

Monthly Operations Report

for the Municipality of Casselman's Water and
Wastewater Systems

August 2022



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

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A decorative graphic in the bottom right corner of the page. It features a light blue sun with a thick, curved arc at the top, and three wavy, horizontal bands below it, representing water or waves. The graphic is semi-transparent and blends into the white background.

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	August 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>		1	
Water Main Flushing	0	●	
<i>Target Achieved</i>		0	
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>		0	
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 2022 Re-Accreditation Audit by SAI Global is scheduled to take place in November 2022.

SECTION 6 - MAINTENANCE / CAPITAL / ADDED VALUE

Water Treatment & Distribution

- Responded to five call-in alarms

Wastewater Treatment & Collection

- Responded to six call-in alarms
- Cleaned wet well at SPS #1
- Contactors for both Pump #1 and Pump #2 at SPS #6 were damaged during a storm, replacements were purchased and installed

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
Casselman DWS	Aug. 10, 2022	Email complaint was received from a resident on Conservation Street regarding coloured water. A hydrant operated the day of the complaint during cleaning of SPS#1 caused the coloured water occurrence.

SECTION 8 – RECOMMENDATIONS / GENERAL COMMENTS

General

- 73 locates completed in August
- Approved Capital & Major Maintenance work for 2022 is ongoing

Water Treatment & Distribution

- The pilot study using manganese dioxide filters at the WTP was set up during the last week of August and will run through September.

Wastewater Treatment & Collection

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

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) quarterly	HAA (µg/L) quarterly
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	2.20	7.30	7.30	308.00	0.09	0.15	3.50	3.50	308.00	0.02	0.04	-	-
JUL	40529	1307	1618	0.44	2.74	0.58	1.83	7.80	7.80	344.00	0.18	0.35	3.70	3.70	333.00	0.03	0.04	163.00	126.00
AUG	39559	1276	1703	0.64	2.94	0.52	3.58	11.30	11.30	293.00	0.15	0.33	5.60	5.60	288.00	0.06	0.17	-	-
SEP																			
OCT																			
NOV																			
DEC																			
TOTAL	276,835																		
AVG		1,138						7.16	7.60	313.88	0.13		3.51	3.64	330.38	0.06		93.00	70.23
MAX			2,029		3.25		3.58					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	49779	1606	2058	0.18	0.61	0.16	0.53	98.24	5	0.65	1.11	52.00	4	12	0	0	29	11	
AUG	49799	1606	2164	0.13	0.41	0.12	0.55	99.90	9	0.61	2.66	64.94	5	15	0	0	150	58	
SEP																			
OCT																			
NOV																			
DEC																			
TOTAL	339,442												35	105	0	0			
AVG		1,395		0.13		0.14		99.39	6.1	0.51									
MAX			2,668		0.75		0.86		14		3.33						17600	117	
MIN												52.00							
CRITERIA			3,182		<1		<1	>95%			<5	>40							

COMMENTS:

Appendix B

Work Order Summary Reports



Monthly Work Order Summary – August 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
PANEL ALARM/DIALER TEST (1m) - 5971	COMP	PM
UV Light Bank Insp/Service (1m) - 5971	COMP	PM
Workplace Inspection (1m) - 5971	COMP	OPER
Annual Facility Description Review (1y) - 5971	APPR	PM
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
Analyzer Turbidity Inspection/Service (1m) 1501	COMP	PM
Casselman 5971 Actiflo 1 fault low chlorine	INPRG	CALL
Casselman 5971 - Service on Hach Instrumentation	APPR	CAP
DNC- Casselman 5971 Safety	APPR	CAP
Casselman 5971 - Service on SCADA system for chlorination - Capital Controls	COMP	CAP
Waste process water alarms	COMP	CALL
CI Casselman WTP - Power Outage	COMP	CALL
UV Sensor Reference Check/Calibration (1m) - 5971	COMP	PM
Casselman 5971 - Manganese Filter Pilot Project	APPR	CAP
5971 Annual H&S Inspection Finding - Install Chemical Placards, H&S Signage & Ladder Holder	APPR	CORR
CI 5971 Casselman WTP - Power Outage	COMP	CALL
Capital Tower Clean and Inspection Casselman WT 5971	MGR	CAP
5971 - Casselman WTP - Alarm Backwash Tank High Level	COMP	CALL

