Janetville Drinking Water System

2025 Annual Water Report

Drinking Water System Number: 220006455

Drinking Water System Operating Authorities: City of Kawartha Lakes and Ontario Clean Water Agency

Drinking Water System Category: Large Municipal Residential

Reporting Period: January 1st – December 31st, 2025

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Annual Drinking Water Report
City of Kawartha Lakes

Kawartha Lakes
Jump In

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2025 Annual Drinking Water System Summary Report

General Information

The City of Kawartha Lakes prepares a report summarizing system operation and water quality for every municipal drinking water system annually. This report has been prepared to satisfy the annual reporting requirements in O. Reg. 170/03 Section 11 and Schedule 22. The annual reports will be available to residents at the City of Kawartha Lakes Public Works Administration Office by appointment and the City's website. Notification that the reports are available free of charge will be made on the City of Kawartha Lakes website. The City of Kawartha Lakes Public Works Administration Office is located at 322 Kent Street West in Lindsay, Ontario.

This system does not serve more than 10,000 residences.

Drinking Water System Number: 220006455
Drinking Water System Name: Janetville Drinking Water System
Drinking Water System Owner: City of Kawartha Lakes
Drinking Water System Category: Large Municipal Residential
Reporting Period: January 1, 2025 – December 31, 2025

Compliance Summary

Table 1. Drinking Water Compliance Summary

	Number of Events	Date (yyyy/mm/dd)	Details
Ministry (MECP) Inspections	1	2025 04 29	Unannounced Focused Drinking Water Inspection – Final Inspection Rating of 100%
Adverse Water Quality Incidents (AWQIs)	2	2025 12 10	Low pressure event due to low chlorine (CT met)
		2025 12 13	Low pressure event due to high lift pump failure
Non-Compliances	0		
Boil Water Advisories	0		
Health and Safety	0		

Drinking Water System Description

The Janetville drinking water system is a large municipal residential drinking water system serving the Hamlet of Janetville within the City of Kawartha Lakes. The drinking water system is classified as a Class II Water Distribution and Supply subsystem in accordance with O. Reg. 128/04.

Source Water

The water supply for the system is obtained from three groundwater wells identified as Well #3, Well #4, and Well #5. These wells are designated as non-GUDI, meaning they are not considered groundwater under the direct influence of surface water.

Water Treatment Facility

The Janetville water treatment facility consists of a sodium hypochlorite disinfection system, and an iron sequesteration system utilizing sodium silicate system for iron removal. The facility includes online continuous monitoring for chlorine residual and turbidity to ensure regulatory compliance.

Treated water is stored within a reservoir/clearwell and hydropneumatic tanks prior to distribution. A high lift pumping system delivers treated water to the distribution system.

A diesel generator is located onsite to provide standby power to the water treatment facility in the event of a power failure.

Distribution System

The distribution system consists of approximately four and a half kilometres of PVC watermain and is not rated for fire protection. There are no additional treated water storage facilities, chlorine boosting stations, secondary disinfection processes, or pressure boosting capabilities within the control of the distribution system.

Table 2. Treatment Chemicals Used

Chemical Name	Use	Supplier
Sodium Hypochlorite	Disinfection	Jutzi Water Technologies
Sodium Silicate	Iron Sequestering	Jutzi Water Technologies

Summary of Non-Compliance

Adverse Water Quality Incidents

Table 3. Adverse Water Quality Incidents

Date (yyyy/mm/dd)	AWQI #	Location	Problem	Details	Legislation	Corrective Action Taken
2025 12 10	171020	Distribution	Low pressure	Low chlorine locked out facility causing low pressure	O. Reg. 170/03	CT met, restore pressure, check system operations, flush distribution system, take bacti samples and chlorine residuals. Results all clear on samples.
2025 12 13	171059	Distribution	Low pressure	High temperature within facility caused high lift pumps to fault, creating low pressure.	O. Reg. 170/03	Pressure restored, check system operations, flush distribution system, take bacti samples and chlorine residuals. Results all clear on samples.

Non-Compliance

There were no non-compliances reported during the reporting period.

Non-Compliance Identified in a Ministry Inspection

There were no non-compliances identified in a Ministry Inspection during this period.

