

**2023 ANNUAL SUMMARY REPORT FOR  
MUNICIPAL COUNCIL**

**TOWN OF GEORGINA**

**DRINKING WATER SYSTEM NO.260062686**

*Schedule 22; Summary Reports for Municipalities, O. Reg. 170/03 – Drinking Water Systems*



## Reporting Requirements under the Ontario Safe Drinking Water Act, 2002

This Annual Summary Report for Municipal Council is to satisfy the annual reporting requirements of Ontario Regulation 170/03 – Drinking Water System of the Safe Drinking Water Act (SDWA), 2002, section 11 – Annual Reports, and schedule 22 – Summary Reports for Municipalities.

The Ontario Safe Drinking Water Act, 2002 (SDWA, 2002) protects human health and the surrounding environment through the control and regulation of drinking water systems and drinking water testing. The Act includes all regulations relating to the treatment and distribution of drinking water; accreditation of operating authorities, municipal drinking water systems, drinking water testing, inspections, compliance and enforcement, and standard of care.

The Town of Georgina is required to maintain compliance with all applicable SDWA, 2002 requirements continually and effectively address any identified incidents of non-compliance.

Schedule 22 Summary Report, and its associated attachments including Section 11 Annual Report contains information pertaining to the overall performance of the Town of Georgina's Drinking Water System for the calendar year, and details from the Annual Ministry of Environment, Conservation and Parks (MECP) Inspection of the Drinking Water System. The Town of Georgina Owners (Mayor/Council), Top Management, Operating Authorities and the public are provided up-to-date information on the Drinking Water System, compliance with applicable regulatory requirements and its conformance with the industry's Best Management Practices (BMP).

## Background

The Town of Georgina owns and operates the municipal Water Distribution System, and the Regional Municipality of York (York Region) provides the treatment, supply, and storage of drinking water.

*Section 19 of the Safe Drinking Water Act: Standard of Care*, requires every person who on behalf of the municipality oversees the accredited operating authority of the system or exercises decision-making authority over the system, to act honestly, competently, and with integrity while exercising a level of care, diligence, and skills to protect the health and safety of the users of the Town's drinking water system. This includes the Mayor, Municipal Councilors, Management, and Ministry of Environment, Conservation and Parks (MECP) Certified Operators.

*Schedule 22 of O. Reg. 170/03*, under *the Safe Drinking Water Act*, requires owners of municipal drinking water systems to prepare annual reports describing the operation of the drinking water system and the results of testing performed that ensures residents are provided with safe drinking water. This report covers the period from January 1, 2023 to December 31, 2023.

## Drinking Water System

The source of water supply for the Keswick-Sutton subsystem is Lake Simcoe. York Region owns and operates two water treatment plants (WTP), one labelled “Keswick”, residing in Keswick, ON and one labelled “Georgina”, residing in Sutton, ON.

York Region also owns and operates four (4) water storage tanks. Water is taken from Lake Simcoe at both plants and undergoes a complete treatment process. The Georgina WTP uses membrane filtration technology, granular activated carbon, UV, and chlorine disinfection while the Keswick WTP uses chemically assisted filtration, granular activated carbon, and chlorine disinfection before being supplied to the Town’s water distribution system. York Region carries out extensive testing at each plant and summarizes the results of these tests in an annual report. Copies of York Region’s annual report may be obtained by contacting York Region at 1-877-464-9675 or accessing the Region’s website, <https://www.york.ca/environment/water-and-wastewater/drinking-water-quality-and-monitoring>. The reports describe the treatment and chemicals used in the process in more detail. A copy of the Region’s report may also be obtained at the Town of Georgina, Civic Centre located at 26557 Civic Centre Road, Keswick, Ontario.

The Keswick-Sutton Water Distribution System is classified by the Ministry of Environment, Conservation and Parks (MECP), as a Class 2 Water Distribution System, “Large Municipal Residential System”, and is owned and operated by the Town of Georgina. Ontario regulation 170/03, Drinking Water Systems regulates municipal drinking water systems, and acts as the framework for regulation for drinking water systems of all sizes.

The Town of Georgina is responsible for the operation and maintenance of the Water Distribution System, including pipes, valves and hydrants. The Town serves a population of approximately 39,527 and the distribution system consists of 236 km of watermain (both municipal and unassumed), 13,500 water connections (active accounts), 1701 hydrants (not including private hydrants), 1915 mainline valves, 1553 property (branch) valves, 2 pressure reducing valves (PRV), 2 booster stations, 2 lift stations, and 30 air valves.

