



Water and Wastewater Capacity Assessment 2025 Year End Report

Town of The Blue Mountains

Water and Wastewater Services Division

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Abbreviations, Definitions and Units

Term or Abbreviation	Definition
ADD	Average Day Demand m ³ /d (water): Total yearly demand divided by 365 days.
ADF	Average Day Flow m ³ /d (wastewater): Total yearly flow divided by 365 days.
Built Capacity	Servicing capacity of existing built Town water and WWTP facilities and associated infrastructure.
BPS	Water Booster Pumping Station
CPUB	Town of Collingwood
Design Capacity	Servicing capacity of planned Town water capacity and wastewater treatment facilities and associated infrastructure based on designed and approved capacity, typically available when an ECA is obtained.
ICI	Industrial, Commercial, and Institutional
ILI	Infrastructure Leak Index
I&I	Inflow and Infiltration
EA	Environmental Assessment
ECA	Environmental Compliance Approval issued by MOECC
ESR	Environmental Study Report
Firm Capacity	Capacity available from infrastructure with largest component out of service.
kg/d	Kilograms per day
L/s	Litres per second
L/unit/day	Litres per equivalent unit per day
Leachate	A solution resulting from downward percolation of ground water through material.
m³/d	Cubic meters per day
m³/unit/d	Cubic meters per equivalent unit per day
MDD	Maximum Day Demand m ³ /d (water)
MDF	Maximum Day Flow m ³ /d (wastewater)
MECP	Ministry of the Environment, Conservation and Parks
PDF	Peak Day Flow m ³ /d (wastewater)
Pressure Zone	Area including a lower and upper elevation that receives water from a hydraulic grade line.
psi	Pounds per square inch
Res.	Residential
Service Area	Settlement area identified in the Town's Official Plan that includes water and wastewater servicing.
Town	Town of The Blue Mountains
WTP	The Blue Mountains Water Treatment Plant
WW	Wastewater
WWPS	Wastewater Pumping Station
WWTP	Wastewater Treatment Plant

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Executive Summary

This report provides an assessment of water and wastewater treatment systems capacity within the Town for 2025. The current Town water supply and wastewater treatment infrastructure includes:

- The Blue Mountains Water Treatment Plant & Distribution System
- Supplemental water supply from the Town of Collingwood
- Thornbury Wastewater Treatment Plant & Collection System
- Craigleith Wastewater Treatment Plant & Collection System

According to Ministry of the Environment Conservation and Parks (MECP) Guideline D-5-1 entitled “Calculating and Reporting Uncommitted Reserve Capacity at Sewage and WTPs”, “The number of lots in approved plans of subdivisions, developments committed by virtue of approved zoning, new official plans or site-specific official plan amendments, should not exceed the design capacity of the sewage and/or water system. To ensure that capacity is not exceeded it is necessary to determine what uncommitted reserve capacity is available. This procedure provides a means for determining uncommitted reserve capacity.”¹ *** See note in TWWTP for modified calculation method.

Key Definitions: Allocations versus Reservations

Built capacity Servicing capacity of existing built Town WTP and WWTP facilities and associated infrastructure (e.g. distribution and collections systems).

Design capacity Servicing capacity of planned Town water supply and wastewater treatment facilities and associated infrastructure based on designed and approved capacity, typically available when an ECA is obtained.

Allocation* Commitment of built plant capacity; and “allocation of servicing capacity” or “allocated servicing capacity” shall have a corresponding meaning.

Reservation* Commitment of approved design capacity, available when design is completed, and approvals are obtained and “reservation of servicing capacity” or “reserved servicing capacity” shall have a corresponding meaning.

* To determine units available for allocation, built capacity will be used. To determine units available for reservation, planned and approved capacity (e.g. facility design complete, ECA obtained) will be used. If no planned or approved capacity is available, the total capacity for reservation and allocation is the built capacity.

¹ MECP guideline D-5-1 entitled, “Calculating and Reporting Uncommitted Reserve Capacity at Sewage and WTPs”, updated March 1995.

Water Supply

1. Total Blue Mountains WTP Capacity

The firm capacity available from the Blue Mountains WTP is 15,140 m³/day. The Town receives up to 1,250 m³/day supplemental supply from the Town of Collingwood.

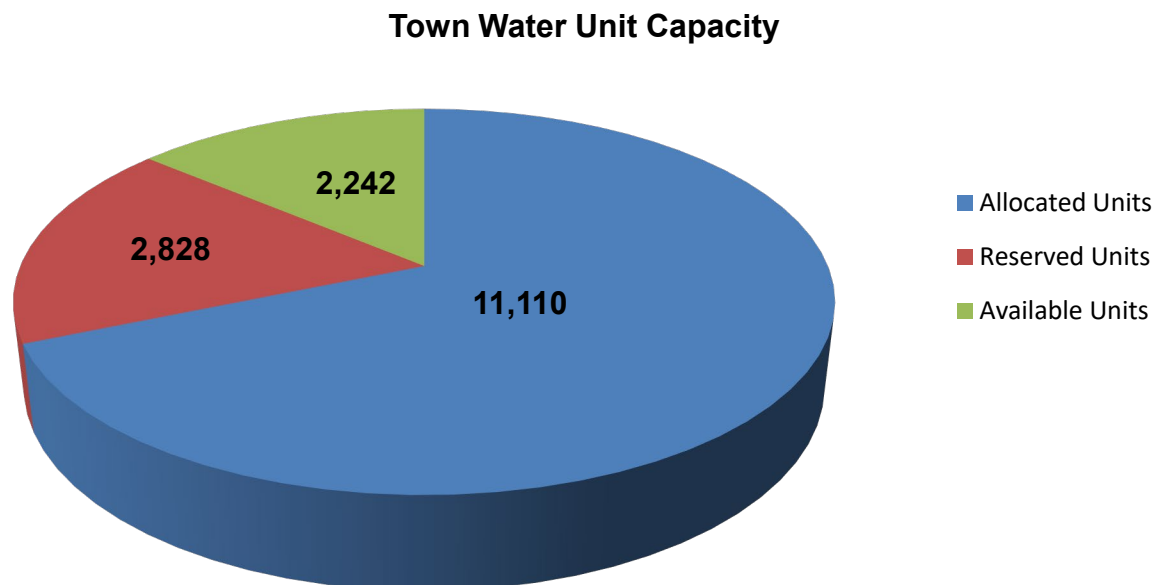
Therefore, the total firm water capacity available is 16,390 m³/day or 16,180 units based on the 5-year rolling MDD of 1.013 m³/unit/day.

2. Available Water Capacity

A total demand of 11,254 m³/day (11,110 units) is currently connected or allocated to the water system based on a 5-year rolling average maximum daily demand of 1.013 m³/unit/day.

A total flow of 2,865 m³/day (2,828 units) is currently reserved at 1.013 m³/unit/day.

Of the 16,180 total units of water supply available, there are currently 13,938 units allocated and reserved. Therefore, the current available capacity of the Town's water supply is 2,242 units.



Thornbury Wastewater Treatment Plant

1. Total Thornbury WWTP Capacity

The total firm ADF built capacity available at the Thornbury WWTP is 5,330 m³/day or 6,913 units based on the 5-year rolling ADF of 0.771 m³/unit/day. The rated capacity of 5,330 m³/day will only be fully realized once the new outfall to Georgian Bay has been constructed to meet peak hourly flows. The new outfall is scheduled to be constructed by Q3 of 2026. For this report, the new rated capacity of 5,330 m³/day will be used.

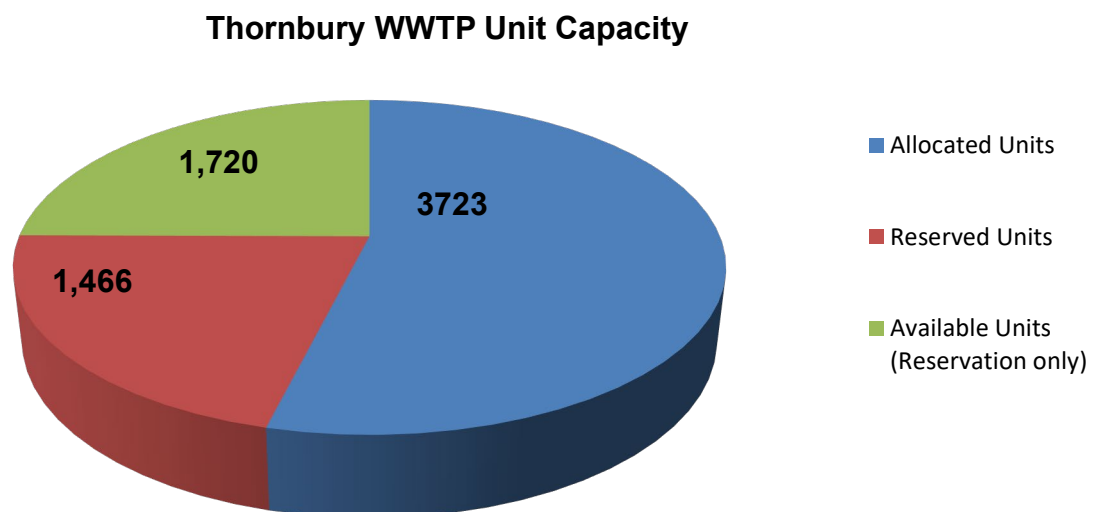
2. Available Wastewater Capacity Based on Planning Projections

A total flow of 2,874 m³/day (3,723 units) is currently connected or allocated to the Thornbury WWTP based on a 5-year rolling ADF. There are currently 3,723 units allocated and 1,466 reserved. Therefore, using planning projections the current available uncommitted reserve capacity based on built capacity is 1,720 units.

The PDF flow at the Thornbury WWTP in 2025 was 12,690 m³/day. The design PDF for the Thornbury WWTP is 22,386 m³/d. The PDF typically occurs during a period of snow melt or a significant wet weather event. The peak day occurred on April 3rd, 2025. The day prior, April 2, 2025, the Town of The Blue Mountains experienced the beginning of a significant spring storm that followed the late-March ice storm. Conditions deteriorated through the afternoon and evening as heavy rain, strong winds, and localized flooding affected the area.

3. Thornbury WWTP Estimated Expansion Timeline

Based on the 2025 five (5) year rolling ADF of 2,566 m³/day, the Thornbury WWTP is operating at 48% of the built capacity.



Craigleith Wastewater Treatment Plant

1. Total Craigleith WWTP Capacity

The total firm ADF built capacity available at the Craigleith WWTP is 8,133 m³/day or 13,487 units based on the 5-year rolling ADF of 0.603 m³/unit/day.

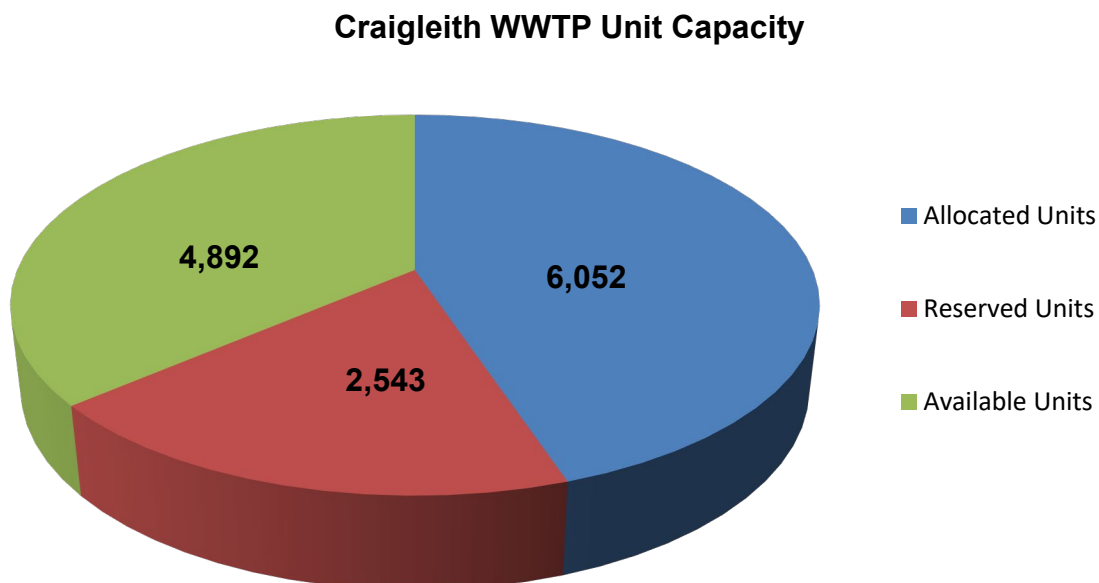
2. Available Wastewater Capacity

A total flow of 3,649 m³/day (6,052 units) is currently connected or allocated to the Craigleith WWTP, based on a 5-year rolling ADF. There are currently 6,052 units allocated and 2,543 units reserved. Therefore, the current uncommitted reserve capacity on built capacity is 4,892 units.

The PDF flow at the Craigleith WWTP in 2025 was 13,193 m³/day. This was on April 3rd, 2025. The design PDF for the Craigleith WWTP is 19,640 m³/d. The PDF typically occurs during a period of significant wet weather or a snow melt event.

3. Craigleith WWTP Estimated Expansion Timeline

Based on the 2024 five (5) year rolling ADF of 3,407 m³/day, the Craigleith WWTP is operating at 42% of the built capacity and as such, there is no immediate need to expand the Craigleith WWTP.



1.0 Introduction

1.1 Purpose

This report provides an assessment of water and wastewater treatment capacity within the Town of The Blue Mountains (Town) for 2025. The current Town water and wastewater supply and treatment infrastructure includes:

- The Blue Mountains Water Treatment Plant & Distribution System
- Supplemental water supply from the Town of Collingwood
- Thornbury Wastewater Treatment Plant & Collection System
- Craigeleith Wastewater Treatment Plant & Collection System

In addition, this report provides a review of the capacity of water storage reservoirs, BPS, WWPS and identifies current or proposed system upgrades or expansion projects.

1.2 The Blue Mountains Official Plan

1.2.1 Servicing Policies

Section D1 of the Official Plan outlines the Town's servicing policies. It identifies the preference for municipal water and wastewater servicing requirements for each Service Area within the Town, establishes policies for the provision of private or municipal water and wastewater servicing, defines requirements for servicing of existing residents, as well as reservation and allocation limitations and requirements for new development.

Section D1.4 of the Official Plan describes five development-staging categories based on development approval status and the corresponding level of commitment of WTP or WWTP infrastructure capacity. The process makes commitment of capacity for existing unserviced development. Figure 1 in Appendix A provides an overview of the development staging process and requirements for moving through the process for both new and existing unserviced development. Development is identified as having "No Capacity", "Reservation", or "Allocation" depending on the stage.

Development staging categories identified in Section D of the Official Plan correspond with the development categories used in the Year End Report as identified in Figure 1, and as discussed below.

1.2.2 Development Categories

The Town's Year End Reports have historically identified 7 categories of connection status within the Town. See Appendix A.

1. Connected – includes all connected units
2. Can connect – includes all existing units and vacant lots fronting servicing that are not connected
3. Committed – includes all new units that are identified in an executed development agreement
4. Not fronting, Not Serviced – includes existing units and vacant lots within a service area that do not front servicing
5. Designated active lands – includes units in areas with draft plan approval

6. Other lands designated – includes units in areas that are designated but do not have draft plan approval
7. Other lands not designated – includes units in areas that require Official Plan Amendments and have no approval

1.3 Key Definitions: Allocations versus Reservations

Built capacity	Servicing capacity of existing built Town WTP and WWTP facilities and associated infrastructure (e.g. distribution and collections systems).
Design capacity	Servicing capacity of planned Town water supply and wastewater treatment facilities and associated infrastructure based on designed and approved capacity, typically available when an ECA is obtained.

Allocation* Commitment of built plant capacity; and “allocation of servicing capacity” or “allocated servicing capacity” shall have a corresponding meaning.

Reservation* Commitment of approved design capacity, available when design is completed, and approvals are obtained and “reservation of servicing capacity” or “reserved servicing capacity” shall have a corresponding meaning.

* To determine units available for allocation, built capacity will be used. To determine units available for reservation, planned and approved capacity (e.g. facility design complete, ECA obtained) will be used. If no planned or approved capacity is available, the total capacity for reservation and allocation is the built capacity.

1.4 Methodology for Calculating Available Capacity

The following sections describe the methodology used to calculate the uncommitted capacity available for “reservation” and “allocation” as defined above. The approach has been adapted from the MECP Guideline as described below.

1.4.1 MECP Guideline for Calculating Reserve Capacity

The MECP has a Guideline D-5-1 entitled “Calculating and Reporting Uncommitted Reserve Capacity at Sewage and WTPs”. The latest revision is March 1995. The reserve capacity calculation is intended to ensure that committed developments do not exceed the design capacity of the wastewater and/or water works.

