Lambton Area Water Supply System



Waterworks # 210000906 System Category – Large Municipal Residential

Annual Summary Report

Prepared For: Lambton Area Water Supply System Joint Board of Management

Reporting Period of January 1st – December 31st, 2024

Issued: February 19, 2024

Revision: 0

Operating Authority:



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Overview

This report fulfills requirements of Ontario Regulation 170/03 Schedule 22. By March 31st, 2025 the report must be provided to members of the LAWSS Joint Board of Management. This summary report is available to anyone free of charge on the LAWSS website (www.lawss.org) or upon request.

Location	Address	Telephone
Lambton Area Water Supply	1215 Fort St. Sarnia, ON	519-344-7429
System	N7V 1M1	

Summary of Non-Compliance

Adverse Water Quality Incidents

Date	AWQI#	Location Problem Details Legislation		Legislation	Corrective Action Taker		
There were no adverse water quality incidents reported during the reporting period.							

Non-Compliance

On Nov. 20, 2024 annual maintenance on the WTP screens wet wells was being conducted. During the cleaning highly turbid water was flushed through astorm drain to an outfall into the St. Clair River. The maintenance activity was immediately stopped after being notified of the issue and a report was made to the Spills Action Centre, Ref #1-DMDEHY. The maintenance activity was resumed Nov. 28, 2024 ensuring that turbid water wasn't released through the storm drain.

Non-Compliance Identified in a Ministry Inspection:

The routine MECP Inspections have an Inspection Rating Record. This record evaluates the system to provide information for the owner/operator on areas that need to be improved. The particular areas that were evaluated for LAWSS were: Capacity Assessment, Certification and Training, Logbooks, Operations Manuals, Reporting and Corrective Actions, Source, Treatment Processes, and Water Quality Monitoring. This system received 0 out of 447 non-compliance ratings and as such received 100% for the Final Inspection Rating.

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status		
There were no non-compliances identified in the Inspection Report.						

Flows

The Permit to Take Water (Number 3560-APLNRJ) states the maximum amount of water taken is 182,000 m³/day. The daily maximum amount of raw water taken in 2024 was 85,044 m³/day on July 8, 2024, which equates to 46.7% of the daily allowable amount.

The rated capacity specified in the Municipal Drinking Water Licence (Licence Number: 020-101) for the Lambton Area Water Supply System is 181,844 m³/day. The maximum treated daily flow for the reporting period was 82,692 m³/day on July 7, 2024, which equates to 45.5% of the design capacity.

Raw Water Flows

The raw water flows are regulated under the Permit to Take Water. Maximum allowable water-taking for LAWSS according to this permit is 182,000 m3/day. The 2024 daily raw flow was submitted to the Ministry electronically under permit # 3560-APLNRJ. A copy of the data that was submitted are attached in Appendix A.

Raw Water Average Daily Flow Total, Max Daily Flow Total, and Peak Daily Flow Rate by Month

Month	Daily Flow Average (m³)	% of Max Allowable Water-	Daily Flow Maximum (m³)	% of Max Allowable Water-	Daily Flow Peak Flow Rate (L/s)	% of Max Allowable Water-	
		Taking*		Taking*		Taking*	
Jan 2024	47411	26.1	53000	29.1	717.9	34.1	
Feb 2024	46742	25.7	57786	31.8	1182.6	56.2	
Mar 2024	45837	25.2	59559	32.7	775.3	36.8	
Apr 2024	47095	25.9	54276	29.8	738.8	35.1	
May 2024	55607	30.6	65904	36.2	1183.1	56.2	
Jun 2024	65399	36.0	83290	45.8	1194.1	56.7	
Jul 2024	65202	35.9	85044	46.7	1294.7	61.5	
Aug 2024	61932	34.1	77849	42.8	1193.1	56.7	
Sep 2024	62043	34.1	73430	40.4	1187.0	56.4	
Oct 2024	51110	28.1	62655	34.4	1098.0	52.1	
Nov 2024	46608	25.6	52638	28.9	1139.4	54.1	
Dec 2024	46757	25.7	54610	30.0	1131.5	53.7	

Treated Water Flows

The water that is treated is regulated under the Municipal Drinking Water Licence # 020-101, in which the rated capacity for the system is $181,844 \text{ m}^3/\text{d}$.

