# City of Newcastle

## Surface Water Management Division

# SWM Utility Rate Study

FINAL REPORT

September 2020


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September 28, 2020

Audrie Starsy
Surface Water Program Manager
City of Newcastle
12835 Newcastle Way Suite 200
Newcastle, WA 98056
425-649-4143 x211

Subject: City of Newcastle SWM Utility Rate Study 2020

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 Newcastle. The recommended rate adjustments are shown below.

| Recommended Rate Schedule | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|---|---|---|
| Annual Rate Adjustments | | 3.0% | 13.5% | 13.5% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| Single-Family Residential (SFR) Annual Rate | $282.36 | $290.83 | $330.09 | $374.66 | $385.90 | $397.47 | $409.40 | $421.68 | $434.33 | $447.36 |

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
Analyst

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# Section I. INTRODUCTION

## Utility Background

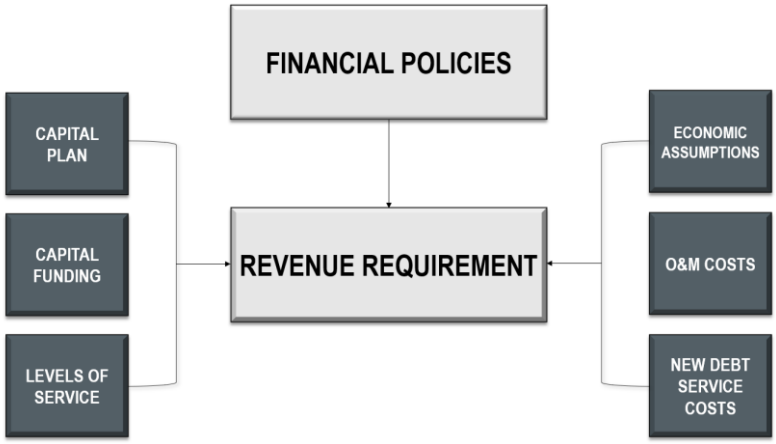
The City of Newcastle's (City) Surface Water Management (SWM) utility manages stormwater runoff to prevent damage to people and property as well as to maintain and enhance the City's natural environment. Efforts of the SWM division include surface water development review and inspections, maintaining public stormwater systems, inspecting privately maintained stormwater systems, monitoring natural waterways, and providing stormwater education and outreach programs. The utility is responsible for nearly 35 miles of pipe, over 2,900 storm drains, over 110 other facilities such as ponds, vaults, and tanks, as well as 25 low impact development (LID) facilities.

The City contracts with King County to bill annual SWM fees on property tax statements. These fees are collected from properties within the City limits to provide resources to plan, manage, design, construct, maintain, revise, and upgrade the storm drainage and surface water runoff system within the corporate limits of the City of Newcastle. The City contracted with FCS GROUP to perform a SWM utility rate study, the purpose of which is to ensure the City has the resources to continue to provide these valuable services into the future.

## Rate Study

The main purpose of this rate study is to develop a funding plan ("revenue requirement") for the City's SWM utility for the 2020-2029 study period, which aligns with the City's ten-year capital improvement program (CIP). The revenue requirement identifies the total revenue needed to fully fund the utility on a standalone basis considering current financial obligations and future capital expenditures identified in the City's CIP. Revenue increases are applied "across-the-board" for the utility; there were no rate design changes incorporated in this rate study.

**Exhibit 1: Revenue Requirement Overview**




## Issue Papers

In support of the rate study, two issue papers were developed and have been included in the appendices to this report: *Issue Paper #1: SWM Funding of Transportation CIP* and *Issue Paper #2: Fiscal Policies*.

# Section II. FISCAL POLICIES

The basic framework for evaluating utility revenue needs includes sound fiscal policies. Several policy topics are important to consider as part of managing the finances of the SWM utility, including: Cash Reserves, Capital Funding, and Rate Funded System Reinvestment. These policies were initially documented and reviewed with City staff in *Issue Paper #2*.

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 strongly suggests that the reserves are, in fact, unnecessary.

## Operating Reserves

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. The most common operating reserve target for SWM utilities is between 45 days to 60 days of operating expenses. For SWM utilities with annual billing, such as the City of Newcastle, the reserve target is commonly increased to 120 days to account for the less frequent billing (as compared to monthly or bi-monthly billing).

**Recommended Policy:** Achieve a year-end minimum balance target of between **90-120 days** of total annual operating expenditures. This equates to a range of **$300,000-$400,000** in 2020 based on the 2020 budgeted expenditures of $1.2 million. The City currently has a 90-day (25%) reserve policy in place.

## 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.

**Recommended Policy:** Achieve a minimum balance target sufficient to fund a small emergency project ($100,000 based on discussions with City staff) plus 25% of the annual capital program, net of anticipated grants ($201,000). This results in a total target of $301,000. Reserves larger than this may be prudent if the City is saving for future capital projects that cannot be funded with same-year rate revenue.

## Debt Related Policies

The City does not currently have any outstanding SWM utility debt. Based on discussions with City staff, it is the City's preference that the SWM utility continue to primarily cash-fund capital projects during the rate study period.

In the adopted level of service, $800,000 of debt is assumed in 2024, to help fund a portion of a one-time capital project. This helps mitigate rate adjustments that would otherwise be needed to fully cash-fund the capital program.

## Debt Reserve

A debt reserve is most often required as a condition of bond issuance, though some loan programs also require a reserve. The reserve intends to protect bondholders (or the agency issuing loans) from the risk of the borrower defaulting on their payments and is most often linked to either average annual debt service or maximum annual debt service.

**Recommended Policy:** The policy should be dictated by terms outlined in contracts for debt obligations if the SWM utility 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 SWM utility's capital funding plans. Coverage is most easily understood as a factor applied to annual debt service. In such a case, if it issues revenue bonds, the SWM utility agrees to collect enough revenue to meet operating expenses and not only pay debt service but to collect an additional 25% above bonded debt service. The extra revenue is a "cushion" that makes bondholders more confident that debt service will be paid on time.

**Recommended Policy:** While 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. Based on $800,000 of borrowing in 2024, the City's debt service coverage achievement never dips below 13.50.

## Rate Funded System Reinvestment

Rate funded system reinvestment is the funding of long-term infrastructure replacement needs through a regular (annual) and predictable rate provision, which helps minimize reliance on debt.

**Recommended Policy:** Target an annual rate funded system investment amount that is sufficient to fund repair and replacement capital programs with same-year rate revenues (cash), including: S-037 Stormwater Pond Restoration Program, S-038 Stormwater Conveyance Rehabilitation Program, and S-039 Seepage Repair Program, as well as amounts needed to contribute to the SWM utility's portion of equipment rental fund needs as well portions of transportation projects that are SWM related. These amounts are estimated to be nearly $800,000 per year by 2029.

**Exhibit 2** provides a summary of the recommended fiscal policies for the SWM utility.

**Exhibit 2: Summary of Fiscal Policies**

| Policy | Recommended Target |
|---|---|
| Operating Reserve | 90 to 120 days of O&M ($300,000 to $400,000 based on 2020 budget) |
| Capital Reserve | Emergency project ($100,000) + 25% of annual avg. CIP ($201,000) = $301,000 |
| Debt Service Coverage | If debt is issued, an internal policy target of at least 1.50 to 2.00 would be prudent |
| Rate Funded System Reinvestment | Generate annual cash resource from rates to fund routine & repair / replacement capital programs, which results in a target of nearly $800,000 per year by 2029 |

# Section III. REVENUE REQUIREMENT

This section presents the revenue requirement analysis results for the SWM utility, as summarized in **Exhibit 3**. As mentioned previously 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.

Three levels of service (LOS) were presented to the City Council on August 18th, 2020 – Minimum, Proactive, and Optimum. All three levels of service funded the same amount of operating expenditures. However, the amount of capital funded in each LOS varied – the Optimum LOS funded more capital than the other two levels of service.

