2025
Annual Wastewater Report

Glen Walter Sewage Treatment

Version 2.0

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February 18, 2026
Date

Approved by:

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February 18, 2026
Date

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Revision History

Date	Description	Revision	Author
February 2, 2026	Initial Issue for Council Receipt	1.0	D. Seguin
February 18, 2026	Issued For Council Acceptance	2.0	D. Seguin

Glen Walter Sewage Treatment Plant

In accordance with the Amended Certificate of Approval, Number 3-0464-84-889, Notice 3 issue date March 23, 2015, the Water Pollution Control Plant (WPCP) is required to prepare an annual performance report. This document covers the reporting year January 01 to December 31, 2025; the facility performance report summarizes important information regarding the quality of the effluent wastewater, analytical test results, maintenance operations, and relevant activities of the WPCP.

1. Description of the Works

Capacity of Works	787 m^3/day (average daily flow)
Service Area	Purcell subdivision, South Glengarry
Service Population	Approximately 1,080
Effluent Receiver	St. Lawrence River
Major Process	Secondary aeration treatment facility complete with a phosphorus removal system; ultra violet disinfection

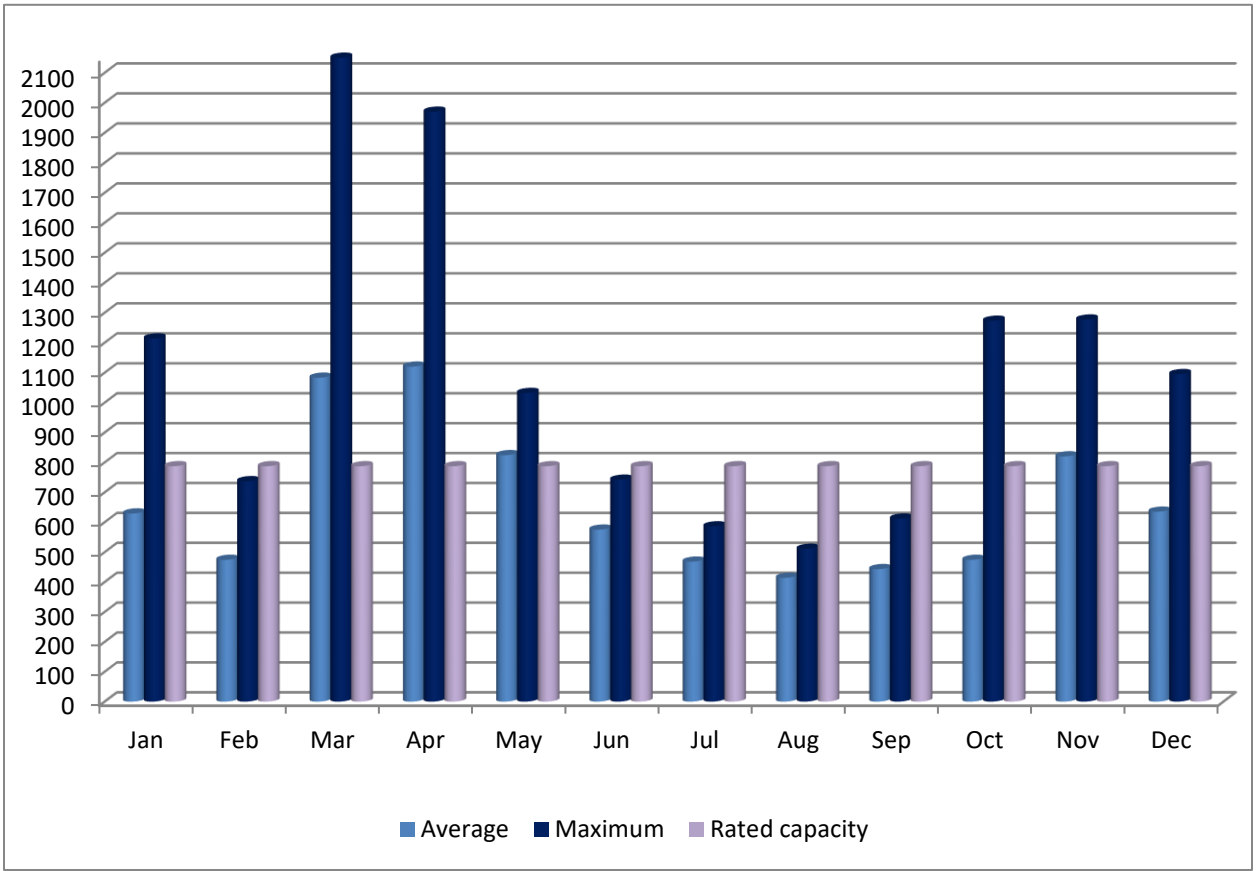
The Glen Walter WPCP received and operates its operation under *Certificates of Approval (now referred to as Environmental Compliance Approval [ECA]) Number 3-0464-84-889*, original, Notice #1 and Notice #2 and Notice #3 documents, in accordance with Section 53 of the Ontario Water Resources Act. The Certificate of Approval outlines the terms and conditions, and the report captures these terms and conditions in the following sections.

