



*Lake Huron*  
Primary Water Supply System

## 2025 Compliance Report



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## Profile

### Who We Are

The Lake Huron Primary Water Supply System (LHPWSS) is owned by a Board of Management who governs the drinking water system. The Board of Management is made up of members appointed from each of the eight (8) member municipalities that are supplied water from the LHPWSS. The City of London acts as the Administering Municipality. Accordingly, the City of London provides all associated administrative and management services on behalf of the Board. The Board of Management contracts the operation and maintenance of the LHPWSS to the Ontario Clean Water Agency (OCWA), an independent Operating Authority.

### Operating Authority:



### LHPWSS Board Member Municipalities:

- City of London (Administering Municipality)
- Municipality of Bluewater
- Municipality of Lambton Shores
- Township of Lucan Biddulph
- Municipality of Middlesex Centre
- Municipality of North Middlesex
- Municipality of South Huron
- Municipality of Strathroy-Caradoc

## What Is Important

### Values of the Water System

The values of the LHPWSS are the inherent beliefs or moral standards that generally reflect what the LHPWSS Board of Management stands for and believes in:

- **Sustainable** - be financially, environmentally, socially, and physically sustainable;
- **Inclusive** - provide access to bulk drinking water for current and prospective members, in accordance with Board policy;
- **Fair and equitable** - balance the interests of individual members with the best interests of all members, as well as the needs of existing members with the needs of new members;
- **Vigilant** - ensure an adequate supply of safe and reasonably priced drinking water is available to members;
- **Innovative** - be receptive to and supportive of new ideas and opportunities for improvement;
- **Cooperative** – be supportive to the needs of the Lake Huron Primary Water Supply System;
- **Open and transparent** – conduct business in a manner that enables member municipalities and the public to review and provide input into major decisions as appropriate;
- **Public Ownership** – retain ownership of the water system in public hands.

## What We Do

### Water Treatment and Supply

The LHPWSS is responsible for the treatment and transmission of drinking water to eight (8) member municipalities in southwestern Ontario. The population served by this system is approximately 500,000 (as per the 2025 Water Master Plan). Water is provided bulk wholesale to the member municipalities who then distribute it to their customers.

The LHPWSS has been in operation since 1967. The LHPWSS employs pre-chlorination, screening, powder activated carbon addition (seasonally on an as-required basis), coagulation, flocculation, sedimentation, dual-media filtration, post-chlorination, and sodium hydroxide addition to treat raw water obtained from Lake Huron. After the water is treated it is pumped from LHPWSS to the member municipalities or to storage reservoirs. The drinking water system is monitored at various locations via a Supervisory Control and Data Acquisition (SCADA) system.

The LHPWSS is operated under the Municipal Drinking Water Licence (MDWL) #001-101 and Drinking Water Works Permit (DWWP) #001-201.

### LHPWSS Assets:

- 1 water treatment plant
- 1 residuals management facility
- 3 water pumping stations
- 3 in-ground storage reservoirs
- 8 monitoring stations
- 151 km of water main



Figure 1: McGillivray Booster Pumping Station

# LHPWSS: At A Glance



Figure 2: LHPWSS Major Infrastructure Locations

## The Water Treatment Process

The following figure provides a general overview of the conventional water treatment process. The processes outlined below are very similar to the treatment at the LHPWSS, although they are not an exact representation. Some details may vary.

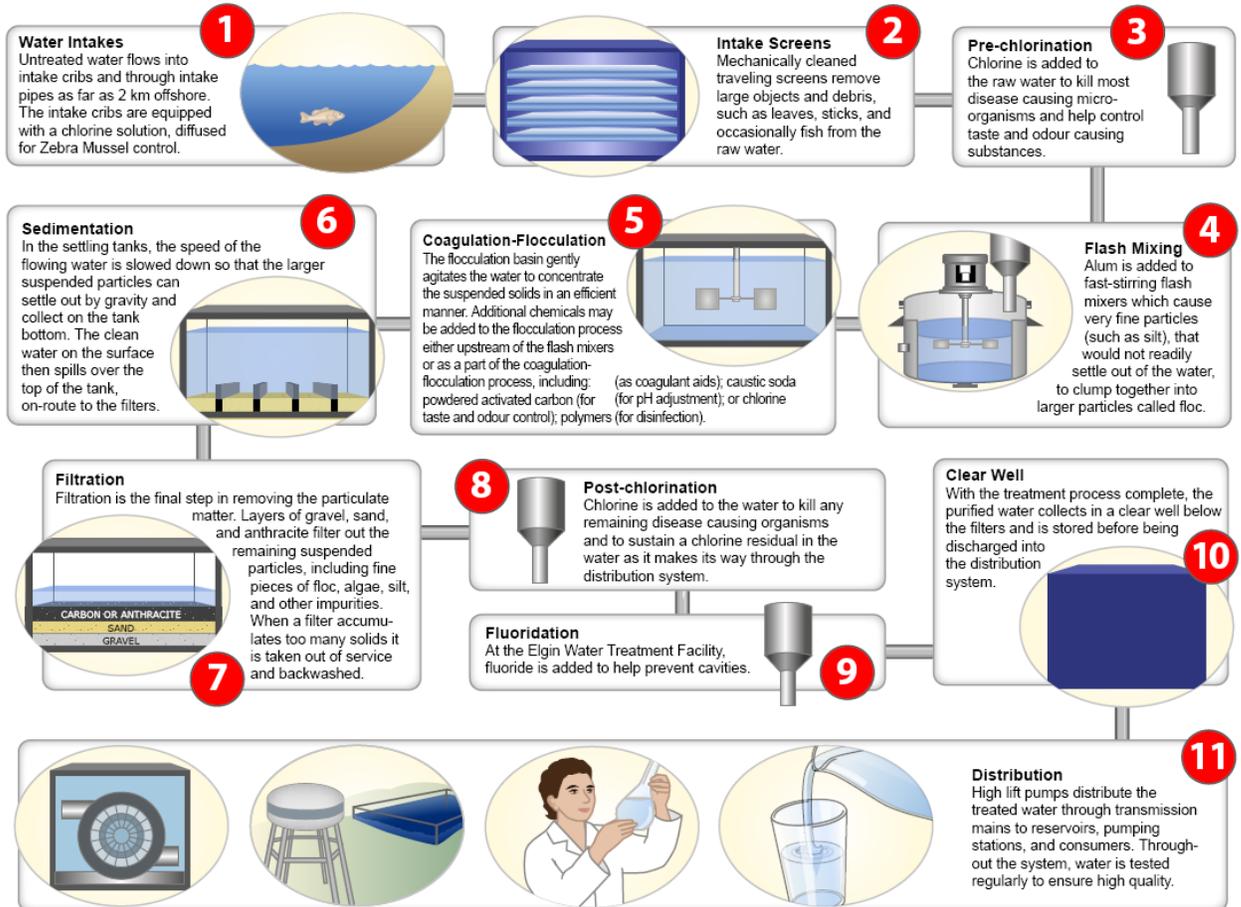


Figure 3: Overview of the Water Treatment Process

At the LHPWSS, Step 9 (Fluoridation) does not take place.

At the LHPWSS, one additional treatment step takes place:

Sodium Hydroxide is added as the treated water leaves the water treatment plant (WTP) and enters the transmission system (Step 11) to raise the treated water pH, resulting in reduced corrosion potential.

