



2022 Progress Report

Upper Thames River Conservation Authority - Drinking Water
Source Protection Risk Management Office

**DRINKING WATER
SOURCE PROTECTION**

Thames - Sydenham & Region Drinking Water Source Protection

**DRINKING WATER SOURCE PROTECTION
RISK MANAGEMENT SERVICES**

WORKING TOGETHER TO PROTECT DRINKING WATER SOURCES

For more information or to obtain a copy of this report in an alternative format, please contact the Upper Thames River Conservation Authority at 519-451-2800 or info@thamesriver.on.ca

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Progress Report Overview

Source water is the water that we take from the ground, lakes, or rivers to supply people with drinking water. Based on the recommendations of the Walkerton Inquiry, the Clean Water Act, 2006, is part of the Ontario government's commitment to protecting municipal drinking water from contamination and overuse. The Clean Water Act led to the implementation of Source Protection Plans (SPPs) across Ontario following an extensive process that included the development of science-based watershed assessments, broad public input, and collaboration with stakeholders. The Thames-Sydenham and Region SPP came into effect on December 31, 2015.

The SPP contains policies written under Part IV of the Clean Water Act, which municipalities are required to implement. These policies ensure that Significant Drinking Water Threat (SDWT) activities identified in vulnerable areas of groundwater wells or surface water intakes will not pose a risk to source water. Part IV policies must be implemented by a specially trained and certified Risk Management Official and/or Risk Management Inspector (RMO/I). Currently, ten municipalities in the Thames-Sydenham and Region have delegated their obligations under Part IV of the Clean Water Act to the Upper Thames River Conservation Authority (UTRCA).

This annual progress report was developed to detail the progress made by our Risk Management Officials and Inspectors towards the implementation of Part IV policies within your municipalities. The report includes actions taken since the SPP came into effect in 2015, highlights some of the specific actions taken in 2021, and provides information about some of our plans for 2022.

Risk Management Plans and Inspections

Negotiation of risk management plans with businesses, farmers, and institutions to manage existing threats has continued. Our risk management staff work with land and business owners to build on existing best management practices and develop practical plans that minimize the impact to business and productivity.

Follow-up compliance monitoring is typically conducted each year following the establishment of a risk management plan, and more thorough compliance inspections are conducted every five years. The monitoring and inspections ensure Risk Management Plans are effectively implemented and all risk management measures have been executed. Failure to implement the plans can lead to formal enforcement action. This can include, if necessary, the issuance of orders to complete work and to pay for any work completed by the Risk Management Official. The number of risk management plans established, and inspections undertaken by our Risk Management Officials is provided in table format for each municipality in the pages that follow.

Due to the extraordinary challenges and restrictions faced by businesses, farmers, and institutions during the pandemic, where appropriate, staff have connected with proponents in more informal manner (i.e., telephone, email exchanges) as an alternative to the more formal review process to ensure compliance with established risk management plans and prohibitions. This approach maintains open communication with proponents and formal compliance processes will be executed as necessary.

Managing Threats from New Development

Some of the policies in the Thames-Sydenham and Region Source Protection Plan were included to ensure new development considers source protection vulnerable areas. Certain development applications within vulnerable areas are sent to our Risk Management Officials for review by municipal building and planning staff to ensure growth is compatible with drinking water protection. The Clean Water Act requires a Section 59 notice for developments near municipal wells and intakes to determine if an application has the potential to introduce a new threat to drinking water. A notice is required before planning and building applications can be deemed complete. Information about the number of development applications reviewed, and the number of Section 59 notices issued within each municipality is provided in this report.

Pandemic Impact Statement

Work performed by Risk Management Officials and Inspectors is deemed essential during this time. The pandemic has generated many challenges across all risk management programs and services. Staff have primarily worked from home since March 15, 2020, and continue to monitor activities within the significant threat areas of each municipality via drive tours, communications with proponents and desktop exercises; monitoring for businesses closing/opening, new development and any other activities that require action. The eyes and ears of municipal staff have also been invaluable during this time. Staff continues to address Section 59 (Restricted Land Use) inquiries and review applications to ensure required notices are issued in a timely manner.

Businesses/Operations (across all sectors) as well as landowners are experiencing unprecedented stresses and struggling to adapt to ever changing pandemic response requirements directed at their particular operation. With that in mind, RMOs/RMIs across the province have found this has slowed the progress of “on the ground” threat verification and compliance monitoring. Risk Management Staff have recognized the need to adapt threat verification and compliance approaches to meet the need for contactless interactions where appropriate. Staff are working diligently to adapt risk management plans and compliance documentation to be more interactive in a growing virtual environment.

Nevertheless, our risk management service program is in a good position at this time. For example, Stratford, West Perth, Perth East, St. Marys, and Chatham-Kent, have 90-100% of sites with significant threats already verified and risk management plans established prior to the start of the pandemic. We have developed good working relationships with the persons undertaking activities requiring risk management plans and this has been vital for effective compliance monitoring. Risk Management in Point Edward, Plympton-Wyoming, Lambton Shores, St. Clair, and Sarnia is also progressing well given the recent challenges. Staff are taking steps to complete threat verification via drive by inspection, telephone and email communications and working towards interim risk management plans that will later be amended as on-site visit and/or in-person inspections are appropriate.

Summary

Due to the challenges of the pandemic response, the past two years have been a period of “adapt and pivot”. Staff continues to work with landowners and tenants of properties that had

originally been identified as having significant drinking water threats in the original assessment report as well as new properties/threats identified by the Risk Management Officials. Staff have been working collaboratively with residents to verify the existence of these threats and, where required, negotiate and establish risk management plans. An inspection and compliance program has been established in order to monitor properties within vulnerable areas. On site, in-person inspections are now being carried out and scheduled to ensure ongoing threat verification, risk management and compliance are maintained. Many of the active risk management plans are approaching a five year, formal review schedule and will require the implementation of any Director Technical Rule changes which came into effect in 2021. The following report will go into detail what those changes are and how they will affect your specific municipality.

The following pages provide a breakdown of the risk management services provided by UTRCA for each municipality. Overall, the 2021/2022 operating expenses are on track, we expect to fulfill our current agreement deliverables within budget.

Reports by Municipality

Risk Management Stats provided in this report represent the 2021 calendar year and cumulative count for each line item completed since the Source Protection Plan took effect, or since UTRCA began providing risk management services for the municipality.

Details regarding risk management services provided for each municipality are displayed in chart form. The chart below provides an explanation of those details to help you interpret the numbers reported.

Risk Management Statistics	Details
Threats enumerated in the 2015 Assessment Report	Total # of individual significant drinking water threats enumerated in the original (2015) Assessment Report (2015).
Sites Identified by Risk Management Official	Additional sites with potential threats identified by a Risk Management Official, not captured in the (2015) Assessment Report.
Map Provided	Map generated for a specific site (via roll #); detailing zone scores and boundaries. In some instances, RMO will detail where the activity of concern is occurring on a site.
Threat Verification Survey	Surveys were mailed out to sites with significant threats enumerated in the original assessment report (2015). The number reported details the number of completed surveys returned to the RMO. Respondents indicated activities currently being undertaken or those that may occur in the future. RMO's followed up to determine if the activities met circumstances requiring a risk management plan (S.58) and/or prohibition (S.57) process.
Clearance Letter	<p>Verifies the parcel noted is within a vulnerable area however, the threat verification process has determined either:</p> <ul style="list-style-type: none"> • a significant threat activity is not occurring under circumstances requiring a risk management plan, or; • a septic system is the only significant drinking water threat on site and the municipality will implement an on-site sewage inspection program as regulated under the <i>Ontario Building Code Act</i>. <p>No risk management plan was required at the time the letter was issued. However, if activities undertaken are modified or new activities are planned in the future, the proponent is directed to contact the Risk Management Official to determine if a risk management plan is required or prohibitions apply.</p>

Risk Management Statistics	Details
<p>S.59 Restricted Land Use</p> <p>Screening, Inquires, S. 59.2(a) and S59 2(b)</p>	<p>Section 59 of the <i>Clean Water Act</i> requires that if a source protection plan designates a land use as a restricted land use in a vulnerable area, a person shall not make an application under the <i>Planning Act</i>, or construct or change the use of a building under the <i>Building Code Act</i>, unless the Risk Management Official issues a notice to that person. The <i>Thames-Sydenham and Region Source Protection Plan</i> identifies all land uses, with the exception of residential uses, as restricted land uses, within the Wellhead Protection Areas A, B and C. Section 59.2(a) notices are issued when neither a prohibition nor a risk management plan apply to the existing or proposed activity. Alternatively, if a prohibition or risk management plan is required, a Section 59.2(b) notice will be issued only after those requirements have been agreed to or established; at such time the notice will indicate the application process may proceed.</p> <p>If a general inquiry or Section 59 screening form is submitted and the Risk Management Official (RMO) reviews the information and confirms a residential exemption applies or the parcel is outside of a significant threat zone, the RMO will advise the municipality and applicant the application can proceed without further review by the RMO.</p>
<p>Risk Management Plan Notice</p> <p>S.58(4), S.58(6) and 58(7)</p>	<p>Section 58(4) - Notice indicates one or more activities engaged in, or proposed to be engaged in, at the noted address has been identified as a significant drinking water threat and requires a risk management plan. Proponent is informed they must contact the Risk Management official by a certain date to begin the risk management plan process and provide any requested information.</p> <p>Section 58(6) - Notice of agreement/negotiation of a risk management plan between the Risk Management Official and Person Engaged in the Activity.</p> <p>Section 58(7) - Notice states that a risk management plan is required. If a risk management plan cannot be agreed to by a certain date, it is the intent of the Risk Management Official to establish one for the identified activities by Order (S.59(1)). Risk Management Officials may use this tool to move the risk management process along if not being achieved in a timely manner.</p>

Risk Management Statistics	Details
Risk Management Plan S.58(5) and S.58(10)	<p>Section 58(5) - risk management plan has been negotiated or agreed to between the Risk Management Official and Person Engaged in the Activity.</p> <p>Section 58(10) - risk management plan established by Order of the Risk Management Official.</p> <p>Note: Risk management plans manage one or more significant threats on a particular parcel or parcels. For example: a business which operates on two parcels (adjacent or not) may have a single risk management plan that manages all significant threat activities associated with all parcels.</p>
Prohibition Letters	<p>Details activities that are prohibited on a parcel; both existing and future.</p>
Order	<p>Confirms agreement on a risk management plan has not been reached by the deadline outlined in the S. 58(7) notice and therefore a risk management plan will be established; including any prohibitions that may apply.</p>
Certificate of Service	<p>Issued under ss. 100(1) of the <i>Clean Water Act</i>, 2006 which states the Risk Management Official has served a true copy of the Order to the Person Engaged in the Activity or person named.</p>
Compliance Review and Inspection	<p>Risk Management Inspectors execute interim reviews of risk management plans with the Person Engaged in the Activity; this process ensures information within the agreement stays accurate and risk management measures are implemented and working effectively. This may or may not include an on-site inspection to ensure all significant threat activities are identified and managed so that it ceases to be, or never becomes, a significant drinking water threat. Additionally, any prohibited activities are also monitored to ensure ongoing compliance.</p>
Site Visits Completed	<p>Risk Management Official / Inspector visited individual sites or completed driving tours with/or without municipal representatives for the purposes of identifying new threats and/or verifying compliance of risk management plan and/or prohibitions.</p>
Sites in Progress	<p>Sites identified in the original Assessment Report (2015) or identified by the Risk Management Official that are in the process of threat verification, risk management plan, policy review/amendment, negotiations and/or prohibition process.</p>