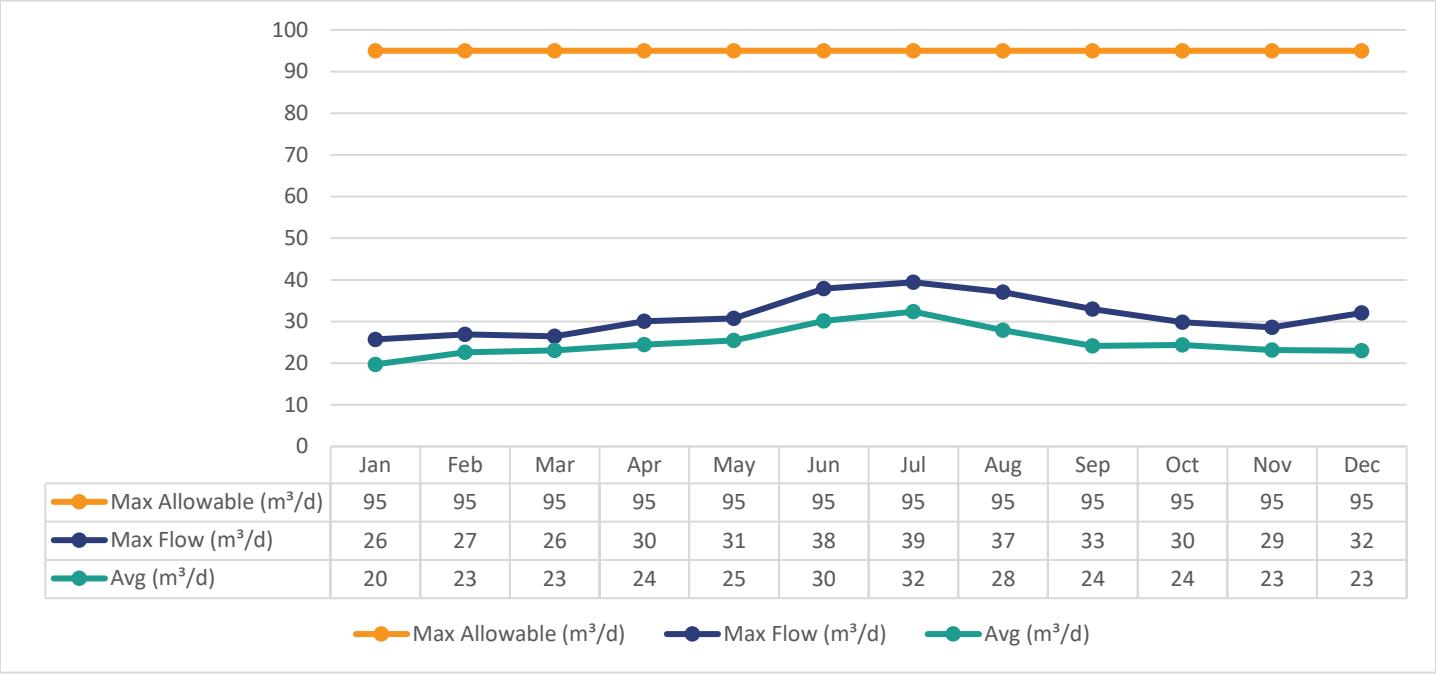
Flows

The Janetville Drinking Water System is operating on average under half the rated capacity. The rated capacity of the system (treated water flows) is 449 m^3/day.

Raw Water Flows

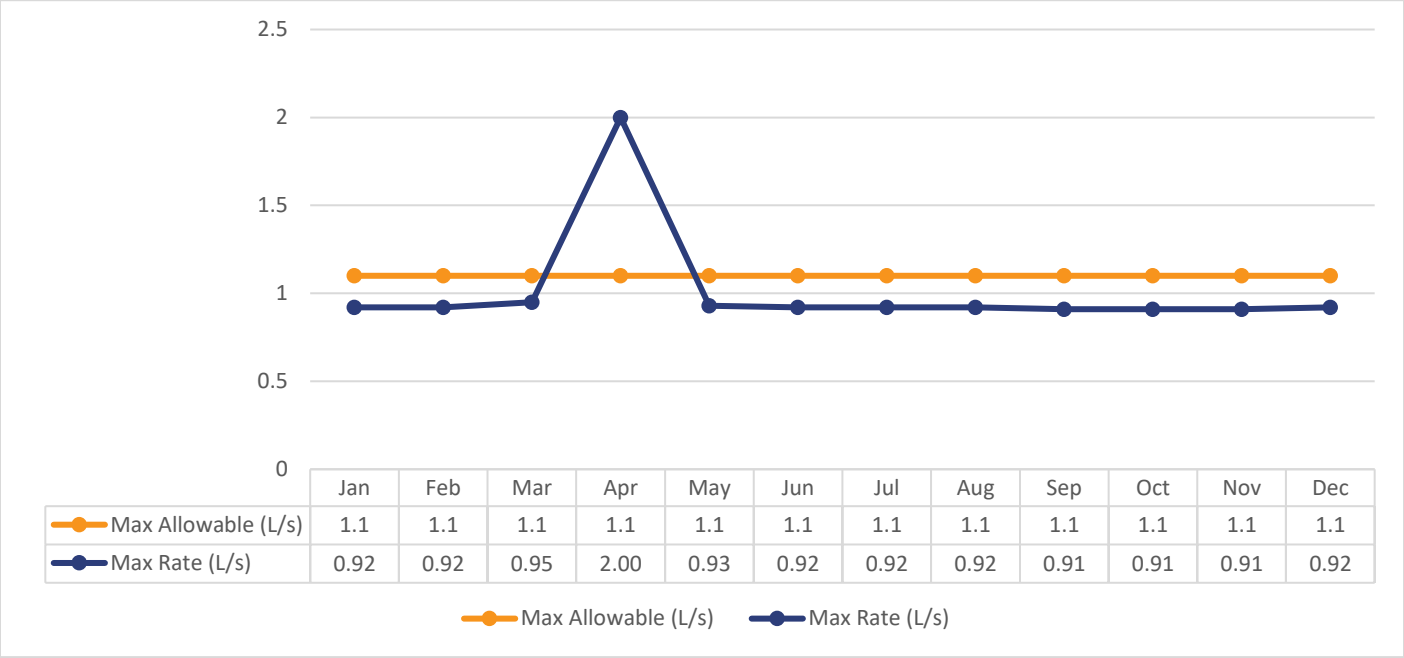
The raw water flows are regulated under the Permit to Take Water. Raw flow data for 2025 was submitted to the Ministry of Environment, Conservation and Parks (MECP) electronically under permit #5583-AQFKVW. The confirmation of the data that was submitted is attached in Appendix A. The Permit to Take Water compliance criteria is in litres per minute (L/min) but for the purposes of this report the flow rate is reported in litres per second (L/sec) based on industry standard for flow monitoring recording.