The City Council decided to adopt rates supporting the Optimum LOS, which has been the level of service target for the City since 2018. Continuing to fund the Optimum LOS enables the SWM utility to perform proactive maintenance instead of resorting to reactive / emergency maintenance. The rest of this report documents the results corresponding to the Optimum LOS.

The original Optimum LOS presented to Council had 13.5% rate adjustments in 2021 and 22, but Council decided to delay implementation by one-year due to COVID-related considerations. Council viewed this delay as a way to mitigate near-term rate impacts to City customers while still adopting the Optimum LOS. This delay means that the City had to reduce capital expenditures by roughly $300,000 over the study period, which is already reflected in numbers shown in this section.

**Exhibit 3: Summary Results of the Revenue Requirement Forecast**

| Summary of Rate Adjustments | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|---|---|
| Annual Rate Adjustments | 3.00% | 13.50% | 13.50% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |

## Economic & Inflation Factors

The operating and maintenance expenditure forecast largely relies on the City's 2020 adopted budget for the Surface Water Management Fund (401). The line items in the budget are then adjusted each year by utilizing one of the following factors:

- General Cost Inflation – assumed to be 2.5 percent per year through 2022 and 3.0 percent per year thereafter based on both the Washington State Economic & Revenue Forecast Council projection for the Consumer Price Index as well as the recent historical performance of the Seattle-Tacoma-Bellevue Consumer Price Index.
- Construction Cost Inflation – assumed to be 3.0 percent per year based on the historical Engineering News-Record Construction Cost Index (20-City Average).
- Personnel Cost Inflation – assumed to be 5.1 percent per year based on the City's projections.
- Taxes – State Business and Occupation tax rate of 1.75 percent.
- Fund Earnings – assumed to be 0.50 percent per year based on the Local Government Investment Pool (LGIP) for Washington.

- Customer Growth – assumed to be 1.0 percent per year, based on discussions with City staff at the time of analysis. Annual population growth has averaged about 2.0 percent per year over the last ten years and 1.0 percent was conservatively assumed in this forecast.

## Fund Balances

The SWM fund (401) tracks both operating and capital activity related to the SWM utility. The combined beginning January 1, 2020 cash and investments balance (net of payables) was $1.27 million. Of that total, City finance staff noted that $395,000 was operating cash and $876,000 was reserved for capital expenditures. As previously noted, the SWM utility does not have separate operating and capital reserve funds; however, the fund has been split into two separate 'buckets' in the analysis to model the reserves and appropriately assign operating resources to operating expenditures and capital resources to capital expenditures.

**Exhibit 4: Cash Balances for Fund 401**

| Description | Beginning 2020 Cash Balances |
|---|---|
| Operating Cash | $395,410 |
| Capital Cash | $876,407 |
| Total Beginning Cash January 1, 2020 | **$1,271,817** |

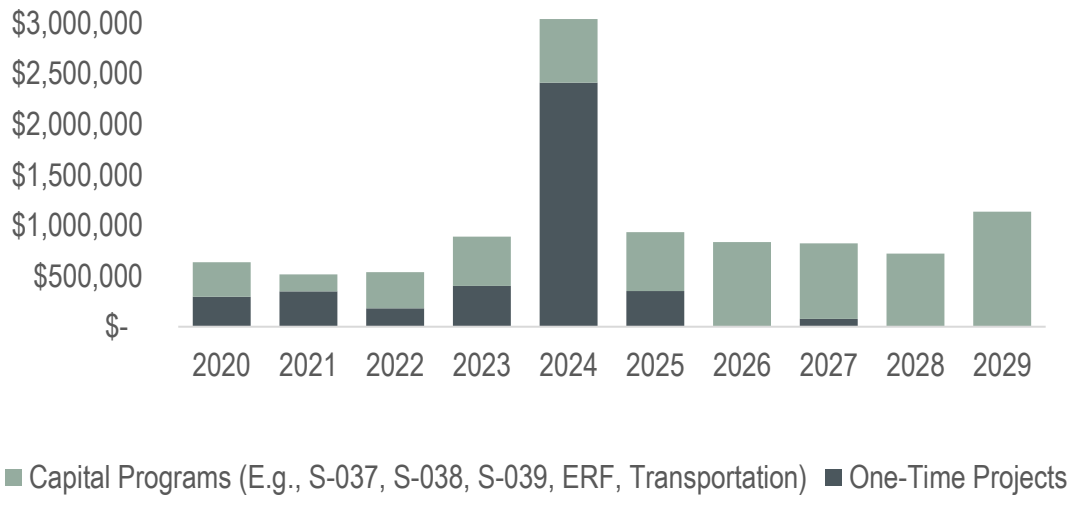
## Existing Debt Obligations

The City does not have any existing debt obligations related to the SWM utility.

## Capital Expenditure Forecast

The 2020-29 CIP was provided by the City. Costs were provided by project, by year, and are in 2020 dollars. To estimate the actual spending by year, costs are escalated to the estimated year of construction. **Exhibit 5** shows the planned annual capital spending, with cost escalation. A detailed project-by-project CIP is provided in the appendices to this report.

**Exhibit 5: Capital Improvement Program for the Optimum Level of Service (escalated dollars)**



## Revenue Requirement Methodology

The revenue requirement analysis evaluates the sufficiency of the utility's revenues against its financial obligations in the context of two tests described below:

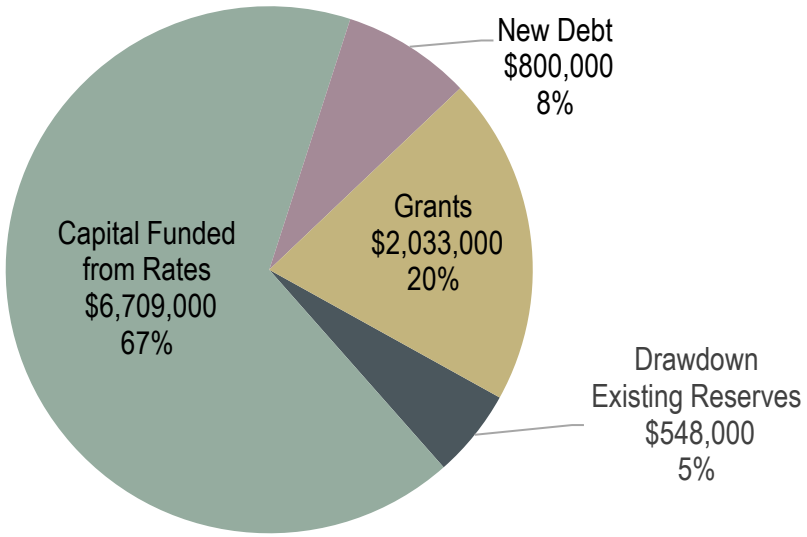
- **Cash Flow Test.** The cash flow test determines whether or not the utility's annual revenues are sufficient to cover the known cash requirements for each year of the forecast. The City can temporarily waive the requirements of the cash flow test as part of a conscious decision to phase in rate increases, as long as its operating reserve balance is sufficient to absorb the resulting cash-flow deficit.
- **Coverage Test.** The coverage test evaluates the utility's ability to meet applicable bond coverage requirements. As this test focuses on annual financial performance, it precludes the use of reserves to cover shortfalls.

In determining the annual revenue requirement, the test with the greatest deficiency generally drives the rate increase in any given year. For this forecast, the cash flow sufficiency test always produces a greater deficiency than the debt service coverage test. As previously noted, with the recommended rate increases, a comfortable debt service coverage ratio of 13.50 or greater is achieved throughout the forecast.

