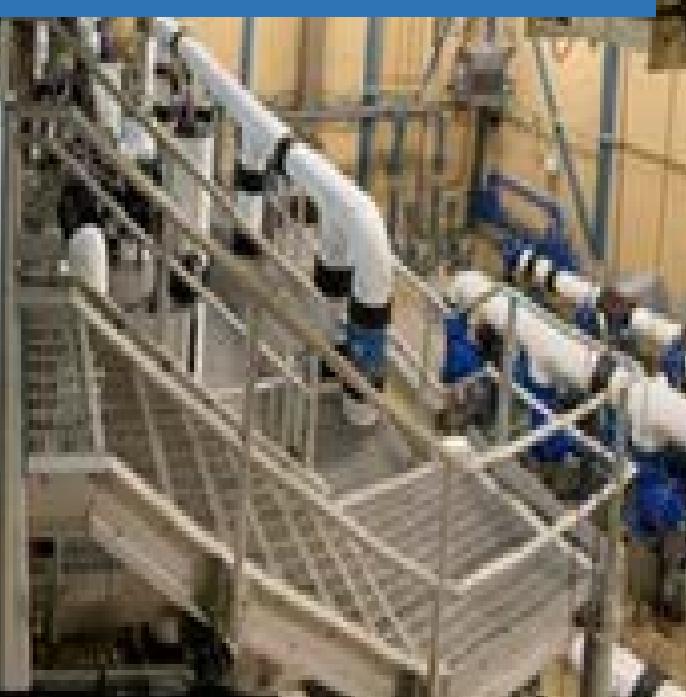




2023 SECTION 22 SUMMARY REPORT

SAUGEEN SHORES
DRINKING WATER SYSTEM



For the period of:
JANUARY 1, 2023 TO DECEMBER 31, 2023

Prepared for the Town of Saugeen Shores by the Ontario Clean Water Agency

This report was prepared in accordance with the requirements of [O.Reg 170/03, Schedule 22, Summary Reports for Municipalities](#) for the following system and reporting period:

Drinking-Water System Number:	210000078
Drinking-Water System Name:	Saugeen Shores Drinking Water System
Drinking-Water System Owner:	Town of Saugeen Shores
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2023 – December 31, 2023

1. Issues of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on January 11, 2024 for the period covering February 2, 2023 to January 11, 2024. On March 7, 2024 the Inspection Report was issued. An Inspection Summary Rating Record (IRR) of 100% was received.

As well, the 2022-2023 Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on February 1, 2023 for the period covering February 10, 2022 to February 2, 2023. On March 30, 2023 the Inspection Report was issued and an Inspection Summary Rating Record (IRR) of 100% was received.

The following is a summary of non-compliances noted in the MECP Inspection Report, as well as the duration and the measures that were taken to correct the non-compliance. If any self-reported non-compliances were included in the inspection report, they will be noted in Table 1.

Table 1. Non-Compliances and Corrective Actions noted in the 2023/2024 MECP Inspection Report

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
N/A	N/A	N/A

The following table (Table 2) is a summary of any incidents that the Operating Authority interpreted as instances where any requirements of the Act, the regulations, the system's approval, drinking water works permit (DWWP), municipal drinking water licence (MDWL), and any orders applicable were not met. The Operating Authority reported the following incidents to the MECP:

Table 2. Self-Reported Incidents and Corrective Actions for the Reporting Period

Reported Non-Compliance(s)	Duration	Required Actions & Corrective Actions
N/A	N/A	N/A

For information on any Adverse Water Quality Incident(s) that may have occurred during the reporting period, please refer to the Saugeen Shores Drinking Water System Annual Report (Section 11).

2. Assessment of Flowrates and Quantity of Water Supplied

The following tables summarize the quantities and flow rates of water supplied during the reporting period, including monthly averages and maximum daily flows as well as a comparison to the rated capacity and flow rates approved in the system's approval, DWWP or MDWL.

2.1 Treated Water

Municipal Drinking Water License (MDWL):	093-101 (Issue Number: 3)
Allowable Rated Capacity:	18,000 m ³ /day
Allowable Flowrate into Treatment System:	Not listed in MDWL

As per the MDWL, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the listed rated capacity. However, the MDWL allows a system to be operated temporarily at a maximum daily volume and/or a maximum flowrate above the values set out in the MDWL for the purposes of fighting a large fire or for the maintenance of the drinking water system.