Annual Water Quality Summary Report(s) are available to the public at:

- Town of Georgina website: <https://www.georgina.ca/living-here/water-and-wastewater/drinking-water-reports>
- Town of Georgina Civic Centre, 26817 Civic Centre Road, Keswick, ON
- Town of Georgina Water/Wastewater Operations Facility (Operations)

## Municipal Drinking Water License and Drinking Water Works Permit

- Municipal Drinking Water License (MDWL) number: 119-101 (Issue number 3)
- Drinking Water Works Permit (DWWP) number: 119-201 (Issue number 3)

The Town's MDWL and DWWP describe the system specific requirements in addition to those included in provincial regulations. These documents outline detailed conditions and regulatory requirements in regard to the operation, maintenance, and monitoring of the drinking water system, along with other things. The MDWL and DWWP are two components associated with the provincial drinking water system approvals framework that are applicable to the Town of Georgina and must be in compliance with all at times. The MDWL is valid for a period of five (5) years and must be renewed every five (5) years in accordance with the MECP requirements, and the DWWP is also renewed on this frequency as part of the MDWL renewal process. The Town is required to maintain compliance with all applicable MDWL and DWWP requirements at all times and adequately address any identified incidents of non-compliance.

MDWL expiry date: May 23, 2026 - Application for MDWL renewal, due 6 months prior to license expiry requirements ~

- Current Water Distribution System Map
- Operational Plan (DWQMS)
- System description
- Accreditation certificate (DWQMS)
- Financial Plan (DWQMS)

## Ontario Regulation 453/07. Financial Plans (SDWA, 2002)

The Financial Plans O. Reg. 435/07 requires all owners of municipal drinking water systems to prepare a financial plan that details at a minimal six (6) year projected financial plan for the drinking water system. For each year the financial plan must include, but is not limited to, details of the proposed or projected financial operations of the drinking water system itemized by revenue, water rates, user charges and other revenues. The Owner of the drinking water system must make the financial plan available to members of the public through publication -

<https://www.georgina.ca/living-here/home-and-property/water-and-wastewater/waterworks-financial-plan> .

As part of the process identified within O. Reg. 453/07, Financial Plans must be formally approved and acknowledged by the Owner of the drinking water system through resolution of the Municipal Council. The regulation is associated with the Operating Authorities corresponding with the Municipal Drinking Water License (MDWL) and must be updated in accordance with O. Reg. 453/07 Financial Plans requirements as part of the provincial water renewal process. The Town is required to maintain compliance with all applicable regulation requirements at all times and adequately address any identified incidents of non-compliance.

## Drinking Water Quality Management Standard (DWQMS)

The Drinking Water Quality Management Standard (DWQMS) sets out a framework for the operating authority and the owner of a drinking water system to develop a *Quality Management System (QMS)* that is relevant and appropriate for their respective drinking water system. The DWQMS is the approved QMS under the SDWA, 2002.

The purpose of the QMS is to establish policy and objectives, achieve those objectives as well as direct and control an organization with regards to quality. To adhere to the DWQMS requirements the Town has developed a QMS Operational Plan that is relevant to and appropriate for the Town of Georgina’s water distribution system. The Town’s is subject to annual internal and external audits as part of the on-going Operating Authority accreditation process. The DWQMS and associated QMS requirements is one of the components associated with the provincial drinking water system approvals framework that is applicable. The Town is required to always maintain compliance with all applicable DWQMS requirements and adequately address any identified incidents of non-conformance.

### Accredited Operating Authority

Part III, Section 13 of the SDWA requires the Owner of the Drinking Water System obtain/become an Accredited Operating Authority for the Drinking Water System. The Operating Authority must establish and maintain a Quality Management System (QMS), specific to the Drinking Water Quality Management Standard (DWQMS), approved under Section 21 of the SDWA.

DWQMS accreditation is valid for three (3) years, and the Town of Georgina will be seeking re-accreditation for the Quality Management System (QMS) in 2024. The Full Audit in 2024 will include the Operational Plan, Financial Plan, standard operating procedures for water quality, risk management processes and maintenance, rehabilitation and renewal of infrastructure activities and system security.

