Item #13.2

UCS2018-0230
ATTACHMENT 1

FINANCIAL PLAN 2019-2022 STORMWATER MANAGEMENT LINE OF SERVICE

2018 MARCH 14

MAKING LIFE BETTER EVERY DAY

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1.0 INTRODUCTION

This report provides an update on the Stormwater Management (Stormwater) line of service financial policies for 2019-2022. Once approved, this plan will guide the Water Utility in preparation of 2019-2022 business plans and budgets and meet recommended financial targets.

Financial policies for the Stormwater line of service, historically referred to as Drainage, were first established in 2013 to provide improved financial capacity and sustainability to meet the challenges of maintaining service and responding to growth (UCS2013-0044). In 2014, an update on the financial plan progress (UCS2014-0022) was presented to the Standing Policy Committee on Utilities and Corporate Services (SPC on UCS). Council directed Administration to target financial compliance by 2018, in accordance with timelines for Drainage financial policy targets.

1.1 CONTEXT FOR REVIEW OF FINANCIAL PLAN, POLICIES & TARGETS

Several influencing factors that guided the financial plan established in 2013 have changed substantially. Specifically:

- Calgary has been facing an economic downturn since late 2014, after being one of the fastest growing municipalities in North America;
- Considering Integrated Watershed Management has become more and more critical for land use planning;
- Priorities in the Stormwater line of service have shifted towards reducing risk of flooding in communities and building resiliency to flooding, as a result of the flood of 2013; and
- An independent utility consultant undertook a review of financial risk and financial policies for the Stormwater line of service relative to industry best practice; and
- In 2016, the approved stormwater charge (approved in the Bylaw as stormwater drainage service charge) increases were reduced for 2017 and 2018 (C2016-0689).

In acknowledging these considerable changes, it is timely to revise the financial policies and targets set out in 2013 and 2014 respectively to mitigate financial risks and ensure financial sustainability in this service.

These revised financial policies will guide the outcomes of the Cost of Service Study currently underway, which will inform the Stormwater (formerly drainage) charge increases proposed for the 2019-2022 budget cycle. The Cost of Service Study will also inform recommendations on variable rate for a future business cycle. It is important to understand the current financial state and potential financial policy changes in advance of the recommended outcomes of the Cost of Service Study.

2.0 THE STORMWATER BUSINESS MODEL

Together, The City's Water Services and Water Resources business units (the Water Utility) manage and operate the Stormwater line of service. This service has operated as a self-funded activity since 2004. In this model, the stormwater charges and levies are set to recover the full costs of providing stormwater management services. A key difference of this self-funded activity in comparison to the full utility financial models is that the Stormwater line of service does not include the payment of franchise fees and return on equity to The City.

The key components of the Stormwater Service Model include:

- Revenue - Revenue is generated from the flat stormwater charge.
- Off-site levies - An off-site levy is collected on greenfield development. The off-site levy is used to fund the full cost of infrastructure investments required to support new growth.
- Cost of service basis - A Cost of Service Study is carried out to ensure costs are being recovered appropriately from each customer class and that the right mix of charges are in place.
- Capital intensive - The nature of stormwater services requires ongoing capital investment in infrastructure. Programs are required to migrate towards consistent and desired levels of service to customers. The demand for new stormwater services continues to grow in response to population growth, environmental objectives, and the 2013 flood event, over and above the requirement to provide reliable service to Calgarians; and
- Financial Policies - In addition to complying with relevant Council and Administrative policies, financial policies specific to the Stormwater Service Model are maintained.

Priority services in stormwater management and the resources required to implement them are detailed in part by watershed management planning activities and as such, this is a line of service which has evolving requirements. The integrated watershed management goals are to:

1. Protect our water supply
2. Use water wisely
3. Keep our rivers healthy; and
4. Build resiliency to flooding

An update on activities supporting these goals was presented to UCS on 2018 February 14 through UCS2018-0093 2017 Watershed Planning Update, and UCS2018-0092 2017 Flood Resiliency and Mitigation Annual Update.

2.1 STORMWATER CHARGE REVENUE

There is currently a single customer class for stormwater services and the same flat rate is charged to all residential, industrial, commercial and institutional customers. Revenue from this stormwater charge is used to fund operations, maintenance, riparian work, the Community Drainage Improvements (CDI) program, flood mitigation, and water quality improvement projects.

