

SUMMARY REPORT

ONTARIO REGULATION 170/03
SCHEDULE 22

SHELBURNE DRINKING WATER SYSTEM

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

*Prepared for the Town of Shelburne
by the Ontario Clean Water Agency*



A People Place, A Change of Pace
SHELBURNE
ONTARIO, CANADA



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

DRINKING-WATER SYSTEM NAME:	SHELBURNE DRINKING WATER SYSTEM
DRINKING-WATER SYSTEM NUMBER:	220004695
DRINKING-WATER SYSTEM CATEGORY:	LARGE MUNICIPAL RESIDENTIAL
DRINKING-WATER WORKS PERMIT #:	109-201, Issue #6 - May 24, 2017
MUNICIPAL DRINKING WATER LICENCE #:	109-101, Issue #4 - June 9, 2017
PERMIT TO TAKE WATER #:	1353-AZHJCQ

REPORT:

This report is a summary of water quality information for the Shelburne 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 Town of Shelburne.

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 Shelburne Drinking Water System was last inspected by the Ministry of the Environment, Conservation, and Parks on November 15, 2018.

Please refer to the Section 11 Annual Report for the Shelburne 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, 2019 – DECEMBER 31, 2019

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.

Table 1: Shelburne DWS – Maximum Allowable Volume and Flow Rate, and Rated Capacity

Shelburne Well Supply	Well #1	Well #3	Well #5	Well #6	Well #7	Well #8
Design Capacity (m ³ /day)	1642.00	1309.00	1964.00	1964.00	1635.00	1635.00
Approved Maximum Flow Rate (L/s)	19.00	15.15	22.73	22.73	18.91	18.91
Average Day Flow (m ³ /day)	83.64	436.03	296.33	307.63	419.95	449.27
Maximum Day Flow (m ³ /day)	340.00	1092.00	1084.00	936.00	1403.00	1336.00
% Average Day Flow/Design Capacity	5.09%	33.31%	15.09%	15.66%	25.68%	27.47%
% Maximum Day Flow/Design Capacity	20.71%	83.42%	55.19%	47.66%	85.81%	81.17%
Average Peak Flow Rate (L/s)	3.71	13.02	13.20	11.87	17.76	18.07
Maximum Peak Flow Rate (L/s)	12.05	14.48	16.24	14.13	18.90	18.85
% Average Peak Flow Rate/Approved	19.53%	85.94%	58.07%	52.22%	93.92%	95.56%
% Maximum Peak Flow Rate/Approved	63.42%	95.58%	71.44%	62.16%	99.95%	99.68%

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.

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

Table 2: Facility Flow Summary for Raw Water Source W1

Well #1						
Month	Monthly Flow Total (m³/month)	Daily Flow Average (m³/day)	Daily Flow Maximum (m³/day)	Max Percent Water Taking Limits (%)	Daily Flow Peak Flow Rate (L/sec)	Number of Days of Water Taking
January	4538.00	146.39	258.00	15.71	5.55	31
February	1251.00	44.68	173.00	10.54	9.63	28
March	3748.00	120.90	200.00	12.18	4.80	31
April	3702.00	123.40	251.00	15.29	4.75	30
May	4369.00	140.94	340.00	20.71	4.75	31

SUMMARY REPORTS FOR MUNICIPALITIES

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

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

June	2898.00	96.60	184.00	11.21	7.36	30
July	3501.00	112.64	167.00	10.17	5.43	31
August	3561.00	117.20	228.00	13.89	4.20	30
September	2792.00	93.07	169.00	10.29	3.94	30
October	49.00	1.58	33.00	2.01	6.91	31
November	11.00	2.75	5.00	0.30	12.05	4
December	19.00	3.17	7.00	0.43	6.45	6
Total	30394.00					313
Avg		83.64			6.32	
Max			340.00	20.71	12.05	

Table 3 : Facility Flow Summary for Raw Water Source W3

Well #3						
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	7858.00	253.48	658.00	50.27	13.23	31
February	15005.00	535.89	782.00	59.74	13.26	28
March	7420.00	239.35	653.00	49.89	13.14	31
April	8091.00	269.70	790.00	60.35	13.21	30
May	10973.00	353.97	1092.00	83.42	13.14	31
June	13368.00	445.60	1087.00	83.04	13.08	30
July	10586.00	341.48	928.00	70.89	13.06	31
August	10550.00	340.32	780.00	59.59	13.13	31
September	9895.00	329.83	716.00	54.70	13.06	30
October	22708.00	732.52	1069.00	81.67	14.48	31
November	21506.00	716.87	1077.00	82.28	14.45	30
December	21190.00	683.55	1082.00	82.66	13.21	31
Total	159150.00					365
Avg		436.03			13.37	
Max			1092.00	83.42	14.48	

