2025
Annual Wastewater Report

Green Valley Sewage Treatment

Version 2.0

Prepared by: _____ February 18, 2026

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Approved by: _____ February 18, 2026

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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

Green Valley Sewage Treatment Plant

In accordance with the Certificate of Approval, Number 3-2012-88-896, Issue date August 1, 1989 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	300 m^3/day (average daily flow)
Service Area	Hamlet of Green Valley
Service Population	Approximately 475
Effluent Receiver	Beaudette River
Major Process	Twin cell waste stabilization pond, with annual alum dosing for phosphorus and solids removal.

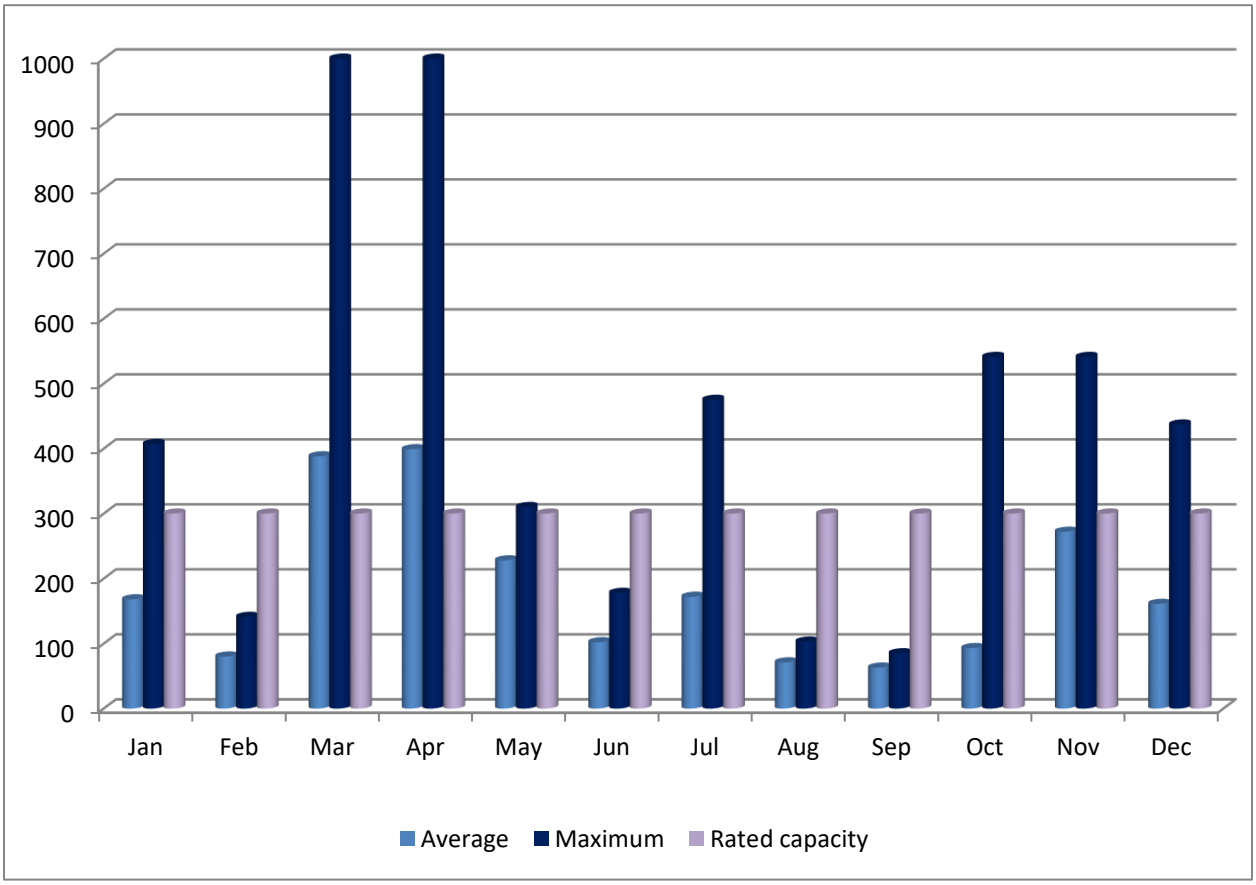
The Green Valley WPCP received and operates its operation under *Certificates of Approval (now referred to as Environmental Compliance Approval [ECA]) Number 3-2012-88-896*, in accordance with Section 53 of the Ontario Water Resources Act. The Certificate of Approval outlines the terms and conditions, 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 Green Valley WPCP is 300 cubic meters per day (m^3/day); that is raw influent (flow) into the lagoon for treatment. During the reporting year 2025, the Green Valley WPCP exceeded the rated average capacity of 300 m^3/day, fifty-seven (57) days.

