Halton Region Integrated Master Plan - Public Information Centre #1

The following provides a text version of the audio that is included in the videos.

Video 2 – Water and Wastewater

Slide 1 (Water&Wastewater Introduction)

Hello and welcome to the Water and Wastewater video – the second of four videos for the Halton Region Integrated Master Plan Study. In this video, we will review the existing conditions of the Water and Wastewater systems in Halton Region, the Water and Wastewater work that the Region has completed or initiated since the last Master Plan, and some opportunities that can be considered as part of the master plan update.

The water component of the plan focuses on the delivery of safe, clean drinking water to homes and businesses, while the wastewater component addresses the collection and treatment of sewage before returning the treated water to the environment.

Slide 2 (Existing Conditions – Water)

Halton Region's water system services the City of Burlington, the Town of Oakville, the Town of Milton and part of the Town of Halton Hills including the communities of Acton, Campbellville and Georgetown.

The existing water system is comprised of the lake-based system and groundwater system. The existing lake-based system distributes drinking water to the City of Burlington, the Town of Oakville, part of the Town of Milton and a small part of the Town of Halton Hills.

There are four groundwater supply systems currently distributing to residents of Milton, Georgetown, Acton and Campbellville.

Water is treated at either the lake-based water purification plants or at the well facilities before it is pumped through the water distribution network. Treated drinking water is stored at several in-ground or above ground storage facilities for water to be used in emergency or fire conditions.

Slide 3 (Existing Conditions – Wastewater)

The Halton Region wastewater system also services the City of Burlington, the Town of Oakville, the Town of Milton and part of the Town of Halton Hills including the communities of Acton and Georgetown.

The existing wastewater infrastructure is comprised of a lake-based system in South Halton and a stream-based system in North Halton.

The lake-based wastewater system includes four large drainage areas that discharge to Lake Ontario based treatment plants: Skyway, Mid-Halton, Oakville Southeast and Oakville Southwest Wastewater Treatment Plants.

There are stream-based wastewater treatment plants in Acton and Georgetown. A stream-based wastewater treatment plant in Milton was recently decommissioned and a new wastewater pumping station was constructed with flows pumping to the Mid-Halton Wastewater Treatment Plant.

Wastewater is collected in small diameter local sewers and is conveyed though large trunk sewers before discharging to the respective treatment plants. Where gravity sewer servicing is not possible due to topographical constraints, wastewater pumping stations are constructed to pump flow to the nearest gravity sewer.

Slide 4 (Opportunities and Considerations – Water System)

There are several opportunities and considerations for Halton's Water system:

1. Expanding the water treatment capacity in Halton to support growth, primarily provided by the Burloak Water Purification Plant that has site capacity for expansion and future planned upgrades;
2. Bronte Creek and Sixteen Mile Creek present challenges for watermain crossings and moving water west to east, then north into the greenfield growth areas of Milton and Georgetown;
3. Drinking water is provided to Milton and Georgetown by both groundwater and lake-based water supply sources. Growth in the groundwater service area and subsequent well capacity will need to be considered;
4. Intensification growth within several key Major Transit Station Areas (or M-T-S-A's) will require continued infrastructure investments;
5. Lake-based water transmission from south to north is achieved through two main trunk watermains, also known as spines. Further growth in Milton and Georgetown will increase the south to north supply capacity needs;
6. Extension of trunk water infrastructure north of Highway 401 will support growth in Halton Hills; and lastly
7. Security of supply for water pumping and transmission will be critical as growth increases further from supply sources.

Slide 5 (Opportunities and Considerations – Wastewater System)

There are several opportunities and considerations for Halton's Wastewater system:

1. Expanding the wastewaster treatment capacity in Halton to support growth, primarily provided at the Mid-Halton Wastewater Treatment Plant that has site capacity for expansion and future planned upgrades.
2. Sixteen Mile Creek presents challenges for gravity sewer servicing. In order to ensure the wastewater flows west and south to the Mid-Halton Wastewater Treatment Plant, pumping stations are required.
3. Intensification growth within several key Major Transit Station Areas (or M-T-S-A's) across the Region will need to be considered at the existing Wastewater Treatment Plants as well as local collection systems.
4. Trunk sewer extension for greenfield growth in Halton Hills and Milton.
5. Infrastructure upgrades to support growth across the Region.
6. Energy efficient strategies that consider climate change will be used where feasible when selecting servicing strategies; and lastly
7. While the wastewater system is being evaluated through the I-M-P process, strategies will also be considered that simplify and consolidate the collection and treatment system.

Slide 6 (We Want to Hear From You)

Thank you for your interest in this study. This video highlighted the existing conditions of water and wastewater in Halton, as well as opportunities and considerations.

We encourage you to provide your comments and feedback by completing the online survey by January 2, 2024. All comments and feedback will be taken into consideration as we move into the next phase of the Master Plan study.

This concludes Video 2 for Water and Wastewater. Please continue to Video 3 for Transportation.