In general, the Guideline recommends calculating reserve capacity as follows:

Reserve Capacity = Approved Design Capacity – Existing Flows – Committed Flows

Where: Approved Design Capacity of a WTP or a WWTP is described as the capacity that may be defined in a Design Report or the Environmental Compliance Approval.

Existing Flows is the flow based on a rolling average of five (5) year historical flow (average inflow for WWTPs, peak inflow for wastewater pumping stations, maximum day demand for WTPs and peak day demand for BPS).

Committed Flows includes all units identified as can connect, committed, not fronting, not serviced and designated active lands.

The MECP suggests that the calculation may be modified to account for any of the following deviations:

- Widely variable seasonal flow fluctuations due to infiltration or seasonal population.
- Rapid development/growth which may dramatically increase the forecasted flows.

- Large industrial facilities which may impact flows.
- Per capita flow projection which may be substantially different from historical flows.

In addition, operating conditions at water and wastewater treatment facilities may necessitate the need to modify the formula to account for capacity loss. For example, a facility may have a deficiency and is not capable of meeting its approved design capacity, or water quality/effluent quality parameter.

1.4.2 Adaptation of MECP Guideline D-5-1 for Year End Reporting

The MECP Guideline D-5-1 entitled “Calculating and Reporting Uncommitted Reserve Capacity at Sewage and WTPs”, as discussed above, has been adapted for use in calculating capacity at the Town’s treatment facilities.

The following provides an overview of the formula and method of applying historical data to be used in the subsequent sections of this document. The MECP Procedure for Calculating and Reporting Uncommitted Reserve Capacity, permits three to five (5) years of records to be used in establishing representative MDDs. The Town has utilized a five (5) year rolling average in its Year End Reports.

The following calculation is used to determine total facility capacity (units):

$$\text{Total Facility Capacity (units)} = \frac{\text{Facility Built or Design Capacity (m}^3\text{/day)}}{5 \text{ Year Rolling Per Unit Flow Rate (m}^3\text{/unit/day)}}$$

The Facility Built Capacity (m³/day) – The total flow that can be treated by the built capacity of the facility based on historical average flows.

Total Facility Design Capacity (units) – Units available for reservation based on planned and approved capacity (design complete, ECA obtained, but not built). If no planned or approved capacity is available, the capacity available for reservation and allocation is the plant-built capacity. It is recognized that the number of units that can be serviced will change from year to year because the per unit flow rate will change with time.

Per Unit Flow Rate (m³/unit/day) - Determined based on a review of historical data as discussed in Section 1.4.3.

If the units available for allocation is negative (e.g. Total Facility Built Capacity (Units) < total units allocated), the facility is over allocated and additional capacity is required. Although this would indicate that the facility would receive flows or demands higher than the operating capacity, it is noted that units identified in Categories 2 and 3 are not necessarily connected. However, the Town is obligated to service units in Categories 2 and 3 and thus must ensure that the capacity is available when a connection is made.

If the units available for reservation is negative (e.g. Total Facility Design Capacity (Units) < total units allocated + total units reserved), then an ECA is required to increase the Design Capacity of facility to allow for additional reservation of servicing capacity.

Total Units Allocated*.... is the sum of units identified in development categories 1 to 3.

Total Units Reserved*....is the sum of units identified in development category 5.

* Note: Development categories are defined under section 1.2.2

The above methods for calculations have been further modified for the Thornbury WWTP (see section 5.0)

1.4.3 Application of Historical Data to Determine Per Unit Flow Rates

To ensure that the per unit flow rate adequately represents credible flows / demands, an assessment of monthly and peak data for five (5) years is analysed to determine a five (5) year rolling average. There are two main reasons for adopting this approach. Firstly, to accommodate for variances in flows and demands based on weather patterns and reduce fluctuation in the per unit flow rate on a yearly basis; and secondly, to ensure that changes in demands related to demographic shifts and changing development do not overly influence the criteria. These two issues are further discussed below.

Water

Maximum day water demands are used to size water treatment facilities and are generally influenced by seasonal factors because peak per unit demands during hot, dry summer periods are higher than those experienced during wet, cooler summers. Using a historical five (5) year rolling average to establish the per unit MDD rate will ensure that yearly changes in demands due to weather patterns do not unduly influence the MDD rate and the potential impact of anomalies in data can be mitigated.

Wastewater

Wastewater average daily flows are used to size wastewater treatment facilities and are generally influenced by seasonal factors due to use of summer and winter facilities by residents and tourists. Typical wet weather flows occur in the spring and fall of each year. Using a five (5) year rolling ADF to establish the per unit ADF rate will ensure that yearly changes in demands due to weather patterns do not unduly influence the ADF rate and potential impact of anomalies in data can be mitigated.

The calculation of WWPS capacity is based on historical instantaneous peak flows since there is quite limited capacity to store wastewater or mitigate an increase in flow like a WWTP.

In summary, the following data will be reported and used to determine the per unit flow rate.

Per Unit Maximum Day Water Demand (MDD/unit) – five (5) year rolling average maximum day demand that occurred within the record period.

Per Unit Average Day Wastewater Flow (ADF/unit) – five (5) year rolling average daily flow that occurred over the record period.

Per Unit Peak Wastewater Flow (PDF/unit) - Maximum instantaneous peak daily flow that occurred over the record period.

Firm Capacity - Capacity of a facility with the largest mechanical unit out of service.

1.4.4 Variations in Planning Versus Actual Units

Throughout the Report there is a small variation noted in the Planning projections versus actual number of units. In 2009, the way the connected units were compiled resulted in a slight discrepancy in the numbers from Planning and the numbers from Infrastructure & Public Works. Recently the numbers migrated from previous spread sheets to the current GIS format and the discrepancy has followed.

Planning Staff undertook a thorough investigation and a comprehensive analysis of the connected units to both the water and wastewater systems for the 2021-unit count. This analysis included utilizing the Town's GIS database, billing database, Google Earth and in some instances, an actual walk through of areas. Significant changes were made, and when it was apparent that unit count had been incorrect for several years, the connected units were changed back to 2012.

2.0 Population and Service Areas

The following sections review population data for the Town and discuss the service areas within the Town and their respective servicing requirements as identified in the Official Plan. The different service areas are outlined on the maps in Appendix B. The population data reviewed in this section is used to project total equivalent population. Capacity status reporting is done on a per equivalent unit basis to account for fluctuations in permanent population. However, it is important to monitor population density with time because a change in per unit density may correspond with a change in per unit flow rates. The Town may experience changes in unit densities due to demographic shifts and as seasonal residences become permanent residences.

2.1 Historical and Services Population

Table 2.1 tabulates the number of units and population from Census Canada for 2001, 2006, 2011, 2016 and 2021. The table represents only the permanent residential units and population. Census Canada only tabulates occupants at their principal residence (not seasonal residences).

Table 2.1 Census Canada Population Data

Blank	Grey County			The Blue Mountains		
Year	Total Units	Population	Persons/Unit	Total Units	Population	Persons/Unit
2001	35,325	89,073	2.52	2,585	6,116	2.37
2006	37,185	92,411	2.49	2,939	6,825	2.33
2011	38,042	92,568	2.43	2,846	6,452	2.27
2016	39,563	93,830	2.37	3,271	7,025	2.15
2021	42,704	100,905	2.36	4,350	9,390	2.15

From Table 2.1, the unit density for permanent residents in the Town was 2.15 persons per unit in 2021. This figure is slightly lower than the Grey County density of 2.36 persons per unit, which dropped slightly from the previous census. Although these figures do not include the significant seasonal component of the Town's population, they are the most accurate figures available for estimating the unit density at this time. Thus, the unit residential density of 2.15 will be used for permanent and part time units.

Tables 2.2 and 2.3a, 2.3b and 2.3c tabulate the number of equivalent units and population serviced by the Town's water and wastewater systems. Industrial, Commercial, and Institutional units are included as equivalent units, whereas the residential component is actual units (including permanent and seasonal units).

Table 2.2 Town Water System Equivalent Serviced Population

Water Units				
Year	Residential Water Units	Equivalent ICI Water Units**	Total Equivalent Water Units	Total Equivalent Served Population*
2016	5,144	3,261	8,405	18,071
2017	5,485	3,124	8,609	18,509
2018	5,718	3,136	8,854	19,036
2019	5,977	3,076	9,053	19,464
2020	6,269	3,088	9,357	20,118
2021	6,631	3,088	9,719	20,896
2022	6,888	3,094	9,982	21,461
2023	7,050	3,115	10,165	21,855
2024	7,114	3,116	10,230	21,995
2025	7,222	3,116	10,338	22,227

*Equivalent service population is based on the Census Canada unit density for the Town of The Blue Mountains as described in Table 2.1. The Total Equivalent Water Units is multiplied by the current unit density of 2.15.

**Equivalent ICI Water units are based on Ainley and Associates 1985 “Basis for Equivalent Units” File No. 81170 (see Appendix H).

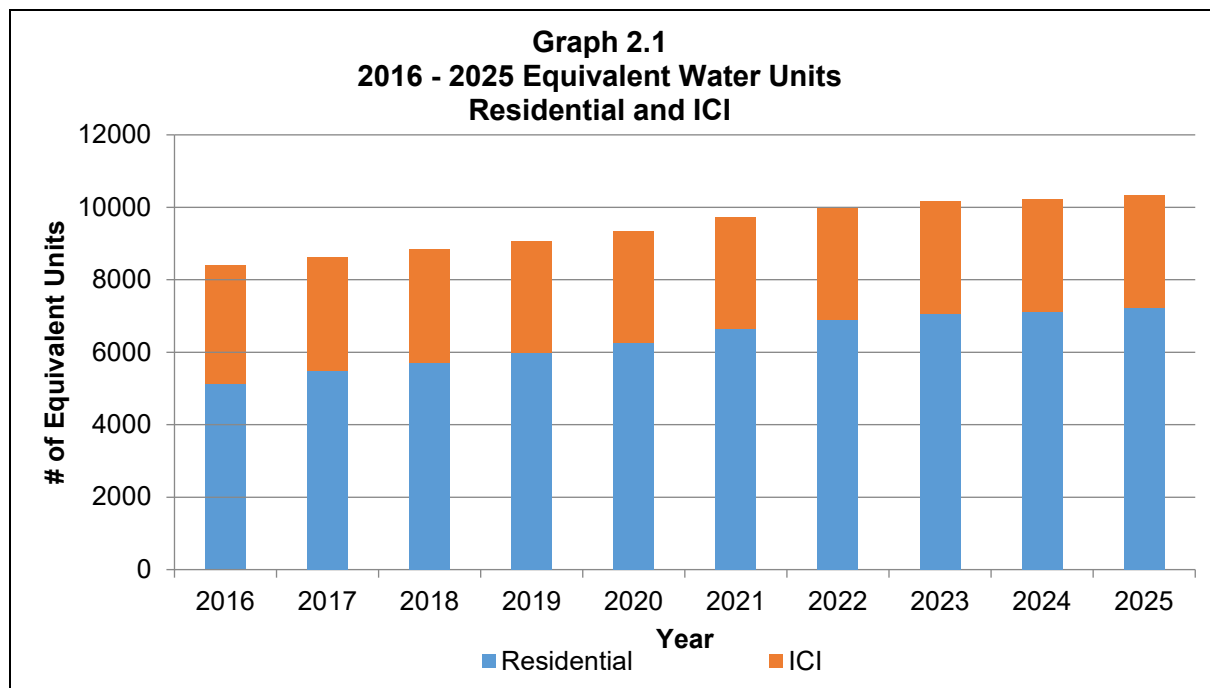


Table 2.3a Thornbury Wastewater System Equivalent Serviced Population

Wastewater Units – Thornbury WWTP				
Year	Thornbury Residential WW Units	Thornbury Equivalent ICI WW Units	Thornbury Total Equivalent WW Units	Equivalent Serviced Population* Thornbury WWTP
2016	1,993	579	2,572	5,530
2017	2,088	580	2,668	5,736
2018	2,161	582	2,743	5,897
2019	2,256	582	2,541	5,463
2020	2,333	612	2,945	6,332
2021	2,518	612	3,130	6,729
2022	2,662	612	3,274	7,039
2023	2,767	632	3,399	7,308
2024	2,784	632	3,416	7,344
2025	2,789	632	3,421	7,355

*Equivalent service population is based on the Census Canada unit density for the Town of The Blue Mountains as described in Table 2.1. The Total Equivalent WW Units is multiplied by the current unit density of 2.15.

Table 2.3b Craigeith Wastewater System Equivalent Serviced Population

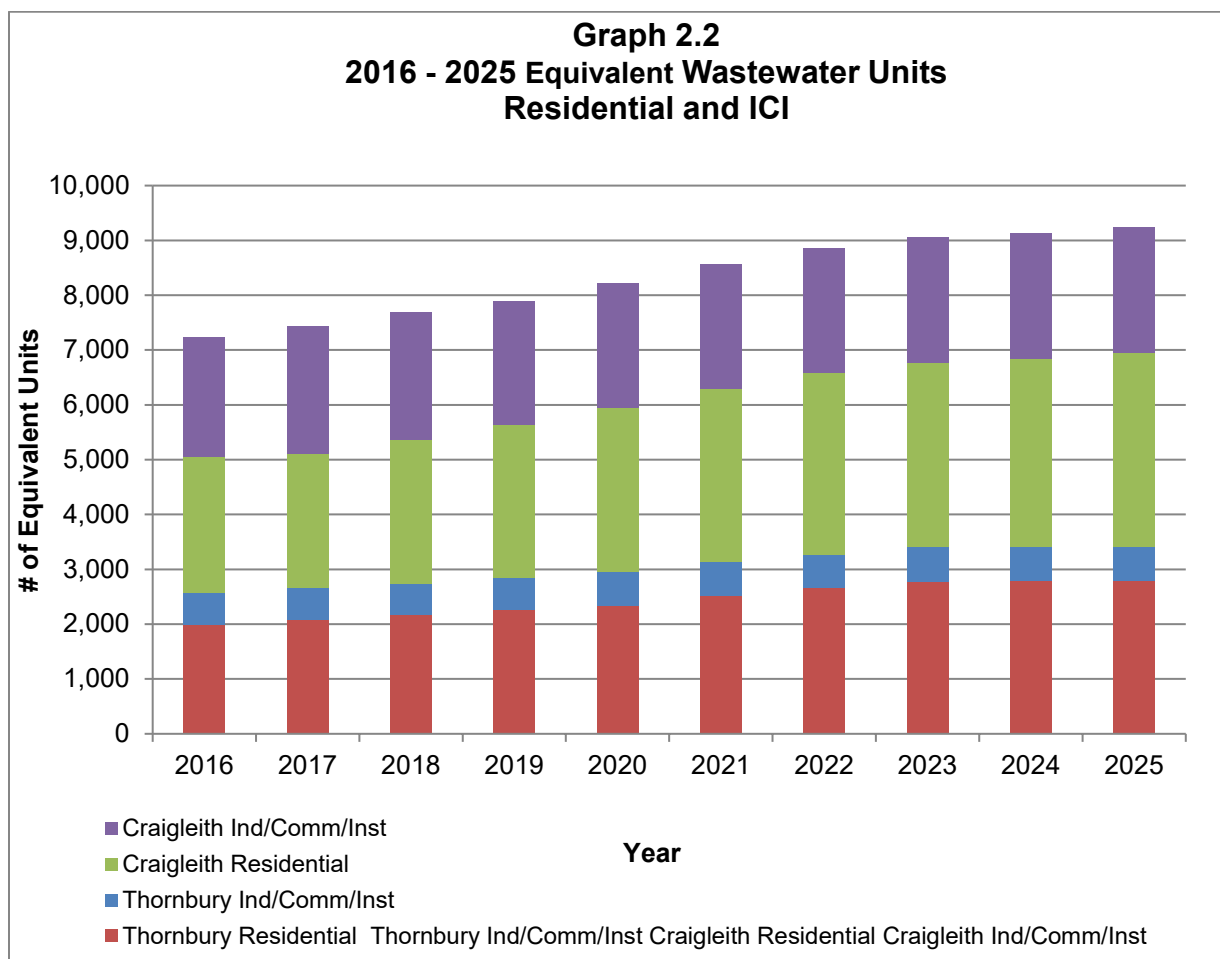
Wastewater Units – Craigeith WWTP				
Year	Craigeith Residential WW Units	Craigeith Equivalent ICI WW Units	Craigeith Total Equivalent WW Units	Equivalent Serviced Population* Craigeith WWTP
2016	2,483	2,178	4,661	10,021
2017	2,448	2,318	4,766	10,247
2018	2,617	2,318	4,935	10,610
2019	2,794	2,256	5,050	10,858
2020	3,005	2,268	5,273	11,337
2021	3,175	2,268	5,443	11,702
2022	3,312	2,275	5,587	12,012
2023	3,377	2,295	5,672	12,195
2024	3,424	2,296	5,720	12,298
2025	3,528	2,296	5,824	12,522

*Equivalent service population is based on the Census Canada unit density for the Town of The Blue Mountains as described in Table 2.1. The Total Equivalent WW Units is multiplied by the current unit density of 2.15.