## Capital Funding Strategy

The 2020-29 capital plan totals $8.8 million ($10.1 million with cost escalation). Of that $10.1 million, $548,000 is expected to be funded with existing reserves accumulated as of the beginning of 2020, and $6.7 million is expected to be funded with rate revenues earmarked for capital during the ten-year planning period. The capital funding strategy also assumes $800,000 of debt financing (in 2024) as well as $2.0 million in grants as shown in **Exhibit 6**.

**Exhibit 6: Capital Funding Strategy 2020-29**



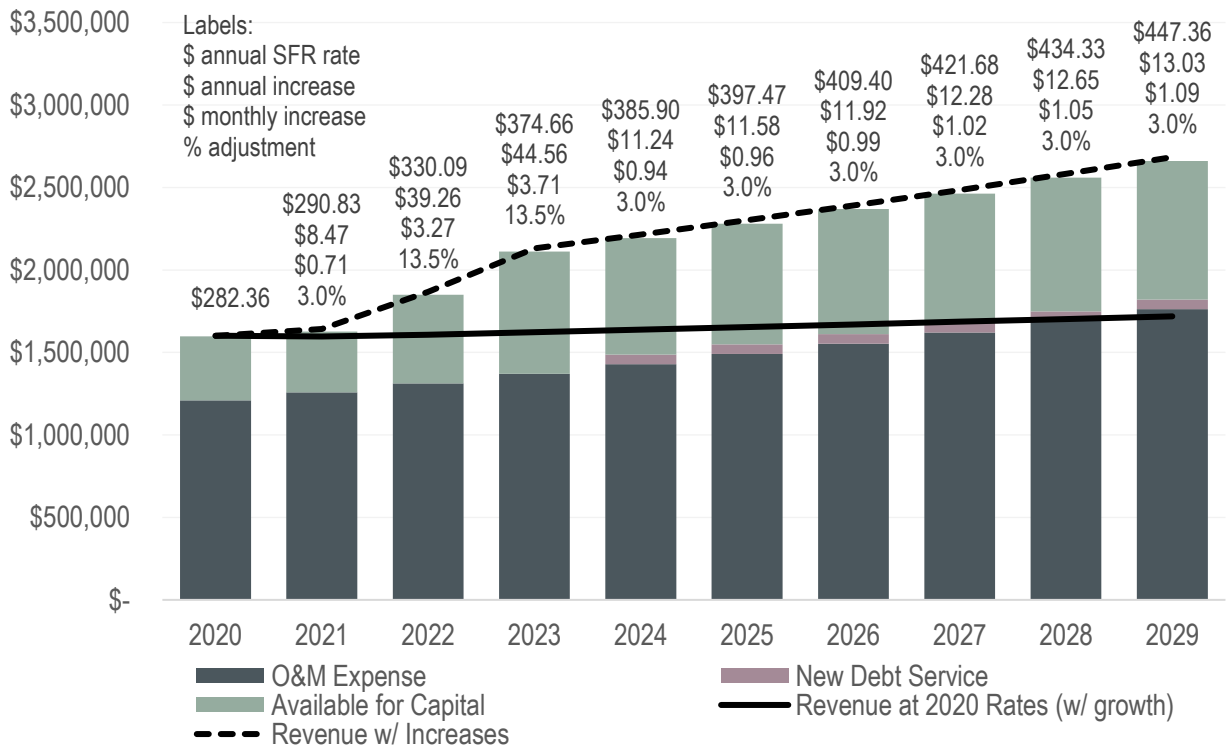

## Revenue Requirement Results

**Exhibit 7** graphically represents the revenue requirement forecast through 2029. The bars represent costs of the utility such as operating expenses, new debt service, and annual rate revenue earmarked

for capital projects. The solid black line represents revenue at existing 2020 rates and the dashed line shows forecasted revenue with rate increases. Other observations are provided below:

- Solid line: Revenue at existing rates.
  - » Rate revenue is expected to be roughly $1.5 million in 2020 and is expected to increase 1.00% per year with customer growth, before future rate adjustments. This line also includes miscellaneous revenues such as review fees and operating grants (E.g., Ecology, King Conservation District, FEMA). The City's 2020 rate revenue is sufficient to cover operating expenditures and approximately $389,000 in capital projects.
- Dashed line: Revenues with rate increases.
  - » As the costs associated with the capital program are incorporated into the forecast, rate revenue must increase to continue to allow the utility to cash-fund most capital projects.
  - » Rate revenues are expected to grow to just over $2.6 million per year by 2029.
- Dark blue bar: Operating and maintenance expense (O&M).
  - » Operating expenses are based on the adopted 2020 budget and increase with the annual cost escalation assumptions previously discussed.
- Pink bar: New debt service.
  - » The forecast assumes $800,000 in debt proceeds in 2024 to help fund a portion of the S-017 Newcastle Railroad Embankment Project; annual debt service is estimated to be $58,000.
- Light Green bar: Available for capital.
  - » This amount increases gradually after 2021 as revenues increase with rate increases. By 2029, $840,000 per year would be available for capital projects.

**Exhibit 7: Annual SWM Utility Revenue Requirement Forecast 2020-29**

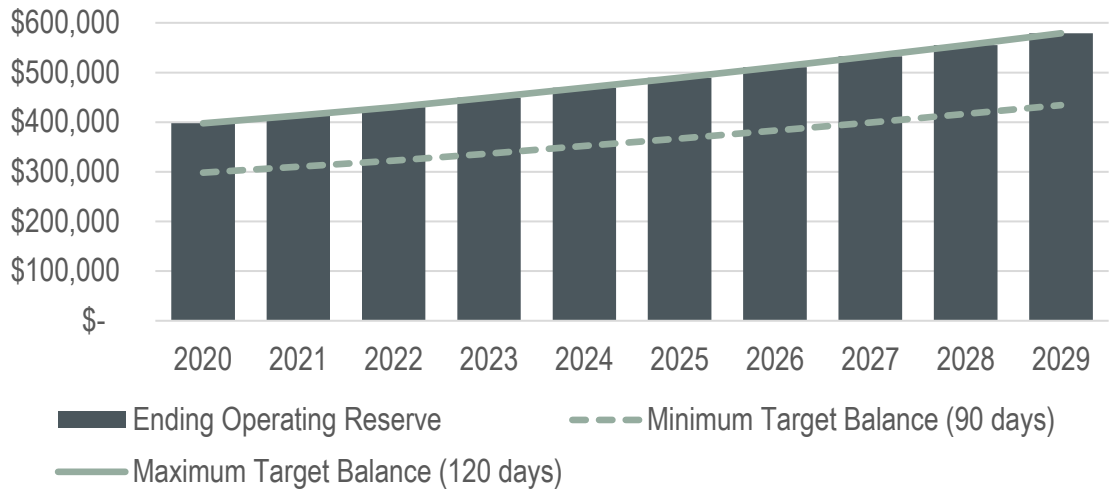


# Forecasted Reserves

## Operating Reserve

The target operating balance is between 90-120 days of total annual operating expenditures. **Exhibit 8** shows that in each year of the forecast, the utility is expected to meet the 120-day mark. Any cash above this 120-day mark is assumed to be available for capital projects. This target increases as operating expenses increase due to forecasted inflation.

