

2023 Annual Performance Report – Mississauga Stormwater Management System

ENVIRONMENTAL COMPLIANCE APPROVAL (# 313-S701) – CITY OF MISSISSAUGA



Prepared by: Stormwater Service Area, Transportation & Works Department

For any inquiries related to the information contained in this report, please call 311 or email: <u>public.info@mississauga.ca</u>

ENVIRONMENTAL COMPLIANCE APPROVAL	ECA Number: 313-S701, Issue No. 2		
System Owner: Corporation of the City of Mississauga			
System Name: Mississauga Stormwater Manageme	nt System		
Reporting Period: 2023			
Submitted to:Director, Ministry of the Environment, Conservation and Parks (MECP)Report Date:April 29, 2024			



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OVERVIEW

Pursuant to Ontario's *Environmental Protection Act*, R.S.O 1990, c. E. 19 (EPA), this report has been prepared in compliance with Section 5.2, Schedule E: Operating Conditions of Mississauga's Environmental Compliance Approval (ECA) for the authorized municipal stormwater management system.

REPORTING – ANNUAL PERFORMANCE

A. Reporting Period (Sec. 5.2.1)

January 1st, 2023 to December 31st, 2023.

B. System Condition, Performance & Monitoring (Sec. 5.2.2)

System Conditions

Overall conditions of Stormwater Management System, at end of the reporting period, can be characterized as 'good'. This rating is derived from condition assessments of the Stormwater Collection System, Third Pipe Collection System and Stormwater Management Facilities as reported in Mississauga's Stormwater Asset Management Plan (see Table 1). For more detailed information on the state of stormwater infrastructure please refer to the City's most <u>recent published asset management plan</u>.

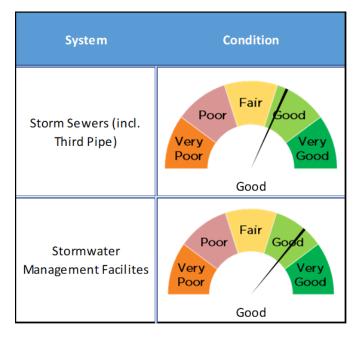


Table 1 – Summary of Stormwater System Condition (2023)



System Performance

Stormwater & Third Pipe Collection System - Overall performance of the stormwater collection system (i.e. sewers/pipes) has been defined as the percentage of inspected sewers with major blockages. Major blockages are those typically with obstructions of more than 30% of the inner pipe diameter. For 2023, major blockages were identified in under 6% of sewers. Issues such as blockages are corrected through the City's operations and maintenance programs to maintain optimal system performance. Storm sewer operations and maintenance activities completed in 2023 are detailed in the sections below.

Stormwater Management Facilities - Overall performance of the stormwater management facilities is provided through detailed annual inspections to visually identify performance or major functional issues. For 2023, 24% of the facilities inspected required interventions to ensure their continued performance. When these issues are identified they are corrected through the City's operations and maintenance programs. Stormwater management facility operations and maintenance activities completed in 2023 are detailed in the sections below.

Monitoring Data Summary

Not applicable at this time. Future system 'monitoring plan' to be developed and implemented in accordance with Ministry of the Environment, Conservation and Parks (MECP) guidelines (yet to be released) and ECA requirements.

C. Environmental Trends – Previous 5 Years (Sec. 5.2.3)

Not applicable (see item B, Monitoring Data).

D. Operations Summary (Sec. 5.2.4)

Mississauga's Stormwater Service Area completes a variety of operations and maintenance (O&M) programs and activities to maintain services of the stormwater management system. Depending on the type of works, some operations are completed through internal programming and others are contracted to external vendors or a combination of both. Where external vendors have completed detailed O&M and inspection plans for a specific facility (i.e. pumping stations), reporting documents are referenced in Appendix A. Table 2 summarizes the primary operations programs delivered.