## **2025 Highlights - General**

### **Quality Management System Re-accreditation**

The continued utilization and accreditation of a Quality Management System (QMS) is a provincial regulatory requirement under the Safe Drinking Water Act and the Municipal Drinking Water Licence Program. The licence framework requires drinking water system owners to obtain a Municipal Drinking Water Licence (MDWL) to operate their drinking water system. In order to obtain a MDWL, a drinking water system must have an accredited operating authority. To become accredited the operating authority must establish and maintain a QMS that meets the minimum requirements of the province's Drinking Water Quality Management Standard (DWQMS). Operating authorities are accredited by a third-party accreditation body against the requirements of the DWQMS. Reaccreditation audits take place every three (3) years. OCWA successfully received DWQMS re-accreditation for the EAPWSS in October 2025 and is accredited for another three-year term ending in 2028. The system's QMS is recognized by the accreditation body as being mature, and outstanding or benchmark in some areas.

### **Master Plan**

The LHPWSS is required to undertake a Master Plan every five (5) years. In 2024 the LHPWSS, through its consultant, AECOM Canada ULC (AECOM), initiated a Master Plan, in accordance with the Municipal Engineers Association Class Environmental Assessment, to assess regional water system needs for the utility over the next 20+ years. The Master Plan is intended to evaluate and identify recommended system improvements, including major system upgrades and expansion, to accommodate proposed growth. Public and agency consultation, and Indigenous engagement are important aspects of the Master Plan. An outcome of the Master Plan is a roadmap outlining major system improvements over the next twenty years.

The Master Water Plan update was completed in fall of 2025 and endorsed at the October 2, 2025 Board meeting. The Lake Huron WTP was determined to have sufficient capacity over the planning horizon, based on the water demand projections determined in the Master Plan. The preferred solution was identified as the optimization and upgrade of the existing system, including treatment, pumping, storage and transmission. Key improvements were identified, as well as several studies to support the improvements and to maintain sustainable utility management.

## 2025 Capital Project Highlights

### Flow Meter Replacements

The two (2) WTP high lift discharge flow meters were nearing the end of their useful life, and while they were still able to be calibrated, parts were no longer readily available in the event of a breakdown. These meters are critical for both regulatory and operational purposes. Both high lift discharge flow meters were replaced in October 2025.

Similarly, the discharge flow meter at the McGillivray Booster Pumping Station had reached the end of its useful life and was experiencing periodic faults, as confirmed during annual calibration. Due to the age of the components, parts were no longer available from the manufacturer to affect a repair. This flow meter was replaced in December 2025.



Figure 4a: Removed high lift discharge flow meter, with the new meter delivered and awaiting installation.

Figure 4b: New ABB flow meter installed in the McGillivray Booster Pumping Station.

### **Distressed Pipe Repairs**

As part of the Acoustic Fiber Optic (AFO) monitoring system installed within the 1200mm transmission pipeline, the LHPWSS determined that several pipes in the primary transmission main were in poor condition (i.e. distressed) and consequently at high risk of failure. On this basis, and with the concurrence Pure Technologies (Xylem Canada), OCWA engaged the services of L82 Construction Ltd. and Dielco Industrial Contractors Ltd. to complete several proactive pipe replacements in 2025.

On March 11, 2025, a proactive replacement of Pipe #10-26 was completed. This pipe is located in the Municipality of South Huron, east of Blackbush Line and north of Mount Carmel Drive. The pipe is in a single (i.e. untwinned) section of the primary transmission main.

On November 25, 2025, a proactive replacement of three (3) pipe segments took place. Pipes #11-106, 11-107 and 11-108 were replaced. These pipes are located in the Municipality of North Middlesex, west of Lieury Road and south of Mount Carmel Drive. The pipes are in a single (i.e. untwinned) section of the primary transmission main.

Had the LHPWSS failed to replace these distressed pipe sections, it could have resulted in a catastrophic failure of the pipeline causing extensive damage to agricultural lands in the area.



Figure 5a: Pipe #10-26 replacement, installation of the first repair piece.  
Figure 5b: Pure Technologies (Xylem Canada) performing an electromagnetic verification to confirm the location of distressed pipes #11-106, 11-107 and 11-108.



Figure 6a: Distressed pipes #11-106, 11-107, 11-108 have been removed.  
Figure 6b: Pipes #11-106, 11-107, 11-108 replacement, installation of the final repair piece.

### **Raw Water Valve Actuator Replacements**

This project involved replacing the existing raw water valve actuators and integrating them into the SCADA control system. These upgrades allow operations to continue operating one (1) side of the WTP if the coagulant system fails, rather than shutting down the entire facility. With the upgraded automation, operations will be able to isolate the affected side of the WTP, maintain partial operation, and complete repairs without interrupting overall service. The actuator replacements improves operational flexibility, reliability, and overall system resilience.



Figure 7a: New raw water valve actuator (north side).  
Figure 7b: New raw water valve actuator (south side).

## **LHPWSS Connection to Oneida Nation of the Thames**

In 2022 the LHPWSS Board of Management endorsed the request from Oneida Nation of the Thames (ONOTT) to supply drinking water to the ONOTT from the LHPWSS. A water supply agreement between the LHPWSS and ONOTT was formalized and executed in 2023 following the federal government's funding announcement to ONOTT.

Given the location of the ONOTT settlement, the existing LHPWSS transmission pipeline, which currently terminates northwest of the community of Mount Brydges, will be extended to a connection point located along Muncey Road (County Road 11) within the municipal right-of-way, east of the Thames River. The preliminary design of the transmission pipeline was completed by Stantec Consulting Ltd. in early 2023. The designed route involves extending the existing transmission pipeline northeast of Mount Brydges by approximately 21 km to a new connection facility near the ONOTT settlement boundary.

In June 2023, Stantec was awarded the engineering consulting services assignment for detailed design, tendering and construction administration. The final detailed design was completed in late 2025, with the construction tender being issued in December 2025. The tender was awarded to L82 Construction Ltd at the March 5, 2026 Board meeting. Construction is anticipated to commence in spring 2026 with completion targeted for spring 2027.

## **Administration Building Extension and Site Redevelopment**

The existing Lake Huron WTP main building was designed and constructed in the 1960s and has not undergone any major renovations or modifications since. There are several challenges with the existing WTP main building that need to be addressed to modernize the facility, enhance the functionality, address gender equity issues, and improve the overall indoor working environment for improved health and safety of staff.

The final design concept is a new two-story administration building addition to the existing WTP as well as an interior renovation to the existing administration spaces within the WTP high lift pump building. This concept will address existing challenges and provide an enhanced indoor working environment with improved staff amenities. Various site changes will be required to accommodate this new building, including demolition of the existing garage, reconstruction of the existing pipeline drain, redesigned parking including electric vehicle charging, renewable energy generation, and fencing changes. A municipal building permit and site plan approval will be required.

A two-staged procurement process to retain a Licensed Coordinating Professional to undertake schematic design, detailed design, and provide construction administration and inspection services was completed in 2024. The assignment was awarded to Ventin Group Limited and was initiated in fall of 2024. The detailed design was advanced throughout 2025. Tendering is anticipated for spring 2026, with construction taking place in 2026 - 2027.

The LHPWSS Board of Management has previously endorsed a recommendation to pursue Leadership in Energy and Environmental Design (LEED) silver certification of the overall building addition and renovation project, as well as striving to meet the Zero-Carbon Building standard for the new building, where feasible.



Figure 8: Rendering of the design concept for the new administration building, south facing view (from Waterworks Road).



Figure 9: Rendering of the design concept for the new administration building, east facing view (from the WTP parking lot).

## 2025 Flow Summary

As per the water system's current Permit To Take Water (PTTW), the amount of raw water taken into the LHPWSS cannot exceed 454.98 million litres/day or 5,266 litres/second.

The 2025 water taking was approved under PTTW #P-300-2068363222.

As per the water system's current Municipal Drinking Water Licence, the rated capacity of the WTP is 340 million litres/day, which converts to 3,935 litres/second. The maximum daily flow of treated water from the treatment plant into the transmission system shall not exceed this value.

