2025 Annual Performance Report
Sanitary System

Town of Aurora

Reporting Period: Jan 1, 2025 to Dec. 31, 2025

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1 Introduction

1.1 Purpose of the Sanitary Annual Performance Report

The purpose of the Sanitary Annual Performance Report is to summarize the operational performance, monitoring activities, maintenance work, capital improvements, and system events for the Town of Aurora's wastewater collection system in 2025. The report fulfills annual compliance requirements under Environmental Compliance Approval (ECA) No. 115 W601.

The Town operates a Class 2 Wastewater Collection System consisting of gravity sewers, forcemains, maintenance holes, and sanitary pumping stations. In 2025, the Town continued to complete routine maintenance, respond to operational issues, track alarms, and undertake capital upgrades to ensure system reliability. Work completed during the year supports long term asset management planning and compliance with applicable municipal, regional, and provincial standards.

2 Sewage Collection System Overview

2.1 Description of the Sewage Collection System

The Town's wastewater collection system includes gravity sewers, forcemains, and eight sanitary pumping stations. Sewage flows are collected and conveyed to York Region's sanitary trunk system for further transmission and end use management.

2.2 Sanitary Infrastructure

2.2.1 Linear Assets

Sanitary linear assets include all pipe-based infrastructure that convey sewage horizontally through the Town's collection system. These assets extend across the municipal road network and easements. Linear components include:

- **Gravity sewers** - primary network conveying flows by gravity
- **Siphon sewers** - low-point inverted pipes conveying sewage under obstructions
- **Forcemains** - pressurized pipes conveying flows from pumping stations

Sanitary Linear Asset Quantities are summarized in Table 1 below.

Table 1 – Sanitary Linear Asset Quantities

Asset Type	Quantity (km)
Gravity Sewers	203.9
Siphon Sewers	0.3
Forcemains	3.2

2.2.2 Vertical Assets

Sanitary vertical assets are structures installed vertically or contain vertically oriented components. They are fixed facilities used for the collection, pumping, or equalization of sanitary flows. Vertical components include:

- **Sanitary pumping Stations (SPS)** – facilities that lift sewage to higher elevations
- **Sanitary Equalization Tanks** – facilities that provide temporary storage to manage peak flows

Sanitary Vertical Asset Quantities are summarized in Table 2 below.

Table 2 – Sanitary Vertical Asset Quantities

Asset Type	Quantity
Sanitary Pumping Stations	8
Equalization Tanks	4

There are sanitary sewer overflow pipes at seven of the Town's eight sanitary pumping stations. Forest Grove (formerly Keyhole) SPS does not have an overflow.

A summary of the overflow infrastructure for each pumping station is provided in Table 3 below.

Table 3 – SPS's and Sanitary Sewer Overflow Infrastructure Summary

Asset ID	Station Name	Address	Structures	Overflow Configurations
SAN-PS-5060-01	Trent SPS	560 St. John's Sideroad	Consists of a 2.4m diameter wet well and a control building.	200 mm Emergency overflow to outfall in slope northwest of pumping station site. Elevation 249.
SAN-PS-4465-01	Woodland Hills SPS	3 Woodland Hills Boulevard	Consists of a 2.4m diameter wet well and a control building.	200mm diameter emergency overflow pipe, discharging into adjacent stormwater management pond. Elevation: 296.72.
SAN-PS-3680-01	Elderberry SPS	12 Equestrian Drive	Consists of a 2.4m diameter wet well and a control building.	300 mm diameter emergency overflow sewer, discharging into a valley adjacent to pumping station and an emergency bypass system. Elevation 296.51.
SAN-PS-3000-01	Temperance SPS	79 Temperance Street	It consists of a 2.4 m diameter wet well and an aboveground control panel.	75 mm diameter Emergency overflow pipe connecting to a downstream receiving manhole at an invert elevation of 255.10.

Asset ID	Station Name	Address	Structures	Overflow Configurations
SAN-PS-2190-01	Vandorf SPS	385 Vandorf Sideroad	Consists of a 2.4 m diameter wet well and a control building.	250 mm diameter emergency overflow sewer, discharging into an open space block adjacent to pumping station.
SAN-PS-1675-01	Dejardins SPS	24 Desjardins Way	Consists of two 1.2 m diameter collection manholes, two 2.4 m diameter wet wells (with only one in use), and a control building.	300 mm diameter emergency overflow sewer from collection maintenance hole MH PS1 discharging to stormwater management pond.
SAN-PS-1910-01	Forest Grove SPS	25 Forest Grove Court	Consists of a 3.6 m diameter wet well, 2 m x 3.4 m valve chamber and a control building.	Forest Grove SPS is not configured with an overflow discharge point.
SAN-PS-1835-01	Bridgepointe SPS	39 Bridgepointe Court	Consists of a 3.6 m diameter wet well, 2 m x 3.4 m valve chamber and a control building.	200 mm diameter emergency overflow sewer, discharging into a wetland through a drainage swale located immediately south of the sanitary pumping station.

