



**THE TOWN OF DEEP RIVER**  
ONTARIO, CANADA

***DEEP RIVER DRINKING WATER SYSTEM***  
***2015 ANNUAL REPORT***



**Prepared by:**

*Brenda Royce*

**Process & Compliance Technician**

**02/10/2016**



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

## **Foreword**

This document contains three different reports required for the Deep River Drinking Water System:

- Section 11, Annual Report, as per the SDWA, 2002- Section 11 of the Ontario Regulation 170/03
- Summary Report, as per the SDWA, 2002- Schedule 22 of the Ontario Regulation 170/03
- Summary of the Raw Water values that were submitted to the Ministry of the Environment under the Ontario Regulation 387/04, OWRA, 1990- Water Taking.

Section 12 of Ontario Regulation 170/03 of the SDWA, 2002, requires both the Summary Report and the Annual Report be made available for inspection by any member of the public during normal business hours, without charge. These reports are to be made available for inspection at the office of the municipality and on the municipality internet site.

**SECTION 11**  
**ANNUAL REPORT 2015**



Drinking-Water Systems Regulation O. Reg. 170/03,  
 Section 11- Annual Report.

System Information:

<b>Drinking Water System Name:</b>	Deep River Drinking Water System
<b>Municipal Drinking Water Licence #</b>	189-101, Issue # 2
<b>Drinking Water Works Permit #</b>	189-201, Issue # 2
<b>Drinking Water System Number:</b>	220000923
<b>System Owner:</b>	Deep River, The Corporation of the Town of
<b>Operating Authority:</b>	Ontario Clean Water Agency
<b>Drinking Water System Category:</b>	Large Municipal Residential
<b>DWQMS Status (SAI Global Certified- File # 1634171-01)</b>	Full Scope/Entire DWQMS Accreditation on December 15, 2012
<b>Reporting Period:</b>	January 1, 2015 – December 31, 2015

**Summary Report (170/03 Schedule 22) will be available for inspection at:**

Town of Deep River  
 100 River Road, Box 400  
 Deep River, ON  
 K0J 1P0

**List all Drinking Water Systems which receive all of their drinking water from your System:**

Name	Drinking Water System Number
No other systems receive water from this system.	

**Provide a brief description of the System:**

There are three Actiflo units that provide coagulation, flocculation and sedimentation. PAS-8 and polymer are added in the Actiflo process. Filtration is provided by dual media filters. Post disinfection is provided using chlorine gas. pH is adjusted using caustic soda both before the Actiflo process and as the treated water enters the distribution system.

**What Treatment Chemicals were used during the Reporting Year:**

Chemical Name	Use	Supplier
PAS-8	Coagulant	Kemira
Fluoride	Fluoridation	Brenntag
Chlorine Gas	Disinfection	Brenntag
Caustic Soda	pH Adjustment	Sodrox Chemical Ltd.
Magnafloc LT27AG	Actiflo	BASF Canada Ltd.
Centrifuge Polymer (Zetag 8140)	Lamella Clarifier & Centrifuge Process	BASF Canada Ltd.
Silica Sand	Actiflo Process	John Meunier

**Summary of any Reports made to the Ministry under subsection 18 (1) of the Act or Section 16-4 of Schedule 16:**

DRINKING WATER LEGISLATION	AWQI #	Cause			STATUS
		PARAMETER/EQUIPMENT FAILURE	DURATION	CORRECTIVE ACTION TAKEN	
SDWA 170/03	124357	Low water pressure in the distribution system with the tower out of service for maintenance and repairs, and a power outage of 36 seconds causing no pump pressure.	June 23, 2015	This event was called into MOECC SAC, HU and the owner. Pressure returned in the distribution system after power outage was completed. No further action required. The Notice of Resolution was provided on June 23, 2015 to MOECC.	Completed

**Does your Drinking-Water System serve more than 10 000 people?**  
NO

**Is your annual report available to the public at no charge on a web site on the internet?**  
YES

**Indicate how you notified system users that your annual report is available, and is free of charge?**

- Notice via the Town of Deep River's internet website
- Newsletter to be mailed to Town residents indicating availability at town office and internet website

*Capacity Assessment of the Deep River Drinking Water System:*

Year	2011	2012	2013	2014	2015
Av. Day Flow (m <sup>3</sup> /d)	2 869.83	2 661.46	2 424.02	2 904.30	2 664.28
Design Capacity (m <sup>3</sup> /d)	13 638.0	13 638.0	13 638.0	13 638.0	13 638.0
% of Capacity (based on av. day flows)	21.0	19.5	17.8	21.3	19.5
Max. Day Flow (m <sup>3</sup> /d)	6 013.0	5 231.4	7 950.2	7 606.60	5887.2
% of Capacity (based on max. day flows)	44.1	38.4	58.3	55.8	43.2

In 2015, the average day flow was at approximately 19.5 % of the current plant design, and the maximum day flow was at approximately 43.2 % of the plant design of 13 638.0 m<sup>3</sup>/d.

## Regulatory Sample Results Summary:

### Microbiological Testing (Ont. Reg. 170/03, Sch. 10, Sch. 11, or Sch. 12 & Ont. Reg. 169/03 Standards – Not Detectable):

	# of E-coli Samples Taken	E-Coli Results (min-max)	# of Total Coliform Samples Taken	Total Coliform Results (min-max)	# of HPC Samples Taken	HPC Results (min-max)
Raw	52	0 - 12	52	0 - 61	52	23 - 500
Treated	52	0 - 0	52	0 - 0	52	0 - 38
Distribution	220	0 - 0	220	0 - 0	220	0 - 91

### Operational Testing, On-Line (Ont. Reg. 170/03, Sch. 7, Sch. 8 or Sch. 9):

Parameter	Ont. Reg. 170/03 Standard	Range of Results (min # - max #)
Filter #1 Turbidity	1 NTU	0.037 – 0.380 NTU
Filter #2 Turbidity	1 NTU	0.145 – 0.290 NTU
Filter #3 Turbidity	1 NTU	0.169 – 0.264 NTU
Treated Free Chlorine	0.05 mg/L – 4 mg/L	0 – 2.94 mg/L *
Treated Fluoride	1.5 mg/L***	0 – 4.09 mg/L
Distribution Free Chlorine	0.2 mg/L – 4.0 mg/L	0.09 – 1.86 mg/L

\*Chlorine spikes recorded by on-line instrumentation were a result of various maintenance/calibration activities. All spikes are reviewed for compliance with O. Reg. 170/03 and reported as required.

