

# DRINKING WATER SOURCE PROTECTION

Trent Conservation Coalition Source Protection Region

## How the Source Protection Program Impacts Municipalities

Meredith Carter

*Otonabee Conservation*

*Otonabee-Peterborough*

*Source Protection Authority*



Jenna Stephens

*Kawartha Conservation*

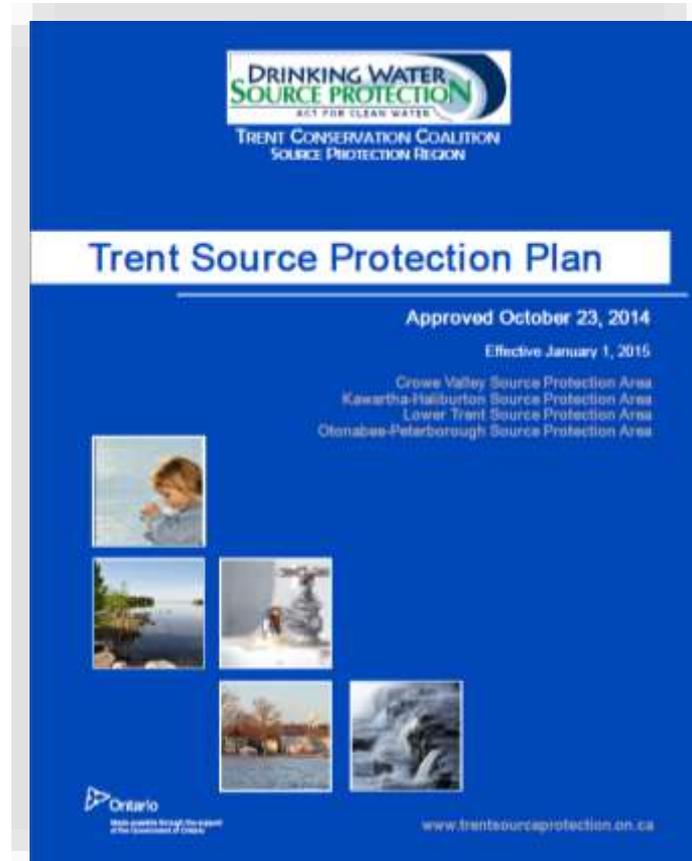
*Kawartha-Haliburton*

*Source Protection Authority*



# Municipal Responsibilities

- Source Protection Plan Policy Implementation
- **Compliance with regulations and legislation**
- **Risk Management**
- Education and Outreach
- Reporting
- Municipal Working Groups
- SPC Membership



# Policy Implementation

- Municipalities are responsible for implementing a number of policies in the Trent and Ganaraska Source Protection Plans
- Appendix 4 provides a list of policies by implementer

## APPENDIX 4: POLICIES BY IMPLEMENTER

The following table lists the policies in the Trent Source Protection Plan by implementing body.

Implementer	Policy No.	
Approval Authority under the <i>Planning Act</i>	General	G-1(1-4); G-7(2); G-9(2-3); G-10(1-2)
	Sewage Systems	S-3(2); S-4(3); S-5(1-2); S-7(1)
	Road Salt	R-4(3)
	Waste Disposal Sites	W-2(2)
	Water Quantity	Y-1(2); Y-1(3); Z-1
Conservation Authorities	General	G-4(1-3)
Environment Canada	Other	OT-4(1,3)
Ministry of Agriculture, Food, and Rural Affairs	General	G-1(1-2,4); G-2(1-2)
	Agriculture	A-2(1-3); A-4(4)
	Non-Agricultural Source Material	N-1
Ministry of the Environment and Climate Change	General	G-1(1-2,4); G-2(1-2)
	Sewage Systems	S-2(1-2); S-3(1,3); S-7(2); S-8(1)
	Agriculture	A-2(1-2,4); A-3; A-4(4)
	Waste Disposal Sites	W-1; W-2(1)
	Other	OT-1(4-7); OT-2(4,5); OT-4(1-3); OT-5(1-2)
Ministry of Natural Resources and Forestry	Water Quantity	Y-1(1,2); Y-1(7)
	Other	OT-4(1-3)
Ministry of Transportation	General	G-6(1-2,5)
	Road Salt	R-2(1,2); R-3(1,2); R-4(1,2)
Municipality	General	G-1(1-2); G-3(1-2); G-5(1-7); G-6(3-5); G-11(1-2)
	Sewage Systems	S-1(1-2); S-4(1-2); S-6(1-4); S-8(2-3)
	Local Threats <sup>1</sup>	L-1(1-4)
	Issues Monitoring <sup>2</sup>	I-2
	Snow Storage	O-1(1-2)
	Other	OT-1(1-3); OT-2(1-3); OT-3(1-2); OT-4(1,3)
	Water Quantity	Y-1(6)
Relevant Airport		

