



# City of Fountain, CO

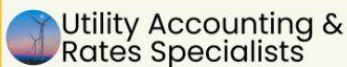
## Water Cost of Service and Rate Design Study

October 14, 2024

Updated November 17,  
2024



Utility Accounting & Rates  
Specialists, LLC





November 17, 2024

Mr. Dan Blankenship, P.E.  
Utilities Director  
City of Fountain  
116 S. Main St.  
Fountain, CO 80817

Subject: 2024 Water Rate Study

Dear Mr. Blankenship,

Utility Accounting and Rates Specialists is pleased to present the 2024 Water Cost of Service and Rate Study Report for the City of Fountain. This report is an update of our report of October 14, 2024.

This report includes:

- A five-year financial plan forecasting the Water Fund's self-sufficiency by FY 2028 and meeting reserve requirements by FY 2029.
- A cost of service analysis to allocate the costs of operations, capital expenditures, and debt services to customer classes.
- Proposed water rates for FY 2025 – 2029.

Your assistance and that of your team were invaluable to this project. Without your help, the data, inputs, and insights included in this study would not have been possible. I look forward to presenting a summary of this report to the City Council.

Thank you once again for the opportunity to serve the City of Fountain.

Sincerely,

*Russ Hissom*

Russ Hissom, CPA, Principal

Utility Accounting and Rates Specialists, LLC

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## 1. Executive Summary

Every utility is crucial to the success of its community by providing reliable services to its customers in as cost effective manner as reasonably possible, while complying with all Federal and State laws, regulations and rules for public water systems.

A utility must recover its cost of service to continue to provide reliable service to its customers. This study was undertaken by the City of Fountain to design rates that ensure the financial health and self-sufficiency of the utility.

The City of Fountain retained Utility Accounting and Rates Specialists, LLC to analyze the Water Fund's finances and design rates that meet the revenue requirement of the Water Fund in providing water service.

The challenges faced by the Water Fund and how the study's recommendations address these challenges are as follows:

**Table 1 - Water Fund Challenges**

<b>Challenge</b>	<b>Issue</b>	<b>Recommendation to Address the Challenge</b>
<b>Financial health</b>	The Water Fund has historically been underfunded. To address this challenge, the City Council passed the Water Fund Stabilization Plan in March 2024.	The recommended rates in this study will help fulfill the Water Fund Rate Stabilization Plan to make the Water Fund self-sufficient.
<b>Existing debt</b>	High Water Fund debt limits the ability to bond for improvements and large maintenance projects.	The recommended rates in this study will enhance the Water Fund's bond coverage, enabling debt pay-down and improving the Fund's capital structure. This will free up debt capacity in the long term.
<b>Infrastructure maintenance</b>	The City aims to restart its capital maintenance and replacement program on the existing water system to prevent future failures and recover costs through rate revenue.	Cash flows from the recommended rates are based on the Water Fund's cost of service to existing customers.
<b>Capacity for growth</b>	Although the City has unused water rights, it lacks the necessary infrastructure for treatment and storage, limiting its ability to exercise those water rights.	This study includes an analysis of the Fountain Reservoir Project.

The following rate design objectives were established by the City of Fountain utilities staff. These principles are the City's guiding philosophy for the rate design study and dictate the approach used in the design of new water rates:

- **Water Utility/Water Fund shall be self-supporting.** Rates shall be designed to meet the revenue requirements of the Water Utility, including operation and maintenance and capital improvement of the existing water system from source to tap.
- **Rates shall be designed to provide revenue stability for the utility.** Alternative rate structures shall be designed for consideration that will enable the utility to recover fixed costs during periods of reduced consumption due to weather-related events, to the greatest extent reasonably possible.
- **Water rates shall be designed to encourage efficient water use and conservation and yield an equitable billing structure for consumers who place different levels of demand on the water supply system.**
- **Rates shall be designed to ensure that the Water Fund maintains a minimum operation and maintenance reserve equal to 3 months of O&M expenses.** Water Fund O&M expenses include: 1) source of supply; 2) operations and maintenance of the water supply system; 3) customer service (billing and collections); 4) utility administration; 5) payment in lieu of taxes to general fund; 6) payment to the general fund for general government support services such as legal, finance, human resources, and technology services; 7) debt; and 8) capital outlay to maintain and upgrade the existing water system as needed to continue to provide reliable.
- **Rates shall be designed to create and maintain a maintenance capital account that is needed to fund maintenance capital projects.**
- **Rates shall not include any costs associated with system capacity enhancements or system extensions that may be needed to accommodate new/future development.** Developers and/or property owners are expected to pay full costs of all system capacity enhancements and system extensions from source to tap that are needed to accommodate new development with NO burden on rate payers.

The study recommendations were designed to address these challenges, and the report outlines the path taken to recommend potential solutions.

**Table 2 – Recommendations and Observations**

Item	Recommendation/Observation
1	Annually increasing rates to those recommended in <a href="#">Section 5</a> (and listed after this table) will allow the Water Fund to be cash flow positive in FY 2027 and to meet the reserve requirement calculation in FY 2029.
2	The rates as designed bring each customer class's revenues closer to their estimated cost of service.
3	Proposed rates are presented in two options. <ul style="list-style-type: none"> <li>• Option 1 rates include a graduated monthly surcharge to recover the Water Fund's fixed costs. The surcharge is increased annually to meet the Water Fund's revenue requirement. The volume charges under Option 1 are not increased and remain at the current 2024 rates.</li> <li>• Option 2 rates include a monthly customer meter charge, which is intended to collect a portion of the Water Fund's fixed costs. Option 2 rates also include annual increases in volume charges.</li> </ul>

Item	Recommendation/Observation
4	Proposed rates will keep the City's water rates in the higher tier of the Pikes Peak region.
5	The study is based on the assumption that water revenues for FY 2024 are based on the annualization of actual customer usage trends for January – October, 2024. These usage trends are used for the forecast period of Fiscal Years 2025 – 2029.
6	This report includes a section on Key Performance Indicators (KPIs) used in the industry for financial reporting, budgeting, and managing strategy implementation.
7	This report discusses alternative rate structures used in the industry, such as surcharges for revenue shortfalls, water shortage rates, seasonal rates, and a water cost adjustment factor.
9	This report includes a scenario of the financial impact of the <a href="#">Fountain Reservoir Project</a> .

The following table shows the level of annual recommended rate increases to meet the operation and maintenance expense needs of the water system and to meet financial goals of the Water Fund Stabilization Plan:

**Table 3 – Recommended Annual Rate Increases – Option 1 and 2 Rates**

Year	Rate Adjustment
2025	9.00%
2026	9.00%
2027	9.00%
2028	9.00%
2029	6.00%

The rate increases are designed to enable the Water Fund to be financially self-supporting in FY 2028 and meet the reserve requirement calculation in FY 2029:

**Table 4 – Water Fund Cash Flows – Option 1 Rates**

Description	Forecasted				
	2025	2026	2027	2028	2029
<b>Sources of Cash</b>					
Revenues from customers	\$ 11,088,131	\$ 12,122,132	\$ 13,238,111	\$ 14,455,214	\$ 15,335,647
Other operating revenues	171,404	186,404	171,404	171,404	171,404
Other non-operating revenues	500,760	272,528	250,000	250,000	250,000
<b>Total Sources of Cash</b>	<b>\$ 11,760,295</b>	<b>\$ 12,581,064</b>	<b>\$ 13,659,515</b>	<b>\$ 14,876,618</b>	<b>\$ 15,757,051</b>
<b>Uses of Cash</b>					
Operation and maintenance expenses	\$ 7,013,417	\$ 7,070,557	\$ 7,282,674	\$ 7,501,154	\$ 7,726,189
Transfer to the General Fund	1,424,024	1,466,720	1,510,722	1,556,043	1,602,725
Debt service	3,493,870	3,488,339	3,467,059	3,465,249	3,466,831
Capital outlay	228,000	286,000	1,512,750	739,400	462,000
<b>Total Uses of Cash</b>	<b>12,159,311</b>	<b>12,311,616</b>	<b>13,773,204</b>	<b>13,261,846</b>	<b>13,257,744</b>
<b>Net Unrestricted Cash Flows</b>	<b>\$ (399,015)</b>	<b>\$ 269,448</b>	<b>\$ (113,689)</b>	<b>\$ 1,614,772</b>	<b>\$ 2,499,307</b>

Cash flows under Option 2 rates are similar to the cash flows in Table 4.

Based on the forecast, the Water Fund should be able to stabilize rates in FY 2029 and maintain adequate cash flows for operating expenses, debt service, and capital outlay, while meeting the reserve requirement. However, as with any long-term forecast, unexpected changes can occur. Therefore, we recommend updating this forecast annually with the rate model that was provided with this study and adjusting assumptions and water rates as needed.

### ***Rate study methodology and rate design philosophy***

A utility rate study is used to determine the costs of providing service to customers and design customer rates to recover those costs. A study consist of three main steps:

1. Determine the revenue requirement, which includes operation and maintenance expenses, capital outlay, and debt service.
2. Prepare a cost of service analysis to allocate the revenue requirement to each customer class based on their consumption of water.
3. Design rates that recover the revenue requirement.

Rates are designed to recover the full cost of service, but revenues from each meter class may exceed or fall short of their cost of service. Utilities have decades of history embedded in their rate structures and sudden changes in rates are not part of the fundamentals of rate design. One key principle of rate design is to ensure smooth transitions and avoid undue rate shock, i.e. rates should be adjusted incrementally and steadily rather than through abrupt changes. This is the approach taken in designing the proposed water rates in this study.



### ***Rate model***

A key deliverable for this Water Rate Study project is a rate model designed for City staff to use in preparing internal forecasts of revenue requirements, cost of service, and rate designs. The model tool will allow City staff to analyze scenarios of revenues, expenses, and capital outlay impacts on cash flows and customer rates.

Since future inputs, model modifications, and assumptions will be made by City staff, Utility Accounting and Rates Specialists, LLC is not responsible for the results of any future model outputs, reports, conclusions, proposed rate adjustments, or financial results of the water fund resulting from the use of the model by City staff.

## 2. Project Background and Rate Study Process

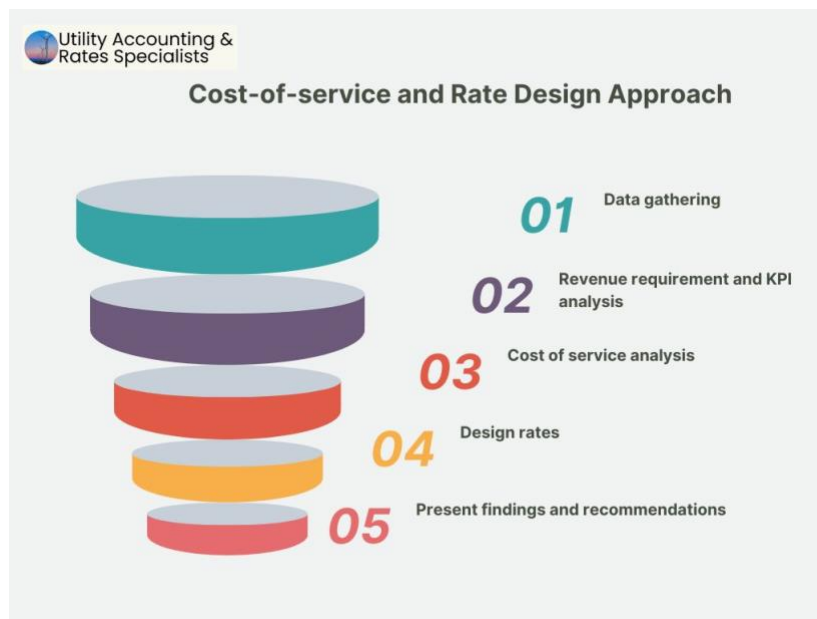
### 2.1 Project background

The City of Fountain (COF or City) serves approximately 8,700 metered customer connections, with approximately 96% of customers being residential customers. The City has grown greatly over since the 1980's, and much of the water system is 40 years old, with parts of the water system as much as 70 years old.

The City receives approximately 10% - 20% of its water from its own wells and the other 80% - 90% of the City's water supplies come from the Fountain Valley Authority (FVA) project, of which the City owns 9.95% of the shared FVA infrastructure and is responsible for that fixed share of all FVA operation and maintenance (O&M) and a variable share of pumping and treatment costs based on water volume.

### 2.2 Rate study process

A rate study consists of the following major steps:



Here we discuss the foundation of the study – revenue requirement, cost of service analysis, and designing rates.

#### ***Determine the Revenue Requirement***

The revenue requirement identifies the necessary revenues needed to operate the utility for a specified future year, known as the “test year.” For this study the test year is 2025. The test year is used to determine cost allocations, which are then used in the cost of service study and rate design. The revenue requirement is based on the following cost components:

**Table 5 – Revenue Requirement Components**

Revenue Requirement Component	Purpose
Operation and maintenance expenses, transfer to General Fund	O&M expenses are the direct expenses that are needed to operate and maintain the water system including all labor, materials and equipment plus utilities admin and billing/collections. The transfer to the General Fund is to cover the indirect expenses that are needed to support O&M including general governments services (admin, legal, finance, HR, It, etc.) plus the payment in-lieu of taxes.
Funding of capital outlay	Provides funds for repair and replacement of current water system components and equipment
Debt service and reserves	Provides funds for payment of annual principal and interest and the funding of reserve accounts

### ***Functionalize Costs in Cost-of-Service Analysis***

A cost-of-service analysis allocates the costs from the revenue requirement to their primary functions. Costs are categorized as fixed, variable, or customer-related based on industry standards and specific Water Fund factors. These costs are then allocated to each meter class according to the number of customers served and their consumption patterns. The general approach is as follows:

**Table 6 – Cost-of-Service – Functionalization of Costs**

Revenue Requirement Component	Fixed Costs	Variable Costs	Customer Costs
Operation and maintenance expenses, transfer to General Fund	√	√	√
Funding of capital outlay	√		
Debt service and reserves	√		

Variable costs fluctuate with usage, such as the amount of water pumped. A small portion of total costs are variable. Fixed costs, on the other hand, are related to infrastructure built to serve customers and do not vary with usage; these are considered “sunk” costs, meaning they must be collected regardless of service usage. Customer costs are incurred to service customers, such as billing and collection expenses. Fixed costs represent the largest portion of costs.

## ***Design Customer Rates***

While the cost-of-service analysis is considered the “science” of a rate study, using industry standards and mathematics to allocate costs to each customer class, designing customer rates is more of an “art.” This process considers the current customer rates in relation to the cost of service for each class.