Table 2.3c Town Wastewater Systems Equivalent Serviced Population (Thornbury & Craigleith)

	Wastewater Units			Equivalent Serviced Population*		
Year	Residential WW Units Craigleith & Thornbury	Equivalent ICI WW Units Craigleith & Thornbury	Total Equivalent WW Units	Craigleith WWTP	Thornbury WWTP	Total Population
2014	2,361 + 1,903 = 4,264	2,176 + 615 = 2,791	7,055	10,299	5,716	16,015
2015	2,415 + 1,942 = 4,357	2,176 + 579 = 2,755	7,112	10,421	5,723	16,144
2016	2,483 + 1,993 = 4,476	2,178 + 579 = 2,757	7,233	10,021	5,530	15,951
2017	2,448 + 2,088 = 4,536	2,318 + 580 = 2,898	7,434	10,247	5,736	15,983
2018	2,617 + 2,161 = 4,778	2,318 + 582 = 2,900	7,678	10,610	5,897	16,507
2019	2,794 + 2,256 = 5,050	2,256 + 582 = 2,838	7,888	10,858	5,463	16,321
2020	3,005 + 2,333 = 5,338	2,268 + 612 = 2,880	8,218	11,337	6,332	17,669
2021	3,175 + 2,518 = 5,693	2,268 + 612 = 2,880	8,573	11,702	6,729	18,431
2022	3,312 + 2,662 = 5,974	2,275 + 612 = 2,887	8,861	12,012	7,039	19,051
2023	3,337 + 2,767 = 6,144	2,295 + 632 = 2,927	9,071	12,195	7,308	19,503
2024	3,424 + 2,784 = 6,208	2,296 + 632 = 2,928	9,136	12,298	7,344	19,642
2025	3,528 + 2,789 = 6,317	2,296 + 632 = 2,928	9,245	12,522	7,355	19,877

*Equivalent service population is based on the Census Canada unit density for the Town of The Blue Mountains as described in Table 2.1. The Total Equivalent WW Units is multiplied by the current unit density of 2.15.



3.0 Water Capacity Assessment

3.1 The Blue Mountains WTP Capacity

The Blue Mountains WTP draws water from Georgian Bay for treatment and distribution. The WTP uses microfiltration, ultraviolet irradiation and gas chlorine disinfection for the treatment of water. The firm capacity of the WTP is 15,140 m³/day.

3.1.1 Collingwood Supply

A water supply agreement was signed in 2015 by the Town and the Town of Collingwood for the purchase of up to 1,250 m³/day on a permanent basis from Collingwood. Water is supplied from the Collingwood Water System via the Mountain Road BPS. In addition to the Mountain Road BPS, the Collingwood Water System provides water to the Crestview development on Grey Road 21. The Town of Blue Mountains provides water to Collingwood residents along Long Point Road.

3.1.2 Total Water Supply

The total available firm capacity including the WTP and supply from Town of Collingwood is 16,390m³/day, (15,140 + 1,250).

3.2 Water Demand

3.2.1 Water Daily Demand

The following table, which includes the supplemental supply from Town of Collingwood, summarizes the annual average day demand (ADD) and maximum day demand (MDD) from 2016 to 2025. For the purposes of calculating the total capacity required, the MDD is used.

Table 3.1 Five (5) Year Rolling Average Water Demands

Year	# of Units	ADD (m ³ /d)	ADD (m ³ /unit/d)	5 Year Rolling Average ADD (m ³ /unit/d)	MDD (m ³ /d)	MDD (m ³ /unit/d)	5 Year Rolling Average MDD (m ³ /unit/d)
2016	8,405	4,940	0.588	0.518	8,950	1.065	0.994
2017	8,609	4,680	0.544	0.514	7,838	0.910	1.044
2018	8,854	4,911	0.555	0.528	8,582	0.969	0.972
2019	9,053	5,389	0.595	0.568	9,507	1.050	1.010
2020	9,357	5,699	0.609	0.578	9,959	1.064	1.012
2021	9,719	6,087	0.626	0.586	9,635	0.991	0.997
2022	9,982	6,005	0.602	0.597	9,753	0.997	1.014
2023	10,165	6,412	0.631	0.613	10,362	1.019	1.024
2024	10,230	5,948	0.581	0.610	9,631	0.941	1.002
2025	10,338	6,250	0.605	0.609	11,557	1.118	1.013
		2025 5 Year Rolling ADD/Unit = 0.609 m ³ /unit/day			2025 5 Year Rolling MDD/Unit = 1.013 m ³ /unit/day		

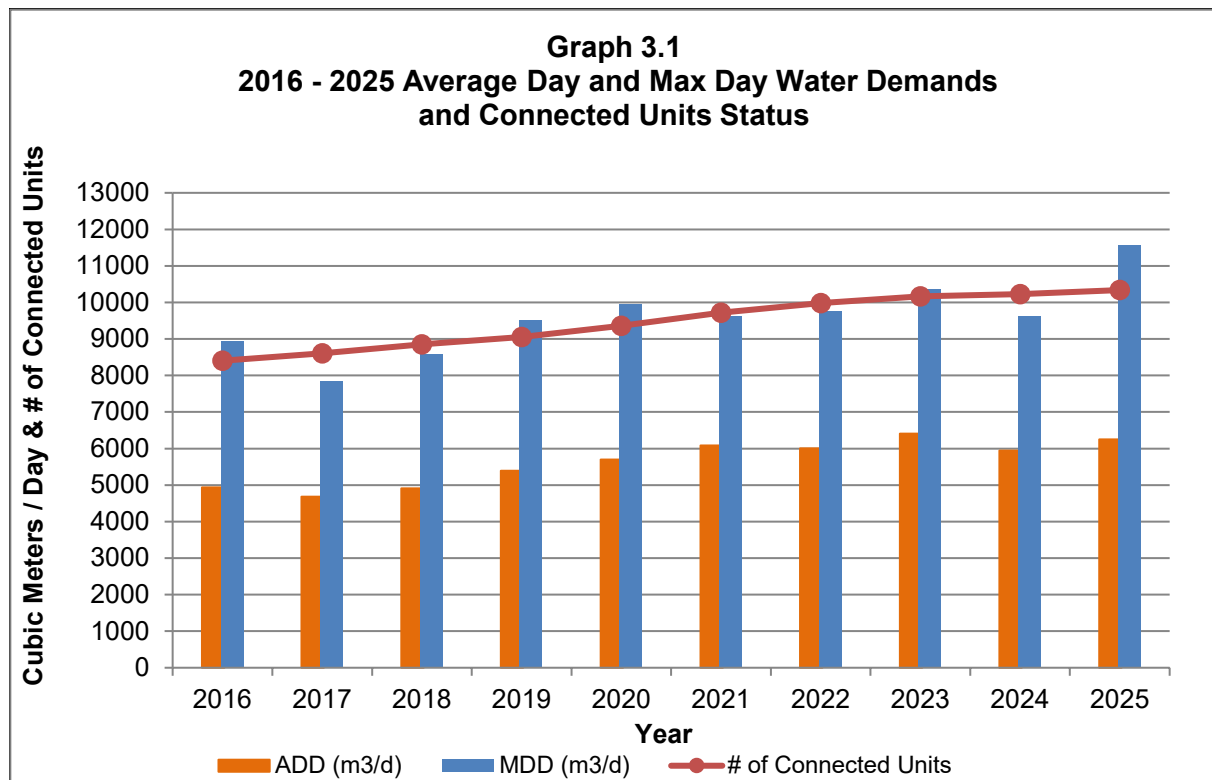
3.2.2 Top 10 Yearly Maximum Day Demands

Tables A16 to A17 in Appendix E summarize the top ten highest demands that occurred in 2024 and 2025. Maximum day water demands typically occur during the summer period when water use increases due to activities such as lawn watering, the ten highest demand days for 2025 were in July and August. The MDD in 2025 was on August 12, 2025 (12,080m³), however, the MDD used for the capacity assessment for 2025 is from August 3, 2025 (11,557m³). The August 12 flow was impacted by maintenance activities at the water treatment plant, and not reflective of the true water demands. The flow from August 3, 2025 (11,557m³) is a significant increase from the previous year increasing the flow/unit/day from .941 m³ to 1.118 m³.

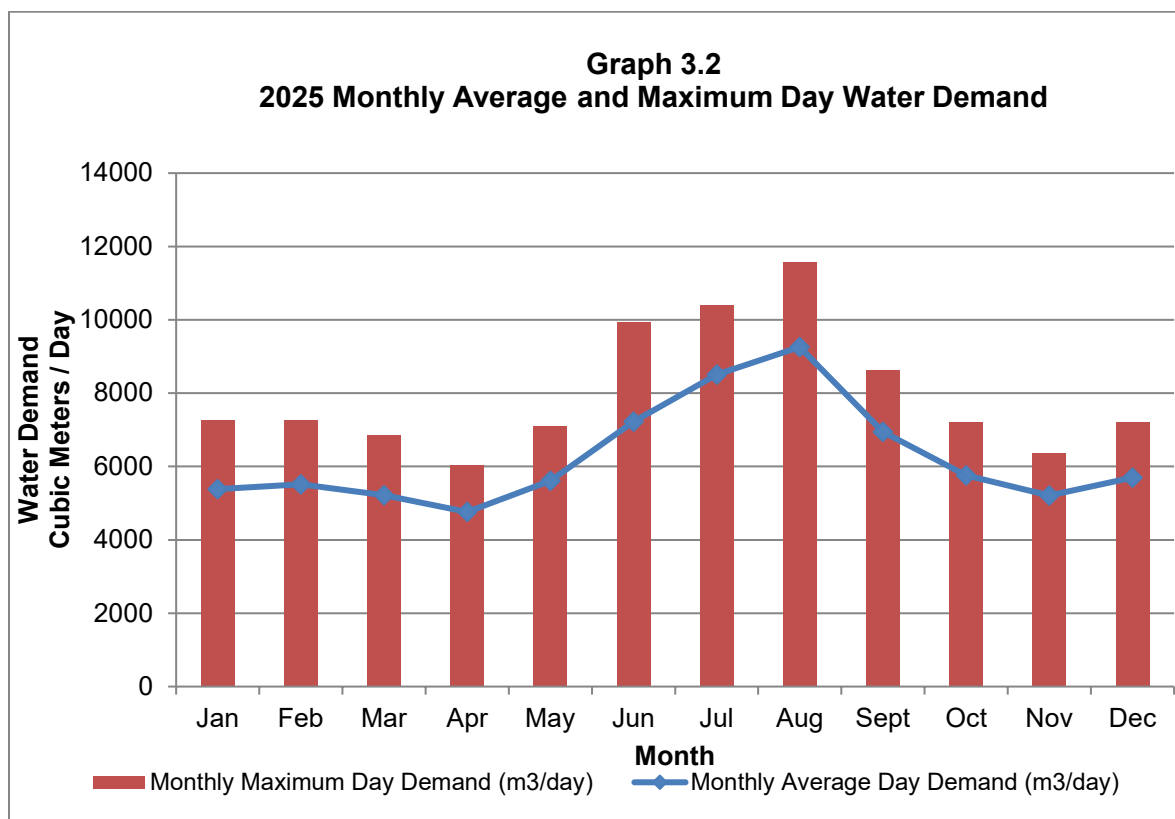
3.2.3 Monthly Average and Maximum Demand Data

Graph 3.1 below illustrates the comparison of average and maximum day water demands from 2016-2025. While the number of connected units rises gradually each year, there is a slight increase in the average water demand since 2016. Maximum daily water demand generally increased from 2016 to 2023. Following a slight decline in 2024, the maximum daily demand increased by 20% in 2025 relative to the previous year, continuing the overall upward trend. Cooler wet summers result in slightly lower

maximum daily water demand, while hot dry summers result in a slightly higher maximum daily water demand, due to increase water taking for irrigation purposes.



A comparison of average to maximum day water consumption for 2025 is illustrated in Graph 3.2 below. The monthly demands tend to decline during spring and fall months and increase during summer and winter months.



3.3 The Blue Mountains WTP and Collingwood Supply Capacity

As discussed in Section 3.1, the firm capacity available from The Blue Mountains WTP in 2025 was 15,140 m³/day and the supplemental supply from Collingwood was 1,250 m³/day. Therefore, the total built capacity is 16,390 m³/day.

Using the per unit rolling five (5) year MDD from Table 3.1 to determine the total number of units that can be supplied, results in the following:

$$\text{Built Capacity: } \frac{16,390 \text{ m}^3/\text{day}}{1.013 \text{ m}^3/\text{unit/day}} = 16,180 \text{ units}$$

Therefore, the Total Built Capacity is 16,180 units.

3.3.1 Water Capacity Status

Table 3.2 summarizes the 2025 capacity status. A breakdown of the water supply capacity status is included in Appendix D.

Table 3.2 2025 Water Unit Status

Year End Report Category	Official Plan Capacity Status	Number of Units	Demand (m ³ /d)*
1. Connected	Allocated	10,338	10,472
2. Can Connect	Allocated	772	782
3. Committed	Allocated	0	0

Sub-Total Allocated (1+2+3)		11,110	11,254
4. Not Fronting, Not Serviced	Reserved	819	829
5. Designated Lands – Active	Reserved	2,009	2,035
Sub-Total Reserved (4+5)		2,828	2,865
Total Can Connect + Committed + Not Fronting, Not Serviced + Designated Lands Active (2+3+4+5)		3,600	3,554
Total Allocated + Reserved (1+2+3+4+5)		13,455	13,630
6. Designated Lands – Other	Not Recognized	6,702	6,789
7. Not Designated	Not Recognized	3,154	3,195
Sub-Total Not Recognized (6+7)		9,856	10,083
Grand Total (1+2+3+4+5+6+7)		23,794	24,341

* number of units multiplied by the 5-year rolling average MDD identified in Table 3.1

3.3.2 Allocated and Reserve Capacity

Using data from Tables 3.1 and 3.2, reserve capacity for the Town's Water Supply is determined using the calculation from Section 1.4.2

Total Built Capacity = 16,180 units (as identified in Section 3.3)

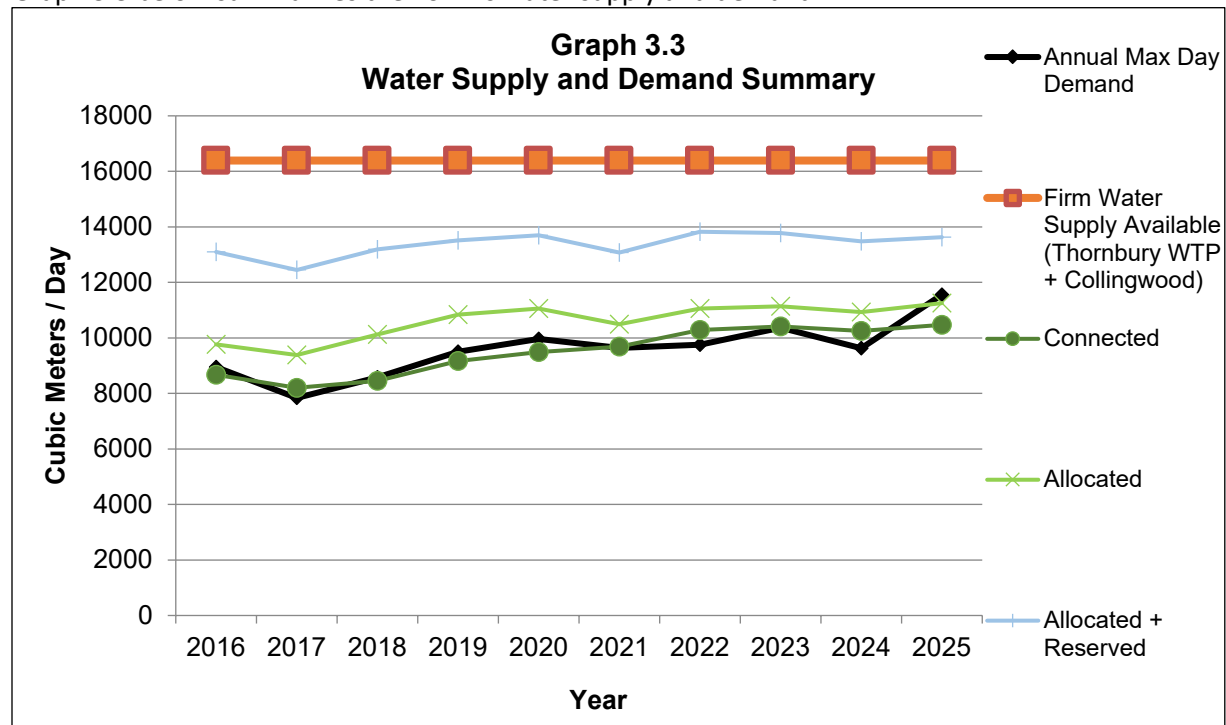
Connected Demand = 10,338 units (connected units as identified in Table 3.2)

Reserved Demand = 2,828 units (total reserved units as identified in Table 3.2)

Therefore: **Units Available for Reservation** = 16,180 – 10,338 – 3,600 = 2,242 units

3.3.3 Flow & Unit Summary

Graph 3.3 below summarizes the Town's water supply and demand



The WTP has adequate capacity to support existing system users and development. Consideration for additional capacity will be required as demand and the user base continue to grow.

