

SUMMARY REPORT

ONTARIO REGULATION 170/03
SCHEDULE 22

MOOREFIELD DRINKING WATER SYSTEM

FOR THE PERIOD:
JANUARY 1, 2020 – DECEMBER 31, 2020

*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, 2020 – DECEMBER 31, 2020

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

DRINKING-WATER SYSTEM NAME:	MOOREFIELD DRINKING WATER SYSTEM
DRINKING-WATER SYSTEM NUMBER:	260069732
DRINKING-WATER SYSTEM CATEGORY:	LARGE MUNICIPAL RESIDENTIAL
DRINKING-WATER WORKS PERMIT #:	105-202, Issue #4 – Issued: November 13, 2020
MUNICIPAL DRINKING WATER LICENCE #:	105-102, Issue #3 – Issued: November 13, 2020 Expiry: November 13, 2025
PERMIT TO TAKE WATER #:	1401-9KXJW5 – May 31, 2024

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, 2020 to December 31, 2020**.

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 September 3, 2020.

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

Period from: JANUARY 01, 2020 – DECEMBER 31, 2020

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.

Moorefield Well Supply	Well #1	Well #2	Total Raw	Treated
Design Capacity (m ³ /day)	1310.00	1310.00	2620.00	1555.00
Approved Maximum Flow Rate (L/s)	15.17	15.17	-	-
Average Day Flow (m ³ /day)	59.10	60.29	-	105.43
Maximum Day Flow (m ³ /day)	167.14	137.44	-	252.99
% Average Day Flow/Design Capacity	4.51%	4.60%	-	6.78%
% Maximum Day Flow/Design Capacity	12.76%	10.49%	-	16.27%
Average Peak Flow Rate (L/s)	10.52	7.35	-	-
Maximum Peak Flow Rate (L/s)	11.62	12.88	-	-
% Average Peak Flow Rate/Approved	69.35%	48.45%	-	-
% Maximum Peak Flow Rate/Approved	76.60%	84.90%	-	-

A review of flow information for the period of January 1, 2020 to December 31, 2020 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.

Treated				
Month	Monthly Flow Total (m ³ /month)	Daily Flow Average (m ³ /day)	Daily Flow Maximum (m ³ /day)	Max Percent Rated Capacity (%)
January	3193.60	103.02	163.20	10.50
February	2986.37	102.98	182.46	11.73
March	3093.89	99.80	160.96	10.35
April	2969.98	99.00	132.35	8.51
May	3249.15	104.81	159.87	10.28
June	3594.11	119.80	252.99	16.27
July	3301.12	106.49	166.85	10.73
August	3169.66	102.25	146.75	9.44
September	3151.17	105.04	147.97	9.52
October	3396.29	109.56	142.66	9.17

SUMMARY REPORTS FOR MUNICIPALITIES

Period from: JANUARY 01, 2020 – DECEMBER 31, 2020

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

November	3160.32	105.34	140.29	9.02
December	3318.85	107.06	148.61	9.56
Total	38584.51			
Avg		105.43		
Max			252.99	16.27

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 ³ /month)	Daily Flow Average (m ³ /day)	Daily Flow Maximum (m ³ /day)	Max Percent Water Taking Limits (%)	Daily Flow Peak Flow Rate (L/sec)	Number of Days of Water Taking
January	1522.56	56.39	92.22	7.04	10.33	26
February	1442.56	57.70	120.32	9.18	10.26	25
March	1430.34	57.21	79.04	6.03	10.29	27
April	1334.59	53.38	62.02	4.73	10.29	28
May	1701.55	58.67	167.14	12.76	10.38	25
June	1837.25	63.35	146.40	11.18	10.29	27
July	1626.27	60.23	125.34	9.57	10.25	27
August	1568.48	58.09	118.05	9.01	10.26	27
September	1463.87	54.22	111.68	8.53	10.31	28
October	2242.69	80.10	151.84	11.59	10.97	29
November	1511.30	55.97	114.34	8.73	11.00	27
December	1560.90	53.82	115.17	8.79	11.62	29
Total	19242.36					325
Avg		59.10			10.52	
Max			167.14	12.76	11.62	

SUMMARY REPORTS FOR MUNICIPALITIES

Period from: JANUARY 01, 2020 – DECEMBER 31, 2020

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 ³ /month)	Daily Flow Average (m ³ /day)	Daily Flow Maximum (m ³ /day)	Max Percent Water Taking Limits (%)	Daily Flow Peak Flow Rate (L/sec)	Number of Days of Water Taking
January	1652.04	61.19	87.23	6.66	6.73	29
February	1526.05	61.04	130.53	9.96	6.77	26
March	1669.18	64.20	136.99	10.46	6.82	25
April	1607.14	59.52	75.17	5.74	6.84	27
May	1577.15	58.41	73.41	5.60	6.87	27
June	1765.25	65.38	137.44	10.49	6.77	28
July	1619.81	57.85	134.75	10.29	6.76	26
August	1591.90	53.06	81.89	6.25	12.88	30
September	1693.31	65.13	114.37	8.73	6.64	26
October	1174.11	55.91	74.14	5.66	6.71	21
November	1591.49	58.94	71.49	5.46	6.76	28
December	1761.18	62.90	119.49	9.12	7.66	30
Total	19228.62					323
Avg		60.29			7.35	
Max			137.44	10.49	12.88	