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Wednesday, May 1, 2024

Town of Amherstburg
Town of Essex
Town of Kingsville
Town of LaSalle
Municipality of Leamington
Municipality of Lakeshore
Township of Pelee
Town of Tecumseh
City of Windsor
Municipality of Chatham-Kent
County of Essex

Attention: Municipal Clerks for Distribution to Council

Re: 2023 Annual Progress Reports on the implementation of the Essex Region Source Protection Plan

The Source Protection Authority is required to prepare an annual progress report under S.46 of the Clean Water Act by 1 May of each year. The reports are required to describe the measures taken to implement the Essex Region Source Protection Plan (SPP), the results of any monitoring program, the extent to which the objectives in the SPP are being achieved, and other information required in the Regulations. The information used to prepare the Annual Progress Report comes from Implementing Bodies, who are required by Monitoring Policies in the SPP to prepare and submit a progress report to the SPA by February 1 of each year.

Annual Progress Report highlights

Of the 44 policies in the Essex Region SPP that address SDWTs, 38 (86%) are now fully implemented. Four policies (9%) are considered in progress and the remaining two policies have been reviewed and it has been determined that no further action is required.

Municipalities are required to include considerations for Source Water Protection in their next Official Plan update as per s.40 of the *Clean Water Act*. Zoning by-law conformity may also be required for certain policies in the Source Protection Plan as per s.42 of the *Clean Water Act* (see attached guidance for Official Plan conformity provided by the MECP). The County of Essex, Town of Essex, Town of LaSalle, Town of Tecumseh, and Town of Kingsville have completed their Official Plan conformity exercises; only the Town of Essex has completed their zoning by-law

conformity exercise. The County of Essex as an upper tier municipality does not require ZBL amendments. All Official Plans are required to include mapping to identify vulnerable areas where activities could pose a significant drinking water threat.

The remaining municipalities (6 of 11) have been reporting being in the process of amending their Official Plan to conform with the policies in the Essex Region SPP for the last several years. With the advent of Bill 23 and the delay in the release of the Provincial Direction and Provincial Policy Statement 2023, OP revisions are likely to be further delayed and it is unknown when they will be complete. For these reasons, the Committee unanimously choose to lower the score on Municipal Progress in 2022 and with minimal progress in 2023, it was the Committee's unanimous decision to retain the score of 'L – Limited Progress'. The Committee encourages municipalities to provide a target date by which the necessary information to bring their OPs into conformity with the Essex Region SPP. This can be completed as an issue-specific amendment under section 17 of the Planning Act, or under the mandatory comprehensive five-year review of their official plan under section 26 of the Planning Act.

All of the municipalities in the Essex Region delegated their authority to implement policies under Part IV of the *Clean Water Act* to the Essex Region Conservation Authority through an agreement that began in 2015 and has been extended to December 31, 2024. Risk Management Plans have been established for all of the identified existing significant drinking water threats in the Essex Region SPA. In 2023, three (3) RMPs were established for future (new) fuel threat(s) through s.59 municipal screening processes. Since the SPP took effect, 21 RMPs have been established through the s. 59 process for new (future) threats. Further details can be found in the attached 2023 Risk Management Official Annual Progress Report.

Harmful Algal Blooms (HABs) continue to be an annual occurrence and are identified as a drinking water issue for several of our drinking water intakes. While the policies in SPP related to HABs are non-legally binding, ERCA is committed to implementing relevant actions to reduce phosphorous in our region, and it is essential that we continue to highlight this international issue as a concern for our drinking water intakes.

ERSPA staff have been working with the SPC on a comprehensive review of the SPP and its policies. It is anticipated that these documents will be available for consultation in Fall 2024.



Katie Stammler, PhD., Source Water
Protection Program Manager



Tom Fuerth, P.Eng, Chair, Essex Region
Source Protection Committee

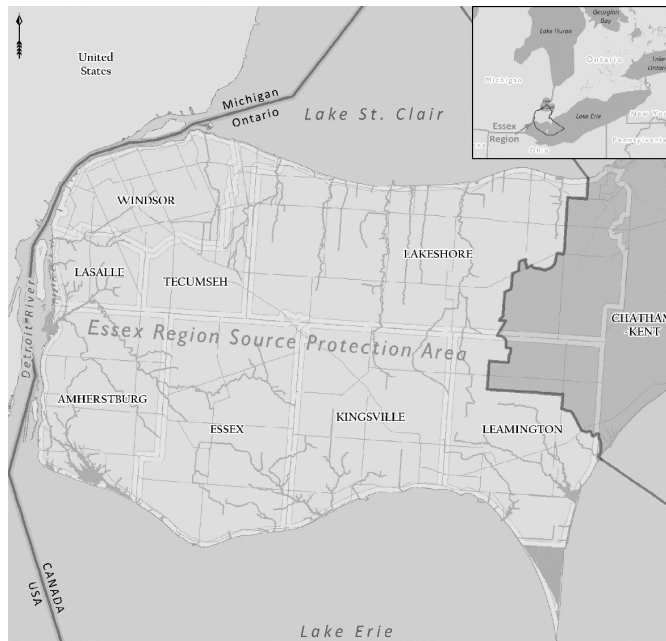
Attached:

- 2023 Essex Region Source Protection Authority Annual Progress Report
- 2023 Risk Management Official Annual Progress Report

2023 ERPA Source Protection Annual Progress Report | 1 May 2024

I. Introduction

This annual progress report outlines the progress made toward implementing the policies in the Essex Region Source Protection Plan (SPP) for the Essex Region Source Protection Area (ERSPA), as required by the *Clean Water Act* and its Regulations. Our policies work by either eliminating or managing activities that could be considered a threat to our sources of drinking water and are based on the foundational knowledge that the actions we take on land have an impact on our local waterways and ultimately our sources of drinking water. Following an extensive process that included broad public input, the Essex Region SPP came into effect on October 1, 2015. This report highlights progress made toward implementation up to December 31, 2023, and highlights the actions taken from January 1 to December 31, 2023.



Scoring for certain elements of the Annual Progress Reports is based on the following:

Progressing Well/On Target (P) – Most of the policies have been implemented &/or are progressing.

Satisfactory (S) – Some of the policies have been implemented and/or are progressing.

Limited progress (L) – A few of policies have been implemented and/or are progressing.

II. A message from your local Source Protection Committee

P – Progressing Well

The Essex Region Source Protection Committee has reviewed this report and once again it is our unanimous opinion that implementation of the policies in the Essex Region Source Protection Plan is progressing well.

The one area that seems to have reached a stalemate is the section that requires specific action by municipalities. The Committee is aware of the challenges that continue to delay the completion of the required review of Official Plan (OP) and Zoning By-Law documents that govern development. Various changes by the province to the governing laws by which the municipalities must conform have exacerbated their ability to produce and approve new OP and Zoning by-laws as quickly as we might like. The Committee suggests that, rather than waiting for the full review of existing documents to be completed, they see their way to adopt amendments that will be included in the final production of their fully updated documents. We are given to understand that the required amendment that would accomplish conformity with the Source Protection Plan is not onerous and has been adopted in new documents that have been finalized by other municipalities. The Committee also encourages SPA staff to offer their suggestions in this regard. Those municipalities that have not completed the required review exercise should be able to come into compliance with the requirement to incorporate Source Water Protection into their planning documents with this method. The Committee also feels that the Chair and SPA staff should appear before each of the elected council's members to put forward this suggestion.

Although the blue-green algae issue made it through another year at a somewhat lower severity than we have witnessed in previous years, the Committee is of the opinion that Source Protection staff should continue to monitor the ingredients that contribute to the annual occurrence of Harmful Algal Blooms. The Committee has been made aware that funding for some programs that support work on the ground (monitoring and stewardship) was discontinued in 2023, and that consistent and uninterrupted data and relationships are being lost. If we are not able to track conditions in the local environment our hands will be tied in making informed decisions regarding the efficacy of our Source Protection Program. Further, stewardship activities provide frontline interactions to encourage uptake of activities that will reduce nutrient loss to the environment. We encourage various funding sources to reconsider abandoning these programs.

III. Our Watershed

The Essex Region Source Protection Area (ERSPA) is approximately 1681 km² and coincides with the watershed boundaries of the Essex Region Conservation Authority (ERCA). The ERSPA is comprised of 28 smaller sub-watersheds, flowing northward into Lake St. Clair, westward into the Detroit River, or southward into Lake Erie. The area predominantly consists of a flat clay plain with the exception of some sandy areas, primarily in the southern portion of the Region. The predominant land use in the watershed is agriculture, due to the region's excellent farmland and growing conditions.

Municipal drinking water supplies in the Essex Region Watershed are drawn from surface water intakes in the Great Lakes system - Lake Erie, Lake St. Clair and the Detroit River. There are seven municipal Water Treatment Plants (WTPs) in the ERSPA, and one WTP outside of the ERSPA in Wheatley serving part of the Municipality of Leamington. Stoney Point and Lakeshore (Belle River) WTPs have their water intakes located in Lake St. Clair; the A. H. Weeks (Windsor) and Amherstburg WTPs have their intakes in the Detroit River; and the Harrow-Colchester South, Union, Pelee Island West Shore and the Wheatley WTPs have their intakes in Lake Erie. These municipal WTPs serve over 95 percent of the population in the ERSPA. The remaining population, less than five percent, depends on groundwater or hauled water.

