



**2025 SUMMARY REPORT FOR
STRATHROY-CARADOC WATER
DISTRIBUTION SYSTEM**

2025 Summary Report for Strathroy-Caradoc Water Distribution System

Statement of Compliance

This report is a summary of water quality information for the Strathroy-Caradoc Water Distribution System and published in accordance with Schedule 22 of Ontario’s Safe Drinking Water Act, Ontario Regulation 170/03 for the reporting period of January 1, 2025 to December 31, 2025. The Strathroy-Caradoc Distribution System is categorized as a Large Municipal Residential Drinking Water System.

The Strathroy-Caradoc Distribution System was operated and maintained in such a manner that the water supplied to the consumers serviced by the system satisfied all the requirements in the Safe Drinking Water Act, the Regulations, the Drinking Water Works Permit Number and the Municipal Drinking Water Licence.

Description of Water Works

The Strathroy-Caradoc Distribution System is supplied with water from the Lake Huron Primary Water Supply System. The Strathroy-Caradoc Distribution System has two connection points to the Lake Huron Primary Water Supply System.

Strathroy is connected at the Lake Huron Primary Water Supply System Monitoring Station #2 located at the Second Street Reservoir. The Strathroy portion of the distribution system consists of the Second Street Pumping Station/Reservoir with re-chlorination and Reservoir (capacity 11,250 m³), the Head Street Water Tower (capacity 1,900 m³) and over 100 km of watermain serving the local street network.

The following tables provide an overview of storage capacity and pump flow rates associated with the Strathroy System

Table 1: Strathroy Water Distribution System Storage Capacity

Site	Capacity (m ³)
Reservoir Cell #1	3,750
Reservoir Cell #2	3,750
Reservoir Cell #3	3,750
Water Tower	1,900
Strathroy-Caradoc Pipeline In-line Emergency Storage	7,500
Total	20,650

Table 2: Strathroy Water Pumping Station Flow Rates

Pump #	Capacity (L/s)
P1	80
P2	139
P3	212
P4	39
P5	39

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The Strathroy portion of the distribution system services the Municipality of Strathroy-Caradoc and Township of Adelaide-Metcalfe.

Mount Brydges is connected to the Lake Huron Primary Water Supply System Monitoring Station #2 located at the intersection of Springwell Road and Falconbridge Drive. The Mount Brydges portion of the distribution system consists of the Oriole Drive Monitoring Station #3 (re-chlorination), the Glendon Drive Reservoir/Pumping Station (capacity 1639m³), the Railroad Street Water Tower (capacity 720m³) and over 40km of watermain serving the local street network.

The following tables provide an overview of storage capacities and pump flow rates associated with the Mount Brydges System

Table 3: Mount Brydges Water Distribution System Storage Capacity

Site	Capacity (m ³)
Reservoir Cell #1	1,639
Water Tower	720
Total	2,359

Table 4: Mount Brydges Water Pumping Station Pump Flow Rates

Pump#	Capacity (L/s)
P1	41
P2	60
P3	58
P4	58

The Mount Brydges portion of the distribution system services the Mount Brydges area.

Water Quality information pertaining to the Lake Huron Primary Water Supply System may be obtained from the following web site: www.huronelginwater.ca

Details of non-compliance issues & how any non-compliance issues were corrected

The Ministry of Environment, Conservation and Parks (MECP) completed a focused inspection of the Strathroy-Caradoc Water Distribution System on January 8th, 2026. Three non-compliances were issued by the MECP. They include:

- Form 1 documents were not prepared as required. The Form 1 submitted for the proposed Buchannon Crossings subdivision contained written verification from a licensed engineering practitioner dated September 22, 2025. However, the required written verification from the drinking water system owner was absent from the submission. **Corrective Action:** The drinking water system owner shall ensure

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that all Form 1 records are completed in accordance with the requirements of the Permit, including all required verifications prior to placing any watermains into service.