Monthly Work Order Summary – August 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
Generator Inspection (1m) 1501	COMP	PM
Analyzer Turbidity Inspection/Service (1m) 1501	COMP	PM
Monthly H&S Equipment Check (1m) - 1501	COMP	PM
Bar Screen Inspection (1m) 1501	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 1501	COMP	PM
PANEL ALARM/DIALER TEST (1m) - 1501	COMP	PM
Specific ECA - Bypass (3m) - 1501	COMP	PM
1501 - SPS-6 - Power Event Damaged Pump Contactors	COMP	CALL
Workplace Inspection (1m) - 1501	COMP	OPER
Quarterly H&S Equipment Check (1m) - 1501	COMP	PM
SPS 1 hi level	COMP	CALL
CI 1501 Casselman Sewage - Power Outage	COMP	CALL
CI 1501 Casselman Sewage - SPS6 Pump 1 Fault	COMP	CALL
1501 Annual H&S Inspection Finding - Install Eye Wash (DiskFilter), Ear Protection & Ladder Holder	APPR	CORR
CI 1501 Casselman - Power Outage	COMP	CALL
Casselman - 1501 - Sewer main flushing	APPR	CAP
Casselman 1501 - SPS#1 Generator Service	COMP	PM
Power fail Plant reset	COMP	CALL

Appendix C

Locate Summary



Casselman Monthly Locate Summary – August 2022

Description	Status	Work Type
Locate Casselman WDS 1553 - 20223116507 - 619 St Isidore St	COMP	OPER
Locate Casselman WDS 1553 - 20223114196 - 300 Dore St.	COMP	OPER
Locate Casselman WDS 1553 - 20223122092 - 722 St Joseph St	COMP	OPER
Locate Casselman WDS 1553 - 20223122106 - 756 Brebeuf St.	COMP	OPER
Locate Casselman WDS 1553 - 2022320633 - 15 Percy St	COMP	OPER
Locate Casselman WDS 1553 - 2022324605 - Principale St	COMP	OPER
Locate Casselman WDS 1553 - 2022320391 - 751 St Joseph	COMP	OPER
Locate Casselman WDS 1553 - 2022321318 - 31 Faucher	COMP	OPER
Locate Casselman WDS 1553 - 20222926686 - 681 Duhamel	COMP	OPER
Locate Casselman WDS 1553 - 20223210594 - 124 Argile	COMP	OPER
Locate Casselman WDS 1553 - 20223210450 - 401 Dore St	COMP	OPER
Locate Casselman WDS 1553 - 20223210492 - 410 Dore St	COMP	OPER
Locate Casselman WDS 1553 - 20223218676 - 702 Brebeuf St.	COMP	OPER
Locate Casselman WDS 1553 - 20223219464 - 31 Desnoyers	COMP	OPER
Locate Casselman WDS 1553 - 20223220296 - Principale St	COMP	OPER
Locate Casselman WDS 1553 - 20223220406 - Principale and Martin	COMP	OPER
Locate Casselman WDS 1553 - 20223223777 - 785 Laval	COMP	OPER
Locate Casselman WDS 1553 - 2022330422 - 394 Dore St	COMP	OPER
Locate Casselman WDS 1553 - 2022331007 - 1 Industrial	COMP	OPER
Locate Casselman WDS 1553 - 2022334201 - 704 Brebeuf St	COMP	OPER
Locate Casselman WDS 1553 - 2022336772 - 95 Lafleche Blvd	COMP	CAP
Locate Casselman WDS 1553 - 2022336795 - 16 Brisson St	COMP	CAP
Locate Casselman WDS 1553 - 2022337268 - Conservation St	COMP	CAP
Locate Casselman WDS 1553 - 2022337458 - Conservation St	COMP	CAP
Locate Casselman WDS 1553 - 20223310988 - 832 Laval St	COMP	CAP
Locate Casselman WDS 1553 - 20223313562 - 730 + 732 St Isidore	COMP	CAP
Locate Casselman WDS 1553 - 20223315872 - 20 Brisson St	COMP	CAP
Locate Casselman WDS 1553 - 20223318103 - Principale and Racine	COMP	CAP
Locate Casselman WDS 1553 - 20223324763 - 700 Des Pins	COMP	CAP
Locate Casselman WDS 1553 -20223314656 - 690 St Isidore	COMP	CAP
Locate Casselman WDS 1553 -2022341771 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 -2022347697 - 540 Barrage St	COMP	CAP
Locate Casselman WDS 1553 -2022347742 - 544 Barrage St	COMP	CAP
Locate Casselman WDS 1553 -20223326834 - 686 St Isidore	COMP	CAP
Locate Casselman WDS 1553 -20223326877 - 209 Nature	COMP	CAP
Locate Casselman WDS 1553 -20223327262 - 5 Sarah St	COMP	CAP
Locate Casselman WDS 1553 - 2022340041 - 731 Des Pommiers	COMP	CAP
Locate Casselman WDS 1553 - 2022340092 - 699 St Isidore	COMP	CAP
Locate Casselman WDS 1553 - 20222010895 - 732 St Isidore	COMP	CAP
Locate Casselman WDS 1553 -2022343790 - Laurier St	COMP	CAP

