2025 PERFORMANCE REPORT

Owen Sound Wastewater Collection System

Reporting Period: January 1 – December 31, 2025

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1.0 INTRODUCTION

The City of Owen Sound was issued Environmental Compliance Approval number 092-W601 for its municipal sewage collection system on December 15th, 2022. Condition 4.6 from Schedule E of the ECA requires the Owner to prepare an annual performance report for the Authorized System. This report must be submitted to the Director on or before March 31st of each year and covers the period from January 1st to December 31st of the preceding calendar year.

1.1 Background

This City of Owen Sound maintains a wastewater collection system that includes approximately 118km of gravity sewers, 3.6km of force main, 7 minor and 1 major pump station. All wastewater flows to the Class III Ministry of Environment, Conservation and Parks (MECP) rated Wastewater Treatment Plant for secondary treatment through its Biological Aerated Filtration system, then outfalls into Owen Sound Bay (Georgian Bay).

2.0 DISCUSSION OF ECA CONDITIONS

2.1 Condition 4.6.1 – Report Preparation

This condition requires the submission of an annual performance report for the City's wastewater collection system by March 31st of each year. The report is to cover the period from January 1 to December 31 of the preceding calendar year. This report covers 2025.

2.2 Condition 4.6.2 – Collection System Overflow or Spills of Sewage

This condition requires submission to the District Manager of this annual report noting any collection system overflow or spills of sewage that occurred in the reporting period.

There were 8 dates that overflow incidents occurred in the reporting period due to snow melt and/or heavy rainfall. These incidents were reported to SAC, Grey-Bruce Public Health Unit, Owen Sound Water Treatment Plant and the local MECP Inspector. Details of these overflows are described in section 2.8.

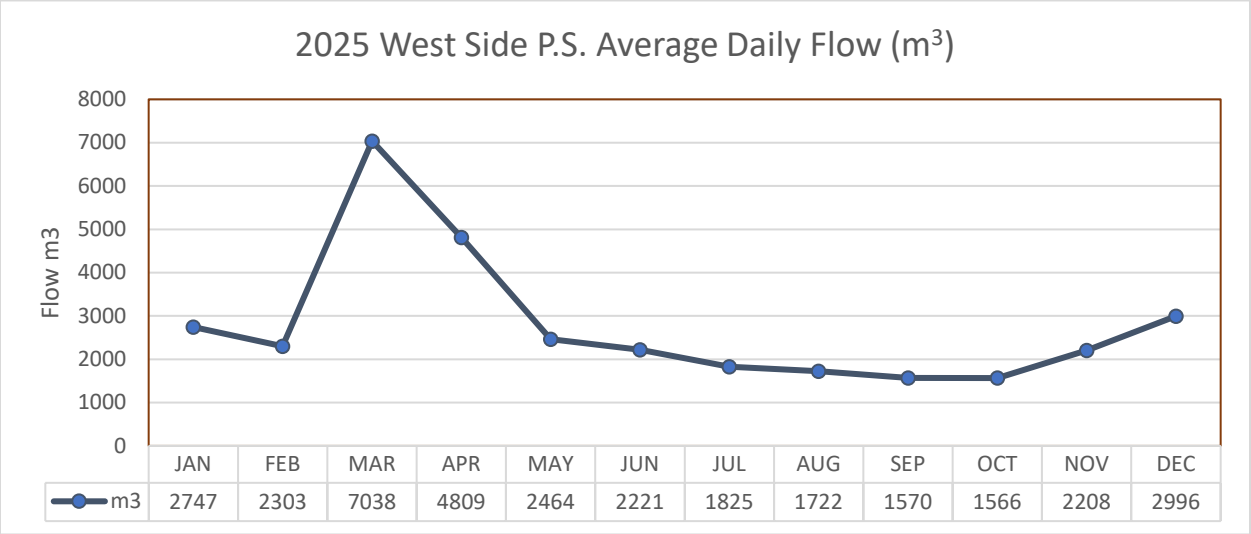
2.3 Condition 4.6.3 – Summary of Monitoring Data & Interpretation

This condition requires the submission of any monitoring data and an evaluation of this.

