



2019 Annual Drinking Water System (DWS) Quality Report Keswick-Sutton Distribution Subsystem

Prepared by the Town of Georgina pursuant to Section 11 of O.Reg. 170/03

Drinking Water System Number: 260062686
Drinking Water System Name: Keswick-Sutton Distribution Subsystem
Drinking Water System Owner: The Town of Georgina
DWS Category: Large Municipal Residential
Drinking Water System Classification: Water Distribution II
Reporting period: Jan 1, 2019 - Dec 31, 2019

The Keswick-Sutton Distribution Subsystem serves 39,527 people

This annual report is available to the public at no charge on the Town's website <https://www.georgina.ca/living-here/home-and-property/municipal-water-and-wastewater/drinking-water-reports> and upon request at the Civic Centre.

Summary report required under O.Reg. 170/03 Schedule 22 will be available for inspection at:

The Town of Georgina
Civic Centre
Office of the Clerk
26557 Civic Centre Road, Keswick, Ontario, L4P 3G1
and online, <https://www.georgina.ca/living-here/home-and-property/municipal-water-and-wastewater/drinking-water-reports>

List all Drinking Water Systems which receive their drinking water from the Keswick-Sutton Distribution Subsystem

None

Description of the Keswick-Sutton Distribution Subsystem

Introduction

Municipal drinking water is being supplied to the communities of Keswick and Sutton, located on the south shore of Lake Simcoe. Surface water from Lake Simcoe is treated by the Regional Municipality of York, while the Town of Georgina distributes treated water to end users. The Province governs the Region and Town of Georgina operations with Acts and Regulations, a Permit to Take Water, a Municipal Drinking Water License and an Operating Permit.

Raw water source

Lake Simcoe

List of water treatment chemicals used over this reporting period

None

Brief description and breakdown of monetary expenses incurred

\$119,250 for capital expenditures – Church Street water service replacement.
\$92,991 for Fleet vehicle replacement – Three (3) service trucks.



2019 Annual Drinking Water System (DWS) Quality Report Keswick-Sutton Distribution Subsystem

Notices submitted under Section 18(1) of the Safe Drinking Water Act or Section 16-4 of O.Reg. 170/03 and reported to MECP Spills Action Centre as Adverse Water Quality results

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
June 19, 2019	TC (Total Coliform)	Present	Presence/ Absence	Resample (at, upstream and downstream), flush, & test for chlorine residuals in accordance with O.Reg. 170/03	June 21, 2019 – 1 st resample + test & monitor June 22, 2019 – 2 nd resample + test & monitor

Microbiological testing completed under Schedule 10 of O.Reg. 170/03

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	752	Range: (Absent)	Range: <1 - 1 (Present)	206	Range: 0 – 10 CFU

Operational testing done under Schedule 7 of Regulation 170/03 during the period covered by this Annual Report

	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
Chlorine	4724	0.07 – 2.04	mg/L



2019 Annual Drinking Water System (DWS) Quality Report Keswick-Sutton Distribution Subsystem

Summary of testing pursuant to Schedule 13 of O. Reg. 170/03 and sampling carried out in accordance with the requirement of an approval, order or other legal instrument

	Date of Sample	Running Annual Average (µg/L)	ODWS Regulatory Limit	Exceedance
Trihalomethanes (THM's)	January 7, 2019	58.38	100 µg/L	No
	February 6, 2019	58.88		
	May 1, 2019	58.85		
	August 7, 2019	60.48		
	November 6, 2019	61.44		
Haloacetic Acid (HAA's)	February 6, 2019	31.13	100 µg/L	No
	May 1, 2019	35.25		
	August 19, 2019	36.13		
	November 6, 2019	37.50		
Nitrate		*Refer to Regional Municipality of York Annual Report O.Reg 170/03 requires these parameters to be tested at the point where water enters the distribution system. The Town of Georgina relies on the Region of York to undertake this sampling and testing when the water leaves the treatment plant.		
Nitrite				
Sodium				
Fluoride				

Lead testing under Schedule 15.1 of O.Reg 170/03

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	ODWS Regulatory Limit	Number of Exceedances
Plumbing	N/A				
Distribution	8 (4 – Keswick) (4 – Sutton)	<0.0005 – 0.0009	mg/L	0.01mg/L	N/A



2019 Annual Drinking Water System (DWS) Quality Report Keswick-Sutton Distribution Subsystem

Summary of Inorganic (Schedule 23 of O.Reg 170/03) parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	*Refer to Regional Municipality of York Annual Report O.Reg 170/03 requires these parameters to be tested at the point where water enters the distribution system. The Town of Georgina relies on the Region of York to undertake this sampling and testing when the water leaves the treatment plant.			
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				
*Lead	*See above table; Schedule 15.1 results			

Summary of Organic (Schedule 23 of O.Reg 170/03) parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	*Refer to Regional Municipality of York Annual Report O.Reg 170/03 requires these parameters to be tested at the point where water enters the distribution system. The Town of Georgina relies on the Region of York to undertake this sampling and testing when the water leaves the treatment plant.			
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				



2019 Annual Drinking Water System (DWS) Quality Report Keswick-Sutton Distribution Subsystem

2-4 Dichlorophenol
2,4-Dichlorophenoxy acetic acid (2,4-D)
Diclofop-methyl
Dimethoate
Dinoseb
Diquat
Diuron
Glyphosate
Heptachlor + Heptachlor Epoxide
Lindane (Total)
Malathion
Methoxychlor
Metolachlor
Metribuzin
Monochlorobenzene
Paraquat
Parathion
Pentachlorophenol
Phorate
Picloram
Polychlorinated Biphenyls(PCB)
Prometryne
Simazine
THM (NOTE: show latest annual average)
Temephos
Terbufos
Tetrachloroethylene
2,3,4,6-Tetrachlorophenol
Triallate
Trichloroethylene
2,4,6-Trichlorophenol
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)
Trifluralin
Vinyl Chloride

Organic and inorganic parameter(s) that exceeded half the standard prescribed in Schedule 2 of O.Reg. 169/03 Ontario Drinking Water Quality Standards

	Date of Sample	Running Annual Average (µg/L)	Value exceeded over half of regulatory standard (ODWS Standard 100 µg/L)
Trihalomethanes (THM's)	January 7, 2019	58.38	Yes
	February 6, 2019	58.88	
	May 1, 2019	58.85	
	August 7, 2019	60.48	
	November 6, 2019	61.44	