

Approved Source Protection Plan:

- Saugeen Valley Source Protection Area
 - Grey Sauble Source Protection Area
- Northern Bruce Peninsula Source Protection Area

October 16, 2015







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Effective Date and General Authority

This Source Protection Plan(Plan) applies to the Saugeen Valley Source Protection Area, Grey Sauble Source Protection Area and Northern Bruce Peninsula Source Protection Area as designated in Ontario Regulation 284/07. The effective date of the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region Plan is <u>July 1, 2016</u>. As of this date the policies in this Plan have legal effect as provided by the *Clean Water Act*, 2006.

Policies generally apply to all three Source Protection Areas unless otherwise stated.

Amendments	Approval/Effective Date
Events-based Area technical work and policies – SPP/AR Water Quantity threats technical work and policies – SPP/AR	July 15, 2016

Acknowledgements

The Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Committee acknowledges and thanks the following groups for their dedication, hard work and perseverance in the preparation of this Source Protection Plan for the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region.

Staff

Many current and past Drinking Water Source Protection and Conservation Authority Staff contributed to the development of this Plan.

Municipalities and Counties

Staff and council from the upper- and lower-tier municipalities in this Source Protection Region have contributed to the creation of the Source Protection Plan through ongoing communication and outreach activities.

Working Groups

The Agricultural and Rural Working Group and Planning Officials Working Group have provided a valuable service in reviewing Source Protection Plan policies and support documents, offering industry insights and providing technical expertise that represent local needs, interests and concerns.

Ministries, Public Health Units and Sector Experts

Provincial ministries, liaison officers, local public health units, and sector experts provided valuable information and advice during the creation of this Plan. Ontario's Ministry of the Environment and Climate Change also funded the development of Source Protection Plans across Ontario.

Residents, Businesses and Stakeholders

Local residents, businesses and stakeholders, many of whom attended our public open houses and responded to our letters and surveys, provided valuable input into this plan.

Conservation Authorities and Partners

Saugeen Valley Conservation Authority, Grey Sauble Conservation Authority and Municipality of Northern Bruce Peninsula, as the three partners that make up the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region, offered direction and assistance throughout the source protection process.

Consultants & Others

Additional thanks to consultants whose work and peer review provided the scientific basis of the Assessment Reports that contributed to this Source Protection Plan.



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Updated Proposed Source Protection Plan

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		Kincardine	
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Systems in the Grey Sauble Source Protection Area

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Systems in the Northern Bruce Peninsula Source Protection Area

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Chapter 1

Background and Context







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1.0 Background and Context

1.1 Source Protection Plans

Source Protection Plans (SPP) enable Ontario communities to effectively protect their drinking water sources. The locally-developed plans are based on scientific studies and involve a collaborative approach with many opportunities for public input.

The Source Protection Plan contains a series of policies that address activities and land uses. The policies reduce or eliminate risks within designated zones around municipal water intakes or municipal wells that are the source water for local municipal drinking water systems.

1.2 Objectives

The objectives of the Source Protection Plan are:

- 1. To protect existing and future drinking water sources in the Source Protection Areas.
- 2. To ensure that, for every area identified in an Assessment Report as an area where an activity is or would be a significant drinking water threat:
 - i. the activity never becomes a significant drinking water threat, or
 - ii. if the activity is occurring when the Source Protection Plan takes effect, the activity ceases to be a significant drinking water threat

1.3 Clean Water Act

The *Clean Water Act* was passed by the Ontario Legislature on October 18, 2006, and lays out how drinking water source protection is to be conducted. In Ontario, a multi-barrier approach protects municipal drinking water from source to tap as part of an overall commitment to safeguard human health and the environment. The *Clean Water Act* helps provide the first barrier by stopping contaminants from entering sources of drinking water, which includes lakes, rivers and aquifers. A key focus of the legislation is the preparation of locally developed, science-based Assessment Reports and Source Protection Plans.

Ontario's Clean Water Act:

- requires that local communities, through local Source Protection Committees, assess
 existing and potential threats to their water, and that they set out and implement the
 actions needed to reduce or eliminate these threats
- empowers communities to take action to prevent threats from becoming significant

- requires public participation on every local Source Protection Plan; the planning process for source protection is open to anyone in the community
- requires that all plans and actions are based on sound science

The *Clean Water Act* also introduces the Ontario Drinking Water Stewardship Program, which offers financial assistance to farmers, landowners and small or medium businesses for activities that reduce threats to local drinking water sources.

1.4 Source Protection Committee

The Source Protection Committee for the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region was appointed in October 2007. Committee members come from various stakeholder groups as shown in Table 1.4.1. The Committee has a total of fifteen representatives and the Chair, as specified by approved regulations. One-third of the representatives are from the municipal sector, one-third represent agriculture, industrial and commercial sectors, and one-third represent other interests. An additional two representatives may be nominated by First Nations communities.

Table 1.4.1 – Members of the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Committee

Chain	Milro Tuoymon				
Chair	Mike Traynor				
	(appointed by the Minister of the Environment and Climate Change)				
Municipal	Kathie Hughes Group 1: Northern Bruce Peninsula, South Bruce				
	Peninsula, Georgian Bluffs				
	Mitch Twolan Group 2: Saugeen Shores, Kincardine, Huron-Kinloss				
	Les Nichols Group 3: Arran-Elderslie, Brockton, South Bruce, Howick, Morris-Turnberry				
	Ken Furlong Group 4: Chatsworth, West Grey, Hanover, Southgate, Wellington North, Minto				
	Bill Twaddle Group 5: Owen Sound, Meaford, The Blue Mountains, Grey Highlands				
Agricultural	Dr. David Biesenthal, Farmer - Brockton				
	Robert Emerson, Farmer - Huron-Kinloss				
	Brent Lanktree, Farmer - The Blue Mountains				
Industrial	Carolyn Parker, Industrial sector				
Commercial	Mark Kraemer, Business owner - Saugeen Shores				
Environment	Vacant				
	Vacant				
Health	Andrew Barton, Georgian Bluffs resident				
Public	Bruce Davidson, Brockton resident				
	Carolyn Day, Saugeen Shores resident				

Past Source Protection Committee members include:

Howard Greig, 2007 – May 2009, representing Municipal sector Group 4
Sandy Gott, 2007 – December 2009, representing Industrial sector
Brad McRoberts, 2007 – February 2010, representing Municipal sector Group 1
Lou D'Alessandro, 2007 – March 2014, representing Health sector
Les MacKinnon, 2007 – May 2015, representing Environment sector
Dale Thompson, 2007 – May 2016, representing Environment sector
Carolyn Parker, 2010 – May 2016, representing Industrial sector

The Source Protection Committee, as stated in the *Clean Water Act*, is responsible for preparing the Terms of Reference, the Assessment Reports and the Source Protection Plan. Committee members attend scheduled meetings and participate in workshops and public meetings throughout the process to develop the Source Protection Plan. Source Protection Authorities provide assistance in terms of project management and staff resources. Regulations on the preparation of the Assessment Report and Source Protection Plan provide direction on how the Source Protection Committee, Conservation Authorities and municipalities work together to prepare these documents.

1.5 Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region

The Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region consists of three Source Protection Areas:

- Saugeen Valley Source Protection Area
- Grey Sauble Source Protection Area
- Northern Bruce Peninsula Source Protection Area

The Region contains almost the full extents of Grey County and Bruce County, as well as small portions of the Counties of Wellington and Huron. Twenty-one lower-tier municipalities are wholly or partially within the Region.

The Region also includes two First Nation communities: the Chippewas of Saugeen, and the Chippewas of Nawash.

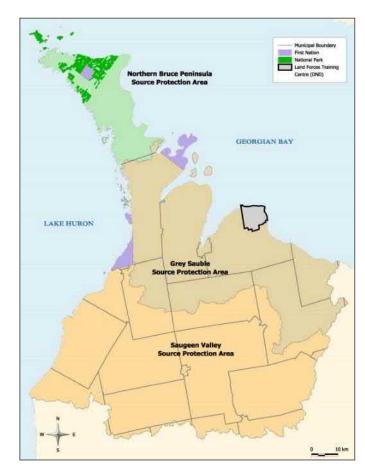


Figure 1.5.1 - Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region 1-3

1.6 Timeline

All Source Protection Areas or Regions were required to undertake source protection plan development and submit their plans to the Ontario Minister of the Environment and Climate Change by August 2012. The Ministry reviewed the documents and provided comments. In the Saugeen, Grey Sauble Northern Bruce Peninsula Source Protection Region an Updated Proposed Source Protection Plan was developed to incorporate the Ministry's comments and reflect additional technical work that had been conducted since the Approved Assessments Reports.

Source Protection Timeline:

- 2007 Chair Mike Traynor appointed
 - Source Protection Committee established
- 2008 Terms of Reference preparation
 - Terms of Reference submission: August 2008
- 2009 Terms of Reference approved by the Minister of the Environment and Climate Change: August 2009
 - Assessment Report preparation
- 2010 Public Consultation on Proposed Assessment Reports
 - Submission of Proposed Assessment Reports: September 2010
- 2011 Commencement of Source Protection Plan preparation
 - Public Consultation on Updated Proposed Assessment Reports: May 2011
 - Submission of Updated Proposed Assessment Reports: June 2011
 - Assessment Reports approved by the Director at Ministry of the Environment and Climate Change:
 - Northern Bruce Peninsula Assessment Report, September 23, 2011
 - Saugeen Valley Assessment Report, November 28, 2011
 - Grey Sauble Assessment Report, November 30, 2011
- 2012 Public Consultation on Proposed Source Protection Plan
 - Submission of Proposed Source Protection Plan: August 2012
- 2015 Public Consultation on Updated Proposed Source Protection Plan: February/March
 2015
 - Public Consultation on Revised Assessment Report: February/March 2015
 - Submission of Updated Proposed Source Protection Plan: June 2015
 - Submission of Revised Assessment Report: June 2015
 - Anticipated approval of Source Protection Plan by the Minister of the Environment and Climate Change

- 2016 Public Consultation on Amended Source Protection Plan: January/February 2016
 - Submission of Amended Source Protection Plan: March 2016
 - Anticipated approval of Amended Source Protection Plan by the Minister of the Environment and Climate Change
 - Implementation of Source Protection Plan commences: July 1, 2016

Once the Source Protection Plan is approved, municipalities and other implementing bodies will implement the Source Protection Plan throughout their own jurisdictions and within their own processes.



Chapter 2

Assessment Reports







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2.0 Assessment Reports

2.1 Assessment Reports Overview

The *Clean Water Act* requires the completion of an Assessment Report for each Source Protection Area. Assessment Reports have been completed for the three Source Protection Areas in the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region.

The Assessment Reports are technical documents and contain the science on which the Source Protection Plan is based. Assessment Reports contain past and present water quality and quantity conditions, as well as projections for the future about those conditions. The reports describe research findings in detail and explain the water resources in the area.

In addition, Assessment Reports describe vulnerable areas and risks to drinking water. The Reports assess the vulnerability of those areas and identify water quality issues related to the water sources. Another function of the Assessment Reports is to identify the number of activities that are, or would be, significant drinking water threats. Assessment Reports include maps of the vulnerable areas.

The Assessment Reports are based on the completion of detailed technical studies. These technical studies underwent a peer review process that enabled scientists and other experts to evaluate the technical work for completeness and whether it met the provincial rules and guidelines. A phased consultation process provided opportunities for the public to review and comment on the Assessment Reports. The Assessment Reports are 'living documents' that will be updated and amended in future years as new information becomes available.

2.2 Timeline and Process for the Assessment Reports

The Assessment Reports look at technical and scientific studies to identify threats and risks to the source water of municipal residential drinking water systems that were identified in the Terms of Reference (approved August 2009).

The Proposed Assessment Reports were initially submitted to the Director of the Ministry of Environment and Climate Change by each Source Protection Authority in September 2010. Prior to the approval of the Assessment Reports, a process was undertaken to develop the Draft Updated Assessment Reports for the three Source Protection Areas within the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. The process commenced with the preparation of the Draft Updated Assessment Reports and was concluded on June 29, 2011 with the submission to the Ministry of the Environment and Climate Change of the Proposed Assessment Reports - Updated June 15, 2011, Amended June 15, 2011, along with supporting documentation.

The Director of the Ministry of the Environment and Climate Change approved the Assessment Reports in the fall of 2011.

Subsequent to their approval, a notice of the approval was posted to the Environmental Registry website on January 25, 2012.

Table 2.2.1 - Assessment Reports Timeline.

Draft Proposed Assessment	SPC approved	April 30, 2010	
Reports	Consultation	May 6 - June 10, 2010	
	SPC approved	June 25, 2010	
Proposed Assessment Reports	Consultation	July 8 - August 9, 2010	
Reports	Submission	September 17, 2010	
Proposed Assessment	SPC approved	April 29, 2011	
Reports (Updated and	Consultation	May 5 - June 6, 2011	
Amended)	Submission	June 29, 2011	
Assessment Report - Northern Bruce Peninsula Source Protection Area	Approved by Director	September 23, 2011	
Assessment Report - Saugeen Valley Source Protection Area	Approved by Director	November 28, 2011	
Assessment Report - Grey Sauble Source Protection Area	Approved by Director	November 28, 2011	
Environmental Registry Notice regarding Assessment Reports	Posting on website	January 25, 2012	
	SPC approved	April 24, 2015	
Revised Assessment Reports	Consultation	Feb. 3 – March 6, 2015	
Troports	Submission	June 30, 2015	
Revisions to Assessment Report - Saugeen Valley Source Protection Area	Approved by Director	October 15, 2015	
Revisions to Assessment Report - Grey Sauble Source Protection Area	Approved by Director	October 15, 2015	
Revisions to Assessment Report - Northern Bruce Peninsula Source Protection Area	Approved by Director	October 15, 2015	

2.3 Summary of the Assessment Reports

Each of the full Assessment Reports have seven chapters that serve a specific purpose in the overall Reports.

- 1. Introduction
- 2. Watershed Characterization
 - describes the watersheds in the area through various topics: physical description including soils, bedrock types and land surface; surface water; wetlands; woodlands; aquatic ecology; population; land use; transportation; agriculture; protected areas; recreation; water quality

3. Water Budgets

- includes groundwater and surface water quantity and flow data
- evaluates areas in the watershed where possible stresses occur and whether there may be water quantity issues

4. Water Quality

- first section provides background and describes methods used in the technical work
- second section is the risk assessment, arranged by municipality and drinking water system
- general information on each municipality, including population, land use, Highly Vulnerable Aquifers (HVA) and Significant Groundwater Recharge Areas (SGRA)
- delineation of vulnerable areas for each drinking water system
- detailed information on each drinking water system, including data about the system and an evaluation of potential drinking water threats and risks

5. Climate Change

• looks at possible impacts of climate change on water sources in our region

6. Great Lakes Considerations

 discusses the governance of the Great Lakes and the effect that various legislation and inter-governmental agreements have on the Source Protection Plan development process

7. Addressing Limitations

• explains where more information or future research may be needed

2.4 Where to View the Assessment Reports

As required by the *Clean Water Act*, the Assessment Reports must be published on the internet. The Source Protection Committee has made the full text and maps from the Reports available at: www.waterprotection.ca

2.5 Items for Further Study

Certain technical work was not completed during this round of Assessment Report work. Chapter 7 of the Assessment Report identifies these ongoing technical tasks.

A thorough inventory has not been completed in this region for locations with conditions that result from past activities. The types of activities that are considered conditions are defined in Technical Rule 126.



Chapter 3

Drinking Water Threats







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3.0 Drinking Water Threats

3.1 Drinking Water Threat Categories

There are 21 drinking water threats prescribed in the *Clean Water Act* regulations. The provincial Tables of Drinking Water Threats (Threats Tables) are also part of the *Clean Water Act* regulations. The Threats Tables take each of the 21 categories of activities and state what circumstances must be present in order for that activity to be considered a potential drinking water threat. A threat category usually has many different sets of circumstances related to it. There is a table for chemical threats and another for pathogen threats.

List of Prescribed Drinking Water Threats:

- 1. The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the *Environmental Protection Act*.
- 2. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.
- 3. The application of agricultural source material to land.
- 4. The storage of agricultural source material.
- 5. The management of agricultural source material.
- 6. The application of non-agricultural source material to land.
- 7. The handling and storage of non-agricultural source material.
- 8. The application of commercial fertilizer to land.
- 9. The handling and storage of commercial fertilizer.
- 10. The application of pesticide to land.
- 11. The handling and storage of pesticide.
- 12. The application of road salt.
- 13. The handling and storage of road salt.
- 14. The storage of snow.
- 15. The handling and storage of fuel.
- 16. The handling and storage of a dense non-aqueous phase liquid.
- 17. The handling and storage of an organic solvent.
- 18. The management of runoff that contains chemicals used in the de-icing of aircraft.
- 19. 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.
- 20. An activity that reduces the recharge of an aquifer.
- 21. The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard.

The following sections describe the 21 prescribed drinking water threats. It should be noted that Threat 5 has no circumstances where this type of activity can be considered a significant

drinking water threat. Further, the delineation for water quantity is of a size that recharge to the wells in question occurs outside of the area to which policies would apply. Therefore, the Source Protection Committee has not developed any policies that relate to Threat 5 or Threat 20 at this time.

3.1.1 Threat 1. The Establishment, Operation or Maintenance of a Waste Disposal Site Within the Meaning of Part V of the *Environmental Protection Act*

Waste disposal sites are activities that can be considered, under certain circumstances, to be a threat to drinking water. The *Environmental Protection Act* (Part V, Section 25) defines waste to include: "ashes, garbage, refuse, domestic waste, industrial waste, or municipal refuse and such other materials as are designated in the regulations." As well, a waste disposal site is defined as:

- a) any land upon, into, in or through which, or building or structure in which, waste is deposited, disposed of, handled, stored, transferred, treated or processed, and
- b) any operation carried out or machinery or equipment used in connection with the depositing, disposal, handling, storage, transfer, treatment or processing referred to in clause (a).

The following sections provide a summary of these circumstances.

Waste disposal is divided into several threat subcategories within the Tables of Drinking Water Threats (Threats Tables):

- Landfarming of petroleum refining waste
- Landfilling (hazardous waste)
- Liquid industrial waste injected into a well
- Landfilling (municipal waste)
- Landfilling (solid non-hazardous industrial or commercial waste)
- Storage, treatment and discharge of tailings from mines
- PCB waste storage
- Storage of hazardous waste at disposal sites
- Storage of waste described in clauses (p), (q), (r), (s), (t), or (u) of the definition of hazardous waste (Note: this definition refers primarily to small quantities of hazardous waste, empty containers with residues and contaminated materials from the clean-up of a spill)
- Application of untreated septage to land

Threat Subcategory (Waste Disposal): Landfarming of petroleum refining waste

Activities under the threat subcategory of "Waste Disposal Site – Landfarming of petroleum refining waste" that have potential significant drinking water threat circumstances include:

- The area where the disposal is undertaken is:
 - o more than 1 hectare, but not more than 10 hectares
 - o more than 10 hectares

Table 3.1.1(a) – Vulnerability scores and vulnerable areas where activities under "Landfarming of petroleum refining waste" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	9	9 or 10	9	

Threat Subcategory (Waste Disposal): Landfilling (Hazardous Waste)

Activities under the threat subcategory of "Waste Disposal Site – Landfilling (Hazardous Waste)" that have potential significant drinking water threat circumstances include:

- The area where the disposal is undertaken is:
 - o less than 1 hectare
 - o at least 1 hectare, but not more than 10 hectares
 - o more than 10 hectares

Table 3.1.1(b) – Vulnerability scores and vulnerable areas where activities under "Landfilling (Hazardous Waste)" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	9	9 or 10	9	

Threat Subcategory (Waste Disposal): Liquid industrial waste injected into a well

Activities under the threat subcategory of "Waste Disposal Site: Liquid industrial waste injected into a well" that have potential significant drinking water threat circumstances include:

- The combined rate of discharge of all wells located at the site is:
 - o more than 380 m³/yr, but not more than 3,800 m³/yr
 - \circ more than 3,800 m³/yr, but not more 38,000 m³/yr
 - \circ more than 38,000 m³/yr, but not more than 380,000 m³/yr
 - \circ more than 380,000 m³/yr, but not more than 3,800,000 m³/yr
 - \circ more than 3,800,000 m³/yr, but not more than 38,000,000 m³/yr
 - \circ more than 38,000,000 m³/yr

Table 3.1.1(c) – Vulnerability scores and vulnerable areas where activities under "Liquid industrial waste injected into a well" may be a significant threat

	VULNERABLE ZONE:	

	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2
Chemical	10	8 or 10	-	-	-	-

Threat Subcategory (Waste Disposal): Landfilling (Municipal Waste)

Activities under the threat subcategory of "Waste Disposal – Landfilling (Municipal Waste)" that have potential significant drinking water threat circumstances include:

- The fill area is:
 - o less than 1 hectare
 - o at least 1 hectare, but not more than 10 hectares
 - o more than 10 hectares

Table 3.1.1(d) – Vulnerability scores and vulnerable areas where activities under "Landfilling (Municipal Waste)" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	8 or10	-	9	9 or 10	9	

Threat Subcategory (Waste Disposal): Landfilling (Solid non-hazardous industrial or commercial)

Activities under the threat subcategory of "Waste Disposal – Landfilling (Solid non-hazardous industrial or commercial)" that have potential significant drinking water threat circumstances include:

- The fill area is:
 - o less than 1 hectare
 - o at least 1 hectare, but not more than 10 hectares
 - o more than 10 hectares

Table 3.1.1(e) – Vulnerability scores and vulnerable areas where activities under "Landfilling (Solid non-hazardous industrial or commercial)" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	8 or 10	-	9	9 or 10	9	

Threat subcategory (Waste Disposal): Storage, treatment and discharge of tailings from mines

Activities under the threat subcategory of "Storage, treatment and discharge of tailings from mines" that have potential significant drinking water threat circumstances include:

- The managed tailings from mining operations are:
 - o stored in a pit, and the site is not part of a facility for which NPRI Notice requires a person to report
 - o stored in a pit, and the site is part of a facility for which NPRI Notice requires a person to report
 - o stored using an impoundment structure located on the surface, and the site is not part of a facility for which NPRI Notice requires a person to report
 - o stored using an impoundment structure located on the surface, and the site is part of a facility for which NPRI Notice requires a person to report

Table 3.1.1(f) – Vulnerability scores and vulnerable areas where activities under "Storage, treatment and discharge of tailings from mines" may be a significant threat

	VULNERABLE ZONE:					
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2
Chemical	10	10	-	9	9 or 10	9

Threat Subcategory (Waste Storage): PCB waste storage

Activities under the threat subcategory of "Waste Disposal Site – PCB waste storage" that have potential significant drinking water threat circumstances include:

- PCB waste stored below grade in a facility or engineered cell
- PCB waste stored in tanks below grade
- PCB waste stored in tanks installed partially below grade
- PCB waste stored in an outdoor area and not in a container

Table 3.1.1(g) – Vulnerability scores and vulnerable areas where activities under "PCB waste storage" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	-	10	-	

Threat Subcategory (Waste Storage): Storage of hazardous waste at disposal sites

Activities under the threat subcategory of "Waste Disposal Site: Storage of hazardous waste at disposal sites" that have potential significant drinking water threat circumstances include:

- waste stored at or above grade
- waste stored below grade
- a portion, but not all, stored above grade

Table 3.1.1(h) – Vulnerability scores and vulnerable areas where activities under "Storage of hazardous waste at disposal sites" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	9	9 or 10	9	

Threat Subcategory (Waste Storage): Storage of waste described in clauses (p), (q), (r), (s), (t), or (u) of the definition of hazardous waste

This threat subcategory describes the following materials (*Environmental Protection Act*, O. Reg. 347 – General: Waste management):

- A small quantity of waste that is:
 - (p) a hazardous industrial waste, hazardous waste chemical, ignitable waste, corrosive waste, leachate toxic waste or reactive waste and that is produced in any month in an amount less than five kilograms or otherwise accumulated in an amount less than five kilograms,
 - (q) an acute hazardous waste chemical and that is produced in any month in an amount less than one kilogram or otherwise accumulated in an amount less than one kilogram,
- An empty container or the liner from an empty container,
 - (r) that contained hazardous industrial waste, hazardous waste chemical, ignitable waste, corrosive waste, leachate toxic waste or reactive waste,
 - (s) that contained acute hazardous waste chemical, where the container is less than twenty litres capacity, or one or more liners weighing, in total, less than ten kilograms from empty containers.
- The residues or contaminated materials from the clean-up of a spill,
 - (t) of less than five kilograms of waste that is a hazardous industrial waste, hazardous waste chemical, ignitable waste, corrosive waste, leachate toxic waste or reactive waste, or
 - (u) of less than one kilogram of waste that is an acute hazardous waste chemical;

Activities under the threat subcategory of "Waste Disposal Site: Storage of waste described in clauses (p), (q), (r), (s), (t), or (u) of the definition of hazardous waste" that have potential significant drinking water threat circumstances include:

- waste stored at or above grade
- waste stored below grade

• a portion, but not all, stored above grade

Table 3.1.1(i) – Vulnerability scores and vulnerable areas where activities under "Storage of waste described in clauses (p), (q), (r), (s), (t), or (u) of the definition of hazardous waste" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	-	10	-	

Threat subcategory (Other Waste): Application of untreated septage to land

Activities under the threat subcategory of "Application of untreated septage to land" that have potential significant drinking water threat circumstances include the following:

- Chemical:
 - o managed land application area is at least 1 hectare, but not more than 10 hectares
 - o managed land application area is more than 10 hectares
- Pathogen:
 - o land application of hauled sewage in any quantity

Table 3.1.1(j) – Vulnerability scores and vulnerable areas where activities under "Application of untreated septage to land" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	-	10	-	
Pathogen	10	10	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9	

3.1.2 Threat 2. The Establishment, Operation or Maintenance of a System That Collects, Stores, Transmits, Treats or Disposes of Sewage

Sewage systems or sewage works are activities that can be considered, under certain circumstances, to be threats to drinking water.

Sewage System or Sewage Works is divided into several threat subcategories within the Tables of Drinking Water Threats (Threats Tables):

- 1. Septic system
- 2. Septic system holding tank
- 3. Sanitary sewers and related pipes
- 4. Industrial effluent discharges
- 5. Sewage treatment plant bypass discharge to surface water
- 6. Sewage treatment plant effluent discharges (includes lagoons)
- 7. Storage of sewage (e.g. treatment plant tanks)
- 8. Combined sewer discharge from a stormwater outlet

Threat subcategory: Septic System

Activities under the threat subcategory of "Septic System" that have potential significant drinking water threat circumstances include the following:

- Class of sewage system:
 - o Class 1 to Class 4 systems including earth pit privy, privy vault, greywater system, cesspool, or a leaching bed system and its associated treatment unit
- Regulatory framework:
 - o Ontario Building Code; or
 - o Ontario Water Resources Act
- Chemical:
 - ∘ acetone; ∘ chloride; ∘ dichlorobenzene 1,4 (para);
 - o nitrogen; o phosphorous (total); o sodium
- Pathogen:
 - o discharge may result in the presence of one or more pathogens

On-site sewage systems fall under either the Ontario Building Code or the *Ontario Water Resources Act*. Systems with a design flow of 10,000 litres or less per day are regulated under the Building Code and are administered by a local principal authority, such as a municipality. The *Ontario Water Resources Act* governs systems of more than 10,000 litres per day of design flow, as well as systems that span beyond one property, and is administered by the Ministry of the Environment.

Table 3.1.2 (a) – Vulnerability scores and vulnerable areas where activities under "Sewage System or Sewage Works – Septic system" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2		
Chemical	10	10	-	-	-	-		
Pathogen	10	10	-	-	10	1		

Threat subcategory: Septic System Holding Tank

Activities under the threat subcategory of "Septic System Holding Tank" that have potential significant drinking water threat circumstances include the following:

- Class of sewage system:
 - o Class 5 systems including holding tanks
- Regulatory framework:
 - o Ontario Building Code; or
 - o Ontario Water Resources Act
- Chemical:
 - ∘ acetone; ∘ chloride; ∘ dichlorobenzene 1,4 (para);
 - ∘ nitrogen; ∘ phosphorous (total); ∘ sodium
- Pathogen:
 - o discharge may result in the presence of one or more pathogens

Table 3.1.2 (b) – Vulnerability scores and vulnerable areas where activities under "Sewage System or Sewage Works – Septic system holding tank" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2		
Chemical	10	10	-	-	-	-		
Pathogen	10	10	-	-	10	-		

Threat subcategory: Sanitary sewers and related pipes

Activities under the threat subcategory of "Sanitary sewers and related pipes" that have potential significant drinking water threat circumstances include the following:

- Type of sewage system:
 - o wastewater collection facility that collects or transmits sewage containing human waste, but does not include a sewage storage tank or a designed bypass
- Design capacity:
 - o 10,000, but not more than 100,000 cubic metres of sewage per day
 - o more than 100,000 cubic metres of sewage per day
- Chemical Parameters:

o BTEX	Cadmium		o Copper
o Dichlorobenzidine-3,3	o Hexachlor	obenzene	∘ Lead
Mercury	o Nitrogen		 Pentachlorophenol
 Polychlorinated Biphenyl 	s (PCBs)	o Polycyclic A	romatic Hydrocarbons (PAHs)

- o Zinc
- Pathogen:
 - o the system is a wastewater collection facility that collects or transmits sewage containing human waste, but does not include any part of the facility that is a sewage storage tank or works used to carry out a designed bypass; and the discharge from the system may result in the presence of one or more pathogens in groundwater or surface water.

Table 3.1.2 (c) – Vulnerability scores and vulnerable areas where activities under "Sewage System or Sewage Works – Sanitary sewers and related pipes" may be a significant threat

		VULNERABLE ZONE:							
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2			
Chemical	10	10	-	-	-	-			
Pathogen	10	10	-	-	10	-			

Threat subcategory: Industrial effluent discharges

Activities under the threat subcategory of "Industrial effluent discharges" that have potential significant drinking water threat circumstances include the following:

• Chemical:

- o the system discharges to surface water and has as its primary function the collection, transmission or treatment of industrial sewage and the system is not part of a facility for which the NPRI Notice requires a person to report
- o the system discharges to surface water and has as its primary function the collection, transmission or treatment of industrial sewage and the system is part of a facility for which the NPRI Notice requires a person to report and the report must include information in relation to a substance listed in Group 1, 2, 3 or 4 of Part 1 of Schedule 1 or Part 2 of Schedule 1 of the notice

• Chemical Parameters:

 Acrylonitrile 	0	Adsorbable Organic Halides	$(AOXs)$ \circ Aluminum
o Arsenic	0	Biphenyl-1,1	o Bis(2-ethylhexyl) phthalate
o Boron	0	Bromomethane	o BTEX
o Butoxyethanol-2	0	Butyl-n alcohol	 Butyl-tert alcohol
o Cadmium	0	Carbon Tetrachloride	o Chloride
o Chloroform	0	Chromium VI	o Cobalt
o Copper	0	Cyanide (CN-)	
o Dichlorobenzene-1	,2 (ortho) o	Dichlorobenzene-1,4 (para)	Dichloroethane 1,2
o Ethylene Glycol	0	Formaldehyde	 Hexachlorobenzene
o Hexachlorobutadie	ene o	Hexachloroethane	o Hydrazine
o Hydroquinone	0	Iron	o Lead
o Manganese	0	Mercury	Methanol
o Methyl ethyl keton	ie o	Methylene chloride (Dichlor	romethane)
o Molybdenum	0	Napthalene	o Nickel
o Nitrogen	0	Nitrosodimethylamine-N (N	DMA)
o Pentachlorobenzen	ie o	Petroleum Hydrocarbons (F)	1, F2, F3 or F4)
o Phenol	0	Phosphorus (total)	
o Polycyclic Aromat	ic Hydrocar	bons (PAHs)	o Selenium
o Silver	0	Sodium fluoride	o Styrene
o Sulphide (Hydroge	en) o	Tetrachlorobenzene-1,2,4,5	o Tetrachloroethylene (PCE)
o Tetracholobenzene	: 1,2,4	Trichloroethylene	o Tritium
 Vanadium 	0	Vinyl chloride	∘ Zinc

Pathogen:

o the system discharges to surface water and its primary functions include conveying sewage from a meat plant the discharge may result in the presence of one or more pathogens in surface water

Table 3.1.2 (d) – Vulnerability scores and vulnerable areas where activities under "Sewage System or Sewage Works – Industrial effluent discharges" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2		
Chemical	-	-	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9		
Pathogen	-	-	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9		

Threat subcategory: Sewage treatment plant bypass discharge to surface water

Activities under the threat subcategory of "Sewage treatment plant bypass discharge to surface water" that have potential significant drinking water threat circumstances include the following:

• Chemical:

- o the system is a wastewater treatment facility that may discharge sanitary sewage containing human waste to surface water by way of a designed bypass and the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is:
 - more than 2,500 but not more than 17,500 cubic metres on an annual basis;
 - more than 17,500 but not more than 50,000 cubic metres on an annual basis; or
 - more than 50,000 cubic metres on an annual basis

• Chemical Parameters:

o BTEX	 Cadmium 	 Copper
o Hexachlorobenzene	o Lead	Mercury
o Nitrogen	o Nitrosodimethylamine-N (NDMA)
 Pentachlorophenol 	o Polychlorinated Biphenyls	
o Trichloroethylene	 Vinyl chloride 	o Zinc

• Pathogen:

o the system is a wastewater treatment facility that may discharge sanitary sewage containing human waste to surface water by way of a designed bypass and the discharge may result in the presence of one or more pathogens in surface water

Table 3.1.2 (e) – Vulnerability scores and vulnerable areas where activities under "Sewage System or Sewage Works – Sewage treatment plant bypass discharge to surface water" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	-	-	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9	
Pathogen	-	-	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9	

Threat subcategory: Sewage treatment plant effluent discharges (includes lagoons)

Activities under the threat subcategory of "Sewage treatment plant effluent discharges (includes lagoons)" that have potential significant drinking water threat circumstances include the following:

• Chemical:

- o the system is a wastewater treatment facility that discharges directly to land or surface water through a means other than a designed bypass and the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 2,500 but not more than 17,500 cubic metres on an annual basis
- o the system is a wastewater treatment facility that discharges directly to land or surface water through a means other than a designed bypass and the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 17,500 but not more than 50,000 cubic metres on an annual basis
- o the system is a wastewater treatment facility that discharges directly to land or surface water through a means other than a designed bypass and the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 50,000 cubic metres on an annual basis

• Chemical Parameters:

 Antimony 	o Arsenic	 Barium
o BTEX	o Cadmium	o Chlorophenol-2
o Chromium VI	o Copper	• Cyanide (CN-)
o Dibutyl phthalate	o Dichlorobenzene-1,2 (ortho)
o Dichlorobenzene-1,4 (para)	o Dichlorophenol-2,4	o Ethylene Glycol
o Lead	o MCPA (2-methyl-4-chloropy	ohenoxyacetic acid)
o Mercury	o Nickel	 Nitrogen
o Nitrosodimethylamine-N (N	DMA)	o Phenol
Phosphorus (total)	o Silver	∘ Zinc

Pathogen:

o the system is a wastewater treatment facility that discharges to surface water through a means other than a designed bypass and a discharge may result in the presence of one or more pathogens in groundwater or surface water

Table 3.1.2 (f) – Vulnerability scores and vulnerable areas where activities under "Sewage System or Sewage Works – Sewage treatment plant effluent discharges (includes lagoons)" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9	
Pathogen	10	10	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9	

Threat subcategory: Storage of sewage (e.g. treatment plant tanks)

Activities under the threat subcategory of "Storage of sewage (e.g. treatment plant tanks)" that have potential significant drinking water threat circumstances include the following:

• Type of system:

 the system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste and the system is associated with a wastewater treatment facility

• Chemical:

- o the tank is at or above grade and the system is designed to discharge treated sanitary sewage at an average daily rate that is:
 - more than 2,500 but not more than 17,500 cubic metres on an annual basis
 - more than 17,500 but not more than 50,000 cubic metres on an annual basis
 - more than 50,000 cubic metres on an annual basis
- o the tank is below grade and the system is designed to discharge treated sanitary sewage at an average daily rate that is:
 - more than 2,500 but not more than 17,500 cubic metres on an annual basis
 - more than 17,500 but not more than 50,000 cubic metres on an annual basis
 - more than 50,000 cubic metres on an annual basis
- o a part of the tank, but not all, is below grade and the system is designed to discharge treated sanitary sewage at an average daily rate that is:
 - more than 2,500 but not more than 17,500 cubic metres on an annual basis
 - more than 17,500 but not more than 50,000 cubic metres on an annual basis
 - more than 50,000 cubic metres on an annual basis

• Chemical Parameters:

BTEX
 Cadmium
 Copper
 Hexachlorobenzene
 Lead
 Mercury
 Nitrogen
 Nitrosodimethylamine-N (NDMA)
 Pentachlorophenol
 Polychlorinated Biphenyls (PCBs)
 Tricholoroethylene
 Vinyl chloride
 Zinc

• Pathogen:

- o the system is a sewage treatment tank or sewage storage tank in either a wastewater collection facility or wastewater treatment facility, and any part of the tank is at or above grade and a spill from the tank may result in the presence of one or more pathogens in groundwater or surface water
- o the system is a sewage treatment tank or sewage storage tank in a wastewater collection facility or a wastewater treatment facility and the tank is below grade and a spill from the tank may result in the presence of one or more pathogens in groundwater or surface water

Table 3.1.2 (g) – Vulnerability scores and vulnerable areas where activities under "Sewage System or Sewage Works – Storage of sewage (e.g. treatment plant tanks)" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	8 or 10	-	-	10	-	
Pathogen	10	10	-	9	9 or 10	9	

Threat subcategory: Combined sewer discharge from a stormwater outlet to surface water

Activities under the threat subcategory of "Combined sewer discharge from a stormwater outlet to surface water" that have potential significant drinking water threat circumstances include the following:

• Type of system:

o the system is a combined sewer that may discharge sanitary sewage containing human waste to surface water other than by way of a designed bypass and the combined sewer is part of a system that includes a wastewater treatment facility

• Chemical:

o the system is designed to discharge treated sanitary sewage at an average daily rate that is more than 2,500 but not more than 17,500 cubic metres on an annual basis

- o the system is designed to discharge treated sanitary sewage at an average daily rate that is more than 17,500 but not more than 50,000 cubic metres on an annual basis
- o the system is designed to discharge treated sanitary sewage at an average daily rate that is more than 50,000 cubic metres on an annual basis
- Chemical Parameters:

o BTEX	o Cadmium	Copper		
 Hexachlorobenzene 	∘ Lead	o Mercury		
o Nitrogen	○ Nitrosodimethylamine-N (NDMA)			
 Pentachlorophenol 	o Polychlorinated Biphenyls	(PCBs)		
∘ Tricholoroethylene	 Vinyl chloride 	o Zinc		

• Pathogen:

o the system is a combined sewer that may discharge sanitary sewage containing human waste to surface water and the discharge may result in the presence of one or more pathogens in surface water

Table 3.1.2 (h) – Vulnerability scores and vulnerable areas where activities under "Sewage System or Sewage Works – Combined sewer discharge from a stormwater outlet to surface water" may be a significant threat

	VULNERABLE ZONE:					
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2
Chemical	-	-	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9
Pathogen	-	-	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9

Threat subcategory: Discharge of untreated stormwater from a stormwater retention pond

Activities under the threat subcategory of "Discharge of untreated stormwater from a stormwater retention pond" that have potential significant drinking water threat circumstances include the following:

- Type of system:
 - o the system is a storm water management facility designed to discharge storm water to land or surface water
- Chemical:
 - o the drainage area associated with the storm water management facility is more than 1 but not more than 10 hectares and the predominant land use in the area is:
 - high density residential land use:
 - industrial or commercial

- o the drainage area associated with the storm water management facility is more than 10 but not more than 100 hectares and the predominant land uses in the area are:
 - rural, agricultural, or low density residential;
 - high density residential land use
 - · industrial or commercial
- o the drainage area associated with the storm water management facility is more than 100 hectares and the predominant land uses in the area are:
 - rural, agricultural, or low density residential;
 - high density residential land use
 - industrial or commercial
- Chemical Parameters:

Arsenic	o Cadmium
○ Chromium VI	Copper
○ Lead	Mecoprop
o Nickel	 Nitrogen
	 Chromium VI Lead

- Polycyclic Aromatic Hydrocarbons (PAHs)
- o Petrleum Hydrocarbons (F1, F2, F3, F4)
- PhosphorousZinc
- Pathogen:
 - the system is a storm water management facility designed to discharge storm water to land or surface water and the discharge may result in the presence of one or more pathogens in surface water

Table 3.1.2 (i) – Vulnerability scores and vulnerable areas where activities under "Sewage System or Sewage Works – Discharge of untreated stormwater from a stormwater retention pond" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9	
Pathogen	-	-	-	-	-	-	

3.1.3 Threat 3. The Application of Agricultural Source Material to Land

The application of agricultural source material to land (ASM) is an activity that can be considered, under certain circumstances, to be a threat to drinking water. Agricultural source materials (ASMs) can include manure, bedding, washwater, yard runoff, and similar organic products that contain nutrients (see O.Reg. 267/03 s. 1(1) under the *Nutrient Management Act*).