3 Operational Activities Conducted in 2025

3.1 Sanitary Sewer Operations

Day-to-day operation and maintenance activities for the Town's sanitary pumping stations was performed by Aquatech Canadian Water Services. Pumping stations were inspected on a weekly, monthly, or bi-monthly basis depending on the required level of inspection and preventative maintenance schedule. Maintenance included but was not limited to routine site checks, pump inspections, wet-well monitoring, generator testing, and mechanical/electrical.

These inspections supported early detection of operational issues and ensured continuous and reliable system performance.

3.2 Monitoring, Maintenance, and Operational Response

The Town's sanitary system is managed through an integrated approach that includes system monitoring, routine operations, preventative maintenance, and corrective response activities. These activities apply to both the sanitary collection network and pumping station infrastructure and are intended to support reliable service delivery, minimize operational risks, and address issues in a timely manner.

3.2.1 Monitoring and Operational Response

The sanitary system is monitored through a combination of field inspections, CCTV investigations, and real-time monitoring systems at sanitary pumping stations, including control panels and auto-dialer alarm systems.

Operations staff respond to system alarms and observed issues as required. Typical conditions requiring response include:

- High or low wet-well levels
- Pump failure or overload
- Float adjustment issues (typically due to grease buildup)
- Intrusion/security alarms (no issues found upon inspection)

In response, staff attend the sites to investigate conditions and restore normal operation. All alarms and operational events in 2025 were addressed through standard response procedures.

3.2.2 Preventative Maintenance Programs

Preventative maintenance activities are undertaken across the sanitary system to support long-term asset performance and reduce the likelihood of blockages, equipment failure, and surcharging events.

These activities include:

- Routine inspection and maintenance of sanitary pumping stations
- Pump servicing (lubrication, seal checks, and operational verification)
- Inspection of valves, piping, guide rails, and associated infrastructure
- Testing of alarm systems and auto-dialers
- Inspection of electrical panels and mechanical equipment
- Generator testing
- Site housekeeping and security checks

In addition, targeted sanitary sewer flushing and cleaning is carried out in priority areas of the collection system based on operational need. This includes locations with historically observed higher grease accumulation or reduced flow conditions. These areas are addressed through periodic “hot spot” maintenance activities.

Location and frequency of hot spot sewer flushing maintenance completed in 2025 is summarized in Table 4 below.

Table 4 – Hot Spot Sewer Flushing Locations

Location / Area
Yonge St. / Orchard Heights Blvd.
Yonge St. / Catherine Ave.
Yonge St. / Cousins Dr.
Henderson Dr. / Poplar Cres.
First Commerce Dr.
Wellington St. W / Harriman Rd.
Tyler St. / Mill St.
330 Industrial Pkwy N

3.2.3 Operational Issues and Corrective Actions

Routine operational issues encountered in 2025 were consistent with typical sanitary system operations and did not indicate system-wide concerns. These included localized debris accumulation, grease buildup in select areas, minor instrumentation irregularities, and isolated equipment faults.

Where required, corrective actions were undertaken to address site-specific issues and restore normal operation. No recurring or system-wide operational deficiencies were identified during the reporting period.

Operational maintenance and repairs completed in 2025 are summarized in Table 5 below.

Table 5 – Operational Maintenance and Repairs Completed in 2025

Maintenance or Repair Activity	Description or Amount of Activity
Sanitary Lateral Repairs	9
Sewer Blockage Repair	16
Lateral Flushing	5 laterals
Transmission line Flushing	4.25 km
Pumps Replaced	2 pumps (Desjardin Lift Station)

4 Condition Assessment Program

4.1 Condition Assessment Strategy Linear Infrastructure

Sanitary linear assets are individual components within a broader sanitary network and typically extend over long distances. Associated linear child components are incorporated into the parent asset segments.

The Town inspects approximately 10% of the sanitary network annually using CCTV technology to identify visible defects, with the goal of establishing a complete baseline inventory by 2027. Inspection activities are being advanced to increase overall system coverage and to address outstanding inspections.

