



Staff Report

Operations – Capital Projects Division

Report To: COW-Operations_Planning_and_Development_Services
Meeting Date: February 27, 2024
Report Number: CSOPS.24.015
Title: East Side Municipal Class EA Public Information Centre 2
Prepared by: Emily Yeo, Senior Infrastructure Capital Project Coordinator

A. Recommendations

THAT Council receive Staff Report CSOPS.24.015, entitled “East Side Municipal Class EA Public Information Centre 2”;

AND THAT Council direct staff to proceed with holding a second virtual Public Information Centre;

AND THAT Council endorse in principle, the Preliminary Preferred Alternative subject to stakeholder and public consultation;

AND THAT Council direct staff to provide a follow-up report after the Public Information Centre;

AND THAT Council direct staff to continue to actively participate in the Town of Collingwood’s Water Treatment Plant expansion project.

B. Overview

This Staff Report provides Council with the materials and information that will be presented at the second Public Information Centre (PIC) for the East Side Water Supply and Storage Municipal Class Environmental Assessment (MCEA).

C. Background

In 2019, the Town completed a Town-Wide Water Distribution System Master Plan. This study identified the need for a subsequent Schedule ‘B’ and ‘C’ MCEA to address water storage and water supply needs in the eastern pressure zones in the Town, including the approximate settlement areas of Craigleith, Swiss Meadows, Castle Glen, and Osler Bluff.

The purpose of this project is to evaluate options and select the Town’s east-side water storage and supply needs and to enable the construction of municipal water infrastructure which will meet the Town’s immediate, long-term, and build-out needs.

In 2021, the Town initiated the East Side Water Supply and Storage MCEA and retained engineering consultant, JL Richards Ltd., to lead the project. As part of the project scope, Town staff identified the need for two PICs.

On March 1, 2022, staff presented Staff Report [CSOPS.22.018](#) entitled “East Side Water Supply and Storage MCEA PIC 1” for direction to proceed with PIC 1. Following direction from Council, the first PIC was held virtually on March 24, 2022, for residents and stakeholders to ask questions and provide comments to Town Staff. The public feedback from PIC 1 was provided in Staff Report [CSOPS.22.051](#) entitled “East Side Water Supply and Storage Class MCEA PIC 1 Follow-up” submitted to Committee of the Whole on June 27, 2022.

Town Staff have proposed another virtual PIC event where the project will be presented to the public through a virtual session for Phase 2 of the MCEA. The public will also be able to submit written comments which can be responded to live or following the PIC.

The presentation slide deck as seen in Attachment 1 has been attached to this Staff Report. Town staff are hoping to proceed with the virtual PIC on March 20, 2024, at 5:00 pm to 7:00 pm. The Notice of Public Information Centre 2 (Attachment 2) is attached to this report.

D. Analysis

Public consultation is an integral part of the MCEA process. In lieu of a regular drop-in PIC, residents will be encouraged to attend the live-stream session, send questions in advance and/or ask questions during the meeting. The questions will be moderated and responded to either during the live-stream or following the PIC. A recording of the presentation will also be made available following the PIC.

The comments received during the virtual PIC will be recorded and considered as part of the overall project. These will become part of the public record as with other comments received during public consultations.

The East Side Schedule ‘B’ and ‘C’ MCEA is being completed to address the deficiencies in providing treated water from the Thornbury Water Treatment Plant (WTP) to the eastern pressure zones as well as storage deficiencies in pressure Zone 4 and 5. These deficiencies were discovered in the Town-Wide Water Distribution System Master Plan completed in 2019. A water supply deficit of 9,863 m³/day and a water storage deficit of 3,445 m³ have been identified under future build-out scenarios. With significant growth anticipated within the next 20 years, the Town must address the near and long-term system deficiencies in the eastern pressure zones to ensure adequate water capacity and storage in the future.

The main objective of Phase 2 of a Class EA is to identify and evaluate possible alternative solutions to the problem(s) and/or opportunities identified in Phase 1. Reasonable potential solutions to the problem(s), are considered. Based on this initial screening, four (4) alternatives have been carried to detailed evaluation:

- Alternative 1A – Increase Thornbury WTP Capacity and Build Storage at Site 2/5
- Alternative 1B – Increase Thornbury WTP Capacity and Build Storage at Site 9
- Alternative 2A – New Craigleith WTP and Storage at Site 2/5
- Alternative 3C – Increase Supply from Collingwood and Storage at Site 12.