Agricultural source material application activities are grouped in the Tables of Drinking Water Threats (Threats Tables) by:

- Managed land percentage:
 - o the managed land map shows a managed land percentage for the applicable area that is:
 - less than 40%
 - at least 40%, but not more than 80%
 - more than 80%

Managed lands are lands to which nutrients are applied.

Agricultural managed land can include areas of cropland, fallow and improved pasture.

Non-agricultural managed land can include golf courses, parks, ski hills, lawns.

• Nutrient units:

- o the livestock density map shows a livestock density for the applicable area that is sufficient to annually apply agricultural source material at a rate that is:
 - less than 0.5 nutrient units per acre
 - at least 0.5 nutrient units per acre but not more than 1.0 nutrient units per acre
 - more than 1.0 nutrient units per acre

• Parameter:

- o Nitrogen
- o Phosphorous (total)

Agricultural managed land includes areas of cropland, fallow and improved pasture. Non-agricultural managed land includes golf courses, sports fields, municipal parks, large school playgrounds, ski hills, lawns, and other grassed areas that may receive nutrients, which is primarily commercial fertilizer. The percentage of managed lands is computed by dividing the hectares of managed lands by the hectares in the vulnerable area zone and multiplying by 100.

Livestock density is given as nutrient units per acre of agricultural managed land. A nutrient unit is defined as the number of animals that will give the fertilizer replacement value of the lower of 43 kilograms of nitrogen or 55 kilograms of phosphate per year as nutrients. Each type of livestock has its own nutrient unit conversion factor to determine the number of animals that generate 1 NU. For instance, one beef cow produces 1 NU while 12 sheep produce 1 NU.

Maps located in the Assessment Reports illustrate the percentage of managed lands and the amount of nutrients units for each vulnerable area. Consulting the pair of maps for each vulnerable area will show which set of circumstances applies in any given location. Note that the maps only include parts of the vulnerable area where activities could potentially be classified as a significant drinking water threat.

Agricultural source material application activities that have potential significant drinking water threat circumstances include:

• Chemical:

- o less than 40% managed lands and more than 1.0 nutrient units per acre
- o at least 40% but not more than 80% managed lands and more than 1.0 nutrient units per acre
- o more than 80% managed lands and less than 0.5 nutrient units per acre
- o more than 80% managed lands and at least 0.5 nutrient units per acre but not more than 1.0 nutrient units per acre
- o more than 80% managed lands and more than 1.0 nutrient units per acre

• Pathogen:

o agricultural source material is applied to land in any quantity

Table 3.1.3 – Vulnerability scores and vulnerable areas where activities under "Application of Agricultural Source Material to Land" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	9	9 or 10	9	
Pathogen	10	10	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9	

3.1.4 Threat 4. The Storage of Agricultural Source Material

The storage of agricultural source material (ASM) is an activity that can be considered, under certain circumstances, to be a threat to drinking water. Agricultural source materials (ASMs) can include manure, bedding, washwater, yard runoff, and similar organic products that contain nutrients (see O.Reg. 267/03 s. 1(1) under the *Nutrient Management Act*).

Agricultural source material storage activities are grouped in the Tables of Drinking Water Threats (Threats Tables) by:

- Physical position:
 - o at or above grade
 - o below grade
 - o a portion, but not all, is stored above grade
- Storage facility type:
 - o permanent nutrient storage facility
 - o temporary field nutrient storage site

• Nutrient units:

- o the weight or volume of manure stored annually on a farm unit is sufficient to annually land apply agricultural source material at a rate that is
 - more than 0.5 nutrient units per acre of the farm units, but not more than 1.0 nutrient units per acre of the farm units
 - more than 1.0 nutrient units per acre of the farm units

• Parameter:

- o Nitrogen
- o Phosphorous (total)

Agricultural source material storage activities that have potential significant drinking water threat circumstances include:

• Chemical:

- o storage at or above grade
- o storage below grade
- o storage where a portion, but not all, is stored above grade

• Pathogen:

- o at or above grade in a permanent nutrient storage facility
- o below grade in a permanent nutrient storage facility
- o at a temporary field nutrient storage site

Table 3.1.4 – Vulnerability scores and vulnerable areas where activities under "Storage of Agricultural Source Material" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	9	9 or 10	9	
Pathogen	10	10	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9	

3.1.5 Threat 5. The Management of Agricultural Source Material

The management of agricultural source material (ASM) under Threat 5 relates specifically to aquaculture, that is fish farming. The Threats Tables do not contain circumstances where it is considered a significant drinking water threat.

Table 3.1.5 – Vulnerability scores and vulnerable areas where activities under "Management of Agricultural Source Material" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	-	-	-	-	-	-	
Pathogen	-	-	-	-	-	-	

3.1.6 Threat 6. The Application of Non-agricultural Source Material to Land

The application of non-agricultural source material to land is an activity that can be considered, under certain circumstances, to be a threat to drinking water. Non-agricultural source materials (NASMs) can include pulp and paper biosolids, sewage biosolids, anaerobic digestion, and any other material that is not from an agricultural source and that is capable of being applied to land as a nutrient (see O. Reg. 267/03 s.1(1) under the *Nutrient Management Act*).

Application of non-agricultural source material activities are grouped in the Tables of Drinking Water Threats (Threats Tables) by:

- Managed land percentage:
 - o the managed land map shows a managed land percentage for the applicable area that is:
 - less than 40%
 - at least 40%, but not more than 80%
 - more than 80%
- Nutrient units:
 - o the livestock density map shows a livestock density for the applicable area that is sufficient to annually apply agricultural source material at a rate that is
 - less than 0.5 nutrient units per acre
 - at least 0.5 nutrient units per acre, but not more than 1.0 nutrient units per acre
 - more than 1.0 nutrient units per acre
- Parameter:
 - o Nitrogen
 - o Phosphorous (total)

For a discussion on managed lands and nutrient units, reference should be made to section 3.1.3.

Non-agricultural source material application activities that have potential significant drinking water threat circumstances include:

• Chemical:

- o less than 40% managed lands and more than 1.0 nutrient units per acre
- o at least 40% but not more than 80% managed lands and more than 1.0 nutrient units per acre
- o more than 80% managed lands and less than 0.5 nutrient units per acre
- o more than 80% managed lands and at least 0.5 nutrient units per acre but not more than 1.0 nutrient units per acre
- o more than 80% managed lands and more than 1.0 nutrient units per acre

• Pathogen:

o application of non-agricultural source material (NASM) to land (including treated septage)

Table 3.1.6 – Vulnerability scores and vulnerable areas where activities under "Application of Non-agricultural Source Material to Land" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2	
Chemical	10	10	-	9	9 or 10	9	
Pathogen	10	10	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9	

3.1.7 Threat 7. The Handling and Storage of Non-agricultural Source Material

The handling and storage of non-agricultural source material are activities that can be considered, under certain circumstances, to be a threat to drinking water. Non- agricultural source materials (NASMs) can include pulp and paper biosolids, sewage biosolids, anaerobic digestion, and any other material that is not from an agricultural source and that is capable of being applied to land as a nutrient (see O. Reg. 267/03 s.1(1) under the *Nutrient Management Act*).

Handling and storage of non-agricultural source material activities are grouped in the Tables of Drinking Water Threats (Threats Tables) by:

- Physical position:
 - o at or above grade
 - o below grade
 - o a portion, but not all, is stored above grade

- Storage facility type:
 - o permanent nutrient storage facility
 - o temporary field nutrient storage site
- Mass of nitrogen:
 - o the mass of nitrogen in the non-agricultural source material stored is
 - at least 0.5 tonnes, but not more than 5 tonnes
 - more than 5 tonnes
- Parameter:
 - Nitrogen
 - o Phosphorous (total)

Non-agricultural source material storage activities that have potential significant drinking water threat circumstances include:

- Chemical:
 - o at or above grade
 - o below grade
 - o a portion, but not all, is stored above grade
- Pathogen:
 - o at or above grade
 - o below grade

Table 3.1.7 – Vulnerability scores and vulnerable areas where activities under "Handling and Storage of Non-agricultural Source Material" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2		
Chemical	10	10	-	9	9 or 10	9		
Pathogen	10	10	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9		

3.1.8 Threat 8. The Application of Commercial Fertilizer to Land

The application of commercial fertilizer to land is an activity that can be considered, under certain circumstances, to be a threat to drinking water. Commercial fertilizer is a synthetic substance containing nitrogen, phosphorus, potassium, or other plant food intended for use as a plant nutrient. The main problems associated with the land application of commercial fertilizer appear to be improper use. Two examples of its potential improper use include:

- (1) application without consideration for nutrients available in the soil and plant requirements;
- (2) inappropriate timing of application for plant growth cycles and weather conditions.

Commercial fertilizer application activities that have potential significant drinking water threat circumstances include:

• Chemical:

- o less than 40% managed lands and more than 1.0 nutrient units per acre
- o at least 40% but not more than 80% managed lands and more than 1.0 nutrient units per acre
- o more than 80% managed lands and less than 0.5 nutrient units per acre
- o more than 80% managed lands and at least 0.5 nutrient units per acre but not more than 1.0 nutrient units per acre
- o more than 80% managed lands and more than 1.0 nutrient units per acre

For a discussion on managed lands and nutrient units, reference should be made to section 3.1.3.

Table 3.1.8 – Vulnerability scores and vulnerable areas where activities under "Application of Commercial Fertilizer to Land" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
Chemical	10	10	-	9	9 or 10	9		

3.1.9 Threat 9. The Handling and Storage of Commercial Fertilizer

The handling and storage of commercial fertilizer are activities that can be considered, under certain circumstances, to be a threat to drinking water. Commercial fertilizer is a synthetic substance containing nitrogen, phosphorus, potassium or other plant food intended for use as a plant nutrient. Problems associated with the storage of commercial fertilizers are leaks and spills as a result of aging infrastructure or improper storage. For both storage and application of commercial fertilizer, it should be noted that the movement of phosphorus is often, but not exclusively, associated with runoff and soil erosion.

Handling and storage of commercial fertilizer activities that have potential significant drinking water threat circumstances include:

• storage for retail sale or in relation to its application to land, of more than 2500 kg

Table 3.1.9 – Vulnerability scores and vulnerable areas where activities under "Handling and Storage of Commercial Fertilizer" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
Chemical	10	10	-	-	10	-		

3.1.10 Threat 10. The Application of Pesticide to Land

The application of pesticide to land is an activity that can be considered, under certain circumstances, to be a threat to drinking water. All of the pesticides considered through the Drinking Water Source Protection initiative are chemicals used to control weeds or fungi.

The main consideration for reducing or eliminating drinking water threats related to the land application of pesticides is to make sure it does not enter surface water and/or groundwater.

Pesticide application activities that have potential significant drinking water threat circumstances include:

- application:
 - o less than 1 hectare
 - o at least 1 hectare, but not more than 10 hectares
 - o more than 10 hectares

In Ontario, the Pesticides Act defines **pesticide** as "any organism, substance or thing that is manufactured, represented, sold or used as a means of directly or indirectly controlling, preventing, destroying, mitigating, attracting or repelling any pest or altering the growth, development or characteristics of any plant life that is not a pest and includes any organism, substance or thing registered under the federal Pest Control Products Act".

Table 3.1.10 – Vulnerability scores and vulnerable areas where activities under "Application of Pesticide to Land" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
Chemical	10	10	-	8.1 or 9	8.1, 9 or 10	8.1 or 9		

3.1.11 Threat 11. The Handling and Storage of Pesticide

The handling and storage of pesticides are activities that can be considered, under certain circumstances, to be a threat to drinking water. For additional discussion on pesticides, refer to section 3.1.10 above. Handling and storage of pesticides is most commonly associated with agricultural, recreational, public works, and retail land uses. There are eleven (11) chemicals listed in the Threats Tables that could make their way into surface water and groundwater through spills resulting from the improper handling and storage of pesticides.

The handling and storage of pesticide activities that have potential significant drinking water threat circumstances include:

- storage for retail sale or in relation to its application to land; more than 250 kg but less than 2500 kg
- storage at a facility where it is manufactured or processed, or from which it is wholesaled; more than 2500 kg
- storage for retail sale or in relation to its application to land; more than 2500 kg

Table 3.1.11 – Vulnerability scores and vulnerable areas where activities under "Handling and Storage of Pesticide" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
Chemical	10	10	-	9	9 or 10	9		

3.1.12 Threat 12. The Application of Road Salt

The application of road salt can be considered, under certain circumstances, to be a threat to drinking water. Road salt as a drinking water threat means any product that is used to maintain roads and pedestrian areas and contains one or both of sodium and chloride. The majority of road salt is used as a deicer or an ice prevention agent, but limited use for dust suppression does occur. The most commonly used products are sodium chloride and calcium chloride because they are effective and inexpensive.

Road salt application activities that have potential significant drinking water threat circumstances include:

- the impervious surface map shows a total of impervious surface percentage for the applicable area that is:
 - o more than 8%, but less than 80%
 - o more than 80%

Table 3.1.12 – Vulnerability scores and vulnerable areas where activities under "Application of Road Salt" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
Chemical	10 10 - 9 9 or 10 9							

3.1.13 Threat 13. The Handling and Storage of Road Salt

The handling and storage of road salt can be considered, under certain circumstances, to be a threat to drinking water. The handling and storage of road salt activities that have potential significant drinking water threat circumstances include:

- road salt stored in a manner that may result in its exposure to precipitation or runoff from precipitation or snow melt and at least 500 tonnes, but not more than 5,000 tonnes, of road salt
- road salt stored in a manner that may result in its exposure to precipitation or runoff from precipitation or snow melt and more than 5,000 tonnes of road salt

Table 3.1.13 – Vulnerability scores and vulnerable areas where activities under "Handling and Storage of Road Salt" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
Chemical	10	10	-	9	9 or 10	9		

3.1.14 Threat 14. The Storage of Snow

The storage of snow can be considered, under certain circumstances, to be a threat to drinking water. Snow removed (plowed) from roads and parking lots can be contaminated with salt, oil, grease, and heavy metals from vehicles, litter and airborne pollutants. Large snow banks along roads and in parking areas can create traffic hazards, and can result in localized flooding when the snow melts, especially on major roadways and in urban areas. In these situations, the excess snow must be melted on-site or transported to a location where it is either melted or stockpiled and allowed to melt. The disposal of snow in one location concentrates the potential contaminants; however, they are diluted by the larger volume of snow. Since the snow is contaminated, it must be handled and stored in ways that protect water sources.

This drinking water threat includes:

- a) Snow that is pushed into large piles on a property (e.g. stored in parking lots),
- b) Snow transported to a central site from other locations (e.g. snow disposal sites),
- c) Large snow banks along roads that are close to municipal wellheads or surface water intakes (if accumulation meets area circumstances identified below).

The classification of a snow storage area as either a significant, moderate or low drinking water threat is dependent on its specific location (vulnerability score) as well as whether the snow is stored above or below grade. Snow storage below grade would occur in a pit or quarry. In general, the greater the snow storage area (and therefore the volume of snow stored), the greater the inherent risk to drinking water.

The storage of snow activities that have potential significant drinking water threat circumstances include:

- Facility where snow is stored at or above grade:
 - o at least 0.01 hectares but not more than 0.5 hectares
 - o more than 0.5 hectares but not more than 1 hectares
 - o more than 1 hectares but not more than 5 hectares
 - o more than 5 hectares
- Facility where snow is stored below grade:
 - o at least 0.01 hectares but not more than 0.5 hectares
 - o more than 0.5 hectares but not more than 1 hectares.

- o more than 1 hectares but not more than 5 hectares
- o more than 5 hectares

Table 3.1.14 – Vulnerability scores and vulnerable areas where activities under "Storage of Snow" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
Chemical	10	10	-	9	9 or 10	9		

3.1.15 Threat 15. The Handling and Storage of Fuel

Fuel handling and storage are activities that can be considered, under certain circumstances, to be a threat to drinking water. The handling and storage of fuel can include diesel, heating oil, kerosene, hydrocarbon fuel (e.g. gasoline), and used oil (when used as a fuel).

Activities related to the handling and storage of fuel are grouped in the Tables of Drinking Water Threats (Threats Tables) by:

- Physical position:
 - o at or above grade
 - o below grade
 - o a portion, but not all, is stored above grade
- The types of facilities to be considered:
 - o facility as defined in Ontario Regulation 213/01 (Fuel Oil) or Ontario Regulation 217/01 (Liquid Fuels), but not a bulk plant
 - o a bulk plant as defined in Ontario Regulation 217/01 (Liquid Fuels), or facility that manufacturers or refines fuel
- Quantity of fuel stored:
 - o not more than 25 litres
 - o more than 25 litres, but not more than 250 litres
 - o more than 250 litres, but not more than 2,500 litres
 - o more than 2,500 litres

The fuel handling and storage activities that have potential significant drinking water threat circumstances include:

- Handling:
 - o above grade
 - o below grade

- Storage:
 - o storage at or above grade
 - o storage below grade
 - o storage if a part, but not all, below grade

Table 3.1.15 – Vulnerability scores and vulnerable areas where activities under "Handling and Storage of Fuel" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
Chemical	10	10	-	-	10	-		

3.1.16 Threat 16. The Handling and Storage of a Dense Non-aqueous Phase Liquid (DNAPL)

DNAPL handling and storage are activities that can be considered, under certain circumstances, to be a threat to drinking water. There are five compounds identified in the Threats Tables: Dioxane-1,4; Polycyclic Aromatic Hydrocarbons (PAHs); Tetrachloroethylene (PCE); Trichloroethylene or another DNAPL that could degrade to Trichloroethylene; and Vinyl chloride or another DNAPL that could degrade to vinyl chloride.

The DNAPL handling and storage activities that have potential significant drinking water threat circumstances include:

- below grade handling
- above grade handling
- storage at or above grade
- storage below grade
- storage if a portion, but not all, of the storage is below grade

Table 3.1.16 – Vulnerability scores and vulnerable areas where activities under "Handling and Storage of a Dense Non-aqueous Phase Liquid (DNAPL)" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
DNAPL	10	6, 8 or 10	4, 6 or 8	-	10	-		

Dense non-aqueous phase liquids, or DNAPLs, are chemical compounds that are denser that water and tend to be sparingly soluble in water. Many are highly toxic and persistent. They may sink to the bottom of groundwater aquifers and surface water bodies, where they can slowly leach into the water over time.

3.1.17 Threat 17. The Handling and Storage of an Organic Solvent

Organic solvent handling and storage are activities that can be considered, under certain circumstances, to be a threat to drinking water. Organic solvents are liquid organic compounds with the ability to dissolve solids, gases or liquids. They have been used in vast quantities for decades in industrial and commercial applications and can also be found in small quantities in common household products such as adhesives and cleaners. Four organic solvents have been identified as potential concerns related to drinking water: carbon tetrachloride, chloroform, dichloromethane and pentachlorophenol.

Activities related to the handling and storage of an organic solvent are grouped in the Tables of Drinking Water Threats (Threats Tables) by:

- Physical position:
 - o at or above grade; or
 - o below grade; or
 - o partially below grade
- Quantity of organic solvent stored is:
 - o not more than 25 litres
 - o more than 25 litres, but not more than 250 litres
 - o more than 250 litres, but not more than 2,500 litres
 - o more than 2,500 litres

The organic solvent handling and storage activities that have potential significant drinking water threat circumstances include:

- storage at or above grade
- storage below grade
- storage if a portion, but not all, of the storage is below grade

Table 3.1.17 – Vulnerability scores and vulnerable areas where activities under "Handling Handling and Storage of an Organic Solvent" may be a significant threat

	VULNERABLE ZONE:						
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2						
Chemical	10	10	-	-	10	-	

3.1.18 Threat 18. The Management of Runoff that Contains Chemicals Used in the De-icing of Aircraft

The management of runoff that contains chemicals used in the de-icing of aircraft can be considered, under certain circumstances, to be a threat to drinking water. Ethylene glycol or propylene glycol is the active ingredient in aircraft de-icing fluids. The runoff of large volumes of de-icing fluids into surface water bodies over a short period of time can lead to oxygen depletion, which results in poor water quality and toxicity to aquatic life and mammals.

The management of runoff that contains chemicals used in the de-icing of aircraft activities that have potential significant drinking water threat circumstances include:

- runoff originates at a regional airport
- runoff originates at a national airport

A "regional airport" is defined in the Threats Tables as an airport with an annual passenger traffic that is less than 200,000 persons and that is not a remote airport or a small airport. A "National airport" is an airport that serves the national capital region or the Greater Toronto Area, or an airport with annual passenger traffic of 200,000 persons or more. All existing airports in the Source Protection Region would meet the definition of a "small airport", which means an airport that does not have regular scheduled service to other airports and is not a remote airport.

Table 3.1.18 – Vulnerability scores and vulnerable areas where activities under "Management of Runoff that Contains Chemicals Used in the De-icing of Aircraft" may be a significant threat

	VULNERABLE ZONE:							
	WHPA-A WHPA-B WHPA-C WHPA-E IPZ-1 IPZ-2							
Chemical	10	10	-	9	9 or 10	9		

3.1.19 Threat 19. 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

The identification of activities as significant threats under Threat 19 requires that: a) a water quantity stress assessment be completed; and b) the assessment indicates that a significant or moderate stress level exists. The Lake Rosalind/Hanover subwatershed is the only area identified in the Assessment Reports as having a potential stress level of moderate. Further study will be undertaken to confirm the final level. Therefore, no threats have been identified at this time in the Source Protection Region.

Table 3.1.19 – Vulnerability scores and vulnerable areas where activities under "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" may be a significant threat

	VULNERABLE ZONE:			
	WHPA-Q1	IPZ-Q		
Water Quantity	Existing taking, increase to an existing taking or a new taking	Existing taking, increase to an existing taking or a new taking		

3.1.20 Threat 20. An Activity That Reduces the Recharge of an Aquifer

The same requirements as identified in section 3.1.19 above also apply to Threat 20. Therefore, no threats have been identified at this time in the Source Protection Region.

Table 3.1.20 – Vulnerability scores and vulnerable areas where activities under "An activity that reduces the recharge of an aquifer" may be a significant threat

	VULNERABLE ZONE:			
	WHPA-Q2	IPZ-Q		
Water Quantity	Existing activity, modified activity or new activity	Existing activity, modified activity or new activity		

3.1.21 Threat 21. The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm-Animal Yard

Livestock grazing, pasturing, outdoor confinement areas and farm-animal yards are activities that can be considered, under certain circumstances, to be a threat to drinking water.

The activities are grouped in the Tables of Drinking Water Threats (Threats Tables) by:

- Activity type:
 - o livestock grazing or pasturing land
 - o outdoor confinement area or farm-animal yard
- Agricultural source material generation:
 - o the number of animals confined in the area at any time is sufficient to generate agricultural source material at a rate of:
 - at least 120 nutrient units and not more than 300 nutrient units per hectare of the area annually
 - more than 300 nutrient units per hectare of the area annually
- Nutrient units:
 - o the number of nutrient units generated in the farm unit divided by the number of acres of land that is used for livestock grazing or pasturing land is sufficient to generate nutrients at an annual rate that is:
 - at least 0.5 nutrient units per acre and not more than 1.0 nutrient units per acre
 - more than 1.0 nutrient units per acre

The activities related to use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard that have potential significant drinking water threat circumstances include:

- Chemical:
 - Livestock grazing or pasturing land
 - o Outdoor confinement area or farm-animal yard
- Pathogen:
 - o Livestock grazing or pasturing land (one or more animals)
 - o Outdoor confinement area or farm-animal yard (one or more animals)

Table 3.1.21 – Vulnerability scores and vulnerable areas where activities under "Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm-Animal Yard" may be a significant threat

	VULNERABLE ZONE:					
	WHPA-A	WHPA-B	WHPA-C	WHPA-E	IPZ-1	IPZ-2
Chemical	10	10	-	9	9 or 10	9
Pathogen	10	10	-	8, 8.1, or 9	8, 8.1, 9 or 10	8, 8.1, or 9

3.2 Tables of Drinking Water Threats

The Tables of Drinking Water Threats (Threats Tables) form part of the regulations made under the *Clean Water Act*. The Threats Tables detail the circumstances under which certain activities may be considered drinking water threats. These tables list activities and circumstances, and set out hazard scores and risk levels. To determine where an activity is a significant, moderate or low threat, and the circumstances, requires one to look at the maps contained in Chapter 5 of the Source Protection Plan to determine the vulnerability score at a particular location.

The Threats Tables give risk ratings for hundreds of unique sets of circumstances. Of these, one table lists chemical threats under almost 2000 sets of circumstances for a combined total of almost one hundred different chemical substances. A second table lists the circumstances under which activities would be considered pathogen threats.

The Threats Tables can be found at the following website: https://www.ontario.ca/environment-and-energy/tables-drinking-water-threats

The Ministry of the Environment also provides the Provincial Tables of Circumstances (Circumstance Tables). These tables divide the Threats Tables into a more manageable size. Each of the Circumstance Tables details activities that are a drinking water threat:

- for one type of contaminant (Chemical/DNAPL/Pathogen);
- within one type of vulnerable area (intake protection zone, wellhead protection area, highly vulnerable aquifer, or significant recharge area);

- at one vulnerability score (10, 9, 8.1, 8, etc.); and
- at one particular threat level (low/moderate/significant).

For example, one table pinpoints all activities or circumstances that are or would be significant chemical threats in a WHPA-B where the vulnerability score at a location is eight. The name of this table is CW8S. The Provincial Tables of Circumstances are meant to be used in conjunction with the Tables of Drinking Water Threats.

Copies of the Circumstance Tables that relate to significant drinking water threats have been included in Appendix D of the Source Protection Plan.

The complete set of Circumstance Tables can be found at the following website: https://www.ontario.ca/environment-and-energy/provincial-tables-circumstances

3.3 Levels of Threats

Drinking water threats identified in the Threats Tables can be considered under one of four threat levels:

- significant;
- moderate;
- low; or
- none.

To determine this risk level, a risk score is first calculated for each activity that takes into account the vulnerability of the water source in the vulnerable area and the hazard rating of a specific activity. The hazard rating and risk rating are already considered in the Threats Tables when each set of circumstances is categorized at a threat level and vulnerability score needed to reach that threat level.

3.4 Transport Pathways

Constructed transport pathways are human-made features or open pathways through the ground. The *Clean Water Act* regulations define transport pathways as "a condition of land resulting from human activity that increases the vulnerability of a raw water supply of a drinking water system" (O.Reg 287/07 s. 1). Transport pathways are not considered a drinking water threat of themselves under the *Clean Water Act*. However, the presence of transport pathways can make an aquifer more susceptible to contamination. In groundwater, transport pathways provide a channel to an aquifer that bypasses the natural protection of the overburden layer resulting in greater potential risk for contamination from nearby threats.

Transport pathways

are not considered a drinking water threat of themselves under the Clean Water Act. However, the presence of transport pathways can make an aquifer more susceptible to contamination.

Common examples of the different types of transport pathways include:

- Improperly constructed or maintained water wells
- Unused/abandoned water wells
- Stormwater sewers/drains
- Agricultural tile drainage
- Improperly constructed or maintained oil and gas wells
- Pits and quarries; construction of underground services or subsurface excavations
- Vertical geothermal wells/earth energy systems
- Private well clusters

Transport pathways may be considered when interpreting the vulnerability score of the surface water sources (Intake Protection Zone or IPZ) or groundwater sources (Wellhead Protection Area or WHPA) of drinking water. Transport pathways also affect the size of a surface water delineation (IPZ or WHPA-E). These pathways have the ability to facilitate the movement of contaminants laterally for IPZs or vertically below the ground for WHPAs. In assigning transport pathway adjustments, the hydrology or the hydrogeology of the site and the condition of the pathway are considered, as well as the cumulative impact of transport pathways.

The risk level may be influenced by the presence of transport pathways. Changes in vulnerability scoring to a higher number would raise the risk level of a prescribed drinking water threat and could change some moderate threats into significant threats. In contrast, natural transport pathways, such as fracturing and karst, are already accounted for under the vulnerability assessment. Therefore, natural transport pathways do not need further consideration in vulnerability scoring.

There are relatively few pits and quarries within IPZs and WHPAs in the Region. Depending on the depth of pits and quarries with respect to the water table, aquifer vulnerability may be adjusted from low to moderate or high, or from moderate to high.

Wells that are not in compliance with existing regulations may be potential conduits for water that would increase the vulnerability of the aquifer locally. Additionally, there are properties for which no well record exists, nor any well is obvious by site inspection, and yet have structures that require water.

Urban areas warrant special consideration as potential areas for transport pathway adjustments under Technical Rule 41 (3) of the *Clean Water Act* regulations, as the cumulative effects of a high density of abandoned historic wells are common. Although these areas today are serviced by a municipal well, most were historically serviced by private wells. Additionally, the age of these wells precludes the existence of a record for the wells.

Finally, there are surface water transport pathways that have increased the size of the vulnerable areas for surface water in the Region. The most common of these are stormwater sewers and

drains in the coastal towns and agricultural tile drainage for the inland intake and the wellheads under the direct influence of surface water.

Transport pathways are considered and addressed by some provincial legislation, policies and programs, including:

- Clean Water Act, 2006, and its related regulations, such as O. Reg. 287/07
- Ontario Water Resources Act, 1990, and its related regulations, such as O. Reg. 903 that covers wells
- *Oil Gas and Salt Resource Act* (O. Reg. 245/97)
- Municipal Act, 2001
- Abandoned Works Program
- Ontario Drinking Water Stewardship Program, which provides funding opportunities for well upgrades and well decommissioning
- Safe Water Program under the Ministry of Health and Long-term Care and in partnership with local Health Units

In addition, programs that address wells and, in some cases, other transport pathways are offered by agencies and non-profit organizations, including: the Canadian Groundwater Association with the Guidelines for Water Well Construction; Well Aware Program; Well Wise Program; Clean Water Program; and Canada-Ontario Environmental Farm Plan.

Policies have been developed to address transport pathways and can be found in section 6.3.

3.5 Local Threats

The *Clean Water Act* Technical Rules allow Source Protection Committees to request the addition of local threats to the Assessment Reports and associated policies to the Source Protection Plan. Approval for local threats come directly from the Minister of Environment and Climate Change. Once approval for the addition of a local threat is obtained, the technical work can be done and policies written.

The Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Committee requested of the Minister the addition of the following two activities as significant drinking water threats;

- 1. The operation of Nuclear Generating Stations where deuterium (heavy water) is used to moderate nuclear reactions; and
- 2. The storage and treatment of tritiated deuterium.

The SPC has not created policies regarding these two threats. Drinking Water Source Protection staff continues to keep in contact with staff at Bruce Nuclear Power Development.



Chapter 4

Policy Background







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4.0 Policy Background

4.1 Policy Intent

The Source Protection Plan consists of a range of policies that together will reduce the risks posed by threats to water quality of drinking water sources.

The *Clean Water Act* and its regulations allow for a variety of methods to be used to fulfill the task of protecting our drinking water including:

- promoting voluntary measures
- providing education and outreach opportunities
- using official plans and zoning by-laws and prescribed instruments
- restricting land uses
- prohibiting activities
- implementing risk management plans

A policy only applies to the activities and in the vulnerable areas described in the policy's text. A description of how to understand the circumstances and areas where policies apply can be found in Chapter 5.

4.2 Policy Development

The Source Protection Committee undertook an extensive process to arrive at the policies contained in the Source Protection Plan. At a workshop in 2010, the Committee agreed upon a decision-making model that outlined the various steps necessary to develop the successful set of policies that the Committee desired as the outcome of their efforts. Information and knowledge formed the initial core of the work. The Committee received presentations, reports and materials about the drinking water systems, drinking water threats and available policy tools. Considerable discussion about policy options then occurred, resulting in various rounds of revisions to draft policies.

The Planning Officials Working Group consisted of planning staff from counties, municipalities and conservation authorities, a planning consultant, building officials and two Source Protection Committee members. Their expertise in planning-related matters and numerous other areas was invaluable. The Agricultural and Rural Working Group involved representatives of various agricultural commodity groups and sectors, as well as two Source Protection Committee members. They provided significant input into understanding agricultural practices and their relation to drinking water sources, along with the many best management practices being used by producers as stewards of the land.

The Source Protection Committee was assisted in its policy process by two working groups:

- Planning Officials Working Group
- Agricultural and Rural Working Group

A series of policy packages were developed to discuss each of the threat categories prescribed by the *Clean Water Act*. The policy packages provided an overview of the threat category and gave details on how the threat was viewed in the *Tables of Drinking Water Threats* (Threats Tables) that are part of the *Clean Water Act* regulations. As well, each package stated the preliminary versions of policies. An appendix at the back gave the details of circumstances where activities would be considered significant drinking water threats. This feature gave context to what specifically could be affected by policies.

In November 2011, pre-consultation with potential implementing agencies began. The pre-consultation was a requirement under the *Clean Water Act* that gave an initial opportunity for these agencies to comment on proposed source protection plan policies. A series of workshops were held with municipal councillors and agency staff members. Several agencies provided written comments and these were carefully considered by the Source Protection Committee prior to adopting the Draft Proposed Source Protection Plan.

4.3 Tools

The *Clean Water Act* allows the Source Protection Committee to use various approaches when generating policies to address drinking water threats. This may include using existing regulatory powers, such as land use planning and provincial approvals (also called instruments), new regulatory powers given under the *Clean Water Act*, education programs, incentive programs, and resource management.

The **policy approach** or tool varies from one policy to the next. The Clean Water Act and its regulations enable a whole series of tools.

The tools used to address activities may include:

- **Prohibition** uses section 57 of the *Clean Water Act* and may prohibit an activity in certain locations.
- **Risk Management Plan** uses section 58 of the *Clean Water Act* and requires a landowner to have an approved plan that is negotiated with the Risk Management Official. The activity can continue as long as an approved plan is in place and bring followed.
- **Restricted Land Use** uses section 59 of the *Clean Water Act* in conjunction with risk management plans or prohibition. Is a screening tool when reviewing applications that identifies to planning agencies and others that an activity is controlled by a Risk Management Plan or prohibition policy.
- Land Use Planning affects land use planning decisions under the *Planning Act* and *Condominium Act* and is generally used to identify, through maps and text in the official plan that certain activities on a property may be subject to policies in the Source Protection Plan. It is used in some instances to manage or eliminate activities associated with particular land uses and is implemented through land use planning decisions (such as official plans, zoning by-laws and site plan controls).
- **Prescribed Instrument** policies that affect decisions to issue or otherwise create, amend or revoke a prescribed instrument for approvals by provincial Ministries.

The following additional tools are identified by the *Clean Water Act* regulations (O.Reg. 287/07, s. 26(1)) and can be used in relation to significant, moderate or low drinking water threats:

- Incentive Program
 - makes funding available to landowners to assist with implementation costs
- Education and Outreach
 - provides information and materials about the activity, such as best management practices and legal requirements
- Stewardship Programs
 - establishes collaborative partnerships between organizations and individuals who take action at a local scale
- Best Management Practices
 - specifies and promotes practices that offer the safest or most efficient way to undertake an activity
 - may include a range of measures from operational procedures to administrative processes
 - generally regarded by professional organizations, industry associations as well as people who operate in that sector

• Govern Research

 identifies that further research may be necessary in specific situations to better understand where targeted actions to address threats would have the most benefit to source water

Specify Action

- requires an agency to take a particular action, such as passing a by-law using *Municipal Act* powers;
- helps to implement the plan or to achieve the plan's objectives
- Establish Pilot Project
 - encourages innovative programs, emerging technologies or new methods to address certain threats to drinking water
 - assesses applicability in different situations or suitability in broader applications

4.4 Definitions/Terminology

Several terms are used frequently in the policies in Chapter 6. The following definitions are provided to assist in the interpretation of the policies.

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*, s.2(1))

Policy approach

- the type of policy tool, such as risk management plan or education program, that is being used by a particular policy text
- policy tools are described in section 4.3 above

Activity

- an action, function, work, development, or similar undertaking
- includes a land use (*Clean Water Act*, s.2(1))
- the Threats Tables describe the circumstances that must be present for an activity to be considered a potential drinking water threat

Activity type

• Existing activities

- includes activities on a property that existed or occurred prior to the effective date of the Source Protection Plan

• Future activities

- includes activities which were not in existence prior to the effective date of the Source Protection Plan; or
- activities proposed on or after the effective date of the Source Protection Plan

Reference should be made to Policy Text ID G-10 where the terms "existing activity" and "future activity" are defined for use throughout the Source Protection Plan.