Designated Town of Georgina personnel coordinate Surveillance Audits internally and externally annually to facilitate the Towns’ ability to consistently deliver safe drinking water to the public and to enhance consumer protection through the effective application and continual improvement of the QMS.

The next certificate of re-accreditation for the Town of Georgina’s QMS will be in 2024 of the 3-year cycle (see chart below).

3 Year Cycle	Audit Description	Date
Y2	Surveillance Audit	Completed July 2023
Y3	On-Site Re-Accreditation Audit	July 2024
Y1	Surveillance Audit	July 2025



In July 2023 a Surveillance Audit (external audit) was conducted, and the Town received two (2) Opportunities for Improvement (OFIs) and 0 Non-Conformances (NC) by the accreditation body SAI Global. In June 2023, an internal audit concluded 14 OFIs and 0 NC of the QMS, and staff have been working diligently to enhance the QMS with these recommendations. Reference to the 2023 QMS Management Review Report will provide further details of the Town of Georgina's QMS audit report.

**Drinking 2023 Adverse Water Quality Incidents (AWQI)**

Town staff reported five (5) Adverse Water Quality Incidents (AWQI) to Ministry Environmental of, Conservation and Parks (MECP) Spills Action Centre (SAC) and to York-Durham Public Health Unit (PHU), and took immediate corrective action in accordance with O. Reg. 170/03: Drinking Water Systems. For each incident, the location of the adverse sample, as well as upstream and downstream locations were flushed, then sampled for microbiological contamination and chlorine residuals. The results of each sample returned negative for the presence of microbiological contamination, and free chlorine concentrations remained within acceptable parameters.

Below is the list of AWQI reporting in 2023 as per *Schedule 16, O. Reg. 170/03*.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
2023/07/28	Total Coliforms	P	PA	Flushed water main, resampled original AWQI location, as well as upstream and downstream locations. E7 Notified MECP and YRPH. Test results received for all locations passed Ontario Drinking Water Quality Standards.	2023/08/02
2023/09/21	High Sodium Content	36	MG/L	Flushed, re-sample.	2023/09/27
2023/09/21	High Sodium Content	34	MG/L	Flushed, re-sample	2023/09/27
2023/09/21	High Sodium Content	35	MG/L	Flushed, re-sample	2023/09/27
2023/09/21	High Sodium Content	36	MG/L	Flushed, re-sample	2023/09/27

- \* - Multiple samples were collected to fulfill requirements of corrective action
- P – present
- P/A – presence/absence
- CFU – colony forming unit
- MG/L – milligrams per liter

## Ministry of the Environment, Conservation and Parks (MECP) Inspection

The Compliance and Enforcement Regulation (O. Reg. 242/05) of the SDWA requires the Ministry of Environmental, Conservation and Parks (MECP) to carry out a number of specific activities such as taking mandatory actions and conducting inspections of municipal residential drinking water systems.

Compliance with O. Reg 170/03 is determined in part through system inspections conducted annually by the MECP. The annual reporting requirements for drinking water systems are also required under section 11 (Annual Reports) and schedule 22 (Summary Reports for Municipalities). The Town is required to maintain compliance with all applicable O. Reg. 170/03 requirements at all times and adequately address any identified incidents of non-compliance.

Under the SDWA, 2002, O. Reg. 128/04, Certification of Drinking Water System Operators and Water Quality Analysts, Water/Wastewater Operators must hold a valid operator license to operate a municipal drinking water system. O. Reg. 128/04, establishes the training and certification requirements for Operators the corporation must ensure Water/Wastewater Operators hold the required certification level, and maintain compliance with training and certification requirements in order legally operate the drinking water system. Water/Wastewater Operators conduct operational checks, adjust, test or evaluate processes that control the effectiveness or efficiency of the subsystem, including directing the flow, pressure or quality of the water, sampling, testing and monitoring water quality within the subsystem.

Compliance with O. Reg. 128/04 is determined partially through system inspections conducted annually by the MECP. The Town is required to maintain compliance with all applicable regulation requirements at all times and adequately address any identified incidents of non-compliance.

### 2023 Annual MECP Inspection

The Ministry of Environment, Conservation, and Parks (MECP) conducted an unannounced, detailed inspection of the Keswick-Sutton Distribution System on February 6, 2024. This inspection is a Full inspection and all data/records for the time period of February 1, 2023 to February 6, 2024, will be inspected, along with visiting selected pumping stations.

