



## ANNUAL REPORT

<b>Drinking-Water System Number:</b>	220005152
<b>Drinking-Water System Name:</b>	Severn Estates Water Supply and Distribution
<b>Drinking-Water System Owner:</b>	The Corporation of the Township of Severn
<b>Drinking-Water System Category:</b>	Small Municipal Residential
<b>Period being reported:</b>	January 1, 2024, to December 31, 2024

**Complete if your Category is Large Municipal Residential or Small Municipal Residential**

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

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

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

Township of Severn Administrative Office  
1024 Hurlwood Lane  
Severn, Ontario  
L3V 0Y6

**Complete for all other Categories.**

Number of Designated Facilities served:

Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]

Number of Interested Authorities you report to:

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]

**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 of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
N/A	

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 [ ] 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

Water for the Severn Estates subdivision is pumped from a 69 m deep drilled well located within the Severn Estates pump house at 4532 Trent Trail. Water is chlorinated using sodium hypochlorite for disinfection and for iron precipitation. It is then filtered using a two-train ceramic filter system for iron removal. Filtered water is stored in a 13.6 m<sup>3</sup> underground concrete reservoir. Treated water is pumped to the distribution system by two high lift pumps and pressure is maintained by three hydro pneumatic pressure tanks. The Severn Estates water system was constructed in the 1970's of PVC piping. There are two sample stations and three blow offs. There are no fire hydrants connected to the distribution system. It serves 24 homes located on Trent Trail.

## List all water treatment chemicals used over this reporting period.

Sodium Hypochlorite

## 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.

Fragmentation Study-\$70,000.00  
New Well Engineering-\$150,000.00

## 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	53	0 – 0	0 – 1	N/A	N/A
Treated	53	0 – 0	0 – 0	53	0 - 10
Distribution	53	0 – 0	0 – 0	53	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	12	0.10 – 1.20 NTU
Turbidity –	8760	0.17 – 0.95NTU
Chlorine	8760	1.07 – 2.17
Chlorine Free Residual Distribution System	104	1.00 – 2.09
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
Aug-12-2024	Cryptosporidium	Annual Avg.	0	N/A

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	Oct. 21, 2024	0.6	µg/L	No
Arsenic	Oct. 21, 2024	0.2	µg/L	No
Barium	Oct. 21, 2024	275	µg/L	No
Boron	Oct. 21, 2024	98	µg/L	No
Cadmium	Oct. 21, 2024	0.003	µg/L	No
Chromium	Oct. 21, 2024	0.18	µg/L	No
*Lead	Jan 22- July 22,2024	0.27-0.28	µg/L	No
Mercury	Oct. 21, 2024	0.01	µg/L	No
Selenium	Oct. 21, 2024	0.04	µg/L	No
Sodium	Oct. 21, 2024	55.3	mg/L	Yes

<b>Uranium</b>	Oct. 21, 2024	0.316	µg/L	No
<b>Fluoride</b>	April 22, 2024	0.14	mg/L	No
<b>Nitrite</b>	January 22, 2024	0.003	mg/L	No
	April 22, 2024	0.003		
	July 22, 2024	0.003		
	October 21, 2024	0.003		
<b>Nitrate</b>	January 22, 2024	0.015	mg/L	No
	April 22, 2024	0.018		
	July 22, 2024	0.029		
	October 21, 2024	0.011		

