

Monthly Operations Report

for the Municipality of Casselman's Water and
Wastewater Systems

July 2025



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Table of Contents

Section 1 - Monthly Operations Report Card

Section 2 - Facility Listing

Section 3 - Compliance

Section 4 - Facility Performance

Section 5 - Drinking Water Quality Management System (DWQMS)

Section 6 - Maintenance / Capital / Added Value

Section 7 - Complaints

Section 8 - Recommendations / General Comments

Appendices

Appendix A – Performance Assessment Reports

Appendix B – Work Order Summary Report

Appendix C – Locate Summary

A decorative graphic in the bottom right corner of the page. It features a light blue semi-circle representing a sun or moon, with three wavy lines below it representing water or waves. The graphic is composed of solid light blue shapes.

SECTION 1 – MONTHLY OPERATIONS REPORT CARD

Operations and Compliance Reliability Indices

Legend					
✓	●	▲	✗	Y/N	N/A
Achieved	On Target	Caution	Not Achieved	Yes/No	Not Applicable

	Target	Current Month	Comments
Health & Safety			
Number of Incidents	0	●	
Actual Result		0	
Drinking Water			
Inspection Ratings (YTD)	100 %	●	
Actual Result		100 %	
AWQI's	0	●	
Actual Result		0	
Number of Non-Compliances	0	●	
Actual Result		0	
Number of Water Main Breaks	0	●	
Actual Result		0	
Number of Complaints	0	●	
Actual Result		0	
Water Main Flushing	0	●	
Target Achieved		Y	
Wastewater			
Number of Non-Compliances	0	●	
Actual Result		0	
Number of Bypasses	0	●	
Actual Result		0	
Number of Sanitary Sewer Back-ups	0	●	
Actual Result		0	
Sanitary Collection System Flushing	0	●	
Target Achieved		Y	
Preventive Maintenance			
Work Orders Completed	>95%	●	
Target Achieved		Y	

SECTION 2 – FACILITY LISTING

Water Treatment & Distribution

Facility	Type
5971 - Casselman Water Treatment Plant	1 WTP (Actiflo Process)
1553 - Casselman Water Distribution System	1 Water Storage Tower + Water Distribution System

Wastewater Treatment & Collection

Facility	Type
1501 - Casselman Wastewater Treatment Plant	3 Facultative Lagoon Cells MBBR (Moving Bed Biofilm Reactor)
1501 - Casselman Wastewater Collection System	6 Sewage Pumping Stations + Wastewater Collection System

SECTION 3 – COMPLIANCE

There were no compliance issues to report for Casselman's water and wastewater treatment systems.

The most recent MECP inspections are listed below:

Location	Inspector	Inspection Rating (%)	Date
Casselman Water	Jean-Francois Durocher	100%	February 5, 2025
Casselman Sewage	Jean-Francois Durocher	Rating not applicable	November 19, 2024

There are no outstanding actions required from any recent MECP inspections.

SECTION 4 – FACILITY PERFORMANCE

Please see the Water & Wastewater Performance Assessment Reports attached in Appendix A.

SECTION 5 – DRINKING WATER QUALITY MANAGEMENT SYSTEM (DWQMS)

OCWA was re-accredited as the Operating Authority for Casselman's Drinking Water System on January 24, 2023.

SECTION 6 - MAINTENANCE / CAPITAL / ADDED VALUE

Water Treatment & Distribution

- Responded to eight after-hours call-back alarms
- Observed new watermain connection between Principale & the new DuBois subdivision
- Repaired watermain break at 872 Principale
- Repaired curb stop at 4 Albert St.
- Observed flow testing on Richer Crescent
- Replaced hydrant valve on Hydrant #108 (Duhamel & Joseph)
- Repaired service leak between watermain and curb stop at 19 Albert St.
- Curb stop repairs completed at 244 Nature, 724 St. Isidore, 241 Argyle, 13 Alice
- Cleaned sodium hydroxide build up in transfer pipe & installed mixer in pipe
- Performed summer dead end flushing in the distribution system

Wastewater Treatment & Collection

- Responded to one after-hours call-back alarm
- Sludge removal from Cell 1 began July 28th
- Lifting devices inspections completed

Preventive Maintenance Plan (PMP) Work Order Summary

All required work orders were completed. Please refer to the summary reports attached in Appendix B.

