EGANVILLE DRINKING WATER SYSTEM

2025 ANNUAL SUMMARY REPORT

Township of Bonnechere Valley
Water and Sewage Department
February 2026

Eganville Drinking Water System – 2025 Annual Summary Report

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Executive Summary

The Eganville Drinking Water System continues to provide a safe and reliable water supply to the residents and businesses of Eganville.

All regulatory requirements with respect to the Safe Drinking Water Act and Ontario Regulation 170/03 Drinking Water Systems were fully complied with during 2025.

All aspects of the Municipal Drinking Water Licence and Drinking Water Works Permit were also fully complied with during 2025.

There were no adverse water quality incidents in 2025.

The volume of water treated and distributed to the Village of Eganville customers averaged 456.6 m^3/day which is 22% of the rated capacity of the Eganville Water Treatment Plant.

Introduction

The treatment and delivery of potable water in Ontario is regulated by the Ministry of the Environment, Conservation and Parks (MECP) under the Safe Drinking Water Act and O. Reg. 170/03 which prescribes the requirements for owners and operators of municipal drinking water systems.

O. Reg. 170/03 Section 11 requires the owner to produce an Annual Report. The annual report must be prepared not later than February 28 of the following year.

The Annual Report must include:

- A description of the drinking water system including a list of the water treatment chemicals used;
- A summary of any adverse test results or observations and corrective actions;
- A summary of all required test results;
- A description of any major expenses incurred to install, repair or replace equipment.

O. Reg. 170/03 Schedule 22 requires the owner to produce a Summary Report. The summary report must be prepared no later than March 31 of the following year and given to the members of the municipal council.

- The report must list the requirements of the Act, its Regulations, the system's Drinking Water Works Permit, Municipal Drinking Water Licence and any orders the system failed to meet during the reporting period. The report must also specify the duration of the failure, and for each failure referred to, describe the measures that were taken to correct the failure.
- To enable the Owner to assess the rated capacity of their system to meet existing and future planned water uses, the following information is also required in the report.
    - A summary of the quantities and flow rates of water supplied during the reporting period, including the monthly average and maximum daily flows;
    - A comparison of the summary to the rated capacity and flow rates approved in the system's Permit To Take Water, Drinking Water Works Permit and Municipal Drinking Water Licence

Report Availability

A copy of this report shall be given, without charge, to every person who requests a copy from the Township of Bonnechere Valley Municipal Office at 49 Bonnechere St. E., Eganville, Ontario.

Users of the Eganville Drinking Water System shall be advised of the availability of the report on their monthly water bill.

The report is available on the Township of Bonnechere Valley website at www.bonnecherevalleytwp.com

Eganville Drinking Water System

The Eganville Water System is owned and operated by the Township of Bonnechere Valley and provides a potable water supply to the residents and businesses of the Village of Eganville. The system generally consists of a Water Treatment Plant (WTP), a distribution system and a water standpipe.

The WTP, built in 1990, treats water from the Bonnechere River with two Graver Monoplant Package Units, which have a combined capacity of 2,070 m^3/day. The distribution system originally constructed in the mid 1970's consists of approximately 13 km of piping ranging in diameter from 150 mm to 250 mm with a 300,000 Imperial gallon (1,363 m^3) capacity steel standpipe for pressure equalization and supply.

The water treatment process within the two Graver Monoplant Package Units uses Sodium Hypochlorite for pre-disinfection and Pre Hydroxylated Aluminum Sulphate with Polyelectrolyte for coagulation. The treated and filtered water is then disinfected with Sodium Hypochlorite prior to being pumped out to the distribution system.

Large Residential Drinking Water System	
Name	Eganville Drinking Water System
Owner	Township of Bonnechere Valley
Number	210000675
Municipal Drinking Water Licence	171-101 (Issue #4)
Drinking Water Works Permit	171-201 (Issue #3)
Permit To Take Water	2101-8W4LN3
Financial Plan (2021 to 2027)	171-301
QMS Operational Plan	171-401

Summary of Adverse Test Results and Other Regulatory Issues

There were no adverse test results or other regulatory issues in 2025.

Summary of Public Complaints

During 2025 no formal public complaints were submitted to the Water and Sewage Department.