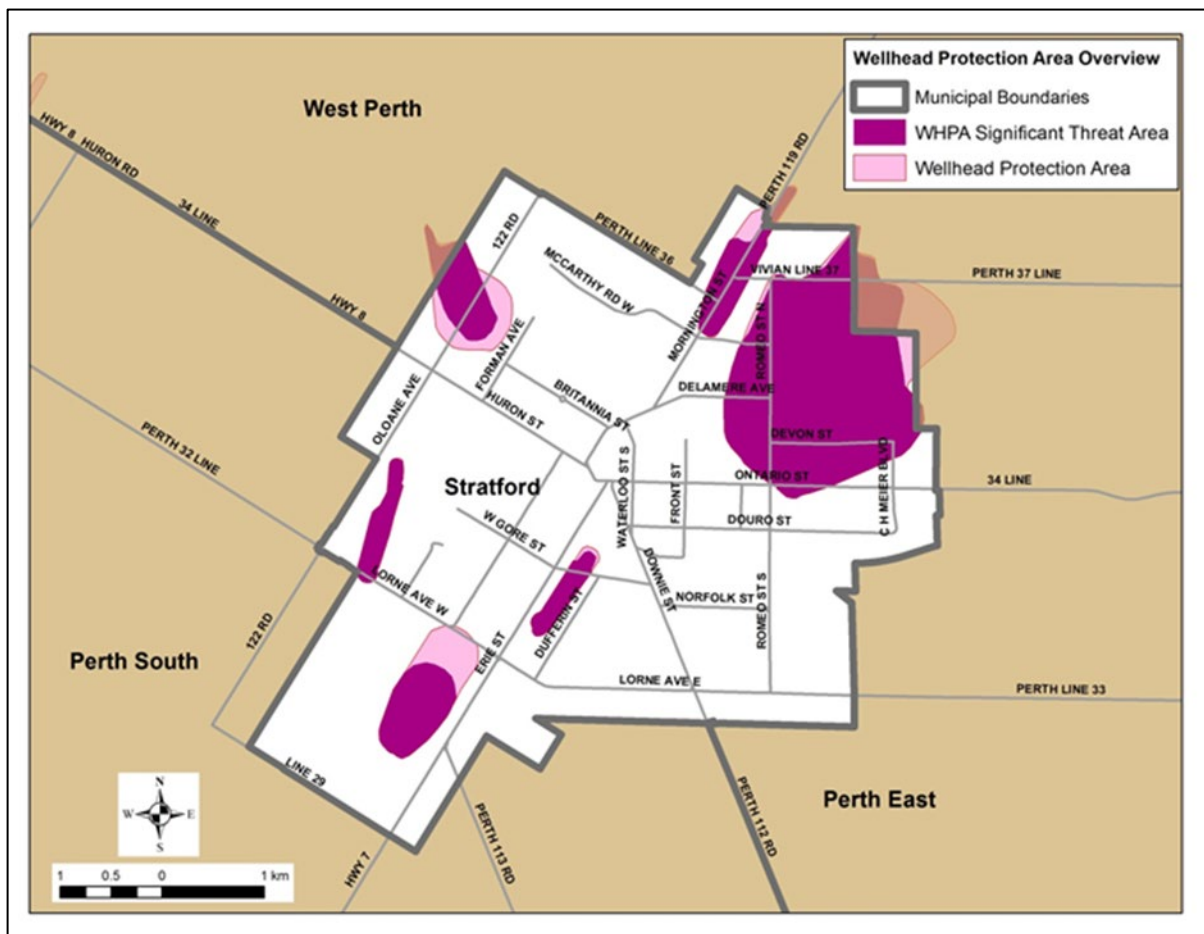
Risk Management Statistics	Details
Education and Outreach – Industrial, Commercial and Residential (DNAPL policy)	<p><i>Policy 2.45 Handling and Storage of DNAPL - Education and Outreach</i></p> <p><i>To reduce the risk to municipal drinking water sources from the handling and storage of dense non-aqueous phase liquids in concentrations typical of household use, where this activity is, or would be, a significant drinking water threat, municipalities, in collaboration with the Conservation Authority, the Ministry of Environment, and/or wherever possible other bodies, shall develop and implement an education and outreach program directed at the owners and/or occupants of such properties. The program may include, but not necessarily be limited to, the provision of education material and information about the nature of the threat, how DNAPLs can be identified and handled and disposed of in a manner so that the activity would cease to be or never become a significant drinking water threat. This policy shall be initiated within one (1) year of the effective date of the Source Protection Plan.</i></p> <p>In response to this policy, a website (www.protectingourwater.ca) was developed and door hangers with magnets were delivered to all residential properties in the wellhead protection area zones A, B and C. These products direct residents to their local hazardous waste depot, detail how to identify, handle and store hazardous products as well as provide some interesting information about their local drinking water.</p> <p>Additionally, some municipalities identified the need for customized source water protection communication products (i.e. factsheets, letters, etc.) to address a local concern. These products could include distribution to industrial, commercial and/or residential properties.</p>
Source Water Protection Training Package	<p>Every risk management plan requires general source water protection training to be implemented for all applicable staff. Risk Management Officials recognized the benefit of developing and offering accessible training tools that would provide consistent messaging and support the proponent in meeting those requirements.</p> <p>Training package (made available digitally by email or via USB drive) includes: SWP training video, RMO/RMI factsheet, and SWP FAQ.</p>

Risk Management Statistics	Details
Municipal Drive Tours	Drive tours (whereby an RMO/RMI drives throughout the significant threat policy areas) are an important tool for RMO/RMIs to survey the landscape for new or future threats and also monitor compliance of existing threats where S. 57 prohibitions or S. 58 Risk Management Plans exist. For example, drive tours may identify: changes in business/land ownership, new or proposed development requiring S.59 review or operational changes of a property - all of which may require further threat verification and/or risk management plan amendments or the application of prohibitions.
Informal Interim Compliance Review	During the pandemic, businesses and landowners in all sectors have faced increased regulatory pressures and conforming with evolving, mandatory pandemic response measures as they relate to their operations. Some shutdown operations temporarily or intermittently throughout; others remained operational but not immune to the unprecedented stress. The RMS office recognized this and adapted our interactions to maintain and encourage on-going communications with proponents as well as limit in-person interactions. Where appropriate, RMO/RMIs reach out to proponents via telephone or email to ensure compliance with risk management plans or prohibitions, carry out threat verification, initiate interim risk management plan negotiations and/or offer assistance in meeting upcoming deadlines of risk management measures.
Interim Compliance Review	May occur every 1 to 2 years and is typically a phone call and or email correspondence with proponent. Site inspections carried out as needed.
Formal Compliance Review	Risk management plans are formally reviewed onsite with proponents every 5 years. This includes a full inspection to verify activities and ensure compliance.

City of Stratford

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	56
Sites Identified by Risk Management Official	1	36
S. 59 Screening Forms Reviewed	0	15
S. 59 General Inquiries	2	6
S. 59 Residential Notices Issued	1	1
S. 59 2(a) Notices Issued	0	3
S. 59 2(b) Notices Issued	0	0
Clearance Letters	0	33
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	0	12
Risk Management Plan S.58(5) and S.58(10) – Active	0	10
Risk Management Plans - Amended	0	0
Risk Management Plans - Dissolved	0	0
Sites in Progress	4	-
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	2	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	6	-
Prohibition Letters Issued	0	1
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	2	10
Formal (5 year) Compliance Review Completed	0	-

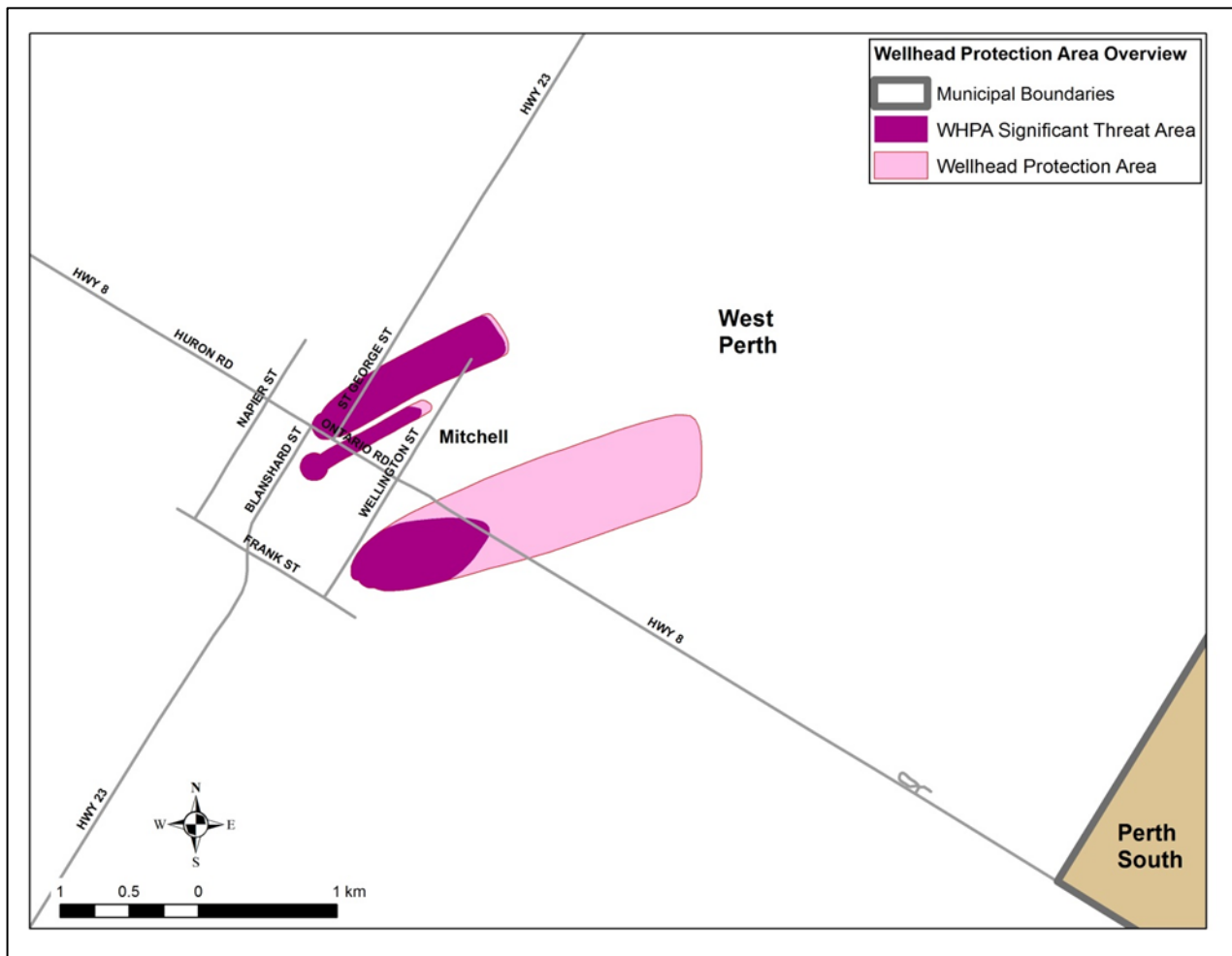
Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Site Visits Completed	2	129
Municipal Drive Tours	2	6
Education and Outreach - Industrial, Commercial and Residential (DNAPL policy)	2121	0
Source Water Protection Training Package	0	10



