# City of Sammamish

## Surface Water Utility Rate Study

FINAL REPORT
December 2022

**Washington**
7525 166th Avenue NE, Ste. D215
Redmond, WA 98052
425.867.1802

**Oregon**
5335 Meadows Road, Ste. 330
Lake Oswego, OR 97035
503.841.6543

**Colorado**
1320 Pearl St, Ste 120
Boulder, CO 80302
719.284.9168

www.fcsgroup.com



FCS GROUP
Solutions-Oriented Consulting

December 27, 2022

Audrie Starsy
Interim Public Works Director
City of Sammamish
801 228th Avenue SE
Sammamish, WA 98075
(425) 295-0572

Subject: City of Sammamish Surface Water Utility Rate Study 2022

Dear Ms. Starsy:

FCS GROUP is pleased to submit this report documenting the Surface Water Management (SWM) Utility Rate Study conducted for the City of Sammamish. The recommended rate adjustments are shown below.

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|
| Annual Increase | 6.25% | 6.25% | 6.25% | 6.25% | 6.25% | 6.25% |
| Annual Rate per ESU | $420.75 | $447.05 | $474.99 | $504.67 | $536.22 | $569.73 |

These increases are forecast to generate the revenue needed to fully fund the utility on a standalone basis, considering operating and maintenance expenditures, fiscal policy achievement, and the capital project needs of the SWM utility. The detailed methodology used to derive the revenue needs is included in this report.

It has been a pleasure to work with you and other City staff on this effort. Please let us know if you have any questions or need additional information. Tage can be reached at (425) 615-6487 or TageA@fcsgroup.com.

Sincerely,

John Ghilarducci
Project Principal

Tage Aaker
Project Manager

Amanda Levine
Senior Analyst

# TABLE OF CONTENTS

# Section I. INTRODUCTION

## Utility Background

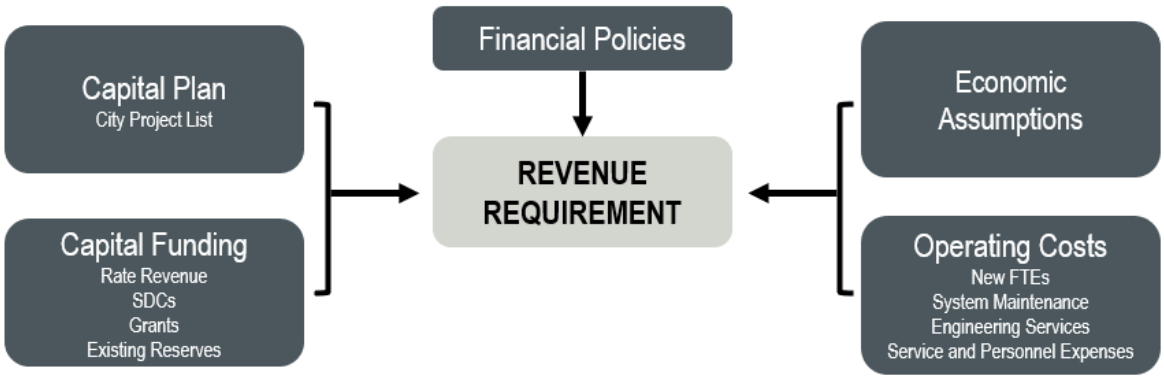
The City of Sammamish ("the City") is located in King County and manages the stormwater activities of over 19,000 residential parcels and over 450 impervious acres on non-residential parcels. According to the City's website, "the Storm and Surface Water Management Program … addresses storm and surface water quality (pollution) and quantity (flood control) in the City." The City's stormwater system includes over 450 facilities (ponds, tanks, and vaults), 60 miles of ditches, 13,000 catch basins, and 235 miles of stormwater pipe which helps protect the 30 miles of streams, five large lakes, and four watersheds within and/or adjacent to the City.

As a result of ongoing National Pollutant Discharge Elimination System (NPDES) requirements, an updated capital improvement plan (CIP), and new operating expenses, the City contracted with FCS GROUP to complete a rate study for the utility, to ensure that the stormwater program can continue to provide quality service to its residents well into the future.

## Rate Study

The main purpose of this rate study is to develop a funding plan ("revenue requirement") for the 2023 through 2028 study period, which aligns with the City's 2023-2028 CIP. The revenue requirement typically identifies the total revenue needed to fully fund the utility on a standalone basis considering operating and maintenance expenditures, fiscal policy achievement, and the capital project needs of the utility. This study approach is shown in **Exhibit 1**.

**Exhibit 1: Revenue Requirement Overview**




The Sammamish City Council was presented with three level of service (LOS) options on September 6th, 2022 – Baseline, Enhanced, and Optimal. The Enhanced Level of Service was adopted on October 18th, 2022 – see **Appendix A** for more details.

**Exhibit 2** shows the rate increases from the Enhanced LOS. The data, methodology, and results documented in this report reflect the Enhanced LOS scenario.

**Exhibit 2: Adopted Enhanced Level of Service: 6.25% Annual Rate Increases**

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|
| Annual Increase | 6.25% | 6.25% | 6.25% | 6.25% | 6.25% | 6.25% |

# Section II. FISCAL POLICIES

The basic framework for evaluating utility revenue needs includes sound fiscal policies. Several policy topics are important to consider further as part of managing the finances of the City, including operating reserves, capital reserves, debt related policies, and rate funded capital. For a detailed analysis of the City's policies, see *Issue Paper #1 Fiscal Polices* attached to this report as **Appendix B**. Note that the recommended polices in this report reflect the Enhanced LOS as adopted by Council.

## Operating Reserve

An operating reserve is designed to provide a liquidity cushion; it protects the utility from the risk of short-term variation in the timing of revenue collection or payment of expenses. For the City of Sammamish, "operating expenses" will refer to the operating expenses related to the Surface Water Operating Fund, excluding transfers to the capital fund. Industry practice for utility operating reserves typically ranges from 30 days (8%) to 120 days (33%) of operating expenses, with the lower end more appropriate for utilities with stable revenue streams and the higher end of the range more appropriate for utilities with significant seasonal or consumption-based fluctuations. The most common operating reserve target for stormwater utilities with annual billing is 120 days.

