

Appendix 4: Wastewater Treatment Plant Reserve Capacity for 2024

| Wastewater Treatment Plant (WWTP) | MECP Rated Capacity m ³ /d | 90% of Plant Capacity ⁽¹⁾ m ³ /d | 5-Year Average Daily Flow m ³ /d | Total Capacity Used | Reserve Treatment 90% Capacity m ³ /d | Design Flow Rate ⁽²⁾ 356 Lcd | Reserve Serviceable Population Equivalents | 10-Year Forecast Population Res & Emp | Surplus Population 10-Year Projection |
|-----------------------------------|--|---|--|---------------------|---|--|--|---------------------------------------|---------------------------------------|
| Anger Avenue (Fort Erie) | 24,500 | 22,050 | 13,395 | 55% | 8,655 | 356 | 24,312 | 4,730 | 19,582 |
| Baker Road (Grimsby) | 31,280 | 28,152 | 20,348 | 65% | 7,804 | 356 | 21,920 | 20,442 | 1,478 |
| Crystal Beach (Fort Erie) | 9,100 | 8,190 | 5,501 | 60% | 2,689 | 356 | 7,552 | 1,081 | 6,471 |
| Niagara Falls ⁽³⁾ | 68,300 | 61,470 | 39,290 | 58% | 22,180 | 356 | 62,305 | 22,309 | 39,996 |
| NOTL | 8,000 | 7,200 | 5,804 | 73% | 1,396 | 356 | 3,920 | 1,036 | 2,884 |
| Port Dalhousie (St. Catharines) | 61,350 | 55,215 | 31,836 | 52% | 23,379 | 356 | 65,672 | 13,784 | 51,888 |
| Port Weller (St. Catharines) | 56,180 | 50,562 | 36,118 | 64% | 14,444 | 356 | 40,572 | 9,392 | 31,180 |
| Queenston (NOTL) ⁽⁴⁾ | 500 | 450 | 178 | 36% | 272 | 356 | 764 | 34 | 730 |
| Seaway (Port Colborne) | 19,600 | 17,640 | 11,176 | 57% | 6,464 | 356 | 18,157 | 2,008 | 16,149 |
| Stevensville/Douglastown | 2,289 | 2,060 | 1,550 | 68% | 510 | 356 | 1,432 | 994 | 438 |
| Welland | 54,550 | 49,095 | 35,929 | 66% | 13,166 | 356 | 36,984 | 18,235 | 18,749 |

Note 1: Region's 2021 W&WW MSP requires planning process for expansion when plant capacity exceeds 80%, and expansion should be completed when capacity exceeds 90%.

Note 2: Region's 2021 W&WW MSP new design criteria calls for 255 Lcd residential and 310 Led employment generation rate including 90 Lcd of extraneous flow allowance. An equivalent of 356 Lcd is applied using 80% and 20% for residential and employment growth share, respectively.

Note 3: The Niagara Falls WWTP assessment includes the sewage flows from the St. David's area of Niagara-on-the-Lake.

Note 4: The Queenston WWTP in Niagara-on-the-Lake has a unique capacity commitment of 226 m³/d for the following properties: Niagara Parks Commission (75 m³/d), Niagara Falls Bridge Commission (63 m³/d), Shalamar Campground (38 m³/d) and Ontario Power Generation (50 m³/d). Due to these commitments and limited UAB, limited residential growth is expected within the next 10 years within the tributary area.