Currently the WTP has three (3) microfiltration trains providing a firm capacity of 15,140 m³/day. Ultimate built WTP capacity will include an additional two (2) microfiltration trains for a total of five (5). However, there are some significant limitations at the WTP, including the size of the intake, the clearwell size and the pipe size existing the plant.

A solution to the Town's long-term water supply needs is currently being addressed through the Eastside Water Storage and Supply Class Environmental Assessment project. This assessment will also address the Town's water storage needs. This Environmental Assessment for Supply will be broken down into two independent studies, one to increase the capacity of the existing plant to 18,165 m³/day, and the other to assess a new source, either increase the amount of water taking from Collingwood, or construct a new water treatment plant.

3.4 Existing Infrastructure by Pressure Zone

Although the water supply is adequate for the Town's water demand, individual components of the distribution system can be inadequate and therefore a review of key components is warranted.

3.4.1 Firm Capacity of Existing Water Booster Stations by Pressure Zone

The following is a list of existing storage facilities and booster stations within each Pressure Zone currently receiving the Town's water supply and their respective firm capacities. Appendix C Water Pressure Zone Boundary Map illustrates the boundaries of Pressure Zones 1-5.

Craigleith – Pressure Zone 4

- Existing storage reservoir capacity is 5,000 m³.

- Arrowhead Road Booster Station has a firm capacity of 68 L/s. The Arrowhead Booster Station will be retrofitted in 2026/2027 to increase the capacity to 100 L/s.
- Mountain Road Booster Station has an operating limit of 14.5 L/s reflecting the Collingwood Agreement but is physically capable of supplying 46 L/s that may be utilized with prior consent from Collingwood.

Swiss Meadows – Pressure Zone 5

- Water Storage Standpipe has a reservoir capacity of 536 m³.
- Happy Valley Booster Station has a firm capacity of 5 L/s.

Camperdown – Pressure Zone 1 & 3

- Camperdown Reservoir and Booster Station has a reservoir capacity of 2,662 m³ and a firm capacity of 25 L/s.
- Camperdown Court Booster Station has a firm capacity of 85 L/s
- Wards Road Booster Station has a firm capacity of 16 L/s

Thornbury – Pressure Zone 1

- Elevated Water Tower has a capacity of 747 m³.

Thornbury Reservoir and BPS has a reservoir capacity of 3,400 m³ and a firm capacity of 174 L/s.

Lora Bay – Pressure Zone 2

- 10th Line Booster Station has a firm capacity of 100 L/s.

3.4.2 Pressure Zone 4 (Arrowhead Road BPS)

The Arrowhead Road BPS and the supplemental water supply from Collingwood provide water to the Craighleith Service Area (Pressure Zone 4) and Swiss Meadows (Pressure Zone 5). The BPS is also able to direct supplemental water supply from Collingwood to pass through the station to Pressure Zone 1 when necessary.

As noted in Section 3.3.1, the firm capacity of the Arrowhead Road BPS is 68 L/s or 5,875 m³/day and the supply available from Collingwood is 14.5 L/s or 1,250 m³/day. Therefore, a total of 7,125 m³/day can be supplied to Pressure Zone 4 and Pressure Zone 5.

Using the 5-year rolling average of the per unit MDD to determine the total number of units that can be supplied results in the following:

$$\frac{7,125 \text{ m}^3/\text{day}}{1.013 \text{ units}/\text{m}^3/\text{day}} = 7,034 \text{ units}$$

Currently, 6,948 units in Pressure Zones 4 and 5 are connected or have received allocation (Categories 1 to 3). Based on the design capacity reported above, the current available allocation capacity for the Zone 4 and 5 is 85 units or 86 m³/day (7,034 – 6,948 = 86 units).

In 2023 the Town commenced with Engineering to increase the capacity of the Arrowhead Booster Pumping Station. The goal of the assignment is to replace the three pumps with 50 L/s pumps. The firm capacity of the station will be increased from 68 L/s to 100 L/s, however there may be limitations with the total water supply and with the transmission main feed to the station being able to convey that volume of water.

The firm capacity of the Arrowhead Road BPS after the upgrades will be 100 L/s or 8,640 m³/day and the supply available from Collingwood is 14.5 L/s or 1,250 m³/day. Therefore, a total of 9,890 m³/day could be supplied to Pressure Zone 4 and Pressure Zone 5.

Using the 5-year rolling average of the per unit MDD and the additional capacity of the station after the retrofit, the theoretical total number of units that can be supplied results in the following:

$$\frac{9,890 \text{ m}^3/\text{day}}{1.013 \text{ units/m}^3/\text{day}} = 9,763 \text{ units}$$

Based on the increased capacity of the booster station following the proposed upgrades, the available allocation capacity for Zones 4 and 5 is estimated at 2,815 units, equivalent to approximately 2,852 m³/day (9,763 – 6,948 = 2,815 units). On paper, this exceeds the remaining allocation available within the overall drinking water system.

However, the firm capacity of the upgraded booster station does not necessarily translate into an equivalent increase in available development capacity. Delivering a sustained flow of 100 L/s to the booster station will present operational challenges due to the diameter and approximately 8 km length of the existing 14-inch ductile iron trunk watermain. Friction losses and the need to maintain adequate residual pressures throughout the distribution system may limit the station's ability to consistently achieve its firm capacity under peak demand conditions.

As a result, while the Town can expect an increase in available capacity at the booster station following the upgrades, the practical increase is likely to be less than the theoretical firm capacity. A calibrated hydraulic model of the Town's water distribution system will be required to accurately assess the additional capacity that can be reliably delivered while maintaining acceptable system pressures and operational performance.

3.4.3 Water Storage Facilities

Table 3.3 summarizes the existing water storage facilities within the Town's water system, the servicing capacity of each facility and the number of approved units within the Pressure Zones.

Storage capacity has three main components: emergency, fire, and equalization storage.

Table 3.3 Summary of Water Storage Capacity by Pressure Zone

Pressure Zone	Storage Capacity (m ³)
Craigleith (Pressure Zone 4)	5,000
Swiss Meadows (Pressure Zone 5)	536
Camperdown (Pressure Zone 3)	2,662
Thornbury (Pressure Zone 1)	4,180
Total Existing	12,378 m ³

A Pressure Zone analysis completed by C3 Water Inc. in "Technical Memorandum 6: Upgrade Implementation Plan" dated August 9, 2016, stated that:

- Pressure Zones 1 & 2 have an existing deficit of 2,500 m³ requiring the addition of storage.
- Pressure Zones 3 & 5 have sufficient storage to meet present and future demands (to build out in 2033).
- Pressure Zone 4 will have sufficient storage to meet 2033 requirements if the pumping capacity of Arrowhead BPS is upgraded.

In 2018, the Town undertook a Town-Wide Water Distribution Master Plan Class Environmental Assessment, (Water MPEA), to establish a long-term solution for the provision of water servicing. Followed by the West-side Water Storage Municipal Class Environmental Assessment (MCEA) to address the drinking water storage and pumping capacity deficiencies in West Pressure Zones 1, 2 and 3. The preferred solutions included rehabilitation of the existing Victoria Street water tower, construction of a new water reservoir at the 10th Line Booster Station, an additional new feedermain from the 10th Line Booster Station to the intersection of Lora Bay Drive and West Ridge Drive, and pump upgrades at the Upper Camperdown Booster Pumping Station. The Town's Victoria Street Water Tower was rehabilitated in 2023. The engineering for the Camperdown Booster is under way, with construction anticipated for 2026.

The Town also has commenced with the Engineering upgrade to the Arrowhead Booster Station. The works include replacing all three pumps with 50 L/s pumps. Once the upgrades are completed, the station will have a firm capacity through the station of 100 L/s, however, it will be challenging to deliver 100 L/s to the station with the Town's existing trunk main from Thornbury to Craigleith.

In 2021, the Town initiated an East-side Water Storage and Supply MCEA to select the preferred solution to address the Town's water storage needs and supply deficiencies in the Town's Eastern Pressure Zones. The East-side Water Storage and Supply MCEA has been finalized. The Town is undertaking additional studies that support the construction of new water treatment plant in the Eastern pressure zones with an additional 5,000m³ storage.

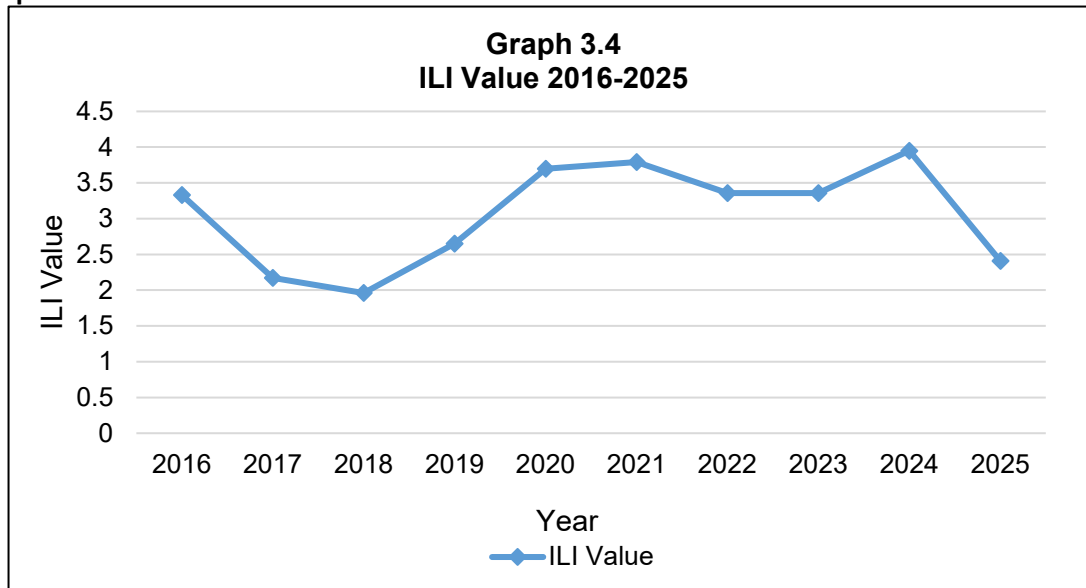
3.5 Infrastructure Leak Index

The Infrastructure Leakage Index (ILI) is a performance indicator of a system's water loss. ILI was developed by the International Water Association. The ILI is the ratio of current annual real losses to unavoidable annual real losses. It is derived from the structural and operational characteristics of the distribution system and is considered by the water industry as a better indicator of a system's condition. The ILI calculation considers the length of service connections, the operating pressures, the length of the system and the number of users on the system.

There are four technical performance categories utilized for ILI values by the International Water Association Water Loss Task Force:

ILI 1 to 2	EXCELLENT	Further loss reduction may be uneconomical unless there are shortages.
ILI 2 to 4	GOOD	Potential for marked improvements, consider pressure management, better active leakage control practices and improved network maintenance.
ILI 4 to 8	POOR	Poor leakage record, tolerable only if water is plentiful and cheap, analyze level and nature of leakage and intensify leakage reduction efforts.
ILI >8	VERY BAD	Very inefficient use of resources; leakage reduction programs imperative and high priority.

Graph 3.4 below illustrates the ILI values for the Town from 2016 - 2025



The Town falls within the 'Good' range for managing non-revenue water or real losses. However, this category also identifies room for improvement and continual monitoring to further reduce the losses.

In 2024, the Town utilized some new technology to find leaks in the transmission trunk main. Xylem's Smart Ball™ was introduced in the drinking water system at the Thornbury Reservoir and ran through to Arrowhead Booster Station. The Smart Ball™ detected four (4) medium leaks and two (2) anomalies in the main. Staff continued to repair the leaks in 2026.

Table 3.4 Summary of Water Produced, Consumed and Lost

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water Produced (TBM) (ML)	1618.2	1541.0	1585.3	1793.4	1899.8	2033.7	2004.1	2161.7	1991.8	2124.7
Imported Water (ML)	190.0	171.0	212.7	185.0	198.4	198.7	199.6	194.8	195.8	170.0
Exported Water (ML)	24.0	25.9	31.5	32.9	35.5	42.9	40.3	50.5	44.0	48.3
Total Water Available (ML)	1784.2	1686.2	1766.5	1945.5	2062.7	2189.4	2163.5	2306	2144	2246
Billed Authorized Consumption (ML)	1124.3	1057.0	1164.6	1335.6	1281.7	1258.2	1292.0	1289.2	1308.4	1311.9
Unbilled Authorized Consumption (ML)	202.1	288.5	202.6	194.9	218.7	331.4	323.7	459	198.4	470.0
Apparent Losses* (ML)	101.5	102.2	102.4	102.9	103.2	103.4	103.4	103.8	103.4	103.6
Real Losses** (ML)	356.3	238.4	296.9	312.1	562.4	599.8	547.8	557.8	533.3	436.4
Real Water Loss (%)	20.0%	14.1%	16.8%	16.0%	27.3%	27.4%	25.3%	24.2%	24.9%	19.4%

Total Water Loss (%)	25.7%	20.2%	22.6%	21.3%	32.3%	32.1%	30.1%	28.7%	29.7%	24.0%
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* Apparent Losses includes unauthorized consumption, customer metering inaccuracies and systematic data handling errors.

** Real Losses includes the total volume of water that cannot be accounted for.

The total percentage of water loss for 2025 was 24.00%. This was lower than 2024. The Town is currently undertaking a leak detection program to identify and repair leaks to reduce the water loss. In addition, the Town has started a program to install flow meters on the watermain entering large developments on private lands. A mass balance with the individual residential meters will assist in identifying leaks on private lands.

In 2025, Staff repaired 3 watermain breaks and 9 service connection leaks. Two of the watermain repairs were in Camperdown area, and the other one was on Arthur Street West in Thornbury.

Staff continue to search for leaks, and unmetered water services.

In 2025, an additional staff member was added, focusing on leak detection in the water distribution system and Inflow and infiltration of the sanitary collection system.

4.0 Thornbury Wastewater Capacity Assessment

4.1 Thornbury WWTP Capacity

The Thornbury WWTP utilizes the activated sludge process, a variation of extended aeration, aerated grit removal, phosphorus removal by alum addition, secondary clarification, and disinfection by ultraviolet irradiation to treat wastewater. Treated effluent is discharged to the Beaver River via a gravity outfall, however, a new outfall, extended 1.5 kms into Georgian Bay is scheduled to be installed by Q3 of 2026.

The Thornbury WWTP achieved substantial performance of the Phase 1A plant expansion in Q4 of 2025. With the completion of the expansion, the current ADF capacity has been increased to 5,330 m³/day from 3580 m³/day. The rated PDF capacity has been increased from 7,196 m³/day to 22,386 m³/day. All calculations and assumptions to the treatment plant for the 2025 Year End report will use the new ADF of 5,330 m³/day and a PDF of 22,386 m³/day. To fully realize the additional capacity, the new outfall will need to be operational to meet peak hourly flows. It is anticipated that this will be operational by Q3 of 2026.

4.2 Inflow Rates

Table 4.1 summarizes the ADF and PDF that occurred over the period from 2016 to 2025.

Table 4.1 Thornbury WWTP Historical Flows

Year	# of Units	ADF (m ³ /day)	ADF (m ³ /unit/day)	5 Year Rolling ADF (m ³ /unit/day)	PDF (m ³ /day)	PDF (m ³ /unit/day)	5 Year Rolling PDF (m ³ /unit/day)
2016	2,626	2,332	0.888	0.870	10,580	4.023	2.903
2017	2,668	2,767	1.037	0.899	7,617	2.854	2.921
2018	2,743	2,660	0.970	0.885	7,656	2.791	2.871

2019	2,868	2,780	0.969	0.916	6,696	2.334	2.756
2020	2,945	3,123	1.060	0.985	8,397	2.851	2.971
2021	3,130	2,567	0.820	0.971	9,118	2.913	2.749
2022	3,274	2,430	0.742	0.912	6,928	2.116	2.601
2023	3,399	2,658	0.782	0.875	9,218	2.712	2.585
2024	3,416	2,412	0.706	0.822	7,482	2.190	2.557
2025	3,421	2,761	0.807	0.771	12,690	3.709	2.728
		2025 5 Year Rolling ADF/Unit = 0.771m ³ /unit/day 2025 5 Year Rolling ADF = 2,566 m ³ /day			2025 5 Year Rolling PDF/Unit = 2.728 m ³ /unit/day 2025 5 Year Rolling PDF = 9,087 m ³ /day Peaking Factor = 4.60		

The Thornbury WWTP rated capacity is 5,330 m³/day. The above data shows that the ADFs over the past five-year period have remained relatively constant, although there have been increased connections to the Thornbury WWTP. The ADF per unit has remained relatively consistent, with minor fluctuations. The 2025 ADF per unit is 0.771 m³/day. The five-year rolling ADF is 2,566 m³/day.