Monthly Average and Maximum Daily Flows for 2025 (Rated capacity 300 m^3/day)



High Flow Events

March 2025 – Snow Melt

April 2025 – Snow Melt and Heavy Rain

2. Effluent Limits

The *Owner* shall operate and maintain the *Works* such that the concentrations and waste loadings of the materials named in Table 1 as effluent parameters are not exceeded in the effluent from the *Works*.

Table 1. 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
$CBOD_5$	30	214.3
Total Suspended Solids	30	214.3
Total Phosphorus	1.0	7.1

3. 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**
$CBOD_5$	Grab	Every 0.5 metres
Total Suspended Solids	Grab	Every 0.5 metres
Total Phosphorus	Grab	Every 0.5 metres

4. Laboratory

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

5. 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.

Parameters	**Average Concentration** mg/L	**Criteria Concentration** mg/L	**Average Loading** kg/d	**Loading Criteria** kg/d
BOD	5.20	30	19.19	214.3
Total Suspended Solids	16.8	30	62.01	214.3
Total Phosphorus	0.19	1.0	0.71	7.1

6. Inventory

Chemical	Annual Status	Units
Alum	9	Cubic meters

7. 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 (W*eekly*)
Quarterly	• N/A
Semi-Annually	• N/A
Annually	• Annual checks of monitoring equipment • Annual checks of flow meters • Re-grease grey-line unit probes in sewage pump stations
Major Maintenance	• Dose Lagoon (May) • Discharge Lagoon (May) • Clean Pump Stations x 2 (Jul) • Mowed Lagoon (Jul)

8. Operational Issues

There were no operational issues noted during 2025.

9. Complaints

No complaints reported during the 2025 operational year.

10. 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. However, bypass/overflows may still occur for the wastewater system facility(s).*

11. Lagoon Performance

On May 6th, 2025, the Township of South Glengarry Wastewater Department dosed the twin celled lagoon system with 9,000 litres of Alum for phosphorus removal. Each cell is equipped with a level marker which read approximatly1.2 meters (Avg.), that is equal to approximately 65,000 cubic meters of raw sewage.

On May 7th, 2025, at approximately 09:00, the lagoon discharge commenced, and the first set of samples were collected. The flow was set at approximately 5,100 cubic meters per day. On May 23rd, 2025, the discharge was terminated as per C of A 3-2012-88-896 which states: the sewage works shall be operated on an annual discharge basis with the effluent discharge commencing not earlier than March 15th or terminating not later than May 25th of each year. A total of 62,752 cubic meters have been recorded on the Manta Ray Level Velocity Logger.

Lab Results

Attached you will find the laboratory results of samples collected for the lagoon discharge period. (See Appendix. A)

Reports

- Appendix A – Green Valley Sewage Annual Performance Report 2025 (Attached)
- Caduceon Environmental Laboratories Analytical Reports - (on-file at plant)
- Green Valley Daily/Monthly Report Summary - (on-file at plant)

