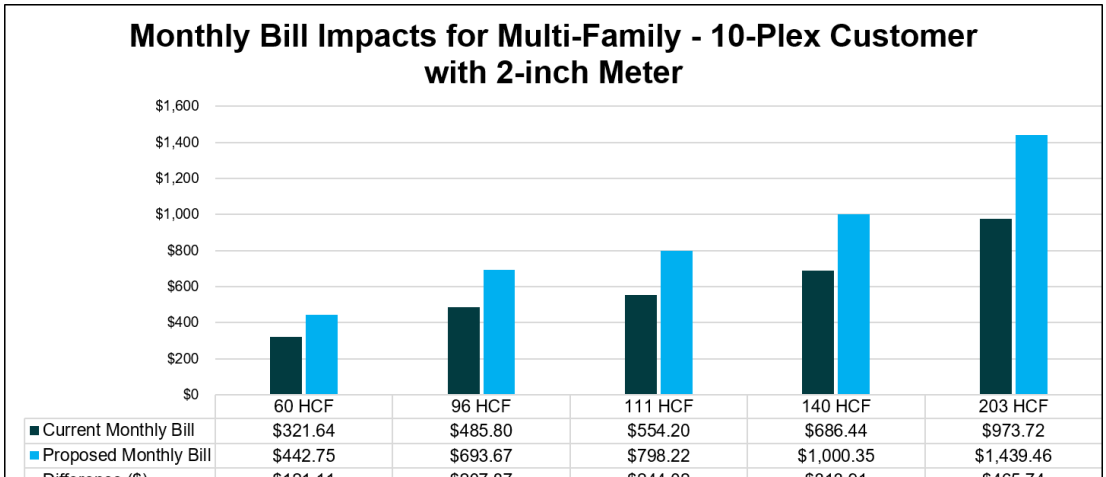
Figure 7-2: Multi-Family 3/4-inch Duplex Monthly Bill Impacts for FY 2027



	9 HCF	15 HCF	18 HCF	23 HCF	34 HCF
Current Monthly Bill	$56.27	$79.70	$93.38	$116.18	$166.34
Proposed Monthly Bill	$79.26	$118.25	$139.16	$174.01	$250.68
Difference ($)	$22.99	$38.55	$45.78	$57.83	$84.34
Difference (%)	40.9%	48.4%	49.0%	49.8%	50.7%

Figure 7-3 shows the monthly bill impacts for Multi-Family customer with ten dwelling units and a 2-inch meter at various use points.

Figure 7-3: Multi-Family 2-inch 10-Plex Monthly Bill Impacts for FY 2027

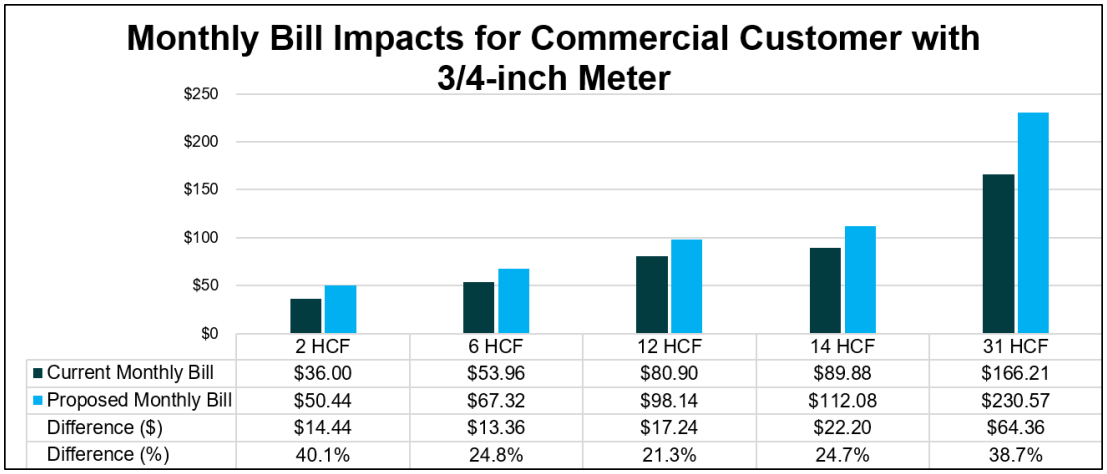


	60 HCF	96 HCF	111 HCF	140 HCF	203 HCF
Current Monthly Bill	$321.64	$485.80	$554.20	$686.44	$973.72
Proposed Monthly Bill	$442.75	$693.67	$798.22	$1,000.35	$1,439.46
Difference ($)	$121.11	$207.87	$244.02	$313.91	$465.74
Difference (%)	37.7%	42.8%	44.0%	45.7%	47.8%

7.3. Commercial Bill Impacts

Figure 7-4 shows the monthly bill impacts for Commercial 3/4-inch customers (the most common commercial meter size) at various use points.

Figure 7-4: Commercial 3/4-inch Monthly Bill Impacts for FY 2027

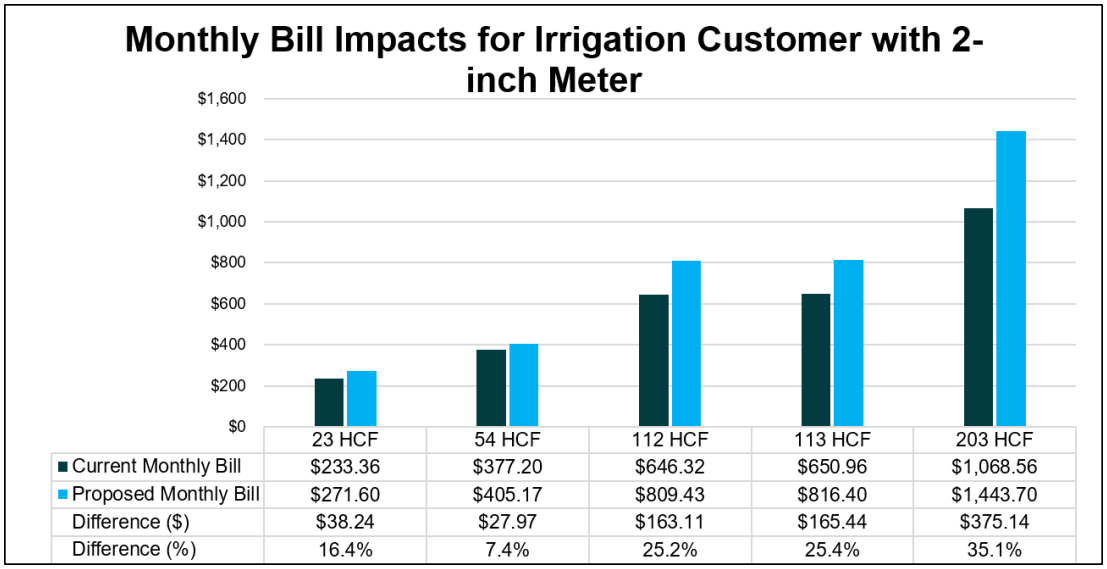


	2 HCF	6 HCF	12 HCF	14 HCF	31 HCF
Current Monthly Bill	$36.00	$53.96	$80.90	$89.88	$166.21
Proposed Monthly Bill	$50.44	$67.32	$98.14	$112.08	$230.57
Difference ($)	$14.44	$13.36	$17.24	$22.20	$64.36
Difference (%)	40.1%	24.8%	21.3%	24.7%	38.7%

7.4. Irrigation Bill Impacts

Figure 7-5 shows the monthly bill impacts for Irrigation 2-inch customers (the most common irrigation meter size) at various use points.

