

March 29, 2017

Andrew Sprunt, Manager of Public Works <u>tsbppwmanager@bmts.com</u> Town of South Bruce Peninsula 315 George Street Wiarton, Ontario N0H 2T0

RE: 2016 Summary Report, Requirement under O. Reg. 170/03, Schedule 22

Dear Mr. Sprunt,

Attached are the 2016 Summary Reports for the following drinking water systems:

- Amabel-Sauble
- Foreman
- Huron Woods
- Oliphant
- Wiarton

These reports were completed in accordance with Schedule 22 of Ontario Regulation 170/03. It is required that a Summary Report for the previous calendar year be prepared no later than March 31^{st} of each year and be given to the members of the Town Council. Please ensure this distribution.

Section 12 of Ontario Regulation 170/03 requires that the Summary Report be made available for inspection, at no charge, by any member of the public during regular business hours. The report should be made available for inspection at the office of the Town or at a location that is convenient for the users of the water system.

Should you require further clarification of information regarding this report, please feel free to contact me.

Sincerely,

Leo^JPaul Frigault Senior Operations Manager OCWA, Georgian Highlands Region



AMABEL-SAUBLE DRINKING WATER SYSTEM

Large Municipal Residential

SCHEDULE 22 SUMMARY REPORT

For the period of JANUARY 1, 2016 TO DECEMBER 31, 2016

This report is a summary of water quality and quantity information submitted in accordance with Schedule 22 of Ontario's Drinking Water System Regulation for the reporting period of January 1, 2016 to December 31, 2016 for the Amabel-Sauble Drinking Water System located in the Town of South Bruce Peninsula. The summary includes the following information:

- Any requirements of the Act and Regulation, Orders or System Approval(s) that the system failed to meet during the reporting period and the measures taken to correct each failure.
- A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.
- A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

Issues of Non-Compliance

An MOECC Drinking Water System Inspection was performed on December 7, 2016. On January 18, 2017 the report for this inspection was issued, the Amabel-Sauble Drinking Water System received an inspection rating of 100%.

The following is a summary of the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water license, and any orders applicable to the system that were not met at any time during the period covered by the report; as well as the duration of the failure and the measures that were taken to correct the failure:

• There were no non-compliances during the reporting period.

Refer to the Section 11 Annual Report for a summary of any Adverse Water Quality Incident(s) which occurred during the reporting period.

Assessment of Flowrates and Quantity of Water Supplied

The following tables summarize the quantities (Table 1) and flow rates (Table 2) of the water supplied during the period covered by the report, including monthly average and maximum daily flows as well as a comparison of the summary to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water license.

As per Municipal Drinking Water License (MDWL) 094-101 (Issue Number: 2, expires March 17, 2020), the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed a rated capacity of $687 \text{ m}^3/\text{day}$. There is no maximum allowable limit listed in the MDWL for the flowrate of water that flows into a treatment subsystem, however, raw water flowrate has been included in this report (Table 3, 4, 5).

Table 1. Treated W	ter Monthly Average and Maximum Daily Flows and Comparison to Rated Capacity for 2016

	Treated Water Flow			
2016	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity
January	62.00	9.02 %	78.42	11.42 %
February	61.86	9.00 %	83.91	12.21 %
March	59.60	8.68 %	75.47	10.99 %
April	70.51	10.26 %	89.55	13.03 %
May	104.18	15.16 %	163.76	23.84 %
June	124.68	18.15 %	177.74	25.87 %
July	156.68	22.81 %	231.11	33.64 %
August	145.51	21.18 %	223.94	32.60 %
September	114.45	16.66 %	339.62	49.44 %
October	75.75	11.03 %	118.60	17.26 %
November	66.14	9.63 %	96.74	14.08 %
December	68.31	9.94 %	86.49	12.59 %

 Table 2. Treated Water Monthly Average and Maximum Flowrates for 2016

	Treated Water		
2016	Average Flowrate	Maximum Flowrate	
	(l /s)	(l/s)	
January	0.72	8.92	
February	0.71	7.68	
March	0.69	8.71	
April	0.82	7.65	
May	1.21	75.77	
June	1.44	8.09	
July	1.82	49.24	
August	1.68	7.83	
September	1.32	55.32	
October	0.88 7.13		
November	0.76	6.54	
December	0.79	4.97	