A brief description of the four (4) alternatives are provided below and a more detailed description of each alternative can be found in the Project File Report located on the project webpage:

[East Side Water Storage Environmental Assessment | Town of The Blue Mountains, ON](#)

Alternative 1A – Increase Thornbury WTP Capacity and Build Storage at Site 2/5

The existing Thornbury WTP would be increased from a capacity of 15,140 m³/day to a capacity of 23,255 m³/day, with a new 5000 m³ reservoir and 190 L/s Booster Pumping Station constructed at Site 2/5. This option would increase the Town's water storage capacity from 12,276 m³ to 17,276 m³, allowing sufficient water storage for firefighting efforts as well as future growth. Watermain twinning would be required at three (3) locations in the water distribution system at lengths of 11 km, 5 km, and 1.5 km, with the Town maintaining a water supply of 1,250 m³/day from the Collingwood WTP. With this option, there is potential for phasing the capacity of Thornbury WTP, but construction of a new intake at Thornbury WTP and watermain twinning at various locations throughout the water distribution system could be potentially disruptive and technically challenging.

Alternative 1B – Increase Thornbury WTP Capacity and Build Storage at Site 9

The existing Thornbury WTP would be increased from a capacity of 15,140 m³/day to a capacity of 23,255 m³/day, with a new 5000 m³ at-grade reservoir and 190 L/s Booster Pumping Station constructed at Site 9. This option would increase the Town's water storage capacity from 12,276 m³ to 17,276 m³, allowing sufficient water storage for firefighting efforts as well as future growth. Watermain twinning would be required at four (4) locations in the water distribution system at lengths of 11 km, 4.5 km, 2 km, and 1.5 km, with the Town maintaining a water supply of 1,250 m³/day from the Collingwood WTP. With this option, there is potential for phasing the capacity of Thornbury WTP, but construction of a new intake at Thornbury WTP and watermain twinning at various locations throughout the water distribution system could be potentially disruptive and technically challenging.

Alternative 2A – New Craigleith WTP and Storage at Site 2/5

A new 7,133 m³/day WTP would be constructed at Site 2/5, with a new 5000 m³ at-grade reservoir and 285 L/s Booster Pumping Station constructed at Site 2/5. This option would increase the Town's water storage capacity from 12,276 m³ to 17,276 m³, allowing sufficient water storage for firefighting efforts as well as future growth. The Thornbury WTP capacity would be increased to 18,165 m³/day, watermain twinning would be required at two (2) locations in the water distribution system at lengths of 5 km and 1.5 km, and the Town would maintain a water supply of 1,250 m³/day from the Collingwood WTP. With this option, there is

high potential for phasing and expansion beyond the Town's current planning horizon, but a new intake will need to be constructed at the new WTP, which will require further studies and property acquisition or easements.

Alternative 3C – Increase Supply from Collingwood and Storage at Site 12

The Town would increase the water supply received from the Collingwood WTP to 8,383 m³/day, with a new 5,000 m³ at-grade reservoir and 190 L/s Booster Pumping Station constructed at Site 12. This option would increase the Town's water storage capacity from 12,276 m³ to 17,276 m³, allowing sufficient water storage for firefighting efforts as well as future growth. The Thornbury WTP capacity would be increased to 18,165 m³/day, and watermain twinning would be required at two (2) locations in the water distribution system at lengths of 10 km and 4.5 km. With this option, Collingwood would be responsible for operations, but complex agreements and funding arrangements would be required for the increase in water supply and conveyance from Collingwood WTP. Collingwood is also in the process of expanding their WTP, but timing and costing of this expansion is unfinalized.

Preliminary Preferred Alternative

After considering the environmental, technical, social, and economical impacts of each alternative, **Alternative 2A – New Craigeleith WTP and Storage at Site 2/5** was identified as having the highest positive impact and therefore has been presented as the Preliminary Preferred Alternative by the engineering consultant. Town Staff has also reviewed each alternative and supports the recommendation of the Preliminary Preferred Alternative provided by the engineering consultant. A detailed evaluation and description of the Preliminary Preferred Alternative can be found in the presentation slide deck, or the Project File Report located on the project webpage linked below:

[East Side Water Storage Environmental Assessment | Town of The Blue Mountains, ON](#)

Next Steps

Public consultation is a pivotal part of the Class EA process and provides several ways the public may be involved in the project. The main objective of PIC 2 is to provide an update on the project to date and to seek feedback from the public and stakeholders on the assessment of alternatives and the selection of the preliminary preferred alternative identified by Town Staff.