Municipality of West Perth

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	60
Sites Identified by Risk Management Official	0	3
S. 59 Screening Forms Reviewed	1	12
S. 59 General Inquiries	2	5
S. 59 Residential Notices Issued	0	0
S. 59 2(a) Notices Issued	1	4
S. 59 2(b) Notices Issued	0	4
Clearance Letters	0	9
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	0	11
Risk Management Plan S.58(5) and S.58(10) – Active	0	11
Risk Management Plans - Amended	0	1
Risk Management Plans - Dissolved	0	0
Sites in Progress	1	-
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	3	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	3	-
Prohibition Letters Issued	0	0
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	1	4
Formal (5 year) Compliance Review Completed	0	0

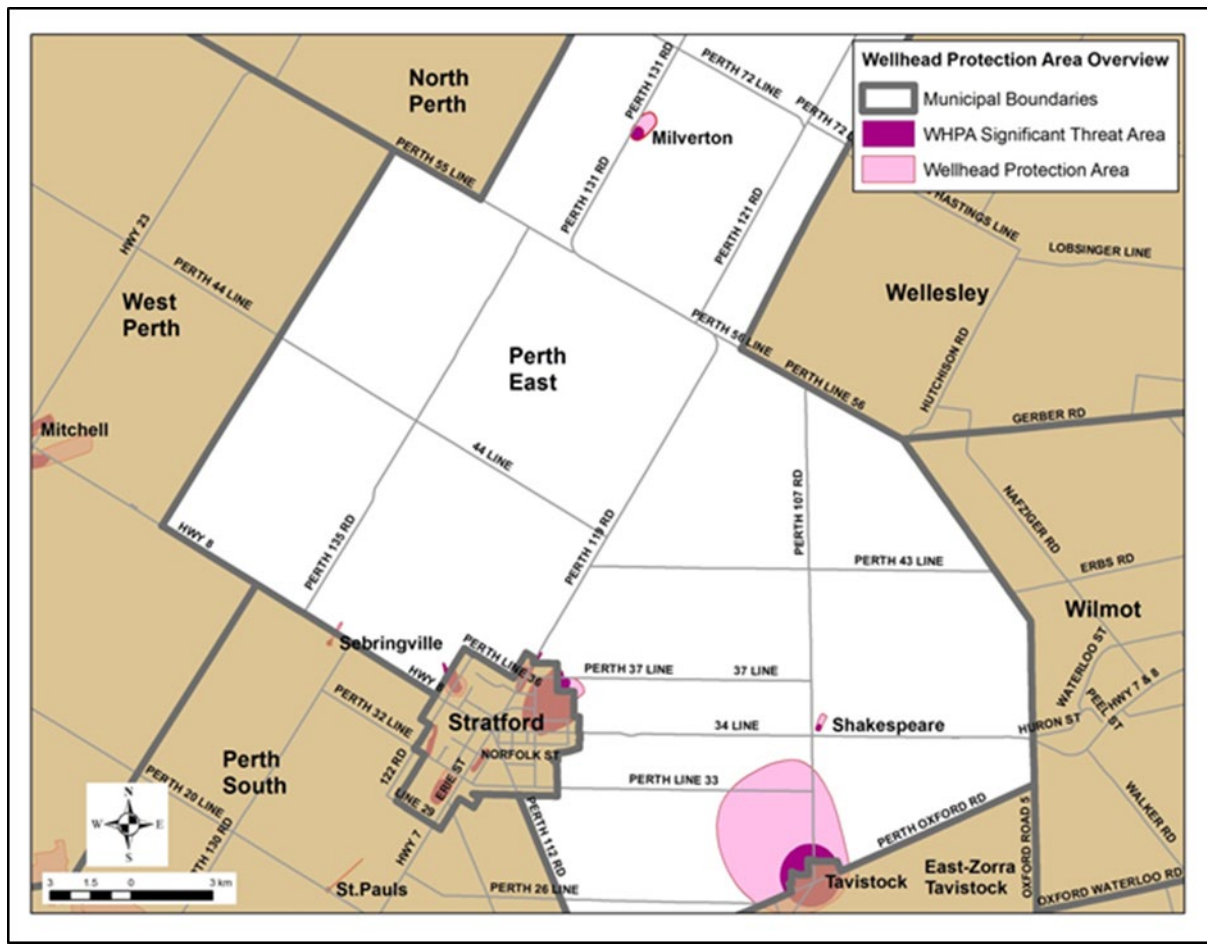
Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Site Visits Completed	1	84
Municipal Drive Tours	2	6
Education and Outreach - Industrial, Commercial and Residential (DNAPL policy)	0	486
Source Water Protection Training Package	0	8



Township of Perth East

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	8
Sites Identified by Risk Management Official	0	3
S. 59 Screening Forms Reviewed	1	5
S. 59 General Inquiries	2	5
S. 59 Residential Notices Issued	0	0
S. 59 2(a) Notices Issued	0	0
S. 59 2(b) Notices Issued	1	1
Clearance Letters	0	1
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	0	6
Risk Management Plan S.58(5) and S.58(10) – Active	0	5
Risk Management Plans - Amended	0	1
Risk Management Plans - Dissolved	0	0
Sites in Progress	0	0
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	2	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	4	-
Prohibition Letters Issued	0	1
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	2	3
Formal (5 year) Compliance Review Completed	0	0

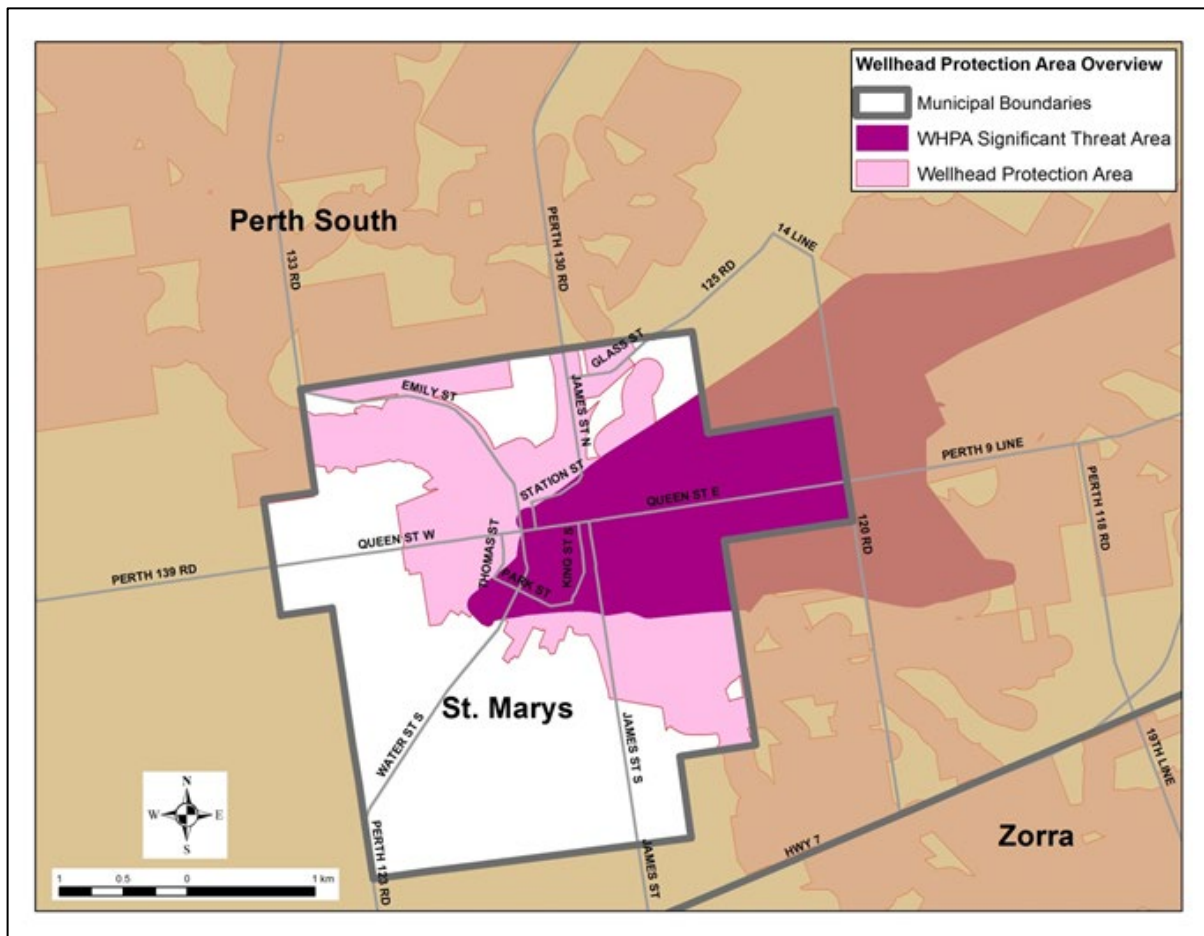
Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Site Visits Completed	0	27
Municipal Drive Tours	2	6
Education and Outreach - Industrial, Commercial and Residential (DNAPL policy)	0	110
Source Water Protection Training Package	0	3