# New Requirements for Municipal Drinking Water System Owners

- New requirements for Municipal Drinking Water System Owners came into effect on July 1, 2018 under the ***Safe Drinking Water Act*** (O. Reg. 205/18) and the ***Clean Water Act*** (O. Reg. 287/07)
- These regulations are related to new wells or changes to existing wells



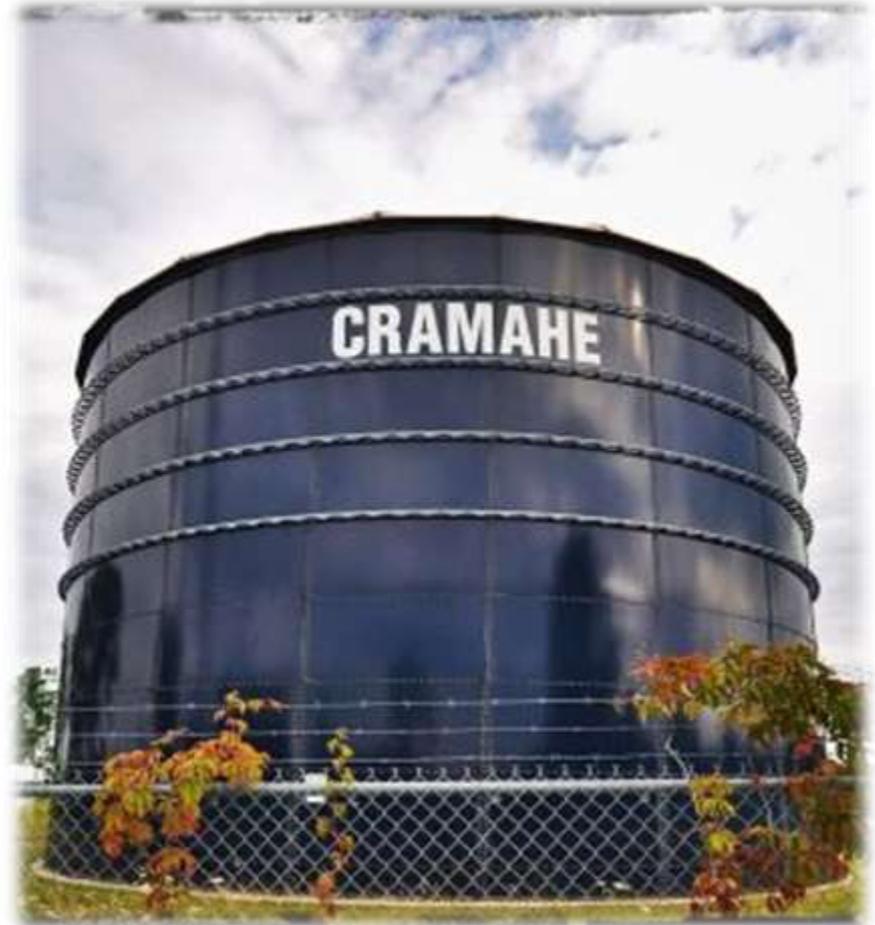
# New Requirements for Municipal Drinking Water System Owners

- Require that municipalities work with Source Protection Authorities to ensure new and changing municipal residential drinking water systems are included in Source Protection Plans.
- Intended to ensure that municipal residential drinking water sources are protected by updating Source Protection Plans before drinking water can be provided to the public.