SUMMARY REPORTS FOR MUNICIPALITIES

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

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

Table 4: Facility Flow Summary for Raw Water Source W5						
Well #5						
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	10161.00	327.77	660.00	33.60	14.32	31
February	9730.00	347.50	686.00	34.93	14.33	28
March	6164.00	198.84	493.00	25.10	14.33	31
April	9363.00	312.10	682.00	34.73	14.29	30
May	11277.00	363.77	1084.00	55.19	14.38	31
June	9102.00	303.40	867.00	44.14	15.42	30
July	11538.00	372.19	946.00	48.16	14.86	31
August	11185.00	360.81	920.00	46.84	16.24	31
September	9491.00	316.37	535.00	27.24	14.26	30
October	6865.00	221.45	630.00	32.08	14.28	31
November	6813.00	227.10	462.00	23.52	14.18	30
December	6175.80	205.86	406.00	20.67	14.24	30
Total	107864.80					364
Avg		296.33			16.24	
Max			1084.00	55.19	14.59	

Table 5: Facility Flow Summary for Raw Water Source W6						
Well #6						
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	8740.00	281.94	730.00	37.17	12.47	31
February	5624.00	200.86	561.00	28.56	12.52	28
March	11766.00	379.55	714.00	36.35	13.44	31
April	8443.00	281.43	704.00	35.85	12.42	30
May	12707.00	409.90	936.00	47.66	12.40	31
June	13018.00	433.93	888.00	45.21	13.14	30
July	10638.00	343.16	858.00	43.69	12.90	30
August	10054.00	324.32	575.00	29.28	12.52	31
September	8860.00	295.33	619.00	31.52	12.35	30
October	7853.00	253.32	472.00	24.03	12.60	31
November	6589.00	219.63	398.00	20.26	12.44	30
December	7992.00	257.81	569.00	28.97	14.13	31

SUMMARY REPORTS FOR MUNICIPALITIES

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

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

Total	112284.00					365
Avg		307.63			12.77	
Max			936.00	47.66	14.13	

Table 6: Facility Flow Summary for Raw Water Source W7

Well #7						
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	12867.00	415.06	792.00	48.44	18.88	31
February	9878.00	352.79	827.00	50.58	18.59	28
March	12067.00	389.26	984.00	60.18	18.47	31
April	12410.00	413.67	911.00	55.72	18.41	30
May	16717.00	539.26	1403.00	85.81	18.40	31
June	16486.00	549.53	1332.00	81.47	18.90	30
July	16085.00	518.87	1286.00	78.65	18.69	31
August	13926.00	449.23	864.00	52.84	18.47	31
September	13554.00	451.80	896.00	54.80	18.41	30
October	11415.00	368.23	709.00	43.36	18.81	31
November	9042.00	301.40	595.00	36.39	18.43	30
December	8414.00	280.47	525.00	32.11	18.82	30
Total	152861.00					364
Avg		419.95			18.61	
Max			1403.00	85.81	18.90	

Table 7: Facility Flow Summary for Raw Water Source W8

Well #8						
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	13974.00	450.77	1096.00	67.03	18.44	31
February	11660.00	416.43	916.00	56.02	18.47	28
March	14642.00	472.32	1071.00	65.50	18.41	31
April	12861.00	428.70	1056.00	64.59	18.42	30
May	17315.00	558.55	1336.00	81.71	18.73	31
June	15288.00	509.60	1156.00	70.70	18.81	30

SUMMARY REPORTS FOR MUNICIPALITIES

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

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

July	15616.00	503.74	1262.00	77.19	18.85	31
August	16227.00	523.45	1229.00	75.17	18.81	31
September	12620.00	420.67	695.00	42.51	18.45	30
October	10831.00	349.39	952.00	58.23	18.51	31
November	10142.00	338.07	569.00	34.80	18.43	30
December	12806.00	413.10	854.00	52.23	18.38	31
Total	163982.00					365
Avg		449.27			18.56	
Max			1336.00	81.71	18.85	