Town of St. Marys

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	134
Sites Identified by Risk Management Official	1	23
S. 59 Screening Forms Reviewed	2	12
S. 59 General Inquiries	2	11
S. 59 Residential Notices Issued	0	0
S. 59 2(a) Notices Issued	1	0
S. 59 2(b) Notices Issued	1	0
Clearance Letters	0	58
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	2	21
Risk Management Plan S.58(5) and S.58(10) – Active	1	20
Risk Management Plans - Amended	0	0
Risk Management Plans - Dissolved	0	1
Sites in Progress	1	-
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	2	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	3	-
Prohibition Letters Issued	0	1
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	0	7
Formal (5 year) Compliance Review Completed	0	0

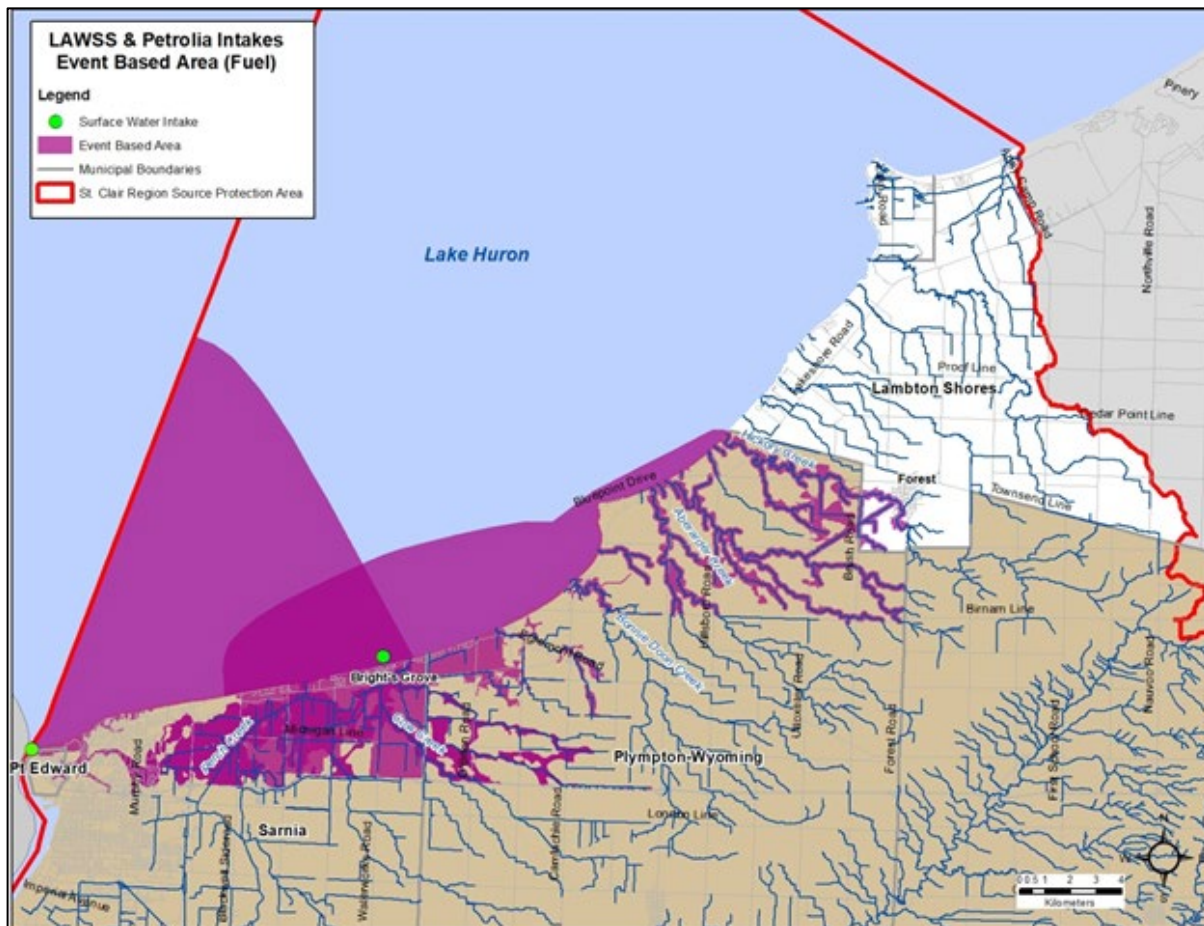
Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Site Visits Completed	0	248
Municipal Drive Tours	2	6
Education and Outreach - Industrial, Commercial and Residential (DNAPL policy)	1247	0
Source Water Protection Training Package	1	10



Municipality of Lambton Shores

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	1
Sites Identified by Risk Management Official	0	0
S. 59 Screening Forms Reviewed	2	4
S. 59 General Inquiries	2	2
S. 59 Residential Notices Issued	0	0
S. 59 2(a) Notices Issued	0	0
S. 59 2(b) Notices Issued	0	0
Clearance Letters	0	0
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	0	0
Risk Management Plan S.58(5) and S.58(10) – Active	0	1
Risk Management Plans - Amended	0	0
Risk Management Plans - Dissolved	0	0
Sites in Progress	0	0
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	1	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	0	-
Prohibition Letters Issued	0	0
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	3	5
Formal (5 year) Compliance Review Completed	0	0

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Site Visits Completed	3	6
Municipal Drive Tours	0	0
Education and Outreach - Industrial, Commercial and Residential (DNAPL policy)	0	0
Source Water Protection Training Package	0	0



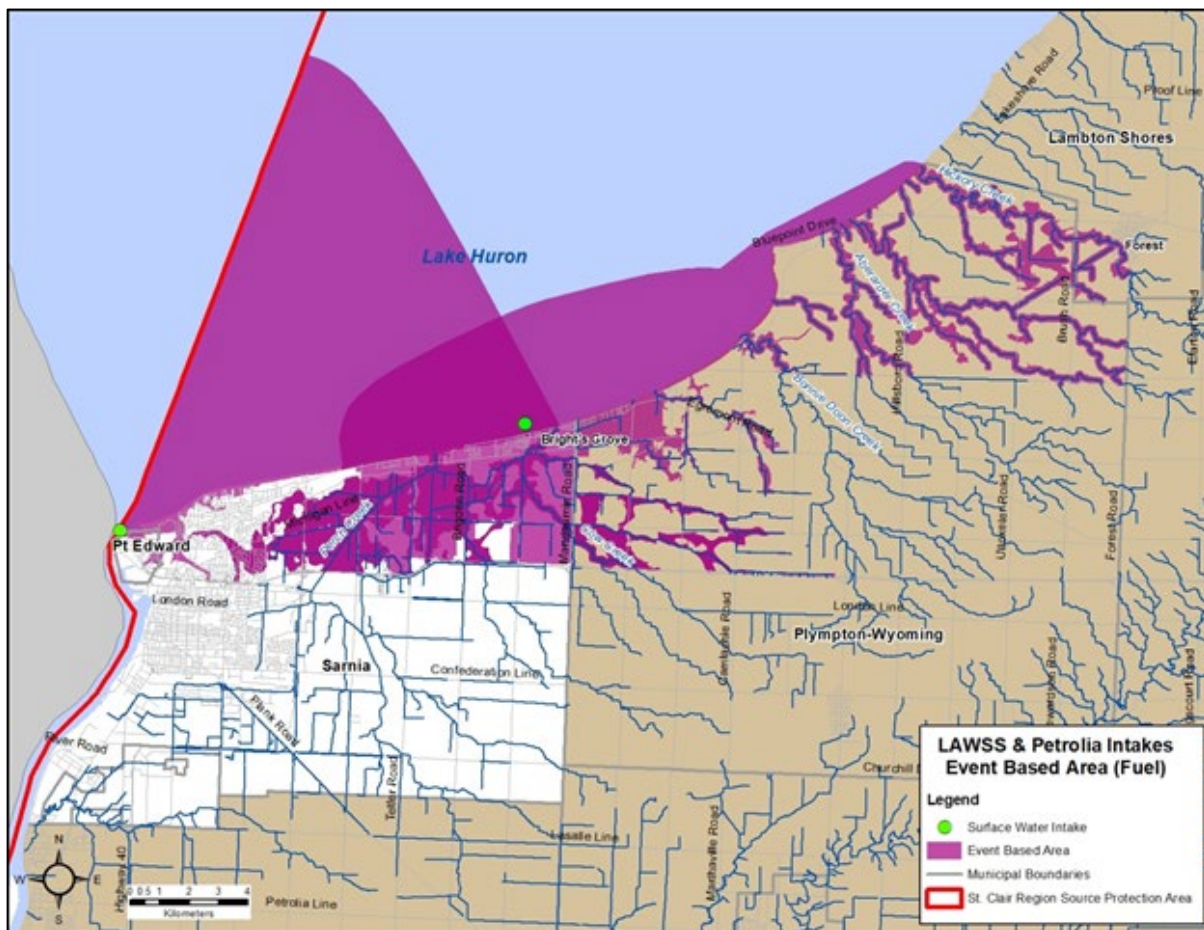
Municipality of Plympton-Wyoming

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	1
Sites Identified by Risk Management Official	0	0
S. 59 Screening Forms Reviewed	0	0
S. 59 General Inquiries	2	4
S. 59 Residential Notices Issued	0	0
S. 59 2(a) Notices Issued	0	0
S. 59 2(b) Notices Issued	0	0
Clearance Letters	0	0
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	0	0
Risk Management Plan S.58(5) and S.58(10) – Active	0	0
Risk Management Plans - Amended	0	0
Risk Management Plans - Dissolved	0	0
Sites in Progress	0	0
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	0	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	2	-
Prohibition Letters Issued	0	0
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	1	3
Formal (5 year) Compliance Review Completed	-	-

Municipality of Point Edward

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	0
Sites Identified by Risk Management Official	0	0
S. 59 Screening Forms Reviewed	0	0
S. 59 General Inquiries	0	0
S. 59 Residential Notices Issued	0	0
S. 59 2(a) Notices Issued	0	0
S. 59 2(b) Notices Issued	0	0
Clearance Letters	0	0
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	0	0
Risk Management Plan S.58(5) and S.58(10) – Active	0	0
Risk Management Plans - Amended	0	0
Risk Management Plans - Dissolved	0	0
Sites in Progress	0	0
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	0	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	15	-
Prohibition Letters Issued	0	0
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	0	0
Formal (5 year) Compliance Review Completed	0	0