This inspection will assess the Keswick-Sutton Distribution System's compliance with Safe Drinking Water Act, 2002 (SDWA), conformity with ministry drinking water policies and guidelines, operations manuals, standard operating procedures, logbooks, operator certifications, and training credentials, water quality results, water quality monitoring processes, reporting procedures, and corrective actions. MECP performed a comprehensive, multi-barrier inspection of the water system focusing on the source, treatment, distribution components, and management system. The inspection has been conducted pursuant to Section 81 of the SDWA.

As a result of the 2023 MECP inspection, the Town of Georgina was provided a final report on February 26, 2024, indicating two (2) incidents of regulatory non-compliance and four (4) Compliance Response(s)/Corrective Action(s)/Observations for 2023. The town received an inspection rating of 97.54%. This score indicates a low risk rank and highest possible inspection rating for drinking water systems. The inspection rank indicates that there were *two (2) non-*



compliance with the system requirements of the Safe Drinking Water Act, the regulations, the system's approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system.

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2023-24)

<b>DWS Name:</b>	KESWICK-SUTTON DISTRIBUTION SYSTEM
<b>DWS Number:</b>	260062686
<b>DWS Owner:</b>	TOWN OF GEORGINA
<b>Municipal Location:</b>	GEORGINA
<b>Regulation:</b>	O.REG. 170/03
<b>DWS Category:</b>	DW Municipal Residential
<b>Type of Inspection:</b>	Detailed
<b>Inspection Date:</b>	Feb-6-2024
<b>Ministry Office:</b>	York Durham District Office

Maximum Risk Rating: 325

Inspection Module	Non Compliance Risk (X out of Y)
Certification and Training	0/35
Logbooks	0/26
Operations Manuals	0/42
Reporting & Corrective Actions	8/71
Treatment Processes	0/80
Water Quality Monitoring	0/71
<b>Overall - Calculated</b>	<b>8/325</b>

Inspection Risk Rating: 2.46%

Final Inspection Rating: 97.54%

Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2023-24)

<b>DWS Name:</b>	KESWICK-SUTTON DISTRIBUTION SYSTEM
<b>DWS Number:</b>	260062686
<b>DWS Owner Name:</b>	TOWN OF GEORGINA
<b>Municipal Location:</b>	GEORGINA
<b>Regulation:</b>	O.REG. 170/03
<b>DWS Category:</b>	DW Municipal Residential
<b>Type of Inspection:</b>	Detailed
<b>Inspection Date:</b>	Feb-6-2024
<b>Ministry Office:</b>	York Durham District Office

Non-Compliance Question(s)	Non Compliance Risk
<b>Reporting &amp; Corrective Actions</b>	
Was an Annual Report containing the required information prepared by February 28 of the following year?	4
Have Summary Reports for municipal council been completed on time, include the required content, and distributed in accordance with the regulatory requirements?	4
<b>Overall - Total</b>	<b>8</b>

Maximum Question Rating: 325

Inspection Risk Rating: 2.46%

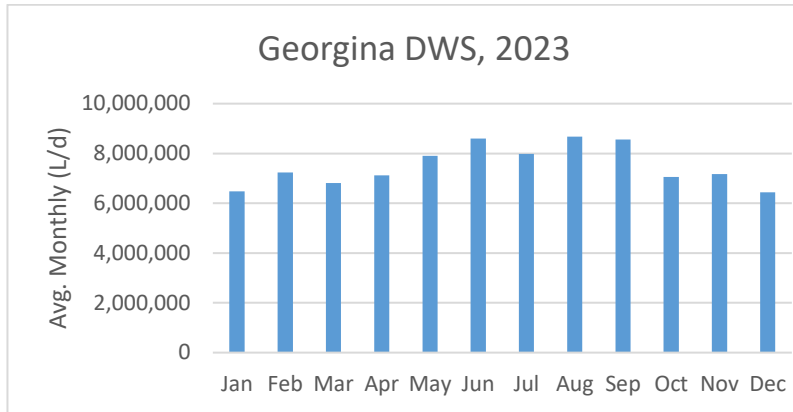
FINAL INSPECTION RATING: 97.54%



### System Monthly Average Flow

#### Georgina Water Treatment Plant (Operated by York Region)

2023 Water Quantity & Flow Rate Data for the Town of Georgina Water Distribution System - summary of the maximum, minimum, and average daily flows per month, and is expressed in m<sup>3</sup> /day.

