

# SUMMARY REPORT

ONTARIO REGULATION 170/03  
SCHEDULE 22

## MOOREFIELD DRINKING WATER SYSTEM

FOR THE PERIOD:  
JANUARY 1, 2019 – DECEMBER 31, 2019

*Prepared for the Township of Mapleton  
by the Ontario Clean Water Agency*



ONTARIO CLEAN WATER AGENCY  
AGENCE ONTARIENNE DES EAUX

## **SUMMARY REPORTS FOR MUNICIPALITIES**

Period from: JANUARY 01, 2019 – DECEMBER 31, 2019

### **DRINKING-WATER SYSTEMS REGULATION O. Reg. 170/03, Schedule 22**

<b>DRINKING-WATER SYSTEM NAME:</b>	<b>MOOREFIELD DRINKING WATER SYSTEM</b>
<b>DRINKING-WATER SYSTEM NUMBER:</b>	<b>260069732</b>
<b>DRINKING-WATER SYSTEM CATEGORY:</b>	LARGE MUNICIPAL RESIDENTIAL
<b>DRINKING-WATER WORKS PERMIT #:</b>	105-202, Issue #3 - November 24, 2015
<b>MUNICIPAL DRINKING WATER LICENCE #:</b>	105-102, Issue #2 - November 24, 2015
<b>PERMIT TO TAKE WATER #:</b>	1401-9KXJW5

#### **REPORT:**

This report is a summary of water quality information for the Moorefield Water Supply, published in accordance with Schedule 22 of Ontario's Drinking-Water System Regulation 170/03 for the reporting period of **January 1, 2019 to December 31, 2019**.

This report was prepared by the Ontario Clean Water Agency on behalf of the Township of Mapleton.

#### **Issues of Non-Compliance**

The following outlines any instances when the DWS failed to meet the requirements of the Act, Regulations, System Approval(s) and any Order during this reporting period and the measures taken to correct each failure.

**There were no instances of non-compliance this reporting year.**

**The Moorefield Drinking Water System was last inspected by the Ministry of the Environment, Conservation, and Parks on June 6, 2019.**

Please refer to the Section 11 Annual Report for the Moorefield Drinking Water System for information regarding Adverse Water Quality Incident(s) which may have occurred during the reporting period.

## SUMMARY REPORTS FOR MUNICIPALITIES

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### DRINKING-WATER SYSTEMS REGULATION O. Reg. 170/03, Schedule 22

#### **SYSTEM PERFORMANCE:**

The following tables list the quantities and flow rates of the water supplied during the reporting period covered by this report, including each raw water well and the treated water system. It includes the monthly average, maximum daily flows and a comparison to the rated capacity and flow rates specified in the system approval.

<b>Moorefield Well Supply</b>	<b>Well #1</b>	<b>Well #2</b>	<b>Total Raw</b>	<b>Treated</b>
Design Capacity (m <sup>3</sup> /day)	1310.00	1310.00	2620.00	1555.00
Approved Maximum Flow Rate (L/s)	15.17	15.17	-	-
Average Day Flow (m <sup>3</sup> /day)	76.80	84.26	-	149.62
Maximum Day Flow (m <sup>3</sup> /day)	255.62	218.82	-	433.09
% Average Day Flow/Design Capacity	5.86%	6.43%	-	9.62%
% Maximum Day Flow/Design Capacity	19.51%	16.70%	-	27.85%
Average Peak Flow Rate (L/s)	10.22	6.60	-	-
Maximum Peak Flow Rate (L/s)	10.27	6.73	-	-
% Average Peak Flow Rate/Approved	67.37%	43.51%	-	-
% Maximum Peak Flow Rate/Approved	67.70%	44.36%	-	-

A review of flow information for the period of January 1, 2019 to December 31, 2019 indicates that:

- The maximum daily volume specified in the PTTW was not exceeded on any well.
- The drinking water system did not exceed the rated capacity for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system as specified in the MDWL.