2.2 OFF-SITE LEVIES

In 2016 January, Council approved a new off-site levy bylaw (C2016-0023, Bylaw 2M2016). The resulting bylaw provides for full cost recovery of growth-related infrastructure through the collection of off-site levies (OSL) from developers. The levy rates were updated with current cost and growth projections for six catchments and the new bylaw continues to recover 100 percent of growth related capital costs for drainage infrastructure. OSL revenue is used to pay principal and interest charges for major stormwater infrastructure to service new growth.

Levies are charged when developers enter into a development agreement for greenfield areas. If development does not materialize as projected, the result is a shortfall in OSL revenue. This injects uncertainty and risk into revenue collections, as was seen when 2016 development was much lower than projected due to economic conditions.

Recovery of growth related costs through OSL may decrease pressure on stormwater fees and charges in 2019-2022, however significant risk and uncertainty exists in this model.

2.3 COST OF SERVICE

It is an industry best management practice to conduct Cost of Service Studies every 5 to 10 years. A Cost of Service Study is a methodical process by which the cost of providing a service is distributed in a fair and equitable manner, in proportion to the benefit derived by each customer class.

The Cost of Service Study is an analytical tool to support financial management, and provide validation and documentation for ratemaking decisions. It is important to all stakeholders and The City that the user rates be founded on a sound set of principles. The guiding principles can be organized into three interdependent categories, including: Financial Sustainability, Fairness and Equity to Customers, and Natural Resource Management:

Financial Sustainability

Deliver sufficient and predictable revenue: To meet current and future regulatory requirements, and provide reliable services desired by customers, this line of service needs to receive sufficient and predictable revenue to recover its costs.

Rate Stability: Offer stability and predictability to both the customers and the service provider.

Adaptability: Set rates structures that are dynamic, and provide flexibility to changing supply and demand.

Fairness and Equity to Customers

User Pay philosophy: Rates are based on the philosophy that a customer's rates should reflect the cost of providing the service to the customer.

Customer Equity: Each customer class should pay their fair share based on the customer class usage pattern and service benefits offered.

Accessible and Simple: Rate structures should be transparent and easy to understand.

Natural Resource Management

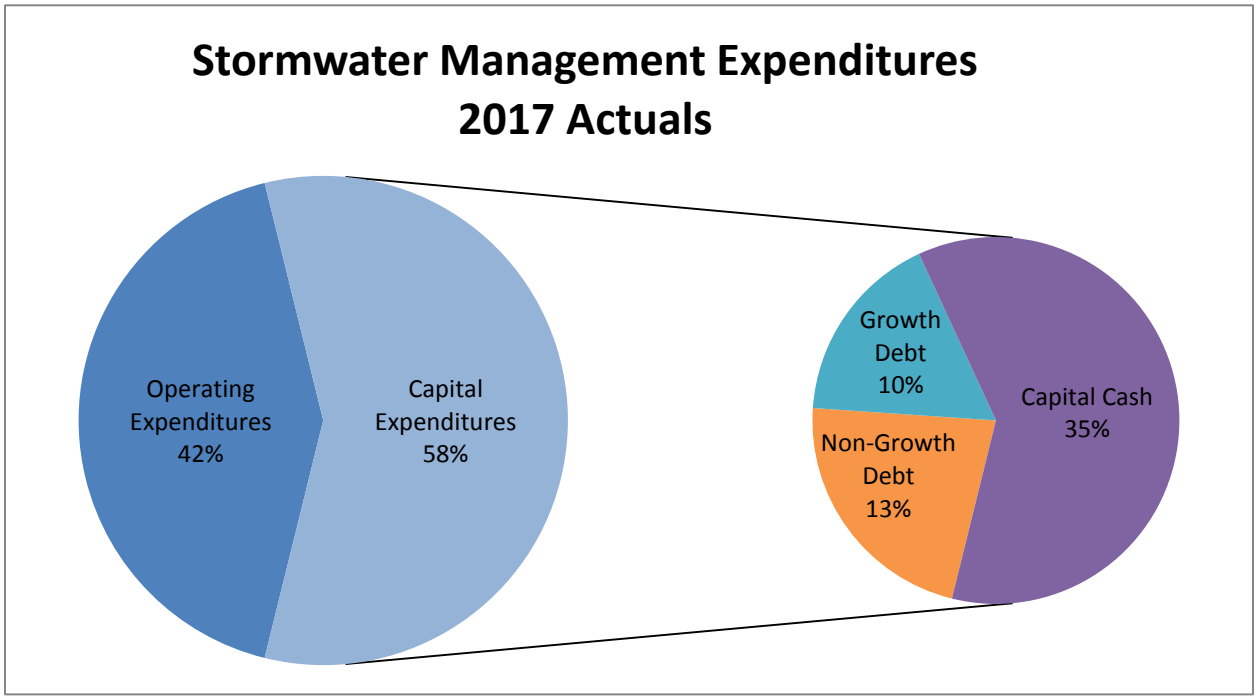
Conservation: Establish a rate that allows The City to continue to meet current and future regulatory requirements, while encouraging customers to adopt behaviors focused on water conservation, and protecting the watershed and river water quality.