The Owen Sound Collection System consists of seven (7) minor and one (1) major sewage pumping stations that pump sewage to the WWTP.

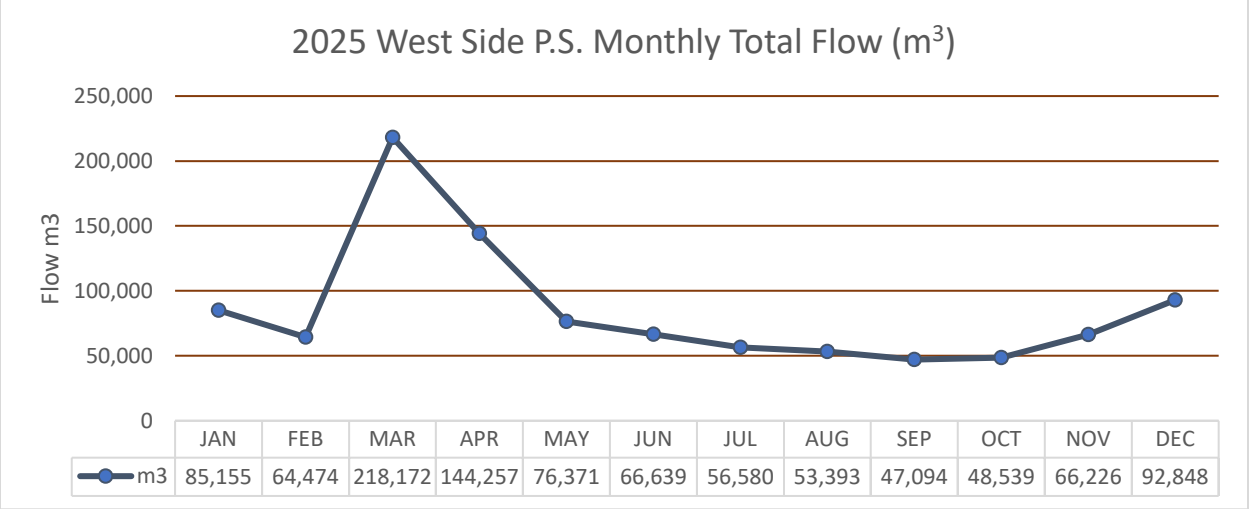
Combined Sewer Overflow (CSO) locations in the system are monitored during peak wet weather events. There were 8 (eight) wet weather overflow events in 2025. The following charts and tables show flow through the major Westside Sewage Pump Station and the CSO events for 2025.

Figure 1



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
m3	2747	2303	7038	4809	2464	2221	1825	1722	1570	1566	2208	2996

Figure 2



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
m3	85,155	64,474	218,172	144,257	76,371	66,639	56,580	53,393	47,094	48,539	66,226	92,848

The 2025 Total Annual Flow through the West Side Sewage Pumping Station was 1,019,748m^3.

2.4 Condition 4.6.4 – Operating Problems & Corrective Actions

This condition includes a summary of any operating problems encountered and corrective actions taken.

To avoid duplication, these are explained in the next section.

2.5 Condition 4.6.5 – Calibration, Maintenance and Repairs

This condition requires a summary of all calibration, maintenance, and repairs carried out in the reporting year on major equipment and infrastructure.

Only the Westside and East Bayshore pump stations have flow monitoring equipment and backup emergency power. The calibration and maintenance records are attached.

Routine monthly flap gate and interceptor inspections were completed. Annual maintenance of Sanitary pump stations was completed including cleaning of wet wells, and pumps were unplugged as required. Operators perform daily checks of the major Westside Sewage Pump Station and weekly checks of the other minor stations.

