City of Peoria

WATER AND WASTEWATER UTILITIES RATE STUDY UPDATE

FINAL REPORT

April 2023

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Section I. INTRODUCTION

In 2020, the City of Peoria ("City") contracted with FCS GROUP to conduct a Comprehensive Water and Wastewater Utilities Rate and Cost of Service Study. The study reviewed each utility's financial needs over the FY 2022 through FY 2026 planning period. The study's overall objective was to establish a financial plan for each utility (revenue requirements analysis) that will inform future financial decisions and their impacts, promote long-term sustainability, and maintain equitable rates of each system (cost of service analysis).

Since the completion of the update, significant changes have occurred associated with the impacts of the pandemic on inflation and further magnified by supply chain constraints arising from other global events. In addition, drought conditions have intensified in the area, with the Bureau of Reclamation activating Tier 2a of the Colorado River Drought Contingency Plan. The dire water supply forecast has added urgency to the City's capital investment around securing future water supply from areas other than the Colorado River.

This study update will focus on revising the analysis to consider the City's most recent budget estimates for both operating and capital expenditures as well as the volatile inflationary environment at this time. This study update includes the following key elements:

- Review and monitor fiscal policies for compliance.
- Assess revenue needs for a multi-year period that includes adequate funding for operations and maintenance, capital projects, debt service, and fiscal policy achievement.
- Incorporate revised cost estimates and modified timing from the City's capital infrastructure plan.
- Develop and recommend rate structures that generate sufficient revenue to meet the City's financial obligations on a standalone, self-supporting basis.
- Write a report documenting the rate study process, assumptions, findings and recommendations.
- Present and discuss findings with staff and Council members.

The key factors, conclusions and recommendations for each of the key task areas of the study are summarized in this report.

Section II. WATER UTILITY

II.A. REVENUE REQUIREMENT

A revenue requirement analysis forms the basis for a long-range financial plan and multi-year rate management strategy. The analysis is developed by completing an operating forecast that identifies future annual operating costs and a capital funding plan that defines a strategy for funding the City's capital improvement needs.

II.A.1. Operating Forecast

The purpose of the operating forecast is to determine whether the existing rates and charges are sufficient to recover the costs the City incurs to operate and maintain the water system. The FY 2024 budget formed the baseline for this forecast. The operating forecast was developed for the FY 2024 through FY 2033 time period. This study focused on establishing water rates for the FY 2024 – FY 2028 rate-setting period. The following list highlights some of the key assumptions used in the development of the water utility operating forecast.

II.A.1.a Operating Revenue

- **Retail Rate Revenue** was based on actual detailed customer accounts and usage statistics from the City's billing system. Usage data from FY 2020 and FY 2021 was used to project future revenue. Due to the unpredictability of precipitation in the region, a historical review of precipitation and cooling degree days contributed to the development of a predictive forecasting tool to allow the City to project rate revenues based on the probability of wet or dry years as well as cold or hot years. Rate revenues for the forecast period are based on precipitation in the 70th percentile and cooling days in the 50th percentile of long-term regional climate patterns. Representing precipitation in the 70th percentile is conservative since historically, only about 30 percent of years have seen more precipitation.
- **Non-Rate Revenue** consists of late fees, new service fees, water meter charges, disconnect/reconnect fees and other miscellaneous service revenues. In addition to these ongoing charges, non-rate revenues also include funds from the New River Deal. New River Deal funds are expected to contribute $1.8M in revenue annually through FY 2026. All non-rate revenues were forecast with minimal to no increase based on discussions with City staff.
- **Customer Growth** was forecast at 1.10 percent in FY 2024, 1.75 percent in FY 2025, and 2.25 percent from FY 2026 forward, based on discussions with the City staff and in alignment with internal building permit forecasting.
- **Interest Earnings** were projected at $500,000 annually (based on discussions with City staff and in alignment with internal forecasting practices). The forecast for interest revenues is conservative, citing the volatile interest environment currently.

II.A.1.b O&M Expenses

- **General Cost Inflation** was set at 3.10 percent in FY 2024, 2.40 percent in FY 2025, and then normalizing at 2.30 percent for the remainder of the forecast based on feedback from City staff and in alignment with internal forecasting practices.

- **Construction Cost Inflation (CCI)** was already built into the construction costs provided by the City, no additional escalation was included.
- **Labor Cost Inflation** was set at 7.0 percent in FY 2024 and FY 2025 before decreasing to 5.0 percent for the remainder of the study period based on feedback from the City.
- **Benefit Cost Inflation** was set at 5.0 percent for all years in the study period based on feedback from the City.
- **Electricity Inflation** was set at 12.4 percent in FY 2024 before decreasing to 5.0 percent from FY 2025 and thereafter based on internal forecasting practices at the City.
- **Chemical Inflation** was set at 52.8 percent in FY 2024 before decreasing to 6.0 from FY 2025 and thereafter based on recent experience and internal forecasting practices at the City.
- **Vehicle Costs Inflation** was set at 8.0 percent in FY 2024, 6.0 percent in FY 2025, and then normalizing at 4.0 percent for the remaining years in the study period based on recent forecasts from the City's fleet replacement analysis.
- **General Fund Service Charge Inflation** was assumed to be 5.0 percent for all years in the study period based on recent experience and internal forecasting practices at the City. The charges paid for general fund services are an area of volatility for the utilities. If future service charge levels exceed the 5.0 percent forecast, rate strategies will need to be revisited.
- **System Supplies & Equipment** was assumed to be 5.0 percent for all years in the forecast based on recent experience and internal forecasting practices.
- **Water Supply Cost Inflation:**

  Capital Charge: This element of the water supply costs reflects the internal City forecast of $53 per acre-foot in FY 2024, increasing to $65 per acre-foot in FY 2025 before falling to $60 per acre-foot in FY 2027/FY 2028. The total capital charge fluctuates between $1.4M and $1.9M annually throughout the forecast period.

  Water Delivery Charge: This element of the water supply costs depends on the Lake Mead depth as a representation of drought severity in the region. The lower the lake depth, the more expensive the water rates. To forecast costs associated with this element, probabilities of drought severities are assumed, based on the United States Bureau of Reclamation Colorado River Hydrology Stress Test. The assumed probabilities are used to develop a weighted average rate for the total acre-feet of water ordered. The average rate is calculated at $268 per acre-foot in FY 2024, increasing to $330 per acre-foot by FY 2028. Total water delivery costs will increase from $7.86M in FY 2024 to $9.4M by FY 2028.

  Salt River Project Costs: Based on input from City staff, costs related to the Salt River Supply increase by 8.39 percent annually. This water cost element comprises the per acre allotment purchased by the City and the O&M share of certain projects related to providing and storing water. Salt River project costs will increase from $870k in FY 2024 to $1.1M by FY 2028.

  Underground Storage Costs: Costs related to underground storage are charged per acre-foot and remain relatively stable throughout the forecast period. FY 2024 costs are reflected as $14 per acre-foot, increasing to $15 per acre-foot by FY 2028. This component is a relatively small component of the overall water supply costs, representing approximately 1.1 percent of the total supply costs, or between $121k - $125k throughout the forecast period.

Pyramid Peak Inflation: Based on City staff input, costs related to the Pyramid Peak wholesale water purchases are expected to increase 5.0 percent annually. Total Pyramid peak costs increase from $2.23M in FY 2024 to $2.72M by FY 2028.

The summation of the five cost elements above represents the total water supply cost forecast. The various inflationary assumptions result in total water supply cost increases of 19.3 percent from FY 2024 to FY 2028. On average, water supply costs represent 34 percent of the water utility's operating expenses.

- **Realization Factor –** Based on the historical budget to actual expense performance, the forecast from FY 2024 forward includes a 98.0 percent realization factor applied to all operating expenses and an 80.0 percent realization factor applied to all capital expenses. The twenty percent of unspent capital projects are carried over to the following year.
- **Additional O&M Expenses -** The following incremental expenses were added for the study period based on direction from City staff:
  - Additional FTEs Annually
    - Two new FTEs are assumed to be added annually - $73,000 per FTE (in current dollars) from FY 2025 - FY 2028.
  - Additional costs / savings related to capital improvement projects. All cost/savings are assumed to be ongoing unless otherwise noted.
    - CAP/LPP Wellfield - $900k added in FY 2026
    - Zone 6E Reservoir & Booster Pump Station - $60k added in FY 2026
    - Reclaimed Transmission Main – Project 2 - $16k added in FY 2027
    - Zone 2/3 Booster - $36,409 added in FY 2030

II.A.1.c Debt Service

- **Existing Debt Service** ranges from $8.05 million in FY 2024 to $7.2 million by FY 2028. The City has two outstanding revenue bonds and two outstanding Water Infrastructure Financing Authority (WIFA) loans:
  - Series 2020 W/WW Refund Revenue Bond, with payments averaging $2.7 million annually through FY 2028, will be paid in full in FY 2030.
  - Series 2022 W/WW Revenue Bond has payments averaging $1.02 million annually through FY 2028.
  - The remaining two WIFA loans total $4.2 million in annual payments in FY 2024 and remain at a similar level through FY 2028.
- **New Debt Service -** A total of $93.0 million, through five debt issuances are forecasted in the study period. The first two debt issuances are assumed to be in FY 2024 where a $7.0 million revenue bond is planned, along with a $35.0 million WIFA loan. Following the initial issuances, subsequent debt issuances are planned at $25.0 million in FY 2025, $19.0 million in FY 2026, and finally $7.0 million in FY 2027. The issuances forecasted from FY 2025 – FY 2027 are all conservatively assumed to be revenue bonds. Revenue bonds are forecasted with a term of 20 years, an interest rate of 5.0 percent and an issuance cost of 1.0 percent. A coverage requirement of 2.0 is assumed for all existing and new revenue bond debt. New debt service payments are forecasted to begin at $3.2 million annually in FY 2024, increasing to $7.3 million after the fifth issuance in FY 2027.

