



Town of The Blue Mountains

32 Mill Street, Box 310
Thornbury, ON N0H 2P0
Phone: 519-599-3131 Fax: 519-599-7723
www.thebluemountains.ca

Date: May 10, 2022

Re: East Side Water Storage and Supply Environmental Assessment – Public Information Centre (PIC) #1

This memo is intended to provide a summary of the questions, comments and answers that were received prior to, or asked during, the PIC held on March 24, 2022. The PIC was held virtually on Microsoft Teams from 5:00 p.m. to 7:00 p.m. A total of 24 individuals attended the meeting.

Included below is a summary of the primary concerns heard through the comment period, as well as a detailed breakdown of the specific questions and comments.

1. Impact/consideration of future developments

Multiple residents asked how the water supply requirements for proposed developments were being included in this study.

2. Regional Water Supply

Comments were received asking what had been done in regard to investigating a regional water supply that take into account the existing agreement between the Town of Collingwood and the Town of The Blue Mountains.

3. Thornbury Water Treatment Plant Capacity

Residents asked whether the Thornbury Water Treatment Plant has sufficient capacity to treat the additional water required for the East Pressure Zones.

Questions and Comments Made Prior to the Public Information Centre

Is the purpose of the environmental assessment to determine the feasibility of water storage, the placement of pumping stations, expanding water treatment capacity?

Yes, this Municipal Class Environmental Assessment (MCEA) will consider the need for additional water storage facilities (e.g. elevated towers, standpipes, at- or below- grade reservoirs) and the need to expand or add booster pumping stations. It will also consider various options to increase water treatment and supply capacity.

Initial options being considered for water treatment and supply are upgrading the infrastructure that conveys water from the Thornbury Water Treatment Plant (i.e. feedermain and pumping stations), entering into an agreement for additional water supply from an adjacent municipality (e.g. Town of Collingwood), and constructing a new Water Treatment Plant in the Craigleith area.

What sort of infrastructure would be needed to meet the demand from the proposed development of Castle Glen by Great Golf Homes, and how significant would the physical footprint be? The proposed development of Castle Glen by Great Gulf Homes would see new development. I am certain such a development would have an influence on the Town's water supply and would also have a significant impact on area groundwater, as well as sensitive escarpment ecosystems.

On March 7, 2022, a Notice of Study Addendum Commencement was issued by the owner of the development land, Great Dale Manor Limited for the “Castle Glen Development, Town of The Blue Mountains Drinking Water Supply Class Environmental Assessment”. This study is being conducted separately from the Town’s East Side Water Storage and Supply Municipal Class Environmental Assessment. Interested parties are referred to the Notices issued for that study for a description of the infrastructure proposed to service Castle Glen.

To obtain a copy of the Notice or be added to the Castle Glen Development Drinking Water Supply Class Environmental Assessment mailing list, please contact:

Suzanne Troxler
Tatham Engineering Limited
Manager, Water & Wastewater Engineering
115 Sandford Fleming Drive, Suite 200
Collingwood, Ontario, L9S 5A6
Tel: 705-444-2565
Email: stroxler@tathameng.com

Will the assessment consider the impact of new infrastructure on ecologically sensitive and significant escarpment lands, flora, and fauna?

The East Side Water Storage and Supply Municipal Class Environmental Assessment has been initiated as a Schedule ‘B’ and ‘C’ project under the Municipal Class Environmental Assessment (MCEA) process. This project Schedule under the MCEA process, necessitates a review of potential environmental impacts of the proposed water supply and storage infrastructure on ecologically significant lands, flora, and fauna. This also includes consideration of the identified works conformance with the Niagara Escarpment Plan (2017).

Findings related to potential environmental impacts and proposed mitigation measures will be presented to the public as the project progresses and will be documented on the Environmental Study Report (ESR). Stakeholders are encouraged to reach out to the project team with local knowledge about sensitive ecological areas at any time during the MCEA process.

