

Stormwater

16.9%

Percentage of total value of city assets

Total asset replacement value **\$433 million**

Current condition **FAIR**

Projected condition in 25 years  **VERY POOR**

Annual average funding **\$2.8 million**

Annual funding needed to meet target performance **\$7.6 million**

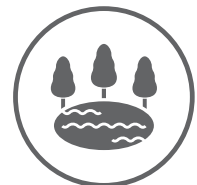
Annual funding gap **\$4.8 million**



345 km of pipes



59 stormwater management ponds

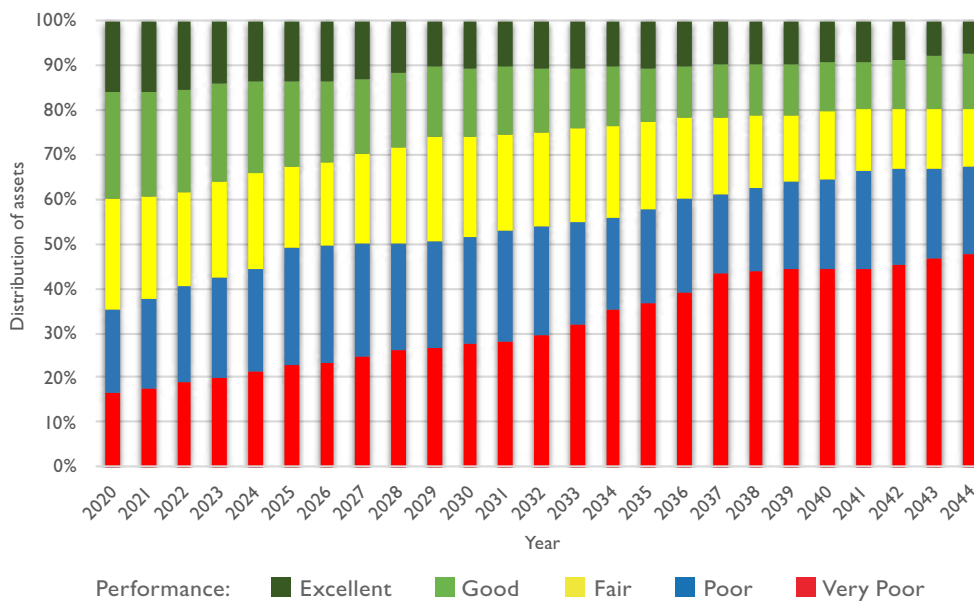


2 impoundments



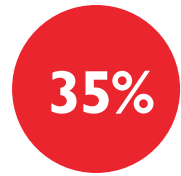
71 km of natural channels

Annual performance of stormwater assets



OUR STANDARDS

Stormwater is comprised of a pipe collection network and stormwater management ponds and natural channels (creeks). The stormwater pipe collection network is comprised of 345 km of pipes with the associated catchbasins and manholes. The City of Waterloo’s stormwater management network is comprised of 59 stormwater management ponds, 2 impoundments (e.g. Silver Lake) and 71 km of natural channels (creeks). The total replacement value of the pipe and pond network is approximately \$433 million.



Stormwater assets with a poor or very poor performance

CURRENT STRATEGY

Storm sewers can either be rehabilitated or replaced. The current strategy in Waterloo is to replace storm sewers that are in very poor condition (i.e. reach a condition performance score of 0%) in coordination with the replacement of the road surface and other subsurface infrastructure such as watermains or sanitary sewers. The current strategy for stormwater management ponds is to dredge them on a routine basis to remove sediment that has accumulated, restoring the full capability of the asset to provide its intended service to treat the quality and quantity control of stormwater runoff. Our natural assets (e.g. creeks) need to be maintained in an urban environment to provide conveyance through the system, reduce erosion and risk to critical infrastructure. Performance scores are dependent on the result of site walks, visual risk assessment and operational feedback.

ANNUAL FUNDING GAP

The average annual budgeted capital expenditures of \$2.8 million will result in a decline in the condition profile of stormwater assets over the next 25 years. This is attributed to the backlog in renewal needs associated with the stormwater assets that have currently or are anticipated to exceed their estimated useful life.

ASSET GROUP	AVERAGE ANNUAL PLANNED FUNDING	ANNUAL FUNDING REQUIRED TO ACHIEVE TARGET	ANNUAL FUNDING GAP
Stormwater	\$2.8 million	\$7.6 million	\$4.8 million

The information presented here is based on best currently available data regarding asset inventory, condition and degradation curve data along with funding as proposed in the approved 2020-2022 capital budget and 2023-2029 capital forecast.