# What does this mean for municipalities?

- As the owner, municipalities are responsible under the new regulation to ensure that vulnerable areas are identified to ensure that your drinking water systems continue to be protected under the Clean Water Act.
- Updates to vulnerable area mapping, vulnerability scores and source protection plan policies



# The Regulation Applies to New Drinking Water Systems or Changes to Existing

---

## New Wells or Intakes

If a **new** municipal residential drinking water system is being located within a source protection area;

## Changes to Wells or Intakes

If **changes** are being made to an **existing** municipal residential drinking water system that will result in:

- Establishment of a new well
- Deepening of a well
- Increasing capacity of an existing well
- Establishment of new surface water intake
- Moving an existing intake

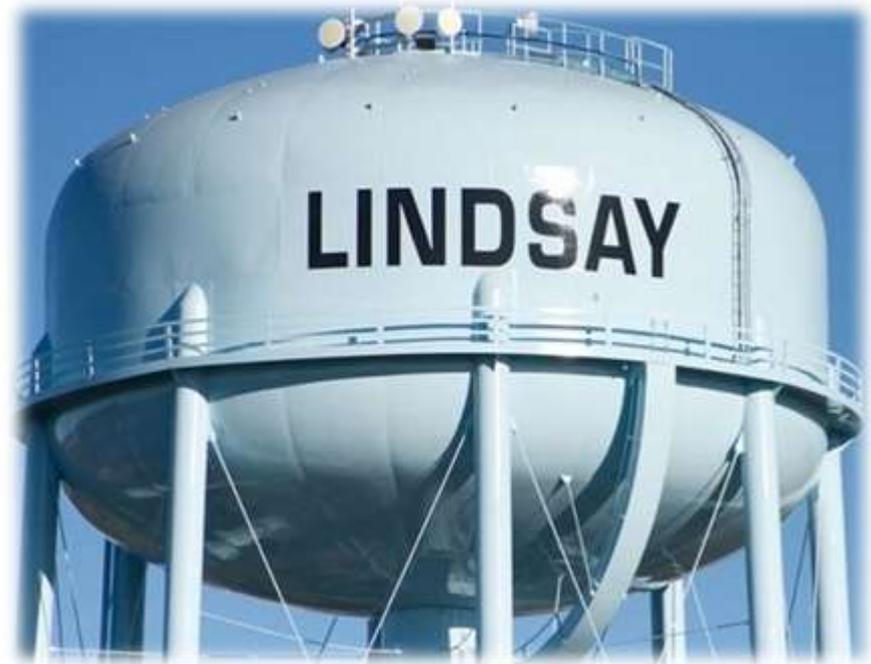
# O. Reg. 205/18

- New regulation under *Safe Drinking Water Act* (O. Reg 205/18)
- Works with a regulation under the *Clean Water Act* to identify when and how system owners must ensure that new or changing drinking water systems are protected by their local source protection plan.



# What are the changes?

- Source Protection Plan must be updated to reflect new drinking water systems or changes to existing drinking water systems **before drinking water can be provided to the public**



# What does this mean for municipalities?



- As a result of new or changes to existing drinking water systems, you may be required to:
- Identify new vulnerable areas (intake protection zones, wellhead protection areas)
- Update existing vulnerable areas
- Confirm vulnerability scores in these areas

# Are there Exemptions?

- An exemption may be granted by the MECP for the following emergency situations:
- DWWP application being made to address an immediate drinking water health hazard; or
- A Declaration Order has been issued under the Environmental Assessment Act



# What is the process for compliance?

- Submit letter of intent to SPA and provide technical work for review (vulnerable area delineation, groundwater models etc.)
- SPA will complete review for completeness



