

MUNICIPAL SEWAGE COLLECTION SYSTEM ANNUAL PERFORMANCE REPORT

ECA# 128-W601, Issue 1

TOWNSHIP OF SPRINGWATER MUNICIPAL SEWAGE COLLECTION SYSTEM

**FOR THE PERIOD:
JANUARY 1, 2025 – DECEMBER 31, 2025**

*Prepared for the Corporation of the Township of Springwater
by the Ontario Clean Water Agency*



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Township of Springwater Sewage Collection System 2025 Annual Performance Report

This report was prepared in accordance with the requirements of the Environmental Compliance Approval for Municipal Sewage Collection Systems, Schedule E, Section 4.6.1.

Municipal Sewage Collection System ECA #	128-W601, Issue 1
Sewage Works	Township of Springwater Municipal Sewage Collection System
Collection System Owner	The Corporation of the Township of Springwater
Reporting Period	January 1, 2025 to December 31, 2025

Note: As per Schedule E, Section 4.6.1 of CLI-ECA #128-W601, the Owner shall prepare an annual performance report for the Authorized System that is submitted to the Director on or before March 31st of each year and covers the period of January 1st to December 31st of the preceding calendar year.

Is the Annual Report available to the public at no charge on a website on the Internet?

Yes

Note: As per Schedule E, Section 4.7.1 of CLI-ECA #128-W601, the annual performance report must be made available, on request and without charge, to members of the public who are served by the Authorized System; and 4.7.2 must be made available, by June 1st of the same reporting year, to members of the public without charge by publishing the report on the Internet, if the Owner maintains a website on the Internet.

Location where Annual Performance Report required under CLI-ECA #128-W601, Schedule E will be available for inspection. (CLI-ECA #128-W601, Schedule E, Section 4.6.1 & 4.7.1):

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|---|
| <ul style="list-style-type: none">• Township of Springwater Municipal Office 2231 Nursery Road, Minesing• www.springwater.ca |
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Pursuant to Schedule E, sections 4.6.3 to 4.6.9, this Annual Performance Report shall:

- If applicable, includes a summary of all required monitoring data along with an interpretation of the data and any conclusion drawn from the data evaluation about the need for future modifications to the Authorized System or system operations.
- If applicable, include a summary of any operating problems encountered and corrective actions taken.
- Includes a summary of all calibration, maintenance, and repairs carried out on any major structure, Equipment, apparatus, mechanism, or thing forming part of the Municipal Sewage Collection System.

- d) Include a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints.
- e) Include 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.
- f) Include a summary of all Collection System Overflow(s) and Spill(s) of Sewage.
 - i. Dates;
 - ii. Volumes and durations;
 - iii. If applicable, loadings for total suspended solids, BOD, total phosphorus, and total kjeldahl nitrogen and sampling results for E.Coli;
 - iv. Disinfection, if any; and
 - v. Any adverse impacts(s) and any corrective actions, if applicable
- g) Includes a summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses, including the following items, as applicable:
 - i. A description of projects undertaken and completed in the Authorized System that result in overall overflow reduction or elimination including expenditures and proposed projects to eliminate overflows with estimated budget forecast for the year following that for which the report is submitted.
 - ii. Details of the establishment and maintenance of a PPCP, including a summary of project progresses compared to the PPCP's timelines.
 - iii. An assessment of the effectiveness of each action taken.
 - iv. An assessment of the ability to meet Procedure F-5-1 or Procedure F-5-5 objectives (as applicable) and if able to meet the objectives, an overview of next steps and estimated timelines to meet the objectives.
 - v. Public reporting approach including proactive efforts.

1. Description of the Works

The Township of Springwater Municipal Sewage Collection System is Owned by the Township of Springwater and operated by the Ontario Clean Water Agency (OCWA) on behalf of the Owner. The Collection System consists of sewage works for the collection and transmission of sewage, consisting of separate sewers, sewage pumping stations and forcemains that discharge into the Elmvale, Royal Oaks, Snow Valley Highlands, Centre Vespra (Stonemanor) and Midhurst Valley Interim Wastewater Treatment Plants. Please refer to the individual WWTPs Annual Performance Reports for more information related to the annual performance of those works.