Finance, together with the Water Utility has been carrying out a Cost of Service Study on the Stormwater line of service, with implementation planned for 2019-2022 based on Council's direction to incorporate Cost of Service Studies in the 2015-2018 Action Plan. This study will set the foundation for a stronger understanding of the contributions of different customers on the costs of providing the service. The ultimate goal of the cost of service analysis is to transition towards an increasingly equitable rate structure where customers contribute for their share of the system costs in proportion to their use of the system. With appropriate engagement and required technology enablement, a program will take six to eight years to form a fair and equitable stormwater rate that complies with cost of service guiding principles. This Cost of Service Study will be brought to Council in 2018 June.

2.4 CAPITAL INTENSIVE

As The City continues to grow, so does the requirement for infrastructure needed to provide reliable service to Calgarians. Stormwater management also requires ongoing capital investment to meet regulatory requirements. Of the current Stormwater operating budget, approximately 58 per cent is capital related, as shown in Figure 1.

Figure 1: Stormwater management - Expenditure Breakdown of 2017 Actual



Capital requirements continue to experience increased pressure due to factors such as:

- Aging infrastructure, which impacts the ability to operate efficiently and effectively without service interruptions;
- Changes to regulatory and environmental requirements, which necessitate infrastructure upgrades or the construction of additional infrastructure;
- Introduction of new services or service levels, which require new or upgraded infrastructure; and
- Continued population growth, which triggers capacity upgrades and expansions.

Each investment driver provides a different perspective on when and where infrastructure investments are needed. The process to prioritize investments considers the need and timing of investments in light of the four drivers. The desired outcome is to meet customer and environmental priorities while staying within the financial capacity of the line of service.

These factors are summarized in Figure 2.

Figure 2: Investment Drivers

Investment Driver	Objective	Percentage of Water Infrastructure Investment Plan (WIIP)
Maintain assets	Maintaining, protecting and extending the life of infrastructure investments.	20% - 25%
Regulatory & Environmental Protection	Continuing to meet increasingly stringent regulatory and environmental protection requirements.	15% - 20%
Service	Continuing to provide reliable and high quality services to meet the needs of citizens.	10% - 20%
Growth	Providing infrastructure to meet the needs of a growing city.	45% - 60%

2.4.1 Maintain Assets

A stormwater asset management plan is underway, including the establishment of a pond condition assessment program. This five-year program began in 2015 and will yield a priority list for pond maintenance, repairs, and sediment removal. A similar program for storm pipes has also been initiated with the recent completion of a criticality model and the commencement of a full inspection program this year. The two programs will ensure that reinvestments are targeted and stormwater assets continue to function as intended.

2.4.2 Regulatory and Environmental Protection

The City of Calgary has a Wastewater Approval to Operate that specifies regulatory requirements under the Government of Alberta's Environmental Protection and Enhancement Act and requires renewals periodically. A renewal application was submitted in November 2017, and is pending review by and discussion with Alberta Environment and Parks. Changes to targets, such as sediment loadings to the rivers, within the Wastewater Approval to Operate may impact the degree of investment required in the Stormwater line of service to ensure continued regulatory compliance.

As part of the 2015-2018 Action Plan, a number of initiatives are underway. The 2017 Watershed Planning Update (UCS2018-0093) outlines watershed management goals and the associated actions:

1. *Protect our water supply*
2. *Use water wisely*
3. *Keep our rivers healthy; and*
4. *Build resiliency to flooding*

The City is achieving targets related to river water withdrawal, water consumption, and reducing pollutant loadings to the river. Specific initiatives to support these goals include regulatory and

environmental protection programs, asset maintenance, planning for growth, flood recovery and resiliency work, and community drainage improvements.

