

Town of Renfrew

Hydraulic Capacity Reserve Calculations - Sanitary Sewer

December 31, 2025

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)

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

Design capacity =	9,500 m3/d (Per ECA)
Average day flows:	From OCWA Annual reports
2025	4603.60 m3/d
2024	4941.32 m3/d
2023	5531.10 m3/d
3-year average flow =	5025.34 m3/d
Cr =	4,474.66 m3/d
L =	1291 approved but unconnected units & infill
F =	0.74 m3/capita/d
P =	6748 connected people (number of connections (H) * Average population per household (per Census data))
H =	3374 Services (# meters from billing data)

Cu = 2551.805 m3/d
(Cu/F/(P/H)) = 1713 units

units Description

21	Hunter Gate Subdivision Ph. 4 (remaining occupancy)
53	Hunter Gate Subdivision Ph. 5
40	Hunter Gate Subdivision Ph. 6
204	Pinnacle View Subdivision
19	Mayhew Subdivision - Phase 4
22	210 Lochiel - Mutli-Res/low rise
180	Lepine - Buildings C,D,F
25	Lapointe Infill Subdivision
29	Stewart east
698	Projected infill and intensification

L= 1291

**Town of Renfrew
Hydraulic Capacity Reserve - Drinking Water
December 31, 2025**

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/industiral lots for load requirements)

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

Water Cu = Cr - ([L x F x P] / H)

Max Allowable Flow =	18,184 m3/d (per Permit to Take Water)
Max flow:	From OCWA Annual reports
2025	6581 m3/d
2024	7527.00 m3/d
2023	5748.00 m3/d
3-year average max flow =	6618.67 m3/d

Cr = 11,565.33 m3/d

L = 1291 approved but unconnected units & infill

F = 0.97 m3/capita/d

P = 6838 connected people (number of connections (H) * Average population per household (per Census data))

H = 3419 Services (# meters from billing data)

Cu = 9066.153 m3/d

(Cu/F/(P/H)) = 4683 units

units Description

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L= 1291