Following PIC 2, Town Staff will bring forward a Staff Report with the results and public feedback and how the comments have been addressed by Town Staff.

Furthermore, Town Staff will be seeking direction from Council on the final selection of the preferred alternative recommended by Town Staff for advancement to Phase 3 and Phase 4 of the MCEA process.

E. Strategic Priorities

1. Communication and Engagement

We will enhance communications and engagement between Town Staff, Town residents and stakeholders.

2. Organizational Excellence

We will continually seek out ways to improve the internal organization of Town Staff and the management of Town assets.

3. Community

We will protect and enhance the community feel and the character of the Town, while ensuring the responsible use of resources and restoration of nature.

4. Quality of Life

We will foster a high quality of life for full-time and part-time residents of all ages and stages, while welcoming visitors.

F. Environmental Impacts

The Ontario Environmental Assessment Act (Act) sets out a planning and decision-making process to ensure that potential environmental effects are considered before a project is implemented. The purpose of the Act is to provide for the protection and conservation of the natural environment (R.S.O. 1990, c.E.18, s.2).

Significant alterations to municipal infrastructure require a Class Environmental Assessment. The Class Environmental Assessment takes into consideration the impacts and the solutions on the natural and cultural environment. The level of impacts in each option are weighed against other impacts such as cost. Options for mitigating natural and cultural impacts (such as historic significance) are also put forth.

G. Financial Impacts

Included in the presentation are Class D estimates (+/- 30%) for the capital construction costs for each of the alternatives discussed in this report.

- Alternative 1A – Increase Thornbury WTP Capacity and Build Storage at Site 2/5 - \$57M
- Alternative 1B – Increase Thornbury WTP Capacity and Build Storage at Site 9 - \$61M
- Alternative 2A – New Craigeith WTP and Storage at Site 2/5 - \$66M
- Alternative 3C – Increase Supply from Collingwood and Storage at Site 12 - \$61M.

Phase 3 and Phase 4 of the East Side Water Storage and Distribution EA will be mainly funded by Water Development Charges.

H. In Consultation With

Allison Kershaw, Manager of Water and Wastewater Services

Rob Gilchrist, Water Supervisor

Sam Dinsmore, Deputy Treasurer/Manager of Budgets & Accounting

Jason Petznick, Communications Coordinator

I. Public Engagement

The topic of this Staff Report will be the subject of a Public Meeting and/or a Public Information Centre in accordance with the following schedule:

- February 27, 2024, Committee of the Whole – Initial staff report CSOPS.24.015 East Side Municipal Class EA Public Information Centre 2 with recommendation to proceed to public consultation;
- February 28, 2024, Public Information Centre 2 Notice posted;
- March 11, 2024, Council – recommendation from Committee of the Whole considered by Council;
- Wednesday, March 20, 2024, PIC 2 at 5:00 pm to 7:00 pm.

Any comments regarding this report should be submitted to Emily Yeo, Senior Infrastructure Capital Project Coordinator at icpc@thebluemountains.ca.

J. Attached

1. Attachment 1 Public Information Centre Presentation
2. Attachment 2 Public Information Centre Notice

Respectfully submitted,

Emily Yeo
Senior Infrastructure Capital Project Coordinator

Pruthvi Desai
Manager of Capital Projects

Shawn Carey
Director Operations

For more information, please contact:
Emily Yeo, Senior Infrastructure Capital Project Coordinator
icpc@thebluemountains.ca
519-599-3131 extension 304

Report Approval Details

Document Title:	CSOPS.24.015 East Side Municipal Class EA Public Information Centre 2.docx
Attachments:	- Attachment 1 Presentation.pdf - Attachment 2 Public Information Centre Notice.pdf
Final Approval Date:	Feb 13, 2024

This report and all of its attachments were approved and signed as outlined below:

No Signature found

Pruthvi Desai - Feb 13, 2024 - 2:04 PM

Shawn Carey - Feb 13, 2024 - 3:11 PM