II.A.1.d Rate-funded Capital

- Rate-funded capital is a way to ensure system integrity through reinvestment in the system. Ideally, the minimum funding would be an amount equal to or greater than the annual depreciation expense. A formal rate-funded capital policy was not incorporated as a part of this study but is recommended as a consideration for a future rate setting period. It should be mentioned, that despite no formal rate-funded capital policy, the City is still contributing cash from rates towards capital projects and is forecast to fund between 83 and 115 percent of annual depreciation levels throughout the forecast period.

II.A.2. Capital Funding Plan

The water utility anticipates $253.3 million in capital costs throughout the ten-year period (adjusted for inflation), with $172.0 million in planned spending through FY 2028. Major projects in the ten-year period include the CAP/LPP Intersection Wellfield ($38.8 million), Zone 6E Reservoir and Booster Pump Station ($23.2 million), and the SRP/CAP interconnect facility ($7.9 million).

Funding for the capital plan comes from a number of different sources:

- **Cash balances (including interest) and rate-funded capital** – Cash balances and rate-funded capital include the beginning capital fund balance, any cash flow from the operating fund above what is needed to meet the operating fund reserve target and available cash after meeting the principles of sound financial management (PSFM) reserve target. Cash balances and rate-funded capital are forecast to fund $79.0 million of the capital plan through FY 2028, about 46 percent of total capital expenditures in the rate-setting forecast period.
- **Revenue bond proceeds** –Four revenue bond issuances are forecasted during the study period. $7.0 million in FY 2024, $25.0 million in FY 2025, $19.0 million in FY 2026, and $7.0 million in FY 2027. Revenue bond proceeds are forecasted to fund 33.7 percent of the capital plan in the rate-setting forecast period.
- **WIFA proceeds** – One new WIFA loan is forecast during the study period. This loan will provide $35.0 million in total proceeds with draws beginning in FY 2024 and is forecast to fund 20.3 percent of the capital plan through FY 2028.

Exhibit 3.1 provides a summary of the funding sources for the capital expenditures. A detailed capital plan can be found in the excel model provided to the City.

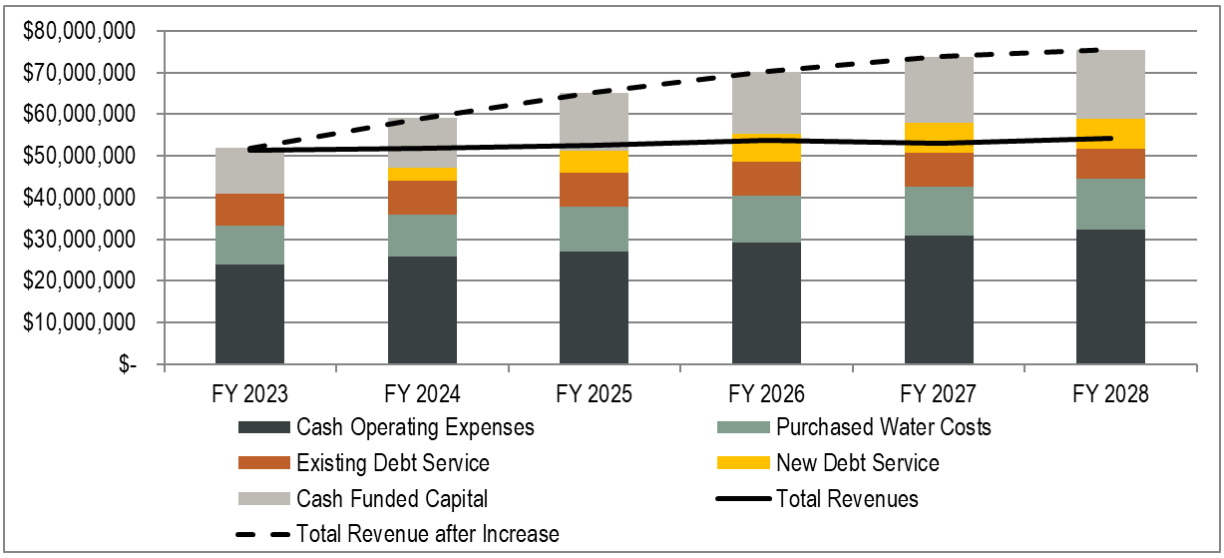
Exhibit 3.1 Water Capital Funding Summary

Funding Summary	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029-FY 2033	Total
Total Capital Costs	**$ 54,575,103**	**$ 52,936,221**	**$ 32,110,044**	**$ 21,236,145**	**$ 11,182,029**	**$ 81,271,927**	**$ 253,311,469**
Funding Sources							
Cash Balances and Rate Funded Capital	$ 12,575,103	$ 27,936,221	13,110,044	$ 14,236,145	$ 11,182,029	$ 74,271,927	153,311,469
WIFA Loan Proceeds	35,000,000					-	35,000,000
Revenue Bond Proceeds	7,000,000	25,000,000	19,000,000	7,000,000	-	7,000,000	65,000,000
Total Capital Funding	**$ 54,575,103**	**$ 52,936,221**	**$ 32,110,044**	**$ 21,236,145**	**$ 11,182,029**	**$ 81,271,927**	**$ 253,311,469**

II.A.3. Summary of Revenue Requirement

The operating forecast components of O&M expenses, debt service, and rate-funded capital come together to form the multi-year revenue requirement. The revenue requirement compares the overall revenue available to the water system to the expenses to evaluate the sufficiency of rates on an annual basis. **Exhibit 3.2** provides a summary of the water system revenue requirement findings.

Exhibit 3.2 Water Utility Revenue Requirement Summary



Summary of water utility revenue requirement:

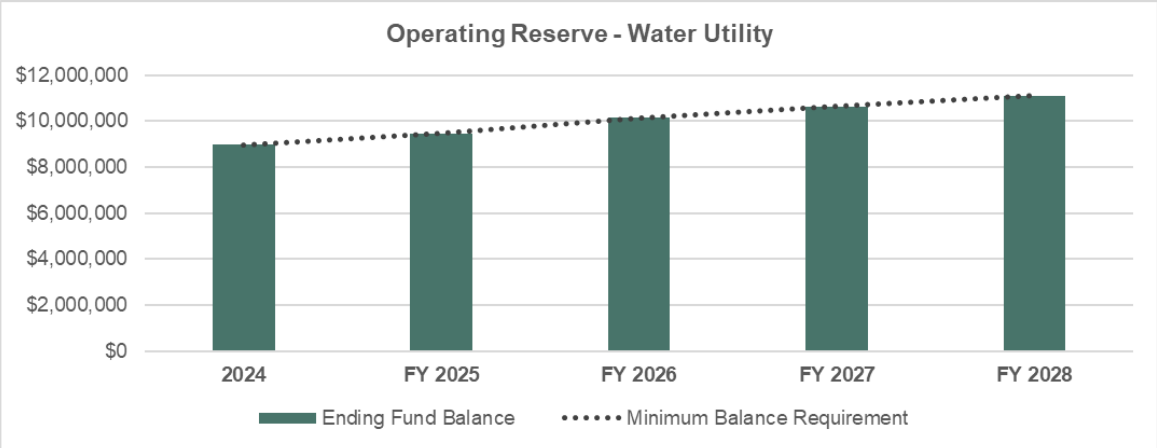
- In FY 2023, current rate levels are sufficient to meet existing annual financial obligations.
- During the FY 2024 – FY 2025 rate-setting period, existing revenues are sufficient to cover O&M expenses, water purchases, and both existing and new forecasted debt service but begin to fall short of funding full rate funded capital needs.
- Beginning in FY 2026, existing revenues would fall short of meeting the new forecasted debt service. This deficiency is forecasted at $2.5 million and would grow to $5.2M by FY 2028 if no rate action is taken.
- As the drought severity intensifies in the region, the City has accelerated the timing on capital projects to address water supply constraints. The increase in capital expenses puts pressure on rates as the City aims to minimize its reliance on debt and fund approximately 46 percent (or $79.0 million) of its capital program through rate revenues during the study period. However, $93.0 million in new debt proceeds are still needed to fund the planned capital program through FY 2028.
- To meet the projected financial obligations of the water utility, rate increases are proposed at 12.0 percent in FY 2024, 9.0 percent in FY 2025, 5.7 percent in FY 2026 and FY 2027 before staying flat for FY 2028.
- Total water debt service coverage is forecasted to remain above 2.0 in all years of the forecast, starting FY 2024 at 2.11, falling to a low of 2.03 in FY 2026, before ending FY 2028 at 2.17.