Table 3. Raw Water Monthly Average and Maximum Flowrates for 2016 (Well 1 PW1)

	Raw Water			
2016	Average Flowrate	Maximum Flowrate		
	(l/s)	(l /s)		
January	3.88	4.73		
February	3.88	4.69		
March	3.88	4.58		
April	3.88	4.68		
May	3.88	4.67		
June	3.88	4.65		
July	3.88	4.62		
August	3.89	4.60		
September	3.89	4.66		
October	3.90	4.65		
November	3.89	4.33		
December	3.89	4.68		

Drinking-Water Systems Regulation O. Reg. 170/03 Schedule 22 Summary Report: January 1, 2016 to December 31, 2016 Town of South Bruce Peninsula: Amabel-Sauble Drinking Water System

	Raw Water		
2016	Average Flowrate	Maximum Flowrate	
	(l /s)	(l/s)	
January	4.00	4.94	
February	4.00	4.91	
March	4.00	4.94	
April	4.00	4.92	
May	4.00	4.90	
June	4.01	4.89	
July	4.00	4.91	
August	4.00	4.84	
September	3.99	4.90	
October	3.98	4.90	
November	3.99	4.91	
December	4.00	4.90	

Table 4. Raw Water Monthly Average and Maximum Flowrates for 2016 (Well 2 PW2)

Table 5. Raw Water Monthly Average and Maximum Flowrates for 2016 (W10-Winburk Well)

	Raw Water		
2016	Average Flowrate	Maximum Flowrate	
	(l /s)	(l /s)	
January	3.78	4.18	
February	3.86	4.16	
March	3.96	4.17	
April	3.93	4.16	
May	3.91	4.15	
June	3.78	4.14	
July	3.98	4.15	
August	3.60	4.14	
September	3.93	4.14	
October	3.99	4.18	
November	3.91	4.14	
December	3.92	4.19	



FOREMAN DRINKING WATER SYSTEM

Small Municipal Residential

SCHEDULE 22 SUMMARY REPORT

For the period of JANUARY 1, 2016 TO DECEMBER 31, 2016

This report is a summary of water quality and quantity information submitted in accordance with Schedule 22 of Ontario's Drinking Water System Regulation for the reporting period of January 1, 2016 to December 31, 2016 for the Foreman Drinking Water System located in the Town of South Bruce Peninsula. The summary includes the following information:

- Any requirements of the Act and Regulation, Orders or System Approval(s) that the system failed to meet during the reporting period and the measures taken to correct each failure.
- A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.
- A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

Issues of Non-Compliance

An MOECC Drinking Water System Inspection was performed on November 28, 2016. On December 28, 2016 the report for this inspection was issued, the Foreman Drinking Water System received an inspection rating of 100%.

The following is a summary of the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water license, and any orders applicable to the system that were not met at any time during the period covered by the report; as well as the duration of the failure and the measures that were taken to correct the failure:

* There were no non-compliances during the reporting period.

Refer to the Section 11 Annual Report for a summary of any Adverse Water Quality Incident(s) which occurred during the reporting period.

Assessment of Flowrates and Quantity of Water Supplied

The following tables summarize the quantities (Table 1) and flow rates (Table 2) of the water supplied during the period covered by the report, including monthly average and maximum daily flows as well as a comparison of the summary to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water license.

As per Municipal Drinking Water License (MDWL) 094-104 (Issue Number: 2, expires March 17, 2020), the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed a rated capacity of 165 m³/day. There is no maximum allowable limit listed in the MDWL for the flowrate of water that flows into a treatment subsystem, however, raw water flowrate has been included in this report (Table 3).

