

# Monthly Operations Report

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for the Municipality of Casselman's Water and  
Wastewater Systems

January 2025



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

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## **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



## 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
<b>Health &amp; Safety</b>			
Number of Incidents	0	●	
<i>Actual Result</i>		0	
<b>Drinking Water</b>			
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	
<b>Wastewater</b>			
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	
<b>Preventive Maintenance</b>			
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	Awaiting Report	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 two after-hours call-in alarms
- Cleaned Actiflo #1 filter and settling tank
- Completed repairs to Filter Tank #2
- Replaced all diffuser nozzles in Filter #2
- Replaced media (Sand & Granular Activated Carbon) in Filter #2
- Operated plant manually after hours while Filter #2 was offline for rehabilitation
- Installed new recirculation pump on Actiflo #2
- Replaced 4" valve on Filter #2
- Capital Controls continued working on upgrades to the WTP SCADA system

### Wastewater Treatment & Collection

- Responded to four after-hours call-in alarms
- Lagoon discharge continued through January
- Cleaned compacter at SPS #1
- Several communications errors received from FlygtCloud system at the SPS's

### 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

- 7 locates were completed in January.

### 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.
- OCWA is experiencing ongoing issues with communication at the SPS's through Flygt Cloud. Redundancy through the use of OCWA's Outpost panels and/or installation of Falcon alarm dialers at these stations should be considered.

# Appendix A

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## 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	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				0.00	0.00	0.00	0.00															
MAR				0.00	0.00	0.00	0.00															
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	35,809																					
AVG		1,155						6.20	6.60	323	0.07		0.31		3.00	3.50	322	0.05		42.00	27.10	0.0009
MAX			1,555		2.60		1.97					0.11		0.50					0.08			
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 (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 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											12	11										
MAR																						
APR																						
MAY																						
JUN																						
JUL																						
AUG																						
SEP																						
OCT																						
NOV																						
DEC																						
TOTAL	42,495																4	12	0	0		
AVG		1,371			0.12		0.12		99.97	99.58	50.0	9.5	0.33									
MAX			1,793	36		0.37		0.64			88	11		1.40							35,000	24
MIN															82.00	67.00						
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-BAHPRE  
 DESCRIPTION: MOVING BED BIOLOGICAL REACTOR (MBBR) TREATMENT LAGOON

YEAR: 2025  
 WATER COURSE: NATION RIVER  
 DESIGN CAPACITY: 2,110 m<sup>3</sup>/d  
 FACILITY WORKS#: 110002201

MONTH	RAW								EFFLUENT										
	Total Flow m <sup>3</sup>	Avg Day Flow m <sup>3</sup>	Max Day Flow m <sup>3</sup> /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 <sup>3</sup>	Effluent Avg Flow m <sup>3</sup>	Effluent Max Flow m <sup>3</sup> /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	74.04	186	272	55.7	6.07	79,869	2,576	2,781	3.5	8.0	7.9	0.33	11.8	9.2	0.05	229
FEB																			
MAR																			
APR																			
MAY																			
JUN																			
JUL																			
AUG																			
SEPT																			
OCT																			
NOV																			
DEC																			
TOTAL	43,311								79,869										
AVG		1,397		74	186	272	56	6.07		2,576		3.5	8.0	7.9	0.33	11.8	9.2	0.05	229
MAX			1,703		186	272	56	6.07			2,781	3.5	8.0	7.9	0.33	11.8	9.2	0.05	229
CRITERIA						Fall Discharge			267,650	2,909									
						Winter/Spring Dircharge			502,500	3,722	5,000								

COMPLIANCE											YES								
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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								
MAR								
APR								
MAY								
JUN								
JUL								
AUG								
SEPT								
OCT								
NOV								
DEC								
TOTAL								
AVG	3.0	6	0.12	0.04	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
MAX	3	6.0	0.12	0.04	0.0	0	0.00	0.00
CRITERIA								

Comments:

## Appendix B

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### Work Order Summary Reports



## Monthly Work Order Summary – January 2025

### Casselman Drinking Water System

Description	Status	Work Type
Daily O&M Activities Casselman Water Treatment (1y) 5971	APPR	OPER
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
Workplace Inspection - DS Silica- 1m - 5971	COMP	OPER
Monthly H&S Equipment Check (1m) - 5971	COMP	PM
Quarterly H&S Equipment Check (3m) - 5971	COMP	PM
Client Reports (1m) - Casselman 5971	APPR	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
Annual 170/03 Reports (1y) - Nation Valley Compliance	COMP	PM
WTRS Flows (1y) - Nation Valley Compliance	COMP	PM
JHSC Meeting (3m) - 5971	APPR	PM