Acoustic sewer line assessments were completed by Rapid Assessment Technology Services Inc.

The 27th Street West sewage pump station electrical rehabilitation upgrade was completed. One of the sewage pumps was also rebuilt.

There was a soft main blockage in the 800 block of 10th St W which was quickly remediated by City staff.

2.6 Condition 4.6.6 – Summary of Complaints

This condition requires a summary of complaints related to the Sewage Works and any steps taken to address the complaints.

In 2025 there were two (2) customer complaints of sewer odours. Operators followed the SOP and logged these complaints. Operators investigated each situation, the issues were resolved, and the customers were satisfied.

There were also 15 sewer lateral problems that were investigated and addressed by City staff (or a plumbing contractor if related to private plumbing issues).

2.7 Condition 4.6.7 – Alterations to Collection System, and those posing a Significant Drinking Water Threat

Below are the alterations to the Sanitary Collection System.

None of these posed a significant drinking water threat.

Project	**Status**
9th Ave E (Superior to 6th St)	Completion in 2026
16th Ave E	Completion in 2026
1799 20th St E- 200mm Sanitary Service	Complete

2.8 Condition 4.6.8 – Overflows and Spills

This condition includes a summary of all Collection System Overflow(s) and Spill(s) of Sewage.

The following table shows the Collection System overflows for 2025 caused by snow melt and/or heavy rain. There was no disinfection or known adverse impact from these overflows. Samples taken at OS-19A are representative of CSO locations OS-22, OS-12, OS-11, OS-16 & OS-17, as per MECP written correspondence.

2025 Owen Sound Collection System Overflows

Quarter	Location	Date (2025)	Volume (m^3)	BOD5 (mg/l)	TSS (mg/l)	TP (mg/l)	E-Coli cfu/100ml	TKN (mg/l)
1	Westside EQ Tank	6-Mar	179.28	22	20	0.46	N/A	3.8
	Westside EQ Tank	3/15-17/2025	10,522.74	14	23	0.32	N/A	2.7
	OS-11	3/15-16/2025	2520					
	OS-12	3/15-16/2025	11,310					
	OS-16	3/15-16/2025	9801					
	OS-19A	3/15-16/2025	1618	26/32	80/44	0.28/.46	>2420	2/3.1
	OS-22	3/15-16/2025	7800					
	OS-12	17-Mar	1592	8	19	0.39	>2420	3.5
	OS-16	17-Mar	864	9	31	0.31	>2420	1.9
	Westside EQ Tank	29-Mar	6872.4	13	21	0.44	N/A	4.6
	OS-16	30-Mar	2417	9	16	0.39	120330	3.1
2	OS-19A	2-Apr	277.3	31	38	0.82	48400	7.4
	OS-16	3-Apr	13.2	8	9	0.32	48400	2.3
	Westside EQ Tank	19-Apr	1598.58	27	62	0.41	N/A	2.3
	OS-2	19-Apr	776					
	OS-2A	19-Apr	1200					
	OS-4	19-Apr	1220					
	OS-6	19-Apr	7305.91					
	OS-11	19-Apr	2906.19					
	OS-12	19-Apr	6918.91					
	OS-16	19-Apr	2033.65					
	OS-19A	19-Apr	2057.24	14	83	0.36	111990	1.5
	OS-22	19-Apr	1992					
	Total		**83,795.40**					

2.9 Condition 4.6.9 – Efforts to Reduce Overflows, Spills and Bypasses

This condition requires a discussion of efforts to reduce sanitary collection system (including pump stations) overflows, spills, and bypasses.

