## HALDIMAND COUNTY

Memorandum ECW-M03-2021 New Caledonia Wastewater Treatment Plant Update



## For Consideration by Council in Committee on June 22, 2021

To: Mayor Hewitt and Members of Council

From: Tyson Haedrich, M. Eng., P. Eng., General Manager of Engineering & Capital Works

Based on an analysis of the existing and projected wastewater flows in Caledonia through the Caledonia Master Servicing Plan (MSP) and the Haldimand County Official Plan Update - Phase 1 Growth Strategy it has been determined that a new wastewater treatment plant will be required on the north side of Caledonia to service future growth.

The 2021 Rate Supported Capital Forecast includes \$46 million to fund a new Caledonia wastewater treatment plant (WWTP). The funding for the new plant will be paid through Development Charges (and is currently being collected) as the new capacity will be used to directly support new growth in the County.

This new wastewater treatment plant, in combination with the existing wastewater treatment plant south of the Grand River, will allow for all existing and proposed expansion lands in Caledonia to be serviced.

The new wastewater treatment plant requires that a Municipal Class Environmental Assessment be completed prior to construction. This process provides a legislated structured approach that involves evaluating options based on economic, social and environmental criteria and consultation. By following this process the ultimate decision is transparent and should it be challenged, defensible within a formal framework. At a high level the Environmental Assessment process consists of five phases as follows:

- Phase 1 Identify the problem (deficiency) or opportunity.
- Phase 2 Identify preferred solution to address the problem or opportunity.
- Phase 3 Identify method of implementing the preferred solution.
- Phase 4 Complete Environmental Study Report.
- Phase 5 Complete contract drawings and documents and proceed to construction and operation.

As part of the Caledonia MSP, Phases 1 and 2 of the Environmental Assessment process have been completed for infrastructure projects identified in the plan, including the new wastewater treatment plant. The final draft of the MSP has determined that the preferred solution for providing future servicing for Caledonia is a new wastewater treatment plant located in an area east of McClung Road along the north side of the Grand River.

The proposed timelines and funding for the new Caledonia wastewater treatment plant are laid out in the 2021 Rate Supported Capital Forecast as follows:

- 2021 \$1.6 million for Phase 3 work including optioning of land
- 2022 \$2.1 million for Phase 4 work (Environmental Study Report)
- 2023 \$5.4 million for Phase 5 design work
- 2025 \$37.0 million for Phase 5 construction

The next step in the Environmental Assessment process (Phase 3) is to specifically identify the location for the wastewater treatment plant (the method of implementing the preferred solution). This phase (as well as Phases 1 and 2) requires mandatory public and agency consultation to ensure an open and transparent process.

As part of the preliminary work for Phase 3 of the Environmental Assessment a WWTP Siting Feasibility Study was completed in May by JL Richards, the same firm completing the Caledonia MSP. This work identified a number of constraints for siting a new plant such as the undermined areas from gypsum mining, proximity to existing residential homes, access to utilities, etc. that will feed directly into the Phase 3 work.

A Request for Proposal (RFP) is being prepared to engage consulting services to complete Phase 3 of the Environmental Assessment which will identify the preferred site location(s) and support land optioning.

Following the completion of Phase 3 work, staff plan to immediately initiate Phase 4 activities in order to complete all requirements of the Municipal Class Environmental Assessment. The land acquisition approach for the new wastewater treatment plant has changed slightly in that staff are recommending to option lands upon the completion of Phase 3 work in late 2021 and proceed with the purchase of lands upon the completion of Phase 4 work, expected in late 2022. As part of the land purchase the County will also take into consideration the possibility of constructing a new roads yard on the same site.

Given that the project is located within the Haldimand Tract it is anticipated that the consultation process may take some time to complete, however, staff are focused on achieving a 2025 construction start date.

It should be noted that several conversations regarding possible sites and potential land purchases have taken place with existing landowners over the past year, however, these were done on an informal basis and the Phase 3 work will formally identify a preferred site(s) for the wastewater treatment plant though an open and transparent process.