

# Monthly Operations Report

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for the Municipality of Casselman's Water and  
Wastewater Systems

September 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 |
|-------------------------------------|--------|---------------|----------|
| <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<br>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. However, notification was provided to the MECP and EOHU regarding the presence of Microcystin in raw water samples collected during the month of September. No Microcystin was detected in treated water samples collected from the WTP.

There were no compliance issues to report for Casselman's wastewater treatment system.

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 three after-hours call-back alarms
- Continued to monitor for the presence of blue-green algae in the South Nation River & collected additional Microcystin samples
- Completed summer dead end flushing in the distribution system
- Witnessed service connection at 9/11 Mercier
- Annual gas detector calibrations completed
- Annual flow meter calibrations completed
- Began winterizing hydrants in distribution system

### Wastewater Treatment & Collection

- Responded to one after-hours call-back alarm
- Sludge removal from Cell 1 was completed, opened valve to equalize
- Cleaned out wet wells at SPS #1, 3, 4 & 5
- Annual flow meter calibrations completed
- Backflow preventer repaired in alum building at lagoon
- Cleaned & greased disc filter in preparation for lagoon discharge

### Preventive Maintenance Plan (PMP) Work Order Summary

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

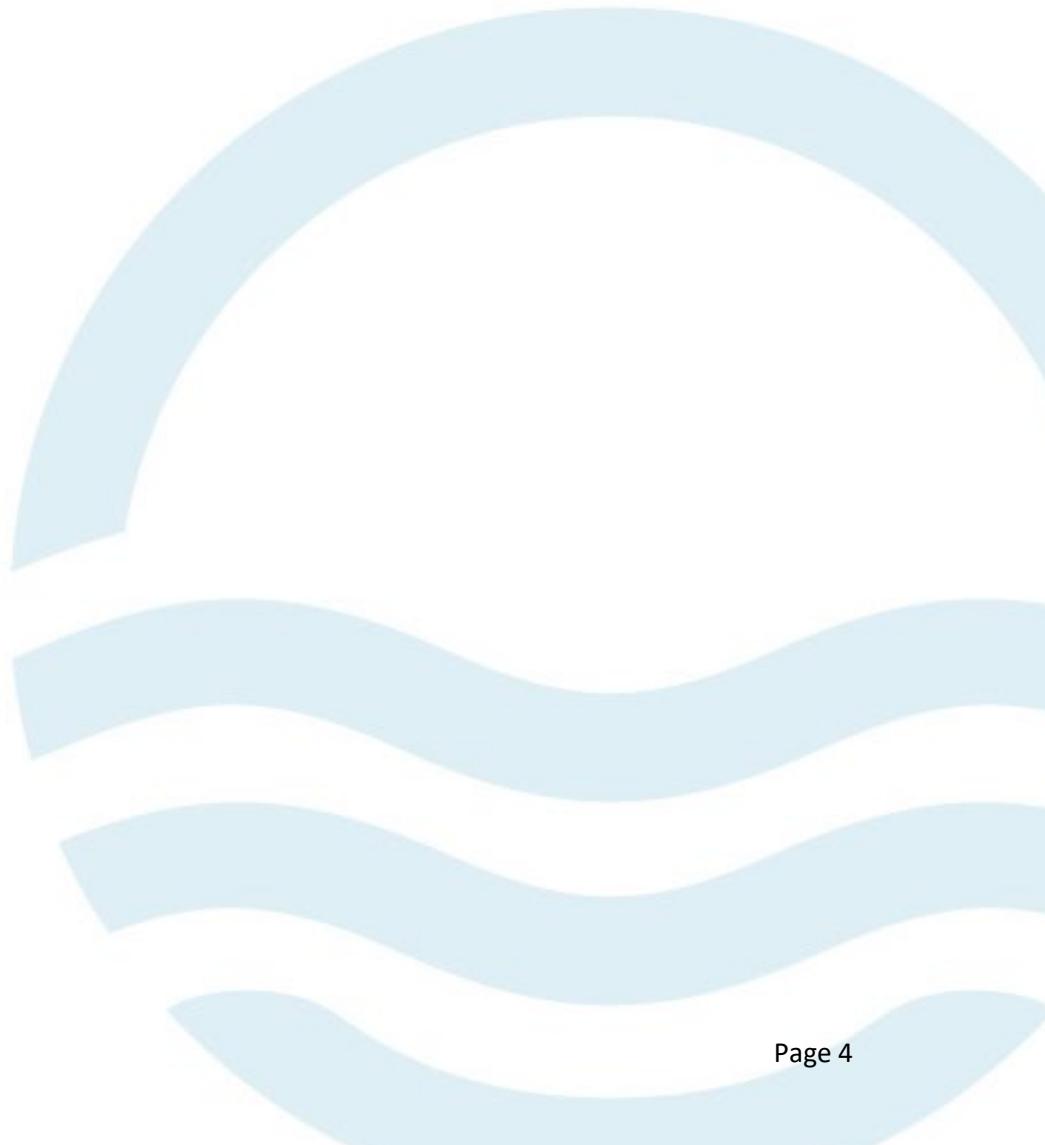
## **SECTION 7 – COMPLAINTS**

| Facility | Date | Description    |
|----------|------|----------------|
|          |      | None to report |

## **SECTION 8 – RECOMMENDATIONS / GENERAL COMMENTS**

### General

- 29 locates were completed in September.



# 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) quarterly | HAA (µg/L) quarterly | NDMA (µg/L) quarterly |
| 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             | 1.06                        | 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                            | 10.70                       | 282                   | 0.16                     | 0.32                 | 0.35                    | 0.48                    | 4.70                            | 4.80                        |                       | 0.03                     | 0.06                 | 98.00                | 49.90                | 0.0029                |
| AUG             | 38,610                 | 1,245          | 1,673             | 1.07                        | 2.80                       | 0.83                           | 2.09                           | 9.60                            | 9.30                        | 308                   | 0.16                     | 0.40                 | 0.45                    | 1.29                    | 4.50                            | 4.30                        |                       | 0.03                     | 0.16                 |                      |                      |                       |
| SEP             | 31,764                 | 1,059          | 1,420             | 1.47                        | 2.30                       | 0.92                           | 1.87                           | 10.20                           | 9.10                        | 254                   | 0.11                     | 0.19                 | 0.24                    | 0.31                    | 4.90                            | 4.50                        |                       | 0.01                     | 0.02                 |                      |                      |                       |
| OCT             |                        |                |                   |                             |                            |                                |                                |                                 |                             |                       |                          |                      |                         |                         |                                 |                             |                       |                          |                      |                      |                      |                       |