2.4.3 Service

The CDI program delivers stormwater infrastructure upgrades in older communities that were built prior to the use of modern drainage techniques and standards. These communities typically have a service level of 1 in 2 year event to 1 in 5 year event (localized flooding for storm events) as opposed to current service standards of 1 in 50 year event to 1 in 100 year event in retrofitted and new communities. The planning and delivery of the CDI program is articulated in the 2017 Flood Resiliency and Mitigation Annual Update (UCS2018-0092).

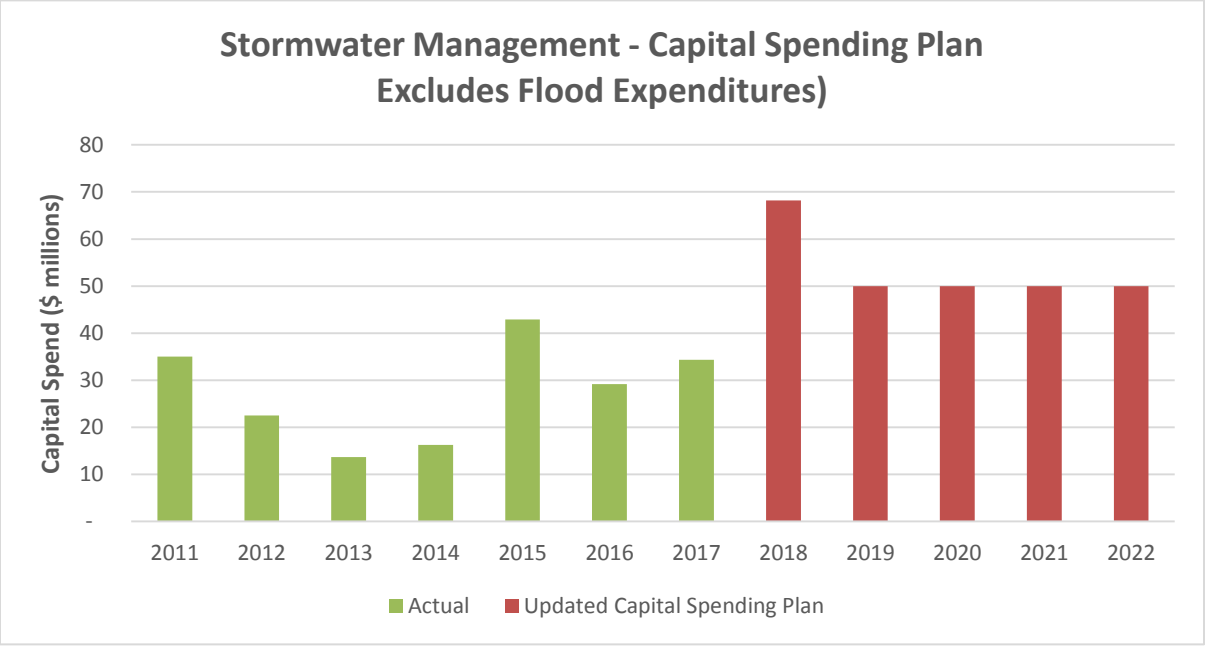
2.4.4 Growth

Stormwater infrastructure is a key enabler for growth. To align with the Corporate Growth Management Framework and to support growth, the Water Utility monitors performance measures for serviced land supply. Currently, the target is to have three to five years of land available for development that is serviced by water, wastewater and stormwater infrastructure. Of the current operating budget, about 10 per cent is attributed to debt payments and finance charges for growth related infrastructure.

2.4.5 Annual Spending Plan

The current Water Infrastructure Investment Plan (WIIP) allocates 45 to 60 per cent of the investments to support growth. Within this planned annual capital spend, focus will be put on highest priority projects and any opportunity to accelerate service levels in the CDI program.

Figure 3: Stormwater Management – Capital Spending Plan



Via capital budget recast, the capital budget is more closely aligned with anticipated capital spend, still targeting an annual spend of $50 million, and ensuring that the investment commitments made in Action Plan are fulfilled. The Water Utility will deliver capital projects through a process with additional controls that ensure the budget is allocated to the highest priority projects when they are ready to proceed and with the most accurate cost estimates available.

