







## Thames – Sydenham and Region Source Protection Region Meeting Agenda

**Source Protection Authority** Lower Thames Valley

Meeting Date: April 15, 2021

Meeting Time: Directly after the Board of Directors Meeting

**Meeting Location:** Remote Access

### Agenda

- 1. Adoption of the Agenda
- 2. Minutes from the Previous Meeting
  - a. April 16<sup>th</sup>, 2020
- 3. Business Arising from the Previous Minutes
- 4. Business for Approval
  - a. Drinking Water Source Protection 2020 Annual Report
  - b. Appendix A 2020 TSR Annual Report
  - c. Appendix B 2020 TSR Supplemental Form
- 5. Business for Information
- 6. Correspondence
  - a. Minutes from the Source Protection Committee Meeting October 30th, 2020
- 7. Other Business
- 8. Adjourn

### 2. a. Minutes from the Previous Meeting – April 16<sup>th</sup>, 2020









### Thames – Sydenham and Region Source Protection Region Minutes

Source Protection Authority Lower Thames Valley

Meeting Date: April 16th, 2020

Meeting Time: Directly after the Board of Directors Meeting

Meeting Location: LTVCA Administration Building Board Room via Teleconference

A meeting of the LTV Source Protection Authority was held via remote access at the LTVCA Administration Building in Chatham, Ontario at 2:30 PM on Thursday, April 16, 2020 with the following directors present: L. McKinlay, T. Thompson, A. Finn, J. Wright, M. Hentz, P. Tiessen, J. Frawley, C. Cowell, S. Emons, S. Hipple and R. Leatham. Absent: Kimble Ainslie

1. Adoption of the Agenda

LTVSPA-2020-01

S. Hipple - P. Tiessen

Moved that the agenda be adopted.

CARRIED

2. Minutes of the Previous Meeting

LTVSPA-2020-02

R. Leatham - M. Hentz

Moved that the April 18th, 2019 minutes be approved.

CARRIED

3. Business Arising from the Previous Minutes

None noted.

- 4. Business for Approval
  - a. Drinking Water Source Protection 2019 Annual Report
  - b. Appendix A 2019 TSR Annual Report
  - c. Appendix B 2019 TSR Supplemental Form

LTVSPA -2020-03 A. Finn - S. Emons

Moved that the Lower Thames Valley Source Protection Authority direct staff to submit the Thames-Sydenham and Region Source Protection Annual Progress Report, Appendix A 2019 TSR Annual Report and Appendix B 2019 TSR Supplemental Form to the Director









of the Source Protection Programs Branch of the Ministry of the Environment, Conservation and Parks.

			CARRIED	
5.	Business for Inform	ation		
	None noted.			
6.	Other Business			
	None noted.			
7.	Adjourn			
	LTVSPA-2020-04	C. Cowell – J. Frawley		
	Moved that the me	eting be adjourned.		
			CARRIED	
			S	
	Linda McKinlay Chair		rk Peacock, P. Eng.  O/Secretary-Treasurer	

# **4. a. Drinking Water Source Protection 2020 Annual Progress Report**









Report to Lower Thames Valley Source Protection Authority

Cc SP Management Committee Date April, 2021

From Jenna Allain, Source Protection Coordinator

Re: Drinking Water Source Protection Annual Progress Report

#### Purpose

To approve the submission of the 2020 Thames-Sydenham and Region Source Protection Annual Progress Report to the Ministry of the Environment, Conservation and Parks (MECP).

#### Background

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.

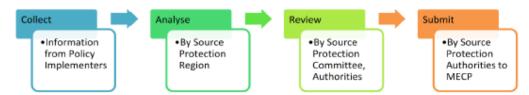


Figure 1: Source Protection Plan - Annual Progress Reporting at a Glance

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.

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.

The Thames-Sydenham and Region Annual Progress Report is a public-facing document developed by the MECP and prepared by Thames-Sydenham and Region staff (Appendix A). The report provides valuable information about the implementation of the Thames-Sydenham and Region Source Protection Plan and the overall success of the program. The report reflects implementation efforts from January 1, 2020 to December 31, 2020.

Information presented in the progress report is intended to be a high-level reflection of annual reporting results collected through the Thames-Sydenham and Region Supplemental Form. The









Supplemental Form is a tool to collect key information from implementing bodies to help convey the story of progress made in the Thames-Sydenham Source Protection Region using a series of questions organized by theme (Appendix B). Some themes are specific and mirror policy tools, e.g., Risk Management Plans, while others are more broad, e.g., municipal integration of source protection, achievement of source protection objectives.

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. The Thames-Sydenham and Region Source Protection Committee has reviewed the results of the Supplemental Form and Annual Progress Report and have approved the following responses for inclusion in the report.

#### 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?

Progressing well/on target –	/
Majority of the source protection plan policies have been implemented and/or	<b>1</b>
are progressing well.	•
Satisfactory -	
Some of the source protection plan policies have been implemented and/or are	
progressing well.	
Limited progress made –	
A few of the source protection plan policies have been implemented and/or are	
progressing well.	

#### Reportable 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 31<sup>st</sup>, 2020 marked five 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, 80% of the policies in the plan that address significant drinking water threats have been fully implemented, with the remaining 20% progressing well.

That being said, 2020 was a difficult year for everyone due to the COVID-19 pandemic, and for those working in source protection, it was no exception. Risk Management Officials and Inspectors throughout the region put a pause on all site visits for most of the spring of 2020, with mostly outdoor-only visits eventually resuming over the summer months. Most Risk Management Officials and Inspectors have reported that it has been a challenging time to try and engage people to negotiate risk management plans, with many businesses just focused on saving or maintaining their operations. Risk Management Officials understood those challenges, and continued their efforts to ensure that municipal drinking water supplies were protected without









creating undue hardships for businesses. An additional six Risk Management Plans were established over the reporting period bringing the Region's total Risk Management Plans to 62.

Approximately 48% of the 1055 originally identified significant drinking water threats 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 Lower Thames Valley Source Protection Authority direct staff to submit the 2020 Thames-Sydenham and Region Source Protection Annual Progress Report and Supplemental form to the Director of the Source Protection Programs Branch of the Ministry of the Environment, Conservation and Parks.