| NOV             |                        |                |                   |                             |                            |                                |                                |                                 |                             |                       |                          |                      |                         |                         |                                 |                             |                       |                          |                      |                      |                      |                       |
| DEC             |                        |                |                   |                             |                            |                                |                                |                                 |                             |                       |                          |                      |                         |                         |                                 |                             |                       |                          |                      |                      |                      |                       |
| <b>TOTAL</b>    | <b>321,858</b>         |                |                   |                             |                            |                                |                                |                                 |                             |                       |                          |                      |                         |                         |                                 |                             |                       |                          |                      |                      |                      |                       |
| <b>AVG</b>      | <b>1,178</b>           |                |                   |                             |                            |                                |                                | <b>7.10</b>                     | <b>7.06</b>                 | <b>324</b>            | <b>0.11</b>              |                      | <b>0.37</b>             |                         | <b>3.50</b>                     | <b>3.23</b>                 | <b>322</b>            | <b>0.04</b>              |                      | <b>60.0</b>          | <b>34.9</b>          | <b>0.0009</b>         |
| <b>MAX</b>      |                        | <b>1,878</b>   |                   | <b>2.80</b>                 |                            | <b>2.17</b>                    |                                |                                 |                             |                       | <b>0.40</b>              |                      | <b>1.29</b>             |                         |                                 |                             |                       |                          | <b>0.16</b>          |                      |                      |                       |
| <b>MIN</b>      |                        |                | <b>0.91</b>       |                             | <b>0.83</b>                |                                |                                |                                 |                             |                       |                          |                      |                         |                         |                                 |                             |                       |                          |                      |                      |                      |                       |
| <b>CRITERIA</b> |                        | <b>3,182</b>   | <b>CT</b>         | <b>0.25</b>                 | <b>3.00</b>                |                                |                                |                                 |                             |                       |                          |                      |                         |                         |                                 |                             |                       |                          | <b>&lt;100</b>       | <b>&lt;80</b>        | <b>&lt;0.009</b>     |                       |