Summary of Water Quality Monitoring

Microbiological

Source	Number of Samples	Range of E. Coli Results (CFU/100ml) (min #-max #)	Range of Total Coliform Results (CFU/100ml) (min #-max #)	ODWQS*
Raw	52	0 – 78	20 - 1400	N/A
Treated	52	0 – 0	0 - 0	0
Distribution	166	0 – 0	0 - 0	0

* ODWQS – Ontario Drinking Water Quality Standards, Ont. Reg. 169/03

Source	Number of HPC* Samples	Range of HPC Results (CFU/mL) (min#-max#)	ODWQS
Raw	0	N/A	N/A
Treated	52	2 - 4	500
Distribution	166	2 - 2	500

*HPC - Heterotrophic Plate Count

Operational

Parameter	Number of Samples	Range of Results (min #)-(max #)	ODWQS
Turbidity - results from continuous turbidity monitors on 4 dual media filters & 2 GAC filters, and weekly grab samples from treated water leaving plant **	48,144	All results were ≤ 0.3 NTU > 95% of the time & <1.0 NTU 100% of the time **	1.0 NTU*
Free Chlorine Residual - continuous monitor on treated water leaving plant	8760	1.31 -- 2.43 mg/L	0.05 - 4.0 mg/L
Total Chlorine Residual - continuous monitor on treated water leaving plant	8760	1.39 -- 2.74 mg/L	N/A
Free Chlorine Residual - grab samples in distribution system	535	0.30 -- 2.08 mg/L	0.05 - 4.0 mg/L
Total Chlorine Residual - grab samples in distribution system	535	0.41 -- 2.45 mg/L	N/A

*NTU – Nephelometric Turbidity Unit

**Summary of Turbidity results presented in "2024 Monitoring Summary Report"

Summary of Schedule 15.1 Lead Monitoring

No exceedance of the ODWQS were noted.

Sample Period	Sample Date	Location	Sample Results		
			Lead* mg/L	Alkalinity mg/L	pH
Dec 2024 to Apr 2025	April 14/25	Hydrant #0031 244 Oak St.	0.00018	36	7.18
Dec 2024 to Apr 2025	April 14/25	Hydrant #0041 4 Foran St.	0.00028	36	7.11
June to Oct 2025	Sept.16/25	Hydrant #0024 98 Hartwig St	N/A	30	7.47
June to Oct 2025	Sept.16/25	Hydrant#0047 30 Bell St.	N/A	29	7.55

*ODWQS standard for lead in drinking water is 0.01 mg/L

** Schedule 15.1 allows for lead sampling every 3rd year with Alkalinity and pH each sampling period.

Summary of Quarterly Trihalomethane (THM) Monitoring

No exceedance of the ODWQS were noted.

DISTRIBUTION SYSTEM – TRIHALOMETHANE (THM)				
Date	Jan.21/25	Apr.22/25	Jul.22/25	Oct.21/25
Total THM ug/L	43	77	33	44
RAA* ug/L	67.3	72.8	55.8	49.3

*RAA – Running Annual Average

*ODWQS - RAA is 100 ug/L

Summary of Quarterly Haloacetic Acid (HAA) Monitoring

No exceedance of the ODWQS were noted.

DISTRIBUTION SYSTEM – HALOACETIC ACID (HAA)				
Date	Jan.21/25	Apr.22/25	Jul.22/25	Oct.21/25
Total HAAs ug/L	49.2	74	36.3	62.5
RAA* ug/L	59.4	66.9	55.0	56.6

*RAA – Running Annual Average

*ODWQS - RAA is 80 ug/L

Summary of Quarterly Nitrate and Nitrite Monitoring

No exceedance of the ODWQS were noted.

TREATED WATER					
Date	Jan.21/25	Apr.22/25	Jul.22/25	Oct.21/25	ODWQS (mg/L)
Nitrate mg/L	0.06	0.05	0.05	0.05	10.0
Nitrite mg/L	0.05	0.05	0.05	0.05	1.0

Summary of Annual Sodium & Fluoride Monitoring

The treated water was sampled on January 21, 2025 for sodium and fluoride. No exceedance of the ODWQS were noted.

TREATED WATER		
Parameter	Results (mg/L)	ODWQS (mg/L)
Sodium mg/L	9.4	200
Fluoride mg/L	<0.1	1.5

Summary of Annual Schedule 23 Inorganic Parameters Monitoring

The treated water was sampled on January 21, 2025 for the following inorganic parameters. No exceedance of the ODWQS were noted.

TREATED WATER		
Parameter	Results (mg/L)	ODWQS (mg/L)
Antimony	<0.0001	0.006
Arsenic	<0.0001	0.01
Barium	0.029	1
Boron	<0.005	5
Cadmium	<0.000010	0.005
Chromium	<0.002	0.05
Mercury	<0.00002	0.001
Selenium	<0.001	0.05
Uranium	<0.00005	0.02

Summary of Annual Schedule 24 Organic Parameters Monitoring

The treated water was sampled on January 21, 2025 for the following organic parameters. No exceedance of the ODWQS were noted.