The Township of Springwater Municipal Sewage Collection System is comprised of five (5) separate Sanitary Sewer Systems which are described below.

The Elmvale Sanitary Sewer System

The Elmvale Sanitary Sewage System consists of Sewage Works for the collection, and transmission of sewage, consisting of two raw sewage pumping stations and forcemains, with discharge into the inlet works of the Elmvale Wastewater Treatment Plant. The sewage pumping stations in the Authorized system include:

- Bishop Park Pumping Station (PS) – is a submersible pump station comprised of a wet well and control building. This PS is listed as an authorized emergency bypass location, with the capability to discharge into Wye River (as necessary). The PS is equipped with PLC, level control system, relays, VFDs and a stand-by diesel generator in case of power failure. The PS discharges into the Elmvale WWTP.
- Queen Street Lift/Pumping Station (PS) – is a sewage lift station consisting of two wet wells, three submersible pumps and forcemains. The PS is equipped with a level control system, relays, and a stand-by diesel generator in case of power failure. The lift station discharges into Bishop Park PS.

The Royal Oaks Sanitary Sewer System

The Royal Oaks Sanitary Sewage System consists of Sewage Works for the collection, and transmission of Sewage, consisting of five raw sewage pumping stations, forcemains, with discharge into the inlet works of the Royal Oaks Wastewater Treatment Plant. The sewage pumping stations in the Authorized system include:

- Buddsmill Pumping Station (PS) – is a submersible sewage pumping station equipped with two (2) submersible pumps, relays and level sensors, and alarming equipment. The PS discharge to the Royal Oaks WWTP. Standby power comes from the generator at the Royal Oaks WWTP, in case of power failure.
- Orchardview Pumping Station (PS) – is a submersible sewage pumping station equipped with two (2) submersible pumps, relays and level sensors, and alarming equipment. The PS discharges to the Royal Oaks WWTP, and is equipped with a standby diesel generator in case of power failure.
- Jean Miller Pumping Station (PS) – is a submersible sewage pumping station equipped with two (2) submersible pumps, relays and level sensors, and alarming equipment. The PS discharges to the Heron PS which then discharges to Royal Oaks WWTP. Standby power comes from the generator at the Heron Pumping Station in case of power failure.
- Heron Pumping Station (PS) – is a submersible sewage pumping station equipped with two (2) submersible pumps, VFD and level sensors, and alarming equipment. The PS discharges to the Royal Oaks WWTP, and is equipped with a standby diesel generator in case of power failure.
- Black Creek Pumping Station (PS) – is a submersible sewage pumping station equipped with two (2) submersible pumps, relays and level sensors, and alarming equipment. The

PS discharges to the Royal Oaks WWTP via forcemain, and is equipped with a standby diesel generator in case of power failure.

The Centre Vespra Sanitary (Stonemanor) Sewer System

The Centre Vespra (Stonemanor) Sanitary Sewage System consists of Sewage Works for the collection, and transmission of Sewage, consisting of two raw sewage pumping stations, forcemains, with discharge into the inlet works of the Centre Vespra (Stonemanor) Wastewater Treatment Plant. The sewage pumping stations in the Authorized system include:

- Pumping Station (PS) #1 (East) – is a submersible sewage pumping station consisting of a wet well with three (3) submersible pumps with VFDs and a control building. Connects to 200 mm diameter forcemain that discharges to the Centre Vespra WWTP, and is equipped with a standby diesel generator in case of power failure.
- Pumping Station #2 (West) - is a submersible sewage pumping station consisting of a 3.6 m diameter and 5.85 m depth wet well that is equipped with three (3) submersible pumps. The PS connects to 250 mm diameter forcemain that discharges to the Centre Vespra (Stonemanor) WWTP, and is equipped with a standby diesel generator in case of power failure.

