

ANNUAL REPORT 2022

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, 2022 – December 31, 2022

<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> <table border="1" style="width: 100%;"> <tr> <td>Municipality of Bluewater 14 Mill Ave. Zurich, Ontario N0M 2T0</td> </tr> </table>	Municipality of Bluewater 14 Mill Ave. Zurich, Ontario N0M 2T0	<p><u>Complete for all other Categories</u></p> <p>Number of Designated Facilities served: Not applicable</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: Not applicable</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>
Municipality of Bluewater 14 Mill Ave. Zurich, Ontario N0M 2T0		

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 m³ 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 4,000 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

Provide a brief description and a breakdown of monetary expenses incurred

- Hydrant repairs
- New subdivisions mains and services - Troy St , Durand Huronview, Deer Ridge, Old River Rd.
- 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	182	0 – 0	0 – 0	80	< 10 – 80

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	360	0.36 – 1.21	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	0.08 - 1.62	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. 2022	15.03	ug/L	No
THMs (Note: show latest running annual average)	Jan. – Dec. 2022	35.25	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: [LHPWSS Consumer Reports](#)



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

2022 Summary Report
Bluewater Lakeshore Distribution System

Prepared for the Municipality of Bluewater

By the Ontario Clean Water Agency

Section Number	CONTENTS	Page Number
1	Overview	1
2	Compliance with Regulations Schedule 22-2 (2)(a) List the requirements of the Act, the regulations, the system’s approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report.	1
3	Corrective Actions Schedule 22-2 (2)(b) For each requirement referred to in section 2 that was not met, specify the duration of the failure and the measures that were taken to correct the failure.	1
4	Flow Summary Schedule 22-2 (3) 1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows. 2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system’s approval, drinking water works permit or municipal drinking water licence, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4), to the flow rates specified in the written agreement.	1
APPENDICES		
Appendix A: Flows January 1, 2022 to December 31, 2022		

SECTION 1 - Overview

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, 2022 to December 31, 2022. The Bluewater Lakeshore Distribution System is categorized as a Large Municipal Residential Drinking Water System.

SECTION 2 – Compliance with Regulations

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 October 06, 2022; there were no non-compliance issues identified. The inspection report was received on December 07, 2022.

SECTION 3 – Corrective Action

There were no non-compliance issues identified in the last Ministry of Environment, Conservation & Parks (MECP) inspection which occurred on October 06, 2022. The MECP Inspection Rating Record has not been received to date.

There were no adverse water quality or non-compliance issues identified in 2022.

SECTION 4 – Flow Summary

The total flow received by the Bluewater Lakeshore Distribution System from the Lake Huron Primary Water Supply System in 2022 was 438,601 m³. This is a 0.73% increase from 2021 flows. The average monthly flow for 2022 was 36,550 m³. The maximum monthly flow for the reporting period of 69,249 m³ was recorded in the month of July. Refer to Appendix A for a summary of the flows supplied to the Bluewater Lakeshore Distribution System in 2022.

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.

Appendix A

Bluewater Lakeshore Distribution System 2022 Water Flows

Month	LHPWSS (m³)	Bayfield Tower (m³)
January	26,184	10,393.1
February	27,400	8,796.1
March	20,054	7,894.2
April	26,593	8,453.1
May	38,065	12,216.2
June	49,661	18,475.2
July	69,249	25,857.2
August	54,754	19,959.6
September	46,961	12,426.8
October	24,832	10,456.3
November	25,205	9,656.0
December	29,643	9,403.5
Average Monthly Flow	36,550	12,832
Total Flow	438,601	153,987