

Monthly Operations Report

for the Municipality of Casselman's Water and
Wastewater Systems

March 2025



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

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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	●	
<i>Actual Result</i>		0	
Drinking Water			
Inspection Ratings (YTD)	100 %	●	
<i>Actual Result</i>		100 %	
AWQI's	0	●	
<i>Actual Result</i>		0	
Number of Non-Compliances	0	●	
<i>Actual Result</i>		0	
Number of Water Main Breaks	0	●	
<i>Actual Result</i>		0	
Number of Complaints	0	●	
<i>Actual Result</i>		0	
Water Main Flushing	0	●	
<i>Target Achieved</i>		Y	
Wastewater			
Number of Non-Compliances	0	●	
<i>Actual Result</i>		0	
Number of Bypasses	0	●	
<i>Actual Result</i>		0	
Number of Sanitary Sewer Back-ups	0	●	
<i>Actual Result</i>		0	
Sanitary Collection System Flushing	0	●	
<i>Target Achieved</i>		Y	
Preventive Maintenance			
Work Orders Completed	>95%	●	
<i>Target Achieved</i>		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	Awaiting Report	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 three after-hours call-in alarms
- Cleaning of the raw water intake pipe and raw water tank was completed by divers
- Replaced diaphragm and tubing on potassium permanganate chemical pump
- Completed maintenance on polymer pump and coagulant pump
- Annual maintenance completed on chlorine gas disinfection system
- Repaired raw water pump hose
- Performed clean outs of supernatant and waste tanks at the WTP

Wastewater Treatment & Collection

- Responded to two after-hours call-in alarms
- Lagoon discharge continued through March
- Re-programmed modem at SPS #1 to resolve communications issues
- Pump #1 at SPS #1 was clogged; pulled and cleaned to remove rags/debris
- Serviced Blower #1 & #2 at lagoon
- Cleaned wet well at SPS #6
- Replaced Flygt Cloud panel screen at SPS #3

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

- 5 locates were completed in March.

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.
- Excessive rag build up is an ongoing issue in the sewage collection system

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 (m ³)	Avg. Flow (m ³)	Max Day Flow (m ³)	Min. Free Cl ₂ Resid. (mg/L)	Max Free Cl ₂ Resid. (mg/L)	Min Combined Cl ₂ Resid. (mg/L)	Max Combined Cl ₂ 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	1155	1555	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	42.00	27.10	0.0009
FEB	31,867	1138	1311	1.39	2.32	1.55	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	1136	1603	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				0.00	0.00	0.00	0.00															
MAY				0.00	0.00	0.00	0.00															
JUN				0.00	0.00	0.00	0.00															
JUL				0.00	0.00	0.00	0.00															
AUG				0.00	0.00	0.00	0.00															
SEP				0.00	0.00	0.00	0.00															
OCT				0.00	0.00	0.00	0.00															
NOV				0.00	0.00	0.00	0.00															
DEC				0.00	0.00	0.00	0.00															
TOTAL	102,906																					
AVG		1,143						4.60	4.40	404	0.09		0.45		2.60	2.33	322	0.06		42.00	27.10	0.0009
MAX			1,603		2.60		2.17							0.62				0.09				
MIN				0.00		0.00																
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 (m ³)	Avg. Day Flow (m ³)	Max. Flow (m ³)	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/cm ²)	Min UVT (%)	Safe		Adverse		Coliform Max. Count	E.coli Max. Count	
																		Treated	Distribution	Treated	Distribution		
JAN	42,495	1371	1793	36.42	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	1351	1538	36.63	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	1337	1850	31.55	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																							
MAY																							
JUN																							
JUL																							
AUG																							
SEP																							
OCT																							
NOV																							
DEC																							
TOTAL	121,772																13	39	0				
AVG		1,353			0.10		0.11		99.63	99.58	36.7	9.3	0.38										
MAX			1,850	37		0.42		0.64			88	11		2.11								35,000	48
MIN															82.00	67.00							
CRITERIA			3,182	2,205		<1		<1	>95%	>95%	<25	<25		<5	>40								

COMMENTS:

Appendix B

Work Order Summary Reports



Monthly Work Order Summary – March 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
Drive VFD Inspection (6m) 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
Mixer Chemical Inspection (3m) 5971	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 5971	COMP	PM
Relief Valve UV Room Inspection (3m) 5971	COMP	OPER
Transformer Air Service (3y) - 5971	COMP	PM
UV Light Bank Insp/Service (1m) - 5971	COMP	PM
Workplace Inspection - DS Silica- 1m - 5971	COMP	OPER
Monthly H&S Equipment Check (1m) - 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
5971-02 Casselman Electrical/Instrumentation Upgrades-MM	COMP	CAP
5971-WTCA-P - Filter Faulted for High Differential	COMP	CALL
5971-WTCA-P - Filter Faulted Backwash required	COMP	CALL
5971-09 Casselman WTP Intake Cleaning	COMP	CAP

Monthly Work Order Summary – March 2025
Casselman Drinking Water System

5971-03 Casselman Chemical Systems-MM Chlorine Annual Maintenance	COMP	CAP
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Monthly Work Order Summary – March 2025
Casselman Wastewater Treatment & Collection System

Description	Status	Work Type
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
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
Workplace Inspection (1m) - 1501	COMP	OPER

WISKI Monthly Review(1m) 1501	COMP	PM
Call Back - Casselman MBBR - 1501 - Pump Low Flow	COMP	CALL
1501-WWCA - Casselman Sewage Excessive Rag Removal	APPR	CAP
1501-WWCA Blowers at lagoon service and repairs.	COMP	PM
High level alarm Casselman SPS1	COMP	CALL

Appendix C

Locate Summary



Casselman Monthly Locate Summary – March 2025

Description	Status	Work Type
Locate Casselman WDS 1553 - Shut Off +repairs - 778 Brebeuf	COMP	CAP
Locate Casselman WDS 1553 - 2025117846 -215 Laurier	COMP	OPER
Locate Casselman WDS 1553 - 2025125949- new development	COMP	OPER
Locate Casselman WDS 1553 - 2025127342- 192 argile	COMP	OPER
Locate Casselman WDS 1553 - Shut Off 744 Laval	COMP	CAP
Total Locates :5		