

Monthly Operations Report

for the Municipality of Casselman's Water and
Wastewater Systems

June 2022



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	June 2022	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	N/A	N/A	
<i>Target Achieved</i>		N/A	
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	N/A	N/A	
<i>Target Achieved</i>		N/A	
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 1 MBBR (Moving Bed Biofilm Reactor)
5976 - 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 or wastewater treatment systems.

The most recent MECP inspections are listed below:

Location	Inspector	Inspection Rating (%)	Date
Casselman Water	Jean-Francois Durocher	100	March 10, 2022
Casselman Sewage	<i>*OCWA has no recent sewage system inspections on file.</i>		

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 received accreditation for Casselman’s Drinking Water System in August 2019.

The 2021 Surveillance Audit was conducted by SAI Global on July 23, 2021. There were no non-conformances identified. One Opportunity for Improvement (OFI) was noted in the report for Element 19 regarding the timing of the annual internal audit, suggesting that it be completed prior to the external audit in each year.

SECTION 6 - MAINTENANCE / CAPITAL / ADDED VALUE

Water Treatment & Distribution

- Responded to five call-in alarms
- Roof repairs completed at the WTP
- Capital Controls in to service SCADA system and fix PLC programming on Actiflo #2

Wastewater Treatment & Collection

- Responded to five call-in alarms
- Two boards replaced by Capital Controls at SPS #1

Preventive Maintenance Plan (PMP) Work Order Summary

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

OCWA has tagged equipment in the wastewater treatment and collection system. The PMP is complete.

SECTION 7 – COMPLAINTS

Facility	Date	Description
		None to report

SECTION 8 – RECOMMENDATIONS / GENERAL COMMENTS

General

- 74 locates completed in June
- Approved Capital & Major Maintenance work for 2022 is ongoing

Water Treatment & Distribution

- Testing for Microcystin in the raw and treated water in accordance with the Municipal Drinking Water License (MDWL) began in June.

Wastewater Treatment & Collection

- Wastewater sampling as part of Queen’s University’s Covid sampling program continued in June.

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: 2022
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)	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
JAN	30632	988	1389	0.96	2.60	1.08	2.48	6.00	6.00	398.00	0.10	0.12	3.30	3.30	401.00	0.09	0.72	58.00	41.30
FEB	28433	1015	1367	0.78	2.60	1.06	2.37	3.60	4.70	478.00	0.18	0.90	2.00	2.50	480.00	0.08	0.14	-	-
MAR	31167	1005	1296	1.32	2.61	0.50	2.61	7.30	9.70	138.00	0.17	0.72	3.70	4.20	287.00	0.12	0.58	-	-
APR	31432	1048	1373	0.75	2.59	0.85	2.10	7.70	7.70	267.00	0.08	0.09	3.40	3.40	264.00	0.03	0.04	58.00	43.40
MAY	37972	1225	2029	0.39	2.24	1.04	2.10	6.30	6.30	285.00	0.11	0.19	2.90	2.90	282.00	0.03	0.07	-	-
JUN	37112	1237	1483	0.73	3.25	0.85	2.01	7.30	7.30	308.00	0.09	0.15	3.50	3.50	308.00	0.02	0.04	-	-
JUL																			
AUG																			
SEP																			
OCT																			
NOV																			
DEC																			
TOTAL	196,747																		
AVG		1,086						6.37	6.95	312.33	0.12		3.13	3.30	337.00	0.06		58.00	42.35
MAX			2,029		3.25		2.61					0.90					0.72		
MIN				0.39		0.50													
CRITERIA			3,182	CT		0.25	3.00											<100	<80

MONTH	SYSTEM FLOWS (RAW)			ACTIFLO FILTER #1		ACTIFLO FILTER #2		Efficiency	FILTER	TREATED			<i>E. coli</i> / Total Coliform / HPC (Number of Samples Collected)				RAW WATER		
	Total Flow (m ³)	Avg. Day Flow (m ³)	Max. Flow (m ³)	Avg. Turbidity (NTU)	Max. Turbidity (NTU)	Avg. Turbidity (NTU)	Max. Turbidity (NTU)	Turbidity % < 0.3 NTU	Backwash SS (mg/L)	Avg. Turbidity (NTU)	Max. Turbidity (NTU)	Min UV Intensity (mJ/cm ²)	Safe		Adverse		Max. Count	Max. Count	
													Treated	Distribution	Treated	Distribution			
JAN	38152	1231	1618	0.07	0.38	0.35	0.80	99.97	<3	0.37	0.60	61.00	5	15	0	0	140	38	
FEB	34681	1239	1686	0.08	0.24	0.06	0.69	99.93	7	0.61	0.98	70.00	4	12	0	0	17600	117	
MAR	37198	1200	1546	0.11	0.39	0.07	0.78	99.85	3	0.53	0.94	67.00	4	12	0	0	180	51	
APR	38033	1268	1824	0.13	0.33	0.10	0.60	99.88	6	0.34	0.97	76.00	4	12	0	0	470	20	
MAY	46116	1488	2668	0.17	0.75	0.15	0.86	97.98	14	0.48	3.33	55.00	5	15	0	0	180	32	
JUN	45684	1523	1796	0.14	0.41	0.13	0.78	99.39	3	0.50	0.76	56.00	4	12	0	0	260	28	
JUL																			
AUG																			
SEP																			
OCT																			
NOV																			
DEC																			
TOTAL	239,865												26	78	0	0			
AVG		1,325		0.12		0.14		99.50	5.8	0.47									
MAX			2,668		0.75		0.86		14		3.33						17600	117	
MIN												55.00							
CRITERIA			3,182		<1		<1	>95%			<5	>40							