Figure 7-5: Irrigation 2-inch Monthly Bill Impacts for FY 2027

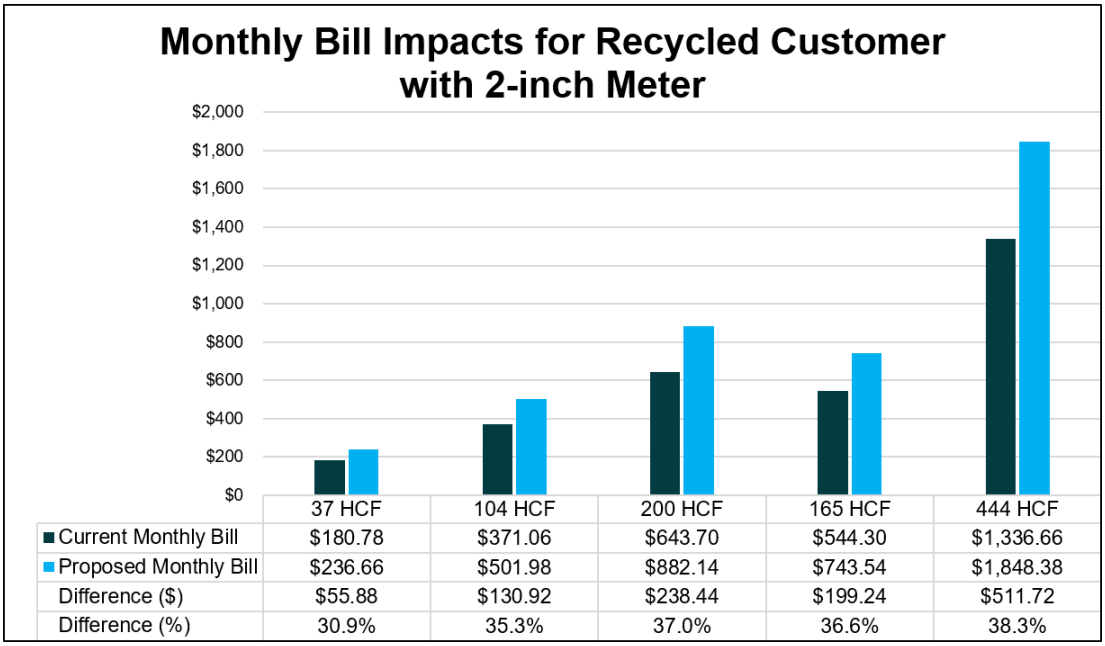


	23 HCF	54 HCF	112 HCF	113 HCF	203 HCF
Current Monthly Bill	$233.36	$377.20	$646.32	$650.96	$1,068.56
Proposed Monthly Bill	$271.60	$405.17	$809.43	$816.40	$1,443.70
Difference ($)	$38.24	$27.97	$163.11	$165.44	$375.14
Difference (%)	16.4%	7.4%	25.2%	25.4%	35.1%

7.5. Recycled Water Bill Impacts

Figure 7-6 shows the monthly bill impacts for Recycled Water 2-inch customers at various use points.

Figure 7-6: Recycled 2-inch Monthly Bill Impacts for FY 2027



	37 HCF	104 HCF	200 HCF	165 HCF	444 HCF
Current Monthly Bill	$180.78	$371.06	$643.70	$544.30	$1,336.66
Proposed Monthly Bill	$236.66	$501.98	$882.14	$743.54	$1,848.38
Difference ($)	$55.88	$130.92	$238.44	$199.24	$511.72
Difference (%)	30.9%	35.3%	37.0%	36.6%	38.3%

8. Proposed Drought Rates

8.1. Drought Rate Background

Drought rates are rates that can be implemented by City Council to recover lost revenue during a water supply shortage response (i.e. a drought). This section provides an overview of the water shortage emergency stages (drought stages), corresponding revenue impacts, drought rate calculations, and a summary of proposed variable rates at each stage (effective only if a water supply shortage is declared by City Council).

The proposed drought rates are increases applied to the volumetric rate ($ /HCF). The percentage increases are in line with each stage in GWP's Water Shortage Contingency Plan. The percent reduction in water demand during each water shortage emergency stage is defined in GWP's Water Shortage Contingency Plan, which was approved by the Board as a part of the 2020 Urban Water Management Plan and Municipal Code. GWP can establish drought rates to:

- Recover lost revenue due to decreased consumption during a drought
- Encourage water conservation through price signaling to meet the desired conservation goals for each tier, at each drought stage

GWP may be subject to penalties from MWD should it exceed drought water allocations. Drought rates are designed to promote conservation and maximize the probability that GWP will escape penalties. Drought rates are needed to recover lost revenues as GWP customers curtail their water consumption.

8.1.1. REVENUE COLLECTION DURING A DROUGHT

Water shortage emergencies can have significant impacts on an agency's revenue. During a drought, GWP's revenue decreases and so does its revenue requirement (costs). However, GWP's revenue decreases more than its costs do. In addition, the majority of GWP's costs are fixed (salaries, benefits, debt service, etc.), and do not decrease with lower customer water use. The proposed drought rates are an option to recover lost revenue to cover its fixed costs. Drought rates are a mechanism to maintain revenue stability and achieve debt coverage requirements during a water shortage emergency.

8.1.2. CUSTOMER BILLS DURING A DROUGHT

Provided that customers cut back their water use in line with the drought cutback goal, their total water bill should be equal to or lower than their bill during "normal" water/rainfall years. Conversely, those that do not cut back consumption will face higher charges. For example, if a certain drought stage calls for a 20% reduction in water use, a customer who reduces their use by 20% will not realize a higher bill. Those that continue using water normally would realize a higher bill.

8.2. Derivations of Drought Rates

To calculate drought rates, Raftelis performed the following steps:

- Estimated reductions for water use at each stage in the drought
- Determined the lost revenue at each stage of reduction
- Adjusted for water supply cost savings (lower water purchase costs) to offset a portion of the revenue loss. In other words, during a drought, GWP buys less water and this lowers its costs.
- Calculated the total revenue shortfall to be recovered via drought rates by summing total revenue losses, and offsetting (e.g., subtracting) decreases in volumetric supply costs
- Calculated the percent increase in revenue needed by dividing the total drought revenue requirement by expected drought revenue.
- Applied the percentages developed in step 5 to the proposed variable rates.

Table 8-1 shows the estimated water use reductions for each customer class at each level and stage of drought as mentioned in step 1.

Table 8-1: Estimated Reduction at Each Stage of Drought, By Customer Class/Tier

		A	B	C	D	E	F	G
Line No.	Description	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 5
1	**Single Family**							
2	Tier 1	0%	3%	15%	25%	35%	38%	45%
3	Tier 2	0%	20%	25%	35%	45%	65%	70%
4	**Multi-Family**							
5	Tier 1	0%	3%	15%	25%	35%	38%	45%
6	Tier 2	0%	20%	25%	35%	45%	65%	70%
7	**Commercial**							
8	Tier 1	0%	3%	15%	25%	35%	38%	45%
9	Tier 2	0%	20%	25%	35%	45%	65%	70%
10	**Irrigation**							
11	Tier 1	0%	3%	15%	25%	35%	38%	45%
12	Tier 2	0%	20%	25%	35%	45%	65%	70%
13	**Target Reduction Up To (%)**		10%	20%	30%	40%	50%	>50%
14	**Total Cutback - %**		10%	19%	29%	39%	49%	55%

Table 8-2 shows the estimated water use at each drought stage. Water use at each phase and tier was calculated by multiplying non-drought use by the percentage reduction shown in Table 8-1 for that stage/tier. The reduced water use provides the basis upon which to calculate estimated lost revenue at each drought stage.