\*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
<b>Plumbing</b>			
<b>Distribution</b>	2	0.27-0.28	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
<b>Alachlor</b>	Oct. 21, 2024	0.02	µg/L	No
<b>Atrazine + N-dealkylated metabolites</b>	Oct. 21, 2024	0.01	µg/L	No
<b>Azinphos-methyl</b>	Oct. 21, 2024	0.05	µg/L	No
<b>Desethyl atrazine</b>	Oct. 21, 2024	0.01	µg/L	No
<b>Atrazine</b>	Oct. 21, 2024	0.01	µg/L	No
<b>Benzene</b>	Oct. 21, 2024	0.32	µg/L	No
<b>Benzo(a)pyrene</b>	Oct. 21, 2024	0.004	µg/L	No
<b>Bromoacetic Acid</b>	Oct. 21, 2024	2.9	µg/L	No
<b>Bromoform</b>	Oct. 21, 2024	11	µg/L	No
<b>Bromodichloromethane</b>	Oct. 21, 2024	20	µg/L	No
<b>Bromoxynil</b>	Oct. 21, 2024	0.33	µg/L	No
<b>Carbaryl</b>	Oct. 21, 2024	0.05	µg/L	No
<b>Carbofuron</b>	Oct. 21, 2024	0.01	µg/L	No
<b>Carbon Tetrachloride</b>	Oct. 21, 2024	0.17	µg/L	No
<b>Chlorpyrifos</b>	Oct. 21, 2024	0.02	µg/L	No
<b>Chloroacetic Acid</b>	Oct. 21, 2024	4.7	µg/L	No
<b>Chloroform</b>	Oct. 21, 2024	9.1	µg/L	No
<b>Diazinon</b>	Oct. 21, 2024	0.02	µg/L	No
<b>Dicamba</b>	Oct. 21, 2024	0.20	µg/L	No

1,2-Dichlorobenzene	Oct. 21, 2024	0.41	µg/L	No
1,4-Dichlorobenzene	Oct. 21, 2024	0.36	µg/L	No
1,2-Dichloroethane	Oct. 21, 2024	0.35	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Oct. 21, 2024	0.33	µg/L	No
Dichloromethane	Oct. 21, 2024	0.35	µg/L	No
2,4-Dichlorophenol	Oct. 21, 2024	0.15	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Oct. 21, 2024	0.19	µg/L	No
Diclofop-methyl	Oct. 21, 2024	0.40	µg/L	No
Dimethoate	Oct. 21, 2024	0.06	µg/L	No
Diquat	Oct. 21, 2024	<1	µg/L	No
Diuron	Oct. 21, 2024	0.03	µg/L	No
Dibromochloromethane	Oct. 21, 2024	32	µg/L	No
Dichloroacetic Acid	Oct. 21, 2024	7	µg/L	No
Dibromoacetic Acid	Oct. 21, 2024	13.6	µg/L	No
Glyphosate	Oct. 21, 2024	<1	µg/L	No
Haloacetic Acids (HAA5) (NOTE: show latest annual average)	2024 Average	20.55	µg/L	No
Malathion	Oct. 21, 2024	0.02	µg/L	No
Metolachlor	Oct. 21, 2024	0.01	µg/L	No
Metribuzin	Oct. 21, 2024	0.02	µg/L	No
Monochlorobenzene	Oct. 21, 2024	0.3	µg/L	No
Pentachlorophenol	Oct. 21, 2024	0.15	µg/L	No
Phorate	Oct. 21, 2024	0.01	µg/L	No
Polychlorinated Biphenyls(PCB)	Oct. 21, 2024	0.04	µg/L	No
Prometryne	Oct. 21, 2024	0.03	µg/L	No
Paraquat	Oct. 21, 2024	<1	µg/L	No
Simazine	Oct. 21, 2024	0.01	µg/L	No
THM (NOTE: show latest annual average)	2024 Average	74	µg/L	No
Terbufos	Oct. 21, 2024	0.01	µg/L	No
Tetrachloroethylene	Oct. 21, 2024	0.35	µg/L	No
Triallate	Oct. 21, 2024	0.01	µg/L	No
Trichloroethylene	Oct. 21, 2024	0.44	µg/L	No
Trifluralin	Oct. 21, 2024	0.02	µg/L	No
Trichloroacetic Acid	Oct. 21, 2024	6.5	µg/L	No
Vinyl Chloride	Oct. 21, 2024	0.17	µg/L	No
MCPA	Oct. 21, 2024	0.00012	µg/L	No
Picloram	Oct. 21, 2024	<1	µg/L	No
2,4,6-Trichlorophenol	Oct. 21, 2024	0.25	µg/L	No
2,3,4,6 Tetrachlorophenol	Oct. 21, 2024	0.20	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.**

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
Sodium	55.3	mg/L	October 21, 2024