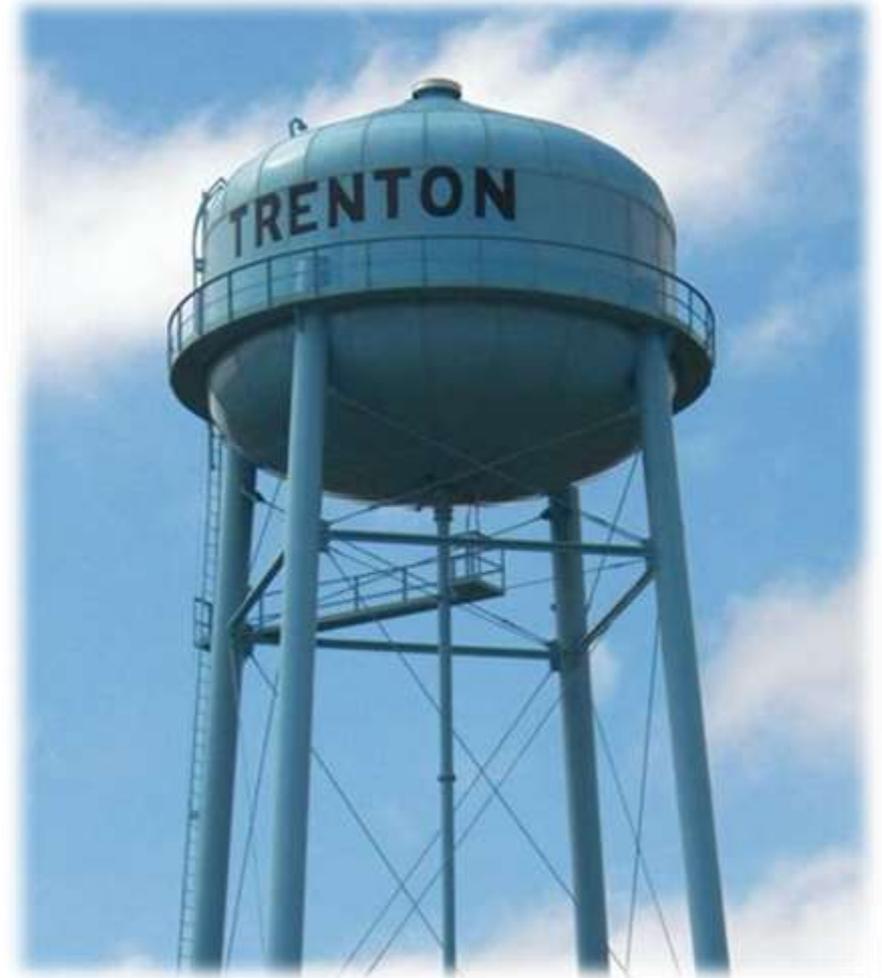
# What is the process for compliance?



- Once SPA is satisfied that the required info has been provided, and the proposed amendments to the SPP have been identified, a notice can be issued to the municipality as per Section 48 CWA.

# What is the process for compliance?

- Municipality submits copy of notice to MECP with their Drinking Water Works Permit Application (DWWP)
- DWWP will include a condition that the SPP be updated as per the notice prior to drinking water being provided to the public.