Table 8-2: Estimated Water Use (HCF) at Each Stage of Drought, By Customer Class/Tier

		A	B	C	D	E	F	G
Line No.	Description	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 5
1	**Single Family**	**3,253,420**	**2,956,948**	**2,648,425**	**2,323,083**	**1,997,741**	**1,701,269**	**1,496,926**
2	Tier 1	2,083,602	2,021,094	1,771,061	1,562,701	1,354,341	1,291,833	1,145,981
3	Tier 2	1,169,818	935,855	877,364	760,382	643,400	409,436	350,945
4	**Multi-Family**	**3,550,586**	**3,158,794**	**2,850,189**	**2,495,131**	**2,140,072**	**1,748,280**	**1,533,300**
5	Tier 1	1,872,498	1,816,323	1,591,623	1,404,374	1,217,124	1,160,949	1,029,874
6	Tier 2	1,678,088	1,342,470	1,258,566	1,090,757	922,948	587,331	503,426
7	**Commercial**	**1,560,819**	**1,427,896**	**1,276,050**	**1,119,968**	**963,886**	**830,963**	**731,835**
8	Tier 1	1,054,356	1,022,725	896,203	790,767	685,331	653,701	579,896
9	Tier 2	506,463	405,171	379,848	329,201	278,555	177,262	151,939
10	**Irrigation**	**193,950**	**166,869**	**152,350**	**132,955**	**113,560**	**86,479**	**75,404**
11	Tier 1	68,875	66,809	58,544	51,657	44,769	42,703	37,882
12	Tier 2	125,075	100,060	93,806	81,299	68,791	43,776	37,522
13	**Total Water Use (HCF)**	**8,558,776**	**7,710,507**	**6,927,015**	**6,071,137**	**5,215,260**	**4,366,991**	**3,837,465**
14	**Overall % Reduction**		**10%**	**19%**	**29%**	**39%**	**49%**	**55%**
15	**Total Cutback (HCF)**		**848,269**	**1,631,761**	**2,487,638**	**3,343,516**	**4,191,785**	**4,721,310**
16	**Total Cutback (Acre Feet)**		**1,947**	**3,746**	**5,711**	**7,676**	**9,623**	**10,839**

Table **8-3** shows the total estimated revenues from reduced water use at the proposed FY 2027 rates for each drought stage. The estimated revenue in each tier and customer class was estimated by taking the water use from Table 8-2 and multiplying by the water rates shown in column A below. The total revenue loss by stage is shown in line 14.

Table 8-3: Estimated Revenues at Each Stage of Drought, By Customer Class/Tier

		A	B	C	D	E	F	G	H
Line No.	Description	FY 2027 Proposed Rate	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 5
1	**Single Family**		**$16,617,073**	**$14,742,387**	**$13,314,998**	**$11,653,291**	**$9,991,583**	**$8,116,897**	**$7,115,605**
2	Tier 1	$4.09	$8,521,931	$8,266,273	$7,243,641	$6,391,448	$5,539,255	$5,283,597	$4,687,062
3	Tier 2	$6.92	$8,095,142	$6,476,114	$6,071,357	$5,261,842	$4,452,328	$2,833,300	$2,428,543
4	**Multi-Family**		**$19,270,886**	**$16,718,657**	**$15,219,016**	**$13,291,928**	**$11,364,839**	**$8,812,610**	**$7,695,895**
5	Tier 1	$4.09	$7,658,517	$7,428,761	$6,509,739	$5,743,888	$4,978,036	$4,748,281	$4,212,184
6	Tier 2	$6.92	$11,612,369	$9,289,895	$8,709,277	$7,548,040	$6,386,803	$4,064,329	$3,483,711
7	**Commercial**		**$7,901,391**	**$7,068,546**	**$6,365,710**	**$5,575,571**	**$4,785,431**	**$3,952,586**	**$3,469,583**
8	Tier 1	$4.17	$4,396,665	$4,264,765	$3,737,165	$3,297,498	$2,857,832	$2,725,932	$2,418,166
9	Tier 2	$6.92	$3,504,726	$2,803,781	$2,628,545	$2,278,072	$1,927,599	$1,226,654	$1,051,418
10	**Irrigation**		**$1,152,727**	**$971,008**	**$893,266**	**$777,994**	**$662,721**	**$481,001**	**$417,621**
11	Tier 1	$4.17	$287,211	$278,594	$244,129	$215,408	$186,687	$178,071	$157,966
12	Tier 2	$6.92	$865,516	$692,413	$649,137	$562,586	$476,034	$302,931	$259,655
13	**Total Variable Revenues**		**$44,942,078**	**$39,500,597**	**$35,792,991**	**$31,298,783**	**$26,804,575**	**$21,363,094**	**$18,698,704**
14	**Total Lost Revenue**			**-$5,441,481**	**-$9,149,087**	**-$13,643,295**	**-$18,137,503**	**-$23,578,983**	**-$26,243,374**
15	**Percent of Commodity Revenue Lost**			12%	20%	30%	40%	52%	58%

Table 8-4 shows the calculation of the drought rate revenue requirement at each drought stage in line 4. Line 1 shows the FY 2027 wholesale water supply costs per acre foot. Line 2 is the volume of avoided purchased water in acre feet due to customer curtailment during the drought stages from line 16 in Table 8-2. Line 2 is then multiplied by the wholesale costs in line 1 to calculate the avoided water purchase costs in line 3. The avoided purchase costs for each level are then subtracted by the baseline volumetric revenue requirement (column A, line 4) to calculate the drought volumetric revenue requirement at the various drought levels shown in line 4.

Table 8-4: Drought Volumetric Revenue Requirements

			A	B	C	D	E	F	G
Line No.	Description	FY 2027	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 6
1	MWD Volumetric Rate ($/ AF)	$1,480							
2	Volume of Purchased Water Avoided (AF)		-	1,947	3,746	5,711	7,676	9,623	10,839
3	Avoided Water Purchase Costs (Savings)		$0	$2,883,023	$5,545,889	$8,454,772	$11,363,656	$14,246,679	$16,046,385
4	**Drought Volumetric Revenue Requirement**		**$44,942,078**	**$42,059,054**	**$39,396,189**	**$36,487,305**	**$33,578,422**	**$30,695,399**	**$28,895,693**

Table 8-5 derives the percentage rate increases, in line 6, to recover the drought revenue requirement in line 5. These percentages are the percentage increase to the non-drought rate at each drought stage. For example, during a Stage 3 drought, the non-drought rates would increase by 17%. Line 6 is derived as line 3 divided by line 4.

Table 8-5: Drought Percentage Increases

		A	B	C	D	E	F
Line No.	Description	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 5
1	Estimated Lost Revenue	$5,441,481	$9,149,087	$13,643,295	$18,137,503	$23,578,983	$26,243,374
2	Estimated Drought Savings	$2,883,023	$5,545,889	$8,454,772	$11,363,656	$14,246,679	$16,046,385
3	Estimated Net Lost Revenue	$2,558,457	$3,603,198	$5,188,523	$6,773,847	$9,332,304	$10,196,989
4	Expected Revenue	$39,500,597	$35,792,991	$31,298,783	$26,804,575	$21,363,094	$18,698,704
5	Drought Revenue Requirement	$42,059,054	$39,396,189	$36,487,305	$33,578,422	$30,695,399	$28,895,693
6	**% Increase**	**6%**	**10%**	**17%**	**25%**	**44%**	**55%**

Table 8-6 through Table 8-10 show the FY 2027 through FY 2031 proposed drought rates by customer class and tier at each drought stage. The rates in FY 2027 were calculated by applying the percentages shown in Table 8-5 to the baseline rates in column A, Table 8-6 below. This calculation is performed for each of the 5 years during the study period as shown in Table 8-6 through Table 8-10.

