

Appendix A
Hydraulic Reserve Capacity Data Assumptions - Water

Reference or Calculation
User Input/ Variable

Data Assumptions:

Collingwood WTP MDD Capacity (m3/d):	31,140	Current Available Capacity (m3/d)	4,560
Collingwood WTP MDD Capacity Future Upgrades (m3/d):	59,000	% Available Capacity	14.6%
		Available SDU-Es	3,417
2022 Collingwood MDD	14,309		
2023 Collingwood MDD	15,850		
2024 Collingwood MDD	16,132		
3-year Average MDD (m3/d):	15,430		
		5% Factor of Safety - (m3/d)	1,557
Town of Blue Mountains Supply Commitment (m3/d)	1,250		
Town of New Tecumseth Supply Commitment (m3/d)	9,900		
External Supply MDD Commitments (m3/d):	11,150		

Assumptions:

ADD/ Capita Consumption (L/day):	260		
Residential Peaking Factor (ADD:MDD Ratio):	1.77		
ICI Peaking Factor (ADD:MDD Ratio):	2.5		
Commercial Area ADD (m3/ha/day)	28		
Industrial Area ADD (m3/ha/day)	35		
Institutional Area ADD (m3/ha/day)	28		
Residential Types Legend	MDD (m3/d)	Residential Types Legend	SDU-E
Residential - Single Detached Home (2.9 ppl/unit)	1.334580	Residential - Single Detached Home (2.9 ppl/unit)	1.00
Residential - Semi Detached (2.7 ppl/unit)	1.24	Residential - Semi Detached (2.7 ppl/unit)	0.93
Residential - Townhouse/ Row-House (2.4 ppl/unit)	1.10	Residential - Townhouse/ Row-House (2.4 ppl/unit)	0.83
Residential - Condo/ Apartment (1.9 ppl/unit)	0.87	Residential - Condo/ Apartment (1.9 ppl/unit)	0.66

Appendix A
Hydraulic Reserve Capacity Data Assumptions - Wastewater

Reference or Calculation
User Input/ Variable

Data Assumptions:

Collingwood WWTP Capacity (m3/d):	24,548	Current Available Capacity (m3/d)	7,356
		% Available Capacity	30%
		Available SDU-Es	7,247
2023 Collingwood ADF	17,751		
2024 Collingwood ADF	16,753		
2025 Collingwood ADF	17,073		
3-year Average ADF (m3/d):	17,192	5% Factor of Safety (m3/d)	1,227

Assumptions:

ADF/ Capita Consumption (L/day):	260		
Commercial Area Flow (m3/ha/day)	28		
Industrial Area Flow (m3/ha/day)	35		
Institutional Area Flow (m3/ha/day)	28		
Extraneous Flow (m3/ha/day)	20		
Extraneous Flow (L/cap/day)	90		
Residential Types Legend	ADF (m3/d)		SDU-E
Residential - Single Detached Home (2.9 ppl/unit)	1.01500	Residential - Single Detached Home (2.9 ppl/unit)	1.00
Residential - Semi Detached (2.7 ppl/unit)	0.95	Residential - Semi Detached (2.7 ppl/unit)	0.93
Residential - Townhouse/ Row-House (2.4 ppl/unit)	0.84	Residential - Townhouse/ Row-House (2.4 ppl/unit)	0.83
Residential - Condo/ Apartment (1.9 ppl/unit)	0.67	Residential - Condo/ Apartment (1.9 ppl/unit)	0.66