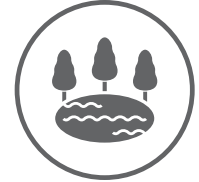


# Stormwater

Total asset replacement value	<b>\$550 million</b>
Current condition	<b>GOOD</b>
Projected condition in 25 years	<b>VERY POOR</b> 
Annual average funding	<b>\$4.7 million</b>
Annual funding needed to meet target performance	<b>\$8.4 million</b>
Annual funding gap	<b>\$3.7 million</b>
Funding Source	<b>Stormwater User Fees</b>
Data Maturity Level	<b>High</b>

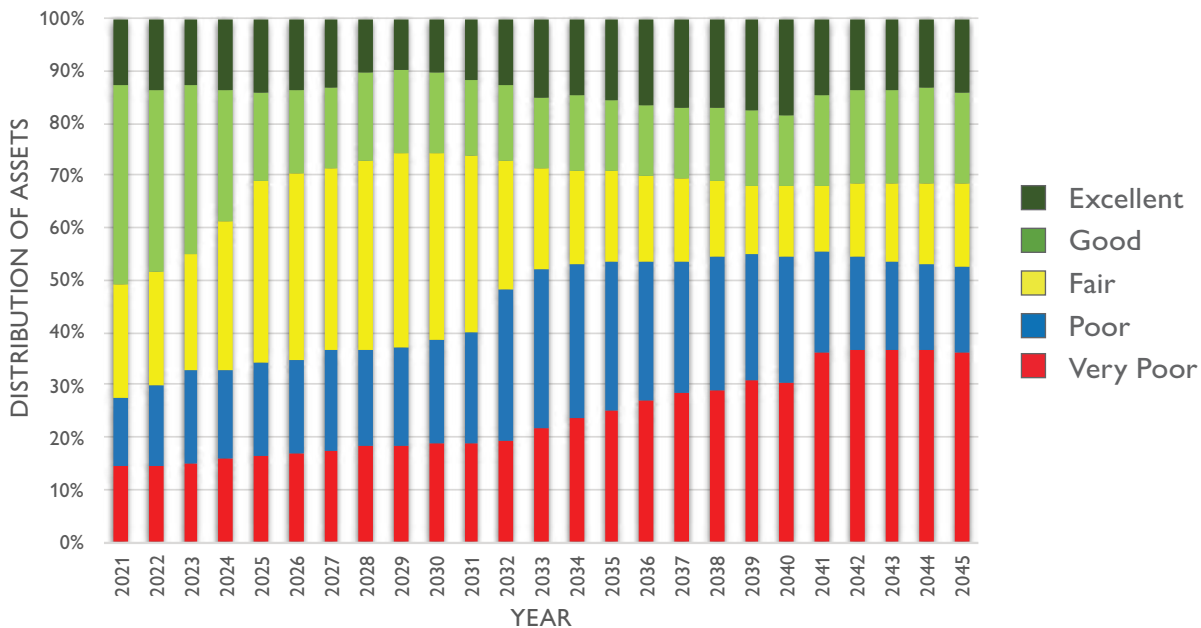


**ASSETS INCLUDE**  
344 km of pipes,  
59 stormwater  
management  
ponds,



**2 impoundments  
and 70 km of  
natural channels**

Annual performance of stormwater assets



## **CURRENT STRATEGY**

The city's stormwater assets are the pipes, catchbasins, ponds, and creeks that collect, manage and infiltrate rain water runoff from roads and properties. The stormwater pipe collection network has 344 km of pipes with associated catchbasins and manholes. The city's stormwater management facilities include 59 stormwater management ponds and 2 impoundments (Silver Lake and Clair Lake). In addition, the city is responsible for 70 km of natural creek channels. The stormwater network is a user fee funded asset.

Storm sewers can either be rehabilitated or replaced. In Waterloo we replace storm sewers that are in very poor condition when other work is being done on watermains or sanitary sewers during road reconstruction. Stormwater management ponds are dredged on a routine basis to remove sediment that has accumulated, restoring the full capability to treat and control the quality and quantity of stormwater runoff. We also maintain our natural stormwater assets (creeks) in the urban environment to support adequate flow through the system, control erosion, and reduce risk to critical infrastructure.

## **ASSET PERFORMANCE**

We evaluate the performance of our assets using asset data, a combination of historical knowledge, age, observed conditions, measurements and analytical techniques. The quality and availability of this information (also known as “asset data maturity”) is continuously improving. Updates to asset data and deterioration trends will change the projected performance of an asset. The higher the data maturity is, the greater confidence we have in our future performance projections for the asset. The maturity of our stormwater asset data is considered high.

Just under 30% of the stormwater assets are currently considered in poor or very poor performance. Over the 25 year timeline, with the current level of funding, we anticipate the percentage of stormwater assets with a poor or very poor performance profile to increase from approximately 30% in 2021 to approximately 50% by 2045. Based on the best available stormwater asset data, deterioration rates and 2020-2029 capital funding, we estimate that stormwater assets have an annual infrastructure funding gap of \$3.7 million.

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



**Stormwater  
collection assets  
with a poor  
or very poor  
performance**