The Snow Valley Highlands Sanitary Sewer System

The Snow Valley Highlands Sanitary Sewage System consists of Sewage Works for the collection, and transmission of Sewage, consisting of three raw sewage pumping stations, forcemains, with discharge into the inlet works of the Snow Valley Highlands Wastewater Treatment Plant. The sewage pumping stations in the Authorized system include:

- Cameron Estates Pumping Station (PS) – is a submersible sewage pumping station equipped with a 3 m by 3 m wet well, two (2) submersible pumps with VFDs discharging to the Snow Valley Highlands WWTP via a 152 mm diameter forcemain, and is equipped with a standby diesel generator in case of power failure.
- Boothby Pumping Station (PS) – is a pumping station with two (2) pumps (1 duty, 1 standby), each 1HP with a capacity of 0.8 L/s at 42 TDH which discharges to Snow Valley Highlands WWTP, and is equipped with a standby diesel generator in case of power failure.
- Timberwolf Pumping Station (PS) – is a submersible sewage pumping station equipped with a 1.8 m diameter and 3.1 m deep wet well, two (2) submersible pumps discharging to the Snow Valley Highlands WWTP via a 75 mm diameter forcemain and sanitary sewers. Standby power comes from the generator at the Snow Valley Highlands WWTP, in case of power failure.

The Midhurst Valley Interim Sanitary Sewer System

The Midhurst Valley Interim Sanitary Sewage System consists of Sewage Works for the collection, and transmission of Sewage, consisting of one raw sewage pumping station, forcemains, with discharge into the inlet works of the Midhurst Valley Interim Wastewater Treatment Plant. The system includes one raw sewage pumping station that conveys flows to the Midhurst Valley Interim Wastewater Treatment Plant via forcemain. Influent from the pumping station is directed to the headworks of the WWTP

The Township of Springwater Municipal Collection System contains no combined sewage pumping stations, no combined sewage storage structures or combined storage tanks. The authorized collection system also contains no authorized combined sewer collection system overflow points and one authorized sanitary sewer overflow point (Bishop Park PS).

2. Summary of Monitoring Data and Interpretation

For the reporting period, monitoring data was required under Schedule E, Section 3.4.2 for the following bypass incidents that occurred on March 16 and April 3, 2025 at the Bishop Park PS within the Elmvale Wastewater Treatment Collection System. For details of the incident, refer to section 7. *Summary of Collection System Overflow(s) and Spill(s) of Sewage* for more information.

As required by the ECA, a least one (1) grab sample was collected and analyzed by a Ministry approved ISO/IEC:17025 accredited laboratory (SGS Lakefield) for BOD₅, Total Suspended Solids, Total Phosphorus, Total Kjeldahl Nitrogen and E.coli. The below tables provide a summary of the sampling results.

Table 1: Summary of Sampling Results for Sewage Overflow incident #1- J2HWYS at Bishop Park Pump Station – March 16, 2025

Parameter	Concentration Bishop Park Pump Station	Concentration Upstream	Concentration Downstream
BOD ₅ (mg/L)	56	4	6
Total Suspended Solids (mg/L)	208	96	97
Phosphorus (mg/L)	0.61	0.14	0.17
TKN (as N) (mg/L)	4.20	<0.50	0.50
<i>E.Coli</i> (cfu/100mL)	>242000	5560	24810

The ECA also requires, where possible, the calculation of the loadings to the Natural Environment for each of the parameters using the discharged volume. The below tables list the calculated loadings based on the estimated discharged volume.

Table 2: Natural Environmental Loadings for Sewage Overflow incident #1- J2HWYS at Bishop Park Pump Station – March 16, 2025

Parameter	Concentration Loading Bishop Park Pump Station	Concentration Loading Upstream	Concentration Loading Downstream
BOD ₅ (Kg/day)	13.50	0.96	1.45
Total Suspended Solids (Kg/day)	50.13	23.14	23.38
Phosphorus (Kg/day)	0.15	0.03	0.04
TKN (as N) (Kg/day)	1.01	0.12	0.12

The estimated discharge volume from the Overflow/Spill event was 241.02 m³.

