

2024 SCHEDULE 22 SUMMARY REPORT

TAY AREA
DRINKING WATER
SYSTEM



For the period of
January 1st, 2024 to December 31st, 2024

Prepared for the Corporation of the Township of Tay 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:	220001076
Drinking-Water System Name:	Tay Area Drinking Water System
Drinking-Water System Owner:	The Corporation of the Township of Tay
Drinking-Water System Category:	Large Municipal Residential
Period 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 September 24 and October 8, 2024 for the period covering September 24, 2023 to October 8, 2024. On January 6, 2025 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 and confirmation of whether the incidents are considered non-compliances are 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
<ul style="list-style-type: none"> June 13, 2024: Loss of Monitoring Data – occurrence incident with O.Reg 170/03, Schedule 6 Power failure triggered alarms, UPS back-up battery shut-off 	1928 hrs to 2208 hrs	<ul style="list-style-type: none"> June 13, 2024 – OCWA responded to the alarms, reboot the back-up battery for the UPS and restored power to control panel and main SCADA computer. OCWA collected treated water free chlorine residuals to ensure the analyzer was reading correctly – 1.11 mg/L analyzer, and 1.17 mg/L handheld. No water was produced during the communication loss. All alarms were functional.

		<ul style="list-style-type: none"> Notification provided to MECP on June 14, 2024. No further actions required. This event was not deemed a non-compliance but an occurrence incident.
<ul style="list-style-type: none"> June 17, 2024: Loss of Monitoring Data – occurrence incident with O.Reg 170/03, Schedule 6 A broken water line spraying water tripped the outlet the treated water free chlorine analyzer was connected to, causing the free chlorine analyzer to shut off 	0415 hrs to 0509 hrs	<ul style="list-style-type: none"> June 17, 2024 – OCWA responded to an alarm for low chlorine, and reviewed trending which indicated a drop from 1.40 mg/L to 0.00 mg/L. OCWA arrived on site, determined that the analyzer failure was due to a tripped outlet. Operations reset the GFCI outlet and the analyzer was restored. OCWA collected treated water free chlorine residuals to ensure the analyzer was reading correctly – 1.30 mg/L handheld, 1.33 mg/L analyzer. No water was distributed to users between 0252 hrs and 0835 hrs. Notification provided to MECP on June 17, 2024. No further actions required. This event was not deemed a non-compliance, but an occurrence incident.

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

2. Assessment of Flowrates and Quantity of Water Supplied

The following tables (Table 3 to 6) summarize the quantities and flowrates of water supplied during the reporting period, including monthly averages and maximum daily flows as well as a comparison to the rated capacity and flowrates approved in the system's approval, DWWP or MDWL.

As required by the MDWL, regulatory flow measuring devices are checked/verified and where necessary calibrated. These checks/verifications/calibrations are performed annually by a third party to ensure the flow measuring devices are within acceptable deviation limits.

2.1 Treated Water

Municipal Drinking Water License (MDWL):	129-102 (Issue Number: 5)
Allowable Rated Capacity:	10,065 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 the treatment subsystem 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 (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January	2,256.13	22.42%	2,805.00	27.87%	69,940.00
February	2,264.31	22.50%	2,760.00	27.42%	65,665.00
March	2,332.55	23.17%	3,055.00	30.35%	72,309.00
April	2,450.97	24.35%	3,155.00	31.35%	73,529.00
May	2,909.94	28.91%	3,791.00	37.67%	90,208.00
June	3,112.93	30.93%	3,891.00	38.66%	93,388.00
July	3,251.19	32.30%	4,316.00	42.88%	100,787.00
August	3,082.10	30.62%	3,785.00	37.61%	95,545.00
September	2,468.60	24.53%	3,010.00	29.91%	74,058.10
October	2,106.77	20.93%	2,840.00	28.22%	65,309.80
November	1,972.10	19.59%	2,620.00	26.03%	59,163.00
December	2,058.61	20.45%	2,616.00	25.99%	63,817.00
2024	2,522.18	25.06%	4,316.00	42.88%	923,718.90

A review of flow information for the reporting period indicates that the drinking water system operated within the rated capacity specified in the MDWL (10,065 m³/day), for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system.

A summary of flowrates of water that flows into the treatment system can be found in Table 6. 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.

2.2 Raw Water

Permit to Take Water Number (PTTW):	4221-9QDGS4 3138-D85GT7
Maximum Allowable Raw Water Volume – Georgian Bay – Lake Huron:	10,627.20 m ³ /day
Maximum Allowable Raw Water Flowrate – Georgian Bay – Lake Huron:	7,380 L/min (123 L/sec)

During the reporting period Tay Area Drinking Water System operated under two separate PTTWs:

- From January 1 to August 13, 2024: Tay Area DWS operated under PTTW #4221-9QDGS4,
- From August 14, 2024 to the end of the reporting period: Tay Area DWS operated under PTTW #3138-D85GT7. There were no changes to the raw water source, allowable maximum volume takings or flowrates.

As per both PTTWs, 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 Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow- Georgian Bay- Lake Huron					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	2,430.80	22.87%	3,118.00	29.34%	72,924.00
February	2,506.69	23.59%	3,171.00	29.84%	72,694.00
March	2,596.45	24.43%	3,435.00	32.32%	80,490.00
April	2,730.80	25.70%	3,493.00	32.87%	81,924.00
May	3,296.23	31.02%	4,155.00	39.10%	102,183.00
June	3,465.87	32.61%	4,336.00	40.80%	103,976.00
July	3,638.77	34.24%	4,802.00	45.19%	112,802.00
August	3,425.61	32.23%	4,406.00	41.46%	106,194.00
September	2,782.82	26.19%	3,247.00	30.55%	83,484.60
October	2,363.11	22.24%	3,196.00	30.07%	73,256.50
November	2,202.80	20.73%	2,908.00	27.36%	66,084.00
December	2,281.39	21.47%	2,891.00	27.20%	70,723.00
2024	2,810.11	26.44%	4,802.00	45.19%	1,026,735.10

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume takings (10,627.20 m³/day).

Table 6. Raw Water Annual and Monthly Maximum Flowrates for 2024

Raw Water Flowrate	
Timeframe	Maximum Flowrate (L/sec)
January	100.00
February	100.00
March	125.00 ^{6a}
April	125.00 ^{6a}
May	125.00 ^{6a}
June	125.00 ^{6a}
July	125.00 ^{6a}
August	125.00 ^{6a}
September	125.00 ^{6a}
October	125.00 ^{6a}
November	125.00 ^{6a}
December	125.00 ^{6a}
2024	125.00^{6a}

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate (123 L/sec), with the exception of:

- ^{6A}March through December, 2024 – flowrate exceedances were for a brief duration due to the re-opening of the valves following a strainer backwash.