Drinking-Water Systems Regulation O. Reg. 170/03 Schedule 22 Summary Report: January 1, 2016 to December 31, 2016 Town of South Bruce Peninsula: Foreman Drinking Water System

	Treated Water Flow			
2016	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity
January	2.10	1.27%	4.00	2.42%
February	2.22	1.35%	3.30	2.00%
March	2.10	1.27%	4.00	2.42%
April	2.15	1.30%	3.50	2.12%
May	3.44	2.08%	12.20	7.39%
June	3.21	1.95%	6.00	3.64%
July	6.13	3.72%	10.91	6.61%
August	5.19	3.15%	9.64	5.84%
September	3.30	2.00%	14.70	8.91%
October	2.39	1.45%	5.52	3.35%
November	2.01	1.22%	3.50	2.12%
December	2.40	1.45%	4.60	2.79%

Table 1. Treated Water Monthly Average and Maximum Daily Flows and Comparison to Rated Capacity for 2016

Table 2. Treated Water Monthly Average and Maximum Flowrates for 2016

	Treated Water		
2016	Average Flowrate	Maximum Flowrate	
	(l /s)	(l/s)	
January	0.04	2.95	
February	0.04	3.30	
March	0.04	3.52	
April	0.02	3.13	
May	0.04	8.00	
June	0.04	2.89	
July	0.07	6.21	
August	0.06	3.04	
September	0.04	2.81	
October	0.03	2.87	
November	0.02	3.57	
December	0.03	2.81	

Table 3. Raw Water Monthly Average and Maximum Flowrates for 2016

	Raw Water		
2016	Average Flowrate	Maximum Flowrate	
	(l/s)	(l/s)	
January	1.70	1.90	
February	1.70	2.00*	
March	1.43	2.00*	
April	1.06	1.90	
May	1.68	2.50*	
June	0.98	1.90	
July	1.51	2.50*	
August	1.37	1.90	
September	1.70	1.90	
October	1.75	1.86	
November	1.35	2.50*	
December	1.75	1.90	

* Less than thirty second blip on pump start up not the true maximum Flowrate.



HURON WOODS DRINKING WATER SYSTEM

Small Municipal Residential

SCHEDULE 22 SUMMARY REPORT

For the period of JANUARY 1, 2016 TO DECEMBER 31, 2016

This report is a summary of water quality and quantity information submitted in accordance with Schedule 22 of Ontario's Drinking Water System Regulation for the reporting period of January 1, 2016 to December 31, 2016 for the Huron Woods Drinking Water System located in the Town of South Bruce Peninsula. The summary includes the following information:

- Any requirements of the Act and Regulation, Orders or System Approval(s) that the system failed to meet during the reporting period and the measures taken to correct each failure.
- A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.
- A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

Issues of Non-Compliance

An MOECC Drinking Water System Inspection was performed on December 21, 2016. On January 18, 2017 the report for this inspection was issued, the Huron Woods Drinking Water System received an inspection rating of 100%.

The following is a summary of the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water license, and any orders applicable to the system that were not met at any time during the period covered by the report; as well as the duration of the failure and the measures that were taken to correct the failure:

* There were no non-compliances during the reporting period.

Refer to the Section 11 Annual Report for a summary of any Adverse Water Quality Incident(s) which occurred during the reporting period.

Assessment of Flowrates and Quantity of Water Supplied

The following tables summarize the quantities (Table 1) and flow rates (Table 2) of the water supplied during the period covered by the report, including monthly average and maximum daily flows as well as a comparison of the summary to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water license.

As per Municipal Drinking Water License (MDWL) 094-103 (Issue Number: 2, expires March 17, 2020), the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed a rated capacity of 743 m^3 /day. There is no maximum allowable limit listed in the MDWL for the flowrate of water that flows into a treatment subsystem, however, raw water flowrate has been included in this report (Table 3).

Drinking-Water Systems Regulation O. Reg. 170/03 Schedule 22 Summary Report: January 1, 2016 to December 31, 2016 Town of South Bruce Peninsula: Huron Woods Drinking Water System

	Treated Water Flow			
2016	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity
January	27.36	3.68 %	47.40	6.38 %
February	26.71	3.59 %	60.70	8.17 %
March	24.83	3.34 %	34.00	4.58 %
April	29.19	3.93 %	43.40	5.84 %
May	43.08	5.80 %	81.80	11.01 %
June	43.51	5.86 %	78.10	10.51 %
July	56.40	7.59 %	97.32	13.10 %
August	52.09	7.01 %	67.20	9.04 %
September	33.33	4.49 %	57.30	7.71 %
October	27.44	3.69 %	42.85	5.77 %
November	26.37	3.55 %	38.70	5.21 %
December	23.04	3.10 %	35.60	4.79 %