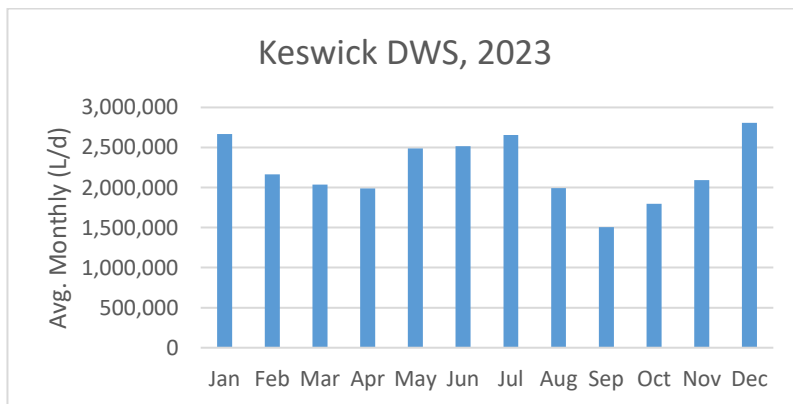


Georgina WTP (2023)	Litres
Maximum Monthly Average Flow (L/day)	8,677,153
Maximum Daily Flow (L/day)	13,694,375
Total Volume Georgina WTP (L/year)	2,737,248,358

\*All data provided by the Regional Municipality of York

#### Keswick Water Treatment Plant – Willow Beach (Operated by York Region)

2023 Water Quantity & Flow Rate Data for the Town of Georgina Keswick Water Distribution System - summary of the maximum, minimum, and average daily flows per month, and is expressed in m<sup>3</sup> /day.



Keswick WTP (2023)	Litres
Maximum Monthly Average Flow (L/day)	2,806,965
Maximum Daily Flow (L/day)	4,874,000
Total Volume Keswick WTP (L/year)	813,538,066

\*All data provided by the Regional Municipality of York



### 2023 Water Quality Testing

Reference 2023 Annual Water Quality Summary Report posted on the Town of Georgina website, in compliance with section 11 SDWA.

#### Top Requested Water Quality Parameters

Chlorine	Lead (Pb)	Sodium (Na)*	Fluoride (F)**
Range 0.05 – 1.93 mg/L	Range <0.0005 mg/L – 0.0028 mg/L	34-36 mg/L	**Refer to York Region Annual Report

\*The owner of a drinking water system and the operating authority for the system shall ensure that at least one water sample is taken every 60 months and tested for sodium.

\*\*If a drinking water system provides fluoridation, the owner of the system and the operating authority for the system shall ensure that a water sample is taken at the end of the fluoridation process at least once every day and is tested for fluoride. F

#### Chlorine Residual Testing

The Town is required to routinely monitor for “free chlorine residual” concentrations in order to ensure the minimum residual is maintained within the distribution system, in accordance with O. Reg. 170/03. As per Schedule 10, O. Reg. 170/03, samples taken from the Town’s Drinking Water Distribution System are required to have chlorine residual tests to ensure drinking water is sufficiently disinfected. The Town of Georgina certified Water/Wastewater Operators submitted for testing 721 free chlorine samples during routine and emergency microbiological sampling in 2023. A total of 5,531 free chlorine residual samples were analyzed in 2023.

Certified Water/Wastewater Operators took daily chlorine residuals readings throughout the distribution system as part of the Town’s Water Quality Monitoring program, as well as carried out a weekly flushing program focused on blow-off valves, fire hydrants, dead-end and sampling stations to purge stagnant water within the distribution system and monitor/maintain chlorine residuals at acceptable levels.

In addition to daily free chlorine residual testing, samples were collected for weekly microbiological testing and scheduled chemical tests. The range of free chlorine residual readings analyzed as part of the Town’s Water Quality Monitoring program was 0.07 mg/L to 2.14 mg/L. The legislated minimum acceptable free chlorine residual is 0.05 mg/L and the maximum is 4.00 mg/L.

There were zero (0) incidents in 2023 detected free chlorine residual results below the minimum acceptable requirement of 0.05mg/L. In case of below the prescribed limit, Town’s Water/Wastewater Operators would perform corrective actions as per *O. Reg. 170/03*.

