



Meeting Date: May 3, 2023

Submitted by: Michael Di Lullo, CAO, and Eric Joudrey, Manager of Water and Wastewater Operations

Report No: CAO-13-2023

Subject: Grant Partnership for Wastewater Testing Project

Recommendation:

THAT Report CAO-13-2023 re: Grant Partnership for Wastewater Testing Project be received for information.

Purpose:

To update Council on a grant submission that has been approved as a result of a partnership opportunity with Western University and other stakeholders to conduct experimentation in wastewater using new technologies.

Background:

Middlesex Centre values its partnerships with education institutions and there have been many projects that have proven successful. In 2021, the Municipality partnered with Western University and other stakeholders for a grant under the Natural Sciences and Engineering Research of Council (NSERC) which focused on testing in wastewater.

Recently, another grant submission was approved through NSERC involving a number of stakeholders, including Western University, University of British Columbia, Toronto Metropolitan University, USP Technologies, Ontario Water Consortium with Middlesex Centre as a municipal participant.

The goal of the project is to create an alliance of multidisciplinary subject matter experts, industries, and municipalities to tackle the issue of accurate and reliable Greenhouse Gasses (GHG) quantification in municipal wastewater systems.

Analysis:

North American municipalities are recognized as major contributors to global green house gas (GHG) emissions, with water resource recovery facilities (WRRFs) and sewers responsible not only for the consumption of considerable amounts of non-renewable resources.

In order to obtain the data, a number of project sites have been identified including a range of municipalities and WRRF sizes from very small (Ilderton) to medium (London) and large (Toronto).

The testing that will be at the Ilderton site will be a low-risk affair which will enable our operations staff to learn and speak with the researchers as we accommodate the implementation of the research at a live test site (being the Ilderton wastewater location).

This is a great opportunity for Middlesex Centre to establish these types of relationships while learning from world-class institutions which bodes well for our organization. There is good possibility to implement the technologies for the betterment of our assets in future.

The grant timeline will be done over the course of a three year study, timelines for when testing will commence at the Ilderton site have not been finalized.

Financial Implications:

The NSERC grant has been approved for \$1.5 million and the municipal cost for this partnership is through in-kind allowing for access to the site and minimal staff time/participation so there is no budget impact.

Strategic Plan:

This matter aligns with following strategic priorities:

- Sustainable Infrastructure and Services

This partnership opportunity for the Municipality bodes well as we continue to have dialogue with our institutions. This aligns with our strategic priorities of learning how to make best use of our infrastructure services while solidifying partnership opportunities.

Attachments:

N/A