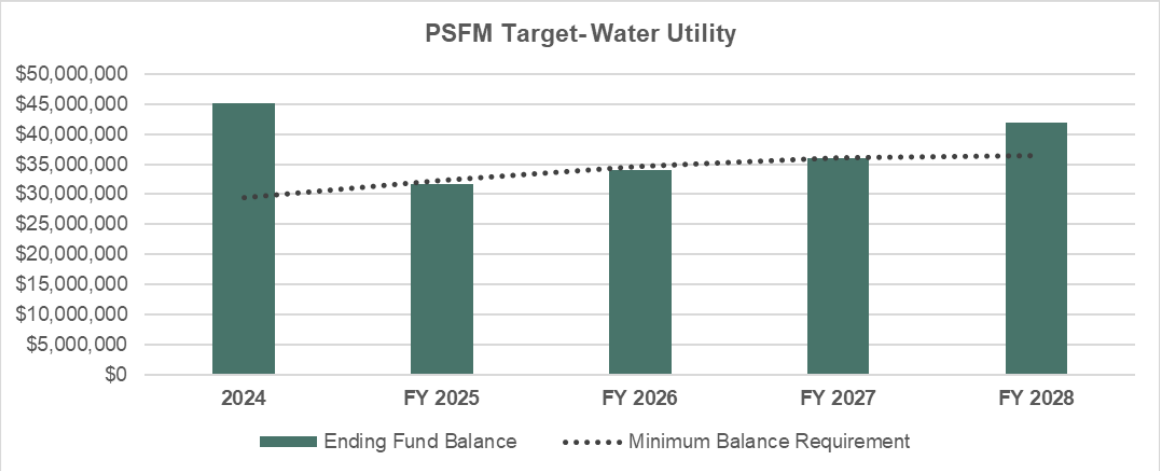
II.A.4. Reserves

Exhibit 3.3 shows a summary of the projected Operating Reserve and Principals of Sound Financial Management (PSFM) Targets through FY 2028 based on the rate forecast presented above. The Operating Reserve has a minimum target balance of 25.0 percent of operating and maintenance (O&M) expenses ($8.97 million to $11.10 million). The PSFM Target combines the operating reserve and 5.0 percent of operating revenues (rate stabilization reserve), 50.0 percent of debt service, and 2.0 percent of asset value.

The Operating target maintains its minimum target balance throughout the study period. The PSFM target balances are met in FY 2024 before falling below target from FY 2025 through FY 2027, bouncing back to above target by FY 2028. To moderate rate increases, the City is utilizing a portion of the rate stabilization reserve, which is the purpose of that reserve. At their lowest point, in FY 2026, PSFM reserves are still within 97 percent of planned target levels.

Exhibit 3.3 Operating and PSFM Target Balances





II.B. RATE DESIGN

The principal objective of the rate design stage is to implement water rate structures that collect the appropriate level of revenue as equitably and fairly from each customer as possible, in accordance with the cost of providing the water service. Several variables must be balanced to arrive at optimal rates and include revenue stability and efficiency of use.

II.B.1. Existing Water Rates

The existing water structure includes a fixed monthly charge and a variable consumption charge billed per thousand gallons (kgals) of water use. The fixed rate depends on the customer's meter size for all customer classes, except multi-residential and residential care customers. For the multi-residential and residential care classes, the same fixed charges per account and per unit are applied,

regardless of meter size. The variable charges are tier based for single-family, commercial, and landscape customers, with the tier thresholds differing by class. The multi-residential, residential care, non-potable, and reclaimed water customers are charged a flat rate per kgal for all usage over 1,000 gallons.

Exhibit 3.4 provides a summary of the existing monthly water utility rates.

Exhibit 3.4 Existing Monthly Water Rates

Residential	FY 2023
Base Charge	
5/8" or 3/4"	$ 17.38
1"	$ 21.27
1.5"	$ 35.56
2"	$ 51.16
3"	$ 92.83
4"	$ 139.66
6"	$ 269.67
8"	$ 425.75
Usage Charge (in gallons)	
1,000-4,000	$ 1.26
5,000-10,000	$ 3.34
11,000-20,000	$ 4.75
20,000+	$ 5.26

Multi-Residential & Residential Care	FY 2023
Base Charge	
5/8" or 3/4"	$ 9.06
1"	$ 9.06
1.5"	$ 9.06
2"	$ 9.06
3"	$ 9.06
4"	$ 9.06
6"	$ 9.06
8"	$ 9.06
Usage Charge (in gallons)	
1,000+	$ 3.34
Capacity Charge (per unit)	$ 5.00

Commercial/Industrial	FY 2023
Base Charge	
5/8" or 3/4"	$ 17.38
1"	$ 21.27
1.5"	$ 35.56
2"	$ 51.16
3"	$ 92.83
4"	$ 139.66
6"	$ 269.67
8"	$ 425.75
Usage Charge (in gallons)	
1,000-10,000	$ 1.26
11,000-50,000	$ 3.34
50,000+	$ 4.75

Landscape	FY 2023
Base Charge	
5/8" or 3/4"	$ 17.38
1"	$ 21.27
1.5"	$ 35.56
2"	$ 51.16
3"	$ 92.83
4"	$ 139.66
6"	$ 269.67
8"	$ 425.75
Usage Charge (in gallons)	
1,000-50,000	$ 3.34
50,000+	$ 4.75

Non-Potable	FY 2023
Base Charge	
5/8" or 3/4"	$ 17.38
1"	$ 21.27
1.5"	$ 35.56
2"	$ 51.16
3"	$ 92.83
4"	$ 139.66
6"	$ 269.67
8"	$ 425.75
Usage Charge (in gallons)	
1,000+	$ 1.54

Reclaimed	FY 2023
Base Charge	
5/8" or 3/4"	$ 17.38
1"	$ 21.27
1.5"	$ 35.56
2"	$ 51.16
3"	$ 92.83
4"	$ 139.66
6"	$ 269.67
8"	$ 425.75
Usage Charge (in gallons)	
1,000+	$ 1.54

Hydrants	FY 2023
Usage Charge (in gallons)	
1,000+	$ 4.75

II.B.2. Proposed Water Rates

The analysis in this financial plan indicates the need for a 12.0 percent increase in FY 2024, a 9.0 percent increase in FY 2025, and 5.70 percent from FY 2026 to FY 2027 to cover all costs and meet fiscal targets. No cost-of-service shifts will be implemented during the study period. Therefore, the rate increases will be applied equally to each class's fixed and variable rate components.

Exhibit 3.5 provides a schedule of existing and proposed fixed and volumetric rates for each year from FY 2024 through FY 2028 for all customer classes.

Exhibit 3.5 Existing and Proposed Monthly Water Rates (FY 2024-FY 2028)