Implementing body

- the organization, agency or individual responsible for ensuring that the actions specified in the policy text are carried out
- in some cases the implementing body is overseeing work that a landowner may be obligated to carry out

Effective date

- the date on which the Source Protection Plan takes effect
- specified by the Minister of the Environment and Climate Change in the notice of approval of the Source Protection Plan

4.5 Policy Examples

The following table provides an explanation of the main policy tools along with a sample policy from Chapter 6 for each policy tool.

Table 4.5.1 – Policy Tools and Sample Source Protection Plan Policies

Policy Tool	Sample Policy
Prohibition - activity cannot occur in the affected areas - may prohibit a certain amount of a product from being used or stored in some cases - may not necessarily prevent a particular use of the land, only a certain aspect	The policy applies in all WHPA-A vulnerable areas where the handling and storage of non-agricultural source material is or would be a significant drinking water threat (existing activity or future activity). The handling and storage of non-agricultural source material shall be prohibited. Therefore, the handling and storage of non-agricultural source material is designated for the purposes of s.57 of the <i>Clean Water Act</i> .
Risk Management Plan	The policy applies in all vulnerable areas where the handling and storage of fuel is a significant drinking water threat (existing activity) under the following circumstances: 1. the quantity of fuel is more than 2,500 L; or 2. the quantity of fuel is more than 250 L but not more than 2,500 L and where the facility is a bulk plant or a facility that manufacturers or refines fuel. Establishment of a Risk Management Plan is required. The handling and storage of fuel may only occur in accordance with an approved Risk Management Plan. Therefore, the handling and storage of fuel is designated for the purposes of s.58 of the Clean Water Act. As a minimum, the Risk Management Plan shall address: 1) product handling; 2) product storage; 3) record keeping and documentation, including any inspection reports; 4) disposal methods; 5) spills response plan; and 6) containment measures. The Risk Management Plan shall document the capacity of the fuel storage as of the effective date of the Source Protection Plan and shall not allow for the expansion of the storage facility beyond the documented capacity. Risk Management Plans for existing activities shall be established within three years of the effective date of the Source Protection Plan.

Policy Tool	Sample Policy
Restricted Land Use - used to identify or flag that an activity is either prohibited or needs a Risk Management Plan	All land use designations and zones described in a municipal official plan and zoning by-law, as amended from time to time, are designated as restricted land uses for the purpose of s. 59 of the <i>Clean Water Act</i> . For clarity, the activities identified above are those which are the subject of other source protection plan policies that utilize prohibition under s. 57 of the <i>Clean Water Act</i> or utilize Risk Management Plans under s. 58 of the <i>Clean Water Act</i> .
Prescribed Instruments (e.g., Environmental Compliance Approvals) - requires the provincial Ministry responsible for the instrument (e.g. permit, approval) to review approvals and amend in some cases - also, used to deny approval of future activities in vulnerable areas	The policy applies to the following provincial instruments related to waste disposal activities as described in clauses (1) to (8) above: A. approvals of waste disposal sites; B. approvals of renewable energy facilities; and C. approvals of sewage works

Policy Tool	Sample Policy
Land Use Planning - requires municipality to process a change to the official plan and zoning by-law	 The municipality shall amend its official plan and zoning by-law to include: mapping that identifies vulnerable areas where activities would be significant threats (future activities); and text that identifies that policies within the Source Protection Plan may apply to activities in these mapped areas.
- identifies to planners, developers, professionals, the public, and others that restrictions apply to the properties shown on zoning maps	This policy applies to all land use designations and zones described in the municipality's official plan and zoning by-law, as amended from time to time. The Municipality shall: A. Adopt the official plan, or official plan amendment as the case may be, and: i. submit the plan to the appropriate approval authority; or ii. give a notice of adoption; and
	B. Adopt the zoning by-law, or zoning by-law amendment as the case may be, and give a notice of adoption.
	For Section 40(2) of the <i>Clean Water Act</i> , the official plan and zoning bylaw must be amended within five years of the effective date of the Source Protection Plan or at the time of the next official plan and zoning bylaw conformity exercise as per Section 26 of the <i>Planning Act</i> .
Specify Action - may require a municipality or other agency to enact a	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage is or would be a significant drinking water threat (existing activity or future activity).
municipal by-law regarding a certain activity or undertake other actions in their	Municipalities shall inspect and maintain municipal sanitary sewers and related pipes so as to uphold high standards of performance and minimize the risk of leakage.
jurisdiction	Existing sewage lines shall be inspected within three years of the effective date of the Source Protection Plan and at regular intervals thereafter.
Establish Pilot Program - seeks to establish an innovative program that will test a method to resolve a problem and gauge whether the	The Ministry of the Environment and Climate Change, in conjunction with municipalities and Conservation Authorities, shall give due consideration to creating a pilot project to determine the location of unused and abandoned wells within vulnerable areas. An additional goal of the project would be to decommission the wells once they are located (existing activity).
method could have broader application	The project could include:
broader application	airborne geophysics;magnetic surveys;
	- interviews;
	- air photo interpretation and comparison over time;
	- historical land use search

Policy Tool	Sample Policy
Incentive Program - offers grants to property owners to assist with the costs of projects that help to address potential drinking water threats	The Ministry of the Environment and Climate Change and/or the Ministry of Agriculture, Food and Rural Affairs should make available an incentive program. The program should require an application that is subject to a technical review and approval process. Eligible projects in the grant program generally may include, but not necessarily be limited to: - consulting fees; - plan preparation costs related to risk management plans, nutrient management plans or nutrient management strategies; - training courses related to the preparation of plans where the applicant intends to prepare the plan themselves; - implementation of best management practices Other eligible projects in the grant program should include, but not necessarily be limited to: A. For the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage: - connection to the municipal sewer line and decommissioning of an on-site sewage system;
Education Program - informs property owners and those affected by policies about legal requirements, best management practices, alternatives, possible grants, and additional sources of information and advice	Conservation Authorities shall provide an education program that offers information and materials to landowners. Furthermore, Conservation Authorities are encouraged to work in partnership with other agencies to implement this policy Topics of a general nature in the program may include, but are not limited to: Prohibition of certain activities; Requirements for a Risk Management Plan for certain activities; Constraints on prescribed instruments (provincial approvals) for certain activities; Local zoning by-law provisions and municipal by-laws; Proper disposal methods; Occurrence of hazardous waste disposal opportunities; Funding opportunities; Advice and assistance available from provincial Ministries, nongovernmental organizations and other agencies; Various types of facilities or equipment for application, handling or storage activities; Best management practices for application, handling or storage activities.

4.6 Legal Effect

The requirements of the implementing bodies named for each policy vary according to the degree of threat the policy is addressing (e.g., significant, moderate or low drinking water threat) and the type of policy. It should be noted that provincial appeal bodies, such as the Ontario Municipal Board, are also bound by the legal effect of the various policies in the plan. There are three 'levels' of legal effect.

The Source Protection Plan and the policies within it, once approved by the Minister of the Environment and Climate Change, will have legal effect in Ontario.

4.6.1 "Conform To" Legal Effect

Policies that are written to address significant drinking water threats must be complied with in most cases. Implementing bodies, including provincial ministries, municipalities, source protection authorities, and other agencies named, must take the action specified in the policy under the authority provided by the *Clean Water Act*. Monitoring policies also have the legal effect of "conform to". An exception would be a significant threat policy where the implementing body is a federal agency or a non-governmental organization.

In most cases, the instruments prescribed in O. Reg. 287/07 are issued by the provincial government, such as environmental compliance approvals. Prescribed instruments that are already issued (i.e. *existing*) at the time the Source Protection Plan is approved must conform with significant threat policies (*Clean Water Act*, s.43). This means that existing approvals may need to be revoked if the policy would prohibit the activity. For other situations, the instrument may need to be amended by the person/body responsible for issuing those instruments to ensure the requirements of the instrument conform with the requirements of the applicable source protection plan policy. Any *future* decision to issue, create or amend an instrument that has been prescribed by O. Reg. 287/07 must conform with (i.e., comply with) any applicable significant threat policies (*Clean Water Act*, s. 39(7)(a)).

4.6.2 "Have Regard For" Legal Effect

Policies that are written to address moderate or low drinking water threats are less stringent than those for significant threats. These policies must be considered when implementing bodies are making decisions relevant to the policy. The decisions made by implementing bodies must be consistent with the intent of the policy. This relates to land use planning decisions under the *Planning Act* and decisions on prescribed instruments for moderate or low drinking water threats.

4.6.3 "Strategic Action" (Non-Legally Binding Commitment) Legal Effect

Strategic action policies are those within the scope of source protection plans that are considered recommendations. Strategic action policies can be used in two ways; as strategic action policies which are non-legally binding and do not directly address significant threats, and as significant threat policies with a non-binding legal effect.

Strategic action policies do not have a legal effect, rather they represent good faith commitments by persons or bodies to carry out certain actions. For example, a policy may designate a public

body to carry out an education and outreach program for a moderate or low drinking water threat.

There is no legal requirement for the agencies to fulfill these policies. However, strategic action policies are still an important part of a source protection plan, and their implementation will be monitored publicly through required progress reports.

Any policy that does not fall under one of the categories listed below must be identified in the plan as a "strategic action policy" (O.Reg 287/07, s. 33):

- a significant threat policy
- a Great Lakes policy
- any type of monitoring policy that is to be carried out by a specified public body
- a low or moderate threat policy that affects decisions made under the *Planning Act* or *Condominium Act*
- a low or moderate threat policy that affects prescribed instruments

4.7 Monitoring Policies

An accompanying monitoring policy has been assigned to each source protection plan policy. The intent of the monitoring policy is to provide a reporting of the implementation of a policy by the implementing body so that the Source Protection Committee can evaluate the implementation of the source protection plan policies. The information that results from monitoring policies may help to inform discussions for revisions to the Source Protection Plan in the future.

Source Protection Committees may also include monitoring policies, where advisable, to monitor activities or conditions that are moderate or low threats to prevent them from becoming significant and to monitor drinking water issues.

The *Clean Water Act* requires that any public body identified in monitoring policies in an approved source protection plan must satisfy their obligations under these policies. Monitoring policies will provide valuable information about the implementation of a source protection plan and the effectiveness of its policies.



Chapter 5

Understanding Policy







Approved Source Protection Plan Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region

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5.0 Understanding Policy

5.1 Overview

The full set of source protection plan policies can be found in Chapter 6. The four primary policy areas are:

- a) policies related to a specific threat category;
- b) policies applying to multiple threat categories (general policies);
- c) policies related to transport pathways; and
- d) policies for monitoring the implementation and effectiveness of the above four areas

The policies that apply within a given threat category or section are summarized by a table, similar to the one shown in Table 5.1.1, just before the actual policies are given. The last row of the table lists the 'general' policies that also apply. The reader will need to turn to a different part of Chapter 6 to view these additional policies. An explanation of the terms Policy Approach, Implementing Body and Activity Type can be found in Chapter 4.

Table 5.1.1 – Sample of a policy summary table found in Chapter 6.

Threat 6.	Threat 6. The Application of Non-agricultural Source Material to Land				
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
06-01	Prohibition		Prohibition	RMO	Existing, Future
06-02	Non-agricultura Plan Approvals	Source Material	Prescribed Instrument	Ministry of Agriculture, Food and Rural Affairs	Existing, Future
see also General Policies: G-01 Restricted La G-02 Amend Offic G-04 Education Pr		ial Plan and Zoning By-la	w		

5.1.1 Understanding Policy Text ID Numbers

Each policy has its own number, referred to as the Policy Text ID. The first half of the Policy Text ID identifies the policy area to which the policy belongs. The second half of the Policy Text ID is simply the order of that policy within the policy set, such as first, second or third.

If the Policy Text ID starts with a number, the policy refers to the specific threat category denoted by the number. If the Policy Text ID begins with the letter G, the policies are referring to general policies relating to more than one threat category. If the Policy Text ID starts with TP, the policies are referring to transport pathways. If the Policy Text ID starts with MP, the policies are referring to monitoring requirements.

The following are examples of the various types of Policy Text ID numbers used in the Source Protection Plan.

- **02-02** specific to threat category 2 (sewage systems and sewage works); second policy in the set
- **11-01** specific to threat category 11 (pesticide storage); first policy in the set
- **G-03** a general policy that applies to more than one threat category; third policy in the set
- **TP-10** policy related to transport pathways; tenth policy in the set
- **MP-24** a monitoring policy; twenty-fourth policy in the set

5.2 How to Read a Policy

The same pattern or structure has been used to construct each policy in the Source Protection Plan. The relevant details are presented so as to answer the primary questions of what, where, when, how, and who.

In the left-hand column is the Policy Text ID number as described in section 5.1.1. The right-hand column is the Policy Text, which is described in section 5.2.1.

POLICY TEXT ID POLICY TEXT

08-02 Risk Management Plan

The policy applies in:

- 1. all vulnerable areas where the application of commercial fertilizer to land is a significant drinking water threat (existing activity); and
- 2. all vulnerable areas, except WHPA-A, where the application of commercial fertilizer to land would be a significant drinking water threat (future activity)

The application of commercial fertilizer to land may only occur in accordance with an approved Risk Management Plan. Therefore, the application of commercial fertilizer to land is designated for the purposes of s.58 of the Clean Water Act.

Establishment of a Risk Management Plan is required. The plan shall meet the guidelines with respect to the contents of a nutrient management plan established under Part III of O.Reg. 267/03 under the Nutrient Management Act.

It is recommended that NMAN software or similar be utilized to assist in calculations. The calculations shall be reviewed annually and the Risk Management Plan updated so that it accurately reflects the anticipated operation on the farm unit during the following year. The plan shall be renewed every five years.

For properties where the person engaging in the activity has a nutrient management plan as per O.Reg. 267/03 under the Nutrient Management Act, the Risk Management Official may accept the nutrient management plan in lieu of a Risk Management Plan for this activity if:

- a) the person engaging in the activity provides a copy of the nutrient management plan to the Risk Management Official; and
- b) the Risk Management Official is satisfied that the nutrient management plan contains sufficient terms, conditions and measures to manage the activity.

Risk Management Plans for existing activities shall be established within three years of the effective date of the Source Protection Plan.

Monitoring policy MP-25 applies.

5.2.1 Structure of Policy Text

The Policy Text has three basic parts that contain all of the key details.

- 1) The first part follows the title of the policy and specifies four items:
 - what threat is being addressed;
 - where the policy applies (vulnerable areas);
 - what activity type it is for (existing or future); and
 - what threat level is addressed (e.g. significant drinking water threat).
- 2) The second part states the required action and any particulars about how the action is to be conducted.
- 3) The third part states what monitoring policy applies to the policy and generally gives a timeframe for the policy to be implemented.

5.3 Connecting Policies to Activities

Determining whether an activity on a particular piece of land is affected by one or more source protection plan policies can be done by connecting three key pieces of information:

- 1. Is the property located in a vulnerable area and, if so, what is the vulnerability score?
- 2. Does an activity that is occurring or could occur on the property generally match one of the drinking water threat categories?
- 3. Do any of the sets of circumstances within the drinking water threat category exactly match that activity?

Policies only apply to activities under certain circumstances and within particular vulnerable areas.

5.3.1 Vulnerable Areas

Wellhead Protection Areas (WHPAs) and Intake Protection Zones (IPZs), along with vulnerability scores, have been delineated for municipal drinking water systems in the Source Protection Region. Section 5.5 of the Source Protection Plan has maps for each vulnerable area in the Source Protection Region where policies could apply. The vulnerable area and vulnerability score can be determined from the maps.

Policies may affect activities in the following vulnerable areas within the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region:

- WHPA-A, where the vulnerability score is 10
- WHPA-B, where the vulnerability score is 10
- WHPA-B where the vulnerability score is 8
- WHPA-B, where the vulnerability score is 6
- WHPA-C, where the vulnerability score is 8, 6, or 4
- WHPA-E, where the vulnerability score is 9

- WHPA-E, where the vulnerability score is 8
- IPZ-1, where the vulnerability score is 10
- IPZ-2, where the vulnerability score is 8
- Events-based areas, where the modelled fuel thresholds apply
- WHPA-Q, where water quantity threats were modelled

In addition, policies regarding Transport Pathways also apply to the above vulnerable areas where the vulnerability score is 10 or 8 or 6.

It should be noted that only the Ruhl Lake intake, for the Hanover drinking water system, has policies that apply to it for numerous threat categories. The vulnerability scores that were determined for the other surface water systems in the Source Protection Region were at lower values, which may have moderate or low drinking water threats. The Source Protection Committee has not developed policies for these moderate or low drinking water threats at this time.

5.3.2 Policies Applied to Vulnerable Areas

Section 5.4 has a series of tables with all the applicable policies that match the vulnerable area scores found on the maps in section 5.5. For each vulnerable area listed in Section 5.3.1 there is a table in Section 5.4. Also, on each table is the list of all the policies that apply to that vulnerable area. The full text of the policies can be found by going to the appropriate Policy Text ID in Chapter 6.

5.3.3 Circumstances Where Policies Apply

For each table in Section 5.4 there is a corresponding Provincial Table of Circumstances. The Table of Circumstances is simply a portion of the Threats Tables. It gives all the details on the manner in which an activity would need to occur for it to be considered a drinking water threat in that particular vulnerable area. Appendix D has copies of the Tables of Circumstances referenced in section 5.4.

5.4 Tables of Policies That Apply in Vulnerable Areas

The box at the top of each table in this section shows the following:

- the vulnerable area that is considered
- the vulnerability score that applies in the vulnerable area
- the colour of the vulnerable area as shown on the maps provided in Section 5.5

The same Policy Text ID number may be found in more than one table. It is the same policy being applied in these cases to more than one vulnerable area.

Table 5.4.1. Policies that apply within WHPA-A or WHPA-B, where the vulnerability score is 10

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-A	10	RED
WHPA-B	10	RED

NOTE:

Policy Text IDs marked with igodot to the left indicate that the policy only applies in WHPA-A.

Policy	Policy Name	Implementation		
Text ID				
Threat 1: The establishment, operation or maintenance of a waste disposal site within the				
	g of Part V of the <i>Environmental Protection Act</i>			
01-01	Risk Management Plan for Hazardous Waste or Liquid Industrial Waste	RMO (Risk Management Official)		
01-02	Risk Management Plan for Waste Described in clause (p), (q), (r), (s), (t) or (u)	RMO		
01-03	Review of Environmental Compliance Approvals	Ministry of the Environment and Climate Change		
01-04	Constraint on Environmental Compliance Approvals	Ministry of the Environment and Climate Change		
01-05	Siting of PCB Waste Storage	Ministry of the Environment and Climate Change		
01-06	Official Plan and Zoning By-law Amendment for Waste Disposal Sites	Municipality		
01-07	Waste Diversion	Municipality		
Threat 2: The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage				
02-01	Sewer Connection By-law	Municipality		
02-02	Approval of Environmental Compliance Approvals for On-site Sewage Systems	Ministry of the Environment and Climate Change		
02-03	Constraint on Environmental Compliance Approvals for On-site Sewage Systems	Ministry of the Environment and Climate Change		
02-04	Maintenance Inspection Program	Municipality		
02-05	Sewer Requirement for New Lots	Municipality		
02-06	Building Code Changes Related to On-site Sewage Systems	Ministry of Municipal Affairs and Housing		
02-07	Review of Environmental Compliance Approvals for Sewage Works	Ministry of the Environment and Climate Change		

	Policy Text ID	Policy Name	Implementation	
	Threat 2: The establishment, operation or maintenance of a system that collects, stor			
	transmit	s, treats or disposes of sewage		
	02-08	Constraint on Environmental Compliance	Ministry of the Environment	
		Approvals for Sewage Works	and Climate Change	
	02-09	Sewer Maintenance	Municipality	
	02-10	Sewer Locating Program	Municipality	
	02-11	Stormwater Management Review	Municipality	
	02-12	Separation of Combined Sewers	Municipality	
	02-13	Infiltration Prevention	Municipality	
	02-14	Design Principles for New Development	Municipality	
	Threat 3	: The application of agricultural source material to la	and	
\Diamond	03-01*	Prohibition	RMO	
Ť	03-02*	Risk Management Plan	RMO	
	Threat 4	: The storage of agricultural source material		
\Diamond	04-01	Prohibition	RMO	
Ť	04-02	Risk Management Plan – Permanent Nutrient Storage Facility	RMO	
	04-03	Risk Management Plan – Temporary Field Nutrient Storage Site	RMO	
	04-04	Constraint on Nutrient Management Approvals	Ministry of Agriculture, Food and Rural Affairs	
	Threat 6	: The application of non-agricultural source materia	l to land	
\Diamond	06-01*	Prohibition	RMO	
•	06-02*	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs	
	Threat 7	: The handling and storage of non-agricultural sourc	e material	
\Diamond	07-01	Prohibition	RMO	
·	07-02	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs	
	Threat 8	: The application of commercial fertilizer to land		
\Diamond	08-01*	Prohibition	RMO	
	08-02*	Risk Management Plan	RMO	
	Threat 9	: The handling and storage of commercial fertilizer		
	09-01	Risk Management Plan	RMO	
	Threat 1	0: The application of pesticide to land		
	10-01	Environmental Compliance Approvals	Ministry of the Environment and Climate Change	
	10-02	Risk Management Plan	RMO	

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-A	10	RED
WHPA-B	10	RED

NOTE:

Policy Text IDs marked with \spadesuit to the left indicate that the policy only applies in WHPA-A.

	Policy Text ID	Policy Name	Implementation
	Threat 11: The handling and storage of pesticide		
	11-01	Prohibition	RMO
	11-02	Risk Management Plan	RMO
	Threat 12	2: The application of road salt	
	12-01†	Risk Management Plan	RMO
	Threat 13	3: The handling and storage of road salt	
	13-01	Prohibition	RMO
	Threat 14	4: The storage of snow	
	14-01	Prohibition	RMO
	14-02	Risk Management Plan for Snow Storage	RMO
	Threat 15	5: The handling and storage of fuel	
	15-01	Prohibition of Certain Fuel Facilities	RMO
	15-02	Risk Management Plan for Small Fuel Facilities	RMO
	15-03	Risk Management Plan for Certain Fuel Facilities	RMO
	Threat 16: The handling and storage of a dense non-aqueous phase liquid (DNAPLs)		ase liquid (DNAPLs)
	16-01	Prohibition	RMO
	16-02	Risk Management Plan	RMO
	16-03	Sewer Use By-law	Municipality
	Threat 17	7: The handling and storage of an organic solvent	
	17-01	Prohibition	RMO
	17-02	Risk Management Plan	RMO
	17-03	Sewer Use By-law	Municipality
		8: The management of runoff that contains chemicals us	
	18-01	Prohibition	RMO
	Threat 21: The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard		an outdoor confinement area
\Diamond	21-01	Prohibition	RMO
	21-02	Risk Management Plan - Grazing or Pasturing	RMO
	21-03	Risk Management Plan - Confinement Area or Yard	RMO
	21-04	Constraint on Nutrient Management Approvals - Confinement Area or Yard	Ministry of Agriculture, Food and Rural Affairs

Table 5.4.1. Policies that apply within WHPA-A or WHPA-B, where *continued* the vulnerability score is 10

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-A	10	RED
WHPA-B	10	RED

NOTE:

Policy Text IDs marked with \spadesuit to the left indicate that the policy only applies in WHPA-A.

Policy	Policy Name	Implementation
Text ID		
General	: Policies applying to multiple threat categories	
G-01	Restricted Land Use – Non-residential	RMO/ Municipality
G-02	Restricted Land Use – Residential	RMO/ Municipality
G-04	Amend Official Plan and Zoning By-law	Municipality
G-05	Incentive Program	Ministry of the Environment
		and Climate Change/ Ministry
		of Agriculture, Food and Rural Affairs
G-06	Education Program	Conservation Authorities
G-07	Vulnerable Area Road Signs	Ministry of Transportation/
		Municipality
G-08	Hazardous Waste Disposal Opportunity	Municipality
G-09	Hazardous Waste Collection Program	Municipality
G-10	Transition Provisions	All those named in other
		Source Protection Plan
		policies
G-11	Financial Support Fund	Ministry of the Environment
		and Climate Change/ Ministry
		of Agriculture, Food and Rural
		Affairs
G-12	Municipal/Conservation Authority Implementation	Ministry of the Environment
	Assistance	and Climate Change
G-13	Update of Municipal Emergency Response Plans	Municipality
G-14	Compliance Monitoring for Prescribed Instruments	Ministry of the Environment
		and Climate Change/
		Ministry of Agriculture, Food
		and Rural Affairs/Ministry of
		Natural Resources and Forests

Details about circumstances that would make policies listed in Table 5.4.1 apply to an activity can be found in:

• Appendix D.1 "PROVINCIAL TABLE 1 (CW10S): Chemicals in a WHPA with a vulnerability score of 10 where threats are significant."

- Appendix D.2 "PROVINCIAL TABLE 12 (PW10S): Pathogens in WHPA A, B with a vulnerability of 10 where threats are significant"
- Appendix D.4 "PROVINCIAL TABLE 9 (DWAS): DNAPLS in WHPA A, B, C, C1, with any vulnerability where threats are significant."
- * These policies require referencing mapping of managed lands and livestock density in the assessment reports (in combination with the vulnerability scoring) to determine where these policies would apply.
- † These policies require referencing mapping impervious surface area in the assessment reports (in combination with the vulnerability scoring) to determine where these policies would apply.

Table 5.4.2. Policies that apply within WHPA-B, where the vulnerability score is 8

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-B	8	ORANGE

Policy Text ID	Policy Name	Implementation	
	Threat 1: The establishment, operation or maintenance of a waste disposal site within the meaning		
	of Part V of the Environmental Protection Act		
01-03	Review of Environmental Compliance Approvals	Ministry of the Environment and	
	The state of the s	Climate Change	
01-04	Constraint on Environmental Compliance Approvals	Ministry of the Environment and	
	, ,,,	Climate Change	
01-06	Official Plan and Zoning By-law Amendment	Municipality	
01-07	Waste Diversion	Municipality	
Threat 2:	The establishment, operation or maintenance of a syste	m that collects, stores, transmits,	
treats or	disposes of sewage		
02-07	Review of Environmental Compliance Approvals for	Ministry of the Environment and	
	Sewage Works	Climate Change	
02-08	Constraint on Environmental Compliance Approvals	Ministry of the Environment and	
	for Sewage Works	Climate Change	
Threat 16	5: The handling and storage of a dense non-aqueous pha	se liquid (DNAPLs)	
16-01	Prohibition	RMO	
16-02	Risk Management Plan	RMO	
16-03	Sewer Use By-law	Municipality	
General:	General: Policies applying to multiple threat categories		
G-01	Restricted Land Use – Non-residential	RMO/Municipality	
G-02	Restricted Land Use – Residential	RMO/Municipality	
G-04	Amend Official Plan and Zoning By-law	Municipality	
G-06	Education Program	Conservation Authority	
G-07	Vulnerable Area Road Signs	Municipality /Ministry of	
		Transportation	
G-08	Hazardous Waste Disposal Opportunity	Municipality	
G-09	Hazardous Waste Collection Program	Municipality	
G-10	Transition Provisions	All those named in other source	
		protection plan policies	
G-11	Financial Support Fund	Ministry of the Environment and	
		Climate Change/ Ministry of	
		Agriculture, Food and Rural	
		Affairs	
G-12	Municipal/Conservation Authority Implementation	Ministry of the Environment and	
	Assistance	Climate Change	
G-13	Update of Municipal Emergency Response Plans	Municipality	

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-B	8	ORANGE

Policy Text ID	Policy Name	Implementation
G-14	Compliance Monitoring for Prescribed Instruments	Ministry of the Environment and Climate Change/ Ministry of Agriculture, Food and Rural Affairs/Ministry of Natural Resources and Forests

Details about circumstances that would make policies listed in Table 5.4.2 apply to an activity can be found in:

- Appendix D.3 "PROVINCIAL TABLE 2 (CW8S): Chemicals in a WHPA with a vulnerability score of 8 where threats are significant."
- Appendix D.4 "PROVINCIAL TABLE 9 (DWAS): DNAPLS in WHPA A, B, C, C1, with any vulnerability where threats are significant."

Table 5.4.3. Policies that apply within WHPA-B, where the vulnerability score is 6, or WHPA-C, where the vulnerability score is 8 or 6 or 4

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-B	6	YELLOW
WHPA-C	8	ORANGE
	6	YELLOW
	4	MEDIUM GREEN

Policy	Policy Name	Implementation
Text ID	 5: The handling and storage of a dense non-aqueous phase	liquid (DNADLs)
16-01	Prohibition	RMO
16-02	Risk Management Plan	RMO
16-03	Sewer Use By-law	Municipality
	Policies applying to multiple threat categories	
G-01	Restricted Land Use – Non-residential	RMO/ Municipality
G-02	Restricted Land Use – Residential	RMO/ Municipality
G-04	Amend Official Plan and Zoning By-law	Municipality
G-06	Education Program	Conservation Authority
G-08	Hazardous Waste Disposal Opportunity	Municipality
G-09	Hazardous Waste Collection Program	Municipality
G-10	Transition Provisions	All those named in other
		source protection plan policies
G-11	Financial Support Fund	Ministry of the Environment
		and Climate Change/ Ministry
		of Agriculture, Food and Rural
		Affairs
G-12	Municipal/Conservation Authority Implementation	Ministry of the Environment
	Assistance	and Climate Change
G-13	Update of Municipal Emergency Response Plans	Municipality
G-14	Compliance Monitoring for Prescribed Instruments	Ministry of the Environment
		and Climate Change/
		Ministry of Agriculture, Food
		and Rural Affairs/Ministry of
		Natural Resources and Forests

Details about circumstances that would make policies listed in Table 5.4.3 apply to an activity can be found in:

• Appendix D.4 "PROVINCIAL TABLE 9 (DWAS): DNAPLS in WHPA A, B, C, C1, with any vulnerability where threats are significant."

Table 5.4.4. Policies that apply within WHPA-E, where the vulnerability score is 9

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-E	9	ORANGE

Policy Text ID	Policy Name	Implementation
Threat 1: The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i>		
01-01	Risk Management Plan for Hazardous Waste or Liquid Industrial Waste	RMO (Risk Management Official)
01-02	Risk Management Plan for Waste Described in clause (p), (q), (r), (s), (t) or (u)	RMO
01-03	Review of Environmental Compliance Approvals	Ministry of the Environment and Climate Change
01-04	Constraint on Environmental Compliance Approvals	Ministry of the Environment and Climate Change
01-06	Official Plan and Zoning By-law Amendment for Waste Disposal Sites	Municipality
01-07	Waste Diversion	Municipality
	The establishment, operation or maintenance of a system disposes of sewage	that collects, stores, transmits,
02-07	Review of Environmental Compliance Approvals for Sewage Works	Ministry of the Environment and Climate Change
02-08	Constraint on Environmental Compliance Approvals for Sewage Works	Ministry of the Environment and Climate Change
02-09	Sewer Maintenance	Municipality
02-10	Sewer Locating Program	Municipality
02-11	Stormwater Management Review	Municipality
02-12	Separation of Combined Sewers	Municipality
02-13	Infiltration Prevention	Municipality
02-14	Design Principles for New Development	Municipality
Threat 4:	The storage of agricultural source material	
04-02	Risk Management Plan – Permanent Nutrient Storage Facility	RMO
04-03	Risk Management Plan – Temporary Field Nutrient Storage Site	RMO
04-04	Constraint on Nutrient Management Approvals	Ministry of Agriculture, Food and Rural Affairs
Threat 6:	The application of non-agricultural source material to land	
06-02*	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs

Table 5.4.4. Policies that apply within WHPA-E, where the vulnerability *continued* score is 9

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-E	9	ORANGE

Policy	Policy Name	Implementation	
Text ID			
	The handling and storage of non-agricultural source mater		
07-02	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs	
Threat 8:	The application of commercial fertilizer to land		
08-02*	Risk Management Plan	RMO	
Threat 10	D: The application of pesticide to land		
10-01	Environmental Compliance Approvals	Ministry of the Environment and Climate Change	
Threat 11	1: The handling and storage of pesticide		
11-02	Risk Management Plan	RMO	
Threat 12	Threat 12: The application of road salt		
12-01†	Risk Management Plan	RMO	
Threat 13	Threat 13: The handling and storage of road salt		
13-01	Prohibition	RMO	
Threat 14	4: The storage of snow		
14-01	Prohibition	RMO	
14-02	Risk Management Plan	RMO	
Threat 15	5: The handling and storage of fuel		
15-01	Prohibition of Certain Fuel Facilities	RMO	
15-02	Risk Management Plan for Small Fuel Facilities	RMO	
15-03	Risk Management Plan for Cetain Fuel Facilities	RMO	
Threat 21: The use of land as livestock grazing or pasturing land, an outdoor confinement area or a			
farm-anii	mal yard		
21-02	Risk Management Plan - Grazing or Pasturing	RMO	
21-03	Risk Management Plan - Confinement Area or Yard	RMO	
21-04	Constraint on Nutrient Management Approvals - Confinement Area or Yard	Ministry of Agriculture, Food and Rural Affairs	

Table 5.4.4. Policies that apply within WHPA-E, where the vulnerability continued score is 9

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-E	9	ORANGE

Policy	Policy Name	Implementation
Text ID		
General:	Policies applying to multiple threat categories	
G-01	Restricted Land Use – Non-residential	RMO/ Municipality
G-02	Restricted Land Use – Residential	RMO/ Municipality
G-04	Amend Official Plan and Zoning By-law	Municipality
G-05	Incentive Program	Ministry of the Environment and Climate Change/ Ministry of Agriculture, Food and Rural Affairs
G-06	Education Program	Conservation Authorities
G-07	Vulnerable Area Road Signs	Ministry of Transportation / Municipality
G-10	Transitions Provisions	All those named in other source protection plan policies
G-11	Financial Support Fund	Ministry of the Environment and Climate Change/ Ministry of Agriculture, Food and Rural Affairs
G-12	Municipal/Conservation Authority Implementation Assistance	Ministry of the Environment and Climate Change
G-13	Update of Municipal Emergency Response Plans	Municipality
G-14	Compliance Monitoring for Prescribed Instruments	Ministry of the Environment and Climate Change/ Ministry of Agriculture, Food and Rural Affairs/Ministry of Natural Resources and Forests

Details about circumstances that would make policies listed in Table 5.4.4 apply to an activity can be found in:

- Appendix D.7 "PROVINCIAL TABLE 20 (CIPZWE9S): Chemicals in an IPZ or WHPA-E where the vulnerability score is 9 where threats are significant."
- Appendix D.8 "PROVINCIAL TABLE 46 (PIPZWE9S): Pathogens in an IPZ or WHPA-E with a vulnerability of 9 where threats are significant."
- * These policies require referencing mapping of managed lands and livestock density in the assessment reports (in combination with the vulnerability scoring) to determine where these policies would apply.
- † These policies require referencing mapping impervious surface area in the assessment reports (in combination with the vulnerability scoring) to determine where these policies would apply.

Table 5.4.5. Policies that apply within WHPA-E, where the vulnerability score is 8

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-E	8	ORANGE

Policy Text ID	Policy Name	Implementation	
	The establishment, eneration or maintenance of a waste of	lisposal sita within the meaning	
	Threat 1: The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i>		
01-03	Review of Environmental Compliance Approvals	Ministry of the Environment	
		and Climate Change	
01-04	Constraint on Environmental Compliance Approvals	Ministry of the Environment	
		and Climate Change	
Threat 2:	The establishment, operation or maintenance of a system	that collects, stores, transmits,	
treats or	disposes of sewage		
02-07	Review of Environmental Compliance Approvals for	Ministry of the Environment	
	Sewage Works	and Climate Change	
02-08	Constraint on Environmental Compliance Approvals for	Ministry of the Environment	
	Sewage Works	and Climate Change	
02-11	Stormwater Management Review	Municipality	
02-12	Separation of Combined Sewers	Municipality	
02-13	Infiltration Prevention	Municipality	
02-14	Design Principles for New Development	Municipality	
Threat 3:	The application of agricultural source material to land		
03-02	Risk Management Plan	RMO	
Threat 4:	Threat 4: The storage of agricultural source material		
04-02	Risk Management Plan – Permanent Nutrient Storage Facility	RMO	
04-03	Risk Management Plan – Temporary Field Nutrient Storage Site	RMO	
04-04	Constraint on Nutrient Management Approvals	Ministry of Agriculture, Food	
		and Rural Affairs	
Threat 6:	The application of non-agricultural source material to land		
06-02	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs	
Threat 7:	Threat 7: The handling and storage of non-agricultural source material		
07-02	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs	
Threat 21	1: The use of land as livestock grazing or pasturing land, an	outdoor confinement area or a	
farm-anii			
21-02	Risk Management Plan - Grazing or Pasturing	RMO	
21-03	Risk Management Plan - Confinement Area or Yard	RMO	
21-04	Constraint on Nutrient Management Approvals -	Ministry of Agriculture, Food	
	Confinement Area or Yard	and Rural Affairs	

Table 5.4.5. Policies that apply within WHPA-E, where the vulnerability *continued* score is 8

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-E	8	ORANGE

Policy	Policy Name	Implementation
Text ID		
General:	Policies applying to multiple threat categories	
G-01	Restricted Land Use – Non-residential	RMO/ Municipality
G-02	Restricted Land Use – Residential	RMO/ Municipality
G-04	Amend Official Plan and Zoning By-law	Municipality
G-05	Incentive Program	Ministry of the Environment and Climate Change/ Ministry of Agriculture, Food and Rural Affairs
G-06	Education Program	Conservation Authorities
G-07	Vulnerable Area Road Signs	Ministry of Transportation / Municipality
G-10	Transition Provisions	All those named in other source protection plan policies
G-11	Financial Support Fund	Ministry of the Environment and Climate Change/ Ministry of Agriculture, Food and Rural Affairs
G-12	Municipal/Conservation Authority Implementation Assistance	Ministry of the Environment and Climate Change
G-13	Update of Municipal Emergency Response Plans	Municipality
G-14	Compliance Monitoring for Prescribed Instruments	Ministry of the Environment and Climate Change/ Ministry of Agriculture, Food and Rural Affairs/Ministry of Natural Resources and Forests

Details about circumstances that would make policies listed in Table 5.4.4 apply to an activity can be found in:

- Appendix D.9 "PROVINCIAL TABLE 22 (CIPZWE8S): Chemicals in an IPZ or WHPA-E where the vulnerability score is 8 where threats are significant."
- Appendix D.10 "PROVINCIAL TABLE 48 (PIPZWE8S): Pathogens in an IPZ or WHPA-E with a vulnerability of 8 where threats are significant."