### 4. b. Appendix A 2020 TSR Annual Report



# **Annual Progress Report**

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

Reporting Period - January 1, 2020 to December 31, 2020











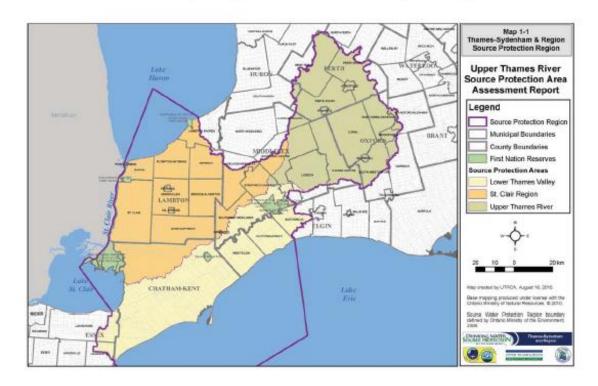


# Source Protection Annual Progress Report

### 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 fourth 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, 2020.

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.



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### 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.
$\bigcirc$	S : Satisfactory – Some of the source protection plan policies have been implemented and/or are progressing.
$\bigcirc$	L : Limited progress – A few of the source protection plan policies have been implemented and/or are progressing.

December 31st, 2020 marked five 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, 80% of the policies in the plan that address significant drinking water threats have been fully implemented, with the remaining 20% progressing well.

That being said, 2020 was a difficult year for everyone due to the COVID-19 pandemic, and for those working in source protection, it was no exception. Risk Management Officials and Inspectors throughout the region put a pause on all site visits for most of the spring of 2020, with mostly outdoor-only visits eventually resuming over the summer months. Most Risk Management Officials and Inspectors have reported that it has been a challenging time to try and engage people to negotiate risk management plans, with many businesses just focused on saving or maintaining their operations. Risk Management Officials understood those challenges, and continued their efforts to ensure that municipal drinking water supplies were protected without creating undue hardships for businesses. An additional six Risk Management Plans were established over the reporting period bringing the Region's total Risk Management Plans to 62.

Approximately 48% of the 1055 originally identified significant drinking water threats 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, Deleware Nation, Munsee-Deleware Nation and Oneida Nation of the Thames. Caldwell First Nation is also established in the area between Learnington 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

For the policies that address significant drinking water threats in the TSR Source Protection Plan, 80% have being fully implemented. Another 16% are currently in progress, and for the remaining 4%, policy outcomes were evaluated and no further action was required. Further progress was also made to implement the significant non-legally binding policies, with 84% of those policies being fully implemented, and the remaining 16% requiring no further action.

### Municipal Progress: Addressing Risks on the Ground

27 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 conforms with the SPP upon the next Planning Act review.

Half of the municipalities in the TSR that have an official plan (9 of 18) have completed their required Official Plan conformity exercises. Of the remaining 9 municipalities, 8 are in the process of amending their Official Plan, and one has not yet started.

All of the municipalities in our Source Protection Region that are responsible for day-to-day land use planning and building permit decisions, have integrated source protection requirements to ensure that their planning and building decisions conform with the policies in the TSR SPP.

### 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, five have completed all of the required inspections, while two municipalities are still undertaking inspections. While only two inspections were undertaken in 2020, many of our municipalities are planning inspections for 2021.

### 4. Risk Management Plans

#### P : Progressing Well/On Target

Risk Management Officials and Inspectors throughout the Thames-Sydenham and Region reported that 2020 was a challenging year to try and engage people to negotiate risk management plans due to the COVID-19 pandemic. Most RMO's and RMI's had to suspend in-person site visits when the pandemic was first declared in March 2020, with limited site visits that included extra safety precautions, resuming in the summer and fall of 2020. Despite the challenging year, six new Risk Management Plans were agreed to in 2020, bringing the Region's total Risk Management Plans to 62.

In The Thames-Sydenham and Region there are 18 municipalities who have areas were risk management plan policies apply. In 10 of those 18 municipalities, 100% of the expected risk management plans have already been agreed to or established. Based on the responses provided by Risk Management Officials, it is estimated that about 70% of the anticipated risk management plans across the Region have been established. However, this assessment does not include some municipalities who are still in the process of verifying significant threats, and do not have an accurate assessment of the number of RMP's that will be required in their municipalities.

Although site visits were limited in 2020 due to the global pandemic (as discussed above), Risk Management Officials and Inspectors still managed to carry out 86 inspections to investigate activities that could either be prohibited or require a risk management plan.

### 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. Our policies set out a timeline of 5 years to complete the review and make any necessary changes. 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 163 Drinking Water Protection Zone signs have been installed on roadways in the Thames-Sydenham Source Protection Region.

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### 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. It should be noted that this is a non-legally binding policy in the Source Protection Plan.

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 as above, 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.

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### Source Water Quality: Monitoring and Actions

Microcystin at the Wheatley and Chatham/South Kent Surface Water Intakes Harmful algal blooms (HABs) of blue-green algae (cyanobacteria) have been increasing in size and severity in recent years in the western basin of Lake Erie. Annual blooms have resulted in the closure of many Lake Erie beaches, as well as the shut-down of drinking water facilities on Pelee Island, and in Ohio. Microcystin-LR, a neurotoxin, is released when blue-green algae cells break down. All water treatment plants for Lake Erie systems in the Thames-Sydenham and Region have the treatment processes in place to remove microcystin-LR and provide safe drinking water during a bloom event. However, there is concern that some systems could be overwhelmed if HABs continue to increase in severity. The Great Lakes Water Quality Agreement (GLWQA) recognized that phosphorous is the limiting nutrient for cyanobacteria growth and, as such, contributes to the microcystin issue. The Conservation Authorities of the Thames-Sydenham and Region (TSR) are committed to working with senior levels of government and other partners to implement relevant actions to reduce phosphorous in our region. The TSR will also continue to consider all available data for the Wheatley and Chatham/South Kent intakes to determine whether microcystin-LR continues to be an issue for these water treatment plants.

#### Nitrates at the Wallaceburg Surface Water Intake

In October 2017, the Thames-Sydenham and Region Source Protection Committee (SPC) reviewed nitrate monitoring data collected between 2013 and 2017 for the Wallaceburg issue. The results of the monitoring were inconclusive and did not yield enough information to confirm the issue and delineate an Issue Contributing Area. Water treatment plant staff and managers for the Wallaceburg intake indicated that they no longer had any significant concerns regarding nitrate concentrations at the intake. The Assessment Report and Source Protection Plan will therefore be amended to indicate that nitrates are no longer an issue at the Wallaceburg intake.

