

Havelock Wastewater Treatment Plant (WWTP) Schedule 'C' Municipal Class Environmental Assessment

Public Information Centre No. 1

March 2022





Why Are We Here?

- The Township of Havelock-Belmont-Methuen and The Ontario
 Clean Water Agency (OCWA) are undertaking a Municipal Class
 Environmental Assessment Study to identify infrastructure
 upgrades required to the Havelock Wastewater Treatment Plant
- The objectives of this Virtual Public Information Centre are:



Introduce the project and the reasons why it is being undertaken



Present the decision-making process and preliminary options



Provide an opportunity for the public to get involved in the project

We Need Your Input!



Please review the PIC presentation to learn about the process, the activities completed to date, and the **Preliminary Preferred Solution being recommended.**

Your feedback is important to this Class Environmental Assessment Study!



Your opinion is important to us!

Members of the project team are available to answer questions via email or telephone.

Please complete the **Online Comment Form** after reviewing the materials.

What is the Purpose of the Study?



- To plan for additional wastewater servicing capacity to support growth in the Village of Havelock to 2041.
- To identify and recommend the preferred infrastructure improvements to the Havelock wastewater servicing system required to accommodate the additional capacity, while minimizing impacts on the natural and sociocultural environments, and has regards to technical and financial implications.

Schedule 'C' Municipal Class EA Process and Timeline

Getting Started

- Review available information/data
- Identify Problem / Opportunity Statement

Exploring the Options

- Consider ways to address existing concerns
- Identify potential impacts
- Evaluate options and select the recommended
 Preliminary
 Preferred Solution

NOTICE OF COMMENCEMENT August 2021 WE ARE HERE VIRTUAL PUBLIC INFORMATION CENTRE #1

March 2022

Conceptualizing the Preferred Solution

- Develop design concepts to implement the Preferred Solution
- Identify impacts and mitigation measures
- Evaluate options and select the recommended
 Preliminary
 Preferred Design
 Concept

PUBLIC INFORMATION CENTRE #2

Spring/Summer 2022

Documenting the **Process**

- Make report available for public review

NOTICE OF COMPLETION

Summer/Fall 2022

Implementing the Recommendations

- Complete detailed design of the recommended solution
- Initiate construction

DETAILED DESIGN / CONSTRUCTION

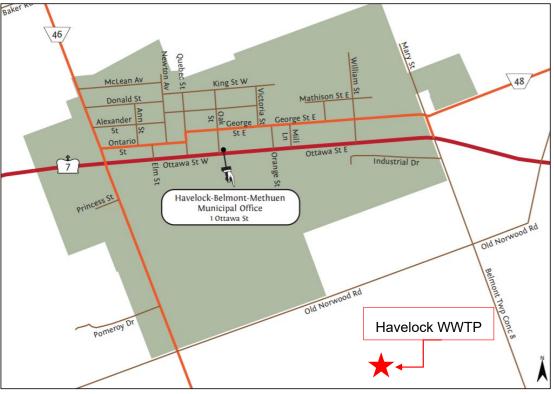
2023 - 2025



Overview of Existing Havelock Wastewater Treatment Plant (WWTP)

- Location: 719
 Old Norwood
 Road
- Rated Capacity: 1,200 m³/d
- Year of Construction:
- 2009