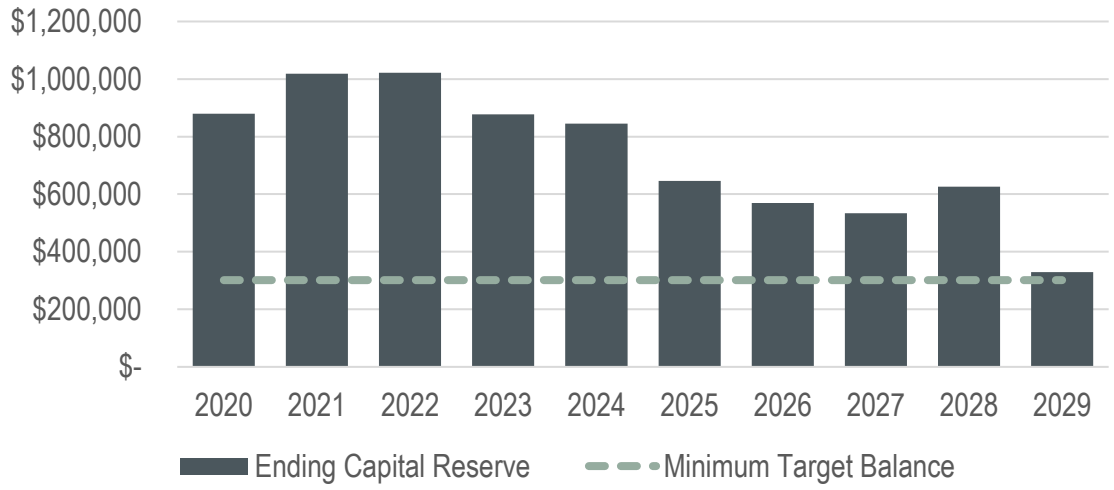
**Exhibit 8: Operating Reserve Forecast**




## Capital Reserve

The minimum target balance for the capital reserve is just over $300,000. The projected ending capital fund balance for 2020 is $880,000. As shown in **Exhibit 9**, this balance is forecast to be drawn down to $329,000 by 2029 as planned, as capital expenditures slightly outpace annual rate funded capital. Future capital would likely need to be funded with rate revenues, grants, and / or debt, as drawing down the capital reserve any further would push it below the minimum target.

**Exhibit 9: Capital Reserve Forecast**



# Section IV. Conclusion

## Revenue Requirement & Rate Schedule

The recommended rate increases in **Exhibit 10** allow the SWM utility to accomplish the following:

- Continue to fund existing operations, plus inflation;
- Allow the utility to fund $10.1 million in capital projects from 2020-2029 (escalated dollars);
- Generate nearly $840,000 per year for rate-funded capital by 2029; and
- Maintain utility reserves at a healthy level throughout the forecast.

**Exhibit 10: Recommended Rate Schedule**

| Recommended Rate Schedule | Current 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Annual Increases** | | **3.0%** | **13.5%** | **13.5%** | **3.0%** | **3.0%** | **3.0%** | **3.0%** | **3.0%** | **3.0%** |
| Single-Family Residential (SFR) per parcel | $282.36 | $290.83 | $330.09 | $374.66 | $385.90 | $397.47 | $409.40 | $421.68 | $434.33 | $447.36 |
| SFR Low-Income Rate (50%) per parcel | $142.94 | $147.23 | $167.10 | $189.66 | $195.35 | $201.21 | $207.25 | $213.47 | $219.87 | $226.47 |
| Multi-family / Commercial per impervious acre | $4,693.00 | $4,833.79 | $5,486.35 | $6,227.01 | $6,413.82 | $6,606.23 | $6,804.42 | $7,008.55 | $7,218.81 | $7,435.37 |
| Minimum | $282.36 | $290.83 | $330.09 | $374.66 | $385.90 | $397.47 | $409.40 | $421.68 | $434.33 | $447.36 |

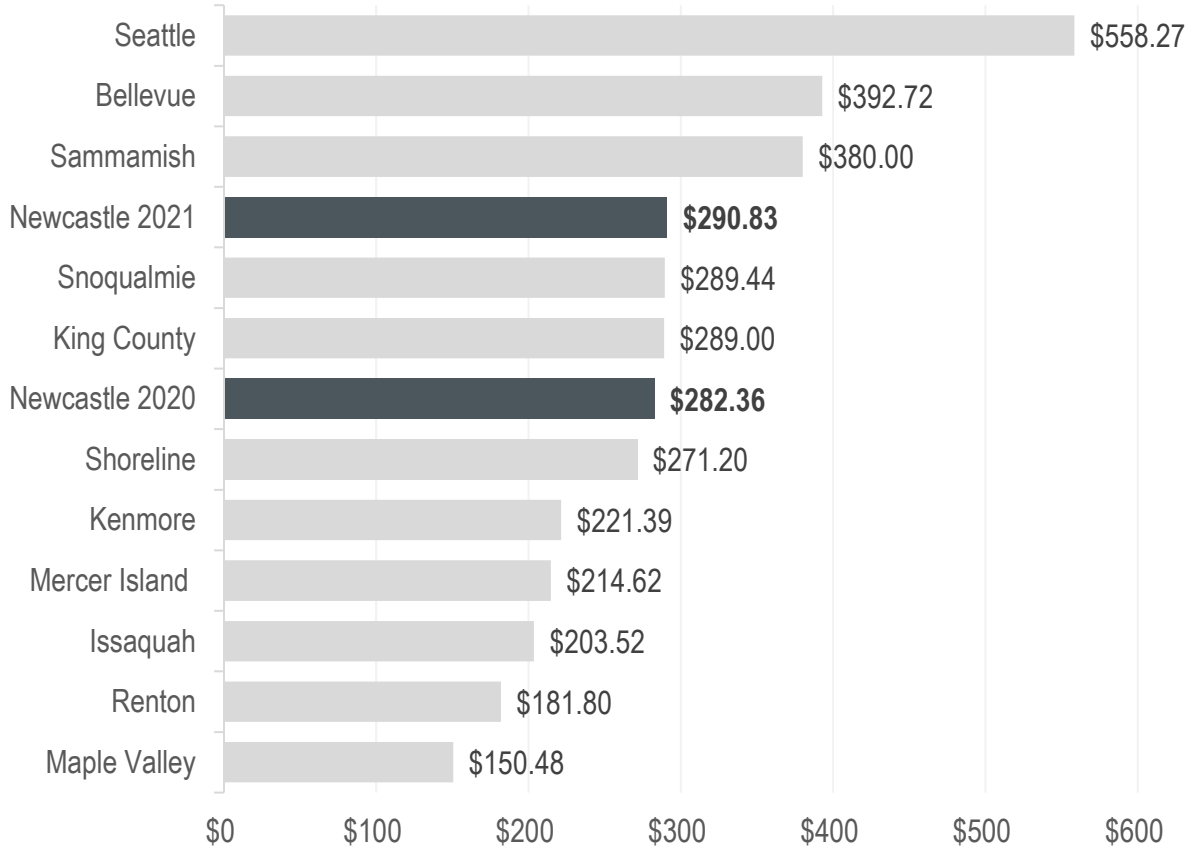
## Single-Family Residential Rate Comparison

As a resource to the City and its customers, a rate survey of regional SWM utilities is provided below. **Exhibit 11** shows each jurisdiction's 2020 annual single-family residential (SFR) rate. Note that each jurisdiction has a unique set of geographic traits, customers, and system characteristics that can have a significant impact on rates. However, most jurisdictions included in the comparison are Western Washington cities that are subject to the National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit (Seattle and King County are subject to the Phase I permit).

Some cities embed their city utility tax in their rates, while others separately itemize the tax on customer bills above the stated rates. Other cities (like the City of Newcastle) may not have a utility tax at this time. We do not have complete data on the billing practices of other cities, so there may or may not be a tax embedded in the utility rates for other jurisdictions. Lastly, some of these jurisdictions may be planning on adjusting rates effective 2021, so the City's current position may change relative to changes in other jurisdictions.

The City's existing SWM fee is towards the middle of the survey group. With the rate adjustment planned for 2021, the City's fee would be slightly higher than the 2020 rates for King County and the City of Snoqualmie.

**Exhibit 11: Annual 2020 Single-Family Residential SWM 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, routinely comparing the study outcomes to actual revenues and expenses. Any significant or unexpected changes may require adjustments to the rate strategy recommended in this report.