The PDFs are influenced by wet weather events. The total rainfall for 2024 and 2025 was average for the Thornbury area. The PDFs remained in an acceptable range. The ADF per unit in 2025 was significantly higher than in 2024. The PDF per unit was higher in 2025 than previous year. The PDF is often influenced by heavy rain events. The five-year rolling average PDF per unit is 2.728 m³/day. The five-year rolling average PDF does not exceed the Thornbury WWTP's rated PDF capacity of 22,386 m³/day. During heavy rain events, excess influent can be diverted to the lagoon system to prevent washout of the treatment train.

The existing flow to the Thornbury WWTP is utilizing 48% of the available ADF built capacity based on the 2025 five-year rolling average.

$$\frac{5 \text{ Year ADF } 2,566 \text{ m}^3/\text{day}}{\text{Built Capacity } 5,330 \text{ m}^3/\text{day}} \times 100\% = 48\%$$

Built Capacity 5,330 m³/day

The Town completed the construction of the Phase 1A Plant Expansion, reaching substantial performance in October of 2025. The Phase 1A expansion increased the capacity to the facility to 5,330 m³/day. The engineering for Phase 1B commenced in 2025. The Phase 1B expansion will increase the capacity to 7,080 m³/day. To realize the additional capacity of the Phase 1A expansion, the new outfall extending into Georgian Bay at the northern termination point of Grey Street will need to be completed and fully operational. The outfall installation will be completed by the third quarter of 2026.

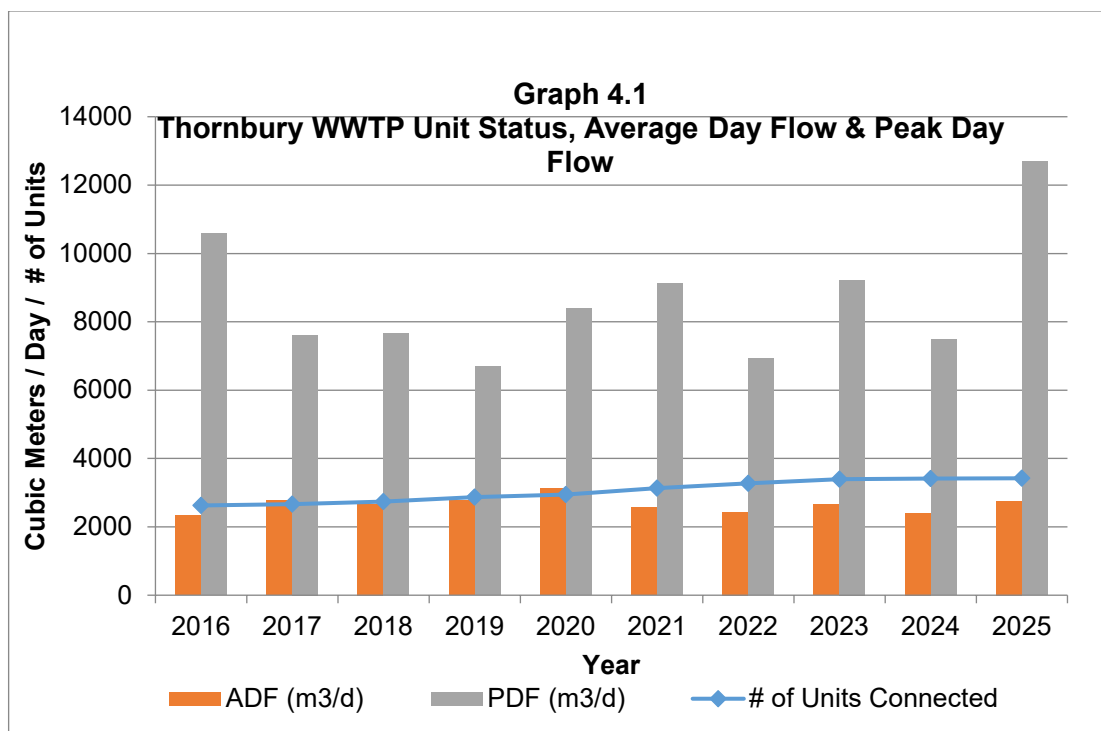
Tables B16 and B17 in Appendix F show the ten highest PDFs for 2024 and 2025. General findings that can be drawn for the data are:

In 2025 the PDF of 12,690 m³ occurred on April 3rd, 2025. This was during a heavy rain event.

Seven of the highest peak flow events in 2025 occurred during the end of March and the being of April, following rainfall events and snow melts and three occurred during the summer during heavy rainfall events.

Inflow and Infiltration in the Thornbury WWTP sewer shed significantly influence the flows to the WWTP.

Graph 4.1 illustrates a comparison of the number of wastewater units, the ADF and the PDF from 2016 to 2025



4.3 Total Thornbury WWTP Capacity

4.3.1 Built & Design Capacity

As discussed in Section 4.1 the ADF built capacity of the Thornbury WWTP is 5,330 m³/day. Using the five-year rolling ADF per unit flow rate to determine the total number of units that can be serviced results in the following:

$$\text{Total Facility Capacity: } \frac{5,330 \text{ m}^3/\text{day}}{0.771 \text{ m}^3/\text{unit/day}} = 6,913 \text{ units}$$

4.3.2 Thornbury WWTP Capacity Status

Graph 4.2 summarizes the 2025 capacity status. A breakdown of the Thornbury WWTP capacity status is included in Appendix D.

Table 4.2 2025 Thornbury WWTP Unit Status

Year End Report Category	Official Plan Capacity Status	Number of Units	Flow (m³/d)*
1. Connected	Allocated	3421	2,638
2. Can Connect	Allocated	306	236
3. Committed	Allocated	0	0
Sub-Total Allocated (1+2+3)		3,727	2874

4. Not Fronting, Not Serviced	Reserved**	984	759
5. Designated Lands – Active	Reserved	482	372
Sub-Total Reserved(4+5)		1,466	1,131
Total Allocated + Reserved (2+3+4+5)		1,772	1,367
6. Designated Lands – Other	Not recognized	1,578	1,217
7. Designated Lands – No Proposal	Not recognized	2,566	1,978
Sub-Total Not Recognized (6+7)		4,144	3,195
Grand Total (1+2+3+4+5+6+7)		9,337	7,200

*number of units multiplied by the 5-year rolling average ADF identified in Table 4.1

**including existing units in Clarksburg

4.3.3 Allocated and Reserve Capacity

Using data from Tables 4.1 and 4.2, reserve capacity for the Thornbury WWTP is determined using the calculation below from Section 1.4

Allocated Serving Capacity = Built Capacity – Connected Flows – Allocated Flows

Built Capacity = 5,330 m³/day (Section 4.2)

Connected Flows = 2,638 m³/day (Table 5.2)

Allocated Flows = 1,366 m³/day (Can Connect [2] + Sub-Total Reserved [4+5] Table 5.2)

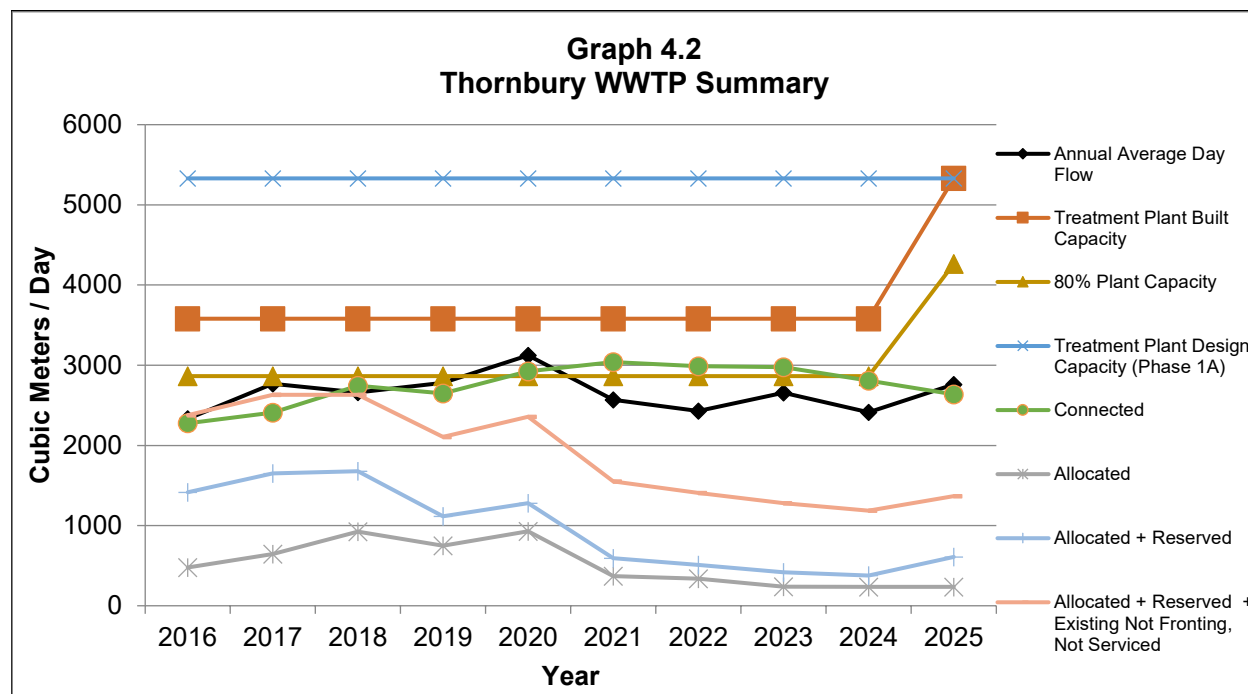
Therefore:

Reserved Servicing Capacity Flow = 5,330 – 2,638 – 1,367 = 1,327 m³/day

$$\text{Units available for reservation} = \frac{\text{Reserved Servicing Capacity Flow (m}^3\text{/day)}}{\text{Flow per unit per day (m}^3\text{/unit/day)}}$$

$$\text{Units available for reservation} = \frac{1,327 \text{ m}^3\text{/day}}{0.771 \text{ m}^3\text{/unit/day}} = 1,721 \text{ units}$$

Graph 4.2 below summarizes the Thornbury WWTP flows and units.



4.4 Flow Projections and Estimated Expansion Timeline

Graph 4.3 below provides a projection of the Thornbury WWTP connected, allocated and reserved units. The Thornbury WWTP is currently at 48% of capacity.

4.4.1 Phasing of WWTP Expansion

The Phase 4 ESR from the Comprehensive EA identified that the first phase of the works to expand the Thornbury WWTP facility would provide an additional average day capacity of approximately 3,500 m³/day for a total average day capacity of 7,080 m³/day. Further to that report Stantec Consulting Ltd. prepared a 90% Design Report which identified that Phase 1 will be split into two (2) sub-phases with Phase 1A having an ADF capacity of 5,330 m³/day. Phase 1B will expand Thornbury WWTP ADF capacity to 7,080 m³/day and a PDF capacity of 22,386 m³/day.

In 2017, the Town completed an Addendum to the 2006 Environmental Assessment for the Thornbury Wastewater treatment plant. This Addendum looked at what had changed between 2006, when the initial EA was completed, and 2017. Upon completion of the EA, the Town applied for and acquired an ECA for the construction of Phase 1A of the Thornbury WWTP upgrades to enable the expansion when inflow reaches 80% of built capacity. The final design of the Phase 1A commenced in 2021, construction started in the second quarter of 2023 and was completed in the fourth quarter of 2025.

The Town commenced with the engineering assignment for the Phase 1B expansion in 2025.

The PDF into the plant did not exceed the design PDF in 2025.

4.5 Wastewater Pumping Stations

4.5.1 Firm Capacity of Pumping Stations

The Thornbury Collection System has multiple Wastewater Pumping Stations. Each Pumping Station's capacity is listed below.

Camperdown Service Area

- Delphi Point WWPS firm pumping capacity is 53 L/s
- Lake Shore WWPS firm pumping capacity is 82 L/s
- Shore Acres WWPS firm pumping capacity is 10 L/s

Thornbury Service Area

- Moore Crescent WWPS has a firm pumping capacity of 13 L/s
- Peel Street WWPS has a firm pumping capacity of 38 L/s, station upgraded in 2023/2024.
- Elgin Street WWPS has a firm pumping capacity of 9 L/s – This station will be decommissioned in 2027.
- The Mill Street Main WWPS has a firm pumping capacity is 160 L/s. This station currently doesn't meet the needs of the Town. Construction will commence in 2026 to increase the firm capacity to 248 L/s. The work also includes a second sanitary forcemain from Mill Street Main WWPS to the Thornbury WWTP.

Lora Bay Service Area

- Sunset WWPS has a firm pumping capacity of 73 L/s

4.6 Peak Day Flow Observations

Thornbury WWTP has an approved ADF capacity of 5,330 m³/day and a peak day flow (PDF) capacity of 22,386 m³/day. The Mill Street and Lakeshore WWPSs in Thornbury convey all sanitary sewage to the Thornbury WWTP.

Peak Daily Flows typically occur with significant weather-related events such as excessive rainfall or run off from melting snow due to unusually high temperatures. These events typically cause very high flows for a short duration (usually less than one to two days). Thornbury WWTP has significant hydraulic capacity in tankage which enables the facility to handle excess flows however the WWPSs are limited to capacities of pumps, forcemains and wet wells and as such need to transfer instantaneous flows.

The design PDF of Thornbury WWTP was not exceeded in 2025. The peak flow for 2025 was 12,690 m³. This occurred on April 3, 2025, during a significant rain event, during the snow melt.

4.6.1 Wastewater Inflow & Infiltration Study (2014) & The Wastewater Master Plan (2025)

In 2014 an Inflow and Infiltration (I&I) Study Report was received from Cole Engineering which includes a number of recommendations to address I&I issues identified throughout the course of the study. The Town is acting on a number of the recommendations including the replacement of sanitary sewer in the Elma Street, Alice Street, Louisa Street and Victoria Street area as it is identified as a point in the Thornbury Collection System that reacts almost instantly to weather related events. The Town has also

completed a Calibrated Sanitary Model for both the Thornbury and the Craigleith collection systems. This model will assist with planning of future flows.

The Town commenced Wastewater Collection System Master Plan Environmental Assessment (MPEA) in 2022. The MPEA reviewed and built on past studies plus incorporating current growth projections to determine the wastewater collection network to build out of the Official Plan. This study builds upon the Needs Assessment completed in 2019. The MPEA was completed in the second quarter of 2025. The work included 12 months of flow data to calibrate the wastewater model.

5.0 Craigleith Wastewater Capacity Assessment

5.1 Craigleith WWTP Capacity

The Craigleith WWTP's Built ADF treatment capacity is 8,133 m³/day and the PDF capacity is 19,640 m³/day. The Craigleith WWTP utilizes an extended aeration process, incorporates tertiary effluent filtration and includes comminution, aerated grit removal, phosphorus removal by alum addition, secondary clarification, 2 stage aerobic sludge digestion and effluent disinfection by ultraviolet irradiation. All raw WW is pumped to the WWTP from the Craigleith Main WWPS, and treated effluent is discharged into Georgian Bay via a staged diffuser.

The Craigleith WWTP is operating at 42% of the built capacity.

5.2 Inflow Rates

Table 5.1 summarizes the ADF and PDF recorded at the Craigleith WWTP over the period from 2015 to 2024.

