

# 1 EXECUTIVE SUMMARY

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The City of Glendale Water & Power (City or GWP) engaged Raftelis Financial Consultants, Inc. (Raftelis) to develop a comprehensive financial plan and rate study for the City's water utility. This report documents the assumptions, methodologies, analyses, and proposed rates for fiscal years (FY) 2018-2019 to FY 2022-2023 (FY 2019 to FY 2023).

The major objectives of the study include the following:

1. Ensure revenue sufficiency to meet the operating and maintenance (O&M) and capital needs of the City's water utility.
2. Determine rates that are fair and equitable, in accordance with cost of service guidelines used in the industry, and in compliance with Proposition 218 requirements.
3. Minimize the financial impact to the City's water customers while retaining revenue stability and preserving the overall financial health of the utility.

This executive summary provides an overview of the study and its results, including recommendations for updated water rates beginning July 2018<sup>1</sup>.

The numbers shown in the tables and equations in this report may be rounded, and therefore may not add up to the precise numbers shown in the report.

## 1.1 BACKGROUND

The City of Glendale provides reliable and sustainable water and recycled water service to approximately 33,744 customers. A third of GWP's water supply is available through the San Fernando and Verdugo Groundwater Basins, and the remaining water is supplied by the Metropolitan Water District of Southern California (MWD).

Historically, GWP has funded its O&M costs entirely through water rates and charges. However, the majority of the water system is depreciated, therefore a main focus of this water rate study is to develop a sustainable financing strategy that will fund capital projects while minimizing impacts on customers.

## 1.2 FINANCIAL PLAN

To determine the revenue requirements needed to fund the City's ongoing expenses, Raftelis projected the O&M costs, capital improvement plan (CIP), debt service payments, and reserve requirements for the study period from FY 2018 to FY 2023.

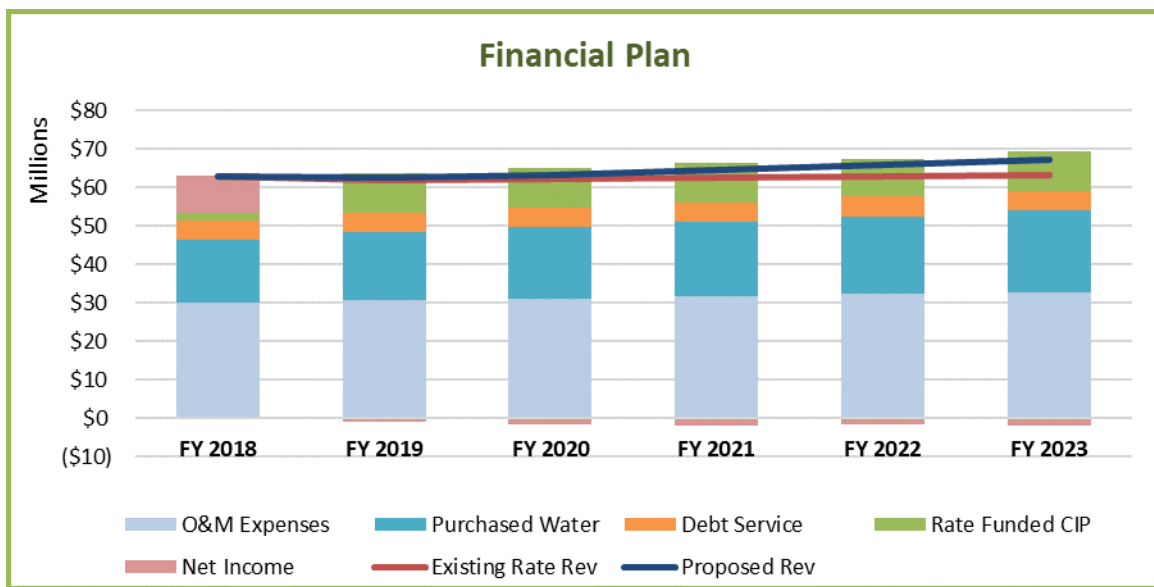
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<sup>1</sup> In this report, FY 2019 refers to the year starting on July 1, 2018 and ending June 30, 2019.

O&M expenses include salaries and benefits, minor repairs and equipment, water pumping and supply costs, etc. Expected O&M expenses over the study period range from \$46.4 million to \$54.0 million per year. The City plans to spend approximately \$52.5 million on capital projects over the six-year period to replace and repair aging infrastructure. The City does not plan to incur new debt, and all capital projects are funded through water rates and reserves.