The assessments completed as part of East Side Water Storage and Supply MCEA will build on the initial Ecological Survey and Environmental Impact Study which was conducted as part of the Town-wide Water Distribution Master Plan. A copy of that report can be found under “Additional Documentation” on the Master Plan project page: <https://www.thebluemountains.ca/planning-building-construction/current-projects/municipal-infrastructure-projects/town-wide-water>

Will the environmental assessment include any study on the potential impact of pesticides (permitted on commercial properties such as golf courses in Ontario) on groundwater and the surrounding environment?

The East Side Water Storage and Supply Municipal Class Environmental Assessment has been initiated as a Schedule ‘B’ and ‘C’ project under the Municipal Class Environmental Assessment (MCEA) process. This project Schedule under the MCEA process, requires that (from Areas of Interest v. February 2021):

The proponent should identify the source protection area and should clearly document how the proximity of the project to sources of drinking water (municipal or other) and any delineated vulnerable areas was considered and assessed. Specifically, the report should discuss whether the project is located in a vulnerable area and provide applicable details about the area.

As part of the MCEA process, an evaluation of potential environmental impacts, including those related to source water protection, will be completed as part of the East Side Water Storage and Supply Municipal Class Environmental Assessment.

Is there any hierarchy used to give priority to the approval of some proposed developments over others? If so, what are the criteria used and are any of the previously mentioned environmental concerns included in that determination?

The Town's Official Plan contains staging policies related to development approvals and the monitoring of available design capacity compared to the expansion of municipal service infrastructure. The commitment of available plant capacity for development approvals is based on five (5) staging categories. Details related to these staging categories can be found in Section D1.4 titled Staging Categories. A link to the Town's Official Plan is provided below and the relevant policies can be found on page 174.

https://www.thebluemountains.ca/sites/default/files/2021-06/document_viewer%20%2810%29.pdf

During the Town-wide Water Master Plan, consideration was given to locating a new storage reservoir in the vicinity of the Happy Valley Reservoirs. A stakeholder expressed concerns about the siting of a potential new tank there would like to see two location options considered in that vicinity. These options are (1) To the north of the existing reservoirs (on combination of Town owned land and ski club land and (2) Further to the south to the side of the creek adjacent to the Happy Valley ski run.

In response to this stakeholder input, further consultation will be undertaken with landowners in the vicinity of the existing Happy Valley Reservoirs. The East Side Water Storage and Supply Municipal Class Environmental Assessment has been initiated as a Schedule 'B' and 'C' project under the Municipal Class Environmental Assessment (MCEA) process. As part of this process consideration will be given to all potentially viable storage locations.

Letters of acknowledgement in response to the Notice of Commencement were also received from the following stakeholders: Township of Clearview, Great Gulf, Grey County, Ministry of Environment, Conservation and Parks (MECP), Ministry of Heritage, Sport, Tourism, and Culture Industries (MHSTCI), Nation Huronne-Wendat, Ontario Heritage Trust. Consultation with these agencies and other stakeholders will be ongoing throughout the East Side Water Storage and Supply Municipal Class Environmental Assessment.

Questions and Comments Made During the Public Information Centre

Does this water supply Blue Mountain Resort for water and for snowmaking? – Pamela Spence

Yes, the Town provides drinking water to the resort. Water to support snowmaking is not treated drinking water and not supplied by the Town via the Water Treatment Plant.

Follow-up comment: There is significant growth proposed at the resort. Greater than planning permits. Growth is exceeding projections overall.

The Town's growth projections for each development area varies a little bit depending on where that application is in the planning process. Where applications have been submitted and approved, the Town will use numbers based on those applications. In areas where plans have not been submitted or approved, the Town will use numbers based on what's permitted in the Official Plan.

Does a multiple unit dwelling have less of an impact on water supply than the same number of people drawing water in single-family homes? (ex. 2 families in a duplex vs. 2 single homes) – Nick Clayton

Future demands have been based on equivalent population which normalizes demands based on the unit count assigned to a future development.

Will the independent study of Castle Glen/Osler (Tatham) be fully incorporated into the J.L. Richards EA? – Nick Clayton

J.L. Richards is advancing the EA using the information that was available from the previous EA concerning Castle Glen and Ostler. J.L. Richards is engaging in regular communication with the consultant and developer of that area. If there are to be significant deviations from the recommendations that came out of the 2011 Castle Glen EA, J.L. Richards will make a decision at that time regarding how to incorporate them into this study.