The following table contains a flow summary, with comparison to the system's rated capacity and permit limits in order to assess the capability of the system to meet existing and planned uses.

	<b>Total Daily Flow (ML/day)</b>	<b>Total Daily Flow (% of Capacity)</b>	<b>Daily Instantaneous Peak Flow (ML/day)</b>
PTTW – permitted raw water taking amount	454.98	100	454.98
Raw Water Flow – Average Day	142.90	31	246
Raw Water Flow – Max. Day	194.69	43	314
WTP Rated Capacity	340	100	340
Treated Water Flow – Average Day	139.36	41	214
Treated Water Flow – Max. Day	190.45	56	272

A complete flow summary for the LHPWSS can be found in Appendix A.

### Treated Water Flows

The average daily flow from the LHPWSS was 139.36 ML/day, which is a 3.20% increase from the previous year. The maximum daily flow for 2025 was 190.45 ML/day, which is a 4.22% decrease from the previous year.

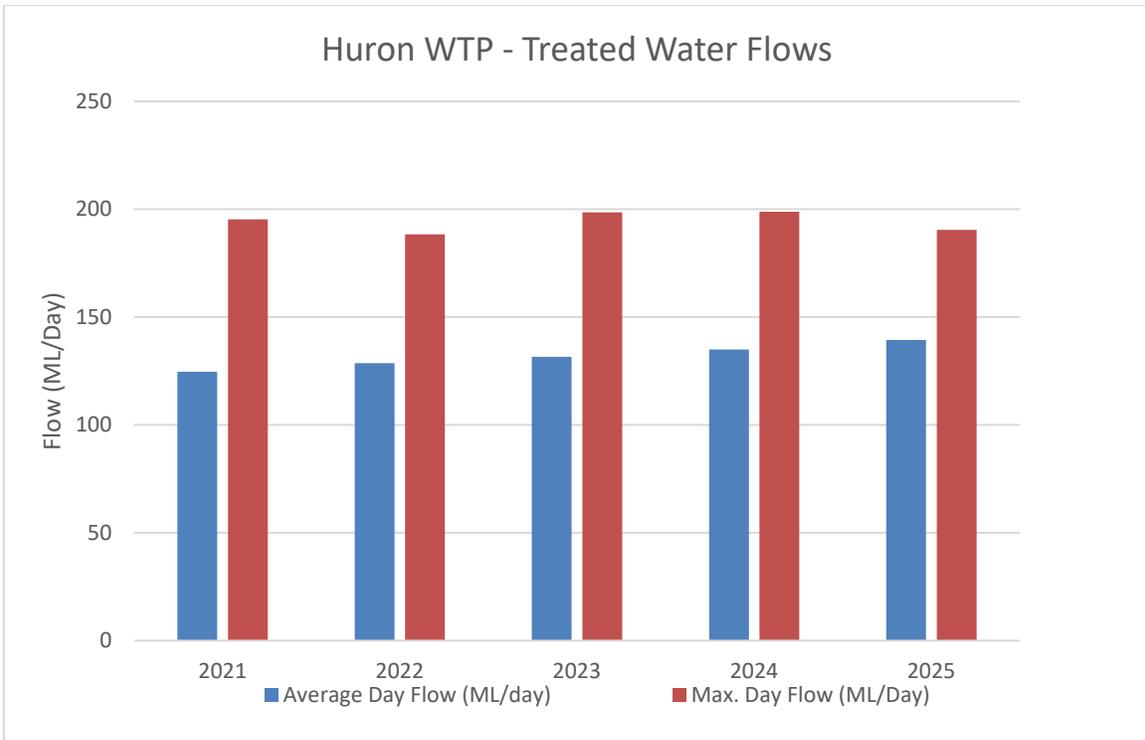


Figure 10: Five Year Treated Water Flow Comparison

The City of London utilizes the largest volume of treated drinking water from the LHPWSS. As shown in Figure 11, the City of London utilizes 82.26% of the volume, with the other seven (7) municipalities utilizing the remaining 17.74% of the volume.

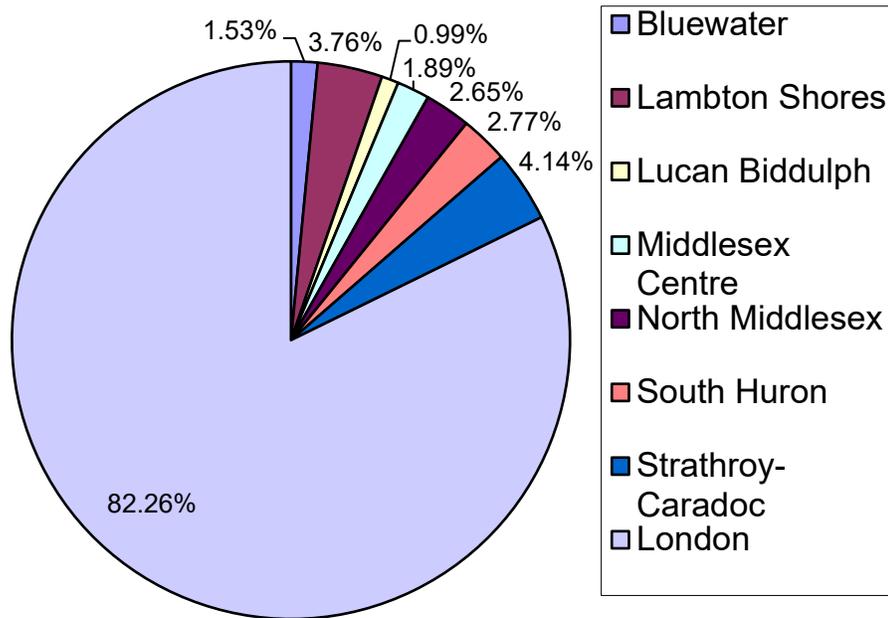


Figure 11: 2025 Treated Water Volumes per Municipality

## 2025 Chemical Consumption

A variety of water treatment chemicals are used at the LHPWSS to ensure safe, clean drinking water. The following table outlines the chemicals most frequently used for the LHPWSS. As part of the system's registered ISO14001 Environmental Management System, objectives and targets are currently in place to optimize chemical usage.

<b>Chemical</b>	<b>Used for</b>	<b>Total Amount Used in 2025</b>
Aluminum Sulphate	Coagulation	935,417 kg
Powdered Activated Carbon	Taste and odour control (seasonally)	72,032 kg
Chlorine Gas	Mussel control	47,061 kg
Chlorine Gas	Primary disinfection	51,920 kg
Chlorine Gas	Pre-Chlorination	7,651 kg
Sodium Hydroxide	pH adjustment for corrosion control	652,999 L
Polymer	Filter aid (used on an as-required basis)	<5 kg
Polymer	Residuals Management Facility – dewatering aid	7,050 L
Sodium Bisulphite	Residuals Management Facility – dechlorination	16,181 L

## 2025 Water Quality Sampling and Monitoring

The LHPWSS consistently provides treated drinking water with water quality above the standards required by provincial regulation. Where applicable, this is a result of the LHPWSS standards being more stringent than what is required by provincial regulation. For example, the target at the LHPWSS for filtered water turbidity (a measure of the cloudiness of water) is 10 times more stringent than the provincial standard. The LHPWSS is utilizing best management practices and continual improvement to ensure that high drinking water standards are maintained and enhanced where possible.

All water quality sampling at the LHPWSS is performed in accordance with the Safe Drinking Water Act and its associated regulations. All samples are collected by licensed operating authority personnel and are submitted to Canadian Association for Laboratory Accreditation (CALA)/Standards Council of Canada (SCC) accredited laboratories for both bacterial and chemical analysis.

