



Staff Report IN2026-03

Standing Committee 2026-04-08

Council 2026-04-20

Amendments

Submitted To: Committee of the Whole | Council

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Subject: 2025 Year End: Water and Wastewater Uncommitted Hydraulic
Reserve Capacity Update

Recommendation

THAT Staff Report IN2026-03 Semi-Annual Water and Wastewater Uncommitted Hydraulic Reserve Capacity Update, dated April 8th, 2026, be received.

Amendments

None.

1. Executive Summary

The purpose of this report is to fulfill the requirement to present semi-annual updates to Council and the public of the remaining hydraulic reserve capacity at the drinking water and wastewater treatment plants, in accordance with the Town's Servicing Capacity Allocation Policy (SCAP).

As of December 31, 2025, the uncommitted hydraulic reserve capacity including the safety factor for the drinking water system is approximately 892m³/d (670 Single

Dwelling Units or SDUs) and the uncommitted hydraulic reserve capacity for the wastewater system is approximately 4,706m³/d (4,636 SDUs).

Staff continue to recommend a factor of safety (5%) be applied to capacity being made available to new development in the short term to allow for potential unanticipated fluctuations in maximum day demands and average day flows, margins of error on servicing capacity requirements for approved development, and uncertainty around the timing of the water treatment plant expansion commissioning.

Following the receipt of this report by Council, staff will be in a position to bring forward a report on the first batch of approved planning applications seeking allocation, when appropriate. Please note that at this time, there are no applications immediately in the queue for servicing capacity allocation as a major development batch was brought forward to Council for servicing allocation on December 1, 2025. However, it is anticipated that some applications may be in the queue for consideration in late-spring or early-summer 2026.

Staff have examined the potential to produce additional interim drinking water capacity per Staff Report PW2024-11 (Water Treatment Plant Interim Capacity Feasibility Study Results and Recommendations). Council endorsed moving forward with Option 1A which will provide an additional 5,000 m³/d in total. Of which Collingwood will receive 1,850m³/d (1,391 SDUs). The expected commissioning date of Option 1A is during the Summer of 2026. As such this report has not included the additional water capacity. Servicing allocations must consider both water and wastewater allocations with the knowledge that a review of the ability of Collingwood's wastewater treatment plant to meet future growth needs is scheduled to commence in Q2 of 2026 through a Class Environmental Assessment (Class EA) process.

2. Analysis

Over the past four years, the Town has moved forward with a comprehensive strategy to ensure water and wastewater servicing capacity is allocated and managed transparently and consistently while ensuring the available servicing capacity is not overallocated. Key milestones of this process are noted below.

- April 26, 2021: Council passed an Interim Control By-Law (ICBL) to remain in place while the Town completed a Land Use Planning Study (the "Study") to ensure tools were in place to manage allocation of water and wastewater servicing capacity for development.
- December 20, 2021: Council endorsed the recommendation to implement the completed Study and move toward the finalization of a servicing capacity allocation framework.
- February 28, 2022: Zoning By-law Amendment 2022-007 was passed, requiring that adequate water and wastewater services, including available capacity be confirmed by the Town before most development and construction may proceed.
- March 28, 2022: Servicing Capacity Allocation Policy (SCAP) approved by Council.
- May 16, 2022: Council enacted a by-law to set the effective date for the Town's SCAP as May 17, 2022.
- September 19, 2022: Council received Report PW2022-18, which provided the first update on uncommitted hydraulic reserve capacity based on the criteria identified in the SCAP.
- December 19, 2022: Council approved an extension to the Town's short-term ICBL exemption program for 2023 and agreed to an interpretation of an accessory residential unit would no longer need to obtain an ICBL exemption.
- January 30, 2023: Council approved changes to the SCAP, including increasing clarity, streamlining processes, decoupling servicing allocation from planning approvals and making it easier for smaller-scale and lower-risk developments to proceed.
- July 19, 2023: Appeals of Zoning By-law Amendment 2022-007 are resolved and the ICBL is no longer in effect.
- March 4, 2024: Council received report PW2024-05, Semi-annual Water and Wastewater Uncommitted Hydraulic Reserve Capacity
- September 23, 2024: Council received report PW2024-11, WTP Interim Capacity options potential to produce additional interim drinking water capacity

- September 23, 2024: Council received report PW2024-12, Semi-annual Water and Wastewater Uncommitted Hydraulic Reserve Capacity
- February 24, 2025: Council received report IN2025-03, Semi-annual Water and Wastewater Uncommitted Hydraulic Reserve Capacity
- November 17, 2025: Council received report P2025-27, Municipal Servicing Capacity Allocation – 2025 Major Development Batch Approval
- February 2, 2026: Council received a Water Treatment Plant Expansion update

In accordance with the SCAP, staff are required to report on the uncommitted hydraulic reserve capacity twice each year. This represents the first report of 2026.