Table 8-6: FY 2027 Proposed Drought Rates by Customer Class/Tier ($/HCF)

		A	B	C	D	E	F	G
Line No.	Description	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 5
	Single Family							
1	Tier 1	$4.09	$4.35	$4.50	$4.77	$5.12	$5.88	$6.32
2	Tier 2	$6.92	$7.37	$7.62	$8.07	$8.67	$9.94	$10.69
	Multi-Family							
3	Tier 1	$4.09	$4.35	$4.50	$4.77	$5.12	$5.88	$6.32
4	Tier 2	$6.92	$7.37	$7.62	$8.07	$8.67	$9.94	$10.69
	Commercial							
5	Tier 1	$4.17	$4.44	$4.59	$4.86	$5.22	$5.99	$6.44
6	Tier 2	$6.92	$7.37	$7.62	$8.07	$8.67	$9.94	$10.69
	Irrigation							
7	Tier 1	$4.17	$4.44	$4.59	$4.86	$5.22	$5.99	$6.44
8	Tier 2	$6.92	$7.37	$7.62	$8.07	$8.67	$9.94	$10.69

Table 8-7: FY 2028 Proposed Drought Rates by Customer Class/Tier ($/HCF)

		A	B	C	D	E	F	G
Line No.	Description	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 5
	Single Family							
1	Tier 1	$4.54	$4.83	$5.00	$5.29	$5.69	$6.52	$7.02
2	Tier 2	$7.68	$8.18	$8.45	$8.95	$9.62	$11.04	$11.87
	Multi-Family							
3	Tier 1	$4.54	$4.83	$5.00	$5.29	$5.69	$6.52	$7.02
4	Tier 2	$7.68	$8.18	$8.45	$8.95	$9.62	$11.04	$11.87
	Commercial							
5	Tier 1	$4.63	$4.93	$5.09	$5.40	$5.80	$6.65	$7.15
6	Tier 2	$7.68	$8.18	$8.45	$8.95	$9.62	$11.04	$11.87
	Irrigation							
7	Tier 1	$4.63	$4.93	$5.09	$5.40	$5.80	$6.65	$7.15
8	Tier 2	$7.68	$8.18	$8.45	$8.95	$9.62	$11.04	$11.87

Table 8-8: FY 2029 Proposed Drought Rates by Customer Class/Tier ($/HCF)

		A	B	C	D	E	F	G
Line No.	Description	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 5
	Single Family							
1	Tier 1	$4.99	$5.31	$5.50	$5.82	$6.26	$7.17	$7.72
2	Tier 2	$8.45	$9.00	$9.30	$9.85	$10.58	$12.14	$13.06
	Multi-Family							
3	Tier 1	$4.99	$5.31	$5.50	$5.82	$6.26	$7.17	$7.72
4	Tier 2	$8.45	$9.00	$9.30	$9.85	$10.58	$12.14	$13.06
	Commercial							
5	Tier 1	$5.09	$5.42	$5.60	$5.94	$6.38	$7.32	$7.87
6	Tier 2	$8.45	$9.00	$9.30	$9.85	$10.58	$12.14	$13.06
	Irrigation							
7	Tier 1	$5.09	$5.42	$5.60	$5.94	$6.38	$7.32	$7.87
8	Tier 2	$8.45	$9.00	$9.30	$9.85	$10.58	$12.14	$13.06

Table 8-9: FY 2030 Proposed Drought Rates by Customer Class/Tier ($/HCF)

		A	B	C	D	E	F	G
Line No.	Description	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 5
	Single Family							
1	Tier 1	$5.49	$5.84	$6.05	$6.40	$6.89	$7.89	$8.49
2	Tier 2	$9.30	$9.90	$10.23	$10.84	$11.64	$13.35	$14.37
	Multi-Family							
3	Tier 1	$5.49	$5.84	$6.05	$6.40	$6.89	$7.89	$8.49
4	Tier 2	$9.30	$9.90	$10.23	$10.84	$11.64	$13.35	$14.37
	Commercial							
5	Tier 1	$5.60	$5.96	$6.16	$6.53	$7.02	$8.05	$8.66
6	Tier 2	$9.30	$9.90	$10.23	$10.84	$11.64	$13.35	$14.37
	Irrigation							
7	Tier 1	$5.60	$5.96	$6.16	$6.53	$7.02	$8.05	$8.66
8	Tier 2	$9.30	$9.90	$10.23	$10.84	$11.64	$13.35	$14.37

Table 8-10: FY 2031 Proposed Drought Rates by Customer Class/Tier ($/HCF)

		A	B	C	D	E	F	G
Line No.	Description	Baseline	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	> Stage 5
	Single Family							
1	Tier 1	$5.87	$6.25	$6.47	$6.85	$7.37	$8.44	$9.08
2	Tier 2	$9.95	$10.59	$10.95	$11.60	$12.45	$14.28	$15.38
	Multi-Family							
3	Tier 1	$5.87	$6.25	$6.47	$6.85	$7.37	$8.44	$9.08
4	Tier 2	$9.95	$10.59	$10.95	$11.60	$12.45	$14.28	$15.38
	Commercial							
5	Tier 1	$5.99	$6.38	$6.59	$6.99	$7.51	$8.61	$9.27
6	Tier 2	$9.95	$10.59	$10.95	$11.60	$12.45	$14.28	$15.38
	Irrigation							
7	Tier 1	$5.99	$6.38	$6.59	$6.99	$7.51	$8.61	$9.27
8	Tier 2	$9.95	$10.59	$10.95	$11.60	$12.45	$14.28	$15.38

8.2.1. DROUGHT RATE ADOPTION

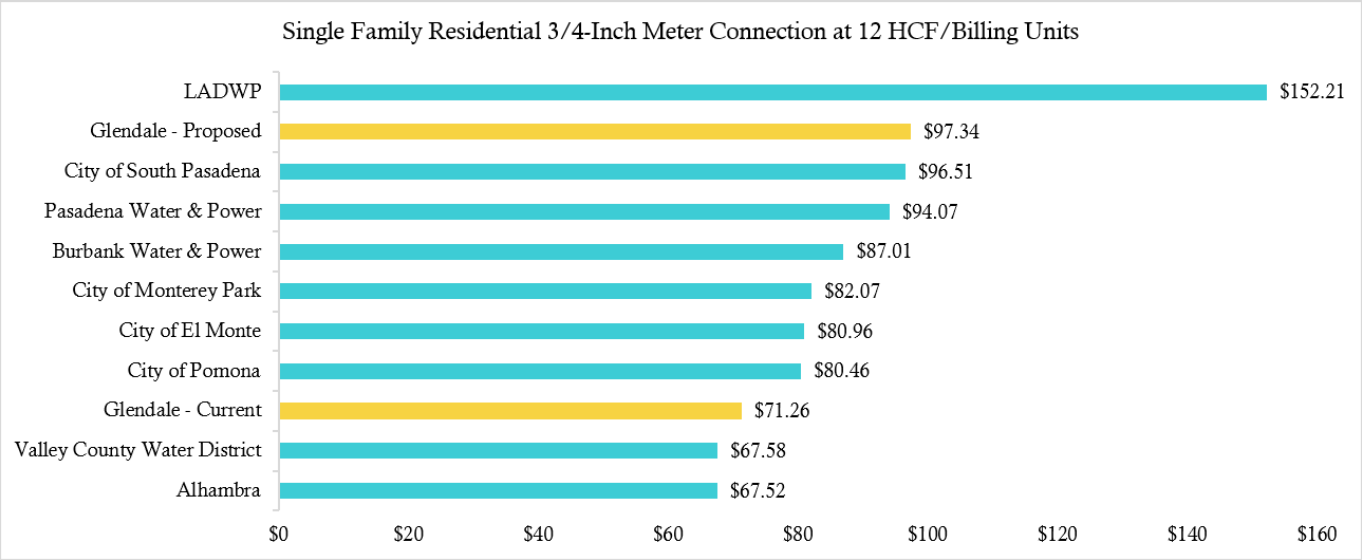
The proposed drought rates are an optional rate response to a drought. City Council has the option to implement drought rates if it declares a drought. For the duration of the Study period (5 years), the Council would have the ability to implement drought rates by increasing the then-current variable rate without having to re-issue the Proposition 218 notice as long as drought rates are included in the Public Hearing notice.

9. Rate Comparisons

Raftelis conducted a rate survey to benchmark current and proposed water rates against nine neighboring water providers. While it is common to compare rates among agencies, there are many factors which affect the cost to deliver water such as water supply sources, age and replacement of infrastructure, topography, revenue sources[11], and most importantly the willingness of the governing body to reinvest in the water system to ensure reliability. For these reasons, Raftelis does not recommend using a rate comparison to strongly influence rate making decisions.

Figure 9-1 shows a monthly[12] water bill comparison for the current (2026) and proposed (2027) rates against nine neighboring agencies. The survey assumes a single-family residential customer using 12 HCF of water per month, with a 3/4-inch metered connection. The current GWP bill below includes the current drought charge of $0.45 per HCF. The bill for GWP proposed rates assumes that the bill is in Pump Zone 1. This survey was conducted in July 2026 and should only be used as a reference point or as a snapshot in time.

