

Appendix 3: WTP Reserve Capacities for 2023

Water Treatment Plant	Permit To Take Water <sup>(1)</sup>	Rated Treatment Capacity	Theoretical Ave Day Capacity	90% of Ave Day Capacity <sup>(2)</sup>	5-Year Ave Day Flow	Peaking Factor	Total Capacity Used	Reserve Treatment Capacity 90% MLD	Design Flow Rate <sup>(3)</sup>	Reserve Serviceable Population Equivalents	10-Year Forecast Population Res & Emp	Surplus Population 10-Year Projection
	MLD								246 Lcd			
DeCew Falls	227.0	227.3	153.3	138.0	52.7	1.483	34%	85.3	246	346,748	30,223	316,525
Grimsby	44.0	44.0	26.5	23.9	14.8	1.659	56%	9.0	246	36,585	17,037	19,548
Niagara Falls	145.5	145.6	94.0	84.6	41.8	1.548	44%	42.8	246	173,984	28,700	145,284
Port Colborne	45.5	36.0	21.2	19.1	7.2	1.700	34%	11.9	246	48,374	2,032	46,342
Rosehill	78.0	50.0	32.8	29.5	11.9	1.525	36%	17.6	246	71,545	7,151	64,394
Welland	110.0	65.0	44.0	39.6	24.0	1.476	55%	15.6	246	63,415	18,388	45,027

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.