Graph 1. Total Monthly Flows (m³/d) – Well #3 (Max Allowable PTTW)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Allowable (m³/d)	95	95	95	95	95	95	95	95	95	95	95	95
Max Flow (m³/d)	26	27	26	30	31	38	39	37	33	30	29	32
Avg (m³/d)	20	23	23	24	25	30	32	28	24	24	23	23

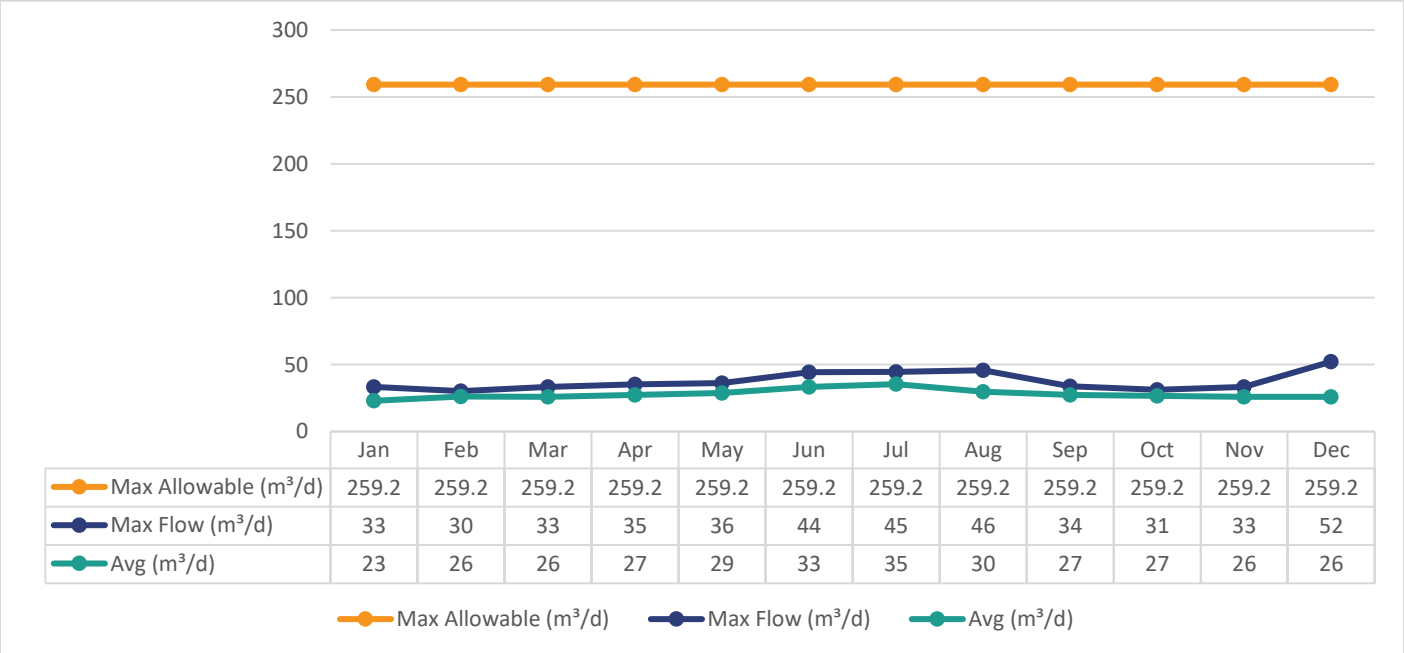
Graph 2. Monthly Rated Flows (L/s) – Well #3 (Max Allowable Rate PTTW)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Allowable (L/s)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Max Rate (L/s)	0.92	0.92	0.95	2.00	0.93	0.92	0.92	0.92	0.91	0.91	0.91	0.92