Asset condition is captured using established Town condition indexes and scoring systems. These condition scores are incorporated into the Town's risk models and used to prioritize rehabilitation projects within the 10-year capital plan.

4.2 Condition Assessment Strategy Vertical Infrastructure

Sanitary vertical discrete assets are centralized facilities with multiple child components that function as a single system. Within the Town, these assets primarily consist of sanitary pumping stations.

All vertical asset locations are assessed for condition on a five-year cycle. The most recent assessment was completed in 2023, with the next scheduled for 2028.

Asset condition is captured using established Town condition indexes and scoring systems. These condition scores are incorporated into the Town's risk models and used to prioritize rehabilitation projects within the 10-year capital plan.

5 Public Complaints

During 2025, the Town received one (1) public complaint related to the sanitary collection system. On September 1 and 2, 2025, residents in the Ironshore Court and Trillium Drive area reported sewage odors and concerns that sewage may be entering the nearby creek. The complaint was received through voicemail messages to the Town.

Operations staff attended the site on the morning of September 2, 2025, and confirmed that the maintenance hole located behind 12 Ironshore Court was surcharging due to a blockage in the sanitary sewer. The surcharge resulted in wastewater entering the adjacent creek.

The blockage was cleared the same day, and the overflow ceased at approximately 2:45 PM. The incident was subsequently reported to the Ministry's Spills Action Centre under SAC Incident No. 1-PG73JY in accordance with regulatory requirements.

6 Spills and Sewage Overflows

One (1) sewage overflow occurred in 2025, associated with a sewer backup at Ironshore Court, confirmed on September 2, 2025.

Spill and Sewage overflow incidents in 2025 are summarized in Table 6 below.

Table 6 – Spill and Sewage overflow incident(s) in 2025

SAC Incident number	Date	Location	Reasoning	Action(s) taken	Duration
1-PG73JY	Sept 2, 2025	Maintenance hole behind 12 Ironshore Court	Blockage in sanitary main caused maintenance hole surcharge and creek discharge	• Investigated by Town Staff. • Capital Sewer (Town's contractor) cleared blockage and the overflow stopped.	4.5 hrs

7 Capital Works and Studies

7.1 Capital Works and Studies in 2025

Capital Works, Studies and the status of each project are listed in Table 7 below.

Table 7 – Capital Works and Studies Completed in 2025

Project & Location	Description	Project Status
McLeod Drive; Lacey Court; Marksbury Court	Localized sanitary sewer repair and rehabilitation.	Construction works completed in 2025.
Centre Street from Yonge Street to Spruce Street	200mm diameter sanitary sewer replacement, including connected sanitary service laterals.	Construction works completed in 2025.

Project & Location	Description	Project Status
Bridgepointe SPS - 39 Bridgepointe Court	Sanitary pumping station (SPS) with 3.6m diameter wet well, 2m x 3.4m valve chamber and a control building assumed by the Town.	Subdivision was assumed by the Town.
Dejardins SPS - 24 Desjardins Way	Replacement of the programmable logic controller (PLC) and two pumps.	Pumps and PLC were successfully replaced.
Town-wide	Arc Flash Hazard Analysis of all sewer pumping stations and water booster station to support worker safety and regulatory compliance.	The study reviewed existing electrical hazards and provided labeling and recommendations to help ensure the safe operation and maintenance of water and wastewater facilities.
Town-wide	Development of a Water and Wastewater (W&WW) Master Plan.	The W&WW Master Plan commenced in November 2024 and is expected to be completed by mid-2026.
Town-wide	Condition assessment of 50% of gravity sewer inventory and maintenance holes.	Report developed for CCTV data previously captured. The report incorporated previously captured CCTV data for other areas of Town for the purposes of prioritization.

7.2 Planned Capital Works and Studies for 2026

Summary of Capital Works and Studies planned for 2026 are listed in Table 8 below.

Table 8 – Planned Capital Works and Studies for 2026

Project & Location	Description
Child Drive and Murdock Avenue	The design for the sanitary sewer rehabilitation project on Child Drive will be completed in 2026. Sanitary lateral rehabilitation on Murdock Avenue is targeted to be completed in 2026.
Patrick Drive, Webster Drive, and Glass Drive	The design for the sanitary sewer rehabilitation project on Patrick Drive, Webster Drive, and Glass Drive will be completed in 2026.
Town-wide	Baseline CCTV data collection for all unsurveyed Town sanitary sewers and maintenance holes.

Appendix

Figure – Sanitary Collection System and Sanitary Pumping Stations