\*\*\* Where fluoride is added to drinking water, it is recommended that the concentration be adjusted to 0.5 – 0.8 mg/L which is the optimum level for the control of tooth decay. Where supplies contain naturally occurring fluoride at levels higher than 1.5 mg/L, but less than 2.4 mg/L, the Ministry of Health and Long Term Care recommends an approach through the local boards of health to raise public and professional awareness to control excessive exposure to fluoride from other sources (taken from the Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, June 2006, MOE PIBS 4449e01).

### Summary of Additional Non-Required Samples, In-House:

Parameter	# of grab samples taken	Ont. Reg. 170/03 / Ont. Reg. 169/03 Standard (MAC), as applicable	Range of Results (min # - max #)
Filter #1 Turbidity	44	1 NTU	0.053 – 0.28 NTU
Filter #2 Turbidity	48	1 NTU	0.065 – 0.283 NTU
Filter #3 Turbidity	48	1 NTU	0.058 – 0.254 NTU
Treated Water Turbidity	48	1 NTU	0.115 – 0.263 NTU
Treated Water pH	247	6.0 – 8.5 (OG)	7.78 – 8.01
Treated Water Alkalinity	45	30 – 500 mg/L (OG)*	0.27 – 31 mg/L
Treated Water Aluminum	45	0.1 mg/L (OG)	0.001 – 0.082 mg/L
Treated Water Conductivity	12	300 – 500 uS/cm	111 – 130 uS/cm
Treated Water Colour	47	5 TCU (AO)**	0 – 1 TCU
Treated Water Fluoride	61	1.5 mg/L	0.5 – 0.78 mg/L
Treated Water Free Chlorine	248	0.05 mg/L – 4.0 mg/L	1.42 – 2.22 mg/L
Treated Water Total Chlorine	242	0.25 mg/L – 3.0 mg/L	1.67 – 2.43 mg/L

Distribution Free Chlorine	211	0.2 mg/L – 4.0 mg/L	0.09 – 1.86 mg/L
----------------------------	-----	---------------------	------------------

\* (OG) - Operational Guidelines- are established for parameters that, if not controlled, may negatively affect the efficient and effective treatment, disinfection and distribution of the water.

\*\* (AO) – Aesthetic Objectives- are established for parameters that may impair the taste, odour or colour of water, or which may interfere with good water quality control practices (taken from the Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, MOE PIBS 4449e01, June 2006).

### Laboratory:

Parameter	# of grab samples taken	Ont. Reg. 170/03 / Ont. Reg. 169/03 Standard (MAC), as applicable	Range of Results (min # - max #)
Treated Water Alkalinity	12	30 - 500 mg/L (OG)	10 – 24 mg/L
Treated Water Colour	12	5 TCU (AO)	< 2 – < 3 TCU
Treated Water Conductivity	12	300 – 500 uS/cm	112 – 138 uS/cm
Treated Water Fluoride	12	1.5 mg/L	< 0.1 – < 0.66 mg/L
Treated Water pH	12	6.5 - 8.5 (OG)	7.3 – 7.67
Treated Water Total Dissolved Solids	12	500 mg/L (AO)	70 – 100 mg/L
Treated Water Hardness	12	80 -100 mg/L (OG)	14 – 28 mg/L
Treated Water Aluminum	12	0.1 mg/L (OG)	0.050 – 0.100 mg/L
Treated Water Iron	12	0.30 mg/L (AO)	< 0.030 – < 0.030 mg/L
Distribution Water Alkalinity	18	30 - 500 mg/L (OG)	13 – 24 mg/L
Distribution Water Colour	12	5 TCU (AO)	< 2 – < 3 mg/L
Distribution Water Conductivity	12	300 – 500 uS/cm	112 – 137 uS/cm
Distribution Fluoride	12	1.5 mg/L	< 0.1 – < 0.63 mg/L
Distribution pH	12	6.5 – 8.5 (OG)	7.27 – 7.62
Distribution Water Total Dissolved Solids	12	500 mg/L (AO)	60 – 90 mg/L
Distribution Water Hardness	12	80 – 100 mg/L (OG)	14 – 28 mg/L
Distribution Water Aluminum	12	0.1 mg/L (OG)	0.05 – 0.10 mg/L
Distribution Water Iron	12	0.30 mg/L (AO)	< 0.030 – < 0.130 mg/L

### Summary of Additional Samples:

Reason	Date of Issuance	Parameter	Date Sampled	Result/Range	Unit of measure
MDWL #189-101	31-Jan-2011	Backwash Effluent Suspended Solids	Monthly	< 1.0 – < 2.0*	mg/L

\*The annual average for Backwash Effluent Suspended Solids is < 1.5 mg/L, which is below the limit of 25 mg/L.

### Summary of Inorganic Parameters Tested or Most Recent Sample Result:

MAC = Maximum Allowable Concentration as per O. Reg. 169/03

(Results Inserted on Next Pages)

### Summary of Organic Parameters Tested or Most Recent Result:

MAC = Maximum Allowable Concentration as per O. Reg. 169/03

(Results Inserted on Next Pages)

Drinking-Water System Number: 220000923

Drinking-Water System Name: DEEP RIVER DRINKING WATER SYSTEM

Drinking-Water System Owner: Title Holder: Municipality

Drinking-Water System Category: Large Municipal Residential

Period being reported: 01/2015 12/2015

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

	Sample Date (mm/dd/yyyy)	Sample Result	MAC	No. of Exceedances	
				MAC	1/2 MAC
<b>TREATED WATER</b>					
Antimony: Sb (ug/L) - TW	13/01/2015	<MDL 0.5	6.0	No	No
Arsenic: As (ug/L) - TW	13/01/2015	<MDL 1.0	25.0	No	No
Barium: Ba (ug/L) - TW	13/01/2015	10	1000.0	No	No
Boron: B (ug/L) - TW	13/01/2015	<MDL 10.0	5000.0	No	No
Cadmium: Cd (ug/L) - TW	13/01/2015	<MDL 0.1	5.0	No	No
Chromium: Cr (ug/L) - TW	13/01/2015	<MDL 1.0	50.0	No	No
Mercury: Hg (ug/L) - TW	13/01/2015	<MDL 0.1	1.0	No	No
Selenium: Se (ug/L) - TW	13/01/2015	<MDL 1.0	10.0	No	No
Uranium: U (ug/L) - TW	13/01/2015	<MDL 1.0	20.0	No	No