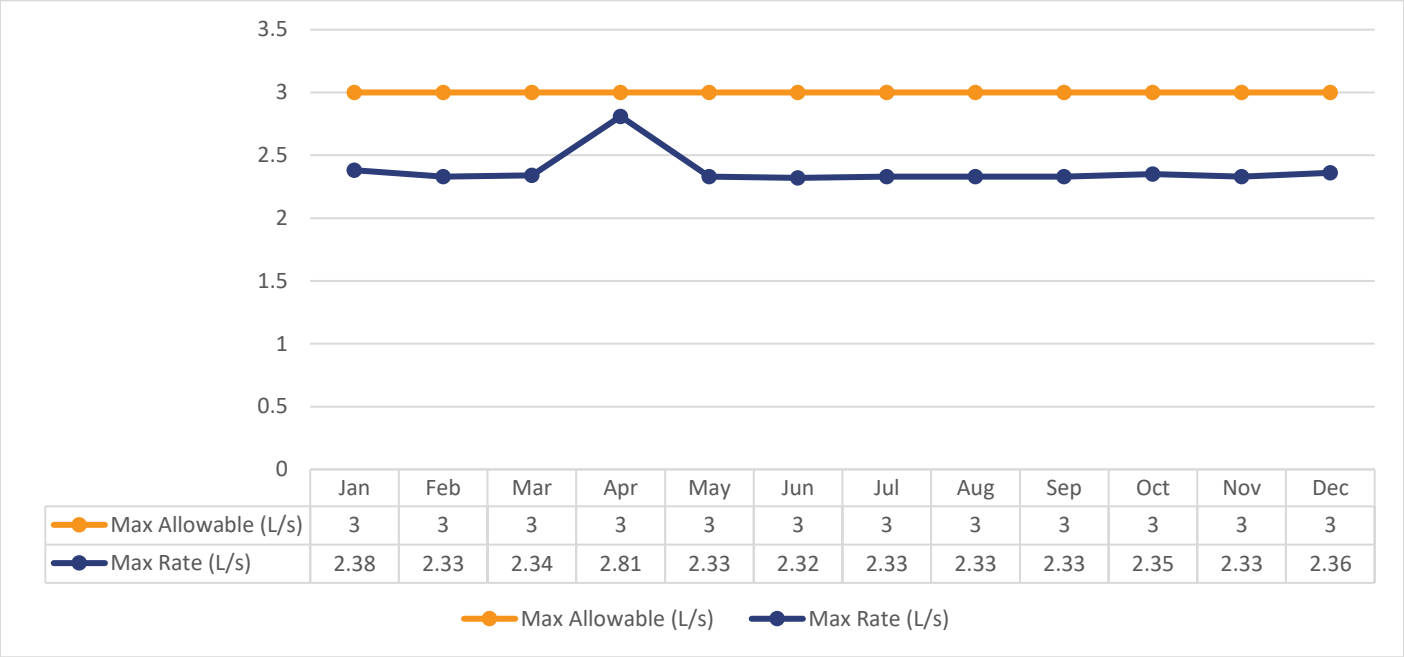
Note: Certain operational circumstances could cause results to be temporarily outside of the allowable rates. In April 2025, the allowable rate was momentarily surpassed as a result of annual calibration of the flow meter and did not indicate a true exceedance. All spikes are reviewed for compliance with O. Reg. 170/03, any true exceedance would be documented within the report.

Graph 3. Total Monthly Flows (m³/d) – Well #4 (Max Allowable PTTW)



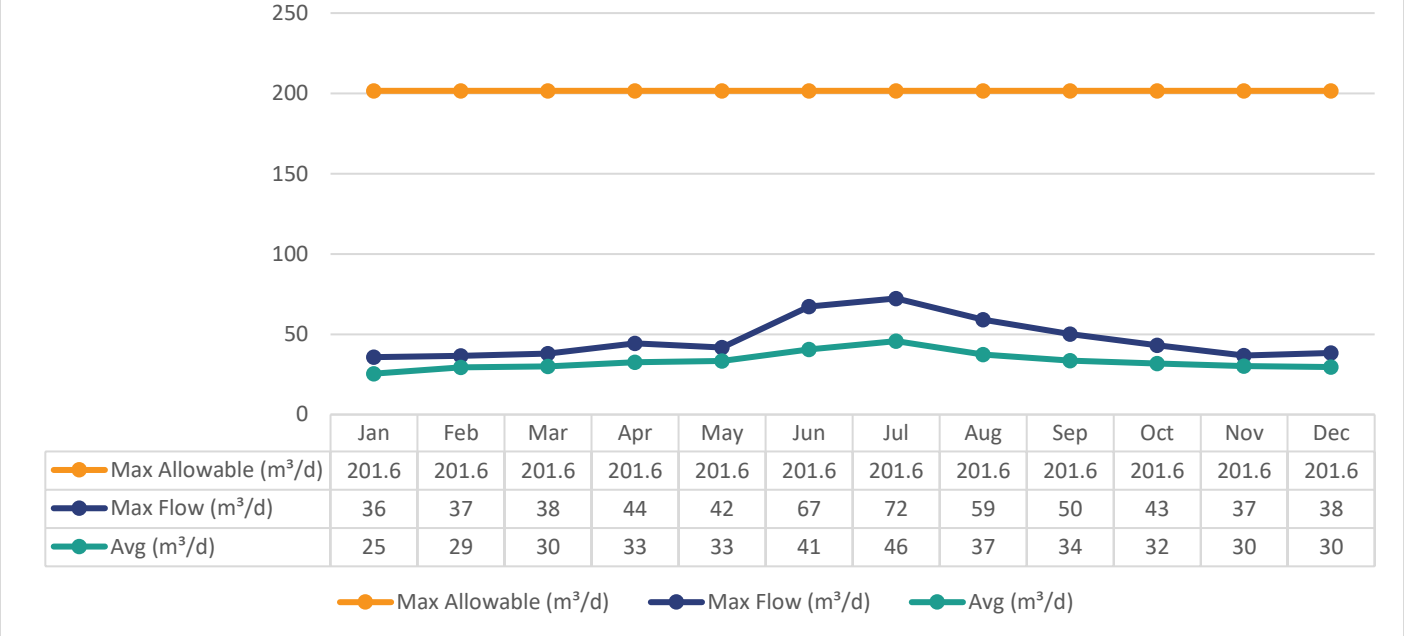
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Allowable (m³/d)	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2
Max Flow (m³/d)	33	30	33	35	36	44	45	46	34	31	33	52
Avg (m³/d)	23	26	26	27	29	33	35	30	27	27	26	26