Casselman Monthly Locate Summary – August 2022

Locate Casselman WDS 1553 -20223417710 - 7 Desnoyers	COMP	CAP
Locate Casselman WDS 1553 -20223417701 - 604 St Isidore	COMP	CAP
Locate Casselman WDS 1553 -20223419107 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 -20223420280 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 -20223322041 - 28 Faucher	COMP	CAP
Locate Casselman WDS 1553 -20223423012 - Barrage St	COMP	CAP
Locate Casselman WDS 1553 -20223423086 - Conservation St	COMP	CAP
Locate Casselman WDS 1553 - 2022341617 - St Therese	COMP	CAP
Locate Casselman WDS 1553 - 2022346972 - 693 St Marie	COMP	CAP
Locate Casselman WDS 1553 - 20223417718 - 76 Laurier	COMP	CAP
Locate Casselman WDS 1553 - 20223425606 - Principale St	COMP	CAP
Locate Casselman WDS 1553 - 20223425731 - 625 Principale St	COMP	CAP
Locate Casselman WDS 1553 - 20223425757 - Principale St	COMP	CAP
Locate Casselman WDS 1553 - 20223425680 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 - 20223426270 - Sauve Terrace	COMP	CAP
Locate Casselman WDS 1553 - 20223426337 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 - 20223323919 - 703 Des Cedres	COMP	CAP
Locate Casselman WDS 1553 - 2022350078 - 12 Percy	COMP	CAP
Locate Casselman WDS 1553 - 2022350080 - 793 St Therese	COMP	CAP
Locate Casselman WDS 1553 - 2022350082 - 755 St Joseph	COMP	CAP
Locate Casselman WDS 1553 - 2022350084 - 721 St Joseph	COMP	CAP
Locate Casselman WDS 1553 - 2022352936 - HWY 417	COMP	CAP
Locate Casselman WDS 1553 - 2022355088 - Barrage St	COMP	CAP
Locate Casselman WDS 1553 - 2022355151 - Conservation St	COMP	CAP
Locate Casselman WDS 1553 - 2022354606 - 280 Nature St	COMP	CAP
Locate Casselman WDS 1553 - 2022354655 - 284 Nature St	COMP	CAP
Locate Casselman WDS 1553 - 2022353014 - Principale St	COMP	CAP
Locate Casselman WDS 1553 - 2022356938 - 304 Dore St	COMP	CAP
Locate Casselman WDS 1553 - 2022358247 - Laurier and Principale	COMP	CAP
Locate Casselman WDS 1553 - 20223520092 - 672 Principale St	COMP	CAP
Locate Casselman WDS 1553 - 20223114074 - 300 Dore St	COMP	CAP
Locate Casselman WDS 1553 - 20223517735 - 745 Brebeuf St	COMP	CAP
Locate Casselman WDS 1553 - 20223511267 - 792 St. Therese St.	COMP	CAP
Total		73