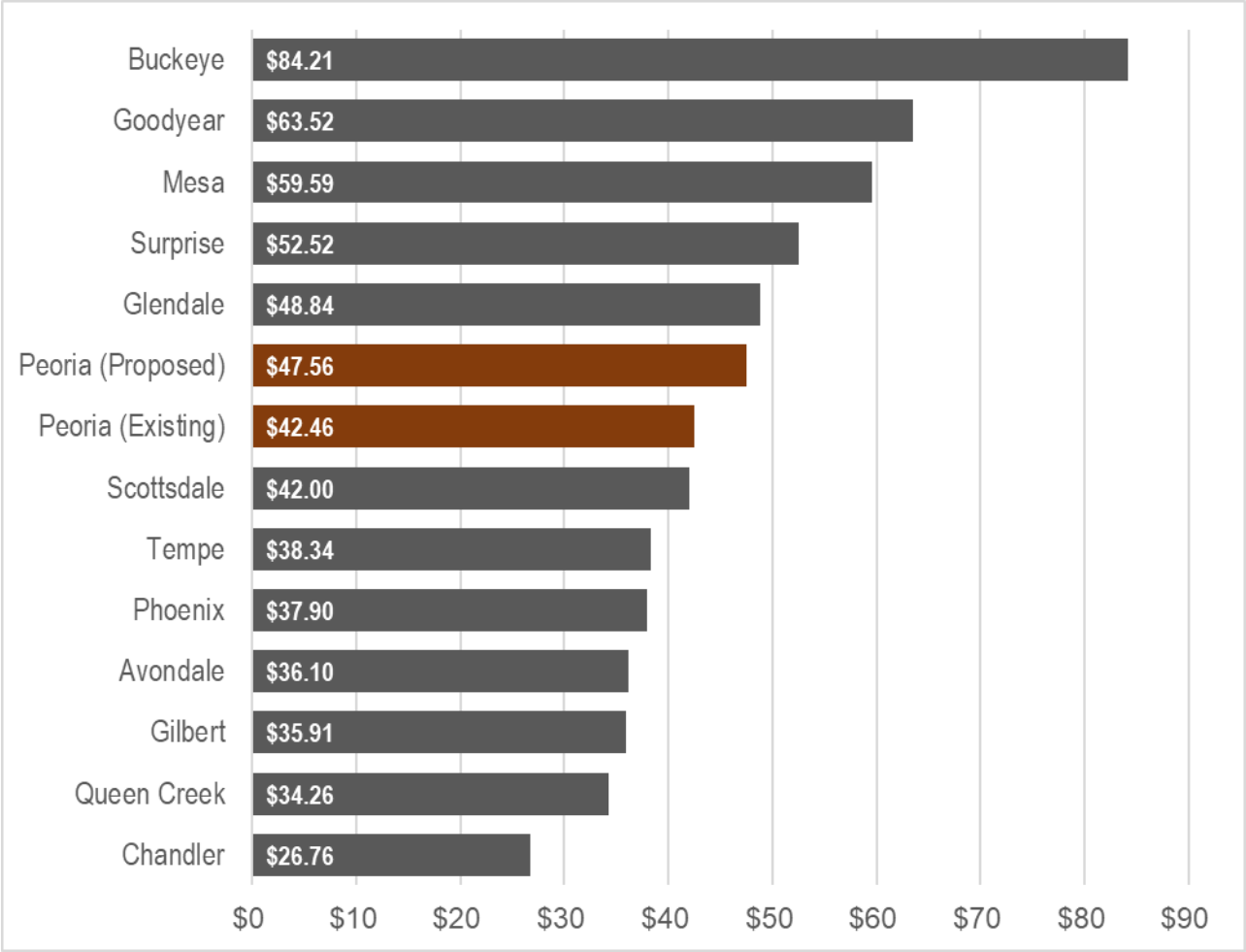
Residential	Existing	Proposed				
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Base Charge						
5/8" or 3/4"	$ 17.38	$ 19.47	$ 21.24	$ 22.43	$ 23.71	$ 23.71
1"	$ 21.27	$ 23.82	$ 25.96	$ 27.44	$ 29.00	$ 29.00
1.5"	$ 35.56	$ 39.83	$ 43.41	$ 45.88	$ 48.50	$ 48.50
2"	$ 51.16	$ 57.30	$ 62.46	$ 66.02	$ 69.78	$ 69.78
3"	$ 92.83	$ 103.97	$ 113.33	$ 119.79	$ 126.62	$ 126.62
4"	$ 139.66	$ 156.42	$ 170.50	$ 180.22	$ 190.49	$ 190.49
6"	$ 269.67	$ 302.03	$ 329.21	$ 347.97	$ 367.80	$ 367.80
8"	$ 425.75	$ 476.84	$ 519.76	$ 549.39	$ 580.71	$ 580.71
Usage Charge (in gallons)						
1,000-4,000	$ 1.26	$ 1.41	$ 1.53	$ 1.62	$ 1.71	$ 1.71
5,000-10,000	$ 3.34	$ 3.74	$ 4.08	$ 4.31	$ 4.56	$ 4.56
11,000-20,000	$ 4.75	$ 5.32	$ 5.80	$ 6.13	$ 6.48	$ 6.48
20,000+	$ 5.26	$ 5.89	$ 6.42	$ 6.79	$ 7.18	$ 7.18
Multi-Residential & Residential Care	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Base Charge						
5/8" or 3/4"	$ 9.06	$ 10.15	$ 11.06	$ 11.69	$ 12.36	$ 12.36
1"	$ 9.06	$ 10.15	$ 11.06	$ 11.69	$ 12.36	$ 12.36
1.5"	$ 9.06	$ 10.15	$ 11.06	$ 11.69	$ 12.36	$ 12.36
2"	$ 9.06	$ 10.15	$ 11.06	$ 11.69	$ 12.36	$ 12.36
3"	$ 9.06	$ 10.15	$ 11.06	$ 11.69	$ 12.36	$ 12.36
4"	$ 9.06	$ 10.15	$ 11.06	$ 11.69	$ 12.36	$ 12.36
6"	$ 9.06	$ 10.15	$ 11.06	$ 11.69	$ 12.36	$ 12.36
8"	$ 9.06	$ 10.15	$ 11.06	$ 11.69	$ 12.36	$ 12.36
Usage Charge (in gallons)						
1,000+	$ 3.34	$ 3.74	$ 4.08	$ 4.31	$ 4.56	$ 4.56
Capacity Charge (per unit)	$ 5.00	$ 5.60	$ 6.10	$ 6.45	$ 6.82	$ 6.82
Commercial/Industrial	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Base Charge						
5/8" or 3/4"	$ 17.38	$ 19.47	$ 21.24	$ 22.43	$ 23.71	$ 23.71
1"	$ 21.27	$ 23.82	$ 25.96	$ 27.44	$ 29.00	$ 29.00
1.5"	$ 35.56	$ 39.83	$ 43.41	$ 45.88	$ 48.50	$ 48.50
2"	$ 51.16	$ 57.30	$ 62.46	$ 66.02	$ 69.78	$ 69.78
3"	$ 92.83	$ 103.97	$ 113.33	$ 119.79	$ 126.62	$ 126.62
4"	$ 139.66	$ 156.42	$ 170.50	$ 180.22	$ 190.49	$ 190.49
6"	$ 269.67	$ 302.03	$ 329.21	$ 347.97	$ 367.80	$ 367.80
8"	$ 425.75	$ 476.84	$ 519.76	$ 549.39	$ 580.71	$ 580.71
Usage Charge (in gallons)						
1,000-10,000	$ 1.26	$ 1.41	$ 1.53	$ 1.62	$ 1.71	$ 1.71
11,000-50,000	$ 3.34	$ 3.74	$ 4.08	$ 4.31	$ 4.56	$ 4.56
50,000+	$ 4.75	$ 5.32	$ 5.80	$ 6.13	$ 6.48	$ 6.48

Landscape	Existing	Proposed				
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Base Charge						
5/8" or 3/4"	$ 17.38	$ 19.47	$ 21.24	$ 22.43	$ 23.71	$ 23.71
1"	$ 21.27	$ 23.82	$ 25.96	$ 27.44	$ 29.00	$ 29.00
1.5"	$ 35.56	$ 39.83	$ 43.41	$ 45.88	$ 48.50	$ 48.50
2"	$ 51.16	$ 57.30	$ 62.46	$ 66.02	$ 69.78	$ 69.78
3"	$ 92.83	$ 103.97	$ 113.33	$ 119.79	$ 126.62	$ 126.62
4"	$ 139.66	$ 156.42	$ 170.50	$ 180.22	$ 190.49	$ 190.49
6"	$ 269.67	$ 302.03	$ 329.21	$ 347.97	$ 367.80	$ 367.80
8"	$ 425.75	$ 476.84	$ 519.76	$ 549.39	$ 580.71	$ 580.71
Usage Charge (in gallons)						
1,000-50,000	$ 3.34	$ 3.74	$ 4.08	$ 4.31	$ 4.56	$ 4.56
50,000+	$ 4.75	$ 5.32	$ 5.80	$ 6.13	$ 6.48	$ 6.48
Non-Potable	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Base Charge						
5/8" or 3/4"	$ 17.38	$ 19.47	$ 21.24	$ 22.43	$ 23.71	$ 23.71
1"	$ 21.27	$ 23.82	$ 25.96	$ 27.44	$ 29.00	$ 29.00
1.5"	$ 35.56	$ 39.83	$ 43.41	$ 45.88	$ 48.50	$ 48.50
2"	$ 51.16	$ 57.30	$ 62.46	$ 66.02	$ 69.78	$ 69.78
3"	$ 92.83	$ 103.97	$ 113.33	$ 119.79	$ 126.62	$ 126.62
4"	$ 139.66	$ 156.42	$ 170.50	$ 180.22	$ 190.49	$ 190.49
6"	$ 269.67	$ 302.03	$ 329.21	$ 347.97	$ 367.80	$ 367.80
8"	$ 425.75	$ 476.84	$ 519.76	$ 549.39	$ 580.71	$ 580.71
Usage Charge (in gallons)						
1,000+	$ 1.54	$ 1.72	$ 1.87	$ 1.98	$ 2.09	$ 2.09
Reclaimed	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Base Charge						
5/8" or 3/4"	$ 17.38	$ 19.47	$ 21.24	$ 22.43	$ 23.71	$ 23.71
1"	$ 21.27	$ 23.82	$ 25.96	$ 27.44	$ 29.00	$ 29.00
1.5"	$ 35.56	$ 39.83	$ 43.41	$ 45.88	$ 48.50	$ 48.50
2"	$ 51.16	$ 57.30	$ 62.46	$ 66.02	$ 69.78	$ 69.78
3"	$ 92.83	$ 103.97	$ 113.33	$ 119.79	$ 126.62	$ 126.62
4"	$ 139.66	$ 156.42	$ 170.50	$ 180.22	$ 190.49	$ 190.49
6"	$ 269.67	$ 302.03	$ 329.21	$ 347.97	$ 367.80	$ 367.80
8"	$ 425.75	$ 476.84	$ 519.76	$ 549.39	$ 580.71	$ 580.71
Usage Charge (in gallons)						
1,000+	$ 1.54	$ 1.72	$ 1.87	$ 1.98	$ 2.09	$ 2.09
Hydrants	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Usage Charge (in gallons)						
1,000+	$ 4.75	$ 5.32	$ 5.80	$ 6.13	$ 6.48	$ 6.48

II.B.3. Rate Survey

Exhibit 3.6 compares the City's monthly rate with the 2023 rates of other jurisdictions. Note that each jurisdiction has a unique set of geographic traits, customers, and system characteristics, each of which can significantly impact rates. Bill calculations assume 10 kgals of monthly water usage.

Exhibit 3.6 Residential Monthly Water Rate Survey (10,000 Gallons of Usage, ¾" Meters)



II.B.4. Water Deficiency Rate Surcharge

II.B.4.a Introduction

Based on Section 25-54 of the City's municipal code, the City has the authority to charge customers a water deficiency rate surcharge upon designation of stages 2, 3, or 4 of the City's Drought Contingency Plan Management Procedure. In other words, the City would only implement the drought surcharge if directed to do so by the City Manager. This surcharge has two main objectives. First, it sends a price signal to the community, incentivizing users to reduce their water consumption. Secondly, it helps ensure the utility's revenue stability as customers respond to demand reduction measures.