Table 5.4.6. Policies that apply within IPZ-1, where the vulnerability score is 10

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
IPZ-1	10	RED

Policy	Policy Name	Implementation
Text ID	 : The establishment, operation or maintenance of a waste d	ispesal site within the meaning
	of the Environmental Protection Act	isposal site within the meaning
01-01	Risk Management Plan for Hazardous Waste or Liquid	RMO (Risk Management
01-01	Industrial Waste	Official)
01-02	Risk Management Plan for Waste Described in clause (p),	RMO
01 02	(q), (r), (s), (t) or (u)	Milio
01-03	Review of Environmental Compliance Approvals	Ministry of the Environment
		and Climate Change
01-04	Constraint on Environmental Compliance Approvals	Ministry of the Environment
	' ''	and Climate Change
01-05	Siting of PCB Waste Storage	Ministry of the Environment
		and Climate Change
01-06	Official Plan and Zoning By-law Amendment for Waste	Municipality
	Disposal Sites	
01-07	Waste Diversion	Municipality
Threat 2:	The establishment, operation or maintenance of a system	that collects, stores, transmits,
treats or	disposes of sewage	
02-01	Sewer Connection By-law	Municipality
02-02	Approval of Environmental Compliance Approvals for	Ministry of the Environment
	On-site Sewage Systems	and Climate Change
02-03	Constraint on Environmental Compliance Approvals for	Ministry of the Environment
	On-site Sewage Systems	and Climate Change
02-04	Maintenance Inspection Program	Municipality
02-05	Sewer Requirement for New Lots	Municipality
02-06	Building Code Changes Related to On-site Sewage	Ministry of Municipal Affairs
	Systems	and Housing
02-07	Review of Environmental Compliance Approvals for	Ministry of the Environment
	Sewage Works	and Climate Change
02-08	Constraint on Environmental Compliance Approvals for	Ministry of the Environment
	Sewage Works	and Climate Change
02-09	Sewer Maintenance	Municipality
02-10	Sewer Locating Program	Municipality
02-11	Stormwater Management Review	Municipality
02-12	Separation of Combined Sewers	Municipality
02-13	Infiltration Prevention	Municipality
02-14	Design Principles for New Development	Municipality

Table 5.4.6. Policies that apply within IPZ-1, where the vulnerability score is 10

continued

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
IPZ-1	10	RED

Policy Text ID	Policy Name	Implementation	
	Threat 3: The application of agricultural source material to land		
03-02*	Risk Management Plan	RMO	
	The storage of agricultural source material		
04-02	Risk Management Plan – Permanent Nutrient Storage Facility	RMO	
04-03	Risk Management Plan – Temporary Field Nutrient Storage Site	RMO	
04-04	Constraint on Nutrient Management Approvals	Ministry of Agriculture, Food and Rural Affairs	
Threat 6:	The application of non-agricultural source material to land	d	
06-02*	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs	
Threat 7:	The handling and storage of non-agricultural source mate	rial	
07-02	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs	
Threat 8:	The application of commercial fertilizer to land		
08-02*	Risk Management Plan	RMO	
Threat 9:	The handling and storage of commercial fertilizer		
09-01	Risk Management Plan	RMO	
Threat 10: The application of pesticide to land			
10-01	Environmental Compliance Approvals	Ministry of the Environment and Climate Change	
10-02	Risk Management Plan	RMO	
Threat 13	L: The handling and storage of pesticide		
11-02	Risk Management Plan	RMO	
Threat 12	2: The application of road salt		
12-01†	Risk Management Plan	RMO	
Threat 13	3: The handling and storage of road salt		
13-01	Prohibition	RMO	
Threat 14	1: The storage of snow		
14-01	Prohibition	RMO	
14-02	Risk Management Plan	RMO	
Threat 15	5: The handling and storage of fuel		
15-01	Prohibition of Certain Fuel Facilities	RMO	
15-02	Risk Management Plan for Small Fuel Facilities	RMO	
15-03	Risk Management Plan for Certain Fuel Facilities	RMO	

Table 5.4.6. Policies that apply within IPZ-1, where the vulnerability score is 10

continued

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
IPZ-1	10	RED

Policy	Policy Name	Implementation	
	Text ID Threat 16: The handling and storage of a dense non-aqueous phase liquid (DNAPLs)		
16-01	Prohibition	RMO	
16-02	Risk Management Plan	RMO	
16-03	Sewer Use By-law	Municipality	
	7: The handling and storage of an organic solvent		
17-01	Prohibition	RMO	
17-02	Risk Management Plan	RMO	
17-03	Sewer Use By-law	Municipality	
	8: The management of runoff that contains chemicals used		
18-01	Prohibition	RMO	
	1: The use of land as livestock grazing or pasturing land, ar		
farm-ani			
21-02	Risk Management Plan - Grazing or Pasturing	RMO	
21-03	Risk Management Plan - Confinement Area or Yard	RMO	
21-04	Constraint on Nutrient Management Approvals -	Ministry of Agriculture, Food	
	Confinement Area or Yard	and Rural Affairs	
General:	Policies applying to multiple threat categories		
G-01	Restricted Land Use – Non-residential	RMO/ Municipality	
G-02	Restricted Land Use – Residential	RMO/ Municipality	
G-04	Amend Official Plan and Zoning By-law	Municipality	
G-05	Incentive Program	Ministry of the Environment	
		and Climate Change/	
		Ministry of Agriculture, Food	
		and Rural Affairs	
G-06	Education Program	Conservation Authority	
G-07	Vulnerable Area Road Signs	Ministry of Transportation /	
		Municipality	
G-08	Hazardous Waste Disposal Opportunity	Municipality	
G-09	Hazardous Waste Collection Program	Municipality	
G-10	Transition Provisions	All those named in other	
		source protection plan policies	
G-11	Financial Support Fund	Ministry of the Environment	
		and Climate Change/ Ministry	
		of Agriculture, Food and Rural	
		Affairs	
G-12	Municipal/Conservation Authority Implementation	Ministry of the Environment	
	Assistance	and Climate Change	

The table below shows policies that apply in these zones

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
IPZ-1	10	RED

G-13	Update of Municipal Emergency Response Plans	Municipality
G-14	Compliance Monitoring for Prescribed Instruments	Ministry of the Environment
		and Climate Change/
		Ministry of Agriculture, Food
		and Rural Affairs/Ministry of
		Natural Resources and Forests

Details about circumstances that would make policies listed in Table 5.4.5 apply to an activity can be found in:

- Appendix D.5 "PROVINCIAL TABLE 19 (CIPZ10S): Chemicals in an IPZ with a vulnerability of 10 where threats are significant."
- Appendix D.6 "PROVINCIAL TABLE 45 (PIPZ10S): Pathogens in an IPZ with a vulnerability of 10 where threats are significant."
- * These policies require referencing mapping of managed lands and livestock density in the assessment reports (in combination with the vulnerability scoring) to determine where these policies would apply.
- † These policies require referencing mapping impervious surface area in the assessment reports (in combination with the vulnerability scoring) to determine where these policies would apply.

Table 5.4.7. Policies that apply within IPZ-2, where the vulnerability score is 8

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
IPZ-2	8	ORANGE

Policy	Policy Name	Implementation		
	Text ID			
	Threat 1: The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i>			
01-03		Ministry of the Environment and		
01-03	Review of Environmental Compliance Approvals	Ministry of the Environment and Climate Change		
01-04	Constraint on Environmental Compliance Approvals	Ministry of the Environment and		
01-04	Constraint on Environmental Compliance Approvais	Climate Change		
Threat 2:	The establishment, operation or maintenance of a syster	<u> </u>		
	disposes of sewage	in that concets, stores, transmits,		
02-07	Review of Environmental Compliance Approvals for	Ministry of the Environment and		
	Sewage Works	Climate Change		
02-08	Constraint on Environmental Compliance Approvals	Ministry of the Environment and		
	for Sewage Works	Climate Change		
02-11	Stormwater Management Review	Municipality		
02-12	Separation of Combined Sewers	Municipality		
02-13	Infiltration Prevention	Municipality		
02-14	Design Principles for New Development	Municipality		
Threat 3:	The application of agricultural source material to land			
03-02*	Risk Management Plan	RMO		
Threat 4:	Threat 4: The storage of agricultural source material			
04-02	Risk Management Plan – Permanent Nutrient Storage Facility	RMO		
04-03	Risk Management Plan – Temporary Field Nutrient Storage Site	RMO		
04-04	Constraint on Nutrient Management Approvals	Ministry of Agriculture, Food and Rural Affairs		
Threat 6:	The application of non-agricultural source material to lar	nd		
06-02*	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs		
Threat 7:	Threat 7: The handling and storage of non-agricultural source material			
07-02	Non-agricultural Source Material Plan Approvals	Ministry of Agriculture, Food and Rural Affairs		
Threat 22	Threat 21: The use of land as livestock grazing or pasturing land, an outdoor confinement area or a			
farm-animal yard				
21-02	Risk Management Plan - Grazing or Pasturing	RMO		
21-03	Risk Management Plan - Confinement Area or Yard	RMO		
21-04	Constraint on Nutrient Management Approvals -	Ministry of Agriculture, Food and		
	Confinement Area or Yard	Rural Affairs		

Table 5.4.7. Policies that apply within IPZ-2, where the vulnerability score is 8

continued

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
IPZ-2	8	ORANGE

Policy	Policy Name	Implementation
Text ID		
General:	Policies applying to multiple threat categories	
G-01	Restricted Land Use – Non-residential	RMO/ Municipality
G-04	Amend Official Plan and Zoning By-law	Municipality
G-05	Incentive Program	Ministry of the Environment and
		Climate Change/
		Ministry of Agriculture, Food and
		Rural Affairs
G-06	Education Program	Conservation Authority
G-07	Vulnerable Area Road Signs	Ministry of Transportation /
		Municipality
G-10	Transition Provisions	All those named in other source
		protection plan policies
G-11	Financial Support Fund	Ministry of the Environment and
		Climate Change/ Ministry of
		Agriculture, Food and Rural
		Affairs
G-12	Municipal/Conservation Authority Implementation	Ministry of the Environment and
	Assistance	Climate Change
G-13	Update of Municipal Emergency Response Plans	Municipality
G-14	Compliance Monitoring for Prescribed Instruments	Ministry of the Environment and
		Climate Change/
		Ministry of Agriculture, Food and
		Rural Affairs/Ministry of Natural
		Resources and Forests

Details about circumstances that would make policies listed in Table 5.4.6 apply to an activity can be found in:

- Appendix D.9 "PROVINCIAL TABLE 22 (CIPZWE8S): Chemicals in an IPZ or WHPA-E where the vulnerability score is 8 where threats are significant."
- Appendix D.10 "PROVINCIAL TABLE 48 (PIPZWE8S): Pathogens in an IPZ or WHPA-E with a vulnerability of 8 where threats are significant."
- * These policies require referencing mapping of managed lands and livestock density in the assessment reports (in combination with the vulnerability scoring) to determine where these policies would apply.

Table 5.4.8a. Policies that apply to Transport Pathways in WHPA-A, where the vulnerability score is 10

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-A	10	RED

Policy Text ID	Policy Name	Implementation
TP-01	Municipal By-law for Geothermal Systems	Municipality
TP-02	Municipal By-law for Water Connection	Municipality
TP-03	Circulation of Proposals with New Transport Pathways	Municipality
TP-04	Water Services for New Lots	Municipality
TP-05	Provincial Legislation for Geothermal Systems	Ministry of the Environment and Climate Change
TP-06	Provincial Permitting System for New Wells	Ministry of the Environment and Climate Change
TP-07	Building Code Changes	Ministry of Municipal Affairs and Housing
TP-08	O. Reg. 903 Changes Constraining Well Location	Ministry of the Environment and Climate Change
TP-09	Pilot Project to Locate Unidentified Wells	Municipality/
		Ministry of the Environment and
		Climate Change/
		Conservation Authorities
TP-10	Incentive Program for Wells	Ministry of the Environment and
		Climate Change
TP-11	Education Program – Transport Pathways	Conservation Authorities

Table 5.4.8b. Policies that apply to Transport Pathways in WHPA-B, where the vulnerability score is 10 or 8 or 6

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-B	10	RED
WHPA-B	8	ORANGE
WHPA-B	6	YELLOW

Policy	Policy Name	Implementation
Text ID		
TP-01	Municipal By-law for Geothermal Systems	Municipality
TP-02	Municipal By-law for Water Connection	Municipality
TP-03	Circulation of Proposals with New Transport Pathways	Municipality
TP-04	Water Services for New Lots	Municipality
TP-05	Provincial Legislation for Geothermal Systems	Ministry of the Environment and
		Climate Change
TP-06	Provincial Permitting System for New Wells	Ministry of the Environment and
		Climate Change
TP-07	Building Code Changes	Ministry of Municipal Affairs and
		Housing
TP-08	Pilot Project to Locate Unidentified Wells	Ministry of the Environment and
		Climate Change /
		Municipality/
		Conservation Authorities
TP-10	Incentive Program for Wells	Ministry of the Environment and
		Climate Change
TP-11	Education Program – Transport Pathways	Conservation Authorities

Table 5.4.8c. Policies that apply to Transport Pathways in WHPA-E, where the vulnerability score is 8

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-E	8	ORANGE

Policy	Policy Name	Implementation
Text ID		
TP-03	Circulation of Proposals with New Transport Pathways	Municipality
TP-05	Provincial Legislation for Geothermal Systems	Ministry of the
		Environment and Climate
		Change
TP-11	Education Program – Transport Pathways	Conservation Authorities

Table 5.4.8d. Policies that apply to Transport Pathways in IPZ-1, where the vulnerability score is 10

The table below shows policies that apply in these zones.

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
IPZ-1	10	RED

Policy	Policy Name	Implementation
Text ID		
TP-03	Circulation of Proposals with New Transport Pathways	Municipality
TP-05	Provincial Legislation for Geothermal Systems	Ministry of the Environment and
		Climate Change
TP-11	Education Program – Transport Pathways	Conservation Authorities

Table 5.4.8e. Policies that apply to Transport Pathways in IPZ-2, where the vulnerability score is 8

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
IPZ-2	8	ORANGE

Policy	Policy Name	Implementation
Text ID		
TP-03	Circulation of Proposals with New Transport Pathways	Municipality
TP-05	Provincial Legislation for Geothermal Systems	Ministry of the Environment and
		Climate Change
TP-11	Education Program – Transport Pathways	Conservation Authorities

Table 5.4.9. Policies that apply within Events-based areas (EBA)

The table below shows policies that apply in these zones

Vulnerable Area: Vulnerability Score		Colour of Zone on Map:
EBA		See maps

Policy Text ID	Policy Name	Implementation			
Threat 15	Threat 15: The handling and storage of fuel				
15-04	Prohibition RMO				
15-05	Risk Management Plan	RMO			
General:	Policies applying to multiple threat categories				
G-01	Restricted Land Use – Non-residential	RMO/ Municipality			
G-02	Restricted Land Use – Residential	RMO/ Municipality			
G-03	Restricted Land Use – Non Residential for Fuel Near	RMO/ Municipality			
	Intakes				
G-04	Amend Official Plan and Zoning By-law	Municipality			
G-05	Incentive Program	Ministry of the Environment			
		and Climate Change/			
		Ministry of Agriculture, Food			
		and Rural Affairs			
G-06	Education Program	Conservation Authority			
G-11	Financial Support Fund	Ministry of the Environment			
		and Climate Change/ Ministry			
		of Agriculture, Food and Rural			
		Affairs			
G-12	Municipal/Conservation Authority Implementation	Ministry of the Environment			
	Assistance	and Climate Change			

Specific fuel quantity thresholds for each of seven Great Lakes Intakes are shown on their individual maps.

Table 5.4.10. Policies that apply within WHPA-Q

The table below shows policies that apply in this zone

Vulnerable Area: Vulnerability Score:		Colour of Zone on Map:
WHPA-Q		See maps

Policy	Policy Name	Implementation	
Text ID			
Threat 19	9: An Activity That Takes Water From an Aquifer or a Surface	e Water Body Without Returning	
the Wate	er Taken to the Same Aquifer or Surface Water Body		
19-01	Review of Permits to Take Water	Ministry of the Environment	
		and Climate Change	
19-02	Ongoing Tier 3 Model Maintenance	Ministry of the Environment	
		and Climate Change	
19-03	Water Management Plan	Municipality	
19-04	Collaboration with Other Agencies	Municipality	

The table below shows policies that apply in this zone

Vulnerable Area:	Vulnerability Score:	Colour of Zone on Map:
WHPA-Q		See maps

General:	General: Policies applying to multiple threat categories				
G-01	Restricted Land Use – Non-residential	RMO/ Municipality			
G-02	Restricted Land Use – Residential	RMO/ Municipality			
G-04	Amend Official Plan and Zoning By-law	Municipality			
G-05	Incentive Program	Ministry of the Environment			
		and Climate Change/			
		Ministry of Agriculture, Food			
		and Rural Affairs			
G-06	Education Program	Conservation Authority			
G-11	Financial Support Fund	Ministry of the Environment			
		and Climate Change/ Ministry			
		of Agriculture, Food and Rural			
		Affairs			
G-12	Municipal/Conservation Authority Implementation	Ministry of the Environment			
	Assistance	and Climate Change			
G-14	Compliance Monitoring for Prescribed Instruments	Ministry of the Environment			
		and Climate Change/			
		Ministry of Agriculture, Food			
		and Rural Affairs/Ministry of			
		Natural Resources and Forests			

5.5 Viewing Vulnerable Areas

Maps have been provided on the following pages for each of the vulnerable areas where policies apply. The maps are organized by municipality. The extent of the vulnerable areas can be seen by turning to the maps. The colours on the tables in Section 5.4 match the colours found on the maps.

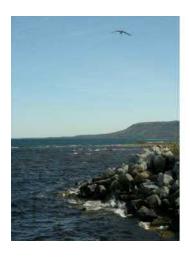
The map set only includes areas where significant drinking water threats could occur (see section 5.3.1 for a list of areas). The vulnerability score for certain systems is lower in value, so that activities do not reach the significant drinking water threat level. This includes the East Linton Water Treatment Plant.

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Chapter 6

Source Protection Plan Policies







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6.0 Source Protection Plan Policies

6.1 Policies Applying to Prescribed Drinking Water Threat Categories

Policies in this section describe the required actions related to particular categories of prescribed drinking water threats. Summary lists of the policies for each threat category are provided in Table 6.1.1. The text of the policies can be found in section 6.1, organized in numerical order. One or more 'general' policies (starting with the letter 'G') also apply to each threat category and can be found in section 6.2. In the tables below, RMO means Risk Management Official.

Table 6.1.1 – Summary of Policies that Apply to Prescribed Drinking Water Threat Categories

Threat 1. The Establishment, Operation or Maintenance of a Waste Disposal Site Within the Meaning of Part V of the <i>Environmental Protection Act</i>				
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)
01-01	Risk Management Plan for Hazardous or Liquid Industrial Wastes with Environmental Compliance Approval	Risk Management Plan	RMO	Existing, Future
01-02	Risk Management Plan for Hazardous or Liquid Industrial Wastes without Environmental Compliance Approval	Risk Management Plan	RMO	Existing, Future
01-03	Review of Environmental Compliance Approvals	Prescribed Instrument	Ministry of the Environment, Conservation, and Parks	Existing
01-04	Constraint on Environmental Compliance Approvals	Prescribed Instrument	Ministry of the Environment, Conservation, and Parks	Future
01-05	Siting of PCB Waste Storage	Specify Action	Ministry of the Environment, Conservation, and Parks	Existing, Future
01-06	Official Plan and Zoning By-law Amendment for Waste Disposal Sites	Land Use Planning	Municipality	Future
01-07	Waste Diversion	Specify Action	Municipality	Existing

see also General Policies: G-01 Restricted Land Use - Non-residential
G-04 Amend Official Plan and Zoning By-law
G-05 Incentive Program
G-06 Education Program
G-08 Hazardous Waste Disposal Opportunity
G-09 Hazardous Waste Collection Program
G-11 Financial Support Fund
G-12 Municipal/Conservation Authority Implementation Assistance
G-14 Compliance Monitoring for Prescribed Instruments

Policy Text ID Policy Name Policy Approach Implementing Body Policy Approach Body	(Existing/Future) Existing
02-01 Sewer Connection By-law Specify Action Municipality 02-02 Review of Environmental Prescribed Instrument Ministry of t	
02-02 Review of Environmental Prescribed Instrument Ministry of t	
,	he Existing
Compliance Approvals Environmen Conservatio and Parks	•
02-03 Constraint on Environmental Prescribed Instrument Ministry of t Compliance Approvals for On-site Environmen Sewage Systems Conservatio and Parks	t,
02-04 Maintenance Inspection Program Specify Action Municipality	Existing, Future
02-05 Sewer Requirement for New Lots Land Use Planning Municipality	· Future
02-06 Building Code Changes Related to Strategic Action Ministry of On-site Sewage Systems Municipal Affairs and Housing	Future
Other Sewage Works	
02-07 Review of Environmental Prescribed Instrument Ministry of t Compliance Approvals for Sewage Works Conservatio and Parks	t,
02-08 Constraint on Environmental Prescribed Instrument Ministry of to Compliance Approvals for Sewage Environmen Works Conservation and Parks	t,
02-09 Sewer Maintenance Specify Action Municipality	Existing, Future
02-10 Sewer Locating Program Specify Action Municipality	Existing, Future

02-11	Stormwater Management Review	Specify Action	Municipality	Existing
02-12	Separation of Combined Sewers	Specify Action	Municipality	Existing
02-13	Infiltration Prevention	Specify Action	Municipality	Existing, Future
02-14	Design Principles for New Development	Specify Action	Municipality	Future
see also General Policies: G-01 Restricted Land Use - Non-residential G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund G-12 Municipal/Conservation Authority Implementation Assistance G-14 Compliance Monitoring for Prescribed Instruments				

Threat 3. The Application of Agricultural Source Material to Land					
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
03-01	Prohibition		Prohibition	RMO	Future
03-02	Risk Managemer	it Plan	Risk Management Plan	RMO	Existing, Future
see also	see also General Policies: G-01 Restricted Land Use - Non-residential G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund G-12 Municipal/Conservation Authority Implementation Assistance G-14 Compliance Monitoring for Prescribed Instruments				sistance

Threat 4	Threat 4. The Handling and Storage of Agricultural Source Material					
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)		
04-01	Prohibition	Prohibition	RMO	Existing, Future		
04-02	Risk Management Plan – Permanent Nutrient Storage Facility	Risk Management Plan	RMO	Existing, Future		
04-03	Risk Management Plan – Temporary Field Nutrient Storage Site	Risk Management Plan	RMO	Future		
04-04	Constraint on Nutrient Management Approvals	Prescribed Instrument	Ministry of Agriculture, Foo and Rural Affair			

see also General Policies: G-01 Restricted Land Use - Non-residential

G-04 Amend Official Plan and Zoning By-law

G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund

G-12 Municipal/Conservation Authority Implementation Assistance

G-14 Compliance Monitoring for Prescribed Instruments

Threat 5. The Management of Agricultural Source Material				
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)
No policies apply				

Threat 6. The Application of Non-agricultural Source Material to Land						
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)	
06-01	Prohibition		Prohibition	RMO	Existing, Future	
06-02	Non-agricultural Plan Approvals	Source Material	Prescribed Instrument	Ministry of Agriculture, Food and Rural Affairs	Existing, Future	
see also General Policies: G-01 Restricted Land Use - Non-residential G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund G-12 Municipal/Conservation Authority Implementation Assistance G-14 Compliance Monitoring for Prescribed Instruments					sistance	

Threat 7	Threat 7. The Handling and Storage of Non-agricultural Source Material						
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)			
07-01	Prohibition	Prohibition	RMO	Existing, Future			
07-02	Non-agricultural Source Material Plan Approvals	Prescribed Instrument	Ministry of Agriculture, Food and Rural Affairs	Existing, Future			

see also General Policies: G-01 Restricted Land Use - Non-residential

G-04 Amend Official Plan and Zoning By-law

G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund

G-12 Municipal/Conservation Authority Implementation Assistance

G-14 Compliance Monitoring for Prescribed Instruments

Threat 8. The Application of Commercial Fertilizer to Land						
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)	
08-01	Prohibition		Prohibition	RMO	Future	
08-02	Risk Management Plan		Risk Management Plan	RMO	Existing, Future	
see also	see also General Policies: G-01 Restricted Land Use - Non-residential G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund G-12 Municipal/Conservation Authority Implementation Assistance					

Threat 9. The Handling and Storage of Commercial Fertilizer							
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)		
09-01	Risk Management Plan		Risk Management Plan	RMO	Existing, Future		
see also	see also General Policies: G-01 Restricted Land Use - Non-residential G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund G-12 Municipal/Conservation Authority Implementation Assistance						

Threat 10. The Application of Pesticide to Land						
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)		
10-01	Environmental Compliance Approvals	Prescribed Instrument	Ministry of the Environment, Conservation, and Parks	Existing, Future		
10-02	Risk Management Plan	Risk Management Plan	RMO	Existing, Future		

see also General Policies: G-01 Restricted Land Use - Non-residential

G-04 Amend Official Plan and Zoning By-law

G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund

G-12 Municipal/Conservation Authority Implementation Assistance

G-14 Compliance Monitoring for Prescribed Instruments

Threat 11. The Handling and Storage of Pesticide						
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)	
11-01	Prohibition		Prohibition	RMO	Future	
11-02	Risk Management Plan		Risk Management Plan	RMO	Existing, Future	
see also General Policies: G-01 Restricted Land Use - Non-residential G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund G-12 Municipal/Conservation Authority Implementation Assistance						

Threat 1	2. The Application	n of Road Salt			
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
12-01	Risk Manageme	ent Plan	Risk Management Plan	RMO	Existing, Future
12-02	Salt Manageme	nt Plan	Specify Action	Municipality	Existing, Future
12-03	Salt Management Plan – Ministry of Transportation Roads		Specify Action	МТО	Existing, Future
12-04	Salt Application – Education & Outreach		Education & Outreach	Municipality/ Public Health Unit	Existing, Future
G-05 Incentive Pro G-06 Education Pi G-11 Financial Su			cial Plan and Zoning By-la ogram rogram	w	sistance

Threat 13. The Handling and Storage of Road Salt

Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
13-01	Risk Manageme	nt Plan	Risk Management Plan	RMO	Existing, Future
13-02	Salt Handling and Storage - Education & Outreach		Education & Outreach	Municipality/ Public Health Unit	Existing, Future
see also	General Policies:	G-04 Amend Offic G-05 Incentive Pro G-06 Education Pr G-11 Financial Su	rogram		sistance

Threat 14. The Storage of Snow						
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)	
14-01	Prohibition		Prohibition	RMO	Existing, Future	
14-02	Risk Managemer Storage	nt Plan for Snow	Risk Management Plan	RMO	Existing, Future	
G-05 Incentive Pr G-06 Education F G-11 Financial Su		cial Plan and Zoning By-la ogram rogram	w	sistance		

Threat 15. The Handling and Storage of Fuel						
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)		
15-01	Prohibition of Certain Fuel Facilities	Prohibition	RMO	Future		
15-02	Risk Management Plan for Small Fuel Facilities	Risk Management Plan	RMO	Existing, Future		
15-03	Risk Management Plan for Certain Fuel Facilities	Risk Management Plan	RMO	Existing		
15-04	Prohibition of Fuel Near Great Lakes Intakes	Prohibition	RMO	Future		
15-05	Risk Management Plan for Fuel Near Great Lakes Intakes	Risk Management Plan	RMO	Existing, Future		

see also General Policies: G-01 Restricted Land Use - Non-residential

G-02 Restricted Land Use - Residential

G-03 Restricted Land Use - Non-residential for Fuel Near Intakes

G-04 Amend Official Plan and Zoning By-law

G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund

G-12 Municipal/Conservation Authority Implementation Assistance

Threat 16. The Handling and Storage of a Dense Non-aqueous Phase Liquid (DNAPL)						
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)	
16-01	Prohibition		Prohibition	RMO	Future	
16-02	Risk Management Plan		Risk Management Plan	RMO	Existing, Future	
16-03	Sewer Use By-law		Specify Action	Municipality	Existing, Future	
G-05 Incentive P G-06 Education I G-08 Hazardous G-09 Hazardous G-11 Financial S		G-04 Amend Office G-05 Incentive Pro G-06 Education Pro G-08 Hazardous V G-09 Hazardous V G-11 Financial Su	cial Plan and Zoning By-la ogram rogram Waste Disposal Opportun Waste Collection Program	w ity	ssistance	

Threat 17. The Handling and Storage of an Organic Solvent						
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)	
17-01	Prohibition		Prohibition	RMO	Future	
17-02	Risk Management Plan		Risk Management Plan	RMO	Existing	
17-03	Sewer Use By-law		Specify Action	Municipality	Existing, Future	
see also Policies:		G-04 Amend Official G-05 Incentive Prog G-06 Education Prog G-08 Hazardous Wo G-09 Hazardous Wo G-11 Financial Supp	gram aste Disposal Opportunity aste Collection Program		stance	

Threat 18. The Management of Runoff that Contains Chemicals Used in the De-icing of Aircraft

Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
18-01	Prohibition		Prohibition	RMO	Future
see also	General Policies:	G-04 Amend Offic G-05 Incentive Pro G-06 Education Pr G-11 Financial Su	rogram		sistance

Threat 19	Threat 19. 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				
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
19-01	Review of Permi	ts to Take Water	Prescribed Instrument	Ministry of Environment, Conservation, and Parks	Existing/Future
19-02	Ongoing Tier 3 M Maintenance	/lodel	Strategic Action	Ministry of Environment, Conservation, and Parks	Existing/Future
19-03	Water Managem	nent Plan	Land Use Planning	Municipality	Future
19-04	Collaboration wi	th Other Agencies	Specify Action	Municipality	Existing/Future
See also	General Policies:	G-02 Restricted La G-04 Amend Offic G-05 Incentive Pro G-06 Education Pr G-11 Financial Sup G-12 Municipal/Co	ogram	olementation Ass	sistance

Threat 2	Threat 20. An Activity That Reduces the Recharge of an Aquifer				
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)	
No policio	No policies apply				

Threat 2	Threat 21. The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm-Animal Yard				
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
21-01	Prohibition		Prohibition	RMO	Future
21-02	Risk Manageme or Pasturing	ent Plan - Grazing	Risk Management Plan	RMO	Existing, Future
21-03	Risk Manageme Confinement Ar		Risk Management Plan	RMO	Existing, Future
21-04	Constraint on N Management A Confinement Ar	pprovals -	Prescribed Instrument	Ministry of Agriculture, Food and Rural Affairs	Existing, Future
see also	General Policies:	G-04 Amend Offic G-05 Incentive Pr G-06 Education P G-11 Financial Su G-12 Municipal/O	Program	w plementation Ass	sistance

Threat 2	Threat 22.The establishment and operation of a liquid hydrocarbon pipeline				
Policy Text ID					
No polic	No policies apply				

6.1.1 Policies Applying to Threat 1. The Establishment, Operation or Maintenance of a Waste Disposal Site Within the Meaning of Part V of the *Environmental Protection Act*

A total of sixteen policies apply to the prescribed drinking water threat "Threat 1. The Establishment, Operation or Maintenance of a Waste Disposal Site Within the Meaning of Part V of the *Environmental Protection Act*." Of these, seven policies are particular to this threat category and are detailed below, while nine other policies can be found in section 6.2 General Policies.

Threat 1. The Establishment, Operation or Maintenance of a Waste Disposal Site Within the Meaning of Part V of the <i>Environmental Protection Act</i>				Site Within the
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)

01-01	Risk Management Plan for Hazardous or Liquid Industrial Wastes with Environmental Compliance Approval		Risk Management Plan	RMO	Existing, Future
01-02	Risk Management Plan for Hazardous or Liquid Industrial Wastes without Environmental Compliance Approval		Risk Management Plan	RMO	Existing, Future
01-03	Review of Environ Compliance App		Prescribed Instrument	Ministry of the Environment, Conservation, and Parks	Existing
01-04	Constraint on Er Compliance App		Prescribed Instrument	Ministry of the Environment, Conservation, and Parks	Future
01-05	Siting of PCB Wa	aste Storage	Specify Action	Ministry of the Environment, Conservation, and Parks	Existing, Future
01-06	Official Plan and Amendment	Zoning By-law	Land Use Planning	Municipality	Future
01-07	Waste Diversion	l	Specify Action	Municipality	Existing
see also	General Policies:	G-04 Amend Offi G-05 Incentive Po G-06 Education F G-08 Hazardous G-09 Hazardous G-11 Financial Su G-12 Municipal/0	Program Waste Disposal Opportun Waste Collection Program	w ity plementation Ass	sistance

POLICY TEXT ID	POLICY TEXT
01-01	Risk Management Plan for Hazardous or Liquid Industrial Wastes with Environmental Compliance
	Approval The policy applies in all vulnerable areas where the storage of hazardous waste or liquid industrial waste, at a facility other than a landfill or transfer station, is or would be a significant drinking water threat (existing activity or future activity).

POLICY TEXT	POLICY TEXT					
ID						
	The storage of hazardous waste or liquid industrial waste may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the <i>Clean Water Act</i> .					
	Establishment of a Risk Management Plan is required.					
	For existing facilities, the expansion or improvement of an existing hazardous waste or liquid industrial waste facility, or the establishment of a new storage facility, the Risk Management Plan shall include the following requirements:					
	1. storage, which should include, but not be limited to:					
	 a) run-off containment measures, b) appropriate buffer zones from watercourses, water bodies or wells, if present and not located over existing piping or drainage, c) leak and spill prevention measures, d) secondary containment measures, 					
	 record keeping spills plan, which should include a pollution prevention assessment. 					
	For properties where the person engaging in the activity has or intends to obtain, an Environmental Compliance Approval as per the <i>Environmental Protection Act</i> , the person engaging in the activity may be deemed to be exempt from the requirement for a Risk Management Plan if the process described in O.Reg. 287/07, s. 61, is followed.					
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.					
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.					
	Monitoring policies MP-24 and MP-25 apply.					
01-02	Risk Management Plan for Hazardous or Liquid					
	Industrial Wastes without Environmental Compliance					
	Approval					
	The policy applies in all vulnerable areas where the storage of hazardous wasteor liquid industrial wasteas defined in Regulation 347 (General - Waste Management) made under the <i>Environmental Protection Act</i> , which does not require an Environmental Compliance Approvalor would be a significant drinking water threat (existing activity or future activity).					

POLICY TEXT	POLICY TEXT
ID	
	Refer to the Tables of Drinking Water Threats and online Threats Tool for site specific features and chemicals.
	The storage of waste as described may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the <i>Clean Water Act</i> .
	Establishment of a Risk Management Plan is required.
	Forexisting facilities, the expansion or improvement of an existing facility, or the establishment of a new storage facility, the Risk Management Plan shall include the following requirements:
	 storage, which should include but not be limited to: run-off containment measures, appropriate buffer zones from watercourses, water bodies or wells, if present, and not located over existing piping or drainage, leak and spill prevention measures, secondary containment measures record keeping
	3. spills plan, which should include a pollution prevention assessment.
	For properties where the person engaging in the activity has or intends to obtain, an Environmental Compliance Approval as per the <i>Environmental Protection Act</i> , the person engaging in the activity may be deemed to be exempt from the requirement for a Risk Management Plan if the process described in O.Reg. 287/07, s. 61, is followed.
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.
	Monitoring policies MP-24 and MP-25 apply.
01-03	Review of Environmental Compliance Approvals
	The policy applies in all vulnerable areas where the following waste disposal activities are significant drinking water threats (existing activity):
	 land disposal of petroleum refining waste within the meaning of clause (d) of the definition of "land disposal" in section 1 of Regulation 347 (General –

POLICY TEXT	POLICY TEXT
ID	
	Waste Management) R.R.O. 1990 made under the <i>Environmental Protection</i> Act
	 land disposal of hazardous waste, liquid industrial waste, or processed liquid industrial waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347, R.R.O. 1990 (General – Waste Management) made under the <i>Environmental Protection Act</i> land disposal of liquid industrial waste within the meaning of clause (c) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) made under the <i>Environmental Protection Act</i> land disposal of industrial waste or commercial waste within the meaning of clause (c) of the definition of "land disposal" in section 1 of Regulation 347 (General - Waste Management) made under the <i>Environmental Protection Act</i> land disposal of municipal waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) made under the <i>Environmental Protection Act</i> storage, treatment and discharge of tailings from mines storage of hazardous waste or liquid industrial waste application of untreated septage to land
	The policy applies to the following provincial instruments related to waste disposal activities as described in clauses (1) to (8) above:
	A. approvals of waste disposal sites;B. approvals of renewable energy facilities; andC. approvals of sewage works
	The Ministry of the Environment, Conservation, and Parks shall:
	 Review all existing approvals as described in clauses (A) to (C) above; Determine whether the approvals as described in clauses (A) to (C) above contain appropriate terms and conditions and require adequate measures to be in place to ensure that the waste disposal activity ceases to be a significant drinking water threat, with particular consideration given to the monitoring, collection and treatment of leachate into groundwater and/or runoff into surface water; and
	3. Where the Ministry is of the opinion that the terms, conditions and measures contained in an approval as described in clauses (A) to (C) above are not adequate, make such amendments to the approval so as to ensure that the waste disposal activity ceases to be a significant drinking water threat.
	Existing approvals shall be reviewed within three years of the effective date of the Source Protection Plan, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities. Where amendments are deemed necessary, the existing approval shall be amended within 12 months of the review, or such other

POLICY TEXT	POLICY TEXT
ID	date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities. Monitoring policy MP-01 applies.
01-04	Constraint on Environmental Compliance Approvals
	The policy applies in all vulnerable areas where the following waste disposal activities would be significant drinking water threats (future activity):
	 land disposal of petroleum refining waste within the meaning of clause (d) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) R.R.O. 1990 made under the <i>Environmental Protection Act</i> land disposal of hazardous waste, liquid industrial waste, or processed liquid industrial waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347, R.R.O. 1990 (General – Waste Management) made under the <i>Environmental Protection Act</i> land disposal of liquid industrial waste within the meaning of clause (c) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) made under the <i>Environmental Protection Act</i> land disposal of industrial waste or commercial waste within the meaning of clause (c) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) made under the <i>Environmental Protection Act</i> land disposal of municipal waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) made under the <i>Environmental Protection Act</i> storage, treatment and discharge of tailings from mines storage of hazardous waste or liquid industrial waste application of untreated septage to land
	The policy applies to the following approvals from the Ministry of the Environment, Conservation, and Parks related to waste disposal activities as described in clauses (1) to (8) above :
	A. approvals of waste disposal sites;B. approvals of renewable energy facilities; andC. approvals of sewage works
	No new waste disposal sites as described in clauses (1) to (8) above shall be established (future activity).
	For existing waste disposal sites, approval for an expansion or the renewal/updating of a previous approval may be given where:

POLICY TEXT ID	POLICY TEXT
	 i. the waste disposal site is one described by clauses (1) to (7) above; and ii. the waste disposal site existed on the property as of the effective date of the Source Protection Plan; and iii. the approval contains appropriate terms and conditions and requires adequate measures to be in place to ensure that the waste disposal activity ceases to be a significant drinking water threat. Monitoring policy MP-03 applies.
01-05	Siting of PCB Waste Storage
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i> related to the storage of PCB waste at a PCB waste disposal site is or would be a significant drinking water threat (existing activity or future activity). The Ministry of the Environment, Conservation, and Parks should review all Director's instructions provided under O. Reg. 362 of the Environmental Protection Act within the affected vulnerable areas. The Ministry should determine whether any PCBs stored on properties within the affected vulnerable areas can be moved to locations outside of the vulnerable areas so as to remove this significant drinking water threat. Where PCBs can be safely moved, the Ministry should require such movement to occur within five years of the effective date of the Source Protection Plan, or such other date as the Director determines. Where the Ministry is of the opinion that the movement of the stored PCBs is not a viable option, the Ministry should ensure adequate measures are in place so that the activity ceases to be a significant drinking water threat (existing activity). The storage of additional PCBs at an existing site and the establishment of new PCB waste storage sites shall be prohibited in all vulnerable areas where the activity would be a significant drinking water threat (future activity). Existing approvals should be reviewed within three years of the effective date of the Source Protection Plan, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.
	Monitoring policy MP-31 apply.