Table 5.1 Craigleith WWTP Historical Flows

Year	# of Units	ADF (m ³ /day)	ADF (m ³ /unit/d)	5 Year Rolling ADF (m ³ /unit/d)	PDF (m ³ /day)	PDF (m ³ /unit/d)	5 Year Rolling PDF (m ³ /unit/d)
2016	4,661	3,202	0.689	0.662	12,428	2.666	1.912
2017	4,793	3,377	0.705	0.679	8,956	1.868	1.993
2018	4,935	3,284	0.665	0.673	10,491	2.126	1.970
2019	5,050	3,440	0.681	0.673	8,931	1.768	2.107
2020	5,273	3,579	0.679	0.684	10,558	2.002	2.086
2021	5,443	3,376	0.620	0.670	14,461	2.657	2.084
2022	5,587	3,248	0.581	0.645	9,767	1.748	2.060
2023	5,672	3,619	0.638	0.640	8,892	1.568	1.949
2024	5,720	3,317	0.580	0.620	8,752	1.530	1.901
2025	5,824	3,474	0.596	0.603	13,193	2.265	1.954
		2025 5-Year Rolling ADF/Unit = 0.603 m ³ /day 2024 5-Year Rolling ADF = 3,407 m ³ /day			2025 5-Year Rolling PDF/Unit = 1.954 m ³ /day 2025 5-Year Rolling PDF = 11,013 m ³ /day		

		Peaking Factor = 3.23
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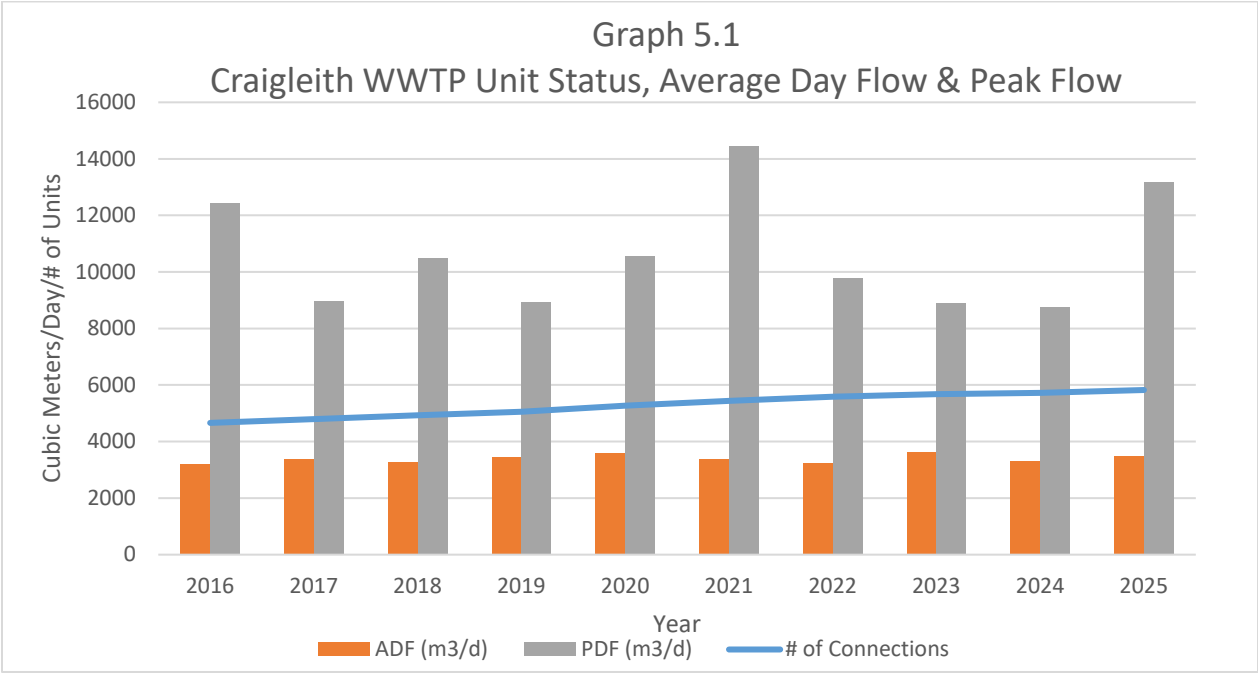
The above data shows that the ADFs over the five-year period fluctuate when wetter years are experienced. The year 2025 was a fairly average year. The ADF was slightly higher than the previous year, and the PDF was significantly higher than the previous year. The 2025 ADF was 3,474 m³/day and the PDF was 13,193 m³/day. The five-year rolling ADF is 3,407 m³/day and the five-year rolling average PDF is 11,013 m³/day. Based on the 2025 five-year rolling ADF of 3,407 m³/day, the Craigleith WWTP is operating at 42% of the built capacity.

The five-year rolling average PDF falls within the Craigleith WWTP’s rated PDF capacity of 19,640 m³/day.

Tables C13 to C14 in Appendix G summarize the ten highest daily flows for 2024 and 2025. The occurrences of peak flows were reviewed for 2025 with the key findings as follows:

- In 2025 the highest flow occurred on April 3rd, during a high precipitation and snow melt event.
- Nine of ten peak influent events occurred mostly in March and April, corresponding with heavy rains and snow melt.

Graph 5.1 Illustrates a comparison of the number of WW units, the ADF and the PDF from 2016 to 2025.



ADF Treatment Capacity is 8,133 m³/day and PDF Treatment Capacity is 19,640 m³/day.

5.3 Total Craigleith WWTP Capacity

5.3.1 Built Capacity

As discussed in Section 5.1, the average day capacity of the Craigleith WWTP is 8,133 m³/day. Using the historical five (5) year rolling ADF per unit flow rate to determine the total number of units that can be serviced results in the following:

$$\text{Total Built Capacity} = \frac{8,133 \text{ m}^3/\text{day}}{0.603 \text{ m}^3/\text{unit}/\text{day}} = 13,487 \text{ units}$$

Table 5.2 and Graph 5.2 summarize the 2025 connection status. A breakdown of connection status is included in Appendix D.

5.3.2 Craigleith WWTP Capacity Status

Table 5.2 summarizes the 2025 capacity status. A breakdown of the Craigleith WWTP capacity status is included in Appendix D.

Table 5.2 2024 Craigleith WWTP Unit Status

Year End Report Category	Official Plan Capacity Status	Number of Units	Flow (m ³ /d) *
1. Connected	Allocated	5,824	3,512
2. Can Connect	Allocated	228	137
3. Committed	Allocated	0	0
Sub-Total Allocated(1+2+3)		6,052	3,649
4. Not Fronting, Not Serviced	Reserved	1,016	613
5. Designated Lands – Active	Reserved	1,527	921
Sub-Total Reserved (4+5)		2,543	1,534
Total Allocated + Reserved (2+3+4+5)		2,771	1,671
6. Designated Lands – Other	Not recognized	53	32
7. Designated Lands – No Proposal	Not recognized	5,414	3,264
Sub-Total Not Recognized (6+7)		5,467	3,296
Grand Total (1+2+3+4+5+6+7)		14,062	8,479

* number of units multiplied by the five-year rolling average ADF identified in Table 5.1

5.3.3 Allocated and Reserve Capacity

Using data from Tables 5.1 and 5.2, reserve capacity for the Craigleith WWTP is determined using the calculation below from Section 1.4.

Allocated Servicing Capacity = Built Capacity – Connected Flows – Allocated Flows

Built Capacity = 8,133 m³/day (Section 5.2.2)

Connected Flows = 3,512 m³/day (Table 5.2)

Allocated Flows = 1,671 m³/day (Can Connect [2] + Sub-Total Reserved [4+5] Table 5.2)

Therefore:

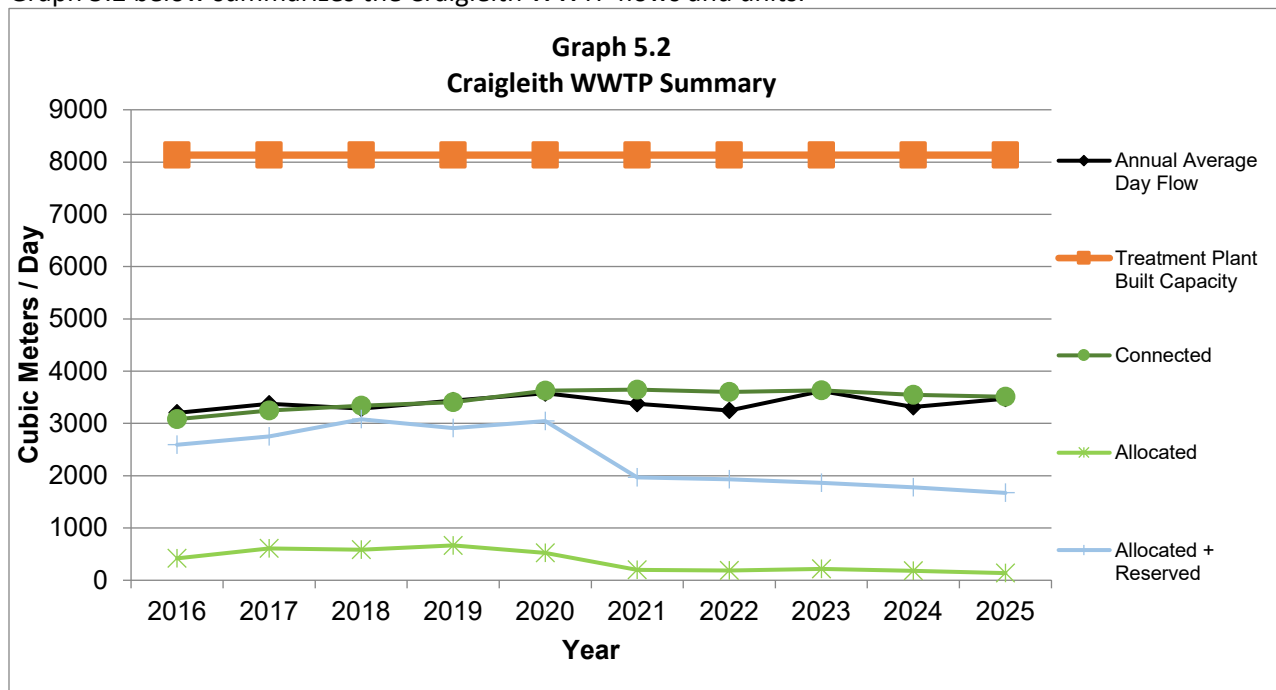
Reserved Servicing Capacity Flow = 8,133 – 3,512 – 1,671 = 2,950 m³/day

$$\text{Units available for reservation} = \frac{\text{Reserved Servicing Capacity Flow (m}^3\text{/day)}}{\text{Flow per unit per day (m}^3\text{/unit/day)}}$$

$$\text{Units available for reservation} = \frac{2,950 \text{ m}^3\text{/day}}{0.603 \text{ m}^3\text{/unit/day}} = 4,892 \text{ units}$$

5.3.4 Flow & Unit Summary

Graph 5.2 below summarizes the Craigleith WWTP flows and units.



5.4 Wastewater Pumping Stations

5.4.1 Firm Capacity of Pumping Stations

The Craigleith Collection System has multiple Wastewater Pumping Stations. Each Pumping Station's capacity is listed below.

Craigleith Service Area

- Craigleith Main WWPS installed pumping capacity is 150 L/s (25,920 m³/day). Forcemain capacities are 227 L/s (19,639 m³/day). The Town completed the final design of the upgrades to the station in 2025, and the construction was tendered. It is anticipated that the project will reach substantial performance in 2027. There are three (3) phases to the upgrades.
 - Phase 1 – Rehabilitation of the existing pumping station, increasing the pumping capacity to 230 L/s
 - Phase 2 – Replacement of one of the 300mm sanitary forcemain with 600mm forcemain on Long Point Road
 - Phase 3 – Replacement of the 300mm sanitary forcemain along Hwy 26.
- Summit Green WWPS firm pumping capacity is 4 L/s (346 m³/day)
- Margaret Drive WWPS firm pumping capacity is 60 L/s (5,184 m³/day)
- Alta WWPS firm pumping capacity is 6 L/s (518 m³/day)
 - Alta WWPS is being retrofitted to accommodate the flows from the new Alta Phase 2 WWPS. This station will have a firm capacity of 13 L/s (1,123 m³/day)
- Proposed Alta Phase 2 WWPS – This station is being constructed by the developer and will have a firm capacity of 6.4 L/s (553 m³/day)
- Homefarm WWPS – has been constructed but not assumed by the municipality firm capacity of 18.9 L/s (1,633 m³/day).

In 2019 The Town undertook a Sanitary Needs Assessment. This work assessed the performance of the existing sanitary sewer system, including the sanitary sewers, pumping station and forcemains.

- The following areas were assessed:

Pumping Station	Dry Weather Flow Criteria Existing and future Conditions	Wet Weather flow Criteria – Existing and Future Conditions				Comments
		2 Year Event	5 Year Event	25 Year Event	100-year Event	
Alta	Criteria met for existing and future conditions, but not when s=planned service extension is included.	Criteria met for existing and future conditions, but not when s=planned service	Criteria met for existing and future conditions, but not when s=planned service	Criteria met for existing and future conditions, but not when s=planned service	Criteria met for existing and future conditions, but not when s=planned service	This is being addressed with the construction of Alta Phase 2

		extension is included.	extension is included.	extension is included.	extension is included.	
Craigleith	Criteria met for existing, not met for future conditions	Criteria not met for existing and future conditions	Criteria not met for existing and future conditions	Criteria partially met for existing and future conditions	Criteria partially met for existing and future conditions	This is being addressed through the upgrades
Margaret	Criteria met for existing and future conditions	Criteria met for existing and future conditions	Criteria met for existing and future conditions	Criteria met for existing and future conditions	Criteria met for existing and future conditions	
Summit Green	Criteria met for existing and future conditions	Criteria partially met under existing and future conditions	Criteria partially met under existing and future conditions	Criteria met for existing and future conditions	Criteria met for existing and future conditions	

In 2023, the Town proceeded with the Long Point Road Municipal Class Environmental Assessment (MCEA). This work was to determine the preferred solution for the 300 mm Jumper sewer between Grey 21 and Timmons Street. The preferred solution is the construction of a gravity sewer on Long Point Road and a lift station at the Craigleith WWTP. Also considered through this MCEA process was the preferred solution for the Town's Septic Receiving Station. The station will be relocated to the Craigleith WWTP. The preliminary design for the lift station and the septic receiving station was completed in 2024. The Town commenced with the final design of the lift station, septic receiving station and gravity main in 2025.

5.4.2 Craigleith Main Wastewater Pumping Station

The Craigleith Main WWPS as noted in Section 5.4.1 has an installed capacity of 300 L/s or 25,920 m³/day and a firm capacity of 150 L/s or 12,960 m³/day. Using the 5-year historical per unit PDF of 1.901 m³/unit/day to determine units that can be serviced results in the following:

$$\text{Total Built Capacity} = \frac{\text{Installed pumping capacity (m}^3\text{/day)}}{\text{5 year historical per unit PDF (m}^3\text{/day/unit)}}$$

$$\text{Total Built Capacity} = \frac{25,920 \text{ m}^3\text{/day}}{1.954 \text{ m}^3\text{/day/unit}} = 13,265 \text{ units}$$

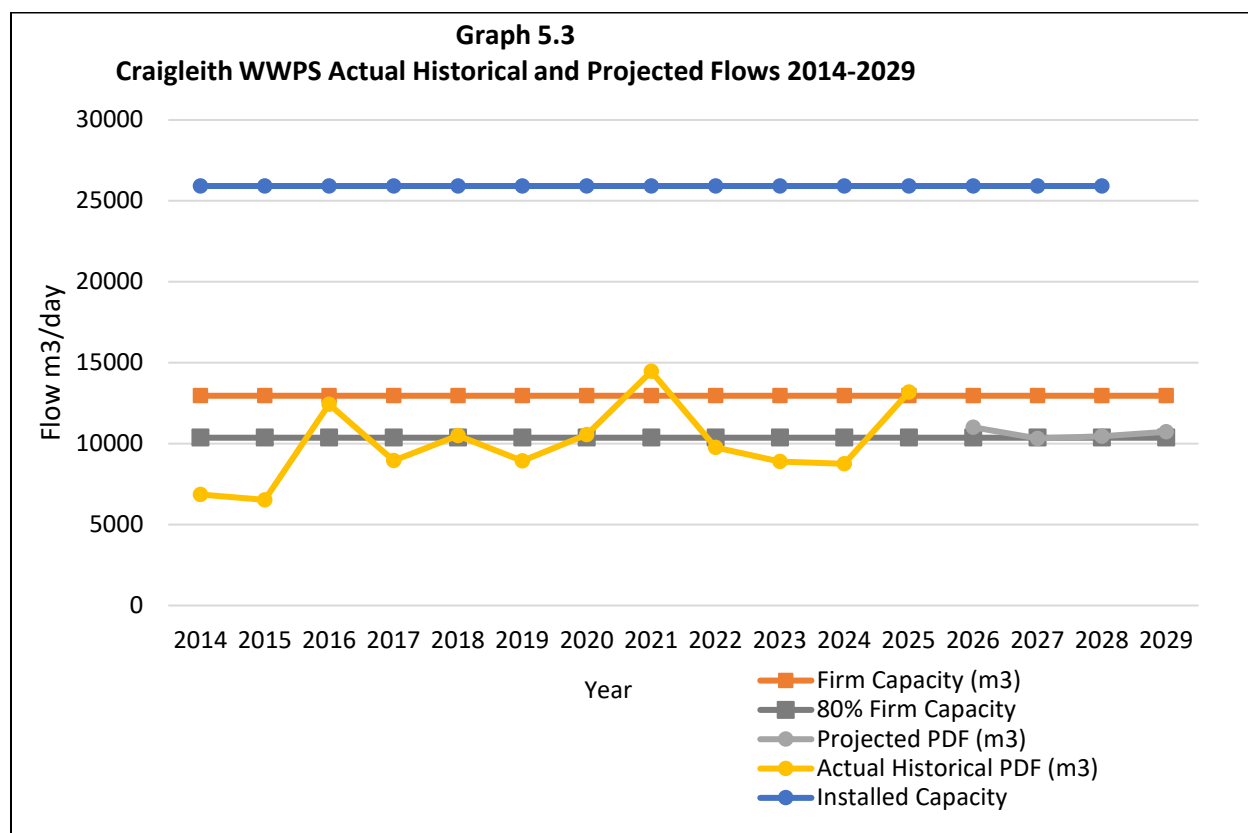
There are currently 8,595 units allocated or reserved. The Craigleith Main WWPS is overallocated by 1,963 units with the largest pumping unit out of service (firm capacity). With both pumps in service the built capacity can accommodate 13,265 units and thus there is surplus capacity of 4,670 units. The risk is that there will be one pump out of service during a large flow event. Therefore, a review of the historical and projected flows is warranted.