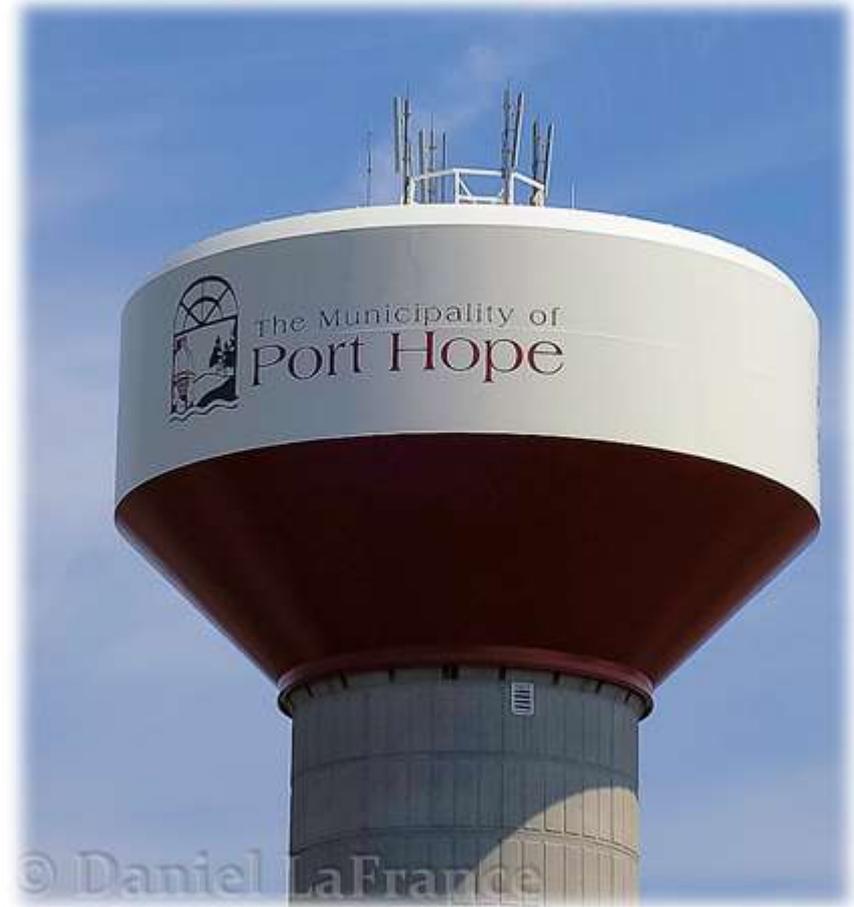


# How is a Source Protection Plan Updated?

- Amendment process as per Section 34 or 36 of the CWA
- Requires endorsement by municipal councils, SPA, SPC
- Involves consultation and notification with affected landowners, ministries and stakeholders
- Proposed Amendment is provided to MECP for review and approval
- Drinking water cannot be provided to the public until the source protection plan is updated, unless an emergency exemption is authorized by MECP

# Why engage SPA early in the process?

- Early discussions ensure process goes smoothly and efficiently
- Process takes time which must be included in project planning
- Costs for technical studies, modelling etc. need to be included in project planning



# RMO and the Municipal Process

---

- Addresses the gap in drinking water source protection under existing regulatory regimes.
- When Municipalities receive applications under both the Planning and Building Code Acts, they must be screened for their location within a vulnerable area. One of the following three circumstances occur if the location is within a vulnerable area:
- Section 57 – Prohibition
  - An outright ban on future instances of particular activities
  - Planning approval authorities advised not to approve applications which may result in the establishment of those activities
  - Landowners must obtain a notice from the Risk Management Official (RMO) before submitting a development application
  - Enforced by the RMO

# RMO and the Municipal Process

---

- **Section 58 – Risk Management Plans**
  - Required for existing or future activities that would be threats
  - Person carrying out affected activities identifies and implements protective measures to ensure activity does not endanger municipal water supply
  - Negotiated with the RMO
- **Section 59 – Restricted Land Uses**
  - Identifies where section 57 or section 58 policies are required for future significant drinking water threats
  - Proponents must obtain a Notice to Proceed from the RMO for their application to be considered complete
  - All vulnerable areas where threats are significant are restricted

