



# **Niagara Falls Water Treatment Plant**

**Regional Municipality of Niagara**

## **2024 Summary Report**

(Prepared under Ontario Regulation 170/03)

**January 1 to December 31, 2024**

**Ministry of the Environment, Conservation and Parks**

**Municipal Drinking Water License # 007-102  
Drinking Water Works Permit # 007-202**

# Niagara Falls Water Treatment Plant - 2024 Summary Report

This report summarizes the water flows for the Niagara Falls Water Treatment Plant, drinking water system number 220002084, from January 1 to December 31, 2024.

This report satisfies the requirements of Ontario Regulation 170/03 – Drinking Water Systems.

## Inspection Rating

The Niagara Falls Water Treatment Plant was granted a 99.18% inspection rating during the 2023/2024 Ministry of Environment, Conservation and Parks annual drinking water system inspection.

## Summary of Non-Compliance

The Niagara Falls Water Treatment Plant received a non-compliance for changes made to the system and not having the registration information provided to the ministry within ten (10) days of change.

## Summary of Water Treatment Plant Flows

The flow rates captured below are moments in time, and can be affected by various circumstances, such as pump changes or valve position. It is not unusual to have higher or lower than normal flows for this reason.

| Month | Total Flow Raw (ML) | Total Flow Treated (ML) | Average Day Raw (ML) | Average Day Treated (ML) | Minimum Day Treated (ML) | Maximum Day Treated (ML) | Minimum Flow Rate Treated (ML/d) | Maximum Flow Rate Treated (ML/d) | Total Waste Sludge (ML) |
|-------|---------------------|-------------------------|----------------------|--------------------------|--------------------------|--------------------------|----------------------------------|----------------------------------|-------------------------|
| Jan   | 1316.522            | 1218.410                | 42.468               | 39.304                   | 32.218                   | 56.848                   | 10.746                           | 72.722                           | 1862.48                 |
| Feb   | 1202.757            | 1117.434                | 41.474               | 38.532                   | 30.237                   | 41.721                   | 6.071                            | 56.401                           | 1040.64                 |
| Mar   | 1298.191            | 1221.412                | 41.877               | 39.400                   | 36.157                   | 45.387                   | 18.253                           | 59.535                           | 1907.84                 |
| Apr   | 1320.605            | 1233.388                | 44.020               | 41.113                   | 36.720                   | 45.913                   | 24.159                           | 62.231                           | 1560.96                 |
| May   | 1501.026            | 1396.688                | 48.420               | 45.054                   | 38.407                   | 56.437                   | 19.416                           | 80.288                           | 390.24                  |
| Jun   | 1573.021            | 1459.657                | 52.434               | 48.655                   | 41.672                   | 59.329                   | 20.594                           | 72.872                           | 1647.68                 |
| Jul   | 1764.753            | 1648.769                | 56.928               | 53.186                   | 44.435                   | 59.688                   | 13.788                           | 86.944                           | 1387.52                 |
| Aug   | 1655.914            | 1545.722                | 53.417               | 49.862                   | 42.894                   | 57.040                   | 17.569                           | 74.906                           | 1994.56                 |
| Sep   | 1460.171            | 1366.124                | 48.672               | 45.537                   | 40.782                   | 52.138                   | 0.001                            | 70.538                           | 1344.16                 |
| Oct   | 1342.474            | 1265.429                | 43.306               | 40.820                   | 37.032                   | 46.232                   | 0.001                            | 60.075                           | 1994.56                 |
| Nov   | 1227.568            | 1162.161                | 40.919               | 38.739                   | 34.380                   | 43.421                   | 0.000                            | 65.963                           | 1777.76                 |
| Dec   | 1301.625            | 1221.477                | 41.988               | 39.402                   | 32.904                   | 44.253                   | 0.000                            | 75.741                           | 2081.28                 |

| Month | Total Flow Raw (ML) | Total Flow Treated (ML) | Average Day Raw (ML) | Average Day Treated (ML) | Minimum Day Treated (ML) | Maximum Day Treated (ML) | Minimum Flow Rate Treated (ML/d) | Maximum Flow Rate Treated (ML/d) | Total Waste Sludge (ML) |
|-------|---------------------|-------------------------|----------------------|--------------------------|--------------------------|--------------------------|----------------------------------|----------------------------------|-------------------------|
| Total | 16,964.627          | 15,856.671              |                      |                          |                          |                          |                                  |                                  |                         |
| Min   |                     |                         |                      |                          | 30.237                   |                          | 0.000                            |                                  |                         |

| Month | Total Flow Raw (ML) | Total Flow Treated (ML) | Average Day Raw (ML) | Average Day Treated (ML) | Minimum Day Treated (ML) | Maximum Day Treated (ML) | Minimum Flow Rate Treated (ML/d) | Maximum Flow Rate Treated (ML/d) | Total Waste Sludge (ML) |
|-------|---------------------|-------------------------|----------------------|--------------------------|--------------------------|--------------------------|----------------------------------|----------------------------------|-------------------------|
| Max   |                     |                         |                      |                          |                          | 59.688                   |                                  | 86.944                           |                         |
| Avg   |                     | 1,321.39                | 46.33                | 43.30                    |                          |                          |                                  |                                  |                         |

## Comparison of Actual to System Approved Flow

Flow rates are required by Municipal Drinking Water Licence number 007-102.

- Maximum daily flow: 145.500 ML
- Maximum flow rate: 145.500 ML/day

| Month | Average Day Treated (ML) | % of Rated Capacity | Maximum Day Treated (ML) | % of Rated Capacity | Maximum Flow Rate Treated (ML/d) | % of Rated Capacity |
|-------|--------------------------|---------------------|--------------------------|---------------------|----------------------------------|---------------------|
| Jan   | 39.304                   | 27.14%              | 56.848                   | 39.03%              | 72.722                           | 49.96%              |
| Feb   | 38.532                   | 26.46%              | 41.721                   | 28.67%              | 56.401                           | 38.76%              |
| Mar   | 39.400                   | 27.07%              | 45.387                   | 31.13%              | 59.535                           | 40.91%              |
| Apr   | 41.113                   | 28.24%              | 45.913                   | 31.55%              | 62.231                           | 42.76%              |
| May   | 45.054                   | 30.92%              | 56.437                   | 38.76%              | 80.288                           | 55.17%              |
| Jun   | 48.655                   | 33.44%              | 59.329                   | 40.75%              | 72.872                           | 50.03%              |
| Jul   | 53.186                   | 35.49%              | 59.688                   | 40.96%              | 86.944                           | 59.72%              |
| Aug   | 49.862                   | 34.22%              | 57.040                   | 39.20%              | 74.906                           | 51.47%              |
| Sep   | 45.537                   | 31.27%              | 52.138                   | 35.82%              | 70.538                           | 48.45%              |
| Oct   | 40.820                   | 28.04%              | 46.232                   | 31.75%              | 60.075                           | 41.23%              |
| Nov   | 38.739                   | 26.39%              | 43.421                   | 29.84%              | 65.963                           | 45.29%              |
| Dec   | 39.402                   | 27.07%              | 44.253                   | 30.37%              | 75.741                           | 52.02%              |