

Thames – Sydenham and Region Source Protection  
Committee

# Meeting Notice

Please be advised that a meeting of the Thames-Sydenham and Region Source Protection Committee has been called for the following time. Please confirm attendance with **Deb Kirk by email at [kirkd@thamesriver.on.ca](mailto:kirkd@thamesriver.on.ca)**

**Meeting Date:** March 22, 2024

**Meeting Time:** 10:00 am 1:30 p.m.

**Meeting Location:** **Upper Thames River Conservation Authority Office or**

**Virtual Option Link:** Microsoft Teams meeting

[Click here to join the meeting](#)

Meeting ID: [222 553 196](#) 00 - Passcode: RZWdT2

## Proposed Agenda

1	<b>Chair’s Welcome, Roll Call and Certification of Quorum</b>	10:00-10:10
2	<b>Adoption of the Agenda</b>	
3	<b>Approval of November 10, 2023 SPC minutes</b>	
4	<b>Delegations</b> ( <i>none scheduled</i> )	
5	<b>Declaration of Conflict of Interest</b>	
6	<b>Business arising from the minutes</b>	
7	<b>Business</b>	
7a	<b>Presentation- Road Salt</b>	10:10-10:40
7b	<b>Annual Reporting 2023</b> ( <i>motion required</i> )	10:40-11:10
7c	<b>Thornton Nitrate ICA</b> ( <i>motion required</i> )	11:10-11:40
7d	<b>LAWSS Back up Intake</b> ( <i>motion required</i> )	11:40-11:50
7e	<b>Systems Updates</b>	11:50-12:00
7f	<b>Road Salt Monitoring Policy</b>	12:00-12:10
7g	<b>2023 Auditor General Report - Proposed Phase out of Free Well Water Testing</b>	12:10-12:15
7gi	<b>Well Sample Drop Off Location Hand Out</b>	
8	<b>Information-</b> <b>8i.</b> Article on Water Operators in Woolwich : <a href="https://esemag.com/water/woolwich-two-water-operators-fined-under-safe-drinking-water-act/">https://esemag.com/water/woolwich-two-water-operators-fined-under-safe-drinking-water-act/</a> <b>8ii.</b> 3M Resolves Claims by Public Water Suppliers, Supports Drinking Water Solutions for Vast Majority of Americans <a href="https://investors.3m.com/news-events/press-releases/detail/1784/3m-resolves-claims-by-public-water-suppliers-supports">https://investors.3m.com/news-events/press-releases/detail/1784/3m-resolves-claims-by-public-water-suppliers-supports</a>	12:15-12:20

	<b>8iii.</b> EPA proposes some 'forever chemicals' be considered hazardous <a href="https://www.cnn.com/2024/02/02/health/epa-proposes-pfas-hazardous-wellness/index.html">https://www.cnn.com/2024/02/02/health/epa-proposes-pfas-hazardous-wellness/index.html</a>	
<b>9</b>	<b>In Camera Session</b> (not planned)	
<b>10</b>	<b>Other Business</b>	
<b>11</b>	<b>MECP Liaison report- update</b>	12:20-12:25
<b>12</b>	<b>Members Reports</b>	12:25-12:30
<b>13</b>	<b>Adjournment &amp; Next Meeting</b>	12:30

SPC MEETING MINUTES  
NOVEMBER 10, 2023  
Meeting #83

The Source Protection Committee Chair, Dean Edwardson called the meeting to order at 10:00 a.m. on November 10, 2023. The following members and staff were in attendance

**Members**

Dean Edwardson  
Johnny Bowes  
Brent Clutterbuck  
Jarrod Craven  
Gary Eagleson  
Matthew Jauernig  
Carl Kennes  
George Marr  
Gary Martin

Valerie M'Garry  
Earl Morwood  
Karleen Sirna  
Matthew Stewart  
Jason Vaillant  
John Van Dorp  
Sandy Levin  
Andrew Powell  
Emma Young

**Regrets:**

Ron Elijah  
Jason Migchels

**Staff:**

Julie Welker  
Jenna Allain  
Deb Kirk  
Steve Clark  
Mark Peacock  
Ken Phillips  
Olivia Orsini

**Guests:**

Bee Bishop  
Sandy Edelsward

**1) Chair's Welcome**

Dean Edwardson welcomed the committee and noted a quorum was achieved. The Chair read the territorial acknowledgement and round table introductions were given.

Jason Migchels, Jason Vaillant and Matthew Stewart were introduced as new members, Olivia Orsini is the new RMO, replacing Katie Ebel who is on a leave.

Pat Feryn a long time SPC member who recently passed away was recognized for his contributions and will be missed.

**2) Adoption of the Agenda**

The agenda was approved.

Moved by Earl Morwood-seconded by Gary Martin

“RESOLVED that the November 10, 2023 agenda be approved.”

CARRIED.

**3) Approval of March 24, 2023 SPC minutes**

The March 24, 2023 meeting minutes were approved.

Moved by Brent Clutterbuck -seconded by Jarrod Craven

“RESOLVED that the March 24, 2023 meeting minutes be approved.”

CARRIED.

**4) Delegations**

None.

**5) Declaration of Conflict of Interest**

No conflict of interest was identified.

**6) Business Arising from the minutes**

None.

**7) Business**

**a) “What is in my well” presentation-Public Health Ontario**

Sandra Edlesward, Program Coordinator for Drinking Water testing, Ontario Public Health, gave a presentation on testing private wells. The Health Units provide testing for the presence of the bacterial indicators of contamination, E. coli and total coliforms. Coliforms are often found in animal waste, sewage, as well as soil and vegetation. If they are in drinking water, surface water may be entering a well. E. coli (Escherichia coli) are normally found only in the digestive systems of people and animals. If they are in drinking water, it usually means that animal or human waste is entering a well from a nearby source. The Health Unit does not test for any other chemicals.

A demonstration on how water is tested was given. The presentation objectives were: Where the Health Units was with water testing in the past, where they are now and where they hope to go. After the Walkerton e.coli outbreak, Health Units across the province received an increase in the amount of water samples from private citizens and this continued for quite some time.

The data compiled was reviewed and it was noted many factors can interfere with the accuracy of the results; the person submitting the tests may not complete all steps, the sample may not come from a private system, the integrity of the sample can be altered by temperate, the timeline it took to submit, analysts quality control and accuracy, false positives and false negatives and heavy bacterial loads can occur.

Decreased sample frequency also will not provide accurate numbers. More tests tend to be submitted in the summer by cottagers and some draw water from the lakes. The bottom line is there just is not enough consistency in the testing to determine hotspots of contamination or average bacterial contamination rates.

### What can be done?

- Increase monitoring and more public outreach is needed; this is a free service.
- Investing in Ontario public drinking water: enforceable drinking water standards, monitoring and treatment.
- Laboratories/system operators having accreditation, licensing and complete more inspections.
- Improved government agency responsibility (municipalities, MECP, OMAFRA etc).
- Improving First Nations drinking water and;
- Source water Protection, looking at the next phase to include private wells. The SPC members are encouraged to speak with the public to educate on well stewardship and maintenance.

### Questions:

- Is there a break down in the data in terms of non-farm wells vs farm wells? The MECP has data with different layers and may have this.
- Is there data showing testing results from dug wells vs drilled wells? Types of wells are not identified.
- Do any of the tests include blue-green algae? This is not part of testing.
- Does a salt softener affect tests; they do not.
- Are there records of all private wells? The MECP keeps records and has locations for all private wells.
- Other chemicals that could be found in private wells that are not tested for are a concern. These tests can be completed through the MECP but the costs associated can be a deterrent.

In summary, ensuring private wells drinking water is safe is important. Best Practices guidance recently rolled out by the Ministry will offer a tool to educate the public as outlined in the next agenda item. Chair Edwardson thanked Sandra for giving the presentation.

### **b) Best Practices for non-municipal drinking water systems**

In 2021, the MECP rolled out Best Practices for Source Water Protection. The report provides voluntary guidance for all drinking water systems that are not covered by the Clean Water Act, 2006, and are not protected under a local Source Protection Plan. This guidance will help protect existing and future drinking water source(s), ensuring safe drinking water.

Private well system owners, schools, long-term care facilities, summer camps, realtors, municipally owned non-residential systems and municipal planning staff can use this guide. The Thames-Sydenham Source Protection Authority staff has sent

material to all municipalities in the region, health units, First Nations, private campgrounds and provided hand-outs at water festivals.

Staff attended a public event lead by the Ausable-Bayfield Source Protection staff in Moncton as a pilot project to offer education to the public about their wells. The hope is for the MECP to provide funding for these types of events to be held in the TSR region. The TSR Source Protection website now has Best Practices tab that contains information and links to other resources.

Recommendations That the SPC receive this update as information.

### **c) s36 Updates**

On July 22, 2019 a comprehensive review of the AR and SPP was required. This allowed for the Thames-Sydenham and Region Source Protection Authority, along with the affected municipalities, to determine if updates were needed and to ensure the SPP continues to protect sources of drinking water.

Two new draft policies were developed, technical rule changes to both the AR and SPP, the addition of for Risk Management Plans deadline and updates to some of the Wellhead Protection Areas.

#### Policies now approved

1. **Policy 2.51.1** Agricultural Source Material (ASM) Generation Through Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm Animal Yard – Prohibition (St. Marys WHPA 10 only).

Rationale: Based on a number of factors affecting the vulnerability of the St. Marys wellhead protection area, including: the presence of fractured bedrock; the presence of exposed bedrock in and adjacent to Trout Creek; and the historical documented evidence of microbial contamination for the municipal groundwater supply wells within this WHPA, it was concluded by the local Risk Management Officials that the threat of livestock grazing and pasturing cannot be reasonably managed through a risk management plan.

2. **Policy 2.21.1** Application of Agricultural Source Material (ASM) to Land – Prohibition in a WHPA-A (10)

Rationale: There were implementation challenges with the original management policy. These were addressed by removing references to the Nutrient Management Act due to confusion around management versus prohibition and created a new standalone policy.

## **Risk Management Plan Deadlines**

RMPs are due on December 31, 2023, eight years starting from the date of SPPs approvals, with the exception of Oxford County.

Regions that could become out of compliance by December 31, 2023 were reviewed.

1. Ridgetown – Two ARDB identified farm properties were impacted by changes to the Erie Street North well configuration. With anticipated changes to potential threat inventories as a result of adjustments to the delineation and mapping in the WHPA-A (10), initial draft RMP's were created for both properties based on the original threat assessment but not finalized until mapping was completed.

With the completion of the consultant's study and approved mapping, any needed adjustments to the threat inventories will be included in the finalized RMPs to be completed in the next few months.

2. Thames Centre is working hard to complete all necessary RMPs by December 31, 2023.

3. Middlesex Centre has a RMP under review but the delay could be as a result of possible future pipeline hook up.

## **Various WHPA delineations**

Tier 3 Modeling analysis on several of Oxford County Wellhead Protection Areas to include Embro, Thamesford, Beachville, Innerkip and Mount Elgin was done by Matrix Consulting. Most of the WHPA delineations changes are included in the Assessment Report. There was also a slight shift for the Shakespeare WHPA and has also been included in the Assessment Report.

Recommendations That the SPC receive this update as information.

### **d) S.34 Updates**

#### **Ridgetown**

Ridgetown has decommissioned four wells with another 5 wells scheduled for the near future and have brought online 3 wells with another one scheduled in the near future. This has triggered a delineation of the new Wellhead Protection Areas using a Tier 3 modeling approach. Chatham-Kent hired AECOM to conduct this exercise which is now complete.

#### **2021 Director Technical Rule Changes**

Changes to the technical rules has led to various policies changes and new draft policies. Approximately 1/3 of the Thames-Sydenham Source

Protection Policies need amendments. As discussed in previous SPC meetings, these changes affect the following threats: Fuel, Salt, Snow, Waste, Sewage, Pesticides, Fertilizers, and DNAPLs.

### **s.34 process**

*The Clean Water Act, 2006* enables Source Protection Plans and Assessment Reports to be revised using various methods, one of those is through a s.34.

The current s.34 is in the Early Engagement phase. Once MECP has provided their initial comments, it will be sent to the SPC for review (via email) and comments before the pre-consultation phase begins. The SPC will be given one week to review and comment. The pre-consultation phase will include engaging all the municipalities that could be affected as well as any policy implementers. The overall process should take approximately 4-6 months. Notices will go on the Source Protection website, in newspapers, social media platforms and landowners will receive letters directly.

Recommendations the SPC receive this update as information.

## **e) Extension of Transfer Payment Agreements**

Additional funds are required for technical work for a second intake that was discovered at Lambton Area Water Supply System (LAWSS) and to delineate a Nitrate Issue Contributing Area (ICA) in Woodstock.

### **LAWSS Back-Up Intake**

In the spring Source Protection Authority (SPA) staff received an Inspection Report from Ministry of the Environment, Conservation and Parks (MECP) for LAWSS. This report assesses compliance with Ministry legislation, policies and guidelines for the unannounced inspection that was conducted on LAWSS on February 1, 2023. Within this report it refers to an alternate intake suggesting there is a second intake. SPA staff was unaware of this intake and was not captured within the Assessment Report. Staff from LAWSS confirmed there is a back-up intake #2 that is approximately 150 m from the primary intake. To include the back-up intake #2 into the Assessment Report technical work needs to be done to delineate the IPZ-1 and IPZ-2 boundaries.

### **Nitrate ICA for Thornton Wellfield in Woodstock**

Nitrates were identified as a problem for the Thornton Wells in Woodstock but no nitrate ICA was delineated at the time of the approved Assessment Report (2015) as further testing was required. Based on County of Oxford

well chemistry since the Assessment Report nitrates over the past 8 years are still well above half mac (5 mg/L) with some wells exceeding mac (10mg/L). No ICA was ever delineated for the Thornton Wells (wells 1,3,5, 8 and 11) only the labor Wells (wells 2 and 4).

