



# **Decew Falls Water Treatment Plant**

**Regional Municipality of Niagara**

## **2022 Summary Report**

(Prepared under Ontario Regulation 170/03)

**January 1 to December 31, 2022**

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

**Municipal Drinking Water License # 007-102**

**Drinking Water Works Permit # 007-202**

# Decew Falls Water Treatment Plant - 2022 Summary Report

This report summarizes the water flows for the Decew Falls Water Treatment Plant, drinking water system number 220002066, from January 1 to December 31, 2022.

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

## Summary of Non-Compliance

The Decew Falls Water Treatment Plant was operated in such a way that at no time did it fail to meet or exceed the requirements of the Safe Drinking Water Act, associated regulations, the system's approval or any order that may have been issued for this reporting period.

## 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) | Maximum Day Treated (ML) | Minimum Day Treated (ML) | Maximum Flow Rate Treated (ML/d) | Minimum Flow Rate Treated (ML/d) | Total Waste Sludge (ML) |
|-------|---------------------|-------------------------|----------------------|--------------------------|--------------------------|--------------------------|----------------------------------|----------------------------------|-------------------------|
| Jan   | 1621.289            | 1400.806                | 52.300               | 45.187                   | 57.174                   | 48.354                   | 99.812                           | 22.267                           | 0.780                   |
| Feb   | 1536.207            | 1322.016                | 54.865               | 47.215                   | 58.242                   | 50.625                   | 77.037                           | 21.523                           | 0.953                   |
| Mar   | 1722.665            | 1487.154                | 55.570               | 47.973                   | 60.210                   | 48.642                   | 69.866                           | 24.698                           | 3.816                   |
| Apr   | 1634.498            | 1398.694                | 54.483               | 46.623                   | 59.099                   | 51.415                   | 70.408                           | 22.042                           | 5.333                   |
| May   | 1805.569            | 1606.736                | 58.244               | 51.830                   | 69.822                   | 49.398                   | 81.821                           | 24.843                           | 4.336                   |
| Jun   | 1974.112            | 1850.799                | 65.804               | 61.693                   | 80.783                   | 43.363                   | 167.580                          | 28.895                           | 0.824                   |
| Jul   | 2206.924            | 2148.653                | 71.191               | 69.311                   | 83.355                   | 56.265                   | 97.616                           | 38.701                           | 5.507                   |
| Aug   | 2291.415            | 2029.865                | 73.917               | 65.480                   | 84.393                   | 59.788                   | 105.516                          | 33.925                           | 0.520                   |
| Sep   | 1911.912            | 1693.780                | 63.730               | 56.459                   | 78.228                   | 54.847                   | 120.144                          | 24.967                           | 6.677                   |
| Oct   | 1668.157            | 1489.743                | 53.812               | 48.056                   | 60.556                   | 48.004                   | 78.430                           | 24.712                           | 0.824                   |
| Nov   | 1645.844            | 1433.801                | 54.861               | 47.793                   | 61.245                   | 48.870                   | 99.041                           | 23.500                           | 4.509                   |
| Dec   | 1693.148            | 1471.819                | 54.618               | 47.478                   | 60.097                   | 48.261                   | 87.013                           | 25.391                           | 0.737                   |

| 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 | 21711.74            | 19333.86                |                      |                          |                          |                          |                                  |                                  | 34.817                  |
| Min   |                     |                         |                      |                          | 43.363                   |                          | 21.523                           |                                  | 0.520                   |
| Max   |                     |                         |                      |                          |                          | 84.393                   |                                  | 167.58                           | 6.677                   |
| Avg.  |                     |                         | 59.449               | 52.925                   |                          |                          |                                  |                                  | 2.901                   |

## Comparison of Actual to System Approved Flow

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

- Maximum daily flow: 227.300 ML
- Maximum flow rate: 227.300 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   | 45.126                   | 20%                 | 51.789                   | 22.78%              | 99.812                           | 43.91%              |
| Feb   | 47.214                   | 21%                 | 50.056                   | 22.02%              | 77.037                           | 33.89%              |
| Mar   | 47.972                   | 21%                 | 57.201                   | 25.17%              | 69.866                           | 25.19%              |
| Apr   | 46.623                   | 21%                 | 48.48                    | 21.33%              | 70.408                           | 25.39%              |
| May   | 51.83                    | 23%                 | 63.759                   | 28.05%              | 81.821                           | 35.99%              |
| Jun   | 61.693                   | 27%                 | 75.069                   | 33.02%              | 167.58                           | 73.73%              |
| Jul   | 69.311                   | 30%                 | 79.893                   | 35.12%              | 97.616                           | 42.94%              |
| Aug   | 65.479                   | 29%                 | 72.177                   | 31.75%              | 105.516                          | 46.42%              |
| Sep   | 56.45                    | 25%                 | 65.269                   | 23.53%              | 120.144                          | 52.86%              |
| Oct   | 48.056                   | 21%                 | 52.371                   | 23.04%              | 78.43                            | 34.51%              |
| Nov   | 47.793                   | 21%                 | 51.024                   | 18.40%              | 99.041                           | 43.57%              |
| Dec   | 47.478                   | 21%                 | 50.996                   | 17.12%              | 87.013                           | 38.29%              |