Township of
SEVERN

Water Supply and Distribution System

Bass Lake Woodlands 2022 Annual Report

ANNUAL REPORT

Drinking-Water System Number:	**220005143**
Drinking-Water System Name:	Bass Lake Woodlands 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, 2022, to December 31, 2022

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 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 of its drinking water?
Yes [ ] No [ ]

Indicate how you notified system users that your 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
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method _____

Describe your Drinking-Water System

Water for Bass Lake Woodlands comes from three (3) ground water wells located at 1852 Ridley Boulevard. Groundwater is pumped from the well into the pump house where it is chlorinated using sodium hypochlorite. It then travels through a 32 m^3 chlorine contact tank before being stored in a 136 m^3 underground reservoir. Treated water is pumped from the reservoir by three VFD-controlled vertical turbine high lift pumps to the distribution system. The distribution system is comprised of 150 mm PVC water main with copper and PE service lines to the homes. There are four (4) sample stations and three (3) blow-offs located throughout the distribution system. There are no fire hydrants. The system services approximately 162 residential homes in the community Bass Lake Woodlands.

List all water treatment chemicals used over this reporting period.

Sodium Hypochlorite

Were any significant expenses incurred to?

[ ] Install required equipment
[X] Repair required equipment
[X] Replace required equipment

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

New turbidity analyzer-$6500.00
Engineering for 2 new wells. Installation in 2023-$400,000.00

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	53	0 - 0	0 – 0	N/A	-
Raw – Well #2	53	0 - 0	0 – 1	N/A	-
Raw – Well #3	53	0 - 0	0 – 0	N/A	-
Treated	53	0 – 0	0 – 0	53	0-480
Distribution	106	0 - 0	0 - 0	97	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	0.72 – 1.14 NTU
Turbidity – Well #2	12	0.15 – 0.82 NTU
Turbidity – Well #3	12	0.06 – 0.52 NTU
Turbidity	8760	0.04 – 0.26 NTU
Chlorine	8760	1.11 – 1.66
Chlorine Free Residual Distribution System	364	0.85 – 1.55
Fluoride (If the DWS provides fluoridation)		

***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 24, 2022	0.6	µg/L	No
Arsenic	October 24, 2022	0.2	µg/L	No
Barium	October 24, 2022	265	µg/L	No
Boron	October 24, 2022	28	µg/L	No
Cadmium	October 24, 2022	0.003	µg/L	No

Chromium	October 24, 2022	0.73	µg/L	No
***Lead**	Jan 24-July 25, 2022	0.04-0.05		
Mercury	October 24, 2022	0.01	µg/L	No
Selenium	October 24, 2022	0.09	µg/L	No
Sodium	October 24, 2022	54.6	mg/L	Yes
Uranium	October 24, 2022	0.221	µg/L	No
Fluoride	April 26, 2022	0.06	mg/L	No
Nitrite	January 24, 2022 April 25, 2022 July 25, 2022 Oct. 24, 2022	0.003 0.003 0.003 0.003	mg/L	No
Nitrate	January 24, 2022 April 25, 2022 July 25, 2022 Oct. 24, 2022	1.89 1.85 1.68 1.80	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	**N/A**		
Distribution	2	0.04-0.05	NO

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 24,2022	0.02	µg/L	No
Atrazine + N-dealkylated metobolites	October 24,2022	0.01	µg/L	No
Atrazine	October 24,2022	0.01	µg/L	No
Azinphos-methyl	October 24,2022	0.05	µg/L	No
Benzene	October 24,2022	0.32	µg/L	No
Benzo(a)pyrene	October 24,2022	0.004	µg/L	No
Bromoxynil	October 24,2022	0.33	µg/L	No
Carbaryl	October 24,2022	0.05	µg/L	No
Carbon tetrachloride	October 24,2022	0.17	µg/L	No
Carbofuran	October 24,2022	0.01	µg/L	No
Chlorpyrifos	October 24,2022	0.02	µg/L	No
Diazinon	October 24,2022	0.02	µg/L	No
Dicamba	October 24,2022	0.20	µg/L	No
1,2-Dichlorobenzene	October 24,2022	0.41	µg/L	No

1,4-Dichlorobenzene	October 24,2022	0.36	µg/L	No
1,2-Dichloroethane	October 24,2022	0.35	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	October 24,2022	0.33	µg/L	No
Dichloromethane	October 24,2022	0.35	µg/L	No
2-4 Dichlorophenol	October 24,2022	0.15	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	October 24,2022	0.19	µg/L	No
Diclofop-methyl	October 24,2022	0.40	µg/L	No
Dimethoate	October 24,2022	0.06	µg/L	No
Diquat	October 24,2022	<1	µg/L	No
Diuron	October 24,2022	0.03	µg/L	No
Glyphosate	October 24,2022	1	µg/L	No
Haloacetic Acids (HAA5) (NOTE: show latest annual average)	2022 Average	<5.3	µg/L	No
Malathion	October 24,2022	.02	µg/L	No
Metolachlor	October 24,2022	0.01	µg/L	No
Metribuzin	October 24,2022	0.02	µg/L	No
MCPA	October 24,2022	0.00012	mg/L	No
Monochlorobenzene	October 24,2022	0.3	µg/L	No
Paraquat	October 24,2022	<1	µg/L	No
Pentachlorophenol	October 24,2022	0.15	µg/L	No
Phorate	October 24,2022	0.01	µg/L	No
Picloram	October 24,2022	<1	µg/L	No
Polychlorinated Biphenyls (PCB)	October 24,2022	0.04	µg/L	No
Prometryne	October 24,2022	0.03	µg/L	No
Simazine	October 24,2022	0.01	µg/L	No
THM (NOTE: show latest annual average)	2022 Average	7.58	µg/L	No
Terbufos	October 24,2022	0.01	µg/L	No
Tetrachloroethylene	October 24,2022	0.35	µg/L	No
2,3,4,6-Tetrachlorophenol	October 24,2022	0.20	µg/L	No
Triallate	October 24,2022	0.01	µg/L	No
Trichloroethylene	October 24,2022	0.44	µg/L	No
2,4,6-Trichlorophenol	October 24,2022	0.25	µg/L	No
Trifluralin	October 24,2022	0.02	µg/L	No
Vinyl Chloride	October 24,2022	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	54.6	mg/L	October 24, 2022