| 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) | < 0.3 NTU Filter #1 | < 0.3 NTU Filter #2 | Turbidity %   | Backwash TSS (mg/L) | Supernatant TSS (mg/L) | OL Avg. Turbidity (NTU) | OL Max. Turbidity (NTU) | Min UV Intensity (mJ/cm²) | Min UV Intensity (%)   | Safe       |              | Adverse  |               | Max. Count | Max. Count |
|                 |                    |                    |                |                        |                      |                      |                      |                      |                     |                     |               |                     |                        |                         |                         |                           |  | Treated    | Distribution | Treated  | Distribution  |            |            |
| 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                   | 0.11                 | 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             | 44,651             | 1,440              | 1,919          | 2405                   | 0.16                 | 0.60                 | 0.14                 | 0.64                 | 99.88               | 99.82               | 12            | 6                   | 0.24                   | 1.14                    | 140                     | 74                        | 4  | 12         | 0            | 0        | 300           | 4          |            |
| SEP             | 36,480             | 1,216              | 1,699          | 1532                   | 0.11                 | 0.67                 | 0.12                 | 0.39                 | 99.92               | 99.85               | 4             | 3                   | 0.10                   | 0.40                    | 126                     | 88                        | 5  | 15         | 0            | 0        | 150           | 76         |            |
| OCT             |                    |                    |                |                        |                      |                      |                      |                      |                     |                     |               |                     |                        |                         |                         |                           |  |            |              |          |               |            |            |
| NOV             |                    |                    |                |                        |                      |                      |                      |                      |                     |                     |               |                     |                        |                         |                         |                           |  |            |              |          |               |            |            |
| DEC             |                    |                    |                |                        |                      |                      |                      |                      |                     |                     |               |                     |                        |                         |                         |                           |  |            |              |          |               |            |            |
| <b>TOTAL</b>    | <b>370,270</b>     |                    |                |                        |                      |                      |                      |                      |                     |                     |               |                     |                        |                         |                         |                           | <b>39</b>  | <b>117</b> | <b>0</b>     | <b>0</b> |               |            |            |
| <b>AVG</b>      | <b>1,356</b>       |                    |                |                        | <b>0.12</b>          |                      | <b>0.12</b>          |                      | <b>99.78</b>        | <b>99.37</b>        | <b>22</b>     | <b>9</b>            | <b>0.26</b>            |                         |                         |                           |  |            |              |          |               |            |            |
| <b>MAX</b>      |                    | <b>2,120</b>       | <b>2,405</b>   |                        | <b>0.67</b>          |                      | <b>0.64</b>          |                      |                     | <b>88</b>           | <b>17</b>     |                     | <b>2.11</b>            |                         |                         |                           |  |            |              |          | <b>35,000</b> | <b>78</b>  |            |
| <b>MIN</b>      |                    |                    |                |                        |                      |                      |                      |                      |                     |                     |               |                     |                        |                         |                         |                           | <b>82</b>  | <b>67</b>  |              |          |               |            |            |
| <b>CRITERIA</b> |                    | <b>3,182</b>       | <b>2,205</b>   |                        | <b>&lt;1</b>         |                      | <b>&lt;1</b>         |                      | <b>&gt;95%</b>      | <b>&gt;95%</b>      | <b>&lt;25</b> | <b>&lt;25</b>       | <b>&lt;5</b>           | <b>&gt;40</b>           |                         |                           |  |            |              |          |               |            |            |

**COMMENTS:**

\*PTTW maximum allowable flow rate was exceeded for two short periods on August 19, 2025 during Chlorine Dioxide Pilot Testing.