January 1st, 2023, the Bureau of Reclamation activated Tier 2a of the Colorado River Drought Contingency Plan. This activation means that Arizona's allocation of the Colorado River is reduced by 592,000 acre-feet per year; this is enough water to serve 1.2 to 1.8 million homes and cuts the normal supply for the Central Arizona Project (CAP) by 34 percent. More recently, the Bureau has indicated that Tier 3 reductions are being considered, and more

aggressive restrictions may be implemented without voluntary actions from the Basin states. The following drought surcharge analysis prepares the City of Peoria to take action to mitigate water supply demands on constrained CAP resources.

II.B.4.b Proposed Water Deficiency Rate Surcharge

In developing the proposed water deficiency rate surcharges, five years of historical water demand data were analyzed, specific to the City of Peoria. A multi-year bill frequency was created to understand how water moves through tiers for the residential, commercial, and landscape classes and to help set conservative demand levels for all classes of service. Drought surcharges were evaluated for six demand reduction scenarios. Surcharge levels are set to ensure full revenue recovery, dependent on the level of demand reduction. The first usage tier for the residential class allows up to 4,000 gallons. This usage level was deemed necessary for indoor use and was a practical limit for account-based reductions. With that in mind, no surcharge is proposed for usages that fall within the tier 1 threshold for the residential class. A similar methodology was used to develop surcharges for the commercial/industrial class. The tier 1 threshold of 10,000 gallons was deemed to be a practical limit for account-based demand reductions and therefore, no surcharge was created for tier 1 of the commercial/industrial classes.

Exhibit 3.7 shows the proposed surcharge levels for FY 2024 and FY 2025, depending on the demand reduction level assumed.

Exhibit 3.7 Proposed Water Deficiency Rate Surcharges (FY 2024-FY 2025)

Residential	Base Rate FY 2024	2024 Drought Surcharges based on Demand Reduction 5%	10%	15%	20%	30%	50%
Usage Charge (in gallons)							
1,000-4,000	$ 1.40	$ -	$ -	$ -	$ -	$ -	$ -
5,000-10,000	$ 3.74	$ 0.23	$ 0.48	$ 0.77	$ 1.09	$ 1.89	$ 4.50
11,000-20,000	$ 5.32	$ 0.32	$ 0.68	$ 1.09	$ 1.55	$ 2.68	$ 6.41
20,000+	$ 5.89	$ 0.36	$ 0.75	$ 1.21	$ 1.72	$ 2.97	$ 7.09
Multi-Residential & Residential Care	**Base Rate FY 2024**	**2024 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000+	$ 3.74	$ 0.20	$ 0.42	$ 0.66	$ 0.94	$ 1.60	$ 3.74
Commercial/Industrial	**Base Rate FY 2024**	**2024 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000-10,000	$ 1.40	$ -	$ -	$ -	$ -	$ -	$ -
11,000-50,000	$ 3.74	$ 0.21	$ 0.45	$ 0.72	$ 1.02	$ 1.77	$ 4.21
50,000+	$ 5.32	$ 0.30	$ 0.64	$ 1.02	$ 1.45	$ 2.51	$ 5.98
Landscape	**Base Rate FY 2024**	**2024 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000-50,000	$ 3.74	$ 0.05	$ 0.11	$ 0.17	$ 0.24	$ 0.41	$ 0.93
50,000+	$ 5.32	$ 0.36	$ 0.77	$ 1.24	$ 1.78	$ 3.18	$ 8.35
Non-Potable	**Base Rate FY 2024**	**2024 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000+	$ 1.72	$ 0.09	$ 0.19	$ 0.30	$ 0.43	$ 0.74	$ 1.72
Reclaimed	**Base Rate FY 2024**	**2024 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000+	$ 1.72	$ 0.09	$ 0.19	$ 0.30	$ 0.43	$ 0.74	$ 1.72
Hydrants	**Base Rate FY 2024**	**2024 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000+	$ 5.32	$ 0.28	$ 0.59	$ 0.94	$ 1.33	$ 2.28	$ 5.32

Residential	Base Rate FY 2025	2025 Drought Surcharges based on Demand Reduction 5%	10%	15%	20%	30%	50%
Usage Charge (in gallons)							
1,000-4,000	$ 1.53	$ -	$ -	$ -	$ -	$ -	$ -
5,000-10,000	$ 4.08	$ 0.25	$ 0.52	$ 0.84	$ 1.19	$ 2.06	$ 4.91
11,000-20,000	$ 5.80	$ 0.35	$ 0.74	$ 1.19	$ 1.69	$ 2.92	$ 6.98
20,000+	$ 6.42	$ 0.39	$ 0.82	$ 1.31	$ 1.87	$ 3.24	$ 7.73
Multi-Residential & Residential Care	**Base Rate FY 2025**	**2025 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000+	$ 4.08	$ 0.21	$ 0.45	$ 0.72	$ 1.02	$ 1.75	$ 4.08
Commercial/Industrial	**Base Rate FY 2025**	**2025 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000-10,000	$ 1.53	$ -	$ -	$ -	$ -	$ -	$ -
11,000-50,000	$ 4.08	$ 0.23	$ 0.49	$ 0.78	$ 1.11	$ 1.93	$ 4.59
50,000+	$ 5.80	$ 0.33	$ 0.70	$ 1.11	$ 1.58	$ 2.74	$ 6.52
Landscape	**Base Rate FY 2025**	**2025 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000-50,000	$ 4.08	$ 0.06	$ 0.12	$ 0.19	$ 0.27	$ 0.45	$ 1.02
50,000+	$ 5.80	$ 0.39	$ 0.84	$ 1.35	$ 1.94	$ 3.46	$ 9.10
Non-Potable	**Base Rate FY 2025**	**2025 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000+	$ 1.87	$ 0.10	$ 0.21	$ 0.33	$ 0.47	$ 0.80	$ 1.87
Reclaimed	**Base Rate FY 2025**	**2025 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000+	$ 1.87	$ 0.10	$ 0.21	$ 0.33	$ 0.47	$ 0.80	$ 1.87
Hydrants	**Base Rate FY 2025**	**2025 Drought Surcharges based on Demand Reduction 5%**	**10%**	**15%**	**20%**	**30%**	**50%**
Usage Charge (in gallons)							
1,000+	$ 5.80	$ 0.31	$ 0.64	$ 1.02	$ 1.45	$ 2.48	$ 5.80

II.B.5. Meter and Service Fees

In addition to monthly water and sewer rates, the utility also has miscellaneous service fees. These are administrative fees that are applied for initiation of utility service or deposits for renter-occupied locations as well as punitive fees for late payments or meter tampering. The schedule of miscellaneous service fees will increase based on the system average increase for the water utility and rounded to the nearest full dollar. Existing and proposed fees are shown in **Exhibit 3.8** below.

Exhibit 3.8 Existing and Proposed Meter and Service Fees (FY 2023-FY 2028)

Description	Existing FY 2023	Proposed FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Utility Service Initiation Fee	$50.00	$56.00	$61.00	$65.00	$68.00	$68.00
Same Day Service Fee	$50.00	$56.00	$61.00	$65.00	$68.00	$68.00
Late Fee		1.5% of balance with min. of $2.00				
Delinquent Bill Processing Fee	$50.00	$56.00	$61.00	$65.00	$68.00	$68.00
Processing Fee for Issuance of Notice of Disconnection	$1.00	$2.00	$2.00	$2.00	$2.00	$2.00
Meter or Service Tampering Fee	$75.00	$84.00	$92.00	$97.00	$102.00	$102.00
Field Trip Service Fee	$50.00	$56.00	$61.00	$65.00	$68.00	$68.00
Non-owner Occupied Utility Service Deposit (Water)	$225.00	$252.00	$275.00	$290.00	$307.00	$307.00
Commerical and Multi-Residential Utility Service Deposit	$225.00	$252.00	$275.00	$290.00	$307.00	$307.00
Hydrant Meter Service Deposit	$2,320.00	$2,598.00	$2,832.00	$2,994.00	$3,164.00	$3,164.00
Curb Stop Repair - 3/4" meter	$200.00	$224.00	$244.00	$258.00	$273.00	$273.00
Curb Stop Repair - 1" meter	$225.00	$252.00	$275.00	$290.00	$307.00	$307.00
Lock Replacement Fee	$20.00	$22.00	$24.00	$26.00	$27.00	$27.00
Certified Letter Fee	$15.00	$17.00	$18.00	$19.00	$20.00	$20.00
New Build Meter Installations (All Sizes - per meter)	Range from $317 to $7,360	Cost to City, plus 20% of cost to cover overhead				
Water Services - Hydrant Meter	$1,280.00	Cost to City, plus 20% of cost to cover overhead				

II.C. SUMMARY

The analysis described above concludes the rate study for the water utility. Annual rate increases are proposed at 12.0 percent in FY 2024, 9.0 percent in FY 2025, 5.7 percent in FY 2026 and FY 2027 before staying flat for FY 2028. The proposed annual rate increases will prepare the City to fund the accelerated capital project schedule in response to increasing drought severity while minimizing reliance on debt in a volatile interest environment. No cost-of-service changes are planned at this time and the suggested rate increases will be applied equally to each class.