Graph 5.3 below outlines both historical and projected flows from 2013-2027. Historical information from 2013-2025 is based on actual recorded flows, while 2024-2027 are projected based on a five-year rolling historical average. The long-term trend illustrates a reduction in PDF prior to 2016. The 2016 PDF indicates a sharp increase and can be attributed to significant wet weather events. The PDF increased

slightly from 2017 to 2018 before declining in 2019. A substantial increase was observed in 2021, primarily due to a significant rainfall event that occurred on September 21, 2021. An increase in the pumping station's capacity is required, along with the replacement of infrastructure that has reached the end of its useful life. The Town commenced with the Engineering for the upgrades to the station in 2023. Construction is anticipated to commence in 2026.

The Town commenced Wastewater Collection System Master Plan Environmental Assessment (MPEA) in 2022. The MPEA is reviewing and building on past studies plus incorporating current growth projections to determine the wastewater collection network to build out of the Official Plan. This study builds upon the Needs Assessment completed in 2019. The MPEA is anticipated to be completed in the second quarter of 2025. The work includes 12 months of flow data, including a flow analysis of the flows from Short Term Accommodations (STAs) to ensure we are using the best available information when determining the impact from STAs.

Graph 5.3 Craigeleith WWPS Historical and Projected Flows 2013-2027



Note 1: Installed capacity is 25,920 m³/day

Note 2: Firm capacity is 12,960 m³/day

Note 3: Projected PDF is estimated by calculating the rolling average of the five-year rolling actual historical PDF

5.5 Peak Day Flow Observations

The Craigeleith WWTP has an approved ADF capacity of 8,133 m³/day and PDF of 19,640 m³/day. The Craigeleith Main WWPS conveys all sanitary sewage to the Craigeleith WWTP.

Peak Daily Flows typically occur with a significant weather-related event such as excessive rainfall or run off from melting snow due to unusually high temperatures. These events typically cause very high flows for a short duration (usually less than one to two days). The Craigleith WWTP has significant hydraulic capacity in tankage which enables the facility to handle excess flows however the WWPSs are limited to capacities of pumps, forcemains and wet wells and as such need to transfer instantaneous flows.

The peak daily flow for the Craigleith WWTP in 2025 occurred on April 3, 2025. The flow was 13,193 m³/day, and this is higher than the peak daily flow in 2024, which was 8,752 m³/day. The peak daily flow occurred during the spring thaw and heavy rain event that followed an ice storm. The flow was much less than Craigleith WWTP design PDF of 19,650 m³/day. There was adequate capacity at the WWTP to deal with peak flow.

5.5.1 Wastewater Inflow & Infiltration Study (2014)

In 2014 an Inflow and Infiltration (I&I) Study Report was received from Cole Engineering which put forward a number of recommendations to address I&I issues identified throughout the course of the study. The Town has also developed a calibrated sanitary model with Cole Engineering. The model will be a valuable tool for planning.

In 2018, the Town initiated the first year of a seven-year sanitary sewer condition assessment program. The program includes CCTV inspection and condition assessment in accordance with the National Association of Sewer Services Companies (NASSCO's) Pipeline Assessment and Certification Program.

6.0 Conclusions and Recommendations

The following table summarizes the capacity status of the water supply and wastewater treatment facilities based on units.

Table 6.1 Summary of Capacity Status for Key Infrastructure (Units) for 2025

Infrastructure	A Total Plant Capacity	B Total units Allocated	C Total units Reserved	D Total Allocated + Reserved (B+C)	E Units Available (A-D)
Water Supply (The Blue Mountains WTP + Collingwood Supply)	16,180	11,110	2,828	13,938	2,242
Thornbury WWTP Based on Phase 1A expansion	6,913	3,723	1,466	5,189	1,720
Craigleith WWTP	13,487	6,052	2,543	8,595	4,892

The highlights of the Water Supply and WWTPs is provided below.

Water Supply

- ADD (6,250 m³/day) and the MDD (11,557 m³/day) both increased slightly from 2024 to 2025. The summer of 2025 was a hot dry summer, however, 2024 was a little cooler, consequently less water was used for irrigation.
- In 2025, the number of connected water units increased by 108 units to 10,338 units.
- There is an available capacity for an additional 2,242 units. The treatment train is gaining and approaching end of life, consequently not able to meet the firm capacity rating. The Town is currently completing an Environmental Assessment for Water Supply. The Town will need additional water capacity within the next 8 years.

Thornbury WWTP

- ADF (2,761 m³/day) and PDF (12,690 m³/day) both increased from 2024 to 2025. The PDF saw a significant increase.
- In 2025 the number of connected wastewater units increased by 5 units to 3,421 units.
- Thornbury WWTP, with a new rated capacity of 5330 m³/day is operating at 48%
- High peak wastewater flows in Thornbury throughout 2025 can be attributed to snow melt and wet weather events during the first part of the year.
- Construction of the Phase 1A expansion was completed in Q3 of 2025.
- The construction of a new effluent outfall to Georgian Bay is expected to be completed by Q3 of 2026.

Craigleith WWTP

- ADF (3,474 m³/day) and PDF (13,193 m³/day) increased from 2024. The PDF saw a significant increase.
- In 2025 the number of connected wastewater units increased by 104 units to 5,824 units.
- There are 7,435 additional units which can be physically connected to the Craigleith WWTP.
- High peak wastewater flows in Craigleith over the past few years have generally corresponded heavy rain and snow melt events.

Appendix A – Figure 1 – Development Staging Process

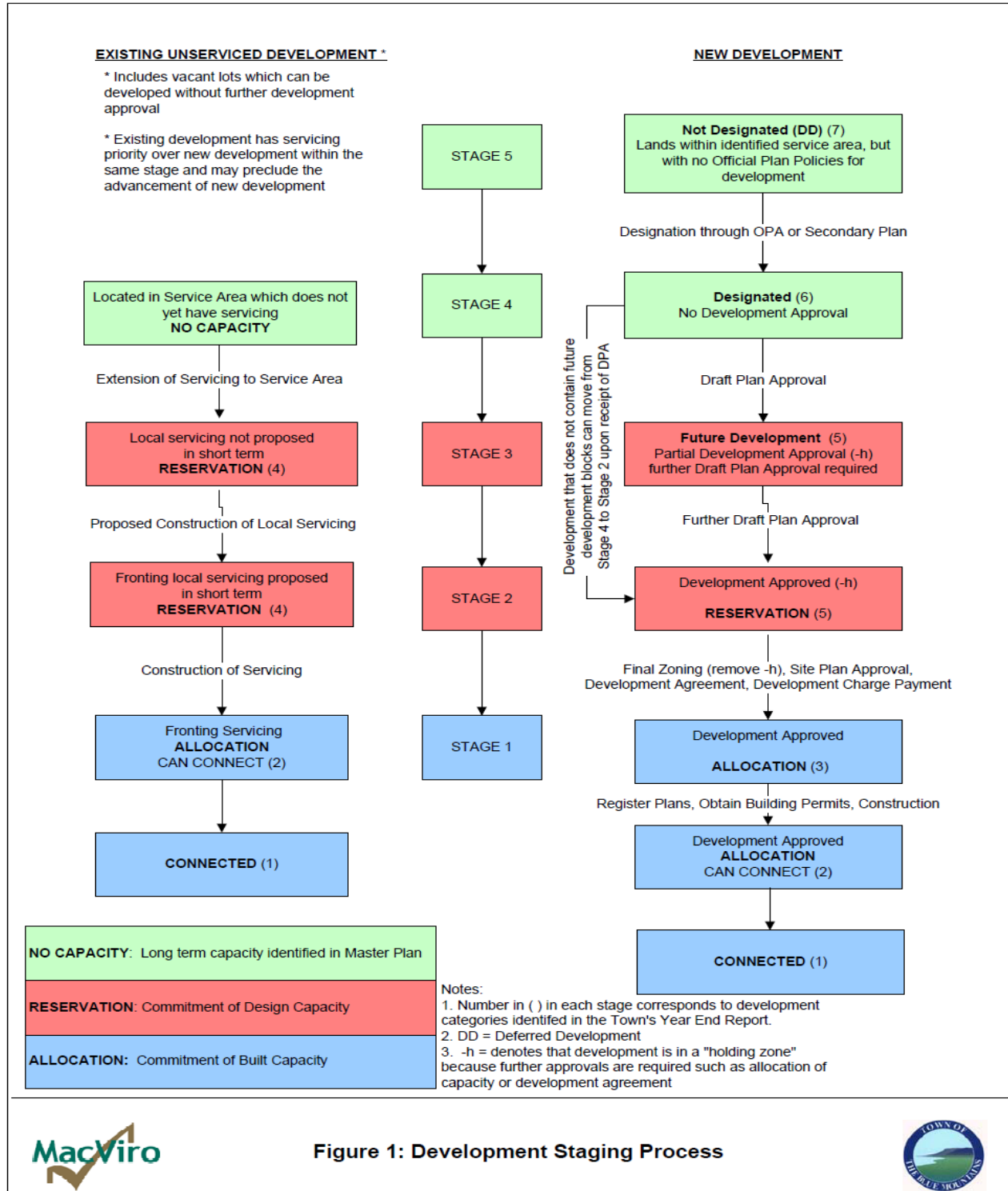
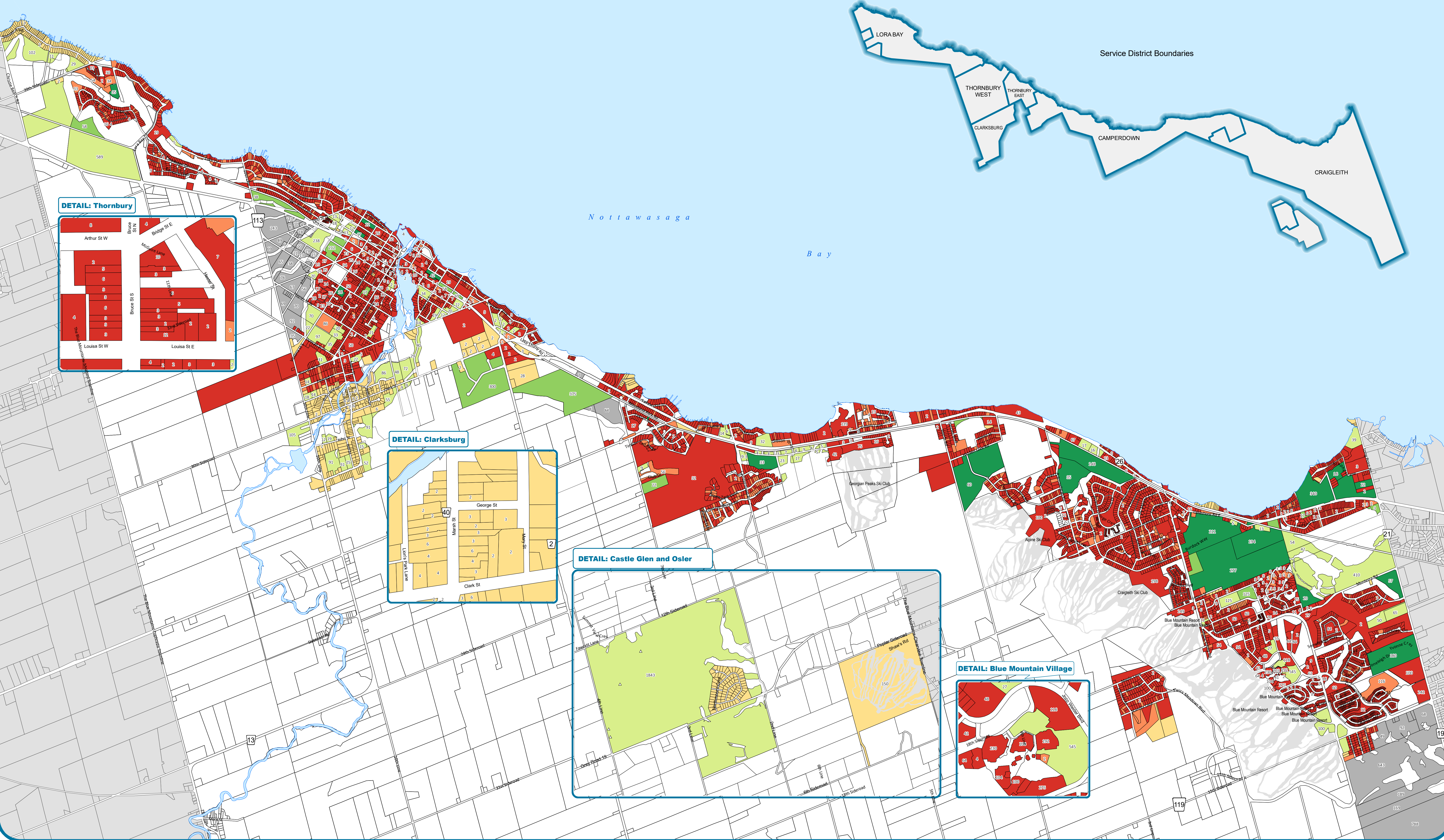


Figure 1: Development Staging Process

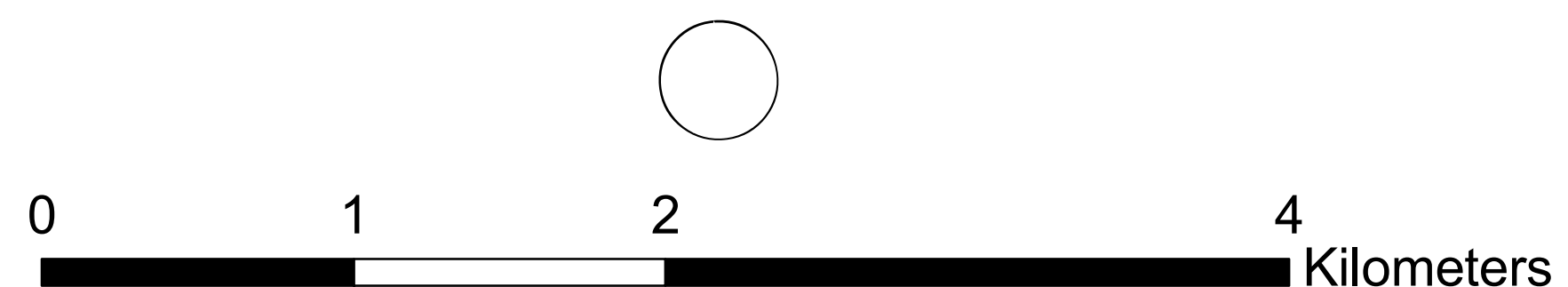


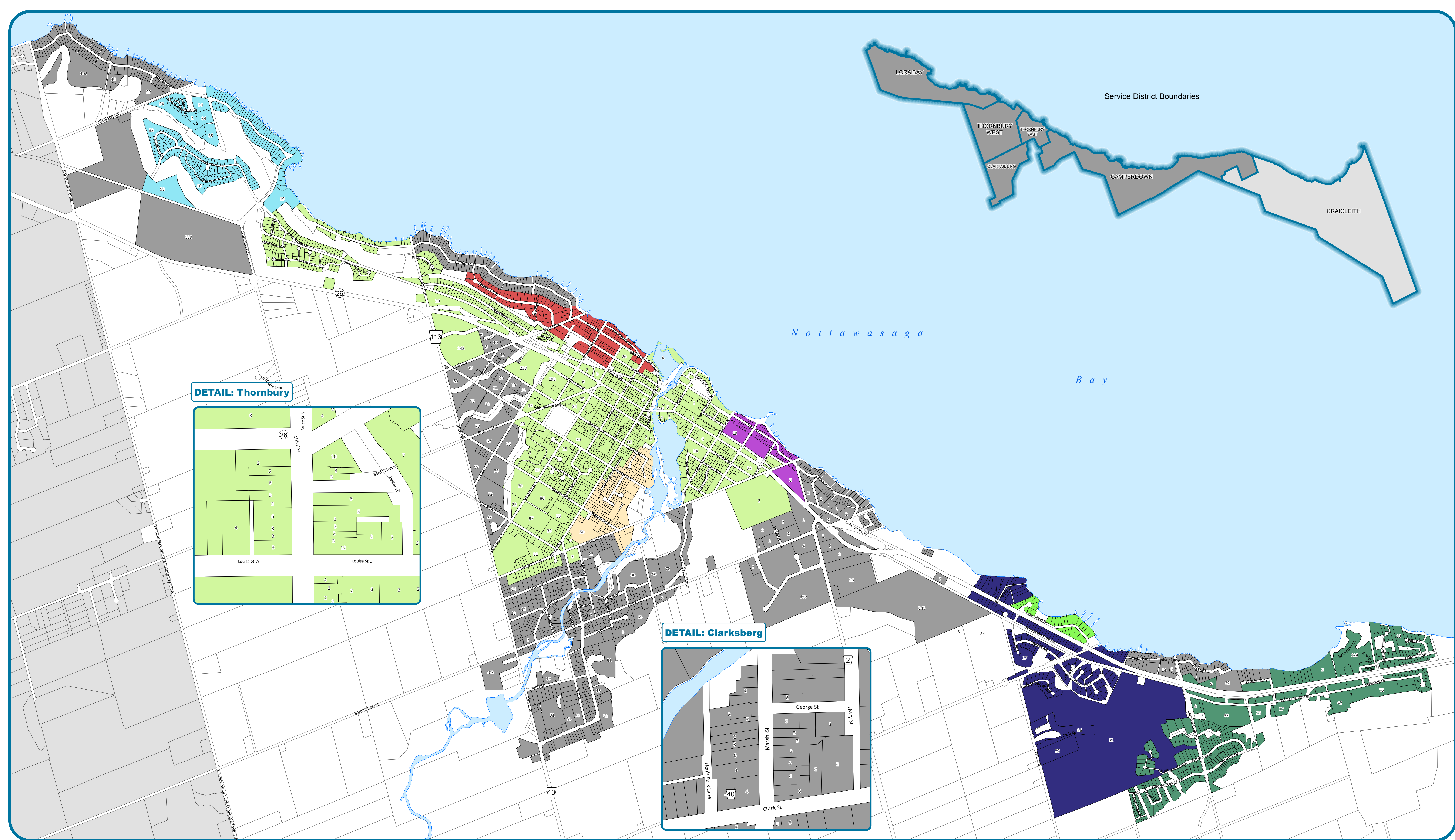
Water Class	
	Not Assigned
	1 Connected
	2 Can Connect
	4 Existing Not Fronting
	5 Reserved -Planning Approvals
	6 Designated (With Proposal)
	7 Designated (No Proposal)
	8 Future Development