In the ERSPA, the handling and storage of large volumes of liquid fuel (> 15,000 L) was identified as a significant drinking water threat (SDWT). Modeling exercises showed that a spill of this volume of fuel close to any body of water could result in contamination of the source water at our drinking water intakes. This resulted in the delineation of an extensive Event Based Area (EBA) in which large volumes of fuel are considered a threat to our drinking water. To mitigate these threats, Risk Management Plans (RMPs) that show actions are being taken to prevent spills are required to be established in consultation with a Risk Management Official.

To learn more about Source Protection in the Essex Region, please visit our website:
<https://essexregionconservation.ca/source-water-protection/>

IV. At a Glance: Progress on Source Protection Plan Implementation

1. Source Protection Plan Policies and Addressing Significant Risks

P – Progressing Well

Of the 44 policies in the Essex Region SPP that address SDWTs, 38 (86%) are fully implemented and 4 (9%) are considered to be in progress. The remaining two policies have been reviewed and it has been determined that no further action is required.

Three (3) in progress policies use s.58 (risk management plans) in specific vulnerable areas to manage SDWTs. The RMO has conducted a review and has not encountered any existing SDWTs. However, these policies have been challenging to implement and the policy approaches will be reviewed in the next Source Protection Plan update. Any new potential SDWTs are captured during the s.59 screening process. One (1) in progress policy requires Windsor, Lakeshore and Amherstburg to prohibit sewage treatment tanks in IPZ-1s. This policy is implemented in Windsor and Lakeshore and will be included in Amherstburg's next Official Plan update. Importantly, this activity is also prohibited using a Prescribed Instrument policy and there are no existing threats.

2. Municipal Progress: Addressing Risks on the Ground

L – Limited Progress

All of the 11 municipalities in the ERSPA have vulnerable areas where SDWT policies apply. Municipalities are required to ensure that their planning and building decisions conform with the Essex Region SPP and must also ensure that their Official Plan conforms with the SPP upon the next Planning Act review.

The County of Essex, Town of Essex, LaSalle, Tecumseh and Kingsville have completed their required Official Plan (OP) conformity exercises. The remaining municipalities (6 of 11) are in the process of amending their OPs and have been for several years. ERSPA staff have reviewed some draft OP revisions, in some cases multiple times. With the advent of Bill 23 and the delay in the release of the Provincial Direction and Provincial Policy Statement 2023, OP revisions are likely to be further delayed and it is unknown when they will be complete. Importantly, the overall status of OP revisions is minimally changed from the previous annual report with limited progress since the Essex Region SPP came into effect. For these reasons, the Committee unanimously choose to lower the score on Municipal Progress in 2022 and with minimal progress in 2023, it was the Committee's unanimous decision to retain the score of 'L – Limited Progress'. The Committee encourages municipalities to provide a target date by which the necessary information to bring their OPs into conformity with the Essex Region SPP will be incorporated either through a complete update or Official Plan Amendment.

All lower tier municipalities are responsible for day-to-day land use planning and building permit decisions and have integrated source protection requirements to ensure that their planning and building decisions conform with the policies in the Essex Region SPP. Municipalities are encouraged to review this process annually to ensure its use and efficacy. The Essex Region Conservation Authority has been delegated by all of these municipalities to implement Part IV policies on their behalf. At the request of municipalities, ERSPA will deliver additional training to municipal staff in 2024.

3. Septic Inspections

Not applicable to the ERSPA. There are currently no policies in the Essex Region SPP that require mandatory septic inspections. However, the Committee notes that high levels of *E.coli* remain a concern for our local waterways and beaches. Landowners are encouraged to have their septic systems inspected and maintained regularly.

4. Risk Management Plans

P - Progressing Well

As of January 2019, threat verification inspections were carried out in accordance with the *Clean Water Act* by the RMO/I for all 384 existing properties originally identified in the ERSPA's Assessment Report to determine whether or not existing activities met the criteria to be considered a SDWT (the handling & storage of fuel). Of these, 96 were identified to be SDWTs. As of 2022, RMPs were established for all 96 existing threats.