**Microbiology Testing**

In the Town of Georgina, Certified Water/Wastewater Operators take weekly water samples from designated sample locations in the Keswick-Sutton water distribution system. The York-Durham Environmental Laboratory in Pickering analyses and tests each sample for the presence of bacteria. York Region and Durham Regions jointly own and operate the accredited laboratory (see the link for detailed lab information: [York Durham Regional Environmental Lab - Region of Durham](#)).

Testing under *Schedule 10 of O. Reg. 170/03: Drinking Water Systems*, a total of 721 water samples from the Keswick-Sutton distribution system were analyzed for the presence of coliform bacteria (total coliforms, and *E. coli*) between January 1, 2023 and December 31, 2023. Of the 721 microbiological samples taken in 2023, one (1) sample tested positive for microbiological contamination (see 2023 AWQI Reporting table in this document).

210 samples were also analyzed using the heterotrophic plate count (HPC) method to check any indicator of ideal conditions for the growth of bacteria within the drinking water supply system. This test is used as a supplement to the routine analysis for coliform bacteria and is used as an aide in assessing overall drinking water quality and the condition of the distribution system. At a minimum, 25% of all routine microbiological sampling tests must be tested for HPC. The sampling quantity of approximately 31% of all routine microbiological samples, surpassing the *MECP* and *SDWA* requirements.

The *MECP* Operational Guideline determines a maximum allowable concentration of 500 CFU/ml HPC. The maximum concentration of HPC analyzed within the Town’s water distribution system in 2023 was 170 CFU/ml.

HPC Range in Colony Forming Units (CFU/mL)	Number of Samples
0 - 170	210

The results above indicate overall drinking water quality is acceptable as all HPC samples throughout 2023 are well below the regulatory limit of 500 CFU/ml.

**Trihalomethanes (THMs) and Haloacetic Acids (HAAs) Testing**

As part of the Town’s Water Quality Monitoring program, free chlorine residual readings must also be taken during quarterly routine testing of Trihalomethanes (THM’s) and Haloacetic Acids (HAA’s). THM’s and HAA’s are disinfection by-products that can be used as an indicator of the effectiveness of the chlorine disinfection process. In 2023, eight (8) samples were tested for Trihalomethanes (THMs) at locations that were deemed to have the highest potential for

elevated THM values, namely those furthest from the treatment facilities. The maximum 12-month running annual average (RAA) of quarterly results limit is 100 µg/L (O. Reg. 169/03). The results of the Town samples for the THM 12-month RAA for 2023 was 59.39 µg/L and thus within regulatory limits.

Eleven (11) samples were tested for Haloacetic Acids (HAAs) at locations deemed to have the highest potential of the highest possible HAA values, namely locations closest to the Treatment Facilities. The maximum 12-month running annual average (RAA) of quarterly results limit is 80 µg/L (O. Reg. 169/03). The results of the Town samples for the HAA 12-month running average for 2023 was 39.25 µg/L, demonstrating that the water is within regulatory limits, but elevated results approaching half the limit need to be monitored. Schedule 23: Inorganic Parameters and Schedule 24: Organic Parameters in O. Reg. 170/03 are sampled by York Region.

Sampling and testing were performed for each 2023 AWQI events and samples returned negative for the presence of microbiological contamination, indicating the measures taken per O. Reg. 170/03 are sufficient in managing the safety and potability of water.

### Sodium

The Regional Municipality of York provides treated drinking water to the Town of Georgina to distribute to residents. Both the Region and Town reported an average sodium concentration of elevated levels:

- 2019: 34mg/L Region Report
- 2020: 32.3 to 32.5mg/L Region Report
- 2023: 34-36mg/L Town of Georgina Report

When test results for sodium exceed 20mg/L, the Safe Drinking Water Act, 2002/03 requires the Operating Authority to report this as an adverse test result to the Ministry of Environment, Conservation and Parks (MECP) and to the Regional Medical Officer of Health (MOH).

