

# **Grimsby Stormwater Management System**

The Corporation of the Town of Grimsby

**2024 Annual Performance Report** 

January 1 to December 31, 2024

Ministry of the Environment, Conservation and Parks

ECA # 065-S701

#### Grimsby Stormwater Management System - 2024 Performance Report

This report summarizes the annual performance of the Grimsby Stormwater Management System (Grimsby Stormwater System) in accordance with Environmental Compliance Approval #065-S701, Schedule E Condition 5.2 from January 1 to December 31, 2024.

#### **Description of Stormwater Management System**

The Grimsby Stormwater System is a municipal stormwater management system which covey's stormwater to the final receiver, Lake Ontario.

The Stormwater Management System serving the Town of Grimsby 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 Grimsby Stormwater System (Town owned) consists of approximately one hundred (100) kilometers (km) of conveyance pipe, twenty-six (26) km of culverts, an unknown length of ditches/swales, nineteen (19) Oil and Grit Separators, and ten (10) Dry/Wet Storm Ponds.

#### **Report Distribution**

As required under Schedule E - Condition 5.3 of ECA 065-S701, the annual report will be available to the public at no charge on the Town's website or through Public Request by June 1<sup>st</sup> of the reporting year.

#### Summary of Monitoring Data (if applicable)

The Grimsby Stormwater System is overseen by the Public Works Department, with the Transportation Services Division being responsible for 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.).

The CLI ECA requires the Town to develop and implement a Stormwater Monitoring Plan by May 21, 2024 or within twenty-four (24) months of the Ministry's guidance document being published. The purpose of this plan is to ensure stormwater infrastructure is functioning as designed, and to enable proactive decision making to improve or maintain performance. At this time, the Ministry has not yet published the required Monitoring guidance; therefore, a plan has not been developed. The development and implementation of the plan will proceed once the guidelines are published.

#### **Sewer Inspection Program**

The Town is in the process of completing a flushing and inspection program for the Grimsby 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. The Town has completed year two (2) of the four (4) year program to assess all mainline sewers within the Grimsby Stormwater System.

#### **Summary of Monitoring Programs**

Table A details the monitoring activities performed 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 required major modifications required for the collection system.

**Table A – Summary of Monitoring Programs** 

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 16,000 metres of mainline sewers were flushed and inspected in 2024 by the Town's contractor. Reports were provided to the Engineering Division.	No
Oil/Grit Separators	Annual inspection and cleaning program. Additional condition assessment project.	There were no contracted inspection or cleaning activities in 2024.	No
Ditches and Culverts	Routine inspections and maintenance.	Inspections performed during routine road patrols. Operational issues address 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 and cleaning were performed, including seasonal management of vegetation.	No
Catch Basins	Inspection and cleaning program	There were no contracted inspection or cleaning activities in 2024.	No
CCTV Inspections	The Town has a 4-year project for CCTV.	16,000 meters of mainline storm sewer were inspected in 2024.	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. Table B summarizes the operating problems which required immediate corrective actions.

Table B - Summary of Operational Issues and Corrective Actions

No reported operational issues. Complaint based responses are summarized in Table A.

Scheduled repairs and maintenance are summarized in Table D

#### 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 2024
Fall Arrest Equipment	All fall arrest and lifting devices were inspected during the reporting period.
CCTV and Flushing	Year two (2) of a four (4) year project to assess all mainline storm sewers was completed. Flushing was performed as needed during inspection periods.
Ridge Road East – Culvert Replacement	Rehabilitation work was completed on a bridge/culvert located on Ridge Road East, approximately 145 meters west of Thirty Road. The rehabilitation work included a full removal and replacement of the structure including the installation of cast in place concrete wing walls, guiderails and roadway restoration.
Woolverton Road – Culvert Replacement	Rehabilitation work was completed on Woolverton Road between Ridge Road West and Mud Street West (RR73). The work included the full removal and replacement of three cross-culverts.