At the start of 2023 Source Water Protection Program Managers were asked to submit a summary of needs for any further Source Protection work. The staff submitted details on technical work needs for both LAWSS and Thornton Well field work. This work was approved in October and the province made amendments to the current Transfer Payment Agreements; SPA staff sent out Memorandum of Understandings to both parties involved to be able to transfer those funds. This work needs to be completed by March 31, 2024.

Recommendations that SPC receive this update as information.

#### **f) ERO Posting – Streamlining Environmental Permissions for Stormwater Management**

Julie Welker gave a presentation on the recent ERO Posting for streamlining environmental permissions for Stormwater Management under the Environmental Activity and Sector Registry (EASR). This was sent out September 31, 2023 with a 30 day comment period and could impact Source Protection Policies.

1. New regulation under the Environmental Protection Act, to allow private owners to self-register on the EASR.
2. To amend Ont. Reg. 525/98 under the Ontario Water Resources Act, to exempt some stormwater management works in residential areas from approval requirements
3. To amend Ont. Reg. 287/07 made under the Clean Water Act, 2006 by removing the need for, limiting, or restricting the types of polices to be included in source protection plans where a significant drinking water treat is being managed through registration on the EASR, and to allow for amendments to existing source protection plans without following the usual process.

Proponents are now required to identify whether the activity is a significant drinking water threat (SDWT). If it is a threat, Licensed Engineering Practitioner (LEP) would be required to consider additional design measures. Prohibitions in the SPP on the establishment of Stormwater Management works that are significant threats would be maintained as part of the proposed EASR regulation and no need for prescribed instruments.

These changes may weaken drinking water source protections and that moving to EASR approach removes any right to appeal. SPP prescribed instrument policies were developed requiring the Province to ensure compliance with the applicable policies; this proposal would remove that protection.

It is understood that this proposal would also prohibit the identification of any new threats in the areas subject to an EASR

It is recommended that the ministry should work directly with the SPCs on any requested changes to a SPP. No details on how province will audit to ensure compliance with EASRs. This represents a potential gap in the multi-barrier approach to protecting drinking water.

2 policies that could be affected for the TSR are:

2.07 – Existing Stormwater Management Facilities – Management

2.08 – Future Stormwater Management Facilities – Prohibition

Key points during discussion:

- Commercial, industrial SWM still has to follow their guidelines/checklists.
- Municipalities will be the first to be alerted and will have the same review process in place.
- The ERO also has de-watering policy removed which is also a concern.
- Desire to create more housing is streamlining processes.

Recommendations that the SPC receive this update as information

## **g) Emerging Issues**

### Battery Storage Facilities

John Van Dorp reported he is concerned about a proposed battery storage facility going just outside the Woodstock City limits. See Agenda item #8iii for the article. The plant would be built approximately 3 kilometers from the Thornton and Tabor well fields for Woodstock water supply and would also be located in an active gravel pit approximately 20-30 feet above ground water table. He noted this is a government proposal to boost energy supply through peak demands by storing energy via batteries when a surplus supply is available and that numerous EV batteries have burst into flames and

firefighters unable to control them with water; which makes it worse with leaching into ground water.

After a discussion it was decided that more information is needed to understand the possible risks. Matt Jauernig, the RMO for Oxford County will complete a report for the next SPC meeting, staff will try to find a battery storage plant representative to give a presentation to the SPC and a site visit for the members of a new plant will be arranged when possible.

Moved by Earl Morwood-seconded by Valerie M'Garry

“RESOLVED that further information about battery storage plants be provided through presentations, a report and a future battery storage plant site visit.”

CARRIED.

#### Sandpoint Wells in new Dorchester Subdivision

Concerns have been raised about sand point wells in the new subdivision in Dorchester. This is in a WHPA-A area and does not fall under Source Protection but there should be guidelines in place. Most of the wells are licensed and most likely will be caught in septic inspections. This item will be brought forward for further discussion at the next SPC meeting.

The recommendations that the SPC receive the information as provided for agenda items: 7b, 7c, 7d, 7e, 7f and 7g was approved.

Moved by Carl Kennes-seconded by George Marr

“RESOLVED that the recommendations for the SPC to accept the information provided as noted.”

CARRIED.

## **8) Information**

The items listed below were provided to the committee as a FYI:

- i. W5 Article on asbestos in drinking water  
<https://www.ctvnews.ca/w5/canadians-should-be-very-concerned-about-their-drinking-water-w5-investigates-asbestos-cement-pipes-1.6322678>
- ii. Article: Kingston area, high levels of PFAs in old landfill  
[https://www.cbc.ca/news/canada/ottawa/rideau-lakes-homeowner-water-contamination-landfill-1.6829374?fbclid=IwAR01f7AHWeW2nlqDeC29Iz-njAl3KdchDQ\\_-7zsbX7MwmKastOmbXEEglXw](https://www.cbc.ca/news/canada/ottawa/rideau-lakes-homeowner-water-contamination-landfill-1.6829374?fbclid=IwAR01f7AHWeW2nlqDeC29Iz-njAl3KdchDQ_-7zsbX7MwmKastOmbXEEglXw)
- iii. Proposed hydroelectric battery storage proposal outside the Woodstock city limits approximately 3 km from the Thornton and Tabor well fields  
<https://www.boralex.com/projects/oxford/>
- iv. Boil Water advisory for Wheatly article:  
<https://cknewstoday.ca/chatham/news/2023/09/16/boil-water-advisory-remains-in-effect-for-wheatley-and-tilbury-areas>

## **9) In Camera Session**

None.

## **10) Other Business**

Julie Welker reported an issue in St. Marys of a retail business who could possibly store fertilizer and pesticides on skids in a WHPA-B 10 and the risk they pose if ripped open. The TSR RMOs asked other regions how they were dealing with this and there are differing opinions. The TSR RMO will follow up with the owners find out where are they being stored and determine how they should be managed, such as having a secondary container. This item will be brought to the next SPC meeting for further discussion.

## **11) MECP Liaison Report-update**

Julie Welker reported there will no longer be a MECP Source Protection Committee Liaison. If there are any questions in the future that require attention they can be directed at the time to a MECP staff.

## 12) Members Report

No reports.

## 13) Adjournment

There being no further business, the meeting was adjourned at 12 p.m.

Moved by Gary Eagelson -seconded by Carl Kennes

*“RESOLVED that the meeting be adjourned.”*

CARRIED.

PLEASE NOTE: The next SPC meeting is to be announced (March).

# Thames-Sydenham and Region Drinking Water Source Protection Source Protection Committee Report

**Report #:** 7b

**Report to:** Chair and Thames-Sydenham and Region Source Protection Committee

**Prepared by:** Julie Welker

**Date:** March 22, 2024

**Re:** Thames-Sydenham and Region 2023 Annual Report

**THAT the SPC approve the SPC comments on the annual report as drafted and direct staff to submit those comments to the Source Protection Authorities for inclusion in the Thames-Sydenham and Region Annual Progress Report submission.**

## Purpose

To review the contents of the Thames-Sydenham and Region 2023 Annual Progress Report and provide written comments to the Source Protection Authorities about the extent to which, in the opinion of the Committee, the objectives set out in the source protection plan are being achieved by the measures described in the report.

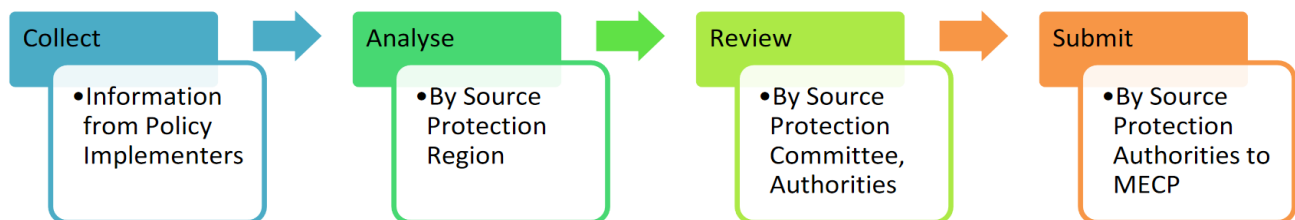
## Background

Staff analysed reports received on source protection plan policy implementation progress from implementing bodies. The 2023 Annual Progress Report is prepared accordingly, for review by the Thames-Sydenham and Region Source Protection Committee (TSR SPC) and Source Protection Authority Boards prior to submission to the Ministry of the Environment, Conservation and Parks (MECP).

### Report

As required by the Clean Water Act, the TSR Source Protection Region must prepare an annual progress report to demonstrate progress made in implementing policies that protect surface water and groundwater municipal drinking water sources in the region.

**Figure 1** provides a simplified overview of the comprehensive process.



## Figure 1: Source Protection Plan - Annual Progress Reporting at a Glance

Staff analysed information from implementing bodies, using the online Electronic Annual Reporting (EAR) tool. Municipalities, provincial ministries and Risk Management Officials are commended for their large effort in collecting pertinent data and information over the course of the year, to inform the annual progress reporting process to multiple source protection authorities overlapping political boundaries.


Reporting information is provided to MECP at the source protection region level, based on TSR SPR's analysis of hundreds of contributing data and information from policy implementers provided by February 1 every year. In turn, the MECP collects the detailed synthesized reports from Source Protection Authorities across Ontario by May 1 every year, and aggregates it to the provincial scale in the annual Chief Drinking Water Inspector's Report.

### Discussion

The theme, "achievement of source protection plan objectives" includes two report items that require Source Protection Committee (SPC) input: the first, the Committee's opinion on the extent to which objectives in the plan have been achieved during the reporting period and the second, comments to explain how the committee arrived at its opinion. TSR staff have reviewed all of the information received from implementing bodies in preparation of the annual progress report and supplemental form and recommend the following responses:

#### Report Item ID: 350

In the opinion of the Source Protection Committee (SPC), to what extent have the objectives of the SPP been achieved in this reporting period?

<b>Progressing well/on target –</b> Majority of the source protection plan policies have been implemented and/or are progressing well.	
<b>Satisfactory –</b> Some of the source protection plan policies have been implemented and/or are progressing well.	
<b>Limited progress made –</b> A few of the source protection plan policies have been implemented and/or are progressing well.	

#### Report Item ID: 351

Please provide comments to explain how the SPC arrived at its opinion. Include a summary of any discussions that might have been had amongst the SPC members, especially where no consensus was reached.

December 31st, 2023 marked eight years since our Source Protection Plan first took effect. In that time significant progress has been made to implement the policies contained in the plan, and address the activities that were identified as posing a risk to

our municipal drinking water supplies. To date, 85% of the policies in the plan that address significant drinking water threats have been fully implemented, with the remaining 15% progressing well. An additional 20 Risk Management Plans were established over the reporting period bringing the Region's total Risk Management Plans to 101. Approximately 90% of the 1058 originally identified significant drinking water threats, along with those identified after the originally approved SPPs, have been successfully managed or eliminated. While there is still a considerable amount of work to do to address the remaining threats, the Thames-Sydenham and Region Source Protection Committee is pleased to see that policy implementation is moving steadily forward. For that reason, they believe that a ranking score of progressing well and on target is a fair assessment on our implementation progress.

### **Recommendation**

That the Source Protection Committee approves the SPC comments on the annual report as drafted and direct staff to submit those comments to the Source Protection Authorities for inclusion in the Thames-Sydenham and Region Annual Progress Report submission.



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Julie Welker

Coordinator, Source Water Protection

# Annual Progress Report

on Implementation of the Source Protection Plans for the  
Thames-Sydenham & Region Source Protection Areas

Reporting Period - January 1, 2023 to December 31, 2023

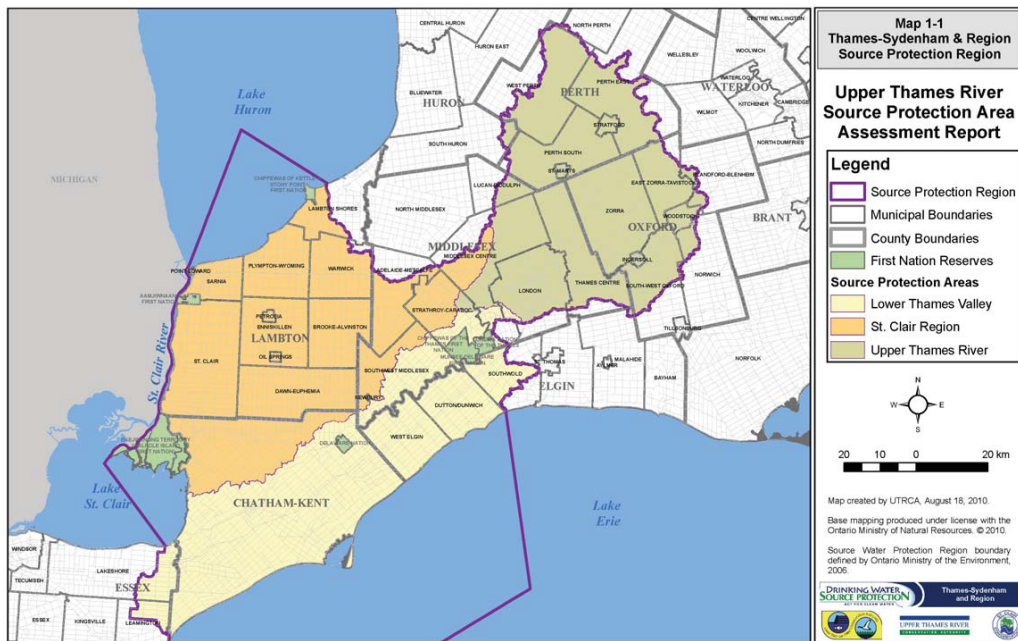
For more information about the drinking water source protection plan, visit  
[www.sourcewaterprotection.on.ca](http://www.sourcewaterprotection.on.ca)

# Source Protection Annual Progress Report

## I. Introduction

This annual progress report outlines the progress made in implementing our source protection plan for the Lower Thames Valley Source Protection Area, St. Clair Region Source Protection Area and Upper Thames River Source Protection Area, as required by the Clean Water Act and regulations. This is the seventh Annual Progress Report released since the Source Protection Plan took effect on December 31st, 2015, and it highlights the actions taken from January 1 to December 31, 2023.