Table 3. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for 2023

Treated Water Flow					
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January	4,471	24.8%	5,016	27.9%	138,611
February	4,299	23.9%	4,849	26.9%	120,383
March	4,238	23.5%	4,490	24.9%	131,391
April	4,702	26.1%	5,131	28.5%	141,060
May	6,051	33.6%	8,424	46.8%	187,576
June	8,002	44.5%	9,480	52.7%	240,049
July	7,906	43.9%	9,531	53.0%	245,076
August	7,122	39.6%	8,169	45.4%	220,797
September	6,309	35.1%	7,687	42.7%	189,276
October	5,254	29.2%	6,015	33.4%	162,884
November	4,795	26.6%	5,400	30.0%	143,864
December	4,848	26.9%	5,351	29.7%	150,273
2023	5,675	31.5%	9,531	53.0%	2,071,242

A review of flow information for the reporting period indicates that the drinking water system operated within the rated capacity specified in the MDWL, for the maximum volume of treated water that flows from the treatment subsystem to the distribution system.

Table 4. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to the Effective Treatment Capacity (13,775 m³) for 2023

Treated Water Flow				
Timeframe	Average Flow (m ³ /day)	Percent of Effective Treatment Capacity	Maximum Flow (m ³ /day)	Percent of Effective Treatment Capacity
January	4,471	32.5%	5,016	36.4%
February	4,299	31.2%	4,849	35.2%
March	4,238	30.8%	4,490	32.6%
April	4,702	34.1%	5,131	37.2%
May	6,051	43.9%	8,424	61.2%
June	8,002	58.1%	9,480	68.8%
July	7,906	57.4%	9,531	69.2%
August	7,122	51.7%	8,169	59.3%
September	6,309	45.8%	7,687	55.8%
October	5,254	38.1%	6,015	43.7%
November	4,795	34.8%	5,400	39.2%
December	4,848	35.2%	5,351	38.8%
2023	5,675	41.2%	9,531	69.2%

The effective treatment capacity has been observed to be at 13,775 m³ which is below the rated capacity set out in the MDWL of 18,000 m³.

Table 5. Treated Water Annual and Monthly Average and Maximum Flowrates for 2023

Timeframe	Treated Water: Zone 1		Treated Water: Zone 2	
	Average Flowrate (l/s)	Maximum Flowrate (l/s)	Average Flowrate (l/s)	Maximum Flowrate (l/s)
January	17.72	69.72	34.03	114.04
February	17.71	103.10	32.05	113.87
March	17.11	69.37	31.95	113.78
April	18.19	69.24	36.24	119.66
May	24.08	69.60	45.96	119.84
June	31.46	134.57 ^{5a}	61.15	120.33
July	31.89	69.19	59.61	114.48
August	29.41	69.38	53.02	125.43
September	25.86	134.04	47.16	121.52
October	21.36	69.17	39.45	118.43
November	19.01	69.25	36.49	119.74
December	19.01	69.25	37.10	127.39
2023	22.77	134.57	42.91	127.39

^{5a}Distribution system flushing

The applicable MDWL for the reporting period did not list a maximum allowable limit for the flowrate of water that flows into a treatment subsystem. A summary of flowrates of water that flows into the treatment system can be found in Table 7.

2.2 Raw Water

Permit to Take Water Number:	1133-AQQLPH
Allowable Maximum Raw Water Volume – Lake Huron:	18,020 m ³ /day
Allowable Maximum Raw Water Flowrate – Lake Huron:	18,000 L/min (300 L/sec)

As per the PTTW, water shall only be taken from the specified source(s) and at the rates and amounts taken as specified in the permit.

Table 6. Raw Water (Lake Huron) Monthly Average, Maximum Flow and Total Volume for 2023

Raw Water Flow – Lake Huron					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	5,259	29.2%	5,859	32.5%	163,037
February	5,022	27.9%	5,714	31.7%	140,624
March	4,776	26.5%	5,112	28.4%	148,061
April	5,074	28.2%	5,767	32.0%	152,216
May	6,507	36.1%	8,917	49.5%	201,720
June	8,594	47.7%	10,346	57.4%	257,810
July	8,617	47.8%	10,320	57.3%	267,134
August	7,721	42.8%	8,912	49.5%	239,346
September	6,785	37.7%	8,392	46.6%	203,558
October	5,755	31.9%	6,627	36.8%	178,391
November	5,174	28.7%	5,538	30.7%	155,224
December	5,233	29.0%	5,744	31.9%	162,237
2023	6,217	34.5%	10,346	57.4%	2,269,360

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume.

Table 7. Raw Water (Lake Huron) Annual and Monthly Average and Maximum Flowrates for 2023

Raw Water		
Timeframe	Average Flowrate (l/s)	Maximum Flowrate (l/s)
January	60.87	219.42
February	58.13	224.11
March	55.28	236.09
April	61.33	234.07
May	75.31	250.04
June	99.51	239.20
July	99.74	237.87
August	89.36	238.11
September	78.53	230.77
October	66.60	212.24
November	59.89	222.55
December	60.57	220.24
2023	72.18	250.04

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate.