

SUMMARY REPORT 2019
For the Town of Lakeshore Water Supply System
Stoney Point Water Service Area

(Made under Schedule 22 of Ontario Regulation 170/03, a regulation made under the Safe Drinking Water Act, 2002)

Explanation

Schedule 22 of Ontario Regulation 170/03, a regulation made under the Safe Drinking Water Act, 2002 requires that a large municipal residential drinking-water system must provide to its board members a Summary Report on various aspects of the system before March 31 of the following year. The Stoney Point Water Service Area is classed as a large municipal residential drinking-water system and is therefore subject to Schedule 22.

The Summary Report must list the following:

- The requirements of the Safe Drinking Water Act, 2002 that the system failed to meet during the period covered by the Summary Report
- The requirements of the regulations made under the Safe Drinking Water Act, 2002 that the system failed to meet during the period covered by the Summary Report
- The drinking-water systems approval that the system failed to meet during the period covered by the Summary Report
- Any order that the system failed to meet during the period covered by the Summary Report, the duration of any such failure and any measures that were taken to correct such failure
- A summary of the quantities and flow rates of water supplied by the drinking-water system by monthly average and maximum daily flow rates and instantaneous peak flow rates
- A comparison of actual flow rates with rated capacity and flow rates in the systems approval
- Minutes of the Management Review Meetings held by the Operating Authority

A drinking-water system that supplies water to a municipality must provide a copy of the Summary Report to the municipality by March 31 of the year following the year covered in the Summary Report.

Failure to meet the requirements of the Safe Drinking Water Act 2002, associated regulations, system approvals and provincial officer orders

The table below lists the occasions on which the Stoney Point Water Service Area failed to meet the requirements of the Safe Drinking Water Act 2002, associated regulations, system approvals and provincial officer orders in 2019.

There were **no** occasions in 2019 when the Stoney Point Water Service Area was not in compliance with the requirements of the Safe Drinking Water Act 2002, associated regulations, system approvals and provincial officer orders.

Stoney Point Water Service Area

Drinking Water Legislation	List the requirement(s) the system failed to meet	Specify the duration of the failure (i.e. date(s))	Describe the measures taken to correct the failure	Status (complete or outstanding)
Safe Drinking Water Act	None			
Ontario Regulations	None			
System Certificate of Approval or Drinking Water Works Permit	None			
Provincial Officer's Order	None			

A Summary of the Quantities and Flow Rates of Water Supplied During the Period Covered by the Report, Including Monthly Average and Maximum Daily Flows, and Daily Instantaneous Peak Flow Rates

The Stoney Point Water Service Area operated under the following Permit to Take Water (PTTW) in 2019:

PTTW Number 2373-87MHXB issued on July 30, 2010 has the following flow conditions

- Maximum Allowable Amount Taken per Minute (Litres/Min) **3,180**
- Maximum Allowable Amount Taken Per Day (Litres/Day) **4,600,000**

The maximum amounts of raw water taken during 2019 are as follows:

- Maximum Amount Taken per Minute in 2019 (Litres/Min) **2,970 (July 7, 2019)**
- Maximum Amount Taken Per Day in 2019 (Litres/Day) **2,591,000 (August 31, 2019)**

The system did not exceed the PTTW limits in 2019.

The Stoney Point Water Service Area operated under Drinking Water Works Permit #301-201 and Municipal Drinking Water Licence #031-101 during 2019:

The Drinking Water Works Licence has the following flow conditions:

- The maximum daily volume of treated water that flows from the treatment subsystem to the distribution subsystem shall not exceed **4,545 m³/day**.
- The maximum daily volume of water pumped into the distribution system in 2019 was **2, 456 m³/day (August 31, 2019)**.

The following tables (Table 1 & Table 2) give the monthly average, maximum and peak raw water and treated water flows for the Stoney Point Water Service Area.

Table 1 Raw Flow Data (flow into the treatment system) in 2019

Month	Maximum Allowed Flow Rate (m ³ /Day)	Average Flow (m ³ /Day)	Maximum Flow (m ³ /Day)	Maximum Allowed Flow Rate (Litres/Minute)	Peak Flow (Litres/Minute)
January	4,600	1,575	1,760	3,180	1,434
February	4,600	1,591	1,868	3,180	1,464
March	4,600	1,575	1,658	3,180	1,386
April	4,600	1,664	2,203	3,180	1,794
May	4,600	1,683	2,296	3,180	1,602
June	4,600	1,867	2,504	3,180	1,902
July	4,600	2,092	2,538	3,180	2,970
August	4,600	2,292	2,592	3,180	2,010
September	4,600	2,229	2,558	3,180	2,064
October	4,600	1,743	2,252	3,180	1,710
November	4,600	1,381	1,596	3,180	1,302
December	4,600	1,399	1,571	3,180	2,850