Table 3: Summary of Sampling Results for Sewage Overflow incident #1- N7AU4T at Bishop Park Pump Station – April 3, 2025

Parameter	Concentration Bishop Park Pump Station	Concentration Upstream	Concentration Downstream
BOD ₅ (mg/L)	16	15	<12
Total Suspended Solids (mg/L)	33	81	79
Phosphorus (mg/L)	0.28	0.10	0.12
TKN (as N) (mg/L)	1.50	<0.50	<0.50
<i>E.Coli</i> (cfu/100mL)	155310	75	11060

The ECA also requires, where possible, the calculation of the loadings to the Natural Environment for each of the parameters using the discharged volume. The below tables list the calculated loadings based on the estimated discharged volume.

Table 4: Natural Environmental Loadings for Sewage Overflow incident #1- N7AU4T at Bishop Park Pump Station – April 3, 2025

Parameter	Concentration Loading Bishop Park Pump Station	Concentration Loading Upstream	Concentration Loading Downstream
BOD ₅ (Kg/day)	10.25	9.61	7.69
Total Suspended Solids (Kg/day)	21.14	51.90	50.61
Phosphorus (Kg/day)	0.18	0.06	0.08
TKN (as N) (Kg/day)	0.96	0.32	0.32

The estimated discharge volume from the Overflow/Spill event was 640.68 m³.

Based on the monitoring results, parameter concentrations and loadings for the March 16, 2025 event were elevated at the overflow location relative to upstream and downstream sampling locations. For the April 3, 2025 event, all parameters except TSS showed higher concentrations

and loadings at the overflow location. Downstream concentrations were generally higher than upstream values, which is consistent with the influence of the overflow.

Based on the monitoring results and operational observations, the Bishop Park Pumping Station experiences peak flow challenges during significant wet weather events. During these conditions, flows may exceed the SPS conveyance capacity, resulting in activation of the authorized overflow to the Wye River. The Township has initiated a study and pre design work to assess capacity needs and identify long term solutions.

3. Summary of Operating Problems Encountered and Corrective Actions Taken

There were two operating problems that occurred during the reporting period, both associated with overflow events at Bishop Park SPS. Corrective actions included responding to high wet well levels, implementing temporary disinfection during the March 16, 2025 event, distributing precautionary notices to potentially affected well users during the April 3, 2025 event, and completing all required notifications. Further details provided in Section 7. *Summary of Collection System Overflows and Spills of Sewage* for more information.

4. Summary of Calibration, Maintenance, and Repairs

All in-house monitoring equipment is calibrated/verified in accordance with manufacturer recommendations. Monitoring and metering equipment is also calibrated annually by a qualified third party. Preventative maintenance is scheduled for all equipment within the sewage collection system at frequencies appropriate to the equipment type. Maintenance activities are scheduled within the work management system (WMS), and completed work orders are reviewed monthly.

Elmvale Sanitary Sewer System

- Weekly alarm testing – all sewage pump stations (SPS)
- Semi-annual SPS cleanouts
- Sanitary sewer flushing program
- Lifting device inspections
- Backflow device testing
- Annual generator service/inspection

Royal Oaks Sanitary Sewer System

- Weekly alarm testing – All SPS
- Semi-annual SPS cleanouts
- Lifting device inspections

- Backflow device testing
- Annual generator service/inspection
- Pump 1 repair/replacement (Orchardview SPS)
- Float replacement (Heron SPS)

Centre Vespra (Stonemanor) Sanitary Sewer System

- Weekly alarm testing – all SPS
- Semi-annual SPS cleanouts
- Lifting device inspections
- Backflow device testing
- Annual generator service/inspection
- Pump 2 Softstart replacement (West SPS)
- Red Lion Replacement (East SPS)

Snow Valley Highlands Sanitary Sewer System

- Weekly alarm testing – all SPS
- Backflow device testing
- Annual generator service/inspection

Midhurst Valley Interim Sanitary Sewer System

- Weekly alarm testing – all SPS
- Semi-annual SPS cleanouts
- Weekly maintenance hole bar screen cleanout
- Backflow device testing

5. Community Complaints Received in Relation to the Sewage Works

There were two community complaints regarding the municipal collection system received in 2025.