Rates are designed to recover the full cost of service, but revenues from each meter class may exceed or fall short of their cost of service. Utilities have decades of history embedded in their rate structures and sudden changes in rates are not part of the fundamentals of rate design. One key principle of rate design is to ensure smooth transitions and avoid undue rate shock. Utilities may introduce new rates or rates that send price signals to influence customer consumption. However, overall, rates should be adjusted incrementally and steadily rather than through abrupt changes.

### 3. Financial Plan

#### 3.1 Water Fund Stabilization Plan

The financial plan was developed to meet the requirements of the March 2024 Water Fund Stabilization Plan. The major action steps of the plan include:

- Achieving financial self-sufficiency for the Water Fund by 2027.
- Meeting the City’s reserves policy by year end 2029, which requires maintaining a reserve equivalent to three months of operation and maintenance expenses.

Other aspects of the plan involve making debt payments and establishing cash flows to enable repairs and replacements of capital assets. The proposed financial plan includes water rates designed to achieve these goals.

#### 3.2 Revenue requirement

The revenue requirement identifies the necessary customer revenues to operate the utility for a specified future year, known as the “test year.” For the Water Fund, the test year is 2025.

The revenue requirement consists of:

**Table 7 – Revenue Requirement Assumptions**

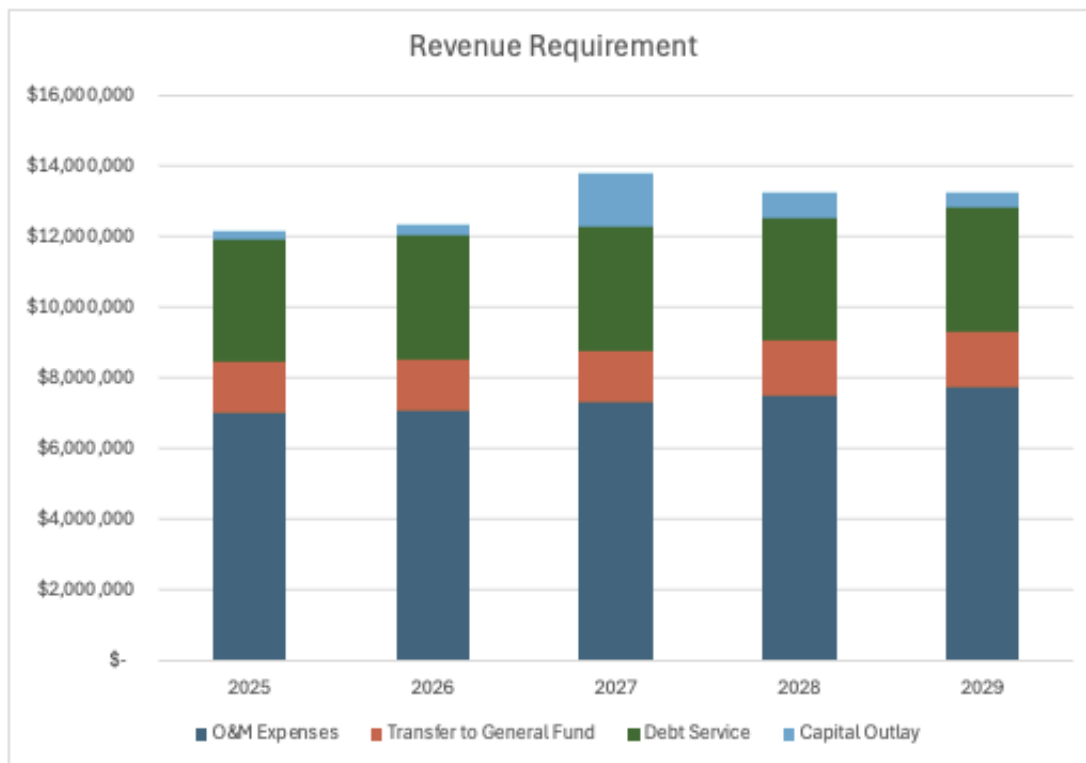
Revenue Requirement Component	Forecasting Method
Operation and maintenance expenses, transfer to General Fund	Water Fund budget for FY 2025 and 2026, forecasted 2027 – 2029 using 3.0% inflation factor. The transfer to the General Fund does not include the PILT for the study period (25-29).
Funding of capital outlay	Water Utility 5-year (25-29) capital plan provided by utilities staff.
Debt service	Bond repayment schedules.

The revenue requirement for FY 2025 – 2029 is shown in the following table and illustration:

**Table 8 – Revenue Requirement FY 2025 – 2029**

Description	Forecasted				
	2025	2026	2027	2028	2029
<b>Revenue Requirement:</b>					
Operation and maintenance expenses	\$ 7,013,417	\$ 7,070,557	\$ 7,282,674	\$ 7,501,154	\$ 7,726,189
Transfer to the General Fund	1,424,024	1,466,720	1,510,722	1,556,043	1,602,725
Debt service	3,493,870	3,488,339	3,467,059	3,465,249	3,466,831
Capital outlay	228,000	286,000	1,512,750	739,400	462,000
<b>Total Revenue Requirement</b>	<b>\$ 12,159,311</b>	<b>\$ 12,311,616</b>	<b>\$ 13,773,204</b>	<b>\$ 13,261,846</b>	<b>\$ 13,257,744</b>

**Illustration 1 – Revenue Requirement Components FY 2025 - 2029**



The revenue requirement remains fairly stable for the forecast period. This stability is due to consistent annual debt payments, and a conservative cost control/management approach, with operations and maintenance expenses and general fund transfers increasing only at the rate of inflation. Additionally, capital outlay is minimal and routine, except for FY 2027 when the rehabilitation of a water storage tank is planned. Once the required reserve has been

established, it is anticipated that the annual capital outlay will increase to meet the repair and replacement needs of the existing system.

### 3.3 Revenues and sources of cash

Once the revenue requirement has been determined, the focus turns towards revenue generation to provide cash flows to meet the revenue requirement and desired operating margins. The assumptions regarding revenues and sources of cash are as follows:

**Table 9 – Revenue Assumptions**

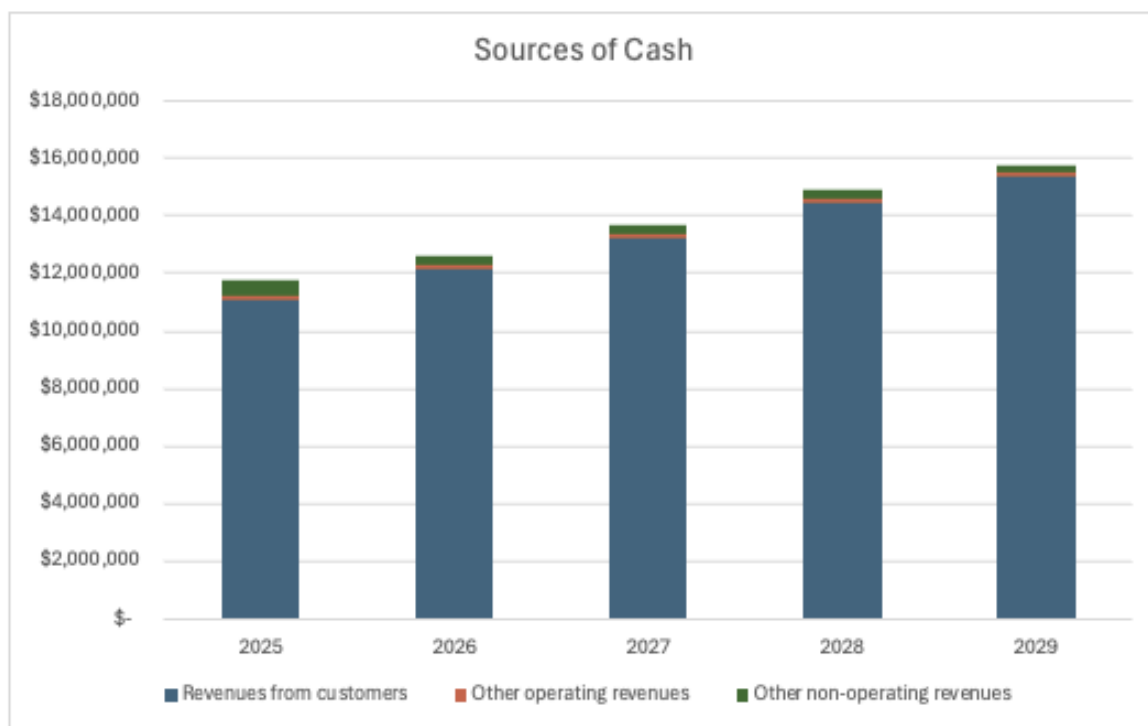
<b>Revenue Component</b>	<b>Forecasting Method</b>
<b>Revenues from customers</b>	Revenues from customers are based on revenues calculated at the recommended rates for FY 2025 – 2029 with nominal increases in the number of new customers added over the same period.  The forecast is based on the annualization of customer consumption for January – October, 2024.
<b>Other operating expenses</b>	Based on budgeted FY 2025 and 2026, forecasted 2027 – 2029 are based on historical averages.
<b>Other non-operating expenses</b>	Based on budgeted FY 2025 and 2026, forecasted 2027 – 2029 are based on historical averages.
<b>Debt proceeds/Committed Cash</b>	No debt proceeds are anticipated in the forecast. The use of the Committed Cash and annual surplus revenues will be used to eliminate the interfund payable to the Electric Fund and to establish an operating reserve.

The sources of cash for FY 2025 – FY 2029 are shown in the following table and illustration:

**Table 10 – Sources of Cash FY 2025 – 2029 – Option 1 Rates**

Description	Forecasted				
	2025	2026	2027	2028	2029
<b>Sources of Cash</b>					
Revenues from customers	\$ 11,088,131	\$ 12,122,132	\$ 13,238,111	\$ 14,455,214	\$ 15,335,647
Other operating revenues	171,404	186,404	171,404	171,404	171,404
Other non-operating revenues	500,760	272,528	250,000	250,000	250,000
<b>Total Sources of Cash</b>	<b>\$ 11,760,295</b>	<b>\$ 12,581,064</b>	<b>\$ 13,659,515</b>	<b>\$ 14,876,618</b>	<b>\$ 15,757,051</b>

**Illustration 2 – Sources of Cash Components – FY 2025 - 2029**



Sources of cash under Option 2 rates are similar to those in Table 10.

The **Required Combined Utility Reserve** will be replenished as the Water Fund achieves financial self-sufficiency in FY 2028 and meets the City's reserve requirement by year end FY 2029.





### 3.4 Expenses

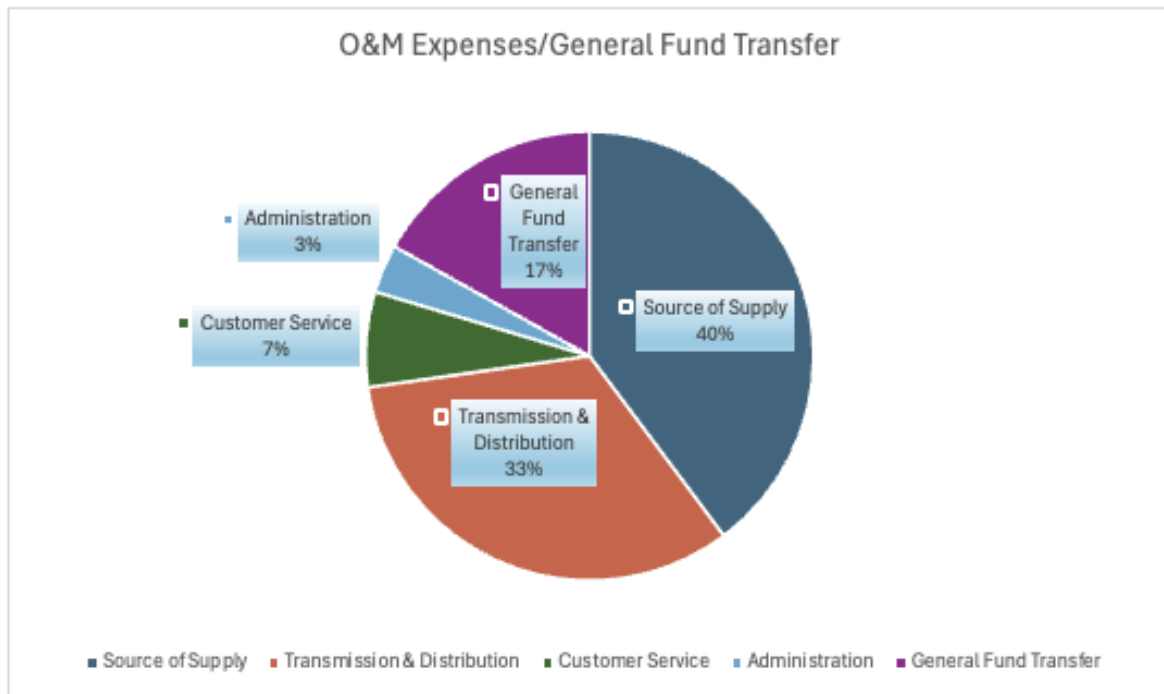
Operating expenses include the costs of purchasing water (source of supply), O&M labor/equipment/materials, customer billing, admin, and the Transfer to the General Fund. Detailed expenses for the Forecasted 2025 Test Year are shown in the following table:

**Table 11 – Detailed Expenses – FY 2025**

<b>Source of Supply Expenses</b>	<b>Forecasted 2025</b>
Chlorinator Supplies	\$ 340,700
Fry-Ark Water Cost	2,050,000
Venetucci Water Purchase	35,700
Purchased Water - District #8	8,850
Sds Operating Costs	480,000
Pueblo Reservoir Storage	117,450
Other Source of Supply Expenses	322,353
<b>Total Source of Supply Expenses</b>	<b>3,355,053</b>
<b>Transmission and Distribution Expenses</b>	
Conservation/Rebate Program	54,500
Other Operation and Maintenance Expenses	2,729,910
<b>Total Transmission and Distribution Expenses</b>	<b>2,784,410</b>
<b>Customer Service</b>	
Customer Service	578,812
<b>Total Customer Service Expenses</b>	<b>578,812</b>
<b>Administration Expenses</b>	
Administration Expenses	295,142
General Fund Transfer	1,424,024
<b>Total Administrative Expenses</b>	<b>1,719,166</b>
<b>Total Operating Expenses</b>	<b>\$ 8,437,441</b>

During the study period (25 -29), it is expected that the percentage of each major category of expenses will be proportionally about the same. The major expense in the Water Fund is the source of supply, at 40%. The current percentage of expenses in each major category is:

### Illustration 3 – Operation and Maintenance Expense Categories



#### 3.5 Debt service

Debt service is based on the repayment schedules for existing Water Fund debt. No additional debt issues are anticipated over the forecast period of FY 2025 – 2029.

