

Municipality of Tweed
Hydraulic Capacity Reserve
December 31, 2022

Cu: Uncommitted hydraulic reserve capacity (m3/d)

Cr: Hydraulic reserve capacity (m3/d) = design capacity less actual existing average day flow (3 year average)

L: Number of unconnected approved lots

P: Existing connected population

H: Number of households or residential connections (convert commercial/industrial lots for load requirements)

F (sewer): Average day flow per capita (m3/capita/d)

F (water): Maximum daily flow per capita (m3/capita/d)

Sewer $Cu = Cr - ([L \times F \times P] / H)$

Design capacity	1,815	Per ECA
Average day flows		
2020	792.40	
2021	664.10	
2022	669.40	708.63 3-year average

Cr = 1,106.37

L = 51 (14 unconnected lots + 26 Pomeroy Subdivision + 6 Metcalf St + 5 Hungerford St)

F = 0.29 (3 year average / population)

P = 2,435 (households x 2.5 people (rounded up))

H = 974 (converted to # of households for the multi-units and high capacity users)

Cu = 1069.262 m3/d

1,469 Units = $(Cu/F/(P/H))$

Water $Cu = Cr - ([L \times F \times P] / H)$

Design capacity	1,633	Per Water Taking Permit
Maximum day flow		
2020	921.00	
2021	1,113.00	
2022	1,043.00	1,025.67 3-year average

Cr = 607.3333

L = 51 (14 unconnected lots + 26 Pomeroy Subdivision + 6 Metcalf St + 5 Hungerford St)

F = 0.41 (3 year average / population)

P = 2,500 (households x 2.5 people (rounded up))

H = 1,000 (converted to # of households for the multi-units and high capacity users)

Cu = 555.0243 m3/d

541 Units = $(Cu/F/(P/H))$