



26557 Civic Centre Rd.
Keswick, Ontario L4P 3G1

GEORGINA

SAFE DRINKING WATER ACT 2017 ANNUAL REPORT

Regulations passed under the *Safe Drinking Water Act* require owners of municipal drinking water systems to publish 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, 2017 to December 31, 2017.

The Town of Georgina operates the water distribution system and The Regional Municipality of York provides the treatment 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 skill to protect the safety of the users of the Town's drinking water system. This includes, the Mayor, Municipal Councilors, Management and Operators.

The source of supply for the Keswick-Sutton system is Lake Simcoe. York Region owns and operates a water treatment plant at Clarlyn Drive and Metro Road North and another plant on Kennedy Road in Willow Beach. York Region also owns and operates four water storage tanks located at Westpark Heights, Woodbine Avenue just north of Old Homestead Road, Deer Park Drive and Dalton Road. Water is taken from Lake Simcoe at each plant and undergoes a complete treatment process consisting of screening, filtration, taste and odor control, disinfection and fluoridation before being supplied to the Town's water distribution system. York Region also carries out extensive testing at each plant and summarizes the results of these tests in an annual report. The reports describe the treatment and chemicals used in the process in more detail. Copies of York Region's annual report may be obtained by contacting York Region at 1-877-464-9675, accessing their web site at York.ca or obtaining a copy at the Town of Georgina Civic Centre located at 26557 Civic Centre Road, Keswick, Ontario.

The Town of Georgina owns and operates the water distribution system that receives water from the York Region treatment plants. The system is comprised of water booster stations, watermains, service connections up to the property line, valves, hydrants and meters. The Town provides distribution, whereas York Region provides treatment.

Licensed Town Drinking Water Operators take water samples from various locations serviced by the Keswick-Sutton water distribution system every week. The York-Durham



26557 Civic Centre Rd.
Keswick, Ontario L4P 3G1

GEORGINA

Laboratory in Pickering analyses and tests each sample for the presence of bacteria. York and Durham Regions jointly own this accredited laboratory and employees of Durham Region staff the laboratory.

Microbiology Testing from January 1 to December 31, 2017

Seven hundred and eighty six (786) samples from the Keswick-Sutton distribution system were analyzed for the presence of coliform bacteria between January 1, 2017 and December 31, 2017. One (1) sample tested positive for Total Coliforms¹. Town staff took immediate corrective action in accordance with Regulation 170/03. The location of the adverse sample, as well as, upstream and downstream was resampled. The results of the resample were negative for the presence of coliforms indicating the likely cause of the initial positive result was from secondary contamination.

Two hundred and four (204) samples were analyzed by using the heterotrophic plate count method to check for background colonies within the drinking water. 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.

Shown in the table below are the results from two hundred and four (204) heterotrophic plate count (HPC) samples.

HPC Range in Colony Forming Units (CFU)	Number of Samples
0	166
1 to 10	37
11 to 20	1
Total HPC Sample Count	204

Chlorine Residual

The Town is also required to monitor chlorine residual concentrations to ensure that bacteria does not develop within the drinking water system. Four thousand seven hundred and forty three (4743) samples were analyzed. The range of free chlorine residual from the 4743 samples analyzed was 0.11 mg/L and 1.88 mg/L. The minimum acceptable chlorine residual is 0.05 mg/L and the maximum is 4.00 mg/L. All samples had sufficient chlorine residual levels.



26557 Civic Centre Rd.
Keswick, Ontario L4P 3G1

GEORGINA

Lead Testing

The Town is exempt from lead sampling within the plumbing system but must continue to sample within the distribution system. The table below outlines the rolling three (3) year lead sampling schedule. In 2017, sampling was carried out as per year two (2).

YEAR	1 st Round	Date of Sampling	2 nd Round	Date of Sampling	# of Samples per Period	Sampling Requirements
2	Dec 15/16 to Apr 15/17	March 8, 2017	Jun 15/17 to Oct 15/17	September 13, 2017	4	Alkalinity and pH
3	Dec 15/17 to Apr 15/18	March 2018	Jun 15/18 to Oct 15/18	September 2018	4	Alkalinity, pH and Lead
1	Dec 15/18 to Apr 15/19	March 2019	Jun 5/19 to Oct 15/19	September 2019	4	Alkalinity and pH

Eight (8) distribution samples were taken in 2017 and were tested for alkalinity and pH. The table below summarizes the results.

Sample Date	Number of Samples	Lead (mg/L) Min. – Max.	Alkalinity (mg/L)	pH Min. – Max.
Mar. 8/17	4	N/A	106 – 112	7.03 – 7.91
Sep. 13/17	4	N/A	103 – 110	6.56 – 6.75

Other Testing

Twenty-eight (28) samples were tested for trihalomethanes (THM). The THM twelve (12) month running average for 2017 was 56.26 µg/L. The maximum (12) month running average allowable limit is 100 µg/L.



26557 Civic Centre Rd.
Keswick, Ontario L4P 3G1

GEORGINA

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 by the Ministry of Health laboratory at no cost.

Further Information

The *Safe Drinking Water Act* requires that an Annual Report be prepared on or before February 28 of the following year. The Summary Report must be prepared and presented to members of Council by March 31 of each year. A copy of this report will be available for inspection in the Office of the Clerk on or before March 31, 2018.

Detailed lab reports are available for review at the Civic Centre, located at 26557 Civic Centre Road, Keswick.

Please direct any questions or concerns regarding this report to John Armstrong, Acting Director of Operations and Infrastructure, at 905-476-4301 extension 2233.

Dean Rurak, P.Eng.
Manager of Operations and Infrastructure

13 MAR 2018

Date

John Armstrong
Acting Director of Operations & Infrastructure

13 MAR 2018

Date

/mt

¹ Note: This document is a revision of the original document posted on February 15, 2018, which incorrectly stated "E.coli".