In 2025, a total of 627 microbiological samples were collected from raw, treated and distribution system water, and were submitted to the laboratory for E. Coli, total coliforms and heterotrophic plate count (HPC) analysis. There was one

reported incident of adverse microbiological test results reported on June 3, 2025 (AWQI reference 168440). For more information, please see the Annual Report which is included as Appendix B.

Annual samples are collected and submitted to the laboratory for inorganics (metals) and organics analysis, which include herbicides, pesticides and volatile organic compounds. Quarterly sampling and laboratory analysis is also completed for trihalomethanes and haloacetic acids (disinfection by-products), nitrates and nitrites.

Seasonal samples are collected and submitted to the laboratory for total microcystin from June through to the end of October as part of the Harmful Algal Bloom (HAB) Monitoring and Sampling Program. The purpose of the HAB program is to keep drinking water safe from potential impacts of aquatic algal bacteria overgrowth (i.e. cyanobacteria), which can produce toxins (i.e. cyanotoxins) in the surrounding water when the algal cells are damaged or die. These toxins, which include microcystins, can be harmful to people. A total of 23 raw and 23 treated water samples were collected and submitted to the laboratory for total microcystin analysis. There were no detectable results in the raw or treated water samples. For more information, please see the Annual Report which is included as Appendix B.

In addition, the WTP operator samples the raw, in-process and treated water six times per day and carries out an array of physical and chemical analysis for operational control.

As required by regulation, the LHPWSS also prepares an Annual Report which includes a summary of water quality test results and a maintenance report. The 2025 Annual Report can be found in Appendix B.

## **Research and Partnerships**

The LHPWSS acknowledges the importance of scientific research on water quality and the effects on human health. The LHPWSS has partnered with the Natural Sciences and Engineering Research Council (NSERC) Chair in Drinking Water Research at the University of Waterloo and the University of Toronto to pursue research opportunities, as well as Western University. The LHPWSS is a member of the Water Research Foundation (WRF). In addition, the LHPWSS continues to evaluate and conduct specific research on the efficacy of the existing treatment processes, optimizing and improving treatment systems, and evaluating the potential and need of more advanced treatment alternatives.

## **Residuals Management Facility (RMF) Compliance**

The Municipal Drinking Water Licence (MDWL) for the LHPWSS requires that non-compliant discharges of total chlorine residual (TCR) and total suspended solids (TSS) to the natural environment must be reported. This annual report (Appendix B) includes a report on the date and time of any non-compliant discharges, the duration, maximum total chlorine residual value, volume of non-compliant discharge, reason, and corrective action taken.

In 2025, there were no incidents of non-compliant discharges, with the annual average concentration and maximum concentrations for TCR and TSS being met (refer to Appendix B).

## **Ministry Inspection**

The Ontario Ministry of the Environment, Conservation and Parks (MECP) conducts an inspection of the LHPWSS annually. A MECP inspection took place on October 24, 2025. The final inspection report was issued on January 26, 2026. There were no non-compliances identified in the inspection report. The final inspection rating received for the 2025-2026 reporting year was 100%.

## **Reports to Regulators**

There was one report made for a potable water spill from the McGillivray Reservoir under subsections 38(5) to (7) of the Fisheries Act and spill reporting requirements of Environmental Protection Act Part X (Report # 1-OHSVTI). On May 29, 2025 the reservoir overflowed from 13:47 to 14:22 without dechlorination of the potable water. This potable water had a free chlorine residual of approximately 0.82mg/L during the time of the overflow. The receiving stream (Little Ausable River) was observed by the operator to have no adverse impacts as a result of the potable water spill. Corrective actions were taken to adjust alarm levels and confirmed level instrumentation reading accurately.



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## Appendix A: 2025 Flow Summary

## 1. Raw Water Intake – Flow (ML/Day)

Day	January (ML/day)	February (ML/day)	March (ML/day)	April (ML/day)	May (ML/day)	June (ML/day)	July (ML/day)	August (ML/day)	September (ML/day)	October (ML/day)	November (ML/day)	December (ML/day)
1	107.57	121.54	132.93	137.60	137.17	136.82	147.02	150.96	138.58	154.24	138.43	137.26
2	112.56	131.41	138.59	138.16	128.86	142.40	157.86	149.98	161.30	171.23	144.56	135.68
3	134.83	139.52	129.54	132.50	126.45	148.00	172.90	148.91	155.94	149.89	121.68	145.10
4	129.23	124.96	141.28	132.85	129.06	177.36	178.90	175.39	156.03	154.88	120.90	148.24
5	108.29	146.18	157.66	134.42	123.86	144.19	174.69	177.54	157.97	152.66	135.92	150.72
6	130.62	110.37	134.48	122.13	132.03	134.40	169.84	176.06	149.25	147.84	111.14	149.07
7	136.56	147.09	145.17	136.69	127.38	155.33	189.10	180.83	149.46	144.50	139.76	138.72
8	137.62	131.34	130.88	105.95	139.39	150.37	165.79	169.89	145.55	148.48	120.00	143.10
9	159.86	125.76	131.97	133.98	147.12	147.44	156.94	180.45	156.93	146.64	125.34	137.28
10	136.06	125.82	173.15	128.18	135.23	146.88	165.87	160.98	179.39	142.58	134.26	141.39
11	128.40	125.60	5.18	140.54	146.74	143.33	168.05	183.49	170.03	131.90	131.54	137.60
12	132.05	132.05	180.21	134.21	139.89	155.65	168.28	184.80	160.90	135.55	149.55	133.94
13	136.02	140.11	172.51	128.98	156.70	192.14	178.66	194.69	189.31	127.38	100.50	138.61
14	140.16	128.78	133.95	135.38	129.84	158.94	175.97	182.51	174.98	138.00	153.78	154.61
15	130.45	133.36	125.15	125.23	149.28	157.94	183.28	179.95	172.22	162.11	142.77	131.41
16	124.67	129.70	131.74	135.49	151.60	160.48	180.14	162.32	178.74	47.01	130.67	149.39
17	134.94	124.53	132.64	128.05	142.85	178.78	179.78	162.48	171.82	172.99	139.57	117.71
18	124.56	133.92	134.64	133.46	131.57	192.77	159.86	151.42	186.78	165.22	143.70	137.97
19	126.29	141.47	135.25	116.54	129.52	67.62	156.30	150.51	174.27	139.84	24.46	155.17
20	130.06	138.29	138.10	115.15	134.56	171.74	159.98	143.78	153.42	158.42	184.74	126.83
21	126.26	130.99	125.42	126.00	145.71	156.30	159.17	146.70	153.25	162.72	152.90	131.78
22	137.55	128.98	122.08	139.46	88.46	163.14	177.89	154.75	142.88	38.46	139.14	136.83
23	139.82	128.40	129.92	155.89	146.14	182.53	162.40	155.66	140.45	144.42	139.49	155.01
24	134.80	130.78	160.86	93.20	141.46	138.18	161.52	149.54	150.24	167.23	163.49	132.86
25	128.98	135.28	86.67	172.88	133.98	187.17	180.40	144.72	150.48	148.34	1.86	115.33
26	130.03	140.61	148.61	127.14	140.43	153.23	145.38	149.87	146.56	140.72	155.45	89.65
27	132.91	115.84	121.23	126.48	139.47	151.71	148.18	151.81	140.38	143.12	132.67	114.00
28	146.70	130.37	128.70	141.18	155.25	168.93	159.54	158.40	140.13	152.24	135.36	121.04
29	139.34		131.14	146.42	142.72	180.10	181.97	153.02	149.18	38.90	127.15	116.60
30	129.42		130.86	135.07	145.58	148.10	168.37	145.81	146.88	139.37	136.58	142.05
31	129.31		121.54		159.89		171.68	129.74		171.50		131.26
<b>Monthly Total</b>	4075.92	3673.05	4112.05	3959.21	4278.19	4691.97	5205.71	5006.96	4743.30	4338.38	3877.36	4196.21