SECTION 7 – COMPLAINTS

Facility	Date	Description
None to report		

SECTION 8 – RECOMMENDATIONS / GENERAL COMMENTS

General

- 47 locates were completed in July.

Water Treatment & Distribution

- Capital/Major Maintenance projects approved for 2025 are underway.
- Operations staff continued to work with Dr. Dallala and EVB on behalf of the Municipality.

Wastewater Treatment & Collection

- Capital/Major Maintenance projects approved for 2025 are underway.

Appendix A

Performance Assessment Reports



ONTARIO CLEAN WATER AGENCY PERFORMANCE ASSESSMENT REPORT

MUNICIPALITY: MUNICIPALITY OF CASSELMAN
PROJECT: CASSELMAN DRINKING WATER SYSTEM
DESCRIPTION: SURFACE WATER TREATMENT PLANT
CHEMICALLY ASSISTED FILTRATION

YEAR: 2025
WATER SOURCE: NATION RIVER
DESIGN CAPACITY: 3182 m3/d
WORKS NUM.: 210001219

MONTH	SYSTEM FLOWS (TREATED)			TREATED		DISTRIBUTION		RAW					TREATED							DISTRIBUTION		
	Total Flow (m³)	Avg. Flow (m³)	Max Day Flow (m³)	Min. Free Cl₂ Resid. (mg/L)	Max Free Cl₂ Resid. (mg/L)	Min Combined Cl2 Resid. (mg/L)	Max Combined Cl2 Resid. (mg/L)	Dissolved Organic Carbon (mg/L)	Total Organic Carbon (mg/L)	Total Hardness (mg/L)	Average Manganese (mg/L)	Max Manganese (mg/L)	IH Avg. Turbidity (NTU)	IH Max. Turbidity (NTU)	Dissolved Organic Carbon (mg/L)	Total Organic Carbon (mg/L)	Total Hardness (mg/L)	Average Manganese (mg/L)	Max Manganese (mg/L)	THM (µg/L) quaterly	HAA (µg/L) quaterly	NDMA (µg/L) quaterly
JAN	35,809	1,155	1,555	1.05	2.60	1.21	1.97	6.20	6.60	323	0.07	0.11	0.31	0.50	3.00	3.50	322	0.05	0.08	42.0	27.1	0.0009
FEB	31,867	1,138	1,311	1.39	2.32	1.32	2.17	3.90	3.60	430	0.10	0.11	0.51	0.60	2.50	1.80		0.07	0.09			
MAR	35,230	1,136	1,603	0.97	2.47	1.22	2.02	3.70	3.00	459	0.09	0.12	0.52	0.62	2.30	1.70		0.06	0.08			
APR	33,940	1,131	1,378	1.09	2.23	1.15	1.71	7.80	7.20	214	0.13	0.22	0.38	0.57	3.00	2.50		0.03	0.04	40.0	27.7	0.0026
MAY	37,094	1,197	1,700	1.05	2.30	1.24	1.98	7.60	7.60	309	0.09	0.12	0.27	0.35	3.50	3.30		0.02	0.03			
JUN	39,041	1,301	1,610	0.91	2.45	1.21	1.86	6.40	6.40	340	0.08	0.12	0.30	0.45	3.10	2.70		0.02	0.04			
JUL	38,503	1,242	1,878	0.92	2.63	1.00	2.06	8.50	10.80	282	0.16	0.32	0.35	0.48	4.70	4.80		0.03	0.06	98.00	49.90	0.0029
AUG																						
SEP																						
OCT																						
NOV																						
DEC																						
TOTAL	251,484																					
AVG		1,186						6.30	6.46	337	0.10		0.38		3.16	2.90	322	0.04		60.0	34.9	0.0009
MAX			1,878		2.63		2.17					0.32		0.62					0.09			
MIN				0.91		1.00																
CRITERIA			3,182	CT		0.25	3.00													<100	<80	<0.009