Additional Inorganics

Fluoride (mg/L) - TW	08/12/2015	0.56	1.5	No	No
Nitrite (mg/L) - TW	06/01/2015	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	07/04/2015	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	07/07/2015	<MDL 0.1	1.0	No	No
Nitrite (mg/L) - TW	06/10/2015	<MDL 0.1	1.0	No	No
Nitrate (mg/L) - TW	06/01/2015	0.23	10.0	No	No
Nitrate (mg/L) - TW	07/04/2015	0.23	10.0	No	No
Nitrate (mg/L) - TW	07/07/2015	0.11	10.0	No	No
Nitrate (mg/L) - TW	06/10/2015	0.18	10.0	No	No
Sodium: Na (mg/L) - TW	07/01/2014	14	20*	No	Yes

\*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified mg/L

When the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.



Drinking-Water System Number: 220000923  
 Drinking-Water System Name: DEEP RIVER DRINKING WATER SYSTEM  
 Drinking-Water System Owner: Title Holder: Municipality  
 Drinking-Water System Category: Large Municipal Residential  
 Period being reported: 01/2015 12/2015

Summary of Organic parameters sampled during this reporting period or the most recent sample results

	Sample Date (mm/dd/yyyy)	Sample Result	MAC	Number of Exceedances	
				MAC	1/2 MAC
<b>TREATED WATER</b>					
Alachlor (ug/L) - TW	13/01/2015	<MDL 0.5	5.00	No	No
Aldicarb (ug/L) - TW	13/01/2015	<MDL 9.0	9.00	No	Yes
Aldrin+Dieldrin (ug/L) - TW	13/01/2015	<MDL 0.012	0.70	No	No
Atrazine + N-dealkylated metabolites (ug/L) - TW	13/01/2015	<MDL 0.2	5.00	No	No
Azinphos-methyl (ug/L) - TW	13/01/2015	<MDL 2.0	20.00	No	No
Bendocarb (ug/L) - TW	13/01/2015	<MDL 2.0	40.00	No	No
Benzene (ug/L) - TW	13/01/2015	<MDL 0.5	5.00	No	No
Benzo(a)pyrene (ug/L) - TW	13/01/2015	<MDL 0.01	0.01	No	Yes
Bromoxynil (ug/L) - TW	13/01/2015	<MDL 0.5	5.00	No	No
Carbaryl (ug/L) - TW	13/01/2015	<MDL 5.0	90.00	No	No
Carbofuran (ug/L) - TW	13/01/2015	<MDL 5.0	90.00	No	No
Carbon Tetrachloride (ug/L) - TW	13/01/2015	<MDL 0.2	5.00	No	No
Chlordane Total (ug/L) - TW	13/01/2015	<MDL 0.018	7.00	No	No
Chlorpyrifos (ug/L) - TW	13/01/2015	<MDL 1.0	90.00	No	No
Cyanazine (ug/L) - TW	13/01/2015	<MDL 1.0	10.00	No	No
Diazinon (ug/L) - TW	13/01/2015	<MDL 1.0	20.00	No	No
Dicamba (ug/L) - TW	13/01/2015	<MDL 1.0	120.00	No	No
1,2-Dichlorobenzene (ug/L) - TW	13/01/2015	<MDL 0.4	200.00	No	No
1,4-Dichlorobenzene (ug/L) - TW	13/01/2015	<MDL 0.4	5.00	No	No
DDT + metabolites (ug/L) - TW	13/01/2015	<MDL 0.024	30.00	No	No
1,2-Dichloroethane (ug/L) - TW	13/01/2015	<MDL 0.2	5.00	No	No
1,1-Dichloroethylene (ug/L) - TW	13/01/2015	<MDL 0.5	14.00	No	No
Dichloromethane (Methylene Chloride) (ug/L) - TW	13/01/2015	<MDL 4.0	50.00	No	No
2,4-Dichlorophenol (ug/L) - TW	13/01/2015	<MDL 0.5	900.00	No	No
2,4-Dichlorophenoxy acetic acid [2,4-D] (ug/L) - TW	13/01/2015	<MDL 1.0	100.00	No	No
Diclofop-methyl (ug/L) - TW	13/01/2015	<MDL 0.9	9.00	No	No
Dimethoate (ug/L) - TW	13/01/2015	<MDL 2.5	20.00	No	No
Disoseb (ug/L) - TW	13/01/2015	<MDL 1.0	10.00	No	No
Diquat (ug/L) - TW	13/01/2015	<MDL 5.0	70.00	No	No
Diuron (ug/L) - TW	13/01/2015	<MDL 10.0	150.00	No	No
Glyphosate (ug/L) - TW	13/01/2015	<MDL 10.0	280.00	No	No
Heptachlor+hepachlor epoxide (ug/L) - TW	13/01/2015	<MDL 0.012	3.00	No	No
Lindane (ug/L) - TW	13/01/2015	<MDL 0.006	4.00	No	No
Malathion (ug/L) - TW	13/01/2015	<MDL 5.0	190.00	No	No