**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 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                          | 74.0                   | 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                 | 550                | 83.6                | 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          | 35,686                    | 1,151                       | 1,236                          | 52.8                   | 153                 | 395                | 59.8                | 6.49              |                                |                                  |                                     |                  |                |                |               |                |                    |                    |                      |
| SEPT         | 32,269                    | 1,076                       | 1,121                          | 54.2                   | 194                 | 480                | 58.3                | 6.44              |                                |                                  |                                     |                  |                |                |               |                |                    |                    |                      |
| OCT          |                           |                             |                                |                        |                     |                    |                     |                   |                                |                                  |                                     |                  |                |                |               |                |                    |                    |                      |
| NOV          |                           |                             |                                |                        |                     |                    |                     |                   |                                |                                  |                                     |                  |                |                |               |                |                    |                    |                      |
| DEC          |                           |                             |                                |                        |                     |                    |                     |                   |                                |                                  |                                     |                  |                |                |               |                |                    |                    |                      |
| <b>TOTAL</b> | <b>396,402</b>            |                             |                                |                        |                     |                    |                     |                   | <b>479,177</b>                 |                                  |                                     |                  |                |                |               |                |                    |                    |                      |
| AVG          |                           | 1,449                       |                                | 53.7                   | 185                 | 390                | 62.4                | 5.38              |                                | 3,850                            |                                     | 4.0              | 9.7            | 8.5            | 0.41          | 12.0           | 15.3               | 0.16               | 101                  |
| MAX          |                           |                             |                                | 2,920                  | 317                 | 550                | 106                 | 7.40              |                                |                                  | 6,938                               | 4.3              | 16.3           | 20.4           | 0.56          | 28.0           | 21.6               | 0.31               | 563                  |
| CRITERIA     |                           |                             |                                |                        |                     |                    |                     |                   | <b>Fall Discharge</b>          | <b>267,650</b>                   | <b>2,909</b>                        |                  |                |                |               |                |                    |                    |                      |
|              |                           |                             |                                |                        |                     |                    |                     |                   | <b>Winter/Spring Dircharge</b> | <b>502,500</b>                   | <b>3,722</b>                        |                  |                |                |               |                |                    |                    |                      |

|                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>COMPLIANCE</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| 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          |                  |                |                |                  |                  |                |                |                  |
| <b>TOTAL</b> |                  |                |                |                  |                  |                |                |                  |
| 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

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### Work Order Summary Reports



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

| <b>Description</b>   | <b>Status</b> | <b>Work Type</b> |
|--|---------------|------------------|
| 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               |
| Electric Heater Inspection (1y) 5971                                     | COMP          | PM               |
| Louvre (1y) Inspection 5971  | COMP          | PM               |
| MCC Insp/Service (1y) - 5971   | COMP          | PM               |
| Tank Pressure Insp/Service (1y) 5971                                     | COMP          | PM               |
| Mixer Chemical Inspection (3m) 5971                                      | COMP          | PM               |
| PANEL ALARM/DIALER TEST (1m) - 5971                                      | COMP          | PM               |
| Panel Control Inspection/Service (1y) 5971                               | COMP          | PM               |
| Panel Control SCADA Inspection/Service (1y) 5971                         | COMP          | PM               |
| Tank Chemical Inspection (1y) 5971                                       | COMP          | PM               |
| Tank Water Clearwell Inspection (1y) 5971                                | COMP          | PM               |
| Tank Hot Water Insp. (1y) - 5971   | COMP          | PM               |
| Tank Process (1y) Inspection 5971  | COMP          | PM               |
| UV Light Bank Insp/Service (1m) - 5971                                   | COMP          | PM               |
| Annual Internal Audit (1y) - Casselman DWS                               | APPR          | PM               |
| QEMS04 Risk Assessment (1y) - 5971                                       | COMP          | PM               |
| Annual Facility Description Review (1y) - 5971                           | COMP          | 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               |
| WISKI Monthly Review(1m) 5971  | COMP          | PM               |
| Chemical Review/Expiry Verification (1y) 5971                            | COMP          | PM               |
| UV Sensor Reference Check/Calibration (1m) - 5971                        | COMP          | PM               |
| Natural Gas Heater Inspection (1y) 5971                                  | COMP          | OPER             |

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

|   |        |       |
|---|--------|-------|
| Relief Valve UV Room Inspection (3m) 5971   | COMP   | OPER  |
| Workplace Inspection - DS Silica- 1m - 5971   | COMP   | OPER  |
| Annual Health & Safety Inspection Findings - Casselman Water - 5971                       | APPR   | OPER  |
| Hydrant Ends Flushing (1m) 1553   | COMP   | OPER  |
| 5971 Casselman WTP Transfer line  | CLIENT | CAP   |
| 5971-WTCA-F - Generator Battery Charger Failed  | COMP   | CAP   |
| 5971-02 Casselman Electrical/Instrumentation Upgrades-MM - Chlorine controller            | APPR   | CAP   |
| Casselman WDS 1553 -9/11 -Mercier Tie in  | COMP   | CAP   |
| 1553-03 Casselman DIST. Dist Maint(Secondary Valves)-MM - Water Service - 37 Richer Cir   | COMP   | CAP   |
| Polymer pump fail Casselman WTP   | COMP   | CALL  |
| 5971 Casselman- High Transfer tank plant shut down  | COMP   | CALL  |
| 5971-CALL BACK - Power Event  | COMP   | CALL  |
| DWQMS External Audit / REACC - Casselman DWS - 5971                                       | APPR   | ADMIN |
| CM01 Non-Compliance - Loss of Trending - Filter Effluent Turbidity - Casselman DWS - 5971 | COMP   | ADMIN |