Graph 4. Monthly Rated Flows (L/s) – Well #4 (Max Allowable Rate



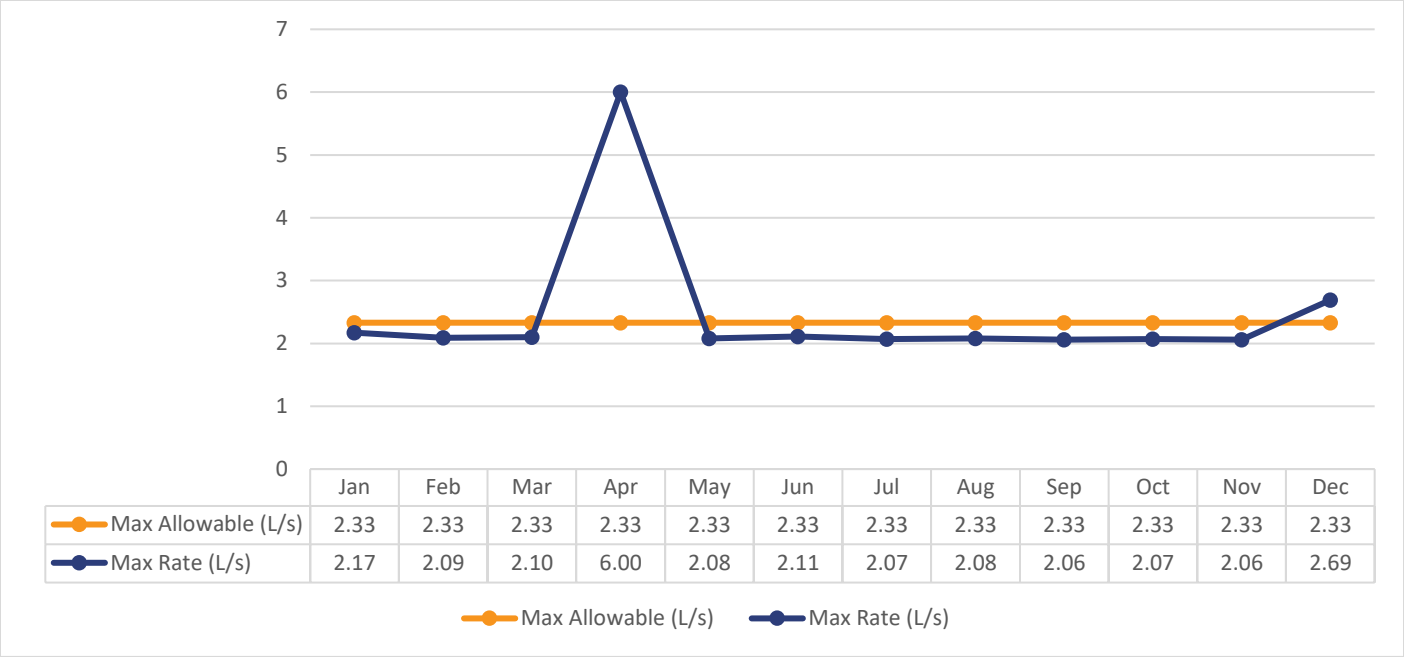
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Allowable (L/s)	3	3	3	3	3	3	3	3	3	3	3	3
Max Rate (L/s)	2.38	2.33	2.34	2.81	2.33	2.32	2.33	2.33	2.33	2.35	2.33	2.36

Graph 5. Total Monthly Flows (m³/d) – Well #5 (Max Allowable PTTW)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Allowable (m³/d)	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6
Max Flow (m³/d)	36	37	38	44	42	67	72	59	50	43	37	38
Avg (m³/d)	25	29	30	33	33	41	46	37	34	32	30	30

Graph 6. Monthly Rated Flows (L/s) – Well #5 (Max Allowable Rate



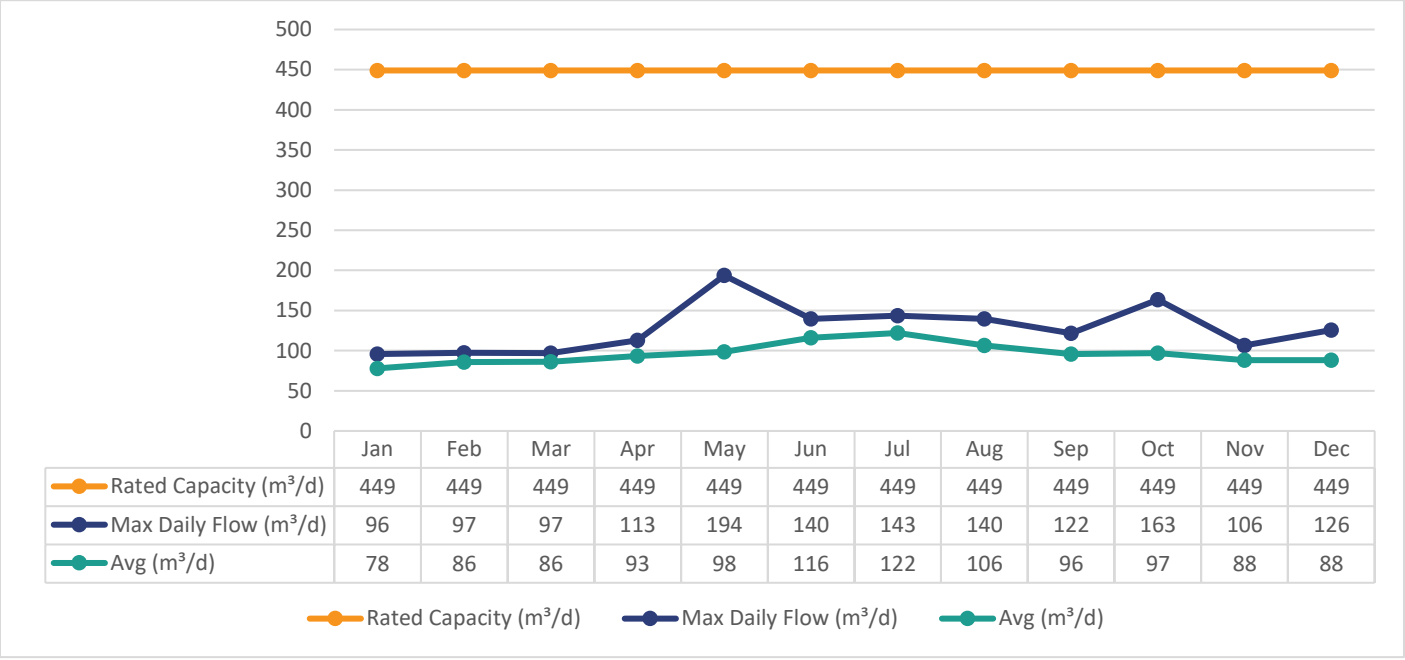
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Allowable (L/s)	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33
Max Rate (L/s)	2.17	2.09	2.10	6.00	2.08	2.11	2.07	2.08	2.06	2.07	2.06	2.69