Figure 9-1: Monthly Bill Comparisons for Neighboring Agencies



[11] Some agencies receive tax funding while others do not. Agencies with tax revenue can therefore have lower customer rates.

[12] Agencies with a bi-monthly billing cycle are adjusted to a monthly billing cycle by dividing fixed charges and tier widths in half.

APPENDIX A:

O&M Functionalization

Table 9-1: Allocation of O&M Costs to Functional Components

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
20	Salaries	$0											100%	
20	Additional pay persable	$0											100%	
20	Additional pay non-pers	$0											100%	
20	Overtime	$0											100%	
20	Hourly wages	$0											100%	
20	Vacation and compensatory time	$0											100%	
20	Sick leave	$0											100%	
20	OPEB Funding Exp	$0											100%	
20	Other benefits	$0											100%	
20	Life insurance	$0											100%	
20	Disability insurance	$0											100%	
20	Vision insurance	$0											100%	
20	Medical insurance	$0											100%	
20	Dental insurance	$0											100%	
20	Unemployment insurance	$0											100%	
20	Workers compensation insurance	$0											100%	
20	Medicare	$0											100%	
20	PERS retirement	$0											100%	
20	PERS cost sharing	$0											100%	
20	Salary charges in (out)	$38,143											100%	
20	Contractual services	$0											100%	
20	Direct Assist - Domestic	$0											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
20	Direct Assist - Commercial	$0											100%	
20	General supplies	$0											100%	
20	Liability Insurance	$0											100%	
20	Capital outlay	$71,865											100%	
4505	Salaries	$226,017											100%	
4505	Additional pay persable	$1,060											100%	
4505	Additional pay non-pers	$3,144											100%	
4505	Overtime	$1,600											100%	
4505	Hourly wages	$0											100%	
4505	OPEB GASB 75 Exp	$0											100%	
4505	Vacation and compensatory time	$4,151											100%	
4505	Sick leave	$4,036											100%	
4505	OPEB Funding Exp	$585											100%	
4505	OPEB Funding Reversal	$0											100%	
4505	Other benefits	$879											100%	
4505	Life insurance	$388											100%	
4505	Disability insurance	$1,089											100%	
4505	Vision insurance	$297											100%	
4505	Medical insurance	$28,407											100%	
4505	Dental insurance	$891											100%	
4505	Unemployment insurance	$130											100%	
4505	Workers compensation insurance	$819											100%	
4505	Medicare	$3,241											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4505	Social security and PARS	$0											100%	
4505	PERS retirement	$75,375											100%	
4505	PERS cost sharing	-$4,465											100%	
4505	PERS funding reversal	$0											100%	
4505	PERS GASB 68 expense	$0											100%	
4505	Salary charges in (out)	$113,838											100%	
4505	Auto allowance	$1,791											100%	
4505	Repairs buildings and grounds	$0											100%	
4505	Contractual services	$98,120											100%	
4505	Repairs to office equipment	$0											100%	
4505	Postage	$0											100%	
4505	Travel	$5,500											100%	
4505	Training	$2,700											100%	
4505	Computer software	$550											100%	
4505	Regulatory	$3,300											100%	
4505	Membership and dues	$66,000											100%	
4505	Furniture and equipment	$44,000											100%	
4505	Computer hardware	$0											100%	
4505	Office supplies	$2,200											100%	
4505	General supplies	$1,100											100%	
4505	Charges to other departments	$17,218											100%	
4505	Uncollectible accounts	$0											100%	
4505	Business meetings	$2,700											100%	
4505	Miscellaneous	$3,300											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4505	Depreciation	$0											100%	
4505	Amortization expense	$0											100%	
4505	Subscription depreciation	$0											100%	
4505	Utilities	$28,174											100%	
4505	Cost allocation charge	$1,069,440											100%	
4505	Fleet equipment rental charge	$634,808											100%	
4505	ISD service charge	$1,456,223											100%	
4505	Building maint service charge	$563,107											100%	
4505	Liability Insurance	$18,557											100%	
4505	Excess insurance and surety	$140,607											100%	
4505	Safety allocation charge	$0											100%	
4505	Radio Charge	$117,895											100%	
4505	Capital Set-Aside	$400,000											100%	
4505	Interest on bonds	$0											100%	
4505	Contra subscription	$0											100%	
4509	Salaries	$987,998								100%				
4509	Additional pay persable	$4,624								100%				
4509	Additional pay non-pers	$10,886								100%				
4509	Overtime	$14,400								100%				
4509	Hourly wages	$0								100%				
4509	Vacation and compensatory time	$18,115								100%				
4509	Sick leave	$17,621								100%				

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4509	OPEB Funding Exp	$2,552								100%				
4509	Other benefits	$2,522								100%				
4509	Life insurance	$1,227								100%				
4509	Disability insurance	$3,553								100%				
4509	Vision insurance	$1,809								100%				
4509	Medical insurance	$158,723								100%				
4509	Dental insurance	$5,930								100%				
4509	Unemployment insurance	$571								100%				
4509	Workers compensation insurance	$10,914								100%				
4509	Medicare	$14,143								100%				
4509	Social security and PARS	$0								100%				
4509	PERS retirement	$329,513								100%				
4509	PERS cost sharing	-$23,035								100%				
4509	PERS vacant positions	$0								100%				
4509	Auto allowance	$398								100%				
4509	Contractual services	$558,948								100%				
4509	Postage	$2,500								100%				
4509	Travel	$2,400								100%				
4509	Training	$2,500								100%				
4509	Computer software	$0								100%				
4509	Regulatory	$1,500								100%				
4509	Membership and dues	$400								100%				
4509	Furniture and equipment	$10,800								100%				
4509	Office supplies	$1,700								100%				
4509	General supplies	$800								100%				