Key Terminology

The SCAP defines the water and wastewater hydraulic reserve capacity and uncommitted hydraulic reserve capacity as follows:

Water Hydraulic Reserve Capacity – Design capacity of the Raymond A. Barker Water Treatment Plant (WTP) minus the existing 3-year running average recorded maximum day demand and any capacity reserved to service municipalities outside the Town of Collingwood

Wastewater Hydraulic Reserve Capacity – Design capacity of the Collingwood Wastewater Treatment Plant (WWTP) minus the existing 3-year running average recorded annual average day wastewater flow

Uncommitted Hydraulic Reserve Capacity – Obtained by subtracting any committed water and wastewater allocation, including through draft approved and registered plans of subdivision and condominium plans and site plan approvals (where the conditions of any individual approval commits capacity and this approval has not expired), any capacity reserved for government projects, projects that do not require a Planning Act application or the treatment of hauled sewage if applicable, plus a safety factor, from the existing hydraulic reserve capacity

To help determine the remaining servicing capacity available for allocation for future development applications, the uncommitted hydraulic reserve capacity can be

converted to a Single Dwelling Unit (SDU) equivalent based on the Town’s Development Standards and 2019 Water and Wastewater Master Servicing Plan (Table 1).

Table 1 SDU Conversion Factors

Criterion	Drinking Water	Wastewater
People Per Single Detached Dwelling	2.9	2.9
Servicing Requirements (L/cap/day)	260	260
Maximum Day Factor	1.77	n/a
Extraneous Flows (L/cap/d)	n/a	90
One SDU Equivalent (m³/d)	1.33	1.02

Hydraulic Reserve Capacity Calculations

The Ministry of Environment, Conservation and Parks D-5-1 guideline has been followed for the determination and calculation of uncommitted reserve capacity for water and wastewater. The water hydraulic reserve capacity is calculated using the average maximum day demand in Collingwood between 2023 and December 2025 and considers the commitments to provide drinking water to the Town of the Blue Mountains (TBM) and the Town of New Tecumseth (NT). The commitment to NT includes the 2024 Council approved increase in water supply to 9,900 m³/d, as per Council direction to provide an additional 400m³/d by April, 2025 (Council resolution April 15, 2024).

The hydraulic reserve capacity at the WTP and WWTP have been updated since the February 24, 2025, IN2025-03 report to include a 3-year average MDD which includes the previous year (2025). The updated hydraulic reserve capacity at both the WTP and WWTP as of December 31, 2025 is approximately 4,560 m³/d (3,417 SDUs) and 7,356 m³/d (7,247 SDUs) respectively (Appendix A).

The uncommitted hydraulic reserve capacity is determined by incorporating information from the Planning and Building Divisions, and considers:

- Approved Site Plans,

- Approved developments with no further Planning approvals required (e.g. Registered Plans of Subdivision that do not require further Site Plan approvals),
- Approved Building Permits, and
- Building Permits that have been closed.

Properties where no Planning application would be required prior to consideration of a building permit application, usually small-scale vacant residential lots, also need to be considered when determining the uncommitted hydraulic reserve capacity. The number of unconnected residential lots with access to existing municipal services was not revised from the January 1, 2023 estimate as part of this update to the uncommitted hydraulic reserve capacity.

In 2026 the uncommitted hydraulic reserve capacity (including a 5% factor of safety) for the drinking water system as of December 31, 2025 is approximately 892 m³/d (670 SDUs). The uncommitted hydraulic reserve capacity (including a 5% factor of safety) for the wastewater system is approximately 4,706 m³/d (4,636 SDUs). These values are shown in table 2 below.

If the factor of safety is excluded, the uncommitted hydraulic reserve capacity of the drinking water system as of December 31, 2025 is approximately 2,449 m³/d (1,835 SDUs). The uncommitted hydraulic reserve capacity (excluding a 5% factor of safety) for the wastewater system is approximately 5,933 m³/d (5,846 SDUs). These values are shown in table 2 below.

Currently the Water Treatment Plant is operating at 85% of its rated capacity. Given the committed capacity allocations noted in Table 2, this would decrease the WTP capacity by approximately 10%. Therefore, the WTP is anticipated to be operating at 95% of its rated capacity when the committed allocations are developed and connected to the water distribution system.