Protecting the sources of our drinking water is the first step in a multi-barrier approach to safeguard the quality and quantity of our water supplies. The source protection plan is the culmination of extensive science-based assessment, research, consultation with the community, and collaboration with local stakeholders and the Province. When policies in the plan are implemented it ensures that activities carried out in the vicinity of municipal wells and lake-based intakes will not pose significant risk to those drinking water supplies.



## II. A message from your local Source Protection Committee

### **P : Progressing Well/On Target – The majority of the source protection plan policies have been implemented and/or are progressing.**

December 31st, 2023 marked eight years since our Source Protection Plan first took effect. In that time significant progress has been made to implement the policies contained in the plan, and address the activities that were identified as posing a risk to our municipal drinking water supplies. To date, 85% of the policies in the plan that address significant drinking water threats have been fully implemented, with the remaining 15% progressing well.

An additional 20 Risk Management Plans were established over the reporting period bringing the Region's total Risk Management Plans to 101.

Approximately 90% of the 1058 originally identified significant drinking water threats along with those that have been identified after the originally approved SPP have been successfully managed or eliminated. While there is still a considerable amount of work to do to address the remaining threats, the Thames-Sydenham and Region Source Protection Committee is pleased to see that policy implementation is moving steadily forward. For that reason, they believe that a ranking score of progressing well and on target is a fair assessment on our implementation progress.

### III. Our Watershed

To learn more, please read our assessment report(s) and source protection plan(s)

The Thames-Sydenham and Region is made up of the watersheds of Lower Thames Valley, the St. Clair Region, and the Upper Thames River.

The Lower Thames Valley Source Protection Area includes those lands draining into the Thames River from the community of Delaware to Lake St. Clair. It also includes the lands that drain into Lake Erie lying south of the lower Thames River watershed and a small triangle of land north of the mouth of the Thames draining directly into Lake St. Clair. This area includes most of the municipality of Chatham-Kent, the western portion of Elgin County, part of southwestern Middlesex County (including some of the City of London) and a portion of eastern Essex County. The Lower Thames Valley Source Protection Area also includes four First Nation reserves; the Chippewas of the Thames First Nation, Delaware Nation, Munsee-Deleware Nation and Oneida Nation of the Thames. Caldwell First Nation is also established in the area between Leamington and Rondeau Bay; however they currently do not have a reserve. The area covers approximately 3,274 square kilometres with a total watershed population (2001) of about 107,000.

The residents of the Lower Thames Valley Source Protection Area receive most of their municipal drinking water from Lake Erie through 3 intakes. The communities of Ridgetown and Highgate receive their drinking water from municipal wells. Some parts of the watershed within Essex County receive their municipal drinking water from intakes in Lake St. Clair. Although the drinking water for much of the population of the Lower Thames is supplied from municipal drinking water sources, some residents rely on water from private wells.

The St. Clair Region Source Protection Area includes the Sydenham River drainage basin and several smaller watersheds that drain to Lake Huron, the St. Clair River or Lake St. Clair. The Source Protection Area covers over 4,100 square kilometres and includes most of the County of Lambton, part of the Municipality of Chatham-Kent and part of the County of Middlesex with a total watershed population of 167,000. The area also includes three First Nation reserves; Chippewas of Kettle and Stoney Point, Aamjiwnaang, and Walpole Island First Nations. The residents of the St. Clair Region Source Protection Area receive most of their municipal drinking water from Lake Huron and the St. Clair River through 3 intakes. Parts of Middlesex County receive their municipally supplied drinking water from an intake in Lake Huron outside the Source Protection Region. There are no longer any communities in the St. Clair Region that receive drinking water from municipal wells. Although the drinking water for much of the population of the Lower Thames is supplied from municipal drinking water sources, some residents rely on water from private wells.

The Upper Thames River Source Protection Area includes all areas draining into the Thames River above the community of Delaware. This covers large parts of Oxford, Perth and Middlesex Counties including most of the City of London. Very small portions of Huron and Elgin Counties also drain into the upper Thames River. The area covers approximately 3,423 square kilometres with a total watershed population (2001) of about 472,000. There are no First Nations in the Upper Thames River Source Protection Area.

The residents of the Upper Thames River Source Protection Area receive their municipal drinking water from Lake Huron or Erie through 2 intakes in other Source Protection Areas. Many of the communities in Perth and Oxford Counties rely on groundwater for municipally supplied drinking water. Although the drinking water for much of the population of the Upper Thames is supplied from municipal drinking water sources, many rural residents rely on water from private wells.

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

### 1. Source Protection Plan Policies

P : Progressing Well/On Target:

For the policies that address significant drinking water threats in the TSR Source Protection Plan, 85% have being fully implemented. Another 15% are currently in progress. Further progress was also made to implement the significant non-legally binding policies with 67% implemented and 33% with some progress made.

### 2. Municipal Progress: Addressing Risks on the Ground

P : Progressing Well/On Target:

26 municipalities in the Thames-Sydenham and Region (TSR) have vulnerable areas where significant drinking water threat policies apply. These municipalities are required to ensure that their planning and building decisions conform with the Thames-Sydenham and Region SPP, and must also ensure that their Official Plan (or their Upper Tier municipality) conforms with the SPP upon the next Planning Act review.

Of the 26 municipality, 17 must undertake a completion of a Official Plan. 9 of the municipalities in the TSR that have an official plan have completed their required Official Plan conformity exercises. Of the remaining 8 municipalities, 6 are in the process of amending their Official Plan, 1 has their OP under appeal and 1 has yet to begin.

### 3. Septic Inspections

P : Progressing Well/On Target: Under the Ontario Building Code, any on-site sewage system which has been identified as a significant drinking water threat is required to be inspected once every five years. In the Thames-Sydenham and Region there are seven municipalities which have on-site sewage systems that require mandatory inspection. Of those seven municipalities, six have completed all of the required inspections for 2023, while one municipality has not completed them due to an initial delay due to COVID restrictions and have been dealing with further delays due to scheduling priorities and staffing constraints.

### 4. Risk Management Plans

P : Progressing Well/On Target

Twenty new Risk Management Plans were agreed to in 2023, bringing the Region's total Risk Management Plans to 101.

Based on the responses provided by Risk Management Officials, 33 (Section 58) Inspections were carried out in 2023 and 12 new RMPs are currently in-progress. None of which are in contravention or non-compliance.

## 5. Provincial Progress: Addressing Risks on the Ground

P : Progressing Well/On Target

Provincial ministries, including MECP, MNRF, MTO and OMAFRA, are responsible for the implementation of source protection policies included in the Thames-Sydenham and Region Source Protection Plan. These ministries are reviewing previously issued provincial approvals (e.g., prescribed instruments such as environmental compliance approvals issued under the Environmental Protection Act), where they have been identified as a tool in our plan to address existing activities that pose a significant risk to sources of drinking water. The provincial approvals are being amended or revoked where necessary to conform with plan policies. The ministries have completed this for 100% of previously issued provincial approvals in our source protection region.

The above-noted Provincial Ministries have also established Standard Operating Policies to ensure that all new applications submitted for provincial approvals take into account the science generated through the Drinking Water Source Protection Program, and policies in the relevant source protection plan. Where necessary, new prescribed instruments are either being denied or issued with conditions added to ensure that the activity does not pose a significant threat to sources of drinking water.

## 6. Source Protection Awareness and Change in Behaviour

New, provincial standard road signs mark locations where well-used roads cross into zones where municipal drinking water sources are the most vulnerable to contamination. The road signs provide general public awareness about the sensitivity of the area. They will also alert first responders of the need to quickly inform the appropriate authorities so action can be taken to keep contaminants out of the public water treatment and distribution system. A total of 157 Drinking Water Protection Zone signs have been installed on roadways in the Thames-Sydenham Source Protection Region.

## 7. Source Protection Plan Policies: Summary of Delays

Incentive programs are not being considered by most organizations in the Thames-Sydenham Region as suggested by Policy 1.04 of the Source Protection Plan. If Provincial funding support were made available to help offset the costs of an incentive programs, more organizations would be open to the consideration of an incentive program.

Discretionary Septic System Maintenance Inspections programs targeting moderate and low septic system threats have not yet been considered by municipalities in the Thames-Sydenham and Region. Discretionary inspections are recommended in policy 3.01, and it should be noted that this is a non-legally binding policy. At this point in time, municipalities have been focusing on the mandatory septic inspections as required for septic systems that pose a significant threat to drinking water. More consideration will be given to discretionary inspections once the mandatory inspections are complete.

## 8. Source Water Quality: Monitoring and Actions

### Nitrogen at the Woodstock Well System

Nitrate occurs in the Thornton wellfield and Tabor wellfield of the Woodstock Drinking Water System. Nitrate levels are routinely above half of the treated water maximum allowable concentration (MAC) of 10 mg/L. Anthropogenic activities associated with agriculture, residential development and wetlands are known sources of nitrate in groundwater. Nitrates were therefore identified as an issue for both the Thornton and Tabor wellfields. An analysis of the nitrate levels in some of the wells for the Thornton wellfield revealed that nitrate levels may be leveling off or decreasing. Additional monitoring was recommended to determine whether an Issue Contributing Area (ICA) was required at the Thornton wellfield. Levels at the Tabor wellfield were significantly lower than those seen in the Thornton wellfield, but appeared to be trending upwards. The wellfield contains two highly productive wells that are a main supply of water to the system. An ICA was therefore delineated for the Tabor wellfield.

The County will complete a review of the Thornton nitrate levels to determine whether the delineation of an Issue Contributing Area (ICA) is warranted.

## 9. Science-based Assessment Reports: Work Plans

No work plans were required to be implemented for our assessment reports.

## 10. More from the Watershed

To learn more about our source protection region, visit our Homepage:  
<https://www.sourcewaterprotection.on.ca/>



# Source Water Protection Annual Report

## 2023 - Supplemental Form

### SPR - Thames, Sydenham and Region

Report Id	Completed	Question	
10	True	As applicable to your source protection region/area, indicate if all relevant implementing bodies submitted a status update/annual report to the source protection authority for the previous reporting year. If "No" is selected for any implementing body(ies), then please complete the Comments field below with details including the name of the specific implementing body along with an explanation, if available, for not submitting a status update/annual report as required by a monitoring policy. *NOTE: Where a listed implementing body(ies) is not applicable/relevant to your source protection region/area, then simply select "No" and explain that it is not an applicable implementing body in your source protection region/area in the Comments field text box.	
<b>Response</b>			<b>Answer</b>
Risk Management Official			Yes
Municipality			Yes
Conservation Authority			Yes
Local Health Unit			No
MECP - Waste Disposal Sites - Landfilling and Storage			Yes
MECP - Wastewater/Sewage Works			Yes
MECP - Pesticides			Yes
MECP - Hauled Sewage/Biosolids			Yes
MECP - Hauled Sewage/Biosolids Inspections			Yes
MECP - Permit to Take Water			Yes
MECP - Permit to Take Water Inspections			Yes
MECP - Municipal Residential Drinking Water Systems			Yes
MECP - Municipal Residential Drinking Water Systems Inspections			Yes
MECP - Source Protection			Yes
MECP - Waste Disposal Sites - Landfilling and Storage Inspections			Yes
MECP - Wastewater/Sewage Works Inspections			Yes
MECP - Conditions Sites			No
MECP - NMA - ASM and NASM Inspections			Yes
MECP - Environmental Monitoring			Yes
MECP - Fuel			Yes
MECP - Great Lakes			Yes



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

MECP - Spills Response	Yes
MECP - Wells	Yes
OMAFRA	Yes
MNRF	Yes
MTO	Yes
MMAH	No
MGCS-TSSA	No
MENDM	No
Provincial Board/Commission	No
Federal Departments/Agencies/Commissions/Crown Corporations	No
Private Entity/Company	No
Association/Organization	No

**Comment:** All implementing bodies met the February 1st deadline to report on their implementation efforts in 2023. All "NO" responses are because that body is not named as an implementing body in the Thames-Sydenham & Region Source Protection Plan.



