



Welland 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 # 007-104

Drinking Water Works Permit # 007-204

Welland Water Treatment Plant - 2022 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, 2022.

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 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	791.900	745.639	25.545	24.093	27.312	19.603	58.523	18.032	57.420
Feb	715.520	679.868	25.554	24.328	26.843	22.014	43.288	20.870	44.375
Mar	769.730	719.873	24.830	23.245	26.336	20.677	45.112	15.412	60.372
Apr	705.150	660.543	23.505	22.041	24.093	19.378	43.306	18.854	52.409
May	781.760	745.013	25.218	24.060	28.798	20.560	45.825	15.196	62.247
Jun	811.900	780.721	27.063	26.059	31.659	22.472	43.362	20.916	42.262
Jul	915.390	875.502	29.529	28.295	35.353	20.252	44.831	25.057	52.547
Aug	895.790	853.648	28.896	27.580	32.320	23.226	43.100	21.395	56.998
Sep	770.180	721.169	25.673	24.073	26.942	20.883	45.825	20.458	62.830
Oct	728.050	684.388	23.485	22.104	25.736	19.490	42.862	20.371	53.148
Nov	670.280	650.627	22.343	21.717	24.032	19.436	42.819	21.704	27.229
Dec	735.810	701.296	23.736	22.655	24.196	20.924	46.994	23.130	39.483

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	9291.460	8818.289							611.320
Min						19.378		15.196	27.229

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)
Max					35.353		58.523		62.830
Avg.			25.448	24.188					50.943

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	24.093	37%	27.312	30%	58.523	89%
Feb	24.328	37%	26.843	34%	43.288	66%
Mar	23.245	36%	26.336	32%	45.112	68%
Apr	22.041	34%	24.093	30%	43.306	66%
May	24.060	37%	28.798	32%	45.825	69%
Jun	26.059	40%	31.659	35%	43.362	66%
Jul	28.295	44%	35.353	31%	44.831	68%
Aug	27.580	42%	32.320	36%	43.100	65%
Sep	24.073	37%	26.942	32%	45.825	69%
Oct	22.104	34%	25.736	30%	42.862	65%
Nov	21.717	33%	24.032	30%	42.819	65%
Dec	22.655	35%	24.196	32%	46.994	71%