Similarly, the Wastewater Treatment Plant (WWTP) is operating at approximately 70% of its rated capacity. Given the capacity allocations noted in Table 2, this would decrease the WWTP capacity by approximately 5%. Therefore, the WWTP is

anticipated to be operating at 75% of its rated capacity when the committed allocations are developed and connected to the sanitary sewer network.

It should be noted that there is no formal tracking of small-scale, low risk developments such as accessory dwelling units being added to existing properties which adds additional draw to the water system. However, minor development, including accessory dwelling units are captured in the annual capacity amount set aside to support minor projects (i.e. 60 SDUs of water capacity and 120 SDUs of wastewater capacity) to ensure that additional capacity used is accounted for. The water demand and wastewater flow from accessory dwelling units will ultimately be captured in the actual water demands and wastewater flows and will decrease the SDU's available.

Table 2 Uncommitted Hydraulic Reserve Capacity Calculations

Criterion	Units	Drinking Water	Wastewater
Hydraulic Reserve Capacity	m³/d	4,560	7,356
No Planning Application Required	m ³ /d	335	59
Committed Servicing Capacity Allocation (SCAP)	m ³ /d	1,766	1,363
Uncommitted Hydraulic Reserve Capacity (No Factor of Safety)	m³/d	2,449	5,933
Uncommitted Hydraulic Reserve Capacity (No Factor of Safety)	SDUs	1,835	5,846
Factor of Safety (5% of Rated Plant Capacity)	m ³ /d	1,557	1,227
Uncommitted Hydraulic Reserve Capacity (Including Factor of Safety)	m³/d	892	4,706
Uncommitted Hydraulic Reserve Capacity (Including Factor of Safety)	SDUs	670	4,636

As presented in Table 2, staff continue to recommend a factor of safety be applied to capacity being made available to new development in the short term to allow for potential fluctuations in maximum day demands and average day flows, margins of error on servicing capacity requirements for approved development, potential for council decisions to allocate servicing capacity outside of the SCAP process (e.g. private-public

partnership projects related to Grain Terminals or affordable housing, Ontario Land Tribunal settlements, the new hospital etc.) and uncertainty around the timing of the water treatment plant expansion commissioning. In 2025, we saw an increase in the MDD at the Water Treatment Plant and an increase in the ADF at the Wastewater Treatment Plant, both of which influence the three-year average and result in a change of available uncommitted capacity. This experience supports the retention for a factor of safety.

In accordance with SCAP, several development approvals have included conditions outlining a commitment from the Town to allocate servicing capacity to the development in the future. These commitments are not included in the uncommitted hydraulic reserve capacity calculations; however, they should be considered by the Town when servicing capacity is made available to other development applications in the future. A summary of the Town's commitments to allocate servicing capacity are provided in Table 3.

Table 3 Developments with Future Servicing Capacity Commitments

Development Name	Drinking Water (SDUs)	Wastewater (SDUs)	Estimated Capacity Allocation Year*
Trails of Collingwood	184	251	Not specified
50 Saunders Drive	62	62	Not specified
Huntingwood West	106	106	Not specified
Panorama North	510	739	After WTP Expansion
Blue Fairway Block 5	109	150	Not specified
Mair Mills Villages (Panorama South) Subdivision – Phase 1	99	99	Not specified
Bridgewater Consulate	522	522	Not specified
7914 Poplar Sideroad – Summitview Phase 3	117	117	Not specified
560, 580, 590 Sixth Street	259	348	Not specified
Total	1,968	2,394	-

* Subject to change based on developer/landowner activities

Planning report P2022-08 outlined a proposed framework for allocating the remaining uncommitted water hydraulic reserve capacity until the expansion of the water treatment plant is completed. Based on the updated uncommitted hydraulic reserve capacity calculations, this recommended allocation framework was updated in September 2022 and was revised again in March 2023.

As per report CAO2023-02, small-scale (minor) development servicing capacity allocations are now being managed within a separate annual bucket to eliminate the staff time associated with tracking these lower risk proposals.

Table 4 below outlines the water and wastewater servicing capacity allocations for 2025.

