



March 27, 2017

Mayor Renald Beaulieu and Council  
The Corporation of the Municipality of Greenstone  
P.O. Box 70  
GERALDTON, Ontario  
POT 1M0

**Re: 2016 Annual Summary Report for the Beardmore Drinking-Water System**  
**2016 Annual Summary Report for the Caramat Drinking-Water System**  
**2016 Annual Summary Report for the Geraldton Drinking-Water System**  
**2016 Annual Summary Report for the Longlac Drinking-Water System**  
**2016 Annual Summary Report for the Nakina Drinking-Water System**

Ontario's Drinking-Water Systems Regulation (O.Reg.170/03), made under the *Safe Drinking Water Act, 2002*, requires that the owner of a drinking water system prepare an annual summary for municipalities on the operation of the system and the quality of its water.

The annual summary must cover the period of January 1<sup>st</sup> to December 31<sup>st</sup> in a year and must be prepared not later than March 31<sup>st</sup> of the following year. Pursuant to the legislative requirements, enclosed for your records is the 2016 Annual Summary for the Greenstone Drinking-Water Systems.

Pursuant to the legislative requirements, *Schedule 22 Summary Reports for Municipalities*, the annual summary must:

- (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; and,
  - (b) for each requirement referred to in clause (a) that was not met, specify the duration of the failure and the measures that were taken to correct the failure."
- O. Reg. 170/03 s. 22 (2)

"The report must also include the following information for the purpose of enabling the owner of the system to assess the rated capability of their system to meet existing and planned uses of the system:

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.”

-O. Reg. 170/03 s. 22 (3)

In addition, Section 12 (1) - 4 - gives the direction that a copy of the annual summary for the system is given, without charge, to every person who requests a copy and be made available for inspection by any member of the public during normal business hours. The reports should be made available at the office of the municipality, or at a location that is accessible to the users of the water system.

These reports were prepared by the Ontario Clean Water Agency on behalf of the Corporation of the Municipality of Greenstone and are based on information kept on record by OCWA at each specific water treatment plant. The report covers the period January 1<sup>st</sup> through to December 31<sup>st</sup> 2016.

Yours truly,



Bradley McMahon  
Senior Operations Manager  
Northwestern Ontario Hub

Copy to: Mark Wright - CAO  
Brian Aaltonen – Director of Public Services  
Operations Staff – Beardmore WTP  
Operations Staff – Caramat WTP  
Operations Staff – Geraldton WTP  
Operations Staff – Longlac WTP  
Operations Staff – Nakina WS

# 2016 Schedule 22 Annual Summary Report

## Beardmore Drinking-Water System

March 2017

Prepared by the



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

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## **SECTION 1: INTRODUCTION**

This report is a summary of water quality information for the Beardmore Drinking-Water System, published in accordance with Schedule 22 of Ontario's Drinking-Water Systems Regulation for the reporting period of January 1<sup>st</sup> to December 31<sup>st</sup> 2016. The Beardmore Drinking-Water System is categorized as a Large Municipal Residential Drinking-Water System.

This report is prepared by The Ontario Clean Water Agency on behalf of the Corporation of the Municipality of Greenstone – Beardmore Ward. A copy of the Summary Report is to be provided to the members of the municipal council by March 31<sup>st</sup> 2017.

## **SECTION 2: WHAT DOES THE REPORT CONTAIN**

"The report must,

- (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; and,
- (b) for each requirement referred to in clause (a) that was not met, specify the duration of the failure and the measures that were taken to correct the failure."

- O. Reg. 170/03 s. 22 (2)

"The report must also include the following information for the purpose of enabling the owner of the system to assess the rated capability of their system to meet existing and planned uses of the system:

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-O. Reg. 170/03 s. 22 (3)

### **SECTION 3: DAILY FLOW RATES**

In accordance with the *Municipal Drinking Water Licence 225-102 Schedule C: System – Specific Conditions 1.0 Performance Limits*, the Beardmore drinking water system shall not be operated to exceed the rated capacity for maximum flow rate from the treatment subsystem to the distribution system of  $752 \text{ m}^3 / \text{day}$ .

The drinking water system may be operated temporarily at a rate above the rated capacity where necessary for:

- (i) the purposes of fighting a large fire or,
- (ii) the maintenance of the drinking-water system

In 2016, the average monthly raw flow rate was  $2915.92 \text{ m}^3$ ; the average raw daily flow rate was  $95.64 \text{ m}^3$ , with a maximum raw daily flow rate of  $311.16 \text{ m}^3$ .

In 2016, the average monthly treated flow rate was  $2669.76 \text{ m}^3$ ; the average daily treated flow was  $87.57 \text{ m}^3$  and the maximum daily treated flow for the year was  $157.41 \text{ m}^3$ ; this represents 20.9 % of the allowable daily volume.