Day	January (ML/day)	February (ML/day)	March (ML/day)	April (ML/day)	May (ML/day)	June (ML/day)	July (ML/day)	August (ML/day)	September (ML/day)	October (ML/day)	November (ML/day)	December (ML/day)
<b>Monthly Minimum</b>	107.57	110.37	5.18	93.20	88.46	67.62	145.38	129.74	138.58	38.46	1.86	89.65
<b>Monthly Maximum</b>	159.86	147.09	180.21	172.88	159.89	192.77	189.10	194.69	189.31	172.99	184.74	155.17
<b>Monthly Average</b>	131.48	131.18	132.65	131.97	138.01	156.40	167.93	161.51	158.11	139.95	129.25	135.36

<b>Annual Total (ML)</b>	52,158.31
<b>Annual Minimum (ML/day)</b>	1.86
<b>Annual Maximum (ML/day)</b>	194.69
<b>Annual Average (ML/day)</b>	142.90

Note: (i) As per the water system's current Permit To Take Water (PTTW), the amount of raw water taken into the Lake Huron Water Treatment Plant cannot exceed 454.98 million litres/day.

## 2. Raw Water Instantaneous Peak Flow (ML/day)

Day	January (ML/day)	February (ML/day)	March (ML/day)	April (ML/day)	May (ML/day)	June (ML/day)	July (ML/day)	August (ML/day)	September (ML/day)	October (ML/day)	November (ML/day)	December (ML/day)
1	251	250	249	251	254	255	246	259	243	260	264	274
2	251	214	249	238	256	249	262	243	257	263	253	255
3	253	248	248	238	256	238	255	245	251	256	243	274
4	257	251	235	253	263	204	272	244	257	255	203	280
5	204	250	248	199	276	242	239	259	245	260	267	268
6	252	247	241	196	236	261	271	260	234	265	262	271
7	251	241	250	272	235	247	283	265	256	263	263	230
8	247	245	237	257	257	258	283	260	257	263	207	261
9	244	249	235	195	241	253	259	252	259	262	257	253
10	250	242	234	256	281	261	257	265	246	240	240	252
11	248	190	65	233	279	258	274	272	244	261	170	246
12	250	238	314	242	258	244	265	281	277	264	171	269
13	256	238	236	235	255	249	280	274	263	223	170	259
14	254	237	237	238	253	240	251	268	245	247	198	259
15	249	236	237	240	256	242	267	253	246	237	268	238
16	248	287	228	240	259	254	258	258	242	232	233	170
17	251	236	236	240	253	273	263	257	255	276	233	170
18	250	252	247	239	248	244	259	279	251	237	258	170
19	248	238	238	174	216	260	259	297	258	237	263	169
20	249	220	233	210	284	245	259	281	258	266	258	171
21	249	199	237	239	275	244	243	277	257	261	240	171
22	248	243	237	257	252	254	251	298	273	241	275	186
23	240	241	234	255	263	260	255	254	251	271	275	249
24	250	220	235	258	223	245	256	261	235	273	259	235
25	249	252	257	274	249	253	258	260	245	195	45	224
26	254	276	213	234	237	244	245	257	264	211	272	175
27	252	249	196	212	284	248	257	257	265	256	270	164
28	251	250	266	263	244	244	259	257	258	258	229	186
29	252		283	273	231	245	262	249	277	240	187	254
30	250		298	269	253	259	220	248	256	243	261	241
31	232		223		241		195	242		259		263

Day	January (ML/day)	February (ML/day)	March (ML/day)	April (ML/day)	May (ML/day)	June (ML/day)	July (ML/day)	August (ML/day)	September (ML/day)	October (ML/day)	November (ML/day)	December (ML/day)
Monthly Minimum	204	190	65	174	216	204	195	242	234	195	45	164
Monthly Maximum	257	287	314	274	284	273	283	298	277	276	275	280
Monthly Average	248	241	238	239	254	249	257	262	254	251	233	229

<b>Annual Minimum (ML/day)</b>	45.00
<b>Annual Maximum (ML/day)</b>	314
<b>Annual Average (ML/day)</b>	246

Note: (i) As per the water system's current Permit To Take Water (PTTW), the amount of raw water taken into the Lake Huron Water Treatment Plant cannot exceed 454.98 million litres/day. This converts to 5266 litres/second.

### 3. Treated Water Flow (ML/Day)

Day	January (ML/day)	February (ML/day)	March (ML/day)	April (ML/day)	May (ML/day)	June (ML/day)	July (ML/day)	August (ML/day)	September (ML/day)	October (ML/day)	November (ML/day)	December (ML/day)
1	105.66	119.53	131.13	135.66	134.12	133.31	145.76	146.72	135.55	149.83	134.37	132.66
2	110.47	129.66	136.76	136.52	125.88	139.20	155.36	147.22	158.59	167.44	136.03	131.23
3	132.98	137.48	127.54	131.18	123.68	144.64	164.66	145.88	155.94	145.72	117.31	140.36
4	127.30	121.65	139.31	131.04	126.13	174.56	173.16	172.35	153.12	151.36	116.41	143.50
5	106.29	144.36	155.91	133.07	120.86	141.68	167.31	174.21	155.27	147.89	131.48	146.04
6	126.45	107.48	132.10	120.15	128.59	131.93	161.23	172.23	146.11	142.69	107.38	143.98
7	133.50	145.05	143.10	134.50	124.38	152.57	182.59	177.71	146.61	140.43	135.52	133.86
8	132.58	129.51	128.96	103.46	136.28	148.51	156.65	165.45	141.18	144.65	115.18	138.60
9	154.66	123.70	130.25	131.74	143.86	145.49	149.16	177.03	153.21	142.00	120.86	132.86
10	132.41	123.78	171.74	125.96	132.60	143.76	160.24	156.54	176.63	138.79	130.05	136.82
11	127.95	122.84	2.02	138.04	144.80	138.95	158.47	178.54	166.14	128.09	127.56	132.36
12	130.16	130.35	177.81	132.12	137.88	152.61	155.35	174.65	157.80	131.78	144.13	129.42
13	131.78	138.54	170.32	126.86	154.30	189.58	169.01	190.45	185.95	124.82	96.63	134.27
14	134.34	126.57	131.66	133.01	127.05	157.07	166.95	176.45	171.60	134.72	143.72	149.99
15	126.18	131.21	122.95	122.65	142.43	155.71	174.05	175.14	167.51	159.41	137.31	127.98
16	121.69	127.86	130.18	132.52	148.72	158.60	173.39	156.37	175.46	43.08	126.58	140.90
17	133.69	122.57	130.37	124.72	140.86	176.03	179.78	155.98	167.21	169.12	134.50	112.69
18	123.52	131.85	132.06	130.46	129.46	190.36	155.62	148.87	182.98	161.49	139.62	133.61
19	124.20	139.76	132.79	112.65	127.57	66.07	153.73	145.64	170.59	136.89	22.91	146.66
20	124.73	136.35	135.52	112.59	132.13	167.59	156.11	140.66	148.67	154.32	180.30	123.61
21	118.74	129.32	122.56	123.52	144.33	154.00	149.68	143.79	149.06	159.55	148.78	128.79
22	141.40	126.80	119.18	136.81	84.99	159.55	174.18	151.36	138.49	40.93	135.02	127.09
23	137.76	126.41	127.41	152.84	143.41	180.46	158.81	151.94	136.16	140.86	135.38	150.82
24	132.68	128.88	158.86	89.70	138.79	135.09	157.94	145.63	146.40	162.57	159.46	128.88
25	128.59	133.15	83.34	169.37	131.09	184.59	176.16	140.69	146.83	144.17	1.13	111.16
26	128.09	138.46	146.94	125.21	138.52	150.06	142.51	145.85	141.81	136.68	146.52	85.85
27	128.30	113.12	118.03	124.55	136.44	148.57	145.35	147.35	136.21	138.82	128.31	110.40
28	139.82	127.82	125.57	139.00	151.04	166.31	155.51	148.02	135.75	148.19	130.84	117.11
29	136.22		128.46	144.36	139.88	177.26	178.76	142.86	144.96	36.84	122.54	112.91
30	128.63		127.88	132.13	143.32	145.76	165.53	142.79	142.68	131.51	131.68	137.88
31	127.01		118.58		158.04		168.20	126.51		167.22		126.89
<b>Monthly Total</b>	3987.78	3614.06	4039.29	3886.39	4191.43	4609.87	5031.21	4864.88	4634.47	4221.86	3737.51	4049.18