**Legend**

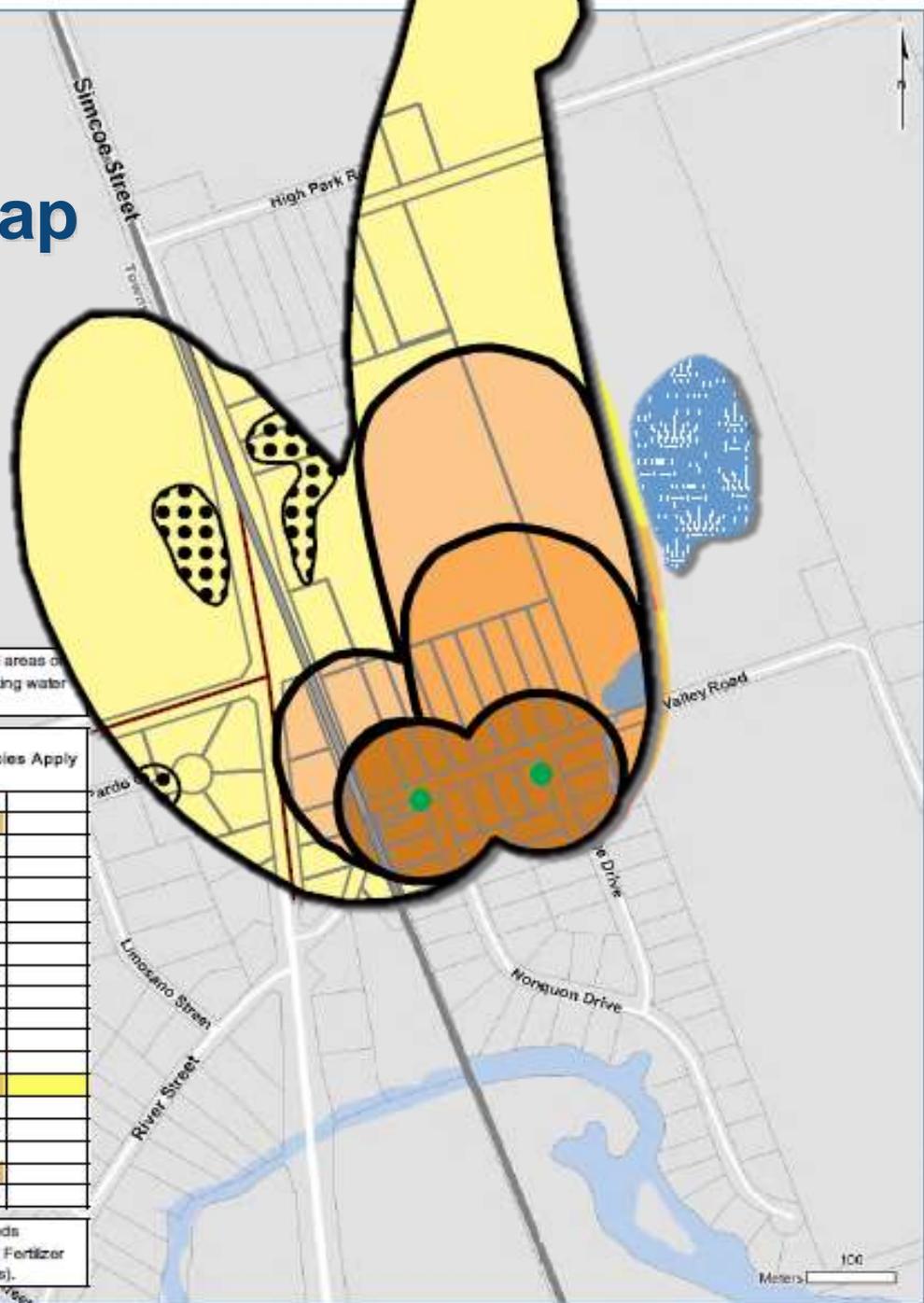
- Municipal Wellhead
- Property Boundary