a) Projects undertaken for overall overflow reduction are:
   - The City of Owen Sound has an ongoing Stormwater Separation Program. This program offers homeowners a subsidy for weeping tile sump pump disconnection of houses that are directly connected to the sanitary sewer.
   - A CSO point was discovered at 468 14th St W and an overflow monitor was purchased/installed at the location. MECP notification was submitted and GIS
   - Maintaining the current real-time overflow monitoring units at seven (7) overflow locations. OS-11 monitor replaced.
   - Equipment installed for real time precipitation data gathering that can be used for sewer modelling programs.
   - The City completed electrical upgrades to the 27th Street West Sewage Pump Station.
   - Capital sanitary sewer replacement on 9th Ave E and 16th St E
   - Wet weather sewer modelling for model calibration and future I&I reduction strategies.
   - A Sewer Rapid Assessment Tool program was implemented in 2023 to scan one of five sanitary sewer zones on a yearly rotating basis. This instantly provides data to show areas that require flushing on a scale of 0-10.

   The estimated budget forecast for sanitary sewer-related projects in 2026 is $1.9 million.

b) The City hired WSP Consulting & Engineering who completed a report on the Assessment and Conformance of Procedure F-5-1 and F-5-5 in October 2023. The following are recommendations and next steps provided by WSP and their current status:

   - The City should continue to implement ongoing inspection and maintenance programs for the wastewater collection system to meet the F-5-1, F-5-5 and ECA requirements for annual reporting. (**In Progress)**
   - The City should continue operations, monitoring and reporting in accordance with the ECA. This includes annual reporting

requirements under the ECA which includes documenting CSO events. (**In Progress)**

- In accordance with Procedure F-5-5, the development of a Pollution Prevention and Control Plan (PPCP is a goal recommended by ECA 092-W601 by May 21, 2027. The Plan shall be based on the information collected to date and implementation of new studies and programs to satisfy the requirements, the aim being to demonstrate conformance, to maintain conformance, or to demonstrate how future capital projects will lead to CSO elimination or reduction. **(Not Started)**
- Assessment of conformance to Procedure F-5-5 and the ECA requirements have been reviewed. **(Complete)**
    1. Per MECP correspondence, the assessment requirements do not apply if the bypass(es) or overflow(s) occurred as a result of power outages or equipment failures at the WWTP. Assessment of conformance to Procedure F-5-1 as it pertains to the WWTP was not reviewed.

Next Steps:

1. New studies and programs to support PPCP preparation.
2. Gather outstanding data.
3. Continue operations, maintenance, and reporting as required by the ECA.
4. Identify capital projects that aim to reduce/eliminate CSO and document the schedule for collection system improvements.

Complete PPCP Submission: by May 21, 2027

1. Develop and Issue PPCP

Implement PPCP

1. Continue annual reporting requirements.
2. Continue to update every 5-10 years as prescribed by the MECP.
3. The City implemented a Wastewater Quality Management System (WWQMS) in 2019. New in 2025, the CSA Group with the consultation of the Ministry of Environment Conservation and Parks created and implemented CSA standard W217:25 Ontario Wastewater Management System. The purpose of this Standard is to provide requirements for the quality and environmental management of wastewater systems. It defines a risk-based process for decision-makers responsible

for the operation, maintenance, and management of wastewater systems. This system will continue to track and assess the effectiveness of required action items.

4. See Subsection b) of Schedule E Condition 4.6.9.
5. The Grey Bruce Public Health Unit is always advised of any reportable sewage spills.

2.10 Condition 4.7 -Report Availability for Public

This annual performance report is available on the City of Owen Sound's website www.owensound.ca.

3.0 CALIBRATION REPORTS

Annual generator inspection and flowmeter verification reports for the Westside & East Bayshore Sewage Pump Stations are attached below:

GenWorx

Your Partner in Emergency Power

Certificate Of Completion

THIS ACKNOWLEDGES THAT THE GENERATOR AT

3475 East Bayshore

HAS SUCCESSFULLY BEEN TESTED IN ACCORDANCE WITH CSA282 AND HAS PASSED THE ANNUAL INSPECTION.

