Stormwater Management

Services, Drivers and Priorities

A healthy, resilient watershed provides clean, reliable water resources, and is vital to ensure that citizens and property are protected from flooding while keeping the rivers healthy. Efforts to improve river flood resiliency and reduce local stormwater flooding are ongoing through a variety of infrastructure programs.

Climate change will alter how and when Calgary's watershed receives precipitation, affecting both water quantity and quality. It is predicted that short duration and high intensity storms will become more frequent, leading to increased flooding and property damage. The Community Drainage Improvement (CDI) program uses a triple bottom line approach to prioritize and invest in stormwater infrastructure improvements with a focus on established communities with the highest risk of local stormwater flooding caused by rainfall. This program continues to be a high priority for the line of service.

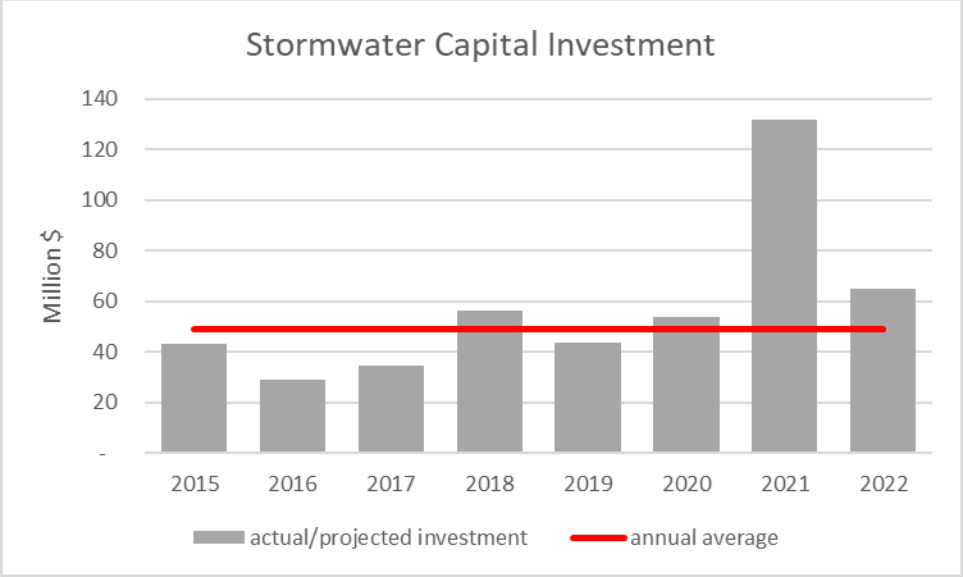
The Water Utility is also focused on implementing the Council-approved Flood Resilience Plan (PFC2017-0462). Flood resiliency investments including flood barriers and riverbank restoration projects are required to reduce impacts of future storm events. These projects represent approximately 38 per cent of the capital budget, of which a large portion is funded through external grants from the Provincial and Federal governments.

In 2019, the Province announced that the $150 million Alberta Community Resilience Program (ACRP) funding would be ending three years early in 2021 with a resulting shortfall of $81 million in capital funding for flood resiliency projects. All flood related projects have been reprioritized to address the funding impacts. The result is that The Water Utility is proceeding with the Downtown Barrier and Upper Plateau Separation projects as scheduled but this will result in a one year delay to some CDI projects. The Federal government recently announced partial funding for these two projects through the Investing in Canada Infrastructure Program (ICIP). Additional opportunities for provincial and federal funding are also being investigated for these and other flood resilience projects such as a potential barrier at Bowness. An application for $30 million was recently submitted to the Municipal Stimulus Program to advance CDI projects that have been delayed due to the reduction in ACRP funding and the subsequent reprioritization of the capital budget.

The Stormwater line of service is updating the 2005 Stormwater Management Strategy to define a unified vision for stormwater management and transform how The Water Utility collaborates with partners and stakeholders and evolves stormwater best management practices. This strategy will outline the short, medium and long-term actions for the Stormwater line of service, guiding the management of stormwater runoff in communities to keep the rivers healthy and build resiliency to flooding. It is anticipated that the strategy will be complete in Q2 2021.

The proposed 2021-2022 capital spending plan is higher than the average annual investment of $49 million primarily due to the investment timing of the Upper Plateau Separation, Downtown Barrier and Sunnyside Barrier projects totalling over $60 million in 2021.