2.5 FINANCIAL POLICIES

The financial plan has financial policies specifically around debt and use of debt for long-term assets. These financial policies help to manage obligations, constraints, and financial risks especially in the area of financing long-term assets. Financial policies have measures and targets associated. These policies and targets are reviewed in preparation for the next business cycle.

2.5.1 Debt and Cash Financing

An appropriate mix of debt and cash financing derived from debt service coverage ratio and minimum cash requirements is necessary to deliver stormwater management services. A good mix of financing strengthens the financial position of the line of service while providing greater flexibility when planning for future capital requirements.

Operating costs are always fully funded from revenues. Subject to funding availability, capital projects that are part of the on-going improvement program, or will reduce the operations and maintenance costs will be cash financed.

Debt financing will be used for capital projects that are substantial in cost and size and where the benefits will extend over a relatively long period. This spreads the costs of the infrastructure over an appreciable portion of the useful life of the assets. The nature of infrastructure is mostly long-lived projects serving current and future generations, which means debt financing is appropriate to achieve “intergenerational equity” with the rate payers who benefit from these capital infrastructures help pay for the cost of the assets.

Debt limits and debt servicing limits are normally established by lending institutions to ensure that debts and related interest costs are repaid in a timely manner. The City as a Corporate has both a debt limit and a debt servicing limit as required by the *Municipal Government Act* (MGA). The MGA outlines that for The City, debt may not exceed a limit of twice the revenue and that debt servicing may not exceed a limit of 35 per cent of revenue. The City has set an administrative target of 80 per cent of the MGA total debt and debt servicing limits. Debt from utility services contributes to The City debt levels and is subject to these targets.

Historically debt has been managed within a fixed debt limit target of $300 million and a target of 40 per cent of revenues for debt servicing. Instead of a fixed specific level of maximum debt limit, a better way to determine the reasonableness of debt obligations is through a debt service coverage ratio. Debt service coverage ratio states net operating income as a multiple of debt, and its target would be stated in terms of how many times those debt servicing obligations could be paid after other obligations are

met. Debt service coverage ratio reflects the line of service's ability to pay debt service after first paying for critical operations and maintenance expenditures and the required transfers to The City. The ratio should be calculated per the following formula:

$$\text{Debt Service Coverage Ratio} = \frac{\text{Total Revenues - (Operating Expenses + Payments to The City)}}{\text{Total Debt Service}}$$

It is recommended that this line of service maintain a debt service coverage ratio at minimum of 1.75 times in place of the current policy's measures and targets. Further for 2023-2026, it is recommended that the debt service coverage ratio target be increased to 1.80 times. This will function as capital contingency to ensure some debt capacity is maintained for unexpected capital requirement. This change in the measurement and target for debt will maintain overall debt for the stormwater management service at a level consistent with the historical $300 million debt ceiling.

2.5.2 Cash Financing of Maintenance Capital

The financial plan outlines a policy and target where the Stormwater line of service will have a target of cash financing 100 per cent of the capital maintenance projects identified in the capital budget. This target has been achieved since 2015. No change is recommended in this area of the policy.

2.5.3 Debt to Equity Ratio

The Stormwater line of service financial plan will report annually the debt to equity ratio, targeted at 60/40, which supports to maintain a long-term capital structure with adequate revenues to support the level of debt service. No change is recommended in this policy area.

2.5.4 Debt Term

For assets financed by self-supported debt, the Stormwater line of service will apply debt terms based on the specific asset and its purpose with the objective of matching a longer debt term with an asset that has a longer useful life. Per historical financial plans, the Stormwater line of service employ a 25 year debt term on major projects. This policy should be revised as "the Stormwater line of service employ up to a 25 year debt term on major projects" to provide greater flexibility to match debt terms to specific asset.

2.5.5 Sustainment Reserves

In 2011, The City of Calgary created the Utilities Sustainment Reserve, this reserve provides a measure of financial flexibility in cash flow to fund unplanned expenditures in both operating and capital, and to manage the financial risks of short term shortfalls in projected revenue for Water and Wastewater and Stormwater lines of service. This reserve has a target balance of 10 per cent of total revenues, and the target was to be met by the end of 2018. The stormwater charge increase approved as part of Action Plan was 19.1 per cent per year. In response to a difficult economic climate, this increase was reduced to 7.4 per cent per year in 2017 and 2018. This was achieved though efficiencies and some service reductions as well as by delaying the achievement of this reserve target, until end of 2022.