**Figure 1-1** shows the City’s projected financial plan over the six-year planning period. The red line represents the current revenues at existing rates; the blue line represents the proposed revenues with the revenue adjustments shown in **Figure 1-2**. The light blue bar shows the O&M expenses (less purchased water costs), the blue bar shows the purchased water cost, the orange bar shows the annual debt service from existing debt, the green bar shows the rate funded CIP, and the red bar shows the net income. If the red bar is above the x-axis, then the City is replenishing reserves; if it is below, then the City is drawing from reserves to fund capital expenses.

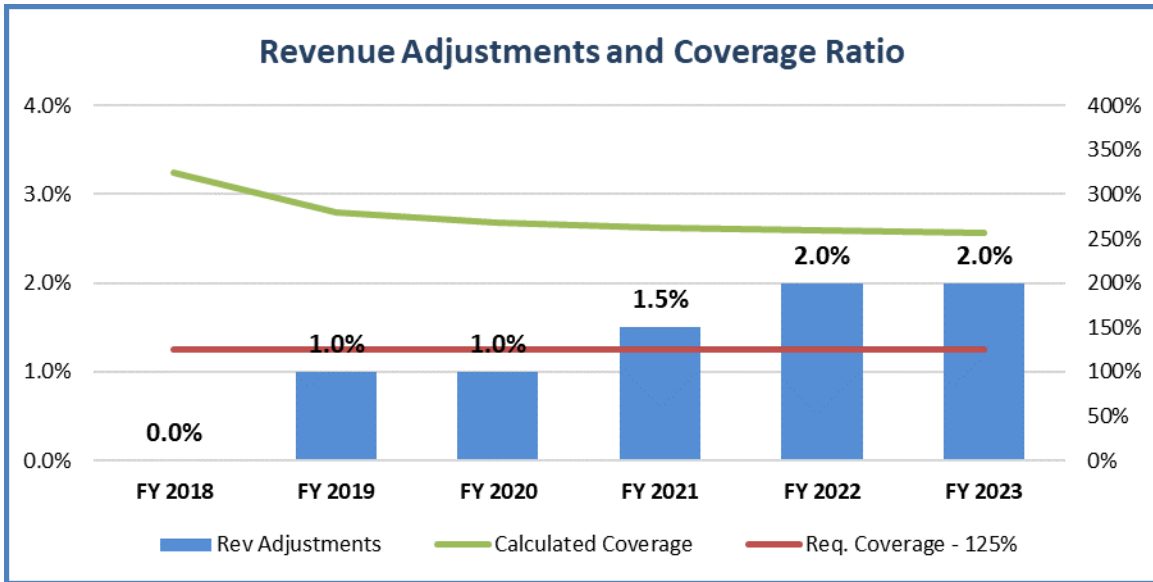
**Figure 1-1: Projected Financial Plan**



**Figure 1-2** shows the proposed revenue adjustments (on the left axis) and calculated debt coverage ratio (on the right axis) for the study period. All revenue adjustments will be effective on July 1<sup>st</sup> of the corresponding fiscal year.

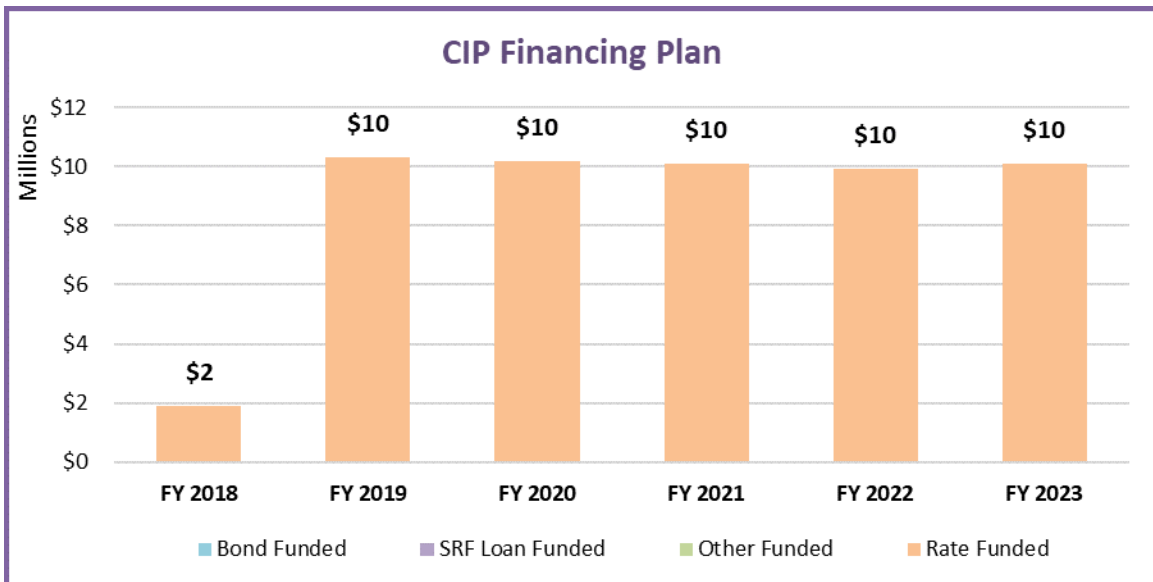
The main factors that determine the City’s revenue adjustments are O&M expenses and capital project costs. Overall, O&M expenses are expected to increase by approximately 2.8 to 3.9 percent each year. The City plans to spend an average of \$10.1 million per year on capital projects from FY 2019 to FY 2023, all of which are funded through rates.