Operating Program/Activity	Frequency*	Contract vs. Internal	
Closed-Circuit Television (CCTV) Sewer Inspections	Every 10 years	Contract	
Catchbasin Cleaning	Once every 3 years	Contract	
Spills Inspection & Response	As needed	Contract / Internal	
Street Sweeping	Seasonal	Contract	
Inlet/Outlet Cleaning	Seasonal / Post-event	Internal	
Sewer Cleaning/Flushing	Per inspection	Contract	
Stormwater Management Facility O&M	Per inspection	Internal	
Oil-Grit Separator (OGS) O&M	Per inspection	Contract	
Pumping Station O&M**	Per inspection	Contract	

*Frequency is subject to change through regular review and updates to level of service. **Pumping Station O&M is contracted to external vendors that carry-out detailed O&M plans.

Table 2 – Summary of Stormwater Operations Programs

Throughout the year, operations work is completed on the stormwater management system and often recorded in a work order (WO). Table 3 summarizes works completed by operations program.

Operating Program/Activity	# of Works Completed / Work Orders
CCTV Sewer Inspections & Cleaning/Flushing	50
Catchbasin Cleaning	36
Street Sweeping	8
Inlet/Outlet Cleaning	14
Stormwater Management Facility O&M	49
OGS Cleaning	1
Pumping Station O&M	Refer to Appendix A

Table 3 – Summary of Works/Work Orders by Operations Program

E. Inspection & Maintenance Details (Sec. 5.2.5)

Mississauga's Stormwater Service Area completes several formal inspection programs to evaluate conditions, identify deficiencies and maintenance and to plan repair/renewal works. Table 4 summarizes the primary inspection activities and the amount of inspection completed.



Inspection Program/Activity	Total
CCTV Sewer Inspections	210,000 m
Priority Inlet/Outlet Inspections - Cleaning	>50
Inlet/Outlet Inspections - Condition	20
Inlet/Outlet Inspections - Water Quality	209
Stormwater Management Facility Inspections	83
OGS Inspections	2
Pumping Station Inspections	Refer to Appendix A

Table 4 – Summary of Inspection Programs for Stormwater System

Through the above inspection programs or internal/external requests received, City staff undertake the necessary works to maintain the Stormwater System in a state of good repair. Similar to operations, some maintenance is completed through internal programming and other works are contracted to external vendors. Maintenance and repairs are often recorded in a work order (WO). Table 5 summarizes works completed by maintenance program.

Maintenance Program/Activity	# of Works Completed / Work Orders	Contract vs. Internal
Storm Sewer Repair	30	Contract
Cross-Connections	9	Contract
Catchbasin/Maintenance Hole Repair	122	Internal
Inlet/Outlet Repair	12	Internal
Ditch/Culvert & Headwall Repair	21	Internal
Stormwater Management Facility Repair	0	Contract / Internal
Pumping Station Repair	Refer to Appendix A	Contract

Table 5 – Summary of Works/Work Orders by Maintenance Program

F. Monitoring Equipment (Sec. 5.2.6)

Not applicable (see item B, Monitoring Data Summary).

G. Inquiry Summary (Sec. 5.2.7)

The City of Mississauga has a central intake system and dedicated division for resident/customer inquiries known as the 311 Citizen Contact Centre. Stormwater System inquiries and requests for service are logged by 311 and sent to the appropriate division/staff. Staff review, assess and investigate the concern and respond to all inquiries based on established service timelines (e.g. 3 to 10 days).



Should the inquiry identify the need to undertake operations & maintenance works or repairs on stormwater infrastructure, staff submit an internal work request or work order.

The Infrastructure Planning & Engineering and Works, Operations & Maintenance divisions receive a large volume of inquiries that relate to the City's Stormwater System. Table 6 below summarizes the inquiries received/resolved for this reporting period.

Inquiry Type	Total		
Infrastructure Planning & Engineering			
Storm Sewer By-law Compliance	6		
Spills & Pollution Prevention	32		
Stormwater Planning & Projects	14		
Stormwater Development & Design	36		
Stormwater Management Ponds	16		
Storm Sewers & Drainage	25		
Council Requests	6		
Works, Operations & Maintenance			
Catchbasin Clearing - Winter Operations	12		
Ditch, Culvert & Headwall Maintenance	349		
Storm Sewer Blockage	27		
Catchbasin & Maintenance Hole Covers	386		
Storm Sewer Outlet Maintenance	10		
Council Requests	9		
Total	928		

Table 6 - Summary of Public Inquiries for Stormwater System (2023)

H. Alterations to the Authorized System Summary (Sec. 5.2.8)

Alterations to the authorized Stormwater System are summarized in Tables 7, 8 and 9 below indicating those that require Director's Notification as well as Storm Sewer alterations (SW1 Form).