#### 3.6 Capital Outlay

Capital outlay is based on the capital projects budget for the forecast period of FY 2025 – 2029. The capital improvement budget anticipates one major project in FY 2027 of \$1 million for a tank rehabilitation. All other additions are routine over the forecast period.

### 3.7 Proposed financial plan

The proposed financial plan enables the Water Utility to recover the cost of providing service to its customers, to become self-sufficient in FY 2028 and to meet the requirements of the City's reserve policy of 3 months of O&M expenses in FY 2029. The Water Fund will achieve these financial goals by implementing the following recommended rate increases:

**Table 12 – Recommended Rate Increases – Option 1 and 2 Rates**

Year	Rate Adjustment
2025	9.00%
2026	9.00%
2027	9.00%
2028	9.00%
2029	6.00%

Implementing the rate increases will provide the following benefits to the Water Fund, the Electric Fund, and water customers:

- Eliminating interfund loans from the Electric Fund starting in FY 2025.
- Repaying the existing Electric Fund interfund payable by year end 2028.
- Providing adequate cash flows to cover water operation and maintenance expenses, debt service, and routine capital outlay.
- Meeting the City reserve requirement calculation by year end FY 2029.

The forecasted sources and uses of cash under the financial plan are shown in the following table:

**Table 13 – Sources and Uses of Cash – FY 2025 – 2029 – Option 1 Rates**

Description	Forecasted				
	2025	2026	2027	2028	2029
<b>Sources of Cash</b>					
Revenues from customers	\$ 11,088,131	\$ 12,122,132	\$ 13,238,111	\$ 14,455,214	\$ 15,335,647
Other operating revenues	171,404	186,404	171,404	171,404	171,404
Other non-operating revenues	500,760	272,528	250,000	250,000	250,000
<b>Total Sources of Cash</b>	<b>\$ 11,760,295</b>	<b>\$ 12,581,064</b>	<b>\$ 13,659,515</b>	<b>\$ 14,876,618</b>	<b>\$ 15,757,051</b>
<b>Uses of Cash</b>					
Operation and maintenance expenses	\$ 7,013,417	\$ 7,070,557	\$ 7,282,674	\$ 7,501,154	\$ 7,726,189
Transfer to the General Fund	1,424,024	1,466,720	1,510,722	1,556,043	1,602,725
Debt service	3,493,870	3,488,339	3,467,059	3,465,249	3,466,831
Capital outlay	228,000	286,000	1,512,750	739,400	462,000
<b>Total Uses of Cash</b>	<b>12,159,311</b>	<b>12,311,616</b>	<b>13,773,204</b>	<b>13,261,846</b>	<b>13,257,744</b>
<b>Net Unrestricted Cash Flows</b>	<b>\$ (399,015)</b>	<b>\$ 269,448</b>	<b>\$ (113,689)</b>	<b>\$ 1,614,772</b>	<b>\$ 2,499,307</b>

The sources and uses of cash under Option 2 rates are similar to those in Table 13. The above table shows the predominant source of cash is from customer revenues (metered sales). The customer revenues are calculated based on the recommended rate increases. The unrestricted Water Fund cash flows are used in this order:

1. Eliminate the reliance on the Electric Fund for cash starting in FY 2025.
2. Payoff the balance of the Electric Fund interfund payable in FY 2028.
3. Achieve cash flow self-sufficiency in FY 2028.
4. Build reserves to meet the reserve requirement in FY 2029.

The progression towards meeting the reserve requirement under the calculation method of the reserve is shown in the following table.

**Table 14 – Reserve Requirement Calculation – FY 2025 – 2029 – Option 1 Rates**

<b>Current Assets</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
Cash and investments (includes interfund payable to electric)	\$ (2,979,476)	\$ (2,710,028)	\$ (2,823,717)	\$ (1,208,945)	\$ 1,290,362
Committed cash	1,256,900	1,256,900	1,256,900	1,256,900	1,256,900
Accounts receivable	1,800,000	1,967,855	2,149,019	2,346,598	2,489,524
Inventory	115,000	115,000	115,000	115,000	115,000
Current Liabilities	(2,700,000)	(2,700,000)	(2,700,000)	(2,700,000)	(2,700,000)
<b>O&amp;M Reserves Calculation</b>	<b>\$ (2,507,576)</b>	<b>\$ (2,070,273)</b>	<b>\$ (2,002,799)</b>	<b>\$ (190,447)</b>	<b>\$ 2,451,786</b>
Operation and maintenance expenses (not including transfer or depreciation)	\$ 7,013,417	\$ 7,070,557	\$ 7,282,674	\$ 7,501,154	\$ 7,726,189
<b>Tota Operating Expenses Used</b>	<b>\$ 7,013,417</b>	<b>\$ 7,070,557</b>	<b>\$ 7,282,674</b>	<b>\$ 7,501,154</b>	<b>\$ 7,726,189</b>
<b>25% of Operating Expenses less Depreciation</b>	<b>\$ 1,753,354</b>	<b>\$ 1,767,639</b>	<b>\$ 1,820,668</b>	<b>\$ 1,875,288</b>	<b>\$ 1,931,547</b>
<b>Current Assets - Current Liabilities = O&amp;M Reserve</b>	<b>\$ (2,507,576)</b>	<b>\$ (2,070,273)</b>	<b>\$ (2,002,799)</b>	<b>\$ (190,447)</b>	<b>\$ 2,451,786</b>
<b>Reserve Surplus/(Deficit)</b>	<b>\$ (4,260,931)</b>	<b>\$ (3,837,912)</b>	<b>\$ (3,823,467)</b>	<b>\$ (2,065,736)</b>	<b>\$ 520,239</b>

The reserve requirement calculation under Option 2 rates results in meeting the reserve requirement in FY 2029 with a surplus of \$66,000.

Based on the forecast, the Water Fund should be able to stabilize rates beginning in FY 2029 and maintain adequate cash flows for operating expenses, debt service, and capital outlay, while meeting the reserve requirement. However, as with any long-term forecast, unexpected changes can occur. Therefore, we recommend updating this forecast annually with the rate model that was provided with this study and adjusting assumptions and water rates as needed.

### 3.8 Key performance indicators

Developing and implementing strategic initiatives involves setting goals, measuring progress, making mid-course adjustments, and evaluating success. The City of Fountain City Council has exemplified this process by initiating the Water Fund Stabilization Plan.

Key Performance Indicators (KPIs) are measures used to set baseline performance and implement strategies for improvement. They serve as a management tool for setting priorities and tracking progress in implementing strategy. They can be used for setting budgets and measuring financial results.

KPIs fall into two general categories: financial and activity-based. To be effective, a KPI should meet the following parameters:

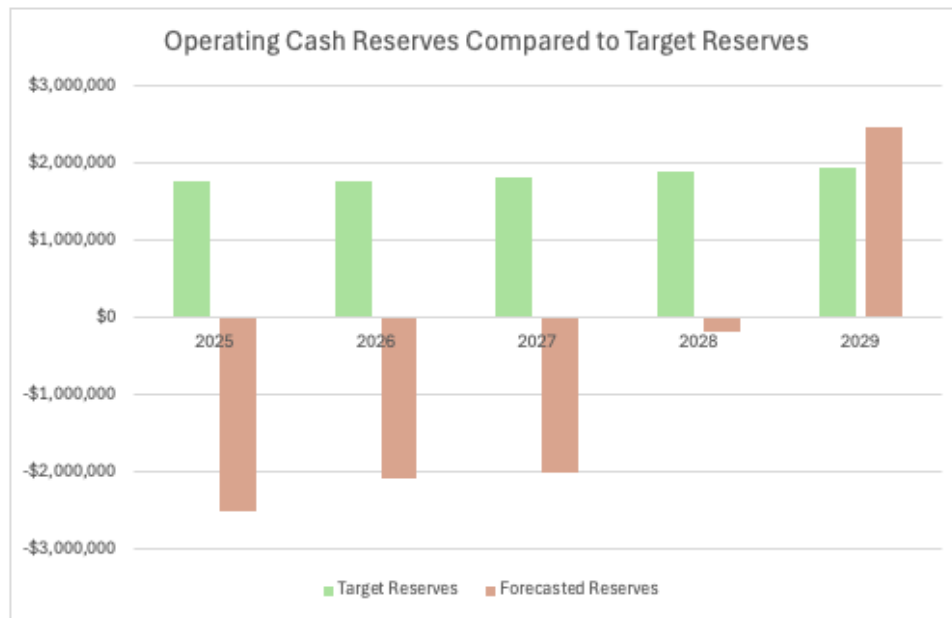
1. **Meaningful:** Assist with managerial decision-making.
2. **Material:** Focus on the most significant issues to the organization, both financial and non-financial.
3. **Externally Assessable:** Help in evaluating the organization's strategic positioning within the industry.
4. **Aligned:** Correspond with the organization's strategic direction.

This section of the report discusses KPIs used in the utility industry. These KPIs are integrated into the water rate model included with this study. A description of each KPI is discussed here and a general description included on the KPI dashboard in the water rate model along with the graphs presented in this section. All graphs shown in this section are calculated using Option 1 rates. The results using Option 2 rates are similar for each calculation and illustration unless noted.

#### 3.8.1 Operating Cash Reserves Compared to Target

Operating Cash Reserves KPI shows the amount required as the targeted reserves under the City reserves requirement (green bar) compared to the calculated actual reserves (brown bar). This graph shows the Water Fund meeting the reserve requirement in FY 2029 by implementing the recommended rate increases.

#### Illustration 4 – Operating Cash Reserves Compared to Target

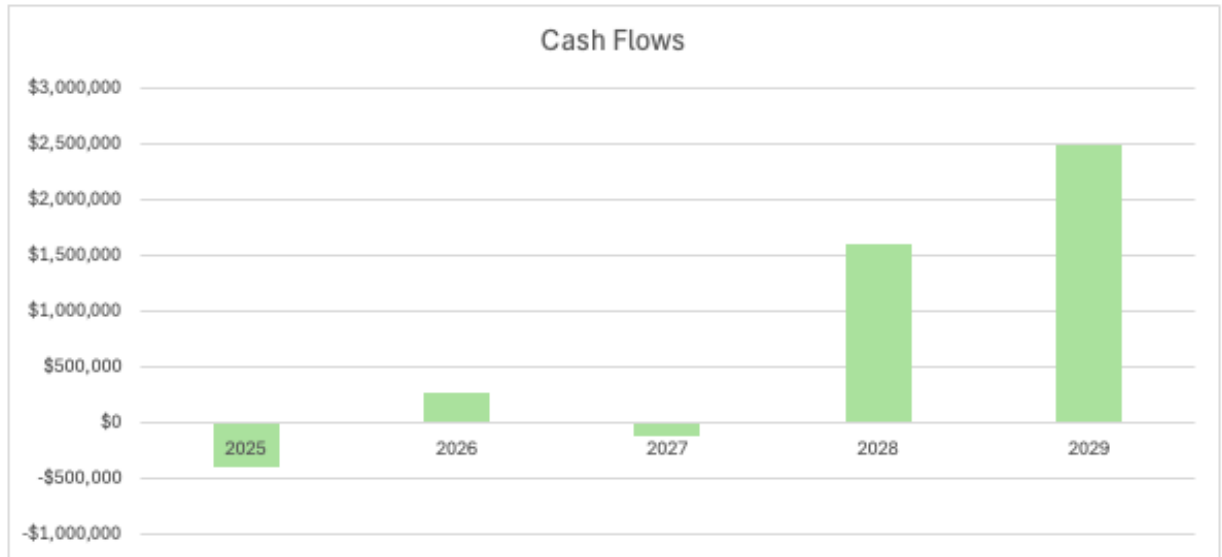


#### 3.8.2 Cash Flows

Cash Flow KPI shows the annual cash flows of sources of Water Fund cash in excess of uses of cash needed for operation and maintenance expenses, debt service, and capital outlay.



### Illustration 5 – Cash Flows – FY 2025 - 2029



#### 3.8.3 Days Cash on Hand

Days Cash on Hand KPI is a financial strength measure used by bond rating agencies in evaluating a utility to provide a bond rating of debt paying ability. It indicates the number of days a utility can continue to operate using its available cash reserves without any additional revenue.

The detail in this graph is based on the forecast used in this study. It shows that the Days Cash on Hand improves to 120 days by FY 2029 with Option 1 rates. Option 2 rates result in Days Cash on Hand of 99 days.

## Illustration 6 – Days Cash on Hand – FY 2025 - 2029



To put this in perspective, the *S&P Global Utility Revenue Bond Rating Methodology Scorecard* shows the ranking criteria S&P applies to days cash on hand in its weighted average in determining a bond rating:

**Table 15 – Days Cash on Hand Bond Rating Criteria**

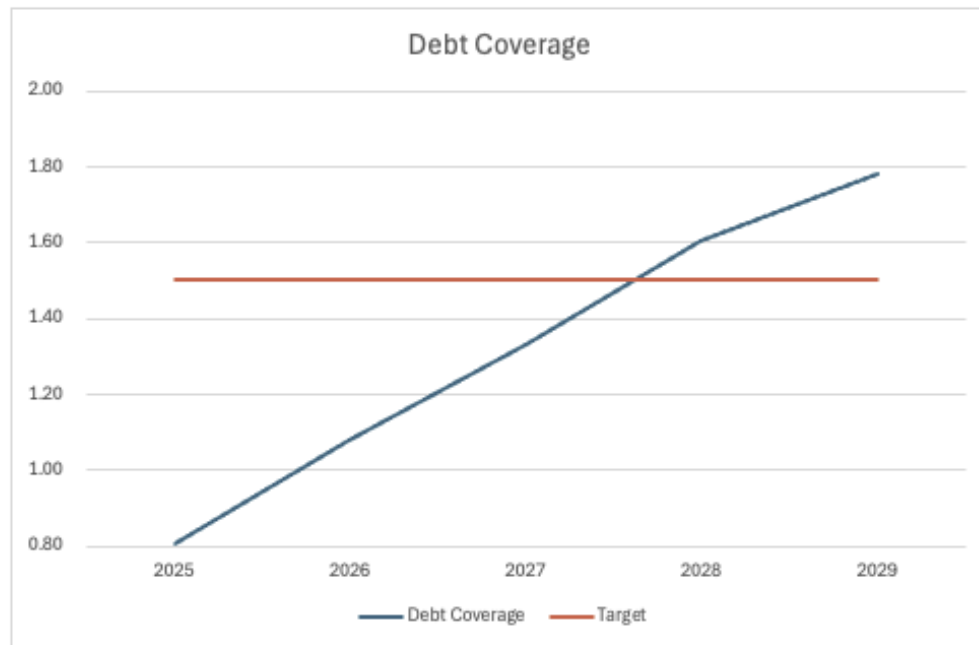
Days Cash on Hand	Preliminary Assessment Ranking
> 150 days	1
150 days > 90 days	2
90 days > 60 days	3
60 days > 30 days	4
30 days > 15 days	5
< 15 days	6

Maintaining a strong bond rating is crucial, as it enables borrowing at lower interest rates and minimizes debt service costs. Additionally, having robust Days Cash on Hand provides a financial cushion, ensuring the utility can meet cash flow requirements even if there are fluctuations in customer water consumption or increased cash needs. The Forecasted FY 2029 Days Cash on Hand of 120 (Option 1) or 99 (Option 2) days places the Water Fund in the Preliminary Assessment Ranking of “2” for this KPI.