Four (4) s.59 applications were reviewed in 2023 resulting in three (3) RMPs being established for new fuel threats. Since the SPP took affect, 21 RMPs have been established through the s.59 process for new threats. To date, all of the RMPs established for new fuel tanks have been for greenhouse construction and crude oil and brine operations. There have not been any applications reviewed for the other Part IV policies applicable to Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1.

In 2022, the RMO began conducting compliance reviews for individuals with existing Risk Management Plans issued under a s.58 (existing threats). Due to staffing changes, compliance reviews were not conducted in 2023. Please refer to the supplementary Part IV 2022 Risk Management Services Report for further information and details.

5. Provincial Progress: Addressing Risks on the Ground

P – Progressing Well

The Essex Region SPP includes 17 policies that use Provincial Instruments (Environmental Compliance Approvals) to address SDWTs. Screening for future threats became mandatory the date the SPP came into effect (October 1, 2015). Our policies set out a timeline of 5 years (October 1, 2020) to review and make necessary changes to previously issued PIs to address existing SDWTs, this work was completed in 2018. Ontario Ministries screen new applications and amend Prescribed Instruments as needed to address any new SDWTs. As a result of this work, all of the policies that use Provincial Instruments in the Essex Region SPP are fully implemented.

As of December 2018, all 38 of the existing PIs were reviewed. Five of these were considered to be SDWTs where the PI was sufficient and no additional conditions were required to mitigate the SDWT. In 2023, no new applications for SDWTs were reviewed by Provincial Ministries in vulnerable areas of the Essex Region. Since 2016, 37 new applications for PIs have been reviewed in the ERSPA. No new SDWTs have been identified through this process.

6. Source Protection Awareness and Change in Behaviour

Road signs have been installed across the ERSPA as part of a provincial awareness initiative. The Ontario Ministry of Transportation (MTO) installed signs five signs in the Essex Region on Hwy 401, Hwy 77 and Hwy 3. Municipalities coordinated installation of more than 60 signs on local municipal and county roads. Signs continue to be replaced as needed.

These road signs identify sections of road where accidental spills could contaminate our sources of drinking water. As part of the Essex Region Source Protection Plan implementation, emergency responders have been notified about these zones so that our sources of drinking water can be protected in the event of a spill. The use of standardized signs throughout Ontario will help to raise public awareness about the importance of protecting our local sources of drinking water.

The main risk to drinking water in our local area is the handling and storage of liquid fuel. If a spill is observed, residents are advised to contact the Spills Action Center at 1-800-268-6060. To learn more about these road signs in the Essex Region, check out our video!

<https://www.youtube.com/watch?v=MwO3V1zsUAs>

7. Source Protection Plan Policies: Summary of Delay

There have been no significant delays in the implementation of the Essex Region Source Protection Plan.

8. Source Water Quality: Monitoring and Actions

Harmful algal blooms (HABs) are an annual occurrence in Lake Erie and Lake St. Clair. HABs are formed by blue-green algae (or cyanobacteria) that produce a neurotoxin called microcystin, which is a parameter listed on Schedule 2 of the Ontario Drinking Water Quality Standards. The Essex Region SPC determined that microcystin was a drinking water issue for Lake Erie intakes in 2014. The data were reviewed for all of the intakes in the Essex Region in 2023, including those in Lake St. Clair, the Detroit River and Lake Erie. The SPC has determined that microcystin is a drinking water issue for all intakes based on that review. The SPP and Assessment Report will be updated accordingly.

Each fall, NOAA releases a final seasonal assessment for the severity of the Lake Erie HAB. The severity index ranges from zero to 10 and indicates the amount of bloom biomass over the peak 30 days of the bloom. These models are not currently able to predict nor report on the toxicity of the bloom. In 2023, the Lake Erie HAB received a score of 5.3, making it a moderately severe bloom but less severe than 2022. It is not yet possible to declare any trend in bloom severity, nor to determine whether on-the-ground actions are responsible for lowering bloom severity. Importantly, peak bloom periods are now longer. In 2010 the peak bloom period was 10 days, in 2022 it was 20-30 days.

The Source Protection Plan includes a policy to continue monitoring for phosphorus and microcystin, and a regional education and outreach policy for phosphorus, microcystin as a drinking water issue, and algae blooms in general. ERCA continues to be a leader in phosphorus monitoring and has integrated HABs into educational programs directed at a variety of target audiences. Unfortunately, in 2023, many of the funding streams that ERCA has relied upon for monitoring were not available. This resulted in a significant decrease in the number of samples taken and the number of sites monitored. Additionally, there were fewer opportunities to participate in outreach events. At the end of 2023, ERCA's Agricultural Stewardship program was put on hold unless or until additional sources of funding become available. At the time of this writing, there are new grants in place or pending that will re-instate some monitoring programs in 2024, but outreach and stewardship are still uncertain.