# Section V. APPENDICES

## V.A. CAPITAL PROGRAM

**Capital Program (2020 Dollars)**

| Description | Total | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S-037 Stormwater Pond Restoration Program | **$262,500** | $10,500 | $26,000 | $- | $55,000 | $- | $56,000 | $- | $57,000 | $- | $58,000 |
| S-038 Stormwater Conveyance Rehabilitation Program | **$3,218,000** | 218,000 | 100,000 | 200,000 | 300,000 | 400,000 | 400,000 | 400,000 | 400,000 | 400,000 | 400,000 |
| S-039 Seepage Repair Program | **$229,000** | 94,000 | - | - | 45,000 | - | - | 45,000 | - | - | 45,000 |
| S-017 Newcastle Railroad Embankment Project | **$2,460,000** | 260,000 | 200,000 | - | - | 2,000,000 | - | - | - | - | - |
| S-040 Landcastle Water Quality Improvement Project | **$988,000** | - | - | 170,000 | 370,000 | 143,000 | 305,000 | - | - | - | - |
| S-041 116th Ave SE & Edmonds Ave NE Pipe Realignment Project | **$173,000** | 35,000 | 138,000 | - | - | - | - | - | - | - | - |
| 135th Place SE Culvert Retrofit | **$62,000** | - | - | - | - | - | - | - | 62,000 | - | - |
| 401-00-597-00-0000-0501: Equipment Rental Fund | **$200,000** | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| 401-00-597-00-0000-0302: Transportation CIP | **$1,198,590** | - | 19,500 | 120,000 | 24,750 | 140,250 | 27,000 | 237,000 | 130,050 | 150,000 | 350,040 |
| **Total** | **$8,791,090** | **$637,500** | **$503,500** | **$510,000** | **$814,750** | **$2,703,250** | **$808,000** | **$702,000** | **$669,050** | **$570,000** | **$873,040** |

**Capital Program (Escalated Dollars)**

| Description | Total | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S-037 Stormwater Pond Restoration Program | **$308,079** | $10,500 | $26,780 | $- | $60,100 | $- | $64,919 | $- | $70,103 | $- | $75,677 |
| S-038 Stormwater Conveyance Rehabilitation Program | **$3,773,099** | 218,000 | 103,000 | 212,180 | 327,818 | 450,204 | 463,710 | 477,621 | 491,950 | 506,708 | 521,909 |
| S-039 Seepage Repair Program | **$255,620** | 94,000 | - | - | 49,173 | - | - | 53,732 | - | - | 58,715 |
| S-017 Newcastle Railroad Embankment Project | **$2,717,018** | 260,000 | 206,000 | - | - | 2,251,018 | - | - | - | - | - |
| S-040 Landcastle Water Quality Improvement Project | **$1,099,188** | - | - | 180,353 | 404,309 | 160,948 | 353,579 | - | - | - | - |
| S-041 116th Ave SE & Edmonds Ave NE Pipe Realignment Project | **$177,140** | 35,000 | 142,140 | - | - | - | - | - | - | - | - |
| 135th Place SE Culvert Retrofit | **$76,252** | - | - | - | - | - | - | - | 76,252 | - | - |
| 401-00-597-00-0000-0501: Equipment Rental Fund | **$229,278** | 20,000 | 20,600 | 21,218 | 21,855 | 22,510 | 23,185 | 23,881 | 24,597 | 25,335 | 26,095 |
| 401-00-597-00-0000-0302: Transportation CIP | **$1,453,265** | - | 20,085 | 127,308 | 27,045 | 157,853 | 31,300 | 282,990 | 159,945 | 190,016 | 456,723 |
| **Total** | **$10,088,938** | **$637,500** | **$518,605** | **$541,059** | **$890,300** | **$3,042,533** | **$936,693** | **$838,224** | **$822,847** | **$722,059** | **$1,139,119** |

# V.B. RATE MODEL

| Summary | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|---|---|---|
| Annual Across the Board Rate Increase (%) | | 3.00% | 13.50% | 13.50% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Debt Service Coverage (all debt) | n/a | n/a | n/a | n/a | 13.55 | 13.99 | 14.43 | 14.89 | 15.36 | 15.87 |
| Single-Family Residential Annual Charge | $282.36 | $290.83 | $330.09 | $374.66 | $385.90 | $397.47 | $409.40 | $421.68 | $434.33 | $447.36 |
| Annual Increase ($) | | $8.47 | $39.26 | $44.56 | $11.24 | $11.58 | $11.92 | $12.28 | $12.65 | $13.03 |