#### 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.

In their 2020 annual monitoring report, Oxford County indicated that there currently was not enough information available to determine changes to the concentration or trend of nitrates in either the Thornton or Tabor wellfields. The County will complete a review of the Thornton nitrate levels to determine whether the delineation of an Issue Contributing Area (ICA) is warranted.

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### 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/

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### 4. c. Appendix B 2020 TSR Supplemental Form



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### Source Water Protection Annual Report 2020 - 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.	
Response			Answer
Risk Manag	ement Official		Yes
Municipality	•		Yes
Conservation	n Authority		Yes
Local Healt	h Unit		No
MECP - Wa	ste Disposal S	ites - Landfilling and Storage	Yes
MECP - Wa	stewater/Sewa	age Works	Yes
MECP - Pe	sticides		Yes
MECP - Ha	uled Sewage/B	Biosolids	Yes
MECP - Pe	mit to Take W	ater	Yes
MECP - Mu	nicipal Resider	ntial Drinking Water Systems	Yes
MECP - Oth	er Policies		Yes
MECP - Wa	ste Disposal S	ites - Landfilling and Storage Inspections	Yes
MECP - Wa	stewater/Sewa	age Works Inspections	Yes
MECP - Co	nditions Sites		No
	IA - ASM and N	NASM Inspections	Yes
OMAFRA			Yes
MNRF			Yes
MTO			Yes
MMAH			No
MGCS-TSS	A		No
MENDM			No

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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 2019. All "No body is not named as an implementing body in the Thames-Sydenham & Region Source Protection Plan.	NO" responses are because that

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Report Id	Completed	d Question	Category
20	True	Did the Source Protection Authority (i) indicate the status of all threat policies as contained in their source protection plan by using one of the two options outlined in the guidance document (ID 20a) AND (ii) either provide details in the response field text box in section 2 for policies with a "No Progress Made" and/or "No information available/no response received" implementation status OR complete the table as part of reportable ID 20b in the Excel Workbook for those policies with a "No Progress Made" and/or "No information available/no response received" implementation status (only if also submitting the Excel Workbook)? Please refer to the instructions provided for EAR Reportable ID 20 in the Guidance document which can be found in the FAQ section of the EAR online tool.	Implementatio n status of source protection plan policies
Answer:	Yes		
Comment:			
Report Id	Completed	Question	<i>-</i>
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).	
		Current Year Cumulative Count	
		6 62	
Provincial	lotal	6 62	
Comment:			
Report Id	Completed	Question	
31	True	Number of properties (i.e., parcels) with risk management plans agreed to or established in this reporting period.	
		Current Year Cumulative Count	
		6 61	
Provincial Total 6 61			į
Comment:	Comment:		

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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)?	
		Current Year Cumulative Count	
		4 121	
Provincial	Total	4 121	
Comment: Two of the six RMP's agreed to/established in 2020 were for future threats, where the RMP was established prior to the development of property and establishment of drinking water threat activities. Therefore, there were more RMP's agreed to or established in 2020 than "existing" significant threats managed.			
Report Id	Completed	Question	Category
33	True	If known, please state the percentage of risk management plans that have been established to date in relation to the ones still needed/pending to manage EXISTING significant drinking water threat activities. [OPTIONAL]: You may also include a description of the effort and time dedicated to getting the risk management plans in place in the Comments field.	Part IV (Sections 57, 58 & Section 59)
Answer:	70		
Comment:	Based on the responses provided by Risk Management Officials, we are estimating that about 70% of the anticipated risk management plans have already been agreed to or established. However, there are some municipalities that are still in the process of verifying significant threats and do not have an accurate assessment of the number of RMP's that will be required in their municipalities, and were therefore unable to provide a response to this question. Those municipalities were left out of the above estimate. In The Thames-Sydenham and Region there are 18 municipalities who have areas were risk management plan policies apply. In 10 of those 18 municipalities, 100% of the expected risk management plans have already been agreed to or established.		verifying alities, and n The Thames-

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Report Id	Completed	Question		
40	True	How many section 59 notices were issued in this reporting pour (section 57) nor a risk management plan (section 58) policy as	eriod for activities to which neither a prohibition applied, as per ss. 59(2)(a) of the Clean Water Act?	
		Current Year	Cumulative Count	
		10	113	
Provincial <sup>1</sup>	Total	10	113	
Comment:				
Report Id	Completed	Question		
41	True	How many section 59 notices were issued in this reporting posterior 58) policy applied, as per ss. 59(2)(b) of the Clean V		
		Current Year	Cumulative Count	
		3	15	
Provincial 7	Total	3	15	
Comment:				
Report Id	Completed	Question		
50	True	For the purposes of section 61 of O. Reg. 287/07, how many state the prescribed instrument conforms with the significant plan (i.e., statement of conformity confirms the instrument hoplan) did the risk management official receive in this reporting	drinking water threat policies in the source protection lder is exempt from requiring a risk management	
		Current Year	Cumulative Count	
		0	6	
Provincial 7	Total	0	6	
Comment:				
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Report Id	Completed	Question		Category
60	True	Provide a brief overview of inspections that were carried or require a risk management plan under section 58 of the C summary of inspection results and an overall indication of previous calendar year, please explain. [OPTIONAL]: If you compliance process in general, please do so.	clean Water Act. You may wish to include a brief compliance. If no inspections were conducted in the ou wish to share any insights or feedback about the	Part IV (Sections 57, 58 & Section 59)
Answer:	Due to the COVID-19 pandemic, only a limited number of on-site inspections were carried out by Risk Management Officials and Inspectors in the Thames-Sydenham and Region. Most Risk Management Officials reported that inspections in 2020 were carried out as drive-by/windshield surveys only and compliance with risk management plans were confirmed through email and telephone correspondence.  32 on-site inspections were completed in Oxford County to verify the presence of significant drinking water threats and confirm the need for risk management plans. All of these inspections led to the RMO/RMI confirming that on-site activities did not to meet the circumstances required to be a significant threat and RMP's were not required.			
Comment:		mpliance issues were reported other than for one property i ish communication with property owner to initiate discussion		ot been able to
Report Id	Completed Q	Question		
61		tate the total number of inspections (including any follow-up r future) that are prohibited under section 57 of the Clean W		
		Current Year	Cumulative Count	
		19	142	
Provincial	Total	19	142	
Comment:				