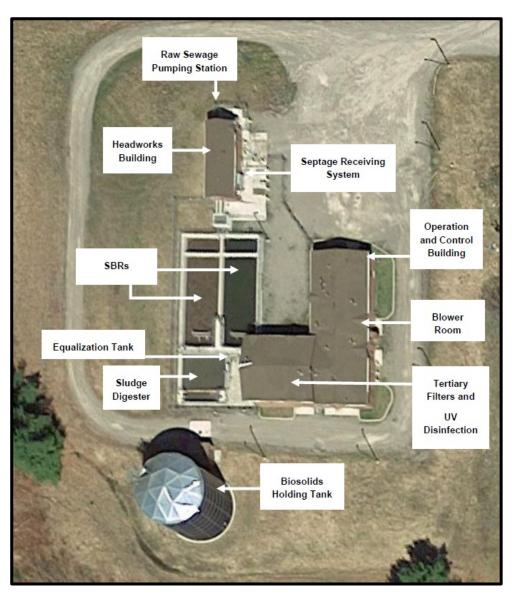




Key Process Components of the Havelock WWTP

Plant Processes

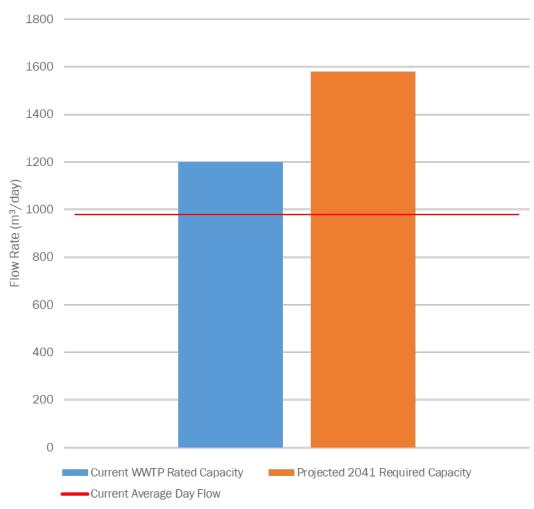
- Raw Sewage Pumping Station
- Septage and Hauled Waste Receiving Facility
- Headworks
- Sequencing Batch Reactor (SBR) Treatment Tanks: 2 reactors
- Equalization Tank
- 3 Up-flow Sand Filter Modules
- Chemical Addition Alum for phosphorus removal
- UV Disinfection
- Sludge Treatment
- Discharge to Plato Creek





Proposed Growth and Design Flows for the Havelock WWTP

- Planned growth in the Havelock South Development Area
 - 3 phases of residential homes
 - Peterborough Housing Development
 - Havelock Long-Term Care (LTC)
 Facility
- Additional anticipated growth to 2,400 people in the study area over a 20-year planning period to 2041





Class EA Phase 1 – Problem/Opportunity Statement

- Population forecasts for the Township of Havelock-Belmont-Methuen indicate that significant growth is planned for the Village of Havelock up to the year 2041.
- The community is currently serviced by the Havelock WWTP which is nearing its rated service capacity and requires expansion to ensure the continued reliable operation of the WWTP for future growth in the community.
- This Class EA study is being conducted to identify the long-term recommendations for the Havelock WWTP to:
 - Meet future growth servicing requirements;
 - Maintain high treatment standards to protect the water quality in Plato Creek; and
 - Meet current industry standards and best practices for wastewater treatment



Selecting the Preferred Wastewater Servicing Solution – The Process



Step 2

Evaluate Alternative

Design Concepts

Step 3
Recommend
Preferred Design
Concept

Identify and Screen Alternative Solutions

- Long-list of wastewater servicing alternative solutions were identified and screened against "must-meet" criteria:
 - Compliance: Ability to meet project objectives and future servicing needs up to 2041
 - Technical Feasibility: Ability to maximize use of the existing infrastructure
- Servicing alternatives that did not meet "must-meet" criteria were eliminated. Expand the Existing Havelock WWTP was identified as the preliminary preferred alternative
- Confirm preliminary preferred alternative solution with input from the public and review agencies.

Evaluate Alternative Design Concepts

- Develop design concepts to implement the preliminary preferred alternative solution
- Design concepts evaluated considering detailed evaluation criteria (shown on next panel)
- The option with the highest overall score will be recommended as the design concept for the preferred wastewater servicing solution for the Village of Havelock.