### 3.8.4 Debt Coverage Ratio

Debt Service Coverage Ratio KPI is another financial strength measure used by bond rating agencies in evaluating a utility to provide a bond rating of debt paying ability.

### Illustration 7 – Bond Coverage – FY 2025 - 2029



Maintaining a ratio of 1.5<sup>1</sup> provides a weighted ranking of “2”<sup>2</sup> in the S&P Global’s rating scale and is an average requirement for many bond issues.

#### 3.8.5 Operating Ratios – Costs per Customer

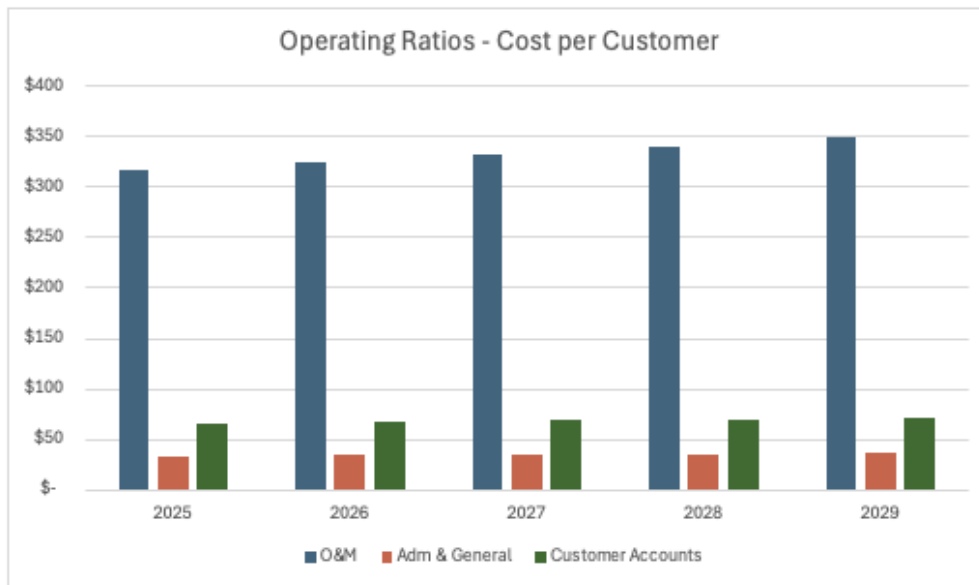
Utilizing KPI operating ratios to assess costs per customer in different expense areas is beneficial for budgeting and predicting cost increases. This approach helps determine how costs may change based on fluctuations in the number of customers connected to the Water Fund for water service. Below is an illustration showing the forecasted costs per customer for three main expense areas:

1. **Operation and Maintenance Costs:** Includes the direct expenses related to operating and maintaining the City’s water system, including the source of supply.
2. **Customer Service Costs:** Expenses for billing, customer support, and other customer-related services.
3. **Administrative and General Costs:** Includes Utilities administration and transfer to the General Fund to pay for general government support services such as finance, technology services, human resources, and legal services. Also includes the payment in-lieu of taxes to the General Fund.

<sup>1</sup> A bond coverage ratio of 1.5 means that there is \$1.50 of cash available to pay every \$1.00 of debt principal and interest. The additional \$0.50 is used for operations and capital improvements.

<sup>2</sup> In the S&P Global ranking scale for the initial assessment of debt coverage, 1 is the highest ranking and 6 is the lowest ranking

### Illustration 8 – Operating Ratios – Cost per Customer



Operating ratio KPI is typically unique to each water system and is used as a measure to make year to year comparisons. Noticeable changes in the KPI typically indicate a change in management philosophy or significant problems with the system.

### 3.8.6 KPI Dashboard

The KPI's used in this study are shown in the following Illustration:

**Illustration 9 – KPI Dashboard**

Description	KPI Measure	Forecasted				
		2025	2026	2027	2028	2029
Overall change in rates		9.00%	9.00%	9.00%	9.00%	6.00%
<b>Unrestricted Cash Balance and Committed Cash</b>						
Balance - End of Year		\$ (1,722,576)	\$ (1,453,128)	\$ (1,566,817)	\$ 47,955	\$ 2,547,262
<b>Operating Cash Reserves</b>						
Reserves for operating expenses						
Target reserves		\$ 1,753,354	\$ 1,767,639	\$ 1,820,668	\$ 1,875,288	\$ 1,931,547
Forecasted reserves		\$ (2,507,576)	\$ (2,070,273)	\$ (2,002,799)	\$ (190,447)	\$ 2,451,786
Surplus/(Deficit)		\$ (4,260,931)	\$ (3,837,912)	\$ (3,823,467)	\$ (2,065,736)	\$ 520,239
<b>Current Ratio</b>						
Current assets for current liabilities						
		0.07	0.23	0.26	0.93	1.91
<b>Quick Ratio</b>						
Cash for current liabilities						
		(1.10)	(1.00)	(1.05)	(0.45)	0.48
<b>Debt Coverage Ratio</b>						
Cash flows for debt service						
Target ratio		1.50	1.50	1.50	1.50	1.50
Forecasted ratio		0.81	1.08	1.33	1.61	1.78
<b>Other Debt Ratios</b>						
Debt borrowing capacity						
		43%	42%	40%	39%	37%
<b>Days cash on hand</b>						
Available unrestricted cash						
		(90)	-	-	2	120
<b>Operating Key Performance Indicators</b>						
Operation and maintenance expense per customer						
		\$ 316	\$ 324	\$ 332	\$ 340	\$ 349
Customer accounts expense per customer						
		\$ 66	\$ 67	\$ 69	\$ 70	\$ 72
Administrative and general costs per customer						
		\$ 33	\$ 34	\$ 35	\$ 36	\$ 37

The yellow highlighted numbers indicate the achievement of these financial benchmarks (from top to bottom of Illustration 9):

1. Financial self-sufficiency is achieved in FY 2028 with a forecasted ending cash balance of \$47,955.
2. The reserve requirement is met at the end of FY 2029 by a margin of \$520,239.
3. Days Cash on Hand at the end of FY 2029 is 120 days.

## 4. Cost of Service

### 4.1 Process and approach

The cost of service approach used in this study is based on the industry standards outlined in the American Water Works Association (AWWA) M-1 Manual<sup>3</sup>. The AWWA approach allocates costs to each customer class based on their water consumption and meter size.

A cost-of-service analysis equitably allocates the costs that were identified in the revenue requirement calculations. Costs are categorized as fixed, variable, or customer-related based on industry standards and other factors that are specific to the City water system. These costs are then allocated to each meter class (meter size) according to the number of customers served and their water consumption patterns.

The following table describes the cost functions used in the model and how those functions are allocated to customer classes.

**Table 16 – Cost Allocator Definitions**

<b>Cost Allocator</b>	<b>Allocator Description and Method</b>
<b>Base</b>	The cost to provide water service to all customers based on the average day consumption. Base costs are allocated on total annual sales to (consumption by) each customer class.
<b>Max Day Extra Capacity</b>	The cost to provide water service to all customers on the system's maximum pumpage day in excess of the base costs. Max day costs are allocated to customer classes by estimated consumption on the maximum day of the year.
<b>Max Hour Extra Capacity</b>	The cost to provide water service to all customers on the system's maximum pumpage hour in excess of the base costs. Max hour costs are allocated to customer classes by estimated consumption during the maximum hour of the year.
<b>Equivalent Meter</b>	Customer-related costs that are related to the size of the customer's meter. Equivalent meter costs are allocated to customer classes based on the number of meters, weighted by meter size.
<b>Billing &amp; Collection</b>	Billing and collection costs are customer-related costs that are independent of the customer's meter size. Customer accounting is a billing and collection cost. Billing and collection costs are allocated to customer classes based on the number of meters in each class.

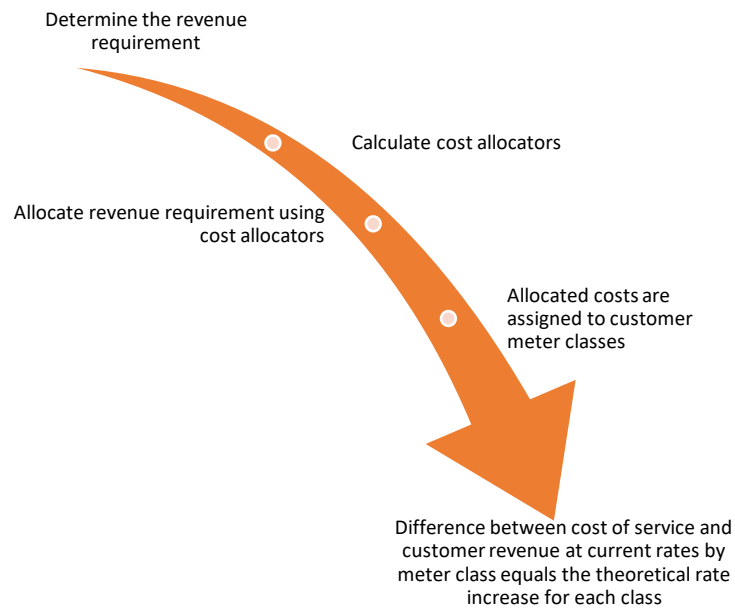
Once costs are allocated to each meter class, the forecasted revenues from each meter class are compared to the cost of service. The difference between these two figures is the indicated rate differential.

The overall cost of service process is shown in this illustration:

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<sup>3</sup> AWWA "Principles of Water Rates, Fees, and Charges" - 2017

## Illustration 10 – Cost of Service Process



## 4.2 Revenue requirement cost allocations

Costs are allocated based on cost functions as described in the prior section. The allocators are calculated based on water consumed by customers and water losses. The cost of water losses is included in customer rates because more water is purchased than used by customers, but the full cost of purchased water and related expenses must be recovered from customer rates.

The summary of cost functions by cost category are shown in the following table:

**Table 17 – Cost Functions by Category**

Revenue Requirement Component	Demand			Customer Costs			
	Forecasted 2025	Base	Max Day	Max Hour (System)	Max Hour (Distribution)	Equivalent Meters	Billing & Collection
Operating Expenses	\$ 8,437,441	\$ 5,976,018	\$ 833,204	\$ 766,674	\$ 100,396	\$ 34,223	\$ 726,927
<b>Total Operating Expenses</b>	<b>\$ 8,437,441</b>	<b>\$ 5,976,018</b>	<b>\$ 833,204</b>	<b>\$ 766,674</b>	<b>\$ 100,396</b>	<b>\$ 34,223</b>	<b>\$ 726,927</b>
<b>Capital &amp; Debt Service</b>							
Average Capital Additions	645,630	340,659	148,612	133,693	14,855	-	7,812
Debt Service	3,494,001	1,843,566	804,252	723,515	80,391	-	42,278
<b>Total Capital &amp; Debt Service</b>	<b>4,139,632</b>	<b>2,184,224</b>	<b>952,863</b>	<b>857,208</b>	<b>95,246</b>	<b>-</b>	<b>50,090</b>
<b>Other Operating Revenues</b>	<b>(171,404)</b>	<b>(111,210)</b>	<b>(24,341)</b>	<b>(22,131)</b>	<b>(2,666)</b>	<b>(466)</b>	<b>(10,589)</b>
<b>Total Revenue Required</b>	<b>\$ 12,405,669</b>	<b>\$ 8,049,032</b>	<b>\$ 1,761,727</b>	<b>\$ 1,601,751</b>	<b>\$ 192,976</b>	<b>\$ 33,757</b>	<b>\$ 766,427</b>
<b>Allocation % of Capital and O&amp;M</b>							
		<b>52.76%</b>	<b>23.02%</b>	<b>20.71%</b>	<b>2.30%</b>	<b>0.00%</b>	<b>1.21%</b>
<b>Allocation % of Other Revenues</b>							
		<b>64.88%</b>	<b>14.20%</b>	<b>12.91%</b>	<b>1.56%</b>	<b>0.27%</b>	<b>6.18%</b>



The details of the allocation by cost category are shown in detail in Tabs 3.1, 3.2, 3.3, 3.4, and 3.7 of the rate model. Those tabs show the calculations that result in the Cost Functions by Category summary in Table 17.