The independent financial review recommended that in lieu of the policy of maintaining sustainment reserves equal to 10 per cent of total revenues, that the sustainment reserves balance be equal to 120 days of annual operating expenses. In terms of the sustainment reserve balance to be achieved and maintained, the 120 days operating expenditures is slightly higher than the previous 10 per cent of revenues target. This reserve balance, once achieved by end of 2022, will provide the services with cash reserves for normal operating expenditure and deal with contingencies in revenue fluctuation. Coupling that with additional debt capacity maintained through Debt Service Coverage Ratio target of 1.80 times in the 2023-2026 timeframe, will allow this line of service to be better able to sustain short term increases in operating and capital requirements.

2.6.6 Depreciation

The Stormwater line of service will maintain depreciation rates that are aligned with generally accepted accounting practices. Depreciation on donated assets is not charged as an operating expense for the purpose of rate setting. No change is recommended in this area of the policy.

3.0 PROJECTED PERFORMANCE RELATIVE TO REVISED FINANCIAL PLAN TARGETS

Along with ongoing focus on achieving current financial targets by 2018 and the revised financial targets by 2022, the Stormwater line of service will continue to manage increasing cost pressures, environmental pressures and market uncertainty and financial sustainability while providing high quality services to Calgarians.

Revenue forecasts were used to test potential financial policies compliance in the Stormwater line of service for the 2019-2022 business cycle. All financial targets recommended in financial plan 2019-2022 will be met.