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Report Id	Completed	Question
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?
		Current Year Cumulative Count
		0 0
Provincial 1	Total	0 0
Comment:		
Report Id	Completed	Question
70	True	How many existing significant drinking water threats have been prohibited as a result of section 57 prohibitions in this reporting period?
		Current Year Cumulative Count
		0 15
Provincial 1	Total	0 15
Comment:		
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.
		Current Year Cumulative Count
		67 805
Provincial 1	Total	67 805
Comment:		

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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)?	
		Current Year Cumulative Count	
		1 1	
Provincial 1	otal	1 1	
Comment:			
Report Id	Completed	Question	
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.)	
		Current Year Cumulative Count	
		0 0	
Provincial 1	otal	0 0	
Comment:			
Report Id	Completed	Question	
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.	
		Current Year Cumulative Count	
		0 0	
Provincial 1	otal	0 0	
Comment:			
D-1- Di-1-	L 2/10/2021 1	12440 PM	

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Report Id	Completed	Question
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.
		Current Year Cumulative Count
		0 0
Provincial	Total	0 0
Comment:		
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.
		Current Year Cumulative Count
		0 0
Provincial	Total	0 0
Comment:		
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.
		Current Year Cumulative Count
		0 0
Provincial	Total	0 0
Comment:		

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#### 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 by-law conformity exercises for source protection and indicate the status of those exercises for each listed municipality. \*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.

. ,		1 1 3 3 1
Municipality	Official Plan	Zoning By Law
Municipality of Thames Centre	Completed	Completed
Township of St. Clair	Completed	Completed
City of London	Completed	In Progress/Updates Underway
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
Essex, County of	Completed	Not Applicable
Lambton, County of	Completed	Not Applicable
Middlesex, County of	Completed	Not Applicable
City of Sarnia	In Progress/Updates Underway	In Progress/Updates Underway
Municipality of Chatham-Kent	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
Oxford, County of	In Progress/Updates Underway	Not Applicable
Perth, County of	In Progress/Updates Underway	Not Applicable
Municipality of Leamington	In Progress/Updates Underway	Not Started
Town of Plympton-Wyoming	In Progress/Updates Underway	Not Started
City of Woodstock	Not Applicable	In Progress/Updates Underway
Town of Ingersoll	Not Applicable	In Progress/Updates Underway
Township of East Zorra-Tavistock	Not Applicable	In Progress/Updates Underway
Township of Norwich	Not Applicable	In Progress/Updates Underway

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# **Source Water Protection Annual Report** 2020 - Supplemental Form SPR - Thames, Sydenham and Region

Township of S Township of Z Municipality of Township of F Township of F Village of Poir	orra f West Perth Perth East Perth South	xford	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Started	 	in Progress/Updates Underway in Progress/Updates Underway Not Started Not Started Not Started Not Started
Comr	ment:				
Report Id	Completed	Question			
240	True	State the number of source water p region/area in this reporting period.		n provincial highw	ays in the source protection
			Current Year	Cumulative Cou	ınt
			0	6	
Provincial 1	otal		0	6	
Comment:					
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.			
			Current Year	Cumulative Cou	int
			0	153	
Provincial 1	otal		0	153	
Comment:					
Ĺ					

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Report Id	Completed	Question	
242		State the number of source water protection signs installed at other locations (if applicable) in the source protection region/area in this reporting period.	
		Current Year Cumulative Count	
		0 4	
Provincial	Total	0 4	
Comment:			
Report Id	Completed	Question	Category
260	True	How many on-site sewage systems in the source protection area require inspections in accordance with the Ontario Building Code (i.e., identified as significant drinking water threat) once every five years? The inspection cycle is every 5 years after the approval date of individual assessment reports. If the inspection cycle ended in 2017, for example, then the numbers reported for 2018 should be the new 'cumulative' total of the second round of inspections.	Sewage System Inspections
Answer:	169		
Comment:			
Report Id	Completed	Question	
261	True	Of those requiring inspections, how many on-site sewage systems were inspected in the previous calendar year?	
		Current Year Cumulative Count	
		2 176	
Provincial	Total	2 176	
Comment:			

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Report Id	Completed	Question  If not all required on-site sewage systems were inspected, please indicate why they were not all inspected from	
202	True	among the options below:	
Response			Answer
on-site sew	age system(s)	is newly constructed and therefore not captured in the first round of inspections	Yes
landowner	refused entry, o	compliance order being sought	Yes
municipality	has not yet in	itiated inspection program	Yes
other, Pleas	se specify in the	e comment box below.	Yes

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Report Id	Completed	Question		
263	True	How many of the on-site sewage systems inspected required minor maintenance work (e.g., pump out, etc.) in this reporting period?		
		Current Year Cumulative Count		
		0 20		
Provincial	Total	0 20		
Comment:				
Report Id	Completed	Question		
264	True	How many of the on-site sewage systems inspected required major maintenance work (e.g., tank replacement, etc.) in this reporting period?		
		Current Year Cumulative Count		
		1 3		
Provincial Total		1 3		
Comment:				

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#### 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. Under "Drinking Water System", only the names of the drinking water system(s) are listed from which to choose. If specific wells or surface water intakes are impacted, please note these in the comments field. Optional: Describe the actions or behavioural changes in the issue contributing area that might be contributing to changes in observations in the Comments field for each applicable system. If this reportable is not applicable to your source protection region/area, please indicate as such by choosing "No system with issues," "No issue," "Not applicable," and "No observation," respectively, under the drop down menu options under each of the four categories of this reportable. Where the drinking water issue, 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 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. 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:

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Report Id	Completed	Question		
280	True	ow 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 apply of a drinking water system) did the source protection authority receive from municipalities in this reporting eriod (as per O. Reg. 287/07, ss. 27(3))?		
		Current Year Cumulative Count		
		0 1		
Provincial	Total	0 1		
Comment:				

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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:	
Response			Answer
Provided in	formation to m	unicipalities about changes in vulnerability	No
Provided no	otice to Source	Protection Committee for information	No
Situation co	ntinues to be r	nonitored	No
Comment:			

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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).	
Response			Answer
Education a etc.)	and Outreach (i	in description include details, if available, on type and percentage of target population reached, outcome(s) achieved,	Yes
	in description i	nclude details, if available, on outcome(s) achieved, how widely available was the incentive, etc.)	No
Stewardshi	p Programs		No
Best Manag	gement Practic	es	Yes
Pilot Progra	ams		No
Research			Yes
		salt management, municipal by-laws, legislative or regulatory amendments, mapping, review of fuel codes, new airport or manage runoff of chemicals from de-icing of aircraft, instrumentation, etc.)	Yes
	ange (e.g., dat		Yes
Spill prever	ntion/spill contir	ngency/emergency response plan updates	Yes
Transport p	athways		Yes
Water quan	ntity		No
Great Lake	s		Yes
Other polici	es (i.e., strateg	jic action, etc.)	Yes

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Comment:

Education and Outreach (Learnington): Discussions with greenhouse developers regarding source protection planning is taking place during the preliminary site plan review/approval process.