MONTH	SYSTEM FLOWS (RAW)				ACTIFLO FILTER #1		ACTIFLO FILTER #2		Efficiency		TANK		TREATED				E. coli / Total Coliform / HPC (Number of Samples Collected)				RAW WATER	
	Total Flow (m³)	Avg. Day Flow (m³)	Max. Flow (m³)	Max. Flow Rate (L/min)	Avg. Turbidity (NTU)	Max. Turbidity (NTU)	Avg. Turbidity (NTU)	Max. Turbidity (NTU)	Turbidity % < 0.3 NTU Filter #1	Turbidity % < 0.3 NTU Filter #2	Backwash TSS (mg/L)	Supernatant TSS (mg/L)	OL Avg. Turbidity (NTU)	OL Max. Turbidity (NTU)	Min UV Intensity (mJ/cm²)	Min UVT (%)	Safe		Adverse		Coliform Count	E.coli Count
																	Treated	Distribution	Treated	Distribution	Max.	Max.
JAN	42,495	1,371	1,793	2185	0.12	0.37	0.12	0.64	99.97	99.58	88	8	0.33	1.40	82	67	4	12	0	0	35,000	24
FEB	37,831	1,351	1,538	2198	0.09	0.28	0.10	0.33	99.99	99.43	12	11	0.44	2.11	87	81	4	12	0	0	2,000	34
MAR	41,446	1,337	1,850	1893	0.08	0.42	0.12	0.49	98.94	99.72	10	9	0.37	1.47	86	67	5	15	0	0	19,000	48
APR	38,744	1,291	1,720	1756	0.09	0.55	0.11	0.48	99.88	96.20	8	9	0.22	0.66	102	76	4	12	0	0	1,300	78
MAY	41,607	1,342	1,875	1739	0.11	0.56	0.12	0.29	99.81	100.00	41	13	0.18	0.52	95	80	4	12	0	0	300	39
JUN	43,552	1,452	1,917	1701	0.12	0.45	0.12	0.34	99.96	99.95	3	4	0.18	0.40	110	81	5	15	0	0	50	12
JUL	43,464	1,402	2,120	1727	0.13	0.61	0.14	0.54	99.71	99.74	17	17	0.27	0.81	127	83	4	12	0	0	160	18
AUG																						
SEP																						
OCT																						
NOV																						
DEC																						
TOTAL	289,139																30	90	0	0		
AVG		1,364			0.11		0.12		99.75	99.23	26	10	0.28									
MAX			2,120	2,198		0.61		0.64			88	17		2.11							35,000	78
MIN															82	67						
CRITERIA			3,182	2,205		<1		<1	>95%	>95%	<25	<25		<5	>40							

COMMENTS:

**ONTARIO CLEAN WATER AGENCY
PERFORMANCE ASSESSMENT REPORT**

OWNER: MUNICIPALITY OF CASSELMAN
PROJECT: CASSELMAN WASTEWATER TREATMENT SYSTEM
ECA NUM.: 8160-BAHPRF
DESCRIPTION: MOVING BED BIOLOGICAL REACTOR (MBBR) TREATMENT LAGOON