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4509	Uncollectible accounts	$502,500								100%				
4509	Business meetings	$200								100%				
4509	Miscellaneous	$600								100%				
4509	Cost allocation charge	$231,955								100%				
4509	Fleet equipment rental charge	$0								100%				
4509	ISD service charge	$315,740								100%				
4509	Building maint service charge	$122,093								100%				
4509	Liability Insurance	$81,475								100%				
4509	Radio Charge	$25,562								100%				
4520	Salaries	$56,853											100%	
4520	Additional pay persable	$0											100%	
4520	Additional pay non-pers	$662											100%	
4520	Overtime	$0											100%	
4520	Hourly wages	$0											100%	
4520	Vacation and compensatory time	$1,036											100%	
4520	Sick leave	$1,007											100%	
4520	OPEB Funding Exp	$145											100%	
4520	Other benefits	$96											100%	
4520	Life insurance	$97											100%	
4520	Disability insurance	$333											100%	
4520	Vision insurance	$59											100%	
4520	Medical insurance	$6,338											100%	
4520	Dental insurance	$295											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4520	Unemployment insurance	$30											100%	
4520	Workers compensation insurance	$203											100%	
4520	Medicare	$820											100%	
4520	PERS retirement	$18,871											100%	
4520	PERS cost sharing	-$995											100%	
4520	Auto allowance	$1,117											100%	
4520	Contractual services	$0											100%	
4520	Advertising	$0											100%	
4520	Postage	$0											100%	
4520	Travel	$0											100%	
4520	Laundry and towel service	$0											100%	
4520	Training	$0											100%	
4520	Membership and dues	$0											100%	
4520	Furniture and equipment	$0											100%	
4520	Computer hardware	$0											100%	
4520	Office supplies	$0											100%	
4520	General supplies	$0											100%	
4520	Reports and publications	$0											100%	
4520	Printing and graphics	$0											100%	
4520	Business meetings	$0											100%	
4520	Miscellaneous	$0											100%	
4520	Liability Insurance	$4,603											100%	
4521	Salaries	$43,890											100%	
4521	Additional pay persable	$0											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4521	Additional pay non-pers	$437											100%	
4521	Overtime	$7,300											100%	
4521	Hourly wages	$0											100%	
4521	Vacation and compensatory time	$809											100%	
4521	Sick leave	$784											100%	
4521	OPEB Funding Exp	$121											100%	
4521	Other benefits	$101											100%	
4521	Life insurance	$52											100%	
4521	Disability insurance	$148											100%	
4521	Vision insurance	$74											100%	
4521	Medical insurance	$7,014											100%	
4521	Dental insurance	$242											100%	
4521	Unemployment insurance	$38											100%	
4521	Workers compensation insurance	$191											100%	
4521	Medicare	$733											100%	
4521	PERS retirement	$14,577											100%	
4521	PERS cost sharing	-$999											100%	
4521	PERS vacant positions	$0											100%	
4521	Auto allowance	$0											100%	
4521	Contractual services	$843,639											100%	
4521	Repairs to office equipment	$3,410											100%	
4521	Postage	$220											100%	
4521	Travel	$3,960											100%	
4521	Training	$5,060											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4521	Computer software	$271,000											100%	
4521	Membership and dues	$440											100%	
4521	Furniture and equipment	$11,440											100%	
4521	Computer hardware	$8,800											100%	
4521	Office supplies	$880											100%	
4521	General supplies	$3,740											100%	
4521	Business meetings	$231											100%	
4521	Miscellaneous	$4,400											100%	
4521	Liability Insurance	$4,137											100%	
4521	Lease interest	$0											100%	
4521	Contra lease	$0											100%	
4530	Salaries	$167,485											100%	
4530	Additional pay persable	$0											100%	
4530	Additional pay non-pers	$2,448											100%	
4530	Hourly wages	$5,750											100%	
4530	Vacation and compensatory time	$3,063											100%	
4530	Sick leave	$2,978											100%	
4530	OPEB Funding Exp	$431											100%	
4530	Other benefits	$648											100%	
4530	Life insurance	$389											100%	
4530	Disability insurance	$963											100%	
4530	Vision insurance	$240											100%	
4530	Medical insurance	$20,370											100%	
4530	Dental insurance	$1,146											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4530	Unemployment insurance	$95											100%	
4530	Workers compensation insurance	$2,887											100%	
4530	Medicare	$2,447											100%	
4530	PERS retirement	$57,503											100%	
4530	PERS cost sharing	-$3,077											100%	
4530	PERS vacant positions	$0											100%	
4530	Auto allowance	$0											100%	
4530	Contractual services	$538,500											100%	
4530	Travel	$1,000											100%	
4530	Training	$1,300											100%	
4530	Membership and dues	$300											100%	
4530	Furniture and equipment	$0											100%	
4530	Office supplies	$0											100%	
4530	General supplies	$250											100%	
4530	Business meetings	$0											100%	
4530	Liability Insurance	$14,058											100%	
4530	Interest on bonds	$0											100%	
4540	Salaries	$108,602											100%	
4540	Additional pay persable	$0											100%	
4540	Additional pay non-pers	$1,754											100%	
4540	Overtime	$2,500											100%	
4540	Hourly wages	$0											100%	
4540	Vacation and compensatory time	$1,990											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4540	Sick leave	$1,935											100%	
4540	OPEB Funding Exp	$280											100%	
4540	Other benefits	$288											100%	
4540	Life insurance	$180											100%	
4540	Disability insurance	$552											100%	
4540	Vision insurance	$87											100%	
4540	Medical insurance	$6,477											100%	
4540	Dental insurance	$178											100%	
4540	Unemployment insurance	$60											100%	
4540	Workers compensation insurance	$1,670											100%	
4540	Medicare	$1,600											100%	
4540	PERS retirement	$36,049											100%	
4540	PERS cost sharing	-$1,831											100%	
4540	PERS vacant positions	$0											100%	
4540	Auto allowance	$280											100%	
4540	Repairs buildings and grounds	$0											100%	
4540	Contractual services	$57,860											100%	
4540	Postage	$0											100%	
4540	Travel	$1,100											100%	
4540	Laundry and towel service	$0											100%	
4540	Training	$4,400											100%	
4540	Regulatory	$0											100%	
4540	Membership and dues	$0											100%	
4540	Books	$0											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4540	Furniture and equipment	$1,100											100%	
4540	Office supplies	$0											100%	
4540	General supplies	$1,100											100%	
4540	Business meetings	$1,100											100%	
4540	Miscellaneous	$4,400											100%	
4540	Liability Insurance	$9,032											100%	
4550	Salaries	$93,834											100%	
4550	Additional pay persable	$530											100%	
4550	Additional pay non-pers	$1,159											100%	
4550	Overtime	$8,800											100%	
4550	Hourly wages	$9,618											100%	
4550	Vacation and compensatory time	$1,724											100%	
4550	Sick leave	$1,676											100%	
4550	OPEB Funding Exp	$244											100%	
4550	Other benefits	$258											100%	
4550	Life insurance	$226											100%	
4550	Disability insurance	$399											100%	
4550	Vision insurance	$63											100%	
4550	Medical insurance	$10,671											100%	
4550	Dental insurance	$248											100%	
4550	Unemployment insurance	$64											100%	
4550	Workers compensation insurance	$9,306											100%	
4550	Medicare	$1,620											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4550	PERS retirement	$34,517											100%	
4550	PERS cost sharing	-$2,329											100%	
4550	PERS vacant positions	$0											100%	
4550	Salary charges in (out)	$0											100%	
4550	Auto allowance	$280											100%	
4550	Repairs buildings and grounds	$2,200											100%	
4550	Lease payments	$11,326											100%	
4550	Contractual services	$153,433											100%	
4550	Repairs to equipment	$1,540											100%	
4550	Postage	$0											100%	
4550	Laundry and towel service	$1,000											100%	
4550	Training	$2,200											100%	
4550	Membership and dues	$0											100%	
4550	Furniture and equipment	$880											100%	
4550	Office supplies	$1,100											100%	
4550	Small tools	$0											100%	
4550	General supplies	$13,200											100%	
4550	Business meetings	$200											100%	
4550	Miscellaneous	$2,250											100%	
4550	Utilities	$176,784											100%	
4550	Liability Insurance	$9,120											100%	
4550	Lease interest	$0											100%	
4550	Leases	$0											100%	
4550	Transfer of Property	$241,500											100%	
4550	Contra lease	$0											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4560	Salaries	$0											100%	
4560	Additional pay persable	$0											100%	
4560	Additional pay non-pers	$0											100%	
4560	Overtime	$0											100%	
4560	Hourly wages	$0											100%	
4560	Vacation and compensatory time	$0											100%	
4560	Sick leave	$0											100%	
4560	OPEB Funding Exp	$0											100%	
4560	Other benefits	$0											100%	
4560	Life insurance	$0											100%	
4560	Disability insurance	$0											100%	
4560	Vision insurance	$0											100%	
4560	Medical insurance	$0											100%	
4560	Dental insurance	$0											100%	
4560	Unemployment insurance	$0											100%	
4560	Workers compensation insurance	$0											100%	
4560	Medicare	$0											100%	
4560	PERS retirement	$0											100%	
4560	PERS cost sharing	$0											100%	
4560	PERS vacant positions	$0											100%	
4560	Office supplies	$0											100%	
4560	Liability Insurance	$0											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4580	Salaries	$36,236											100%	
4580	Additional pay non-pers	$332											100%	
4580	Overtime	$2,200											100%	
4580	Vacation and compensatory time	$659											100%	
4580	Sick leave	$641											100%	
4580	OPEB Funding Exp	$93											100%	
4580	Other benefits	$104											100%	
4580	Life insurance	$71											100%	
4580	Disability insurance	$219											100%	
4580	Vision insurance	$62											100%	
4580	Medical insurance	$4,030											100%	
4580	Dental insurance	$130											100%	
4580	Unemployment insurance	$22											100%	
4580	Workers compensation insurance	$1,133											100%	
4580	Medicare	$546											100%	
4580	PERS retirement	$12,028											100%	
4580	PERS cost sharing	-$483											100%	
4580	Contractual services	$361,000											100%	
4580	Advertising	$4,400											100%	
4580	Postage	$18,700											100%	
4580	Travel	$3,300											100%	
4580	Training	$1,560											100%	
4580	Computer software	$1,500											100%	
4580	Membership and dues	$2,000											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4580	Furniture and equipment	$16,500											100%	
4580	Office supplies	$1,100											100%	
4580	General supplies	$1,100											100%	
4580	Business meetings	$1,320											100%	
4580	Miscellaneous	$2,200											100%	
4580	Liability Insurance	$3,103											100%	
4590	Salaries	$81,058											100%	
4590	Additional pay persable	$265											100%	
4590	Additional pay non-pers	$1,720											100%	
4590	Overtime	$2,000											100%	
4590	Vacation and compensatory time	$1,497											100%	
4590	Sick leave	$1,457											100%	
4590	OPEB Funding Exp	$211											100%	
4590	Other benefits	$265											100%	
4590	Life insurance	$144											100%	
4590	Disability insurance	$422											100%	
4590	Vision insurance	$169											100%	
4590	Medical insurance	$11,859											100%	
4590	Dental insurance	$860											100%	
4590	Unemployment insurance	$47											100%	
4590	Workers compensation insurance	$301											100%	
4590	Medicare	$1,155											100%	
4590	PERS retirement	$26,994											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4590	PERS cost sharing	-$1,573											100%	
4590	Contractual services	$66,000											100%	
4590	Advertising	$4,400											100%	
4590	Postage	$5,500											100%	
4590	Travel	$2,200											100%	
4590	Laundry and towel service	$150											100%	
4590	Training	$900											100%	
4590	Membership and dues	$650											100%	
4590	Furniture and equipment	$16,400											100%	
4590	Office supplies	$900											100%	
4590	General supplies	$3,100											100%	
4590	Printing and graphics	$5,000											100%	
4590	Business meetings	$1,000											100%	
4590	Miscellaneous	$7,700											100%	
4590	Liability Insurance	$6,807											100%	
4700	Salaries	$2,732,886	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Additional pay persable	$66,669	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Additional pay non-pers	$6,605	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Overtime	$80,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Hourly wages	$145,600	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Vacation and compensatory time	$36,167	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Sick leave	$35,162	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	OPEB Funding Exp	$5,027	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Other benefits	$4,130	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4700	Life insurance	$2,437	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Disability insurance	$6,518	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Vision insurance	$1,598	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Medical insurance	$195,916	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Dental insurance	$5,983	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Unemployment insurance	$1,125	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Workers compensation insurance	$28,093	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Medicare	$31,859	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Social security and PARS	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	PERS retirement	$712,915	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	PERS cost sharing	-$43,578	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	PERS vacant positions	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Salary charges in (out)	-$38,143	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Auto allowance	$5,581	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Lease payments	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Contractual services	$2,784,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Repairs to equipment	$15,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Advertising	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Travel	$15,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Training	$15,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Computer software	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Regulatory	$230,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Membership and dues	$73,500	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Books	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Digital resources	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4700	Furniture and equipment	$5,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Computer hardware	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Office supplies	$4,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Small tools	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	General supplies	$6,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Purchased water	$25,000,000	100%											
4700	Business meetings	$500	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Miscellaneous	$5,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Utilities	$4,433,150		3%	3%	4%	53%	12%	4%		2%	1%	11%	6%
4700	Liability Insurance	$178,771	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Subscription interest	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Leases	$75,000	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4700	Contra subscription	$0	5%	3%	5%	9%		26%	9%		5%	2%	34%	2%
4710	Salaries	$2,144,828	1%		4%	3%		55%	4%		13%		17%	3%
4710	Additional pay persable	$101,692	1%		4%	3%		55%	4%		13%		17%	3%
4710	Additional pay non-pers	$61,980	1%		4%	3%		55%	4%		13%		17%	3%
4710	Overtime	$150,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Hourly wages	$0	1%		4%	3%		55%	4%		13%		17%	3%
4710	Vacation and compensatory time	$41,566	1%		4%	3%		55%	4%		13%		17%	3%
4710	Sick leave	$40,413	1%		4%	3%		55%	4%		13%		17%	3%
4710	OPEB Funding Exp	$5,786	1%		4%	3%		55%	4%		13%		17%	3%
4710	Other benefits	$2,706	1%		4%	3%		55%	4%		13%		17%	3%
4710	Life insurance	$2,680	1%		4%	3%		55%	4%		13%		17%	3%
4710	Disability insurance	$7,282	1%		4%	3%		55%	4%		13%		17%	3%

