



2023

ANNUAL PERFORMANCE REPORT

WELLINGTON COUNTY STORMWATER MANAGEMENT SYSTEM
APRIL 2024



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1.0 Introduction

This annual performance report was prepared in accordance with Schedule E, Condition 5.2 of the Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) Number 337-S701, issued April 20, 2023 by the Ministry of the Environment, Conservation and Parks (MECP) for the Wellington County Stormwater Management (SWM) System.

Condition 5.2 of the CLI-ECA outlines the below requirements in the Annual Performance Report:

- a) a summary of all monitoring data along with an interpretation of the data and an overview of the condition and operational performance of the Authorized System and any Adverse Effects on the Natural Environment;
- b) a summary and interpretation of environmental trends based on all monitoring information and data for the previous five (5) years;
- c) a summary of any operating problems encountered and corrective actions taken;
- d) a summary of all inspections, maintenance, and repairs carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Authorized System;
- e) a summary of the calibration and maintenance carried out on all monitoring equipment;
- f) a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints;
- g) Includes a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat;
- h) Includes a summary of all spills or abnormal discharge events;
- i) Includes a summary of actions taken, including timelines, to improve or correct performance of any aspect of the Authorized System; and
- j) Includes a summary of the status of actions for the previous reporting year.

1.1. System Description

The County of Wellington covers a large geographical area. As such, the roads and related assets, like the Municipal Stormwater Management (SWM) System are separated into 4

different areas to better assist with the maintenance of these assets. The Municipal SWM System serving the County of Wellington’s drainage area, is a separate system for stormwater (i.e. designed not to convey sanitary sewage, combined sewage) within the Great Lakes and the Lower Grand River, Upper Grand River, Maitland River, Credit River, Saugeen River watersheds. The SWM System consists of storm sewers, culverts, ditches, stormwater management facilities and outlets; however, does not currently have any Stormwater Management Ponds or LID Facilities. The County’s SWM System connects to several member and surrounding municipalities.

2.0 Monitoring Data

The Operation and Maintenance (O&M) Manual required as per Schedule E, Section 3.2 of CLI-ECA No. 337-S701 was mandatory as of January 9, 2024 and therefore in effect after the reporting year of this report. Additionally, the requirement of a Monitoring Plan in Schedule E, Condition 4 of CLI-ECA No. 337-S701 is also not in effect during the reporting year of this report. Due to the Monitoring Plan not being implemented during the reporting period, verification of operational performance has not been assessed.

However, Table 1 describes the four programmes in place in 2023. These processes monitor the SWM System and provide details on the state of the infrastructure that comprise the system to help maintain functionality and aid decision-making of Capital works. The frequency of these events have been determined to understand and detect important changes in the network. There are no reports of any Adverse Effects on the Natural Environment of the SWM System.

Programme Name	Asset Class	Programme Description	Frequency
Catch Basin Cleaning	Catch basins	A contractor is hired to complete cleaning and inspections of all catch basins in the County.	Annually
Culvert OSIM Inspections	Culverts – width greater or equal to 3 metres	Inspected using Ontario Structure Inspection Manual (OSIM) inspections by a qualified consultant and rated BCI.	Biennially
Storm Sewer Condition Assessment	Storm sewer pipes	As outlined in our Asset Management Programme, storm sewers are inspected and cleaned as need and rated using NASSCO Pipe Rating System.	Quadrennially
Culvert Condition Assessments	Culverts – width less than 3 metres	Recorded formal internal inspections to record condition and operation.	Quadrennially

Table 1: SWM System Programmes

Table 2 displays the overall condition of the infrastructure components of the SWM System using the Asset Management Database internal rating system (Very Good, Good, Fair, Poor and Very Poor) determined in the Asset Management Programme. Each asset class has an overall average condition in the Good to Fair range.

Asset Class	Overall Average Condition	Source
Storm sewers, Outlets and Oil/Grit Separators	Good	Annual State of Infrastructure 2023 *
Culverts – greater or equal to 3 metres in width	Good	Annual State of Infrastructure 2023 *
Culverts – less than 3 metres in width	Fair	Preliminary condition value from inspections

*Annual State of Infrastructure 2023 contains the latest condition values for the year 2022.

Table 2: Asset Condition Values

3.0 Environmental Trends

There were no environmental trends based on the monitoring information described in Section 2 of this report. The programmes listed in Table 1 do not provide environmental trends data. This section will be populated after the implementation of the Monitoring Plan as described in Schedule E, Condition 4 of CLI-ECA No. 337-S701.

4.0 Operational Issues and Corrective Actions

There were no operating problems encountered during the reporting period throughout 2023. Table 3, shown below remains not applicable.

Location	Operating Problem	Corrective Action
N/A	N/A	N/A

Table 3: Operating problems and corrective actions

5.0 Maintenance Activities

This section aims to summarize all inspections, maintenance and repairs carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Authorized System. Since the County does not require any equipment or apparatus for the system, this section will largely be concentrated on summarizing the inspection, maintenance and repairs on components of the County's SWM System.

5.1. Inspections

As mentioned in Section 2 of this report, there are four programmes in 2023 that inspect elements of the SWM System at varying frequencies; storm sewer pipes, catch basins and culverts. Table 4 displays the latest inspection instance along with the next inspection year. The only programme that did not have an inspection in 2023 was the Storm Sewer Condition Assessment, which last took place in 2021 and expected to take place again in 2025. The Catch Basin Cleaning, the Culvert OSIM Inspections and the Culvert Condition Assessments all taking place in 2023; next occurring in the years 2024, 2025 and 2027.

