



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

2020 Annual and Summary Reports
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 Section 11 and Schedule 22 of Ontario's Safe Drinking Water Act, Ontario Regulation 170/03 for the reporting period of January 1, 2020 to December 31, 2020. 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, Issue Number: 02 and the Municipal Drinking Water Licence Number: 045-102, Issue Number 3. The last Ministry of Environment, Conservation & Parks (MECP) inspection occurred on December 12th, 2019; there were no non-compliance issues identified. The inspection report was received on March 2nd, 2020. No Ministry of Environment, Conservation & Parks inspection occurred in 2020.

Water quality data is presented in the Section 11 Annual Report found in Appendix A.

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 December 12th, 2019.

There was one incident of potential adverse water quality reported in 2020 by the Operating Authority.

On August 11, 2020, a contractor hit the watermain that fed Elliot Street in Bayfield. The Operator in Charge deemed that this was a Category 2 watermain break because flow was stopped before a water gap was established. The Huron Perth Public Health Inspector was notified of this event and advised that the watermain be flushed, sampled and a Precautionary Boil Water Advisory be put in place following repair. The Precautionary Boil Water Advisory was lifted on August 13, 2020 following receipt of good sample results.

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 Bluewater Lakeshore Distribution System, Municipal Drinking Water License (License Number: 045 -102 Issue No. 3) does not identify a system rated capacity. The total flow for the Bluewater Lakeshore Distribution System in 2020 was 475,059 m³. The average monthly flow for 2020 was 39,588 m³. The maximum monthly flow for the reporting period of 73,214 m³ was recorded in the month of July. Refer to the table below for a summary of the flows supplied to the Bluewater Lakeshore Distribution System in 2020.

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: 045-201) 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 2020 Water Flows

Month	LHPWSS (m³)	Bayfield Tower (m³)
January	28,371	9,110.80
February	26,700	9,418.31
March	31,803	10,567.20
April	30,000	11,072.25
May	42,000	14,875.76
June	59,317	21,856.15
July	73,214	26,927.21
August	57,466	22,122.12
September	42,116	16,415.91
October	31,088	12,689.46
November	26,527	12,071.41
December	26,457	11,446.70
Average Monthly Flow	39,588	-
Total Flow	475,059	178,573.27

Appendix A
Section 11 Annual Report

SECTION 11 ANNUAL REPORT: 2020

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, 2020 – December 31, 2020

<p>Does your Drinking-Water System serve more than 10,000 people? No</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <p>Municipality of Bluewater 14 Mill Ave. Zurich, Ontario N0M 2T0</p>	<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>
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List all Drinking-Water Systems (if any), which receive all of their drinking water from your system: 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 of its 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-Water Department Office
- Public access/notice via Public Request

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) & 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 8,000 residents.

List all water treatment chemicals used over this reporting period:

Sodium Hypochlorite

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

System repairs & replacements included:

- Stanley Booster pump
- 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
August 11, 2020	Category 2 Watermain Break	PBWA	N/A	Precautionary Boil Water Advisory (PBWA) Issued: On August 11, 2020 there was a watermain break that fed Elliot Street in Bayfield. The Operator in Charge deemed this a Category 2 watermain break because flow was stopped before a water gap was established. A Huron Perth Public Health Inspector was notified and advised that the watermain be repaired, flushed, sampled and a PBWA be put in place until sample results are received. The PBWA was lifted on August 13, 2020 following receipt of good sample results.	August 13, 2020

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 or Fecal Results (min -max) cfu/100ml	Range of Total Coliform Results (min –max) cfu/100ml	Number of HPC Samples	Range of HPC Results (min –max) cfu/1mL spread plate
Distribution	162	0 – 0	0 – 0	64	< 10 – 30

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	369	0.33 – 1.15	mg/L

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

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

Location Type	Date Sampled	Number of Samples	pH Range	Range of Alkalinity (min – max) mg/L	Range of Lead Results (min – max) ug/L	Number of Exceedances
Distribution	Mar 27, 2020	3	6.97-7.05	84 - 86	0.10 - 0.23	0
Distribution	Aug 13, 2020	3	7.78 - 8.23	74 - 79	0.07 - 0.32	0

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

Parameter	Annual Running Average	Result Value	MAC ug/L	Exceedance
Trihalomethane: Total (ug/L)	Jan - Dec. 2020	32.5	100.00	No
Haloacetic Acids: Total (ug/L)	Jan - Dec. 2020	14.28	80.00	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards. Not applicable

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

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