**Recommended Policy:** Achieve a year-end minimum balance target of 120 days (33%) of total annual operating expenditures excluding transfers. This equates to $2.1 million, based on the 2022 operating budget of approximately $6.5 million.

## Capital Reserve

This reserve provides a source of emergency funding for unexpected asset failures or other unanticipated capital needs. This capital reserve policy is not intended to guard against catastrophic system failure or extreme acts of nature. Given these different purposes, there are a variety of potential benchmarks for setting a minimum balance for this fund – options include a percentage (commonly 1 – 2%) of the original cost of fixed assets, a rolling multi-year average of capital costs, or an amount determined sufficient to fund an equipment or asset failure.

**Recommended Policy:** Achieve a year-end target of at least 1-2% of the original cost of fixed assets. In 2022, the City had $101 million of stormwater assets, which results in a $1-2 million capital reserve target in 2022. Capital reserves larger than this may be prudent if the City is saving in advance for future capital projects.

## Debt Related Policies

The City does not currently have any outstanding stormwater-related debt. Based on the adopted level of service, it is not anticipated that the stormwater utility will need to borrow to fund its 2023-2028 capital program. However, if the City were to ever issue debt, it may be prudent to reference the debt-related policies in *Issue Paper #1 Fiscal Policies*, in addition to coordinating with bond counsel if applicable.

## Rate Funded System Reinvestment (Rate Funded Capital)

Rate funded system reinvestment is the funding of long-term infrastructure replacement needs through a regular (annual) and predictable rate provision. Most commonly, utilities that have addressed replacement funding needs have used historical (original cost) depreciation expense as the basis for a reasonable level of reinvestment in the system. This strategy can help minimize (or eliminate) a utility's reliance on debt.

**Recommended Policy:** At this time, the City desires to continue to cash-fund its capital program. Therefore, the utility should strive to generate revenues to cover both operating and capital costs. The City has sufficient reserves to phase into this goal over many years. The rate strategy in this report allows the utility to cash-fund over $5.5 million of capital projects per year by 2028.

**Exhibit 3** shows the utility's projected rate funded capital per year as compared to the average cost of recurring capital projects in 2028. By 2026, the utility can rate fund the forecasted cost of recurring capital programs, which include drainage corrections, rehabilitations, retrofits, restorations, property acquisition, and the stormwater portion of transportation projects. Any rate revenue remaining after paying for recurring capital programs can be used to pay for same-year, one-time capital projects or saved for future one-time projects.

**Exhibit 3: Rate Funded Capital vs. Annual Recurring Capital Programs**

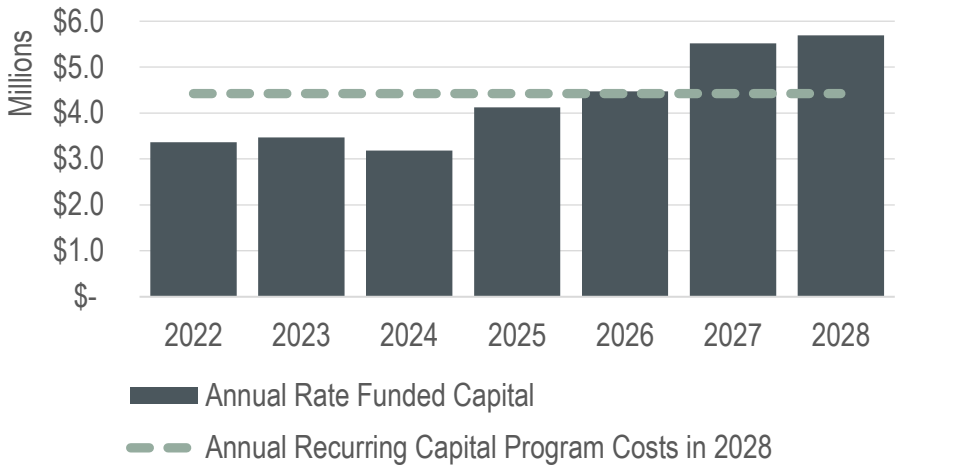



**Exhibit 4** provides a summary of the recommended fiscal policies for the City.

**Exhibit 4: Summary of Fiscal Policies**

| Policy | Recommended Target |
|---|---|
| Operating Reserve | Achieve a year-end minimum balance target of 120 days (33%) of total annual operating expenditures excluding transfers. |
| Capital Reserve | Achieve a year-end target of 1-2% of the original cost of fixed assets. |
| Rate Funded Capital | Set rates to allow the utility to cash fund its capital program. |

# Section III. Revenue Requirement

As previously mentioned, the main purpose of the revenue requirement is to develop a funding plan ("revenue requirement") for the 2023 through 2028 study period. The revenue requirement identifies the total revenue needed to fully fund the utility on a standalone basis considering current financial obligations including operating expenditures, policy-driven commitments, and future capital project needs. These increases are applied "across-the-board" for the utility; there were no rate structure changes incorporated in this plan. **Exhibit 5** shows the results of the rate study.

**Exhibit 5: Annual Increase Needs**

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|
| Annual Increase | 6.25% | 6.25% | 6.25% | 6.25% | 6.25% | 6.25% |

## Economic & Inflation Factors

The operating and maintenance expenditure forecast largely relies on the City's 2022 budget. The line items in the budget are then adjusted each year by utilizing one of the following applicable factors:

- **General Cost Inflation.** Assumed to be 3.0 percent per year (as applied to the City's 2022 budget) based on both the Washington State Economic & Revenue Forecast Council projection for the Consumer Price Index and the recent historical performance of the Seattle-Tacoma-Bellevue Consumer Price Index. [Note on inflation: In the short term, the U.S. economy is experiencing a higher-than-historical level of inflation, which is influenced by pandemic conditions, supply chain issues, and reduced labor force participation. However, the inflation assumptions for this forecast are intended to be averages over the long term.]
- **Construction Cost Inflation.** Assumed to be 6.0 percent per year from 2023 through 2024, and 3.0 percent per year thereafter based on the Engineering News-Record's Construction Cost Index (20-City Average), discussions with City staff, and current trends within the industry.
- **Taxes.** State Business and Occupation tax rate of 1.75 percent (taxable revenue exceeds $1.0 million threshold).
- **Personnel Cost Inflation.** Based on discussions with City staff.
  - » Labor Cost Inflation: assumed to be in the range of 4.7 percent to 5.9 percent from 2023 to 2026, then 3.0 percent per year thereafter.
  - » Benefits Cost Inflation: assumed to be 5.0 percent per year.
- **Fund Earnings.** Assumed to be 0.50 percent per year based on input from City staff as well as recent earnings reports from the State's Local Government Investment Pool (LGIP).
- **Customer Account Growth.** Assumed to be 0.75 percent throughout the forecast, based on discussions with the City staff, and buildable land reports at the time of analysis. This equates to roughly 190 additional equivalent service units (ESUs) per year through 2028. One ESU is equal to one single-family home or 3,500 impervious square feet on non-residential parcels.