# Example Policy Map

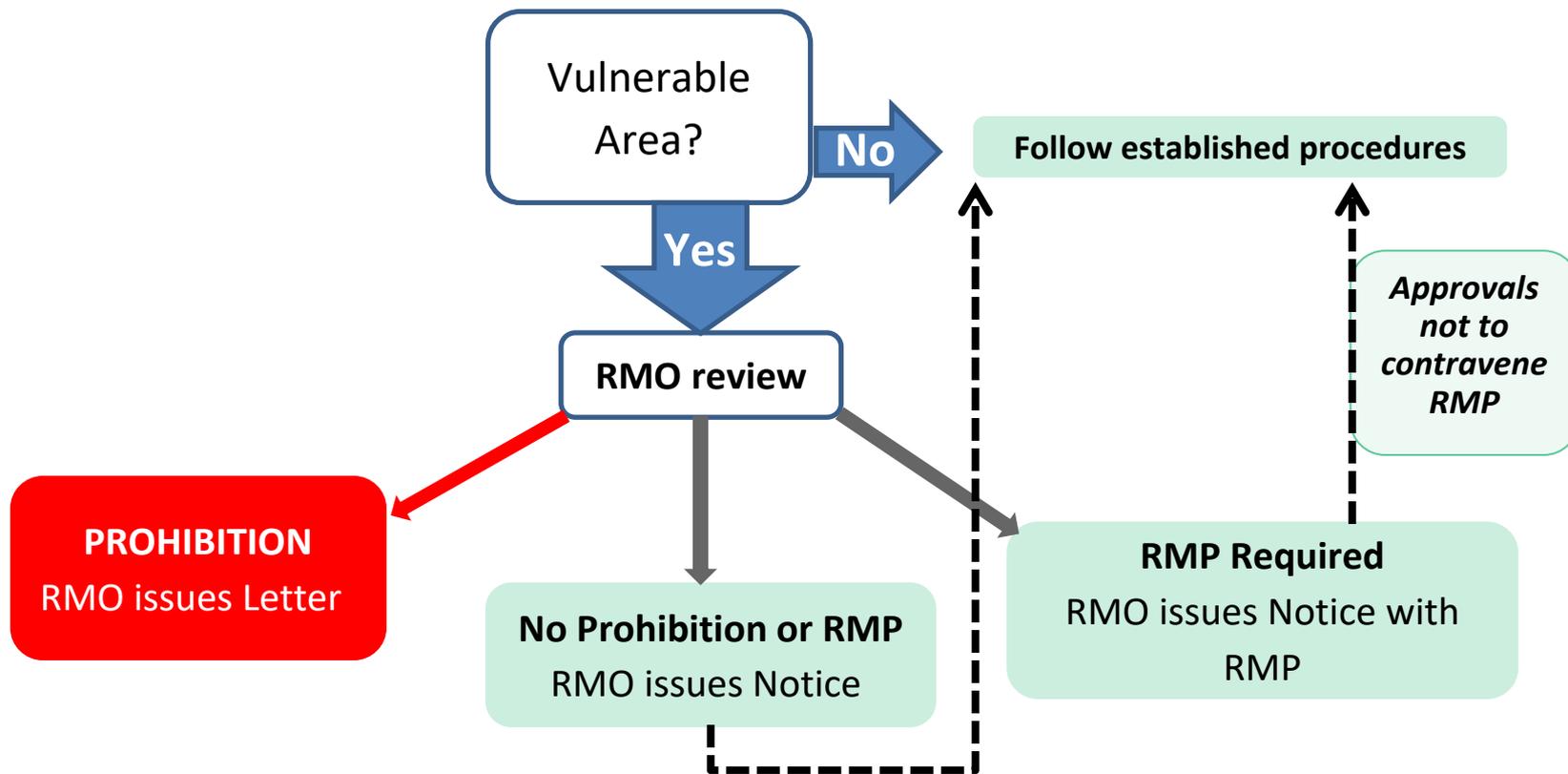
This table indicates which activities are subject to source protection policies in the corresponding coloured areas of the map. Policies apply only if the activity is carried out under circumstances that make it a significant drinking water threat. These circumstances are detailed in the Provincial Tables of Circumstances.

		Areas Where Policies Apply			
Sewage Systems					
Agricultural Source					
Non-Agricultural Source					
Material	Application*				
Commercial Fertilizer	Handling & Storage				
Pesticide	Application				
	Handling & Storage				
Road Salt	Application*				
	Handling & Storage				
Fuel	Handling & Storage				
DNAPL	Handling & Storage				
Organic Solvents	Handling & Storage				
Aircraft De-icing	Management of Runoff				
Livestock Grazing or Pasturing, Outdoor Confinement, or Farm Animal Yard					
Waste Disposal Sites (within the meaning of Part V of the EPA)					
Snow Storage					

\*These activities can be significant drinking water threats only if carried out in a vulnerable area that exceeds threshold values of the following parameters: percent managed land and livestock density for Commercial Fertilizer Application; and total impervious surface area for Road Salt Application (refer to Assessment Report maps).



# RMO and Municipal Process



# Annual Reporting

---

All implementing bodies are required to provide Annual Reports to their local Source Protection Authority by February 1 each year outlining:

- Measures taken to implement source protection plan
  - Steps taken to address gaps in information used for assessment report, details on activities undertaken in the previous year to satisfy the policies within the source protection plan, etc.
- Extent to which objectives of source protection plan achieved
  - List and reasons for policies that do not meet timelines included in source protection plan
- Other information specified in regulation or that the implementer considers advisable

The Act requires Annual Progress Reports be prepared by Source Protection Authority (O. Reg. 287/07 s.52), containing information obtained from the Annual Reports submitted by all of the implementing bodies.

