

Wastewater Collection and Treatment

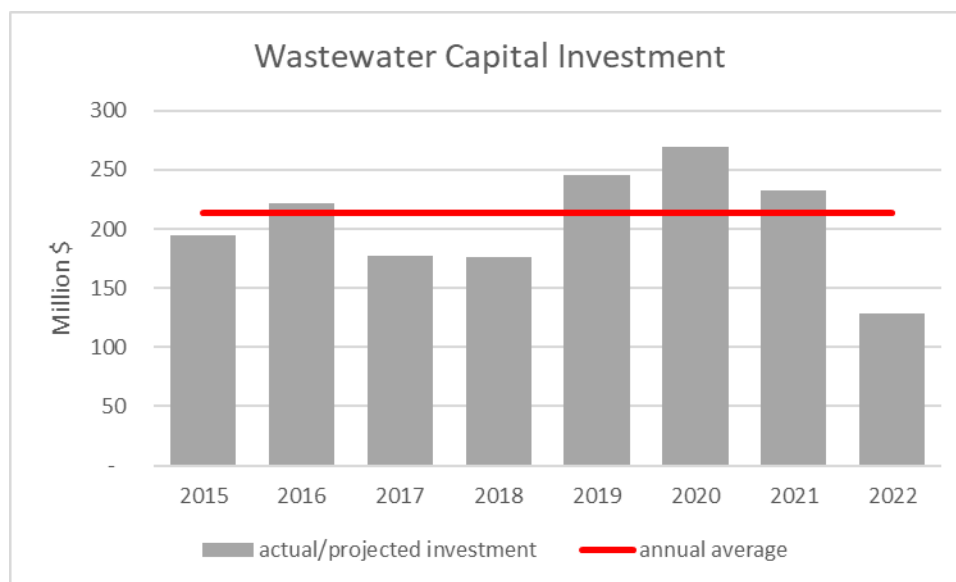
Services, Drivers and Priorities

Calgary is a large, growing city located on two small rivers. To maintain the health of the rivers, ongoing investment is required to meet regulatory requirements. Over the next few years, a continued priority for this service is the significant upgrades at Bonnybrook Wastewater Treatment Plant to address wastewater demands and regulations that will serve future generations of Calgarians.

The nature of the Wastewater line of service is capital intensive, and the majority of the planned investments are driven by population growth. With rising capital investments required to maintain highly reliable Wastewater systems, meet regulatory requirements, and protect the rivers and the environment, an increased emphasis on service efficiency is vital to the line of service. As the city grows, pressure on treatment processes will continue to increase. Water conservation efforts do not reduce this need. In response, the Wastewater line of service is focused on continually finding efficiencies and process improvements within the plants and collection system.

The proposed 2021-2022 capital spending plan is slightly lower than the average investment of \$213 million annually due to the completion of the Rangeview and Inglewood Sanitary Trunks by the end of 2021, and the planned phasing of the Bonnybrook Plant Expansion.

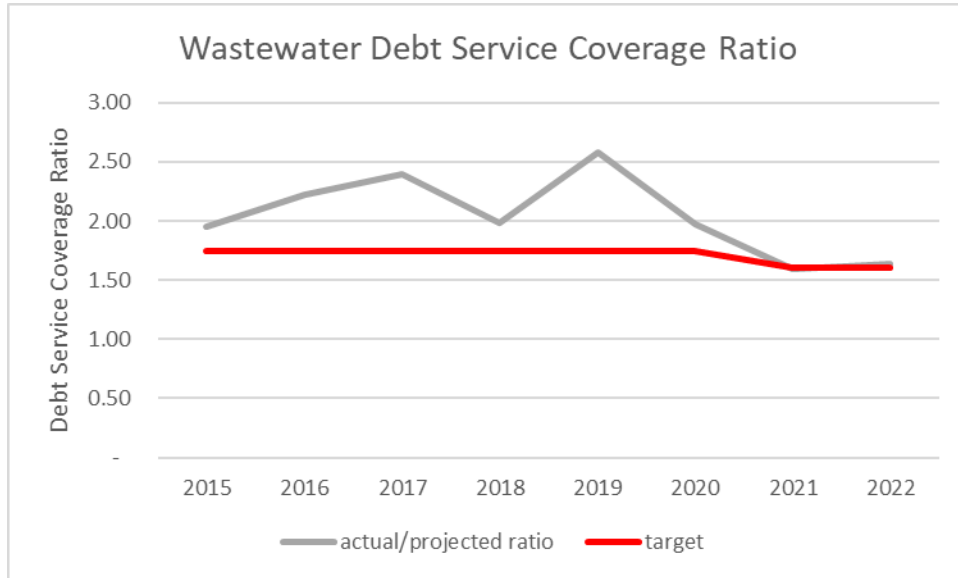
Figure 1: Capital Spending Plan



To maintain wastewater rates at affordable levels, the Wastewater line of service continues to reduce expenditures in several areas including capital maintenance, salary and wage, and consulting to offset capital investments, increasing debt, and inflationary pressures. The capital maintenance reductions include reduced investment in the customer initiated private side sanitary replacement program and sanitary trenchless rehabilitation. These reductions may result in increased risk of sanitary sewer backups in homes and businesses, and will be monitored closely by Administration.