| Operating Activity | | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Beginning Fund Balance** | | **$ 395,410** | **$ 397,683** | **$ 413,389** | **$ 430,050** | **$ 449,258** | **$ 469,465** | **$ 489,477** | **$ 510,391** | **$ 532,249** | **$ 555,095** |
| **Operating Revenue** | | | | | | | | | | | |
| 401-00-343-10-0000-0000 | Surface Water Fees | $ 1,510,231 | $ 1,571,094 | $ 1,801,023 | $ 2,064,603 | $ 2,147,806 | $ 2,234,363 | $ 2,324,408 | $ 2,418,082 | $ 2,515,530 | $ 2,616,906 |
| 401-00-345-83-0000-0000 | Stormwater Review Fees | 32,000 | 32,000 | 32,000 | 32,000 | 32,000 | 32,000 | 32,000 | 32,000 | 32,000 | 32,000 |
| 401-00-334-03-2000-0001 | WA Ecology Capacity Grant | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 |
| 401-00-337-03-3000-0001 | KCD Member Jurisdiction Grant | 12,500 | 12,500 | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 |
| 401-00-337-03-3000-0002 | KCD Knotweed Control Grant | 7,000 | - | - | - | - | - | - | - | - | - |
| n/a | FEMA Storm Event 4539DR-WA | 12,000 | - | - | - | - | - | - | - | - | - |
| 401-00-361-11-0000-0000 | Investment Interest | 1,977 | 1,988 | 2,067 | 2,150 | 2,246 | 2,639 | 2,739 | 2,843 | 2,953 | 3,067 |
| | Total Revenue | $ 1,600,708 | $ 1,642,582 | $ 1,867,090 | $ 2,130,753 | $ 2,214,053 | $ 2,301,002 | $ 2,391,147 | $ 2,484,925 | $ 2,582,483 | $ 2,683,973 |
| | | | 2.6% | 13.7% | 14.1% | 3.9% | 3.9% | 3.9% | 3.9% | 3.9% | 3.9% |
| **Operating Expenditures** | | | | | | | | | | | |
| 401-70-531-15-1100-0000 | Salaries | $ 428,255 | $ 450,096 | $ 473,051 | $ 497,176 | $ 522,532 | $ 549,182 | $ 577,190 | $ 606,627 | $ 637,565 | $ 670,080 |
| 401-70-531-15-1200-0000 | Temp/Seasonal Help | 59,950 | 63,007 | 66,221 | 69,598 | 73,148 | 76,878 | 80,799 | 84,920 | 89,251 | 93,802 |
| 401-70-531-15-2100-0000 | Benefits | 201,850 | 212,144 | 222,964 | 234,335 | 246,286 | 258,847 | 272,048 | 285,922 | 300,504 | 315,830 |
| 401-70-531-15-3100-0000 | Office & Operating Supplies | 1,000 | 1,025 | 1,051 | 1,082 | 1,115 | 1,148 | 1,182 | 1,218 | 1,255 | 1,292 |
| 401-70-531-15-3101-0000 | Meeting Meals | 400 | 410 | 420 | 433 | 446 | 459 | 473 | 487 | 502 | 517 |
| 401-70-531-15-3103-0000 | Soil & Ground Materials | 7,500 | 7,688 | 7,880 | 8,116 | 8,360 | 8,610 | 8,869 | 9,135 | 9,409 | 9,691 |
| 401-70-531-15-3107-0000 | Maintenance & Repair Supplies | 35,000 | 35,875 | 36,772 | 37,875 | 39,011 | 40,182 | 41,387 | 42,629 | 43,908 | 45,225 |
| 401-70-531-15-3108-0000 | Clothing & Accessories | 2,300 | 2,358 | 2,416 | 2,489 | 2,564 | 2,641 | 2,720 | 2,801 | 2,885 | 2,972 |
| 401-70-531-15-3400-0000 | Books & Maps | 1,000 | 1,025 | 1,051 | 1,082 | 1,115 | 1,148 | 1,182 | 1,218 | 1,255 | 1,292 |
| 401-70-531-15-3500-0000 | Small Tools/Minor Equipment | 7,050 | 7,226 | 7,407 | 7,629 | 7,858 | 8,094 | 8,337 | 8,587 | 8,844 | 9,110 |
| 401-70-531-15-4100-0000 | Professional Services | 45,000 | 46,125 | 47,278 | 48,696 | 50,157 | 51,662 | 53,212 | 54,808 | 56,453 | 58,146 |
| 401-70-531-15-4160-0000 | King County Services | 60,445 | 61,956 | 63,505 | 65,410 | 67,372 | 69,394 | 71,475 | 73,620 | 75,828 | 78,103 |
| 401-70-531-15-4165-0000 | Permit Fees | 18,300 | 18,758 | 19,226 | 19,803 | 20,397 | 21,009 | 21,640 | 22,289 | 22,957 | 23,646 |
| 401-70-531-15-4182-0000 | External Tax (State B&O) | 26,989 | 28,054 | 32,078 | 36,691 | 38,147 | 39,661 | 41,237 | 42,876 | 44,582 | 46,356 |
| 401-70-531-15-4200-0000 | Communications | 1,500 | 1,538 | 1,576 | 1,623 | 1,672 | 1,722 | 1,774 | 1,827 | 1,882 | 1,938 |
| 401-70-531-15-4203-0000 | Cell Phones | 4,350 | 4,459 | 4,570 | 4,707 | 4,849 | 4,994 | 5,144 | 5,298 | 5,457 | 5,621 |
| 401-70-531-15-4300-0000 | Travel & Meetings | 1,600 | 1,640 | 1,681 | 1,731 | 1,783 | 1,837 | 1,892 | 1,949 | 2,007 | 2,067 |
| 401-70-531-15-4301-0000 | Professional Development | 6,185 | 6,340 | 6,498 | 6,693 | 6,894 | 7,101 | 7,314 | 7,533 | 7,759 | 7,992 |
| 401-70-531-15-4500-0000 | Rental & Leases | 5,000 | 5,125 | 5,253 | 5,411 | 5,573 | 5,740 | 5,912 | 6,090 | 6,273 | 6,461 |
| 401-70-531-15-4703-0000 | Waste Disposal | 1,500 | 1,538 | 1,576 | 1,623 | 1,672 | 1,722 | 1,774 | 1,827 | 1,882 | 1,938 |
| 401-70-531-15-4800-0000 | Repairs & Maintenance | 97,680 | 100,122 | 102,625 | 105,704 | 108,875 | 112,141 | 115,505 | 118,971 | 122,540 | 126,216 |
| 401-70-531-15-4803-0000 | Maintenance & Repairs-St Sweep | 63,000 | 64,575 | 66,189 | 68,175 | 70,220 | 72,327 | 74,497 | 76,732 | 79,034 | 81,405 |
| 401-70-531-15-4901-0000 | Membership & Dues | 200 | 205 | 210 | 216 | 223 | 230 | 236 | 244 | 251 | 258 |
| 401-70-531-15-4903-0000 | Printing | 1,500 | 1,538 | 1,576 | 1,623 | 1,672 | 1,722 | 1,774 | 1,827 | 1,882 | 1,938 |
| 401-70-531-15-4904-0000 | Equipment Rental Services | 25,015 | 25,640 | 26,281 | 27,070 | 27,882 | 28,718 | 29,580 | 30,467 | 31,381 | 32,323 |
| 401-70-531-15-4980-0000 | Copier Service | 7,050 | 7,226 | 7,407 | 7,629 | 7,858 | 8,094 | 8,337 | 8,587 | 8,844 | 9,110 |
| 401-70-531-15-4990-0000 | Facility Fee | 100,000 | 102,500 | 105,063 | 108,214 | 111,461 | 114,805 | 118,249 | 121,796 | 125,450 | 129,214 |
| | Total Operating Expenditures | $ 1,209,619 | $ 1,258,191 | $ 1,311,825 | $ 1,370,837 | $ 1,429,141 | $ 1,490,067 | $ 1,553,738 | $ 1,620,283 | $ 1,689,837 | $ 1,762,542 |
| | | | 4.0% | 4.3% | 4.5% | 4.3% | 4.3% | 4.3% | 4.3% | 4.3% | 4.3% |
| **Capital Activity** | | | | | | | | | | | |
| New Annual Debt Service | | $ - | $ - | $ - | $ - | $ 58,272 | $ 58,272 | $ 58,272 | $ 58,272 | $ 58,272 | $ 58,272 |
| System Reinvestment Funding (Rate-Funded Capital) | | 388,816 | 368,685 | 538,604 | 740,708 | 706,433 | 732,651 | 758,223 | 784,512 | 811,527 | 839,277 |
| | Total Capital Activity | $ 388,816 | $ 368,685 | $ 538,604 | $ 740,708 | $ 764,705 | $ 790,923 | $ 816,495 | $ 842,784 | $ 869,799 | $ 897,549 |
| Revenue Less Operating Expenditures & Capital Activity | | $ 2,273 | $ 15,706 | $ 16,661 | $ 19,208 | $ 20,207 | $ 20,012 | $ 20,914 | $ 21,858 | $ 22,846 | $ 23,881 |
| **Ending Fund Balance** | | **$ 397,683** | **$ 413,389** | **$ 430,050** | **$ 449,258** | **$ 469,465** | **$ 489,477** | **$ 510,391** | **$ 532,249** | **$ 555,095** | **$ 578,977** |
| *Minimum Target Balance: 90 days* | | *$ 298,000* | *$ 310,000* | *$ 323,000* | *$ 337,000* | *$ 352,000* | *$ 367,000* | *$ 383,000* | *$ 399,000* | *$ 416,000* | *$ 434,000* |
| *Maximum Target Balance: 120 days* | | *$ 398,000* | *$ 413,000* | *$ 430,000* | *$ 449,000* | *$ 469,000* | *$ 489,000* | *$ 510,000* | *$ 532,000* | *$ 555,000* | *$ 579,000* |
| *Actual Days of Cash Achieved* | | *120 days* | *120 days* | *120 days* | *120 days* | *120 days* | *120 days* | *120 days* | *120 days* | *120 days* | *120 days* |