## Fund Balances

The City began 2022 with roughly $10.1 million in combined cash or cash equivalents in Fund 408 (Operating Fund) and Fund 438 (Capital Fund). For forecasting purposes, **Exhibit 6** shows that of the $10.1 million in beginning cash, $2.1 million was allocated to the operating reserve (120 days of operating expenses) and the remainder was assumed to be available for capital projects.

**Exhibit 6: Cash or Cash Equivalent Balances**

| Reserve | 2022 Beginning Balance | Allocated for Forecast |
|---|---|---|
| Operating Reserve (Fund 408) | $5.7 million | $2.1 million |
| Capital Reserve (Fund 438) | $4.4 million | $8.0 million |
| **Total** | **$10.1 million** | **$10.1 million** |

## Existing Debt Obligations

The City does not currently have any outstanding stormwater-related debt. Based on discussions with City staff, it is their preference that the utility continues to cash-fund capital projects during the study period. However, if the City were to ever issue debt, it may be prudent to consider the following:

- While cash funding might be cheaper overall because there is no interest cost, debt funding may be practical in some situations since it allows for the payment of costs over an extended period. Utilizing debt might also allow the City to complete projects more quickly, thereby avoiding some inflation costs.
- Using debt to spread the cost over time also promotes "generational equity," ensuring that future customers pay for their fair share of system costs.
- The City's ability to meet debt service coverage and other debt-related requirements may limit the amount of debt that it can issue.
- Excessive amounts of outstanding debt can affect a utility's credit rating (and its ability to secure low-interest debt).

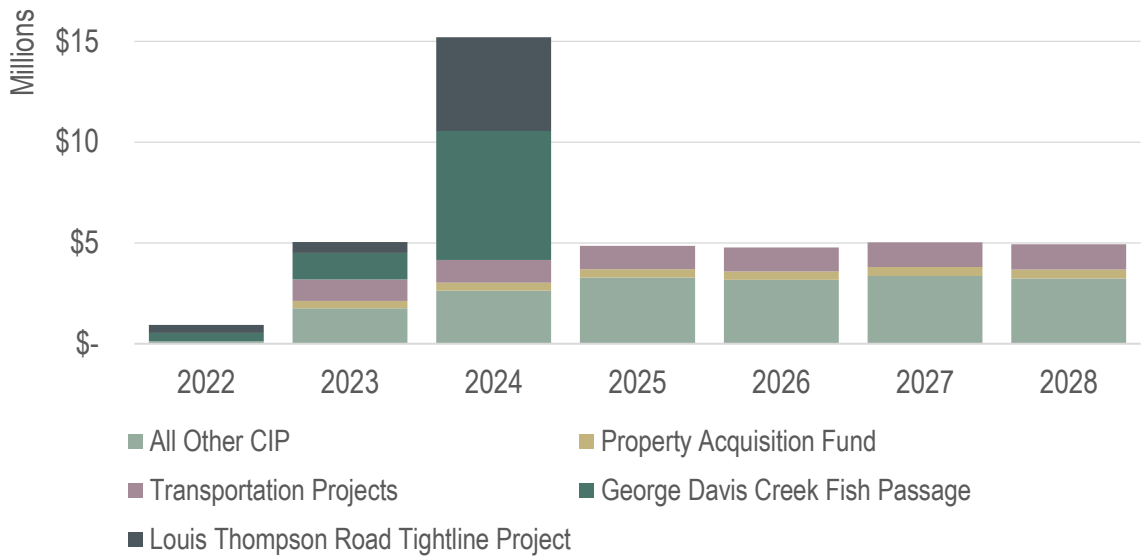
## Capital Program

The City supplied FCS GROUP with the 2023-2028 capital plan at three distinct levels of service – Baseline, Enhanced, and Optimal. While all three levels of service and accompanying scenarios were presented to Council, this report documents the "Enhanced LOS" capital plan, which was adopted by Council on October 18th, 2022.

Project costs and timing were provided by year through 2028. The 2023-2028 Enhanced LOS capital program totals $33.3 million in 2022 dollars or $39.8 million with anticipated cost escalation. A few summary notes related to the capital plan are provided below and shown in **Exhibit 7**.

- The 2022 estimated actuals total approximately $900,000.
- The 2023-2028 spending plan totals $39.8 million (average of $6.6 million per year).
- In total, the 2022-2028 spending plan totals $40.8 million and averages $5.8 million per year.

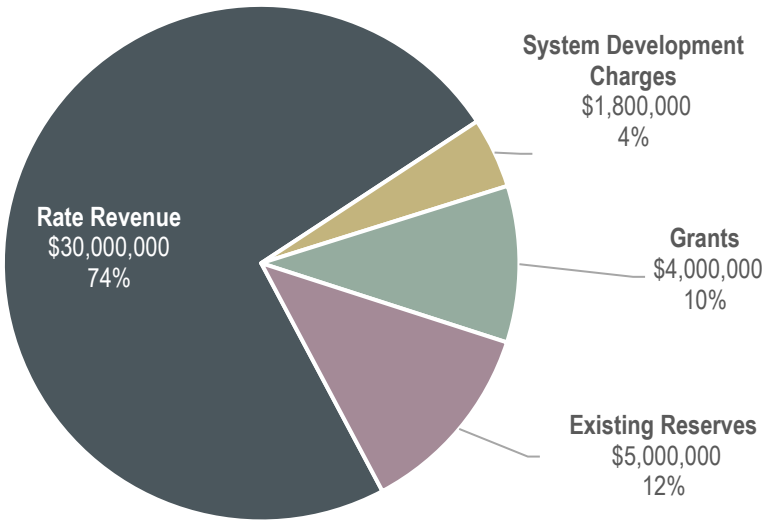
**Exhibit 7: Enhanced LOS Capital Improvement Program (escalated dollars)**




