

2023 Annual Performance Report

Peel Regional Road Stormwater Management System

Environmental Compliance Approval (#009-S701)

Prepared by: Infrastructure Programming, Transportation Division, Peel Region

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ENVIRONMENTAL COMPLIANCE APPROVAL	ECA Number: 009-S701, Issue No. 4
System Owner: Regional Municipality of Peel	
System Name: Peel Regional Road Stormwater Management System	
Reporting Period: 2023	
Submitted to: Director, Ministry of the Environment, Conservation and Parks (MECP)	Report Date: August 30, 2024

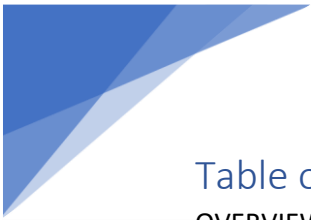


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OVERVIEW

This report has been prepared in fulfillment of the requirement under Peel’s Consolidated Linear Infrastructure Environment Compliance Approval (CLI ECA) # 009-S701, to submit an annual performance report to the Ministry of Environment, Conservation and Parks (MECP) summarizing the status of the stormwater system listed in the CLI ECA.

REPORTING – ANNUAL PERFORMANCE

A. Reporting Period (SEC. 5.2.1)

January 1st, 2023 to December 31st, 2023

B. System Condition and Performance (Sec. 5.2.2)

System Conditions

The Stormwater Management Systems portfolio is comprised of storm sewers, culverts, ditches, outlets, and stormwater management facilities which includes LID facilities (Low Impact Development), stormwater management ponds, pumping stations, and manufactured treatment devices (MTD).

The overall condition of Peel’s Stormwater Management System can be described, at the end of 2023, as in a “**good state**”, meaning most assets in the portfolio are achieving the desired targets. This rating is a cumulation of the condition assessments performed on Peel’s Stormwater Collection System and Stormwater Management Facilities (**see Table 1.**)

Table 1 – Summary of Stormwater Management System (2023)

System	Condition
Stormwater Management Ponds	Poor State
Manufactured Treatment Devices	Fair State
Storm Sewers	Good State
Stormwater Pumping Stations	Very Good State

Overall performance and condition of the LID facilities and stormwater management ponds is provided through detailed annual inspections to visually identify performance or major functional issues. For 2023, 86% of the LID facilities and stormwater management ponds inspected required interventions on at least one asset within the treatment train to ensure their continued performance.

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 0.33% of sewers.

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

Not applicable

D. Operations Summary (Sec. 5.2.4)

Based on Peel’s Inspection and Maintenance Program, stormwater assets are inspected at certain frequencies. **See Table 2.**

Table 2 - Summary of Inspection and Maintenance Program Frequencies

Operating Program/Activity	Frequency
Close-circuit Television (CCTV) Inspections	Every 10 years
Sewer Cleaning/Flushing	Per Inspection (based on inspection results)
Manufactured Treatment Device Inspections	Annually or every 3 years
Manufactured Treatment Device Cleaning	Per Inspection (based on inspection results)
LID Facility and Stormwater Management Pond Inspections	Annually
LID Facility and Stormwater Management Pond Operations and Maintenance	Per Inspection (based on inspection results)
Catch Basin Cleaning	Once every 3 years
Spills Inspection & Response	As needed
Street Sweeping	Seasonal (spring and fall)
Pumping Stations – Finch Avenue and Four Corners of Malton	
Station Inspection	Weekly
Generator Testing	Monthly
Wet Well Cleaning	Monthly

Operating Program/Activity	Frequency
Pumping Stations – Finch Avenue and Four Corners of Malton (continued)	
Building Maintenance	Monthly
Valve Inspection	Annually
Thermographic Inspection	Annually
Lift Equipment Inspection	Annually
Generator Load Testing	Annually
ESA Inspection	Annually
MCC Maintenance\Cleaning	Annually
SCADA Testing	Annually
Sump Pump Inspection	Monthly
QAQC Inspection	Semi-Annually
Valve Inspection	Annually
Pump Inspection	Annually
Flow Meter Calibration	Annually
Pump Chambers	Annually

E. Inspection and Maintenance Details (Section 5.2.5)

Peel performs inspections on the stormwater assets to gather information on the asset's condition, identify any deficiencies and to plan for any future State of Good Repairs (SOGR) as shown in **Table 3, Table 4 and Table 5.**

Table 3 - Summary of Stormwater Management Inspection Program Quantities.