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Category
20	True	Did the Source Protection Authority indicate the status of all threat policies as contained in their source protection plan? Please provide details in the response field text box in the Policy Interface for policies with a "No Progress Made" and "No information available/no response received" implementation status especially for legally-binding policies that address significant drinking water threat activities and for any moderate/low threat policies that use prescribed instruments and Planning Act tools.	Implementation status of source protection plan policies
<b>Answer:</b>	Yes		

**Comment:**

Report Id	Completed	Question	Category
21	True	Did the source protection authority(ies) confirm the accuracy of the implementation status of all threat policies as contained in their source protection plan and located on the policy interface database for the current reporting year?	Monitoring Policy Implementation
<b>Answer:</b>	Yes		

**Comment:**

Report Id	Completed	Question	Category
22	True	Did all source protection authority(ies) confirm that if a policy is significant and legally binding and has not been implemented by a person or a body by the implementation date specified in the policy, that there are written comments that include a description of the failure and the reasons for the failure as per O.Reg 287/07 s.52(1) 1.?	Monitoring Policy Implementation
<b>Answer:</b>	Yes		

**Comment:**



# Source Water Protection Annual Report

## 2023 - Supplemental Form

### SPR - Thames, Sydenham and Region

Report Id	Completed	Question									
30	True	Number of risk management plans agreed to or established within the source protection area/region (to address existing and future threats) in this reporting period (i.e., annual total).									
		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center;">Current Year</th> <th style="text-align: center;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">20</td> <td style="text-align: center;">103</td> </tr> <tr> <td><b>Provincial Total</b></td> <td style="text-align: center;">20</td> <td style="text-align: center;">103</td> </tr> </tbody> </table>		Current Year	Cumulative Count		20	103	<b>Provincial Total</b>	20	103
	Current Year	Cumulative Count									
	20	103									
<b>Provincial Total</b>	20	103									
<b>Comment:</b>											

Report Id	Completed	Question									
31	True	Number of properties (i.e., parcels) with risk management plans agreed to or established in this reporting period.									
		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center;">Current Year</th> <th style="text-align: center;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">20</td> <td style="text-align: center;">100</td> </tr> <tr> <td><b>Provincial Total</b></td> <td style="text-align: center;">20</td> <td style="text-align: center;">100</td> </tr> </tbody> </table>		Current Year	Cumulative Count		20	100	<b>Provincial Total</b>	20	100
	Current Year	Cumulative Count									
	20	100									
<b>Provincial Total</b>	20	100									
<b>Comment:</b>											

Report Id	Completed	Question									
32	True	How many existing* significant drinking water threats have been managed through the established risk management plans in this reporting period (* meaning engaged in OR enumerated as existing significant threats)?									
		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center;">Current Year</th> <th style="text-align: center;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">27</td> <td style="text-align: center;">176</td> </tr> <tr> <td><b>Provincial Total</b></td> <td style="text-align: center;">27</td> <td style="text-align: center;">176</td> </tr> </tbody> </table>		Current Year	Cumulative Count		27	176	<b>Provincial Total</b>	27	176
	Current Year	Cumulative Count									
	27	176									
<b>Provincial Total</b>	27	176									
<b>Comment:</b>											



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Current Year	Cumulative Count
40	True	How many section 59 notices were issued in this reporting period for activities to which neither a prohibition (section 57) nor a risk management plan (section 58) policy applied, as per ss. 59(2)(a) of the Clean Water Act?	19	151
<b>Provincial Total</b>			19	151
<b>Comment:</b>				

Report Id	Completed	Question	Current Year	Cumulative Count
41	True	How many section 59 notices were issued in this reporting period for activities to which a risk management plan (section 58) policy applied, as per ss. 59(2)(b) of the Clean Water Act?	1	24
<b>Provincial Total</b>			1	24
<b>Comment:</b>				

Report Id	Completed	Question	Current Year	Cumulative Count
61	True	State the total number of inspections (including any follow-up site visits) that were carried out for activities (existing or future) that are prohibited under section 57 of the Clean Water Act in this reporting period. If no inspections were conducted in the previous calendar year, please explain.	0	183
<b>Provincial Total</b>			0	183
<b>Comment:</b>				



# Source Water Protection Annual Report

## 2023 - Supplemental Form

### SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Current Year	Cumulative Count
62	True	Among the inspections conducted for section 57, how many showed that activities were taking place on the landscape even though they were prohibited (i.e., in contravention) under section 57 of the Clean Water Act in this reporting period?	0	0
<b>Provincial Total</b>			0	0
<b>Comment:</b>				

Report Id	Completed	Question	Current Year	Cumulative Count
63	True	How many new properties were identified with s.57 prohibited activities during the reporting year (do not include properties established outside of this reporting year)?	0	0
<b>Provincial Total</b>			0	0
<b>Comment:</b> None were found.				

Report Id	Completed	Question	Current Year	Cumulative Count
70	True	How many existing significant drinking water threats have been prohibited as a result of section 57 prohibitions in this reporting period?	0	15
<b>Provincial Total</b>			0	15
<b>Comment:</b>				



# Source Water Protection Annual Report

## 2023 - Supplemental Form

### SPR - Thames, Sydenham and Region

Report Id	Completed	Question						
80	True	State the total number of inspections (including any follow-up site visits) that were carried out for activities that require a risk management plan under section 58 of the Clean Water Act in this reporting period. If no inspections were conducted in the previous calendar year, please explain.						
		<table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">Current Year</th> <th style="text-align: left;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">33</td> <td style="text-align: center;">966</td> </tr> <tr> <td style="text-align: center;">33</td> <td style="text-align: center;">966</td> </tr> </tbody> </table>	Current Year	Cumulative Count	33	966	33	966
Current Year	Cumulative Count							
33	966							
33	966							
		<table style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td style="text-align: center;"><b>Provincial Total</b></td> <td style="text-align: center;">33</td> <td style="text-align: center;">966</td> </tr> </tbody> </table>	<b>Provincial Total</b>	33	966			
<b>Provincial Total</b>	33	966						
<b>Comment:</b>								

Report Id	Completed	Question						
81	True	Among the inspections conducted for section 58, how many were in contravention with section 58 of the Clean Water Act in this reporting period (i.e., person engaging in a drinking water threat activity without a risk management plan as required by the source protection plan)?						
		<table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">Current Year</th> <th style="text-align: left;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">41</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">41</td> </tr> </tbody> </table>	Current Year	Cumulative Count	0	41	0	41
Current Year	Cumulative Count							
0	41							
0	41							
		<table style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td style="text-align: center;"><b>Provincial Total</b></td> <td style="text-align: center;">0</td> <td style="text-align: center;">41</td> </tr> </tbody> </table>	<b>Provincial Total</b>	0	41			
<b>Provincial Total</b>	0	41						
<b>Comment:</b>								



# Source Water Protection Annual Report

## 2023 - Supplemental Form

### SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Current Year	Cumulative Count
82	True	Among the inspections for section 58, how many were in non-compliance with the specific contents of the risk management plan in this reporting period? (NOTE: Please only include those inspections that showed non-compliance with measures/conditions to manage the actual threat activity.)	0	6
<b>Provincial Total</b>			0	6
<b>Comment:</b>				

Report Id	Completed	Question	Current Year	Cumulative Count
83	True	State the total number of notices issued where there were cases of contraventions and/or non-compliance found with section 57 in this reporting period.	0	1
<b>Provincial Total</b>			0	1
<b>Comment:</b>				

Report Id	Completed	Question	Current Year	Cumulative Count
84	True	State the total number of notices issued where there were cases of contraventions and/or non-compliance found with section 58 in this reporting period.	0	7
<b>Provincial Total</b>			0	7
<b>Comment:</b>				



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question						
85	True	State the total number of orders issued for contraventions and/or non-compliance found with section 57 in this reporting period.						
		<table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">Current Year</th> <th style="text-align: left;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>	Current Year	Cumulative Count	0	0	0	0
Current Year	Cumulative Count							
0	0							
0	0							
<b>Provincial Total</b>								
<b>Comment:</b>								

Report Id	Completed	Question						
86	True	State the total number of orders issued for contraventions and/or non-compliance found with section 58 in this reporting period.						
		<table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">Current Year</th> <th style="text-align: left;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">7</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">7</td> </tr> </tbody> </table>	Current Year	Cumulative Count	0	7	0	7
Current Year	Cumulative Count							
0	7							
0	7							
<b>Provincial Total</b>								
<b>Comment:</b>								

Report Id	Completed	Question
220	True	List the municipality(ies) (including upper-, lower-, and single-tier) within the source protection region/area that are required to complete Official Plan and Zoning exercises to conform to the latest source protection plan, and indicate the status of those exercises for each applicable municipality. "Latest source protection plan" means the first approved plan or any subsequent approved plan update. *NOTE: Applies to every municipality affected by land use planning or Part IV type policies. Where the official plan and/or zoning by-law status for any particular municipality needs to be changed/updated, then please do so by deleting the entry for that particular municipality by clicking on the red "-" (minus) sign and then re-select the municipality name from the drop down list of municipalities followed by selecting the updated status of the conformity exercise for the official plan and zoning by-law from the drop down list for that particular municipality. After doing so, please be sure to add the municipality as your response by clicking on the green plus sign.
<b>Municipality</b>	<b>Official Plan</b>	<b>Zoning By Law</b>
City of Sarnia	Completed	Completed



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Municipality of Thames Centre	Completed	Completed
City of Stratford	Completed	In Progress/Updates Underway
Municipality of Lambton Shores	Completed	In Progress/Updates Underway
Municipality of Middlesex Centre	Completed	In Progress/Updates Underway
Village of Point Edward	Completed	In Progress/Updates Underway
Essex, County of	Completed	Not Applicable
Middlesex, County of	Completed	Not Applicable
Oxford, County of	Completed	Not Applicable
Town of Plympton-Wyoming	Completed, but Under appeal	Not Started
Township of St. Clair	In Progress/Updates Underway	Completed
Municipality of Chatham-Kent	In Progress/Updates Underway	In Progress/Updates Underway
Municipality of Leamington	In Progress/Updates Underway	In Progress/Updates Underway
Town of Lakeshore	In Progress/Updates Underway	In Progress/Updates Underway
Town of St. Marys	In Progress/Updates Underway	In Progress/Updates Underway
Lambton, County of	In Progress/Updates Underway	Not Applicable
Perth, County of	In Progress/Updates Underway	Not Applicable
Township of East Zorra-Tavistock	Not Applicable	Completed
Township of South-West Oxford	Not Applicable	Completed
City of Woodstock	Not Applicable	In Progress/Updates Underway
Township of Norwich	Not Applicable	In Progress/Updates Underway
Township of Perth South	Not Applicable	In Progress/Updates Underway
Township of Zorra	Not Applicable	In Progress/Updates Underway
Municipality of West Perth	Not Applicable	Not Started
Township of Perth East	Not Applicable	Not Started

**Comment:**



# Source Water Protection Annual Report

## 2023 - Supplemental Form

### SPR - Thames, Sydenham and Region

Report Id	Completed	Question						
240	True	State the number of source water protection signs installed on provincial highways in the source protection region/area in this reporting period.						
		<table border="1"> <thead> <tr> <th>Current Year</th> <th>Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">179</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">179</td> </tr> </tbody> </table>	Current Year	Cumulative Count	0	179	0	179
Current Year	Cumulative Count							
0	179							
0	179							
<b>Provincial Total</b>		0      179						
<b>Comment:</b> The question that was asked of the municipalities was how many total.								

Report Id	Completed	Question						
241	True	State the number of source water protection signs installed on municipal roads in the source protection region/area in this reporting period.						
		<table border="1"> <thead> <tr> <th>Current Year</th> <th>Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">170</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">170</td> </tr> </tbody> </table>	Current Year	Cumulative Count	5	170	5	170
Current Year	Cumulative Count							
5	170							
5	170							
<b>Provincial Total</b>		5      170						
<b>Comment:</b>								

Report Id	Completed	Question						
242	True	State the number of source water protection signs installed at other locations (if applicable) in the source protection region/area in this reporting period.						
		<table border="1"> <thead> <tr> <th>Current Year</th> <th>Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>	Current Year	Cumulative Count	0	4	0	4
Current Year	Cumulative Count							
0	4							
0	4							
<b>Provincial Total</b>		0      4						
<b>Comment:</b>								



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Category
260	True	Current total overall number of on-site sewage systems that are assessed as significant drinking water threat activities and that are required to be inspected every five years in accordance with the Ontario Building Code.	Sewage System Inspections
<b>Answer:</b>		143	
<b>Comment:</b>			

Report Id	Completed	Question	Category
261	True	Of those requiring inspections, how many inspections of on-site sewage systems were due to be carried out in this reporting period? If not applicable or no inspections of on-site sewage systems were due to be carried out in this reporting period because they were already inspected earlier within the inspection cycle or will be inspected in a future year within the cycle, then please enter "0" and state either explanation in the comment field.	Sewage System Inspections
<b>Answer:</b>		54	
<b>Comment:</b>			

Report Id	Completed	Question		
262	True	How many on-site sewage system inspections were completed in this reporting period?		
			<b>Current Year</b>	<b>Cumulative Count</b>
			31	207
<b>Provincial Total</b>			31	207
<b>Comment:</b>				



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Current Year	Cumulative Count
263	True	How many of the inspected on-site sewage systems required minor maintenance work in this reporting period?	0	24
<b>Provincial Total</b>			0	24
<b>Comment:</b>				

Report Id	Completed	Question	Current Year	Cumulative Count
264	True	How many of the inspected on-site sewage systems required major maintenance work (e.g., tank replacement, etc.) in this reporting period?	0	4
<b>Provincial Total</b>			0	4
<b>Comment:</b> Thames Centre - Septic Bed replacement at 1 existing property				

Report Id	Completed	Question	Category
265	True	How many of the inspected on-site sewage systems required no maintenance work?	Sewage System Inspections
<b>Answer:</b>	31		
<b>Comment:</b>			



# Source Water Protection Annual Report

## 2023 - Supplemental Form

### SPR - Thames, Sydenham and Region

Report Id	Completed	Question	
266	True	For those on-site sewage systems that were not inspected in this reporting period but should have been inspected, and are now out of compliance, please indicate why they were not all inspected from among the reasons below. [Note: For municipalities that have not yet initiated the mandatory on-site sewage system inspection program, please see the next reportable to provide your response if this is the case].	
		<b>Response</b>	<b>Answer</b>
		landowner refused entry, compliance order being sought	No
		inspections delayed/postponed due to COVID-19 restrictions	Yes
		vulnerable area changed and on-site sewage system(s) no longer a threat activity	No
		other. Please specify in the comment box below.	Yes
<b>Comment:</b> Initially delayed due to COVID restrictions and have been further delayed due to scheduling priorities and staffing constraints			



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

**Report Id    Completed    Question**

270            True            Complete the information below regarding environmental monitoring of drinking water issues identified in accordance with the Technical Rules within your source protection region/area. Begin by selecting the drinking water system, the specific well or intake, the drinking water issue, the delineation status, and the observation of the concentration. [OPTIONAL]: In the comments field, describe any actions or behavioural changes that might be contributing to reported changes in the concentration of the issue or parameter. Where the drinking water issue, well or intake, delineation status, or observation of any previously listed drinking water system needs to be changed/updated, then please do so by deleting the entry for that particular drinking water system by clicking on the red minus sign on the right side of the entry and then re-select the drinking water system from the dropdown list of drinking water systems followed by selecting the associated well or intake, the drinking water issue, its delineation status, and the observation from the dropdown list for that particular drinking water system. After doing so, please be sure to add the drinking water system as your response by clicking on the green plus sign on the right side of the entry. If this reportable is not applicable to your source protection region/area, please indicate as such by choosing "No system with issues," "Not Known/Available," "No issue," "Not applicable," and "No observation," respectively, under the drop down menu options under each of the categories of this reportable. Do not leave blank.

