



Welland Water Treatment Plant

Regional Municipality of Niagara

2023 Summary Report

(Prepared under Ontario Regulation 170/03)

January 1 to December 31, 2023

Ministry of the Environment, Conservation and Parks

Municipal Drinking Water License # 007-104

Drinking Water Works Permit # 007-204

Welland Water Treatment Plant - 2023 Summary Report

This report summarizes the water flows for the Welland Water Treatment Plant, drinking water system number 220002048, from January 1 to December 31, 2023.

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

Inspection Rating

The Welland Water Treatment Plant was granted a 100% inspection rating during the 2022-2023 Ministry of Environment, Conservation and Parks annual drinking water system inspection.

Summary of Non-Compliance

The Welland 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	721.880	699.495	23.286	22.597	24.646	20.850	45.312	26.502	28.918
Feb	657.380	639.034	23.478	22.852	25.016	20.068	42.944	24.445	25.386
Mar	728.080	697.113	23.486	22.517	24.855	19.736	44.756	26.121	41.658
Apr	703.870	683.381	23.462	22.807	25.983	20.396	51.650	21.799	29.723
May	814.310	788.846	26.268	25.479	36.293	21.762	43.025	18.856	36.635
Jun	868.350	834.003	56.727	54.782	34.386	20.960	43.381	19.062	47.116
Jul	825.490	795.508	26.629	25.702	29.496	21.150	43.044	19.109	43.637
Aug	790.180	760.829	25.490	24.582	26.325	22.698	46.882	22.256	42.018
Sep	828.610	790.871	27.620	26.400	35.764	22.650	45.500	24.600	50.354
Oct	753.320	727.195	24.301	23.490	32.900	18.906	46.131	22.576	35.318
Nov	688.190	672.852	22.940	22.458	25.294	19.568	64.644	23.656	22.753
Dec	719.060	696.210	23.195	22.485	25.512	19.324	42.825	21.331	34.078

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)
Total	9098.720	8785.338							437.594
Min						18.906		18.856	22.753
Max					36.293		64.644		437.594
Avg.			27.240	26.346					36.466

Comparison of Actual to System Approved Flow

Flow rates are required by Municipal Drinking Water Licence number 007-104.

- Maximum daily flow: 65.000 ML
- Maximum flow rate: 65.000 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	22.597	34.764	24.646	37.916	45.312	69.710
Feb	22.852	35.156	25.016	38.486	42.944	66.067
Mar	22.517	36.180	24.855	38.238	44.756	68.853
Apr	22.807	35.087	25.983	39.973	51.650	79.461
May	25.479	39.198	36.293	55.835	43.025	66.192
Jun	27.838	84.280	34.386	52.901	43.381	66.740
Jul	25.702	39.541	29.496	45.378	43.044	66.221
Aug	24.582	37.818	26.325	40.500	46.882	72.126
Sep	26.400	40.615	35.764	55.021	45.500	70.000
Oct	23.490	36.138	32.900	50.615	46.131	70.970
Nov	22.458	34.386	25.294	38.913	44.644	68.683
Dec	22.485	34.592	25.512	39.249	42.825	65.884