Note: Certain operational circumstances could cause results to be temporarily outside of the allowable rates. In April 2025, the allowable rate was momentarily surpassed as a result of annual calibration of the flow meter and did not indicate a true exceedance. All spikes are reviewed for compliance with O. Reg. 170/03, any true exceedance would be documented within the report.

Treated Water Flows

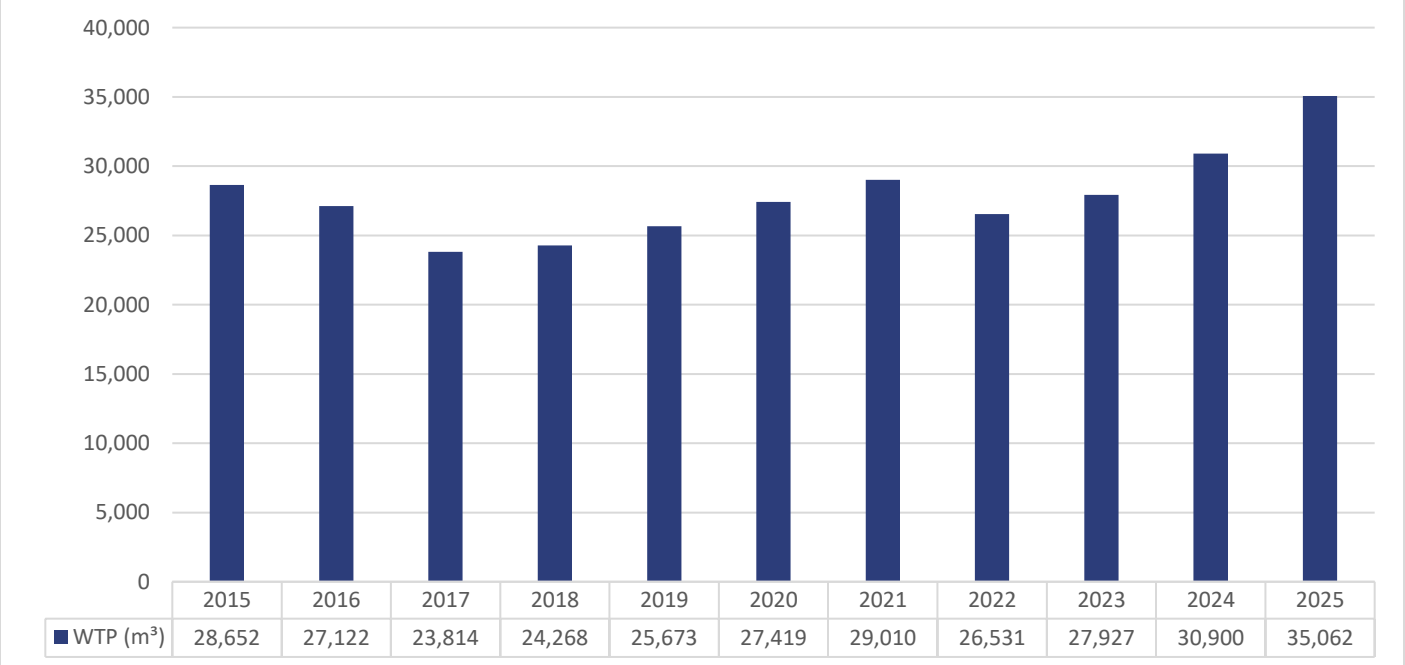
The Treated Water flows are regulated under the Municipal Drinking Water Licence 141-111.