| Capital Activity | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Beginning Fund Balance** | **$ 876,407** | **$ 879,105** | **$ 1,019,081** | **$ 1,021,721** | **$ 877,238** | **$ 845,526** | **$ 645,711** | **$ 568,938** | **$ 533,448** | **$ 625,584** |
| **Revenues** | | | | | | | | | | |
| System Reinvestment Funding (Rate-Funded Capital) | $ 388,816 | $ 368,685 | $ 538,604 | $ 740,708 | $ 706,433 | $ 732,651 | $ 758,223 | $ 784,512 | $ 811,527 | $ 839,277 |
| S-017 Newcastle Railroad Embankment Project Grant | 76,500 | 200,000 | - | - | 1,500,000 | - | - | - | - | - |
| S-038 Stormwater Conveyance Rehab. Program Grant | 153,000 | - | - | - | - | - | - | - | - | - |
| S-041 116th Ave SE & Edmonds Ave NE Pipe Realignment Grant | 17,500 | 85,500 | - | - | - | - | - | - | - | - |
| Revenue Bonds: Net Proceeds | - | - | - | - | 800,000 | - | - | - | - | - |
| Interest Earnings | 4,382 | 4,396 | 5,095 | 5,109 | 4,386 | 4,228 | 3,229 | 2,845 | 2,667 | 3,128 |
| Total Revenues | $ 640,198 | $ 658,581 | $ 543,699 | $ 745,816 | $ 3,010,819 | $ 736,879 | $ 761,452 | $ 787,357 | $ 814,195 | $ 842,405 |
| **Capital Project Expenditures (escalated to year of construction)** | | | | | | | | | | |
| S-037 Stormwater Pond Restoration Program | $ 10,500 | $ 26,780 | $ - | $ 60,100 | $ - | $ 64,919 | $ - | $ 70,103 | $ - | $ 75,677 |
| S-038 Stormwater Conveyance Rehabilitation Program | 218,000 | 103,000 | 212,180 | 327,818 | 450,204 | 463,710 | 477,621 | 491,950 | 506,708 | 521,909 |
| S-039 Seepage Repair Program | 94,000 | - | - | 49,173 | - | - | 53,732 | - | - | 58,715 |
| S-017 Newcastle Railroad Embankment Project | 260,000 | 206,000 | - | - | 2,251,018 | - | - | - | - | - |
| S-040 Landcastle Water Quality Improvement Project | - | - | 180,353 | 404,309 | 160,948 | 353,579 | - | - | - | - |
| S-041 116th Ave SE & Edmonds Ave NE Pipe Realignment Project | 35,000 | 142,140 | - | - | - | - | - | - | - | - |
| 135th Place SE Culvert Retrofit | - | - | - | - | - | - | - | 76,252 | - | - |
| 401-00-597-00-0000-0501: Equipment Rental Fund | 20,000 | 20,600 | 21,218 | 21,855 | 22,510 | 23,185 | 23,881 | 24,597 | 25,335 | 26,095 |
| 401-00-597-00-0000-0302: Transportation CIP | - | 20,085 | 127,308 | 27,045 | 157,853 | 31,300 | 282,990 | 159,945 | 190,016 | 456,723 |
| Total Capital Expenditures | $ 637,500 | $ 518,605 | $ 541,059 | $ 890,299 | $ 3,042,532 | $ 936,693 | $ 838,225 | $ 822,847 | $ 722,059 | $ 1,139,119 |
| **Ending Fund Balance** | **$ 879,105** | **$ 1,019,081** | **$ 1,021,721** | **$ 877,238** | **$ 845,526** | **$ 645,711** | **$ 568,938** | **$ 533,448** | **$ 625,584** | **$ 328,869** |
| *Minimum Capital Reserve Target* | *$ 301,000* | *$ 301,000* | *$ 301,000* | *$ 301,000* | *$ 301,000* | *$ 301,000* | *$ 301,000* | *$ 301,000* | *$ 301,000* | *$ 301,000* |

# V.C. ISSUE PAPERS

FCS GROUP
Solutions-Oriented Consulting

# Issue Paper #1

# SWM Funding of Transportation CIP

## ISSUE

The City of Newcastle's (City) Surface Water Management (SWM) utility manages stormwater runoff to prevent damage to people and property as well as to maintain and enhance the City's natural environment. The SWM program includes performing development reviews and inspection, maintaining public stormwater systems, inspecting privately maintained stormwater systems, monitoring natural waterways, and providing stormwater education and outreach programs.

Portions of the surface water conveyance system are constructed in conjunction with and are essentially a part of many City transportation projects. The City's SWM utility has routinely paid for the SWM-related portion of such transportation improvements in the past. The City has requested that FCS GROUP evaluate this practice against industry best practices, the practices of other jurisdictions, as well as the City's objectives and values.

## ANALYSIS

The City's 2020 Amending Budget identifies over $300,000 of annual transfers from the SWM Fund to the Transportation Capital Investment Program (CIP) Fund, to help pay for the SWM-related portion of transportation projects.

**Exhibit 1: SWM-related Portions of Transportation CIP Funded by SWM Utility**

| Description | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| Annual Transfers from SWM to Transportation CIP | $0 | $19,500 | $120,000 | $24,750 | $140,250 | $0 |

### Industry Best Practices

Within an equitable cost recovery framework, it is reasonable that major costs related to enterprise fund utilities should be paid for by those respective utilities. It follows then, that a SWM utility should pay for the SWM related capital cost within a transportation project. In fact, it is often more cost-effective to coordinate the timing of various utility projects when possible so that the street does not need to be torn up and restored to install SWM infrastructure at a different time.

### Jurisdictional Practices

In practice, it is not uncommon for a SWM utility to fund SWM capital costs that are specifically related to transportation projects. FCS GROUP has recently worked with several jurisdictions that contribute resources to these types of costs. Examples include the Cities of Sammamish, Maple Valley, Lakewood, Lynnwood, and Kirkland.

## City Objectives

According to the City's Comprehensive Surface Water Management Plan Update, Section 5-3, "Due to Surface Water Utility's distinction as an enterprise fund, it must be self-sustaining and recover its operating and capital costs." Based on these objectives, it may be concluded that both standalone and related portions of transportation projects should be funded by the SWM utility.

# RECOMMENDATION

Based on the analysis above, FCS GROUP would recommend that the City's SWM utility continue to fund the portions of transportation projects that can be attributed to SWM related functions, provided that the following items are verified and monitored over time: the methodology of the contribution amount; potential differences between budgeted transfers versus actual expenditures; and whether or not the City's transportation impact fee includes these SWM related capital expenditures.

### Contribution Amount Methodology

The amount of SWM costs relative to transportation-only costs should be developed in a defensible way, such as by using one of the following methodologies:

- **Project-by-project basis:** If the unique amount of each project can be easily identified, that is most defensible.
- **Apply a percentage:** Another alternative would be to analyze several "as-builts" or project bids to determine an average amount of a typical transportation project that is SWM related. For example, if it is determined that 20% of a typical transportation project serves SWM functions, that percentage could be applied to the annual transportation capital spending budget to arrive at an amount that the SWM utility should fund. It is recommended that the percentage be occasionally reviewed and updated if necessary. This methodology helps avoid a potentially time-consuming analysis for each transportation project.
- **Fixed annual amount:** A third approach is to establish an average amount of annual funding to be transferred from SWM to help fund the SWM portion of transportation projects. This approach requires periodic calibration but is perhaps the easiest approach to budget from year to year. The required transfer is stable and predictable.

### Budget versus Actual

If the SWM Fund provides resources to the transportation fund before projects are constructed, actual versus budgeted transportation capital spending should be evaluated on a routine basis.

For example, the 2021 forecast has identified nearly $19,500 in SWM capital, directly related to transportation projects. If for whatever reason, only half of the transportation capital plan is executed, the $19,500 in SWM resources will likely have exceeded corresponding SWM related capital expenses (less total transportation projects would likely mean less SWM related transportation spending).

Funds must be restricted to surface water management uses. If this were to continue year after year, reserves in the transportation capital fund may grow to a level that is not prudent. However, if the SWM Fund provides resources on a reimbursement basis (or provides funds upfront, but only when spending is imminent and certain), this issue can likely be avoided.

## SWM System Development Charge (SDC) vs. Transportation Impact Fee (TIF)

Because the SWM utility is paying for portions of transportation projects that are SWM related, those SWM assets should then be booked and accounted for in the SWM utility and should not be included in the TIF. This would help the City avoid including the same project in the TIF and a SWM utility SDC, if the City were to implement a SWM utility SDC in the future.

# FISCAL POLICIES

## BACKGROUND

Sound fiscal policies are an important part of the framework for evaluating utility revenue needs. 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 (including System Development Charges and Rate Funded System Reinvestment).