 Table 2. Treated Water Monthly Average and Maximum Flowrates for 2016

	Treated Water		
2016	Average Flowrate	Maximum Flowrate	
	(l/s)	(l/s)	
January	0.38	3.10	
February	0.38	2.70	
March	0.38	2.70	
April	0.42	2.80	
May	0.56	3.20	
June	0.59	3.70	
July	0.70	4.40	
August	0.66	3.60	
September	0.46	16.50	
October	0.40	3.30	
November	0.38	5.80	
December	0.35	2.50	

	Raw Water		
2016	Average Flowrate	Maximum Flowrate	
	(l/s)	(l/s)	
January	4.61	5.30	
February	4.61	5.40*	
March	4.60	5.30	
April	4.54	5.30	
May	4.51	5.30	
June	4.60	5.30	
July	4.53	5.30	
August	4.55	5.40*	
September	4.59	5.40*	
October	4.61	5.40*	
November	4.60	5.40*	
December	4.61	5.40*	

* Less than thirty second blip on pump start up not the true maximum Flowrate.



OLIPHANT DRINKING WATER SYSTEM

Small Municipal Residential

SCHEDULE 22 SUMMARY REPORT

For the period of JANUARY 1, 2016 TO DECEMBER 31, 2016

This report is a summary of water quality and quantity information submitted in accordance with Schedule 22 of Ontario's Drinking Water System Regulation for the reporting period of January 1, 2016 to December 31, 2016 for the Oliphant Drinking Water System located in the Town of South Bruce Peninsula. The summary includes the following information:

- Any requirements of the Act and Regulation, Orders or System Approval(s) that the system failed to meet during the reporting period and the measures taken to correct each failure.
- A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.
- A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

Issues of Non-Compliance

An MOECC Drinking Water System Inspection was performed on August 10, 2016. On September 16, 2016 the report for this inspection was issued, the Oliphant Drinking Water System received an inspection rating of 100%.

The following is a summary of the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water license, and any orders applicable to the system that were not met at any time during the period covered by the report; as well as the duration of the failure and the measures that were taken to correct the failure:

• There were no non-compliances during the reporting period.

Refer to the Section 11 Annual Report for a summary of any Adverse Water Quality Incident(s) which occurred during the reporting period.

Assessment of Flowrates and Quantity of Water Supplied

The following tables summarize the quantities (Table 1) and flow rates (Table 2) of the water supplied during the period covered by the report, including monthly average and maximum daily flows as well as a comparison of the summary to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water license.

As per Municipal Drinking Water License (MDWL) 094-105 (Issue Number: 3, expires March 17, 2020), the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed a rated capacity of 75 m^3 /day There is no maximum allowable limit listed in the MDWL for the flowrate of water that flows into a treatment subsystem.

The Oliphant Water Treatment Plant stopped treating water on January 16, 2011 and began receiving transported water from the Wiarton Water Treatment Plant, by the direction of the Town of South Bruce Peninsula. The transported from Wiarton Water Treatment Plant is pumped into the clearwell of the Oliphant Water Treatment Plant and sodium hypochlorite (12%) is added to increase the chlorine residual prior to entering the distribution system.

Drinking-Water Systems Regulation O. Reg. 170/03 Schedule 22 Summary Report: January 1, 2016 to December 31, 2016 Town of South Bruce Peninsula: Oliphant Drinking Water System

		Flow (Treated Water from Wiarton)			
2016	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	
January	5.08	6.77 %	6.83	9.11 %	
February	4.83	6.45 %	6.65	8.87 %	
March	6.12	8.16 %	8.04	10.72 %	
April	7.54	10.05 %	10.15	13.53 %	
May	10.53	14.03 %	14.45	19.27 %	
June	8.39	11.19 %	11.79	15.72 %	
July	10.54	14.05 %	19.47	25.96 %	
August	11.41	15.21 %	14.69	19.59 %	
September	14.76	19.68 %	21.37	28.49 %	
October	11.06	14.75 %	55.81	74.41 %	
November	4.80	6.39 %	6.45	8.60 %	
December	4.81	6.41 %	6.27	8.36 %	

 Table 2. Treated Water Monthly Average and Maximum Flowrates for 2016

	Treated	Water
2016	Average Flowrate	Maximum Flowrate
	(l/s)	(l/s)
January	1.31	9.86
February	1.33	2.28
March	1.32	5.01
April	1.32	8.11
May	1.35	10.00
June	1.33	4.27
July	1.34	10.00
August	1.33	5.14
September	1.43	8.71
October	1.36	10.00
November	1.25	2.93
December	1.24	2.87