Education and Outreach (Middlesex Centre): Mailing in fall 2020 outlining source protection area info and advising of septic inspections in 2021.

Specify Action (Plympton-Wyoming): Application of Salt Sand is Tracked yearly by staff utilizing a events calendar along with purchasing receipts and calibration of equipment.

Spill Prevention (Plympton-Wyoming): Spill kits are on hand to apply if needed. Emergency calls to SAC and to local contractors for clean up measures.

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Report Id	Completed	Question					
305	True	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 for the current reporting year, but please be sure to review, edit, and confirm the counts for accuracy in the table below. *NOTE: SPAs are strongly encouraged to refer to the Guidance document for additional details and instructions on completing this table.					
ThreatId	Threat		Α	В	C	D	
1		blishment, operation or maintenance of a waste disposal site within the meaning of Part V of the mental Protection Act.	35	1	17	9	
2	The esta sewage.	blishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of	269	0	46	104	
3	The appl	lication of agricultural source material to land.	87	0	12	39	
4	The stora	age of agricultural source material.	12	2	3	6	
5	The man	agement of agricultural source material.	0	0	0	0	
6	The appl	ication of non-agricultural source material to land.	34	0	10	4	
7	The hand	dling and storage of non-agricultural source material.	0	0	0	0	
8	The appl	lication of commercial fertilizer to land.	57	5	20	18	
9	The hand	dling and storage of commercial fertilizer.	22	3	12	7	
10	The appl	ication of pesticide to land.	60	0	18	11	
11	The hand	dling and storage of pesticide.	19	0	11	1	
12	The appl	lication of road salt.	0	0	0	0	

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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.	91	6	52	14
16	The handling and storage of a dense non-aqueous phase liquid.	257	51	179	88
17	The handling and storage of an organic solvent.	35	4	21	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.	29	0	16	4
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
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	1	27	5

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1009	Waterfowl		0	0	0	0
1010	Local condition	on	0	0	0	0
		Totals:	105 5	73	446	324
Commen	t:		MECP Calc	D/(A+B-C	): 0 9	%
Report Id	Completed	Question		Categ	ory	
310 Answer:	There	Please provide comments below to explain the overall progress made in addressing these significant include the percentage of overall progress made within the comments provided. 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 by taking the total number in column D (i.e., significant drinking water threat addressed because implemented) from the table in reportable ID 305 and dividing it by the number that is derived by total numbers in columns A and B and then subtracting this sum total from the total in column C overall progress made = D/(A plus B minus C).  I progress made is 48%  were 1,055 threats included in the original enumeration and subsequently 73 new threats have be tion Plan was approved. Of those threats 446 were determined to not be present/or no longer a or are 326 threats that are being managed.	tage of overal is determined policy is adding the In other word en identified a	I enume threats s,	g erated s	_
Comment:						
Report Id	Completed	Question		Categ	ory	_
320	True	If applicable to the assessment report in your source protection region/area, provide a summary to further assess or implement the plans of work described in technical rule 30.1: Water Budget included in your original assessment report(s).		report inform		_
Answer:	N/A			gaps		
Comment:						

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Report Id	Completed	Question	Category
321	True	If applicable to the assessment report in your source protection region/area, 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
Answer:	N/A		gaps
Comment:			
Report Id	Completed	Question	Category
322	True	If applicable to the assessment report in your source protection region/area, 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
Answer:	N/A		gaps
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 oth	ner items to report on.	items
Comment:			

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Report Id	Completed	Question	Category
340	True	What positive outcomes (e.g., less water consumption, changes in behaviour, reduction in phosphorus and nitrogen concentrations, less chloride from road salt, reduction in algal blooms, human health protected, etc.), if any, have potentially resulted from the implementation of source protection plan policies? Please describe the outcomes below.	Source protection outcomes
Answer:	Lambte City of water. Oxford to setti St. Cla	are some comments from our municipalities: on County: Public and business community awareness of the existence of drinking water threats. Protection of hum London: Our ongoing Water conservation program has reduced consumption and increased awareness of our sou County: Changes in behaviour has been noted. More people are aware of the Source Protection program and less ing up site visits.  iir Township: Increase in general public and public sector awareness of source protection. Incorporation of source p works regular business practices. New industry is being reviewed with a source protection lens to include spills pre	rce of drinking s apprehensive protection into
Comment:			

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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?	
Response			Answer
Progressing	Well/On Targ	et - The majority of the source protection plan policies have been implemented and/or are progressing well	Yes
Satisfactory - Some of the source protection plan policies have been implemented and/or are progressing well			
Limited Pro	gress made - A	few of the source protection plan policies have been implemented and/or are progressing well	No
Comment:			

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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
Answer:	made t drinkin	nber 31st, 2020 marked five years since our Source Protection Plan first took effect. In that time significant progres to implement the policies contained in the plan, and address the activities that were identified as posing a risk to on any water supplies. To date, 80% of the policies in the plan that address significant drinking water threats have been mented, with the remaining 20% progressing well.	s has been ur municipal
	was no 2020, have n just foo efforts	eing said, 2020 was a difficult year for everyone due to the COVID-19 pandemic, and for those working in source polycocopion. Risk Management Officials and Inspectors throughout the region put a pause on all site visits for most with mostly outdoor-only visits eventually resuming over the summer months. Most Risk Management Officials and reported that it has been a challenging time to try and engage people to negotiate risk management plans, with macused on saving or maintaining their operations. Risk Management Officials understood those challenges, and control to ensure that municipal drinking water supplies were protected without creating undue hardships for businesses. It Management Plans were established over the reporting period bringing the Region's total Risk Management Plans.	of the spring of d Inspectors ny businesses itinued their An additional
	While t Protec	ximately 48% of the 1055 originally identified significant drinking water threats have been successfully managed or there is still a considerable amount of work to do to address the remaining threats, the Thames-Sydenham and Re ction Committee is pleased to see that policy implementation is moving steadily forward. For that reason, they belie g score of progressing well and on target is a fair assessment on our implementation progress.	gion Source
Comment:			

