



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

## **Annual Summary Report**

### **Bluewater Lakeshore Distribution System**

**2019**

**Prepared for the Municipality of Bluewater**

**By the Ontario Clean Water Agency**

# Bluewater Lakeshore Distribution System - Annual Summary Report 2019

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# **Bluewater Lakeshore Distribution System - Annual Summary Report 2019**

## **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, 2019 to December 31, 2019. The Bluewater Lakeshore Distribution System is categorized as a Large Municipal Residential Drinking Water System.

This report was prepared by the Ontario Clean Water Agency on behalf of the Municipality of Bluewater.

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 10<sup>th</sup>, 2018; one (1) non-compliance issue was identified. The inspection report was received February 21<sup>st</sup>, 2019. Details of this last MECP inspection were documented in the 2018 Annual Report submitted. No Ministry of Environment, Conservation & Parks inspection occurred in 2019.

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### **SECTION 2**

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

No Ministry of Environment, Conservation & Parks inspection occurred in 2019.

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

There was one (1) incident of adverse water quality or potential for adverse water quality reported in 2019.

AWQI # 145784

On June 21, 2019 Adverse Water Quality Incident # 145784 was issued following the detection of 5 cfu/100ml in a sample collected on June 19, 2019. The sample was collected from a blow off on a dead end watermain after a water service repair on the same watermain. Resamples were collected at the blow-off, at a home on the same watermain and at the Kippen Sample station. Resample results were all compliant.

There were no Spill Incidents reported in 2019.

### **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, maximum daily 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 for this reporting period was 443,670 m<sup>3</sup> /yr. The average monthly flow for 2019 was 36,972.5 m<sup>3</sup>. The maximum monthly flow for the reporting period was 67,030 m<sup>3</sup> recorded in August 2019; on September 5<sup>th</sup> 2019 the Bayfield tower maximum daily flow of 1,570.6 m<sup>3</sup> was recorded. Refer to the table below for a summary of the flows supplied to the Bluewater Lakeshore Distribution System.

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**Bluewater Lakeshore Distribution System  
2019 Water Flows From LHPWSS- Cubic Meters**

<b>Month</b>	<b>Total Cubic Meters</b>
<b>January</b>	<b>23,500</b>
<b>February</b>	<b>22,000</b>
<b>March</b>	<b>25,500</b>
<b>April</b>	<b>24,600</b>
<b>May</b>	<b>37,000</b>
<b>June</b>	<b>60,000</b>
<b>July</b>	<b>64,413</b>
<b>August</b>	<b>67,030</b>
<b>September</b>	<b>42,042</b>
<b>October</b>	<b>32,849</b>
<b>November</b>	<b>26,128</b>
<b>December</b>	<b>18,608</b>
<b>Average</b>	<b>36,972.5</b>
<b>TOTAL (m<sup>3</sup>)</b>	<b>443,670.0</b>



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<b>Drinking-Water System Number:</b>	260006542
<b>Drinking-Water System Name:</b>	Bluewater Lakeshore Distribution System
<b>Drinking-Water System Owner:</b>	Corporation of the Municipality of Bluewater
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2019 – December 31, 2019

<p><b>Does your Drinking-Water System serve more than 10,000 people?</b> No</p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet?</b> Yes</p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b>  Municipality of Bluewater 14 Mill Ave. Zurich, Ontario N0M 2T0</p>	<p align="center"><b><u>Complete for all other Categories.</u></b></p> <p><b>Number of Designated Facilities served:</b> Not applicable</p> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve?</b> Not applicable</p> <p><b>Number of Interested Authorities you report to:</b> Not applicable</p> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?</b> 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 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



# Ontario Drinking-Water Systems Regulation O. Reg. 170/03

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) & 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 3,000 permanent residents increasing to 4,000 residents seasonally.

**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**

System repairs & replacements included:

- SCADA Upgrades
- Repair Parts Inventory re-stock
- 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
AWQI # 145784 issued June 21, 2019	Total Coliform Count	5	cfu/100 ml	Flushed line and resampled from the location of the adverse & 2 upstream locations on June 21, 2019; no downstream sample point due to dead end main. Resamples were all compliant with zero Total Coliform & zero E.coli	June 25, 2019

**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
<b>Distribution</b>	165	0 – 0	0 – 5	61	<10 – 140

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	0.32 – 1.08	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**

(Applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

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	March 25, 2019	3	7.22-7.25	84 - 85	0.04 - 0.05	0
Distribution	September 12, 2019	3	6.44-6.98	74 - 77	0.04 - 0.82	0

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

Parameter	Annual Running Average	Result Value	Unit of Measure	Exceedance
THM	Jan –Dec. 2019	38.5	ug/L	No
HAA	Jan –Dec. 2019	17.8	ug/L	NA

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

Not applicable