- All parts of the drinking water system were not disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit. **Corrective Action:** The system owner shall ensure that all watermains are disinfected in accordance with the Disinfection Procedure and that complete, accurate documentation is maintained for all disinfection activities. To strengthen oversight and mitigate risk of reoccurrence, the system owner has implemented an internal verification and sign off procedure for watermain commissioning projects.
- Secondary disinfectant residual was not tested as required for the large municipal residential distribution system. **Corrective Action:** To strengthen oversight and mitigate risk of recurrence, the system owner has implemented a internal verification and sign-off procedure for chlorine sampling and testing operational checks.

Details of adverse water quality or potential issues reported as well as how and when any adverse water quality issues were corrected.

Table 5: Summary of Adverse Water Quality Incidents

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
N/A					

Summary of the Quantities and Flow Rates of Water Supplied

The following tables summarize the quantities and totalized volume of water supplied during 2025 in Strathroy and Mt Brydges.

Table 6: Strathroy Water Distribution System Monthly Flow Rates Comparison

System Capability Assessment			
Comparison of Flow Rates: Strathroy			
Month	Total Flow m ³	Average Flow m ³ /day	Max Flow m ³ /day
January	127,550	4,115	4,255
February	117,500	4,052	5,983
March	128,303	4,139	4,696
April	125,040	4,168	6,011
May	143,164	4,618	6,140
June	164,284	5,476	6,190
July	183,750	5,927	6,381

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System Capability Assessment			
August	175,638	5,666	6,467
September	176,044	5,868	6,443
October	170,253	5,492	7,907
November	164,597	5,487	6,897
December	152,554	4,921	6,221
Average Flow	152,390	4,994	6,133
Maximum Flow	183,750	5,927	7,907
Total Flow	1,828,677	NA	NA
Cubic Meters	Available Storage Capacity	Required Storage Capacity	Remaining Storage Capacity
	13,150	6,220	6,930

Table 7: Mount Brydges Water Pumping Station Monthly Flow Rates Comparison

System Capability Assessment			
Comparison of Flow Rates: Mt Brydges			
Month	Total Flow m ³	Average Flow m ³ /day	Max Flow m ³ /day
January	34,873	1,125	1,015
February	28,886	996	1,013
March	23,967	773	1,075
April	24,634	821	1,110
May	29,781	961	1,490
June	37,796	1,260	1,663
July	40,105	1,294	1,715
August	36,893	1,190	1,585
September	31,060	1,035	1,244
October	28,369	915	1,061
November	24,584	819	1,144
December	26,371	851	1,056
Average Flow	30,610	1,003	1,264
Maximum Flow	40,105	1,294	1,715
Total Flow	367,319	NA	NA
Cubic Meters	Available Storage Capacity	Required Storage Capacity	Remaining Storage Capacity
	13,150	6,220	6,930

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2,350	1,715	635
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Comparison of Actual Flow Rates and Maximum Allowable Rates

The water system’s highest daily flow for the Strathroy Area was on October 17, 2025. The highest daily flow for Mt Brydges Area was on July 23, 2025. The Masterplan found that the water storage for each area is the limiting factor since there are no restrictions on the water supply received from the Lake Huron Primary Water Supply System. The required storage capacity is below the available storage capacity for both the Strathroy and Mt Brydges areas.

Comparison of Current Flow Rates to Historical

The table below shows the average day flow since 2005. The table shows that water usage has been consistent over the last several years for the Strathroy and Mt Brydges areas.

Table 8: Historical Strathroy-Caradoc Water Distribution System Flow Rates

Year	Strathroy Average Flow (m ³ /day)	Mount Brydges Average Flow (m ³ /day)	Combined Average Day Flow (m ³ /day)
2005	NA	894	6,554
2006	NA	732	5,795
2007	4,962	748	5,710
2008	4,776	717	5,493
2009	4,597	691	5,288
2010	4,795	727	5,522
2011	4,602	683	5,285
2012	4,845	704	5,549
2013	4,852	663	5,515
2014	4,631	647	5,278
2015	4,380	662	5,042
2016	4,367	714	5,081
2017	4,325	724	5,049
2018	4,349	756	5,105
2019	4,362	795	5,157
2020	4,551	892	5,444
2021	4,591	949	5,540
2022	4,725	934	5,659
2023	4,499	910	5,409
2024	4,490	904	5,394
2025	4,994	1,006	6,000