Figure 4: Debt Service Coverage Ratio

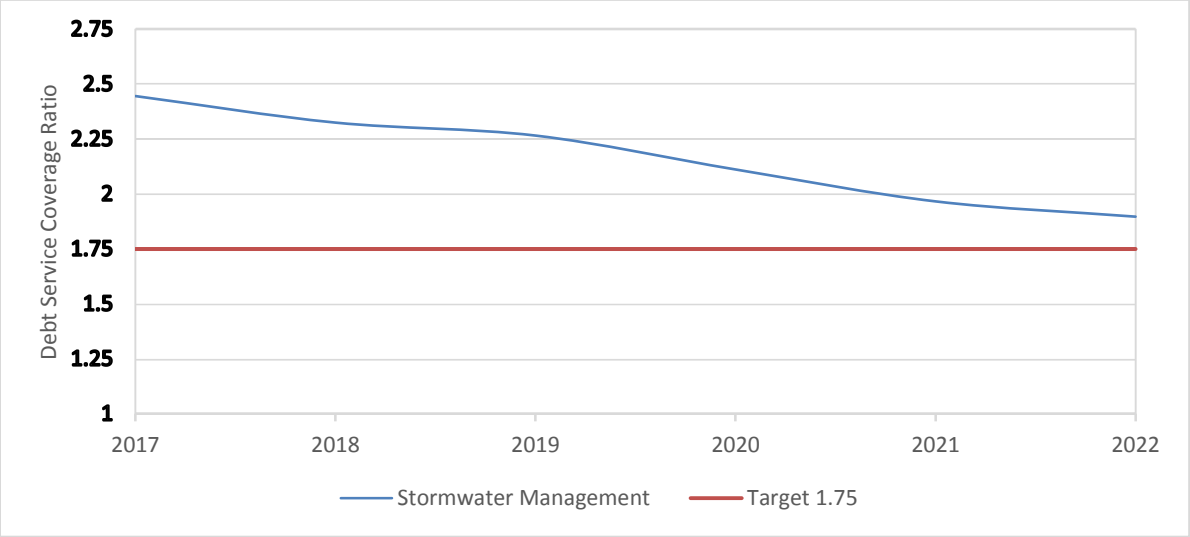
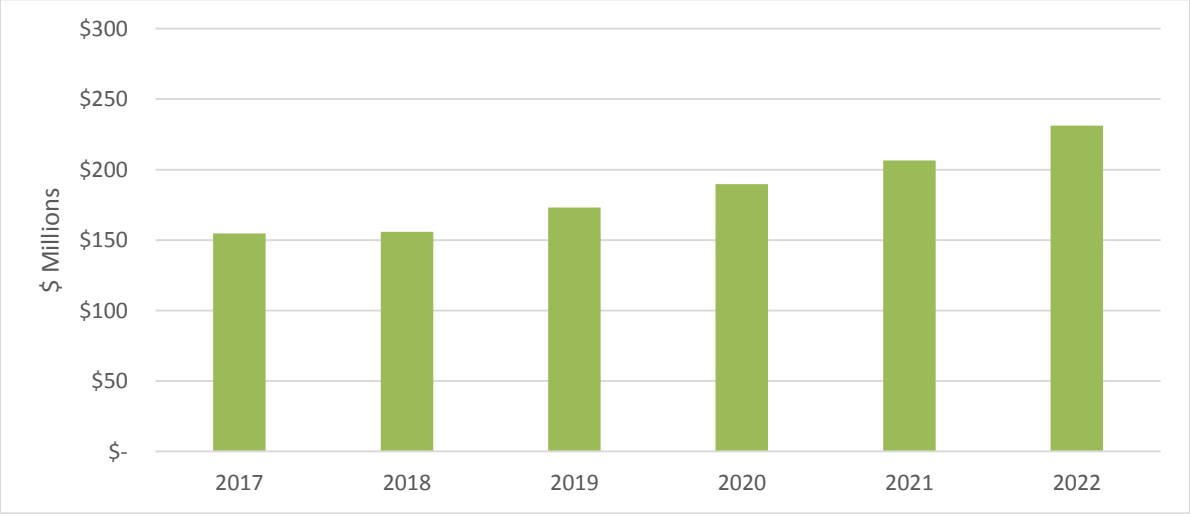
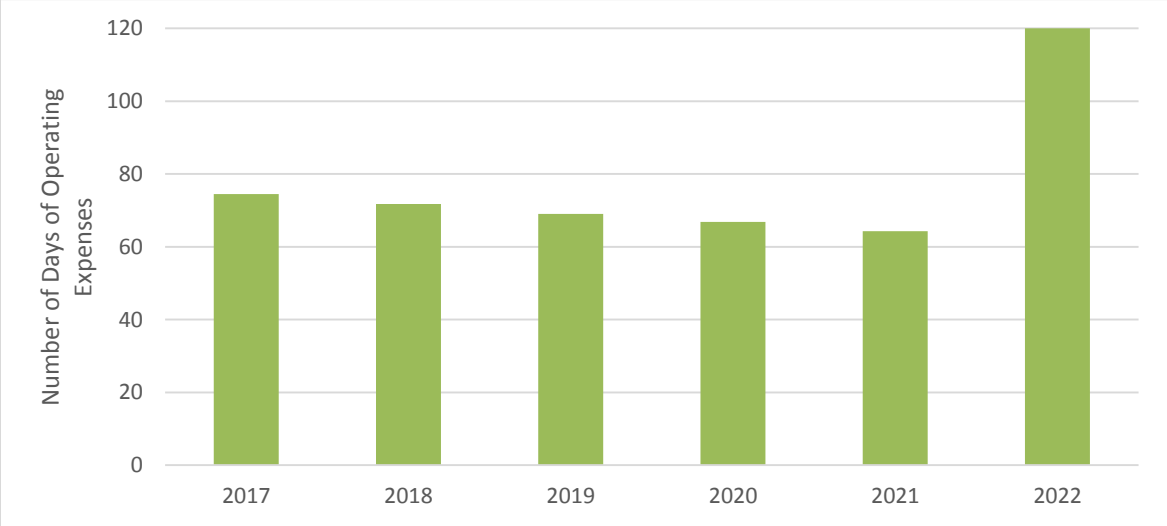


Figure 5: Total Debt



Note: This Chart provides information only, not financial targets for compliance.

Figure 6: Sustainment Reserve Balance



4.0 CONCLUSION

The Stormwater line of service will achieve compliance with the financial targets set out in its financial plan 2019-2022, thereby ensuring a financially sustainable future. Compliance to the financial plan by the end of 2022 will be contingent on the rate increases that will be presented to Council as part of One Calgary. The Stormwater line of service will concentrate on:

- Report to Council on stormwater charge increases for 2019-2022 in alignment with One Calgary.
- Complete and report to Council on the Cost of Service Study to inform 2019-2022 stormwater charge increases by 2018 June.