

West Lincoln

Your Future Naturally

West Lincoln Township Stormwater Management System

The Corporation of the Township of West Lincoln

2023 Annual Performance Report

January 1 to December 31, 2023

Ministry of the Environment, Conservation and Parks

ECA # 077-S701

West Lincoln Township Stormwater Management System – 2023 Performance Report

This report summarizes the annual performance of the West Lincoln Township Stormwater Management System (West Lincoln Stormwater System) in accordance with Environmental Compliance Approval #077-S701, Schedule E Condition 5.2 from January 1 to December 31, 2023.

Description of Stormwater Management System

The West Lincoln Township Stormwater Management System is a municipal stormwater management system which conveys stormwater to the final receiver, Lake Ontario.

The Stormwater Management System serving the Township of West Lincoln is a separate system for stormwater within the Lake Ontario watershed. The system consists of storm sewers, culverts, ditches, management facilities and outlets to Lake Ontario. All privately and regionally owned connections and systems, as well as any municipal drains (constructed under the Ontario Municipal Drainage Act) are not covered under the Town's CLI-ECA and are not discussed in this report. Overall, the system consists of conveyance pipe, ditches, and various treatment types including ponds and oil and grit separators before runoff is discharged to its final receiver in Lake Ontario. Much of the existing system has predated contemporary stormwater management standards, hence the Town is continuously evaluating opportunities to improve quality and quantity control of the system to lessen the impacts during major events.

The West Lincoln Stormwater System (Town owned) consists of approximately twenty two (22) kilometres (km) of conveyance pipe, sixteen (16) kilometres of ditches/swales, four (4) Oil and Grit Separators, and nine (9) Dry/Wet Storm Ponds.

Report Distribution

As required under Schedule E – Condition 5.3 of ECA 077-S701, the annual report will be available to the public at no charge on the Town's website or through Public Request by June 1st of the reporting year.

Summary of Monitoring Data (if applicable)

The West Lincoln Stormwater System is overseen by the Public Works Department, with the Public Works Staff being responsible for the day-to-day operation and maintenance (i.e. mainline sewer flushing, ditch maintenance, small culvert installations/replacements, etc.) and the Engineering Division managing long term programs (i.e. annual facility assessments, asset condition assessments, rehabilitation programs, etc.).

Sewer Inspection Program

The Town completed a flushing and inspection program for the West Lincoln Stormwater System consisting of storm sewer mainline flushing and camera (CCTV) inspections. The purpose of these inspections is to identify infrastructure that have structural or other noted deficiencies. Information collected during the inspections is reviewed and analyzed by a CCTV contractor. An assessment condition rating report is provided to the Town to support future infrastructure repairs and replacement projects. Deficiencies found during the CCTV inspections are prioritized and addressed through rehabilitation programs.

Sewer Flushing Program

Semi-annual flushing is performed in areas of the system that have been identified as “problematic” through past incidents and inspections. Flushing is conducted using a hydrovac/water flushing truck. High-pressure, high-volume water and specially designed nozzles are used to clear the system of built-up debris that has the potential to reduce system efficiency. During the flushing program, operators inspect each maintenance hole that is being accessed for flushing. Any deficiencies that are identified are prioritized for future rehabilitation programs.

Summary of Monitoring Programs

Table A details the monitoring activities performed by West Lincoln staff during the reporting period. Based on the data collected and reviewed, it has been determined that the system is performing effectively and as designed. At this time there are no major modifications required for the collection system.

Table A – Summary of Monitoring Program

Program Title	Program Description	Program Data from Reporting Period	Adverse Effects on the Natural Environment
Storm Sewer Flushing	Reactive flushing due to obstructions or other CCTV findings.	Approximately 500 metres of mainline sewer were flushed in 2023 by the Town’s contractor.	No
Oil/Grit Separators	Annual inspection and cleaning program. Additional condition assessment project.	Post annual inspection, 4 OGS units were cleaned in 2023.	No
Ditches and Culverts	Routine inspections and maintenance.	Inspections performed during routine road patrols. Operational issues addressed as required.	No