Table 2 Treated Flow Data (flow into the distribution system) in 2019

Month	Maximum Allowed Flow Rate (m ³ /Day)	Average Daily Flow (m ³ /Day)	Maximum Daily Flow (m ³ /Day)	Peak Flow (Litres/Minute)
January	4,545	1,391	1,529	2,094
February	4,545	1,428	1,734	2,124
March	4,545	1,424	1,583	2,160
April	4,545	1,493	1,867	3,840
May	4,545	1,575	2,062	3,468
June	4,545	1,783	2,264	3,876
July	4,546	2,011	2,451	3,678
August	4,546	2,183	2,456	4,152
September	4,546	2,118	2,397	3,294
October	4,546	1,667	2,102	3,108
November	4,546	1,292	1,517	3,180
December	4,546	1,303	1,442	2,706



ANNUAL REPORT

Drinking-Water System Number:	220003396
Drinking-Water System Name:	Stoney Point Water Treatment Plant/Water Service Area
Drinking-Water System Owner:	The Corporation of the Town of Lakeshore
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 01, 2019 to December 31, 2019

Does this Drinking-Water System serve more than 10,000 people? Yes [] No [X]

Is this annual report available to the public at no charge on a web site on the Internet?
Yes [X] No []

Location where this system's Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

Town of Lakeshore
Municipal Office
419 Notre Dame Street
Belle River, Ont
N0R 1A0

Drinking-Water Systems which receive all of their drinking water from this system:

Drinking Water System Name	Drinking Water System Number
None	

How system users are told that this annual report is available, and is free of charge.

- [X] Public access/notice via the web.
- [X] Public access/notice via Government Office.
- [] Public access/notice via a newspaper.
- [X] Public access/notice via Public Request.



Description of the Drinking-Water System during this reporting period

The Stoney Point Water Service Area (SPWSA) serves the eastern portion of the Town of Lakeshore generally from Lake St.Clair south to County Rd.8 and Rochester Townline Road east to Big Creek. The SPWSA is supplied from the Stoney Point Water Treatment Plant. The plant processes include coagulation, flocculation, sedimentation, filtration, taste and odour control, zebra mussel control and chlorination systems. Approximately 6,588 Lakeshore residents are served in the SPWSA. The SPWSA includes 208km of water distribution piping ranging in size from 25 to 300 mm in diameter. The distribution system disinfection is by free chlorine residual. The SPWSA also includes the Haycroft reservoir/pumping station and the Comber reservoir/pumping station, both of which provide storage, re-disinfection and pumping in the SPWSA.

List of all water treatment chemicals used over this reporting period

Aluminum Sulphate, Activated Carbon, Chlorine Gas

Significant expenses incurred during this reporting period to:

- Install required equipment
- Repair required equipment
- Replace required equipment

A brief description and a breakdown of monetary expenses incurred

Intermediate pump replacement (Pumps 2 & 3) - \$ 43,000
 VFD's for Intermediate Pumps (Pumps 1,2&3) - \$ 11,000

Details of notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
None					

Microbiological testing done under the Schedule 10 of Regulation 170/03, during this reporting period.

	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	52	0 – 90	0 - >2000	N/A	N/A
Treated	104	0 – 0	0 – 0	104	0 – 30



Distribution	260	0 – 0	0 – 0	104	0 - 20
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Operational testing done under Schedule 7 of Regulation 170/03 during this reporting period.

	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
Turbidity (filter avg)	8760	0.02 – 0.05	NTU
Chlorine	8760	1.63 – 2.02	Mg/L
All Distribution Free Chlorine Residuals	1070	0.29 – 2.36	Mg/L

NOTE: 8760 indicates that continuous monitors were used for sampling.

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
June 6, 2016 DWWL 031-101 (issue 02)	Suspended Solids	Running Annual Average	3.13	Mg/L

Summary of Inorganic parameters tested during this reporting period

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	November 13, 2019	ND	Mg/l	NO
Arsenic	November 13, 2019	ND	Mg/l	NO
Barium	November 13, 2019	0.022	Mg/l	NO
Boron	November 13, 2019	0.05	Mg/l	NO
Cadmium	November 13, 2019	ND	Mg/l	NO
Chromium	November 13, 2019	ND	Mg/l	NO
Mercury	November 13, 2019	ND	Mg/l	NO
Selenium	November 13, 2019	ND	Mg/l	NO
Sodium	November 13, 2019	ND	Mg/l	NO
Uranium	November 13, 2019	ND	Mg/l	NO
Fluoride	November 13, 2019	ND	Mg/l	NO
Nitrite	Annual average	ND	Mg/l	NO
Nitrate	Annual average	1.68	Mg/l	NO