**Monthly Work Order Summary – September 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        |
| Bar Screen Inspection (1m) 1501   | COMP   | PM        |
| PANEL ALARM/DIALER TEST (1m) - 1501                                     | COMP   | PM        |
| Outpost Panel Inspection/Maintenance (1y) 1501                          | APPR   | 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        |
| UPS LAGOON (1y) 1501  | APPR   | PM        |
| PANEL ALARM/DIALER TEST (1m) - 1501                                     | COMP   | PM        |
| WISKI Monthly Review(1m) 1501   | COMP   | PM        |
| Chemical Review/Expiry Verification (1y) 1501                           | APPR   | PM        |
| Workplace Inspection (1m) - 1501  | COMP   | OPER      |
| Annual Health & Safety Inspection Findings - Casselman Sewage - 1501    | APPR   | OPER      |
| 1501-WWCA - Natural Gas Leak - SPS-6                                    | COMP   | EMER      |
| 1501-08 Casselman Lagoon Sludge Removal - MM - Pump Trailer Maintenance | COMP   | CAP       |

## Appendix C

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### Locate Summary



## Casselman Monthly Locate Summary – September 2025

| Description   | Status | Work Type |
|---|--------|-----------|
| Locate request "2025360916" 24 Alice                        | COMP   | OPER      |
| Locate request "20253523141" 632 Principale                 | COMP   | OPER      |
| Locate request "20253521915" 832 St isadore                 | COMP   | OPER      |
| Locate request "2025364807" Cima 245-249 Argile             | COMP   | OPER      |
| Locate request "2025364787" Cima 253-247 Argile             | COMP   | OPER      |
| Locate request "2025366646" 19 Sarah                        | COMP   | OPER      |
| Locate request "20253613185" Dubois/ Principale             | COMP   | OPER      |
| Locate request "20253614619" CIMA 361 Dore                  | COMP   | OPER      |
| Locate request "20253619380" 319 Zakari                     | COMP   | OPER      |
| Locate request "20253716654" 744 Brebeuf                    | COMP   | OPER      |
| Locate request "20253716654" 630 St isidore                 | COMP   | OPER      |
| Locate request "20253716654" 630 St isidore                 | COMP   | OPER      |
| Locate request "20253719355" Lafontaine Bell                | COMP   | OPER      |
| Locate request "20253721549" 120 argile                     | COMP   | OPER      |
| Locate request "20253721356" Lafontaine Bell                | COMP   | OPER      |
| Locate request "2025370124" 844 Marquette                   | COMP   | OPER      |
| Locate request "2025382509" 13 Maria                        | COMP   | OPER      |
| Locate request "20253813247" Laurier Pit                    | COMP   | OPER      |
| Locate request "2025389239" 237 Argile                      | COMP   | OPER      |
| Locate request "20253810028" 98 Lafleshe                    | COMP   | OPER      |
| Locate request "20253817380" 1 Industrial                   | COMP   | OPER      |
| Locate Casselman WDS 1553 - 20253823128- 12 Maria           | COMP   | CAP       |
| Locate Casselman WDS 1553 - 20253823687- 49 Faucher         | COMP   | CAP       |
| Locate Casselman WDS 1553 - 20253823179- 623 St. Isidore    | COMP   | CAP       |
| Locate Casselman WDS 1553 - 2025395057- Des Pommiers 731    | COMP   | CAP       |
| Locate Casselman WDS 1553 - 2025395098- Des Pommiers 731    | COMP   | CAP       |
| Locate Casselman WDS 1553 - 20253320574- 755-757 Principale | COMP   | CAP       |
| Locate Casselman WDS 1553 - 20253320586- 755-757 Principale | COMP   | CAP       |
| Locate Casselman WDS 1553 - 20253417784- 6 Vanessa          | COMP   | CAP       |
| Total   |        | 29        |

## Appendix D

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### Notifications to MECP



**Notices of Adverse Test Results and  
Issue Resolution (Schedule 16)**

Drinking Water Systems Regulation (O. Reg. 170/03)

Fields marked with an asterisk (\*) are mandatory.