2025	Details of Community Complaints
January 12, 2025	OCWA responded to a sewer back up at 14 George Street (Elmvale Community Arena). OCWA staff investigated the situation and contacted Region of Huronia (ROHES) to flush both upstream and downstream.
February 1, 2025	A resident in Stonemanor reported a sewage backup. OCWA staff investigated the situation and determined the cause to be an internal plumbing issue.

6. Alterations to the Authorized System

There were a no alterations to the Authorized System during the reporting period. For information on maintenance and repair activities completed in 2025, refer to Section 4. *Summary of Calibration, Maintenance and Repairs*.

7. Summary of Collection System Overflow(s) and Spill(s) of Sewage

There were two collection system overflow/spill of sewage for the Municipal Collection System in 2025. For monitoring results of the below Overflow/Spill event, see section 2. *Summary of Monitoring Data and Interpretation* of this report.

Date (yyyy/mm/dd)	Event	Details
2025/03/16	Class 1 Approved Discharge (CLI-ECA # 128-W601)	SAC Reference Number: 1-J2HWYS Spill Location: Bishop Park Pump Station (PS) - Elmvale Collection System Duration: March 16 from 1210 - 2019 hrs intermittently Total duration: 8hr 09 minutes (intermittently) Spill Contents: Untreated Sewage Approximate Volume: ~241.02m3 <u>Incident Description</u> On March 16, 2025, the Town of Elmvale experienced heavy rainfall and melting snow due to warmer temperatures, which contributed to increased flows to the PS. The system pumps were unable to keep up with the flow demand, causing an overflow from the wet well into the Wye River. <u>Corrective Actions Taken to Control Incident</u> • Samples were collected as required and sent to an external laboratory to be analyzed for BOD₅, TSS, TP, TKN, and <i>E.Coli</i>. • OCWA staff responded to the high wet well level, and began a chlorine drip into the wet well until flows subsided and the overflow event ended. <u>Reporting Communications</u> • Verbal and written notification provided to SAC, MoH-SMDHU, Owner and MECP on March 16th and 17th, 2025. • No adverse environmental impacts were observed or reported. • No further actions were required

2025/04/03	Class 1 Approved Discharge (CLI-ECA # 128-W601)	SAC Reference Number: 1- N7AU4T Spill Location: Bishop Park Pump Station (PS) - Elmvale Collection System Duration: April 3, 2025 at 0035 hrs to 1012 hrs (intermittently) Total duration: 281 minutes (intermittently) Spill Contents: Untreated Sewage Approximate Volume: ~640.68 m3 <u>Incident Description</u> Heavy rainfall contributed to increased flows to the pump station. The system pumps were unable to keep up with the flow demand, resulting in activation of the authorized overflow from the wetwell into the Wye River <u>Corrective Actions Taken to Control Incident</u> • Due to the rising water level of the Wye River from heavy rainfall and melting snow, the Township of Springwater handed out notices to properties with wells that could possibly be affected by the bypass. • Sample results to be submitted to applicable parties once lab results are made available. <u>Reporting Communications</u> • Verbal and written notification provided to SAC, MoH-SMDHU, Owner and MECP on April 3rd, 2025. • No adverse environmental impacts were observed or reported. • No further actions were required
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8. Efforts Made to Reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses

This section summarizes the efforts made during the reporting period to reduce collection system overflows, spills, and bypasses, as required under Schedule E, Section 4.6.9(g) of the ECA.

8.1 Projects Undertaken and Completed

8.1.1 Projects Undertaken and Completed in 2025

During the reporting period several operational and maintenance activities that support overflow reduction and system reliability were completed. These activities included:

- Weekly alarm testing at all sewage pumping stations
- Semi-annual pump station cleanouts
- Annual generator inspection and maintenance
- Sanitary sewer flushing (Elmvale)
- Routine pump station inspections
- Headworks inspections
- Pump repairs and component replacements as identified in Section 4

These activities help maintain system capacity, reduce inflow and infiltration impacts, and support reliable operation during wet weather events.