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4710	Vision insurance	$2,894	1%		4%	3%		55%	4%		13%		17%	3%
4710	Medical insurance	$281,746	1%		4%	3%		55%	4%		13%		17%	3%
4710	Dental insurance	$8,628	1%		4%	3%		55%	4%		13%		17%	3%
4710	Unemployment insurance	$1,241	1%		4%	3%		55%	4%		13%		17%	3%
4710	Workers compensation insurance	$163,360	1%		4%	3%		55%	4%		13%		17%	3%
4710	Medicare	$33,763	1%		4%	3%		55%	4%		13%		17%	3%
4710	Social security and PARS	$0	1%		4%	3%		55%	4%		13%		17%	3%
4710	PERS retirement	$745,638	1%		4%	3%		55%	4%		13%		17%	3%
4710	PERS cost sharing	-$56,971	1%		4%	3%		55%	4%		13%		17%	3%
4710	PERS vacant positions	$0	1%		4%	3%		55%	4%		13%		17%	3%
4710	Salary charges in (out)	$192,500	1%		4%	3%		55%	4%		13%		17%	3%
4710	Repairs buildings and grounds	$2,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Contractual services	$482,500	1%		4%	3%		55%	4%		13%		17%	3%
4710	Construction services	$0	1%		4%	3%		55%	4%		13%		17%	3%
4710	Repairs to equipment	$10,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Repairs to office equipment	$0	1%		4%	3%		55%	4%		13%		17%	3%
4710	Postage	$0	1%		4%	3%		55%	4%		13%		17%	3%
4710	Travel	$2,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Laundry and towel service	$10,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Training	$5,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Membership and dues	$1,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Furniture and equipment	$3,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Office supplies	$1,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Small tools	$5,000	1%		4%	3%		55%	4%		13%		17%	3%

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4710	General supplies	$315,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Printing and graphics	$0	1%		4%	3%		55%	4%		13%		17%	3%
4710	Charges to other departments	$57,500	1%		4%	3%		55%	4%		13%		17%	3%
4710	Uncollectible accounts	$0	1%		4%	3%		55%	4%		13%		17%	3%
4710	Business meetings	$500	1%		4%	3%		55%	4%		13%		17%	3%
4710	Miscellaneous	$1,000	1%		4%	3%		55%	4%		13%		17%	3%
4710	Utilities	$85,029	1%		4%	3%		55%	4%		13%		17%	3%
4710	Liability Insurance	$196,687	1%		4%	3%		55%	4%		13%		17%	3%
4710	Leases	$15,000	1%		4%	3%		55%	4%		13%		17%	3%
4720	Salaries	$1,304,482	8%		12%	18%		11%	18%		5%		11%	18%
4720	Additional pay persable	$92,997	8%		12%	18%		11%	18%		5%		11%	18%
4720	Additional pay non-pers	$65,717	8%		12%	18%		11%	18%		5%		11%	18%
4720	Overtime	$80,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Hourly wages	$0	8%		12%	18%		11%	18%		5%		11%	18%
4720	Vacation and compensatory time	$26,343	8%		12%	18%		11%	18%		5%		11%	18%
4720	Sick leave	$25,613	8%		12%	18%		11%	18%		5%		11%	18%
4720	OPEB Funding Exp	$3,664	8%		12%	18%		11%	18%		5%		11%	18%
4720	Other benefits	$1,948	8%		12%	18%		11%	18%		5%		11%	18%
4720	Life insurance	$1,569	8%		12%	18%		11%	18%		5%		11%	18%
4720	Disability insurance	$4,801	8%		12%	18%		11%	18%		5%		11%	18%
4720	Vision insurance	$2,545	8%		12%	18%		11%	18%		5%		11%	18%
4720	Medical insurance	$171,264	8%		12%	18%		11%	18%		5%		11%	18%
4720	Dental insurance	$10,566	8%		12%	18%		11%	18%		5%		11%	18%