## Capital Funding Strategy (Enhanced LOS)

The 2023-2028 capital plan totals $39.8 million with cost escalation. This results in a plan in which $30.0 million is expected to be funded with stormwater rate revenue, $1.8 million is expected to be funded with system development charges, $4.0 million is expected to be funded with grants already secured (including American Rescue Plan Act funds), and $5.0 million is expected to be funded by drawing down existing reserves. The capital funding strategy is shown in **Exhibit 8**. Note that the capital funding strategy does not assume any debt.

**Exhibit 8: Capital Funding Strategy 2023-2028**

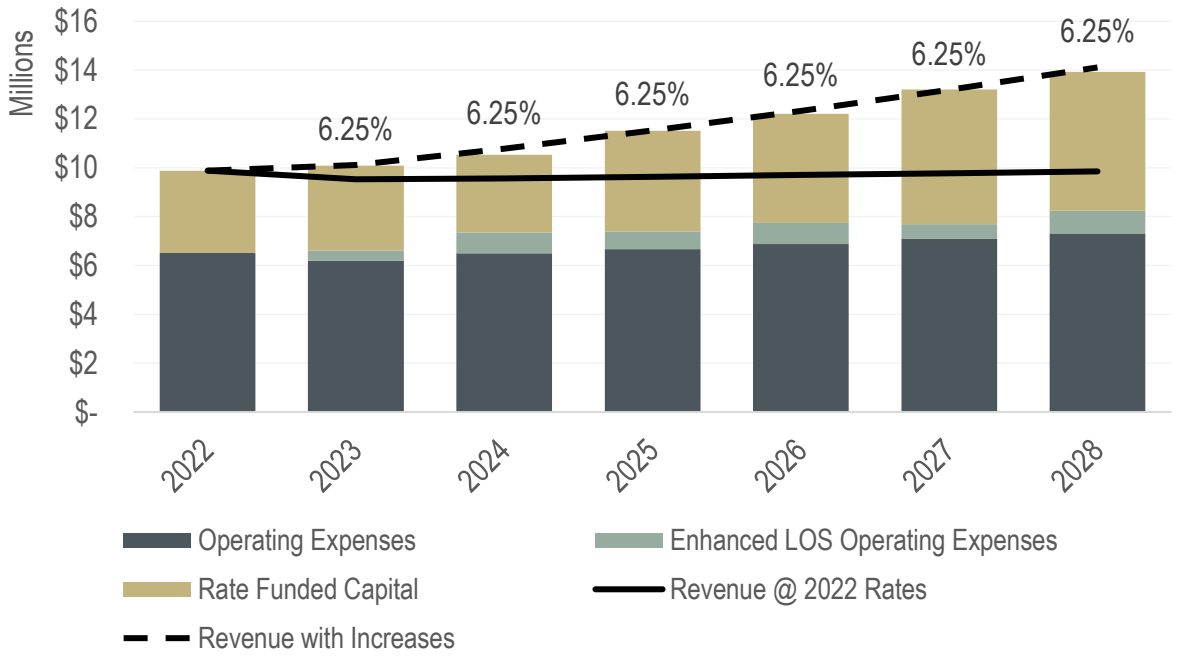


## Revenue Requirement Forecast

**Exhibit 9** graphically represents the revenue requirement forecast through 2028. The stacked columns represent costs of the utility such as operating expenses, additional costs for the Enhanced level of service, and annual rate revenue earmarked for capital projects. The solid black line represents revenue at existing rates and the dashed line shows forecasted revenue with rate increases. Additional observations are provided below.

- Solid black line: Revenue at existing rates.
  - » Rate revenue is expected to be roughly $9.9 million in 2022 and is expected to grow 0.75 percent per year with customer growth.
- Dashed black line: Revenues with rate increases.
  - » Rate revenue must increase to allow the utility to fund capital improvement projects. These rate increases start in 2023 at 6.25 percent per year.
- Dark blue bar: Cash operating expenses.
  - » Operating expenses are based on the 2022 budget and increase with the annual cost escalation assumptions previously discussed.
- Light green bar: Enhanced LOS operating expenses.
  - » These costs include Stormwater Management Action Planning (SMAP) one-time expenditures, comprehensive and rate plan updates, the pipe condition assessment program, basin planning, source control programs, and two additional FTEs – one for water quality planning and another to manage these enhanced level of service activities.
- Gold bar: Cash available for capital (i.e., rate funded capital).
  - » In 2022, roughly $3.4 million is available for rate funded capital. With rate increases, this amount is projected to increase to $5.7 million by 2028.

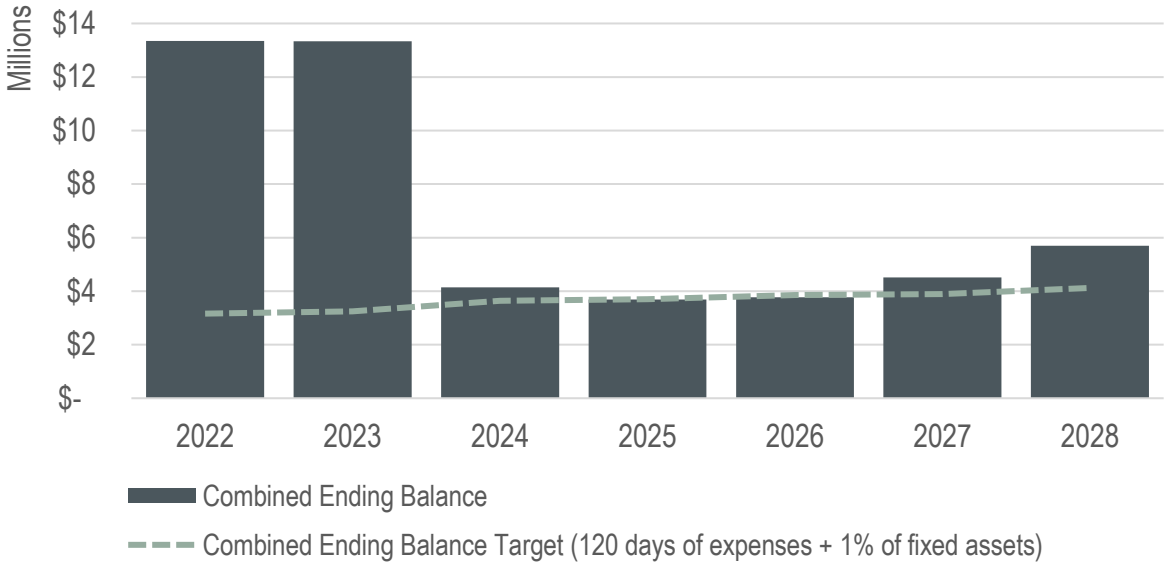
**Exhibit 9: Annual Revenue Requirement Forecast 2022-2028**