Should we not be looking at water demand on the other side of the border (Collingwood)? Should we not be looking at a truly regional water supply picture? – Coun. Rob Sampson

The Town is investigating a more regional water supply, and has received Council direction to do so. Many municipalities in South Georgian Bay are experiencing high rates of growth, and servicing this growth is an important subject for all of them. The Town is reaching out to neighbouring municipalities to investigate opportunities for a more regional supply model that could work as a longer-term solution.

If the Town chooses a storage option utilizing the elevation of the escarpment, will there be an opportunity for power generation as the water makes its way down? – Mayor Alar Soever

One of the evaluation criteria being used is the potential to mitigate greenhouse gas emissions and climate change. As part of this, the consultant will consider options that would have the potential to reduce the reliance on sources of energy that produce more greenhouse gases. These options would have to be weighed against all of the other technical, social and environmental factors being evaluated as part of this study.

Thornbury has plant expansion in the works - is that water or wastewater? The plant at north end of Grey Road 21 is water or waste? Are these included? When you discuss pumps, would this include storage as well? – Pamela Spence

The expansion underway in Thornbury is for wastewater treatment. The plant at the north end of Grey Road 21 is also a wastewater treatment plant.

We are talking of adding water supply, is there adequate treatment for all this additional supply? – Alex Cumming

The Thornbury Water Treatment Plant has a current capacity of around 15,000 m³ per day. Excluding the water currently coming from Collingwood that is treated at their facilities, there is adequate treatment capacity at the Thornbury Water Treatment Plant as it is operating at around 66% of its total capacity. One of the key challenges in the Town's eastern pressure zones is how far their water must travel from the Thornbury Water Treatment Plant. The near to mid-term capacity issue is with the current feeder main from the Thornbury Water Treatment Plant as it is undersized to serve the near-term needs of the eastern pressure zones. Treatment capacity has been identified as a longer-term issue that would need to be addressed by expanding the capacity at the existing Water Treatment Plant, by building a new Water Treatment Plant to service the eastern pressure zones, or increasing supply from a neighbouring municipality.

Follow-up question: What about wastewater capacity?

There are studies and projects being undertaken to address the Town's wastewater capacity as well. A major expansion of the Thornbury Wastewater Treatment Plant is slated to be completed by the end of

2024, the Town is running a program with the goal of reducing Inflow and Infiltration which takes up wastewater capacity, and there is also a Town-Wide Wastewater Collection System Environmental Assessment about to be started.

The Town's source of water is still Georgian Bay via the Thornbury Water Treatment Plant, but it doesn't have sufficient capacity left for 20-year build out. Is this problem part of the EA and solutions? – Pamela Spence

The Town is looking at different options to realize the 20-year build out needs for water supply. These options include the potential for an increase to the capacity of the Thornbury Water Treatment Plant – which would also require an increase to the conveyance capacity to reach the Town's eastern pressure zones, the potential for an increase in the water supply coming from the Town of Collingwood, and the potential for construction of a new water treatment plant dedicated to the eastern pressure zones. J.L. Richards is also evaluating the different implications regarding infrastructure that would be required for each of these options.

Tatham's study on Castle Glen is supposed to be completed by the end of 2023? When is this study going to be completed? – Alex Cumming

We are currently in the first phase of the assessment process, and will be progressing to phase two in late spring or early summer. The next stage of public consultation and engagement in this study will occur in late 2022 or early 2023 to review the preferred alternative solutions.

Will the source of water always be Georgian Bay in any of the three scenarios? Will aquifer drainage be considered? – Pamela Spence

This study is primarily looking at surface water sources. There has not been consideration given to a groundwater source as communities do not typically revert to a groundwater source after a surface water source has been established. Supplementing an existing surface water source with groundwater is more complex as you are generally dealing with significantly different water quality from each source.

Follow-up comment: The Bay has a lot of silt at the Craigleith end, so factor that into the study.