### 4.3 Cost of service by customer class

The next steps in the cost of service analysis are to allocate the costs from each function to the meter classes. The allocation of each cost category is shown in the following table:

**Table 18 – Cost Allocations to Customer Classes**

		Allocation						
	Forecasted Cost	Residential - 3/4"	Comm - 3/4"	1"	1 1/2"	2"	3"	4"
Base	\$ 8,049,032	72.06%	1.45%	4.01%	4.14%	7.71%	9.00%	1.64%
Max Day	1,761,727	62.82%	1.69%	3.89%	5.65%	9.90%	14.72%	1.33%
Max Hour (System)	1,601,751	62.82%	1.69%	3.89%	5.65%	9.90%	14.72%	1.33%
Max Hour (Distribution)	192,976	62.82%	1.69%	3.89%	5.65%	9.90%	14.72%	1.33%
Equivalent Meters	33,757	92.52%	1.20%	1.31%	0.97%	1.31%	1.93%	0.77%
Billing & Collection	766,427	96.54%	1.25%	0.94%	0.56%	0.47%	0.18%	0.06%
<b>Cost of Service</b>	<b>\$ 12,405,669</b>							
		Allocated Costs						
	Forecasted Cost	Residential - 3/4"	Comm - 3/4"	1"	1 1/2"	2"	3"	4"
Base	\$ 8,049,032	\$ 5,800,213	\$ 116,309	\$ 322,605	\$ 333,230	\$ 620,258	\$ 724,735	\$ 131,682
Max Day	1,761,744	1,106,769	29,703	68,602	99,485	174,481	259,361	23,343
Max Hour (System)	1,601,767	1,006,268	27,006	62,372	90,451	158,637	235,810	21,223
Max Hour (Distribution)	192,977	121,233	3,254	7,514	10,897	19,112	28,410	2,557
Equivalent Meters	33,757	31,232	404	441	326	441	653	260
Billing & Collection	766,426	739,904	9,573	7,201	4,303	3,601	1,405	439
Cost of Service	12,405,703	8,805,619	186,249	468,735	538,692	976,530	1,250,374	179,504
Revenue At Present Rates	10,032,975	7,116,794	149,081	402,567	427,784	830,600	935,481	170,668
<b>Difference from Cost of Service</b>	<b>\$ 2,372,728</b>	<b>\$ 1,688,825</b>	<b>\$ 37,168</b>	<b>\$ 66,168</b>	<b>\$ 110,908</b>	<b>\$ 145,930</b>	<b>\$ 314,893</b>	<b>\$ 8,836</b>
<b>Calculated Rate Change</b>	<b>23.6%</b>	<b>23.7%</b>	<b>24.9%</b>	<b>16.4%</b>	<b>25.9%</b>	<b>17.6%</b>	<b>33.7%</b>	<b>5.2%</b>

Finally, the cost of service is compared to revenues at current rates. The difference indicates the over/under recovery between revenues and the cost of service, as well as the theoretical rate adjustment by customer rate class. The actual rate adjustment may differ from the theoretical rate adjustment due to factors discussed in the rate design section of this report.

## 5. Rate Design

### 5.1 Rate design philosophy

The proposed water rates in the financial plan were developed based on the industry standards outlined in the AWWA M-1 Manual<sup>4</sup> and the rate principles commonly followed in the utility industry. These principles<sup>5</sup> include:

1. **Revenue Sufficiency:** Rates should generate enough revenue to cover the utility's total cost of service, including a reasonable return on investment.
2. **Fairness:** Rates should be fair and equitable, ensuring that no customer class is unduly burdened or favored.
3. **Efficiency:** Rates should promote the efficient use of resources and encourage conservation where appropriate.
4. **Simplicity:** Rate structures should be simple and understandable to customers, facilitating ease of administration and compliance.
5. **Stability:** Rates should provide revenue stability for the utility and rate stability for customers, avoiding frequent or drastic changes.
6. **Reflective of Costs:** Rates should reflect the cost of providing service to different customer classes, ensuring that each class pays its fair share.
7. **Non-Discrimination:** Rates should not discriminate against any customer or group of customers.
8. **Public Acceptability:** Rates should be acceptable to the public and policymakers, balancing economic and social objectives.

The 5-year recommended rates are designed to meet the requirements of the Water Fund Stabilization Plan through annual and gradual rate increases, adhering to the City's rate design objectives and these rate-making principles.

### 5.2 Rate overview

Proposed rates are presented in two options:

1. Option 1 rates include a graduated monthly surcharge to recover the Water Fund's fixed costs. The surcharge is based on customer consumption. The surcharge is increased annually to meet the Water Fund's revenue requirement. Surcharges will be calculated for each customer based on average monthly usage over prior 12 months, and surcharges will remain fixed for the ensuing 12-months based on that prior usage. The volume charges under Option 1 are not increased and remain at the current 2024 rates.

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<sup>4</sup> AWWA "Principles of Water Rates, Fees, and Charges" - 2017

<sup>5</sup> "Principles of Public Utility Rates", James C. Bonbright - 1961

2. Option 2 rates include a monthly customer meter charge, which is intended to collect a portion of the Water Fund's fixed costs. Option 2 rates also include annual increases in volume charges.

### 5.3 Proposed rate changes

The recommended rates for the period 2025–2029 are detailed by meter class and volume block in Appendices A and B. The recommended annual rate increases from current rates are as follows:

**Table 19 – Recommended Rate Increases – Options 1 and 2**

Year	Rate Adjustment
2025	9.00%
2026	9.00%
2027	9.00%
2028	9.00%
2029	6.00%

The rates are discussed in greater detail in the remainder of this section.

#### ***Option 1 – Monthly Surcharge Rate***

Option 1 rates include a graduated monthly surcharge to recover the Water Fund's fixed costs. The surcharge increases based on the monthly volume of water used by the customer. Customers are placed in a water volume grouping based on their average water use over the prior 12 months, calculated annually in October. Surcharges will remain fixed for the ensuing 12-months based on that prior usage. The new rates are placed into effect on January 1 each year. The volume charges under Option 1 are not increased for FY 2025 – 2029 and remain at the current 2024 rates.

The monthly surcharges for residential customers are shown in the following table<sup>6</sup>:

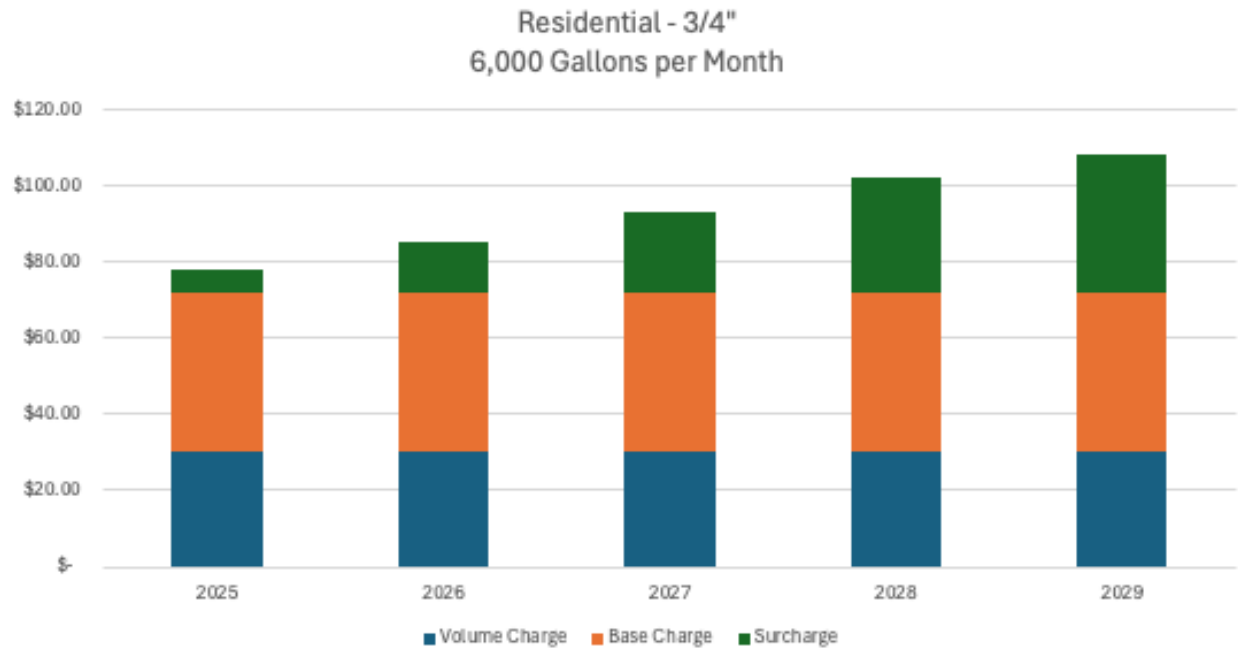
**Table 20 – Residential Monthly Surcharge**

Monthly Consumption	2025	2026	2027	2028	2029
Up to 1,500	\$ 3.25	\$ 6.90	\$ 10.85	\$ 15.15	\$ 18.25
1,501-3,000	\$ 4.90	\$ 10.40	\$ 16.30	\$ 22.70	\$ 27.40
3,001-6,000	\$ 6.50	\$ 13.80	\$ 21.70	\$ 30.30	\$ 36.50
6,001-10,000	\$ 8.10	\$ 17.30	\$ 27.10	\$ 37.90	\$ 45.60
10,001-15,000	\$ 9.80	\$ 20.70	\$ 32.60	\$ 45.50	\$ 54.80
15,001-21,000	\$ 11.40	\$ 24.20	\$ 38.00	\$ 53.00	\$ 63.90
over 21,000 gallons	\$ 13.00	\$ 27.60	\$ 43.40	\$ 60.60	\$ 73.00

<sup>6</sup> The monthly volume rate and surcharge rates for all customer classes for Option 1 rates is shown in Appendix A.

For example, for a Residential – ¾” customer with a consumption of 6,000 gallons per month, the bill for each month for the period of FY 2025 – FY 2029 would be as follows:

**Illustration 11 – Residential Monthly Bill – 6,000 gallons of usage – Option 1 Rates**



Further rate comparisons are shown in the following table:

**Table 21 – Option 1 – Rate Comparison with Surcharges**

Rate Class	Monthly Gallons	Current Rates	Proposed 2025 Rates			Proposed 2026 Rates			Proposed 2027 Rates		
			Monthly Bill	\$ over 2024	% over 2024	Monthly Bill	\$ over 2024	% over 2024	Monthly Bill	\$ over 2024	% over 2024
Residential - 3/4"	6,000	\$ 71.77	\$ 78.27	\$ 6.50	9.1%	\$ 85.57	\$ 13.80	19.2%	\$ 93.47	\$ 21.70	30.2%
Residential - 3/4"	12,000	\$ 123.79	\$ 133.59	\$ 9.80	7.9%	\$ 144.49	\$ 20.70	16.7%	\$ 156.39	\$ 32.60	26.3%
Commercial - 3/4"	16,000	\$ 162.09	\$ 173.49	\$ 11.40	7.0%	\$ 186.29	\$ 24.20	14.9%	\$ 200.09	\$ 38.00	23.4%
1"	44,000	\$ 516.04	\$ 564.79	\$ 48.75	9.4%	\$ 619.54	\$ 103.50	20.1%	\$ 678.79	\$ 162.75	31.5%
1 1/2"	82,000	\$ 944.43	\$ 1,054.93	\$ 110.50	11.7%	\$ 1,179.03	\$ 234.60	24.8%	\$ 1,313.33	\$ 368.90	39.1%
2"	230,000	\$ 2,795.61	\$ 3,039.36	\$ 243.75	8.7%	\$ 3,313.11	\$ 517.50	18.5%	\$ 3,609.36	\$ 813.75	29.1%
3"	700,000	\$ 8,778.40	\$ 9,558.40	\$ 780.00	8.9%	\$ 10,434.40	\$ 1,656.00	18.9%	\$ 11,382.40	\$ 2,604.00	29.7%
4"	1,000,000	\$ 12,337.39	\$ 13,273.39	\$ 936.00	7.6%	\$ 14,324.59	\$ 1,987.20	16.1%	\$ 15,462.19	\$ 3,124.80	25.3%

Rate Class	Monthly Gallons	Current Rates	Proposed 2028 Rates			Proposed 2029 Rates		
			Monthly Bill	\$ over 2024	% over 2024	Monthly Bill	\$ over 2024	% over 2024
Residential - 3/4"	6,000	\$ 71.77	\$ 102.07	\$ 30.30	42.2%	\$ 108.27	\$ 36.50	50.9%
Residential - 3/4"	12,000	\$ 123.79	\$ 169.29	\$ 45.50	36.8%	\$ 178.59	\$ 54.80	44.3%
Commercial - 3/4"	16,000	\$ 162.09	\$ 215.09	\$ 53.00	32.7%	\$ 225.99	\$ 63.90	39.4%
1"	44,000	\$ 516.04	\$ 743.29	\$ 227.25	44.0%	\$ 789.79	\$ 273.75	53.0%
1 1/2"	82,000	\$ 944.43	\$ 1,459.53	\$ 515.10	54.5%	\$ 1,564.93	\$ 620.50	65.7%
2"	230,000	\$ 2,795.61	\$ 3,931.86	\$ 1,136.25	40.6%	\$ 4,164.36	\$ 1,368.75	49.0%
3"	700,000	\$ 8,778.40	\$ 12,414.40	\$ 3,636.00	41.4%	\$ 13,158.40	\$ 4,380.00	49.9%
4"	1,000,000	\$ 12,337.39	\$ 16,700.59	\$ 4,363.20	35.4%	\$ 17,593.39	\$ 5,256.00	42.6%

As the listing of recommended Option 1 rates for FY 2025 – FY 2029 are lengthy, they are included in the Appendix A to this report.

### ***Option 2 – Annual Increases in Volume Charge***

Option 2 rates include a monthly customer meter charge, which is intended to collect a portion of the Water Fund's fixed costs. Option 2 rates also include annual increases in volume charges.

The Option 2 rates were designed with the following fixed monthly meter charge:

**Table 22 – Monthly Customer Meter Charges**

<b>Meter Size</b>	<b>2025</b>		<b>2026</b>		<b>2027</b>		<b>2028</b>		<b>2029</b>	
Residential - 3/4"	\$	35.20	\$	38.40	\$	41.90	\$	45.70	\$	48.40
Commercial - 3/4"	\$	35.20	\$	38.40	\$	41.90	\$	45.70	\$	48.40
1"	\$	79.00	\$	86.10	\$	93.80	\$	102.20	\$	108.90
1 1/2"	\$	183.50	\$	200.00	\$	218.00	\$	237.60	\$	251.90
2"	\$	350.10	\$	381.60	\$	415.90	\$	453.90	\$	480.50
3"	\$	745.70	\$	812.80	\$	886.00	\$	965.70	\$	1,023.60
4"	\$	1,159.60	\$	1,264.00	\$	1,377.80	\$	1,501.80	\$	1,591.90

As the listing of recommended rates for FY 2025 – FY 2029 are lengthy, they are included in the Appendix B to this report.