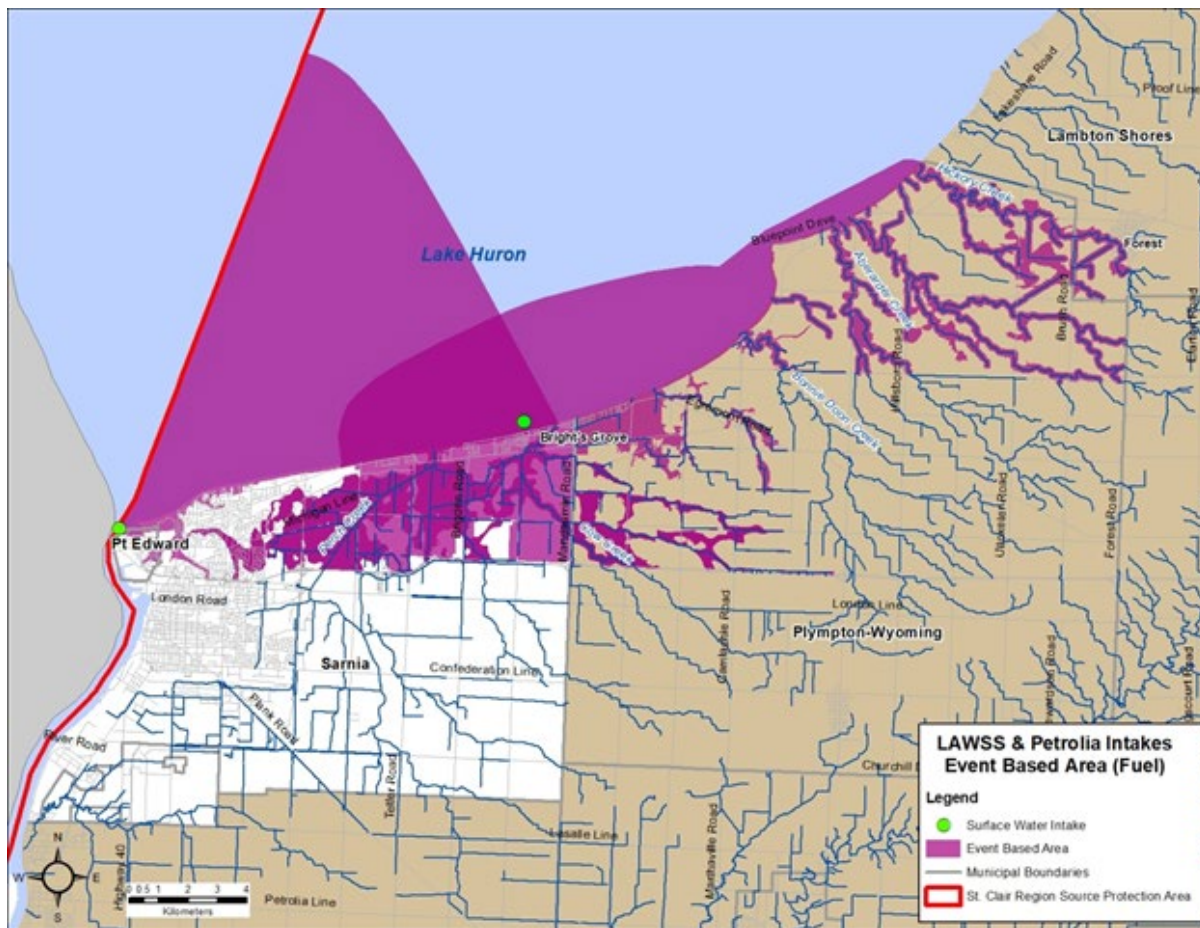
Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Site Visits Completed	0	0
Municipal Drive Tours	0	0
Education and Outreach - Industrial, Commercial and Residential (DNAPL policy)	0	0
Source Water Protection Training Package	0	0



City of Sarnia

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	4
Sites Identified by Risk Management Official	0	1
S. 59 Screening Forms Reviewed	5	21
S. 59 General Inquiries	5	0
S. 59 Residential Notices Issued	5	0
S. 59 2(a) Notices Issued	0	0
S. 59 2(b) Notices Issued	0	0
Clearance Letters	1	3
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	0	0
Risk Management Plan S.58(5) and S.58(10) – Active	0	2
Risk Management Plans - Amended	0	-
Risk Management Plans - Dissolved	0	-
Sites in Progress	1	0
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	0	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	7	-
Prohibition Letters Issued	0	0
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	2	8
Formal (5 year) Compliance Review Completed	0	-

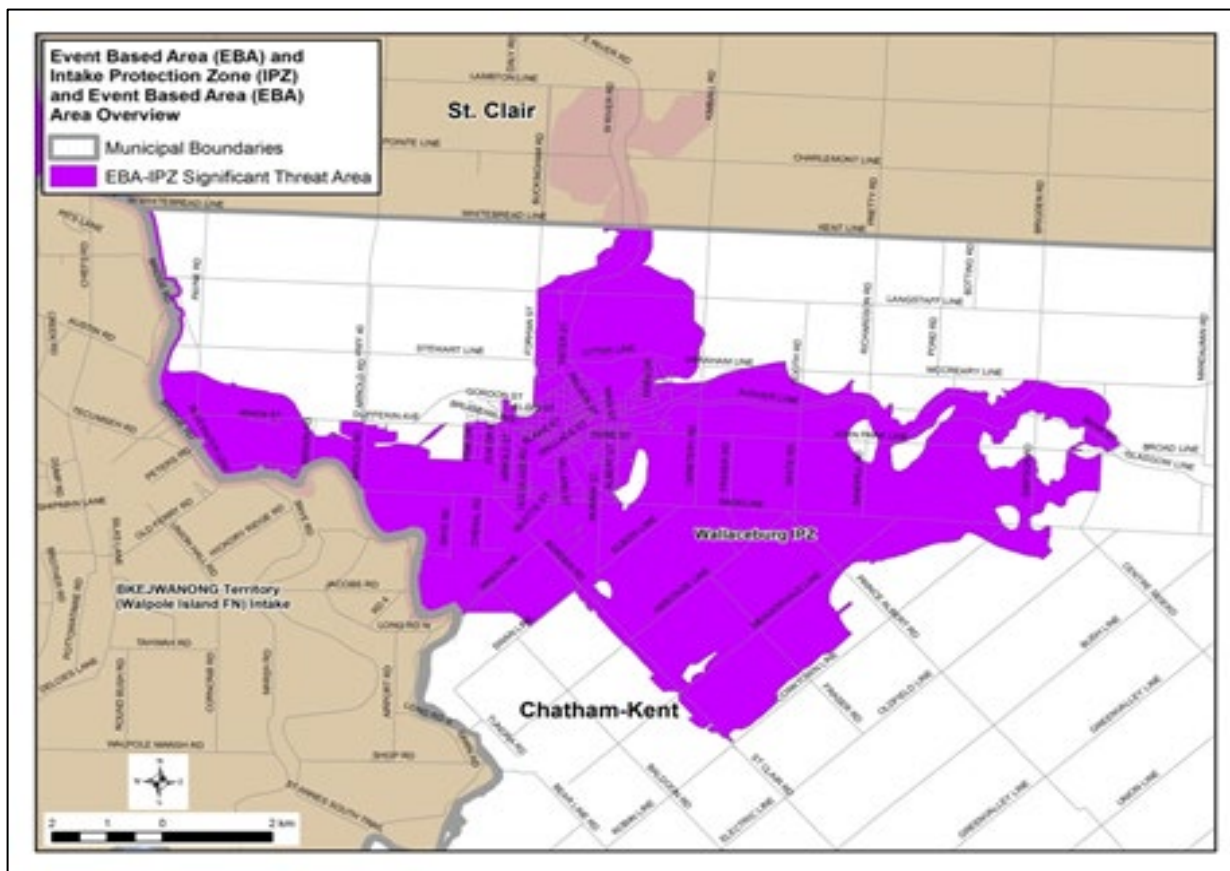
Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Site Visits Completed	2	-
Municipal Drive Tours	0	-
Education and Outreach - Industrial, Commercial and Residential (DNAPL policy)	2	0
Source Water Protection Training Package	1	6

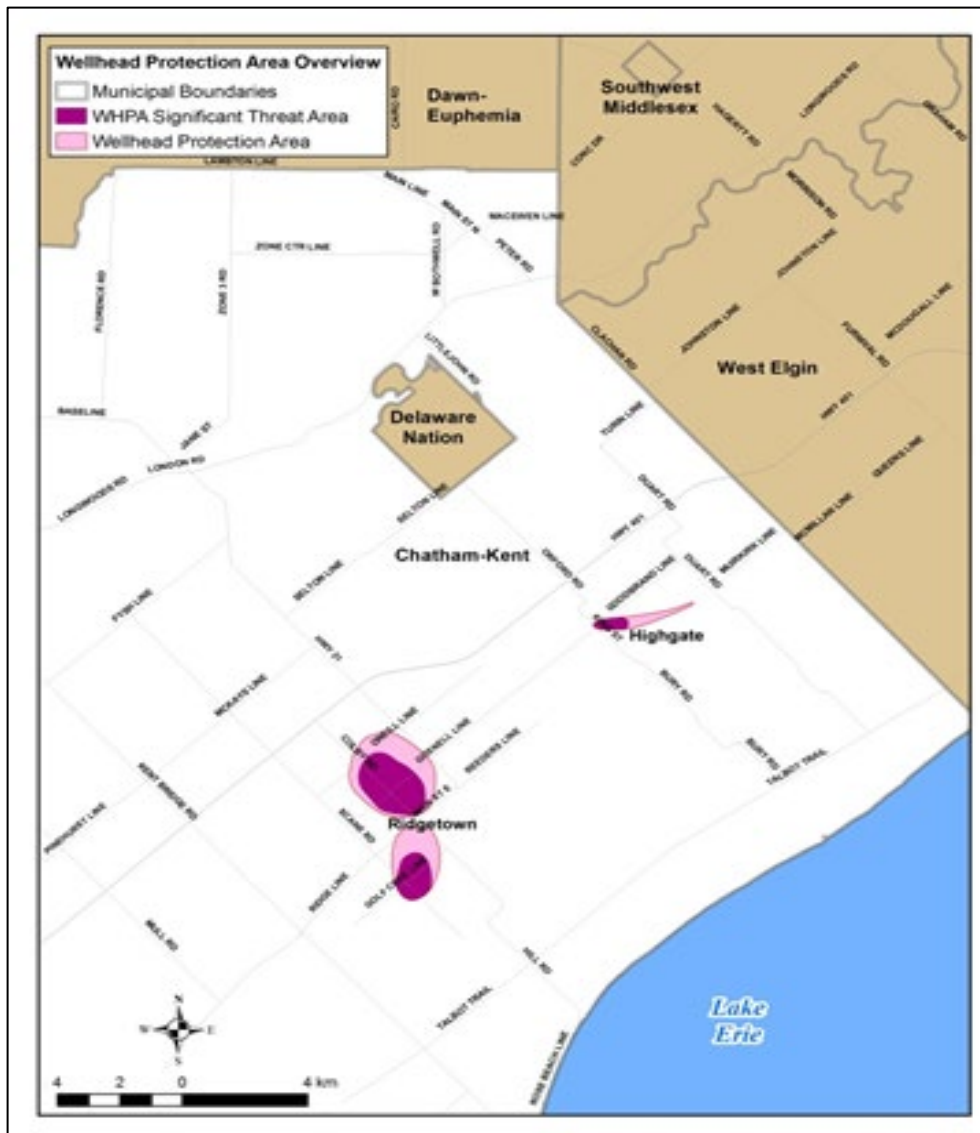


Municipality of Chatham-Kent

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	105
Sites Identified by Risk Management Official	1	10
S. 59 Screening Forms Reviewed	4	12
S. 59 General Inquiries	5	24
S. 59 Residential Notices Issued	0	-
S. 59 2(a) Notices Issued	0	5
S. 59 2(b) Notices Issued	0	5
Clearance Letters	3	50
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	0	7
Risk Management Plan S.58(5) and S.58(10) – Active	0	7
Risk Management Plans - Amended	0	0
Risk Management Plans - Dissolved	0	0
Sites in Progress	0	6
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	3	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	12	-
Prohibition Letters Issued	0	0
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	7	21
Formal (5 year) Compliance Review Completed	0	0

