July & August 2024 Storm Events Flood Mitigation Action Plan

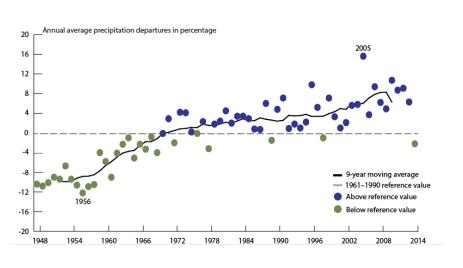
September 25, 2024

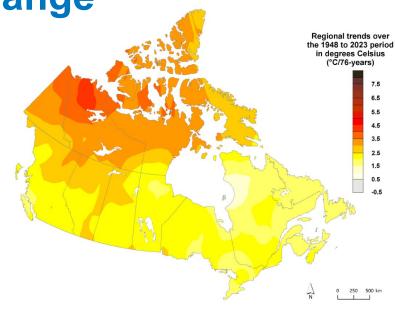
Emma Calvert
Acting Director, Infrastructure Planning & Engineering Services



Impacts of Climate Change







Stormwater Master Plan





ACTION – Expediting Dixie-Dundas

- Fast-tracking design
- Leaning on partnerships
- Single proponent management
- Advancing land acquisition
- Streamlining utility relocation



The implementation of this updated approach projects a completion date of **2028** (6-year acceleration)

ACTION – Undertakings (2024/2025)

Through the remainder of 2024 and into 2025, several undertakings will be initiated to expand and expedite capital projects in areas of the City where large clusters of impacts were identified – Little Etobicoke Creek, Lisgar, Malton, Applewood and Streetsville

Action	Ward	Timeline	Consultant Fees	Contractor Fees	Estimated Total Fees	
Accelerated and New Undertakings						
Review Flooding Concerns in North Streetsville for Causes and Mitigation Opportunities	11	Fall 2024	\$75,000	\$25,000	\$100,000	
Capacity Assessment of the Trunk Storm Sewer System in the Vicinity of Harvest Drive	1	Fall 2024	\$50,000	ı	\$50,000	
Design of Storm Sewer Upgrades for Historic Malton Village	5	2024	\$250,000	-	\$250,000	
Riverine Flooding Review	3	2024	\$500,000	-	\$500,000	
Accelerate the Design and Construction of the Dixie- Dundas Flood Mitigation Project	3	Ongoing - 2025	\$500,000	\$500,000	\$1,000,000	
Design for Downspout Disconnection Pilot in Black Walnut Tr. area	10	2025	\$350,000	-	\$350,000	
Additional Inlets along Winding Trail	3	2025	\$100,000	\$385,000	\$485,000	
Outlet Pipe from Runningbrook Drive through Cedarbrook Park	3	2025	\$100,000	\$1,080,000	\$1,180,000	
Construction of Storm Sewer Upgrades for Historic Malton Village	5	2025	-	\$3,750,000	\$3,750,000	
Streetsville Area Storm Sewer Capacity Review	11	2025	\$900,000	-	\$900,000	

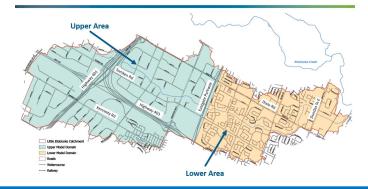


ACTION – Undertakings (2026)

Action	Ward	Timeline	Consultant Fees	Contractor Fees	Estimated Total Fees
Curb Cut from Hedgestone Court to Little Etobicoke Creek	3	2026	\$100,000	\$225,000	\$325,000
Construction for Downspout Disconnection Pilot in Black Walnut Tr. area	10	2026	-	\$500,000	\$500,000
Increase CBs on Fieldgate Drive and Hedgestone Court	3	2026	\$100,000	\$875,000	\$975,000
Overland pathway from Taviton Court to Little Etobicoke Creek	3	2026	\$100,000	\$225,000	\$325,000
Increase CBs on Taviton Court & upsize sewer outlet	3	2026	\$100,000	\$1,350,000	\$1,450,000

2026 will see a continuation of the undertakings, including further accelerating the recommendations from the Little Etobicoke Creek Flood Evaluation Study.

Little Etobicoke Creek Drainage Area





Post-storm Clean-up & Regular Maintenance

- 336 Service Requests were received during/following the storms
- 93% have been addressed, with the balance already programmed for action

Report a problem with a ditch

How and when to report cracked grates, debris, or water that isn't draining properly.

Report a problem with a catch basin

Report cracked grates or frames, debris or damaged pavement around the catch basin.

Report a blocked or damaged culvert or headwall

Report debris in a culvert or damage to a culvert or headwall.