**Monthly Work Order Summary – January 2025**  
**Casselman Drinking Water System**

WISKI Monthly Review(1m) 5971	COMP	PM
Lab Standard Verification (1y) - 5971	BUSCOMP	PM
UV Sensor Reference Check/Calibration (1m) - 5971	COMP	PM
5971-01 Casselman Emergency Repairs-MM	CLIENT	CAP
5971-02 Casselman Electrical/Instrumentation Upgrades-MM - RO system	COMP	CAP
5971-03 Casselman Chemical Systems-MM	CLIENT	CAP
5971-04 Casselman Tank Cleaning (Clearwell/Backwash/Raw Water)-MM	CLIENT	CAP
5971-06 Casselman UV System Parts & Repairs-MM	CLIENT	CAP
5971-05 Casselman Building and Grounds Maintenance-MM -	CLIENT	CAP
5971-11 Casselman UV Upgrades-CAP	CLIENT	CAP
5971-13 Casselman Chlorine Panel Upgrade-CAP	CLIENT	CAP
5971-05 Casselman Building and Grounds Maintenance-MM - Cleaning supplies for filter	COMP	CAP
5971-01 Casselman Emergency Repairs-MM- Sodium Hydroxide buildup removal.	APPR	CAP
5971 Casselman WTP - Filter #2 Media Replacement - Sand & GAC	COMP	CAP
5971 Casselman WTP - Circulation Pump and valve install.	APPR	CAP
5971-WTCA-P - Power Outage	COMP	CALL
5971-10 Casselman SCADA Upgrades - CAP	APPR	CAP
High Distrobution Cl2 Alarm Casselman WTP	COMP	CALL
5971-05 Casselman Building and Grounds Maintenance-MM - Salt Bins	COMP	CAP
5971-02 Casselman Electrical/Instrumentation Upgrades-MM -	CLIENT	CAP
5971-02 Casselman Electrical/Instrumentation Upgrades-MM - Low Lift #1 Ground Fault	APPR	CAP

## Monthly Work Order Summary – January 2025

### Casselman Wastewater Treatment & Collection System

Description	Status	Work Type
Daily O&M Casselman Sewage Operation and Maintenance (1Y)1501	COMP	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
Workplace Inspection (1m) - 1501	COMP	OPER
Quarterly H&S Equipment Check (1m) - 1501	COMP	PM
WISKI Monthly Review(1m) 1501	COMP	PM
Daily O&M Casselman Sewage Operation and Maintenance (1Y)1501	APPR	PM
Actiflow Pressure Alarm Casselman WTP	COMP	CALL
1501-08 Casselman Lagoon Sludge Removal - MM	CLIENT	CAP
Hi Hi level diskfilter Alarm	COMP	CALL
1501- Power Failure Casselman WWTP WTP	COMP	CALL
Flyghtcloud Communication alarms	COMP	CALL
1501-01 Emergency Repairs - MM	CLIENT	CAP
1501-02 Generator Maintenance - MM	CLIENT	CAP
1501-03 Electrical/instrumentation - MM	CLIENT	CAP
1501-04 WWTP Blower Parts and Maint- MM	CLIENT	CAP
1501-05 Camera Inspection- MM	CLIENT	CAP
1501-06 Building and Grounds- MM	CLIENT	CAP
1501-07 Wet Well Repairs- MM	CLIENT	CAP
1501-01 Emergency Repairs - MM - Communication and Interface SPS1- SPS3	APPR	CAP

# Appendix C

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## Locate Summary



## Casselman Monthly Locate Summary – January 2025

Description	Status	Work Type
Locate Casselman WDS 1553 - 2025052550 30 Faucher emergency	COMP	OPER
Locate Casselman WDS 1553 - 2025047373 30 Faucher	COMP	OPER
Locate Casselman WDS 1553 - 2025045864 210 Zakari	COMP	OPER
Locate Casselman WDS 1553 - 2025045871 314 Zakari	COMP	OPER
Locate Casselman WDS 1553 - 2025046629 241 argile st	COMP	OPER
Locate Casselman WDS 1553 - 2025052986 Laurier	COMP	OPER
Locate Casselman WDS 1553 - 2025052365 738 principale	COMP	OPER
Total	7	