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Site Visits Completed	9	53
Municipal Drive Tours	0	0
Education and Outreach - Industrial, Commercial and Residential (DNAPL policy)	0	390
Source Water Protection Training Package	0	3

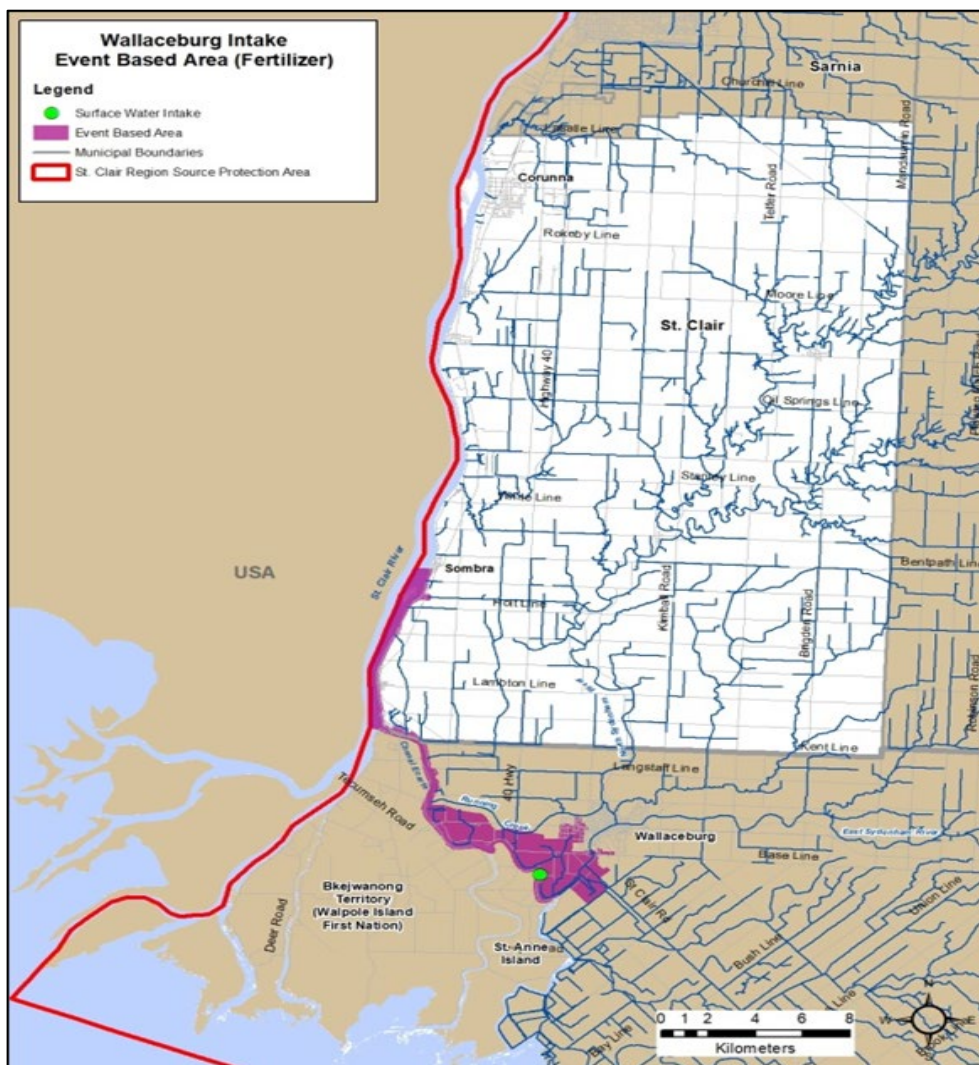


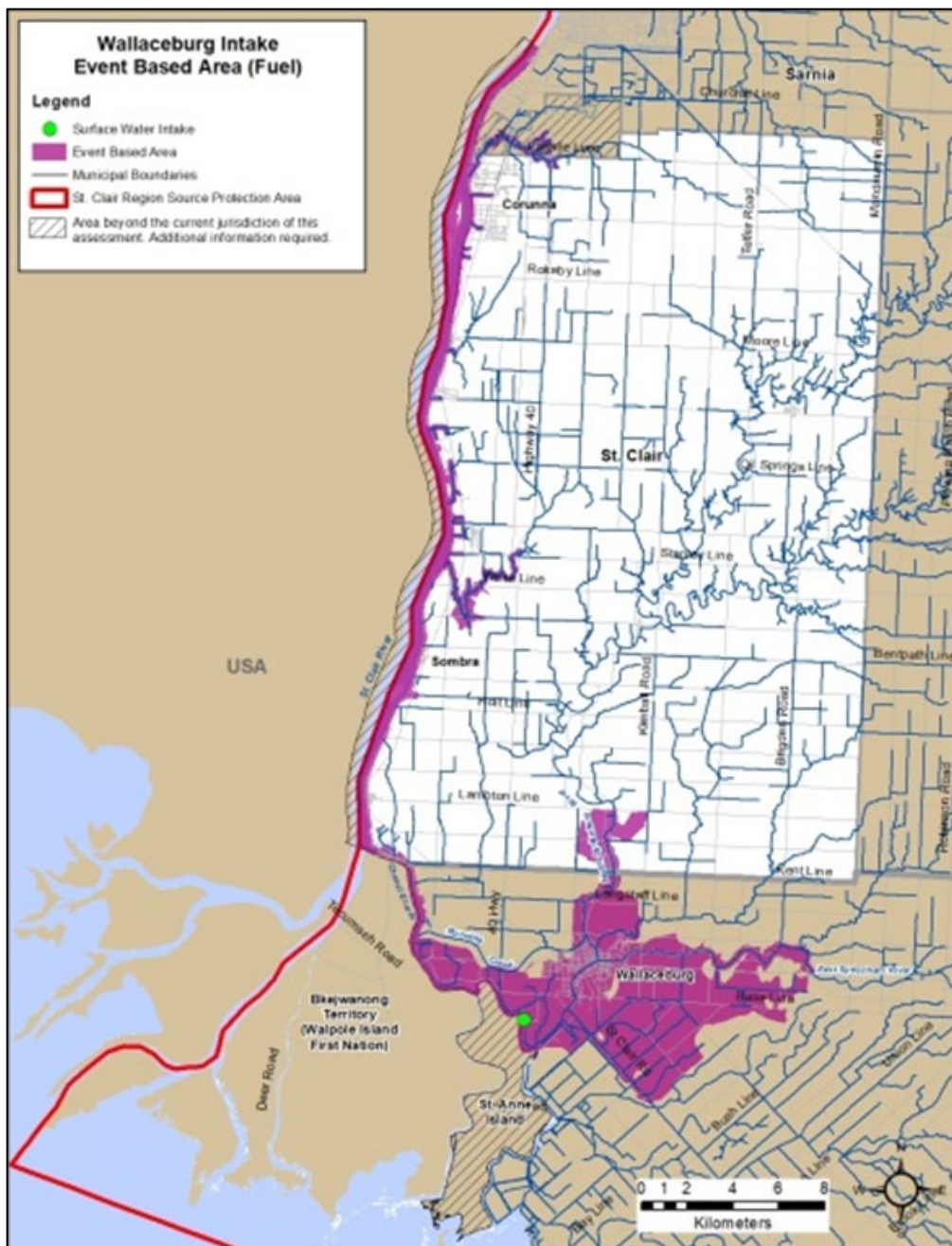


Municipality of St. Clair

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Threats enumerated in the 2015 Assessment Report (AR)	Updates to AR in progress to reflect 2021 DTR changes	4
Sites Identified by Risk Management Official	0	3
S. 59 Screening Forms Reviewed	0	0
S. 59 General Inquiries	5	10
S. 59 Residential Notices Issued	0	-
S. 59 2(a) Notices Issued	0	2
S. 59 2(b) Notices Issued	0	-
Clearance Letters	2	2
Risk Management Plan Notice S.58.(4), S.58(6) and 58.(7)	0	1
Risk Management Plan S.58(5) and S.58(10) – Active	1	4
Risk Management Plans - Amended	0	-
Risk Management Plans - Dissolved	0	-
Sites in Progress	2	4
Estimated # of Risk Management Plans likely impacted by 2021 MECP Director Technical Rule (DTR) changes or local policy updates	0	-
Estimated # of sites that will require threat verification due to 2021 DTR changes (excluding those with active risk management plans as detailed above) – may or may not lead to S.58 or S.57	0	-
Prohibition Letters Issued	0	0
Orders Issued	0	0
Certificate of Service Received	0	0
Interim Compliance Review Completed	6	14
Formal (5 year) Compliance Review	0	-

Risk Management Statistics	2021 Reporting Period	Cumulative Total (since 2015 approval of Assessment Report)
Completed		
Site Visits Completed	6	17
Municipal Drive Tours	0	0
Education and Outreach - Industrial, Commercial and Residential (DNAPL policy)	0	0
Source Water Protection Training Package	0	0






Education and Outreach

Source Water Protection Displays

Displays are available to support source water protection education and outreach initiatives in our participating municipalities and associated events. We also have flyers and magnets promoting the importance of drinking water source protection and how residents can do their part to ensure safe, plentiful drinking water in their community.

If your municipality would like to host the displays in your municipal buildings or at an event, please contact the Risk Management Service Office (rms@thamesriver.on.ca).

Risk Management Services





THAMES-SYDENHAM AND REGION SOURCE PROTECTION

Protecting our communities' sources of drinking water with a multi-barrier approach.

HAVE YOU SEEN THIS DRINKING WATER PROTECTION ZONE SIGN?

These signs are appearing across Ontario to raise awareness about the vulnerability of our municipal drinking water sources. Local and provincial governments are placing these signs along roadways in areas where a pollution spill could affect our drinking water sources.