**Figure 1-2: Proposed Revenue Adjustments and Debt Coverage**



**Figure 1-3** shows the total amount of capital projects and their funding sources. The City is expected to spend approximately \$52.5 million on capital projects over six years, all of which will be funded through rates as the City does not plan to incur new debt.

**Figure 1-3: Proposed Capital Financing Plan**

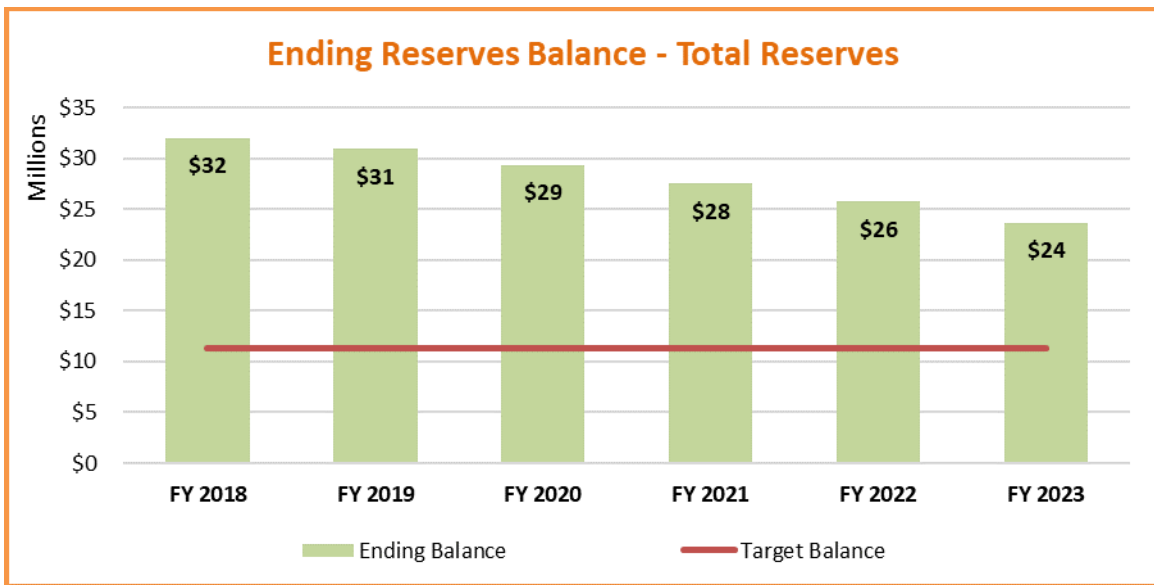


**Figure 1-4** shows the City’s fund ending balances. For all years of the study, the City is expected to meet reserve requirements. The reserve requirements help to mitigate cash flow risks, unexpected O&M expenses, or asset failure. The City’s current reserve policy includes:

- » Operating Reserve: \$3.8 million
- » Contingency Reserve: \$6.5 million
- » Rate Stabilization Fund: \$1.0 million

Due to unforeseen reductions in water usage since the water supply shortage of 2015, the City has reduced the amount of water it needs to purchase from MWD. However, to ensure the lowest supply cost possible, prior to the water supply shortage of 2015, the City agreed to purchase at least 17,481 acre-feet (AF) of water from MWD each year, in order to ensure that all of the City’s use was within MWD’s lowest pricing tier. With the unforeseen reductions since the water supply shortage, the City is still required to meet its agreed upon minimum purchase amount for the length of the agreement with MWD. The total reserves shown in this study, which are higher than the target, allows the City to pay its commitment to MWD. There may be a difference of approximately \$11.6 million between projected demands and the minimum purchase amount, at the end of the agreement in FY 2024. Maintaining this reserve will allow the City to meet its obligation without risking the utility’s financial stability.