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### Implementation Status - Significant Legally Binding Policies

Implementation Status Category	Policies	Policies
Implemented	329	80 %
In progress/some progress made	64	16 %
No response required/not applicable	16	4 %
TOTAL	409	100 %

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### Implementation Status - Significant Non Legally Binding Policies

Implementation Status Category	Count of Plan Policies	Percent of Plan Policies
Implemented	58	84 %
No response required/not applicable	11	16 %
TOTAL	69	100 %

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### Implementation Status - Moderate/Low Policies

Implementation Status Category	Count of Plan Policies	Percent of Plan Policies
Implemented	110	81 %
In progress/some progress made	26	19 %
TOTAL	136	100 %

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Count of Plan

Dorcont of Dlan

### Implementation Status - Non-threat specific policies

Implementation Status Category	Policies	Policies
Implemented	40	67 %
In progress/some progress made	18	30 %
No response required/not applicable	2	3 %
TOTAL	60	100 %

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# 6. Minutes from the Source Protection Committee Meeting – October 30th, 2020









#### SPC MEETING MINUTES OCTOBER 30, 2020 Meeting #76

The Source Protection Committee Chair, Dean Edwardson called the meeting to order at 10:00 a.m. on October 30, 2020 via ZOOM. The following members and staff were in attendance;

#### Members

Dean Edwardson Brent Clutterbuck Cassandra Banting Gary Eagleson George Marr Gary Martin Earl Morwood Nich Seebach John Van Dorp Joe Salter (Liaison) Olga Yudina, MECP

#### Regrets:

Hugh Moran Andrew Powell (HU Liaison) Darlene Whitecalf Pat Feryn Carl Kennes Christa Sawyer

#### Staff:

Jenna Allain
Deb Kirk
Steve Clark
Linda Nicks
Katie Ebel
Jason Wintermute
Mark Peacock
Donna Blue
Girish Sankar









#### 1) Chair's Welcome

Dean Edwardson welcomed the committee. After the roll call, he acknowledged a quorum was not achieved and advised the meeting will be held as a "sub-committee" meeting and any decisions be brought forward to the full SPC for final approval.

#### 2) Adoption of the Agenda

The agenda was approved.

### Moved by George Marr-seconded by Earl Morwood

"RESOLVED that the October 30, 2020 agenda be approved."

CARRIED.

#### 3) Approval of March 13, 2020 SPC minutes

Minutes of the March 13, 2020 meeting were approved.

### Moved by George Marr-seconded by Gary Eagleson

"RESOLVED that the March 13, 2020 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

#### **Updated SPC Rules and Procedures**

The members were circulated the amended SPC Rules and Procedures. J. Allain reported on March 26, 2020, the Minister of the Environment, Conservation and Parks (MECP) issued a direction to all Conservation Authorities enabling a special meeting to be held to make some recommended amendments to their Administrative bylaws to allow for certain electronic processes during declared states of emergencies. The Minister's Direction applies to CAs when meeting as a Source Protection Authority under the Clean Water Act, 2006. Amendments were also made to the Rules of Procedure for the Thames-Sydenham and Region Source Protection Committee to allow ongoing business during a declared state of emergency.

#### Recommendation:

THAT the Thames-Sydenham and Region Source Protection Committee endorses the proposed amendments to the Committee's Rules of Procedures.

#### Moved by George Marr-seconded by N. Seebach

"RESOLVED that the SPC endorsed the SPC Rules and Procedures amendments as circulated to allow for electronic meetings to be held during states of emergency".

CARRIED.









#### b) Program Update

J. Allain reported that a lot has happened since the previous March SPC meeting. Most of the CA staff have worked from home since the start of the pandemic and all Conservation Authority offices have been closed to the public. Risk Management Official work was put on pause, with no site visits. Activity has resumed and outdoor visits at a safe distance with landowners are occurring. Risk Management Officials report that it is a challenging time to try and engage people to negotiate risk management plans with many businesses just trying to stay afloat.

SPC Membership: Currently there are (3) vacant committee positions: Municipal seats for City of Stratford, Mike Mortimer, Thames Centre, Carlos Reyes and for John Trudgen. Everyone was reminded that we are entering a membership renewal year with (7) members expiring in June 2021. The recruitment process will start in January 2021. Each current member will be asked if they want to remain on the committee and are encouraged to do so. The non-municipal positions will be posted on line and the committee will be informed when this occurs.

Fanshawe and Hyde Park wells in the City of London and the Highgate well in Chatham-Kent have been officially decommissioned. This will result in a minor amendment to the SPP and does not require Minister Approval. A notice will be issued to the municipalities and be posted on-line soon and the SPC notified.

The Risk Management Services agreements between UTRCA and municipalities are set to expire December 31, 2020. UTRCA provides services to (11) municipalities and are in the process of renewing the agreements for another (3) year term. J. Allain will provide an update at the next SPC meeting.

The Walkerton tragedy occurred 20 years ago this year and was commemorated. Quinte Conservation and Lower Trent Conservation came up with a "Trust the Tap" campaign to commemorate Walkerton and communicate the importance of source protection. A logo can be found on the Thames, Sydenham and Region SP website taking you to a the Quinte webpage that outlines all the actions taken to date to ensure drinking water is protected province wide.

#### Annual Progress Reporting - Provincial Summary

Olga Yudina gave a presentation and highlighted the province's 2019 Annual Progress Reporting numbers. She noted the CWA requires all implementers to report annually by February 1, 2020 to the SPA on their progress for implementing SPP policies. The SPA's then summarize the reporting data and report to the Ministry by May 1 of each year. The MECP then analyzes the progress and identifies and addresses any implementation challenges. The presentation summarized the following:









- Policy Implementation (Legally/non-legally binding Significant Drinking water threats policies, moderate-low threat policys and other non-threat policies were looked at and the implementation challenges)
- Part IV Implementation (Section 58 RMPs, inspections)
- Provincial Ministry Policy Implementation (Prescribed Instruments Integration/conformity)
- Municipal & Source Protection Authority Policy Implementation (land use planning, education & outreach, road signage, septic system inspections, environmental monitoring of drinking water issues and transport pathways).
- Source Protection Positive Outcomes were listed
- Achievement of Source Protection Plan Objectives

In summarizing the overall progress, 91% of Source Protection Committees (SPC) report they are progressing well and are on target towards achieving the objectives of the SPPs. The Thames Sydenham and Region is making significant progress in all areas and is on target.