POLICY TEXT	POLICY TEXT
01-06	Official Plan and Zoning By-law Amendment for Waste Disposal Sites
	The policy applies in all vulnerable areas where the following waste disposal activities would be significant drinking water threats (future activity):
	 land disposal of petroleum refining waste within the meaning of clause (d) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) R.R.O. 1990 made under the Environmental Protection Act land disposal of hazardous waste, liquid industrial waste, or processed liquid industrial waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347, R.R.O. 1990 (General – Waste Management) made under the Environmental Protection Act land disposal of liquid industrial waste within the meaning of clause (c) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) made under the Environmental Protection Act land disposal of industrial waste or commercial waste within the meaning of clause (c) of the definition of "land disposal" in section 1 of Regulation 347 (General - Waste Management) made under the Environmental Protection Act land disposal of municipal waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) made under the Environmental Protection Act municipality shall prohibit, through the official plan and zoning by-law, the establishment of waste disposal sites as a land use under the circumstances listed in the Tables of Drinking Water Threats for a significant drinking water threat. This policy applies to all land use designations and zones described in the municipality's official plan and zoning by-law, as amended from time to time. The Municipality shall: A Adopt the official plan, or official plan amendment as the case may be, and give a notice of adoption; and Adopt the zoning by-law, or zoning by-law amendment as the case may be, and give a notice of adoption. For Section 40(2) of the Clean Water Act,

POLICY TEXT	POLICY TEXT
ID	
	Furthermore, the municipality shall give due consideration to amending the official plan and zoning by-law so as to apply the prohibition on the establishment of waste disposal sites as listed in clauses (1) to (5) above to all WHPA-A and WHPA-B vulnerable areas.
	Monitoring policy MP-21 applies.
01-07	Waste Diversion
	The policy applies in all vulnerable areas where the land disposal of municipal waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347 (General – Waste Management) made under the <i>Environmental Protection Act</i> , is a significant drinking water threat (existing activity).
	Municipalities shall give due consideration to waste diversion measures that would:
	a) reduce the total quantity of waste that must be disposed; andb) reduce the toxicity of this waste.
	Monitoring policy MP-19 applies.

6.1.2 Policies Applying to Threat 2. Sewage System or Sewage Works

A total of twenty one policies apply to the prescribed drinking water threat "Threat 2. Sewage System or Sewage Works." Of these, fourteen are particular to this threat category and are detailed below, while seven other policies can be found in section 6.2 General Policies.

Threat 2	Threat 2. Sewage System or Sewage Works				
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)	
On-site	On-site Sewage Systems				
02-01	02-01 Sewer Connection By-law Specify Action Municipality Existing		Existing		
02-02	Review of Environmental Compliance Approvals	Prescribed Instrument	Ministry of the Environment, Conservation, and Parks	Existing	
02-03	Constraint on Environmental Compliance Approvals for On-site Sewage Systems	Prescribed Instrument	Ministry of the Environment, Conservation, and Parks	Future	

02-04	Maintenance Inspection Program	Specify Action	Municipality	Existing, Future
02-05	Sewer Requirement for New Lots	Land Use Planning	Municipality	Future
02-06	Building Code Changes Related to On-site Sewage Systems	Strategic Action	Ministry of Municipal Affairs and Housing	Future
Other S	Sewage Works			
02-07	Review of Environmental Compliance Approvals for Sewage Works	Prescribed Instrument	Ministry of the Environment, Conservation, and Parks	Existing
02-08	Constraint on Environmental Compliance Approvals for Sewage Works	Prescribed Instrument	Ministry of the Environment, Conservation, and Parks	Future
02-09	Sewer Maintenance	Specify Action	Municipality	Existing, Future
02-10	Sewer Locating Program	Specify Action	Municipality	Existing, Future
02-11	Stormwater Management Review	Specify Action	Municipality	Existing
02-12	Separation of Combined Sewers	Specify Action	Municipality	Existing
02-13	Infiltration Prevention	Specify Action	Municipality	Existing, Future
02-14	Design Principles for New Development	Specify Action	Municipality	Future
see also	G-05 Incentive Pr G-06 Education P G-11 Financial Su G-12 Municipal/0	cial Plan and Zoning By-lo ogram rogram	nw Oplementation Assis	stance

POLICY TEXT	POLICY TEXT
ID	
On-site Sev	wage Systems
02-01	Sewer Connection By-law
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a septic system is a significant drinking water threat (existing activity).
	Municipalities with a sewer line in a vulnerable area or within 100 metres of a vulnerable area shall enact a sewer connection by-law. The by-law shall:

POLICY TEXT	POLICY TEXT
ID	
	 apply to all properties in vulnerable areas where: a) the establishment, operation or maintenance of a septic system is a significant drinking water threat; and b) a municipal sewer line is located on a right-of-way that abuts a property; and c) the linear distance between the sewer line and the point from which plumbing exits a structure on the property is less than 100 metres; and d) sufficient capacity exists in the municipal sewage system to handle the effluent from the property; require connection to the municipal sewer line; require decommissioning of the on-site sewage system at the time of connection to the municipal sewer line; establish a deadline not later than five years after the effective date of the Source Protection Plan for the connection to be completed. At the discretion of the municipality, the by-law may also contain an exemption for properties where the estimated cost of the sewer connection exceeds three times the estimated cost of an advanced septic system that is sized appropriately for the calculated daily design flow. The process to enact the by-law shall be initiated within three years of the effective date of the Source Protection Plan and the by-law enacted within five years of the effective date of the Source Protection Plan. Monitoring policy MP-11 applies.
02-02	Review of Environmental Compliance Approvals for Onsite Sewage Systems The policy applies in all vulnerable areas where the establishment, operation or
	maintenance of a septic system would be a significant drinking water threat (existing activity).
	The policy applies to approvals from the Ministry of the Environment, Conservation, and Parks related to the establishment, operation or maintenance of an on-site sewage system as regulated under the <i>Ontario Water Resources Act</i> .
	It is recommended that the Ministry review all Environmental Compliance Approvals for on-site sewage systems to determine whether:
	a) the system contains design standards that provide reductions in the level of Nitrogen and Phosphorus in the treatment unit effluent;b) the conditions include requirements for an emergency plan in the event of a failure of the system; and

POLICY TEXT	POLICY TEXT
ID	c) the conditions include requirements for onsite monitoring to ensure that the system is functioning as designed and require the proponent to have the system inspected regularly using a standard equal to or greater than the inspection protocols of the "On-Site Sewage Maintenance Inspection" document dated March 2011 as amended from time to time, developed by the Ministry of Municipal Affairs and Housing. Monitoring policy MP-01.
02-03	Constraint on Environmental Compliance Approvals for On-site Sewage Systems
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a septic system would be a significant drinking water threat (future activity).
	The policy applies to approvals from the Ministry of the Environment, Conservation, and Parks related to the establishment, operation or maintenance of an on-site sewage system as regulated under the <i>Ontario Water Resources Act</i> .
	 A. Installation of an on-site sewage system is not permitted in locations where a municipal by-law made pursuant to Policy Text ID 02-01 applies. B. Installation of a treatment unit and associated leaching bed system, or alternative, is permitted provided that the approval contains appropriate terms and conditions and requires adequate measures to be in place to ensure that the on-site sewage system never becomes a significant drinking water threat.
	It is recommended that:
	 a) the system contain design standards that provide reductions in the level of Nitrogen and Phosphorus in the treatment unit effluent; b) the conditions include requirements for an emergency plan in the event of a failure of the system; and c) the conditions include requirements for onsite monitoring to ensure that the system is functioning as designed and require the proponent to have the system inspected regularly using a standard equal to or greater than the inspection protocols of the "On-Site Sewage Maintenance Inspection" document dated March 2011 as amended from time to time, developed by the Ministry of Municipal Affairs and Housing.
	C. A class 5 on-site sewage system, i.e. a holding tank, may only be permitted in cases where:
	a) the Ministry:i. deems that an approval is necessary to address a temporary or otherwise unsafe situation; and

POLICY TEXT	POLICY TEXT	
ID	 ii. provides an approval for a one-time period of use; and iii. sets an approval period that does not exceed 12 months; or b) the Ministry: i. determines that other treatment options cannot be utilized because the footprint of the principal building does not allow adequate space for siting of other treatment options on the property; and ii. ensures that the holding tank installation meets all applicable requirements; and iii. ensures that the approval contains appropriate terms and conditions and requires adequate measures to be in place so that the holding tank never becomes a significant drinking water threat. Monitoring policy MP-03 applies. 	
02-04	Maintenance Inspection Program	
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a septic system is or would be a significant drinking water threat (existing activity or future activity).	
	As per the Building Code (Ontario Regulation 332/12 under the <i>Building Code Act</i>), the local principal authority shall implement a mandatory on-site sewage maintenance inspection program within their areas of jurisdiction.	
	It is recommended that the inspection program: follow inspection guidelines produced by the Ministry of Municipal Affairs and Housing; and	
	 a) determine whether all greywater or blackwater drains that exit buildings on the property connect to an on-site sewage system; and b) prioritize systems that are: located closest to the municipal drinking water wellhead; or lacking documentation of a prior license, permit or approval; or more than 10 years old; or all other remaining systems. 	
	Where an on-site sewage system is found to be failing or in violation of the current Building Code provisions, the system shall be repaired or replaced so as to be compliant with current Building Code requirements.	
	Initially, inspections for any systems existing as of January 24, 2012 must be completed by January 24, 2017.	
	Monitoring policy MP-15 applies.	

POLICY TEXT	POLICY TEXT	
02-05	Sewer Requirement for New Lots	
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a septic system would be a significant drinking water threat (future activity).	
	New lots created either through severance or subdivision under the <i>Planning Act</i> shall only be permitted by the planning approval authority where the lots will be serviced by a municipal sewage system or where an on-site septic system could be located outside of a vulnerable area with a vulnerability score of 10.	
	Monitoring policy MP-14 applies.	
02-06	Building Code Changes Related to On-site Sewage	
02-00	Systems	
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a septic system would be a significant drinking water threat (future activity).	
	The Ministry of Municipal Affairs and Housing shall give due consideration to making changes to the Ontario Building Code and other such legislation related to on-site sewage systems (future activity).	
	The legislative changes would include provisions that would:	
	Set standards under the Ontario Building Code to define advanced systems, including, but not necessarily limited to, standards for Nitrate and Phosphorous levels in effluent; and	
	 Require that advanced septic systems be required for new installations in vulnerable areas where an on-site sewage system is or would be a significant drinking water threat. 	
	For the purposes of determining which systems achieve Nitrogen and Phosphorous reduction, it is suggested that reference could be made to the CAN/BNQ 3680-600 standard "Onsite Residential Wastewater Treatment Technologies" as established by the Bureau de normalisation du Québec (BNQ), or an equivalent standard.	
	Monitoring policy MP-09 applies.	

POLICY TEXT ID	POLICY TEXT		
Other Sewage Works			
02-07	Review of Environmental Compliance Approvals for		
	Sewage Works		
	The policy applies in all vulnerable areas where the following activities related to the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage are significant drinking water threats (existing activity):		
	industrial effluent discharge sowage treatment plant bypass discharge to surface water.		
	 sewage treatment plant bypass discharge to surface water storage of sewage (e.g. treatment plant tanks) 		
	4. sewage treatment plant effluent discharge (including lagoons)		
	The policy applies to provincial instruments related to approvals to establish, alter, extend or replace existing sewage works as described in clauses (1) to (4) above.		
	The Ministry of the Environment, Conservation, and Parks shall:		
	 A. Review all existing approvals as described above; B. Determine whether the approvals contain appropriate terms and conditions and require adequate measures to be in place to ensure that the sewage works ceases to be a significant drinking water threat; and C. Where the Ministry is of the opinion that the terms, conditions and measures contained in an approval are not adequate, make such amendments to the approval so as to ensure that the sewage works ceases to be a significant drinking water threat. 		
	Existing approvals shall be reviewed within three years of the effective date of the Source Protection Plan, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities. Where amendments are deemed necessary, the existing approval shall be amended within 12 months of the review, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.		
	Monitoring policy MP-01 applies.		
02-08	Constraint on Environmental Compliance Approvals for Sewage Works		

POLICY TEXT	POLICY TEXT	
ID		
	The policy applies in all vulnerable areas where the following activities related to the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage would be significant drinking water threats (future activity):	
	1. industrial effluent discharge	
	sewage treatment plant bypass discharge to surface water storage of sewage (e.g. treatment plant tanks)	
	4. sewage treatment plant effluent discharge (including lagoons)	
	The policy applies to approvals from the Ministry of the Environment, Conservation, and Parks related to approvals to establish, alter, extend or replace new or existing sewage works as described in clauses (1) to (4) above.	
	No new sewage works as described in clauses (1) to (4) above shall be established (future activity).	
	Approval for an expansion of an existing sewage works or the renewal/updating of a previous approval for an existing sewage works may be given where:	
	 i. the sewage works is one described by clauses (1) to (4) above; and ii. the sewage works existed on the property as of the effective date of the Source Protection Plan; and iii. the approval is either: 	
	a. a renewal of a previous approval related to a site as described by clause (i) and (ii); or	
	 b. a new approval related to a site as described by clause (i) and (ii); and iv. the approval contains appropriate terms and conditions and requires adequate measures to be in place to ensure that the sewage works ceases to be a significant drinking water threat. 	
	Monitoring policy MP-03 applies.	
02-09	Sewer Maintenance	
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage is or would be a significant drinking water threat (existing activity or future activity).	
	Municipalities shall inspect and maintain municipal sanitary sewers and related pipes so as to uphold high standards of performance and minimize the risk of leakage.	
	Existing sewage lines shall be inspected within five years of the effective date of the Source Protection Plan and at regular intervals thereafter.	

POLICY TEXT	POLICY TEXT		
	Monitoring policy MP-19 applies.		
02-10	Sewer Locating Program		
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage is or would be a significant drinking water threat (existing activity or future activity).		
	Municipalities shall give due consideration to establishing or continuing a program that would:		
	 a) collect information and document the location of sewage lines b) document whether properties were serviced by municipal sewage lines or other sewage systems, such as septic systems c) be in digital format and contain GPS coordinates 		
	An initial review shall be completed within three years of the effective date of the Source Protection Plan.		
	Monitoring policy MP-19 applies.		
02-11	Stormwater Management Review		
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage is a significant drinking water threat, in particular the discharge of stormwater from a stormwater management facility (existing activity).		
	Municipalities shall give due consideration to evaluating existing stormwater management facilities in vulnerable areas. If found to be deficient, due consideration shall be given to implementing measures that would improve the functioning of the facilities with respect to water quality.		
	An initial review shall be completed within three years of the effective date of the Source Protection Plan.		
	Monitoring policy MP-19 applies.		

POLICY TEXT ID	POLICY TEXT			
02-12	Separation of Combined Sewers			
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage is a significant drinking water threat, in particular:			
	a) combined sewer discharge to surface water (existing activity)b) sewage treatment plant bypass discharge to surface water (existing activity)			
	Municipalities shall give due consideration to establishing or continuing programs that separate combined sewers, as much as is feasible, to alleviate the amount of wastewater transported to the wastewater treatment plants.			
	An initial review shall be completed within three years of the effective date of the Source Protection Plan.			
	Monitoring policy MP-19 applies.			
02-13	Infiltration Prevention			
	The policy applies in all vulnerable areas where the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage is or would be a significant drinking water threat, in particular:			
	a) sanitary sewers and related pipes (existing activity or future activity)b) discharge of stormwater from a stormwater management facility (existing activity or future activity)			
	Municipalities shall give due consideration to establishing or continuing programs that reduce infiltration of waste water into groundwater aquifers that are used as drinking water sources. An initial review shall be completed within three years of the effective date of the Source Protection Plan.			
	Monitoring policy MP-19 applies.			
02-14	Design Principles for New Development			
	The policy applies in all wellhead protection areas where the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage would be a significant drinking water threat, in particular the discharge of stormwater from a stormwater management facility (future activity).			

POLICY TEXT	POLICY TEXT		
ID			
	The municipality shall give due consideration to design standards for stormwater management facilities that would:		
	 minimize infiltration to groundwater from stormwater detention ponds, constructed wetlands, vegetated swales and other similar stormwater management components prohibit the use of infiltration trenches, infiltration galleries and other similar sub-surface components of the system that allow for the direct infiltration of the collected stormwater. 		
	Monitoring policy MP-19 applies.		

6.1.3 Policies Applying to Threat 3. Application of Agricultural Source Material to Land

A total of nine policies apply to the prescribed drinking water threat "Threat 3. Application of Agricultural Source Material to Land." Of these, two are particular to this threat category and are detailed below, while seven other policies can be found in section 6.2 General Policies.

Threat :	Threat 3. Application of Agricultural Source Material to Land				
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
03-01	Prohibition		Prohibition	RMO	Future
03-02	Risk Managemer	it Plan	Risk Management Plan	RMO	Existing, Future
see also	General Policies:	G-04 Amend Offic G-05 Incentive Pro G-06 Education Pr G-11 Financial Sup G-12 Municipal/Co	ogram	olementation Ass	sistance

POLICY TEXT ID	POLICY TEXT	
03-01	Prohibition	
05 01		

POLICY TEXT ID	POLICY TEXT	
TOLICI ILATID	The policy applies in all WHPA-A vulnerable areas where the application of agricultural source material to land would be a significant drinking water threat (future activity).	
	The application of agricultural source material shall be prohibited.	
	Therefore, the application of agricultural source material to land is designated for the purposes of s.57 of the <i>Clean Water Act</i> .	
	Monitoring policy MP-23 applies.	
03-02	Risk Management Plan	
	The policy applies in:	
	 all vulnerable areas where the application of agricultural source material to land is a significant drinking water threat (existing activity); and all vulnerable areas, except WHPA-A, where the application of agricultural source material to land would be a significant drinking water threat (future activity) 	
	The application of agricultural source material to land may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the <i>Clean Water Act</i> .	
	Establishment of a Risk Management Plan is required. The plan shall meet the guidelines with respect to the contents of a nutrient management plan established under Part III of O.Reg. 267/03 under the <i>Nutrient Management Act</i> .	
	It is recommended that NMAN software or similar be utilized to assist in calculations.	
	The calculations shall be reviewed annually and the Risk Management Plan updated so that it accurately reflects the anticipated operation on the farm unit during the following year.	
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.	
	For properties where the person engaging in the activity has or intends to obtain, a nutrient management plan approval as per the <i>Nutrient Management Act</i> , the person engaging in the activity may be deemed to be exempt from the requirement for a Risk Management Plan if the process described in O.Reg. 287/07, s. 61, is followed.	

POLICY TEXT ID	POLICY TEXT
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.
	Monitoring policies MP-24 and MP-25 apply.

6.1.4 Policies Applying to Threat 4. Storage of Agricultural Source Material

A total of eleven policies apply to the prescribed drinking water threat "Threat 4. Storage of Agricultural Source Material." Of these, four are particular to this threat category and are detailed below, while seven other policies can be found in section 6.2 General Policies.

Threat 4. Storage of Agricultural Source Material					
Policy	Policy Name		Policy Approach	Implementing	Activity Type
Text ID				Body	(Existing/Future)
04-01	Prohibition		Prohibition	RMO	Existing, Future
04-02	Risk Management Plan –		Risk	RMO	Existing, Future
	Permanent Nutri	ent Storage	Management		
	Facility		Plan		
04-03	Risk Managemen	t Plan –	Risk	RMO	Future
	Temporary Field	Nutrient	Management		
	Storage Site		Plan		
04-04	Constraint on Nu	trient	Prescribed	Ministry of	Existing, Future
	Management Approvals		Instrument	Agriculture, Food	
				and Rural Affairs	
see also	General Policies:	G-01 Restricte	ed Land Use - Non-re	sidential	
		G-04 Amend (Official Plan and Zoni	ing By-law	
		G-05 Incentive	e Program		
		G-06 Education	n Program		
		G-11 Financia	l Support Fund		
		G-12 Municipa	al/Conservation Autl	hority Implementation	n Assistance
		G-14 Complia	nce Monitoring for P	rescribed Instrumen	ts

POLICY TEXT ID	POLICY TEXT
04-01	Prohibition
0.01	
	The policy applies in all WHPA-A vulnerable areas where the storage of agricultural source material is or would be a significant drinking water threat (existing activity or future activity).

POLICY TEXT ID **POLICY TEXT** The expansion of an existing permanent nutrient storage facility, or the establishment of a new permanent nutrient storage facility, for agricultural source material shall be prohibited. The expansion of an existing temporary field nutrient storage site, or the establishment of a new temporary field nutrient storage site, for agricultural source material shall be prohibited. Therefore, the storage of agricultural source material is designated for the purposes of s.57 of the Clean Water Act. For clarity, the improvement of an existing permanent nutrient storage facility is allowed where it is determined that such improvements would provide additional measures to protect sources of drinking water. Any material within temporary field nutrient storage sites existing as of the effective date of the Source Protection Plan shall be removed within 240 days of the effective date of the Source Protection Plan. As of the effective date of the Source Protection Plan, no new material may be added to a temporary field nutrient storage site existing as of the effective date of the Source Protection Plan. Monitoring policy MP-23 applies. 04-02 Risk Management Plan – Permanent Nutrient Storage **Facility** The policy applies in: 1. all vulnerable areas where the storage of agricultural source material in a permanent nutrient storage facility is a significant drinking water threat, except for the expansion of an existing permanent nutrient storage facility within WHPA-A (existing activity or future activity); and 2. all vulnerable areas where the storage of agricultural source material in a permanent nutrient storage facility would be a significant drinking water threat, except for the establishment of a new permanent nutrient storage facility within WHPA-A (future activity). Establishment of a Risk Management Plan is required. Agricultural source material may only be stored in a permanent nutrient storage facility in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the Clean Water Act. The Risk Management Plan shall satisfy the following provisions: 1. The Risk Management Plan shall follow the guidelines with respect to the contents of a nutrient management strategy established under Part III of

POLICY TEXT ID	POLICY TEXT
	O.Reg. 267/03 under the Nutrient Management Act.
	It is recommended that NMAN software or similar be utilized to assist in calculations. The calculations shall be reviewed annually and the Risk Management Plan updated so that it accurately reflects the anticipated operation on the farm unit during the following year. 2. The Risk Management Plan shall state:
	a) the capacity of nutrient storage facilities on the property at the time of threats verification; and
	 b) the number of nutrient units that would normally be housed on the property at the time of the effective date of the Source Protection Plan 3. The Risk Management Plan shall not allow for the expansion of an existing permanent nutrient storage facility, or the establishment of a new permanent
	nutrient storage facility, for agricultural source material unless: a) the expansion or new facility would provide the capacity necessary for a minimum of 240 days of storage for the number of nutrient units housed
	on the property; and b) sufficient land base to accommodate the application of the stored agricultural source material is documented elsewhere in the Risk Management Plan; and
	c) the expansion or new facility would be constructed to the following design standards, as a minimum: i. for a liquid storage system, a synthetic liner, as defined by O. Reg.
	 267/03 s. 1; or ii. for a dry storage system, reinforced concrete floor and reinforced concrete walls; and iii. installation, material, engineering, setbacks and other such standards as specified under the <i>Nutrient Management Act</i>, 2002, and its regulations
	It is strongly encouraged that consideration be given to having a capacity for 365 days of storage for the number of nutrient units housed on the property.
	For clarity, the improvement of an existing permanent nutrient storage facility is allowed where it is determined that such improvements would provide additional measures to protect sources of drinking water.
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.
	For properties where the person engaging in the activity has or intends to obtain, a nutrient management strategy approval as per the <i>Nutrient Management Act</i> , the person engaging in the activity may be deemed to be exempt from the requirement for a Risk Management Plan if the process described in O.Reg. 287/07, s. 61, is followed.
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.

POLICY TEXT ID	POLICY TEXT
	Monitoring policies MP-24 and MP-25 apply.
04-03	Risk Management Plan – Temporary Field Nutrient Storage Site
	The policy applies in all vulnerable areas, except WHPA-A, where the storage of agricultural source material in a temporary field nutrient storage site is or would be a significant drinking water threat (existing activity or future activity).
	Establishment of a Risk Management Plan is required. Agricultural source material may only be stored in a temporary field nutrient storage site in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the <i>Clean Water Act</i> .
	The Risk Management Plan shall satisfy the following provisions: 1. The Risk Management Plan shall follow the guidelines with respect to the contents of a nutrient management strategy established under Part III of O.Reg. 267/03 under the Nutrient Management Act.
	It is recommended that NMAN software or similar be utilized to assist in calculations. The calculations shall be reviewed annually and the Risk Management Plan updated so that it accurately reflects the anticipated operation on the farm unit during the following year. 2. The Risk Management Plan shall not allow for the expansion of an existing temporary field nutrient storage site. 3. The Risk Management Plan shall not allow for the establishment of a new temporary field nutrient storage site for agricultural source material unless: a) the temporary field site is identified in the Risk Management Plan; and
	 b) prior to the use of a site, a notice is obtained from the Risk Management Official that specifies the location of the site and limits the period of use to not more than 30 days, or a lesser time period if deemed appropriate; and c) sufficient land base to accommodate the application of the stored agricultural source material is documented elsewhere in the Risk Management Plan.
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.
	For properties where the person engaging in the activity has or intends to obtain, a nutrient management strategy approval as per the Nutrient Management Act, the person engaging in the activity may be deemed to be exempt from the requirement for a Risk Management Plan if the process described in O.Reg. 287/07, s. 61, is followed.

POLICY TEXT ID	POLICY TEXT
TOLIGITE AT IS	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.
	Monitoring policies MP-24 and MP-25 apply.
04-04	Constraint on Nutrient Management Approvals
	The policy applies in all vulnerable areas where the storage of agricultural source material is or would be a significant drinking water threat (existing activity or future activity).
	The policy applies to provincial instruments under the <i>Nutrient Management Act</i> .
	A nutrient management strategy shall satisfy the following provisions:
	 The nutrient management strategy shall not permit the expansion of an existing permanent nutrient storage facility, or the establishment of a new permanent nutrient storage facility, for agricultural source material in all WHPA-A vulnerable areas where the activity is or would be a significant drinking water threat (existing activity or future activity). The nutrient management strategy shall not permit the expansion of an existing temporary field nutrient storage site, or the establishment of a new temporary field nutrient storage site, for agricultural source material in all WHPA-A vulnerable areas where the activity is or would be a significant drinking water threat (existing activity or future activity). The nutrient management strategy shall not allow for the expansion of an existing permanent nutrient storage facility, or the establishment of a new permanent nutrient storage facility, for agricultural source material within the affected vulnerable areas, excluding WHPA-A, where the activity is or would be a significant drinking water threat (existing activity or future activity) unless: a) the expansion or new facility would provide the capacity necessary for a minimum of 240 days of storage for the number of nutrient units housed on the property; and b) sufficient land base to accommodate the application of the stored agricultural source material is documented elsewhere in the nutrient management strategy; and c) the expansion or new facility would be constructed to the following design standards, as a minimum:
	 iii. installation, material, engineering, setbacks and other such standards as specified under the <i>Nutrient Management Act</i>, 2002, and its regulations

POLICY TEXT ID	POLICY TEXT
	4. The nutrient management strategy shall not allow for the expansion of an existing temporary field nutrient storage site, or the establishment of a new temporary field nutrient storage site, for agricultural source material within the affected vulnerable areas, excluding WHPA-A, where the activity is or would be a significant drinking water threat (existing activity or future activity) unless:
	 a) the location of the temporary field site is identified in the nutrient management strategy; and b) the period of use is restricted to not more than 30 days, or a lesser time period if deemed appropriate.
	It is strongly encouraged that consideration be given to having capacity in the permanent nutrient storage facility for 365 days of storage for the number of nutrient units housed on the property.
	For clarity, the improvement of an existing permanent nutrient storage facility is allowed where it is determined that such improvements would provide additional measures to protect sources of drinking water.
	The Ministry of the Agriculture, Food and Rural Affairs shall:
	 A. Review all existing nutrient management strategies and nutrient management plans in all vulnerable areas where the storage of agricultural source material is a significant drinking water threat (existing activity); B. Determine whether the approvals as described in clause (A) contain appropriate terms and conditions and require adequate measures to be in place to satisfy clauses (1) to (4) above; and
	C. Where the Ministry is of the opinion that the terms, conditions and measures contained in an approval as described in clause (B) are not adequate, cause such amendments to be made to the nutrient management strategy or nutrient management plan so as to satisfy clauses (1) to (4) above.
	Existing approvals shall be reviewed within three years of the effective date of the Source Protection Plan. Where amendments are deemed necessary, the existing approval shall be amended within 12 months of the review.
	Monitoring policies MP-07 and MP-08 apply.

6.1.5 Policies Applying to Threat 5. The Management of Agricultural Source Material

There are no policies that apply to the prescribed drinking water threat "Threat 5. The Management of Agricultural Source Material."

Threat 5. The Management of Agricultural Source Material				
Policy	Policy Name	Policy Approach	Implementing	Activity Type
Text ID			Body	(Existing/Future)

No policies apply

6.1.6 Policies Applying to Threat 6. The Application of Non-agricultural Source Material to Land

A total of nine policies apply to the prescribed drinking water threat "Threat 6. The Application of Non-agricultural Source Material to Land." Of these, two are particular to this threat category and are detailed below, while seven other policies can be found in section 6.2 General Policies.

Threat 6	5. The Applic	ation of Non-agr	icultural Source Mater	ial to Land	
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
06-01	Prohibition		Prohibition	RMO	Existing, Future
	Non-agricultural Plan Approvals	Source Material	Prescribed Instrument	Ministry of Agriculture, Food and Rural Affairs	Existing, Future
see also	General Policies:	G-04 Amend Offic G-05 Incentive Pro G-06 Education Pr G-11 Financial Sup G-12 Municipal/Co	rogram	olementation Ass	sistance

POLICY TEXT ID	POLICY TEXT
06-01	Prohibition The policy applies in all WHPA-A vulnerable areas where the application of non-agricultural source material to land is or would be a significant drinking water threat (existing activity or future activity). The application of non-agricultural source material to land shall be prohibited. Therefore, the application of non-agricultural source material to land is designated for the purposes of s.57 of the Clean Water Act.
06-02	Monitoring policy MP-23 applies. Non-agricultural Source Material Plan Approvals

POLICY TEXT ID	POLICY TEXT
	The policy applies in all vulnerable areas where the application of non-agricultural source material to land is or would be a significant drinking water threat (existing activity or future activity).
	The policy applies to the following provincial instruments:
	- non-agricultural source material plans under the Nutrient Management Act
	- environmental compliance approvals under the <i>Environmental Protection</i> Act
	For all parts of properties located in WHPA-A where the application of non-agricultural source material is or would be a significant drinking water threat (existing activity of future activity) and where the property is required to have a non-agricultural source material plan as per Part II of the <i>Nutrient Management Act</i> , the Ministry of Agriculture, Food and Rural Affairs shall:
	 a) review all existing non-agricultural source material plans and ensure all parts of the property within WHPA-A are excluded as an area where the application of non-agricultural source material could occur (existing activity); and
	 b) cause an amendment to be made to any existing non-agricultural source material plans that do not contain a provision as noted in clause (a) above (existing activity); and c) ensure that any new non-agricultural source material plans specifically
	exclude all parts of the property within WHPA-A as an area where the application of non-agricultural source material could occur (future activity).
	Environmental compliance approvals shall be reviewed in the same manner as clauses (a) to (c) above.
	For all parts of properties located where the application of non-agricultural source material is or would be a significant drinking water threat (existing activity of future activity), but not WHPA-A, and where a property is required to have a non-agricultural source material plan as per Part II of the <i>Nutrient Management Act</i> , the Ministry of Agriculture, Food and Rural Affairs shall:
	 Review all existing non-agricultural source material plans (existing activity); Determine whether the approvals as described in clause 1 contain appropriate terms and conditions and require adequate measures to be in place to ensure that the application of non-agricultural source material ceases to be a significant drinking water threat; and
	3. Where the Ministry is of the opinion that the terms, conditions and measures contained in an approval as described in clause 1 are not adequate, make such amendments to the approval so as to ensure that the application of non-agricultural source material ceases to be a significant drinking water threat;
	4. Ensure that any new non-agricultural source material plans contain appropriate terms and conditions and require adequate measures to be in

POLICY TEXT ID	POLICY TEXT
	place to ensure that the application of non-agricultural source material never becomes a significant drinking water threat.
	Environmental compliance approvals shall be reviewed in the same manner as clauses (1) to (4) above.
	Existing approvals shall be reviewed within three years of the effective date of the Source Protection Plan, or, in the case of environmental compliance approvals, such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities. Where amendments are deemed necessary, the existing approval shall be amended within 12 months of the review, or, in the case of environmental compliance approvals, such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities. Monitoring policies MP-07 and MP-08 apply.

6.1.7 Policies Applying to Threat 7. The Handling and Storage of Non-agricultural Source Material

A total of nine policies apply to the prescribed drinking water threat "Threat 7. The Handling and Storage of Non-agricultural Source Material." Of these, two are particular to this threat category and are detailed below, while seven other policies can be found in section 6.2 General Policies.

Threat 7	Threat 7. The Handling and Storage of Non-agricultural Source Material				
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
07-01	Prohibition		Prohibition	RMO	Existing, Future
	Non-agricultural Plan Approvals	Source Material	Prescribed Instrument	Ministry of Agriculture, Food and Rural Affairs	Existing, Future
see also (General Policies:	G-04 Amend Offic G-05 Incentive Pro G-06 Education Pr G-11 Financial Sup G-12 Municipal/Co	ogram	olementation Ass	sistance

POLICY TEXT ID	POLICY TEXT
07-01	Prohibition

	Т
POLICY TEXT ID	POLICY TEXT
	The policy applies in all WHPA-A vulnerable areas where the handling and storage of non-agricultural source material is or would be a significant drinking water threat (existing activity or future activity).
	The handling and storage of non-agricultural source material shall be prohibited. Therefore, the handling and storage of non-agricultural source material is designated for the purposes of s.57 of the <i>Clean Water Act</i> .
	Monitoring policy MP-23 applies.
07-02	Non-agricultural Source Material Plan Approvals
	The policy applies in all vulnerable areas where the handling and storage of non-agricultural source material is or would be a significant drinking water threat (existing activity or future activity).
	The policy applies to the following provincial instrument:
	- non-agricultural source material plans under the Nutrient Management Act
	For all parts of properties located in WHPA-A where the handling and storage of non-agricultural source material is or would be a significant drinking water threat (existing activity of future activity) and where the property is required to have a non-agricultural source material plan as per Part II of the <i>Nutrient Management Act</i> , the Ministry of Agriculture, Food and Rural Affairs shall:
	 a) review all existing non-agricultural source material plans and ensure all parts of the property within WHPA-A are excluded as an area where the handling and storage of non-agricultural source material could occur (existing activity); and b) cause an amendment to be made to any non-agricultural source material plans that do not contain a provision as noted in clause (a) above (existing activity); and c) ensure that any new non-agricultural source material plans specifically exclude all parts of the property within WHPA-A as an area where the handling and storage of non-agricultural source material could occur (future activity).
	For all parts of properties located where the handling and storage of non-agricultural source material is or would be a significant drinking water threat (existing activity of future activity), but not WHPA-A, and where a property is required to have a non-agricultural source material plan as per Part II of the <i>Nutrient Management Act</i> , the Ministry of Agriculture, Food and Rural Affairs shall: 1. Review all existing non-agricultural source material plans (existing activity);
	Determine whether the approvals as described in clause 1 contain appropriate terms and conditions and require adequate measures to be in

POLICY TEXT ID	POLICY TEXT
	place to ensure that the handling and storage of non-agricultural source material ceases to be a significant drinking water threat; and 3. Where the Ministry is of the opinion that the terms, conditions and measures contained in an approval as described in clause 1 are not adequate, make such amendments to the approval so as to ensure that the handling and storage of non-agricultural source material ceases to be a significant drinking water threat; 4. Ensure that any new non-agricultural source material plans contain appropriate terms and conditions and require adequate measures to be in place to ensure that the handling and storage of non-agricultural source material never becomes a significant drinking water threat. Existing approvals shall be reviewed within three years of the effective date of the Source Protection Plan. Where amendments are deemed necessary, the existing approval shall be amended within 12 months of the review. Monitoring policies MP-07 and MP-08 apply.

6.1.8 Policies Applying to Threat 8. The Application of Commercial Fertilizer to Land

A total of eight policies apply to the prescribed drinking water threat "Threat 8. The Application of Commercial Fertilizer to Land." Of these, two are particular to this threat category and are detailed below, while six other policies can be found in section 6.2 General Policies.

Threat	Threat 8. The Application of Commercial Fertilizer to Land						
Policy Text ID	Policy Name		Policy Approach	Implementin g Body	Activity Type (Existing/Future)		
08-01 Prohibition			Prohibition	RMO	Future		
08-02	Risk Manageme	ent Plan	Risk Management Plan	RMO	Existing, Future		
Policies: G-04 Amend Off G-05 Incentive P G-06 Education I G-11 Financial S		Program	y-law	on Assistance			

POLICY TEXT	POLICY TEXT
ID	

08-01

Prohibition

The policy applies in all WHPA-A vulnerable areas where the application of commercial fertilizer to land would be a significant drinking water threat (future activity).

The application of commercial fertilizer to land shall be prohibited.

Therefore, the application of commercial fertilizer to land is designated for the purposes of s.57 of the *Clean Water Act*.

Monitoring policy MP-23 applies.

08-02

Risk Management Plan

The policy applies in:

- 1. all vulnerable areas where the application of commercial fertilizer to land is a significant drinking water threat (existing activity); and
- 2. all vulnerable areas, except WHPA-A, where the application of commercial fertilizer to land would be a significant drinking water threat (future activity)

The application of commercial fertilizer to land may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the *Clean Water Act*.

Establishment of a Risk Management Plan is required. The plan shall meet the guidelines with respect to the contents of a nutrient management plan established under Part III of O.Reg. 267/03 under the Nutrient Management Act.