Methoxychlor (ug/L) - TW	13/01/2015	<MDL 0.006	900.00	No	No
Metolachlor (ug/L) - TW	13/01/2015	<MDL 1.0	50.00	No	No
Metribuzin (ug/L) - TW	13/01/2015	<MDL 5.0	80.00	No	No
Monochlorobenzene (Chlorobenzene) (ug/L) - TW	13/01/2015	<MDL 0.2	80.00	No	No
Paraquat (ug/L) - TW	13/01/2015	<MDL 1.0	10.00	No	No
Parathion (ug/L) - TW	13/01/2015	<MDL 1.0	50.00	No	No
PCB (ug/L) - TW	13/01/2015	<MDL 0.1	3.00	No	No
Pentachlorophenol (ug/L) - TW	13/01/2015	<MDL 0.5	60.00	No	No
Phorate (ug/L) - TW	13/01/2015	<MDL 1.0	2.00	No	No
Picloram (ug/L) - TW	13/01/2015	<MDL 5.0	190.00	No	No
Prometryne (ug/L) - TW	13/01/2015	<MDL 0.25	1.00	No	No
Simazine (ug/L) - TW	13/01/2015	<MDL 1.0	10.00	No	No
Temephos (ug/L) - TW	13/01/2015	<MDL 10.0	280.00	No	No
Terbufos (ug/L) - TW	13/01/2015	<MDL 1.0	1.00	No	Yes
Tetrachloroethylene (ug/L) - TW	13/01/2015	<MDL 0.3	30.00	No	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW	13/01/2015	<MDL 0.5	100.00	No	No
Triallate (ug/L) - TW	13/01/2015	<MDL 1.0	230.00	No	No
Trichloroethylene (ug/L) - TW	13/01/2015	<MDL 0.3	50.00	No	No
2,4,6-Trichlorophenol (ug/L) - TW	13/01/2015	<MDL 0.5	5.00	No	No
2,4,5-T (ug/L) - TW	13/01/2015	<MDL 1.0	280.00	No	No
Trifluralin (ug/L) - TW	13/01/2015	<MDL 1.0	45.00	No	No
Vinyl Chloride (ug/L) - TW	13/01/2015	<MDL 0.2	2.00	No	No
DISTRIBUTION WATER					
Trihalomethane: Total (ug/L) Annual Average - DW	01/01/2015	88.475	100.00	No	Yes

**Summary of Lead Samplings:** (Ont. Reg. 169/03 Standard = 10 ug/L or 0.01 mg/L MAC)

**Reduced Sampling: Distribution Samples Only Required (Dec 15th-Apr 15th & Jun 15th-Oct 15<sup>th</sup> annually): Taken from 3 hydrants for Deep River DWS.**

**Distribution Samples-**

Date Sampled	pH Results		Alkalinity Results		Lead Results	
	Max Result	Min Result	Max Result	Min Result	Max Result	Min Result
09-Apr-15	7.28	7.11	17	13	< 0.001 mg/L	< 0.001 mg/L
11-Nov-15	7.58	7.51	24	23	< 0.001 mg/L	< 0.001 mg/L

**Facility Work Order Status:**

Preventative Work Orders Completed	27
Operational Work Orders Completed	4
Weekly Maintenance Orders Completed	4
Capital Work Orders Completed	4
Corrective Work Orders Completed	2

**Maintenance Summary:**

**Brief Description - Summary of Expenses Incurred for Installations, Repairs or Replacements:**

- Costs associated with a new motor for the lamella circulating pump.
- Miscellaneous capital items required for repair and maintenance of the facility and associated equipment.
- Repairs to chemical feed pumps at the plant.

**Distribution Activities for 2015:**

**Background:** OCWA is responsible for the operation of the water treatment plant and water storage facility (1 tower), and the distribution system that OCWA assumed responsibility on April 1st, 2011.

- Deep River Water Treatment Plant is a Class 3 Facility.
- Deep River Distribution System is a Class 1 System.

## Distribution Summary:

1. OCWA Operators attended to 5 water main breaks during 2015:
  - February 14, 2015: Corner of Iberville Street & Glendale Avenue.
  - February 28, 2015: Back lane behind 67 Hillcrest Avenue.
  - April 5, 2015: 22 Faraday Crescent.
  - April 22, 2015: St. Mary's School.
  - Dec. 17, 2015: Frontenac Crescent & Avon Road.
2. Hydrant Flushing was performed on approx. 238 hydrants between September to October 2015. There was no spring session of flushing due to the maintenance and repair of the water tower during April to July. The fall session started on September 15<sup>th</sup> in the west end and was completed on October 6<sup>th</sup>, 2015, in the east end of town. Thawing and pumping of non-draining hydrants, and installing anti-freeze to winterize the hydrants, was also completed at that time. The tower, building, and pump house are inspected monthly throughout the year.
3. As part of the Community Lead Sampling program, alkalinity and pH and Lead were sampled from three distribution hydrants during the Winter Period (December 15, 2014 to April 15, 2015) and Summer Period (July 15, 2015 to October 15, 2015). Hydrant (distribution plumbing) samples were collected under the reduced sampling requirements. These samples were collected on April 9<sup>th</sup>, 2015 and November 11<sup>th</sup>, 2015. The October samples were originally done before the October 15<sup>th</sup> deadline, but due to missing sending in the lead 1-litre bottle size, with the other alkalinity and pH sample bottles, the total set of samples were re-done on November 11<sup>th</sup>, 2015. The inspector was made aware of this situation. Refer to Summary of Lead Sampling above for results achieved during 2015.
4. Due to major maintenance and repair work performed on the tower again this year, due to a leak found on April 3<sup>rd</sup>, 2015, the spring flushing program did not take place. The tower was out of service between May 5<sup>th</sup> to July 10<sup>th</sup>, for the work to be completed by hired contractor.
5. Water Service Inspections (including water turn on/off, locates, pressure/flow testing, hydrant flushing, piping installations, hydrant replacements, valve locates/exercising, tapping of pipes, collecting bacti samples for new pipe installations, winterizing hydrants, service leaks, installing backflow preventers, etc.) were performed on many homes and businesses within the Town of Deep River. The numbers are as follows: (Total of 101 Inspections)

Chadwick Drive - 7  
Glendale Avenue- 2  
Highland Crescent - 3  
Thomas Street- 4  
Yacht & Tennis Club- 4  
Beach Avenue- 1  
Highway #17 East- 5

Pine Point Road- 6  
Spruce Crescent- 2  
Huron Street- 1  
Morrison School- 2  
Highway #17 West- 1  
Beattie Crescent- 3  
Thomson Crescent - 3