WIARTON DRINKING WATER SYSTEM

Large Municipal Residential

SCHEDULE 22 SUMMARY REPORT

For the period of JANUARY 1, 2016 TO DECEMBER 31, 2016

This report is a summary of water quality and quantity information submitted in accordance with Schedule 22 of Ontario's Drinking Water System Regulation for the reporting period of January 1, 2016 to December 31, 2016 for the Wiarton Drinking Water System located in the Town of South Bruce Peninsula. The summary includes the following information:

- Any requirements of the Act and Regulation, Orders or System Approval(s) that the system failed to meet during the reporting period and the measures taken to correct each failure.
- A summary of the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows.
- A comparison of the average and monthly maximum daily flows to the approved capacity specified in the System Approval.

Issues of Non-Compliance

An MOECC Drinking Water System Inspection was performed on January 22, 2016. March 11, 2016 the report for this inspection was issued, the Wiarton Drinking Water System received an inspection rating of 100%.

The following is a summary of the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water license, and any orders applicable to the system that were not met at any time during the period covered by the report; as well as the duration of the failure and the measures that were taken to correct the failure:

• There were no non-compliances during the reporting period.

Refer to the Section 11 Annual Report for a summary of any Adverse Water Quality Incident(s) which occurred during the reporting period.

Assessment of Flowrates and Quantity of Water Supplied

The following tables summarize the quantities (Table 1) and flow rates (Table 2) of the water supplied during the period covered by the report, including monthly average and maximum daily flows as well as a comparison of the summary to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water license.

As per Municipal Drinking Water License (MDWL) 094-202 (Issue Number: 2, expires March 17, 2020), the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed a rated capacity of $5,400 \text{ m}^3/\text{day}$ There is no maximum allowable limit listed in the MDWL for the flowrate of water that flows into a treatment subsystem, however, raw water flowrate has been included in this report (Table 3).

Drinking-Water Systems Regulation O. Reg. 170/03 Schedule 22 Summary Report: January 1, 2016 to December 31, 2016 Town of South Bruce Peninsula: Wiarton Drinking Water System

	Treated Water Flow			
2016	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity
January	934.48	17.31 %	1,347.67	24.96 %
February	1,004.78	18.61 %	1,292.47	23.93 %
March	977.28	18.10 %	1,200.22	22.23 %
April	921.50	17.06 %	1,146.09	21.22 %
May	1,088.68	20.16 %	1,391.46	25.77 %
June	1,201.04	22.24 %	1,608.15	29.78 %
July	1,225.12	22.69 %	1,502.35	27.82 %
August	1,191.86	22.07 %	1,522.83	28.20 %
September	1,243.47	23.03 %	1,724.61	31.94 %
October	1,019.09	18.87 %	1,795.18	33.24 %
November	1,184.50	21.94 %	2,173.13	40.24 %
December	1,230.03	22.78 %	1,586.14	29.37 %

Table 1. Treated Water Monthly Average and Maximum Daily Flows and Comparison to Rated Capacity for 2016

Table 2. Treated Water Monthly Average and Maximum Flowrates for 2016

	Treated Water		
2016	Average Flowrate	Maximum Flowrate	
	(l/s)	(l/s)	
January	64.41	74.47	
February	66.10	77.51	
March	66.05	76.60	
April	65.86	78.57	
May	66.35	92.59	
June	66.74	78.15	
July	66.68	77.82	
August	66.71	78.67	
September	66.17	78.31	
October	52.08	75.74	
November	54.91	77.58	
December	66.99	76.48	

Table 3. Raw Water Monthly Average and	Maximum Flowrates for 2016
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	Raw Water		
2016	Average Flowrate	Maximum Flowrate	
	(l/s)	(l/s)	
January	45.14	56.38	
February	49.16	55.27	
March	49.22	55.08	
April	48.07	55.75	
May	49.31	57.63	
June	47.73	58.18	
July	49.15	56.42	
August	49.03	56.28	
September	49.07	55.97	
October	49.22	55.20	
November	46.73	55.22	
December	48.95	55.01	