<u>Treated Water Average Daily Flow Total, Max Daily Flow Total, and Peak Daily Flow Rate by Month</u>

Month	Daily Flow Average	% of Design Capacity	Daily Flow Maximum	% of Design Capacity	Daily Flow Maximum	% of Design Capacity
	(m³)	Capacity	(m³)	Capacity	(L/s)	Capacity
Jan 2024	46332	30.5	55399	30.5	1143.8	54.3
Feb 2024	45714	28.5	51902	28.5	980.3	46.6
Mar 2024	44676	30.1	54639	30.0	962.8	45.7
Apr 2024	46179	27.9	50678	27.9	1009.9	48.0
May 2024	54620	34.8	63268	34.8	1075.3	51.1
Jun 2024	64365	45.4	82604	45.4	1228.4	58.4
Jul 2024	65876	54.8	82692	45.5	1099.4	52.2
Aug 2024	61720	45.4	82470	45.4	1127.5	53.6
Sep 2024	60600	39.4	71760	39.5	1116.7	53.1
Oct 2024	50756	31.1	56571	31.1	1010.4	48.0
Nov 2024	46139	30.5	55511	30.5	840.3	39.9
Dec 2024	45926	28.7	52149	28.7	1143.1	54.3

Revision History

Date	Revision #	Revision Notes
Feb. 19, 2025	0	Created report.

Appendix A

Permit to Take Water (PTTW) Data

Annual Water Taking and Transfer Report

From 1/1/2024 To 12/31/2024 LAMBTON AREA WATER SUPPLY SYSTEM PTTW # 3560-APLNRJ

Flow Recorded in m³/d

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	45640	47151	44000	47342	50117	62135	73477	70089	61235	54002	47594	46834
2	46120	44202	47210	46392	60775	51225	59400	60260	63434	54756	52638	47942
3	45939	48180	46720	48446	52052	68977	73598	75619	64800	57250	48412	45890
4	47468	43890	46358	50310	40075	62653	76104	66259	61220	50806	50266	40458
5	46333	51121	45603	46021	57559	56938	64274	59857	59500	50697	49270	43830
6	46478	41087	46219	45720	60634	51880	64030	45731	60856	62655	50476	48591
7	50392	48742	41750	43827	51501	69752	75012	63002	51442	58022	47422	45471
8	42803	47390	44962	44802	57075	60900	85044	56490	67312	49290	47382	45490
9	45795	50802	44749	49900	50992	59201	62904	60064	52330	51353	43740	53976
10	48412	41695	40687	43663	53733	58501	58284	57764	67400	59388	46310	41586
11	48500	47717	45075	45337	49607	62126	55410	61326	60798	53339	43996	47688
12	45422	50006	48337	48710	46935	65633	56642	60186	66838	50955	49204	54610
13	45778	44650	42547	45430	57898	76640	63554	73120	66534	50555	44258	47918
14	43464	44718	45412	42971	49057	73488	62594	60093	61970	48851	45112	44689
15	51455	49085	48291	51035	56186	68939	71758	67886	72860	50223	42218	45226
16	53000	46897	45369	49549	55651	65875	49482	54611	73260	50706	47858	50558
17	42145	46356	43032	45506	58699	75157	63128	57740	70401	49550	50458	47299
18	48451	41816	45098	47019	58670	83290	53118	55790	66799	50551	44466	48405
19	51903	48503	46154	51313	60040	71336	60234	57609	73430	49526	49596	45041
20	49316	48508	44347	43003	55040	72630	62860	55141	67656	47034	32400	47838
21	51984	46717	39828	44569	60900	76994	57790	54650	63478	48389	50714	45417
22	45448	43256	59559	49365	58082	67660	71470	60510	63847	46910	51810	46317
23	47943	50880	44534	43549	65904	60410	66944	62487	53789	47543	45104	47320
24	48910	47559	50420	45632	65434	69504	55871	64011	51840	51758	46596	49350
25	47349	57786	47301	46857	59922	68446	60095	68973	56600	48599	42268	49113
26	45587	46289	42820	47982	59641	71330	67460	77849	60175	46091	45924	44305
27	46520	42870	45431	54276	53966	59340	67776	62150	62385	45099	49322	45618
28	47966	43671	48895	49131	47677	65471	73330	58968	52500	45621	38480	45383
29	45557	43969	44174	44542	53313	50131	70994	60206	48279	52969	49328	45778
30	50450		45540	50649	61070	55421	63630	68574	58323	57111	45612	47351
31	47217		50530		55617		74993	62863		44799		44175