It is recommended that NMAN software or similar be utilized to assist in calculations. The calculations shall be reviewed annually and the Risk Management Plan updated so that it accurately reflects the anticipated operation on the farm unit during the following year

The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.

For properties where the person engaging in the activity has or intends to obtain, a nutrient management plan approval as per the *Nutrient Management Act*, the person engaging in the activity may be deemed to be exempt from the requirement for a Risk Management Plan if the process described in O.Reg. 287/07, s. 61, is followed.

All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.
Monitoring policies MP-24 and MP-25 apply.

6.1.9 Policies Applying to Threat 9. The Handling and Storage of Commercial Fertilizer

A total of seven policies apply to the prescribed drinking water threat "Threat 9. The Handling and Storage of Commercial Fertilizer." Of these, one is particular to this threat category and is detailed below, while six other policies can be found in section 6.2 General Policies.

			cies can be found in section 6		U ,
Threat 9. The Handling and Storage of Commercial Fertilizer					
Policy Pol Text ID	icy Na	ame	Policy Approach	Implementing Body	Activity Type (Existing/Future)
09-01 Risk	Man	agement Plan	Risk Management Plan	RMO	Existing, Future
see also General Policies: G-01 Restricted Land Use - Non-residential G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund G-12 Municipal/Conservation Authority Implementation Assistance					sistance
POLICY TEX	T ID	POLICY TEXT		·	
09-01		commercial fertilist activity or future at The handling and with an approved purposes of s.58 control Establishment of at the second commercial fertilist activity or future at the second commercial fertilist ac	in all vulnerable areas where the zer is or would be a significant descrivity). storage of commercial fertilizer. Risk Management Plan and is the Clean Water Act. a Risk Management Plan is require. Risk Management Plan shall act adding rage.	Irinking water thr may only occur i nerefore designat	reat (existing naccordance

For the expansion or improvement of an existing commercial fertilizer storage facility, or the establishment of a new storage facility, the Risk Management Plan shall include the following requirements:

A. For liquid fertilizer:

- i. A secondary containment system consisting of either:
 - a) A double-walled tank; and a reinforced concrete pad that extends one metre beyond the edges of the tank; and a visible interstitial alarm; or
 - b) A total containment system with a berm and liner capable of containing 120% of the volume of the stored material; and
- ii. Other such measures so as to comply with applicable regulations or meet best management practices

B. For solid fertilizer:

- i. A roofed structure so as to prevent exposure to precipitation; and
- ii. A reinforced concrete pad that extends one metre beyond the edges of the stored material; and
- iii. Other such measures so as to comply with regulations or meet best management practices.

The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.

All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.

Monitoring policies MP-24 and MP-25 apply.

6.1.10 Policies Applying to Threat 10. The Application of Pesticide to Land

A total of nine policies apply to the prescribed drinking water threat "Threat 10. The Application of Pesticide to Land." Of these, two are particular to this threat category and are detailed below, while seven other policies can be found in section 6.2 General Policies.

Threat 10. The Application of Pesticide to Land						
Policy Name	Policy Approach	Implementin	Activity Type			
		g Body	(Existing/Future)			
Environmental Compliance Approvals	Prescribed Instrument	Ministry of the Environment, Conservation	Existing, Future			
Risk Management Plan	Risk Management	, and Parks RMO	Existing, Future			
	Policy Name Environmental Compliance Approvals	Policy Name Policy Approach Environmental Compliance Approvals Prescribed Instrument	Policy Name Policy Approach Implementin g Body Environmental Compliance Approvals Prescribed Instrument Approvals Environment, Conservation , and Parks Risk Management Plan Risk Management RMO			

see also General Policies:	G-01 Restricted Land Use - Non-residential
	G-04 Amend Official Plan and Zoning By-law
	G-05 Incentive Program
	G-06 Education Program
	G-11 Financial Support Fund
	G-12 Municipal/Conservation Authority Implementation Assistance
	G-14 Compliance Monitoring for Prescribed Instruments

POLICY TEXT ID	POLICY TEXT			
10-01	Environmental Compliance Approvals			
	The policy applies in all vulnerable areas where the application of pesticide to land is or would be a significant drinking water threat (existing activity or future activity).			
	The policy applies to the following provincial instrument:			
	 permits for land exterminations under the Pesticides Act 			
	The application of pesticides to land shall only occur in accordance with any permit requirements as set out in the <i>Pesticides Act</i> and Ontario Regulation 63/09.			
	Monitoring policy MP-03 applies.			
10-02	Risk Management Plan			
	The policy applies in all vulnerable areas where the application of pesticide to land is or would be a significant drinking water threat (existing activity or future activity) and the person engaging in the activity does not require a permit under the <i>Pesticides Act</i> and Ontario Regulation 63/09.			
	The application of pesticides to land may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the <i>Clean Water Act</i> .			
	Establishment of a Risk Management Plan is required. The plan shall meet the guidelines with respect to the contents of an approval under the <i>Pesticides Act</i> and Ontario Regulation 63/09.			
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.			
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.			

Monitoring policies MP-24 and MP-25 apply.

6.1.11 Policies Applying to Threat 11. The Handling and Storage of Pesticide

A total of eight policies apply to the prescribed drinking water threat "Threat 11. The Handling and Storage of Pesticide." Of these, two are particular to this threat category and are detailed below, while six other policies can be found in section 6.2 General Policies.

Threat 11. The Handling and Storage of Pesticide						
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)	
11-01	Prohibition		Prohibition	RMO	Future	
11-02	Risk Managemer	nt Plan	Risk Management Plan	RMO	Existing, Future	
see also General Policies: G-01 Restricted Land Use - Non-residential G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund G-12 Municipal/Conservation Authority Implementation Assistance						

	G-12 Municipal/Conservation Authority Implementation Assistance					
POLICY TEXT ID	POLICY TEXT					
11-01	Prohibition					
	The policy applies in all WHPA-A vulnerable areas where the handling and storage of pesticide would be a significant drinking water threat (future activity).					
	The expansion of existing handling or storage facilities for pesticides beyond the capacity existing as of the threats verification date shall be prohibited.					
	The establishment of new handling or storage facilities for pesticides shall be prohibited.					
	Therefore, the handling and storage of pesticide is designated for the purposes of s.57 of the <i>Clean Water Act</i> .					
	Monitoring policy MP-23 applies.					
11-02	Risk Management Plan					
	The policy applies in: 1. all vulnerable areas where the handling and storage of pesticide is a significant drinking water threat, except for the expansion of existing handling					

- or storage facilities for pesticides within WHPA-A (existing activity or future activity); and
- 2. all vulnerable areas where the handling and storage of pesticide would be a significant drinking water threat except for the establishment of new handling or storage facilities for pesticides within WHPA-A (future activity).

The handling and storage of pesticide may only occur in accordance with an approved Risk Management Plan where:

- A. the handling and storage is an existing activity for all vulnerable areas where the activity is a significant drinking water threat; or
- B. the handling and storage is a proposed activity for all vulnerable areas, except WHPA-A, where the activity would be a significant drinking water threat.

Establishment of a Risk Management Plan is required. Therefore, the handling and storage of pesticide is designated for the purposes of s.58 of the *Clean Water Act*.

As a minimum, the Risk Management Plan shall contain:

- 1) product handling;
- 2) product storage;
- record-keeping;
- 4) disposal methods;
- 5) spills response plan

The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.

All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.

Monitoring policies MP-24 and MP-25 apply.

6.1.12 Policies Applying to Threat 12. The Application of Road Salt

A total of ten policies apply to the prescribed drinking water threat "Threat 12. The Application of Road Salt." Of these, four are particular to this threat category and is detailed below, while six other policies can be found in section 6.2 General Policies. Please refer to the Assessment Reports and Explanatory Document to identify the circumstances where this activity would be a significant drinking water threat, as per the Technical Rules, as amended from time to time.

Definition of Road Salt - means any solid or liquid chloride-based chemical used to melt ice, provide traction and / or ice / snow control.

Threat	Threat 12. The Application of Road Salt						
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)		
12-01	Risk Managemen	it Plan	Risk Management Plan	RMO	Existing, Future		
12-02	Salt Managemen	t Plan	Specify Action	Municipality	Existing, Future		
12-03	Salt Managemen of Transportation	•	Specify Action	МТО	Existing, Future		
12-04	Salt Application - Outreach	- Education &	Education & Outreach	Municipality/ Public Health Unit	Existing, Future		
G-05 Incentive Pro G-06 Education Po G-11 Financial Su		ial Plan and Zoning By-lad ogram ogram		sistance			

POLICY TEXT ID	POLICY TEXT
12-01	Risk Management Plan
	The policy applies in all vulnerable areas where the application of road salt is or would be a significant drinking water threat (existing activity or future activity).
	Establishment of a Risk Management Plan is required. The application of road salt may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the <i>Clean Water Act</i> , where the following applies: a) Where the activity is or would be a significant drinking water threat; b) Salt is or could be applied to the property; c) The salt application area is equal to or greater than 200 square metres or 8 parking spots; and d) The property is used for any land uses except residential consisting of four units or fewer.
	As a minimum, the Risk Management Plan shall:
	a) follow best management practices consistent with those used across Canada;b) employ the latest winter maintenance technologies;c) identify actions to improve practices in the general use of road salts.

The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.

Notwithstanding the above, a Risk Management Plan will also be required for any municipal properties where the activity is or would be a significant drinking water threat.

All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the amendment to the Source Protection Plan taking effect.

Monitoring policies MP-24 and MP-25 apply.

12-02

Where the application of road salt is or would be a significant drinking water threat, the municipality shall review and, if necessary, revise or issue new Salt Management Plans for the application of salt on roadways in all Wellhead Protection Areas. The Salt Management Plan shall include, as a minimum, measures to ensure application rate, timing and location to reduce the potential for salt-related surface water run-off and groundwater infiltration and meet the objectives of Environment Canada's Code of Practice for Environmental Management of Road Salts including the salt vulnerable area mapping to include areas where significant threats can occur.

All locations for Salt Management Plans for existing activities shall be inventoried within three years and plans established within five years of the amendment to the Source Protection Plan taking effect

12-03

To ensure any existing or new application of road salt, where road salt application is or would be a significant drinking water threat, ceases to be or never becomes a significant drinking water threat, the Ministry of Transportation should review and, if necessary, revise or issue new Salt Management Plans for the application of salt on roadways in all Wellhead Protection Areas.

The Salt Management Plan should include, as a minimum, measures to ensure application rate, timing and location reduce the potential for salt-related surface water run-off and groundwater infiltration and meet the objectives of Environment Canada's Code of Practice for Environmental Management of Road Salts including the salt vulnerable area mapping to include areas where significant threats can occur.

	All locations for Salt Management Plans for existing activities shall be inventoried within three years and plans established within five years of the amendment to the Source Protection Plan taking effect.
12-04	To ensure any existing or new application of road salt, where road salt application is or would be a significant drinking water threat, ceases to be or never becomes a significant threat, the municipality and / or the Public Health Unit shall develop and implement an education initiative addressing the application of road salt. The education program shall encourage the implementation of best management practices that form the core of the Smart About Salt or similar accreditation program to reduce the impact of winter de-icing activities.

6.1.13 Policies Applying to Threat 13. The Handling and Storage of Road Salt

A total of eight policies apply to the prescribed drinking water threat "Threat 13. The Handling and Storage of Road Salt." Of these, two are particular to this threat category and is detailed below, while six other policies can be found in section 6.2 General Policies. Please refer to the Assessment Reports and Explanatory Document to identify the circumstances where this activity would be a significant drinking water threat, as per the Technical Rules, as amended from time to time.

Definition of Road Salt - means any solid or liquid chloride-based chemical used to melt ice, provide traction and / or ice / snow control.

Threat	Threat 13. The Handling and Storage of Road Salt				
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
13-01	Risk Managemer	nt Plan	Risk Management Plan	RMO	Existing, Future
13-02	Salt Handling and Storage - Education & Outreach		Education & Outreach	Municipality/ Public Health Unit	Existing, Future
see also	General Policies:	G-04 Amend Offic G-05 Incentive Pro G-06 Education Pr G-11 Financial Sup	rogram		sistance

POLICY TEXT ID	POLICY TEXT

13-01 Risk Management Plan

Establishment of a Risk Management Plan is required. The handling and storage of road salt may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the *Clean Water Act*.

For clarity, a Risk Management Plan is required where the following applies:

- a) Where the activity is or would be a significant drinking water threat;
- b) Salt is handled or stored on the property; and
- c) The property is used for any land uses except residential consisting of four units or fewer.

The risk management plan, at a minimum, will include terms and conditions that mirror a salt management plan, and comply with contemporary standards to ensure the handling and storage of road salt ceases to be a significant drinking water threat.

All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the amendment to the Source Protection Plan taking effect.

Monitoring policy MP-23 applies.

13-02

To ensure any existing or new handling and storage of road salt, where this activity is or would be a significant drinking water threat, ceases to be or never becomes a significant threat, the municipality and / or the Public Health Unit shall develop and implement an education initiative addressing the handling and storage of road salt. The education program shall encourage the implementation of best management practices that form the core of the Smart About Salt or similar accreditation program to reduce the impact of winter de-icing activities.

6.1.14 Policies Applying to Threat 14. The Storage of Snow

A total of eight policies apply to the prescribed drinking water threat "Threat 14. The Storage of Snow." Of these, two are particular to this threat category and are detailed below, while six other policies can be found in section 6.2 General Policies.

Threat 14. The Storage of Snow

6-50

Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
14-01	Prohibition		Prohibition	RMO	Existing, Future
14-02	Risk Management Plan		Risk Management Plan	RMO	Existing, Future
see also	see also General Policies: G-01 Restricted Land Use - Non-residential G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund G-12 Municipal/Conservation Authority Implementation Assistance				sistance

POLICY TEXT ID	POLICY TEXT
14-01	Prohibition
	The policy applies in all groundwater vulnerable areas where the storage of snow is or would be a significant drinking water threat (existing activity or future activity).
	The storage of snow shall be prohibited under the following conditions:
	 A. the snow is stored below grade and the storage area is: 1. at least 0.01 but not more than 0.5 hectares; or 2. more than 0.5 but not more than 1 hectare; or 3. more than 1 but not more than 5 hectares; or 4. more than 5 hectares.
	Therefore, the storage of snow is designated for the purposes of s.57 of the <i>Clean Water Act</i> .
	Notwithstanding clause (A) above, the storage of snow is not prohibited where:
	a) the snow storage constitutes the snowbanks immediately adjacent to a travelled roadway; andb) the snow storage is contained within the road allowance for the travelled roadway.
	With regards to any snow storage sites existing as of the effective date of the Source Protection Plan, the policy takes effect eight months following the effective date of the Source Protection Plan.
	Monitoring policy MP-23 applies.
14-02	Risk Management Plan for Snow Storage

POLICY TEXT ID	POLICY TEXT
	The policy applies in all vulnerable areas where the storage of snow is or would be a significant drinking water threat (existing activity or future activity).
	The storage of snow may only occur in accordance with an approved Risk Management Plan under the following conditions:
	For surface water systems;
	 A. the snow is stored at or above grade and the storage area is: 1. at least 0.01 but not more than 0.5 hectares; or 2. more than 0.5 but not more than 1 hectare.
	For groundwater systems;
	B. the snow is stored at or above grade and the storage area is:1. more than 1 but not more than 5 hectares; or2. more than 5 hectares.
	Establishment of a Risk Management Plan is required. Therefore, the storage of snow is designated for the purposes of s.58 of the <i>Clean Water Act</i> .
	As a minimum, the Risk Management Plan shall address:
	 runoff management; implementation of best management practices; consideration of alternative sites outside of the affected vulnerable area
	Notwithstanding clause (A) and clause (B) above, a Risk Management Plan is not required where:
	a) the snow storage constitutes the snowbanks immediately adjacent to a travelled roadway; and
	b) the snow storage is contained within the road allowance for the travelled roadway.
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.
	Monitoring policies MP-24 and MP-25 apply.

6.1.15 Policies Applying to Threat 15. The Handling and Storage of Fuel

A total of thirteen policies apply to the prescribed drinking water threat "Threat 15. The Handling and Storage of Fuel." Of these, five are particular to this threat category and are

detailed below, while eight other policies can be found in section 6.2 General Policies. Please refer to the Assessment Reports and Explanatory Document to identify the circumstances where this activity would be a significant drinking water threat, as per the Technical Rules, as amended from time to time.

Threat	15. The Handl	ing and Storage o	of Fuel		
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
15-01	Prohibition of Certain Fuel Facilities		Prohibition	RMO	Future
15-02	Risk Management Plan for Small Fuel Facilities		Risk Management Plan	RMO	Existing, Future
15-03	Risk Management Plan for Certain Fuel Facilities		Risk Management Plan	RMO	Existing
15-04	Prohibition of Fu Lakes Intakes	el Near Great	Prohibition	RMO	Future
15-05	Risk Managemer Near Great Lakes		Risk Management Plan	RMO	Existing, Future
see also	General Policies: G-01 Restricted Land Use - Non-residential G-02 Restricted Land Use - Residential G-03 Restricted Land Use - Non-residential for Fuel Near Intakes G-04 Amend Official Plan and Zoning By-law G-05 Incentive Program G-06 Education Program G-11 Financial Support Fund				
		G-12 Municipal/C	onservation Authority Im	plementation As.	sistance

POLICY TEXT ID	POLICY TEXT
15-01	Prohibition of Certain Fuel Facilities
	 The policy applies in: all Wellhead Protection Areas where the handling and storage of fuel would be a significant drinking water threat (future activity); and all Intake Protection Zones with a vulnerability score of 10 where the handling and storage of fuel would be a significant drinking water threat (future activity).
	Furthermore, the policy applies under the following circumstances: A. the quantity of fuel is more than 2,500 L; or B. the quantity of fuel is more than 250 L but not more than 2,500 L and where the facility is a bulk plant or a facility that manufacturers or refines fuel

POLICY TEXT ID	POLICY TEXT
	The expansion of an existing facility is permitted, if it can be proven to the Risk Management Official's satisfaction that the expansion provides greater integrity to the system and reduces the risk to the drinking water supply.
	The establishment of a new facility shall be prohibited.
	Therefore, the handling and storage of fuel is designated for the purposes of s.57 of the <i>Clean Water Act</i> .
	Monitoring policy MP-23 applies.
15-02	Risk Management Plan for Small Fuel Facilities
	 The policy applies in: all Wellhead Protection Areas where the handling and storage of fuel would be a significant drinking water threat (existing activity or future activity); and all Intake Protection Zones with a vulnerability score of 10 where the handling and storage of fuel would be a significant drinking water threat (existing activity or future activity).
	Furthermore, the policy applies under the following circumstances:
	A. the quantity of fuel is more than 250 L but not more than 2,500 L; and where the facility is not a bulk plant or a facility that manufacturers or refines fuel Establishment of a Risk Management Plan is required. The handling and storage of fuel may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the <i>Clean Water Act</i> .
	As a minimum, the Risk Management Plan shall contain:
	 a requirement for an annual inspection as per Section 14 of the CAN/CSA-B139-00 Installation Code for Oil Burning Equipment that includes an inspection of the storage tank; or requirements for record keeping and documentation, including the annual
	inspection report and a copy of the ten-year comprehensive inspection by the fuel oil distributor;
	3) provisions for the proper disposal of unused fuel;4) a spills response plan;
	5) requirements for the following containment measures:
	 i. a double-walled storage tank; ii. a visible interstitial leak alarm; iii. if the tank is situated near a floor drain, sump, indoor well, or cracks in the floor, then an electronic monitoring system for spills and leaks with a visible and audible alarm;
	6) a deadline for the containment measures identified in clause (5) to be in place within five years of the effective date of the Source Protection Plan.

POLICY TEXT ID	POLICY TEXT
	A Risk Management Plan shall not be approved unless the Risk Management Plan contains provisions requiring:
	a) an impervious floor surface in the vicinity of the tank; andb) the body of the tank and any supply lines to not be in direct contact with the ground.
	For clarity, the policy only applies to storage located inside a building.
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.
	Monitoring policies MP-24 and MP-25 apply.

POLICY TEXT ID	POLICY TEXT
15-03	Risk Management Plan for Certain Fuel Facilities
	 The policy applies in: all Wellhead Protection Areas where the handling and storage of fuel is a significant drinking water threat (existing activity); and all Intake Protection Zones with a vulnerability score of 10 where the handling and storage of fuel is a significant drinking water threat (existing activity). Furthermore, the policy applies under the following circumstances: the quantity of fuel is more than 2,500 L; or the quantity of fuel is more than 250 L but not more than 2,500 L and where the facility is a bulk plant or a facility that manufacturers or refines fuel
	Establishment of a Risk Management Plan is required. The handling and storage of fuel may only occur in accordance with an approved Risk Management Plan. Therefore, the handling and storage of fuel is designated for the purposes of s.58 of the <i>Clean Water Act</i> .
	As a minimum, the Risk Management Plan shall address: 1) product handling; 2) product storage; 3) record keeping and documentation, including any inspection reports; 4) disposal methods; 5) spills response plan; and 6) containment measures.
	The expansion of an existing facility is permitted, if it can be proven to the Risk Management Official's satisfaction that the expansion provides greater integrity to the system and reduces the risk to the drinking water supply.
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.
	Monitoring policies MP-24 and MP-25 apply.
15-04	Prohibition of Fuel near Great Lakes Intakes
	The policy applies where storage of fuel would be a significant drinking water threat (future activity) within the following areas:

POLICY TEXT ID POLICY TEXT 1. for Events-based Area for the Kincardine Drinking Water System (as shown on Map 5.1.K.K.1) where fuel is stored in a quantity of 3,000 L or more (EBA-3000); 2. for Event-based Area for the Meaford Drinking Water System (as shown on Map 5.2.M.M.1) where fuel is stored in a quantity of 2,000 L or more (EBA-2000) The establishment of new fuel storage shall be prohibited. The expansion or replacement of existing fuel storage is permitted, and shall be governed by Policy 15-05, if it can be demonstrated to the Risk Management Official's satisfaction that the expansion or replacement will provide greater integrity. The establishment of any new fuel storage at a new location in the Meaford EBA-2000, which is being constructed to replace any existing storage to service the marina in Meaford is not prohibited and is therefore designated for the purposes of s.58 of the Clean Water Act and governed by Policy 15-05. Therefore, the storage of fuel is designated for the purposes of s.57 of the Clean Water Act. Monitoring policy MP-23 applies. **Risk Management Plan for Fuel near Great Lakes** 15-05 **Intakes** The policy applies where the storage of fuel is a significant drinking water threat (existing activity) within the following areas: 1. for Events-based Area for the Kincardine Drinking Water System (as shown on Map 5.1.K.K.1) where fuel is stored in a quantity of 3,000 L or more (EBA-3000); 2. for Events-based Area for the Meaford Drinking Water System (as shown on Map 5.2.M.M.1) where fuel is stored in a quantity of 2,000 L or more (EBA-2000) The policy applies where the storage of fuel is a significant drinking water threat (existing and future activity) within the following areas: 1. for Events-based Area for the Kincardine Drinking Water System (as shown on Map 5.1.K.K.1) where fuel is stored in a quantity of 5,000 L or more (EBA-5000), and 10,000 L or more (EBA-10000);

POLICY TEXT ID	POLICY TEXT
	2. for Events-based Area for the Meaford Drinking Water System (as shown on Map 5.2.M.M.1) where fuel is stored in a quantity of 5,000 L or more (EBA-5000), and 12,000 L or more (EBA-12000);
	3. for Events-based Area for the Wiarton Drinking Water System (as shown on Map 5.2.SBP.W.1) where fuel is stored in a quantity of 5,000 L or more (EBA-5000), and 8,000 L or more (EBA-8000);
	4. for Events-based Area for the Lion's Head Drinking Water System (as shown on Map 5.3.NBP.LH.1) where fuel is stored in a quantity of 5,000 L or more (EBA-5000), 7,500 L or more (EBA-7500), and 22,500 L or more
	 (EBA-22500); 5. for Events-based Area for the Owen Sound Drinking Water System (as shown on Map 5.2.OS.RN.1) where fuel is stored in a quantity of 15,000 L or more (EBA-15000), 25,000 L or more (EBA-25000), and 50,000 L or more
	 (EBA-50000); 6. for Events-based Area for the Southampton Drinking Water System (as shown on Map 5.1.SS.S.1) where fuel is stored in a quantity of 13,000 L or more (EBA-13000), and 22,500 L or more (EBA-22500);
	7. for Events-based Area for the Thornbury Drinking Water System (as shown on Map 5.2.BM.T.1) where fuel is stored in a quantity of 50,000 L or more (EBA-50000), and 100,000 L or more (EBA-100000)
	8. For Events-based Area for the East Linton Drinking Water System (as shown on map) where fuel stored in a quantity of 2,500L or more (EBA-2500), 5,000L or more (EBA-5000), and 10,000L or more (EBA-10000)
	The capacity of existing fuel storage shall be determined and recorded within three years of the effective date of the Source Protection Plan. The expansion or replacement of existing fuel storage is permitted, if it can be demonstrated to the Risk Management Official's satisfaction that the expansion or replacement will provide greater integrity.
	Establishment of a Risk Management Plan is required. The storage of fuel may only occur in accordance with an approved Risk Management Plan. Therefore, the storage of fuel is designated for the purposes of s.58 of the <i>Clean Water Act</i> .
	As a minimum, the Risk Management Plan shall address: 1) product handling; 2) product storage;
	 3) record keeping and documentation, including any inspection reports; 4) disposal methods; 5) spills response plan; and 6) containment measures.
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.

POLICY TEXT ID	POLICY TEXT
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.
	Monitoring policies MP-24 and MP-25 apply.

6.1.16 Policies Applying to Threat 16. The Handling and Storage of a Dense Non-aqueous Phase Liquid (DNAPL)

A total of eleven policies apply to the prescribed drinking water threat "Threat 16. The Handling and Storage of a Dense Non-aqueous Phase Liquid (DNAPL)." Of these, three are particular to this threat category and are detailed below, while eight other policies can be found in section 6.2 General Policies.

Threat	Threat 16. The Handling and Storage of a Dense Non-aqueous Phase Liquid (DNAPL)						
Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)		
16-01	Prohibition		Prohibition	RMO	Future		
16-02	Risk Managemer	t Plan	Risk Management Plan	RMO	Existing, Future		
16-03	Sewer Use By-lav	V	Specify Action	Municipality	Existing, Future		
see also	General Policies:	G-02 Restricted La G-04 Amend Offic G-06 Education Pr G-08 Hazardous V G-09 Hazardous V G-11 Financial Sup	Vaste Disposal Opportunion Vaste Collection Program	ty	sistance		

POLICY TEXT ID	POLICY TEXT
16-01	Prohibition
	The policy applies in WHPA-A and WHPA-B where the handling and storage of a dense non-aqueous phase liquid (DNAPL) would be a significant drinking water threat (future activity).
	The handling and storage of a dense non-aqueous phase liquid (DNAPL) shall be prohibited where the total quantity of liquid product(s) is greater than 25 litres and contains any amount of any of the following:
	 Dioxane-1,4 Polycyclic Aromatic Hydrocarbons (PAHs)

POLICY TEXT ID **POLICY TEXT** Tetrachloroethylene (PCE) • Trichloroethylene or another DNAPL that could degrade to Trichloroethylene Vinyl chloride or another DNAPL that could degrade to vinyl chloride. Therefore, the handling and storage of a dense non-aqueous phase liquid (DNAPL) is designated for the purposes of s.57 of the *Clean Water Act*. Monitoring policy MP-23 applies. 16-02 **Risk Management Plan** The policy applies to the handling and storage of a dense non-aqueous phase liquid (DNAPL) for all vulnerable areas where the activity is a significant drinking water threat (existing activity) and in the WHPA-C (future activity). The handling and storage of a dense non-aqueous phase liquid (DNAPL) may only occur in accordance with an approved Risk Management Plan where the total quantity of liquid product(s) is greater than 25 litres and contains any amount of any of the following: • Dioxane-1,4 Polycyclic Aromatic Hydrocarbons (PAHs) • Tetrachloroethylene (PCE) • Trichloroethylene or another DNAPL that could degrade to Trichloroethylene • Vinyl chloride or another DNAPL that could degrade to vinyl chloride. Establishment of a Risk Management Plan is required. Therefore, the handling and storage of a dense non-aqueous phase liquid (DNAPL) is designated for the purposes of s.58 of the Clean Water Act. As a minimum, the Risk Management Plan shall contain: 1) product handling; 2) product storage; 3) record keeping; 4) disposal methods; 5) spills response plan The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official. All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.

POLICY TEXT ID	POLICY TEXT			
	Monitoring policies MP-24 and MP-25 apply.			
16-03	Sewer Use By-law			
	The policy applies in all vulnerable areas where the handling and storage of a dense non-aqueous phase liquid (DNAPL) is or would be a significant drinking water threat (existing activity or future activity).			
	A municipal by-law shall be enacted to control the disposal of a dense non-aqueous phase liquid (DNAPL) into the municipal sewer.			
	The by-law shall contain the following provisions:			
	 applies to all properties in a wellhead protection area zone A or B or C; and prohibits the discharge of sewage containing: 			
	a) Dioxane-1,4; or			
	b) one or more Polycyclic Aromatic Hydrocarbons (PAHs); orc) Tetrachloroethylene (PCE); or			
	d) Trichloroethylene or another DNAPL that could degrade to Trichloroethylene; or			
	e) Vinyl chloride or another DNAPL that could degrade to vinyl chloride.			
	The process to enact the by-law shall be initiated within three years of the effective date of the Source Protection Plan and the by-law enacted within five years of the effective date of the Source Protection Plan.			
	Monitoring Policies MP-11 and MP-12 apply.			

6.1.17 Policies Applying to Threat 17. The Handling and Storage of an Organic Solvent

A total of eleven policies apply to the prescribed drinking water threat "Threat 17. The Handling and Storage of an Organic Solvent." Of these, three are particular to this threat category and are detailed below, while eight other policies can be found in section 6.2 General Policies.

Threat 17. The Handling and Storage of an Organic Solvent						
Policy Text ID						
17-01	Prohibition	Prohibition	RMO	Future		
17-02	Risk Management Plan	Risk Management Plan	RMO	Existing		

17-03	Sewer Use By-law	Specify Action	Municipality	Existing, Future
	General Policies:	G-01 Restricted Land Use - Non-residential G-02 Restricted Land Use - Residential G-04 Amend Official Plan and Zoning By-law G-06 Education Program G-08 Hazardous Waste Disposal Opportunit G-09 Hazardous Waste Collection Program	,	
		G-11 Financial Support Fund G-12 Municipal/Conservation Authority Imp	lementation As	sistance

POLICY TEXT ID	POLICY TEXT
17-01	Prohibition
	The policy applies in all vulnerable areas where the handling and storage of an organic solvent would be a significant drinking water threat (future activity).
	The handling and storage of an organic solvent shall be prohibited and is therefore designated for the purposes of s.57 of the <i>Clean Water Act</i> .
	Monitoring policy MP-23 applies.
17-02	Risk Management Plan
	The policy applies in all vulnerable areas where the handling and storage of an organic solvent is a significant drinking water threat (existing activity).
	Establishment of a Risk Management Plan is required. The handling and storage of an organic solvent may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the <i>Clean Water Act</i> .
	As a minimum, the Risk Management Plan shall address:
	 product handling product storage record keeping disposal methods spills response plan.
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.

POLICY TEXT ID	POLICY TEXT
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan. Monitoring policies MP-24 and MP-25 apply.
17-03	Sewer Use By-law
	The policy applies in all vulnerable areas where the handling and storage of an organic solvent is or would be a significant drinking water threat (existing activity or future activity).
	A municipal by-law shall be enacted to control the disposal of an organic solvent into the municipal sewer.
	The by-law shall contain the following provisions:
	 applies to all properties in a wellhead protection area zone A or B with a vulnerability score of 10; and prohibits the discharge of sewage containing:
	a) Carbon tetrachloride; orb) Chloroform; orc) Methylene chloride (Dichloromethane); ord) Pentachlorophenol.
	The process to enact the by-law shall be initiated within three years of the effective date of the Source Protection Plan and the by-law enacted within five years of the effective date of the Source Protection Plan.
	Monitoring policies MP-11 and MP-12 apply.

6.1.18 Policies Applying to Threat 18. The Management of Runoff that Contains Chemicals Used in the De-icing of Aircraft

A total of three policies apply to the prescribed drinking water threat "Threat 18. The Management of Runoff that Contains Chemicals Used in the De-icing of Aircraft." Of these, one is particular to this threat category and is detailed below, while two other policies can be found in section 6.2 General Policies.

Threat 18. The Management of Runoff that Contains Chemicals Used in the De-icing of Aircraft

Policy Text ID	Policy Name		Policy Approach	Implementing Body	Activity Type (Existing/Future)
18-01 Prohibition		Prohibition	RMO	Future	
see also General Policies: G-01 Restricted La G-04 Amend Offici		ind Use - Non-residential ial Plan and Zoning By-lav	v		

POLICY TEXT ID	POLICY TEXT
18-01	Prohibition
	The policy applies in all vulnerable areas where the management of runoff that contains chemicals used in the de-icing of aircraft would be a significant drinking water threat (future activity).
	The management of runoff that contains chemicals used in the de-icing of aircraft shall be prohibited and is therefore designated for the purposes of s.57 of the <i>Clean Water Act</i> .
	Monitoring policy MP-23 applies.

6.1.19 Policies Applying to Threat 19. 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

A total of twelve policies apply to the prescribed drinking water threat "Threat 19. 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." Of these, four are particular to this threat category and are detailed below, while eight other policies can be found in section 6.2 General Policies.

Threat 1	Threat 19. 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						
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)			
19-01	Review of Permits to Take Water	Prescribed Instrument	Ministry of Environment, Conservation, and Parks	Existing/Future			
19-02	Ongoing Tier 3 Model Maintenance	Strategic Action	Ministry of Environment, Conservation, and Parks	Existing/Future			
19-03	Water Management Plan	Land Use Planning	Municipality	Future			

19-04	Collaboration w Agencies	ith Other	Specify Action	Municipality	Existing/Future
see also	General Policies:	G-02 Restricte G-04 Amend (G-05 Incentive G-06 Educatio G-11 Financia G-12 Municip	-	y-law y Implementation A	ssistance

POLICY TEXT ID	POLICY TEXT				
19-01	Review of Permits to Take Water				
	The policy applies in all vulnerable areas where water taking activities are significant drinking water threats (existing and future activity). The policy applies to provincial instruments related to water takings, Permits to Take Water.				
	The Ministry of the Environment, Conservation, and Parks shall:				
	 Review all existing permits; Review all future permit applications; Determine whether the permits contain appropriate terms and conditions and require adequate measures to be in place to ensure that the water taking activity ceases to be a significant drinking water threat; and Where the Ministry is of the opinion that the terms, conditions and measures contained in a permit are not adequate, make such amendments to the approval so as to ensure that the water taking activity ceases to be a significant drinking water threat. Monitoring policy MP-01 applies.				
	memoring pency in the applies.				
19-02	Ongoing Maintenance of Tier 3 Water Budget Models				
	The Ministry of Environment, Conservation, and Parks should consider the need for ongoing maintenance and funding of the Tier 3 Water Budget models. Ongoing maintenance includes, but is not limited to; 1. Supporting environmental monitoring to address data gaps; and 2. Providing information to improve modelling inputs. Monitoring policies MP-02 and MP-32 apply.				

POLICY TEXT ID	POLICY TEXT
19-03	Water Quantity Management Plan Development
	The Municipality of Brockton shall develop and implement a water management plan using the Tier 3 water budget findings and any other available data to ensure that consumptive demand does not become a significant drinking water threat. The plan shall address; 1. Issues with water supply; 2. Future development; 3. New water supply options; and 4. Water conservation. The municipal Official Plan must be updated or amended with the water management plan. The update or amendment to the Official Plan must be initiated within three years and completed within five years of the effective date of the Source Protection Plan. Monitoring policy MP-21 applies.
10.04	Collaboration with Other Agencies
19-04	Conaboration with other Agencies
	The Municipality of Brockton shall give due consideration to collaborating with other agencies for, but not limited to, the following purposes; - Incentive/financial assistance programs; - Education programs/materials; - Scientific research; - Policy implementation; and - Communication with the public.
	Monitoring policy MP-19 applies.

6.1.20 Policies Applying to Threat 20. An Activity That Reduces the Recharge of an Aquifer

There are no policies that apply to the prescribed drinking water threat "Threat 20. An Activity That Reduces the Recharge of an Aquifer."

Threat 20. An Activity That Reduces the Recharge of an Aquifer					
Policy Text ID	Policy Name	Policy Approach		Activity Type (Existing/Future)	
No policies apply					

6.1.21 Policies Applying to Threat 21. The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm-Animal Yard

A total of eleven policies apply to the prescribed drinking water threat "Threat 21. The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm-Animal Yard." Of these, four are particular to this threat category and are detailed below, while seven other policies can be found in section 6.2 General Policies.

Threat 21. The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm-Animal Yard						
Policy Text ID	Policy Name			Policy Approach	Implementing Body	Activity Type (Existing/Future)
21-01	Prohibition – Confinement Area or Yard			Prohibition	RMO	Future
21-02	Risk Management Plan - Grazing or Pasturing			Risk Management Plan	RMO	Existing, Future
21-03	Risk Management Plan - Confinement Area or Yard			Risk Management Plan	RMO	Existing, Future
21-04	N	Constraint on Nutrient Management Approvals - Confinement Area or Yard		Prescribed Instrument	Ministry of Agriculture, Food and Rural Affairs	Existing, Future
Policies: G-04 Amend Of G-05 Incentive I G-06 Education G-11 Financial S G-12 Municipal,		G-04 Amend Official G-05 Incentive Progr G-06 Education Prog G-11 Financial Supp G-12 Municipal/Con	gram		tance	

POLICY TEXT ID	POLICY TEXT
21-01	Prohibition – Confinement Area or Yard
	The policy applies in all WHPA-A vulnerable areas where use of land as an outdoor confinement area or a farm-animal yard would be a significant drinking water
	threat (future activity).