Further rate comparisons are shown in the following table:

**Table 23 – Option 2 – Rate Comparison with Percentage Change in Volume Rates**

Rate Class	Monthly Gallons	Current Rates	Proposed 2025 Rates			Proposed 2026 Rates			Proposed 2027 Rates		
			Monthly Bill	\$ over 2024	% over 2024	Monthly Bill	\$ over 2024	% over 2024	Monthly Bill	\$ over 2024	% over 2024
Residential - 3/4"	6,000	\$ 71.77	\$ 78.21	\$ 6.44	9.0%	\$ 85.28	\$ 13.51	18.8%	\$ 93.00	\$ 21.23	29.6%
Residential - 3/4"	12,000	\$ 123.79	\$ 134.91	\$ 11.12	9.0%	\$ 147.08	\$ 23.29	18.8%	\$ 160.36	\$ 36.57	29.5%
Commercial - 3/4"	16,000	\$ 162.09	\$ 177.68	\$ 15.59	9.6%	\$ 193.71	\$ 31.62	19.5%	\$ 211.19	\$ 49.10	30.3%
1"	44,000	\$ 516.04	\$ 571.29	\$ 55.25	10.7%	\$ 622.69	\$ 106.65	20.7%	\$ 678.69	\$ 162.65	31.5%
1 1/2"	82,000	\$ 944.43	\$ 1,057.39	\$ 112.96	12.0%	\$ 1,152.54	\$ 208.11	22.0%	\$ 1,256.27	\$ 311.84	33.0%
2"	230,000	\$ 2,795.61	\$ 3,114.99	\$ 319.38	11.4%	\$ 3,395.33	\$ 599.72	21.5%	\$ 3,700.87	\$ 905.26	32.4%
3"	700,000	\$ 8,778.40	\$ 9,695.26	\$ 916.87	10.4%	\$ 10,567.82	\$ 1,789.43	20.4%	\$ 11,518.98	\$ 2,740.58	31.2%
4"	1,000,000	\$ 12,337.39	\$ 13,554.43	\$ 1,217.04	9.9%	\$ 14,774.36	\$ 2,436.97	19.8%	\$ 16,104.09	\$ 3,766.70	30.5%

Rate Class	Monthly Gallons	Current Rates	Proposed 2028 Rates			Proposed 2029 Rates		
			Monthly Bill	\$ over 2024	% over 2024	Monthly Bill	\$ over 2024	% over 2024
Residential - 3/4"	6,000	\$ 71.77	\$ 101.39	\$ 29.62	41.3%	\$ 107.44	\$ 35.67	49.7%
Residential - 3/4"	12,000	\$ 123.79	\$ 174.82	\$ 51.03	41.2%	\$ 185.27	\$ 61.48	49.7%
Commercial - 3/4"	16,000	\$ 162.09	\$ 230.22	\$ 68.13	42.0%	\$ 243.99	\$ 81.90	50.5%
1"	44,000	\$ 516.04	\$ 739.73	\$ 223.69	43.3%	\$ 784.08	\$ 268.04	51.9%
1 1/2"	82,000	\$ 944.43	\$ 1,369.31	\$ 424.88	45.0%	\$ 1,451.51	\$ 507.08	53.7%
2"	230,000	\$ 2,795.61	\$ 4,033.92	\$ 1,238.31	44.3%	\$ 4,275.95	\$ 1,480.34	53.0%
3"	700,000	\$ 8,778.40	\$ 12,555.64	\$ 3,777.25	43.0%	\$ 13,308.94	\$ 4,530.55	51.6%
4"	1,000,000	\$ 12,337.39	\$ 17,553.46	\$ 5,216.07	42.3%	\$ 18,606.66	\$ 6,269.27	50.8%



A comparison of Option 1 and Option 2 rates is shown in the following table:

**Table 24 – Average Customer Bills FY 2025 – FY 2029 – Options 1 and 2 Rates**

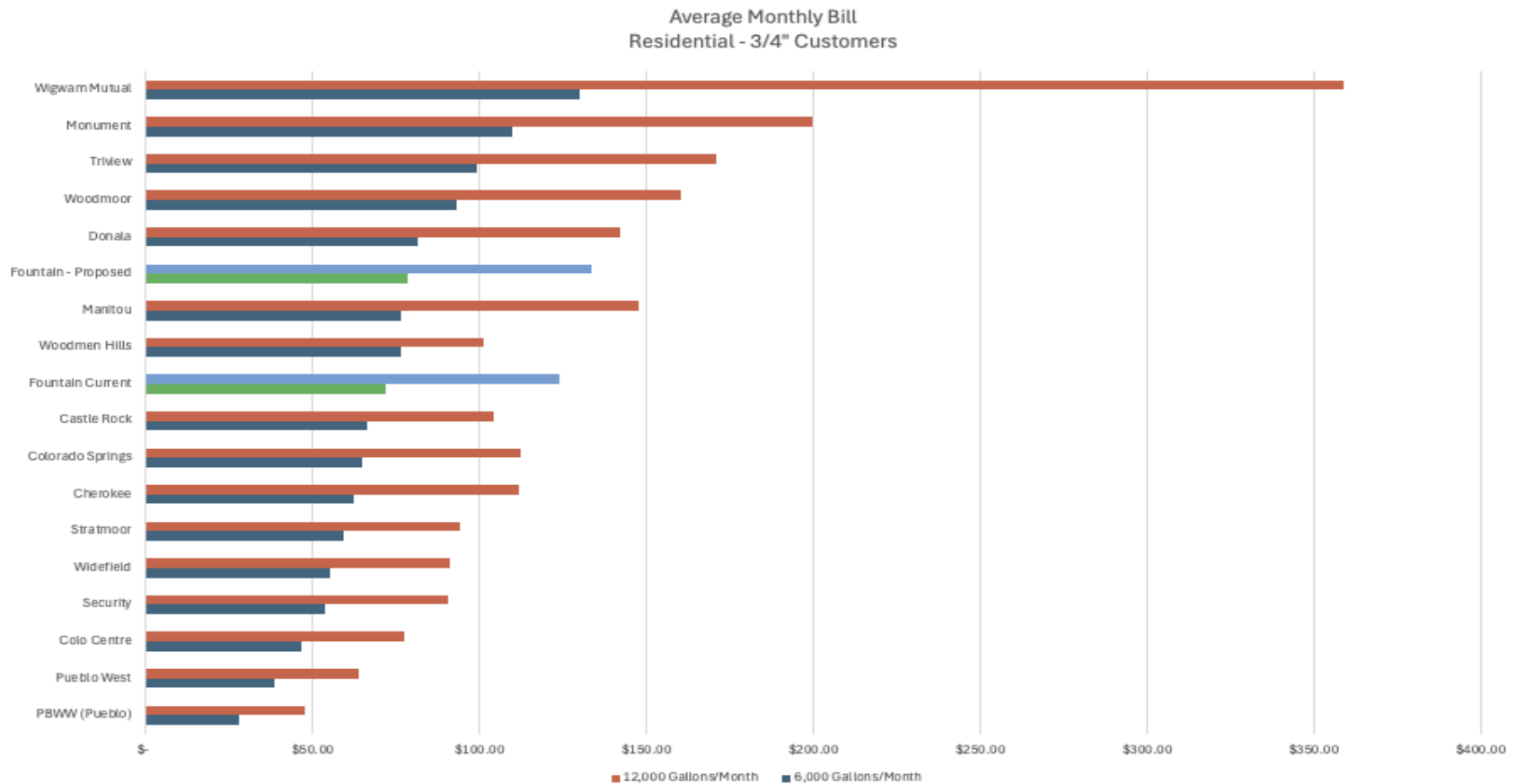
Rate Class	Monthly Gallons	Current Rates	Proposed 2025 Rates		Proposed 2026 Rates		Proposed 2027 Rates	
			Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
Residential - 3/4"	6,000	\$ 71.77	\$ 78.27	\$ 78.21	\$ 85.57	\$ 85.28	\$ 93.47	\$ 93.00
Residential - 3/4"	12,000	\$ 123.79	\$ 133.59	\$ 134.91	\$ 144.49	\$ 147.08	\$ 156.39	\$ 160.36
Commercial - 3/4"	16,000	\$ 162.09	\$ 173.49	\$ 177.68	\$ 186.29	\$ 193.71	\$ 200.09	\$ 211.19
1"	44,000	\$ 516.04	\$ 564.79	\$ 571.29	\$ 619.54	\$ 622.69	\$ 678.79	\$ 678.69
1 1/2"	82,000	\$ 944.43	\$ 1,054.93	\$ 1,057.39	\$ 1,179.03	\$ 1,152.54	\$ 1,313.33	\$ 1,256.27
2"	230,000	\$ 2,795.61	\$ 3,039.36	\$ 3,114.99	\$ 3,313.11	\$ 3,395.33	\$ 3,609.36	\$ 3,700.87
3"	700,000	\$ 8,778.40	\$ 9,558.40	\$ 9,695.26	\$ 10,434.40	\$ 10,567.82	\$ 11,382.40	\$ 11,518.98
4"	1,000,000	\$ 12,337.39	\$ 13,273.39	\$ 13,554.43	\$ 14,324.59	\$ 14,774.36	\$ 15,462.19	\$ 16,104.09

Rate Class	Monthly Gallons	Current Rates	Proposed 2028 Rates		Proposed 2029 Rates	
			Option 1	Option 2	Option 1	Option 2
Residential - 3/4"	6,000	\$ 71.77	\$ 102.07	\$ 101.39	\$ 108.27	\$ 107.44
Residential - 3/4"	12,000	\$ 123.79	\$ 169.29	\$ 174.82	\$ 178.59	\$ 185.27
Commercial - 3/4"	16,000	\$ 162.09	\$ 215.09	\$ 230.22	\$ 225.99	\$ 243.99
1"	44,000	\$ 516.04	\$ 743.29	\$ 739.73	\$ 789.79	\$ 784.08
1 1/2"	82,000	\$ 944.43	\$ 1,459.53	\$ 1,369.31	\$ 1,564.93	\$ 1,451.51
2"	230,000	\$ 2,795.61	\$ 3,931.86	\$ 4,033.92	\$ 4,164.36	\$ 4,275.95
3"	700,000	\$ 8,778.40	\$ 12,414.40	\$ 12,555.64	\$ 13,158.40	\$ 13,308.94
4"	1,000,000	\$ 12,337.39	\$ 16,700.59	\$ 17,553.46	\$ 17,593.39	\$ 18,606.66

## 5.4 Peer utility rate comparison

Comparing customer bills to those of other local governments and water districts is informative for utilities and their customers. While these comparisons are not always “apples to apples” due to differences in service composition, the latest year of rate increases, customer mix, age of the system, and cost of service components, they still provide valuable insights into rate comparability. The following table compares a residential water customer’s bill at 6,000 and 12,000 gallons per month under current and proposed 2025 rates (using the Option 1 Surcharge Method), alongside rates from other water providers in the region. The Fountain Water Fund’s rates are highlighted in blue and green.

**Table 25 – Rate Comparison to Pikes Peak Region Water Providers**



## 6. Alternative rate designs

### 6.1 Surcharge rates and Water Scarcity Rates

Surcharge and water scarcity rates can be assessed to encourage reduced customer consumption in the higher rate blocks or to make up for lost revenues due to reduced consumption.

#### 6.1.1 Surcharge rates

The advantage of a surcharge rate is that it is simple to calculate, easy for customers to understand, and straightforward to implement and administer. The surcharge can be applied to a customer's entire consumption or on a block-by-block basis, increasing as the rate tiers increase to encourage reduced water usage. However, a surcharge on the lower rate tiers will not be effective in reducing water usage, as the water used in these tiers is typically for non-discretionary, everyday activities.

A disadvantage of a surcharge rate is that it can be a blunt pricing mechanism if applied to a customer's total usage and may not necessarily encourage conservation.

### 6.1.2 Surcharge rates on all consumption

The following table presents the format and calculation for applying a surcharge rate to overall consumption, based on the Water Fund's Forecasted 2025 "Residential – ¾" gallons:

**Table 26 – Rate Surcharge Example**

					Forecasted Decrease in Consumption of 10%		Forecasted Decrease in Consumption of 20%		Forecasted Decrease in Consumption of 30%			
Proposed Rates		Forecasted Gallons		Forecasted Revenues - 2025		Gallons Revenues		Gallons Revenues		Gallons Revenues		
		2025										
Residential - 3/4"	Customer Charge	\$	35.20		\$	3,566,054		\$	3,566,054		\$	3,566,054
	Up to 1,500	\$	6.50	151,070,607		981,959	143,517,077	932,861	132,942,134	864,124	117,835,074	765,928
	1,501-3,000	\$	7.22	124,472,634		898,170	118,249,002	853,261	102,067,560	736,499	93,354,475	673,627
	3,001-6,000	\$	7.48	140,426,654		1,050,026	120,766,922	903,023	98,298,658	735,018	91,277,325	682,517
	6,001-10,000	\$	9.13	71,469,032		652,812	60,748,677	554,891	61,284,695	559,787	42,881,419	391,687
	10,001-15,000	\$	10.08	32,549,409		328,179	26,039,527	262,544	22,784,586	229,726	19,529,645	196,908
	15,001-21,000	\$	11.46	13,534,631		155,051	10,827,705	124,041	9,474,242	108,536	8,120,778	93,031
	over 21,000 gallons	\$	12.72	9,775,372		124,346	7,820,297	99,477	6,842,760	87,042	5,865,223	74,607
				<u>533,522,966</u>		<u>\$ 7,756,598</u>	<u>480,148,910</u>	<u>\$ 7,296,151</u>	<u>426,851,874</u>	<u>\$ 6,886,786</u>	<u>372,998,717</u>	<u>\$ 6,444,360</u>
Revenue Shortage						<u>\$ 460,447</u>		<u>\$ 869,812</u>		<u>\$ 1,312,238</u>		
Calculated Surcharge per 000 gallons						<u>\$ 0.96</u>		<u>\$ 2.04</u>		<u>\$ 3.52</u>		

The surcharge would be calculated for all meter classes. The Residential – ¾" is shown here for example purposes.

A surcharge rate can also be effective in funding specific improvements or funding reserves for future service requirements.

### 6.1.3 Water Scarcity rates

Some utilities use a rate structure that adjusts rates for each block based on 3 levels of drought severity – moderate, severe, or extreme. The rate structures are part of an overall water management plan that first seeks to reduce customer watering, then may move to pricing adjustments.<sup>7</sup>The severity of the declared drought or level of water scarcity could be based on the measures of a drought monitor<sup>8</sup> and/or the City’s Water Scarcity Response Plan.

The adjusted rates are applied to each block for the declared drought or water scarcity period, with larger rate increases for higher customer usage to encourage reduction of water usage beyond everyday uses and to recognize that most consumption reductions will be in the higher usage tiers.