YEAR: 2025
WATER COURSE: NATION RIVER
DESIGN CAPACITY: 2,110 m³/d
FACILITY WORKS#: 110002201

MONTH	RAW								EFFLUENT										
	Total Flow m ³	Avg Day Flow m ³	Max Day Flow m ³ /d	Avg Alum Dosage (mg/L)	Avg Raw BOD5 (mg/L)	Avg Raw TSS (mg/L)	Avg. Raw TKN (mg/L)	Avg Raw TP (mg/L)	Effluent Flow m ³	Effluent Avg Flow m ³	Effluent Max Flow m ³ /d	Avg CBOD5 (mg/L)	Avg TSS (mg/L)	Avg TAN (mg/L)	Avg TP (mg/L)	Avg TKN (mg/L)	Avg Nitrate (mg/L)	Avg Nitrite (mg/L)	E. coli (cfu/100 mL)
JAN	43,311	1,397	1,703	74.0	186	272	55.7	6.07	80,565	2,599	2,781	3.5	8.0	7.9	0.33	11.75	9.17	0.05	229
FEB	30,948	1,105	1,158	41.9	241	400	80.2	7.17	64,941	2,824	3,982	4.3	8.8	20.4	0.50	27.97	11.88	0.31	563
MAR	61,990	2,000	2,376	52.9	317	540	73.6	7.40	74,222	2,394	3,811	4.0	6.8	11.46	0.56	13.9	21.6	0.31	78
APR	62,792	2,093	2,920	60.3	157	444	27.7	3.27	175,858	5,862	6,938	4.0	16.3	2.55	0.34	4.4	17.7	0.08	27
MAY	45,289	1,461	1,728	39.3	194	266	41.6	4.49	83,591	5,573	6,763	4.0	8.5	0.29	0.30	2.0	16.2	0.05	38
JUN	38,706	1,290	1,328	53.3	64	190	49.0	1.98											
JUL	45,411	1,465	1,978	54.7	161	510	106.0	5.09											
AUG																			
SEPT																			
OCT																			
NOV																			
DEC																			
TOTAL	328,447								479,177										
AVG		1,544		53.8	189	375	62.0	5.07		3,850		4.0	9.7	8.5	0.41	12.0	15.3	0.16	101
MAX			2,920		317	540	106	7.40			6,938	4.3	16.3	20.4	0.56	28.0	21.6	0.31	563
CRITERIA						Fall Discharge			267,650	2,909									
						Winter/Spring Discharge			502,500	3,722									

COMPLIANCE																			
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MONTH	UPSTREAM				DOWNSTREAM			
	Avg CBOD5 (mg/L)	Avg TSS (mg/L)	Avg TAN (mg/L)	Avg PHOS. (mg/L)	Avg CBOD5 (mg/L)	Avg TSS (mg/L)	Avg TAN (mg/L)	Avg PHOS. (mg/L)
JAN	3.0	6.0	0.12	0.04				
FEB	3.0	6.0	0.14	0.06				
MAR	3.0	32.3	0.1	0.1				
APR	3.0	34.8	0.1	0.12	3.0	154.0	0.3	0.16
MAY	3.0	5.0	0.06	0.05	3.0	10.5	0.26	0.06
JUN								
JUL								
AUG								
SEPT								
OCT								
NOV								
DEC								
TOTAL								
AVG	3.0	17	0.12	0.08	3.0	82.3	0.29	0.11
MAX	3	34.8	0.14	0.12	3.0	154	0.31	0.16
CRITERIA								

Comments:

*No Upstream/Downstream Samples required to be collected when downstream sampling is not feasible due to ice cover on the Nation River.