**Figure 1-4: Projected Ending Balances**



### 1.3 PROPOSED WATER RATES

**Table 1-1** shows the proposed customer charges for five years; **Table 1-2** shows the proposed variable charges for five years.

**Table 1-1: Proposed Customer Charges**

	July 2018	July 2019	July 2020	July 2021	July 2022
<b>Monthly Customer Charge</b>					
Meter Size					
5/8"	\$18.14	\$18.33	\$18.61	\$18.99	\$19.37
3/4"	\$25.33	\$25.58	\$25.97	\$26.49	\$27.02
1"	\$39.70	\$40.10	\$40.71	\$41.53	\$42.37
1 1/2"	\$75.61	\$76.37	\$77.52	\$79.08	\$80.67
2"	\$118.72	\$119.91	\$121.71	\$124.15	\$126.64
3"	\$255.22	\$257.77	\$261.64	\$266.88	\$272.22
4"	\$456.37	\$460.93	\$467.85	\$477.21	\$486.76
6"	\$937.68	\$947.06	\$961.27	\$980.50	\$1,000.11
8"	\$1,727.91	\$1,745.19	\$1,771.37	\$1,806.80	\$1,842.94
10"	\$2,733.66	\$2,761.00	\$2,802.42	\$2,858.47	\$2,915.64
12"	\$3,595.73	\$3,631.69	\$3,686.17	\$3,759.90	\$3,835.10
<b>Monthly Private Fire Line Customer Charge</b>					
Line Size					
1"	\$4.17	\$4.22	\$4.29	\$4.38	\$4.47
1 1/2"	\$4.91	\$4.96	\$5.04	\$5.15	\$5.26
2"	\$6.20	\$6.27	\$6.37	\$6.50	\$6.63
3"	\$10.81	\$10.92	\$11.09	\$11.32	\$11.55
4"	\$18.77	\$18.96	\$19.25	\$19.64	\$20.04
6"	\$47.34	\$47.82	\$48.54	\$49.52	\$50.52
8"	\$96.61	\$97.58	\$99.05	\$101.04	\$103.07
10"	\$170.72	\$172.43	\$175.02	\$178.53	\$182.11
12"	\$273.43	\$276.17	\$280.32	\$285.93	\$291.65
<b>Monthly Recycled Water Customer Charge</b>					
Meter Size					
5/8"	\$12.17	\$12.30	\$12.49	\$12.74	\$13.00
3/4"	\$16.37	\$16.54	\$16.79	\$17.13	\$17.48
1"	\$24.77	\$25.02	\$25.40	\$25.91	\$26.43
1 1/2"	\$45.76	\$46.22	\$46.92	\$47.86	\$48.82
2"	\$70.96	\$71.67	\$72.75	\$74.21	\$75.70
3"	\$150.74	\$152.25	\$154.54	\$157.64	\$160.80
4"	\$268.31	\$271.00	\$275.07	\$280.58	\$286.20
6"	\$549.63	\$555.13	\$563.46	\$574.73	\$586.23
8"	\$1,011.51	\$1,021.63	\$1,036.96	\$1,057.70	\$1,078.86
10"	\$1,599.36	\$1,615.36	\$1,639.60	\$1,672.40	\$1,705.85
12"	\$2,103.23	\$2,124.27	\$2,156.14	\$2,199.27	\$2,243.26

**Table 1-2: Proposed Variable Charges**

	Monthly Tiers	July 2018	July 2019	July 2020	July 2021	July 2022
<b>Monthly Water Variable Charges</b>						
Single Family						
Tier 1	8	\$2.61	\$2.64	\$2.68	\$2.74	\$2.80
Tier 2	15	\$3.84	\$3.88	\$3.94	\$4.02	\$4.11
Tier 3	15+	\$3.99	\$4.03	\$4.10	\$4.19	\$4.28
Multi Family						
Tier 1	6	\$2.61	\$2.64	\$2.68	\$2.74	\$2.80
Tier 2	6+	\$3.84	\$3.88	\$3.94	\$4.02	\$4.11
Commercial		\$3.78	\$3.82	\$3.88	\$3.96	\$4.04
Irrigation		\$3.91	\$3.95	\$4.01	\$4.10	\$4.19
Private Fire Line		\$3.99	\$4.03	\$4.10	\$4.19	\$4.28
Recycled Water - Commercial		\$2.64	\$2.67	\$2.72	\$2.78	\$2.84
Recycled Water - Irrigation		\$2.64	\$2.67	\$2.72	\$2.78	\$2.84

## 1.4 CUSTOMER IMPACTS

Table 1-3 shows the impacts to Single Family customers with a 3/4" meter.