Asset ID	Description	Facility Type	Form SW2	Director's Notification	Date
	McKenzie Park Underground				
2102	Storage	Storage Facility	\checkmark	\checkmark	2/16/2024
		LID Facilities -			
3908	Sonnet Court LID	Retention	\checkmark	\checkmark	3/21/2024

Table 7 – Summary of Stormwater Management Facility Alterations (2023)

Asset ID	Description	Facility Type	ECA Number	Director's Notification	Date	Rationale
4801	Oil-Grit Separator (Goreway Drive & Brandon Gate Drive)	Sedimentation MTD - OGS	1440-C63KMP	~	2/16/2024	C. Not in service prior to CLI-ECA
5001	King's Park Infiltration Facility (NE of Derry Road East & Dixie Road)	Infiltration Basin	n/a	~	3/21/2024	D. Assumed via another agreement
4904	Torbram Road Pumping Station (7481 Torbram Road)	Pumping Station	6882-8WYJGD	✓	3/21/2024	E. Discovery of existing works

Table 8 – Summary of Other Stormwater Facilities Added to System Inventory (Transition to CLI-ECA)

Asset ID	Description	Form SW1	Status	ECA Number	
TBD Britannia Road Storm Sewer Replacement		✓	In Service	n/a	
Table 0. Communications (Strong Altrasticus (2022)					

Table 9 – Summary of Storm Sewer Alterations (2023)

I. Spills Response Summary (Sec. 5.2.9)

Staff receive notice of spills and/or abnormal discharge events from various sources (internal and external) and respond with the necessary mitigations and inspections. Table 10 below summarizes the City's spills response for the reporting period.

Spills / Abnormal Discharge	Total
Reported Events	69
Inspections	257
Work Orders	5

Table 10 – Summary of Spills Response

Mississauga

J. Corrective Actions Taken & Proposed (Sec. 5.2.10)

Through regular inspection programs, assessments and studies, the Stormwater Service Area identifies projects to improve or reinstate performance of the Stormwater Management System. Examples include drainage/capacity improvements, flood relief works, rehabilitation and retrofits and adding additional stormwater management services to the system. Identified projects are prioritized in the Stormwater 10-year Capital Plan and approved through the City's <u>Business Plan and Budget</u>. Table 11 highlights corrective stormwater projects proposed over the next three years (2024-26).

Corrective Actions Proposed	Estimated Construction Year	System
		Stormwater Management
Pond #2701 & 2702 Dredging & Rehabilitation	2024	Facilities
		Stormwater Management
Rathburn Road East LID (#2604)	2024	Facilities
		Stormwater Management
Lisgar Pumping Stations (#5508 & #5509)	2024-2025	Facilities
		Stormwater Management
Pond #0901 & #1001 Dredging & Rehabilitation	2024-2025	Facilities
Malton Drainage Improvements	2024-2025	Storm Sewers
Port Credit Drainage Improvements	2025	Storm Sewers
		Stormwater Management
Pond #4601 & #4602 Dredging & Rehabilitation	2025-2026	Facilities
		Stormwater Management
Pond #2401 & #4501 Dredging & Rehabilitation	2025-2026	Facilities
Cooksville Creek Flood Storage Facility - Huron		Stormwater Management
Heights Park (#2805)	2025-2026	Facilities

Table 11 – Proposed Corrective Actions (per Stormwater Capital Plan)

K. Status of Previously Reported Actions (Sec. 5.2.11)

Not applicable for initial report.



Appendix A – Reference Documents

- i. *2023 Annual Sewage Report, Lisgar Stormwater Pumping Station*. Prepared by Ontario Clean Water Agency (OCWA), dated March 26, 2024.
- ii. Torbram Stormwater Pump Station 2023 Operations Summary. Prepared by Region of Peel, received March 28, 2024.