



The Corporation of the Town of Tecumseh

Public Works & Engineering Services

To: Mayor and Members of Council

From: Phil Bartnik, Director Public Works & Engineering Services

Date to Council: June 27, 2023

Report Number: PWES-2023-51

Subject: Source Water Protection 2022 Annual Progress Reports

Recommendations

It is recommended:

That Report PWES-2023-51 Source Water Protection 2022 Annual Progress Reports, be received.

Background

Source Protection Plans protect municipal wells and surface water intakes from specific activities that may pose a threat to drinking water. The Ontario government passed the Clean Water Act in 2006 to protect drinking water because of the Walkerton E. coli outbreak tragedy in May 2000. The Clean Water Act established a process for developing local, watershed-based Source Protection Plans.

Lake St. Clair, the Detroit River and Lake Erie provide the Windsor-Essex Region with its municipal drinking water.

The Essex Region Source Protection Plan (SPP) contains policies to ensure that identified potential risks to the source water are prohibited or managed in a way that protects the municipal drinking water supply.

The Essex Region SPP was first developed in 2015 by a Source Protection Committee (SPC) in consultation with municipalities, community groups and residents, and is

supported by the Essex Region Conservation Authority's Board of Directors, which is the Source Protection Authority (SPA).

Source Protection Progress Reports are submitted to the Town on an annual basis. The 2022 Source Protection Annual Progress Report and the 2022 Risk Management Official Annual Progress Report (Attachment 1) highlight the progress made toward implementation of the Essex Region SPP up to December 31, 2022 and actions taken from January 1 to December 31, 2022.

A representative from the Essex Region Conservation Authority will be in attendance at the June 27, 2023 Regular Council meeting to present the 2022 Annual Progress Reports (Attachment 2) and answer any questions and/or provide additional information as requested.

Comments

The Source Protection Annual Progress Report is summarized below:

1. Source Protection Plan Policies and Addressing Significant Risks

There are 44 Essex Region SPP policies to address Significant Drinking Water Threats (SDWT). Thirty-eight policies are now fully 'implemented,' up from twenty-nine, with only four policies considered 'in progress'. The remaining four policies have been reviewed and require no further action.

Policies respecting existing SDWTs meeting criteria defined in s.57, s.58 and existing large fuel tanks were implemented.

2. Municipal Progress: Addressing Risks on the Ground

Planning and building decisions must correspond with policies that address vulnerable areas within the municipalities in the Essex Region Source Protection Area (ERSPA) where SDWT have been identified. It is encouraged that municipalities review their process on an annual basis to validate its use and efficacy.

Of the 11 municipalities in the ERSPA, the Towns of Tecumseh, LaSalle, and Essex in addition to the County of Essex have completed their required Official Plan conformity exercises. The remaining seven municipalities remain in process of amending their respective Official Plans to comply with the policies outlined in the Essex Region SPP.

3. Septic Inspections

This is not applicable to the Essex Region SPA.

While mandatory septic inspections are not required, landowners are encouraged to have their septic systems inspected and maintained.

4. Risk Management Plans

In the ERSPA, the handling of storage for liquid fuel volumes greater than 15,000-litres was identified as a SDWT. As a form of mitigation, Risk Management Plans (RMPs) are established, in consultation with a Risk Management Official (RMO/I), to show preventative actions are being taken against spills.

In 2022, two RMPs were established to address the last remaining existing threats.

Six applications were reviewed in 2022 resulting in one RMP being established for future (new) threat and one RMP being resolved through Section 59 municipal screening processes.

There have been no cases of non-compliance with the established RMPs.

5. Provincial Progress: Addressing Risks on the Ground

All policies in the Essex Region SPP that use Provincial Instruments (i.e. Environmental Compliance Approvals) are fully implemented and incorporate SWP into their processes.

In 2022, Provincial Ministries examined four applications for sewage works and one application for an aggregate license in vulnerable areas of the Essex Region. None were found to be SDWT.

6. Source Protection Awareness and Change in Behaviours

Road signs have been installed across the ERSPA to identify sections of road where accidental spills could contaminate our sources of drinking water. Signs continue to be replaced as needed.

If a spill is observed, residents are advised to contact the Spills Action Center at 1-800-268-6060.

7. Source Protection Plan Policies: Summary of Delays

There are no significant delays in the implementation of the Essex Region SPP.

8. Source Water Quality: Monitoring and Actions

The Essex Region SPP includes a policy to continue monitoring for phosphorus and microcystin as a drinking water issue and harmful algae blooms (HAB) in general. In 2022, the predicted severity score of the HAB was between 4 to 5.5. In November 2022, the National Oceanic and Atmospheric Administration (NOAA) announced that the actual bloom severity received a score of 6.8, which is a moderately severe bloom and more severe than 2021. The severity index ranges from 0 to 10.

Lake St. Clair experiences annual HABs in the nearshore areas on the north shore of the Essex Region, affecting the Stoney Point and Belle River drinking water intakes. In 2022, HAB made its way to the shores of Essex a few times. This included a sighting and report made by a local Lake Erie Water Keeper in early November. This was reported to the Spills Action Centre and confirmed by NOAA satellites.

If citizens observe what is suspected to be a harmful algal bloom (classic description is that it looks like green paint and often has a white/yellow scum on top), it is strongly encouraged to take photos and report it to the Ministry of the Environment's Spills Action Centre.

9. Science-based Assessment Reports: Works Plans

The update of the Essex Region SPP per Section 36 of the *Clean Water Act (2006)* is on track to be completed at the end of 2023. The formal consultation process on new and amended policies will begin mid-2023.

10. More from the Watershed

In 2023, the SPC and ERSPA will be finalizing their comprehensive review and updates to the Essex Region SPP and Assessment Report. Consultation with MECP, municipalities and the public will take place as part of the process.

Progress scores for achieving the objectives of the source protection plan are: (1) Progressing Well/On Target; (2) Satisfactory; or (3) Limited Progress. The overall score for the Essex Region SPP for 2022 is **Progressing Well**, although Municipal Progress is rated as **Limited Progress**.

Consultations

Essex Region Conservation Authority

Financial Implications

There are no financial implications associated with this report.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input checked="" type="checkbox"/>	Ensure that Tecumseh’s current and future growth is built upon the principles of sustainability and strategic decision-making.
<input checked="" type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh’s plans and priorities.
<input checked="" type="checkbox"/>	Steward the Town’s “continuous improvement” approach to municipal service delivery to residents and businesses.
<input checked="" type="checkbox"/>	Demonstrate the Town’s leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable

Website Social Media News Release Local Newspaper

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Joseph Lappalainen
Project Technician

Reviewed by:

Brad Dupuis, C. Tech.
Manager Water Services

Reviewed by:

Phil Bartnik, P.Eng.
Director Public Works & Engineering Services

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
1	2022 Annual Progress Reports
2	Essex Region Conservation Authority, Presentation to Council