Day	January (ML/day)	February (ML/day)	March (ML/day)	April (ML/day)	May (ML/day)	June (ML/day)	July (ML/day)	August (ML/day)	September (ML/day)	October (ML/day)	November (ML/day)	December (ML/day)
<b>Monthly Minimum</b>	105.66	107.48	2.02	89.70	84.99	66.07	142.51	126.51	135.55	36.84	1.13	85.85
<b>Monthly Maximum</b>	154.66	145.05	177.81	169.37	158.04	190.36	182.59	190.45	185.95	169.12	180.30	150.82
<b>Monthly Average</b>	128.64	129.07	130.30	129.55	135.21	153.66	162.30	156.93	154.48	136.19	124.58	130.62

<b>Annual Total (ML)</b>	50867.93
<b>Annual Minimum (ML/day)</b>	1.13
<b>Annual Maximum (ML/day)</b>	190.45
<b>Annual Average (ML/day)</b>	139.36

Note: (i) As per the water system's current Municipal Drinking Water Licence, the rated capacity of the Water Treatment Plant is 340.0 million litres/day. The maximum daily flow of treated water from the treatment plant into the distribution system shall not exceed this value.

#### 4. Treated Water Instantaneous Peak Flow (ML/day)

Day	January (ML/day)	February (ML/day)	March (ML/day)	April (ML/day)	May (ML/day)	June (ML/day)	July (ML/day)	August (ML/day)	September (ML/day)	October (ML/day)	November (ML/day)	December (ML/day)
1	173	213	198	229	205	205	235	235	236	232	206	201
2	204	215	243	232	177	204	238	212	235	230	201	195
3	196	242	232	206	178	206	238	218	236	231	194	198
4	175	236	232	204	176	201	236	215	235	234	186	226
5	165	223	237	201	214	196	234	239	238	233	199	234
6	175	247	236	174	226	207	234	238	233	232	207	234
7	229	240	198	237	176	207	213	234	206	229	243	224
8	209	173	201	238	246	209	208	235	217	233	200	232
9	201	177	204	193	243	202	233	236	240	230	203	228
10	203	178	205	233	234	204	235	235	239	230	195	202
11	205	172	38	234	237	203	228	238	218	219	173	205
12	206	219	228	225	232	210	207	238	232	217	178	204
13	200	233	233	176	233	238	213	238	233	195	178	199
14	239	174	197	224	230	207	234	238	228	235	195	226
15	231	211	204	228	239	232	233	237	241	235	195	226
16	177	209	199	191	243	234	232	236	239	230	227	167
17	199	175	200	226	234	237	232	234	236	207	226	171
18	196	199	199	226	231	204	235	232	237	198	199	174
19	174	219	227	171	176	200	242	223	237	202	210	177
20	175	219	219	171	233	203	233	214	231	272	238	172
21	213	196	174	172	240	207	233	229	233	204	233	170
22	213	174	171	218	232	205	234	231	236	193	222	174
23	199	211	177	245	203	206	234	236	231	272	216	234
24	198	210	241	241	202	212	232	234	235	205	218	228
25	200	204	216	235	202	235	232	230	232	206	30	173
26	174	219	191	232	203	230	222	233	231	200	216	172
27	175	216	173	177	205	234	239	232	232	207	213	147
28	234	207	176	209	198	237	237	234	229	202	196	174
29	237		214	241	201	236	235	231	232	195	172	206
30	206		210	233	203	238	219	236	232	201	197	171
31	197		174		206		178	236		205		194

Day	January (ML/day)	February (ML/day)	March (ML/day)	April (ML/day)	May (ML/day)	June (ML/day)	July (ML/day)	August (ML/day)	September (ML/day)	October (ML/day)	November (ML/day)	December (ML/day)
<b>Monthly Minimum</b>	165	172	38	171	176	196	178	212	206	193	30	147
<b>Monthly Maximum</b>	239	247	243	245	246	238	242	239	241	272	243	234
<b>Monthly Average</b>	199	208	202	214	215	215	229	232	232	220	199	198

<b>Annual Minimum (ML/day)</b>	30.0
<b>Annual Maximum (ML/day)</b>	272
<b>Annual Average (ML/day)</b>	214

Note: (i) As per the water system's current Municipal Drinking Water Licence, the rated capacity of the Water Treatment Plant is 340.0 million litres/day. This converts to 3935 litres/second. The maximum daily flow of treated water from the treatment plant into the distribution system shall not exceed this value.

## Appendix B: 2025 Annual Report



**Annual Drinking Water Report**  
Drinking-Water Systems Regulation O. Reg. 170/03

<b>Drinking-Water System Number:</b>	210000791
<b>Drinking-Water System Name:</b>	<b>Lake Huron Primary Water Supply System (LHPWSS)</b>
<b>Drinking-Water System Owner:</b>	Lake Huron Primary Water Supply System Joint Board of Management
<b>Drinking-Water System Operating Authority:</b>	Ontario Clean Water Agency (OCWA)
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2025 through December 31, 2025

<p><b>Complete if your Category is Large Municipal Residential or Small Municipal Residential</b></p> <p><b>Does your Drinking-Water System serve more than 10,000 people?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></p> <p>Lake Huron and Elgin Area Water Supply Systems c/o Regional Water Supply Division 235 North Centre Road, Suite 200 London, ON N5X 4E7 <a href="https://huroneginwater.ca/">https://huroneginwater.ca/</a></p> <p>Lake Huron Water Treatment Plant 71155 Bluewater Hwy. Grand Bend, ON</p>	<p><b>Complete for all other Categories.</b></p> <p><b>Number of Designated Facilities served:</b> N/A</p> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve?</b> Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p><b>Number of Interested Authorities you report to:</b> N/A</p> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?</b> Yes <input type="checkbox"/> No <input type="checkbox"/></p>
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**Annual Drinking Water Report**  
Drinking-Water Systems Regulation O. Reg. 170/03

**List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:**

**Systems that receive their drinking water from the LHPWSS:**

<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>
City of London Distribution System	260004917
Bluewater Lakeshore Distribution System	260006542
Hensall Zurich Distribution System	260091650
East Lambton Shores Water Distribution System	260006568
Lucan Biddulph Distribution System	260003071
Middlesex Centre Distribution System	260004202
North Middlesex Distribution System	260006529
Strathroy-Caradoc Distribution System	260080106
South Huron Water Distribution System	220001520

**Systems that may receive their drinking water from the LHPWSS:**

<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>
Municipality of Lambton Shores (West Lambton Shores Distribution System) *Normally supplied by the Lambton Area Water Supply System (LAWSS) but a connection to the LHPWSS exists	260006581

**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.**

- 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 \_\_\_\_\_

**Annual Drinking Water Report**  
Drinking-Water Systems Regulation O. Reg. 170/03

**Describe your Drinking-Water System**

The Lake Huron Primary Water Supply System (LHPWSS) employs pre-chlorination, screening, powder activated carbon addition (seasonally on an as-required basis), coagulation, flocculation, sedimentation, dual-media filtration, post-chlorination, and pH adjustment using sodium hydroxide to treat raw water obtained from Lake Huron. The intake crib and raw water intake pipe have an estimated gross capacity of 454.6 megalitres/day (MLD). The Lake Huron Water Treatment Plant (WTP) rated capacity is 340.0 MLD.