An example of a water supply shortage/drought rate structure is shown in the following table, based on the Forecasted 2025 “Residential – ¾” gallons<sup>9</sup>:

**Table 27 – Water Scarcity Rate Examples**

				Forecasted Decrease in Consumption of 10%			Forecasted Decrease in Consumption of 20%		
Proposed Rates		Forecasted	Forecasted						
2025		Gallons	Revenues - 2025	Rate	Gallons	Revenues	Rate	Gallons	Revenues
Customer Charge	\$	35.20	\$	35.20		\$	35.20		\$
Up to 1,500	\$	6.50	151,070,607	\$	6.83	143,517,077	\$	7.80	132,942,134
1,501-3,000	\$	7.22	124,472,634	\$	7.94	118,249,002	\$	9.02	102,067,560
3,001-6,000	\$	7.48	140,426,654	\$	8.60	120,766,922	\$	9.35	98,298,658
6,001-10,000	\$	9.13	71,469,032	\$	10.50	60,748,677	\$	11.87	61,284,695
10,001-15,000	\$	10.08	32,549,409	\$	12.10	26,039,527	\$	13.61	22,784,586
15,001-21,000	\$	11.46	13,534,631	\$	13.75	10,827,705	\$	15.47	9,474,242
over 21,000 gallons	\$	12.72	9,775,372	\$	15.26	7,820,297	\$	18.44	6,842,760
		533,522,966	\$	480,148,910		\$	426,851,874		\$
		Revenue Shortage		\$			\$		
				12,579			3,612		

<sup>7</sup> Denver Water – [Water Shortage Drought Response](#)

<sup>8</sup> As an example, the Colorado State University [assessment of current conditions](#)

<sup>9</sup> In the rate model this is extended to the 30% shortage level, omitted here to maintain table readability

## 6.2 Rate stabilization reserves

Once the Water Fund has met its reserve calculation goal in FY 2029, it is recommended that a rate stabilization reserve be established. The rate stabilization reserve can be used to supplement revenues in times of reduced water usage and to offset or delay rate increases.

## 6.3 Water adjustment clause

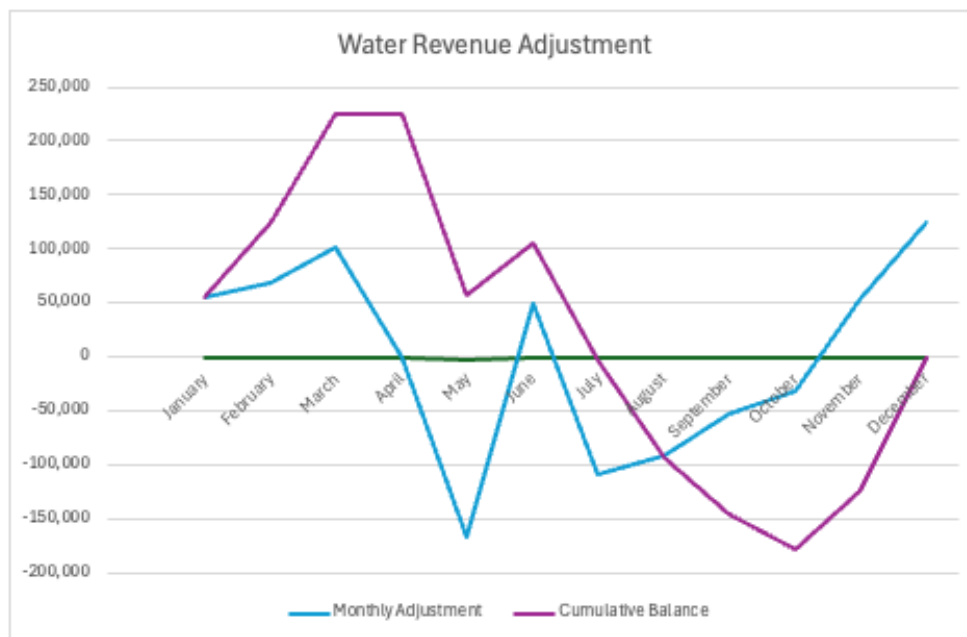
A Water Revenue Adjustment Factor (WRA) functions as a type of surcharge rate. A WRA is not commonly used by water utilities but would operate similarly to the City of Fountain Electric Fund's Electric Cost Adjustment (ECA).

For example, based on actual 2023 purchased water costs, the base monthly cost of purchased water was \$3.01 per 1,000 gallons. The formula that would be used each month is:

$$\text{Actual Monthly Cost minus Base Cost (\$3.01) times Gallons Sold} = \text{WAC}$$

An illustration of the fluctuation of a WRA for FY 2023 follows:

**Illustration 12 – Water Revenue Adjustment – FY 2023**



The amount of a WRA in FY 2023 ranged from a positive cumulative balance of \$225,000 to a negative cumulative balance of \$178,000.

The WRA could also be designed to collect or return differences in target rate revenues. For example, If budgeted revenues for the month are \$1 million and the actual revenues are \$900,000, the \$100,000 could be charged as a WRA in the next month's billings. Likewise, if the

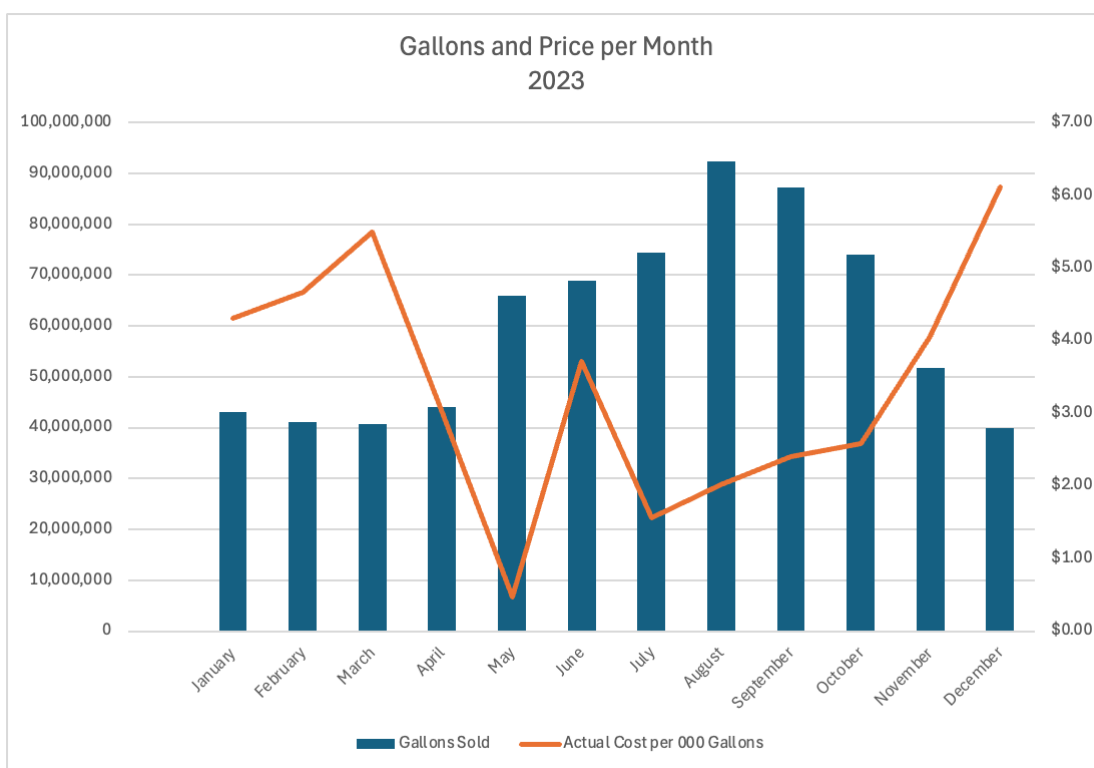
actual revenues were \$1.1 million, the \$100,000 difference could be credited to customers in the next month's billing.

#### 6.4 Seasonal rates

Utilities use seasonal rates to reduce demand during peak seasons or to charge customers appropriately for their water use during these periods. These rates provide a price signal to customers, indicating the high cost of providing water during peak seasons, limited peak day treated water capacity, or highlighting that water resources are limited at certain times of the year, encouraging reduced consumption.

In this study, an analysis was performed comparing the monthly gallons of usage to the Water Fund's purchased water cost by month, as illustrated below:

**Illustration 13 – Monthly Gallons and Price Per Month – FY 2023**



The cost line represents purchased water costs only.

The analysis shows that the Water Fund could develop a seasonal water rate with two distinct periods: May to October and November to April. The goal of a seasonal rate in this case would be to reduce customer consumption or build reserves to lower rates in the November to April period, as the purchased unit cost of water is lower in the May to October period compared to the November to April period.

The implementation of seasonal rates may require adjustments initially to ensure that the rate design meets its revenue goals. A more detailed analysis of monthly consumption trends over the most recent five year period will give more solid information on which to base any decisions on implementing seasonal rates.

It is recommended that a seasonal water rate not be considered until the Water Fund has met its reserve goals in FY 2029.

#### 6.4.1 Example seasonal rates

Examples of seasonal rates that were found for Colorado water utilities were for surcharges on higher water tiers to charge for the irrigation season.<sup>10</sup> Other seasonal rate approaches were not noted.

#### 6.5 Economic development rates

Economic development rates are utilized by communities as part of a comprehensive community plan. We have observed water economic development rates being combined with other city incentives, such as Tax Incremental Financing, electric economic development rates, and additional incentives to attract desired businesses to the community.

According to the AWWA M-1 manual<sup>11</sup>, five criteria should be met when considering economic development rates:

1. A comprehensive economic development plan.
2. A financially sound utility.
3. A long-term economic gain.
4. Direct analysis of the benefits of offering economic incentives.
5. Provisions regarding unmet performance by the customer.

#### 6.6 Contract rates

Contract rates are more common in electric, water, and wastewater utilities where dedicated infrastructure and capacity enhancements have been made to serve a single customer. Examples include additional water storage or purchases, electric infrastructure such as new substations or line extensions, and additional wastewater capacity built to treat specific customer wastes.

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<sup>10</sup> See Castle Rock [water rates](#)

<sup>11</sup> AWWA "Principles of Water Rates, Fees, and Charges" - 2017



Key items to consider for a successful contract include:

1. Performing a cost of service study that places the customer in a separate class.
2. Determining the full cost of infrastructure dedicated to this customer.
3. Accurately forecasting the commodity needed to serve the customer (e.g., gallons of water, electric demand, wastewater capacity).
4. Setting the monthly fixed charge equal to the fixed cost of infrastructure to serve the customer.
5. Establishing clear expectations on volumes by the customer.
6. Analyzing cost of service scenarios to understand the impact on the system and other utility customers if performance varies from expectations.
7. Designing a rate that is revenue-neutral to other existing customers.
8. Including penalties or surcharges for not meeting the contracted customer goals.
9. Adding clauses that require repayment of dedicated infrastructure costs if the customer relocates or ceases business.

The current composition of the City's water customers does not seem to support a specific contract rate with a customer. However, a contract rate might be an option if a large new customer, served with dedicated facilities or requiring excess capacity, is added to the City's distribution system.

## 7. Impact of Fountain Reservoir Project

This study analyzed two scenarios of the financial impact of constructing the Fountain Reservoir Project, which is an infrastructure option that would convert the City's available raw water rights to treated water.

### 7.1.1 Minimum Number of New Connections Needed to Meet Debt Service Requirements for Fountain Reservoir Project Bond Issue

The analysis included the following assumptions:

- Construction costs of \$75 million would take place in FY 2027 and FY 2028 in the amounts of \$37.5 million per year.
- Construction would be financed with a \$75 million bond issue, with debt payments beginning in FY 2029.
- New customers would pay the Infrastructure Tap Fee of \$10,824 per connection.
- 400 new customers would be required to be added to cover the debt service costs in 2029 for the Fountain Reservoir Project
- New customer Water Acquisition Tap Fees of \$6,500 are applied to operations
- The incremental water usage of the new customers is based on the Residential – ¾" class average.
- The incremental increase in purchased water would be \$100,000 for FY 2029.
- Additional operation and maintenance expenses were not part of the analysis.

The forecasted cash flows by adding 400 new customers are as follows:

**Table 28 – Cash Flows – Fountain Reservoir Project – 400 Customers Added in FY 2029**

Description	Forecasted				
	2025	2026	2027	2028	2029
<b>Sources of Cash</b>					
Revenues from customers	\$ 11,041,134	\$ 12,047,076	\$ 13,146,763	\$ 13,752,435	\$ 13,974,480
Other operating revenues	171,404	186,404	171,404	171,404	171,404
Other non-operating revenues	500,760	272,528	250,000	250,000	250,000
Debt proceeds				75,000,000	
<i>Fountain Valley additional customer connection revenues</i>					
Connection fees - Infrastructure portion					4,329,600
Water acquisition revenues					2,600,000
<b>Total Sources of Cash</b>	<b>\$ 11,713,298</b>	<b>\$ 12,506,008</b>	<b>\$ 13,568,167</b>	<b>\$ 89,173,839</b>	<b>\$ 21,325,484</b>
<b>Uses of Cash</b>					
Operation and maintenance expenses	\$ 7,013,417	\$ 7,070,557	\$ 7,282,674	\$ 7,501,154	\$ 7,726,189
Transfer to the General Fund	1,424,024	1,466,720	1,510,722	1,556,043	1,602,725
Debt service - Pre 2027 Issues	3,493,870	3,488,339	3,467,059	3,465,249	3,466,831
Debt service - Fountain Reservoir Project					4,337,257
Capital outlay	228,000	286,000	1,512,750	75,739,400	462,000
<b>Total Uses of Cash</b>	<b>12,159,311</b>	<b>12,311,616</b>	<b>13,773,204</b>	<b>88,261,846</b>	<b>17,595,002</b>
<b>Net Unrestricted Cash Flows</b>	<b>\$ (446,013)</b>	<b>\$ 194,392</b>	<b>\$ (205,037)</b>	<b>\$ 911,993</b>	<b>\$ 3,730,482</b>

The above table shows that 400 new customers in FY 2029 would need to be connected to the water system to produce sufficient Infrastructure Tap Fees to pay the FY 2029 debt service on the Fountain Reservoir project bonds.

