



Drinking-Water System Number:	220005143
Drinking-Water System Name:	Bass Lake Woodlands Well 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, 2011 to December 31, 2011

<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;"> Township of Severn Administrative Office 1024 Hurlwood Lane Orillia, Ontario L3V 6J3 </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>
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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 of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number

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 Bass Lake Woodlands comes from three ground water wells located on Ridley Boulevard, east of Glen Oak Lane. Ground water is chlorinated using sodium hypochlorite and then travels through a 32 m³ chlorine contact tank before being stored in a 136 m³ 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 PVC and copper piping. It services the approximately 400 residents of the community of Bass Lake Woodlands.

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

Data recording system upgraded - \$17000
HL#1 VFD fan replaced - \$700
Raw water header repaired - \$1000
Standby generator repairs - \$800

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

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	49	0	0 – 8	0	
Raw – Well #2	52	0	0 – 4	0	
Raw – Well #3	52	0	0	0	
Treated	52	0	0	52	<10 – 80
Distribution	104	0	0	52	<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	11	0.33 – 1.52 NTU
Turbidity – Well #2	12	0.27 – 1.52 NTU
Turbidity – Well #3	12	0.10 – 0.80 NTU
Turbidity	8760	0.00 – 5.11 NTU
Chlorine	8760	0.00 – 5.01 mg/L
Chlorine Free Residual Distribution System	364	0.21 – 1.04 mg/L
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

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	Nov. 2, 2009	< 0.02	µg/L	No
Arsenic	Nov. 2, 2009	< 0.2	µg/L	No
Barium	Nov. 2, 2009	210	µg/L	No
Boron	Nov. 2, 2009	15.4	µg/L	No
Cadmium	Nov. 2, 2009	0.003	µg/L	No
Chromium	Nov. 2, 2009	1.5	µg/L	No
*Lead	N/A			
Mercury	Nov. 2, 2009	< 0.02	µg/L	No
Selenium	Nov. 2, 2009	2	µg/L	No
Sodium	Oct. 24, 2011	44.1	mg/L	Yes
Uranium	Nov. 2, 2009	0.266	µg/L	No
Fluoride	Nov. 4, 2008	0.08	mg/L	No
Nitrite	Jan. 31, 2011 Apr. 26, 2011 Jul. 25, 2011 Oct. 24, 2011	<0.005 <0.005 <0.005 <0.005	mg/L	No
Nitrate	Jan. 31, 2011 Apr. 26, 2011 Jul. 25, 2011 Oct. 24, 2011	1.00 0.921 0.659 0.924	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	10	0.32 – 8.48 ug/L	0
Distribution	3	0.16 – 0.66 ug/L	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	Nov. 2, 2009	<0.11	µg/L	No
Aldicarb	Nov. 2, 2009	<0.30	µg/L	No
Aldrin + Dieldrin	Nov. 2, 2009	<0.067	µg/L	No
Atrazine + N-dealkylated metabolites	Nov. 2, 2009	<0.12	µg/L	No
Azinphos-methyl	Nov. 2, 2009	<0.21	µg/L	No
Bendiocarb	Nov. 2, 2009	<0.13	µg/L	No

Benzene	Nov. 2, 2009	<0.32	µg/L	No
Benzo(a)pyrene	Nov. 2, 2009	<0.004	µg/L	No
Bromoxynil	Nov. 2, 2009	<0.33	µg/L	No
Carbaryl	Nov. 2, 2009	<0.16	µg/L	No
Carbofuran	Nov. 2, 2009	<0.37	µg/L	No
Carbon Tetrachloride	Nov. 2, 2009	<0.16	µg/L	No
Chlordane (Total)	Nov. 2, 2009	<0.11	µg/L	No
Chlorpyrifos	Nov. 2, 2009	<0.18	µg/L	No
Cyanazine	Nov. 2, 2009	<0.18	µg/L	No
Diazinon	Nov. 2, 2009	<0.081	µg/L	No
Dicamba	Nov. 2, 2009	<0.20	µg/L	No
1,2-Dichlorobenzene	Nov. 2, 2009	<0.41	µg/L	No
1,4-Dichlorobenzene	Nov. 2, 2009	<0.36	µg/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Nov. 2, 2009	<0.14	µg/L	No
1,2-Dichloroethane	Nov. 2, 2009	<0.35	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Nov. 2, 2009	<0.33	µg/L	No
Dichloromethane	Nov. 2, 2009	<0.35	µg/L	No
2-4 Dichlorophenol	Nov. 2, 2009	<0.15	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Nov. 2, 2009	<0.19	µg/L	No
Diclofop-methyl	Nov. 2, 2009	<0.40	µg/L	No
Dimethoate	Nov. 2, 2009	<0.12	µg/L	No
Dinoseb	Nov. 2, 2009	<0.36	µg/L	No
Diquat	Nov. 2, 2009	<1	µg/L	No
Diuron	Nov. 2, 2009	<0.087	µg/L	No
Glyphosate	Nov. 2, 2009	<6	µg/L	No
Heptachlor + Heptachlor Epoxide	Nov. 2, 2009	<0.11	µg/L	No
Lindane (Total)	Nov. 2, 2009	<0.056	µg/L	No
Malathion	Nov. 2, 2009	<0.091	µg/L	No
Methoxychlor	Nov. 2, 2009	<0.14	µg/L	No
Metolachlor	Nov. 2, 2009	<0.092	µg/L	No
Metribuzin	Nov. 2, 2009	<0.12	µg/L	No
Monochlorobenzene	Nov. 2, 2009	<0.30	µg/L	No
Paraquat	Nov. 2, 2009	<1	µg/L	No
Parathion	Nov. 2, 2009	<0.18	µg/L	No
Pentachlorophenol	Nov. 2, 2009	<0.15	µg/L	No
Phorate	Nov. 2, 2009	<0.11	µg/L	No
Picloram	Nov. 2, 2009	<0.25	µg/L	No
Polychlorinated Biphenyls(PCB)	Nov. 2, 2009	<0.04	µg/L	No
Prometryne	Nov. 2, 2009	<0.23	µg/L	No
Simazine	Nov. 2, 2009	<0.15	µg/L	No
THM (NOTE: show latest annual average)		6.9	µg/L	No
Temephos	Nov. 2, 2009	<0.31	µg/L	No



Terbufos	Nov. 2, 2009	<0.12	µg/L	No
Tetrachloroethylene	Nov. 2, 2009	<0.35	µg/L	No
2,3,4,6-Tetrachlorophenol	Nov. 2, 2009	<0.14	µg/L	No
Triallate	Nov. 2, 2009	<0.10	µg/L	No
Trichloroethylene	Nov. 2, 2009	<0.43	µg/L	No
2,4,6-Trichlorophenol	Nov. 2, 2009	<0.25	µg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Nov. 2, 2009	<0.22	µg/L	No
Trifluralin	Nov. 2, 2009	<0.12	µg/L	No
Vinyl Chloride	Nov. 2, 2009	<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	44.1	mg/L	Oct. 24, 2011