Questions and Comments Received After the Public Information Centre

Were known developments that have not yet been constructed factored into the supply numbers? In addition, there was a deputation before Council with a proposal for a large condo/hotel project in the Blue Mountain Village [...] which was more than the 15 units per hectare used in the East Side Water Storage and Supply Municipal Class Environmental Assessment build-out forecast. It seems there is not sufficient supply remaining for a 20-year forecast.

The growth projections for the Craigleith service area (excluding Swiss Meadows, Osler Bluff, and Swiss Meadows) currently being considered includes areas that are reserved for draft plan approvals (i.e. approved but may not have been constructed), are on Official Plan Designated Lands with application, or are Official Plan Designated Lands without an application.

Where applications have been approved or made, growth will be based on best available information. Where an application has not been made, growth is estimated based on densities prescribed in the Official Plan. Potential changes to estimated unit counts are being closely monitored as the study evolves. As of April 2022, build out growth projections for the Craigleith, Swiss Meadows, Osler Bluff and Castle Glen Area are being based on the Town's development Charges Background Study (Hemson Consulting, 2019).

As future growth projections are finalized for the purposes of East Side Water Storage and Supply Municipal Class Environmental Assessment, information will be made available to stakeholders.

It is understood from the Public Information Center that the Blue Mountains Resort has its own water system in place to draw water from Georgian Bay. If snow making is only used 2-3 months a year, is there a way, with additional filtration, the Town could utilize this infrastructure for water supply?

This option is not being considered because the pipes and pumps that are used for municipal drinking water supply must meet stringent drinking water standards. The existing infrastructure used for pumping water for the purposes of snow making would not be designed to these standards.

It is in the news that Town of Collingwood Council and staff are expecting that Town of The Blue Mountains will contribute to the cost of the expansion to the Collingwood Water Treatment Plant. This is a regional issue and should be explained to the public and coordinated within the umbrella of Regional Servicing or Infrastructure.

The Town of The Blue Mountains completed a Town-Wide Water Distribution Master Plan in 2019. As part of that study, consultation was undertaken with the Town of Collingwood to identify potential future water supply needs for the Town of The Blue Mountains. At approximately the same time the Town of Collingwood was completing a Water and Sanitary Sewer System Master Plan (December 2019). At that time, it was determined that the Town of The Blue Mountains may consider entering into an agreement for additional water supply from the Town of Collingwood.

This initial work at the Master Planning stage, was then built on in the Town of Collingwood's Raymond A. Barker Water Treatment Plant Expansion Schedule C Class Environmental Assessment (October 2020). It is also being built on through the East Side Water Storage and Supply Municipal Class Environmental Assessment (currently underway). Consultation is ongoing between the Town of The Blue Mountains and the Town of Collingwood, and a key component of the East Side Water Storage and Supply Municipal Class Environmental Assessment is to determine what future water supply alternative is preferred for the Town of The Blue Mountains.

Initial options being considered for water treatment and supply are upgrading the infrastructure (i.e. feedermain and pumping stations) that convey water from the Thornbury Water Treatment Plant, entering into an agreement for additional water supply from an adjacent municipality (e.g. Town of Collingwood), and constructing a new Water Treatment Plant in the Craigeleith area. In all cases, the evaluation will include updated treatment costing information from The Town of Collingwood and other industry benchmarks.

The Town is investigating a more regional water supply, and has received Council direction to do so. Many municipalities in South Georgian Bay are experiencing high rates of growth, and servicing this growth is an important subject for all of them. The Town is reaching out to neighbouring municipalities to investigate opportunities for a more regional supply model that could work as a longer-term solution.

In the Public Information Center, it was noted that current capacity of the Thornbury Water Treatment Plant is roughly 15,000 m³/day of water and residual capacity of 6,000 m³/day. 1m³ is allocated to a unit. Does this represent dwelling units or population?

The 2020 Year End Water & Wastewater Capacity Assessment (Staff Report No. CSPOPS.21.038) contains the most up-to date published information on water demands in the Town. From that report, the 5-year (2016 - 2020) rolling Maximum Day Demand was 1.060 m³/unit/day. A full copy of Staff Report No. CSPOPS.21.038 can be found at the following link: <https://pub-bluemountains.escribemeetings.com/FileStream.ashx?DocumentId=4666>. The 2021 report will be presented to Council in spring/summer 2022.