In 2023, ERCA published two important reports. The [Kingsville Leamington Nutrient Project](#) report uses 10 years of data (2012 – 2022) to explore trends and patterns in greenhouse and non-greenhouse influenced streams. The report uses multiple lines of evidence and shows that nutrient concentrations are higher in greenhouse-influenced streams. Importantly, concentrations are increasing in streams with newly built greenhouses. ERCA is working with Provincial and Federal agencies on next steps for monitoring and mitigation. The [Essex Region Phosphorus Management Plan](#) describes the status of phosphorus concentrations in local waterbodies, identifies sources of phosphorus in the Essex Region as well as knowledge gaps, and reduction strategies. It includes a list of Action Items that are intended to be a living document, updated as actions are completed and/or new actions identified.

9. Science-based Assessment Reports: Work Plans

The Essex Region SPA continues to make progress towards completing our s.36 update with a goal of finalizing the update by the end of 2024. The formal consultation process on new and amended policies will begin mid-2024. This process is about a year delayed in part due to the late release of the 2021 Director Technical Rules by the MECP, which were required to prepare new policies and updates to the majority of the existing policies in the Source Protection Plan. Staffing shortages and increased workload in other areas has also contributed to this delay.

10. More from the Watershed

Each year, Implementing Bodies are invited to include any success stories related to Source Water Protection through the Annual Reporting process. The SPC has chosen to highlight the actions taken by our municipalities that help meet the goals of Source Water Protection. Since 2019, several of our municipalities have declared a climate emergency and some have approved Climate Change Adaptation Plans that include actions that will also protect water quality through the reduction and/or mitigation of flooding and erosion. Many municipalities have subsidy programs that provide support for downspout disconnection and rain barrels to mitigate high flow events and backflow valves to prevent basement flooding. Municipalities are also updating sewer master plans with the inclusion and encouragement of riparian buffers, and planning for future flood mitigation. Community events like beach clean ups and tree plantings are supported. Municipalities are also examining their own internal processes and updating standard operating procedures for things like road salt application, sediment control during construction, stormwater management, fire fighting, spill containment, and incorporating low impact design where possible. While our municipalities are behind in updating their Official Plans, they have been taking clear actions to protect the environment, which in turn protects our sources of drinking water. The SPC wishes to acknowledge these actions and encourage our municipalities to continue down this path, especially in light of rising development pressures.

To learn more about our source protection region/area, visit our homepage:
<https://essexregionconservation.ca/source-water-protection/>



Have you seen this Drinking Water Protection sign?

These signs are appearing across Ontario to raise awareness about the vulnerability of our municipal drinking water sources. Governments at the local and provincial level placed signs along roadways where a pollution spill could have a negative impact on our drinking water sources. The main risk to drinking water in the Essex Region Source Protection Area is the handling and storing of liquid fuel. These signs indicate areas where a spill of a large volume of liquid fuel could impact one of our drinking water intakes. If a spill is identified or if you observe what you suspect to be a harmful algal bloom (classic description is that it looks like green paint and often has a white/yellow scum on top), residents should contact the Spills Action Centre at 1-800-268-6060 or online: [Spills Action Centre](#)

2023 Risk Management Official Annual Progress Report

Prepared by:



PART IV IMPLEMENTATION – RISK MANAGEMENT SERVICES

INTRODUCTION

Source water is the water that supplies our drinking water treatment plants. Following the Walkerton Inquiry, the *Clean Water Act, 2006* became part of the Ontario government's commitment to protecting municipal drinking water systems from contamination and overuse, now and into the future. The *Clean Water Act* led to the creation of Source Protection Plans (SPPs) across Ontario. The [Essex Region SPP](#) came into effect on October 1, 2015 and the [Thames-Sydenham and Region SPP](#) came into effect on December 31, 2015.

The SPPs contain policies to ensure that [Significant Drinking Water Threat \(SDWT\) activities](#) identified in vulnerable areas near surface water intakes cease to be or never become a risk to source water. Municipalities are required to have a specially trained and certified Risk Management Official and Risk Management Inspector (RMO/I) to implement policies written under Part IV of the *Clean Water Act*. The municipalities in the Essex Region Source Protection Area (ERSPA) and the Municipality of Chatham-Kent in the Thames-Sydenham and Region Source Protection Region (TSRSPR) delegated these obligations to the Essex Region Conservation Authority (ERCA). This agreement began in 2015 and is renewed on a three-year cycle. The terms of the current agreement expire on December 31, 2024.