Summary of water test results required under Drinking Water Systems O. Reg. 170/03 and MDWL:

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
THM (NOTE: show latest annual average)	February 1, 2023; May 1, 2023; August 2, 2023; November 1, 2023	59.39	UG/L	0
HAA (NOTE: show latest annual average)	February 1, 2023; May 1, 2023; August 2, 2023; November 1, 2023	39.25	UG/L	0
	September 21, 2023	36	MG/L	4
		34		
		35		

Sodium		36	MG/L	4
	September 25, 2023	35		
		35		
		36.3		
		35.1		

### Nitrate and Nitrite testing

The Regional Municipality of York performs Nitrate and Nitrite testing of the drinking water at the treatment facilities where the water enters the distribution system as required under Schedule 13, O. Reg. 170/03. In 2023, the Town of Georgina did not perform sampling of nitrates and nitrites as determined by the Water/Wastewater Supervisor. After 2023 Annual QMS Management Review, Top Management in consultation with Water/Wastewater Operations Manager determined that nitrate and nitrites sampling will be added back into the sampling schedule.

### Lead Testing

In 2007, the Ontario Government implemented municipal and non-municipal drinking water systems to undertake mandatory semi-annual lead testing in the drinking water systems to ensure the lead concentration remains under the standards set forth in *O.Reg.169/03: Ontario Drinking Water Quality Standards and O.Reg.170/03: Drinking Water Systems*, under the *Safe Drinking Water Act, SDWA 2002*. The Ontario drinking water quality standard for lead is 10 micrograms per litre (10 µg/L) or 0.010 milligrams per litre (0.010 mg/L). This standard is based on the national guideline set by Health Canada.

The lead testing performed over the past decade has demonstrated that most municipal and non-municipal residential drinking water systems have met the regulated standards. As a result, the Ministry has amended regulations under the *SDWA* to clarify requirements for lead testing and to introduce an automatic lead testing exemption within plumbing systems for municipal drinking water systems serving under 50,000 people.

Systems serving under 50,000 users can transfer to a “reduced” lead sampling schedule on condition that no more than 10% of samples taken within the latest two (2) sampling periods do not exceed half of the 10ug/mL standard (0.010 mg/L). Since the Town has not had any exceedances for lead since 2007, the Town falls under the “reduced” lead sampling schedule for the water distribution system and is exempt from Lead sampling within the plumbing system. Lead samples are taken every 36 months on a rolling three (3) year schedule under the “reduced” sampling protocol. Each year semi-annual alkalinity or pH sampling are mandatory, whereas lead must be sampled every 36 months on a semi-annual basis (summer, and winter).

The table below outlines the rolling three (3) year “reduced” Lead sampling schedule.

Sampling year	1 <sup>st</sup> Round Sampling	Date of 1 <sup>st</sup> Round Sampling	2 <sup>nd</sup> Round Sampling	Date of 2 <sup>nd</sup> Round Sampling	# Of Samples per Period	Sampling Requirements
Y2	Dec 15, 2022 - Apr 15, 2023	March 2023	Jun 15, 2023 - Oct 15, 2023	September 2023	8 Alkalinity 6 Lead	Alkalinity and pH
Y3	Dec 15, 2024 - Apr 15, 2024	March 2024	Jun 15, 2024 - Oct 15, 2024	September 2024	4	Alkalinity, pH, and Lead
Y1	Dec 15, 2025 - Apr 15, 2025	March 2025	Jun 15, 2025 - Oct 15, 2025	September 2025	4	Alkalinity and pH

In 2023, the Town was in year two (Y2) of this cycle, and was not required to sample for lead, however six (6) samples for lead were taken prematurely. In total, four (4) alkalinity samples were taken on 08-Mar-2023, and an additional four (4) alkalinity samples were taken on 13-Sep-2023.

The table below summarizes the sample results, which demonstrate that the results are all within compliance limits.

Sample Date	Number of Samples	Lead (mg/L) Min. – Max.	Alkalinity CaCO <sub>3</sub> (mg/L)	pH Min. – Max.
March 08, 2023	4 (Lead) & 4 (Alkalinity)	<0.0005 – 0.0006	113-118	7.35 – 7.87
Sept 13, 2023	2 (Lead) & 4 (Alkalinity)	0.0007 – 0.0028	106-115	7.22 – 7.69
<i>MAC – (Maximum Allowable Concentration)</i>		<i>MAC</i>	<i>OG</i>	<i>OG</i>
<i>OG – (Operational Guideline)</i>		<i>0.01mg/L</i>	<i>500mg/L</i>	<i>6.5 – 8.5</i>

### Private Wells

Residents that obtain water from private wells are encouraged to take samples periodically to determine if their water is safe to drink. Sample bottles may be obtained at the Civic Centre and returned to the same location for testing conducted by the Ministry of Health laboratory at no cost to the residents.