**Section 2A – Written Notice By Drinking Water System (DWS) Owner (For THM and HAA reporting see  
Section 2C)****Indicators of Adverse Water Quality**

|               |   |
|---------------|---|
| AWQI Number * | Is this a resample? *   |
| 170255        | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, then provide initial AWQI number |

**Indicator of Adverse Results**

Microbiological \*  Chemical \*  Radiological \*  Operational \*  Licence/Order/Certificate Authority \*

Observations of Improperly disinfected water directed to water users

Low Distribution Chlorine \_\_\_\_\_ mg/L

High Turbidity \_\_\_\_\_ NTU

Other \_\_\_\_\_

**Details of Adverse Result \***

Microcystin DM detected above the Method Detection Limit (MDL) in the Raw Water. However, Microcystin DM detected below the Method Detection Limit (MDL) in the Treated Water.

**DWS Information**

|                     |                                   |  |                   |
|---------------------|-----------------------------------|--|-------------------|
| DWS Name *          | Casselman Drinking Water System   | DWS Number *                           | 210001219         |
| Last Name *         | Lamarche                          | First Name *                           | Caroline          |
| Position *          | Process and Compliance Technician |  |                   |
| Email Address       | clamarche@ocwa.com                | Telephone Number (including area code) | 613-448-3098 ext. |
| Additional Comments |                                   |  |                   |

**Oral Notification to Health Unit - Person Contacted**

|  |                                  |                     |                |
|--|----------------------------------|---------------------|----------------|
| Public Health Unit Name *                | Eastern Ontario Health Unit      |                     |                |
| Last Name *                              | First Name *                     |                     |                |
| Position *                               |                                  |                     |                |
| Telephone Number (including area code) * | Fax Number (including area code) | Date (yyyy/mm/dd) * | Time (hh:mm) * |
| 800-267-7120 ext.                        | 613-933-7930                     | 2025/10/07          | 2:55 PM        |

DWS Person Providing Oral Notification \*  
Caroline Lamarche

Email Address  
clamarche@ocwa.com

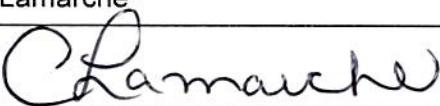
## Corrective Actions to be Taken by Owner/Operator

| Corrective Actions  | Required *  | Completed                               |                             | Comments                                |
|---|---|---|-----------------------------|---|
| Resample and Test (including upstream, downstream and at AWQI location)         | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A            |
| Disinfection Restored / Increased   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Mains / Pipes Flushed   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Signs Posted (Do Not Drink Water)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Users Advised to Boil Water / Seek Alternate Source                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
| Other (Include any other Health Unit directions and any additional attachments) |   |   |                             |   |
| Other:  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |

## Oral Notification to Spills Action Centre (SAC) - Person Contacted

|             |              |
|-------------|--------------|
| Last Name * | First Name * |
| St-Denis    | Neil         |

|                       |                     |                |
|-----------------------|---------------------|----------------|
| Position *            | Date (yyyy/mm/dd) * | Time (hh:mm) * |
| Environmental Officer | 2025/10/07          | 1:10 PM        |

|   |                     |
|---|---------------------|
| Initial DWS Notification Prepared by *  | Date (yyyy/mm/dd) * |
| Caroline Lamarche   | 2025/10/07          |
| Signature  | Date (yyyy/mm/dd) * |
|   | 2025/10/07          |

## Additional Comments

Call EOHU and left a voicemail at 2:55 PM on October 7th, 2025.  
Rami Basha, from EOHU, is aware of the Microcystin DM detected in Raw Water

Ongoing sampling at a minimum weekly the RW and TW until 3 consecutive sets of all samples that were tested indicate no detectable microcystin AND a bloom is no longer suspected/observed.

Do you have another adverse to report? \*  Yes  No