



— Township of —

**SEVERN**

Water Supply and Distribution System

# **West Shore 2020 Annual Report**



**ANNUAL REPORT**

<b>Drinking-Water System Number:</b>	<b>260061958</b>
<b>Drinking-Water System Name:</b>	West Shore Treatment and Distribution
<b>Drinking-Water System Owner:</b>	The Corporation of the Township of Severn
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2020 to December 31, 2020

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p><b>Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X]</b></p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]</b></p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></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><b><u>Complete for all other Categories.</u></b></p> <p><b>Number of Designated Facilities served:</b>  <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> </p> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</b></p> <p><b>Number of Interested Authorities you report to:</b> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div></p> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]</b></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:**

<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>
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 m<sup>3</sup> 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**

Rebuilt high lift #1- \$35,000.00.  
 Painted and color-coded fire hydrants- \$15,000.00  
 Added new fiber communications line from low lift- \$50,000.00.



**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
November 29, 2020	Sodium	31.7	mg/L	Resample	October 6, 2020

**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 – 20	0 – 440	N/A	N/A
Treated	52	0 – 0	0 – 0	52	0 – 25
Distribution	156	0 – 0	0 – 0	52	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 – 0.13 NTU
Turbidity – Train 2	8760	0.04 – 0.98 NTU
Turbidity	8760	0.03 – 0.19 NTU
Chlorine	8760	1.30 – 2.03
Chlorine Free Residual Distribution System	368	0.92 – 1.73
Fluoride (If the DWS provides fluoridation)	1	0.06

*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 26, 2020	0.09	µg/L	No
Arsenic	October 26, 2020	0.3	µg/L	No
Barium	October 26, 2020	26.5	µg/L	No
Boron	October 26, 2020	36	µg/L	No
Cadmium	October 26, 2020	0.003	µg/L	No
Chromium	October 26, 2020	0.28	µg/L	No
*Lead	Jan 27-July 27, 2020	0.02-0.08	µg/L	No
Mercury	October 26, 2020	0.01	µg/L	No
Selenium	October 26, 2020	0.10	µg/L	No
Sodium	October 26, 2020	31.7	mg/L	Yes
Uranium	October 26, 2020	0.030	µg/L	No
Fluoride	October 26, 2020	0.06	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	0.173 0.073 0.066 0.046	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	0.02 – 0.08	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 26, 2020	0.02	µg/L	No
Atrazine + N-dealkylated metabolites	October 26, 2020	0.01	µg/L	No
Azinphos-methyl	October 26, 2020	0.05	µg/L	No
Benzene	October 26, 2020	0.32	µg/L	No
Benzo(a)pyrene	October 26, 2020	0.004	µg/L	No
Bromoxynil	October 26, 2020	0.33	µg/L	No

<b>Carbaryl</b>	October 26, 2020	0.05	µg/L	No
<b>Carbofuran</b>	October 26, 2020	0.01	µg/L	No
<b>Carbon Tetrachloride</b>	October 26, 2020	0.17	µg/L	No
<b>Chlorpyrifos</b>	October 26, 2020	0.02	µg/L	No
<b>Diazinon</b>	October 26, 2020	0.02	µg/L	No
<b>Dicamba</b>	October 26, 2020	0.20	µg/L	No
<b>1,2-Dichlorobenzene</b>	October 26, 2020	0.41	µg/L	No
<b>1,4-Dichlorobenzene</b>	October 26, 2020	0.36	µg/L	No
<b>1,2-Dichloroethane</b>	October 26, 2020	0.35	µg/L	No
<b>1,1-Dichloroethylene (vinylidene chloride)</b>	October 26, 2020	0.33	µg/L	No
<b>Dichloromethane</b>	October 26, 2020	0.35	µg/L	No
<b>2,4 Dichlorophenol</b>	October 26, 2020	0.15	µg/L	No
<b>2,4-Dichlorophenoxy acetic acid (2,4-D)</b>	October 26, 2020	0.19	µg/L	No
<b>Diclofop-methyl</b>	October 26, 2020	0.40	µg/L	No
<b>Dimethoate</b>	October 26, 2020	0.06	µg/L	No
<b>Diquat</b>	October 26, 2020	<1	µg/L	No
<b>Diuron</b>	October 26, 2020	0.03	µg/L	No
<b>Glyphosate</b>	October 26, 2020	<1	µg/L	No
<b>Haloacetic Acids (HAA5) (NOTE: show latest annual average)</b>	2020 Average	21.4	µg/L	No
<b>Malathion</b>	October 26, 2020	0.02	µg/L	No
<b>MCPA</b>	October 26, 2020	0.00012	mg/L	No
<b>Metolachlor</b>	October 26, 2020	0.01	µg/L	No
<b>Metribuzin</b>	October 26, 2020	0.02	µg/L	No
<b>Monochlorobenzene</b>	October 26, 2020	0.3	ug/L	No
<b>Paraquat</b>	October 26, 2020	<1	µg/L	No
<b>Pentachlorophenol</b>	October 26, 2020	0.15	µg/L	No
<b>Phorate</b>	October 26, 2020	0.01	µg/L	No
<b>Picloram</b>	October 26, 2020	<1	µg/L	No
<b>Polychlorinated Biphenyls(PCB)</b>	October 26, 2020	0.04	µg/L	No
<b>Prometryne</b>	October 26, 2020	0.03	µg/L	No
<b>Simazine</b>	October 26, 2020	0.01	µg/L	No
<b>THM (NOTE: show latest annual average)</b>	2020 Average	38.75	µg/L	No
<b>Terbufos</b>	October 26, 2020	0.01	µg/L	No
<b>Tetrachloroethylene</b>	October 26, 2020	0.35	µg/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	October 26, 2020	0.20	µg/L	No
<b>Triallate</b>	October 26, 2020	0.01	µg/L	No
<b>Trichloroethylene</b>	October 26, 2020	0.44	µg/L	No
<b>2,4,6-Trichlorophenol</b>	October 26, 2020	0.25	µg/L	No
<b>Trifluralin</b>	October 26, 2020	0.02	µg/L	No
<b>Vinyl Chloride</b>	October 26, 2020	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.**

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
Sodium	31.7	mg/L	October 26, 2020