Municipality: Township of South Glengarry
Project: Green Valley Lagoons

Annual Report Data
2025

Water Course: Beaudette River
Design Capacity: 0.300 x 1000 m3/D

Description: 2 Sewage Pumping Stations - 2 Faculative Cells - Annual Discharge

	Influent Flow			Effluent	Biochemical Oxygen Demand			Suspended Solids - Total			Phosphorus			Waste Loadings			Alum
	Total X 1000 m3	Average X 1000 m3	Maximum Daily X 1000 m3	Flow - Total X 1000 m3/D	Average Influent mg/L	Average Effluent mg/L		Average Influent mg/L	Average Effluent mg/L		Average Influent mg/L	Average Effluent mg/L		BOD Kg/D	TSS Kg/D	TP Kg/D	m3 Used
January	5.210	0.168	0.407	0.000	173	0		236	0		5.67	0		0.00	0.00	0.00	0
February	2.232	0.080	0.141	0.000	199	0		290	0		7.19	0		0.00	0.00	0.00	0
March	10.851	0.388	1.225	0.000	62	0		74	0		2.29	0		0.00	0.00	0.00	0
April	11.963	0.399	1.009	0.000	40	0		75	0		1.84	0		0.00	0.00	0.00	0
May	7.066	0.228	0.310	62.752	100	5.2		200	16.8		3.55	0.19		19.19	62.01	0.71	9000
June	3.047	0.102	0.178	0.000	110	0		140	0		3.63	0		0.00	0.00	0.00	0
July	5.266	0.172	0.475	0.000	138	0		186	0		5.01	0		0.00	0.00	0.00	0
August	2.198	0.071	0.103	0.000	122	0		145	0		4.62	0		0.00	0.00	0.00	0
September	1.877	0.063	0.085	0.000	186	0		145	0		7.94	0		0.00	0.00	0.00	0
October	2.892	0.093	0.541	0.000	302	0		205	0		8.89	0		0.00	0.00	0.00	0
November	8.161	0.272	0.541	0.000	104	0		178	0		3.45	0		0.00	0.00	0.00	0
December	5.002	0.161	0.437	0.000	89	0		110	0		2.89	0		0.00	0.00	0.00	0
Total	65.765			62.752										19.19	62.01	0.71	0
Average	5.480	0.183	0.454	3.691	135.4	5.2		165.3	16.8		4.75	0.19		19.19	62.01	0.71	0
Criteria		**0.300**				**30**			**30**			**1.0**		**214.3**	**214.3**	**7.10**	
Maximum																	
Compliance		**Yes**		**3.691**		**Yes**			**Yes**			**Yes**		**Yes**	**Yes**	**Yes**	

	Influent				Effluent		Effluent									
	BOD Average mg/L	TKN Average mg/L	TP Average mg/L	NH3 Average mg/L	Average Flow X1000 m3/D		BOD mg/L	TSS mg/L	TP mg/L	NH3 mg/L	pH	TKN mg/L	NO2 mg/L	NO3 mg/L	E. Coli cfu/100ml	T. Coli cfu/100ml
						Sample Date:										
January	173	58.50	5.67	40.70	0.000	May 7th, 2025	5	4	0.01	4.49	7.82	5.7	0.05	0.05		
February	199	56.80	7.19	56.10	0.000	May 9th, 2025	3	9	0.08	1.03	7.94	2.3	0.05	0.09		
March	62	16.80	2.29	6.74	0.000	May 13th, 2025	5	5	0.10	1.5	7.97	2.9	0.05	0.3		
April	40	17.00	1.84	10.50	0.000	May 16th, 2025	3	6	0.14	1.1	7.24	3.1	0.05	0.24	10	100
May	100	25.8	3.55	13.6	62.752	May 23rd, 2025	10	60	0.63	0.31	7.11	6.4	0.07	0.05	260	2600
June	110	34.10	3.63	17.60	0.000											
July	138	42.60	5.01	24.90	0.000											
August	122	46.50	4.62	29.90	0.000											
September	186	95.60	7.94	60.70	0.000											
October	302	82.80	8.98	51.90	0.000											
November	104	29.10	3.45	13.90	0.000											
December	89	28.00	2.89	12.50	0.000											
Average	135.42	44.47	4.76	28.25	31.376		5.20	16.80	0.19	1.69	7.62	4.08	0.05	0.15	135	1350