Rated Capacity

For the purposes of the ECA and the terms and conditions specified, the following definition applies: *"Rated Capacity"* means the *Average Daily Flow* for which the *Works* are approved to handle.

The rated capacity of the Glen Walter WPCP is 787 cubic meters per day (m^3/day); that is raw influent (flow) into the plant for treatment. During the reporting year 2025, the Glen Walter WPCP exceeded the rated capacity of 787 m^3/day, Ninety-five (95) days.

Monthly Average and Maximum Daily Flows for 2025 (Rated capacity 787 m^3/day)



High Flow Events

March 2025 – Snow Melt

April 2025 – Heavy Rain Event

2. Effluent Objectives

The owner and/or operating authority shall use *best efforts* to design, construct and operate the *Works* with the objective that the concentrations and loadings of the materials named below (Table 1) as effluent parameters are not exceeded in the effluent from the *Works*.

Table 1. Effluent Best Efforts Limits as per ECA, condition 3.1

Effluent Parameter	**Average Concentration** (milligrams per litre unless otherwise indicated)	**Average Loading Objective** (kilograms per day unless otherwise indicated)
Column 1	Column 2	Column 3
$CBOD_5$	15	-
Total Suspended Solids	15	-
Total Phosphorus	0.32	-
Total Ammonia Nitrogen: Summer – June 1 to November 30 Winter- December 1 to May 31	 2.0 4.0	-
E. Coli – May 1 to September 31	100 organisms per 100 millilitres	-

3. Effluent Limits

The *Owner* shall operate and maintain the *Works* such that the concentrations and waste loadings of the materials named in Table 2 as effluent parameters are not exceeded in the effluent from the *Works*.

Table 2. Effluent Limits as per C of A, conditions 1.4

Effluent Parameter	**Average Concentration** (milligrams per litre unless otherwise indicated)	**Average Loading Objective** (kilograms per day unless otherwise indicated)
Column 1	Column 2	Column 3
$CBOD_5$	25	19.7
Total Suspended Solids	25	19.7
Total Phosphorus	0.64	0.50
Total Ammonia Nitrogen: Summer – June 1 to November 30 Winter- December 1 to May 31	 4.0 8.0	 3.2 6.3
E. Coli – May 1 to September 31	200 organisms per 100 millilitres	-

4. Monitoring And Recording

The *Owner* shall, upon commencement of operation of the *Works*, carry out the following the monitoring program.

Effluent Monitoring - (samples to be collected at the outlet of the disinfection facilities or at the outfall sewer as close as possible at the treatment plant).

Parameters	Sample Type	Frequency
$CBOD_5$	24-hr composite	Weekly
Total Suspended Solids	24-hr composite	Weekly
Total Phosphorus	24-hr composite	Weekly
Total Ammonia Nitrogen	24-hr composite	Weekly
E. Coli	Grab	Weekly

5. Laboratory

Caduceon Environmental laboratories is contracted to conduct the required analytical tests of the influent (raw) and effluent samples, as per the ECA.