Dalton Street-2	Frontenac Crescent- 1
Lamure Beach- 1	Maple Street- 2
Wolfe Avenue- 1	Mountain View Gardens- 1
Marina- 1	Summit Street- 1
Grouse Park- 1	Deep River Road- 5
Rutherford Avenue- 3	Hillcrest Avenue- 1
Faraday Crescent -1	Iberville Street- 2
Parkdale Avenue- 3	Cabot Place - 1
Golf Course & Lawn Bowling Club- 3	
Darwin Crescent- 2	Algonquin Street- 1
Birch Street- 1	Hill Park- 1
MacDonald Street- 1	Burger King- 2
St. Mary's School- 1	J.L. Gray Centre- 2
Silvie Street- 2	Alder Crescent- 2
Spring Avenue- 1	Kennedy Place- 5
Thomas Street- 4	Morrison School- 2

# **SUMMARY REPORT**

**2015**

# DEEP RIVER DRINKING WATER SYSTEM

## 2015 SUMMARY REPORTS FOR MUNICIPALITIES

### Report:

This report is a summary of water quality information for the Deep River Drinking Water System, published in accordance with Schedule 22 of Ontario's Drinking-Water Systems Regulation for the reporting period of January 1, 2015 to December 31, 2015. The Deep River Drinking Water System is categorized as a Large Municipal Residential Drinking Water System.

This report was prepared by the Ontario Clean Water Agency on behalf of the Town of Deep River.

### Who gets a copy of the Report?

- in the case of a drinking-water system owned by a municipality, the members of the municipal council;

### What must the Report contain?

The report must,

- list the requirements of the Act, the regulations, the system's approval and any order that the system **failed to meet** at any time during the period covered by the report and specify the duration of the failure; and
- for each failure referred to in clause (a) describe the measures that were taken to correct the failure.

The following table lists the requirements that the system failed to meet and the measures taken to correct the failure:

DRINKING WATER LEGISLATION	AWQI #	Cause			STATUS
		PARAMETER/EQUIPMENT FAILURE	DURATION	CORRECTIVE ACTION TAKEN	
SDWA 170/03	124357	Low water pressure in the distribution system with the tower out of service for maintenance and repairs	June 23, 2015	A power outage of 36 seconds caused no pump pressure. Once outage was over, the pressure was back to normal. This event was called into MOECC SAC, the Health Unit, and the owner. No further action required, as per HU. The Notice of Resolution was provided on June 23, 2015.	Completed

## DEEP RIVER DRINKING WATER SYSTEM 2015 SUMMARY REPORTS FOR MUNICIPALITIES

### The MGECC Annual Inspection Report:

The Ministry of Environment conducted their annual site visit for the 2015-2016 reporting year on December 10th, 2015. The final inspection report was received on February 23, 2016, in which an inspection rating of 100 % was received. There was one recommendation cited within the report that read as follows: “It is recommended that valves are inspected and exercised on a regular basis to ensure proper operation in the event of an emergency”.

### Summary of 2015 Community Complaints/Service Forms:

- March 30, 2015: 38 Rutherford Avenue – yellow-coloured water.
- November 17, 2015: 6 Thomson Crescent – coloured water.
- November 18, 2015: 1014 Beattie Crescent – low water pressure.

### What else must the Report contain?

The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system:

1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system’s approval, drinking water works permit or municipal drinking water licence.

### Capacity Assessment of the Deep River Drinking Water System:

<b>Year</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Av. Day Flow (m <sup>3</sup> /d)	2 869.83	2 661.46	2 424.02	2 904.30	2 664.28
Design Capacity (m <sup>3</sup> /d)	13 638.0	13 638.0	13 638.0	13 638.0	13 638.0
<b>% of Capacity</b> (based on av. day flows)	21.0	19.5	17.8	21.3	19.5
Max. Day Flow (m <sup>3</sup> /d)	6 013.0	5 231.4	7 950.2	7 606.60	5887.2
<b>% of Capacity</b> (based on max. day flows)	44.1	38.4	58.3	55.8	43.2



## DEEP RIVER DRINKING WATER SYSTEM 2015 SUMMARY REPORTS FOR MUNICIPALITIES

In 2015, the average day flow was at approximately 19.5 % of the current plant design, and the maximum day flow was at approximately 43.2 % of the plant design of 13 638.0 m<sup>3</sup>/d.

Attached is a copy of the Facility Flow Summary for the Deep River Drinking Water System. This document contains all required flow information. Also, attached is the confirmation for the submission into the MOECC WTRS for the 2015 reporting period.

### *When Does the Report Get Submitted?*

If a report is prepared for a system that supplies water to a municipality under the terms of a contract, the owner of the system shall give a copy of the report to the municipality by March 31st.



**ANNUAL WATER TAKING AND TRANSFER  
REPORT - SUBMITTED DATA TO MOEECC,  
FOR THE YEAR OF 2015**

[WT DATA](#) | [REPORTS](#) | [SEARCH WT DATA](#) | [ADMINISTRATION](#) | [USER PROFILE](#) | [CONTACT US](#) | [HELP](#) | [HOME](#) | [LOG](#)Location: [WTRS](#) / [WT DATA](#) / [Input WT Record](#)

WTR

**Water Taking Data submitted successfully.****Confirmation:**

Thank you for submitting your water taking data online.

Permit Number: 0792-SW3HY8

Permit Holder: THE CORPORATION OF THE TOWNSHIP OF WHITEWATER REGION.

Received on: Feb 4, 2016 2:28 PM

This confirmation indicates that your data has been received by the Ministry, but should not be construed as acceptance of this if it differs from that specified on the Permit Number, assigned to the Permit Holder stated above.

[WT DATA](#) | [REPORTS](#) | [SEARCH WT DATA](#) | [ADMINISTRATION](#) | [USER PROFILE](#) | [CONTACT US](#) | [HELP](#) | [HOME](#) | [LOG](#)Location: [WTRS](#) / [WT DATA](#) / [Input WT Record](#)

WTR

**Water Taking Data submitted successfully.****Confirmation:**

Thank you for submitting your water taking data online.

Permit Number: 8528-9ECQPJ

Permit Holder: THE CORPORATION OF THE TOWN OF DEEP RIVER.

Received on: Feb 4, 2016 2:38 PM

This confirmation indicates that your data has been received by the Ministry, but should not be construed as acceptance of this if it differs from that specified on the Permit Number, assigned to the Permit Holder stated above.

