



# **Annual Performance Report 2023**

**Napanee Wastewater Collection System  
CLI-ECA Number: 157-W601**

Town of Greater Napanee

Prepared: May 16, 2024

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# 1. Introduction

Wastewater treatment and collection systems in Ontario are governed by the Ministry of the Environment, Conservation and Parks (MECP) and are also subject to federal legislation. The purpose of a wastewater treatment system is to remove solids and nutrients in order to minimize the impact of the effluent on the receiving waterbody. The wastewater collection system collects and conveys wastewater, thus protecting public health and the environment from contaminated water.

This report was prepared in accordance with the requirements of the Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) Number 157-W601, dated January 11<sup>th</sup>, 2023, for the Napanee Wastewater Collection System, Schedule E, Section 4.6. This assessment pertains to the reporting period from January 1, 2023, to December 31, 2023. This report must be forwarded to the MECP no later than March 31<sup>st</sup> for the preceding year.

## 1.1 Facility and Systems Overview

The Napanee Wastewater Collection System consists of works for the collection and transmission of sanitary sewage, consisting of trunk sewers, separate sewers, nominally separate sewers, sewage pumping stations, and forcemains, with discharge to the Napanee Water Pollution Control Plant. Following treatment, the effluent is discharged into the Napanee River.

The system includes seven sanitary sewage lift stations, including: Clarksville Sanitary Lift Station (SLS), County Road 2 SLS, County Road 41 SLS, Grange Crescent SLS, Jim Kimmett Boulevard SLS, Napier Street SLS, Victoria Street SLS. There is also one (1) leachate/sewage pumping station known as the Enviro Park Receiving Station located on Enviro Park Lane.

The Napanee Wastewater Collection System contains no known combined sewers.

The system is operated and maintained by the Town of Greater Napanee through the Utilities Department.

## 2. Monitoring Data and Environmental Trends

As per the CLI-ECA Schedule E, Section 4.6.3, a summary of all required monitoring data along with interpretation of the data and any conclusions drawn from the data about the need for future modifications to the Authorized System or system operations, is required, if applicable. This section of the CLI-ECA reporting requirements does not apply.

## 3. Operating Problems Encountered and Corrective Actions Taken

Operating problems encountered and applicable corrective actions taken for 2023 are shown in Table 1.

**Table 1. 2023 Operating Problems and Corrective Actions Taken**

Location	Operating Problem	Corrective Action
Lift Stations	Rags/debris impacting pumps at lift stations	A boom truck is readily available to lift pumps from dry/wet wells as needed, for access to remove the obstruction. Each sewage lift station has a duty and standby pump, and a spare is on hand for replacement as required.

## 4. Calibration, Maintenance, and Repairs

Monitoring and metering equipment is calibrated by a third party on a regular basis.

All sewage pumping stations are checked by Town of Greater Napanee Utilities staff at minimum, three days per week. All inspection data is kept in log sheets and is routinely uploaded to an electronic spreadsheet.

Preventative maintenance is scheduled for all equipment at the pumping stations at regular frequency (frequency depends on the equipment and type of maintenance). Maintenance activities are scheduled within the departments Work Order System, Antero.

For the reporting period (2023), the following maintenance and repairs were completed:

**Table 2. 2023 Calibration, Maintenance, and Repair Activities**

Pump Station/Location	Maintenance, Calibration and Repair Activities
All Sewage Pumping Stations	Scheduled inspections of sewage pumping stations including amperage checks for pumps, run time, visual inspection of panel, alarm check on generators, test run of pumps, testing of level sensors/floats, visual inspection of wet well, grounds keeping, snow removal and other maintenance checks are completed at minimum, 3 days a week
Enviro Park Receiving Station	Scheduled inspection of leachate pumping station including amperage checks for pumps, run time, visual inspection of panel, alarm check on generator, test run of pumps, testing of level sensors/floats, visual inspection of wet well, grounds keeping, snow removal and other maintenance checks is completed a minimum of once per week
All Pumping Stations with a natural gas backup generator	Generators automatically run once per week for half an hour
All Pumping Stations with a generator	Scheduled monthly internal generator testing
All Pumping Stations with a generator	Scheduled annual third-party generator testing
All pumping stations with a wet well	Annual wet well pump/clean out

Jim Kimmett Blvd SLS, Highway 41 SLS, Napier St SLS, Victoria St SLS, and Enviro Park Receiving Station	Third-party Flow Meter Calibrations at sanitary sewage lift stations, as applicable (Doppler Flow Meters are unable to be calibrated)
Community Road, Highway 41, Alkenbrack Street, Sarah Street, James Street, Edgewood Drive, Campbell Crescent, Southcrest Drive, Cynthia Street, Briggs Street, McCabe Street, River Road, Parks Street	Camera inspections
River Road, Pearl Street, Edgewood Drive, Alfred Street, Sarah Street, James Street, McCabe Street, Cynthia Street, Briggs Street, Alkenbrack Street	Sanitary flushing
County Road 41 Lift Station	Replaced one pump at lift station
219 Bridge Street 70 Graham Street 169,172 John Street 201 Water Street	A limited number of sanitary sewer breaks were repaired, as required

## 5. Complaints

A standard operating procedure (SOP) is in place for addressing complaints received from the community. Table 3. presents complaints received during 2023 that concerned the sanitary collection system. There were two complaints related to odours from the sanitary sewer system, both of which were investigated.

**Table 3. 2023 Collection System Complaints**

Location	Nature of Complaint	Actions
██████████	Odour	Utilities department investigated; sewer back up on Town side was identified and rectified.
██████████	Odour	Utilities department investigated; no sewer back up identified.
██████████	Sewer Backup	Utilities department investigated; blockage appeared to be on resident side, and information regarding permits to repair was provided.
██████████	Damaged Sewer Cap	Utilities department investigated, replaced cap.

## 6. Alterations to the Authorized System

Table 4. presents the alterations made to the Authorized System in 2023. There were no alterations that pose a Significant Drinking Water Threat.

**Table 4. 2023 Alterations to the Authorized System**

<b>Street</b>	<b>Location</b>	<b>Nature of Alteration</b>
East Street	Dundas Street to North of Isabella Street	Sanitary sewer replacement
County Road 41	County Road 41 Lift Station	Pump replacement

## 7. Collection System Overflows and Spills

The discharge of untreated sanitary sewage from the collection system can occur at any of the seven sewage lift stations and/or collection system manholes as the result of flooding events, power outages, pump failures, or sewer blockages. Measures are in place to prevent bypassing/spills which include: multiple (backup) pumps at all lift stations, spare pumps, high level alarms, backup power generation capability, and readily available vacuum truck service.

There were no collection system overflows or spill events that occurred during the reporting period.

## 8. Sanitary Sewage Collection System Improvement Efforts

The Town of Greater Napanee is undertaking initiatives to reduce sanitary collection system overflows, spills, and sewage treatment plant overflows and bypasses. These will ensure the sewage pump stations are operating as designed. The key initiatives include:

- Continued scheduled sanitary sewer flushing and camera inspections. The specific areas are determined based on operational observations and annual operational budget.
- Continued routine inspections, maintenance/repairs/calibrations.
- Long term plan to construct a new WWTP with a significant capacity increase.
- Sanitary sewer replacements as required and approved by Capital budgets each year.