## POLICY TEXT

### POLICY S-1

Threat Subcategory Sewage System or Sewage Works:	Threat Circumstances		Applicable Area				
	Chemical	Pathogens	IPZ & WHPA-E		WHPA A-D		
Septic System	695-706	1956	10	-	-	10	-
Septic System Holding Tank	707-718	1957	10	-	-	10	-

**Applicable Activities:** Sewage systems as defined in section 1 of O. Reg. 332/12 (Building Code) made under the *Building Code Act, 1992* that are existing significant drinking water threats or would be future significant drinking water threats.

Policy No.	Tool	Legal Effect	Implementer	E/F	Policy Text	Monitoring Policy
S-1(1)	SA	MC	Municipality	E/F	<p>Report by February 1 of each year to the applicable source protection authority on the implementation of the mandatory maintenance inspection program<sup>1</sup> for the preceding calendar year. The report must, at minimum, include the following information:</p> <ul style="list-style-type: none"> <li>a) The number and location of inspections carried out under the maintenance inspection program during the reporting year;</li> <li>b) The number and location of inspections that were not compliant with the septic inspection guideline; and</li> <li>c) For the properties identified in (b), a description of the deficiencies in the system, the orders issued by the inspector, and any follow-up with the system owner.</li> </ul>	S-1(2)
S-1(2)	MON	MC	Municipality	E/F	Copy the municipality, building official, and Risk Management Official on all reporting required by Policy S-1(1) unless the municipality is the Principal Authority under the <i>Ontario Building Code Act</i> .	N/A

<sup>1</sup>The details of the inspection program are specified in the Ontario Building Code (O. Reg. 332/12) and the Ministry of Municipal Affairs Sewage System Inspection Guideline.

Principal Authority					
Source Protection Area	select from dropdown	Legend	<b>Complete the table below if Principal Authority is responsible for conducting the sewage system inspections in more than one municipality.</b>  Replace Row labels ("1, 2, 3 etc.") with name of Municipality sewage system(s) is/are located		
<a href="#">Source Protection Plan</a>	select from dropdown	SPP Policy			
Drinking Water System(s)		MECP Reportable			
Staff Reporting		input required			
Reporting to	select from dropdown				

While every effort was taken to ensure accuracy and completeness, this form should be read in conjunction with the Source Protection Plan (SPP) found here <http://trentsourceprotection.on.ca/resources/reports-legislation/source-protection-plans>

No.	SPP Policy or MECP ID: Description of Reportable	Comments	No.	No. and location of inspections completed in 2018.	No. and location of inspections undertaken in 2018 that were not compliant with the guideline.	For systems that did not meet the guideline, describe the deficiency(ies), orders issued and follow-up with system owner	Total
			1				0
1	Policy S-1(1): Submit report on mandatory maintenance inspection program for the 2018 calendar year to the Source Protection Authority (i.e. Conservation Authority staff).	select from dropdown	2				0
2	(a) No. and location of inspections completed in 2018	input number here	3				0
3	(b) No. and location of inspections undertaken in 2018 that were not compliant with the septic inspection guideline	input number here	4				0
4	(c) For all properties identified in (b) above, describe the deficiency(ies), orders issued and any follow-up with the system owner	input details here or otherwise provide	5				0
5	Policy S-1(2) Were the municipality, building official and Risk Management Official copied on the report required under Policy S-1(1) above, as may apply?	select from dropdown	6				0
6	MECP 26: Mandatory Sewage System Inspections – Ontario Building Code (OBC)		7				0
7	(a) No. of sewage systems requiring inspection (i.e. once every 5 years)	input number here	8				0
8	(b)(i) No. of sewage systems inspected as of Dec 31, 2018	input number here	9				0
9	(b)(ii) If all required inspections were not completed as of Dec 31, 2018, indicate why by choosing all that apply from options below.		10				0
10	On-site sewage system(s) is/are newly constructed and so not captured in the first round of inspections	select from dropdown	11				0
11	Landowner refused entry, compliance order being sought	select from dropdown	12				0
12	Municipality has not yet initiated inspection program	select from dropdown	Total	0	0	0	0

Additional comments, if any

A dynamic splash of clear blue water against a light blue background, with water droplets and bubbles visible. The splash is centered horizontally and extends across most of the width of the image.

**Thank  
you!**

**Questions?**