DWIS Number	DWIS Name	Issue	ICA Delinated	Observation
220003332	Wheatley system	Microsystin LR	No	No Change in Concentration / Trend
220003378	Chatham/South Chatham-Kent System	Microsystin LR	No	No Change in Concentration / Trend
220003341	Wallaceburg System	Nitrate	No	No Longer Monitoring - issue improved
220000709	Woodstock Well Supply	Nitrogen	Yes	Not Enough Data
220000709	Woodstock Well Supply	Nitrogen	No	Not Enough Data

**Comment:** Woodstock (Tabor Wellfield), Nitrogen, Yes, Not Enough Data/Information Available to Determine Changes in Concentration/Trend; Woodstock (Thornton Wellfield), Nitrogen, No, Not Enough Data/Information Available to Determine Changes in Concentration/Trend; University of Waterloo (UofW) have been completing groundwater studies within the Thornton Wellfield. UofW have indicated the elevated nitrates have been identified with monitoring wells within upgradient of the Thornton Wellfield.



# Source Water Protection Annual Report

## 2023 - Supplemental Form

### SPR - Thames, Sydenham and Region

**Report Id   Completed   Question**

280      True      How many notices about transport pathways (meaning a condition of land resulting from human activity (e.g., pits and quarries, improperly abandoned wells, geothermal system, etc.) that increases the vulnerability of a raw water supply of a drinking water system) did the source protection authority receive from municipalities in this reporting period (as per O. Reg. 287/07, ss. 27(3))?

**Current Year    Cumulative Count**

0                    1

**Provincial Total**

0                    1

**Comment:**    Question not asked in 2022



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	
281	True	Where transport pathway notices were received, indicate the action(s) taken by the source protection region/area in response to receiving these notices:	
<b>Response</b>			<b>Answer</b>
Provided information to municipalities about changes in vulnerability			No
Provided notice to Source Protection Committee for information			No
Situation continues to be monitored			No
<b>Comment:</b> N/A			



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	
300	True	[OPTIONAL]: If and where there are successful examples for each of the following initiatives in the source protection region/area (including from local municipalities, residents and businesses) that occurred in this reporting period that the authority wishes to highlight, then please indicate in the Comments field below. In your comments, please include details for each of the selected topics. Please limit the descriptions provided (e.g., one example for each topic or more could be included when the source protection authority feels they are exceptional/quite successful).	
<b>Response</b>			<b>Answer</b>
Education and Outreach (in description include details, if available, on type and percentage of target population reached, outcome(s) achieved, etc.)			Yes
Incentives (in description include details, if available, on outcome(s) achieved, how widely available was the incentive, etc.)			No
Stewardship Programs			Yes
Best Management Practices			Yes
Pilot Programs			Yes
Research			Yes
Specify Action (e.g., road salt management, municipal by-laws, legislative or regulatory amendments, mapping, review of fuel codes, new airport facility design standards to manage runoff of chemicals from de-icing of aircraft, instrumentation, etc.)			Yes
Climate Change (e.g., data collection)			Yes
Spill prevention/spill contingency/emergency response plan updates			Yes
Transport pathways			Yes
Water quantity			No
Great Lakes			Yes
Other policies (i.e., strategic action, etc.)			Yes



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

**Comment:** Chatham-Kent: Climate Change Action Plan (mitigation/adaptation) initiated in 2020. To be completed in 2024.

Lakeshore: The University of Toronto , is evaluation of GAC Performance for Geosmin an MIB removal at the Lakeshore Water Treatment Plant in Belle River.

Lemington: Discussions with greenhouse developers regarding source protection planning is taking place during the preliminary site plan review/approval process.

Oxford County: 2021 was an unusual year due to Covid restrictions and staff changes (i.e., new RMO and RMI position being vacated). Details of success stories haven't been characterized for this reporting year.

Perth County: Council's received a workshop on how growth areas are planned for serviced settlement areas which included how the SWP areas in the vicinity of municipal wells affects the lower risk types of land uses that we would permit in those areas. Perth County Initiated the development of a stewardship program and the project launched in December 2022. They received \$75,000 in funding towards projects. We have scheduled SWP training for all our planning staff in March 2023 with two local RMO's. Research for the SWP policies proposed in the New OP that have been reviewed by the RMO's.

Stratford: With the increase of online learning in schools, we engaged with a few teachers and arranged presentations for Stratford HS classes which explained our water and wastewater process with a section focused solely on SWP. We piloted a new Unidirectional Flushing Program in 2023 and completed a system wide leak detection survey and made repairs to limit water loss and enhance conservation.

St. Marys: Town has partnered with external company to provide emergency spill response that provides the Town with better access to equipment, services and supplies in the event of a spill response. Town has initiated data collection and development of a Climate Change Action Plan

City of Sarnia: The City of Sarnia developed a Sarnia Emergency Management "Guideline for communication & response for spills that could impact municipal drinking water sources" in 2017 and a special training exercise was held for the City's emergency response Primary Control Group in December 2017. In 2018, a workshop was held and the Source Protection Authority provided guidance materials for Transport Pathways. Ongoing BMP's including contracted RMO services and expertise added in late 2020. Additional research conducted in 2023 regarding salt management strategies and best practices.

Plymton-Wyoming: Specify action: Application of Salt Sand is Tracked yearly by staff utilizing a events calendar along with purchasing receipts and Calibration of equipment; implemented a prewetting program. Spill prevention: Spill kits are on hand to apply if needed!

Perth East: GHG reduction plan developed over the the previous two years. Completed in 2021 which involved data collection.



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

**Report Id    Completed    Question**

305      True      Complete the table below with the count data for each significant drinking water threat activity/local threat activity/condition being engaged in (i.e., enumerated as 'existing' significant threats) at the time of source protection plan approval or approval of amendments that include new / changing protection zones. Please use the best available information/desktop exercises, reports from Risk Management Officials, and other implementing bodies to provide the counts below. For convenience, the count data from the previous reporting year have been copied over, but please be sure to review, edit, and confirm the counts for accuracy in the table below. [CWA Section 46(1)(a)]

The running tally consists of the formula: A+B-C-D where:

- A = Number of significant drinking water threats estimated when the source protection plan was first approved
- B = Number of additional significant drinking water threats counted after the first source protection plan approval (not part of the original estimate)
- C = Number of significant drinking water threats included in A and B that were determined through field verification to longer exist because: (i) the threat was not actually engaged in at a particular location after all OR (ii) it was no longer engaged in (e.g., land may still have an agricultural operation but owner no longer applying pesticides for their own reasons)
- D = Number of significant drinking water threats addressed because a policy is implemented. (It is understood that multiple policies/policy tools may address a single threat on the landscape. If any one policy is implemented and directed at that single threat it is considered addressed.)

In the comments box below summarize any remaining significant threats needing to be addressed for each source protection authority and what actions will be taken to eliminate those threats. If all threats have been addressed for each source protection authority(ies) write "All known significant threats have been addressed" in the comments box. Note that this summary response will be posted under the objective summary section 3 of the report.

ThreatId	Threat	A	B	C	D
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	36	1	27	9
2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	262	1	55	152
3	The application of agricultural source material to land.	90	0	24	40
4	The storage of agricultural source material.	13	2	7	5
5	The management of agricultural source material.	0	0	0	0



# Source Water Protection Annual Report

## 2023 - Supplemental Form

### SPR - Thames, Sydenham and Region

6	The application of non-agricultural source material to land.	34	0	22	5
7	The handling and storage of non-agricultural source material.	0	0	0	0
8	The application of commercial fertilizer to land.	58	6	24	24
9	The handling and storage of commercial fertilizer.	23	4	16	9
10	The application of pesticide to land.	57	0	26	17
11	The handling and storage of pesticide.	19	0	16	3
12	The application of road salt.	0	0	0	0
13	The handling and storage of road salt.	0	0	0	0
14	The storage of snow.	2	0	2	0
15	The handling and storage of fuel.	90	6	66	18
16	The handling and storage of a dense non-aqueous phase liquid.	259	56	220	91
17	The handling and storage of an organic solvent.	35	4	25	14
18	The management of runoff that contains chemicals used in the de-icing of aircraft.	0	0	0	0
19	Water taking from an aquifer without returning the water to the same aquifer or surface water body	0	0	0	0
20	Reducing recharge of an aquifer	0	0	0	0
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	34	0	25	3
22	The establishment and operation of a liquid hydrocarbon pipeline	0	0	0	0
1000	Water conditioning salts from water softeners	0	0	0	0
1001	Transportation of specified substances along corridors	0	0	0	0



# Source Water Protection Annual Report

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1002	Spill of Tritium from Nuclear Generating Station	0	0	0	0	
1003	Handling storage of fuel	0	0	0	0	
1004	Transportation, storage and handling of diesel/gasoline	0	0	0	0	
1005	Transportation of Agricultural and Non-Agricultural Source Materials	0	0	0	0	
1006	International Shipping Channel within IPZ2	0	0	0	0	
1007	Transportation of hazardous substances along transportation corridors	0	0	0	0	
1008	Transportation or Storage and Handling of Fuel in an Event Based Area	46	4	30	19	
1009	Waterfowl	0	0	0	0	
1010	Local condition	0	0	0	0	
<b>409</b>	<b>557</b>	<b>Totals:</b>	<b>105</b>	<b>84</b>	<b>585</b>	<b>409</b>
			<b>8</b>			

Comment:

MECP Calc D/(A+B-C): 90 %



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Category
310	True	Please provide comments below to explain the overall progress made in addressing existing significant threat activities and include the percentage of overall progress made within the comments provided. The percentage of overall progress made in addressing local threats and conditions that are taking place on the landscape is determined by taking the total number in column D (i.e., significant drinking water threat addressed because policy is implemented) from the table above (reportable 305) adding it to C (i.e., significant threats determined through field verification to no longer be threats) and dividing it by the number that is derived by adding the total numbers in columns A and B. In other words, overall progress made = $(C+D)/(A + B)$ .	Addressing existing enumerated threats
<b>Answer:</b>		Overall progress made is 87 %	
<b>Comment:</b>		There were 1,058 threats included in the original enumeration and subsequently 84 new threats have been identified after the Source Protection Plan was approved. Of those threats 585 were determined to not be present/or no longer a occurring on the landscape. There are 409 threats that are being managed. There are 148 outstanding threats that need to be addressed.	

Report Id	Completed	Question	Category
320	True	If applicable, where the 2013/2017 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 30.1: Water Budget Tier 3 not included in your original assessment report(s).	Assessment report information gaps
<b>Answer:</b>		N/A	
<b>Comment:</b>			



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Category
321	True	If applicable, where the 2013/2017 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 50.1: GUDI for WHPA-E or F not included in your original assessment report(s).	Assessment report information gaps
<b>Answer:</b>		N/A	
<b>Comment:</b>			

Report Id	Completed	Question	Category
322	True	If applicable, where the 2013/2017 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 116: Issue Contributing Area not included in your original assessment report(s).	Assessment report information gaps
<b>Answer:</b>		N/A	
<b>Comment:</b>			

Report Id	Completed	Question	Category
323	True	[OPTIONAL] If applicable where the 2021 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 30.1: Water Budget Tier 3 not included in your original assessment report(s).	Assessment report information gaps
<b>Answer:</b>		N/A	
<b>Comment:</b>			



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Category
324	True	[OPTIONAL] Where the 2021 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 50.1: GUDI for WHPA-E or F not included in your original assessment report(s).	Assessment report information gaps

**Answer:** N/A

**Comment:**

Report Id	Completed	Question	Category
330	True	Does the source protection authority have any other item(s) on which it wishes to report? If so, please explain.	Other reporting items

**Answer:** No other items to report on.

**Comment:**



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	
350	True	In the opinion of the Source Protection Committee, to what extent have the objectives of the source protection plan been achieved in this reporting period?	
		<b>Response</b>	<b>Answer</b>
		Progressing Well - The majority of the policies from the approved original or an amended source protection plan have been implemented and/or are progressing well	Yes
		Satisfactory - Some of the policies from the approved original or an amended source protection plan have been implemented and/or are progressing well	No
		Limited Progress made - A few of the policies from the approved original or an amended source protection plan have been implemented and/or are progressing well	No
<b>Comment:</b>			



# Source Water Protection Annual Report 2023 - Supplemental Form SPR - Thames, Sydenham and Region

Report Id	Completed	Question	Category
351	True	Please provide comments to explain how the Source Protection Committee arrived at its opinion. Include a summary of any discussions that might have been had amongst the Source Protection Committee members, especially where no consensus was reached.	Achievement of source protection plan objectives
<b>Answer:</b>		<p>December 31st, 2023 marked eight years since our Source Protection Plan first took effect. In that time significant progress has been made to implement the policies contained in the plan, and address the activities that were identified as posing a risk to our municipal drinking water supplies. To date, 85% of the policies in the plan that address significant drinking water threats have been fully implemented, with the remaining 15% progressing well.</p> <p>An additional 20 Risk Management Plans were established over the reporting period bringing the Region’s total Risk Management Plans to 101.</p> <p>Approximately 87% of the 1058 originally identified significant drinking water threats, along with those identified after the originally approved SPPs, have been successfully managed or eliminated. While there is still a considerable amount of work to do to address the remaining threats, the Thames-Sydenham and Region Source Protection Committee is pleased to see that policy implementation is moving steadily forward. For that reason, they believe that a ranking score of progressing well and on target is a fair assessment on our implementation progress.</p>	
<b>Comment:</b>			

# Thames-Sydenham and Region Drinking Water Source Protection Source Protection Committee Report

**Report #:** 7c

**Report to:** Chair and Thames-Sydenham and Region Source Protection Committee

**Prepared by:** Matthew Jauernig

**Date:** March 22, 2024

**Re:** s.34 update for the Delineation of a Nitrate Issue Contributing Area around the Thornton Wellfield

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**THAT the SPC approve the Nitrate ICA delineation report and agree for it to be submitted to the MECP for early engagement as per s.34 of the *Clean Water Act, 2006***