## Forecasted Reserves

The target operating reserve is equal to 120 days of operating expenses. The target minimum capital reserve is equal to 1% of the original cost of fixed assets. In 2024, the utility plans to spend over $15 million on capital projects, which results in a significant drawdown of existing reserves. **Exhibit 10** shows that although the combined reserve declines, the ending fund balance is generally at or above these targets over the study period with the recommended rate increases.

**Exhibit 10: Ending Operating (Fund 408) and Capital Reserve (Fund 438) Forecast**



# Section IV. CONCLUSION

Based on the Enhanced level of service, FCS GROUP recommends the annual rate plan shown in **Exhibit 11**. These increases allow the utility to accomplish the following:

- Continue to fund existing operating expenses, plus cost escalation;
- Allow the utility to pay for operating costs associated with the Enhanced level of service;
- Allow the utility to rate fund $30.0 million in capital projects from 2023-2028;
- Generate nearly $5.7 million per year for rate-funded capital by 2028; and
- Maintain utility reserves at a healthy level throughout the forecast.

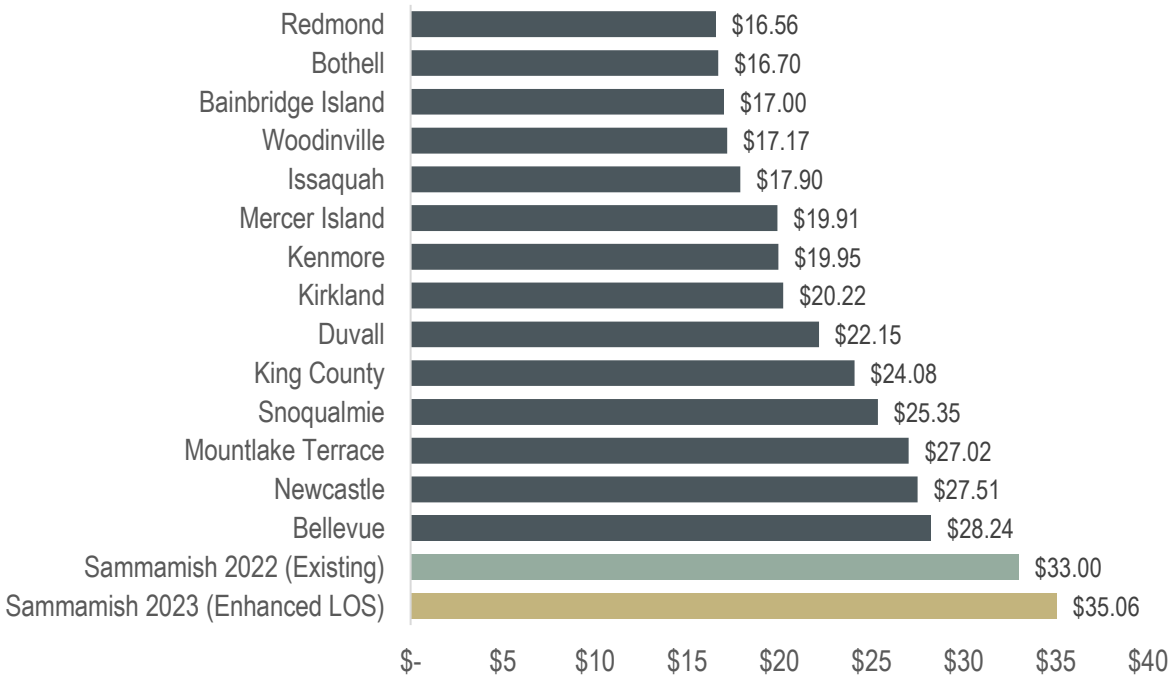
**Exhibit 11: Enhanced Level of Service Rate Increases**

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|
| Annual Increase | 6.25% | 6.25% | 6.25% | 6.25% | 6.25% | 6.25% |
| Annual Rate per ESU | $420.75 | $447.05 | $474.99 | $504.67 | $536.22 | $569.73 |

## Single-Family Residential Rate Comparison

As a resource to the City and its customers, a rate survey of regional utilities was performed in 2022. **Exhibit 12** shows each jurisdiction's monthly single-family residential stormwater rate. Note that each jurisdiction has a unique set of geographic traits, customers, and system characteristics that can have a significant impact on rates. Additionally, some of these jurisdictions may have adjusted rates in 2022 for 2023.

**Exhibit 12: Jurisdictional Survey – Monthly Single-Family Stormwater Rates**



## Updating This Study's Findings

It is recommended that the City revisit the study findings during the forecast period to check that the assumptions used are still appropriate and that no significant changes have occurred that would alter the results of the study. The City should use the study findings as a living document, comparing study outcomes to actual revenues and expenses each year. Any significant or unexpected changes may require adjustments to the rate strategy recommended in this report.