COMMENTS:

Appendix B

Work Order Summary Reports



Monthly Work Order Summary – June 2022

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 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
Mixer Chemical Inspection (3m) 5971	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 5971	COMP	PM
Relief Valve UV Room Inspection (3m) 5971	COMP	OPER
Transmitter Flow (1y) Service 5971	APPR	PM
UV Light Bank Insp/Service (1m) - 5971	COMP	PM
Workplace Inspection (1m) - 5971	COMP	OPER
Annual Corporate H&S Checklist (1y) - 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
5971 - Casselman WTP - high filter effluent turbidity	COMP	OPER
Casselman 5971 Repaired Roof	APPR	CAP
Casselman 5971 Actiflo 1 fault High Chlorine	COMP	CALL
UV Sensor Reference Check/Calibration (1m) - 5971	COMP	PM
Casselman 5971 - Service on SCADA system - Capital Controls	COMP	CAP
Backwash process alarm 5971	COMP	CALL
Low Cl2 alarm 5971	COMP	CALL
raw water valve fault 5971	COMP	CALL
Casselman 5971 WTP - High turbidity and low chlorine	COMP	CALL
5971 - Casselman WTP - Capital Controls - SCADA issue with valves FV2207 and FV2208	COMP	OPER
5971 - Casselman WTP - Capital Controls - Issue with printing daily report	COMP	OPER

Monthly Work Order Summary – June 2022
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
Transmitter Flow (1y) Service 1501	APPR	PM
Generator Inspection (1m) 1501	COMP	PM
Analyzer Turbidity Inspection/Service (1m) 1501	COMP	PM
Casselman WWT MBBR O&M Manual - 1501	APPR	CAP
Annual Corporate H&S Checklist (1y) - 1501	COMP	OPER

Appendix C

Locate Summary



Casselman Monthly Locate Summary – June 2022

Description	Status	Work Type
Locate Casselman WDS 1553 - 20222312520 - 2 Racine St	COMP	OPER
Locate Casselman WDS 1553 - 202223154700 - 651 Des Epinettes	COMP	OPER
Locate Casselman WDS 1553 - 20222316011 - 2 Castonguay	COMP	OPER
Locate Casselman WDS 1553 - 20222317027 - 759 Principale	COMP	OPER
Locate Casselman WDS 1553 - 20222318517 - 679 St. Isidore	COMP	OPER
Locate Casselman WDS 1553 - 20222317864 - 669 Principale	COMP	OPER
Locate Casselman WDS 1553 - 20222319342 - 215 Laurier	COMP	OPER
Locate Casselman WDS 1553 - 20222319355 - 215 Laurier	COMP	OPER
Locate Casselman WDS 1553 - 20222319361 - 207 Laurier	COMP	OPER
Locate Casselman WDS 1553 - 20222319372 - 124 Laurier	COMP	OPER
Locate Casselman WDS 1553 - 20222319383 - 122 Laurier	COMP	OPER
Locate Casselman WDS 1553 - 20222319403 - 54 Laurier	COMP	OPER
Locate Casselman WDS 1553 - 20222319405 - Zackari St	COMP	OPER
Locate Casselman WDS 1553 - 20222319420 - 726 Brebeuf	COMP	OPER
Locate Casselman WDS 1553 - 20222319434 - 715 Brebeuf	COMP	OPER
Locate Casselman WDS 1553 - 20222320216 - 33 Argile St	COMP	OPER
Locate Casselman WDS 1553 - 20222310294 - 1 Argile St	COMP	OPER
Locate Casselman WDS 1553 - 20222320322 - 3 Argile St	COMP	OPER
Locate Casselman WDS 1553 - 20222320337 - 5 Argile St	COMP	OPER
Locate Casselman WDS 1553 - 20222321931 - 39 Faucher	COMP	OPER
Locate Casselman WDS 1553 - 20222322022 - 853 Marquette	COMP	CAP
Locate Casselman WDS 1553 - 20222322094 - 849 Principale	COMP	CAP
Locate Casselman WDS 1553 - 20222322134 - 751 St. Joseph	COMP	CAP
Locate Casselman WDS 1553 - 20222324408 - 870 Laval St.	COMP	CAP
Locate Casselman WDS 1553 - 20222322215 - 21 Richer Close	COMP	CAP
Locate Casselman WDS 1553 - 20222322117 - Dore St	COMP	CAP
Locate Casselman WDS 1553 - 20222322069 - 699 St-Anne St.	COMP	CAP
Locate Casselman WDS 1553 - 2022243837 - 541 Barrage St.	COMP	CAP
Locate Casselman WDS 1553 - 2022246392 - 54 Laurier	COMP	CAP
Locate Casselman WDS 1553 - 2022247173 - 673 Montcalm	COMP	CAP
Locate Casselman WDS 1553 - 2022249832 - 320 Dore St.	COMP	CAP
Locate Casselman WDS 1553 - 20222411906 - 95 Lafleche	COMP	CAP
Locate Casselman WDS 1553 - 2022247011 - 681 Duhamel	COMP	CAP
Locate Casselman WDS 1553 - 20222418028 - 25 Sarah	COMP	CAP
Locate Casselman WDS 1553 - 20222422844 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 - 20222428125 - 837 Principale	COMP	CAP
Locate Casselman WDS 1553 - 2022250303 - 743 Laval	COMP	CAP
Locate Casselman WDS 1553 - 2022250330 - Barrage St	COMP	CAP
Locate Casselman WDS 1553 - 2022251053 - 684 Montcalm	COMP	CAP
Locate Casselman WDS 1553 - 2022251060 - 17 Albert	COMP	CAP