For more information visit
www.sourcewaterprotection.on.ca



UPPER THAMES SOURCE PROTECTION

St. Clair conservation

Lower Thames conservation

Ontario

Source Water Protection



Working together to protect drinking water sources

THAMES-SYDENHAM AND REGION SOURCE PROTECTION

www.sourcewaterprotection.on.ca

PROTECTING DRINKING WATER SOURCES BY MANAGING RISKS

When a property is in an area where certain activities could affect municipal drinking water sources, Risk Management Officials work with the landowners/renters to ensure compliance with policies in the Clean Water Act (CWA Part IV).

These CWA policies may require the development of a legally binding risk management plan, with measures to protect sources of drinking water, and/or the prohibition of certain activities.

Risk Management Inspectors ensure ongoing compliance. An inspector may take samples and measurements, run tests, copy documents, and issue an enforcement order if compliance is not met.



VISIT AND DISCOVER

www.protectingourwater.ca

Information about your community's sources of drinking water and what you can do to protect them.

St. Clair conservation

Lower Thames conservation

UPPER THAMES SOURCE PROTECTION

Social Media Campaign

Social media campaigns are developed by Conservation Ontario in collaboration with Source Water Project Managers and Risk Management Officials across the province. Every quarter, the working group meets to identify upcoming needs to communication and education and outreach. For example, the spring/summer campaign focused on cleaning (pet waste, hazardous waste), nutrient management (bio solids, agricultural runoff), real estate (vulnerable areas and RMPs), and more. For information regarding specific social media statistics from UTRCA, SCRCA, or LTVCA, please contact rms@thamesriver.on.ca

Minor Spills Response Guide Poster

This product was developed to support risk management measure compliance for those risk management plans that require a spills action plan. The poster offers a quick reference guide in the event of a spill. Additionally, posters will be available for distribution to businesses operating in low-moderate threat areas as an opportunity for education and outreach.



Protect local sources of municipal drinking water and human health

SPILLS RESPONSE GUIDE

1. BE PREPARED

- Evaluate the types of materials and ensure they are clearly labelled
- Minimise volumes and ensure proper handling and storage. Keep the area tidy
- Ensure availability of Safety Data Sheets (SDS)
- Ensure you have the necessary spill response equipment and Personal Protective Equipment (PPE) available in the right place(s)



2. BE SAFE

- If it's an emergency, evacuate the area and **CALL 911**
- Identify the spill. What is it?
- Wear appropriate PPE

3. STOP THE SOURCE

- Locate the source of the spill and stop it
- Close valves or taps, rotate punctured drums and plug leaks

4. PROTECT THE STORMWATER

- As necessary, dike the spill with absorbent socks. Lay absorbent pads and/or granular absorbent material on the spill
- Direct the spill to a location where it will not create a fire hazard or any risk to the health or safety of individuals or the natural environment - away from floor drains, storm sewers and catch basins

5. NOTIFY

- Tell your supervisor, site foreman or manager
- Alert emergency services as required
- If necessary, contact the SPILLS ACTION CENTRE (available 24/7) to report the spill:

Tel: 416-325-3000
Toll-free: 1-800-268-6060
Toll-free TTY: 1-855-889-5775

Be sure to communicate that the spill is located within a _____ time of travel to a municipal well.

6. CLEAN UP

- Where necessary, neutralize hazardous substances
- Use absorbents to clean up any spilled liquids and place in suitable container or bag
- Clean all residues without contaminating the storm water system or soil

7. DISPOSE

- Use a responsible waste disposal contractor to dispose of contaminated material, absorbents, soil and PPE

8. RESTOCK & REVIEW

- Immediately replace all used absorbents and PPE
- Assess the cause and take necessary steps to prevent recurrence
- Review how you handled the spill and determine if more training is needed
- Complete required documentation and communicate lessons learned
- As necessary, follow-up with your local Drinking Water Source Protection Risk Management Office to review details of the spill and assess the prevention measures to determine if they can be improved

Business Name: _____

Phone: _____

Site Address: _____

Onsite Emergency Contact
Primary (Name/Title): _____
Phone Number: _____

Secondary (Name/Title): _____
Phone Number: _____



NOTICE: This document provides general information on discharges and spills, but is not to be relied upon as advice on these matters. Users of this GUIDE should satisfy themselves with respect to their full obligations under environmental and health and safety legislation, engaging technical and legal experts as necessary. The Issuer is not responsible for any damages whatsoever arising from the information in this document or its interpretation.

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Training Opportunities

Does your municipality have new staff or want a refresher? The Risk Management Services Office provides ongoing training and refresher sessions upon request. If interested in scheduling a session, please contact our office by email (<mailto:rms@thamesriver.on.ca>) or telephone (519-451-2800 ext. 294).

SWP Mandated Septic Inspections

The Building Code was amended in 2011 to establish and govern mandatory on-site sewage system inspection programs. The requirements of the Building Code are reinforced by Policy 2.17 of the Source Protection Plan. The Upper Thames River Source Protection Area Assessment Report was approved on August 12, 2011. First inspections should have been completed by August 12, 2016. Municipalities may also choose to establish discretionary maintenance inspection programs within their jurisdictions.

Training or refresher sessions will include:

- Overview of septic inspection requirements and process,
- Reporting on septic inspections,
- Communications materials and tools.

Section 59 (Restricted Land Use) Screening Process

The s.59 (Restricted Land Use) process is triggered by planning act or building permit applications. These sessions will focus on the screening process and tools - including the specific required notices issued by an RMO prior to any application approvals. General Source Water Protection (SWP) program information will be discussed as well as the s.59 screening process for policies that apply to your specific municipality.

If you would like any other source water protection training or support, let us know by contacting rms@thamesriver.on.ca

Important Program Updates

2021 Director Technical Rules, Phase II Amendments Interpretation of Impacts for the Thames-Sydenham Region Source Protection Authority

Non-Mandatory

1. **Climate Considerations** - Specify the information to be incorporated into the assessment report (e.g.: description of approach and data sources) **should** a municipality / source protection authority decide to evaluate the impact of climate change to drinking water sources.
2. **Delineations of IPZ-1** - Allows expansion of IPZ-1 to maximum of 1km radius around drinking water intake
3. **Vulnerability Scores in IPZ-2** - Amendments allow for multiple vulnerability scores in 'areas' of IPZ-2

Mandatory – Changes to Table of Drinking Water Threats

1. **Application and Storage of Salt** - Decrease thresholds for impervious areas to identify SDWT; Reduce volume thresholds for storage; Distinguish between covered and uncovered storage
2. **Storage of Snow** - Use OWRA definitions, reduces volume limits substantially; Enable SPA/SPC to add other activities with supporting evidence
3. **The Handling and Storage of Fuel** - Combine the handling and storage under one risk category; Focused on permanent tanks/structures where fuel is stored; Reduced threshold
4. **The Handling and Storage of Dense Non-aqueous Liquids (DNAPLs)** - Adopt the list of activities from O.Reg 153; Enable SPA/SPC to add other activities with supporting evidence
5. **Handling and Storage of Non-agricultural Source Material** - Explicitly state NASM categories that pose risk to drinking water
6. **The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage**
 - a. **Sub-threat: Wastewater collection facilities and associated parts** - previously CSO discharge and sanitary sewers and related pipes; Use the definitions of storm water in the *Ontario Water Resources Act* (OWRA) for consistency.
 - b. **Sub-threat: Wastewater treatment facilities and associated parts** - Use the definitions of storm water and wastewater works in the *Ontario Water Resources Act* (OWRA) for consistency; Add holding tanks and lagoons as SDWT
 - c. **Sub-threat: Storm Water Management Facilities and Drainage System** - Aligns with Ministry approach
 - d. **Sub threat: Industrial effluent discharge** - Include risk of discharge to land and threat to groundwater
7. **The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.**

- a. **Sub-threat: Waste transfer/processing sites** - Two sub-categories: Hazardous and Liquid Industrial Waste; Municipal Waste
- b. **Sub-threat: Application and storage of Processed Organic Waste** - Explicitly state Processed Organic Waste as a risk
- c. **Sub-threat: Hauled Sewage** - Use the term 'disposal'; Add storage as a SDWT; Storage of hauled sewage (threat #1.8): Table did not capture the risk associated with the stationary storage where the hauled sewage is stored temporarily by haulers where it is not generated or disposed.

Local Impact and Implementation of Technical Rule Changes

Amendments to the Director's Technical Rules in December 2021 are currently being reviewed by the DWSP Committee and RMS staff. A number of changes were proposed to further refine the impact of specific threats on drinking water sources. While there are a large number of changes proposed in the DTR document, it was decided to take a graduated approach to implementing these changes in order to provide time to identify the extent of the threats and their impact on changes to current policy in our Source Protection Region.

Three priority threats were identified for initial review: 1) Application of Road Salt; 2) Storage of Snow; 3) Handling and Storage of Fuel. The changes in these threats include the adjustment to the circumstances which in turn may require changes to either existing RMP's or development of new RMP's as dictated through updated policy. Additional threats identified in the Technical Rules continue to be reviewed in 2022 including DNAPLs, NASMs, Sewage Systems, and Waste Disposal.

Local Impact – Salt

Since the beginning of risk management programs, the impact of salt has been a concern due to its wide use during winter months. Salt use is not limited to specific drinking water threat zones and can be found wherever roads, sidewalks and parking lots exist and must be considered a managed environmental threat on a broader regional basis. In addition, where salt use has been identified in significant threat areas, a policy of Education and Outreach has been adopted with regards to both storage and application in order to strike a balance between public safety and drinking water threat. We will continue to assist and promote salt management policies with all municipalities in our region.

Source Water Protection Best Practices

Ministry of the Environment, Conservation and Parks has released [best practices for source water protection](#) to help ensure communities and landowners in areas not covered by provincially-approved source protection plans have the tools they need to protect their drinking water sources.

Types of drinking water systems not generally included in source protection plans include privately-owned wells or cottage lake intakes and communal well systems for places like hamlets or campgrounds.

The new user-friendly best practices provide easy to understand information and tips to help protect these drinking water sources from contamination, such as how to ensure a septic system is functioning properly and how to store on-site fuel tanks and pesticides safely. The best practices also provide municipalities with information on how to use existing regulatory

and non-regulatory tools under the Planning Act, Municipal Act and septic inspection programs under the Ontario Building Code to protect sources of drinking water.

Let us know what you think about the best practices by taking part in our [survey on ontario.ca](https://survey.on.ontario.ca) and sharing it with your members, citizens, staff and committees as applicable. Your feedback will help MECP continually improve best practices and ensure they are a useful tool for protecting drinking water sources.