**No Downstream sample collected in January, February, March and part of April.

Appendix B

Work Order Summary Reports



Monthly Work Order Summary – July 2025

Casselman Drinking Water System

Description	Status	Work Type
Analyzer Total Chlorine Inspection/Service (1m) 5971	COMP	PM
Analyzer pH Inspection/Service (1m) 5971	COMP	PM
Analyzer Spectrophotometer Insp/Service (1m) - 5971	COMP	PM
Analyzer Turbidity Inspection/Service (1m) 5971	COMP	PM
Blower Centrifugal Inspection/Service (1m) 5971	COMP	PM
Air Compressor Inspection/Service (1m) 5971	COMP	PM
Dryer Air Service (1m) - 5971	COMP	PM
Generator Inspection (1m) 5971	COMP	PM
Meter Level Inspection/Service (3m) 5971	COMP	PM
Pump Submersible ACTIFLO Inspection (3m) 5971	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 5971	COMP	PM
UV Light Bank Insp/Service (1m) - 5971	COMP	PM
Monthly H&S Equipment Check (1m) - 5971	COMP	PM
Quarterly H&S Equipment Check (3m) - 5971	COMP	PM
Client Reports (1m) - Casselman 5971	COMP	PM
UVT Sensor Checks/Calibration (1m) - 5971	COMP	PM
Pump Diaphragm Coagulant Route Inspection/Service (1m) 5971	COMP	PM
Pump Diaphragm Polymer Route Inspection/Service (1m) 5971	COMP	PM
Pump Diaphragm Sodium Hydroxide Route Inspection/Service (1m) 5971	COMP	PM
Pump Diaphragm Ammonium Sulphate Route Inspection/Service (1m) 5971	COMP	PM
Pump Diaphragm Potassium Permanganate Route Inspection/Service (1m) 5971	COMP	PM
WISKI Monthly Review(1m) 5971	COMP	PM
UV Sensor Reference Check/Calibration (1m) - 5971	COMP	PM
Workplace Inspection - DS Silica- 1m - 5971	COMP	OPER
Hydrant Ends Flushing (1m) 1553	COMP	OPER
Secondary Valve Operation 1553 (1y) - turn water on @ 642 ste isidore	COMP	CAP
Secondary Valve Operation 1553 (1y) - turn water on @ 310+308 Zakari	COMP	CAP
Secondary Valve Operation 1553 (1y) - turn water off - St. Isidore	COMP	CAP
Secondary Valve Operation 1553 (1y) - turn water off - 4 Albert St.	COMP	CAP
Casselman WDS 1553 - Shut Off +repairs - 4 Albert	COMP	CAP
Casselman WDS 1553 Dubois tie in	COMP	CAP
Casselman WDS 1553 - Albert Water Main repair	COMP	CAP
Casselman WDS 1553 - Albert Water Main repair	COMP	CAP
1553-01 Casselman DIST. Distribution Maintenance (Hydrant)-MM- Hydrant 108 - St joseph/Duhamel	APPR	CAP
5971-WTCA-P - Low Flow Actiflo 2	COMP	CALL
5971-WTCA-P - UV Bank 1 in alarm	COMP	CALL
5971-WTCA-P - Actiflo Settled Water turbidity high	COMP	CALL

Monthly Work Order Summary – July 2025
Casselman Drinking Water System

WTP transfer tank trip Alarm	COMP	CALL
5971 Casselman WTP- High Transfer tank Alarm	COMP	CALL
Call Back - Casselman WTP - 5971 - Actiflo 2 Low flo	COMP	CALL
5971- Actiflo Settled Water turbidity high	COMP	CALL
Call Back - 879 Principal - 1553 - Water Main Break	COMP	CALL

Monthly Work Order Summary – July 2025
Casselman Wastewater Treatment & Collection System

Description	Status	Work Type
Significant Drinking Water Assessment (1y) - 1501	APPR	PM
Generator Inspection (1m) SPS #1 1501	COMP	PM
Generator Inspection (1m) SPS #2 1501	COMP	PM
Generator Inspection (1m) SPS #3 1501	COMP	PM
Generator Inspection (1m) SPS #5 1501	COMP	PM
Generator Inspection (1m) SPS #6 1501	COMP	PM
Generator Inspection (1m) 1501	COMP	PM
Analyzer Turbidity Inspection/Service (1m) 1501	COMP	PM
PANEL ALARM/DIALER TEST SPS#4 (1m) 1501	COMP	PM
Monthly H&S Equipment Check (1m) - 1501	COMP	PM
Blower Inspection/Service (1m/1y) 1501	COMP	PM
Blower Inspection/Service (1m/1y) 1501	COMP	PM
Blower Inspection/Service (1m/1y) 1501	COMP	PM
Blower Inspection/Service (1m/1y) 1501	COMP	PM
Blower Inspection/Service (1m/1y) 1501	COMP	PM
Bar Screen Inspection (1m) 1501	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST SPS#6 (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST SPS#3 (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST SPS#2 (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST SPS#5 (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST SPS#1 (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST LAGOON (1m) - 1501	COMP	PM
Specific ECA - Bypass (3m) - 1501	COMP	PM
Quarterly H&S Equipment Check (1m) - 1501	COMP	PM
WISKI Monthly Review(1m) 1501	COMP	PM
Workplace Inspection (1m) - 1501	COMP	OPER
Call Back - Casselman SPS 1 - 1501 - High WW Rain Event	COMP	CALL