## 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 Reserves

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. Target balances for an operating reserve are generally expressed as a certain number of days of operating expenses, with the minimum target varying with expected revenue volatility.

Industry practice for utility operating reserves typically ranges from 45 days (12%) 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 (i.e., water and sewer utilities).

The most common operating reserve target for surface water management (SWM) utilities is between 45 days to 60 days of operating expenses because surface water revenue is typically steady billing cycle to billing cycle. For surface water utilities with annual billing, such is the case for the City of Newcastle, the reserve target is commonly increased to 120 days to account for the longer billing period (as compared to monthly or bi-monthly billing).

**Recommended Policy:** Achieve a year-end minimum balance target of between **90-120 days** of total annual operating expenditures. This equates to a range of **$300,000-$400,000** in 2020 based on the 2020 budgeted expenditures of $1.2 million. The City currently has a 90-day (25%) reserve policy in place.

In any year where operating reserves exceed the target (i.e., 120 days), it is assumed that the excess cash can be used to help pay for capital projects.

## Capital Reserves

The capital reserve consists of cash that has been set aside for capital purposes. Resources can include utility rate revenue, system development charges (if adopted by the City of Newcastle), grants, and debt proceeds. 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 may rely upon to meet its capital needs may have a local cash matching requirement. 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 reserve. Some potential options include:

- a percentage (commonly 1-2%) of the original cost of SWM utility fixed assets;
- a percentage of the annual average capital improvement program (CIP); or
- an amount determined sufficient to fund an emergency capital project / equipment failure.

**Recommended Policy:** While the City does have a current asset inventory, it does not have reliable original cost data. Therefore, we do not recommend trying to develop a capital reserve based on a percentage of fixed assets.

As an alternative, the City could consider holding in reserve an amount sufficient to fund an emergency capital project, such as an emergency stormwater pipe repair (e.g., $100,000). Capital reserves larger than this may be prudent if the City is saving for future capital projects that cannot be funded with same-year rate revenue.

# DEBT MANAGEMENT

The SWM utility currently does not carry any long-term debt. However, the following discussion highlights a few items to keep in mind if the SWM utility decides to borrow money in the future.

## Debt Reserve

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

**Recommended Policy:** The policy should be dictated by terms outlined in contracts for debt obligations if the SWM utility 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 SWM utility's capital funding plans. Coverage is most easily understood as a factor applied to annual debt service. In such a case, if it sells revenue bonds, the SWM utility agrees to collect enough revenue to meet operating expenses and not only pay debt service but to collect an additional 25% 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 reserves for future asset replacement, or debt service on subordinate debt.

**Recommended Policy:** While 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.

# 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 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 long 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.

## 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.

## 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 SWM 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.

If the City were to adopt a system development charge in the future, revenues from that charge (as growth / densification occurs) could be a supplemental capital funding resource. These charges are discussed in further detail in a subsequent section.

## Across the Industry

Drawing from a report by Black & Veatch, "*2018 Stormwater Utility Survey*", of the 75 participants surveyed (from 21 states), 87% of participants funded a majority of capital projects with cash versus

13% funding a majority of projects with debt. This result is consistent compared to previous years – 85% of participants funded a majority of projects with cash in 2014, and 88% did so in 2016.

# SYSTEM DEVELOPMENT CHARGES

## Purpose

System development charges (SDCs) are one-time fees, paid at the time of development, intended to recover a share of the cost of system capacity needed to serve growth. They serve two primary purposes:

- to provide equity between existing and new customers; and
- to provide a source of funding for system capital costs.

The charge is an upfront charge imposed on growth and is primarily a charge on new development, although also applicable to expansion or densification of development when such actions increase requirements for utility system capacity. Charges imposed on redevelopment should be net of any existing developed area.

The City of Newcastle does not currently have an SDC in place for its SWM utility.

## Legal Basis

There are a variety of approaches that are used in the industry to establish a defensible system development charge. The City is authorized to assess such charges under Section 35.92.025 of the Revised Code of Washington (RCW), as shown below. Additionally, under RCW 35.67.010, "system of sewerage" is defined to include stormwater facilities.

> *"Cities and towns are authorized to charge property owners seeking to connect to the water or sewerage system of the city or town as a condition to granting the right to so connect, in addition to the cost of such connection, such reasonable connection charge as the legislative body of the city or town shall determine proper in order that such property owners shall bear their equitable share of the cost of such system." RCW 35.92.025*

RCW 35.92.025 is silent regarding specific methodology to be used in the charge calculation. However, language contained in the Special District RCW 57.08.005 (11) does provide some guidance regarding specific methodology. While this guidance does not legally apply to municipal SWM utilities, some elements help inform the methodology used for SWM system development charges. These guidelines should be considered if the City wanted to implement an SDC in the future.

# RATE FUNDED SYSTEM REINVESTMENT

The concept of rate funded system reinvestment is essentially funding long-term infrastructure replacement needs through a regular and predictable rate provision. Specific benchmarks for annual funding might include any of the following:

- Original cost depreciation expense;
- Replacement cost depreciation expense;
- An amount determined by an asset management plan; and
- Directly budgeted replacement as needs arise.

Each of these benchmarks is described in more detail in the following sections.

## Original Cost Depreciation Expense

This approach fully funds the decline in asset value attributable to wear and tear from routine use, as measured by original construction cost. It avoids a decline in system asset value (financial integrity) by replacing physical assets with cash assets.

## Replacement Cost Depreciation Expense

This approach estimates the replacement cost of the system and bases the funding target on this higher cost. This approach more closely conforms to the true cost of replacing the system or asset. If original cost records were available, the replacement cost could be estimated by applying historical construction cost inflation on an asset by asset basis.

## 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 recent 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

By budgeting replacement expenditures as they occur, this approach does not attempt to anticipate or accumulate toward replacement needs and is likely to result in highly variable annual requirements.

## Summary

Of these various approaches, only the Asset Management Plan approach is designed to ensure full funding of replacement needs, assuming the accuracy of assumptions used. All of 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 cash funding needs have used historical (original cost) depreciation expense as the basis for a reasonable level of rate funded system reinvestment, if data from an asset management program is not available.

**Recommended Policy:** The City has several capital programs that restore, rehabilitate, or repair existing assets, such as S-037 Stormwater Pond Restoration Program, S-038 Stormwater Conveyance Rehabilitation Program, and S-039 Seepage Repair Program. Preliminary average annual cost estimates from the City for these programs totals approximately $200,000 to $300,000 per year. It is our understanding that these costs are informed by an evaluation of the utility's asset inventory supplemented by asset condition and criticality assessments.

We recommend that the City target an annual rate funded system investment amount that is sufficient to fund these programs with same-year rate revenues (cash).

# RECOMMENDATIONS

We recommend that the City consider the fiscal policies shown in **Exhibit 1** for the SWM utility. The combined operating and capital reserve results in a target reserve range of between $400,000 and $500,000 at the end of each year.

**Exhibit 1: Recommended Fiscal Policies**

| Policy | Recommended Target |
|---|---|
| Operating Reserve | 90 to 120 days of O&M<br>($300,000 to $400,000 based on 2020 budget) |
| Capital Reserve | Amount sufficient to fund an emergency project / equipment failure<br>(possibly $100,000 based on discussions with City staff) |
| Debt Service Coverage | If debt is issued, an internal policy target of at least 1.50 to 2.00 would be prudent |
| Rate Funded System Reinvestment | Fund an amount to cover the utility's annual repair-related capital programs such as S-037 Stormwater Pond Restoration, S-038 Stormwater Conveyance Rehabilitation, S-039 Seepage Repair, as well as its new Ditch Rehabilitation Program<br>(possibly $200,000 to $300,000 per year in total) |