Summary of Alkalinity and pH testing done under Schedule 15.1 during this reporting period

Location Type Distribution	Number of Samples	Alkalinity Result (range 30 – 500)	Unit of Measure	Field pH	Number of Exceedances
Winter Session					

s/stn SP-018	1	85	Mg/l	7.31	N/A
s/stn SP-027	1	105	Mg/l	7.20	N/A
s/stn SP-007	1	104	Mg/l	7.36	N/A
s/stn SP-012	1	106	Mg/l	7.17	N/A
Summer Session					
s/stn SP-007	1	82	Mg/l	7.55	N/A
s/stn SP-018	1	87	Mg/l	7.78	N/A
s/stn SP-027	1	84	Mg/l	7.81	N/A
s/stn SP-012	1	93	Mg/l	7.44	N/A

Summary of Organic parameters sampled during this reporting period

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	November 13, 2019	ND	Mg/l	NO
Atrazine + N-dealkylated metabolites	November 13, 2019	ND	Mg/l	NO
Azinphos-methyl	November 13, 2019	ND	Mg/l	NO
Benzene	November 13, 2019	ND	Mg/l	NO
Benzo(a)pyrene	November 13, 2019	ND	Mg/l	NO
Bromoxynil	November 13, 2019	ND	Mg/l	NO
Carbaryl	November 13, 2019	ND	Mg/l	NO
Carbofuran	November 13, 2019	ND	Mg/l	NO
Carbon Tetrachloride	November 13, 2019	ND	Mg/l	NO
Chlordane (Total)	November 13, 2019	ND	Mg/l	NO
Chlorpyrifos	November 13, 2019	ND	Mg/l	NO
Diazinon	November 13, 2019	ND	Mg/l	NO
Dicamba	November 13, 2019	ND	Mg/l	NO
1,2-Dichlorobenzene	November 13, 2019	ND	Mg/l	NO
1,4-Dichlorobenzene	November 13, 2019	ND	Mg/l	NO
Dichlorodiphenyltrichloroethane (DDT) + metabolites	November 13, 2019	ND	Mg/l	NO
1,2-Dichloroethane	November 13, 2019	ND	Mg/l	NO
1,1-Dichloroethylene (vinylidene chloride)	November 13, 2019	ND	Mg/l	NO
Dichloromethane	November 13, 2019	ND	Mg/l	NO



2-4 Dichlorophenol	November 13, 2019	ND	Mg/l	NO
2,4-Dichlorophenoxy acetic acid (2,4-D)	November 13, 2019	ND	Mg/l	NO
Diclofop-methyl	November 13, 2019	ND	Mg/l	NO
Dimethoate	November 13, 2019	ND	Mg/l	NO
Diquat	November 13, 2019	ND	Mg/l	NO
Diuron	November 13, 2019	ND	Mg/l	NO
Ethylbenzene	November 13, 2019	ND	Mg/L	NO
Glyphosate	November 13, 2019	ND	Mg/l	NO
HAA's – distribution only	Running Annual Average	0.019	Mg/L	NO
MCPA	November 13, 2019	ND	Mg/L	NO
Malathion	November 13, 2019	ND	Mg/l	NO
Metolachlor	November 13, 2019	ND	Mg/l	NO
Metribuzin	November 13, 2019	ND	Mg/l	NO
Monochlorobenzene	November 13, 2019	ND	Mg/l	NO
Paraquat	November 13, 2019	ND	Mg/l	NO
Pentachlorophenol	November 13, 2019	ND	Mg/l	NO
Phorate	November 13, 2019	ND	Mg/l	NO
Picloram	November 13, 2019	ND	Mg/l	NO
Polychlorinated Biphenyls(PCB)	November 13, 2019	ND	Mg/l	NO
Prometryne	November 13, 2019	ND	Mg/l	NO
Simazine	November 13, 2019	ND	Mg/l	NO
THM - treatment	Running Annual Average	0.017	Mg/l	NO
THM - distribution	Running Annual Average	0.026	Mg/l	NO
Terbufos	November 13, 2019	ND	Mg/l	NO
Tetrachloroethylene	November 13, 2019	ND	Mg/l	NO
2,3,4,6-Tetrachlorophenol	November 13, 2019	ND	Mg/l	NO
Toluene	November 13, 2019	ND	Mg/L	NO



Triallate	November 13, 2019	ND	Mg/l	NO
Trichloroethylene	November 13, 2019	ND	Mg/l	NO
2,4,6-Trichlorophenol	November 13, 2019	ND	Mg/l	NO
Trifluralin	November 13, 2019	ND	Mg/l	NO
Vinyl Chloride	November 13, 2019	ND	Mg/l	NO

List of Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample
None			