A Residuals Management Facility (RMF) providing equalization, clarification, sediment thickening and dechlorination is also housed in the main complex. Thickened sediment is dewatered by centrifuges and the sediment is sent to the landfill for final disposal. Clarified and dechlorinated liquid streams are sent back to Lake Huron through the plant drain via the diversion chamber.

The transmission system is comprised of the McGillivray Booster Pumping Station and Reservoir, the Exeter-Hensall Booster Pumping Station and Reservoir, Arva Terminal Reservoir, Komoka-Mt. Brydges Booster Pumping Station (PS#4) and associated interconnecting transmission water mains, which includes the primary, Strathroy-Caradoc, Exeter-Hensall, and Komoka-Mt. Brydges transmission water mains.

The drinking water system is monitored at various locations throughout the system via a Supervisory Control and Data Acquisition (SCADA) system.

**List all water treatment chemicals used over this reporting period**

Filter Aid Polymer (on an as-required basis)  
Aluminum Sulphate  
Powder Activated Carbon (PAC)  
Chlorine Gas  
Sodium Hydroxide  
Sodium Hypochlorite (Exeter-Hensall Pumping Station)  
Dewatering Polymer (Residuals Management Facility)  
Sodium Bisulphite (Residuals Management Facility)

**Were any significant expenses incurred to?**

- Install required equipment
- Repair required equipment
- Replace required equipment

**Annual Drinking Water Report**  
Drinking-Water Systems Regulation O. Reg. 170/03

**Please provide a brief description and breakdown of monetary expenses incurred:**

**Capital and Maintenance Projects:**

- Distressed pipeline segment replacements
- Maintenance shop overhead door replacement
- Safety railing replacements (Flocculation area and North elevator stairwells, Arva Valve House)
- Generator fuel system spill sensor installation
- Low lift pump check valve and isolation valve replacements
- Chlorine line replacements (Chlorine injectors to Low lift)
- Interior lighting and emergency lighting upgrades (High lift and maintenance shop areas)
- Remote monitoring station generator connections
- Chlorine system switchover valve replacement
- Roof drain piping replacements (Flocculation area)
- Chlorine building electric heater installation
- Security upgrades (remote stations gate automation, intercom, card access, cameras, and exterior lighting upgrades)
- WTP high lift discharge flowmeter replacements
- Exeter-Hensall Pumping Station chlorine injection point relocation
- Instrumentation upgrades (in-line pH analyzers, handheld pocket colorimeters, benchtop zeta potential analyzer)
- Pipeline chamber flood prevention upgrades
- Pipeline pressure regulating valve upgrades
- Remote monitoring station enclosure upgrades and Uninterruptible Power Supply (UPS) installation
- Main line valve repair (GV7B)
- McGillivray Pumping Station inlet valve upgrades
- McGillivray Pumping Station discharge flow meter replacement
- McGillivray Pumping Station Heating, Ventilation & Air Conditioning (HVAC) and electrical upgrade
- IT Asset replacement program
- WTP seagull control system
- Sodium hydroxide system upgrades
- Programmable Logic Controller (PLC) replacements
- Raw water actuator replacements

**Annual Drinking Water Report**  
 Drinking-Water Systems Regulation O. Reg. 170/03

**Studies & Design:**

- Powder Activated Carbon (PAC) system upgrade
- Oneida Transmission Pipeline
- Water Treatment Plant (WTP) Administration Building Extension and Site Redevelopment
- Dechlorination at remote stations (Arva Terminal Reservoir)
- Flow Control Program Study
- Master Water Plan Update
- WTP Surge System rehabilitation – condition assessment

**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**

<b>Incident Report Date</b>	<b>Parameter</b>	<b>Result</b>	<b>Unit of Measure</b>	<b>Corrective Action</b>	<b>Corrective Action Date</b>
June 3, 2025	Total Coliform	1	cfu/100 mL	Adverse Water Quality Incident (AWQI) reported (reference #168440). Resample upstream, downstream and at the AWQI location. All resample test results were non-detectable for Total Coliform.	June 6, 2025

**Annual Drinking Water Report**  
Drinking-Water Systems Regulation O. Reg. 170/03

**Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.**

<b>Location</b>	<b>Number of Samples</b>	<b>Range of E. coli Results (CFU/100mL) (min #)-(max #)</b>	<b>Range of Total Coliform Results (CFU/100mL) (min #)-(max #)</b>	<b>Range of HPC Results (CFU/1mL) (min #)-(max #)</b>
Raw Water	105	(0)-(210)	(0)-(11,400)	(<10)-(>2,000)
Treated Water (WTP)	240	(0)-(0)	(0)-(0)	(<10)-(50)
Distribution (McGillivray PS)	57	(0)-(0)	(0)-(1)*	(<10)-(10)
Distribution (North Exeter)	65	(0)-(0)	(0)-(0)	(<10)-(10)
Distribution (South Exeter)	56	(0)-(0)	(0)-(0)	(<10)-(10)
Distribution (Exeter-Hensall Reservoir)	52	(0)-(0)	(0)-(0)	(<10)-(40)
Distribution (Komoka-Mt. Brydges PS)	52	(0)-(0)	(0)-(0)	(<10)-(10)

\*Maximum Total Coliform result of 1 CFU/100mL was reported as an AWQI (reference #168440) on June 3, 2025. Resample results were all non-detectable for Total Coliform.

**Annual Drinking Water Report**  
Drinking-Water Systems Regulation O. Reg. 170/03

**Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.**

<b>Parameter</b>	<b>Number of Samples</b>	<b>Range of Results (min #)-(max #)</b>
Treated Water Free Chlorine (mg/L)	Continuous Monitoring	(0.44)-(2.00)
Filter #1 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.017)-(0.129)
Filter #2 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.030)-(0.252)
Filter #3 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.033)-(0.285)
Filter #4 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.019)-(0.079)
Filter #5 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.018)-(0.318)
Filter #6 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.020)-(0.206)
Filter #7 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.018)-(0.610)
Filter #8 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.020)-(0.124)
Filter #9 - Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.024)-(0.900)
Filter #10- Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.021)-(0.532)
Filter #11- Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.015)-(1.998)*
Filter #12- Filtered Water Turbidity (NTU)	Continuous Monitoring	(0.021)-(1.999)*
Distribution Grab Samples Free Chlorine (mg/L)	680	(0.62)-(1.41)

\*Maximum turbidity >1 NTU was less than 3 minutes in duration, no Adverse Water Quality Incident (AWQI) as a result of the spike.

Filter performance criteria of <0.3NTU 95% of the time for the month was met for all 12 filters.