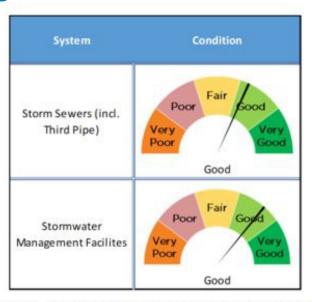


Table 1 - Summary of Stormwater System Condition (2023)

- Routine maintenance of infrastructure
 - Inspection and cleaning of inlets and outlets
 - Inspection and flushing of sewers
 - Catchbasin cleaning



ACTION - Increase Levels of Service



- Increase the inspection and cleaning of all stormwater inlets and outfalls to a monthly activity.
- Add more priority inlet and outlet locations as they are identified as areas of concern.
- Increase the frequency of CCTV inspection and flushing of sewers to once every 5 years

ACTION - Financial Relief Programs

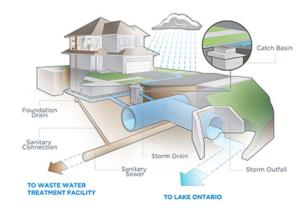
- Residential Compassionate Flood Relief Grant (City-wide)
 - One time grant up to \$1,000 for residential homeowners or tenants
 - Retroactive, and applicable, to July 16 or August 17&18 storms
 - Funded from tax
 - Program will be open by December 2024
- Basement Flooding Prevention Rebate Program (City-wide)
 - Rebate of up to \$6,800 for residents to install flood protection devices
 - Eligible works to include sump pumps, downspout disconnection and weeping tile (foundation drain) disconnection
 - Funded from the Stormwater Charge
 - Program will be open by February 2025



ACTION – Education & Other Initiatives

- Collaboration with Region
- Education/Resources





- Collaboration with CAs
- Notification/Alerts

- Collaboration with third parties
- Cost sharing





Staffing Requirements

Staffing resources are required to support the implementation of the recommended action plan and meet timelines.

Action Plan Implementation	Staffing		
Municipal Financial Relief and Flood Protection Rebate	2 ETE (incl. one contract)		
Programs	3 FTE (incl. one contract)		
Expand or Accelerate Capital Projects and Initiatives	2 FTE (contract)		
Enhance Inspections and Increase Maintenance and	5 FTE (non-union)		
Operations	10 FTE (union)		
Enhance public communication of project delivery	1 FTE (contract)		
status and existing programs/services			

Financial Impact

Additional funding is required to support the implementation of the recommended action plan and meet timelines.

Action Plan Financial Impacts	Funding Source	2024	2025	2026*
Financial Relief Grant	Tax	-	\$3,000,000	-
Basement Flood Protection Rebate	Stormwater Operating	-	\$6,400,000	\$6,400,000
Expand or Accelerate Capital Projects and Initiatives	Stormwater Capital	\$900,000	\$8,225,000	\$3,575,000
Enhance Inspections and Increase Maintenance and Operations & Staffing Resources	Stormwater Operating	-	\$2,941,000	\$2,966,000

^{* 2026} Budget shown for information purposes, not included in report recommendations.



DRAO Current Status

- MMAH continue to engage with staff and are willing to assess neighbourhoods impacted by flooding in the vicinity of the Little Etobicoke Creek
- Staff are currently organizing an itinerary for a PDAT to conduct a damage assessment in the vicinity of the Little Etobicoke Creek
- MMAH are willing to assess additional areas in the City where staff can identify riverine flooding damage, but it is not viable for them to visit all waterways in Mississauga
- MMAH will not make a decision about conducting an assessment for the August storm event until the assessments for the July event have been completed



ACTION – Grant Applications

- Housing Enabling Water Systems Fund (Intake #2)
 - Purpose: To help municipalities develop, repair, rehabilitate and expand critical drinking water, wastewater and stormwater infrastructure
 - Recommended Project: Dixie Dundas Flood Mitigation Project
 - Deadline: November 1, 2024
- Housing Enabling Core Servicing Stream
 - Purpose: To help municipalities build, maintain, repair and expand municipal roads, bridges and culverts to support the construction of new homes
 - Recommended Project: Ninth Line Widening Project
 - Deadline: October 18, 2024





Conclusion

- Staff have taken an action-oriented approach to propose a program to accelerate planned and new undertakings in respect of:
 - Flood mitigation projects
 - Increased inspections, maintenance and operations
 - Education and outreach
- A Residential Flood Relief Grant has been proposed to help residential homeowners or tenants offset the cost of basement flooding impacts
- A Basement Flooding Prevention Rebate has been proposed to assist residents make home flood protection improvements more affordable



Thank You