8.1.2 Proposed Projects and Budget Forecast for 2026

The following projects are planned for 2026 to support continued conformance with Procedure F-5-1 and to reduce the likelihood of overflows:

Planned Scope of Work	Budget Allocated
Annual Pump Station and Tank Cleanouts- All Systems	\$124,000
Elmvale – Collection System Flushing	\$30,000
Bishop Park Pump Station & Forcemain (Elmvale) upgrade design/planning/construction	\$5,000,000
Gravity Sewer replacement work	\$165,000
Inflow & Infiltration Abatement Program	\$250,000

8.2 PPCP Establishment and Maintenance

The Springwater collection system does not require a Pollution Prevention and Control Plan (PPCP) as per the CLI-ECA because there are no combined or partially separated sewers within the Township. In support of future PPCP development, OCWA submitted the *Assessment of Wet Weather Flows to Dry Weather Flows* on June 21, 2024, as required under the ECA Schedule E (8.0). This assessment identifies actions intended to reduce or eliminate wet weather overflows within the municipal collection system.

The assessment identified the following action items and timelines:

#	Action Item	Proposed Timeline
1	Conduct high velocity flushing and CCTV inspections of the collection system	Every 5 Years
2	Complete repairs to the collection system based on the findings of the inspection identified in Action Item #1. These action plans must be approved as a capital expense, and will include timelines for repair.	Annually
3	Continue to complete pump station cleans in Spring and Fall	Semi-Annually
4	I/I Studies/investigations for problem areas	Every 5 Years

5	Continue to complete pump inspections, repairs and track outstanding deficiencies	Annually
6	Complete repairs and pump rebuilds at the pump stations	2024-2032
7	Complete repairs as identified during watermain work and road replacements.	Annually
8	Continue to monitor and correlate overflows to wet weather events for future assessments	As they occur

Progress during the reporting period was consistent with the above timelines.

8.3 Effectiveness of Actions Taken

Based on the overflow events documented in Section 7:

- All overflow events in 2025 were authorized Class 1 discharges under the ECA.
- All events were associated with wet weather conditions (heavy rainfall and/or snowmelt).
- No unauthorized overflows occurred during the reporting period.
- No adverse environmental impacts were observed or reported.
- Required corrective actions and notifications were completed.

These outcomes indicate that operational controls and maintenance activities supported system performance during wet weather conditions.

8.4 Ability to Meet Procedure F-5-1 Objectives

The Township continues to implement the action items identified in the Wet Weather Flow Assessment. Planned capital upgrades—particularly the Bishop Park Pump Station and forcemain improvements—are expected to further support progress toward meeting Procedure F-5-1 objectives.

Next steps include:

- Advancing the Bishop Park Pump Station upgrade design
- Continuing I/I investigations
- Completing repairs identified through CCTV and flushing programs
- Maintaining routine pump station inspections and cleanouts

8.5 Public Reporting Approach

OCWA completes all required notifications and reporting in accordance with applicable regulatory requirements and established procedures. OCWA also informs the Township of Springwater, as the Owner, of any reportable events to ensure timely communication, documentation, and follow-up. Two authorized overflow events occurred in 2025, and all notifications were completed in accordance with the ECA and regulatory requirements. Both OCWA and the Township remain committed to transparent reporting and effective communication regarding any future events.

The sewage pumping stations are equipped with alarm monitoring for high flow events. Preventative maintenance procedures are in place to ensure the sewage pumping stations are operating as designed and include:

- Pump station inspections
- Alarm testing
- Generator inspection and maintenance
- Headworks inspections

For the 2026 reporting year, the following budget forecast for proposed/planned projects for 2026 to support efforts to continually achieve conformance with Procedure F-5-1 are summarized below:

Planned Scope of Work	Budget Allocated
Annual Pump Station and Tank Cleanouts- All Systems	\$124,000
Elmvale – Collection System Flushing	\$30,000
Bishop Park Pump Station & Forcemain (Elmvale) upgrade design/planning/construction	\$5,000,000
Gravity Sewer/replacement work	\$165,000
Inflow & Infiltration Abatement Program	\$250,000