Additionally, in accordance with Ontario Regulation 170/03, the Town maintains a Drinking Water System Public Access Binder. The binder contains information regarding the Town's Water System including the annual report, water sampling results and daily operational checks. All information contained within the binder is current as of January of the present year. Information from past years can be made available upon request. The binder is located outside of the Operations Department on the second floor of the Town Hall and can be reviewed during regular business hours from 8:30 a.m. to 4:30 p.m., Monday to Friday.

In the Public Information Center, it was noted that approximately 9000 m³/day of the Town's treated water supply is in use now. Does this number factor in the population growth exposed in the recently published Canada census? Where do draft approved subdivisions factor into this measurement? In the 9,000 m³/day in use and in the 6,000 m³/day residual?

The 2020 Year End Water & Wastewater Capacity Assessment (Staff Report No. CSPOPS.21.038) contains the most up-to date published information on water demands in the Town. From that report:

The Town of The Blue Mountains total firm water supply capacity is 16,390 m³/day, or 15,462 units based on the five-year rolling Maximum Day Demand (MDD) of 1.060 m³/unit/day. Of the total system capacity of 15,462 units, 10,431 units are allocated (i.e. connected, can connect, committed, or not fronting but not serviced), and 2819 units are reserved (i.e. designated active lands, including units in areas with draft plan approval). This leaves 2,212 available units.

The growth projections presented in the Public Information Center on the Town's East Side Water Storage and Supply Municipal Class Environmental Assessment include units that are reserved for draft plan approvals, are on Official Plan Designated Lands with application, or are Official Plan Designated Lands without an application.

Rock and shale are ubiquitous near the surface from the shore of the bay to the Escarpment; any excavation needs to take this info into account and anticipate dynamiting as a possibility.

This comment has been noted by the project team and will be considered in the development and evaluation of alternatives. The assessments completed as part of East Side Water Storage and Supply Municipal Class Environmental Assessment will build on the initial Geotechnical Investigation which was conducted as part of the Town-wide Water Distribution Master Plan. A copy of that report can be found under "Additional Documentation" on the Master Plan project page:
<https://www.thebluemountains.ca/planning-building-construction/current-projects/municipal-infrastructure-projects/town-wide-water>

Any construction, installation and storage options that visually scar or detract from the escarpment, the bay and our vistas and views should be avoided.

This comment has been noted by the project team and will be considered in the development and evaluation of alternatives. The assessments completed as part of East Side Water Storage and Supply Municipal Class Environmental Assessment will build on the initial Cultural Heritage Investigation which was conducted as part of the Town-wide Water Distribution Master Plan. A copy of that report can be found under "Additional Documentation" on the Master Plan project page:
<https://www.thebluemountains.ca/planning-building-construction/current-projects/municipal-infrastructure-projects/town-wide-water>

The Town must respect the policies of Provincial Policy Statement (PPS) and should respect Niagara Escarpment Commission (NEC), Conservation Authorities, Town Official Plan and other commonly accepted planning practices.

The East Side Water Storage and Supply Municipal Class Environmental Assessment has been initiated as a Schedule 'B' and 'C' project under the Municipal Class Environmental Assessment (MCEA) process. As part of this process consideration must be given to each alternatives conformance with applicable Planning Policies at the federal (where applicable), provincial, County, and local level.

The information in this water study highlights that information should also be presented on the drainage patterns in the area, wastewater status and options and storm water treatment options. I was surprised there was no mention made of the on-going infiltration and inflow studies or the location and repairs required in the existing system to prevent infiltration as infiltration was considered the cause of recent flooding. These studies on drainage, infiltration, wastewater, water flows and treatment are all going on at the moment, they overlap and from the taxpayers' perspective should be coordinated in one study/report.