# Section V. APPENDIX

Council Adoption of Enhanced Level of Service

Issue Paper #1 Fiscal Policies

# Stormwater Enhanced Level of Service

**City Council Regular Meeting**

**October 18, 2022**

# 2022 Stormwater Rate Study

- Overview the Enhanced Level of Service (LOS)
- Updates to the Rate Model
- Adopt Enhanced Level of Service

  Council Direction (Motion)

| | |
|---|---|
| **April 19, 2022** | Introduction to Rate Study |
| **June 14, 2022** | Issue Papers 1 & 2 |
| **July 19, 2022** | Issue Paper 3, Draft Capital & Operational Levels of Service, Stormwater CIP |
| **Sept. 6, 2022** | Draft Rate Model with LOS, Draft 2023-2028 Stormwater CIP |
| **Sept. 20, 2022** | Public Hearing: Stormwater 2023-2028 CIP |
| **Oct. 4, 2022** | Close Public Hearing for Stormwater 2023-2028 CIP<br>Finalize Rate Model |
| **Oct. 18, 2022** | Adopt 2023-2028 Stormwater CIP<br>**Adopt Enhanced Level of Service** |
| **Nov. 2022** | Adopt Fee Schedule with 2023 Surface Water Management (SWM) Fees<br>Adopt Rate Study Report |
| **Dec. 2, 2022** | (staff action) Transmit Fee Schedule to King County SWM Billing for 2023 Billing |

# Enhanced Level of Service

## Operational Programs (Fund 408)

- ✓ All Baseline LOS programs:
  - NPDES requirements + 2024 Permit planning
  - Street Sweeper purchase in 2023-2024
  - Storm & Surface Water Comp Plan Update (2024-2025)
  - Basin Planning (1 plan every 2 years)
  - Water Quality Monitoring
  - Ditch Maintenance Program

*Plus:*

- ✓ Fish Barrier Assessment
- ✓ Implements Pipe Condition Assessment
- ✓ Additional FTEs to manage additional programs and projects, 1 FTE in 2023 and 1 FTE in 2025.

## Capital Projects & Programs (Fund 438)

- ✓ All Baseline LOS projects & programs
  - SW-100: Small Drainage Resolutions Program
  - SW-400: Storm Facility Restoration Program
  - SW-601 George Davis Creek Fish Passage & Storm Improvement
  - SW-602 Hazel Wolf Culvert Improvement Project
  - SW-603 Louis Thompson Road Tightline Project

*Plus:*

- ✓ Implements the Storm Pipe Rehabilitation Program
- ✓ Increases funding for:
  - SW-300 Retrofit Program
  - SW-500 Small-scale Projects (Between $50k - $300k)
  - SW-608 Property Acquisition Fund (SW-A)
- ✓ Includes these projects in the 2023-2028 SW CIP:
  - ✓ SW 605: Queen's Bog Bioretention
  - ✓ SW-606: Culvert Improvement/Ditch Rehab at 3420 ELSP
  - ✓ SW-607: 212th Ave Flooding at Zackuse Headwaters

# 2022 Stormwater Rate Model - Updates

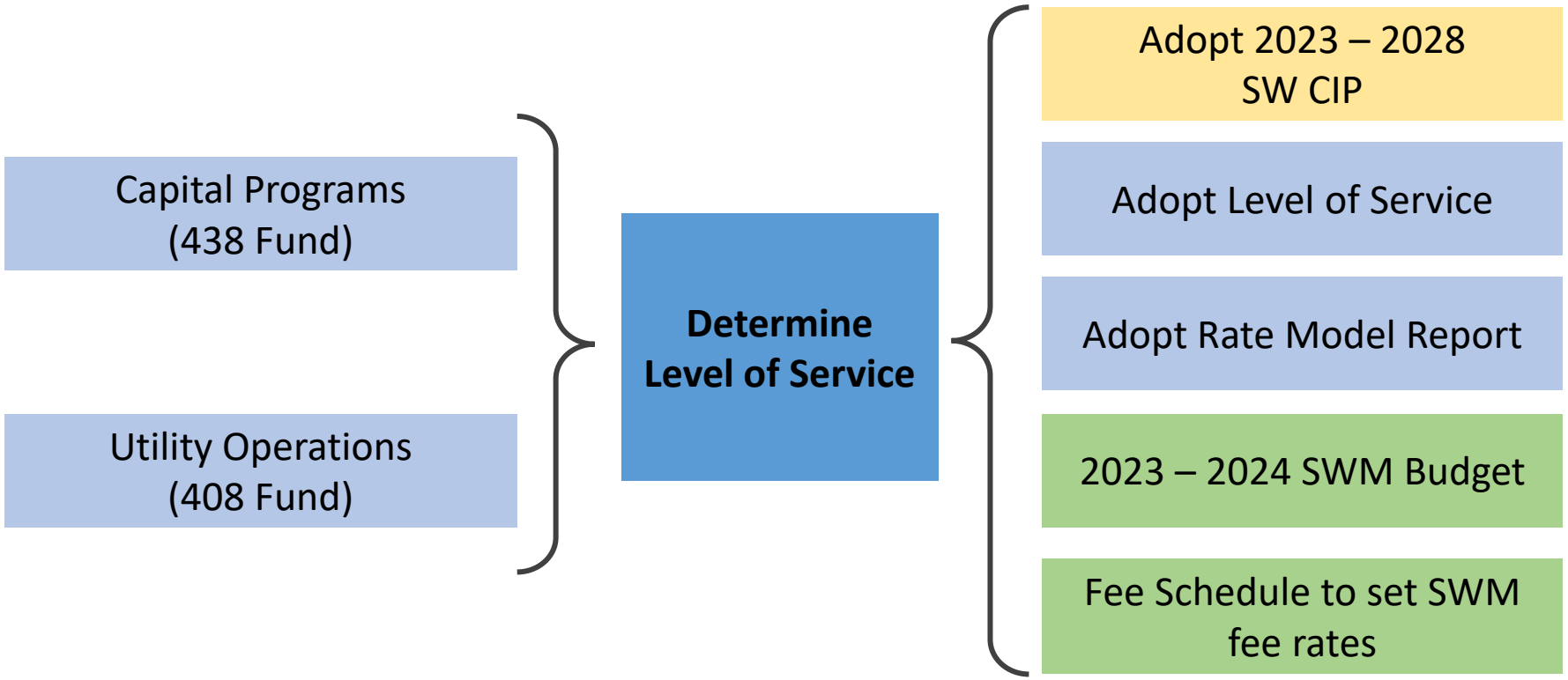
## Updates to model inputs

- SW CIP updates
- Reviewed and updated escalators

## Results

- 6.25% Surface Water Management (SWM) fee rate increase per year
- No debt service

# Rate Model, CIP, & Budget Overlap




| | April | May | June | July | Aug | Sept | Oct | Nov |
|---|---|---|---|---|---|---|---|---|
| Budget | | | | | | | | |
| SW CIP | | | | | | | | |
| Rate Study | | | | | | | | |

# Adopt Enhanced Level of Service

## Recommended Motion:

I move to adopt the Enhanced Level of Service for the Storm & Surface Water Utility rate study for 2023-2024; I further move to direct the City Manager to bring the rate study and Surface Water Management (SWM) fee schedule resolution back to Council next month.