6. 2025 Annual Effluent Quality

In the reporting year 2025, the *Works* were operated and maintained such that the concentrations and waste loadings of the materials named in Table 2 as effluent parameters were not exceeded in the effluent from the *Works*; in compliance with the ECA requirements for the effluent limits parameters.

In addition, *best efforts* were achieved with the objective that the concentrations and loadings of the materials named above in (Table 1) as effluent parameters were not exceeded in the effluent from the *Works.*

Parameters	Average Concentration mg/L	Criteria Concentration mg/L	Average Loading kg/d	Loading Criteria kg/d
$CBOD_5$	3.0	25	2.01	15.63
Total Suspended Solids	6.0	25	4.17	15.63
Total Phosphorus	0.17	0.86	0.11	0.54
Total Ammonia Nitrogen: Summer – June 1 to Nov 30 Winter- Dec 1 to May 31	 0.17 0.15	 4.0 8.0	 0.10 0.12	 2.5 5.0
E. Coli	5.9	200 organisms per 100 millilitres	-	-

7. Inventory

Chemical	Annual Status	Units
Alum	12.1	Cubic meters

8. Maintenance

The Operators performed the routine operations and maintenance at the treatment plant and pumping stations in accordance with the preventative maintenance program (report on file at plant). The activities are highlighted as follows:

Monthly	• Checked Operations and Performance of Sewage Pumps. • Flushed Alum Feed Line • Rotation of Sewage Pumps
Treatment Plant	• Changed Oil on Blower #1 + #2 • Cleaned Air Diffusers in Digester
Quarterly	• N/A
Semi-Annually	• Changed Filters on Blower #1 and #2. • Greased Clarifier Drive. • Cleaned Alum Sensors
Annually	• Annual Calibration of Monitoring Equipment • Annual Calibration of Flow Meters
Major Maintenance	• Clean Grit Channel (Jun) • Pump Station Cleaning x 3 Stations (Jun) • Replace UV Bulbs (Sep) • Confined Space for Pump Stations Inspections (Nov)

9. Operational Issues

There were no operational issues noted during 2025.

10. Biosolid (Sludge) Summary

The Glen Walter WPCP has a program in place for the removal of biosolids transferred from the Glen Walter W.P.C.P *Works to the Lancaster lagoons*; volume totaling 433 m^3 for the fiscal year 2025. Goulet Septic (Certificate of Approval Hauler # A 920463) is contracted and hauled/transported 433 m^3 to the Lancaster Lagoons for disposal.

The *Works* maintains haulage records for biosolids transferred from the Glen Walter WPCP to the Lancaster Lagoons; available upon request.

11. Complaints

No complaints reported during the 2025 operational year.

12. By-Pass Report(s)

By-passing occurrences: 0

**All by-pass/overflows for the collection system(s) have been moved to the Municipal sewer collection report ongoing. However, bypass/overflows may still occur for the wastewater system facility(s).*

13. Reports

- Appendix A – Lancaster Sewage Annual Performance Report 2025 (Attached)
- Caduceon Environmental Laboratories Analytical Reports - (on-file at plant)
- Glen Walter Daily/Monthly Report Summary - (on-file at plant)
- Glen Walter Bypass Incident Report – (on-file at plant)

Municipality: Township of South Glengarry
Project: Glen Walter W.P.C.P

Annual Report Data
2025

Water Course: St. Lawrence River
Design Capacity: 0.787 x 1000 m3/D

Description: 3 Sewage Pumping Stations - 1 Extended Aeration Plant - UV Effluent Disinfection