**Ontario Clean Water Agency  
Annual Water Taking and Transfer Report**

From 01/01/2015 To 12/31/2015

Facility: DEEP RIVER DRINKING WATER SYSTEM-6097

Tag: Raw Flow: Sum (m3/d)

Tag Group: Raw Water

Permit#: 8528-9ECQPJ  
Source Name: OTTAWA RIVER  
Source: SURFACE  
Type: RIVER  
Purpose: Municipal

Coordinate Zone: 18  
Easting: 307340  
Northing: 5109278  
Method deter: Metered

<u>Date Measured</u>	<u>Value (m<sup>3</sup>/d)</u>	<u>Value (Litres)</u>
1/1/2015	1686.6000	1686600.0000
1/2/2015	2516.1000	2516100.0000
1/3/2015	2461.3000	2461300.0000
1/4/2015	2543.9000	2543900.0000
1/5/2015	2312.3000	2312300.0000
1/6/2015	2954.6000	2954600.0000
1/7/2015	2111.3000	2111300.0000
1/8/2015	1882.4000	1882400.0000
1/9/2015	2513.9000	2513900.0000
1/10/2015	2174.8000	2174800.0000
1/11/2015	2328.3000	2328300.0000
1/12/2015	2512.5000	2512500.0000
1/13/2015	2155.8000	2155800.0000
1/14/2015	1961.1000	1961100.0000
1/15/2015	2400.1000	2400100.0000
1/16/2015	2199.3000	2199300.0000
1/17/2015	1809.3000	1809300.0000
1/18/2015	2545.9000	2545900.0000
1/19/2015	2184.2000	2184200.0000
1/20/2015	2471.7000	2471700.0000
1/21/2015	1988.7000	1988700.0000

1/22/2015	3403.8000	3403800.0000
1/23/2015	2532.1000	2532100.0000
1/24/2015	2025.1000	2025100.0000
1/25/2015	2245.3000	2245300.0000
1/26/2015	2552.2000	2552200.0000
1/27/2015	2545.8000	2545800.0000
1/28/2015	2262.2000	2262200.0000
1/29/2015	2228.9000	2228900.0000
1/30/2015	2825.3000	2825300.0000
1/31/2015	2078.1000	2078100.0000
2/1/2015	2644.1000	2644100.0000
2/2/2015	2278.0000	2278000.0000
2/3/2015	2506.6000	2506600.0000
2/4/2015	2302.3000	2302300.0000
2/5/2015	2065.4000	2065400.0000
2/6/2015	2204.9000	2204900.0000
2/7/2015	2555.7000	2555700.0000
2/8/2015	1976.9000	1976900.0000
2/9/2015	2115.7000	2115700.0000
2/10/2015	2300.7000	2300700.0000
2/11/2015	2210.9000	2210900.0000
2/12/2015	2108.4000	2108400.0000
2/13/2015	3049.2000	3049200.0000
2/14/2015	2090.3000	2090300.0000
2/15/2015	2537.4000	2537400.0000
2/16/2015	2075.4000	2075400.0000
2/17/2015	2222.0000	2222000.0000
2/18/2015	2080.2000	2080200.0000
2/19/2015	2238.8000	2238800.0000
2/20/2015	2425.0000	2425000.0000
2/21/2015	2022.4000	2022400.0000
2/22/2015	2744.2000	2744200.0000
2/23/2015	2555.2000	2555200.0000
2/24/2015	2458.1000	2458100.0000
2/25/2015	2285.3000	2285300.0000
2/26/2015	2412.1000	2412100.0000
2/27/2015	2614.3000	2614300.0000
2/28/2015	3121.0000	3121000.0000
3/1/2015	3156.9000	3156900.0000
3/2/2015	2225.4000	2225400.0000

3/3/2015	2805.5000	2805500.0000
3/4/2015	2769.9000	2769900.0000
3/5/2015	2320.4000	2320400.0000
3/6/2015	2732.5000	2732500.0000
3/7/2015	3873.3000	3873300.0000
3/8/2015	2209.7000	2209700.0000
3/9/2015	2291.1000	2291100.0000
3/10/2015	2695.3000	2695300.0000
3/11/2015	2316.7000	2316700.0000
3/12/2015	2643.4000	2643400.0000
3/13/2015	2157.4000	2157400.0000
3/14/2015	2602.5000	2602500.0000
3/15/2015	2625.4000	2625400.0000
3/16/2015	2741.6000	2741600.0000
3/17/2015	2008.3000	2008300.0000
3/18/2015	2161.3000	2161300.0000
3/19/2015	3087.9000	3087900.0000
3/20/2015	1822.9000	1822900.0000
3/21/2015	2386.3000	2386300.0000
3/22/2015	2222.9000	2222900.0000
3/23/2015	2216.8000	2216800.0000
3/24/2015	2607.1000	2607100.0000
3/25/2015	3307.7000	3307700.0000
3/26/2015	1719.8000	1719800.0000
3/27/2015	3169.5000	3169500.0000
3/28/2015	2582.2000	2582200.0000
3/29/2015	2684.5000	2684500.0000
3/30/2015	2369.5000	2369500.0000
3/31/2015	2702.7000	2702700.0000
4/1/2015	2097.0000	2097000.0000
4/2/2015	2545.9000	2545900.0000
4/3/2015	1939.3000	1939300.0000
4/4/2015	2160.4000	2160400.0000
4/5/2015	2428.3000	2428300.0000
4/6/2015	2953.2000	2953200.0000
4/7/2015	1799.6000	1799600.0000
4/8/2015	2159.1000	2159100.0000
4/9/2015	2300.5000	2300500.0000
4/10/2015	2134.8000	2134800.0000
4/11/2015	2316.3000	2316300.0000