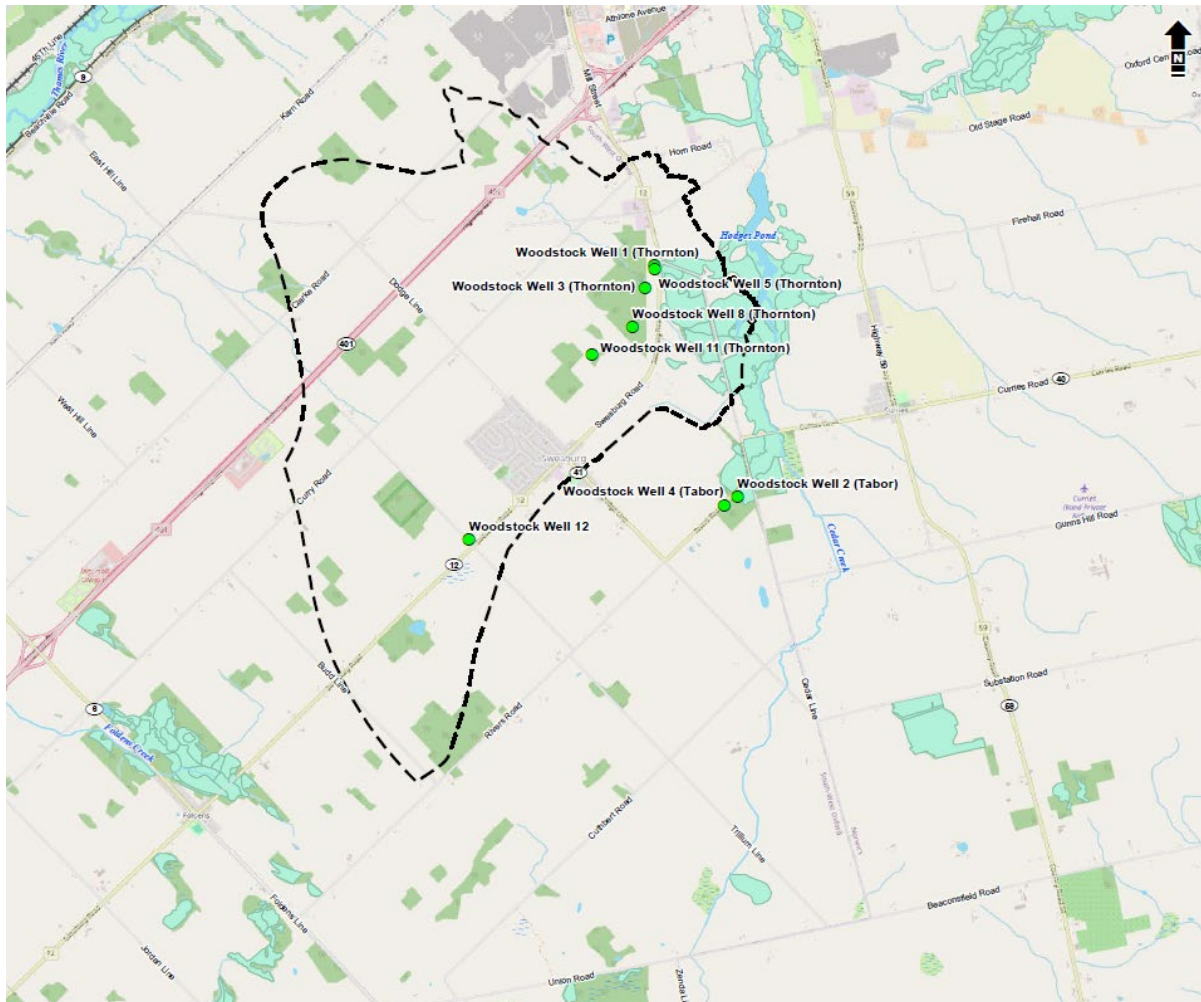
## Summary

- Oxford County has completed a Nitrate Issue Contributing Area (ICA) for the Thornton Wellfield (Woodstock Wells 1, 3, 5, 8, 11 and 12)
- Oxford County would like to engage in a S.34 update to update the Assessment Report as well as the Source Protection Plan to update mapping and policies applicable to the newly delineated Nitrate ICA.

## Discussion

Oxford County retained Matrix Solutions Inc. to delineate a Nitrate ICA around the Thornton Wellfield. These municipal wells are all completed in overburden and nitrate has been identified as a water quality issue due to currently elevated concentrations that have been near or routinely exceeding half of the maximum allowable concentration of 10mg/L. Figure 1 demonstrates the applicable lands that are impacted by the Nitrate ICA.

Figure 1: Land area impacted by the Nitrate ICA



Approximately 379 new significant drinking water threats (SDWT) were identified within the Nitrate ICA. It should be noted that some of these properties already fall within an area that where SDWT are applied (i.e., Wellhead Protection Area A and B with a vulnerability score of 10). Table 1 demonstrates the type of threats applicable identified within the Nitrate ICA.

Table 1: Nitrate Threats identified within the Nitrate ICA

Threat Category	MPAC Property Description	Threat Type(s) <sup>(1), (2)</sup>	Count
Agricultural	Farm Property without any buildings	ASM, NASM	9
	Farm with a residence and farm outbuildings	ASM, NASM	25
	Farm with gravel pit	ASM, NASM	3
	Farm with residence but no farm buildings	ASM, NASM	2
	Farm with residence with commercial/industrial operation	ASM, NASM	3
	Farm without a residence but has outbuildings	ASM, NASM	7
	Farmer-owned land, some being farmed, improved with non-farm residence	ASM, NASM	1
	Grain / seed and feed operation	ASM, NASM	1
	Land improved with non-farm buildings with some land being farmed	ASM, NASM	2
	Large scale poultry operation	ASM, NASM	1
	Vacant residence/commercial/industrial land owned by farmer, some being farmed	ASM, NASM	10
Septic	Single family detached (not on water)	The establishment, operation, or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage.	315
Total Number of Properties			379

Notes:

(1) ASM – Storage and Application of Agricultural Source Material

(2) NASM – Storage and Application of Non-agricultural Source Material

Policies applied to these properties are subjected to the policies already stipulated for Nitrate ICA threats outlined within Volume II of the Thames-Sydenham and Region Source Protection Plan.

## Recommendations

**THAT the SPC approve the Nitrate ICA delineation report and agree for it to be submitted to the MECP for early engagement as per s.34 of the Clean Water Act, 2006**

# Thames-Sydenham and Region Drinking Water Source Protection Source Protection Committee Report

**Report #:** 7d

**Report to:** Chair and Thames-Sydenham and Region Source Protection Committee

**Prepared by:** Julie Welker

**Date:** March 22, 2024

**Re:** Lambton Area Water Supply System Back-Up Intake

---

## **THAT the SPC receive this update as information**

### **Summary**

- Second Intake not captured within the St. Clair Region Assessment Report
- Lambton Area Water Supply System (LAWSS) has hired a consultant to conduct technical work and vulnerability assessment of second intake.

### **Discussion**

In the spring of 2023 Source Protection Authority (SPA) staff received an Inspection Report from Ministry of the Environment, Conservation and Parks (MECP) for LAWSS referring to a back-up intake. SPA staff were unaware of this intake and concluded that it is also not captured within the Assessment Report. Upon follow up meetings with staff from LAWSS, it was confirmed there is a back-up intake #2 that is approximately 150 m from the primary intake.

To include the back-up intake #2 into the Assessment Report, SPA staff communicated the need for technical work to be conducted to delineate the IPZ-1 and IPZ-2 boundaries.

LAWSS has since hired R.V. Anderson Associates Limited (RVA) to develop a Second Intake Source Water Protection Technical Report. RVA, in association with Baird & Associates, completed a series of technical reports related to LAWSS's primary intake between 2007 and 2010.

The scope of the work will involve the development of the Surface Vulnerability Report and Threats and Issues Assessment Report.

The intention for this work is to be used by Thames-Sydenham Source Protection Authorities to update the St. Clair Region Assessment Report.

This work is scheduled to be completed by mid-April, 2024, which is beyond the date for the Source Protection Committee meeting for review.

**Recommendations THAT the SPC receive this update as information**



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Julie Welker

Coordinator, Source Water Protection

# Thames-Sydenham and Region Drinking Water Source Protection Source Protection Committee Report

**Report #: 7e**

**Report to:** Chair and Thames-Sydenham and Region Source Protection Committee

**Prepared by:** Julie Welker

**Date:** March 22, 2024

**Re: Municipal Systems Update**

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**THAT the SPC receive this update as information**

## Summary

- **Update on 7 possible future municipal system changes**

## Discussion

Further Section 34s

1. LAWSS Back Up Intake – separate report
2. Wallaceburg Intake - The Wallaceburg Water Treatment Plant (WTP), the raw water intake and the low-lift pump station equipment and structures have reached the end of their life expectancy and require frequent repairs and replacement. Through a Municipal Class Environmental Assessment (Class EA) conducted by Jacobs Consulting on behalf of Chatham-Kent, the preferred option is to move the Intake from the original location on the Chenal Ecarte to further upstream (approx.5 km).

**Update:** EA work is complete. Notice of Completion was first issued on February 23, 2023. After public consultation the CK-PUC will proceed with design and construction of the new raw intake, low lift pumping station, water treatment plant, raw and treated water transmission main.

The current plan would see the intake on the Snye River (aka Chenail Ecarte) moved several kilometers upstream and the taking rate increased.

Expected Timelines – Likely late 2024 or early 2025. The scope of work will be included as part of detailed design for the new facilities and C-K PUC still has to issue an RFP and select a consultant for this.

3. Petrolia Intake - Town of Petrolia is moving ahead with a Class EA to determine a replacement plan with issues (ice, zebra mussels and age) with

the current intake which is at the end of its service life. The proposed new intake will be in close proximity (approx. 15 m) to current intake.

**Update:** Issued EA Project file in December 2023 and are now in the process of addressing the comments that were received during the 30-day review period. Hoping to wrap up the Project File report by April. Also advancing the necessary approvals and permits for the new intake, in parallel with finalizing the EA.

4. Tavistock Well - The County of Oxford has initiated a Class EA study to explore potential opportunities for a new well supply to improve the security and supply of drinking Water for the community.

**Update:** Project is 18 months behind schedule. There will be a public consultation occurring before the detail design is initiated. Possible new WHPA could extend into Perth East.

5. Sebringville Well - Notice of Study Commencement was sent out in 2022 to examine the towns' needs for water and waste water infrastructure as a result of projected residential growth.

**Update:** Planning Process and EA underway. Possible new well to service a large development block. Possible new WHPA could extend into Perth East.

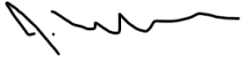
6. Dorchester Well - Thames Centre has completed exploratory drilling in 2021 and 2022, and from the boreholes drilled near the existing well field area, only one viable test well was installed. It remains offline but the plan is to connect it to the system in the near future. Drilling plans for 2023 are to expand the exploratory area to further outside of the existing well field, but still within the urban limits. The municipality is currently in the approval and land access step before they can proceed with drilling.

**Update:** A proposed well location approximately 150' inside the Vista Woods property immediately east of the Dorchester Well Field will be drilled mid-April. To date, the existing wells that have been drilled are sitting dormant until we find an additional well with positive yields.

7. Ridgetown - Ridgetown has two well fields. 1. Scane Wells 2. Colby Wells. The Scane wells #4,5,6 and 7 were decommissioned in fall 2022 and wells #1 and 2 brought into full production. Colby well C#1 is in full production with C #2 coming online in the near future. Wells #1, 2, 1A, 3, and 3A will be decommissioned in the near future.

**Update:** No update in time for this report.

**Recommendations THAT the SPC receive this update as information**



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Julie Welker

Coordinator, Source Water Protection

# Thames-Sydenham and Region Drinking Water Source Protection Source Protection Committee Report

**Report #: 7f**

**Report to:** Chair and Thames-Sydenham and Region Source Protection Committee

**Prepared by:** Julie Welker

**Date:** March 22, 2024

**Re:** Road Salt Monitoring Policy Discussion

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**THAT the SPC receive this report as information for discussion**

## Summary

- The Table of Drinking Water Threats was updated in 2021
- The threat circumstances for the storage and application of road salt were changed
- A number of SPC's are discussing the need for a Road Salt Monitoring Policy

## Discussion

### Background: Threat for Drinking Water - Sodium and Chloride

The Guidelines for Ontario Drinking Water Standards set an aesthetic objective of **200 mg/L for sodium**. Sodium concentrations above 200 mg/L may alter the taste of water. The local Medical Officer of Health is notified when the sodium concentration **exceeds 20 mg/L** in a water supply. Sodium in drinking water is not a health concern for most people but may be an issue for someone with hypertension, congestive heart failure or on a sodium-restricted diet. Chloride produces a detectable salty taste at the aesthetic objective level of **250 mg/L**.

Several municipal drinking water systems in the TSR region have elevated sodium levels, above the 20 mg/L threshold. Sodium is naturally occurring in this region, but without additional monitoring and data analysis, it is difficult to quantify the impact, if any, due to road salt application.

Road salt can cause serious damage to infrastructure, ecological functions, aquatic habitat, crops and drinking water. However, businesses are often concerned with liability and are hesitant to reduce salt usage.

## **2021 Technical Rules and Draft Policies:**

In 2021 there was an update to the Technical Rules which included Road Salt Storage and Road Salt Application.

As a result the Thames-Sydenham Source Protection Committee approved three separate policies:

- 1) Road Salt Application – Education & Outreach in WHPA (10) and IPZ-1 (9);
- 2) Road Salt Storage (Exposed) – Prohibition in WHPA (10) and IPZ-1 (9);
- 3) Road Salt Storage (Partially Exposed) – Management in WHPA (10) and IPZ – (10)

## **Road Salt Monitoring Policy Discussion:**

Essex Region Source Protection Committee asked staff to poll other Source Protection Regions to see if they are thinking of including a policy for increasing monitoring of sodium chloride at municipal drinking water systems. Currently the requirement is only once every 5 years.