EGANVILLE DRINKING WATER SYSTEM - TREATED WATER - SCHEDULE 24 - ORGANIC PARAMETERS							
SAMPLE DATE:	Jan.21/25	RESULT	ODWQS			RESULT	ODWQS
PARAMETER		ug/l	ug/l		PARAMETER	ug/l	ug/l
Alachlor		<0.3	5		Diquat	<5	70
Atrazine + N-dealkylated metabolites		<0.5	5		Diuron	<5	150
Azinphos-methyl		<1	20		Glyphosate	<25	280
Benzene		<0.5	1		Malathion	<5	190
Benzo(a)pyrene		<0.006	0.01		2-Methyl-4-chlorophenoxyacetic acid (MCPA)	<0.10	100
Bromoxynil		<0.5	5		Metolachlor	<3	50
Carbaryl		<3	90		Metribuzin	<3	80
Carbofuran		<1	90		Chlorobenzene	<0.5	80
Carbon Tetrachloride		<0.2	2		Paraquat	<1	10
Chlorpyrifos		<0.5	90		Pentachlorophenol	<0.2	60
Diazinon		<1	20		Phorate	<0.3	2
Dicamba		<1	120		Picloram	<5.0	190
1,2-Dichlorobenzene		<0.5	200		Polychlorinated Biphenyls (PCB)	<0.05	3
1,4-Dichlorobenzene		<0.5	5		Prometryne	<0.1	1
1,2-Dichloroethane		<0.5	5		Simazine	<0.5	10
1,1-Dichloroethylene (vinylidene chloride)		<0.5	14		Terbufos	<0.5	1
Dichloromethane		<0.5	50		Tetrachloroethylene (perchloroethylene)	<0.5	10
2,4-Dichlorophenol		<0.2	900		2,3,4,6-Tetrachlorophenol	<0.2	100
2,4-Dichlorophenoxy acetic acid (2,4-D)		<1.0	100		Triallate	<10	230
Diclofop-methyl		<0.9	9		Trichloroethylene	<0.5	5
Dimethoate		<1	20		2,4,6-Trichlorophenol	<0.2	5
					Trifluralin	<0.5	45
					Vinyl Chloride	<0.2	1

Infrastructure Improvements

Eganville Water Treatment Plant and Distribution System

Complete refurbishment of the Granular Activated Carbon (GAC) Filters in the Eganville Water Treatment Plant including sandblasting, interior and exterior painting, metal work, valve and underdrain component replacement, and new GAC media installation.

Replacement of a Hydrant in the Water Distribution System at 300 Queen St.

The ongoing renewal and equipment replacement program ensures a reliable and fully operational drinking water system.

Instrument Calibration and Maintenance

The raw water and treated water flow meters were calibrated by SCG Flowmetrix on September 23, 2025. The flowmeters passed the internal continuous verification and automatic self calibration. They are working within +/- 1% of their original factory calibration.

All water level measuring devices were checked and calibrated on November 6, 2025 by Franklin Empire. They are working within +/- 1% of the measured and reported levels.

All lab instrumentation was serviced, calibrated, verified with standards on December 16, 2025 by Hach Sales & Service Canada Ltd.

All calibration and maintenance activities were done by qualified Technicians using industry standards and calibrated equipment as detailed in the WTP Calibration Report for 2025.

All turbidimeters and chlorine analyzers were calibrated and maintained in accordance with manufactures recommendations by certified Operators.

Water Usage Summary

TREATED WATER			
2024 Month	**Average Day m^3**	**Maximum Day m^3**	**Monthly Total m^3**
JANUARY	536.4	629.4	16629.7
FEBRUARY	403.9	481.3	11310.2
MARCH	395.1	507.5	12249.4
APRIL	373.8	474.3	11214.9
MAY	392.9	754.4	12179.7
JUNE	471.2	608.8	14137.1
JULY	454.7	576.1	14095.1
AUGUST	458.2	670.3	14203.7
SEPTEMBER	477.9	597.4	14337.2
OCTOBER	481.1	553.4	14913.2
NOVEMBER	496.9	587.1	14906.9
DECEMBER	537.5	841.8	16663.0
Year Total			**166840**
Average	**456.6**		**13903.3**
Max Day		**841.8**	

Note:
The approved rated capacity of the Eganville Water Treatment Plant is 2070 m^3/day.
The average day flow during 2025 was 456.6 m^3 which is 22% of the rated capacity.
The maximum daily flow recorded during 2024 was 841.8 m^3 which is 40% of the rated capacity.
Based on this the Eganville Water Treatment Plant has more than adequate capacity to supply the Village of Eganville with drinking water for the foreseeable future.

Monitoring Summary Report

The appended 2025 Eganville Drinking Water System Monitoring Summary Report provides additional detail on the results of both the operational and compliance monitoring.