**Annual Drinking Water Report**  
Drinking-Water Systems Regulation O. Reg. 170/03

**Summary of Inorganic parameters tested during this reporting period**

*(\*All tests were conducted on treated water leaving the WTP unless otherwise noted)*

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
Antimony	January 22, 2025	Not Detected	mg/L	NO
Arsenic	January 22, 2025	Not Detected	mg/L	NO
Barium	January 22, 2025	0.0155	mg/L	NO
Boron	January 22, 2025	0.016	mg/L	NO
Cadmium	January 22, 2025	Not Detected	mg/L	NO
Chromium	January 22, 2025	0.00013	mg/L	NO
Lead (Komoka Mt- Brydges Monitoring Station #2)	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	Not Detected Not Detected Not Detected 0.00001	mg/L mg/L mg/L mg/L	NO
Mercury	January 22, 2025	Not Detected	mg/L	NO
Selenium	January 22, 2025	0.00014	mg/L	NO
Sodium	January 22, 2025	14.1	mg/L	NO
Uranium	January 22, 2025	0.000057	mg/L	NO
Fluoride	January 22, 2025	Not Detected	mg/L	NO
Nitrite	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	Not Detected Not Detected Not Detected Not Detected	mg/L mg/L mg/L mg/L	NO
Nitrate	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	0.318 0.757 0.233 0.234	mg/L mg/L mg/L mg/L	NO

**Annual Drinking Water Report**  
Drinking-Water Systems Regulation O. Reg. 170/03

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

(\*All tests were conducted on treated water leaving the WTP unless otherwise noted)

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
Alachlor	January 22, 2025	Not Detected	mg/L	NO
Atrazine + N-dealkylated metabolites	January 22, 2025	0.00003	mg/L	NO
Azinphos-methyl	January 22, 2025	Not Detected	mg/L	NO
Benzene	January 22, 2025	Not Detected	mg/L	NO
Benzo(a)pyrene	January 22, 2025	Not Detected	mg/L	NO
Bromoxynil	January 22, 2025	Not Detected	mg/L	NO
Carbaryl	January 22, 2025	Not Detected	mg/L	NO
Carbofuran	January 22, 2025	Not Detected	mg/L	NO
Carbon Tetrachloride	January 22, 2025	Not Detected	mg/L	NO
Chlorpyrifos	January 22, 2025	Not Detected	mg/L	NO
Diazinon	January 22, 2025	Not Detected	mg/L	NO
Dicamba	January 22, 2025	Not Detected	mg/L	NO
1,2-Dichlorobenzene	January 22, 2025	Not Detected	mg/L	NO
1,4-Dichlorobenzene	January 22, 2025	Not Detected	mg/L	NO
1,2-Dichloroethane	January 22, 2025	Not Detected	mg/L	NO
1,1-Dichloroethylene (vinylidene chloride)	January 22, 2025	Not Detected	mg/L	NO
Dichloromethane	January 22, 2025	Not Detected	mg/L	NO
2-4 Dichlorophenol	January 22, 2025	Not Detected	mg/L mg/L	NO
2,4-Dichlorophenoxy acetic acid (2,4-D)	January 22, 2025	Not Detected	mg/L	NO
Diclofop-methyl	January 22, 2025	Not Detected	mg/L	NO
Dimethoate	January 22, 2025	Not Detected	mg/L	NO
Diquat	January 22, 2025	Not Detected	mg/L	NO
Diuron	January 22, 2025	Not Detected	mg/L	NO
Glyphosate	January 22, 2025	Not Detected	mg/L	NO
Haloacetic Acids (HAA's) (Arva Terminal Reservoir)	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	Not Detected 0.0056 0.0059 Not Detected	mg/L mg/L mg/L mg/L	NO

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<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
Haloacetic Acids (HAA's) (Arva Terminal Reservoir) Running Annual Average	2025	< 0.0053	mg/L	NO
Haloacetic Acids (HAA's) (Exeter-Hensall Monitoring Station #3)	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	0.0150 0.0124 0.0070 0.0071	mg/L mg/L mg/L mg/L	NO
Haloacetic Acids (HAA's) (Exeter-Hensall Monitoring Station #3) Running Annual Average	2025	0.0104	mg/L	NO
Haloacetic Acids (HAA's) (Komoka Mt-Brydges Monitoring Station #2)	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	0.0117 0.0128 0.0070 0.0054	mg/L mg/L mg/L mg/L	NO
Haloacetic Acids (HAA's) (Komoka Mt-Brydges Monitoring Station #2) Running Annual Average	2025	0.0092	mg/L	NO
Haloacetic Acids (HAA's) (Strathroy-Caradoc Monitoring Station #2)	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	Not Detected 0.0058 0.0064 Not Detected	mg/L mg/L mg/L mg/L	NO
Haloacetic Acids (HAA's) (Strathroy-Caradoc Monitoring Station #2) Running Annual Average	2025	< 0.0053	mg/L	NO
Malathion	January 22, 2025	Not Detected	mg/L	NO

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<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
2-Methyl-4-chlorophenoxyacetic acid (MCPA)	January 22, 2025	Not Detected	mg/L	NO
Metolachlor	January 22, 2025	Not Detected	mg/L	NO
Metribuzin	January 22, 2025	Not Detected	mg/L	NO
Monochlorobenzene	January 22, 2025	Not Detected	mg/L	NO
Paraquat	January 22, 2025	Not Detected	mg/L	NO
Pentachlorophenol	January 22, 2025	Not Detected	mg/L	NO
Phorate	January 22, 2025	Not Detected	mg/L	NO
Picloram	January 22, 2025	Not Detected	mg/L	NO
Polychlorinated Biphenyls (PCB)	January 22, 2025	Not Detected	mg/L	NO
Prometryne	January 22, 2025	Not Detected	mg/L	NO
Simazine	January 22, 2025	Not Detected	mg/L	NO
Total Trihalomethanes (Arva Terminal Reservoir)	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	0.016 0.022 0.024 0.021	mg/L mg/L mg/L mg/L	NO
Total Trihalomethanes (THMs) (Arva Terminal Reservoir) Running Annual Average	2025	0.021	mg/L	NO
Total Trihalomethanes (Exeter-Hensall Monitoring Station #3)	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	0.031 0.027 0.032 0.032	mg/L mg/L mg/L mg/L	NO
Total Trihalomethanes (Exeter-Hensall Monitoring Station #3) Running Annual Average	2025	0.031	mg/L	NO
Total Trihalomethanes (Komoka Mt-Brydges Monitoring Station #2)	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	0.022 0.023 0.030 0.027	mg/L mg/L mg/L mg/L	NO

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<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
Total Trihalomethanes (Komoka Mt-Brydges Monitoring Station #2) Running Annual Average	2025	0.026	mg/L	NO
Total Trihalomethanes (Strathroy-Caradoc Monitoring Station #2)	January 14, 2025 April 10, 2025 July 10, 2025 October 8, 2025	0.019 0.021 0.027 0.025	mg/L mg/L mg/L mg/L	NO
Total Trihalomethanes (Strathroy-Caradoc Monitoring Station #2) Running Annual Average	2025	0.023	mg/L	NO
Terbufos	January 22, 2025	Not Detected	mg/L	NO
Tetrachloroethylene	January 22, 2025	Not Detected	mg/L	NO
2,3,4,6- Tetrachlorophenol	January 22, 2025	Not Detected	mg/L	NO
Triallate	January 22, 2025	Not Detected	mg/L	NO
Trichloroethylene	January 22, 2025	Not Detected	mg/L	NO
2,4,6-Trichlorophenol	January 22, 2025	Not Detected	mg/L	NO
Trifluralin	January 22, 2025	Not Detected	mg/L	NO
Vinyl Chloride	January 22, 2025	Not Detected	mg/L	NO

**NOTE:** During 2025, no Inorganic or Organic parameter(s) exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

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**Summary of Additional Legislative Samples during this reporting period**

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
Microcystin (Raw Water)	June 2, 2025 to November 3, 2025	All results <0.1	µg/L	NO
Microcystin (Treated Water)	June 2, 2025 to November 3, 2025	All results <0.1	µg/L	NO
RMF Total Suspended Solids (Effluent Discharge)	January 1, 2025 to December 31, 2025 (Annual Average)	6	mg/L	NO
RMF Total Chlorine Residual (Effluent Discharge)	January 1, 2025 to December 31, 2025 (Annual Average)	0.00	mg/L	NO