

ANNUAL REPORT

Drinking Water System Number:	260091650
Drinking Water System Name:	Hensall Distribution System
Drinking Water System Owner:	Corporation of the Municipality of Bluewater
Drinking Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2021 – December 31, 2021

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking Water System serve more than 10,000 people? Yes [] No [X]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Municipality of Bluewater 14 Mill Ave. Zurich, Ontario N0M 2T0</p> </div>	<p><u>Complete for all other Categories</u></p> <p>Number of Designated Facilities served: <div style="border: 1px solid black; padding: 2px;">n/a</div></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Not applicable</p> <p>Number of Interested Authorities you report to: <div style="border: 1px solid black; padding: 2px;">n/a</div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Not applicable</p>
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List all Drinking Water Systems (if any), which receive all their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Not applicable	

Did you provide a copy of your annual report to all Drinking Water System owners that are connected to you and to whom you provide all drinking water?
Not applicable

Indicate how you notified system users that your annual report is available and is free of charge.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method _____

Describe your Drinking Water System

Treated water is delivered to the Hensall Distribution System by a trunk main fed from the Lake Huron Primary Water Supply System. The main runs east from Grand Bend along Huron Rd. towards Exeter (600 mm) and north along Airport Line (400 mm) to Hensall. The Hensall Distribution System serves a population of approximately 1,024.

The Hensall Pump house consists of:

- 300 m³ underground reservoir with a submersible pump.

The meter and valve chamber located at the intersection of Hwy 84 and Airport Rd consists of an in-ground manhole structure with:

- Magnetic flow meter;
- Valved by-pass;
- Remote telemetry;
- Pressure reducing valve.

The distribution system is constructed of a combination of cast iron, ductile and PVC piping. There is an elevated tower that maintains system pressure in addition to providing some reserve storage.

List all water treatment chemicals used over this reporting period

Not applicable

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

System repairs & replacements included:

- Installed heater at reservoir
- Parts Inventory
- Watermain Repairs – Water Service Repairs

Provide details on the notices submitted in accordance with subsection 18 (1) of the Safe Drinking Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
No issues applicable to this reporting period					

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period

	Number of Samples	Range of E. Coli Results (min#)-(max#)	Range of Total Coliform Results (min#)-(max#)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Distribution	156	0 – 0	0 – 0	52	< 10 – 50

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
Chlorine: Distribution	364	0.31 – 1.27	mg/L

NOTE: For continuous monitors use 8760 as the number of samples

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
Not applicable				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Not applicable

Summary of lead testing under Schedule 15.1 during this reporting period (applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Distribution	4	0.13 – 0.99	ug/L	0

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
HAAs (Note: show latest running annual average)	Jan. – Dec. 2021	14.63	ug/L	No
THMs (Note: show latest running annual average)	Jan. – Dec. 2021	43.5	ug/L	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards

Parameter	Result Value	Unit of Measure	Date of Sample
Not applicable			

The Annual Report for the Lake Huron Primary Water Supply System can be found at:

<https://huronelginwater.ca/consumer-resources/consumer-reports/>



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

2021 Summary Report

Hensall Distribution System

Prepared for the Municipality of Bluewater

By the Ontario Clean Water Agency

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SECTION 1 - Statement of Compliance

This report is a summary of water quantity and quality information for the Hensall 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, 2021 to December 31, 2021. The Hensall Distribution System is categorized as a Large Municipal Residential Drinking Water System.

The Hensall 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: 045-201, Issue Number: 03 and the Municipal Drinking Water License Number: 045-101, Issue Number 4.

The last Ministry of Environment, Conservation & Parks inspection occurred on December 21, 2020; no MECP inspection occurred in 2021.

SECTION 2 - Details of the non-compliance issues as well as how and when any non-compliance issues were corrected

No non-compliance issues were identified.

SECTION 3 - Summary and discussion of quantity of water supplied

In accordance with Schedule 22-2 (3) "the report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system."

1. A summary of the quantities and totalized volume of water supplied during the period covered by this report include monthly averages and the annual total flow with respect to DWS 260091650

The total flow into the Hensall Distribution System for 2021 was 128,448 m³. The average monthly flow for 2021 was 10,704 m³. The maximum monthly flow for the reporting period of 13,089 m³ was recorded for August 2021. Refer to the table below for a summary of flow supplied to the Hensall Distribution System.

2. A comparison of the summary of flows to the rated capacity and flow rates approved in the system system's MDWL, DWWP or written agreement.

The Hensall Distribution System, Municipal Drinking Water License (License Number: 045-101) does not identify a system rated capacity. The agreement between the Municipality of Bluewater and the Lake Huron Primary Water Supply Board of Management does not specify a maximum volume for water taking.

Hensall Distribution System - 2021 Water Flows From LHPWSS

Month	Total Volume (m³)
January	9,789
February	9,755
March	9,369
April	8,702
May	11,088
June	11,261
July	10,185
August	13,089
September	11,577
October	10,727
November	10,739
December	12,167
Average	10,704
Total	128,448