



— Township of —

SEVERN

Water Supply and Distribution System

Coldwater 2020 Annual Report



ANNUAL REPORT

Drinking-Water System Number:	220001110
Drinking-Water System Name:	Coldwater Water Supply and Distribution
Drinking-Water System Owner:	The Corporation of the Township of Severn
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2020 to December 31, 2020

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [X]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Township of Severn Administrative Office 1024 Hurlwood Lane Severn, Ontario L3V 0Y6</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to: <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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Note: For the following tables below, additional rows or columns may be added, or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Riverwalk Estates Drinking Water System	260095277

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all its drinking water? Yes [X] No []



Indicate how you notified system users that your annual report is available and is free of charge.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method _____

Describe your Drinking-Water System

The Coldwater water supply system was built in 1994 to replace the spring water supply west of the village. Water now comes from three (3) drilled groundwater wells. Two are located on the pump house property and the third is across the street from the pump house, on private property. In 2008, an addition was completed to the WTP to house two GAC filters, a softener and a backwash settling tank. Raw water is partially softened before passing through the GAC filters (operated in series). Filtered water is then chlorinated using Sodium Hypochlorite. Treated water is stored in a 1,612 m³ two-cell, concrete, underground reservoir below the pump house. The reservoir provides the required chlorine contact time to achieve primary disinfection before it is distributed to the residents. The treated water is then pumped from the reservoir to the distribution system via a jockey pump and two (2) vertical turbine pumps. A fire pump is also installed to provide adequate flow in the event of a fire. There are 86 fire hydrants, 10 sampling stations and 5 blow-offs connected to the system. The distribution system is comprised of PVC water mains. The system services approximately 1,400 residents of the Village of Coldwater.

List all water treatment chemicals used over this reporting period.

Sodium Hypochlorite
Softener Salt

Were any significant expenses incurred to?

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

Please provide a brief description and a breakdown of monetary expenses incurred.

New backwash pump-\$8000.00
Painted and color coded all fire hydrants-\$10,000.00.

Provide details on the 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
N/A					

Microbiological testing done under the Schedule 10, 11 or 12 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 – Well #1	52	0 – 0	0 – 0	N/A	-
Raw – Well #2	52	0 – 0	0 – 12	N/A	-
Raw – Well #3	52	0 – 0	0 – 1	N/A	-
Treated	52	0 – 0	0 – 0	52	0 – 20
Distribution	156	0 – 0	0 – 15	81	0 – 10

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min #) - (max #)
Turbidity – Well #1	12	0.06 – 0.34 NTU
Turbidity – Well #2	12	0.24 – 0.54 NTU
Turbidity – Well #3	12	0.09 – 0.35 NTU
Turbidity	8760	0.19 – 0.44 NTU
Chlorine	8760	0.88– 1.17
Chlorine Free Residual Distribution System	367	0.65– 1.14
Fluoride (If the DWS provides fluoridation)	N/A	

NOTE: For continuous monitors use 8760 as the number of samples.

*NOTE: Record the unit of measure if it is **not** milligrams per litre.*

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
N/A	TSS	Annual Average	7.23	mg/L

Summary of Inorganic parameters tested during this reporting period or the most recent sample results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	October,26, 2020	0.09	µg/L	No
Arsenic	October,26, 2020	0.2	µg/L	No



Barium	October,26, 2020	246	µg/L	No
Boron	October,26, 2020	74	µg/L	No
Cadmium	October,26, 2020	0.003	µg/L	No
Chromium	October,26, 2020	0.56	µg/L	No
*Lead	Jan 27,2020-July 27, 2020	0.08-.022	Cfu/100mL	No
Mercury	October,26, 2020	0.01	µg/L	No
Selenium	October,26, 2020	0.07	µg/L	No
Sodium	October,26, 2020	90.2	mg/L	Yes
Uranium	October,26, 2020	0.842	µg/L	No
Fluoride	April 18, 2018	0.14	mg/L	No
Nitrite	January 27, 2020 April 27, 2020 July 27, 2020 October 26, 2020	<0.003 <0.003 <0.003 <0.003	mg/L	No
Nitrate	January 27, 2020 April 27, 2020 July 27, 2020 October 26, 2020	<0.006 <0.006 <0.006 <0.006	mg/L	No

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems.

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing			
Distribution	4	0.08 – 0.22	0

Summary of Organic parameters sampled during this reporting period or the most recent sample results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	October 26,2020	0.02	µg/L	No
Atrazine + N-dealkylated metobolites	October 26,2020	0.01	µg/L	No
Benzene	October 26,2020	0.32	µg/L	No
Benzo(a)pyrene	October 26,2020	0.004	µg/L	No
Carbaryl	October 26,2020	0.05	µg/L	No
Carbofuran	October 26,2020	0.01	µg/L	No



Chlorpyrifos	October 26,2020	0.02	µg/L	No
Diazinon	October 26,2020	0.02	µg/L	No
Dicamba	October 26,2020	0.20	µg/L	No
1,2-Dichlorobenzene	October 26,2020	0.41	µg/L	No
1,4-Dichlorobenzene	October 26,2020	0.36	µg/L	No
1,2-Dichloroethane	October 26,2020	0.35	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	October 26,2020	0.33	µg/L	No
Dichloromethane	October 26,2020	0.35	µg/L	No
2-4 Dichlorophenol	October 26,2020	0.15	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	October 26,2020	0.19	µg/L	No
Diclofop-methyl	October 26,2020	0.40	µg/L	No
Dimethoate	October 26,2020	0.06	µg/L	No
Diquat	October 26,2020	<1	µg/L	No
Glyphosate	October 26,2020	<1	µg/L	No
Haloacetic Acids (HAA5) (NOTE: show latest annual average)	2020 Average	5.3	µg/L	No
Malathion	October 26,2020	0.02	µg/L	No
Metolachlor	October 26,2020	0.01	µg/L	No
Metribuzin	October 26,2020	0.02	µg/L	No
Monochlorobenzene	October 26,2020	0.3	µg/L	No
Paraquat	October 26,2020	<1	µg/L	No
Phorate	October 26,2020	0.01	µg/L	No
Picloram	October 26,2020	<1	µg/L	No
Polychlorinated Biphenyls(PCB)	October 26,2020	0.04	µg/L	No
Prometryne	October 26,2020	0.03	µg/L	No
Simazine	October 26,2020	0.01	µg/L	No
THM (NOTE: show latest annual average)	2020 Average	19.75	µg/L	No
Terbufos	October 26,2020	0.01	µg/L	No
Tetrachloroethylene	October 26,2020	0.35	µg/L	No
2,3,4,6-Tetrachlorophenol	October 26,2020	0.20	µg/L	No
Triallate	October 26,2020	0.01	µg/L	No
Trichloroethylene	October 26,2020	0.67	µg/L	No
2,4,6-Trichlorophenol	October 26,2020	0.25	µg/L	No
Trifluralin	October 26,2020	0.02	µg/L	No
Vinyl Chloride	October 26,2020	0.17	µg/L	No
Carbon tetrachloride	October 26,2020	0.17	µg/L	No
MCPA	October 26,2020	0.00012	µg/L	No
Diuron	October 26,2020	0.03	µg/L	No
Bromoxynil	October 26,2020	0.33	µg/L	No
Desethyl atrazine	October 26,2020	0.01	µg/L	No
Azinphos-methyl	October 26,2020	0.05	µg/L	No
Bromoform	October 26,2020	8.2	µg/L	No
Chloriform	October 26,2020	0.87	µg/L	No



List any 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
Sodium	90.2	mg/L	October 26, 2020