Timing of infrastructure needs, and the scale of each undertaking has necessitated the completion of separate studies for water, wastewater, and drainage. However, Town staff are involved in work related to studies on all three infrastructure components, as such, information moves regularly between the project teams. In the future, the Town may consider coordination of future infrastructure planning studies.

As you are aware there was a catastrophe last September with sewage flooding into homes and that needs to never happen again. While storm water drainage and infiltration were factors, pump failure was a major contributor. Had the pumping station at Lakeshore Rd and Hwy 26 not been there, this disaster that affected many would not have happened. This pumping station is in a soon-to-be densely populated area and will have substantial different road and traffic patterns. It is not appropriate that 40-foot tankers are maneuvering in this residential area. While staff and consultants may not relate this pumphouse to the east side water study the residents do.

The Town is currently in the process of retaining a consultant to complete a Town-Wide Wastewater Master Plan. The Town-Wide Wastewater Master Plan will look at methods of addressing inflow and infiltration and establish current and future wastewater pumping and conveyance infrastructure needs. This will enable to Town to identify and undertake projects that will increase the wastewater system's capacity and mitigate sewage flooding risks.

There also was a point made to me by a neighbor that there seems to be a problem with the sizing of the pipes to or from the Arrowhead booster station. Infiltration and flow problems may be associated with the piping longevity.

Currently, an approximately 10 km long water feedermain along Highway 26 is used to convey water to the Arrowhead Road Booster Pumping Station. The existing feedermain and Arrowhead Booster Pumping Station are undersized to meet future water demands in the East Side of the Town (i.e. Craigleith, Swiss Meadows, Osler Bluff and Castle Glen). This is one of the key drivers for the East Side Water Storage and Supply Municipal Class Environmental Assessment. Initial options being considered for water treatment and supply are upgrading the infrastructure that convey water from the Thornbury Water Treatment Plant (i.e. feedermain and pumping stations), entering into an agreement for additional water supply from an adjacent municipality (e.g. Town of Collingwood), and constructing a new Water Treatment Plant in the Craigleith area.

If we are laying new pipe and trenches are dug then the trenches should serve other infrastructure uses – namely, grey supply for lawn watering etc., as is done in many locations, and or piping for cables, power etc.

All utility providers (power, gas, telecommunications) have been notified of this study and will be consulted as the study and subsequent design stages advance.

The public is aware and concerned about the tax dollars being committed and the growth being anticipated. It behooves the Town, their consultants, and advisors to coordinate all water infrastructure matters together,

provide all research and information together, use out-of-the-box thinking and make the best-informed recommendations so the Town can make the best decisions.

This Municipal Class Environmental Assessment (MCEA) will consider the need for additional water storage facilities (e.g. elevated towers, standpipes, at- or below- grade reservoirs) and the need to expand or add booster pumping stations. It will also consider various options to increase water treatment and supply capacity. This work will be completed in a coordinated manner to enhance the Town's decision-making process.

The first phase of the Castle Glen development will rely on surface and ground water. It would seem to me that this would make the Lake of Clouds and Amabel Aquifer highly relevant to any study of water supply to the area. Will there be any study of the long-term sustainability of taking surface and groundwater? Could this development potentially lead to the depletion of these sources of water? Additionally, the state of these headwaters impacts the Black Ash and Silver Creek wetlands. It is incumbent upon the developers to consider the (literal) downstream effects of the development on these significant ecosystems.

On March 7, 2022, a Notice of Study Addendum Commencement was issued by the owner of the development land, Great Dale Manor Limited for the 'Castle Glen Development, Town of The Blue Mountains Drinking Water Supply Class Environmental Assessment'. This study is being conducted separately from the Town's East Side Water Storage and Supply Municipal Class Environmental Assessment. Interested parties are referred to the Notices issued for that study for a description of the infrastructure proposed to service Castle Glen.

To obtain a copy of the Notice or be added to the Castle Glen Development Drinking Water Supply Class Environmental Assessment, please contact:

Suzanne Troxler
Tatham Engineering Limited
Manager, Water & Wastewater Engineering
115 Sandford Fleming Drive, Suite 200
Collingwood, Ontario, L95 5A6
Tel: 705-444-2565
Email: stroxler@tathameng.com