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4720	Unemployment insurance	$778	8%		12%	18%		11%	18%		5%		11%	18%
4720	Workers compensation insurance	$85,116	8%		12%	18%		11%	18%		5%		11%	18%
4720	Medicare	$21,017	8%		12%	18%		11%	18%		5%		11%	18%
4720	Social security and PARS	$0	8%		12%	18%		11%	18%		5%		11%	18%
4720	PERS retirement	$463,831	8%		12%	18%		11%	18%		5%		11%	18%
4720	PERS cost sharing	-$34,809	8%		12%	18%		11%	18%		5%		11%	18%
4720	PERS vacant positions	$0	8%		12%	18%		11%	18%		5%		11%	18%
4720	Salary charges in (out)	$0	8%		12%	18%		11%	18%		5%		11%	18%
4720	Repairs buildings and grounds	$5,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Contractual services	$436,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Repairs to equipment	$65,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Repairs to office equipment	$0	8%		12%	18%		11%	18%		5%		11%	18%
4720	Postage	$0	8%		12%	18%		11%	18%		5%		11%	18%
4720	Travel	$2,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Training	$5,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Regulatory	$1,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Membership and dues	$0	8%		12%	18%		11%	18%		5%		11%	18%
4720	Furniture and equipment	$3,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Small tools	$1,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	General supplies	$150,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Business meetings	$0	8%		12%	18%		11%	18%		5%		11%	18%
4720	Miscellaneous	$1,000	8%		12%	18%		11%	18%		5%		11%	18%
4720	Utilities	$62,776	8%		12%	18%		11%	18%		5%		11%	18%
4720	Liability Insurance	$123,461	8%		12%	18%		11%	18%		5%		11%	18%

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4720	Leases	$130,000	8%		12%	18%		11%	18%		5%		11%	18%
4730	Salaries	$897,814			14%			21%	14%		9%		37%	5%
4730	Additional pay persable	$44,610			14%			21%	14%		9%		37%	5%
4730	Additional pay non-pers	$11,417			14%			21%	14%		9%		37%	5%
4730	Overtime	$30,000			14%			21%	14%		9%		37%	5%
4730	Hourly wages	$0			14%			21%	14%		9%		37%	5%
4730	Vacation and compensatory time	$17,174			14%			21%	14%		9%		37%	5%
4730	Sick leave	$16,695			14%			21%	14%		9%		37%	5%
4730	OPEB Funding Exp	$2,390			14%			21%	14%		9%		37%	5%
4730	Other benefits	$524			14%			21%	14%		9%		37%	5%
4730	Life insurance	$1,002			14%			21%	14%		9%		37%	5%
4730	Disability insurance	$2,349			14%			21%	14%		9%		37%	5%
4730	Vision insurance	$615			14%			21%	14%		9%		37%	5%
4730	Medical insurance	$80,615			14%			21%	14%		9%		37%	5%
4730	Dental insurance	$1,626			14%			21%	14%		9%		37%	5%
4730	Unemployment insurance	$497			14%			21%	14%		9%		37%	5%
4730	Workers compensation insurance	$64,642			14%			21%	14%		9%		37%	5%
4730	Medicare	$13,849			14%			21%	14%		9%		37%	5%
4730	PERS retirement	$312,799			14%			21%	14%		9%		37%	5%
4730	PERS cost sharing	-$26,099			14%			21%	14%		9%		37%	5%
4730	Lease payments	$0			14%			21%	14%		9%		37%	5%
4730	Contractual services	$207,000			14%			21%	14%		9%		37%	5%
4730	Repairs to equipment	$5,000			14%			21%	14%		9%		37%	5%

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4730	Postage	$1,000			14%			21%	14%		9%		37%	5%
4730	Travel	$2,000			14%			21%	14%		9%		37%	5%
4730	Training	$5,000			14%			21%	14%		9%		37%	5%
4730	Computer software	$55,000			14%			21%	14%		9%		37%	5%
4730	Membership and dues	$500			14%			21%	14%		9%		37%	5%
4730	Furniture and equipment	$3,000			14%			21%	14%		9%		37%	5%
4730	Office supplies	$0			14%			21%	14%		9%		37%	5%
4730	General supplies	$200,000			14%			21%	14%		9%		37%	5%
4730	Printing and graphics	$0			14%			21%	14%		9%		37%	5%
4730	Business meetings	$0			14%			21%	14%		9%		37%	5%
4730	Miscellaneous	$0			14%			21%	14%		9%		37%	5%
4730	ISD service charge	$0			14%			21%	14%		9%		37%	5%
4730	Liability Insurance	$78,711			14%			21%	14%		9%		37%	5%
4730	Leases	$0			14%			21%	14%		9%		37%	5%
4740	Salaries	$58,749											100%	
4740	Additional pay non-pers	$728											100%	
4740	Hourly wages	$1,938											100%	
4740	Vacation and compensatory time	$1,072											100%	
4740	Sick leave	$1,042											100%	
4740	OPEB Funding Exp	$150											100%	
4740	Other benefits	$149											100%	
4740	Life insurance	$94											100%	
4740	Disability insurance	$291											100%	
4740	Vision insurance	$65											100%	

Cost Center	Description	2027 Test Year Amount	Purchased Water Costs	Supply Related Costs	Treatment	Pumping	Elevational Pumping	Transmission & Distribution	Storage	Customer Service	Meter Maintenance	Conservation	General & Admin	Recycled Water
4740	Medical insurance	$4,831											100%	
4740	Dental insurance	$138											100%	
4740	Unemployment insurance	$32											100%	
4740	Workers compensation insurance	$217											100%	
4740	Medicare	$884											100%	
4740	Social security and PARS	$25											100%	
4740	PERS retirement	$19,499											100%	
4740	PERS cost sharing	-$872											100%	
4740	Auto allowance	$1,228											100%	
4740	Contractual services	$3,080											100%	
4740	Advertising	$5,500											100%	
4740	Training	$2,200											100%	
4740	Membership and dues	$1,320											100%	
4740	Office supplies	$220											100%	
4740	General supplies	$110											100%	
4740	Business meetings	$5,280											100%	
4740	Miscellaneous	$660											100%	
4740	Liability Insurance	$4,915											100%	
4740	Radio Charge	$227											100%	

APPENDIX B:

Bill Impacts by Pump Zone

Table 9-2: FY 2027 Bill Impacts by Pump Zone

	A	B	C
Line No.	Customer Class/Pump Zone	Average Use (HCF)	FY 2027
1	**Single Family**	**12**	
2	Pump Zone 1 (724')		$26.08
3	Pump Zone 2 (968')		$28.48
4	Pump Zone 3 (1,290')		$35.56
5	Pump Zone 4 (1,666')		$47.44
6	Pump Zone 5 (2,000')		$53.20
7	Pump Zone 6 (2,400')		$66.52
8	Pump Zone 7 (2,483')		$86.44
9	**Multi-Family: Duplex**	**18**	
10	Pump Zone 1 (724')		$45.78
11	Pump Zone 2 (968')		$49.38
12	Pump Zone 3 (1,290')		$60.00
13	Pump Zone 4 (1,666')		$77.82
14	Pump Zone 5 (2,000')		$86.46
15	Pump Zone 6 (2,400')		$106.44
16	Pump Zone 7 (2,483')		$136.32
17	**Commercial**	**12**	
18	Pump Zone 1 (724')		$17.24
19	Pump Zone 2 (968')		$19.64
20	Pump Zone 3 (1,290')		$26.72
21	Pump Zone 4 (1,666')		$38.60
22	Pump Zone 5 (2,000')		$44.36
23	Pump Zone 6 (2,400')		$57.68
24	Pump Zone 7 (2,483')		$77.60
25	**Irrigation**	**112**	
26	Pump Zone 1 (724')		$163.11
27	Pump Zone 2 (968')		$185.51
28	Pump Zone 3 (1,290')		$251.59
29	Pump Zone 4 (1,666')		$362.47
30	Pump Zone 5 (2,000')		$416.23
31	Pump Zone 6 (2,400')		$540.55
32	Pump Zone 7 (2,483')		$726.47