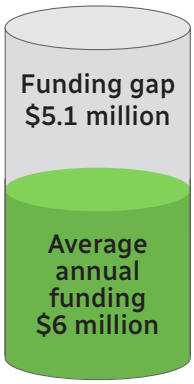


Stormwater

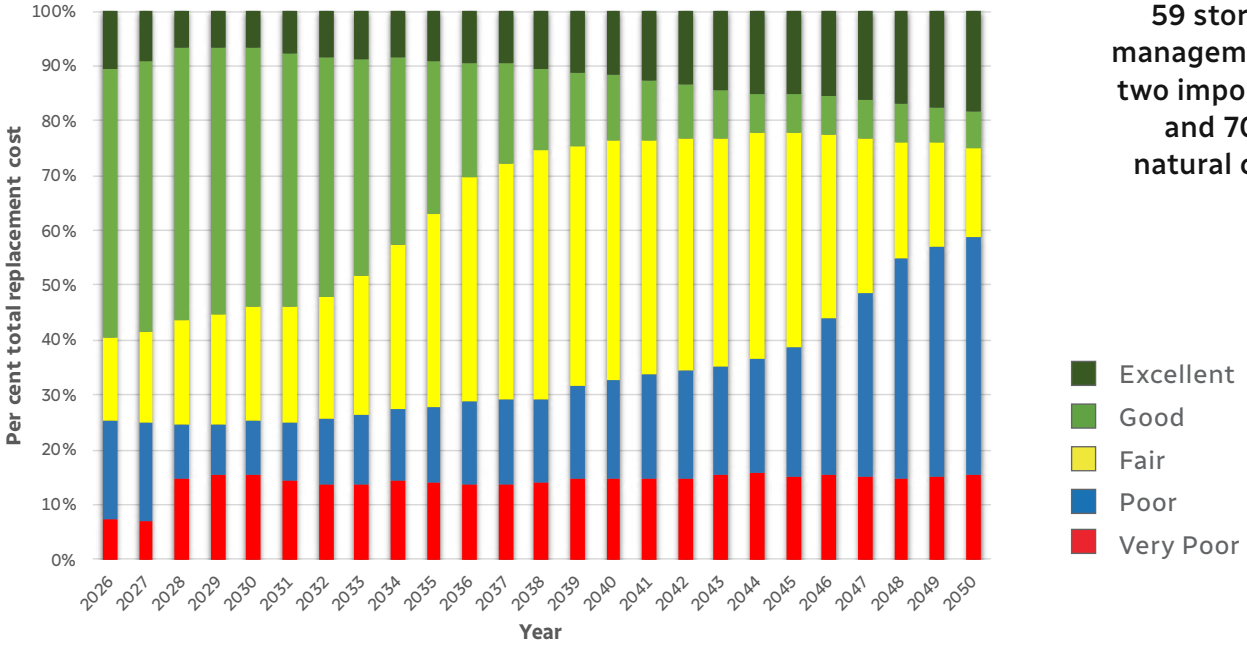
Total asset replacement value	**$976.6 million**
Current condition	**GOOD**
Projected condition in 25 years	**POOR**
Annual funding needed to meet target performance	**$11.1 million**
Annual average funding	**$6 million**
Annual funding gap	**$5.1 million**
Funding source	**Stormwater user fees**
Data maturity level	**High**



Annual funding needed $11.1 million

Assets include 354 km of pipes, 59 stormwater management ponds, two impoundments and 70 km of natural channels.

Projected annual performance of stormwater assets



A FEATURED STORY

A diverse approach to Stormwater Management

Our stormwater system continues to thrive through a diverse and sustainable approach to water management. The system plays a vital role in capturing, filtering and managing water runoff which is supporting environmental health and urban resilience. In addition to maintaining this infrastructure, we invest each year in the dredging, and rehabilitation of stormwater management ponds to ensure they continue to perform effectively and provide long-term environmental benefits. We also undertake ongoing creek bank stabilization projects to address erosion, protect natural habitats and enhance the health of our waterways. Together, these efforts reduce flooding, recharge groundwater and protect waterways, reflecting our commitment to effective, integrated stormwater solutions.

CURRENT STRATEGY



The 2026 replacement value of the City's stormwater management assets is estimated at $976.6 million. The City's stormwater assets are the pipes, catchbasins, ponds and creeks that collect, manage and infiltrate rainwater runoff from roads and properties. The stormwater pipe collection network has 354 km of pipes with associated catchbasins and manholes. The City's stormwater management facilities include 59 stormwater management ponds and two 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

Stormwater asset performance is evaluated using historical knowledge, age, and observed conditions. The quality and availability of our asset data (data maturity) are continuously evolving. The current data maturity level for stormwater assets is assessed to be medium. The city is continuously working to improve asset data quality.

Approximately 75% of the stormwater assets are currently considered in fair or better performance. Over the 25-year timeline, with the current level of funding, we anticipate the percentage of stormwater assets with fair or better performance profile to decrease from approximately 75% in 2026 to approximately 41% by 2050. Based on the best available stormwater asset data, deterioration rates and 2024-2026 capital budget and 2027-2033 capital forecast, we estimate that stormwater assets have an annual infrastructure funding gap of $5.1 million.

75%

Stormwater assets with a fair or better performance

LEVELS OF SERVICE

The following tables show the levels of service established by the city for stormwater assets. These metrics include the technical and community level of service required as part of the Ontario Regulation 588/17. Service metrics are reported for the prior year ending on December 31.



COMMUNITY LEVELS OF SERVICE

The following table outlines the qualitative descriptions that determine the community levels of service for stormwater assets.

SERVICE ATTRIBUTE	QUALITATIVE DESCRIPTION	2025
Scope	Description, which may include maps, of the user groups or areas of the municipality that are protected from flooding, including the extent of the protection provided by the municipal stormwater management system.	A significant portion of the developed area within the City of Waterloo is protected from flooding either through surface or underground stormwater management infrastructure as seen in **Figure 67** in the 2024 Asset Management Plan

TECHNICAL LEVELS OF SERVICE

The following table outlines the quantitative metrics that determine the technical level of service for stormwater assets.

SERVICE ATTRIBUTE	QUANTITATIVE METRICS	2024	2025
Scope	Per cent of properties in the municipality resilient to a 100-year storm.	81.5%	81.5%
	Per cent of properties in the municipality resilient to a 5-year storm.	92.3%	92.3%

The information presented here is based on the best available asset inventory and condition data as of March 2026, as well as funding details from the 2024-2026 approved capital budget and the 2027-2033 capital forecast.

The forecasting model allows staff to project the condition of City assets over a 25-year timeframe and therefore all funding is based on a 25-year average.