Figure 1: Capital Spending Plan



The Stormwater line of service continues to maintain a healthy debt service coverage ratio and has achieved the target for its sustainment reserve

Figure 2: Debt Service Coverage Ratio

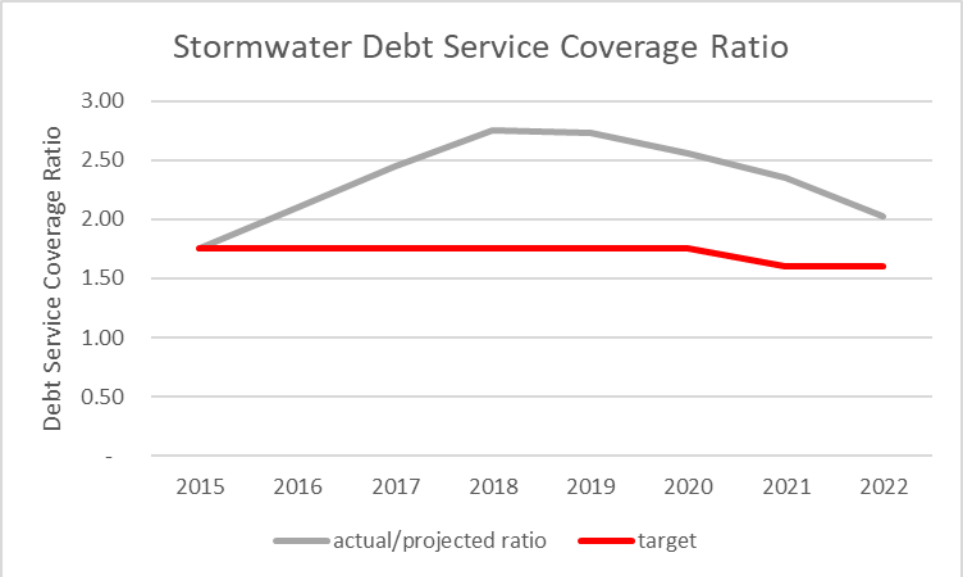
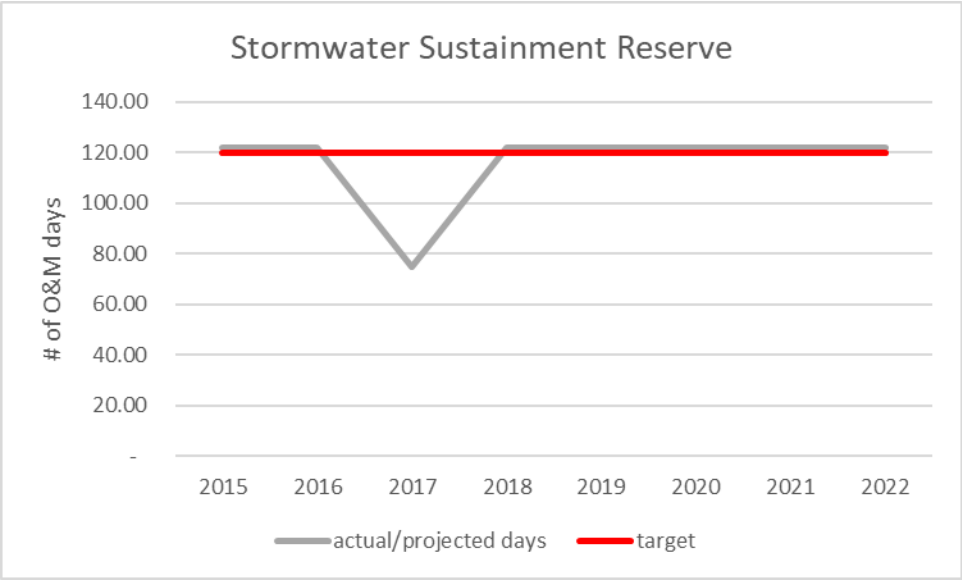


Figure 3: Sustainment Reserve Balance



Stormwater Rates

The Stormwater line of service continues to experience upward pressure to mitigate the environmental, social, and economic risks of river and localized flooding while considering climatic variability. Despite these pressures, as well as a reduced land development forecast and recent provincial funding changes, a reduced rate increase is recommended for Stormwater. This is due in part to a good financial position given early achievement of all financial targets as well as ongoing efficiency efforts.

Administration is recommending a 0.0 per cent increase to the Stormwater rate, which is 2.5 per cent lower than the One Calgary approved 2021 and 2022 rates. The result is that the stormwater management rate for 2021 and 2022 will remain the same as for 2020.

The tables below summarize previous reported and current proposed stormwater rates and drivers for 2021 and 2022.

Table 1: Stormwater rate change

	One Calgary Approved 2021 & 2022	Proposed Change	Revised 2021 & 2022 Recommended Rates
Stormwater rate change	+2.5%	-2.5%	0.0%

Table 2: Estimated Stormwater Management drivers / impacts

STORMWATER	Total	Change in operating costs	Change in capital related costs	Off-site levy shortfall	Contribute to sustainment reserve
Impact on typical monthly utility bill $15.63 in 2020	0.0%	1.0%	-1.0%	0.0%	0.0%

Table 3: Impact on typical utility bill

Line of Service	2020 monthly bill	2021 incremental change	2021 monthly bill	2022 incremental change	2022 monthly bill
Stormwater Management	$15.63	$0.00	$15.63	$0.00	$15.63