



2023 Annual Performance Report

Norfolk County Urban Stormwater Management System

1. Introduction

This report has been completed in accordance with the requirements of the Norfolk County Urban Stormwater Management System Environmental Compliance Approval Number: 070-S701 Issue Number 2, approved May 16, 2023, Schedule E Section 5.2. The report covers the period from January 1, 2023 to December 31, 2023.

The Norfolk County Urban Stormwater Management (SWM) System consists of five independent systems serving the drainage areas of the urban communities of Delhi, Port Dover, Port Rowan, Simcoe and Waterford. These systems are designed for stormwater (i.e. designed not to convey sanitary sewage, combined sewage) within the Great Lakes – St. Lawrence River Primary Watershed and Lake Erie Secondary Watershed. The Municipal SWM System consists of storm sewers, culverts, ditches, overflow lands, Stormwater Management Facilities and outlets.

The ECA covers the entire Urban Municipal SWM System owned and operated by the County of Norfolk. This ECA does not cover municipally, or privately owned sewage works on industrial or commercial land.

2. Summary & Interpretation of Monitoring Data

Schedule E Section 5.2.2 – The County, through its Roads Division, regularly observed and monitored the system for any major failures. There were no adverse effects on the natural environment documented. Commencing in May 2024, the County's stormwater infrastructure monitoring program will be supported by three new positions. The primary focus moving forward will be to ensure annual monitoring and inspection programs meet or exceed the requirements of the CLI-ECA.



3. Interpretation of Environmental Trends

Schedule E Section 5.2.3 – Prior to the conditions of the new CLI-ECA, the County did not have a formalized monitoring program. In 2024 the monitoring programs as defined by the new O&M Manual will be created, including detailed records of inspection and maintenance. As the new monitoring programs progress, there will be consistent data that can be trended and interpreted.

4. Operating Problems & Corrective Actions

Schedule E Section 5.2.4 – Below is a summary of operating problems that required immediate corrective action to allow the system to function as designed.

Table A – Operating Problems and Corrective Actions

Date	Operating Problem	Corrective Action
	Waterford – Green Street required maintenance outside of annual CB cleaning program to suck out basins between Leamon Street and St. James Street.	Suspect basin in front of #65 Green Street was not tied into St. James Street when reconstructed a few years ago, plans are underway to reconnect.

5. Inspections, Maintenance, Repairs

Schedule E Section 5.2.5 – Below is a summary of inspections, maintenance, and repairs completed by County staff or contracted service providers. Annual cleaning of catch basins was completed in Delhi. The current cleaning program for the urban areas of Simcoe, Waterford, and Port Dover aims to clean all catch basins annually.

Table B – Inspections, Maintenance, Repairs

Work Order	Date	Work Type / Description
		Simcoe – Norfolk St N, first basin north of 14 th Street West on the west side of the road (15m of new 700 CSP was installed from the basin to the creek to the southwest).



Work Order	Date	Work Type / Description
		Simcoe – County easement north of #14 Nelson Street, new 2x2x2 basin installed and tied into basin directly in front of residence.
		Simcoe – dead end of Metcalfe St N, French drain installed to replace existing destroyed drain (1.5m of 500mm HDPE, with four 6m lengths of 150mm perf Big O running to the north and south of the basin, draining into a bed of clear set on sand).
		Port Dover – #80 New Lakeshore, as requested by drainage, added 4-6” on basin.
		Port Dover – dead end of Grace Street, hot mix added to improve flow to basins at the dead end.
	October 2, 2023	<p>SWMF #6 – Somerset Phase 1 & 4</p> <p>Completed remediation works of SWMF #6 in Port Dover. Works included rebuilding the outlet structure, wildlife management, re-establishing low-flow channel, sediment removal, disposal and site restoration. Invasive species (Phragmites) were also managed as part of the site restoration. Approx. 340m³ of sediment removed.</p>
	Jan – Dec 2023	<p>All SWMF’s in Norfolk County received a general inspection.</p> <ul style="list-style-type: none"> • 20% of facilities were noted to monitor for erosion, no facilities had appropriate signage or safety measures, • 30% of the facilities had noted invasive species (Phragmites), • 50% of facilities required work around inlet and outlet structures to ensure flow was not blocked, mostly due to vegetation. <p>A more intensive review and re-inspection will occur with new storm operations team in 2024 to address issues identified.</p>



6. Calibration and Maintenance of Monitoring Equipment

Schedule E Section 5.2.6 – The current SWM System does not include any monitoring equipment that required calibration for the reporting period.

7. Complaints

Schedule E Section 5.2.7 – The County has no record of any complaints related to the SWM System during the reporting period.

8. Alterations to the Authorized System

Schedule E Section 5.2.8 – Below is a summary of the alterations made to the authorized system.

Table C – Alterations to Authorized System

Form	Details	Status
SW1	Delhi – new storm sewer servicing James Street from Ann Street to Crosier Street.	Parts 1-5 Signed
SW1	Simcoe – new storm sewer servicing Colborne Street North from Windham Street to Union Street as part of Phase 2 Colborne Street North Reconstruction.	Parts 1-5 Signed
SW1	Simcoe – proposed storm sewer replacement, design based on five-year storm event, located on West Street from Holden Avenue to Brook Street, existing storm sewer outlet to be maintained.	Parts 1-5 Signed

9. Spills & Abnormal Discharge Events

Schedule E Section 5.2.9 – There were no reported spills or abnormal discharges that occurred in the SWM System during the reporting period.



10. System Performance Improvements/Corrections

Schedule E Section 5.2.10 - In order to properly assess the system as a whole for performance improvement a new stormwater operations department is being implemented. Initiating in May 2024 these positions will have defined duties that would relate strictly to the operation and maintenance of Norfolk County's stormwater systems.

11. Summary of Previous Reporting Year Actions

Schedule E Section 5.2.11 – As this is the first Annual Performance Report as required by the CLI-ECA there are no previous reporting year actions. The internal development of the SWM program will lead to tangible action items and performance improvements that will be reviewed in the 2024 Annual Performance Report.