<b>Treated</b>				
<b>Month</b>	<b>Monthly Flow Total (m<sup>3</sup>/month)</b>	<b>Daily Flow Average (m<sup>3</sup>/day)</b>	<b>Daily Flow Maximum (m<sup>3</sup>/day)</b>	<b>Max Percent Rated Capacity (%)</b>
<b>January</b>	6121.41	197.46	257.92	16.59
<b>February</b>	5625.92	208.37	433.09	27.85
<b>March</b>	6177.34	199.27	285.06	18.33
<b>April</b>	5890.82	196.36	268.93	17.29
<b>May</b>	6212.59	200.41	349.89	22.50
<b>June</b>	5864.21	195.47	279.30	17.96
<b>July</b>	3684.35	118.85	251.84	16.20

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<b>August</b>	3037.89	98.00	158.91	10.22
<b>September</b>	2848.58	94.95	138.24	8.89
<b>October</b>	2929.22	94.49	148.29	9.54
<b>November</b>	2981.6	99.39	167.81	10.79
<b>December</b>	3086.53	99.57	152.32	9.80
<b>Total</b>	54450.61			
<b>Avg</b>		149.62		
<b>Max</b>			433.09	27.85

The following tables outline the detailed flow summary for each Raw Water Well:

Table 3: Facility Flow Summary for Raw Water Source W1						
Well #1						
Month	Monthly Flow Total (m <sup>3</sup> /month)	Daily Flow Average (m <sup>3</sup> /day)	Daily Flow Maximum (m <sup>3</sup> /day)	Max Percent Water Taking Limits (%)	Daily Flow Peak Flow Rate (L/sec)	Number of Days of Water Taking
January	2601.92	83.93	146.50	11.18	10.25	31
February	2284.16	84.60	194.08	14.82	10.27	27
March	2646.47	85.37	131.23	10.02	10.23	31
April	2621.34	87.38	136.90	10.45	10.19	30
May	2701.06	87.13	132.54	10.12	10.19	31
June	3507.49	116.92	255.62	19.51	10.21	30
July	1896.67	72.95	235.33	17.96	10.21	26
August	1506.78	53.81	84.19	6.43	10.16	28
September	991.64	58.33	109.06	8.33	10.14	17
October	1129.25	56.46	117.34	8.96	10.24	20
November	1342.33	55.93	87.81	6.70	10.27	24
December	1422.85	54.72	111.17	8.49	10.27	26
<b>Total</b>	24651.96					321
<b>Avg</b>		76.80			10.22	
<b>Max</b>			255.62	19.51	10.27	

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### DRINKING-WATER SYSTEMS REGULATION O. Reg. 170/03, Schedule 22

Table 4: Facility Flow Summary for Raw Water Source W2						
Well #2						
Month	Monthly Flow Total (m <sup>3</sup> /month)	Daily Flow Average (m <sup>3</sup> /day)	Daily Flow Maximum (m <sup>3</sup> /day)	Max Percent Water Taking Limits (%)	Daily Flow Peak Flow Rate (L/sec)	Number of Days of Water Taking
January	3266.40	105.37	193.76	14.79	6.52	31
February	3143.14	116.41	204.83	15.64	6.52	27
March	3249.47	104.82	184.29	14.07	6.53	31
April	3005.27	100.18	177.86	13.58	6.54	30
May	3492.26	112.65	218.82	16.70	6.65	31
June	2346.27	102.01	183.65	14.02	6.54	23
July	1747.97	62.43	167.94	12.82	6.73	28
August	1540.67	55.02	86.59	6.61	6.67	28
September	1837.44	68.05	153.62	11.73	6.65	27
October	1785.34	63.76	158.62	12.11	6.60	28
November	1607.74	57.42	77.25	5.90	6.57	28
December	1625.89	58.07	113.09	8.63	6.67	28
<b>Total</b>	28647.87					340
<b>Avg</b>		84.26			6.60	
<b>Max</b>			218.82	16.70	6.73	