We recommend that the City revisit the study findings during each budget cycle to check that the assumptions used are still appropriate and no significant changes have occurred that would alter the results of the study. The City should use the study findings as a living document, continuously comparing the study outcomes to actual revenues and expenses. Any significant or unexpected changes will require adjustments to the rate strategy proposed.

Section III. WASTEWATER UTILITY

III.A. REVENUE REQUIREMENT

Similar to the water utility, a revenue requirement was completed for the wastewater utility and forms the basis for the long-range financial plan and multi-year financial management strategy.

III.A.1. Operating Forecast

The purpose of the operating forecast is to determine whether the existing rates and charges are sufficient to recover the costs the City incurs to operate and maintain the wastewater system. The FY 2024 budget formed the baseline for this forecast. While the operating forecast was developed for the FY 2024 through FY 2033 time period, this study focused on establishing wastewater rates for the FY 2024 – FY 2028 rate-setting period. The following list highlights some of the key assumptions used in the development of the wastewater utility operating forecast.

III.A.1.a Operating Revenue

- **Retail Rate Revenue** was based on actual detailed customer account and flow statistics from the City's billing system and is being forecasted utilizing the City's internal customer growth forecast. Wastewater is billed on the prior year's winter average for the months of December through March. Multiple years of historical customer statistics were reviewed to normalize flow estimates for hotter than average years, linking climate assumptions to those used in the water utility forecast.
- **Non-Rate Revenue** consists of EPA mandate fees, interdepartmental service charges and late fees. These revenues, which represent approximately 6.5 percent of total revenues, were forecast with minimal to no increase with the exception of the EPA mandate fees, which are linked to customer growth.
- **Customer Growth** was forecast at 1.10 percent in FY 2024, 1.75 percent in FY 2025, and 2.25 percent from FY 2026 forward, based on discussions with the City staff and in alignment with internal building permit forecasting.
- **Interest Earnings** were projected at $300,000 annually (based on discussions with City staff and in alignment with internal forecasting practices). Similar to water, the forecast for interest revenues is conservative, citing the volatile interest environment currently.

III.A.1.b O&M Expenses

- **General Cost Inflation** was set at 3.10 percent in FY 2024, 2.40 percent in FY 2025, and then normalizing to 2.30 percent for the remainder of the forecast based on feedback from City staff and in alignment with internal forecasting practices.
- **Construction Cost Inflation (CCI)** was already built into the construction costs provided by the City, no additional escalation was included.
- **Labor Cost Inflation** was set at 7.0 percent in FY 2024 to FY 2025, then decreasing to 5.0 percent for the remainder of the study period based on feedback from the City.

- **Benefit Cost Inflation** was set at 5.0 percent for all years in the study period based on feedback from the City.
- **Electricity Inflation** was assumed to be 18.4 percent in FY 2024 then dropping to 5.0 percent from FY 2025 and thereafter based on internal forecasting practices at the City.
- **Chemical Inflation** was assumed to be 21.3 percent in FY 2024 then dropping to 6.0 percent from FY 2025 and thereafter based on recent experience and internal forecasting practices at the City.
- **Vehicle Costs Inflation** was set at 10.0 percent in FY 2024 lowering to 6.0 percent in FY 2025, and returning to 4.0 percent for the remainder of years in the study period based on recent forecasts from the City's fleet replacement analysis.
- **General Fund Service Charge Inflation** was assumed to be 5.0 percent for all years in the study period based on recent experience and internal forecasting practices at the City. The charges paid for general fund services are an area of volatility for the utilities. If future service charge levels exceed the 5.0 percent forecast, rate strategies will need to be revisited.
- **System Supplies & Equipment** was assumed to be 5.0 percent for all years in the forecast based on recent experience and internal forecasting practices.
- **Realization Factor –** Based on historical to actual expense performance, the forecast for FY 2024 forward will include a 98.0 percent realization factor applied to all operating expenses and an 80.0 percent realization factor applied to all capital expenses. The twenty percent of unspent capital projects are carried over to the following year.
- **Additional O&M Expenses -** while the FY 2024 budgeted expenses were used as the basis to forecast future expenses, the following incremental expenses were added for the study period:
  - Additional FTEs Annually
    - Two new FTEs are assumed to be added annually - $73,000 per FTE (in current dollars) from FY 2025-FY 2028.
  - Additional costs / savings related to capital improvement projects. All cost / savings are assumed to be ongoing unless otherwise noted.
    - Jomax WRF Expansion – $2,400 added in FY 2027
    - Reclaimed Water Transmission Main - $10,000 in FY 2026

III.A.1.c Debt Service

- **Existing Debt Service** - The wastewater utility currently has three outstanding debt issues resulting in annual debt service of $4.3 million in FY 2024, decreasing to $3.4 million by FY 2028. The debt issues are broken down as follows:
  - Series 2020 W/WW Refund Revenue Bond with payments of $2.9 million annually from FY 2024 to FY 2027, dropping to $2.1 million by FY 2028.
  - Series 2022 W/WW Refund Revenue Bond with payments averaging $1.1 million annually for each year of the forecast period.
  - WIFA 2009 Beardsley WRF loan with payments averaging $310,000 from FY 2024 to FY 2027, before dropping to $256,000 in FY 2028.
- **New Debt Service -** A total of $31.5 million in new debt issuances have been forecasted throughout the study period. The first issuance is $12.0 million in FY 2024, followed by $10.0 million in FY

2025 and $9.4 million in FY 2026. These issuances have conservatively been assumed to be revenue bonds, with an interest rate of 5.0 percent, an issuance cost of 1.0 percent, term of 20 years, and coverage requirement of 2.00. New debt service payments are forecasted to begin at $973,000 annually in FY 2024, increasing to $2.6 million after the third issuance in FY 2026.

III.A.1.d Rate-Funded Capital

- Rate-funded capital is a way to ensure system integrity through reinvestment in the system. Ideally, the minimum funding would be an amount equal to or greater than the annual depreciation expense. A formal rate-funded capital policy was not incorporated as a part of this study but is recommended as a consideration for a future rate setting period. It should be mentioned, that despite no formal rate-funded capital policy, the City is still contributing cash from rates towards capital projects and is forecast to fund 52 percent of annual depreciation levels in FY 2024. Funding averages $7.0 million annually through FY 2028.

III.A.2. Capital Funding Plan

The wastewater utility is anticipating $152.5 million in capital costs from FY 2024 through FY 2033 (adjusted for inflation) with $72.1 million in costs recognized by FY 2028. Major projects in the ten-year period include Jomax WRF Expansion ($63.5 million), Reclaimed Water Projects ($52.2 million), and the Lake Pleasant Parkway 18-inch Sewer Line ($13.1 million).

Funding for the capital plan identified comes from a number of different sources:

- **Cash balances (including interest) and rate-funded capital** – Cash balances and rate-funded capital include the beginning capital fund balance, any cash flow from the operating fund above what is needed to meet the operating fund reserve target and available cash after meeting the principles of sound financial management (PSFM) reserve target. Cash balances and rate funded capital are forecast to fund $40.6 million of the capital plan through FY 2028, about 56.3 percent of total expenditures.
- **Revenue bond proceeds** – Three revenue bond issuances are forecasted, $12.0 million in FY 2024, $10.0 million in FY 2025 and $9.5 million in FY 2026 for a total of $31.5 million. Revenue bond proceeds are forecasted to fund 43.7 percent of the capital plan through FY 2028.

Exhibit 4.1 provides a summary of the funding sources for the capital program. A detailed capital plan can be found in financial models provided to the City.

Exhibit 4.1 Wastewater Capital Funding Summary

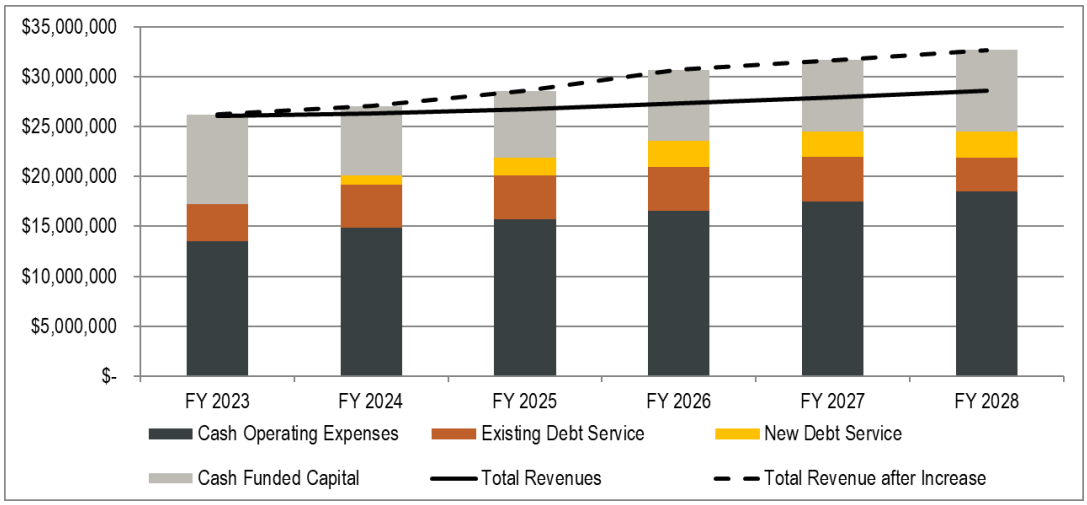
Funding Summary	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029-FY 2033	Total
Total Capital Costs	**$ 28,502,869**	**$ 15,893,614**	**$ 16,222,323**	**$ 6,436,729**	**$ 5,021,346**	**$ 80,442,093**	**$ 152,518,973**
Funding Sources							
Cash Balances and Rate Funded Capital	$ 16,502,869	$ 5,893,614	$ 6,722,323	$ 6,436,729	$ 5,021,346	$ 38,442,093	79,018,973
Revenue Bond Proceeds	12,000,000	10,000,000	9,500,000			42,000,000	73,500,000
Total Capital Funding	**$ 28,502,869**	**$ 15,893,614**	**$ 16,222,323**	**$ 6,436,729**	**$ 5,021,346**	**$ 80,442,093**	**$ 152,518,973**

III.A.3. Summary of Revenue Requirement

The operating forecast components of O&M expenses, debt service and rate-funded capital come together to form the multi-year revenue requirement. The revenue requirement compares the overall wastewater system revenue against forecasted expenses to evaluate the sufficiency of rates on an

annual basis. **Exhibit 4.2** provides a summary of the wastewater system revenue requirement findings.