Table 4 Water Servicing Capacity Allotment for 2026

Year	Water Servicing Capacity Allotment (SDUs)	Wastewater Servicing Capacity Allotment (SDU)
Major Development	240	410
Minor Development	60	120
Total	300	530

It is industry practice to initiate the process of determining the best option to meet future demands and flows when a treatment plant is consistently operating at 80% of facility rated capacity. The Town completed a Municipal Class Environmental Assessment (EA) for the water treatment plant in 2019 and construction of a WTP expansion to a total rated capacity of 59,000 m³/d began in July 2024, with an expected commissioning date of March 2030. The three-year average of the average day flows to the WWTP are at approximately 70% of the facility rated capacity; however, given the committed capacity allocations noted in Table 2 this would decrease the WWTP capacity by approximately 10% bringing the anticipated operating capacity to 80%. Therefore, staff are preparing to begin a Municipal Class EA for an expansion of the WWTP in 2026. The planning, design and construction of these critical infrastructure facilities takes time. These timelines must be considered when determining the annual capacity allotment such that remaining available capacity is managed during the years of planning, design and construction while development is consistently and fairly supported. Table 5 shows a conceptual annual allotment forecast of SDUs corresponding to the expansion of both the water and wastewater treatment plants. This conceptual forecast considers the allocation of the factor of safety when the treatment plant expansion is well underway and is subject to change based on commissioning timeline for both plant expansions.

Table 5 Conceptual Annual Servicing Capacity Forecast

WTP Expansion	WWTP Expansion	Year	Water SDU	Wastewater SDU
Phase 1 Construction	Class EA	2026	300	530
Phase 1 Construction* (*)	Class EA	2027	220	530
Phase 1 Construction (")	Design	2028	220	530
Phase 1 Construction (")	Design	2029	220	530
Phase 1 Commissioning (")	Design/ Construction	2030	220	530
	Construction	2031		530
	Construction	2032		540
	Construction*	2033		540
	Construction	2034		540
	Construction	2035		540
Total			1,180	5,340

Note 1* Release of the original factor of safety (1557 SDUs). A new factor of safety of 150 SDUs have been retained. Applies to WTP only.

Note 2" These allocations are subject to change based on interim capacity implementation

Note 3: 500 SDUs have been set aside for municipal projects

Related to the remaining water capacity allocation, Council has provided direction to move forward with an interim capacity option (Option 1A), which will provide Collingwood with an additional 1,850m³/d (1,391 SDUs). The work has commenced with an anticipated completion date of Summer 2026, as such the additional capacity has not been considered in the forecast but will be included the next semi-annual report.

The future annual water capacity allocation thresholds will continue to be re-evaluated and adjusted as needed through the semi-annual monitoring and reporting on the Uncommitted Hydraulic Reserve Capacity. This review will continue to take into consideration the average maximum daily demands (which will change as development is occupied) if the previous annual allocation is not fully committed or if developments do not proceed (based on performance requirements) and some allocation is expired or

withdrawn. The regular monitoring and review will provide for flexibility in setting the next year's allocation allotment.

Financial Impacts

Not applicable.

Conclusion

Sufficient servicing capacity remains in the Town's water and wastewater uncommitted hydraulic reserve capacity to support growth within the Town, however the remaining uncommitted hydraulic reserve capacity in the water and wastewater systems is limited and needs to be managed in accordance with the Town's SCAP to ensure sustainable growth, especially during times of limited capacity while infrastructure upgrades are in progress.

3. Input from Other Sources

Development Engineering staff consulted with Water and Wastewater, Planning and Building staff to verify the status of development applications and building permits.

Department Heads reviewed this report at their regular meeting on March 24, 2026, and the report was recommended to proceed to the Committee of the Whole Standing Committee meeting.

4. Applicable Policy or Legislation

- Safe Drinking Water Act
- Planning Act
- Provincial Policy Statement
- Town of Collingwood Servicing Capacity Allocation Policy

5. Considerations

- | | |
|---|---------------------------------------|
| <input type="checkbox"/> Community Based Strategic Plan: | Consistent with CBSP |
| <input type="checkbox"/> Services adjusted if any | |
| <input type="checkbox"/> Climate Change / Sustainability: | Not Applicable |
| <input type="checkbox"/> Communication / Engagement: | Advertisement/Notice will be provided |

- Accessibility / Equity, Diversity, Inclusion: Not Applicable
- Registered Lobbyist(s) relating to content: [add content and meeting dates]

Next steps and future action required following endorsement: Allocations will be considered under future reports within the recommended annual allocation amounts.

6. Appendices and Other Resources

Appendix A: Hydraulic Reserve Capacity Data Assumptions – Water & Wastewater

Appendix B: Committed Hydraulic Reserve Capacity Calculations – Water & Wastewater

Appendix C: Developments with Committed Water and Wastewater Servicing Capacity

Appendix D: List of Staff Reports Submitted to Council as Referenced in this Report

7. Approval

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Reviewed By:

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CAO Comments:

- Endorsed by CAO Skinner on April 2, 2026 to proceed to COW.