4/12/2015	2794.4000	2794400.0000
4/13/2015	2422.6000	2422600.0000
4/14/2015	2141.7000	2141700.0000
4/15/2015	2060.8000	2060800.0000
4/16/2015	2456.5000	2456500.0000
4/17/2015	2468.7000	2468700.0000
4/18/2015	2193.6000	2193600.0000
4/19/2015	2454.3000	2454300.0000
4/20/2015	2077.7000	2077700.0000
4/21/2015	2306.1000	2306100.0000
4/22/2015	2513.0000	2513000.0000
4/23/2015	2378.1000	2378100.0000
4/24/2015	2544.1000	2544100.0000
4/25/2015	2466.2000	2466200.0000
4/26/2015	2441.3000	2441300.0000
4/27/2015	2753.3000	2753300.0000
4/28/2015	2565.9000	2565900.0000
4/29/2015	4277.6000	4277600.0000
4/30/2015	2376.2000	2376200.0000
5/1/2015	2122.5000	2122500.0000
5/2/2015	3126.3000	3126300.0000
5/3/2015	3006.5000	3006500.0000
5/4/2015	1478.2000	1478200.0000
5/5/2015	3216.0000	3216000.0000
5/6/2015	3363.3000	3363300.0000
5/7/2015	3296.9000	3296900.0000
5/8/2015	2992.6000	2992600.0000
5/9/2015	2958.5000	2958500.0000
5/10/2015	3365.4000	3365400.0000
5/11/2015	3331.0000	3331000.0000
5/12/2015	2864.1000	2864100.0000
5/13/2015	3343.7000	3343700.0000
5/14/2015	3288.0000	3288000.0000
5/15/2015	3112.4000	3112400.0000
5/16/2015	3391.8000	3391800.0000
5/17/2015	3478.1000	3478100.0000
5/18/2015	3326.3000	3326300.0000
5/19/2015	2721.5000	2721500.0000
5/20/2015	3176.7000	3176700.0000
5/21/2015	3018.2000	3018200.0000



5/22/2015	2637.6000	2637600.0000
5/23/2015	3135.3000	3135300.0000
5/24/2015	3464.6000	3464600.0000
5/25/2015	3061.4000	3061400.0000
5/26/2015	3348.9000	3348900.0000
5/27/2015	2786.8000	2786800.0000
5/28/2015	2886.5000	2886500.0000
5/29/2015	3229.4000	3229400.0000
5/30/2015	2898.1000	2898100.0000
5/31/2015	3126.2000	3126200.0000
6/1/2015	3334.2000	3334200.0000
6/2/2015	3373.5000	3373500.0000
6/3/2015	3055.8000	3055800.0000
6/4/2015	4004.0000	4004000.0000
6/5/2015	3271.0000	3271000.0000
6/6/2015	2953.8000	2953800.0000
6/7/2015	2695.0000	2695000.0000
6/8/2015	2954.4000	2954400.0000
6/9/2015	2820.5000	2820500.0000
6/10/2015	2477.2000	2477200.0000
6/11/2015	2595.7000	2595700.0000
6/12/2015	2545.3000	2545300.0000
6/13/2015	2551.2000	2551200.0000
6/14/2015	2533.3000	2533300.0000
6/15/2015	2786.6000	2786600.0000
6/16/2015	2802.8000	2802800.0000
6/17/2015	2770.1000	2770100.0000
6/18/2015	2704.0000	2704000.0000
6/19/2015	2645.9000	2645900.0000
6/20/2015	2872.1000	2872100.0000
6/21/2015	3043.7000	3043700.0000
6/22/2015	3047.3000	3047300.0000
6/23/2015	3243.1000	3243100.0000
6/24/2015	2491.3000	2491300.0000
6/25/2015	2463.7000	2463700.0000
6/26/2015	2767.8000	2767800.0000
6/27/2015	2691.7000	2691700.0000
6/28/2015	2710.7000	2710700.0000
6/29/2015	2800.8000	2800800.0000
6/30/2015	3047.5000	3047500.0000

7/1/2015	3169.1000	3169100.0000
7/2/2015	3121.0000	3121000.0000
7/3/2015	2739.7000	2739700.0000
7/4/2015	2926.1000	2926100.0000
7/5/2015	3377.7000	3377700.0000
7/6/2015	3410.9000	3410900.0000
7/7/2015	4834.6000	4834600.0000
7/8/2015	2864.2000	2864200.0000
7/9/2015	3173.7000	3173700.0000
7/10/2015	2155.3000	2155300.0000
7/11/2015	3253.6000	3253600.0000
7/12/2015	3442.5000	3442500.0000
7/13/2015	4439.4000	4439400.0000
7/14/2015	3537.5000	3537500.0000
7/15/2015	4314.5000	4314500.0000
7/16/2015	3214.6000	3214600.0000
7/17/2015	2762.4000	2762400.0000
7/18/2015	2886.5000	2886500.0000
7/19/2015	3003.3000	3003300.0000
7/20/2015	2339.1000	2339100.0000
7/21/2015	2861.6000	2861600.0000
7/22/2015	2855.0000	2855000.0000
7/23/2015	3035.8000	3035800.0000
7/24/2015	3151.2000	3151200.0000
7/25/2015	3482.6000	3482600.0000
7/26/2015	2545.8000	2545800.0000
7/27/2015	3586.3000	3586300.0000
7/28/2015	4174.0000	4174000.0000
7/29/2015	4115.0000	4115000.0000
7/30/2015	4074.3000	4074300.0000
7/31/2015	3014.4000	3014400.0000
8/1/2015	2721.5000	2721500.0000
8/2/2015	3465.7000	3465700.0000
8/3/2015	3103.0000	3103000.0000
8/4/2015	2983.5000	2983500.0000
8/5/2015	2767.5000	2767500.0000
8/6/2015	2990.1000	2990100.0000
8/7/2015	3027.3000	3027300.0000
8/8/2015	3286.7000	3286700.0000
8/9/2015	3149.4000	3149400.0000