Appendix C

Locate Summary



Casselman Monthly Locate Summary – July 2025

Description	Status	Work Type
Locate Casselman WDS 1553 - 20252810407 730-728 des chien	COMP	OPER
Locate Casselman WDS 1553 - 2025288933 860 principal	COMP	OPER
Locate Casselman WDS 1553 - 2025286247 593 ste isidore	COMP	OPER
Locate Casselman WDS 1553 - 2025288016 43 rancine	COMP	OPER
Locate Casselman WDS 1553 - 20252714834 814 ste isidore	COMP	OPER
Locate Casselman WDS 1553 - 2025271390 728 Laval	COMP	OPER
Locate Casselman WDS 1553 - 20252623839 319 Zakari	COMP	OPER
Locate Casselman WDS 1553 - 20252816248- 20 dennoyer	COMP	OPER
Locate Casselman WDS 1553 - 20252814590- 34 dennoyer	COMP	OPER
Locate Casselman WDS 1553 - 2025815474-685 principal	COMP	OPER
Locate Casselman WDS 1553 - 20252816243-215 laurier	COMP	OPER
Locate Casselman WDS 1553 - 20252816998-241 argile	COMP	OPER
Locate Casselman WDS 1553 - 2025292854-157 argile	COMP	OPER
Locate Casselman WDS 1553 - 2025294205-120 argile	COMP	OPER
Locate Casselman WDS 1553 - 20252816985-13 Alice	COMP	OPER
Locate Casselman WDS 1553 - 20252816971-244 Nature	COMP	OPER
Locate Casselman WDS 1553 - 20252817263 Laurier	COMP	OPER
Locate Casselman WDS 1553 - 2025295445 685 principale	COMP	OPER
Locate Casselman WDS 1553 - 2025291263 688 montcalm	COMP	OPER
Locate Casselman WDS 1553 - 20252825982-244 Nature	COMP	OPER
Locate Casselman WDS 1553 -2025305917 - 17 albert	COMP	CAP
Locate Casselman WDS 1553 -2025312345 - CIMA	COMP	CAP
Locate Casselman WDS 1553 -2025312496 - CIMA	COMP	CAP
Locate Casselman WDS 1553 -2025312534 - CIMA	COMP	CAP
Locate Casselman WDS 1553 -2025312411 - CIMA	COMP	CAP
Locate Casselman WDS 1553 -2025312443 - CIMA	COMP	CAP
Locate Casselman WDS 1553 -2025308166 - aurette Lot	COMP	CAP
Locate Casselman WDS 1553 -2025309719- 724 ste isidore	COMP	CAP
Locate Casselman WDS 1553 -2025312259 - CIMA	COMP	CAP
Locate Casselman WDS 1553 -2025312290 - CIMA	COMP	CAP
Locate Casselman WDS 1553 -2025312311 - CIMA	COMP	CAP
Locate Casselman WDS 1553 -20253016961 - 700 ste isidore	COMP	CAP
Locate Casselman WDS 1553 -20253012604 - Albert main break locate	COMP	CAP
Locate Casselman WDS 1553 -2025312924 - Hydro BaseBall Park	COMP	CAP
Locate Casselman WDS 1553 -2025313910 - 120 argile	COMP	CAP
Locate Casselman WDS 1553 -2025318059 - Richer Cres	COMP	CAP
Locate Casselman WDS 1553 -2025316330- 41 dennoyer	COMP	CAP
Locate Casselman WDS 1553 -2025313990-158-152 Argile	COMP	CAP
Locate Casselman WDS 1553 -2025313975 - CIMA	COMP	CAP
Locate Casselman WDS 1553 - 2025293579-760,762,764 laurier	COMP	CAP
Locate Casselman WDS 1553 - 20252819119-102 laurier	COMP	CAP
Locate Casselman WDS 1553 - 20252821539- 4 Albert	COMP	CAP
Locate Casselman WDS 1553 - 20252821868- Hydro laurier	COMP	CAP
Locate Casselman WDS 1553 - 20252913306- 699 ste anne	COMP	CAP

Casselman Monthly Locate Summary – July 2025

Locate Casselman WDS 1553 -20252910743 - Jean Mence Valve	COMP	CAP
Locate Casselman WDS 1553 -2025302603 - 776 aurelle	COMP	CAP
Locate Casselman WDS 1553 -20252917442 - oak tree laval	COMP	CAP
Total		47