#### d) Proposed Changes to the Director's Technical Rules

A discussion paper titled "Proposed Updates to Directors' Technical Rule Changes for Source Protection" was circulated in the meeting package. The Source Protection Programs Branch (SPPB) initiated a project to review the source protection framework in 2014/15 after the first round of planning. The purpose of this project was to address challenges identified during the implementation of source protection plans, recommendations made in the 2014 Auditor General Report, and lessons learned during the development of the source protection plans and assessment reports. This project was divided into two phases, with the first phase of amendments to the Director's Technical Rules (Rules) completed in March 2017. In August, phase 2 of the proposed updates to the Director's Technical Rules was posted on the Environmental Registry, closing on November 9th, 2020. J. Allain reported that earlier this week regional engagement sessions were held with Chairs and Project Managers about the proposed changes. Although the rules may are changing this does not mean that all previously completed technical work has to be re-done. The Drinking Water Threats circumstances changes will have the biggest impact for the Thames-Sydenham and Region. The SPC will have to review policies for certain threats. The proposed amendments to the Director's Technical Rules include changes to the following items:

- Surface water vulnerability delineation of Intake Protection Zone 1 (IPZ-1) and scoring of IPZ-2
- Impervious surface area calculation of percentage of impervious area
- Drinking water issues delineation of Issue Contributing Areas
- Conditions identification of a condition site
- Alternative approach request administrative requirements to seek Director's approval









- Local activity / threat requirements to designate a local activity as a risk
- Climate change assessment specify what needs to be included in an assessment report if climate impact assessment (CIA) is conducted
- Drinking water threats updates to the circumstances, e.g. waste, sewage, road salt, storage of snow, DNAPLs

Proposed Changes to Threat Circumstances — Tables of Drinking Water Threats (TDWT); page 83-137 of the MECP '2020 Proposed Amendments to Technical Rules: Assessment Report' was reviewed.

- Road Salt application More stringent thresholds are included: Percentages to
  identify significant risk will decrease to 30% for WHPAs scored 10, 6% or
  greater for IPZ scored 10, and 8% for IPZ scored 9 or 10; Percent impervious
  in a vulnerable area can be calculated as a whole now, or in a sub-area within a
  vulnerable area, rather than using 1km by 1 km grids. This will require a
  significant amount of work to re-map impervious areas. New salt application
  threats will require the SPC to develop new Source Protection Plan policies.
  Currently the TSR SPP does not contain any policies to address salt application
  threats.
- Wastewater/ Sewage- A number of changes have been proposed to threat subcategories and threat circumstances. The SPP policies will need to be revised for new terminology and circumstances. There is uncertainty around whether the changes will affect the number of drinking water threats in the TSR. These activities are mostly managed through prescribed instrument policies implemented by provincial ministries. It is assumed that any changes that may arise to the number of threats as a result of these circumstance changes will be managed by the Provincial Ministries responsible for implementing the policies.
- Snow Storage The proposed changes mean that any volume of snow stored within an IPZ where the vulnerability score is 8 to 10 or a WHPA where the score is 10 is now a significant threat. The existing circumstances set high volume thresholds in order for snow storage to be a significant drinking water threat. Policies will need to be revised for changed circumstances. Local snow storage in IPZ's and WHPA's will need to be reassessed and is likely to create many new significant threats in the TSR. The current policy approach is a Risk Management Plan for existing and future threats.

<u>Discussion</u>: Shopping mall parking lots would now be identified as a significant drinking water threat for snow storage if located in a WHPA or IPZ with a high vulnerability score. The size of the snow pile, any contaminates in the snow, and paved surfaces should all be considered as part of the threats assessment. Business owners may not have the ability to move a snow storage location if it is identified as a significant drinking water threat. A question was asked about a parking lot near Running Creek in Crothers Conservation Area in the Wallaceburg area. S. Clarke will look into this and report back. It was noted that road salt application management will need to consider the public's safety on the roads as well as the protection of drinking water. The TSR has not dealt









with salt application threats to date, but with these proposed changes this could change significantly. However, there are not vast areas where the proposed changes will apply. The larger urban centers will be affected more than smaller rural areas that will not reach the 30% impervious surface area threshold for significant salt application threats to be identified.

- DNAPLs The proposed changes include the addition of a list of the types of industries and businesses that would typically handle and store DNAPL products. The list has been adopted from O. Reg. 153 (brownfields).. These changes may require some review of activities and existing RMP's but will not significantly change the number of existing threats in the TSR. Discussion: There has been a lot of discussion over the years on how to deal with DNAPLs. Should there be more chemicals added to the list of potential DNAPL threats or less? Ultimately, the proposed changes do neither. The new list is to be used by RMOs as a guide only. Information provided by MECP this past week indicated that waste oil is no longer to be considered a DNAPL threat, and should instead be considered as a waste threat. This change will reduce area where waste oil is a significant threat since waste is only a significant threat in WHPA-A or B where the vulnerability score is 10 or 8, and DNAPLs are a significant threat out to the WHPA-C regardless of vulnerability score. In our region DNAPL RMPs have been developed for waste oil threats and it will be difficult to now advise landowners that a RMP is no longer required. Comments about this will be forwarded to the MECP.
- <u>Fuel</u> The proposed changes include changing the threshold for SDWT in WHPA 10 for the above ground storage of fuel from 2,500 L of to 250 L or greater. The TSR does not have many as residential home heating oil tanks since most WHPA's in the TSR are serviced with has. It may however, have an impact on agricultural and commercial properties. A threats re-assessment is required.
- <u>Fertilizer</u> The proposed threat circumstances have been changed to remove
  references to land use type. The quantity thresholds for significant threats
  remain the same. Risk is based on the total storage at a given site and RMO's
  are asked to use professional judgement to determine risk of individual storage
  versus total storage based on property characteristics. Proposed changes are
  unlikely to impact the number of threats in the TSR.

#### General Comments / Questions included in the table:

- Will there be an outline that shows previous circumstances vs. new circumstances? This will help especially with the property owners that previously didn't need an RMP and now they do. The hope is to receive more details on this from MECP.
- Which amendments are mandatory, and which are enabling will be important to know.