Inspection Program/Activity	# of Work Orders/Works Completed	Length (km)
CCTV Sewer Inspections	674	11.7 km
Maintenance Hole Inspections	50	-
LID Facility and Stormwater Management Pond Inspections	12	-
Manufactured Treatment Device Inspections	94	-
Minor Culvert Inspections	83	-
Outlet Inspections	41	-

Table 4 – Summary of Work Orders Completed by the Maintenance and Repair Program

Maintenance Program/Activity	# of Work Orders/Works Completed	Length
Catch basin/ Maintenance Hole Repair	106	-
Catch Basin Cleaning	2618	-
Storm Sewer Flushing	674	11.7 km
Culvert Maintenance	185	-
Ditch Maintenance	39	-
Manufactured Treatment Device Cleaning	12	-
Minor Culvert Replacement	20	-
Storm Sewer Repair	34	-
Storm Sewer Lining	77	2.883 km

Table 5 – Summary of Pumping Station Maintenance and Repair Program

Activity	Hours
Capital Rehabilitation	7
Inspections	123.76
Preventative Maintenance	181.77
Emergency Maintenance	19
Corrective Maintenance	78.87
Total hours	410.4

F. Monitoring Equipment (Sec. 5.2.6)

Not applicable.

G. Public Complaints Summary (Sec. 5.2.7)

Peel receives stormwater complaints from residents/customers through Peel’s Customer Contact Centre. Calls are received then forwarded to the appropriate staff. All complaints are responded to within 2 business days of receipt except for emergency calls/complaints, which are responded to immediately upon receipt. See **Table 6** for a summary of Public Complaints received by Peel Region for this reporting period.

Table 6 – Summary of Public Complaints

Complaint Type	Total
Blocked Catch Basin	24
Ditching Issues	19
Drainage/Flooding	45
Culvert Entrance Issues	26
Washouts	7
Total number of SWM complaints	121

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

Alterations to the authorized Stormwater System are summarized in **Table 7** below.

Table 7 – Summary of Stormwater Facilities Added to System Inventory (Transition to CLI-ECA)

Description	Project Type	Stormwater Alterations	Form Completed	Form Date	Rationale
King Street & Albion-Vaughan Road	Intersection and Storm Improvements	<ul style="list-style-type: none"> Storm sewer replacement Storm sewer extension Storm sewer modification Ditching Enhanced swale Addition of oil grit separator (OGS) 	Director Notification	2024/08/15	Discovery of existing works
17940 Airport Road, Caledon	Storm Improvements	<ul style="list-style-type: none"> Storm sewer modification Culvert replacement Bioswale or enhanced swale 	Director Notification	2024/10/11	Discovery of existing works
Installation of Oil Grit Separators on Erin Mills Parkway north of Sheridan Park Drive and on the Queensway east of Hurontario	Storm Improvements	<ul style="list-style-type: none"> Addition of four (4) oil grit separator (OGS) 	Director Notification	2024/08/16	Discovery of existing works
Coleraine Drive (approx. 300m North of George Bolton Parkway to approx. 1200m north of George Bolton	Storm Improvements	<ul style="list-style-type: none"> Storm sewer extension 	Director Notification	2023/11/16	An ECA issued prior to the date of issue of CLI ECA

I. Spills or Discharge Events Summary (Sec. 5.2.9)

Peel's Environmental Control group is responsible for the administration and enforcement of the water, wastewater and backflow bylaws. Environmental Inspectors from Peel's Environmental Control group inspect and investigate reported spills received through Peel's Customer Contact Centre. **Table 8** below summarizes Peel's spills response for 2023.

Table 8 – Summary of Spills

Spills/Abnormal Discharge	Total
Reported events	94
Spills Inspections/Investigations	123

J. Summary of Actions Taken and Proposed Improvements (5.2.10)

Through Peel’s condition assessment and inspection programs, the Infrastructure Programming group identifies projects to improve the condition and performance of the existing Stormwater Management System including rehabilitation, replacement, and capacity improvements. See **Table 9** for a summary of actions taken and proposed to improve the authorized system.

Table 9 – Summary of Action Taken to Improve/Correct performance of Authorized System

Corrective Actions Taken and Proposed	Construction Year	Project Status	System
Professional Services for Storm Sewer Flushing, Inspection and Condition Assessment	2023	Complete	Storm Sewers
Low Impact Development (LID) retrofit on Erin Mills Parkway between Highway 403 and Burnhamthorpe Rd	2024	Ongoing	Stormwater Management Facility
Trenchless Technology Rehabilitation – Relining and Spot Repairs	2026	Detailed Design	Storm Sewers
Outfall Improvements	2026	Planning	Storm Sewers
Drainage Improvements of Highway 50 from Mayfield Road to Healey Road	2027	Detailed Design	Storm Sewers Stormwater Management Facilities
Mayfield - Heart Lake to Hurontario Road Widening – Includes existing storm facility improvements	2031	Detailed Design	Storm Sewers Stormwater Management Facilities

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

Not applicable for the initial report.