



— Township of —

SEVERN

Water Supply and Distribution System
Westshore
2023 Annual Report



ANNUAL REPORT

Drinking-Water System Number:	260061958
Drinking-Water System Name:	West Shore Treatment 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, 2023, to December 31, 2023

<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: <input style="width: 100px; height: 20px;" type="text"/></p> <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: <input style="width: 100px; height: 20px;" type="text"/></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>
---	---

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
West Shore Beach Club Distribution System	260095641

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 of 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

Water for the West Shore water treatment plant is pumped from Lake Couchiching, via three low lift pumps located at 3491 Hedgemere Landing, to a package water treatment plant located at 3333 New Brailey Line. The treatment plant consists of a conventional two-train coagulation, flocculation, sedimentation, and filtration plant. Filtered water flows through granular activated carbon tanks for taste and odor removal before being disinfected by ultraviolet light and sodium hypochlorite. Water is then stored in a 1,910 m³ concrete underground reservoir. Backwash water from the filters is sent directly to the sanitary sewage system. Three high lift pumps provide water to the distribution system. The distribution system was constructed in 2005 and consists of PVC water main with PE service piping. There are 12 sample stations, 127 fire hydrants and 7 private hydrants connected to the distribution system. The West Shore system services approximately 901 residential and commercial properties as well as supplying water to 86 homes in the West Shore Beach Club.

List all water treatment chemicals used over this reporting period.

Sodium Hypochlorite
 Alum
 ClearFloc AP1065 polymer

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

Alum Dosing System-\$40,000.00



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
August 1, 2023	Operations-Category 2 watermain break	0	mg/L	Flushed and sampled	August 2, 2023
September 6, 2023	Lead exceedance in Beach Club Waterworks # 260095641	26.5	ug/L	Resampled	September 18, 2023
December 19, 2023	Operations-Category 2 watermain break	0	mg/L	Flushed and sampled.	December 22, 2023

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	52	0 – >200	0 – >200	N/A	N/A
Treated	52	0 – 0	0 – 0	51	0 – 10
Distribution	187	0 – 0	0 – 0	105	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 – Train 1	8760	0.03 – 0.12 NTU
Turbidity – Train 2	8760	0.09 – 0.20 NTU
Turbidity	8760	0.06 – 0.14 NTU
Chlorine	8760	1.32 – 2.34
Chlorine Free Residual Distribution System	365	0.94 – 2.20
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				

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 23, 2023	0.6	µg/L	No
Arsenic	October 23, 2023	0.3	µg/L	No
Barium	October 23, 2023	26.8	µg/L	No
Boron	October 23, 2023	16	µg/L	No
Cadmium	October 23, 2023	0.003	µg/L	No
Chromium	October 23, 2023	0.15	µg/L	No
*Lead	Jan 23-July 24, 2023	0.02-0.08	µg/L	No
Mercury	October 23, 2023	0.01	µg/L	No
Selenium	October 23, 2023	0.07	µg/L	No
Sodium	October 23, 2023	35.1	mg/L	Yes
Uranium	October 23, 2023	0.018	µg/L	No
Fluoride	April 24, 2023	0.06	mg/L	No
Nitrite	January 23, 2023 April 24, 2023 July 24, 2023 October 23, 2023	<0.003 <0.003 <0.003 <0.003	mg/L	No
Nitrate	January 23, 2023 April 24, 2023 July 24, 2023 October 23, 2023	0.146 0.166 0.085 0.047	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	0		0
Distribution	4	0.35 – 3.46	0

Note: Lead sample results are from the Westshore Beach Club Distribution System DWS# 260095641

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 23, 2023	0.02	µg/L	No



Atrazine + N-dealkylated metabolites	October 23, 2023	0.01	µg/L	No
Azinphos-methyl	October 23, 2023	0.05	µg/L	No
Atrazine	October 23, 2023	0.01	µg/L	No
Benzene	October 23, 2023	0.32	µg/L	No
Benzo(a)pyrene	October 23, 2023	0.004	µg/L	No
Bromoxynil	October 23, 2023	0.33	µg/L	No
Bromoform	October 23, 2023	0.34	µg/L	No
Bromodichloromethane	October 23, 2023	12	µg/L	No
Bromoacetic Acid	October 23, 2023	2.9	µg/L	No
Carbaryl	October 23, 2023	0.05	µg/L	No
Carbofuran	October 23, 2023	0.01	µg/L	No
Carbon Tetrachloride	October 23, 2023	0.17	µg/L	No
Chlorpyrifos	October 23, 2023	0.02	µg/L	No
Chloroacetic Acid	October 23, 2023	4.7	µg/L	No
Chloroform	October 23, 2023	33	µg/L	No
Diazinon	October 23, 2023	0.02	µg/L	No
Dicamba	October 23, 2023	0.20	µg/L	No
1,2-Dichlorobenzene	October 23, 2023	0.41	µg/L	No
1,4-Dichlorobenzene	October 23, 2023	0.36	µg/L	No
1,2-Dichloroethane	October 23, 2023	0.35	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	October 23, 2023	0.33	µg/L	No
Dichloromethane	October 23, 2023	0.35	µg/L	No
2-4 Dichlorophenol	October 23, 2023	0.15	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	October 23, 2023	0.19	µg/L	No
Diclofop-methyl	October 23, 2023	0.40	µg/L	No
Dimethoate	October 23, 2023	0.06	µg/L	No
Diquat	October 23, 2023	<1	µg/L	No
Diuron	October 23, 2023	0.03	µg/L	No
Desethyl atrazine	October 23, 2023	0.01	µg/L	No
Dibromoacetic Acid	October 23, 2023	2.0	µg/L	No
Dichloroacetic Acid	October 23, 2023	13.9	µg/L	No
Dibromochloromethane	October 23, 2023	3.2	µg/L	No
Glyphosate	October 23, 2023	<1	µg/L	No
Haloacetic Acids (HAA5) (NOTE: show latest annual average)	2023 Average	28.95	µg/L	No
Malathion	October 23, 2023	0.02	µg/L	No
MCPA	October 23, 2023	0.00012	mg/L	No
Metolachlor	October 23, 2023	0.01	µg/L	No
Metribuzin	October 23, 2023	0.02	µg/L	No
Monochlorobenzene	October 23, 2023	0.3	ug/L	No
Paraquat	October 23, 2023	<1	µg/L	No
Pentachlorophenol	October 23, 2023	0.15	µg/L	No
Phorate	October 23, 2023	0.01	µg/L	No
Picloram	October 23, 2023	<1	µg/L	No
Polychlorinated Biphenyls(PCB)	October 23, 2023	0.04	µg/L	No
Prometryne	October 23, 2023	0.03	µg/L	No



Simazine	October 23, 2023	0.01	µg/L	No
THM (NOTE: show latest annual average)	2023 Average	45.0	µg/L	No
Terbufos	October 23, 2023	0.01	µg/L	No
Tetrachloroethylene	October 23, 2023	0.35	µg/L	No
2,3,4,6-Tetrachlorophenol	October 23, 2023	0.20	µg/L	No
Triallate	October 23, 2023	0.01	µg/L	No
Trichloroethylene	October 23, 2023	0.44	µg/L	No
2,4,6-Trichlorophenol	October 23, 2023	0.25	µg/L	No
Trifluralin	October 23, 2023	0.02	µg/L	No
Trichloroacetic Acid	October 23, 2023	12	µg/L	No
Vinyl Chloride	October 23, 2023	0.17	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	35.1	mg/L	October 23, 2023