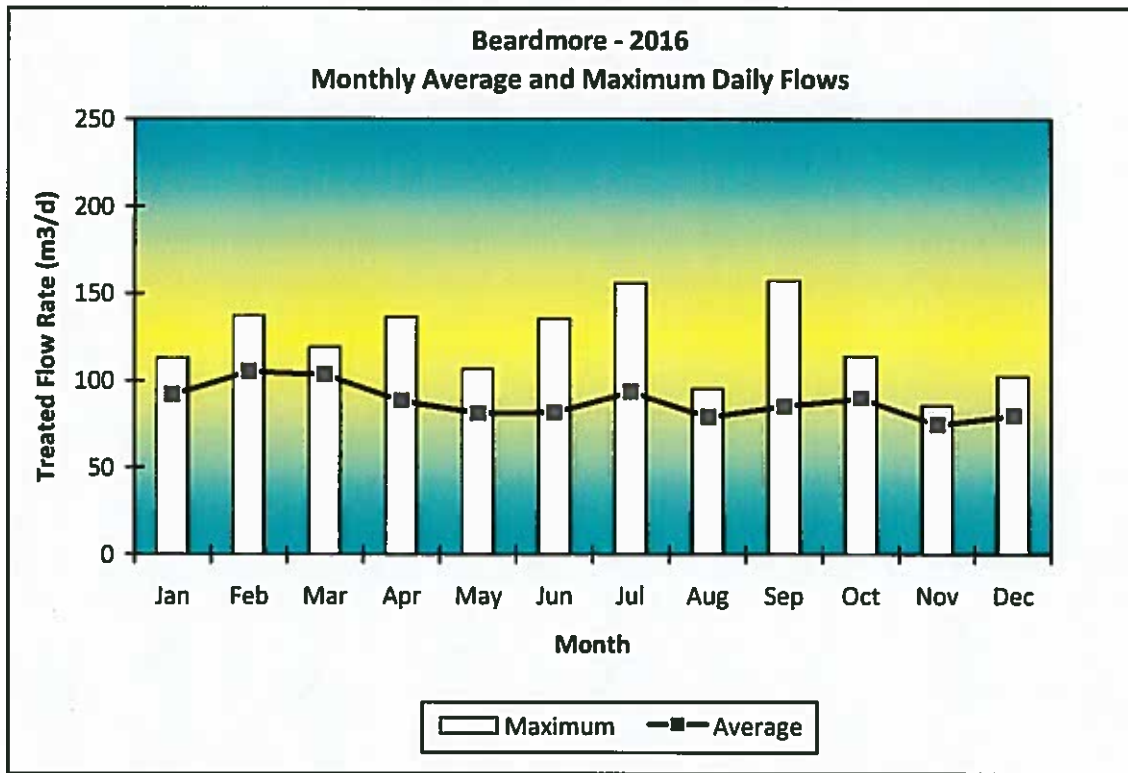
A summary of raw and treated flows, including maximum raw flow into the treatment system as well as treated average, maximum and total flow rates are included in the tables below.

The quantity of raw water supplied during the reporting period did not exceed the terms and conditions of the *Permit to Take Water* nor did the treated flows directed to the distribution system exceed the rated capacity for this system.

### Monthly Raw & Treated Flow Rates for 2016

Month	Average Daily Raw Flow Rate (m <sup>3</sup> /d)	Maximum Daily Raw Flow Rate (m <sup>3</sup> /d)	Average Daily Treated Flow Rate (m <sup>3</sup> /d)	Maximum Daily Treated Flow Rate (m <sup>3</sup> /d)	Total Monthly Treated Flow Rate (m <sup>3</sup> / month)
January	98.64	138.50	91.86	113.05	2847.75
February	113.34	196.97	105.03	136.96	3045.82
March	109.16	165.32	103.15	119.13	3197.72
April	101.13	311.16	88.14	136.39	2644.06
May	99.20	285.03	80.71	106.75	2501.98
June	86.81	146.79	81.33	135.13	2440.02
July	98.34	182.78	93.29	155.86	2892.04
August	86.25	115.11	78.74	95.14	2440.80
September	93.65	159.84	85.10	157.41	2553.06
October	95.70	147.51	89.74	114.13	2781.98
November	80.17	120.46	74.22	85.24	2226.67
December	85.33	122.72	79.52	102.48	2465.26
	<b>2016 Total Treated Flows (m<sup>3</sup>)</b>				<b>32037.16</b>

## Comparison of Treated Monthly Average and Maximum Treated Flows for 2016



### SECTION 4: SYSTEM FAILURES AND CORRECTIONS

There were no identified system failures in 2016.

The Ministry of Environment conducted an inspection of the water plant in February 2016. The inspection rating was 100%



**SECTION 5: CONCLUSION**

In the reporting year of 2016, there was one adverse water quality incident (AWQI) reports filed as summarized in the below table.

<b>Incident Date</b>	<b>Parameter</b>	<b>Result</b>	<b>Unit of Measure</b>	<b>Corrective Action</b>	<b>Corrective Action Date</b>
16-May-16	Other observation - Precautionary BWA for Maintenance work in Clear well			Collect 2 sets of Bacteriological samples from Distribution system	24-May-16

For the operating year of 2016, the Beardmore Drinking-Water System was able to meet the demand of water use within the town without exceeding the Municipal Drinking Water Licence and Permit to Take Water.