

Appendix 4: WWTP Reserve Capacity for 2022

Wastewater Treatment Plant	MECP Rated Capacity	90% of Plant Capacity ⁽¹⁾	5-Year Average Daily Flow	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
	m ³ /d								
Anger Avenue (Fort Erie)	24,500	22,050	14,027	57%	8,023	356	22,537	4,730	17,807
Baker Road (Grimsby)	31,280	28,152	19,331	62%	8,821	356	24,777	20,442	4,335
Crystal Beach (Fort Erie)	9,100	8,190	5,689	63%	2,501	356	7,025	1,081	5,944
Niagara Falls ⁽³⁾	68,300	61,470	38,597	57%	22,873	356	64,251	22,309	41,942
NOTL	8,000	7,200	5,413	68%	1,787	356	5,019	1,036	3,983
Port Dalhousie (St. Catharines)	61,350	55,215	33,403	54%	21,812	356	61,270	13,784	47,486
Port Weller (St. Catharines)	56,180	50,562	35,830	64%	14,732	356	41,383	9,392	31,991
Queenston (NOTL) ⁽⁴⁾	500	450	171	34%	279	356	783	34	749
Seaway (Port Colborne)	19,600	17,640	11,571	59%	6,069	356	17,048	2,008	15,040
Stevensville/Douglastown	2,289	2,060	1,608	70%	452	356	1,270	994	276
Welland	54,550	49,095	35,182	64%	13,913	356	39,083	18,235	20,848

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.