There are eight municipal surface water intake systems serving the municipalities in the ERSPA and the southernmost portion of the TSRSPR that have vulnerable areas where Part IV policies apply:

- Stoney Point Intake (Lake St. Clair)
- Lakeshore (Belle River) Intake (Lake St. Clair)
- Windsor (A.H) Weeks Intake (Detroit River)
- Amherstburg Intake (Detroit River)
- Harrow - Colchester Intake (Lake Erie)
- Union Intake (Lake Erie)
- Wheatley Intake (Lake Erie)
- Pelee Island (Lake Erie)

This annual progress report details the progress made by the RMO/I toward the implementation of Part IV policies in both the ERSPA and TSRSPR Source Protection Plans, as required annually by the *Clean Water Act* and its Regulations. The report includes actions taken by the RMO/I between October 1, 2015 and December 31, 2023, highlighting actions between January 1, 2023 and December 31, 2023.

SIGNIFICANT DRINKING WATER THREATS

Activities on the land can pose threats to sources of municipal drinking water through spills and runoff. The above grade handling and storage of large volumes of liquid fuel was determined to be a SDWT in both the ERSPA and TSRSPR in an extensive vulnerable area (Event Based Area). There are additional SDWT activities identified in Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1. The land portion of these areas, however, are small and/or predominantly residential or municipal land use where the identified activities are not likely to exist.

PART IV POLICIES, *CLEAN WATER ACT*

Part IV policies can be used to prohibit (Section 57) or manage (Section 58) activities identified as SDWTs. These policies apply to both existing and future (new) SDWTs located within vulnerable areas identified as Intake Protections Zones (IPZs) or Event Based Areas (EBA). Policies written using restricted land uses (Section 59) are intended to act as a screening tool by municipal planning and building staff to identify any potential new SDWTs that would be subject to Section 57 or Section 58 policies. In the Essex Region Source Protection Area, activities are only prohibited if they do not currently occur in identified vulnerable areas and are not likely to occur in the future. Most of the policies written to address identified and future SDWTs in the SPPs use Section 58, which requires the development of a Risk Management Plan (RMP) to minimize the risks to sources of municipal drinking water.

PROHIBITION (SECTION 57, PART IV POLICIES)

The Essex Region SPP contains six policies that prohibit specific SDWT activities using s.57 of the Clean Water Act. These prohibition policies currently only apply to Lakeshore IPZ-1, Windsor IPZ-1 and Amherstburg IPZ-1 where the designated land use precludes many of these activities. Prohibited activities include the following under specific circumstances as indicated in their relevant policies:

- The application and storage of Agricultural Source Material (ASM)
- The application and storage of Non-Agricultural Source Material (NASM)
- The storage of road salt (>5000 tonnes)
- The storage of snow (>1 ha)

There is no agriculturally zoned land in any of the subject vulnerable areas, therefore the application and storage of both ASM and NASM as defined in the policies cannot occur. In 2022, The RMO confirmed through a detailed review of aerial photography in ERCA's Georcortex, street view imagery from Google, and consultation with the City of Windsor that there are no existing storage structures for salt, nor large areas for snow storage in the subject vulnerable areas that meet the criteria to be a SDWT. The RMO is satisfied that there are no existing activities that are prohibited using s.57 policies. Municipalities have received training to screen for potential SDWTs that meet these criteria, and none have been identified since the Plan came into effect in 2015.

RISK MANAGEMENT PLANS (SECTION 58, PART IV POLICIES)

Risk Management Plans (RMPs) are agreements between the RMO and the person engaged in the activity, typically the landowner or business operator, to prescribe how a SDWT activity is managed on a specific property using appropriate risk management measures (RMMs). RMPs outline existing RMMs and identify additional RMMs required to prevent spills and contain one should it occur. RMPs may be straightforward in circumstances where persons are already implementing RMMs. RMPs are meant to be flexible and allow the activity to continue to occur, provided that RMMs agreed upon are followed. The person engaged in the activity is responsible for maintaining RMMs on site. The RMO/I monitors the implementation of RMPs once they are established and conducts compliance inspections. RMPs can be amended at any time following the effective to date to accurately reflect any changes on the site or to the SDWT activity.

The RMO/I provides guidance and assistance in the development of RMPs through site visits, emails, phone calls and additional meetings. Resources and templates were developed by Risk Management staff and are provided to the proponent during the negotiation of the RMP. The following risk management measures are typically included in RMPs: documentation of regular fuel tank inspections, an updated spill prevention and containment plan, spill emergency response plan and training for staff, and documentation that fuel storage tanks adhere to applicable fuel regulations and remain safe for refueling and storage.