#### **Inquiries and Complaints**

The Town received seventy-nine (79) complaints during the reporting period, related to the Grimsby 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	# of Calls	Steps Taken
Ditch and Swale - Maintenance	11	Staff inspected and cleared vegetation, sediment, or obstructions to restore proper flow. Additional maintenance scheduled as required.
Ditch and Swale - Drainage	13	Staff inspected and cleared vegetation, sediment, or obstructions to restore proper flow. Additional maintenance scheduled as required.
Ditch and Swale - Litter/Debris	1	Staff inspected and removed litter and other debris.
Cross Culverts	3	Staff inspected for blockages and structural integrity. Culverts are cleaned, repaired or replaced as necessary.
Entrance Culverts	32	Staff inspected for blockages and structural integrity. Culverts are cleaned, repaired or replaced as necessary.
Catch Basins	15	Staff inspected and removed sediment, debris, and standing water to maintain functionality.
Storm Sewer - Cleaning/Flushing	1	Staff performed flushing or vacuum cleaning to remove sediment, debris, and obstructions.
Inlets and Outlets	1	Staff inspected and removed sediment, litter and other debris.
Maintenance Holes	2	Staff inspect for damages. Repairs completed as needed.

## Summary of Alterations to the Authorized System

Table E summarizes the projects in which alterations were made to the collection system. There were no alterations to the Stormwater System in 2024.

Table E – Summary of Alterations to the Authorized System

Alteration to the Authorized System (Project Name)	Project Details	Does this Project Pose a Significant Drinking Water Threat (SDWT)?
-	-	-

### Summary of Spills or Abnormal Discharges

There were no spills or abnormal discharges reported in 2024. However, there were two (2) spills related to cross-connections discovered through CCTV inspections in 2023. Repairs are scheduled for 2025. Table F summarizes the incidents and corrective actions.

Table F – Summary of Spills or Abnormal Discharges

Spill Location	SAC Incident Number	Date mm-dd-yyyy	Volume (m3) and Duration (estimate)	Adverse Impacts / Corrective Actions
Single Residential Sewer Lateral	1-3V4XZQ	09-14-2023	47 years 12,205 m3	Single residential sewer lateral was discovered to be connected to the Town's storm sewer system.  Lateral(s) to be re-routed to ensure proper connection to sanitary and storm mains (2024 Capital Project). Scheduled for 2025.
Single Residential Sewer Lateral	1-4HL64S	12-13-2023	22 years 3,034 m3	Single residential sewer lateral was discovered to be connected to the Town's storm sewer system.  Lateral(s) to be re-routed to ensure proper connection to sanitary and storm mains (2024 Capital Project). Scheduled for 2025.

#### 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	In 2023, a consultant was retained to undertake sediment surveys and condition assessments at Town owned Stormwater Management Facilities. The objective of the assessment was to determine sediment removal and maintenance requirements.  The rehabilitation of both the Kelson Ave. and Civic Storm Ponds have been budgeted for 2025.	
Street Catch Basins	In 2025, the Town will be cleaning all street catch basins.	

System Performance Improvement	Project Description
Oil and Grit Separators (OGS)	In 2025, the Town will be inspecting eight (8) OGS units. Cleaning will be completed as needed.
10 Year Capital Summary	The 2025 budget includes a ten (10) Year Capital Summary. This summary outlines rehabilitation work proposed for the stormwater system.
Asset Management Plan	In 2025, the Town will be updating the Core Asset Management Plan. As a part of the update the Town's Capital Renewal Funding Gap projections will be revised. These updates will show the forecasted average annual need over the next ten (10) years compared to the average annual funding over the same period.
Stormwater Operations and Maintenance Manual	A consultant was retained to develop and implement an Operations and Maintenance (O&M) Manual for the Stormwater System. The manual is to be implemented throughout 2025, including integration into the CMMS.

#### **Previous Reporting Year Update**

This section of the report highlights the ongoing work within the Town of Grimsby to improve its stormwater management system. Below is an updated on the 2023 actions and/or projects.

2023 System Improvement	Project Update
Computerized Maintenance Management System (CMMS)	In 2024, the Town fully implemented the CMMS within the Transportation Division. In 2025, the OM manual and its maintenance schedule will be integrated into the system for streamlined asset management.

### **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: March 14, 2025

B. Wartman

**Director of Public Works**