An email was sent to all 19 Project Managers in Ontario on 27 February, 2024 to inquire about their existing or proposed monitoring policies as well as Risk Management and E&O approaches. Six email responses were received, as expected there are a variety of approaches summarized below.

### **Essex**

- Proposing a monitoring policy that states ‘In accordance with Section 22(2)-[7] of the Clean Water Act, further monitoring of sodium chloride is warranted for drinking water intakes with vulnerable areas where the application, handling and/or storage of road salt is significant drinking water threat. Currently testing for sodium chloride is required once every five years. We recommend at least quarterly sampling of the raw water. Participation in these monitoring programs is dependent on adequate resources (including funding and staff capacity) being available.’

### **Sudbury**

- Has a monitoring policy only for their Issue Contributing Area (known salt contamination). “Originally the frequency was left up to the municipality, but we did make an update a couple of years ago to stipulate twice a year sampling for the spring/fall.”

### **Halton/Hamilton**

- No salt monitoring policy, but stressed the importance of municipal consultation and also to consider the purpose of collecting the data and implications of the results. “in this case potentially putting in programs to reduce road salt use if monitoring would show increasing trends that can be linked to road salt.”

### Credit Valley

- Has a monitoring policy only for their Issue Contributing Area (known salt contamination)  
"To address the municipal concerns, we developed a sampling frequency decision tree that accounts for vulnerability and available data, and we are working on a high-level financial impact analysis."
- Recommends increased sampling frequency, but not through policy
- Also stressed the importance of municipal buy-in for policies that require action

### Sault Ste.Marie

- Relies on data collected by Provincial water monitoring programs (PGMN)

### Quinte

Proposing a policy for annual sampling. They have just finished public consultation and received no comments on this policy

### Some points of discussion:

- Currently, no NaCl Issue Contributing Area within the TSR region.
- Popular opinion is not to force municipalities hand in testing
- Should MECP consider revising their requirements for monitoring if it is now a SDWT

### Recommendations

**THAT the SPC receive this report as information for discussion.**



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Julie Welker

Coordinator, Source Water Protection

# Thames-Sydenham and Region Drinking Water Source Protection Source Protection Committee Report

**Report #: 7g**

**Report to:** Chair and Thames-Sydenham and Region Source Protection Committee

**Prepared by:** Julie Welker

**Date:** March 22, 2024

**Re:** 2023 Auditor General Report – Proposed Phase Out of Free Well Water Testing

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**THAT** the SPC receive this update as information.

**AND THAT** the SPC direct staff to write a letter to the Minister of the Environment, Conservation, and Parks and the Minister of Health requesting that the province does not proceed with the recommended phase out of free private well water testing in Ontario.

## **Summary**

The 2023 Auditor General's Value-for-Money audit of Public Health Ontario (PHO) recommended that PHO, in conjunction with the Ministry of Health, update and implement a plan to streamline public health laboratory operations. The plan included gradually discontinuing free private drinking water testing. The proposed phase out of free water testing for private drinking water is of concern. In Ontario, 80% of the population has access to municipal water which is regularly monitored and treated by professionals. However, the other 20% of Ontarians depend on non-municipal water supplies which are not protected by the government's multi-barrier approach.

## **Discussion**

In December 2023 the Auditor General released its Value-for-Money Audit of Public Health Ontario (PHO). The audit, among other items, found that PHO's laboratory sites were not operating efficiently. In 2017, PHO developed a plan collaboratively with the Ministry of Health to modernize its laboratory operations by consolidating resources into 1 fewer laboratory sites and discontinuing or restricting eligibility for certain tests. This plan has not been approved and implemented. According to the audit, implementation of this plan was put on hold due to the construction of the new London public health laboratory, as well as increased capacity required from all PHO laboratory sites for COVID-19. Audit recommendation #5 states that PHO, in conjunction with the Ministry of Health, should update and implement a plan within 12 months to streamline public health laboratory operations. The 2017 plan proposed to gradually close six of the 11 public health laboratory sites (Hamilton, Kingston, Orillia, Peterborough, Sault Ste. Marie and Timmins) and changing the types of test offered at the PHO laboratory sites,

including gradually discontinuing free private drinking water testing. Mitigating rising costs of maintaining facilities and establishing a more efficient operating model that reduces the rerouting of samples to other PHO laboratory sites are stated as the main reasons for the plan. The proposed phasing out of free private drinking water well testing is of concern. Private drinking water systems do not have the legislated safeguards that are required for municipal, communal, and public systems under the Safe Drinking Water Act, 2002. Neither are the water sources of private drinking water systems protected through the source protection program under the Clean Water Act, 2006. Under the Clean Water Act, 2006, only municipal drinking water systems are mandated to be included in the source protection program. According to Health Canada's guidance on waterborne pathogens, private and small community water systems are vulnerable and recognized as being more likely to contribute to cases of human gastrointestinal illness than municipal systems. Testing of private well water is one of the only avenues for residents on private systems to ensure their drinking water is safe. Well water testing of private wells is the responsibility of each well owner. Currently, most Public Health laboratories offer free private drinking water testing. All public health organizations recommends testing at least three times a year for bacteria. Free private well water testing is important to reduce barriers for residents to test their wells on a regular basis. Without free water testing, well owners would need to use commercial labs for a fee, which disincentivizes testing. Without regular testing, water quality is unknown, and residents are at increased risk of falling ill. 2 In the Walkerton Inquiry Report Part 2, Justice Dennis O'Connor concluded the privatization of laboratory testing of drinking water samples contributed directly to the E. coli O157:H7 outbreak in Walkerton, Ontario in May 2000. Twenty-four years later, there is a proposal to privatize water testing once again.

## Recommendations

**THAT** the SPC receive this update as information.

**AND THAT** the SPC direct staff to write a letter to the Minister of the Environment, Conservation, and Parks and the Minister of Health requesting that the province does not proceed with the recommended phase out of free private well water testing in Ontario.



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Julie Welker

Coordinator, Source Water Protection

Attachment: letter from ABMV SPC, list of current drop off locations in TSR.

February 26th, 2023

**Honourable Lisa Thompson, Ontario Minister of Agriculture, Food and Rural Affairs**

Via e-mail: [lisa.thompsonco@pc.ola.org](mailto:lisa.thompsonco@pc.ola.org)

**Re: Recommended Phase Out of Free Well Water Testing in the 2023 Auditor General's Report**

Dear Minister Thompson,

In the 2023 Auditor General's Value-for-Money Audit of Public Health Ontario (PHO) released in December 2023, recommendation number 5 states that PHO, in conjunction with the Ministry of Health (MOH), are to update and implement a laboratory modernization plan within 12 months to streamline the laboratory's operations.

[https://www.auditor.on.ca/en/content/annualreports/arreports/en23/AR\\_publichealth\\_en23.pdf](https://www.auditor.on.ca/en/content/annualreports/arreports/en23/AR_publichealth_en23.pdf)

This stemmed from a 2017 proposal by PHO, collaboratively with the MOH at the request of the Deputy Minister to close six of the 11 public health laboratory sites (Hamilton, Kingston, Orillia, Peterborough, Sault Ste. Marie and Timmins) and gradually discontinue private drinking water testing. The justification:

- Mitigating rising costs of maintaining facilities
- Establishing a more efficient operating model that reduces the rerouting of samples to other PHO laboratory sites

About 50% of the Ausable Bayfield Maitland Valley Region population is serviced by private wells. The proposed removal of PHO's free private drinking water testing is of concern to our Ausable Bayfield Source Protection Committee, particularly when Source Protection Regions have been directed by the Ministry of Environment, Conservation and Parks, Source Protection Branch, to deliver education and outreach to private well owners under the new Best Practices initiative.

In our region, we have been working with service and community organizations such as the Lions, Optimists and Lakeshore Residents Associations to co-host very successful Best Practices 'Water Wise' events that encourage private well owners to sample their drinking water using the free microbial testing provided by the province. By distributing water sample bottles ahead of the event and delivering the samples to Huron Perth Public Health for lab analysis, most of the barriers to water sampling are removed. At these events 25% to 50% of a communities well water will be sampled in one day or night.

Well owners understand the importance of testing their well water; it is the inconvenience of doing so that is the barrier. One of the goals of the 'Water Wise' events is to encourage well owners to get in the habit of testing their water regularly as part of Best Practices for protecting their drinking water. The hope is that the community groups and service clubs that Source Protection staff work with will make Water Wise water sampling events part of their regular activities.

Private drinking water systems in Ontario do not have the legislated safeguards that are required for municipal/communal/public systems under the *Safe Drinking Water Act, 2002*. Only municipal water supply systems fall under the *Clean Water Act, 2006* and the Source Water Protection program. Health Canada's guidance on waterborne pathogens references three studies that determine that private systems are vulnerable

and there is evidence that demonstrates they are more likely to contribute to gastrointestinal illness than public drinking water systems.

If the free water testing phase out recommendation is approved, well owners would have to use a commercial lab for a fee, which disincentivizes testing. When water is not monitored regularly, there is no way to know the true quality of the water, which puts people at increased risk of becoming ill. With private systems being stand-alone systems, any associated illnesses are isolated sporadic events and do not come to public attention like those seen during the Walkerton outbreak.

The private drinking water test data maintained by PHO has been used by researchers to publish evidence that helps support public health policy. Source Protection Committees can access data associated with their area, as was presented at our March 2023 meeting. The data can be used to inform well owners of regional water quality concerns and associated health risks. If PHO stops testing, this data and affiliated research will no longer be available.

In the Walkerton Inquiry Report [Part 2](#), Justice O'Connor concluded the privatization of laboratory testing of drinking water samples connected directly to the *E. coli* O157:H7 outbreak in Walkerton Ontario in May 2000. Twenty-four years later, there is a proposal to privatize water testing once again.

At the January 31<sup>st</sup> meeting of the Ausable Bayfield Maitland Valley Source Protection Committee the following resolution was unanimously approved:

**MOTION #SPC: 2024-02-04**

**Moved by Philip Keightley**

**Seconded by Mary Ellen Foran**

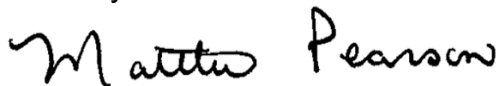
**“THAT the Source Protection Committee direct a letter to Minister Thompson requesting that the province not proceed with the recommended phase out of free private well testing in Ontario, and**

**“FURTHER, THAT area municipalities, the Minister of Environment Conservation and Parks, the Minister of Health and Long-Term Care, other Source Protection Committees, and local health units be forwarded the letter and asked for their support. “**

**Carried.**

Thank you for your consideration of this request.

Sincerely



Matthew Pearson

Chair

Ausable Bayfield Maitland Valley Source Protection Committee

Cc Honourable Sylvia Jones, Minister of Health and Long-Term Care  
Honourable Andrea Khanjin, Minister of the Environment, Conservation and Parks

Municipalities of Adelaide Metcalfe, Ashfield-Colborne-Wawanosh, Bluewater, Central Huron, Goderich, Howick, Huron East, Lambton Shores, Lucan Biddulph,

Mapleton, Middlesex Centre, Minto, Morris-Turnberry, North Middlesex, North Perth, Perth South, South Bruce, South Huron, Warwick, West Perth, Wellington North

Townships of Huron-Kinloss and North Huron

Huron Perth Public Health, Lambton Public Health, Middlesex-London Health Unit, Wellington Dufferin Guelph Public Health

Source Protection Regions: Cataraqui; Central Lake Ontario, Toronto, Credit Valley; Essex; Hamilton Halton; Grey Sauble, Saugeen, Northern Bruce Peninsula; Lake Erie; Lakehead; Mattagami; Mississippi-Rideau; Niagara; North Bay; Quinte; Raisin South Nation; Sault Ste. Marie; South Georgian Bay Lake Simcoe; Sudbury; Thames -Sydenham and Region; Trent Conservation Coalition

# DRINKING WATER SOURCE PROTECTION RISK MANAGEMENT SERVICES

Office located at:  
Upper Thames River Conservation Authority  
1424 Clarke Road, London, ON N5V 5B9  
Tel: 519.451.2800 Fax: 519.451.1188

Working together to protect drinking water sources

## Well Water Testing Sample Drop Off Locations:

Please ensure the sample is taken within 48 hours and kept in a cold location until it is delivered to a drop off location.

For more information on how to collect a well water sample go to: [www.publichealthontario.ca](http://www.publichealthontario.ca)

### Middlesex-London Locations:

Location	Drop-Off Times:
Middlesex-London Health Unity, London Office Citi Plaza 355 Wellington Street, Suite 110 London, ON N6A 3N7 (519) 663-5317	Monday to Thursday 8:30 am - 4:30 pm Friday 8:30 am - Noon
Public Health Laboratory 1200 Commissioners Road East, Unit 102 London, ON N5Z 4R3 (519) 455-9310	Monday to Friday 8:00 am - 4:00 pm
Middlesex-London Health Unit, Strathroy Office 51 Front Street East Strathroy, ON N7G 1Y5 (519) 663-5317	Tuesday 8:30 am – noon & 1:00 pm – 4:30 pm Wednesday 8:30 am – Noon
South West Middlesex Health Centre 22262 Mill Road, RR#5 Mt. Brydges, ON N0L 1W0 (519) 264-2800	Monday, Tuesday & Thursday 9:00 am - 4:30 pm Wednesday 9:00 am - Noon

### Huron/Perth Locations:

Location:	Drop-Off Times:
Clinton: Huron Perth Public Health 77722B London Rd, Clinton, ON N0M 1L0	Monday to Thursday 8:30 a.m. to 4:30 p.m.
Exeter: South Huron Hospital 24 Huron St W, Exeter, ON N0M 1S2	Monday to Thursday 7:30 to 10:30 a.m.
Listowel: Huron Perth Public Health 161 Inkerman St W, Listowel, ON N4W 1B8	Friday 10:00 a.m. to 2:00 p.m.
Milverton: Community Outreach Services at Knollcrest Lodge 50 William St, Milverton, ON N0K 1M0	Monday to Thursday 8:00 a.m. to 3:00 p.m.
Seaforth: Seaforth Community Hospital Lab 24 Centennial Dr. Seaforth, ON N0K 1W0	Monday to Friday 8 to 9:45 a.m.
Stratford- Huron Perth Public Health 653 W Gore St Stratford, ON N5A 1L4	Monday to Thursday 8:30 a.m. to 4:30 p.m. Friday 8:30 to 11:30 a.m.