- Assuming that the change to threat circumstances are mandatory, will these new
  circumstances only apply to new vulnerable areas associated with new or
  changed drinking water systems, or would they be applied to Existing threats as
  well? If the latter, then if these new circumstances identify a new SDWT on a
  property that already has a RMP in place, does the Ministry expect the RMP to
  be re-negotiated?
- C. Banting reported that Oxford County did not include waste oil as a DNAPL threat so there will not be an impact to that part of the region. They viewed waste oil as a waste threat in a vulnerably score of 10 only. Impervious surface calculation for salt application threats will need to be re-assessed and could have impacts. Threshold changes for fuel threats will also need to be looked at for home heating oil fuel tanks that are now significant threats. Oxford County has (4) SPPs that they are implementing and may deal with some threats differently than the rest of the TSR.

The members were asked to review the proposed changed to the Director's Technical Rules and submit any comments to J. Allain by Friday, November 6th for consideration. The finalized comments will be submitted to the MECP on November 9th, 2020.

#### Recommendation

That Report 2020.10.30 7(d) is received for information AND THAT the Thames-Sydenham and Region Source Protection Committee direct TSR staff to finalize and submit the comments on the proposed changes to the Director's Technical Rules, on behalf of the Thames-Sydenham and Region Source Protection Committee. An update will be provided at the next SPC meeting.

#### Moved by Brent Clutterbuck-seconded by George Marr

"RESOLVED that the SPC direct TSR staff to finalize and submit the comments on the proposed changes to the Director's Technical Rules, on behalf of the Thames-Sydenham and Region Source Protection Committee."

CARRIED.

#### e) Section 36 SPP and AR Amendments

At the March 13th, 2020 meeting of the Thames-Sydenham and Region Source Protection Committee, the committee reviewed some of the proposed amendments to be included in the Section 36 update to the SPP and AR's. A discussion paper titled "S.36"

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SPP and AR Amendments" was circulated to seek approval from the SPC for the remaining proposed amendments to be included in the Section 36 update as outlined.

#### Wallaceburg Nitrate Issue

Proposed Amendment: Update the SCR Assessment Report to indicate that nitrates are no longer an issue for the Wallaceburg drinking water system and remove Policy 4.13 from the SPP.

#### Shakespeare and Ridgetown WHPA Delineations

Update to the Shakespeare and Ridgetown DWS information and mapping to reflect changes to the number of wells and well locations. There are new wells that have been added to these systems and some wells that have been decommissioned in Ridgetown only. New wells are in close proximity to the existing wells, have been drilled to the same depth and there is no increase in the pumping rates for either system. For these reasons, it has been determined that new modelling work is not required, and the WHPA-A will be shifted for these systems to include the new wells and remove the decommissioned ones.

#### Livestock Grazing and Pasturing in the Town of St. Marys

Proposed Amendment: Change the Section 58 Risk Management Plan policy for Livestock Grazing and Pasturing to a Section 57 Prohibition policy for the Town of St. Marys only. Policy would apply in WHPA-A and WHPA-B where the vulnerability score is 10.

It has been determined by the RMOs that the threat of livestock grazing and pasturing cannot be reasonably managed through a risk management plan in the St. Marys WHPA. L. Nicks, the UTRCA hydrogeologist spoke to the vulnerability of the St. Marys WHPA consisting of fractured bedrock, exposed bedrock in, and adjacent to Trout Creek, and the evidence of microbial contamination for the municipal groundwater supply wells within this WHPA. The RMOs have asked farmers to fence cattle out of the most vulnerable parts of the WHPA (WHPA-A and B with a vulnerability score of 10). Several farms in St. Marys and neighboring farms in the Township of Perth South which fall within the St. Marys WHPA are affected. The proposed amendment is to change the policy from risk management to prohibition to support the decision made by the local risk management officials. The committee agreed this is a highly sensitive area that requires special policies and also acknowledged the impact this may have on landowners. The committee agreed it is in the best interest of everyone to control risk and also felt it important that further consultation occur with the MECP, OMAFRA and with the landowners. Results from the consultation will be brought back to the committee and only at that point will the policies be finalized and brought forward for a formal public consultation.

#### Risk Management Plan Policy Timeline for Existing Threats

A timeframe of eight years will be added to all Section 58 Risk Management Plan policies in the Thames-Sydenham and Region SPP with the exception of those policies that apply in Oxford County. This would require risk management plans to be established









for all existing significant threats identified at the time of the initial SPP approval by December 31st, 2023.

#### Recommendation

That the SPC approve the proposed amendments to be submitted to the MECP for early engagement.

#### Moved by George Marr-seconded by John Van Dorp

"RESOLVED that the proposed amendments to be submitted to the MECP for early engagement".

CARRIED.

#### 8) Information

- J. Allain noted the items listed below were provided to the committee as a FYI:
- a) CA Review Mandate Letter of Support from Quinte SPC
- b) ESE Magazine Article on Source Protection
- c) Water Canada Article on Source Protection
- d) Microplastics Article

#### 9) In Camera Session

None.

#### 10) Other Business

None.

#### 11) MOECP Liaison Report

Olga Yudina, the MECP Liaison provided an update and reported the MECP is working on guidance for private well systems that are not included under the CWA. Some of the same SPP strategies to protect municipal drinking water will be used. Information will be provided to landowners on the proper storage of contaminants to manage risks. Municipalities will be given the guidance to use along with the mandatory/non-mandatory tools used for septic systems under the building code. The guidance is in draft form and MECP has been working with some SPCs, project managers and other groups to review. Next steps are to take all comments into consideration with a target to roll out the guidance in 2021. The committee will be kept up to date on this.

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#### 12) Members Report

Gary Eagleson- noted his interest in the St. Mary's area and will be following.

John Van Dorp —noted a planning concern he has in Oxford County, along the 401 with a cavern being washed away and the threat to an aquifer, noting the area is fenced off now for liability. O. Yudina advised him she would obtain more information from him and investigate further.

George Marr- hopes the next meeting will be in person.

Gary Martin- reported the virtual Southwest Agricultural Conference, Golden Horseshoe & Heartland SCIAs and Eastern Ontario Crop Conference is being held January 6 & 7<sup>th</sup>, registration is open November 2, 2020.

#### 13) Adjournment

There being no further business, the meeting was adjourned at 12:05 p.m..

Moved by Brent Clutterbuck -seconded by John Van Dorp
"RESOLVED that the meeting be adjourned."

CARRIED.

PLEASE NOTE: The next SPC meeting will be scheduled in January.