Casselman Monthly Locate Summary – June 2022

Locate Casselman WDS 1553 - 2022251206 - Dore St.	COMP	CAP
Locate Casselman WDS 1553 - 20222511796 - 836 Princiaple	COMP	CAP
Locate Casselman WDS 1553 - 20222516162 - Zackari St.	COMP	CAP
Locate Casselman WDS 1553 - 20222517489 - 517 Barrage St.	COMP	CAP
Locate Casselman WDS 1553 - 20222517541 - 521 Barrage St.	COMP	CAP
Locate Casselman WDS 1553 - 20222517736 - 321 Dore St.	COMP	CAP
Locate Casselman WDS 1553 - 20222523079 - 778 Brebeuf	APPR	CAP
Locate Casselman WDS 1553 - 20222523079 - 778 Brebeuf	COMP	CAP
Locate Casselman WDS 1553 - 20222524939 - 656 Ste Isidore	COMP	CAP
Locate Casselman WDS 1553 - 2022260194 - 100 Lafleche	COMP	CAP
Locate Casselman WDS 1553 - 2022262642 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 - 2022262672 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 - 2022264631 - Conservation St	COMP	CAP
Locate Casselman WDS 1553 - 2022264685 - Conservation St	COMP	CAP
Locate Casselman WDS 1553 - 2022265579 - 862 Laval	COMP	CAP
Locate Casselman WDS 1553 - 2022267154 - 632 St Isidore	COMP	CAP
Locate Casselman WDS 1553 - 2022268694 - 524 Barrage St	COMP	CAP
Locate Casselman WDS 1553 - 20222517751 - St Isidore	COMP	CAP
Locate Casselman WDS 1553 - 20222517803 - St Isidore	COMP	CAP
Locate Casselman WDS 1553 - 2022268730 - 528 Barrage St.	COMP	CAP
Locate Casselman WDS 1553 - 2022268802 - 532 Barrage St.	COMP	CAP
Locate Casselman WDS 1553 - 20222611432 - 657 St Anne	COMP	CAP
Locate Casselman WDS 1553 - 20222612682 - 778 Brebeuf	COMP	CAP
Locate Casselman WDS 1553 - 20222621718 - 280 Nature	COMP	CAP
Locate Casselman WDS 1553 - 20222621759 - 284 Nature	COMP	CAP
Locate Casselman WDS 1553 - 20222616408 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 - 20222616486 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 - 20222612682 - 778 Brebeuf	COMP	CAP
Locate Casselman WDS 1553 - 20222117817 - 794 Levesque	COMP	CAP
Locate Casselman WDS 1553 - 20222628709 - 220 Nature St.	COMP	CAP
Locate Casselman WDS 1553 - 2022270800 - Conservation St.	COMP	CAP
Locate Casselman WDS 1553 - 2022276764 - Conservation St.	COMP	CAP
Locate Casselman WDS 1553 - 2022277816 - 758 Brebeuf	COMP	CAP
Locate Casselman WDS 1553 - 2022185362 - 730 St Isidore	COMP	CAP
Total		74