Inlet and Outlet Inspections	Routine and pre/post significant weather event inspections and maintenance.	Staff performed inspections in response to weather report assessments. Post-event inspections completed after all significant weather events.	No
SWM Ponds	Routine inspections and maintenance. Additional condition assessment project.	Routine inspections were performed, and maintenance including seasonal management of vegetation. Condition assessment completed for all Dry/Wet Ponds.	No
Catch Basins	Annual inspection and cleaning program.	All catch basins (447) were inspected and cleaned in 2023.	No
CCTV Inspections	CCTV inspection program.	1,900 metres of mainline storm sewer were inspected and CCTV in 2023.	No

Operational Issues and Corrective Actions

All maintenance was performed on behalf of the Owner, by qualified Operators or qualified contracted service providers who exercise due diligence in ensuring the works, and the related equipment, are properly operated and maintained to achieve compliance with the Approval.

As noted in Table B, there were no operational issues identified during the reporting period.

Table B – Summary of Operational Issues and Corrective Actions

Date	Description	Corrective Actions
N/A	N/A	N/A

Major Structure & Equipment Calibration, Maintenance and Repairs

Table C provides a summary of activities carried out on major structures and collection system works that were not covered under the operational issues section of this report.

Table C – Major Structure & Equipment Calibration, Maintenance and Repairs

Major Structure or Equipment	Summary of Work performed in 2023
Fall Arrest Equipment	All fall arrest and lifting devices were inspected during the reporting period.
Stormpond and OGS Inspections	All OGS, as well as Dry/Wet Stormponds were inspected by a consultant. A condition

	assessment was completed for all Dry/Wet Ponds.
CCTV and Flushing	1,900 metres of mainline storm sewers were flushed and CCTV in 2023.

Inquiries and Complaints

The Town received Seventeen (17) complaints during the reporting period, related to the West Lincoln Stormwater System. The types of complaints and corresponding steps taken to address them, are described in Table D.

Table D – Summary of Complaints

Complaint Type	Location of Issue (Owner)		Resolution
	Public	Private	
Catch basin blockage	4	-	Staff responded and removed debris as required.
Culvert blockage	9	-	Staff responded and removed debris as required.
Culvert replacement	1	-	Staff inspected culverts and replaced as required.
Ditch blockage	3	-	Staff responded and removed debris as required.

Summary of Alterations to the Authorized System

Table E summarizes the projects that saw alterations to the collection system. There were no authorized alterations to the Stormwater System in 2023. Capital projects from the reporting period were related to water and road infrastructure.

Table E – Summary of Alterations to the Authorized System

Alterations to the Authorized System (Project Name)	Project Details	Does this Project Pose a Significant Drinking Water Threat (SDWT)?
N/A	N/A	N/A

Summary of Spills or Abnormal Discharges

There were zero (0) environmental incidents such as spills or abnormal discharges from the stormwater system to be reported for 2023.

Table F – Summary of Stormwater Spills or Abnormal Discharges

Overflow or Spill Location	SAC Incident Number	Date mm-dd-yyyy	Volume (m3) and Duration (Estimate)	Adverse impacts / Corrective Actions
N/A	N/A	N/A	N/A	N/A

Summary of Actions Taken to Improve System Performance

Table G summarizes the capital and operating projects undertaken during the reporting period.

Table G – Summary of Performance Improvements

System Performance Improvement	Project Description
Stormwater Management Facilities and Oil and Grit Separator Sediment Assessments	<p>A consultant was retained to undertake sediment surveys and condition assessments at Town owned Stormwater Management Facilities (SWMFs) and Oil and Grit Separator (OGS) units.</p> <p>The objective of the assessment was to determine sediment removal and maintenance requirements.</p>

Previous Reporting Year Update

This section of the report highlights the ongoing work within the Township of West Lincoln to improve its stormwater management system. As this is the inaugural year for the CLI-ECA Annual Performance Report, there are no pre-existing actions or projects to update. New goals and objectives are being developed internally and there will be quantifiable and tangible action items reviewed in the 2024 Performance Report.

Public Reporting

The Stormwater Management System Performance Report will be communicated to the system owner (Council) and posted on the Town’s website and made available for public review (free of charge) at Town Hall.

Report Date: May 5, 2023

Tray Benish

Manager of Operations