The total number of RMPs established for existing and new significant drinking water threats, and the number of RMPs issued by Order in each municipality in the ERSPA and TSRSPR are reported in Table 1a and Table 1b. Table 2 provides a detailed annual accounting of the activities the RMO/I is required to report to the MECP in compliance with Section 81 of the *Clean Water Act* for the ERSPA. The RMO/I provides responses to the TSRSPR for inclusion in their report to the MECP.

There are three Part IV policies that remain in progress. These policies address the storage of hazardous waste and pesticide in Lakeshore, Windsor and Amherstburg IPZ-1 and the application of pesticide in Lakeshore, Windsor and Amherstburg IPZ-1 and Windsor IPZ-2. The RMO has conducted a thorough review of available information and did not find any existing SDWTs. The RMO is now working with municipalities to confirm that these activities do not currently exist and that new activities are being identified through s.59 screening. The specific pesticides identified are typically only used for agriculture. Importantly, these policies will be updated to align with the 2021 Director Technical Rules.

EXISTING ENUMERATED SIGNIFICANT DRINKING WATER THREAT ACTIVITIES

There were 384 potential SDWTS identified in the ERSPA Source Protection Plan and 33 potential SDWTS identified in the TSRSPR Source Protection Plan when the Plans were written. Threat verification inspections were completed to determine whether the fuel tanks installed on site met the criteria to be considered a SDWT (e.g. capacity, location in relation to the Event Based Area and contents of the fuel tanks). These threat verification inspections and windshield surveys confirmed that there were 96 existing SDWTS in the ERSPA and 9 existing SDWTS in the TSRSPR that required a RMP. As of October 2022, RMPs have been established for all existing SDWTS in both Source Protection Areas.

Of the existing SDWTS, six RMPs were issued by Order in the ERSPA and six in the TSRSPR. Eight of these properties are owned and operated by a corporation that oversees crude oil and brine operations. There was a breakdown in communication that necessitated the completion of the RMPs by Order. The remaining four RMPs issued by Order were for absentee owners of greenhouse cannabis operations.

RESTRICTED LAND USES AND THE WRITTEN DIRECTION (SECTION 59, PART IV POLICIES)

Section 59 (Restricted Land Use) policies serve as a screening process to identify new potential SDWTS through incoming municipal building and planning applications before they are established. If a project meets the criteria outlined in the Written Direction, proponents are notified that they must complete and submit a [Section 59 Application](#) to the RMO/I for review. Building or planning applications cannot proceed until the applicant has demonstrated that a SDWT activity will not pose a risk to drinking water sources (e.g. RMP established) and a written notice to proceed from the RMO/I has been issued.

Between October 1, 2015 and December 31, 2022, the RMO has received 55 applications in the ERSPA and 4 applications in the TSRSPR through Section 59 screening for new potential fuel threats in the Event Based Area. Of these, there were 21 instances in the ERSPA and 2 instances in the TSRSPR where an application met the criteria to be considered a SDWT, triggering the need for a RMP. In these cases, the process for developing a RMP was expedited and a notice to proceed was issued once the RMP was finalized and agreed to. In 2023, three RMPs in the ERSPA was established through the s.59 screening process. To date, all of the RMPs established for new fuel tanks have been for greenhouse construction and crude oil and brine operations. There have not been any applications reviewed for the other Part IV policies applicable to Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1.

COMPLIANCE MONITORING

The RMO began working with individuals with existing Risk Management Plans to ensure compliance. A compliance checklist was circulated to all individuals who were issued a s.58 notice to proceed (existing threats) with a Risk Management Plan established. The compliance check is a self-assessment that allows the RMO to ensure that all documents are up to date and that properties with significant drinking water threat activities continue to implement appropriate Risk Management Measures.

The checklist includes the following items: Proof of adherence to the applicable fuel regulations (ensuring fuel tanks are certified to obtain fuel and/or installed by a TSSA technician), proof of fuel tank inspections, updates to the spill prevention and containment plan, updates to the spill and emergency response plan, and proof of employee training. Unfortunately, due to staffing shortage, compliance monitoring was put on hold for 2023.

MUNICIPAL INTEGRATION

The Risk Management Official will be providing refresher training to Planning and Building staff for municipalities in 2024 at their request. In addition, [training was recorded](#) that applies to all municipalities and is available on YouTube for new municipal staff or those wishing a refresher.