	Influent Flow			*Effluent Flow*	*Biochemical Oxygen Demand*			*Suspended Solids - Total*			*Phosphorus*			*Ammonium*	*Waste Loadings*				*Alum*	*Effluent Flow*
	Total X 1000 m3	*Average X 1000 m3*	*Maximum Daily X 1000 m3*	*Total X 1000 m3/D*	*Average Influent mg/L*	*Average Effluent mg/L*	*Removal Percent*	*Average Influent mg/L*	*Average Effluent mg/L*	*Removal Percent*	*Average Influent mg/L*	*Average Effluent mg/L*	*Removal Percent*	*Average Effluent mg/L*	*BOD Kg/D*	*TSS Kg/D*	*TP Kg/D*	*N-NH3 Kg/D*	*m3 Used*	*Average m3/D*
January	19.499	0.629	1.214	19.499	79	3.00	96.20	500	6.75	98.65	4.43	0.21	95.26	0.07	1.89	4.25	0.13	0.04	0.892	0.629
February	13.280	0.474	0.737	13.280	68	3.00	95.59	150	7.25	95.17	3.81	0.18	95.28	0.05	1.42	3.44	0.09	0.02	0.806	0.474
March	33.600	1.083	2.418	33.600	43	3.00	93.02	142	9.60	93.24	3.18	0.23	92.77	0.25	3.25	10.40	0.25	0.27	0.921	1.083
April	33.607	1.120	1.970	33.607	36	3.00	91.67	62	4.75	92.34	1.39	0.09	93.53	0.90	3.36	5.32	0.10	1.01	1.036	1.120
May	25.561	0.824	1.032	25.561	51	3.00	94.12	190	7.50	96.05	2.91	0.08	97.25	4.24	2.48	6.20	0.07	3.50	1.071	0.826
June	17.272	0.575	0.742	17.272	46	3.40	92.61	89	3.00	96.63	3.46	0.14	95.95	2.66	1.96	1.73	0.08	1.53	1.036	0.575
July	14.534	0.468	0.586	14.534	49	3.00	93.88	106	4.25	95.99	4.20	0.13	96.90	4.26	1.40	1.99	0.06	1.99	1.071	0.468
August	12.840	0.414	0.511	12.840	126	3.00	97.62	245	3.00	98.78	5.56	0.08	98.56	4.26	1.24	1.24	0.03	1.76	1.071	0.414
September	13.309	0.443	0.612	13.309	102	3.00	97.06	195	3.00	98.46	4.79	0.13	97.29	0.12	1.33	1.33	0.06	0.05	1.036	0.443
October	14.705	0.474	1.273	14.705	147	3.00	97.96	480	11.25	97.66	7.59	0.36	95.26	0.12	1.42	5.33	0.17	0.06	1.071	0.474
November	24.624	0.820	1.277	24.624	89	3.00	96.63	210	7.25	96.55	3.26	0.21	93.56	0.07	2.46	5.95	0.17	0.06	1.036	0.820
December	19.711	0.635	1.095	19.711	52	3.00	94.23	135	4.60	96.59	3.15	0.14	95.56	1.09	1.91	2.92	0.09	0.69	1.071	0.635
Total	242.542			242.542										18.09	24.11	50.08	1.30	11.00	12.118	7.96
Average		0.663		20.212	74.0	3.0	95.0	208.7	6.0	96.3	3.98	0.17	95.60	1.51	2.01	4.17	0.11	0.92	1.010	0.66
Criteria		**0.787**				**25**			**25**			**0.64**		**(S) 4 W (8)**	**19.7**	**19.7**	**0.5**	**S 3.2**		
																		W 6.3		
Maximum		0.663				3.0			6.0			0.17		(S) Y (W) Y						
Compliance		**Yes**				**Yes**			**Yes**			**Yes**		**Yes**	**Yes**	**Yes**	**Yes**	**Yes**		

	Effluent E-Coli		
	Min	Max	**Geo. Mean**
January	1	1	1.0
February	1	1	1.0
March	1	61	7.8
April	1	169	13.0
May	1	3	1.7
June	1	13	3.6
July	2	440	29.7
August	1	5	2.2
September	1	38	6.2
October	1	2	1.4
November	1	2	1.4
December	1	3	1.7

Average	1.1	62	5.9
Criteria		200	

Maximum	Yes
Compliance	***Yes***