

**ANNUAL REPORT**

Drinking Water System Number:	260006542
Drinking Water System Name:	Bluewater Lakeshore 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><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></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><b><u>Complete for all other Categories</u></b></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**

The Bluewater Lakeshore distribution system trunk main (250mm, 300mm, 350mm,) is fed from the Lake Huron Primary Water Supply System northerly along Highway 21 to Bayfield; subdivisions west of Highway 21 are serviced. In 2015 the subdivisions of Carriage Lane and Harbour Lights both were connected to this system. The Stanley Booster Pumping Station located on the southwest corner of Highway 21 and Danceland Road increases system pressure during periods of high demand. An elevated storage tank, with a total volume of 4000 m<sup>3</sup> supplies water to the remainder of the residents of Bayfield. This elevated tank facility contains standby re-chlorination equipment, two chemical metering pumps (one duty and one standby) and an online chlorine analyzer. The on-line chlorine analyzer residuals are monitored by a SCADA system located in Zurich. This system serves a population of 7,500 residents.

**List all water treatment chemicals used over this reporting period**

Sodium Hypochlorite

**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**

- Bayfield Elevated Tank Exterior repairs and clean
- Water service installed at the Bayfield Lift Station; new sample location site.
- Stanley Booster Station backflow preventer replaced
- Watermain repairs & service repairs
- Parts inventory

**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	162	0 – 0	0 – 0	55	< 10 – 70

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	0.41 – 1.54	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	6	0.03 - 0.74	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
<b>HAAs</b> (Note: show latest running annual average)	Jan. – Dec. 2021	13.30	ug/L	No
<b>THMs</b> (Note: show latest running annual average)	Jan. – Dec. 2021	39.5	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://huroneginwater.ca/consumer-resources/consumer-reports/>



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

**2021 Summary Report**

**Bluewater Lakeshore 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 Bluewater Lakeshore 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 Bluewater Lakeshore Distribution System is categorized as a Large Municipal Residential Drinking Water System.

The Bluewater Lakeshore 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: 045-202 and the Municipal Drinking Water License Number: 045-102. The last Ministry of Environment, Conservation & Parks (MECP) inspection occurred on January 25, 2021; there were no non-compliance issues identified. The inspection report was received on February 24, 2021.

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

There were no non-compliance issues identified in the last Ministry of Environment, Conservation & Parks (MECP) inspection which occurred on January 25, 2021. The routine MECP Inspections have an Inspection Rating Record, which evaluates the system to provide information for the owner/operator on areas that need to be improved. The particular areas that were evaluated for the Bluewater Lakeshore Distribution System were: Treatment Process, Operations Manuals, Logbooks, Certification and Training, Water Quality Monitoring, Reporting and Corrective Actions and Treatment Process Monitoring. This system received 0 out of 580 non-compliance ratings and as such received 100% for the Final Inspection Rating.

No potential adverse water quality or non-compliance issues were identified in 2021.

## **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 including monthly averages and the annual total flow with respect to DWS 260006542.

The total flow for the Bluewater Lakeshore Distribution System in 2021 was 435,438 m<sup>3</sup>. The average monthly flow for 2021 was 36,287 m<sup>3</sup>. The maximum monthly flow for the reporting period of 58,474 m<sup>3</sup> was recorded in the month of

June. Refer to the table below for a summary of the flows supplied to the Bluewater Lakeshore Distribution System in 2021.

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

The Bluewater Lakeshore Distribution System, Municipal Drinking Water License (License Number: 045-102) 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.

### Bluewater Lakeshore Distribution System 2021 Water Flows

Month	LHPWSS (m <sup>3</sup> )	Bayfield Tower (m <sup>3</sup> )
January	24,473	10,174.8
February	22,144	8,614.7
March	26,361	10,585.1
April	27,476	9,906.0
May	43,057	15,289.5
June	58,474	21,634.3
July	55,132	20,462.9
August	57,766	21,772.4
September	40,474	15,093.7
October	25,501	10,060.0
November	25,986	9,221.3
December	24,594	9,780.7
<b>Average Monthly Flow</b>	<b>36,287</b>	-
<b>Total Flow</b>	<b>435,438</b>	<b>162,595.40</b>