Town of The Blue Mountains - 2024 Year End Report

WATER SUPPLY AND DISTRIBUTION

Unit Counts and Connections By Property (Water Service Only)



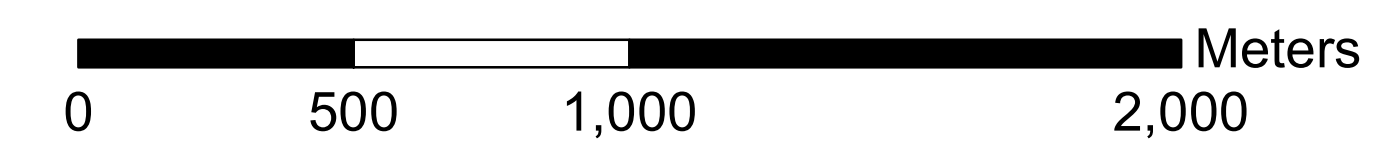
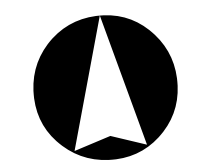


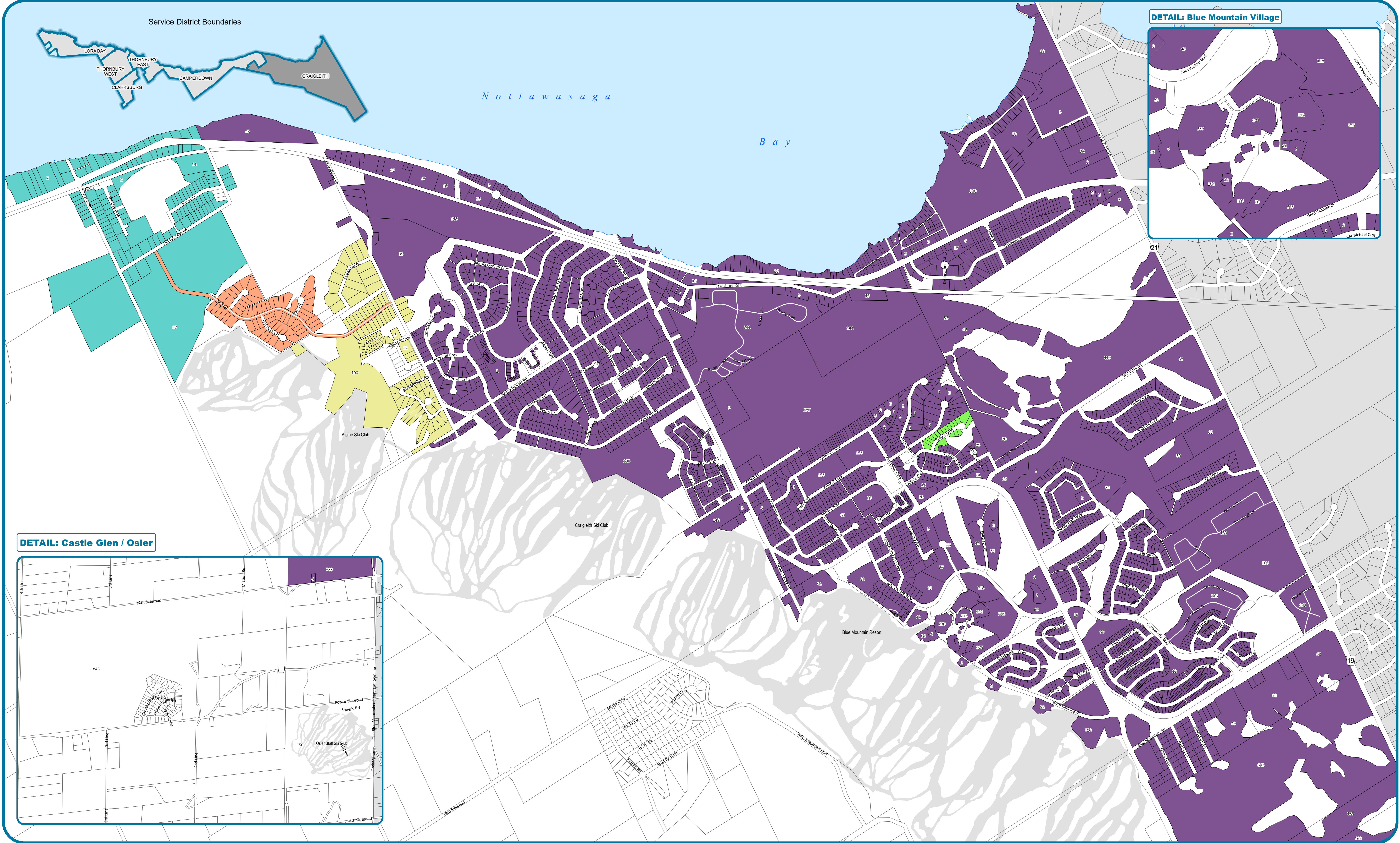
- Lift Station**
- Alta
 - Delphi
 - Elgin
 - Lakeshore
 - Mill
 - Moore
 - Peel
 - Shore Acres
 - Sunset
 - Unserved

Lift Stations (Thornbury) - 2025 Year End Report

SANITARY SEWER COLLECTION

Thornbury Waste Water Treatment Plant





DETAIL: Castle Glen / Osler

DETAIL: Blue Mountain Village

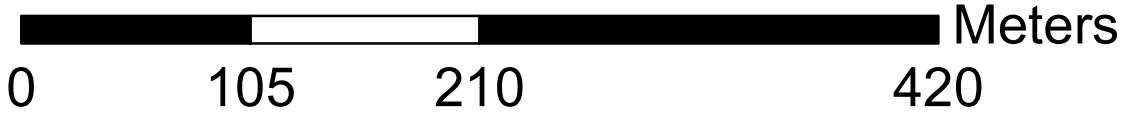
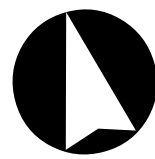


- Lift Station**
- Alta
 - Craigleith
 - Margaret
 - Moore
 - Summit Green
 - Unserved

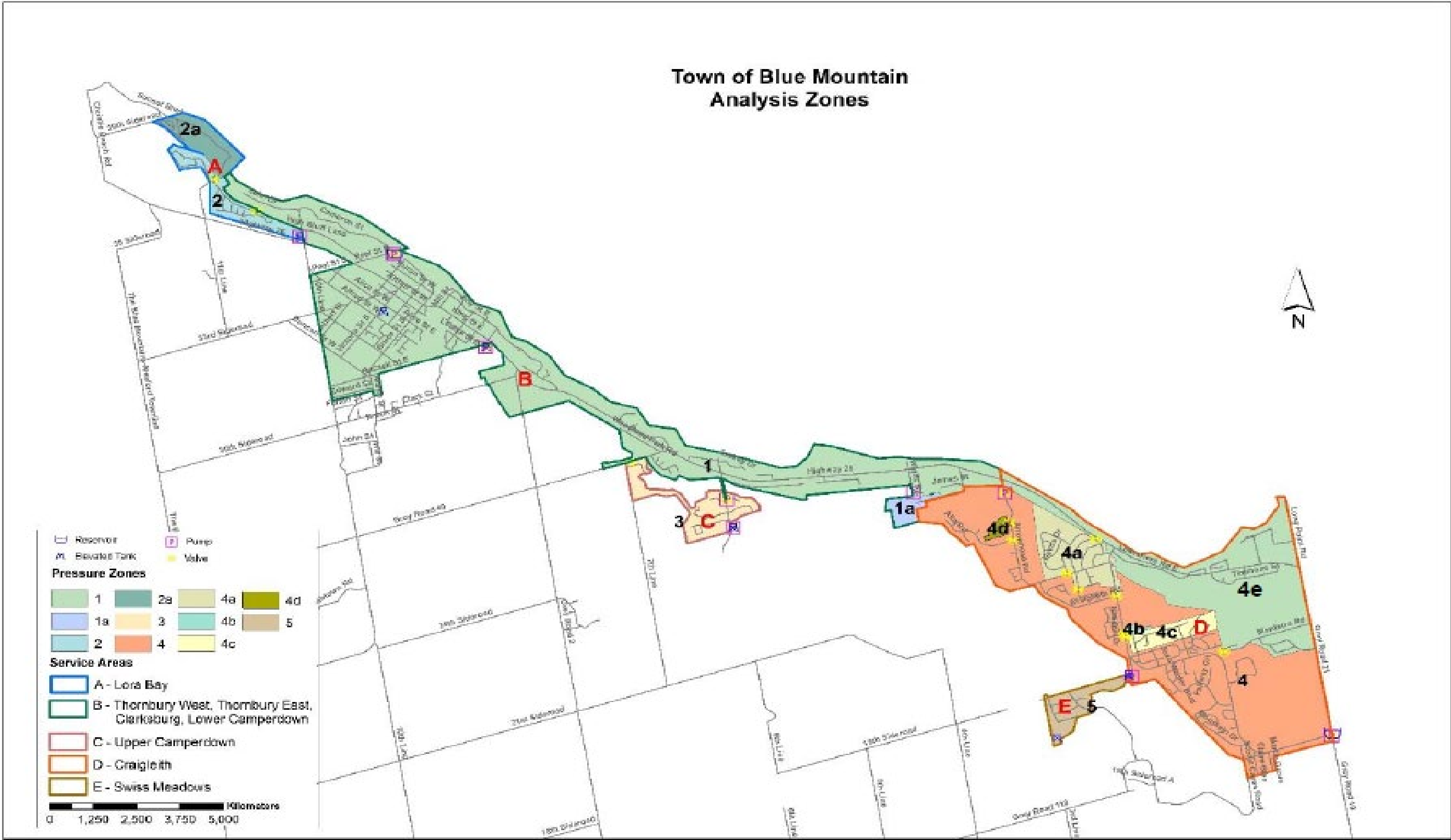
Lift Stations (Craigleith) - 2025 Year End Report

SANITARY SEWER COLLECTION

Craigleith Waste Water Treatment Plant



Appendix C – Water Pressure Zone Boundary Map



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Appendix E – WTP 10 Water Demands

Thornbury Water Treatment Plant

Tables A16 & A17: Top 10 Highest Water Demands, 2024 – 2025

Table A16 – 2024

Rank	Month	Day	Flow (m ³)	Units	m ³ /d/unit
1	August	4	9631	10,230	0.94
2	August	27	9529	10,230	0.93
3	July	29	9435	10,230	0.92
4	July	27	9,316	10,230	0.91
5	August	3	9,286	10,230	0.91
6	July	1	8,933	10,230	0.87
7	July	7	8,903	10,230	0.87
8	August	2	8,887	10,230	0.87
9	July	28	8,885	10,230	0.87
10	August	26	8,836	10,230	0.86

Table A17 – 2025

Rank	Month	Day	Flow (m ³)	Units	m ³ /d/unit
1	August	3	11,557	10,338	1.12
2	August	7	11,305	10,338	1.09
3	August	5	11,093	10,338	1.07
4	August	14	10,802	10,338	1.04
5	August	4	10,760	10,338	1.04
6	August	9	10,633	10,338	1.03
7	August	13	10,572	10,338	1.02
8	August	2	10,430	10,338	1.02
9	July	17	10,402	10,338	1.01
10	August	15	10,325	10,338	1.00

2024 Average 9,164 m³

2025 Average 10,788 m³

	Peak Season (Christmas, Family Day & March Break)
	Summer Season
	Winter Season

Appendix F – Thornbury WWTP 2024 and 2025 Top 10 Peak Flows

Thornbury WWTP

Tables B16 and B17: Top 10 Highest Peak Flows, Thornbury WWTP 2024 – 2025

Table B16 – 2024

Rank	Month	Day	Flow (m ³)	Units	m ³ /d/unit
2	April	18	6,376	3416	1.87
4	April	13	5,704	3416	1.67
6	April	14	5,587	3416	1.63
7	December	17	5,551	3416	1.63
8	April	19	5,480	3416	1.60
9	April	20	4,957	3416	1.45
10	April	17	4,892	3416	1.43

Table B17 – 2025

Rank	Month	Day	Flow (m ³)	Units	m ³ /d/unit
1	April	3	12,690	3421	3.71
2	March	30	11,879	3421	3.47
4	March	29	8,858	3421	2.59
5	April	4	8,278	3421	2.42
6	March	31	8,199	3421	2.40
7	April	5	7,537	3421	2.20
10	April	6	6,495	3421	1.90

2024 Average 5,761 m³

2023 Average 8,975 m³

	Peak Season (Christmas, Family Day & March Break)
	Summer Season
	Winter Season

Appendix G – Craigleith WWTP – 2024 and 2025, Top 10 Peak Flows

Craigleith WWTP

Tables C16 C17: Top 10 Highest Peak Flows, Craigleith WWTP 2024 – 2025

Table C16 – 2024

Rank	Month	Day	Flow (m³)	Units	m³/d/unit
2	July	10	7,757	5,720	1.36
4	April	13	7,034	5,720	1.23
6	April	14	6,396	5,720	1.12
7	April	12	6,374	5,720	1.11
8	January	27	6,313	5,720	1.10
9	April	18	6,250	5,720	1.09
10	January	26	6,143	5,720	1.07

Table C17 – 2025

Rank	Month	Day	Flow (m³)	Units	m³/d/unit
1	April	3	13,193	5,824	2.27
2	March	30	10,176	5,824	1.75
3	March	29	10,061	5,824	1.73
4	March	6	9,298	5,824	1.60
9	March	31	7,065	5,824	1.21

2024 Average 6,917 m³

2024 Average 9,041 m³

	Peak Season (Christmas, Family Day & March Break)
	Summer Season
	Winter Season

Appendix H – Basis for Calculating Equivalent Units

APPENDIX "A"

TOWNSHIP OF COLLINGWOOD

CRIAGLEITH - CAMPERDOWN AREA SERVICES

WATER WORKS PROJECT NO. 3-0174

SEWAGE WORKS PROJECT NO. 7-0242

CUSTOMER INVENTORY REVIEW

Basis for Equivalent Units

<u>Facility</u>	<u>Units</u>
Dwelling - single family unit	1
Multiple Unit, Apartment, Condominium, Efficiency Unit - unit	1
Hotel, Motel (No cooking facilities) - 1 room	1/2
Lodge, Hostel, Dormitory accommodation (More than 4 beds/room)-4 beds	1
Restaurants, Licenced Lounges, Cocktail Bars -12 seats	1
Commercial, Professional Offices, Retail Outlets (Take out restaurant, variety store) up to 7,000 sq. ft.-building	2
Major Retail/Offices 7,000 sq. ft. and over - building	3
Gas Bar (no repair service)	1
Service Station	3
Storage/Private Garage with washroom facilities	1
Laundromat Commercial - 1 machine	1
Campground -4 sites	1

Residential unit attached to commercial building add
1 unit to commercial value.

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File No. 81170
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