Graph 7. Monthly Rated Flows (m³/d) – Rated Capacity - MDWL



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rated Capacity (m³/d)	449	449	449	449	449	449	449	449	449	449	449	449
Max Daily Flow (m³/d)	96	97	97	113	194	140	143	140	122	163	106	126
Avg (m³/d)	78	86	86	93	98	116	122	106	96	97	88	88

Graph 8. Annual Total Flow Comparison (m³)



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
WTP (m³)	28,652	27,122	23,814	24,268	25,673	27,419	29,010	26,531	27,927	30,900	35,062

Regulatory Sample Results Summary

Microbiological Testing

Table 4. Microbiological Test Results

	Number of Samples Collected	Range of E. Coli Results	Range of E. Coli Results	Range of Total Coliform Results	Range of Total Coliform Results	Range of HPC Results	Range of HPC Results
		Min	Max	Min	Max	Min	Max
Raw Well 3	52	0	0	0	0	N/A	N/A
Raw Well 4	52	0	0	0	0	N/A	N/A
Raw Well 5	52	0	0	0	0	N/A	N/A
Treated	52	0	0	0	0	0	840
Distribution	161	0	0	0	0	0	91

OG = Overgrowth
HPC = Heterotrophic Plate Count

Operational Testing

Table 5. Operational Test Results

Parameter	Number of Samples Collected	Range of Results Minimum	Range of Results Maximum
Turbidity Well 3 (NTU)	12	0.23	0.58
Turbidity Well 4 (NTU)	12	0.32	0.64
Turbidity Well 5 (NTU)	12	0.22	0.88
Turbidity – TW (NTU)	8760	0.00	2.00
Chlorine	8760	0.00	5.00
Fluoride (If the DWS provides fluoridation)	N/A	N/A	N/A

Note: Record the unit of measurement if it is **not** milligrams per litre.
Note: For continuous monitors 8760 is used as the number of samples. Spikes recorded by online instrumentation were a result of air bubbles and various maintenance/calibration activities. All spikes are reviewed for compliance with O. Reg. 170/03.

Inorganic Parameters

These parameters are tested as a requirement under O. Reg. 170/03. Sodium and Fluoride are required to be tested every five years. Nitrate and Nitrate are tested quarterly and the metals are tested every three years as required under O. Reg. 170/03. In the event any of the parameters

listed in Schedule 23 or 24 of O. Reg. 170/03 exceed half of the maximum allowable concentration the parameter is required to be samples quarterly. Based on the latest test results no additional testing is required.

Table 6. Inorganic Parameters Test Results

	Sample Date (yyyy/mm/dd)	Sample Result	Unit of Measure	MAC	Exceedance
Treated Water					
Antimony	2023 01 03	<MDL 0.6	µg/L	6.0	No
Arsenic	2023 01 03	<MDL 0.2	µg/L	10.0	No
Barium	2023 01 03	66.7	µg/L	1000.0	No
Boron	2023 01 03	10.0	µg/L	5000.0	No
Cadmium	2023 01 03	<MDL 0.003	µg/L	5.0	No
Chromium	2023 01 03	0.43	µg/L	50.0	No
Mercury	2023 01 03	<MDL 0.01	µg/L	1.0	No
Selenium	2023 01 03	0.1	µg/L	50.0	No
Uranium	2023 01 03	1.38	µg/L	20.0	No
Additional Organics					
Fluoride	2023 01 03	0.17	mg/L	1.5	No
Nitrite	2025 01 06	<MDL 0.003	mg/L	1.0	No
Nitrite	2025 04 14	<MDL 0.003	mg/L	1.0	No
Nitrite	2025 07 14	<MDL 0.003	mg/L	1.0	No
Nitrite	2025 10 14	<MDL 0.003	mg/L	1.0	No
Nitrate	2025 01 06	0.017	mg/L	10.0	No
Nitrate	2025 04 14	0.016	mg/L	10.0	No
Nitrate	2025 07 14	0.014	mg/L	10.0	No
Nitrate	2025 10 14	0.015	mg/L	10.0	No
Sodium	2023 01 03	8.31	mg/L	20*	No

MAC = Maximum Allowable Concentration as per O. Reg. 169/03
MDL = Method Detection Limit
*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. Sodium results exceeding 20 mg/L are to be reported to the Medical Officer of Health as per Schedule 16-3 (8) of O. Reg. 170/03.

Schedule 15 Sampling (Lead)

The Schedule 15 sampling is required under O. Reg. 170/03. This system is under reduced sampling. Only distribution samples were collected, and no plumbing samples were collected.

Table 7. Schedule 15 Test Results (Lead)

	Number of Sampling Points	Number of Samples	Range of Results Minimum	Range of Results Maximum	MAC (µg/L)	Number of Exceedances
Alkalinity (mg/L)	1	2	220	237	N/A	N/A
pH	1	2	7.87	8.03	N/A	N/A
Lead (µg/L)	N/A	N/A	N/A	N/A	10.0	N/A

Organic Parameters

These parameters are tested as a requirement under O. Reg. 170/03. In the event any of the parameters listed in Schedule 23 or 24 of O. Reg. 170/03 exceed half of the maximum allowable concentration the parameter is required to be samples quarterly. Based on the latest test results no additional testing is required.