A joint program provided by the UTRCA  
(as per Part IV of the Clean Water Act)

Wingham: Wingham and District Hospital Lab 270 Carling Terrace, Wingham, ON N0G 2W0	Monday to Thursday 8:30 a.m. to 3 p.m.
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Oxford County Locations:

Location:	Drop Off Times:
St. Thomas: Southwestern Public Health 1230 Talbot Street, St. Thomas, ON 519-631-9900	All day Monday and Wednesday or Tuesday and Thursday before 11:30am.
Woodstock: Southwestern Public Health 410 Buller Street, Woodstock, ON 519-421-9901	Monday - Thursday 8:30am - 4:30pm Friday 8:30am - 11:00am
Tilsonburg District Memorial Hospital 167 Rolph St. Tilsonburg	Monday - Thursday 8:00am - 8:00pm
Ingersoll: Alexandra Hospital 29 Noxon St. Ingersoll	Monday 8:00am - 8:00pm Friday 8:00am - 11:00am
Princeton: Siden Feed & Seed Inc. 15 Main Street, Princeton ON N0J 1V0	First Wednesday of every month ONLY 8:30am -10:30am

If the area you reside in is not listed, you can find the closest drop off location by searching your local health unit.

For more information on how to protect your drinking water, scan the QR code below to follow the best practices to ensure your drinking water is safe to drink!



Thames-Sydenham & Region Source Water Protection  
Upper Thames River Conservation Authority  
1424 Clarke Road, London, Ontario N5V 5B9  
Tel: 519-451-2800



# Ontario's Woolwich, two water operators fined under Safe Drinking Water Act

Jan 8, 2024

2

The township is located in the northeast part of Waterloo Region and is made up of 10 small communities. Its distribution system receives water from two large, municipal drinking water systems that provide primary and secondary disinfection. Graphic: Google Maps  
The Ontario Township of Woolwich, as well as two of its certified drinking water operators, have been fined for failing to report or correct the direction of water to users that was not properly disinfected.

The violations under the *Safe Drinking Water Act* date back to August 2020.

The Corporation of the Township of Woolwich is the owner and operator of the Breslau Distribution System, which supplies drinking water to some 3,788 residents. The township is located in the northeast part of Waterloo Region and is made up of 10 small communities. Its distribution system receives water from two large, municipal drinking water systems that provide primary and secondary disinfection.

“The Township of Woolwich is responsible for maintaining secondary disinfection in the Breslau [drinking water system] by adhering to regular sampling/testing requirements for chlorine residual to maintain drinking water quality,” states a [court bulletin](#) from the Ontario Ministry of the Environment, Conservation and Parks (MECP).

The certified drinking water operator for the township, and the operator-in-charge for the day on August 19, 2020, obtained a distribution sample from a local tap, tested the chlorine residual and recorded the results, which showed adverse water quality readings. He did not, however, report the incident verbally or in writing, nor did he take corrective actions to address the adverse water quality. According to the MECP, the operator instead proceeded to another location for sampling and submitted the sample results to the overall responsible operator for review.

The overall responsible operator employed by the township initialed the sample results and also failed to report the adverse water quality verbally or in writing to the ministry, the local health unit, or the medical officer of health. He also did not take corrective actions to address the adverse water quality, states the Ontario court bulletin.

On July 14, 2021, the ministry conducted an inspection of the Breslau system and determined that appropriate reporting for the incident had not occurred, nor had any corrective actions been taken.

As a result, the ministry's Environmental Investigations and Enforcement Branch laid charges that resulted in the convictions.

The Corporation of the Township of Woolwich was fined \$10,000, plus a victim fine surcharge of \$2,500.

The overall responsible operator was fined \$1,600, plus a victim fine surcharge of \$400.

The operator in charge on the day of the incident was fined \$1,200, plus a victim fine surcharge of \$300.

# 3M Resolves Claims by Public Water Suppliers, Supports Drinking Water Solutions for Vast Majority of Americans

Jun 22, 2023 • 5:00 PM EDT [Download as PDF](#)

- Agreement includes present value commitment of up to \$10.3 billion payable over 13 years
- Provides funding for public water suppliers (PWS) nationwide that have detected PFAS in drinking water, as well as for eligible PWS that may detect PFAS at any level in the future  
ST. PAUL, Minn., June 22, 2023 /PRNewswire/ -- 3M (NYSE: MMM) has entered into a broad class resolution to support PFAS remediation for public water suppliers (PWS) that detect PFAS at any level or may do so in the future. This agreement will benefit U.S.-based PWS nationwide that provide drinking water to a vast majority of Americans. Subject to court approval, the agreement:
- Provides funding for PWS across the country for PFAS treatment technologies without the need for further litigation.
- Provides funding for eligible PWS that may detect PFAS in the future.
- Resolves current and future drinking water claims by PWS related to PFOA, PFOS, and all other PFAS, including those that are included as a portion of the Aqueous Film Forming Foam (AFFF) multi-district litigation based in Charleston, South Carolina.
- Provides funding for PWS nationwide to conduct testing for PFAS.  
"This is an important step forward for 3M, which builds on our actions that include our announced exit of PFOA and PFOS manufacturing more than 20 years ago, our more recent investments in state-of-the-art water filtration technology in our chemical manufacturing operations, and our announcement that we will exit all PFAS manufacturing by the end of 2025," said 3M chairman and CEO Mike Roman.

## Financial Considerations

Under the terms of the settlement, 3M has agreed to contribute up to a present value of \$10.3 billion, payable over 13 years.

3M expects to record a pre-tax charge of approximately \$10.3 billion in the second quarter of 2023 and to reflect it as an adjustment in arriving at results,

adjusted for special items. Additional details will be included in 3M's filings with the Securities and Exchange Commission.

The strength and stability of 3M's business model and strong free cash flow capability, together with proven capital markets access, provide financial flexibility to deploy capital to meet its cash flow needs under this agreement and other contractual commitments and obligations.

This agreement is not an admission of liability. If the agreement is not approved by the court or certain agreed terms are not fulfilled, 3M is prepared to continue to defend itself in the litigation. 3M also will continue to address other PFAS litigation by defending itself in court or through negotiated resolutions, all as appropriate.

### **About PFAS**

PFAS can be safely made and used and are critical in the manufacture of many products that are important for modern life, including medical technologies, semiconductors, batteries, phones, automobiles, and airplanes. Additional details are available on 3M's website, [www.3M.com/PFAS](http://www.3M.com/PFAS).

### **Forward-Looking Statements**

This news release contains certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including projections as to the amount and timing of payments made under the Settlement. You can identify these statements by the use of words such as "anticipate," "estimate," "expect," "aim," "project," "intend," "plan," "believe," "will," "should," "could," "would," "target," "forecast" and other words and terms of similar meaning in connection with any discussion of future operating or financial performance or business plans or prospects. Forward-looking information is based on management's estimates, assumptions, and projections, and is subject to significant uncertainties and other factors, many of which are beyond 3M's control. Important risk factors could cause actual future results and other future events to differ materially from those currently estimated by management, including, but not limited to, whether court approval of the Settlement will be obtained, whether the number of plaintiffs that opt out of the Settlement will exceed current expectations or will exceed the level that would permit 3M to terminate the Settlement (and whether 3M will elect to terminate the Settlement if this occurs), whether the Settlement is appealed, the filing of additional, or the outcome of any other pending or future, litigation relating to PFAS or related products or chemistries, costs of remediation obligations relating to PFAS or related products or chemistries, changes in related laws or regulations, or the impact of the settlement, any

litigation or related matters on 3M's financial condition. Additional important risk factors that could cause future actual results or events to differ materially are the following: (1) worldwide economic, political, regulatory, international trade, geopolitical, capital markets and other external conditions and other factors beyond 3M's control, including inflation, recession, military conflicts, natural and other disasters or climate change affecting the operations of 3M or its customers and suppliers; (2) risks related to unexpected events such as the public health crises associated with the coronavirus (COVID-19) global pandemic; (3) foreign currency exchange rates and fluctuations in those rates; (4) risks related to certain fluorochemicals, including liabilities related to claims, lawsuits, and government regulatory proceedings concerning various PFAS-related products and chemistries, as well as risks related to 3M's plans to exit PFAS manufacturing and discontinue use of PFAS across its product portfolio; (5) legal proceedings, including significant developments that could occur in the legal and regulatory proceedings described in 3M's Annual Report on Form 10-K for the year ended Dec. 31, 2022 and any subsequent quarterly reports on Form 10-Q (the "Reports"); (6) competitive conditions and customer preferences; (7) the timing and market acceptance of new product and service offerings; (8) the availability and cost of purchased components, compounds, raw materials and energy due to shortages, increased demand and wages, supply chain interruptions, or natural or other disasters; (9) unanticipated problems or delays with the phased implementation of a global enterprise resource planning (ERP) system, or security breaches and other disruptions to 3M's information technology infrastructure; (10) the impact of acquisitions, strategic alliances, divestitures, and other strategic events resulting from portfolio management actions and other evolving business strategies; (11) operational execution, including the extent to which 3M can realize the benefits of planned productivity improvements, as well as the impact of organizational restructuring activities; (12) financial market risks that may affect 3M's funding obligations under defined benefit pension and postretirement plans; (13) 3M's credit ratings and its cost of capital; (14) tax-related external conditions, including changes in tax rates, laws or regulations; (15) matters relating to the proposed spin-off of 3M's Health Care business; and (16) matters relating to the voluntary chapter 11 proceedings of 3M's subsidiary Aearo Technologies and certain of its affiliates. Changes in such assumptions or factors could produce significantly different results. A further description of these factors is located in the Reports under "Cautionary Note Concerning Factors That May Affect Future Results" and "Risk Factors" in Part I, Items 1 and 1A (Annual Report) and in Part I, Item 2 and Part II, Item 1A (Quarterly Reports). 3M assumes no obligation to update any forward-

looking statements discussed herein as a result of new information or future events or developments.

**About 3M**

3M (NYSE: MMM) believes science helps create a brighter world for everyone. By unlocking the power of people, ideas and science to reimagine what's possible, our global team uniquely addresses the opportunities and challenges of our customers, communities, and planet. Learn how we're working to improve lives and make what's next at [3M.com/news](https://www.3m.com/news) or on Twitter at [@3M](https://twitter.com/3M) or [@3MNews](https://twitter.com/3MNews).

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SOURCE 3M

*Released June 22, 2023*

# EPA proposes some ‘forever chemicals’ be considered hazardous



By [Jen Christensen](#), CNN

3 minute read

Published 12:52 PM EST, Fri February 2, 2024

[Video Ad Feedback](#)

What you need to know about toxic 'forever chemicals'

02:23 - Source: [CNN](#)

CNN —

The US Environmental Protection Agency is proposing that it will label nine of the thousands of PFAS “forever chemicals” as hazardous.

[PFAS](#), or per- and polyfluoroalkyl compounds, are considered a “forever chemical” because it takes a long time to break down in the environment and in the human body. They’re found in hundreds of household items and in drinking water systems and are thought to be in the blood of [98% of the human population](#).

A change to the regulations would make it easier for the government to address PFAS as a part of its cleanup program, the EPA said. Last year, the EPA proposed the first [national drinking water standard for PFAS](#) chemicals.

[Ad Feedback](#)

“Thanks to strong partnerships with our co-regulators in the states, we will strengthen our ability to clean up contamination from PFAS, hold polluters accountable and advance public health protections,” EPA Administrator Michael Regan said in a [statement](#).

The EPA said it’s proposing to change the definition of hazardous waste in regard to cleanups at permitted hazardous waste facilities. [The agency signed](#) a proposal to change Resource Conservation and Recovery Act regulations on Wednesday that would add some of the most common PFAS compounds, their salts, and structural isomers to a list of “hazardous constituents.”

[RELATED ARTICLE](#) Common contaminants linked to accelerated weight gain in children

Under EPA regulations, to be considered a “hazardous constituent,” studies must show that the chemical is a threat to human health or “other life forms” and demonstrate that the chemical is toxic; that it can cause cancer; is mutagenic, meaning it could prompt a change in the DNA and damage a cell potentially leading to cancer; or teratogenic, which means that the chemical can disturb the growth and development of an embryo or fetus.

For years, studies have shown that these chemicals are much more hazardous to human health than scientists initially thought and are dangerous at levels thousands of times lower than previously believed.

Exposure to PFAS chemicals are thought to lead to [reproductive problems](#), [heart issues](#), breathing problems [such as asthma](#), and problems with the immune system, in addition to cancers.

While the EPA is proposing to regulate nine PFAS, there are thousands of these chemicals that have been used to make coatings and products that can repel water, grease, heat and oil. The chemicals are found in carpets, clothing, cookware, and many other common household products.

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High concentrations have even been found as far away as the [Arctic](#) and in the blood of animals that live in areas that presumably have little opportunities for direct exposure to these human-made chemicals.

Before it could become official, the EPA must seek input from the public. The public comment period is open for 60 days after it is published in the [Federal Register](#).

Environmentalists say the EPA’s announcement is a good start, but groups like the U.S. PIRG Education Fund and Environment America Research and Policy Center have been calling the EPA to ban the entire class of PFAS chemicals, not just the nine. There are [more than 12,000 forms](#) of PFAS chemicals in the environment.

“For decades the chemical industry has polluted our communities with toxic ‘forever chemicals,’ putting our health at risk,” said [Emily Scarr](#), director of U.S. PIRG Education Fund’s Stop Toxic PFAS campaign, in a news release. “The EPA’s proposal is a welcome step toward cleaning up contamination. To fully prevent harm from PFAS, we need to phase out the use of the entire class of PFAS and regulate them as a single class. Otherwise, our regulators and lawmakers will be stuck playing an endless game of whack-a mole.”