

For the period of: JANUARY 1, 2024 TO DECEMBER 31, 2024

Prepared for the Township of Georgian Bluffs by the Ontario Clean Water Agency





Schedule 22 Summary Report: January 1, 2024 to December 31, 2024 Township of Georgian Bluffs: Shallow Lake Drinking Water System

This report was prepared in accordance with the requirements of <u>O.Req 170/03, Schedule 22, Summary Reports for Municipalities</u> for the following system and reporting period:

Drinking-Water System Number:220009096Drinking-Water System Name:Shallow Lake Drinking Water SystemDrinking-Water System Owner:Township of Georgian BluffsDrinking-Water System Category:Large Municipal ResidentialPeriod being reported:January 1, 2024 – December 31, 2024

1. Issue(s) of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on June 18, 2024 for the period covering August 24, 2023 to June 18, 2024. On July 19, 2024 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

Table 2 summarizes any incidents interpreted by the Operating Authority as instances where any requirements of the Act, the regulations, the system's approval, the drinking water works permit (DWWP), the municipal drinking water licence (MDWL), and any orders applicable were not met. The Operating Authority reported the following incidents to the MECP and confirmation of whether the incidents are considered non-compliances is noted in the MECP Inspection Report and included in Table 1.

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

Incident	Duration	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 Shallow Lake Drinking Water System Annual Report (Section 11).

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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):	083-102 (Issue Number: 4)	
Allowable Rated Capacity:	696 m³/day	
Allowable Flowrate into Treatment System:	N/A	

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 2024

	Treated Water Flow				
Timeframe	Average Flow (m³/day)	Percent of Rated Capacity	Maximum Flow (m³/day)	Percent of Rated Capacity	Total Volume (m³)
January	77.3	11.1%	98	14.1%	2,395
February	80.0	11.5%	190	27.3%	2,321
March	77.0	11.1%	116	16.7%	2,388
April	75.3	10.8%	137	19.7%	2,260
May	80.0	11.5%	141	20.3%	2,480
June	85.5	12.3%	131	18.8%	2,564
July	85.9	12.3%	116	16.7%	2,664
August	90.0	12.9%	247	35.5%	2,791
September	89.0	12.8%	161	23.1%	2,671
October	86.6	12.4%	111	15.9%	2,684
November	89.6	12.9%	112	16.1%	2,687
December	84.2	12.1%	108	15.5%	2,609
2024	83.4	12.0%	247	35.5%	30,514

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 treated volume of treated water that flows from the treatment subsystem to the distribution system.

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Table 4. Treated Water Annual and Monthly Average and Maximum Flowrates for 2024

Treated Water Flowrate			
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)	
January	0.94	3.80	
February	0.98	58.73 ^{4a}	
March	0.93	4.63	
April	0.92	6.01	
May	0.98	16.03 ^{4b}	
June	1.04	8.20	
July	1.05	8.62	
August	1.09	64.99 ^{4c}	
September	1.08	63.64 ^{4d}	
October	1.05	8.09	
November	1.09	18.65 ^{4b}	
December	1.03	9.65	
2024	1.02	64.99 ^{4c}	

^{4a}Maximum daily flow rate on February 6, 2024 due to fire department taking water.

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 6 and Table 8.

^{4b}Maximum daily flow rate on May 29, 2024 and November 21, 2024 due to 1 minute spike.

^{4c}Maximum daily flow rate on August 19, 21, and 22 due to fire flow testing.

^{4d}Maximum daily flow rate on September 4, 2024 due to distribution flushing.

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2.2 Raw Water

Permit to Take Water Number:	5165-9KBQ6V
	3405-D3SLE4
Allowable Maximum Raw Water Volume - Well #1: PW2	696 m³/day
Allowable Maximum Raw Water Flowrate - Well #1: PW2	483 L/min (8.05 L/sec)
Allowable Maximum Volume of Raw Water - Well #2: PW3	696 m³/day
Allowable Maximum Raw Water Flowrate – Well #2: PW3	483 L/min (8.05 L/sec)

During the reporting period, Shallow Lake Drinking Water System operated under two separate PTTWs:

- From January 1 to June 19, 2024: Shallow Lake DWS operated under PTTW #5165-9KBQ6V
- From June 20, 2024 to the end of the reporting period: Shallow Lake DWS operated under PTTW #3405-D3SLE4. There were no changes to the raw water source, allowable maximum volume takings or flowrates.

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 5. Raw Water (Well #1: PW2) Monthly Average, Maximum Flow and Total Volume for 2024

	Raw Water Flow – Well #1: PW2				
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	1.0	0.1%	10.0	1.4%	32
February	0.7	0.1%	7.0	1.0%	19
March	0.9	0.1%	9.0	1.3%	28
April	0.4	0.1%	4.0	0.6%	12
May	0.4	0.1%	6.0	0.9%	12
June	1.1	0.2%	13.0	1.9%	32
July	0.6	0.1%	5.0	0.7%	18
August	1.1	0.2%	14.0	2.0%	33
September	2.6	0.4%	38.0	5.5%	78
October	0.9	0.1%	7.0	1.0%	28
November	1.5	0.2%	38.0	5.5%	45
December	0.6	0.1%	7.0	1.0%	20
2024	1.0	0.1%	38.0	5.5%	357

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume for Well #1: PW2.

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Table 6. Raw Water (Well #1: PW2) Annual and Monthly Average and Maximum Flowrates for 2024

Raw Water Flowrate – Well #1: PW2			
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)	
January	0.01	6.84	
February	0.01	6.46	
March	0.01	6.59	
April	0.00	6.87	
May	0.00	6.75	
June	0.01	6.53	
July	0.01	6.77	
August	0.01	6.59	
September	0.03	6.71	
October	0.01	6.61	
November	0.02	6.57	
December	0.01	6.60	
2024	0.01	6.87	

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate for Well #1: PW2.

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Table 7. Raw Water (Well #2: PW3) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Well #2: PW3					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	152	21.8%	216	31.0%	4,711
February	154	22.1%	312	44.8%	4,468
March	153	22.0%	226	32.5%	4,743
April	143	20.5%	209	30.0%	4,289
May	154	22.1%	255	36.6%	4,764
June	168	24.1%	279	40.1%	5,038
July	174	25.0%	263	37.8%	5,399
August	183	26.3%	306	44.0%	5,664
September	180	25.9%	284	40.8%	5,401
October	180	25.9%	303	43.5%	5,583
November	184	26.4%	311	44.7%	5,512
December	178	25.6%	273	39.2%	5,526
2024	167	24.0%	312	44.8%	61,098

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume for Well #2: PW3.

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Table 8. Raw Water (Well #2: PW3) Annual and Monthly Average and Maximum Flowrates for 2024

Raw Water Flowrate – Well #2: PW3			
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)	
January	1.79	6.60	
February	1.81	6.46	
March	1.79	6.45	
April	1.68	6.98	
May	1.81	6.88	
June	1.98	6.77	
July	2.05	6.70	
August	2.15	6.53	
September	2.12	6.24	
October	2.12	6.28	
November	2.16	6.15	
December	2.10	6.43	
2024	1.96	6.98	

A review of flow information for the reporting period indicates that the system operated within the PTTW's the maximum allowable raw water flowrate for Well #2: PW3.