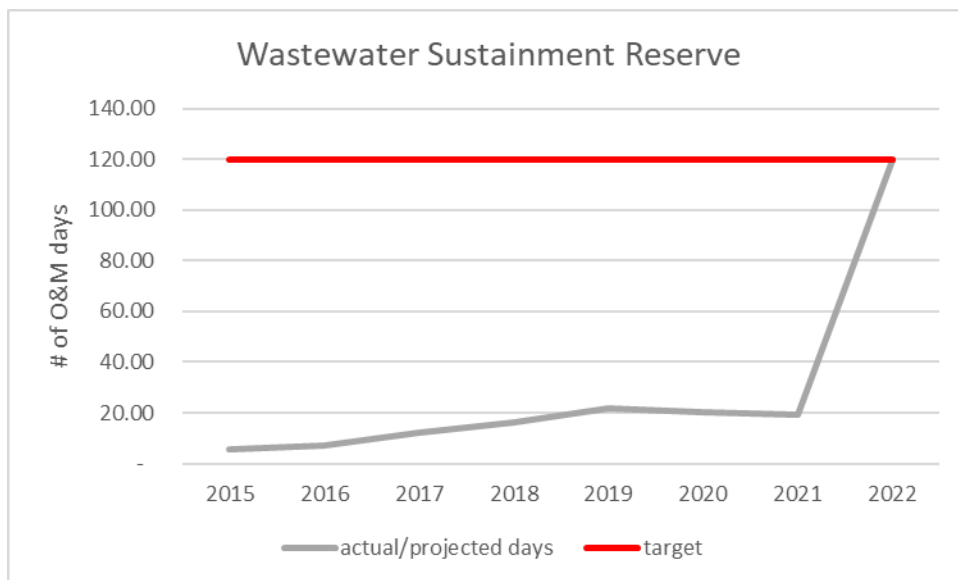
Reducing the Wastewater rates from what was previously approved as part of One Calgary impacts the debt service coverage ratio adversely in the next year but is rectified by 2022, and maintained thereafter.

Figure 2: Debt Service Coverage Ratio



Despite the above constraints, the Wastewater line of service remains on track to achieving its sustainment reserve target by the end of 2022. The reserve provides a safety buffer and mitigates adverse financial impacts that would otherwise have to be absorbed by customers through larger rate increases.

Figure 3: Sustainment Reserve Balance



Wastewater Rates

The effect of population growth has a substantial and compounding impact on the Wastewater line of service due to the capital required to build new infrastructure. The above-mentioned reductions enable the Wastewater line of service to partially absorb the adverse fluctuations and persistent shortfalls in off-site levies for growth related costs with a 4.5 per cent rate increase, a reduction of 0.6 per cent from what was approved in One Calgary. This will result in a \$0.59 decrease by 2022 on a typical residential metered customer's monthly bill compared to 2020.

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

Table 1: Wastewater rate change

	One Calgary Approved 2021 & 2022	Proposed Change	Revised 2021 & 2022 Recommended Rates
Wastewater rate change	+5.1%	-0.6%	4.5%

Table 2: Estimated Wastewater Collection and Treatment drivers / impacts

WASTEWATER	Total	Change in operating costs	Change in capital related costs	Off-site levy shortfall	Contribute to sustainment reserve	Transition to ROE
Impact on typical residential metered monthly utility bill \$55.73 in 2020	+4.5%	2.5 %	-3.1%	1.2%	2.8%	1.1%

Based on the cost of service recommendations, not all customer will see the same increase or decrease in rates. As shown in Table 3, a typical residential metered customer will see a small decrease to the monthly Wastewater charges of approximately \$0.59 by 2022 compared to 2020. However, because the impact for each customer class does vary, multi-family and business customers will see different increases to their respective monthly bills.

Table 3: Impact on typical monthly utility bill

Line of Service	2020 monthly bill	2021 incremental change	2021 monthly bill	2022 incremental change	2022 monthly bill
Residential Metered (19m ³)	\$55.73	(\$0.94)	\$54.79	\$0.35	\$55.14
Multi Family Metered (584m ³)	\$1,182.26	\$56.92	\$1,239.18	\$82.61	\$1,321.79
General Service Regular (400m ³)	\$717.66	\$13.35	\$731.01	\$29.01	\$760.02
General Service Large (10,365 m ³)	\$17,902.89	\$344.73	\$18,247.62	\$733.43	\$18,981.05