**Table 1-3: Single Family Customer Impacts**

	Monthly Usage (hcf)	Bills Impacted - All Meter Sizes	Current Fixed	Current Variable	Total Current Bill	Proposed Fixed	Proposed Variable	Total Proposed Bill	Difference
Very Low	4	33,968	\$29.15	\$10.28	<b>\$39.43</b>	\$25.33	\$10.44	<b>\$35.77</b>	(\$3.67)
Low	10	91,247	\$29.15	\$28.18	<b>\$57.33</b>	\$25.33	\$28.56	<b>\$53.89</b>	(\$3.44)
Average	15	55,661	\$29.15	\$45.45	<b>\$74.60</b>	\$25.33	\$47.76	<b>\$73.09</b>	(\$1.51)
High	25	51,036	\$29.15	\$81.75	<b>\$110.90</b>	\$25.33	\$87.66	<b>\$112.99</b>	\$2.08
Very High	50	23,639	\$29.15	\$192.25	<b>\$221.40</b>	\$25.33	\$187.41	<b>\$212.74</b>	(\$8.66)

Table 1-4 shows the impacts to Multi-Family customers with a 1" meter and four dwelling units.

**Table 1-4: Multi-Family Customer Impacts**

	Monthly Usage (hcf)	Bills Impacted - All Meter Sizes	Current Fixed	Current Variable	Total Current Bill	Proposed Fixed	Proposed Variable	Total Proposed Bill	Difference
Very Low	8	4,781	\$38.42	\$21.52	<b>\$59.94</b>	\$39.70	\$20.88	<b>\$60.58</b>	\$0.64
Low	16	14,987	\$38.42	\$43.04	<b>\$81.46</b>	\$39.70	\$41.76	<b>\$81.46</b>	(\$0.00)
Average	20	11,067	\$38.42	\$53.80	<b>\$92.22</b>	\$39.70	\$52.20	<b>\$91.90</b>	(\$0.32)
High	40	42,086	\$38.42	\$133.20	<b>\$171.62</b>	\$39.70	\$124.08	<b>\$163.78</b>	(\$7.85)
Very High	100	10,650	\$38.42	\$371.40	<b>\$409.82</b>	\$39.70	\$354.48	<b>\$394.18</b>	(\$15.65)

Table 1-5 shows the impacts to Commercial customers with a 1” meter.

**Table 1-5: Commercial Customer Impacts**

	Monthly Usage (hcf)	Bills Impacted - All Meter Sizes	Current Fixed	Current Variable	Total Current Bill	Proposed Fixed	Proposed Variable	Total Proposed Bill	Difference
Very Low	5	12,771	\$38.42	\$15.90	<b>\$54.32</b>	\$39.70	\$18.90	<b>\$58.60</b>	\$4.28
Low	25	12,198	\$38.42	\$79.50	<b>\$117.92</b>	\$39.70	\$94.50	<b>\$134.20</b>	\$16.28
Average	47	3,789	\$38.42	\$149.46	<b>\$187.88</b>	\$39.70	\$177.66	<b>\$217.36</b>	\$29.48
High	75	2,312	\$38.42	\$238.50	<b>\$276.92</b>	\$39.70	\$283.50	<b>\$323.20</b>	\$46.28
Very High	100	1,035	\$38.42	\$318.00	<b>\$356.42</b>	\$39.70	\$378.00	<b>\$417.70</b>	\$61.28

## 1.5 DROUGHT SURCHARGES

As part of the water rate study, Raftelis calculated drought surcharges in case of a reduction in water usage due to drought. The study determined that for every percentage decrease in water usage due to drought, a \$0.015 per hundred cubic feet (hcf) surcharge will be added to the proposed rates for that year. For example, if there is a 10 percent reduction in water use, each water rate will increase by \$0.15 per hcf of water.

Table 1-6 shows the proposed drought surcharges utilizing the methodology mentioned above for four stages of drought, based on the City’s Mandatory Water Conservation Ordinance: 20 percent, 30 percent, 40 percent, and 50 percent reductions.

**Table 1-6: Proposed Drought Surcharges**

	Stage 1	Stage 2	Stage 3	Stage 4
Curtailment Target	20%	30%	40%	50%
<b>Proposed Drought Surcharge (\$/hcf)</b>	<b>\$0.30</b>	<b>\$0.45</b>	<b>\$0.60</b>	<b>\$0.75</b>