POLICY TEXT ID	POLICY TEXT
	The expansion of an existing outdoor confinement area or farm-animal yard beyond the number of square metres existing as of the effective date of the Source Protection Plan shall be prohibited.
	The establishment of a new outdoor confinement area or a farm-animal yard shall be prohibited and is therefore designated for the purposes of s.57 of the <i>Clean Water Act</i> .
	Monitoring policy MP-23 applies.
21-02	Risk Management Plan – Grazing or Pasturing
	The policy applies in all vulnerable areas where use of land as livestock grazing or pasturing land is or would be a significant drinking water threat (existing activity or future activity).
	Establishment of a Risk Management Plan is required. The use of land as livestock grazing or pasturing land may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the <i>Clean Water Act</i> .
	The Risk Management Plan shall satisfy the following provisions:
	 The Risk Management Plan shall be based on appropriate agricultural best management practices. The Risk Management Plan shall contain measures that will prevent farm animals from accessing land that lies within three metres of the top of bank of a watercourse. A reasonable allowance can be made to provide a stream crossing where necessary.
	The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.
	All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan.
	Monitoring policies MP-24 and MP-25 apply.
21-03	Risk Management Plan – Confinement Area or Yard
	The policy applies in all vulnerable areas where the use of land as an outdoor confinement area or a farm-animal yard is or would be a significant drinking water threat (existing activity or future activity), except for: a) the expansion of an existing outdoor confinement area or farm-animal yard within WHPA-A (future activity); or

POLICY TEXT ID **POLICY TEXT** b) the establishment of a new outdoor confinement area or a farm-animal yard within WHPA-A (future activity). The use of land as an outdoor confinement area or a farm-animal yard may only occur in accordance with an approved Risk Management Plan: 1. for existing facilities (existing activity); or 2. for the expansion of an existing facility (future activity); or 3. for the establishment of a new facility (future activity). Establishment of a Risk Management Plan is required. Therefore, the use of land as an outdoor confinement area or a farm-animal yard is designated for the purposes of s.58 of the Clean Water Act. The plan shall meet the guidelines with respect to the contents of a nutrient management strategy established under Part III of O.Reg. 267/03 under the Nutrient Management Act. It is recommended that NMAN software or similar be utilized to assist in calculations. The calculations shall be reviewed annually and the Risk Management Plan updated so that it accurately reflects the anticipated operation on the farm unit during the following year. The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official. For properties where the person engaging in the activity has, or intends to obtain, a nutrient management strategy approval as per the Nutrient Management Act, the person engaging in the activity may be deemed to be exempt from the requirement for a Risk Management Plan if the process described in O.Reg. 287/07, s. 61, is followed. All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan. Monitoring policies MP-24 and MP-25 apply. 21-04 **Constraint on Nutrient Management Approvals – Confinement Area or Yard** The policy applies in all vulnerable areas where use of land as an outdoor confinement area or a farm-animal yard is or would be a significant drinking water threat (existing activity or future activity). The policy applies to the following provincial instruments:

POLICY TEXT ID	POLICY TEXT
	- nutrient management strategies under the Nutrient Management Act
	A nutrient management strategy shall satisfy the following provisions:
	 The nutrient management strategy shall not permit the expansion of an existing outdoor confinement area or a farm-animal yard beyond the number of square metres existing as of the effective date of the Source Protection Plan in all WHPA-A vulnerable areas where the activity is or would be a significant drinking water threat (existing activity or future activity); and The nutrient management strategy shall not permit the establishment of a new outdoor confinement area or a farm-animal yard in all WHPA-A vulnerable areas where the activity would be a significant drinking water threat (future activity).
	The Ministry of the Agriculture, Food and Rural Affairs and/or the Ministry of the Environment, Conservation, and Parks shall:
	 A. review all existing nutrient management strategies in all vulnerable areas where the use of land as an outdoor confinement area or a farm-animal yard is a significant drinking water threat (existing activity); and B. determine whether the approvals as described in clause (A) contain appropriate terms and conditions and require adequate measures to be in place to satisfy clauses (1) and (2) above; and C. where the Ministry is of the opinion that the terms, conditions and measures contained in an approval as described in clause (B) are not adequate, cause such amendments to be made to the nutrient management strategy so as to satisfy clauses (1) and (2) above.
	Existing approvals shall be reviewed within three years of the effective date of the Source Protection Plan. Where amendments are deemed necessary, the existing approval shall be amended within 12 months of the review.
	Monitoring policies MP-07 and MP-08 apply.

6.1.22 Policies Applying to Threat 22. The establishment and operation of a liquid hydrocarbon pipeline

There are no policies that apply to the prescribed drinking water threat "Threat 22. **The establishment and operation of a liquid hydrocarbon pipeline**"

Threat	Threat 22. The establishment and operation of a liquid hydrocarbon pipeline			
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)

No policies apply

6.2 Policies Applying to Multiple Threat Categories

Policies in this section describe the required actions related to multiple categories of prescribed drinking water threats. One policy may apply to several different threat categories as specified in the policy text. The policies in this section complement those found in section 6.1

Table 6.2.1 – Summary of Policies that Apply to Multiple Threat Categories

Policies	Applying to Multiple Thre	at Categories	imple Tilleat Categories	
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)
G-01	Restricted Land Use – Non-residential	Restricted Land Use	RMO/ Municipality	Existing, Future
G-02	Restricted Land Use – Residential	Restricted Land Use	RMO/ Municipality	Existing, Future
G-03	Restricted Land Use – Non- Residential for Fuel Near Intakes	Restricted Land Use	RMO/ Municipality	Existing, Future
G-04	Amend Official Plan and Zoning By-law	Land Use Planning	Municipality	Future
G-05	Incentive Program	Incentive Program	Ministry of the Environment, Conservation, and Parks/ Ministry of Agriculture, Food and Rural Affairs	Existing
G-06	Education Program	Education and Outreach	Conservation Authorities	Existing, Future
G-07	Vulnerable Area Road Signs	Education and Outreach	Ministry of Transportation/ Municipality	Existing, Future
G-08	Hazardous Waste Disposal Opportunity	Specify Action	Municipality	Existing, Future
G-09	Hazardous Waste Collection Program	Specify Action	Municipality	Existing, Future
G-10	Transition Provisions	Specify Action	All those named in other Source Protection Plan policies	Existing, Future
G-11	Financial Support Fund	Specify Action	Ministry of the Environment, Conservation, and Parks/ Ministry of Agriculture, Food and Rural Affairs	Existing

G-12	Municipal/Conservation Authority Implementation Assistance	Specify Action	Ministry of the Environment, Conservation, and Parks	Existing, Future
G-13	Update of Municipal Emergency Response Plans	Specify Action	Municipality	Existing, Future
G-14	Compliance Monitoring for Prescribed Instruments	Strategic Action	Ministry of the Environment, Conservation, and Parks/Ministry of Agriculture, Food and Rural Affairs/Ministry of Natural Resources and Forests	Existing

POLICY TEXT ID	POLICY TEXT
G-01	Restricted Land Use – Non-residential
	The policy applies to the following activities in all vulnerable areas where the activity is or would be a significant drinking water threat (existing activity or future activity):
	 The Establishment, Operation or Maintenance of a Waste Disposal Site Within the Meaning of Part V of the Environmental Protection Act The application of agricultural source material to land; The storage of agricultural source material; The application of non-agricultural source material to land; The handling and storage of non-agricultural source material; The application of commercial fertilizer to land; The handling and storage of commercial fertilizer; The application of pesticide to land; The handling and storage of pesticide; The handling and storage of road salt; The storage of snow; The handling and storage of fuel; The handling and storage of a dense non-aqueous phase liquid (DNAPL); The handling and storage of an organic solvent; The management of runoff that contains chemicals used in the de-icing of aircraft; An activity that takes water from an aquifer or 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; The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard.
	All non-residential land uses are designated as restricted land uses for the purpose of s. 59 of the <i>Clean Water Act</i> .

POLICY TEXT ID **POLICY TEXT** For clarity, the activities identified above are those which are the subject of other source protection plan policies that utilize prohibition under s. 57 of the Clean Water Act or utilize Risk Management Plans under s. 58 of the Clean Water Act. Despite the above policy, a Risk Management Official may issue written direction specifying the situations under which a planning authority or building official may be permitted to make the determination that a site specific land use is or is not designated for the purposes of section 59. Where such direction has been issued, a site specific land use that is the subject of an application for approval under the Planning Act or for a permit under the Building Code Act is not designated for the purposes of Section 59, provided that the planning authority or building official, as applicable, is satisfied that: a. The application complies with the written direction issued by the Risk Management Official; and b. The applicant has demonstrated that a significant drinking water threat activity designated for the purposes of section 57 or 58 will not be engaged in, or will not be affected by the application. The policy takes effect on the effective date of the Source Protection Plan. Restricted Land Use – Residential G-02 The policy applies to the following activities in all vulnerable areas where the activity is or would be a significant drinking water threat (existing activity or future activity): 1. The handling and storage of fuel; 2. The handling and storage of a dense non-aqueous phase liquid (DNAPL); 3. The handling and storage of an organic solvent 4. An activity that takes water from an aquifer or surface water body without returning the water taken to the same aquifer or surface water body; 5. An activity that reduces the recharge of an aquifer. All residential land uses are designated as restricted land uses for the purpose of s. 59 of the Clean Water Act. For clarity, the activities identified above are those which are the subject of other source protection plan policies that utilize prohibition under s. 57 of the Clean Water Act or utilize Risk Management Plans under s. 58 of the Clean Water Act. Despite the above policy, a Risk Management Official may issue written direction specifying the situations under which a planning authority or building official may be

permitted to make the determination that a site specific land use is not designated for the purposes of section 59. Where such direction has been issued, a site specific

POLICY TEXT ID	POLICY TEXT
POLICY TEXT ID	land use that is the subject of an application for approval under the Planning Act or
	for a permit under the Building Code Act is not designated for the purposes of
	Section 59, provided that the planning authority or building official, as applicable, is satisfied that:
	a. The application complies with the written direction issued by the Risk
	Management Official; and
	b. The applicant has demonstrated that a significant drinking water threat activity designated for the purposes of section 57 or 58 will not be engaged in, or will not be affected by the application.
	The policy takes effect on the effective date of the Source Protection Plan.
G-03	Restricted Land Use – Non-Residential for Fuel Near
	Intakes
	The policy applies to the following activities in all Events-based Areas where the activity is or would be a significant drinking water threat (existing activity or future activity):
	The handling and storage of fuel. All non-residential land uses are designated as restricted land uses for the purpose of s. 59 of the <i>Clean Water Act</i> .
	For clarity, the activities identified above are those which are the subject of other source protection plan policies that utilize prohibition under s. 57 of the <i>Clean Water Act</i> or utilize Risk Management Plans under s. 58 of the <i>Clean Water Act</i> .
	This policy takes effect on the effective date of the Source Protection Plan.
G-04	Amend Official Plan and Zoning By-law
	The municipality shall amend its official plan and zoning by-law to include:
	mapping that identifies vulnerable areas where activities would be significant threats (future activities); and
	text that identifies that policies within the Source Protection Plan may apply to activities in these mapped areas.
	This policy applies to all land use designations and zones described in the municipality's official plan and zoning by-law, as amended from time to time.
	The Municipality shall:
	A. Adopt the official plan, or official plan amendment as the case may be, and:

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TOLICI TEXT ID	i. submit the plan to the appropriate approval authority; or
	ii. give a notice of adoption; and
	B. Adopt the zoning by-law, or zoning by-law amendment as the case may be, and give a notice of adoption.
	For Section 40(2) of the <i>Clean Water Act</i> , the official plan and zoning by-law must be amended within five years of the effective date of the Source Protection Plan or at the time of the next official plan and zoning by-law conformity exercise as per Section 26 of the <i>Planning Act</i> .
	Monitoring policy MP-21 applies.
G-05	Incentive Program
	The policy applies to the following activities in all vulnerable areas where the activity is a significant drinking water threat (existing activity):
	 The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage; The application of agricultural source material to land; The storage of agricultural source material; The application of commercial fertilizer to land; The handling and storage of commercial fertilizer; The application of pesticide to land; The handling and storage of pesticide; The handling and storage of fuel; The handling and storage of an organic solvent; An activity that takes water from an aquifer or 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; The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard.
	The Ministry of the Environment, Conservation, and Parks and/or the Ministry of Agriculture, Food and Rural Affairs should make available an incentive program. The program should require an application that is subject to a technical review and approval process.
	Eligible projects in the grant program generally may include, but not necessarily be limited to:
	 consulting fees; plan preparation costs related to risk management plans, nutrient management plans or nutrient management strategies; training courses related to the preparation of plans where the applicant intends to prepare the plan themselves; implementation of best management practices

POLICY TEXT ID	POLICY TEXT
	Other eligible projects in the grant program may include, but not necessarily be limited to:
	A. For the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage:
	 connection to the municipal sewer line and decommissioning of an on-site sewage system; connection to a communal system and decommissioning of an on-site sewage system; installation of an advanced on-site sewage treatment system; repairs and upgrades
	Note: Any unused components of the previous on-site sewage system should be properly decommissioned. Systems that are subject to an order by a principal authority should not be eligible.
	B. For the application of agricultural source material, pesticide or commercial fertilizer:
	spreading equipment improvements;calibration equipment;GPS technology
	C. For the storage of pesticide or commercial fertilizer:
	storage improvements;handling equipment improvements
	D. For the storage of agricultural source material:
	runoff management;relocation of manure storage facilities;improvements to manure storage facilities
	E. For the storage of fuel:
	 storage and handling equipment improvements; secondary containment measures; strike prevention barriers; spill prevention measures; spills plans; exclusion of remediation costs
	F. For the use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard:
	 fencing or other measures to restrict access to watercourses; alternative watering systems; runoff management; relocation of outdoor confinement areas or farm-animal yards; improvements to outdoor confinement areas or farm-animal yards

POLICY TEXT ID **POLICY TEXT** The following costs related to projects may also be considered as eligible expenses: - permit and approval fees; - applicable taxes The program should be established within three years of the effective date of the Source Protection Plan. Monitoring policy MP-06 applies. **Education Program** G-06 The policy applies to the following activities in all vulnerable areas where the activity is or would be a significant drinking water threat (existing activity or future activity): 1. The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act; 2. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage; 3. The application of agricultural source material to land; 4. The storage of agricultural source material; 5. The application of non-agricultural source material to land; 6. The handling and storage of non-agricultural source material; 7. The application of commercial fertilizer to land; 8. The handling and storage of commercial fertilizer; 9. The application of pesticide to land; 10. The handling and storage of pesticide; 11. The application of road salt; 12. The handling and storage of road salt; 13. The storage of snow; 14. The handling and storage of fuel; 15. The handling and storage of a dense non-aqueous phase liquid (DNAPL); 16. The handling and storage of an organic solvent; 17. The management of runoff that contains chemicals used in the de-icing of aircraft: 18. An activity that takes water from an aquifer or surface water body without returning the water taken to the same aquifer or surface water body; 19. An activity that reduces the recharge of an aquifer; 20. The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. Conservation Authorities shall provide an education program that offers information and materials to landowners. Furthermore, Conservation Authorities are encouraged to work in partnership with other agencies to implement this policy. Topics of a general nature in the program may include, but are not limited to:

POLICY TEXT ID **POLICY TEXT** - Prohibition of certain activities; - Requirements for a Risk Management Plan for certain activities; - Constraints on prescribed instruments (provincial approvals) for certain activities; Local zoning by-law provisions and municipal by-laws; - Proper disposal methods; - Occurrence of hazardous waste disposal opportunities; - Funding opportunities; - Advice and assistance available from provincial Ministries, non-governmental organizations and other agencies; - Various types of facilities or equipment for application, handling or storage activities; Best management practices for application, handling or storage activities. Other topics in the program related to particular activities may include, but are not necessarily limited to: A. For waste disposal sites: - risks associated with use and disposal of hazardous products; - alternative or environmentally-friendly products; - a 'take back' concept whereby retailers and manufacturers would offer to collect materials that they have sold or manufactured. B. For on-site sewage systems and sewers: - risks associated with disposal of hazardous products into sewers; - the location of storm sewers and the negative impacts of disposing of materials down the sewer; - alternative or environmentally-friendly products. C. For the application of agricultural source material to land or the storage of agricultural source material: - the emerging science of vaccinations for ruminants against the shedding of Escherichia coli O157:H7 as a further best management practice. D. For the application of pesticides: - the requirement for permits and licenses. E. For the storage of fuel: - risks associated with use of these products; - fostering of fuel companies' efforts to promote best management practices within the industry; - education of associated industries, such as the insurance sector, to promote best management practices within the industry and reflect these in their premiums. F. For the handling and storage of a dense non-aqueous phase liquid (DNAPL) or an organic solvent: - risks associated with use of these products; - products that may contain these chemicals; - alternative or environmentally-friendly products;

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	 municipal sewer use by-laws prohibiting the discharge of products containing dense non-aqueous phase liquids or organic solvents; education of businesses about the importance of proper hazardous waste disposal; fostering of chemical manufacturing associations' efforts to promote best management practices within the industry; education of associated industries, such as the insurance sector, to promote best management practices within the industry and reflect these in their premiums.
	The program shall be established within three years of the effective date of the Source Protection Plan.
	Monitoring policy MP-27 applies.
G-07	Vulnerable Area Road Signs
	The policy applies in all vulnerable areas where activities are or would be a significant drinking water threat (existing activity or future activity).
	 In accordance with Section 22 (7) of the Clean Water Act, the Ministry of Transportation should: in collaboration with the Ministry of the Environment, Conservation, and Parks as well as in consultation with Source Protection Authorities, design a sign to the appropriate Provincial standards, to identify the locations of Wellhead Protection Areas and Intake Protection Zones; and manufacture, install and maintain the signs along Provincial Highways within the Wellhead Protection Areas with a vulnerability score of 10, an Intake Protection Zone or Wellhead Protection Area E with a vulnerability score of 8 or higher and/or an events-based area.
	 Municipalities and counties shall be responsible for: purchasing, installing and maintaining appropriate signs designed by the Province in collaboration with the Ministry of the Environment, Conservation, and Parks as well as in consultation with Source Protection Authorities; and placing these signs, at a minimum, where municipal arterial roads or county roads are located within a Wellhead Protection Area with a vulnerability score of 10, an Intake Protection Zone or Wellhead Protection Area E with a vulnerability score of 8 or higher and/or within an events-based area.
	The program shall be established within two years of the effective date of the Source Protection Plan.
	Monitoring policies MP-10 and MP-18 apply.

POLICY TEXT ID	POLICY TEXT		
G-08	Hazardous Waste Disposal Opportunity		
	The policy applies to the following activities in all vulnerable areas where the activity is or would be a significant drinking water threat (existing activity or future activity):		
	 The land disposal of municipal waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in s. 1 of Regulation 347 (General - Waste Management) made under the Environmental Protection Act, is undertaken at the site; or A site that is not approved to accept hazardous waste but accepts a waste 		
	described in clause (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste as defined in Regulation 347 (General - Waste Management) made under the <i>Environmental Protection Act</i> ; or		
	3. The handling and storage of a dense non-aqueous phase liquid (DNAPL); or4. The handling and storage of an organic solvent.		
	Municipalities shall provide, to residents, access to a minimum of eight hazardous waste disposal days or opportunities per calendar year where products will be accepted for disposal. The interval between hazardous waste days or opportunities shall not exceed 210 days.		
	Municipalities may provide this service either:		
	a) on their own; orb) in conjunction with upper tier or other lower tier municipalities; orc) through other arrangements.		
	Furthermore, municipalities shall give due consideration to providing similar access to disposal opportunities for materials from agricultural uses.		
	The program shall be in effect within three years of the effective date of the Source Protection Plan.		
	Monitoring policy MP-16 applies.		
G-09	Hazardous Waste Collection Program		
	The policy applies to the following activities in all vulnerable areas where the activity is or would be a significant drinking water threat (existing activity or future activity):		
	 The land disposal of municipal waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in s. 1 of Regulation 347 (General - Waste Management) made under the <i>Environmental Protection Act</i>, is undertaken at the site; or A site that is not approved to accept hazardous waste but accepts a waste described in clause (p), (q), (r), (s), (t) or (u) of the definition of hazardous 		

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POLICY TEXT ID	 waste as defined in Regulation 347 (General - Waste Management) made under the <i>Environmental Protection Act</i>; or 3. The handling and storage of a dense non-aqueous phase liquid (DNAPL); or 4. The handling and storage of an organic solvent. Municipalities shall discuss the feasibility and logistics of jointly offering a hazardous waste collection program that would provide an ongoing disposal opportunity to property owners in the region. Municipalities may provide this service either: a) on their own; b) in conjunction with upper tier or other lower tier municipalities; or c) through other arrangements. 	
	Discussions shall be initiated within three years of the effective date of the Source Protection Plan. The lead Source Protection Authority shall assist municipalities in initiating these discussions. Monitoring policy MP-17 applies.	
G-10	Transition Provisions The policy applies to all other policies contained in the Source Protection Plan for all activities and in all vulnerable areas described in those policies. Where the term 'existing activity' is used in a source protection plan policy, the term shall be interpreted to include: 1) an activity that existed or occurred on a property on the day prior to the effective date of the Source Protection Plan; or 2) an activity that occurs seasonally or occasionally on the property and the activity has occurred at some point within the four years prior to the effective date of the Source Protection Plan; or 3) an activity where an application for one of the following approvals had been submitted to the approval authority prior to the effective date of the Source Protection Plan and a decision was pending or had been granted as of the effective date of the Source Protection Plan: a) an approval under one of the prescribed instruments (as defined by s. 1.0.1 of O.Reg 287/07); or b) a building permit under the Building Code; or c) an approval under the Planning Act or Condominium Act, including: i. a request for an official plan amendment;	

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	iv. an application for a minor variance under section 45 of the <i>Planning</i>Act;
	v. an application to amend or revoke an order under section 47 of the <i>Planning Act</i> ;
	vi. an application for the approval of a plan of subdivision under section 51 of the <i>Planning Act</i> ;
	vii. an application for a consent under section 53 of the <i>Planning Act</i> viii. an application for the approval of, or an exemption from an approval of, a condominium under section 9 of the <i>Condominium Act</i> , 1998;
	Where an activity is considered to be an existing activity under clause (3) above: A. other approvals as described by clauses 3(a) to 3(c) above which are necessary for the activity may be granted by the approval authority at any time within five years of the effective date of the Source Protection Plan.
	Where the term 'future activity' is used in a source protection plan policy, the term shall be interpreted to include:
	 i) activities that were not in existence prior to the effective date of the Source Protection Plan, except as described in clauses (1) to (3) above; ii) activities that commence on or after the effective date of the Source
	Protection Plan, except as described in clauses (3) above;
	iii) activities proposed on or after the effective date of the Source Protection Plan;
	iv) activities where an application for an approval under one of the prescribed instruments (as defined by s. 1.0.1 of O.Reg 287/07) is submitted on or after the effective date of the Source Protection Plan, except when allowed under clause 3(a) above;
	v) activities where an application for a building permit under the Building Code is submitted on or after the effective date of the first Source Protection Plan, except when allowed under clause 3(b) above;
	vi) activities where an application for an approval under the <i>Planning Act</i> or
	Condominium Act is submitted on or after the effective date of the first Source Protection Plan, except when allowed under clause 3(c) above.
	Frotection Fian, except when allowed under clause 3(c) above.
	The policy takes effect on the effective date of the Source Protection Plan.
G-11	Financial Support Fund
	The policy applies to the following activities in all vulnerable areas where the activity is a significant drinking water threat (existing activity):
	The establishment, operation or maintenance of a waste disposal site within
	the meaning of Part IV of the Environmental Protection Act;
	2. The establishment, operation or maintenance of a system that collects,
	stores, transmits, treats or disposes of sewage;
	3. The application to agricultural source material to land;
	4. The storage of agricultural source material;

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	5. The application of non-agricultural source material;		
	6. The handling and storage of non-agricultural source material;		
	7. The application of commercial fertilizer to land;		
	8. The handling and storage of commercial fertilizer;		
	9. The application of pesticide to land;		
	10. The handling and storage of pesticide;		
	11. The application of road salt;		
	12. The handling and storage of road salt;		
	13. The storage of snow;		
	14. The handling and storage of fuel;		
	15. The handling and storage of a dense non-aqueous phased liquid (DNAPL);		
	16. The handling and storage of an organic solvent;		
	17. The management of runoff that contains chemicals used in the de-icing of aircraft;		
	18. An activity that takes water from an aquifer or surface water body without		
	returning the water taken to the same aquifer or surface water body;		
	19. An activity that reduces the recharge of an aquifer;		
	20. The use of land as livestock grazing or pasture land, an outdoor confinement		
	area or a farm-animal yard.		
	The Ministry of the Environment, Conservation, and Parks and/or the Ministry of Agriculture, Food and Rural Affairs should establish a Financial Support Fund. The purpose of the fund would be to provide appropriate levels of monetary support for landowners incurring identifiable financial losses and costs resulting from the implementation of Source Protection Plan policies.		
	Claims for financial support should be submitted to, and reviewed by, a local review committee to determine the acceptability of the claim and amount of support to be paid.		
	Note: The financial support would not be available to cover the costs of implementation activities or projects eligible under incentive program policies (Policy Text ID G-05 in the Source Protection Plan).		
	The Ministry of the Environment, Conservation, and Parks and/or Ministry of Agriculture, Food and Rural Affairs should establish the Financial Support Fund within two years of the effective date of the Source Protection Plan.		
	Monitoring policy MP-16 applies.		

POLICY TEXT POLICY TEXT ID Municipal/Conservation Authority Implementation G-12 Assistance The policy applies to the following activities in all vulnerable areas where the activity is or would be a significant drinking water threat (existing activity or future activity): 1. The establishment, operation or maintenance of a waste disposal site within the meaning of Part IV of the Environmental Protection Act; 2. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage; 3. The application to agricultural source material to land; 4. The storage of agricultural source material; 5. The application of non-agricultural source material; 6. The handling and storage of non-agricultural source material; 7. The application of commercial fertilizer to land; 8. The handling and storage of commercial fertilizer; 9. The application of pesticide to land; 10. The handling and storage of pesticide; 11. The application of road salt; 12. The handling and storage of road salt; 13. The storage of snow; 14. The handling and storage of fuel; 15. The handling and storage of a dense non-aqueous phased liquid (DNAPL); 16. The handling and storage of an organic solvent; 17. The management of runoff that contains chemicals used in the de-icing of aircraft; 18. An activity that takes water from an aquifer or surface water body without returning the water taken to the same aquifer or surface water body; 19. An activity that reduces the recharge of an aquifer 20. The use of land as livestock grazing or pasture land, an outdoor confinement area or a farm-animal yard. The Ministry of the Environment, Conservation, and Parks should consider providing appropriate levels of financial assistance to municipalities for the costs of implementing policies under Part IV (Prohibition, Risk Management Plan and Restricted Land Uses) of the Clean Water Act. The Ministry of the Environment, Conservation, and Parks should consider providing appropriate levels of financial assistance to Conservation Authorities for the costs of implementing the education program policies (Policy Text ID G-04 and WN-35). The Ministry of the Environment, Conservation, and Parks should initiate discussions concerning implementation funding within two years of the effective date of the Source Protection Plan. Monitoring policy MP-02 applies.

POLICY TEXT POLICY TEXT ID **Update of Municipal Emergency Response** G-13 **Plans** For all municipalities where a Wellhead Protection Area or an Intake Protection Zone occurs in their jurisdiction and where activities are or would be significant drinking water threats, it is recommended that the Municipality: A. update their Emergency Response Plans to include: 1. maps to show the location of municipal drinking water systems and associated Wellhead Protection Areas and Intake Protection Zones 2. emergency contact numbers and protocols for the respective water treatment plant operating authority 3. spill contingency measures to prevent contamination of the drinking water 4. containment measures for water or chemicals used to deal with an emergency (including fire suppressants) B. ensure that local first responders have information about Wellhead Protection Areas or Intake Protection Zones as the case may be. Municipalities are strongly encouraged to implement these measures within one year of the effective date of the Source Protection Plan. Monitoring policy MP-26 applies. G-14 **Compliance Monitoring for Prescribed Instruments** The policy applies to the following activities in all vulnerable areas where the activity is a significant drinking water threat (existing activity): 1. The establishment, operation or maintenance of a waste disposal site within the meaning of Part IV of the Environmental Protection Act; 2. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage; 3. The storage of agricultural source material; 4. The application of non-agricultural source material; 5. The handling and storage of non-agricultural source material; 6. The application of pesticide to land; 7. An activity that takes water from an aquifer or surface water body without returning the water taken to the same aquifer or surface water body; 8. An activity that reduces the recharge of an aquifer; 9. The use of land as livestock grazing or pasture land, an outdoor confinement area or a farm-animal yard.

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	The policy applies to all Ministries where an activity requires approval using a Prescribed Instrument. The Ministry should undertake compliance/verification inspections to confirm that any new or amended conditions of approval are, or have been, implemented by the facility owner within 3 years of the date of the new or amended approval to ensure that the activity ceases to be, or does not become, a significant drinking water threat. Ongoing inspections should be conducted at least once every 5 years.

6.3 Policies Applying to Transport Pathways

Policies in this section address the various circumstances related to transport pathways. Transport pathways have the potential to increase the susceptibility of contamination in a vulnerable area.

Table 6.3.1 – Summary of Policies that Address Transport Pathways

Transport Pathways				
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)
TP-01	Municipal By-law for Geothermal Systems	Specify Action	Municipality	Future
TP-02	Municipal By-law for Water Connection	Specify Action	Municipality	Existing, Future
TP-03	Circulation of Proposals with New Transport Pathways	Specify Action	Municipality	Future
TP-04	Water Services for New Lots	Specify Action	Municipality	Future
TP-05	Provincial Legislation for Geothermal Systems	Specify Action	Ministry of the Environment, Conservation, and Parks	Future
TP-06	Provincial Permitting System for New Wells	Specify Action	Ministry of the Environment, Conservation, and Parks	Future
TP-07	Building Code Changes Related to Wells	Specify Action	Ministry of Municipal Affairs and Housing	Future
TP-08	O. Reg. 903 Changes Constraining Well Location	Specify Action	Ministry of the Environment, Conservation, and Parks	Future

Transpo	Transport Pathways			
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)
TP-09	Pilot Project to Locate Unidentified Wells	Establish Pilot Program	Ministry of the Environment, Conservation, and Parks/ Municipality/ Conservation Authority	Existing
TP-10	Incentive Program for Wells	Specify Action	Ministry of the Environment, Conservation, and Parks/ Ministry of Agriculture, Food and Rural Affairs	Existing
TP-11	Education Program – Transport Pathways	Specify Action	Conservation Authorities	Existing, Future

POLICY TEXT ID	POLICY TEXT	
TP-01	Municipal By-law for Geothermal Systems	
	To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, municipalities shall give due consideration to enacting a municipal by-law regarding geothermal energy systems in a WHPA-A or WHPA-B vulnerable area (future activity).	
	The municipal by-law would:	
	 prohibit the installation of vertical geothermal energy systems in WHPA-A; and prohibit the installation of open loop geothermal systems (where water is pumped out and not re-circulated) in WHPA-A and WHPA-B; and require that any drilling below the water table necessary for the installation of vertical geothermal systems in WHPA-B only be performed by a licensed well driller. 	
	The process to enact the by-law should be initiated within three years of the effective date of the Source Protection Plan and the by-law enacted within five years of the effective date of the Source Protection Plan.	
	Monitoring policies MP-11, MP-12 and MP-19 apply.	

POLICY TEXT ID	POLICY TEXT		
TP-02	Municipal By-law for Water Connection		
	To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, municipalities shall give due consideration to enacting a water connection by-law in a WHPA-A or WHPA-B vulnerable area (existing activity or future activity).		
	The by-law shall:		
	1. apply to all properties in a wellhead protection area zone A or B where:		
	a) the vulnerability score is 6, 8 or 10; andb) a municipal water line is located on a right-of-way that abuts a property;		
	 c) the linear distance between the water line and the point from which plumbing enters or is situated within a structure on the property is less than 100 metres; and d) sufficient capacity exists in the municipal water system to supply the 		
	 property require connection to the municipal water line; require decommissioning of any water wells on the property at the time of connection to the municipal water line; establish a deadline for the connection to be completed that is within five years of the effective date of the Source Protection Plan. 		
	At the discretion of the municipality, the by-law may also contain an exemption for properties where the estimated cost of the water connection exceeds three times the estimated cost of any upgrades or maintenance required on the existing water supply well to bring it into compliance with current regulations.		
	The process to enact the by-law should be initiated within three years of the effective date of the Source Protection Plan and the by-law enacted within five years of the effective date of the Source Protection Plan.		
	Monitoring policies MP-11 and MP-19 apply.		
TP-03	Circulation of Proposals with New Transport Pathways		
	To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a		

POLICY TEXT ID	POLICY TEXT
	transport pathway ceases to endanger the raw water supply of a drinking water system, municipalities have the following obligation under O. Reg 287/07 s. 27(3): If a person applies to a municipality for approval of a proposal to engage in an activity in a wellhead protection area or a surface water intake protection zone that may result in the creation of a new transport pathway or the modification of an existing transport pathway, the municipality shall give the source protection authority and the source protection committee notice of the proposal and shall include a description of the proposal, the identity of the person responsible for the proposal and a description of the approvals the person requires to engage in the proposed activity. Municipalities shall ensure that information on any proposals involving transport pathways are provided to the parties noted in the regulation (future activity). Monitoring policy MP-20 applies.
TP-04	Water Services for New Lots To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, municipalities shall give due consideration to including in their official plan a provision regarding the servicing of new lots in a WHPA-A or WHPA-B vulnerable area (future activity). The provision would:
	 apply to WHPA-A and WHPA-B where the vulnerability score is 10; and apply to new lots created either through severance or subdivision; and stipulate that new lots are only permitted where the property will be connected to a municipal water system Monitoring policies MP-13 and MP-22 apply.
TP-05	Provincial Legislation for Geothermal Systems To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, the Ministry of the Environment, Conservation, and Parks shall give due

POLICY TEXT ID	POLICY TEXT
	consideration to implementing legislation regarding geothermal energy systems (future activity).
	The legislation would include provisions that:
	 require that any drilling necessary for the installation of vertical geothermal systems only be performed by a licensed well driller; and prohibit the installation of open loop geothermal systems (where water is pumped out and not re-circulated); and prohibit the installation of vertical geothermal energy systems in WHPA-A. Monitoring policy MP-04 applies.
	
TP-06	Provincial Permitting System for New Wells
	To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, the Ministry of the Environment, Conservation, and Parks shall give due consideration to implementing legislation regarding a permit system for wells (future activity).
	The legislation would include provisions that would:
	 require a permit to be obtained prior to the construction of a well; require an application for a permit to include information about:
	 a) any wells currently on the property; b) distances to other features on the property or nearby, such as municipal wells, wellhead protection areas, lot lines, structures, wells, geothermal systems, and sewage systems; c) anticipated drilling depth and methods to be employed; d) materials to be used in construction; e) finished height and grading;
	 set guidelines for setbacks; establish a database for well permits that is connected to roll numbers and well records; establish an inspection regime and penalties for non-compliance; and consider the cumulative effect of wells.
	Monitoring policy MP-04 applies.
TP-07	Building Code Changes Related to Wells

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	To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, the Ministry of Municipal Affairs and Housing shall give due consideration to making changes to the Ontario Building Code and other such legislation related to wells (future activity).		
	The legislative changes would include provisions that would:		
	 deem wells to be a structure under the Ontario Building Code; and deem appropriate sections of O. Reg. 903 to be applicable law under the Ontario Building Code. 		
	Monitoring policy MP-09 applies.		
	O. Dog. 002 Changes Constraining Wall Location		
TP-08	O. Reg. 903 Changes Constraining Well Location		
	To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, the Ministry of the Environment, Conservation, and Parks shall give due consideration to making changes to O. Reg. 903 under the <i>Ontario Water Resources Act</i> (future activity).		
	The legislative changes would include provisions that would:		
	1. prohibit the drilling of wells within WHPA-A unless:		
	a) the well to be drilled would be a production well associated with a large residential municipal drinking water system; orb) the well to be drilled would be a monitoring well.		
	Monitoring policy MP-04 applies.		
TP-09	Pilot Project to Locate Unidentified Wells		
	To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, the Ministry of the Environment, Conservation, and Parks, in conjunction with municipalities and Conservation Authorities, shall give due consideration to creating a pilot project to determine the location of unused and abandoned wells		

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	within vulnerable areas. An additional goal of the project would be to decommission	
	the wells once they are located (existing activity).	
	The project could include:	
	- airborne geophysics;	
	- magnetic surveys;	
	- interviews;	
	- air photo interpretation and comparison over time;	
	- historical land use search.	
	Monitoring policy MP-05 applies.	
TP-10	Incentive Program for Wells	
	The policy applies to the establishment, operation or maintenance of a well in all WHPA-A and WHPA-B vulnerable areas (existing activity).	
	To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, the Ministry of the Environment, Conservation, and Parks and/or the Ministry of Agriculture, Food and Rural Affairs should make incentive programs available to property owners in the affected vulnerable areas. Investment should continue in existing incentive programs (e.g. Ontario Drinking Water Stewardship Program) that contribute to the protection of drinking water threats over the long term. Consideration could also be given to new incentive programs to assist with the implementation costs of risk mitigation practices (existing activity).	
	Incentive programs should require an application that is subject to a technical review and approval process.	
	Eligible projects in the grant program should include, but not necessarily be limited to:	
	 well decommissioning; upgrades to meet standards; well maintenance; connection to municipal water service when accompanied by decommissioning of a well; consulting fees; other best management practices 	
	Monitoring policy MP-06 applies.	

POLICY TEXT ID	POLICY TEXT		
TP-11	Education Program - Transport Pathways		
	To ensure that any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or that a transport pathway ceases to endanger the raw water supply of a drinking water system, Conservation Authorities should provide an education program that offers information and materials to landowners whose properties may have transport pathways (existing activity or future activity). Topics to be discussed in the program may include, but are not limited to:		
	 connection between transport pathways and risks to groundwater aquifers; obligation to maintain wells and decommission abandoned wells under O. Reg 903; municipal by-laws governing geothermal systems, if enacted; Canadian Standards Guidelines for the Design and Installation of Earth Energy Systems; available resources, such as Water Wells Best Management Practices Book from OMAFRA and Water Supply Wells Requirements and Best Management Practices book from MOE other initiatives, such as WellAware and Well Wise, that encourage public participation; assistance and advice available from agencies, such as Ministry of the Environment, Conservation, and Parks and Ontario Ground Water Association; funding opportunities; the use of a qualified professional to consider the effect of municipal infrastructure and other developments with regard to the establishment of transport pathways; partnerships between licensing authorities (i.e. Ministry of the Environment, Conservation, and Parks for drinking water and Ministry of Natural Resources for oil and gas wells, and pits and quarries) and landowners; requirement for municipalities to forward proposals to Source Protection Authority where a proposed activity would create a transport pathway; limitations on siting of wells and geothermal systems that may come into force if new by-laws or statutes are passed; and best management practices for wells, geothermal systems and other transport pathways. 		
	Monitoring policy MP-28 applies.		

6.4 Monitoring Policies

Policies in this section provide the monitoring requirements for policies listed in sections 6.1, 6.2 and 6.3 of the Source Protection Plan. In particular, the monitoring policies direct that the implementing body for a Source Protection Plan policy is to provide a report on activities taken

to fulfill obligations under the policy. The numbers located at the end of each monitoring policy are the Policy Text ID numbers to which the monitoring policy applies.