# Thank you

Audrie Starsy

Interim Public Works Director

FCS GROUP
Solutions-Oriented Consulting

# Issue Paper #1

# SURFACE WATER UTILITY FISCAL POLICIES

## BACKGROUND

The basic framework for evaluating utility revenue needs includes sound fiscal policies. Intended to promote long-term financial viability for the utility, these policies can address a variety of topics including Cash Reserves, Debt Management, and Capital Funding strategies.

## CASH RESERVES

Reserves are a key component of any utility financial strategy, as they provide the flexibility to manage variations in costs and revenues that could otherwise have an adverse impact on ratepayers. For rate and financial planning, resources are commonly separated into the following distinct accounts or funds: Operating Reserves, Capital Reserves, and Debt Reserves.

When evaluating fund reserve levels and objectives, it is important to recognize that the value of reserves lies in their potential use. A reserve strategy that deliberately avoids any use of reserves negates their purpose. The fluctuation of reserve levels may indicate that the system is working, while lack of variation over many years suggests that the reserves are, in fact, unnecessary.

### Operating Reserve

An operating reserve is designed to provide a liquidity cushion; it protects the utility from the risk of short-term variation in the timing of revenue collection or payment of expenses. Like other types of reserves, operating reserves also serve another purpose: they can help smooth rate increases over time. Target balances for an operating reserve are generally expressed as a certain number of days of operating expenses less transfers, with the minimum requirement varying with the expected revenue volatility. For the City of Sammamish, "operating expenses" will be referring to the operating expenses related to the Surface Water Operating Fund, excluding transfers to the capital fund. Industry practice for utility operating reserves typically ranges from 30 days (8%) to 120 days (33%) of operating expenses, with the lower end more appropriate for utilities with stable revenue streams and the higher end of the range more appropriate for utilities with significant seasonal or consumption-based fluctuations. The most common operating reserve target for stormwater utilities with annual billing is 120 days.

> **Example Policy:** Achieve a year-end minimum balance target of 120 days (33%) of total annual operating expenditures excluding transfers. This equates to $1.95 million, based on the 2022 operating budget of approximately $5.94 million.

Given the City's timing of rate revenue collection and monthly expenses, the operating reserve target is based on March 31 of each calendar year. In any year where operating reserves exceed the target (i.e., 120 days) of operating expenses at this time, it is assumed that the excess cash is "swept" into the capital account to help pay for capital projects. This can be accomplished by calculating the

target balance and comparing it against the actual existing cash balance. If the actual balance is greater than the target, the difference can be designated as a capital resource.

### Capital Reserve

The capital reserve consists of cash that has been set aside for capital purposes. Resources include system development charges, grants, and debt proceeds, among others. This fund also provides a source of emergency funding for unexpected asset failures or other unanticipated capital needs. It can also help the utility address cash flow issues related to capital projects – for example, grants that the utility relies on to meet its capital needs may have a local cash matching requirement.

Given these different purposes, there are a variety of potential benchmarks for setting a minimum balance for this fund – options include a percentage (commonly 1 – 2%) of the original cost of fixed assets, a rolling multi-year average of capital improvement program (CIP) costs, or an amount determined sufficient to fund an equipment or asset failure. However, this capital reserve policy is not intended to guard against catastrophic system failure or extreme acts of nature.

> **Example Policy:** Achieve a year-end target of between 1-2% of the original cost of fixed assets. If an up-to-date fixed asset inventory is unavailable, an alternative strategy could be to save in reserve an amount sufficient to fund an emergency project (e.g., $500,000) plus some percentage of the utility's annual capital program (e.g., 25%). Capital reserves larger than this may be prudent if the City is saving in advance for future capital projects.

## DEBT MANAGEMENT

The following discussion highlights a few items to keep in mind if the City decides to borrow money in the future to fund utility improvements.

### Debt Reserve

The debt reserve is most often required as a condition of bond issuance, though some loan programs also require a reserve. The intent of the reserve is to protect bondholders (or the agency issuing loans) from the risk of the borrower defaulting on their payments. Typically specified in the related bond or loan agreement, the minimum balance for this reserve is most often linked to either average annual debt service, maximum annual debt service, or the amount issued.

> **Example Policy:** The City does not currently have any debt obligations for its surface water management utility. The policy should be dictated by terms outlined in contracts for debt obligations if the City chooses to utilize debt in the future.

### Debt Service Coverage

Debt service coverage is typically a requirement associated with revenue bonds and some State loans, and it is an important benchmark to measure the riskiness of the utility's capital funding plans.

Debt service coverage is most easily understood as a factor applied to annual debt service. In such a case, if it sells revenue bonds, the City agrees to collect enough revenue to meet operating expenses and not only pay debt service but collect an additional 25% increment above bonded debt service. The extra revenue is a cushion that makes bondholders more confident that debt service will be paid

on time. The extra revenue can be used for capital expenditures, to build system reinvestment reserves, or for debt service on subordinate debt. Achieving a bonded debt service coverage level greater than the minimum required level is a positive signal that bond rating agencies notice, and it can result in more favorable terms if the City goes to the market for revenue bonds.

> **Example Policy:** While a factor of 1.25 is a common legal minimum coverage for revenue bonds, we recommend a more conservative internal policy coverage target of at least 1.50 to 2.00 if the City were to issue utility-related debt in the future.