The impact on customer rate increases assuming 400 customers are added in FY 2029 is shown in the following table:

**Table 29 – Fountain Reservoir Project - Recommended Rate Increases – 400 Customers Added in FY 2029**

Year	Rate Adjustment
<b>2025</b>	9.00%
<b>2026</b>	9.00%
<b>2027</b>	9.00%
<b>2028</b>	4.50%
<b>2029</b>	0%

#### 7.1.2 Fountain Reservoir Project – Impact if Zero Customers are Added

The analysis included the following assumptions:

- Construction costs of \$75 million would take place in FY 2027 and FY 2028 in the amounts of \$37.5 million per year.
- Construction would be financed with a \$75 million bond issue, with debt payments beginning in FY 2029.
- Zero new customers are added in FY 2029 as a result of the project

This analysis is the worst case scenario of the project. The impact on customer rate increases assuming zero customers are added in FY 2029 is shown in the following table:

**Table 30 – Fountain Reservoir Project - Recommended Rate Increases – Zero Customers Added in FY 2029**

Year	Rate Adjustment
2025	9.00%
2026	9.00%
2027	9.00%
2028	9.00%
2029	34.50%

## Appendix – Recommended Water Rates FY 2025 – 2029 – Option 1

The Appendix shows the recommended 5-year rate track using a surcharge on customer consumption.

		Surcharge Rate per Month					
Customer Class or Meter Size	Rate Categories	Volume Rate 2025 - 2029	2025	2026	2027	2028	2029
Residential - 3/4"							
	Up to 1,500	\$ 41.26	\$ 3.25	\$ 6.90	\$ 10.85	\$ 15.15	\$ 18.25
	1,501-3,000	\$ 6.62	\$ 4.90	\$ 10.40	\$ 16.30	\$ 22.70	\$ 27.40
	3,001-6,000	\$ 6.86	\$ 6.50	\$ 13.80	\$ 21.70	\$ 30.30	\$ 36.50
	6,001-10,000	\$ 8.38	\$ 8.10	\$ 17.30	\$ 27.10	\$ 37.90	\$ 45.60
	10,001-15,000	\$ 9.25	\$ 9.80	\$ 20.70	\$ 32.60	\$ 45.50	\$ 54.80
	15,001-21,000	\$ 10.51	\$ 11.40	\$ 24.20	\$ 38.00	\$ 53.00	\$ 63.90
	over 21,000 gallons	\$ 11.67	\$ 13.00	\$ 27.60	\$ 43.40	\$ 60.60	\$ 73.00
Commercial - 3/4"							
	Up to 3,000	\$ 51.23	\$ 4.90	\$ 10.40	\$ 16.30	\$ 22.70	\$ 27.40
	3,001-6,000	\$ 6.86	\$ 6.50	\$ 13.80	\$ 21.70	\$ 30.30	\$ 36.50
	6,001-10,000	\$ 8.38	\$ 8.10	\$ 17.30	\$ 27.10	\$ 37.90	\$ 45.60
	10,001-15,000	\$ 9.25	\$ 9.80	\$ 20.70	\$ 32.60	\$ 45.50	\$ 54.80
	15,001-21,000	\$ 10.51	\$ 11.40	\$ 24.20	\$ 38.00	\$ 53.00	\$ 63.90
	over 21,000 gallons	\$ 11.67	\$ 13.00	\$ 27.60	\$ 43.40	\$ 60.60	\$ 73.00
1"							
	Up to 6,000	\$ 106.70	\$ 6.50	\$ 13.80	\$ 21.70	\$ 30.30	\$ 36.50
	6,001-12,000	\$ 8.19	\$ 13.00	\$ 27.60	\$ 43.40	\$ 60.60	\$ 73.00
	12,001-20,000	\$ 9.76	\$ 19.50	\$ 41.40	\$ 65.10	\$ 90.90	\$ 109.50
	20,001-30,000	\$ 10.76	\$ 29.25	\$ 62.10	\$ 97.65	\$ 136.35	\$ 164.25
	30,001-42,000	\$ 12.29	\$ 39.00	\$ 82.80	\$ 130.20	\$ 181.80	\$ 219.00
	over 42,000 gallons	\$ 13.52	\$ 48.75	\$ 103.50	\$ 162.75	\$ 227.25	\$ 273.75
1 1/2"							
	Up to 13,500	\$ 237.88	\$ 13.00	\$ 27.60	\$ 43.40	\$ 60.60	\$ 73.00
	13,501-27,000	\$ 8.19	\$ 29.25	\$ 62.10	\$ 97.65	\$ 136.35	\$ 164.25
	27,001-45,000	\$ 9.76	\$ 48.75	\$ 103.50	\$ 162.75	\$ 227.25	\$ 273.75
	45,001-67,500	\$ 10.76	\$ 78.00	\$ 165.60	\$ 260.40	\$ 363.60	\$ 438.00
	67,501-94,500	\$ 12.29	\$ 110.50	\$ 234.60	\$ 368.90	\$ 515.10	\$ 620.50
	Over 94,500 gallons	\$ 13.52	\$ 149.50	\$ 317.40	\$ 499.10	\$ 696.90	\$ 839.50
2"							
	Up to 24,000	\$ 428.17	\$ 48.75	\$ 103.50	\$ 162.75	\$ 227.25	\$ 273.75
	24,001-48,000	\$ 8.19	\$ 78.00	\$ 165.60	\$ 260.40	\$ 363.60	\$ 438.00
	48,001-80,000	\$ 9.76	\$ 110.50	\$ 234.60	\$ 368.90	\$ 515.10	\$ 620.50
	80,001-120,000	\$ 10.76	\$ 149.50	\$ 317.40	\$ 499.10	\$ 696.90	\$ 839.50
	120,001-168,000	\$ 12.29	\$ 195.00	\$ 414.00	\$ 651.00	\$ 909.00	\$ 1,095.00
	Over 168,000	\$ 13.52	\$ 243.75	\$ 517.50	\$ 813.75	\$ 1,136.25	\$ 1,368.75
3"							
	Up to 52,500	\$ 937.87	\$ 78.00	\$ 165.60	\$ 260.40	\$ 363.60	\$ 438.00
	52,501-105,000	\$ 8.19	\$ 156.00	\$ 331.20	\$ 520.80	\$ 727.20	\$ 876.00
	105,001-175,000	\$ 9.76	\$ 312.00	\$ 662.40	\$ 1,041.60	\$ 1,454.40	\$ 1,752.00
	175,001-262,500	\$ 10.76	\$ 468.00	\$ 993.60	\$ 1,562.40	\$ 2,181.60	\$ 2,628.00
	262,501-367,500	\$ 12.29	\$ 624.00	\$ 1,324.80	\$ 2,083.20	\$ 2,908.80	\$ 3,504.00
	Over 367,500	\$ 13.52	\$ 780.00	\$ 1,656.00	\$ 2,604.00	\$ 3,636.00	\$ 4,380.00

Customer Class or Meter Size	Rate Categories	Volume Rate					
		2025 - 2029	2025	2026	2027	2028	2029
4"							
	Up to 90,000	\$ 1,600.49	\$ 156.00	\$ 331.20	\$ 520.80	\$ 727.20	\$ 876.00
	90,001-180,000	\$ 8.19	\$ 234.00	\$ 496.80	\$ 781.20	\$ 1,090.80	\$ 1,314.00
	180,001-300,000	\$ 9.76	\$ 390.00	\$ 828.00	\$ 1,302.00	\$ 1,818.00	\$ 2,190.00
	300,001-450,000	\$ 10.76	\$ 546.00	\$ 1,159.20	\$ 1,822.80	\$ 2,545.20	\$ 3,066.00
	450,001-630,000	\$ 12.29	\$ 702.00	\$ 1,490.40	\$ 2,343.60	\$ 3,272.40	\$ 3,942.00
	Over 630,000	\$ 13.52	\$ 936.00	\$ 1,987.20	\$ 3,124.80	\$ 4,363.20	\$ 5,256.00
			Annual Rate	Annual Rate	Annual Rate	Annual Rate	Annual Rate
Non Potable	All sales	\$	3.78	\$ 4.12	\$ 4.49	\$ 4.90	\$ 5.19
City Hydrants	Up to 3,000	\$	14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
	Over 3,000	\$	14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
Construction Hydrants	Up to 3,000	\$	14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
	Over 3,000	\$	14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23

## Appendix – Recommended Water Rates FY 2025 – 2029 – Option 2

The Appendix shows the recommended 5-year rate track using percentage increases on volume rates and a monthly customer service charge.

Customer Class or Meter Size	Rate Categories	2025	2026	2027	2028	2029
Residential - 3/4"	Customer Charge	\$ 35.20	\$ 38.40	\$ 41.90	\$ 45.70	\$ 48.40
	Up to 1,500	\$ 6.50	\$ 7.09	\$ 7.72	\$ 8.42	\$ 8.92
	1,501-3,000	\$ 7.22	\$ 7.87	\$ 8.57	\$ 9.34	\$ 9.91
	3,001-6,000	\$ 7.48	\$ 8.15	\$ 8.88	\$ 9.68	\$ 10.26
	6,001-10,000	\$ 9.13	\$ 9.96	\$ 10.85	\$ 11.83	\$ 12.54
	10,001-15,000	\$ 10.08	\$ 10.99	\$ 11.98	\$ 13.06	\$ 13.84
	15,001-21,000	\$ 11.46	\$ 12.49	\$ 13.61	\$ 14.84	\$ 15.73
	over 21,000 gallons	\$ 12.72	\$ 13.87	\$ 15.11	\$ 16.47	\$ 17.46
Commercial - 3/4"	Customer Charge	\$ 35.20	\$ 38.40	\$ 41.90	\$ 45.70	\$ 48.40
	Up to 3,000	\$ 7.22	\$ 7.87	\$ 8.57	\$ 9.34	\$ 9.91
	3,001-6,000	\$ 7.48	\$ 8.15	\$ 8.88	\$ 9.68	\$ 10.26
	6,001-10,000	\$ 9.13	\$ 9.96	\$ 10.85	\$ 11.83	\$ 12.54
	10,001-15,000	\$ 10.08	\$ 10.99	\$ 11.98	\$ 13.06	\$ 13.84
	15,001-21,000	\$ 11.46	\$ 12.49	\$ 13.61	\$ 14.84	\$ 15.73
	over 21,000 gallons	\$ 12.72	\$ 13.87	\$ 15.11	\$ 16.47	\$ 17.46
1"	Customer Charge	\$ 79.00	\$ 86.10	\$ 93.80	\$ 102.20	\$ 108.30
	Up to 6,000	\$ 7.48	\$ 8.15	\$ 8.88	\$ 9.68	\$ 10.26
	6,001-12,000	\$ 9.13	\$ 9.96	\$ 10.85	\$ 11.83	\$ 12.54
	12,001-20,000	\$ 10.64	\$ 11.60	\$ 12.64	\$ 13.78	\$ 14.60
	20,001-30,000	\$ 11.73	\$ 12.78	\$ 13.93	\$ 15.19	\$ 16.10
	30,001-42,000	\$ 13.40	\$ 14.60	\$ 15.92	\$ 17.35	\$ 18.39
	over 42,000 gallons	\$ 14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
1 1/2"	Customer Charge	\$ 183.50	\$ 200.00	\$ 218.00	\$ 237.60	\$ 251.90
	Up to 13,500	\$ 7.48	\$ 8.15	\$ 8.88	\$ 9.68	\$ 10.26
	13,501-27,000	\$ 9.13	\$ 9.96	\$ 10.85	\$ 11.83	\$ 12.54
	27,001-45,000	\$ 10.64	\$ 11.60	\$ 12.64	\$ 13.78	\$ 14.60
	45,001-67,500	\$ 11.73	\$ 12.78	\$ 13.93	\$ 15.19	\$ 16.10
	67,501-94,500	\$ 13.40	\$ 14.60	\$ 15.92	\$ 17.35	\$ 18.39
	Over 94,500 gallons	\$ 14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
2"	Customer Charge	\$ 350.10	\$ 381.60	\$ 415.90	\$ 453.30	\$ 480.50
	Up to 24,000	\$ 7.48	\$ 8.15	\$ 8.88	\$ 9.68	\$ 10.26
	24,001-48,000	\$ 9.13	\$ 9.96	\$ 10.85	\$ 11.83	\$ 12.54
	48,001-80,000	\$ 10.64	\$ 11.60	\$ 12.64	\$ 13.78	\$ 14.60
	80,001-120,000	\$ 11.73	\$ 12.78	\$ 13.93	\$ 15.19	\$ 16.10
	120,001-168,000	\$ 13.40	\$ 14.60	\$ 15.92	\$ 17.35	\$ 18.39
	Over 168,000	\$ 14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
3"	Customer Charge	\$ 745.70	\$ 812.80	\$ 886.00	\$ 965.70	\$ 1,023.60
	Up to 52,500	\$ 7.48	\$ 8.15	\$ 8.88	\$ 9.68	\$ 10.26
	52,501-105,000	\$ 9.13	\$ 9.96	\$ 10.85	\$ 11.83	\$ 12.54
	105,001-175,000	\$ 10.64	\$ 11.60	\$ 12.64	\$ 13.78	\$ 14.60
	175,001-262,500	\$ 11.73	\$ 12.78	\$ 13.93	\$ 15.19	\$ 16.10
	262,501-367,500	\$ 13.40	\$ 14.60	\$ 15.92	\$ 17.35	\$ 18.39
	Over 367,500	\$ 14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23

Customer Class or Meter Size	Rate Categories	2025	2026	2027	2028	2029
4"	Customer Charge	\$ 1,159.60	\$ 1,264.00	\$ 1,377.80	\$ 1,501.80	\$ 1,591.90
	Up to 90,000	\$ 7.48	\$ 8.15	\$ 8.88	\$ 9.68	\$ 10.26
	90,001-180,000	\$ 9.13	\$ 9.96	\$ 10.85	\$ 11.83	\$ 12.54
	180,001-300,000	\$ 10.64	\$ 11.60	\$ 12.64	\$ 13.78	\$ 14.60
	300,001-450,000	\$ 11.73	\$ 12.78	\$ 13.93	\$ 15.19	\$ 16.10
	450,001-630,000	\$ 13.40	\$ 14.60	\$ 15.92	\$ 17.35	\$ 18.39
	Over 630,000	\$ 14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
Non Potable	All sales	\$ 3.78	\$ 4.12	\$ 4.49	\$ 4.90	\$ 5.19
City Hydrants	Up to 3,000	\$ 14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
	Over 3,000	\$ 14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
Construction Hydrants	Up to 3,000	\$ 14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23
	Over 3,000	\$ 14.74	\$ 16.06	\$ 17.51	\$ 19.08	\$ 20.23