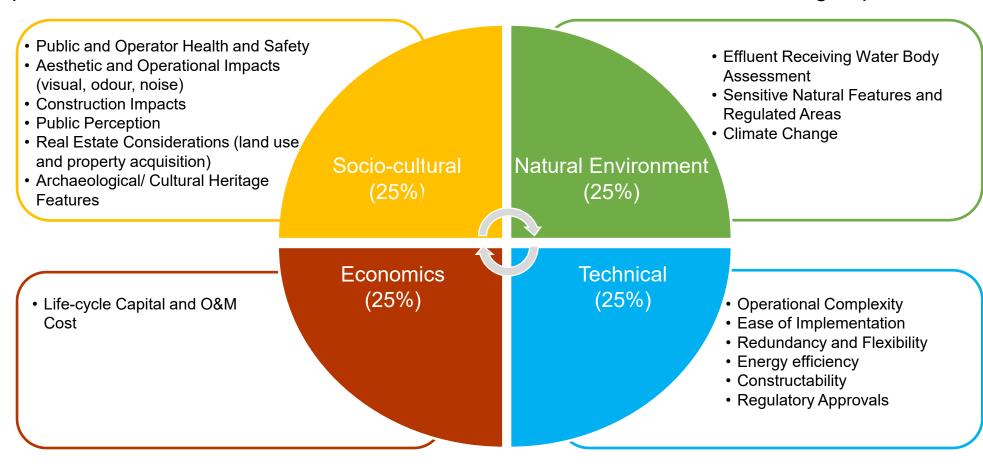
Confirm Preferred Design Concept

• Confirm recommended design concept with input from the public and review agencies.



Selecting the Preferred Wastewater Servicing Solution—Detailed Evaluation Criteria

The criteria below and the proposed weighting factors (shown in brackets as %) will be updated based on your input from this Virtual Public Information Centre and used to evaluate the design options.





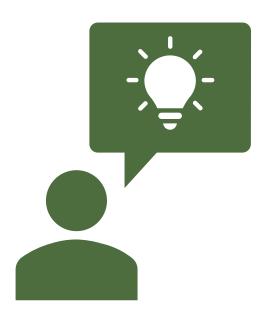
List of Servicing Alternatives –Screening Results

#	Servicing Alternative	Screening and Recommendation
1.	Do Nothing	Eliminated – alternative would lead to non-compliance and plant by-passes with an increased risk of wastewater system failure.
2.	Limit Community Growth	Eliminated – alternative would not allow for any additional future development beyond the capacity of the WWTP leading to noncompliance with growth objectives.
3.	Reduce Inflow and Infiltration (I/I)	Eliminated – I/I Control measures already in place. Not recommended as a stand-alone solution. Could be included as part of a preferred solution.
4.	Expand the Existing Havelock WWTP	CARRIED FORWARD
5.	Construct a New WWTP on the Existing Site	Eliminated – alternative addresses the need for additional wastewater servicing capacity, but it does not maximize use of existing infrastructure.
6.	Construct a New WWTP on a New Site	Eliminated – alternative addresses the need for additional wastewater servicing capacity, but it does not maximize use of existing infrastructure.

Preliminary
Preferred
Servicing
Solution:
Expand the
Existing
Havelock
WWTP



What are the Next Steps?



- ✓ Complete additional studies to provide information to the detailed evaluation:
 - Natural Environment Inventory
 - Archaeological and Cultural Heritage Assessments
 - Receiving Water Assessment of Plato Creek
- ✓ Assess advantages/disadvantages of the alternative design concepts to expand the Havelock WWTP. Alternative design concepts include:
 - Re-rate the Plant Capacity
 - Use Existing Previously Decommissioned Lagoon(s) for Flow Equalization
 - Expand Mechanical Plant Using Existing or New Technologies
- ✓ Complete a detailed evaluation of the design concepts based on the criteria and weighting factors shown in Slide 11.
- ✓ Select the design concept that achieves the highest score in the evaluation process.

The results of the detailed evaluation process and preliminary preferred design concept will be presented to the public for review and input at a second Public Information Centre.

Thank you for Participating! Please Stay Engaged

After the virtual PIC, the Project Team will:

- Review and consider input received during the virtual Public Information Centre No.1
- Confirm the recommended alternative solution to provide additional wastewater treatment capacity to the Village of Havelock
- Continue with the next phases of the Class EA study process.

Stay Involved!

Please complete the **Online Comment Form** available on the webpage or email questions or comments to the project team by April 21st..



Project Information

For more information about this project, please visit our webpage:

www.hbmtwp.ca

 Should you have any questions or comments at any time during the project, please contact:

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