MOVING FORWARD IN 2024

Continuing actions and next steps for Risk Management Services in 2024 include:

- Continue monitoring established risk management plans to ensure compliance
- Review Section 59 Applications circulated to riskmanagement@erca.org as a result of incoming municipal building and planning applications for new developments
- Deliver municipal training sessions on Section 59 processes and Source Protection Plan policies
- Respond to requests from developers, consultants and municipal staff during pre-planning for sites identified through the Section 59 process
- Continue working with local businesses and landowners on negotiating and establishing Risk Management Plans; continue to assist and provide guidance to those affected by Part IV policies
- Renegotiate agreements with municipalities to continue providing Risk Management Services

March 2024

Table 1a – Total number of Risk Management Plans established for existing and future (new) significant drinking water threats in each municipality in the ERSPA since October 1, 2015 for existing threats (AR+) and new threats (s.59). The table also indicates the number of those RMPs that were issued by Order.

Essex Region Source Protection Area (ERSPA)										
	Amherstburg	Essex	Kingsville	Lakeshore	LaSalle	Leamington	Pelee	Tecumseh	Windsor	Total
Total Identified threats in the AR	16	31	93	29	3	164	3	12	33	384
No RMP required (AR)	16	28	62	26	3	121	1	10	29	296
RMPs Required (AR)	-	3	31	3	-	43	2	2	4	88
Threats identified after the AR through field verification (AR +)	-	-	6	-	-	2	-	-	-	8
RMPs established (AR +)	-	3	37	3	-	45	2	2	4	96
RMPs established (s.59)	-	1	2	-	-	18	-	-	-	18
Number of RMPs Issued by Order under Part IV of the CWA	-	-	3	-	-	3	-	-	-	6
Total RMPs established		3	39	3		63	2	2	4	117

Table 1b – Total number of Risk Management Plans established for existing and future (new) significant drinking water threats in each municipality in the TSRSR since October 1, 2015 for existing threats (AR+) and new threats (s.59). The table also indicates the number of those RMPs that were issued by Order.

Thames Sydenham and Region Source Protection Region (ERSR)				
	Lakeshore	Leamington	Chatham Kent	Total
Total Identified threats in the AR	6	9	18	33
No RMP required (AR)	5	6	13	23
RMPs Required (AR)	1	3	5	10
Total threats identified after the AR through field verification (AR +)	-	-	-	-
RMPs established (AR)	1	3	5	9
RMPs established (s.59)	-	2	-	2
Number of Orders Issued Under Part IV of the CWA	-	3	3	6
Total RMPs established	1	9	1	11

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Table 2 – Detailed activity report for the ERSPA provided by the RMO/I to the MECP to comply with Section 81 of the *Clean Water Act*. The RMO/I provides responses to TSRSPR for inclusion in their report to the MECP.

Essex Region Source Protection Area (ERSPA)								
Additional Part IV Reportables under Section 81 of the <i>Clean Water Act</i> (ERSPA)	2016	2017	2018	2019	2020	2021	2022	2023
RMPs established for existing threats (s.58)	0	1	14	34	38	7	2	0
RMPs established for new threats (s.59)	4	0	1	1	2	8	1	3
Total RMPs agreed to or established	4	1	15	35	40	15	3	3
s.59 Applications Received	18	2	2	4	7	12	9	4
S. 59 notices issued for activities to which neither S. 57 nor S.58 policies applied	14	2	1	3	5	4	6	2
S. 59 notices issued for activities to which a S.58 policy applied	4	0	1	1	2	8	1	2
Total S. 59 notices issued	18	2	2	4	7	12	7	4
Inspections* carried out for activities that are prohibited under S. 57	0	0	0	0	0	0	0	0
Inspections* carried out for activities that require a RMP under S. 58	14	32	47	63	32	0	2	0
Inspections* carried out for activities that were determined not to require a RMP under S.58	55	160	82	7	3	0	1	0
Total number of inspections	69	192	129	70	35	0	3	0
Notices issued where there were cases of contraventions and/or non-compliance with S.57	0	0	0	0	0	0	0	0
Notices issued where there were cases of contraventions and/or non-compliance S.58	0	0	0	0	0	0	0	0
Orders issued for contraventions and/or non-compliance found with S. 57	0	0	0	0	0	0	0	0
Orders issued for contraventions and/or non-compliance found with S.58	0	0	0	0	0	4	8	0
Total number of notices and/or orders issued under Part IV of the CWA	0	0	0	0	0	4	8	0

*Inspections imply that the RMO/I had a physical presence on the site, including follow-up site visits, e.g., threats verification visit, including drive-bys, if applicable. Phone calls and emails are not considered to be an inspection.