# CAPITAL FUNDING

Utilities can typically draw funds for capital projects from a variety of sources, such as grants, developer contributions, system development charges, utility rates, and debt. While grants, system development charges, and developer contributions would logically be applied to project costs first, the next choice in the funding "hierarchy" is not necessarily apparent.

## Debt Funding

Debt helps spread capital costs over a prolonged period, such as 20 years. This helps spread costs between existing and future customers who will benefit from those assets. However, debt comes with issuance and interest costs. A utility's ability to meet debt service coverage and other debt-related requirements may limit the amount of additional debt that it can issue. Additionally, excessive amounts of outstanding debt can affect a utility's credit rating and its ability to secure low-interest debt in the future. It is best suited for large, discrete, projects rather than ongoing capital programs or system replacement.

One key advantage to borrowing is that capital projects could be funded and executed quicker than saving up cash in advance, thereby reducing the effects of long-term cost inflation.

## Cash Funding

Funding capital projects with rate revenue (cash) typically results in higher near-term rates since existing customers pay 100% of the cost. However, it could be argued that existing customers should pay for the repair and replacement of assets that are currently in use. Rate revenue designated for capital can be applied to project costs directly or held in reserve for future capital spending needs.

While it is a flexible source of revenue, its biggest disadvantage is that the amount available in any given year is limited, whereas the amounts needed to fund the CIP might vary widely. To smooth out the financial demands over time, utilities typically need to either save money in advance or borrow.

## Resulting Considerations

Whether to fund projects with cash and / or debt is an important policy decision. While cash funding will be cheaper in the long run because there is no interest cost, debt funding is a practical option since it allows for the payment of costs over an extended period. Using debt to spread the cost over time promotes "intergenerational equity," since future customers will help pay for debt service through annual stormwater utility rates.

The City may want to consider a hybrid approach. For example, the City could use rate revenues to fund annual repair and replacement projects and consider a combination of cash and debt for large, one-time projects that may be difficult to fund solely with rate revenues.

### Across the Industry

Drawing from a report by Black & Veatch, "2021 Stormwater Utility Survey", of the 73 participants surveyed (from 20 states), 78% of participants funded most capital projects with cash versus 22% funding most projects with debt. This result is slightly different compared to previous years – 87% of participants funded most projects with cash in 2018, and 88% did so in 2016.

## RATE FUNDED SYSTEM REINVESTMENT

The concept of system reinvestment funding entails funding long-term infrastructure replacement needs through a regular and predictable rate provision. A system reinvestment funding program can be structured to consider the defined funding source (rates), accumulation of funds when funding exceeds near-term needs, and augmentation of funds (e.g., through debt) when replacement needs exceed available cash resources. Many municipal utilities incorporate a system reinvestment funding provision based on depreciation expense. Specific benchmarks for annual funding can include:

- **Original cost depreciation expense as reported in financial records.** This approach fully funds the decline in asset value attributable to the wear and tear from routine use, as measured by original construction costs. It avoids a decline in system asset value (financial integrity) by replacing physical assets with cash assets.
- **Replacement-based depreciation expense.** This approach estimates the replacement cost of the system, and bases system reinvestment funding on this higher cost. By so doing, it more closely conforms to the actual cost of replacing the system.
- **Asset management plan.** This approach identifies a specific dollar amount of funding to be budgeted annually, ideally based on an asset management plan, which relies on an accurate asset inventory, supplemented by an evaluation of asset criticality and routine asset condition assessments. Based on discussions with staff from the Department of Ecology, a condition of qualifying for future infrastructure funding may be dependent upon having an accurate asset inventory, an asset condition assessment program, and a plan to maintain, repair, and replace existing infrastructure.
- **Directly budgeted replacement project expenditures.** Budgeting replacement project expenditures as they occur, this approach does not attempt to anticipate or accumulate toward replacement needs and is likely to provide highly variable annual requirements.

Of these various approaches, only the asset management approach is designed to ensure full funding of replacement needs, assuming the accuracy of assumptions used. All the others are intended to provide reasonable contributions toward meeting replacement needs, but do not ensure the adequacy of such funding. Most commonly, utilities that have addressed replacement funding needs have used historical (original cost) depreciation expense as the basis for a reasonable level of reinvestment in the system. This strategy and level of funding satisfies several standards for reasonable rates:

- It avoids a decline in system asset value (financial integrity);
- It charges customers commensurate with their consumption of facility useful lives and avoids the possibility of charging customers more than the current cost to provide service (rate equity); and
- It provides a substantial source of funding for replacement (capital funding adequacy).

However, it is important to recognize that funding system reinvestment based on original cost depreciation will generally not fully meet future replacement needs (especially for mature systems that are just beginning to address or fund those needs). In such cases, debt or use of other City cash resources would be required to cover the resulting funding gap.

> **Example Policy:** If original cost depreciation data is available, strive to fund that expense with annual rate revenue. If original cost depreciation data is unavailable, achieve a capital funding strategy that targets cash funding for routine repair and replacement projects and then balances cash and debt for larger, one-time capital projects (if applicable).

## RECOMMENDATIONS

We recommend that the City consider the following fiscal policies for its surface water utility:

| Policy | Recommended Target |
|---|---|
| Operating Reserve | Achieve a year-end minimum balance target of 120 days (33%) of total annual operating expenditures excluding transfers. This equates to $1.95 million, based on the 2022 operating budget of approximately $5.94 million. |
| Capital Reserve | Achieve a year-end target of between 1-2% of the original cost of fixed assets. If an up-to-date fixed asset inventory is unavailable, an alternative strategy could be to save in reserve an amount sufficient to fund an emergency project (e.g., $500,000) plus some percentage of the utility's annual capital program (e.g., 25%). Capital reserves larger than this may be prudent if the City is saving in advance for future capital projects. |
| Debt Service Coverage | While a factor of 1.25 is a common legal minimum coverage for revenue bonds, we recommend a more conservative internal policy coverage target of at least 1.50 to 2.00 if the City were to issue utility-related debt in the future. |
| Rate Funded System Reinvestment | If original cost depreciation data is available, strive to fund that expense with annual rate revenue. If original cost depreciation data is unavailable, achieve a capital funding strategy that targets cash funding for routine repair and replacement projects and then balances cash and debt for larger, one-time capital projects (if applicable). |