8/10/2015	4604.1000	4604100.0000
8/11/2015	4098.2000	4098200.0000
8/12/2015	3476.7000	3476700.0000
8/13/2015	4248.8000	4248800.0000
8/14/2015	5887.2000	5887200.0000
8/15/2015	5336.1000	5336100.0000
8/16/2015	5380.3000	5380300.0000
8/17/2015	5859.0000	5859000.0000
8/18/2015	3590.6000	3590600.0000
8/19/2015	3653.8000	3653800.0000
8/20/2015	3081.8000	3081800.0000
8/21/2015	2608.0000	2608000.0000
8/22/2015	3041.1000	3041100.0000
8/23/2015	2825.8000	2825800.0000
8/24/2015	3084.9000	3084900.0000
8/25/2015	3112.0000	3112000.0000
8/26/2015	2313.9000	2313900.0000
8/27/2015	2937.8000	2937800.0000
8/28/2015	3252.8000	3252800.0000
8/29/2015	2274.9000	2274900.0000
8/30/2015	2797.6000	2797600.0000
8/31/2015	3547.8000	3547800.0000
9/1/2015	2816.0000	2816000.0000
9/2/2015	3906.0000	3906000.0000
9/3/2015	3580.7000	3580700.0000
9/4/2015	3174.3000	3174300.0000
9/5/2015	3360.1000	3360100.0000
9/6/2015	3362.3000	3362300.0000
9/7/2015	3224.0000	3224000.0000
9/8/2015	3252.5000	3252500.0000
9/9/2015	2697.8000	2697800.0000
9/10/2015	3076.9000	3076900.0000
9/11/2015	2905.7000	2905700.0000
9/12/2015	2370.9000	2370900.0000
9/13/2015	3287.7000	3287700.0000
9/14/2015	2759.9000	2759900.0000
9/15/2015	3433.6000	3433600.0000
9/16/2015	3116.7000	3116700.0000
9/17/2015	3559.2000	3559200.0000
9/18/2015	3161.3000	3161300.0000

9/19/2015	2674.3000	2674300.0000
9/20/2015	2413.5000	2413500.0000
9/21/2015	2986.3000	2986300.0000
9/22/2015	3258.8000	3258800.0000
9/23/2015	2855.2000	2855200.0000
9/24/2015	2454.8000	2454800.0000
9/25/2015	2394.9000	2394900.0000
9/26/2015	2908.8000	2908800.0000
9/27/2015	2444.0000	2444000.0000
9/28/2015	3765.6000	3765600.0000
9/29/2015	2856.1000	2856100.0000
9/30/2015	2217.6000	2217600.0000
10/1/2015	2940.4000	2940400.0000
10/2/2015	2411.5000	2411500.0000
10/3/2015	2332.2000	2332200.0000
10/4/2015	2569.4000	2569400.0000
10/5/2015	2117.0000	2117000.0000
10/6/2015	3203.5000	3203500.0000
10/7/2015	3987.5000	3987500.0000
10/8/2015	2576.3000	2576300.0000
10/9/2015	2408.9000	2408900.0000
10/10/2015	2705.0000	2705000.0000
10/11/2015	2533.0000	2533000.0000
10/12/2015	3209.6000	3209600.0000
10/13/2015	2795.3000	2795300.0000
10/14/2015	2276.3000	2276300.0000
10/15/2015	2210.4000	2210400.0000
10/16/2015	2272.4000	2272400.0000
10/17/2015	2086.9000	2086900.0000
10/18/2015	2107.5000	2107500.0000
10/19/2015	1948.3000	1948300.0000
10/20/2015	2269.9000	2269900.0000
10/21/2015	1997.0000	1997000.0000
10/22/2015	1522.3000	1522300.0000
10/23/2015	2447.0000	2447000.0000
10/24/2015	2089.8000	2089800.0000
10/25/2015	1965.2000	1965200.0000
10/26/2015	1791.7000	1791700.0000
10/27/2015	2631.0000	2631000.0000
10/28/2015	2103.0000	2103000.0000

10/29/2015	1741.6000	1741600.0000
10/30/2015	2146.7000	2146700.0000
10/31/2015	1975.8000	1975800.0000
11/1/2015	2299.2000	2299200.0000
11/2/2015	1837.4000	1837400.0000
11/3/2015	2417.9000	2417900.0000
11/4/2015	2124.2000	2124200.0000
11/5/2015	1916.9000	1916900.0000
11/6/2015	1628.5000	1628500.0000
11/7/2015	2123.9000	2123900.0000
11/8/2015	2189.8000	2189800.0000
11/9/2015	1817.7000	1817700.0000
11/10/2015	2312.3000	2312300.0000
11/11/2015	2120.6000	2120600.0000
11/12/2015	1720.0000	1720000.0000
11/13/2015	2243.4000	2243400.0000
11/14/2015	1345.0000	1345000.0000
11/15/2015	2490.1000	2490100.0000
11/16/2015	2013.9000	2013900.0000
11/17/2015	2084.8000	2084800.0000
11/18/2015	2167.2000	2167200.0000
11/19/2015	1774.1000	1774100.0000
11/20/2015	2039.7000	2039700.0000
11/21/2015	2077.1000	2077100.0000
11/22/2015	2069.4000	2069400.0000
11/23/2015	2084.4000	2084400.0000
11/24/2015	1879.9000	1879900.0000
11/25/2015	2100.7000	2100700.0000
11/26/2015	2102.1000	2102100.0000
11/27/2015	1840.7000	1840700.0000
11/28/2015	2010.6000	2010600.0000
11/29/2015	2278.4000	2278400.0000
11/30/2015	1770.4000	1770400.0000
12/1/2015	2132.8000	2132800.0000
12/2/2015	2079.6000	2079600.0000
12/3/2015	2124.6000	2124600.0000
12/4/2015	1989.7000	1989700.0000
12/5/2015	1928.2000	1928200.0000
12/6/2015	2640.1000	2640100.0000
12/7/2015	2268.2000	2268200.0000

12/8/2015	1752.7000	1752700.0000
12/9/2015	2038.6000	2038600.0000
12/10/2015	2159.1000	2159100.0000
12/11/2015	2083.1000	2083100.0000
12/12/2015	2450.7000	2450700.0000
12/13/2015	1898.8000	1898800.0000
12/14/2015	2570.1000	2570100.0000
12/15/2015	1683.0000	1683000.0000
12/16/2015	2136.2000	2136200.0000
12/17/2015	2628.3000	2628300.0000
12/18/2015	1601.1000	1601100.0000
12/19/2015	2436.6000	2436600.0000
12/20/2015	2341.0000	2341000.0000
12/21/2015	1574.9000	1574900.0000
12/22/2015	2465.0000	2465000.0000
12/23/2015	1960.7000	1960700.0000
12/24/2015	2449.1000	2449100.0000
12/25/2015	1996.8000	1996800.0000
12/26/2015	1968.4000	1968400.0000
12/27/2015	1931.6000	1931600.0000
12/28/2015	2301.1000	2301100.0000
12/29/2015	2000.0000	2000000.0000
12/30/2015	4349.7000	4349700.0000
12/31/2015	1892.6000	1892600.0000