Appendices

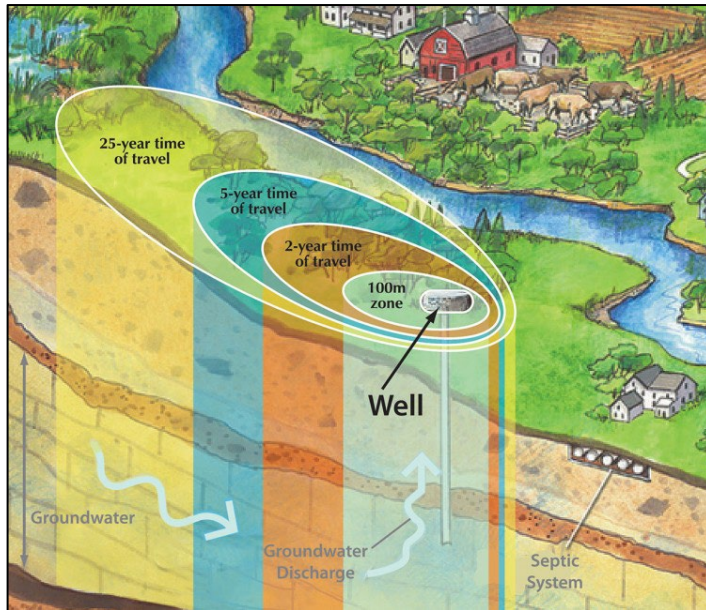
Appendix A: Glossary of Terms

Term	Definition
Assessment Report	<p>A science-based document that forms the basis of the Source Protection Plan, by identifying vulnerable areas, assessing vulnerability identifying source water quality issues, identifying threats to the drinking water, and assessing the risk due to threats.</p> <p>A requirement of the Clean Water Act, 2006 whose contents are set out in the Act, its regulations and technical rules.</p>
Clearance Letters	Letter verifies that at the time of issuance, none of the prescribed threat activities were occurring on the property under circumstances that required a risk management plan.
Dense Non-Aqueous Phase Liquids (DNAPL)	Chemicals that are heavier than water, including petroleum products and chlorinated solvents (such as dichloromethane, trichloromethane) which, when released into the ground, cause severe adverse effects in groundwater.
Drinking Water Threat	Means an activity or condition that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as a source of drinking water, and includes an activity or condition that is prescribed by the regulations as a drinking water threat (Clean Water Act, 2006)
Event Based Area	<p>In the Thames-Sydenham and Region, Event Based Areas are the areas within the Intake Protection Zones where event-based modelling has demonstrated that a spill can reach the intake at a concentration which would deteriorate the water for the purposes of drinking.</p> <p>Event-based modelling involved the use of specific event which was not to exceed an extreme event as defined by the Technical Rules</p> <p>Each EBA is associated with a specific contaminant, and quantity</p> <p>The spills modelled may be the result of the local threat activity (transportation) or it may be the result of a similar prescribed drinking water threat (storage or handling). Within the EBA these activities are identified as Significant Drinking Water Threat under the circumstance (volumes) modelled.</p>
Intake Protection Zone	<p>Refers to a surface water intake protection zone</p> <p>Surface water intake protection zone means an area that is related to a surface water intake and within which it is desirable to regulate or monitor drinking water threats (General Regulation 287/07)</p>

Term	Definition
Prescribed Instrument	<p>Prescribed Instruments (PI) are issued by the Province through various ministries to set out terms and conditions that are designed to protect the environment and human health.</p> <p>PI policies are intended to reduce risks to municipal drinking water sources by managing or prohibiting those risks associated with an activity that has been identified as a drinking water threat in the Assessment Report.</p>
Prohibition Section 57	This provision enables policies in the Source Protection Plans to prevent activities identified as existing or future significant drinking water threats from occurring within designated portions of intake protection zones and/or wellhead protection areas (Clean Water Act, 2006)
Restricted Land-Use Section 59	This tool is used to flag specific land uses in a given area that are or may be associated with the activities that are prohibited under Section 57 of the Clean Water Act or that require a risk management plan under Section 58 of the Clean Water Act (Clean Water Act, 2006)
Risk Management Official	Means the risk management official appointed under Part IV of the Clean Water Act, 2006 (Clean Water Act, 2006)
Risk Management Plan Section 58	Means a plan for reducing a risk prepared in accordance with the regulations and the rules of the Clean Water Act, 2006 (Clean Water Act, 2006)
Significant Drinking Water Threat	Significant drinking water threat means a drinking water threat that, according to a risk assessment, poses or has the potential to pose a significant risk (Clean Water Act, 2006)
Source Protection Plan	<p>Means a drinking water source protection plan prepared under the Clean Water Act (Clean Water Act, 2006)</p> <p>Contains policies to reduce the threats (identified in the Assessment Report) to drinking water sources</p>
Vulnerability area	Intake Protection Zone, Wellhead Protection Area, Highly Vulnerable Aquifer and Significant Groundwater Recharge Areas (Clean Water Act, 2006)
Wellhead Protection Area	<p>Means an area that is related to a wellhead and within which it is desirable to regulate or monitor drinking water threats (General Regulation 287/07)</p> <p>One of the four vulnerable areas to be delineated under the Clean Water Act, comprised of WHPA-A, WHPA-B, WHPA-C, WHPA-D, and in certain cases, may also be comprised of WHPA-E and WHPA-F</p>

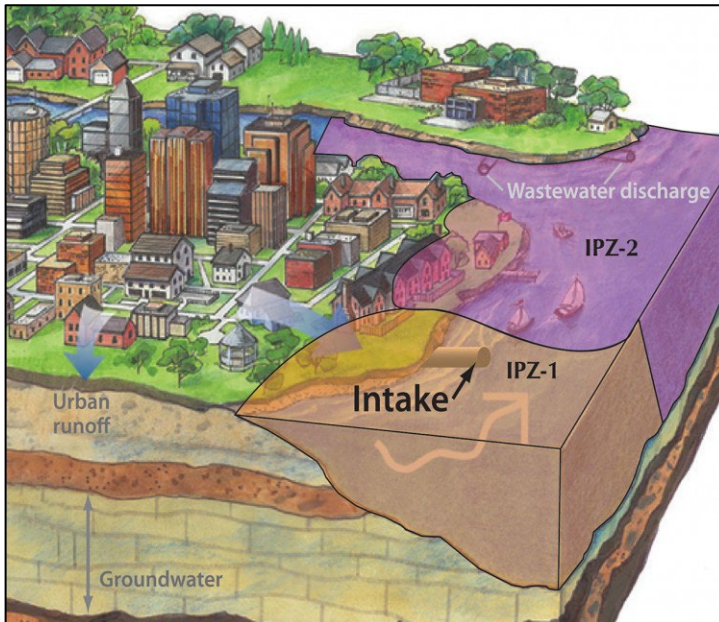
Appendix B: Wellhead Protection Area

Wellhead Protection Areas (WHPAs): areas where water travels through the ground to a municipal well.



Appendix C: Intake Protection Zones

Intake Protection Zones (IPZs): areas around municipal surface water intakes.



Appendix D: Categories of Activities that are Potential Threats to Water Quality and Quantity

Quality

- Waste disposal sites
- Sewage systems, including septic systems
- Storage, management and application of agricultural source material (e.g. manure)
- Handling, storage and application of non-agricultural source material (e.g. biosolids, food waste)
- Handling, storage and application of commercial fertilizers
- Handling, storage and application of pesticides
- Handling, storage and application of road salt
- Storage of snow
- Handling and storage of fuel (e.g. gasoline, home heating oil)
- Handling and storage of dense non-aqueous phase liquids (DNAPL, e.g. paint strippers, metal and plastic cleaning solvents, dry cleaning solvents)
- Handling and storage of organic solvents (e.g. dry cleaning solvents, paint thinners, glue solvents)
- Chemicals used in the de-icing of aircraft
- Livestock grazing, pasturing, outdoor confinement areas and farm-animal yards
- Establishment and operation of a liquid hydrocarbon pipeline

Quantity

- An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body.
- An activity that reduces the recharge of an aquifer.

Appendix E: Helpful Links

Content	Link
Thames - Sydenham and Region Drinking Water Source Protection (Official Website)	https://www.sourcewaterprotection.on.ca
Protecting Our Water Education and Outreach (DNAPLs) Developed in fulfillment of strategic policy 2.45, which targets residential quantities and uses (existing and future) of dense non-aqueous phase liquids (DNAPLs) within significant threat policy areas; more specifically the handling and storage through all phases of its life cycle including disposal. Residents can visit their specific municipal page to learn: where their drinking water comes from, how to identify hazardous household products and important information regarding their local hazardous waste disposal program and location.	https://www.protectingourwater.ca/
Thames - Sydenham and Region Drinking Water Source Protection (YouTube)	https://youtu.be/YH0tWNHnY-A
Drinking Water Risk Management Training Video (YouTube)	https://youtu.be/koo0880FJCE
Interactive Source Water Protection Mapping Tool	https://maps.thamesriver.on.ca/gvh/?viewer=tsrassessmentreport
Table of Drinking Water Threats and Circumstances	https://www.ontario.ca/page/tables-drinking-water-threats
Interactive Tool	https://swpip.ca/
2021 Technical rules under the CWA	https://www.ontario.ca/page/2021-technical-rules-under-clean-water-act#section-11

Appendix F: Financial Statement

Upper Thames River Conservation Authority

Program Status

For The Period Ending December 31, 2021

Risk Management Services

Annual Report

	Budget	Q1	Q2	Q3	Q4	Total Year
Revenues						
All Participants	198,628	31,324	-	90,438	90,438	212,201
Operating Expenditures						
Staff Support Costs						
Internal Staffing	84,695	33,544	29,875	32,254	12,078	107,751
Purchased Services						
RMO Staff - SCRA	19,852	-	-	19,891	6,630	26,522
Printing	-	-	-	-	-	-
Office Supplies	-	-	-	-	-	-
Meeting Costs	500	-	-	-	-	-
Allocated Costs						
Occupancy	8,121	2,196	1,827	1,590	1,762	7,375
IS/IT	9,850	2,078	2,063	2,332	2,168	8,642
Fleet Services	7,575	1,331	1,795	1,886	1,496	6,508
Administration	10,400	2,897	3,102	2,366	2,053	10,419
Finance	7,605	3,500	2,705	1,941	(1,362)	6,784
Marketing	10,535	2,611	2,276	2,431	2,039	9,358
Travel & Expenses						
Staff Expenses - Travel	6,500	1,222	-	3,525	3,923	8,669
Staff Expenses - Training	1,000	-	-	-	-	-
Staff Expenses - General	1,100	81	128	106	528	844
Data Acquisition/Management						
IM Software (LSWIMS)	9,000	-	36	-	10,266	10,302
Insurance	950	311	373	373	373	1,428
Total Operating Expenditures	177,683	49,770	44,178	68,696	41,956	204,600
Net Program Balance	20,945	(18,446)	(44,178)	21,742	48,482	7,601