10-06-2025

Test Date

106.3

Unit Hours

Aaron B

Technician(s)

Rick Surette

Director of Field Service


GenWorx
Your Partner in Emergency Power
Certificate Of Completion
THIS ACKNOWLEDGES THAT THE GENERATOR AT
1460 Second Ave, Owen Sound
HAS SUCCESSFULLY BEEN TESTED IN ACCORDANCE WITH CSA282 AND
HAS PASSED THE ANNUAL INSPECTION.
09-09-2025
Test Date
395.2
Unit Hours
Thomas S, Aaron B
Technician(s)
Rick Sarette
Director of Field Service

Report no. CO1653-2510-31

Verification report Promag 300

Endress+Hauser

People for Process Automation

Plant operator: INDUSCONTROL INC.

Device information

Location	Pumping Station
Device tag	FIT-01
Module name	C300-01
Nominal diameter	DN150 / 6"
Device name	Promag 300
Order code	5W381F-5FF8/101
Serial number	54007016000
Firmware version	01.01.05

Calibration

Calibration factor	1.1392
Zero point	-1

Verification information

Operating time (counter)	1484d02h58m50s
Date/time (manually recorded)	14.10.25 14:12
Verification ID	7
Verification mode	Internal verification

Overall verification result*

☑ Passed	Details see next page

*Result of the complete device functionality test via Heartbeat Technology

Confirmation

Heartbeat Verification verifies the function of the flowmeter within the specified measuring tolerance, over the useful lifetime of the device, with a total test coverage > 94 %, and complies with the requirements for traceable verification according to DIN EN ISO 9001:2008 – Section 7.6 a. (attested by TÜV-SÜD Industrieservices GmbH)

Notes

14.10.25		
Date	Operator's signature	Inspector's signature

INDUS CONTROL YOUR ONE STOP SOLUTION	IndusControl Inc. 3170 Ridgeway Drive, Unit #11,Mississauga,ON L5L 5R4	**VERIFICATION REPORT** **FLOW MEASUREMENT**	

Customer Name:	City of Owen Sound	Site/Plant Address:	1490, 2nd Avenue, West
Plant Name:	WSPS		Owen sound, ON

Device Information		Service Information	
Make:	Kent	Date:	October 7, 2025
Model:	Verifiux	Report No:	CO1653-2510-17
Serial No.:	79/5383/2	Job No:	CO1653-2510
Tag:	N/A		
Job Location:	Station flow	Flow Details	
Asset ID:	75611	Unit:	m3/day
		Flow Range:	0 - 40000
Sensor Details		Current Output:	4-20 mA
Line size:	12"	4 mA Set Point	0
Mounting:	Remote	20 mA Set Point	40000

Inst. Reading	AS FOUND	AS LEFT
TOTALIZER (m3)	NA	NA
FLOW (m3/day)	1668	1622

Maintenance Checklist			Remarks
Visual Inspection:	☑ OK	☐ NOT OK	
Electrical Inspection:	☑ OK	☐ NOT OK	
Sensor Installation:	☑ OK	☐ NOT OK	
Transmitter Installation:	☑ OK	☐ NOT OK	

Instrument Test Information and Results

Test-Point	Flow Measured on ClampOn Calibrator (m3/day)	UUT Display (m3/day)	Deviation (m3/day)
1	1640.00	1668	1.68
2	1645.00	1675	1.79
3	1634.00	1661	1.63

Information of Tools used for Verification of the Instruments

Details	Tool/Kit 1	Tool/Kit 2	Tool/Kit 2
Device Description:	Clamp ON Calibrator	N/A	N/A
Manufacturer:	Greyline	N/A	N/A
Model No:	Pulsar PDFM5.1	N/A	N/A

* Refer Calibration Tools Certificates submittal for more information

Verification Test Result:	☑ Passed	☐ Fail	☐ Not Verified
Overall Remarks:	Measurement Works within Specification. Verification Test Passed		
Service Technician :	Parth Panchal	Stamp/Signature	
Printed Date:	October 7, 2025		

End of Report

Version: 19-12