Exhibit 4.2 Wastewater Utility Revenue Requirement Summary



Summary of wastewater revenue requirement:

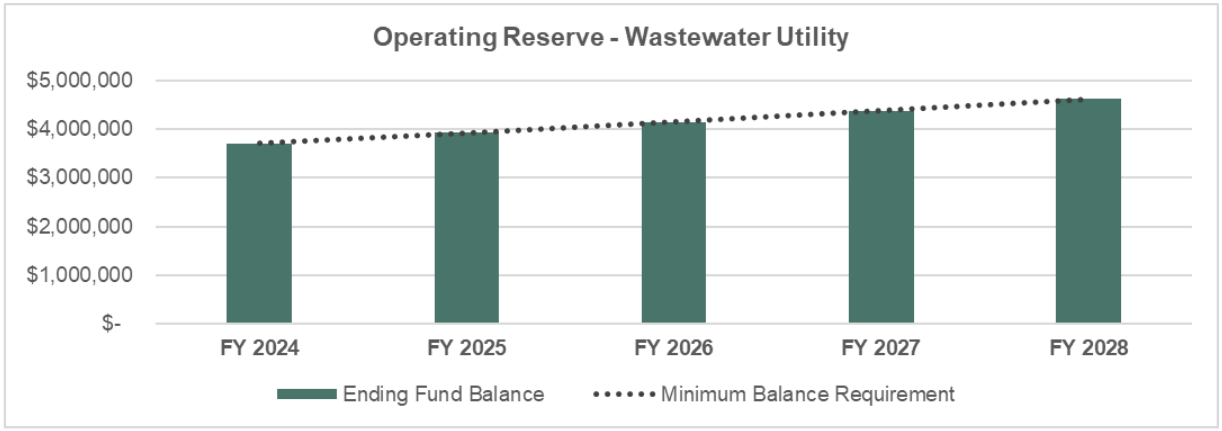
- In FY 2023, current rate levels are sufficient to meet existing annual financial obligations.
- During the FY 2024 – FY 2028 study period, existing revenues are sufficient to cover O&M expenses and both existing and new forecasted debt service.
- In addition to $31.5 million in new debt proceeds, the financial plan funds approximately 56.3 percent (or $40.6 million) of the wastewater utility's capital program through rate revenues during the forecast period. Rates will need to increase to generate sufficient revenue capacity to meet the planned capital program.
- To meet the projected financial obligations of the wastewater utility and minimize the use of debt while in a volatile interest environment, rate increases are proposed at 1.50 percent in FY 2024, increasing to 4.00 percent in FY 2025 and 5.50 percent for FY 2026 before dropping to 1.00 percent annually from FY 2027 and thereafter.
- Total wastewater debt service coverage is forecasted to remain above 2.0 in all years of the study, starting FY 2024 at 2.37, reaching a low of 2.07 in FY 2026 with the issuance of the third proposed revenue bond, before increasing to 2.42 by FY 2028.

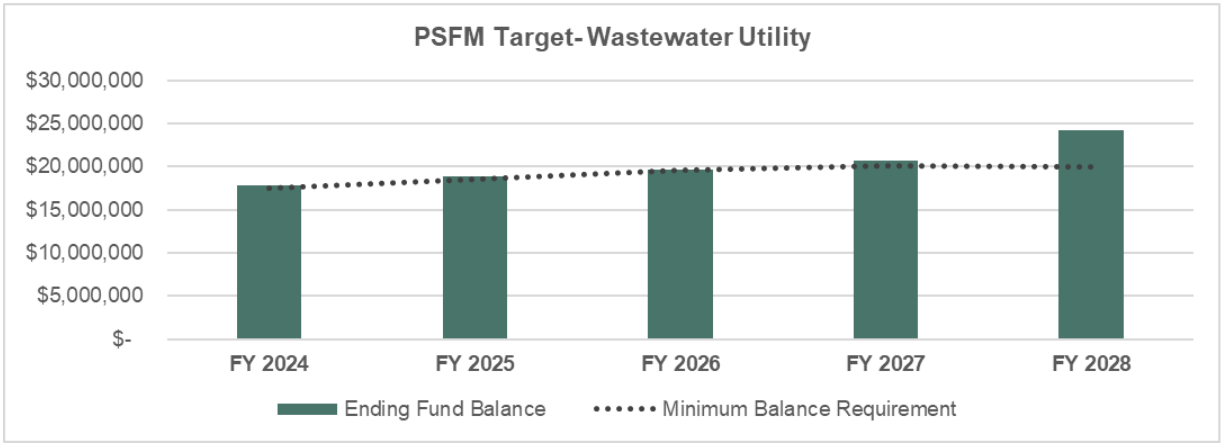
III.A.4. Reserves

Exhibit 4.3 shows a summary of the projected Operating Reserve and PSFM Target through FY 2028 based on the rate forecasts presented above. The Operating Reserve has a minimum target balance of 25 percent of operating and maintenance (O&M) expenses ($3.7 million to $4.6 million). The PSFM Target is a combination of the operating reserve as well as 5 percent of operating revenues, 50 percent of debt service and 2 percent of asset values.

Both the Operating and PSFM reserves maintain or exceed their minimum target balances throughout the study timeline.

Exhibit 4.3 Operating and PSFM Fund Balances





III.B. RATE DESIGN

The principal objective of the rate design stage is to implement rate structures that collect the appropriate level of revenue as outlined by the revenue requirement as equitably and fairly from each customer as possible, in accordance with the cost of providing the wastewater service. Several variables must be balanced to arrive at optimal rates.

III.B.1. Existing Wastewater Rates

The existing wastewater structure is composed of a fixed monthly charge and a variable charge billed per thousand gallons (kgals) of flow contribution. For all customer classes, with the exception of multi-residential and residential care customers, the fixed rate is charged to each customer dependent on the customer's meter size. For the multi-residential and residential care classes the same fixed charge per account and capacity charge per unit are applied, regardless of meter size. The variable charges are the same for all classes and are based on the winter average usage during the months of December, January, February and March. In addition to the monthly fixed and variable rates, each customer is charged an Environmental Mandate (EPA) fee based on the customer's assigned EPA class. Residential customers are charged a fixed fee per account for this fee, while non-residential customers are charged a variable rate per kgal of flow contributed. Charges for non-residential customers increase as the assumed strength of influent increases.

Exhibit 4.4 provides a summary of the existing wastewater utility rates.

Exhibit 4.4 Existing Monthly Wastewater Rates

Residential	FY 2023
Base Charge	
5/8" , 3/4", 1"	$ 10.23
1.5"	$ 24.58
2"	$ 36.90
3"	$ 69.80
4"	$ 106.75
6"	$ 209.37
8"	$ 332.56
Usage Charge (in gallons)	
All Usage (winter average)	$ 2.24

Commercial/Industrial	FY 2023
Base Charge	
5/8" or 3/4"	$ 10.23
1"	$ 13.31
1.5"	$ 24.58
2"	$ 36.90
3"	$ 69.80
4"	$ 106.75
6"	$ 209.37
8"	$ 332.56
Usage Charge (in gallons)	
All Usage	$ 2.24

Residential Care / Multi-Residential	FY 2023
Base Charge	
5/8" or 3/4"	$ 4.07
1"	$ 4.07
1.5"	$ 4.07
2"	$ 4.07
3"	$ 4.07
4"	$ 4.07
6"	$ 4.07
8"	$ 4.07
Usage Charge (in gallons)	
All Usage	$ 2.24
Capacity Charge (per unit)	$ 3.70

Environmental Charges - EPA Mandate	FY 2023
EPA 1 - Commercial (large industrial)	$ 0.78
EPA 2 - Commercial (medium industrial)	$ 0.59
EPA 3 - Commercial (w/grease traps)	$ 0.39
EPA 4 - Commercial (w/o grease traps)	$ 0.20
EPA 5 - Residential	$ 0.90

III.B.2. Proposed Wastewater Rates

The financial plan indicates the need for annual rate increases of 1.50 percent in FY 2024, 4.00 percent in FY 2025, and 5.50 percent for FY 2026 before dropping to 1.00 percent annually from FY 2027 and thereafter. The rate increases will be applied equally to each class's fixed and variable rate components. **Exhibit 4.5** provides a schedule of existing and proposed fixed and volumetric rates for each year FY 2024 through FY 2028 for all customer classes.

