

Appendix 3: WTP Reserve Capacities for 2022

Water Treatment Plant	Permit To Take Water ⁽¹⁾	Rated Treatment Capacity	Theoretical Ave Day Capacity	90% of Ave Day Capacity ⁽²⁾	5-Year Ave Day Flow	Peaking Factor	Total Capacity Used	Reserve Treatment Capacity 90% MLD	Design Flow Rate ⁽³⁾	Reserve Serviceable Population Equivalents	10-Year Forecast Population Res & Emp	Surplus Population 10-Year Projection
	MLD								246 Lcd			
DeCew Falls	227.0	227.3	147.2	132.5	53.3	1.544	36%	79.2	246	321,951	30,223	291,728
Grimsby	44.0	44.0	26.6	23.9	14.9	1.656	56%	9.1	246	36,992	17,037	19,955
Niagara Falls	145.5	145.6	90.8	81.7	42.1	1.604	46%	39.6	246	160,976	28,700	132,276
Port Colborne	45.5	36.0	20.8	18.7	7.3	1.727	35%	11.4	246	46,341	2,032	44,309
Rosehill	78.0	50.0	32.8	29.5	12.0	1.524	36%	17.6	246	71,545	7,151	64,394
Welland	110.0	65.0	43.5	39.2	23.7	1.493	55%	15.4	246	62,602	18,388	44,214

Note 1: Original MOE approved quantity of raw water permitted (Permit To Take Water).

Note 2: 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 3: Region's 2021 W&WW MSP new design criteria calls for 240 Lcd residential consumption and 270 Led employment consumption. This is equivalent to 246 Lcd for both, using the 79% and 21% residential and employment share, respectively.