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Programme Name	Latest Inspection	Next Inspection Year
Storm Sewer Condition Assessment	2021	2025
Catch Basin Cleaning	Oct – Nov 2023	2024
Culvert OSIM Inspections	2023	2025
Culvert Condition Assessments	2023	2027

Table 4: SWM System Inspections

5.2. Maintenance and Repairs

The Catch Basin Cleaning programme described in Section 2 of this report occurs every year and inspects all the catch basins owned by the County and also serves as a maintenance activity by cleaning the catch basins during the inspections. As well, the County Roads staff assist in the maintenance and repairs to various elements of the system. Roads staff create Work Orders (WO) using the Computerized Maintenance Management Software (CMMS) under the Work Order Type, “Drainage & Structure Maintenance” when performing maintenance on the SWM System. Shown in the Table 5 below, is a summary of the number of WO Road staff created during the reporting period. A total of 150 work orders were created from January 1 to December 31 in 2023. Four of those WO correspond to cleaning culverts, 70 were created for placing and replacing culverts, 47 are related to ditching activities, 11 are associated with manhole and catch basin repairs or cleaning and 18 work orders are related to other drain and structures.

WO Type Group	Number of WO
Culvert Cleaning	4
Culvert Place/Replace	70
Ditching	47
MH & CB Repair & Clean	11
Other Drain & Structures	18
Total	150

Table 5: Number of SWM System Related Work Orders

Supplementary maintenance was completed throughout the year by a contractor to clean storm sewer and culvert assets of the SWM System described in Table 6. There was a total of nine locations that required cleaning over seven different days prior to the completion of the Catch Basin Cleaning programme in the fall of 2023 to help maintain the operating condition of the system.

Date	Location	Description
April 11, 2023	Wellington Road 16	Clean catch basin for repair
May 13, 2023	Wellington Road 109	Culvert cleaning
June 19, 2023	Wellington Road 123	Culvert cleaning
June 22, 2023	Wellington Road 123	Culvert cleaning
June 22, 2023	Wellington Road 109	Culvert cleaning
July 12, 2023	Wellington Road 45	Culvert cleaning
August 30, 2023	Wellington Road 109	Storm sewer and culvert cleaning
September 20, 2023	Wellington Road 10	Culvert cleaning
September 20, 2023	Wellington Road 109	Culvert cleaning

Table 6: Additional Culvert and Catch Basing Cleaning

6.0 Calibration of Monitoring Equipment

The County of Wellington does not require any equipment to monitor the SWM System, therefore there are no calibration and maintenance records.

7.0 Complaints Related to Sewage Works

Complaints related to sewage works are recorded in the County's CMMS. They are assigned a service request number and sent to pertinent County staff for resolution. In total there were nine complaints received involving drainage issues of SWM System components; see Table 7. All complaints received were resolved and had appropriate actions. In addition to the nine complaints recorded in Table 7, seven other records were recorded in the CMMS regarding questions on status follow up, capital projects and entrance permits related to culverts. All the seven calls regarding questions received a call back with the applicable information.

Service Request No.	Description of Complaint	Action
SR-0849	Culvert drainage problem	Grate at culvert end point cleaned.
SR-0906	Driveway wash out	Culvert cleaned and additional work on private property needed.
SR-0932	Sinkhole at entrance due to culvert in poor condition	Culvert replaced.
SR-1026	Culvert drainage problem	Ditched area while awaiting adjacent connected culvert is cleaned or replaced.
SR-1042	Pooling water on property	Ditched area
SR-1073	Driveway wash out after shoulder gravel added.	Shoulder gravel graded to correct cross slope.
SR-1080	Culvert drainage problem causing pooling	Culvert cleaned.
SR-1089	Concern with culvert size being too small	Additional culvert installed.
SR-1252	Debris covering catch basin preventing water from entering catch basin.	Catch basin grate cleaned off.

Table 7: SWM System services request during the reporting period.

8.0 Alterations to the Authorized System

There were three Alterations to the Authorized System commencing within the reporting period as shown in Table 8. Alterations were focused on improvements to storm sewer and culvert assets with no alterations to Stormwater Management Facilities or Third Pipe Collection. None of the below projects pose a Significant Drinking Water Threat.

Project Name	Project Description	Significant Drinking Water Threat
Reconstruction of East Mill Street (Elora)	Reconstruction of East Mill Street (Wellington Road 18) from Metcalfe Street to Melville Street, resulting in replacement and new installation of storm sewer infrastructure.	No
Lake Road (Wellington Road 32) from Waterloo Region 33 to Concession 2	New installation of culverts and replacement of culverts with the addition of new storm sewer infrastructure on Lake Road from Waterloo Region 33 to Concession 2.	No
Wellington Road 42 and Wellington Road 24 Intersection Improvements	Intersection improvements to Wellington Road 42 and Wellington Road 24, requiring installation of new storm sewer infrastructure.	No

Table 8: Alterations that pose a Significant Drinking Water Threat

9.0 Spills or Abnormal Discharge Events

There were no spills or abnormal discharge events throughout the 2023 reporting year.

Date	Description
N/A	N/A

Table 9: Spills or Abnormal Discharge Events

10.0 Status of Actions

Schedule E, Section 5.2.1 (a) of ECA No. 337-S701 states, "... the first report shall cover the period of January 1, 2023 to December 31, 2023". Since this is the first Annual Performance Report, Table 10 remains not applicable due to no action items from the previous reporting year.

Action	Status
N/A	N/A

Table 10: Status of Actions