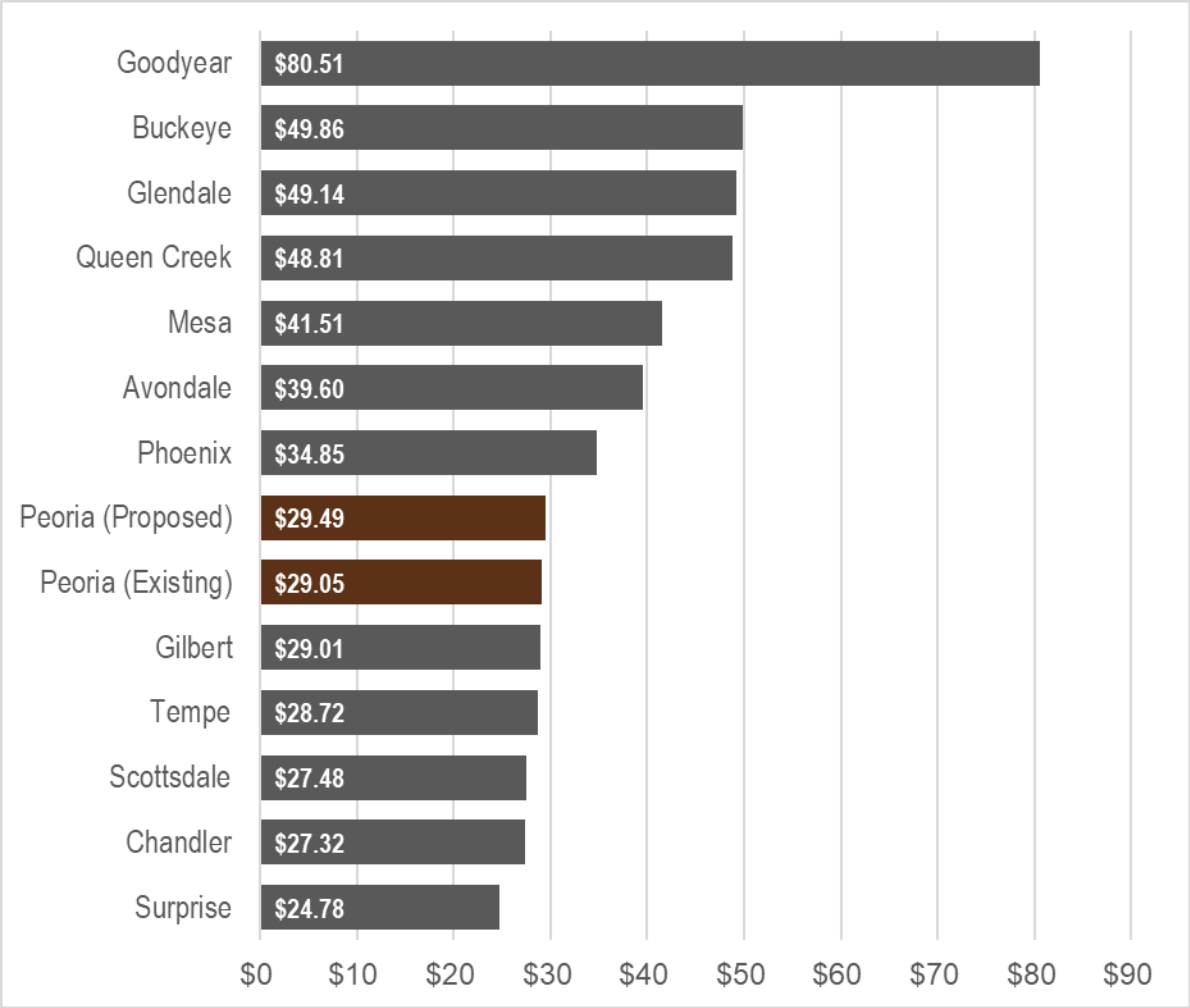
Exhibit 4.5 Proposed Monthly Wastewater Rates

Residential	Existing	Proposed				
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Base Charge						
5/8" , 3/4", 1"	$ 10.23	$ 10.42	$ 10.84	$ 11.39	$ 11.50	$ 11.62
1.5"	$ 24.58	$ 24.95	$ 25.95	$ 27.38	$ 27.65	$ 27.93
2"	$ 36.90	$ 37.45	$ 38.95	$ 41.09	$ 41.50	$ 41.92
3"	$ 69.80	$ 70.85	$ 73.68	$ 77.73	$ 78.51	$ 79.30
4"	$ 106.75	$ 108.35	$ 112.68	$ 118.88	$ 120.07	$ 121.27
6"	$ 209.37	$ 212.51	$ 221.01	$ 233.17	$ 235.50	$ 237.86
8"	$ 332.56	$ 337.55	$ 351.05	$ 370.36	$ 374.06	$ 377.80
Usage Charge (in gallons)						
All Usage (winter average)	$ 2.24	$ 2.27	$ 2.36	$ 2.49	$ 2.51	$ 2.54
Commercial/Industrial	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Base Charge						
5/8" or 3/4"	$ 10.23	$ 10.42	$ 10.84	$ 11.39	$ 11.50	$ 11.62
1"	$ 13.31	$ 13.51	$ 14.05	$ 14.82	$ 14.97	$ 15.12
1.5"	$ 24.58	$ 24.95	$ 25.95	$ 27.38	$ 27.65	$ 27.93
2"	$ 36.90	$ 37.45	$ 38.95	$ 41.09	$ 41.50	$ 41.92
3"	$ 69.80	$ 70.85	$ 73.68	$ 77.73	$ 78.51	$ 79.30
4"	$ 106.75	$ 108.35	$ 112.68	$ 118.88	$ 120.07	$ 121.27
6"	$ 209.37	$ 212.51	$ 221.01	$ 233.17	$ 235.50	$ 237.86
8"	$ 332.56	$ 337.55	$ 351.05	$ 370.36	$ 374.06	$ 377.80
Usage Charge (in gallons)						
All Usage	$ 2.24	$ 2.27	$ 2.36	$ 2.49	$ 2.51	$ 2.54
Residential Care / Multi-Residential	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Base Charge						
5/8" or 3/4"	$ 4.07	$ 4.13	$ 4.30	$ 4.54	$ 4.59	$ 4.64
1"	$ 4.07	$ 4.13	$ 4.30	$ 4.54	$ 4.59	$ 4.64
1.5"	$ 4.07	$ 4.13	$ 4.30	$ 4.54	$ 4.59	$ 4.64
2"	$ 4.07	$ 4.13	$ 4.30	$ 4.54	$ 4.59	$ 4.64
3"	$ 4.07	$ 4.13	$ 4.30	$ 4.54	$ 4.59	$ 4.64
4"	$ 4.07	$ 4.13	$ 4.30	$ 4.54	$ 4.59	$ 4.64
6"	$ 4.07	$ 4.13	$ 4.30	$ 4.54	$ 4.59	$ 4.64
8"	$ 4.07	$ 4.13	$ 4.30	$ 4.54	$ 4.59	$ 4.64
Usage Charge (in gallons)						
All Usage	$ 2.24	$ 2.27	$ 2.36	$ 2.49	$ 2.51	$ 2.54
Capacity Charge (per unit)	$ 3.70	$ 3.75	$ 3.90	$ 4.11	$ 4.15	$ 4.19
Environmental Charges - EPA Mandate	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
EPA 1 - Commercial (Industrial)	$0.78/kgal	$0.79/kgal	$0.82/kgal	$0.87/kgal	$0.88/kgal	$0.89/kgal
EPA 2 - Commercial (High)	$0.59/kgal	$0.60/kgal	$0.62/kgal	$0.65/kgal	$0.66/kgal	$0.67/kgal
EPA 3 - Commercial (Medium)	$0.39/kgal	$0.40/kgal	$0.42/kgal	$0.44/kgal	$0.44/kgal	$0.44/kgal
EPA 4 - Commercial (Low)	$0.20/kgal	$0.20/kgal	$0.21/kgal	$0.22/kgal	$0.22/kgal	$0.22/kgal
EPA 5 - Residential - (Standard)	$0.90/account	$0.91/account	$0.95/account	$1.00/account	$1.01/account	$1.02/account

III.B.3. Rate Survey

Exhibit 4.6 compares the City's monthly rate with the 2023 rates of other jurisdictions. Note that each jurisdiction has a unique set of geographic traits, customers, and system characteristics, each of which can have a significant impact on rates. Bill calculations assume 8 kgals of monthly sewer flow contribution.

Exhibit 4.6 Residential Monthly Wastewater Rate Survey (8,000 Gallons of Usage)



III.C. SUMMARY

The analysis described above concludes the rate study for the wastewater utility. Annual rate increases of 1.50 percent in FY 2024, 4.00 percent in FY 2025, 5.50 percent in FY 2026 and 1.00 percent from FY 2027 to FY 2028, are needed to ensure the City can continue to fully fund its operations while completing the identified capital program and maintaining fiscal policy targets. The suggested rate increases will be applied equally to each class.

We recommend that the City revisit the rate study with each budget cycle to review if revenue and expense projections are reasonable when compared to actual experience. Any significant or unexpected changes will require adjustments to the rate strategy proposed.