Table 8. Organic Parameters Test Results

	Sample Date (yyyy/mm/dd)	Sample Result	Unit of Measure	MAC	Exceedance
Treated Water					
Alachlor	2023 01 03	<MDL 0.02	µg/L	5.0	No
Atrazine + N-dealkylated metabolites	2023 01 03	<MDL 0.01	µg/L	5.0	No
Azinphos-methyl	2023 01 03	<MDL 0.05	µg/L	20.0	No
Benzene	2023 01 03	<MDL 0.32	µg/L	1.0	No
Benzo(a)pyrene	2023 01 03	<MDL 0.004	µg/L	0.01	No
Bromoxynil	2023 01 03	<MDL 0.33	µg/L	5.0	No
Carbaryl	2023 01 03	<MDL 0.05	µg/L	90.0	No
Carbofuran	2023 01 03	<MDL 0.01	µg/L	90.0	No
Carbon Tetrachloride	2023 01 03	<MDL 0.17	µg/L	2.0	No
Chlorpyrifos	2023 01 03	<MDL 0.02	µg/L	90.0	No
Diazinon	2023 01 03	<MDL0.02	µg/L	20.0	No
Dicamba	2023 01 03	<MDL 0.2	µg/L	120.0	No
1,2-Dichlorobenzene	2023 01 03	<MDL 0.41	µg/L	200.0	No
1,4-Dichlorobenzene	2023 01 03	<MDL 0.36	µg/L	5.0	No
1,2-Dichloroethane	2023 01 03	<MDL 0.35	µg/L	5.0	No
1,1-Dichloroethylene	2023 01 03	<MDL 0.33	µg/L	14.0	No

	Sample Date (yyyy/mm/dd)	Sample Result	Unit of Measure	MAC	Exceedance
Dichloromethane (Methylene Chloride)	2023 01 03	<MDL0.35	µg/L	50.0	No
2,4-Dichlorophenol	2023 01 03	<MDL 0.15	µg/L	900.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2023 01 03	<MDL 0.19	µg/L	100.0	No
Diclofop-methyl	2023 01 03	<MDL 0.4	µg/L	9.0	No
Dimethoate	2023 01 03	<MDL 0.06	µg/L	20.0	No
Diquat	2023 01 03	<MDL 1.0	µg/L	70.0	No
Diuron	2023 01 03	<MDL 0.03	µg/L	150.0	No
Glyphosate	2023 01 03	<MDL 1.0	µg/L	280.0	No
Malathion	2023 01 03	<MDL 0.02	µg/L	190.0	No
2-Methyl-4chlorophenoxyacetic Acid (MCPA)	2023 01 03	<MDL 0.12	µg/L	100.0	No
Metolachlor	2023 01 03	<MDL 0.01	µg/L	50.0	No
Metribuzin	2023 01 03	<MDL 0.02	µg/L	80.0	No
Monochlorobenzene (Chlorobenzene)	2023 01 03	<MDL 0.3	µg/L	80.0	No
Paraquat	2023 01 03	<MDL 1.0	µg/L	10.0	No
PCB	2023 01 03	<MDL 0.04	µg/L	3.0	No
Pentachlorophenol	2023 01 03	<MDL 0.15	µg/L	60.0	No
Phorate	2023 01 03	<MDL 0.01	µg/L	2.0	No
Picloram	2023 01 03	<MDL 1.0	µg/L	190.0	No
Prometryne	2023 01 03	<MDL 0.03	µg/L	1.0	No
Simazine	2023 01 03	<MDL 0.01	µg/L	10.0	No
Terbufos	2023 01 03	<MDL 0.01	µg/L	1.0	No
Tetrachloroethylene	2023 01 03	<MDL 0.35	µg/L	10.0	No
2,3,4,6-Tetrachlorophenol	2023 01 03	<MDL 0.2	µg/L	100.0	No
Triallate	2023 01 03	<MDL 0.01	µg/L	230.0	No
Trichloroethylene	2023 01 03	<MDL 0.44	µg/L	5.0	No
2,4,6-Trichlorophenol	2023 01 03	<MDL0.25	µg/L	5.0	No
Trifluralin	2023 01 03	<MDL 0.02	µg/L	45.0	No
Vinyl Chloride	2023 01 03	<MDL 0.17	µg/L	1.0	No
Distribution Water					
Trihalomethane Total Annual Average Q1	2025 01 06	13.0	µg/L	100.0	No
Trihalomethane Total Annual Average Q2	2025 04 14	13.0	µg/L	100.0	No
Trihalomethane Total Annual Average Q3	2025 07 14	13.0	µg/L	100.0	No

	Sample Date (yyyy/mm/dd)	Sample Result	Unit of Measure	MAC	Exceedance
Trihalomethane Total Annual Average Q4	2025 10 14	34.00	µg/L	100.0	No
HAA Total Annual Average Q1	2025 01 06	5.30	µg/L	80.0	No
HAA Total Annual Average Q2	2025 04 14	5.30	µg/L	80.0	No
HAA Total Annual Average Q3	2025 07 14	5.30	µg/L	80.0	No
HAA Total Annual Average Q4	2025 10 14	5.30	µg/L	80.0	No

MAC = Maximum Allowable Concentration as O. Reg. 169/03
MDL = Method Detection Limit

Additional Legislated Samples

There were no additional legislated samples required to report during this reporting period.

Minor Maintenance

- VFD replacement
- Turbidity analyzer repair
- Heating ventilation stuck open, replace thermostat
- HLP replacement
- Heater failure
- Heater thermostat replacement

Major Maintenance Expense (above $10,000)

Under Section 11 of O. Reg. 170/03, a description of any major expenses incurred during this reporting period to install, repair or replace required equipment must be included in the annual report. The details of the major expenses for this drinking water system are as follows:

Nothing to report for the reporting period.

APPENDIX A

WTR Submission Confirmation