POLICY TEXT ID	POLICY TEXT
MP-01	The Ministry of the Environment, Conservation, and Parks should, within 40 months after the effective date of the Source Protection Plan or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities, provide to the local Source Protection Authority a summary report of the approvals that were reviewed and any amendments that were made. 01-03; 01-05; 02-02; 02-07; 19-01
MP-02	The Ministry of the Environment, Conservation, and Parks should, by February 15 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives information on the financial support provided to Municipalities and Conservation Authorities for the implementation of Source Protection Plan policies. 19-02; G-13
MP-03	The Ministry of the Environment, Conservation, and Parks should, by February 15 each year, provide to the local Source Protection Authority, a summary report for the preceding calendar year that gives information on the number of occasions where: a) approvals were provided in the affected vulnerable areas and b) approvals were denied as a result of these policies. 01-04; 02-03; 02-08; 10-01
MP-04	The Ministry of the Environment, Conservation, and Parks should advise the Source Protection Authority and Source Protection Committee at such time as a proposal for changes to provincial legislation or regulations is brought forward. TP-05; TP-06; TP-10
MP-05	The Ministry of the Environment, Conservation, and Parks should, by February 15 each year, provide to the local Source Protection Authority a brief summary report for the preceding calendar year that gives information on the activities taken toward implementing the pilot project. A final report should be provided to the Source Protection Authority at the conclusion of the pilot project. TP-11
MP-06	The Ministry of the Environment, Conservation, and Parks and/or the Ministry of Agriculture, Food and Rural Affairs should advise the Source Protection Authority and Source Protection Committee at such time as the program is established.

POLICY TEXT ID	POLICY TEXT
	Once the program is established, the Ministry or the designated delivery agent should provide to the local Source Protection Authority, by February 15 each year, a summary report for the preceding calendar year that gives information on the number of grant recipients, the nature of the projects and the value of the grants.
	G-05; G-11; TP-08
MP-07	The Ministry of Agriculture, Food and Rural Affairs shall, within 40 months after the approval date of the Source Protection Plan, provide to the local Source Protection Authority a summary report that gives information on the number of occasions where provincial instruments were amended as a result of these policies.
	04-04; 06-02; 07-02; 21-04
MP-08	The Ministry of Agriculture, Food and Rural Affairs shall, by February 15 each year, provide to the local Source Protection Authority, a summary report for the preceding calendar year that gives information on the number of occasions where: a) approvals were provided in the affected vulnerable areas; and b) approvals were denied as a result of these policies.
	04-04; 06-02; 07-02; 21-04
MP-09	The Ministry of the Municipal Affairs and Housing should advise the Source Protection Authority and Source Protection Committee at such time as a proposal for changes to the Building Code is brought forward.
	02-06; TP-07
MP-10	The Ministry of Transportation shall, by February 15 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives information on the number of signs installed, the location of the signs and the associated vulnerable area. G-07
MP-11	Municipalities shall, within 30 days following the passing of the by-law, provide a copy of the by-law to the Source Protection Authority.
	02-01; 16-03; 17-03; TP-01; TP-02
MP-12	Municipalities shall, by February 15 each year, provide to the local Source Protection Authority, a summary report for the preceding calendar year that gives information on any violations, the number of occasions where enforcement action was taken and the result of the action.
	16-03; 17-03; TP-01

POLICY TEXT ID	POLICY TEXT
MP-13	Municipalities shall, by February 15 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that: a) gives information on the number of occasions where applications were denied as a result of these policies; and b) provides details on the number and type of approvals given. TP-04
MP-14	Municipalities shall, by February 15 each year, provide to the local Source Protection Authority, a summary report for the preceding calendar year that gives information on the number of occasions where applications were denied as a result of this policy, and provide details of any occasions where new lots were created.
	02-05
MP-15	Municipalities shall, by February 15 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives information on the number of inspections, the number of passed and failed inspections, the nature of the failures and the number of systems that were decommissioned.
	02-04
MP-16	Municipalities shall, by February 15 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives information on the dates and materials collected at household hazardous waste disposal opportunities. G-08
MP-17	Municipalities shall, by February 15 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives an update on the progress of discussions related to this policy. G-09
MP-18	Municipalities shall, by February 15 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives information on the number of signs installed, the location of the signs and the associated vulnerable area.
	G-07

POLICY TEXT ID	POLICY TEXT
MP-19	Municipalities shall, by February 15 each year, provide to the local Source Protection Authority a brief summary report for the preceding calendar year that gives information on the activities taken toward implementing the policy.
	01-07; 02-09; 02-10; 02-11; 02-12; 02-13; 02-14; 19-04; TP-01; TP-02, TP-04
MP-20	Municipalities should, within a reasonable timeframe after receiving a proposal that may involve a transport pathway, provide the necessary documents to the parties noted in O. Reg. 287/07 s 27(3).
	TP-03
MP-21	The Planning Approval Authority shall, within 30 days following the expiration of the appeal period after the passing of the zoning by-law or official plan, provide a copy of the zoning by-law or zoning by-law amendment, or official plan or official plan amendment to the Source Protection Authority.
	01-06; 19-03; G-04
MP-22	The Planning Approval Authority should, within 30 days following the expiration of the appeal period after the passing of the zoning by-law or official plan, provide a copy of the zoning by-law or zoning by-law amendment, or official plan or official plan amendment to the Source Protection Authority.
	TP-04
MP-23	The Risk Management Official shall, by February 1 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives information on the number of violations.
	03-01; 04-01; 06-01; 07-01; 08-01; 11-01; 13-01; 14-01; 15-01; 15-04; 16-01; 17-01; 18-01; 21-01
MP-24	The Risk Management Official shall, by February 1 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives an inventory of the number of locations where Risk Management Plans will be negotiated. This inventory must be completed by February 1 of the year following the third anniversary of the effective date.
	01-01; 01-02; 03-02; 04-02; 04-03; 08-02; 09-01; 10-02; 11-02; 12-01; 14-02; 15-02; 15-03; 15-05; 15-06; 16-02; 17-02; 21-02; 21-03
MP-25	The Risk Management Official shall, by February 1 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives information on the number of plans, a summary of the plans and a summary of any violations.

POLICY TEXT ID	POLICY TEXT
	01-01; 01-02; 03-02; 04-02; 04-03; 08-02; 09-01; 10-02; 11-02; 12-01; 14-02; 15-02; 15-03; 15-05; 15-06; 16-02; 17-02; 21-02; 21-03
MP-26	Municipalities should, within a reasonable timeframe after undertaking the suggested changes to the emergency response plan, provide a written summary to the Source Protection Authority.
	G-13
MP-27	The Conservation Authority shall, by February 15 each year, provide to the local Source Protection Authority, a summary report for the preceding calendar year that gives details of the dates, materials and number of contacts.
	G-06
MP-28	The Conservation Authority should, by February 15 each year, provide to the local Source Protection Authority a summary report for the preceding calendar year that gives details of the dates, materials and number of contacts.
	TP-11
MP-29	To ensure that long-term data are available for the analysis of trends in nitrate levels for the Walkerton Municipal Well supply, the Municipality of Brockton should continue to regularly analyse samples of raw water from the Walkerton municipal supply wells and other monitoring wells operated by the Municipality of Brockton.
	A copy of the results of these nitrate tests should be provided to the Saugeen Valley Source Protection Authority on a regular basis.
	Further, to ensure that long-term data are available for the analysis of trends in water levels for the Lake Rosalind Municipal Well supply, the Municipality of Brockton should continue to regularly analyse water quantity from the Lake Rosalind Municipal Well supply.
	The Municipality of Brockton shall, by February 15 each year, provide to the local Source Protection Authority, the results of monitoring for nitrates conducted on the wells for the Walkerton municipal drinking water system and any related monitoring wells. Additionally, by February 15 each year, the Municipality of Brockton shall provide a report on the quantity of water in the Lake Rosalind Municipal Well supply.
MP-30	The Ministry of the Environment, Conservation, and Parks shall report by February 15 and on August 15 of each year, the progress of the Ministry of the Environment, Conservation, and Parks Annual Reporting framework.

POLICY TEXT ID	POLICY TEXT
MP-31	The Ministry of the Environment, Conservation, and Parks should, within five years after the effective date of the Source Protection Plan or such other date as the Director determines, provide to the local Source Protection Authority a summary report of the Director's instructions that were reviewed and any amendments that were made. 01-05
MP-32	The Ministry of the Environment, Conservation, and Parks should, by February 15 of each year, provide to the local Source Protection Authority with a summary report of any relevant activities or funding related to the ongoing maintenance of Tier 3 Water Budget models. 19-02

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Chapter 7

Source Protection Plan Implementation







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7.0 Source Protection Plan Implementation

7.1 General Responsibilities

The *Clean Water Act* specifies the responsibilities of implementing bodies and persons engaged in activities that are subject to Source Protection Plan policies. The following sections provide a generalized overview of these responsibilities. Reference may be made to the *Clean Water Act* and Ontario Regulation 287/07 (General) for specific information. The Source Protection Plan identifies municipalities, provincial ministries and the Saugeen Valley and Grey Sauble Conservation Authorities as the main implementing bodies of the Plan. The policies that have been assigned to each implementing body are listed in Table 7.1.1.

Municipalities are responsible for:

- Enforcing Part IV of the Clean Water Act, or delegating the enforcement to another authority
- Using municipal planning tools to prohibit and/or manage drinking water threats that could emerge in the future
- Updating existing municipal operations and programs
- Reporting on the implementation of Source Protection Plan policies to the Saugeen Valley, Grey Sauble and Northern Bruce Peninsula Source Protection Authorities

Provincial ministries are responsible for:

- using prescribed instruments to manage existing threats by updating, amending or revoking provincial approvals (e.g. nutrient management strategies);
- using prescribed instruments to prohibit and/or manage drinking water threats that could emerge in the future;
- updating existing provincial programs;
- collaborating on research studies, education and outreach programs, and incentive programs; and
- reporting on the implementation of Source Protection Plan policies to the Saugeen Valley, Grey Sauble and Northern Bruce Peninsula Source Protection Authorities.

The Conservation Authorities are responsible for:

- coordinating an education program;
- collaborating with other agencies for pilot projects and certain other initiatives;
- assisting municipalities with their implementation tasks (upon request); and
- reporting on the implementation of Source Protection Plan policies to the Ministry of the Environment and Climate Change.

Persons carrying out or proposing to commence significant threat activities are responsible for:

• conforming to policies that use Part IV powers under the *Clean Water Act* and any other provisions that the Source Protection Plan policies may affect through other means, such as municipal by-laws or official plans.

 Table 7.1.1 Source Protection Plan Policies Assigned to Implementing Bodies

Agency/Municipality	Policies to be Implemented
Ministry of Agriculture, Food and Rural Affairs (OMAFRA)	04-04, 06-02, 07-02, 21-04, G-05, G-010, G-11, G-12, G-14, TP-10, MP-06, MP-07, MP-08
Ministry of the Environment and Climate Change (MOECC) Ministry of Natural Resources and	01-03, 01-04, 01-05, 02-02, 02-03, 02-07,02-08, 10-01, 19-01, 19-02, G-05, G-10, G-10, G-11, G-12, G-14, TP-05, TP-06, TP-08, TP-09, TP-10, MP-01, MP-02, MP-03, MP-04, MP-05, MP-06, MP-30, MP-31, MP-32 G-14
Forests (MNRF) Ministry of Transportation (MTO)	G-07, MP-10
Ministry of Municipal Affairs and Housing (MMAH)	02-06, G-10, TP-07, MP-09
Municipalities	01-06, 01-07, 02-01, 02-04, 02-05, 02-09, 02-10, 02-11, 02-12, 02-13, 02-14, 16-03, 17-03, 19-03, 19-04, G-01, G-02, G-03, G-04, G-07, G-08, G-09, G-10, G-13, TP-01, TP-02, TP-03, TP-04, TP-09, MP-11, MP-12, MP-13, MP-14, MP-15, MP-16, MP-17, MP-18, MP-19, MP-20, MP-21, MP-22, MP-26
RMO	01-01, 01-02, 03-01, 03-02, 04-01, 04-02, 04-03, 06-01, 07-01, 08-01, 08-02, 09-01, 10-02, 11-01, 11-02, 12-01, 13-01, 14-01, 14-02, 15-01, 15-02, 15-03, 15-04, 15-05, 16-01, 16-02, 17-01, 17-02, 18-01, 21-01, 21-02, 21-03, G-01, G-02, G-03, G-10, MP-23, MP-24, MP-25
Conservation Authorities	G-06, G-10, TP-09, TP-11, MP-27, MP-28
Municipality of Brockton	MP-29

^{*}The NEC is the planning authority in *Niagara Escarpment Planning and Development Act* (NEPDA) areas

7.2 Timeline for Implementation

The Source Protection Committee has the ability to specify when a given Source Protection Plan policy will take effect. In setting dates, there was a need to balance the urgency of addressing significant drinking water threats versus the capacity of the implementing body to act (i.e. staffing, funding, other requirements) and a reasonable timeframe for a landowner to take the necessary steps.

For existing activities, a specific timeframe is often stated in the policy text. Where a timeframe is not given, the default as specified in the *Clean Water Act* regulations would prevail. For future activities, a specific timeframe is usually not provided in the policy text. Policies related to future activities generally take effect on the effective date of the Source Protection Plan. The effective date will be specified by the Minister of the Environment and Climate Change in the approval of the Source Protection Plan.

7.3 Annual Reporting to the Ministry of the Environment and Climate Change

Under subsection 46(1) of the *Clean Water Act*, the Saugeen Valley, Grey Sauble and Northern Bruce Peninsula Source Protection Authorities are required to prepare and submit a progress report annually to the Director of the Source Protection Programs Branch of the Ministry of the Environment and Climate Change, and to the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Committee. The annual report must:

- describe the measures that have been taken to implement the Source Protection Plan, particularly relating to activities that are or would be significant drinking water threats;
- describe the result of any monitoring program;
- describe the extent to which the objectives set out in the Source Protection Plan are being achieved; and
- include other information such as:
 - i. a description of any failure by a person or body to take action in accordance with a policy by a specified date, and the reason for the failure,
 - ii. a description of any steps taken to address any deficiencies in the information that was used in the development of the Assessment Report set out in the Source Protection Plan, and
 - iii. a summary of the report prepared and submitted by the risk management official(s).

Ontario Regulation 287/07 specifies that this report must be submitted to the Ministry of the Environment and Climate Change by May 1st of each year.

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Chapter 8

Summary of Consultation Activities for Terms of Reference, Assessment Report and Source Protection Plan







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8.1 Terms of Reference

The process undertaken to develop the Terms of Reference for the three Source Protection Areas within the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region consisted of six major steps which commenced on January 8, 2008 and were concluded on October 17, 2008 with the submission of the Proposed Terms of Reference documents and supporting documentation to the Ministry of the Environment and Climate Change.

The six major steps were as follows:

Step 1: Notice of Commencement

A Notice of Commencement letter was sent on January 8, 2008 to the Clerks of all the upperand lower-tier municipalities, any part of which extends into the Source Protection Region, as well as the Chiefs of the two First Nations bands. The letter included an invitation to be a part of the Terms of Reference process.

Step 2: Development of Draft Proposed Terms of Reference

This step involved communicating with Source Protection Authorities and municipalities within the Source Protection Region and receiving from these agencies the information necessary to complete the Draft Proposed Terms of Reference. Presentations were made to municipal councils.

Draft Proposed Terms of Reference documents were prepared for each of the Source Protection Areas, while a single, common Summary Document was produced for the entire Region.

The Draft Proposed Terms of Reference documents for the three Source Protection Areas were approved by the Source Protection Committee at their May 20, 2008 meeting.

Step 3: Consultation of the Draft Proposed Terms of Reference

This step involved the publishing of the Draft Proposed Terms of Reference on the program website and making them available to the public and other groups. First Nations communities, municipalities and the Chairs of neighbouring Source Protection Committees were mailed copies of the documents. Copies were made available for public viewing at six locations across the Source Protection Region.

The commenting period for the Draft Proposed Terms of Reference commenced on May 23, 2008 and concluded on June 27, 2008, during which time all the Draft Proposed Terms of Reference documents were available to the public. A Draft Proposed Terms of Reference Notice was also published on May 23, 2008 in local newspapers.

Three public meetings were held in the Region to provide: additional access to the Draft Proposed Terms of Reference documents; an opportunity to speak with staff and Source Protection Committee members; and an occasion to submit comments. These meetings were held on June 17, 2008 at the Grey Sauble Conservation Authority offices, June 18, 2008 at the Municipality of Northern Bruce Peninsula offices and on June 19, 2008 at the Saugeen Valley

Conservation Authority offices. Comments on the documents were received as part of the consultation process.

Step 4: Finalization of the Proposed Terms of Reference

The Proposed Terms of Reference were prepared incorporating many of the comments received during Step 3.

The Proposed Terms of Reference documents for the three Source Protection Authorities were approved by the Source Protection Committee at their July 25, 2008 meeting.

Step 5: Consultation on the Proposed Terms of Reference

This step involved making the Proposed Terms of Reference available to the public on the program website. The Proposed Terms of Reference Notice was circulated to municipalities, First Nations communities, Source Protection Authorities and other groups, and those who made comments on the documents. The Source Protection Committee expressed concern that the 30-day commenting period for the Proposed Terms of Reference was not long enough. In order to accommodate these concerns, a preliminary release of the Proposed Terms of Reference took place on July 29, 2008. On this date, the documents were made available to the three Source Protection Authorities, the Chiefs of the First Nations bands and upper- and lower-tier municipalities within the Source Protection Region.

The Proposed Terms of Reference documents were presented to the three Source Protection Authorities. These meetings took place on July 31, 2008 at Saugeen Valley SPA, on August 11, 2008 at Northern Bruce Peninsula SPA and on August 13, 2008 at Grey Sauble SPA.

The Proposed Terms of Reference documents were officially released to the public on August 15, 2008. A Proposed Terms of Reference Notice was published on August 15, 2008 in local newspapers.

The deadline for receiving comments on the Proposed Terms of Reference was September 15, 2008. Sixteen comments were received on the Proposed Terms of Reference.

Step 6: SPA Reviews and comments on Proposed Terms of Reference

Comments concerning the Proposed Terms of Reference were summarized. The Proposed Terms of Reference documents and comments were presented to the three Source Protection Authorities. These meetings took place on October 2, 2008 at Saugeen Valley SPA; on October 8, 2008 at Grey Sauble SPA; and on October 14, 2008 at Northern Bruce Peninsula SPA. The three Source Protection Authorities passed motions to receive the documents and forward them on to the Ministry of the Environment and Climate Change.

The Terms of Reference documents were approved by the Minister of the Environment and Climate Change. The notices were posted to the Environmental Registry website on August 17, 2009.

8.2 Assessment Report

The process undertaken to develop the Assessment Reports for the three Source Protection Areas within the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region consisted of nine major steps that commenced on August 12, 2009 with the approval of the three Terms of Reference documents. These steps concluded on June 29, 2011 with the submission of the Proposed Assessment Report Updated June 15, 2011, Amended June 15, 2011 documents and supporting documentation to the Ministry of the Environment and Climate Change.

The nine major steps were as follows:

Step 1: Development of Draft Proposed Assessment Report

The development of the Draft Proposed Assessment Report was conducted by the Source Protection Committee between the months of September 2009 and April 2010. This step involved communicating with the Source Protection Authorities and municipalities within the Source Protection Region, and receiving information necessary to complete the Draft Proposed Assessment Report from these agencies. Presentations were made to municipal councils.

Draft Proposed Assessment Reports were prepared. These included three detailed Draft Proposed Assessment Reports developed from the Ministry of the Environment and Climate Change template, one for each of the Source Protection Areas, and one Summary Document for the entire Region.

The Draft Proposed Assessment Report documents for the three Source Protection Authorities were approved by the Source Protection Committee at its April 30, 2010 meeting.

Step 2: Consultation on the Draft Proposed Assessment Report

This step involved the publishing of the Draft Proposed Assessment Reports on the program website and making these available to the public, First Nations communities and other groups. This step also included receiving comments on the documents. The commenting period for the Draft Proposed Assessment Report commenced on May 6, 2010 and concluded on June 10, 2010, during which time all the Draft Proposed Assessment Report documents were available to the public. On May 6, 2010 the Draft Proposed Assessment Report notice was published in local newspapers.

Public consultation meetings were held in 2010:

May 19 Grey Sauble Conservation Authority office

May 26 Beaver Valley Community Centre

May 27 Walkerton Agricultural Society Building #2

May 28 Holstein Community Centre

May 29 Amabel-Sauble School

May 31 Mount Forest Fire Department Community Hall

June 2 Davidson Centre in Kincardine

June 3 Municipality of Northern Bruce Peninsula office

Eight public meetings were held in the Region to provide additional access to the Draft Proposed Assessment Report documents and to provide the public with an opportunity to speak with staff and Source Protection Committee members, as well as to submit comments.

The Draft Proposed Assessment Report documents were also forwarded to upper- and lower-tier municipalities and First Nations communities within the Source Protection Region. They were also sent to the Chairs of the three Source Protection Committees for the Source Protection Regions bordering the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region.

Step 3: Finalization of the Proposed Assessment Report

The Proposed Assessment Report was prepared incorporating many of the comments received during Step 2. The Proposed Assessment Report documents for the three Source Protection Authorities were approved by the Source Protection Committee at their June 25, 2010 meeting.

Step 4: Consultation on the Proposed Assessment Report

This step involved publishing the Proposed Assessment Report on the program website and making it available to the public, municipalities, First Nations communities, Source Protection Authorities, and other groups and receiving comments on the documents. On July 8, 2010 the Proposed Assessment Report documents were made available to the three Source Protection Authorities, the Chiefs of the two First Nations communities, and upper- and lower-tier municipalities within the Source Protection Region. They were also forwarded to the Chairs of the three Source Protection Committees for the Source Protection Regions bordering the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. A Proposed Assessment Report notice was published on July 8, 2010 in local newspapers.

A Proposed Assessment Report notice and information concerning significant drinking water threats was sent to landowners of properties with significant drinking water threats, which totalled approximately 3,400 packages.

The Proposed Assessment Report documents were presented to the three Source Protection Authorities. These meetings took place on July 12, 2010 for the Northern Bruce Peninsula Source Protection Authority, on July 22, 2010 for the Saugeen Valley Source Protection Authority and on July 28, 2010 for the Grey Sauble Source Protection Authority.

The deadline for receiving comments on the Proposed Assessment Report was August 9, 2010. One set of comments was received on the Proposed Assessment Report.

Step 5: Source Protection Authority Reviews and Comments on the Proposed Assessment Report

The Proposed Assessment Report documents and comments were presented to the three Source Protection Authorities. These meetings took place on September 8, 2010 for the Grey Sauble Source Protection Authority, on September 13, 2010 for the Northern Bruce Peninsula Source Protection Authority, and on September 15, 2010 for the Saugeen Valley Source Protection Authority. The three Source Protection Authorities passed motions to receive the documents and forward them on to the Ministry of the Environment and Climate Change.

Step 6: Draft Updated Assessment Report Preparation

The development of the Draft Updated Assessment Report documents was conducted by the Source Protection Committee between the months of September 2010 and April 2011. This step involved communicating with, and receiving information from the Source Protection Authorities and municipalities within the Source Protection Region as necessary to complete the Draft Updated Assessment Report.

Three separate Draft Updated Assessment Report documents were prepared. These included three detailed Draft Updated Assessment Report documents developed from the Ministry of the

Environment and Climate Change template, one for each of the Source Protection Areas. Comments received from the Director of the Source Protection Branch dated April 5, 2011 and the supplementary documentation listing of minor amendments as supplied by the Liaison Officer dated April 1, 2011 were considered and included where possible in preparation of the Draft Updated Assessment Report.

The Draft Updated Assessment Report documents for the three Source Protection Authorities were approved by the Source Protection Committee at its April 29, 2011 meeting

Step 7: Consultation on the Draft Updated Assessment Report

This step involved the publishing of the Draft Updated Assessment Reports on the program website and making them available to the public, municipalities, First Nations communities, and other groups and receiving comments on the documents. The commenting period for the Draft Updated Assessment Report commenced on May 5, 2011 and concluded on June 6, 2011, during which time all the Draft Updated Assessment Report documents were available to the public. On May 5, 2011, the Source Protection Committee published and made available to the public the Draft Updated Assessment Report. A Draft Updated Assessment Report notice was also published on May 5, 2011 in local newspapers.

The Draft Updated Assessment Report documents were forwarded to upper- and lower-tier municipalities and First Nations communities within the Source Protection Region. They were also sent to the Chairs of the three Source Protection Authorities for this Source Protection Region and the three Source Protection Regions bordering the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region.

The Draft Updated Assessment Report notice and information concerning significant drinking water threats was sent to landowners at properties with new significant drinking water threats. Approximately 1,090 packages were sent to landowners. An extension for submitting comments was given to property owners in the Walkerton Wellhead Protection Area and Walkerton Issue Contributing Area due to a mailing delay.

For the Draft Updated Assessment Report, two comments were received from municipalities and fifteen comments were received from the public.

Step 8: Proposed Assessment Report Updated June 15, 2011, Amended June 15, 2011 Finalization

Additional changes were made to the documents addressing the remaining MOECC comments made earlier with respect to suggested amendments.

The Proposed Assessment Report Updated June 15, 2011, Amended June 15, 2011 documents for the three Source Protection Areas were approved by the Source Protection Committee at their June 15, 2011 meeting.

Step 9: Source Protection Authority Review and Comment on the Proposed Assessment Report Updated June 15, 2011, Amended June 15, 2011

The Proposed Assessment Report Updated June 15, 2011, Amended June 15, 2011 documents were forwarded to the three Source Protection Authorities on June 17, 2011 for review and commenting.

The documents and comments received from the consultation process were presented to the three Source Protection Authorities. These meetings took place on June 27, 2011 for the Northern Bruce Peninsula SPA, on June 28, 2011 for the Saugeen Valley SPA via a telephone poll and on June 29, 2011 for the Grey Sauble SPA during a teleconference. The three Source Protection Authorities passed motions to receive the documents and forward them on to the Ministry of the Environment and Climate Change.

The Assessment Report documents were approved by the Minister of the Environment and Climate Change on September 23, 2011 (Northern Bruce Peninsula SPA), November 28, 2011 (Saugeen Valley SPA) and November 30, 2011 (Grey Sauble SPA). Notices were posted to the Environmental Registry website on January 24, 2012.

8.3 Revised Assessment Report

Step 1: Development of the Revised Assessment Report

The development of the Revised Assessment Report documents was conducted by the Source Protection Committee between July 2012 and June 2015.

Step 2: Consultation on the Revised Assessment Report

Five public meetings were held in the Region to provide additional access to the Revised Assessment Report documents, to provide the public with an opportunity to speak with staff and Source Protection Committee members, and to solicit comments. These meetings were held as follows: February 18, 2015 at the Durham Old Town Hall; February 19 at the Chesley Community Centre; February 24, 2015 at the Owen Sound Bayshore Community Centre; February 25, 2015 at the Walkerton Community Centre Auditorium Hall; and February 26, 2015 at the Southampton Town Hall. Two sessions were held for municipal officials and staff: February 19 at the Chesley Community Centre; and February 24, 2015 at the Owen Sound Bayshore Community Centre.

The Revised Assessment Report documents were forwarded to upper- and lower-tier municipalities and First Nations communities within the Source Protection Region. They were also sent to the Chairs of the three Source Protection Committees for the Source Protection Regions bordering the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region.

Step 3: Finalization of the Revised Assessment Report

The Revised Assessment Report was prepared, incorporating many of the comments received during Step 2. The Revised Assessment Report documents for the three Source Protection Areas were approved by the Source Protection Committee at their May 8, 2015 meeting.

Step 4: Source Protection Authority Review and Comment on the Revised Assessment Report

The Revised Assessment Report documents were forwarded to the three Source Protection Authorities seven days prior to the Source Protection Authority meetings for review and commenting.

The documents and comments received from the consultation process were presented to the three Source Protection Authorities. These meetings took place on May 28, 2015 for the Saugeen Valley SPA, on June 10, 2015 for the Grey Sauble SPA and on June 22, 2015 for the Northern Bruce Peninsula SPA. The three Source Protection Authorities passed motions to receive the documents and forward them to the Ministry of the Environment and Climate Change.

8.4 Source Protection Plan

The process undertaken to develop the Source Protection Plan for the three Source Protection Areas within the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region consisted of eleven major steps, which commenced on September 23, 2011 with the approval of the Assessment Report document for the Northern Bruce Peninsula. Prior to these steps commencing, a notice of commencement of Source Protection Plan preparation was sent to landowners potentially affected by the policies to be developed on May 11, 2011.

The eleven major steps were as follows:

Step 1: Pre-Consultation for the Draft Proposed Source Protection Plan

This step involved the forwarding of the Preliminary Source Protection Plan policies to all potential implementing agencies. Presentations were made to municipal councils, upper- and lower-tier municipal staff as well as Conservation Authority boards and staff about their roles as potential implementing agencies.

Municipal workshops were held for planning staff from various potential implementing agencies. These meetings took place in various locations around the region to be most convenient to each municipality. These meetings took place as follows: November 29, 2011 at the Kincardine

Municipal offices; December 1, 2011 at the Sauble Beach Community Centre; December 6, 2011 at the Neustadt Community Centre Hall; December 7, 2011 at the Flesherton Kinplex; and December 9, 2011 at the Saugeen Valley Conservation Authority office.

The commenting period for the Preliminary Source Protection Plan policies commenced on October 28, 2011 and concluded on January 13, 2012, during which time all of the Draft Preliminary Source Protection Plan policies were available to the potential implementing agencies.

Step 2: Development of the Draft Proposed Source Protection Plan

The development of the Draft Proposed Source Protection Plan was conducted by the Source Protection Committee between the months of October 2011 and March 2012. One detailed Draft Proposed Source Protection Plan and one Explanatory Document were developed for the entire Source Protection Region.

The Draft Proposed Source Protection Plan for the Source Protection Region was approved by the Source Protection Committee at its March 30, 2012 meeting.

Step 3: Consultation on the Draft Proposed Source Protection Plan

This step involved the publishing of the Draft Proposed Source Protection Plan on the program website, making it available to the public, municipalities, First Nations communities, and other groups, and receiving comments on the documents. The commenting period for the Draft Proposed Source Protection Plan commenced on April 5, 2012 and concluded on May 9, 2012, during which time the Draft Proposed Source Protection Plan was available to the public, both at the Source Protection Authority offices and on the website. A Draft Proposed Source Protection Plan notice was published on April 5, 2012 in local newspapers and online.

Five public meetings were held so that landowners and interested members of the public could come and learn about source protection and the Source Protection Plan policies. Landowners were also given the opportunity to meet with staff to discuss the potential significant drinking water threats that had been identified on their property.

The Draft Proposed Source Protection Plan was forwarded to upper- and lower-tier municipalities and First Public consultation meetings were held in 2012:

April 25 Mount Forest Complex

April 26 Royal Canadian Legion in Chatsworth

May 1 Northern Bruce Peninsula Municipal office

May 2 Mildmay Carrick Recreation Complex

May 3 Royal Canadian Legion in Tara

Nations communities within the Source Protection Region. It was also sent to the Chairs of the three Source Protection Authorities for this Source Protection Region and the three Source Protection Regions bordering the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region.

The Draft Proposed Source Protection Plan notice and other information was sent to landowners who have significant drinking water threats identified on their property. Approximately 3,400 packages were sent to landowners.

For the Draft Proposed Source Protection Plan, comments were received from five provincial Ministries, seven upper- and lower-tier municipalities, one other agency, and 29 comments from members of the public.

Step 4: Proposed Source Protection Plan Finalization

Changes were made to the Source Protection Plan addressing the comments received during consultation.

The Proposed Source Protection Plan for the Source Protection Region was approved by the Source Protection Committee at their May 25, 2012 meeting.

Step 5: Consultation on the Proposed Source Protection Plan

The Proposed Source Protection Plan was forwarded to the three Source Protection Authorities on June 4, 2012 for review and commenting. The commenting period concluded on July 3, 2012.

The Proposed Source Protection Plan (PSPP) and notice were posted on the program website on June 4, 2012. Hardcopies of the PSPP were placed in the three Source Protection Authority offices. Notices were also placed in fifteen area newspapers. Notices and CDs containing the Proposed Source Protection Plan were sent to upper- and lower-tier municipalities, ministries, conservation authorities, neighbouring Source Protection Committees, and First Nations communities. Notices were also sent to all those who submitted comments concerning the Draft Proposed Source Protection Plan.

A total of ten written comments were received from three provincial Ministries, four lower-tier municipalities, one other agency, a Source Protection Committee member, and members of the public.

Step 6: Source Protection Authority Review and Comment on the Proposed Source Protection Plan

The documents and comments received from the consultation process were presented to the three Source Protection Authorities. These meetings took place on July 11, 2012 for the Grey Sauble Conservation Authority, on July 23, 2012 for the Northern Bruce Peninsula Municipality and on July 26, 2012 for the Saugeen Valley Conservation Authority.

All three Authorities passed motions to support implementation of the Source Protection Plan provided the province provides full and continued funding for implementation. Saugeen Valley Source Protection Authority went further and stated that the Authority would not fund the implementation of the Source Protection Plan. All three Authorities also passed motions to receive the Proposed Source Protection Plan and authorized staff to submit the documents to the Ministry of the Environment of the Climate Change.

The comments regarding the Proposed Source Protection Plan documents for the Source Protection Region were discussed by the Source Protection Committee at their July 27, 2012

meeting. Minor modifications were made to the documents addressing the comments received during consultation. These changes were clarifications only and the meaning and intent of the policies were not altered.

Step 7: Pre-Consultation on the Updated Proposed Source Protection Plan

This step involved the forwarding of the Updated Proposed Source Protection Plan Policies to all potential implementing agencies. This took place in January 2015.

Step 8: Development of the Updated Proposed Source Protection Plan

The development of the Updated Proposed Source Protection Plan was conducted by the Source Protection Committee between the months of January 2014 and January 2015. One detailed Updated Proposed Source Protection Plan and one Explanatory Document were developed for the entire Source Protection Region.

The Director of the Source Protection Programs Branch at the Ministry of the Environment and Climate Change provided comments in June of 2014 regarding the Proposed Source Protection Plan. These comments helped to inform discussions by the Source Protection Committee on revisions to policies.

The Updated Proposed Source Protection Plan for the Source Protection Region was approved to proceed to consultation by the Source Protection Committee at its January 23, 2015 meeting.

Step 9: Consultation on the Updated Proposed Source Protection Plan

This step involved the publishing of the Updated Proposed Source Protection Plan on the program website, making them available to the public, municipalities, First Nations communities, and other groups, and receiving comments on the documents. The commenting period for the Updated Proposed Source Protection Plan commenced on February 3, 2015 and concluded on March 6, 2015, during which time the Updated Proposed Source Protection Plan was available to the public, both at the Source Protection Authority offices and on the website. An Updated Proposed Source Protection Plan notice was published on February 3, 2015 in local newspapers and online.

The public meetings for the Updated Proposed Source Protection Plan were held as follows: February 18, 2015 at the Durham Old Town Hall; February 19 at the Chesley Community Centre; February 24, 2015 at the Owen Sound Bayshore Community Centre; February 25, 2015 at the Walkerton Community Centre Auditorium Hall; and February 26, 2015 at the Southampton Town Hall. Two sessions were held for municipal officials and staff: February 19 at the Chesley Community Centre; and February 24, 2015 at the Owen Sound Bayshore Community Centre.

Five public meetings were held so that landowners and interested members of the public could come and learn about source protection and the Source Protection Plan.

Landowners were also given the opportunity to meet with staff to discuss the potential significant drinking water threats that had been identified on their property.

The Updated Proposed Source Protection Plan was forwarded to upper- and lower-tier municipalities and First Nations communities within the Source Protection Region. It was also sent to the Chairs of the three Source Protection Authorities for this Source Protection Region and the three Source Protection Regions bordering the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region.

The Updated Proposed Source Protection Plan notice and other information was sent also to landowners where mapping in the Revised Assessment Report had changed compared to the Approved Assessment Report from 2011 and where significant drinking water threats are identified on their property. Approximately 1216 packages were sent to landowners.

For the Updated Proposed Source Protection Plan, 17 sets comments were received from provincial Ministries, upper- and lower-tier municipalities, and the public.

Step 10: Finalization of the Updated Proposed Source Protection Plan

The Updated Proposed Source Protection Plan was prepared, incorporating many of the comments received during Step 9. The Updated Proposed Source Protection was approved by the Source Protection Committee at their May 8, 2015 meeting.

Step 11: Source Protection Authority Review and Comment on the Updated Proposed Source Protection Plan

The Updated Proposed Source Protection Plan documents were forwarded to the three Source Protection Authorities seven days prior to the Source Protection Authority meetings for review and commenting.

The documents and comments received from the consultation process were presented to the three Source Protection Authorities. These meetings took place on May 28, 2015 for the Saugeen Valley SPA, on June 10, 2015 for the Grey Sauble SPA and on June 22, 2015 for the Northern Bruce Peninsula SPA. The three Source Protection Authorities passed motions to receive the documents and forward them to the Ministry of the Environment and Climate Change.

Step 12: Source Protection Plan Approval

The Updated Proposed Source Protection Plan was approved by the Minister of the Environment and Climate Change on October 16, 2015.

Step 13: Pre-Consultation on the Amended Source Protection Plan

This step involved creating a Technical Advisory Working Group for consultation with municipalities on updating water quality work and including municipal staff on the peer review committee for the water quantity work.

Step 14: Development of the Amended Source Protection Plan

The development of the Amended Source Protection Plan was conducted by the Source Protection Committee between the months of January 2015 and January 2016. One detailed

Amended Source Protection Plan and one Explanatory Document were developed for the entire Source Protection Region.

In consultation with the Source Protection Committee, the Source Protection Authorities and the Ministry of the Environment and Climate Change, new water quality and water quantity work was added to both the Source Protection Plan and the associated Assessment Reports.

Under section 48 of the O. Reg. 287/07 of the *Clean Water Act*, the affected municipalities must pass resolutions to have the new technical work added to the Source Protection Plan. This process occurred during the period January 18, 2016, and March 7, 2016.

The Amended Source Protection Plan for the Source Protection Region was approved to proceed to consultation by the Source Protection Committee at its January 29, 2016, meeting.

Step 15: Consultation on the Amended Source Protection Plan

This step involved the publishing of the Amended Source Protection Plan on the program website, making them available to the public, municipalities, First Nations communities, and other groups, and receiving comments on the documents. The commenting period for the Amended Source Protection Plan commenced on January 12, 2016 and concluded on March 7, 2016, during which time the Amended Source Protection Plan was available to the public, both at the Source Protection Authority offices and on the website. The public consultation period was extended to March 7, 2016 to allow for a full 30-day consultation on all proposed Source Protection Plan (SPP) amendments, including water quantity threat policies for Brockton. An Amended Source Protection Plan notice was published on January 13, 2016 in local newspapers: Kincardine News, Owen Sound Sun Times, Shoreline Beacon, Wiarton Echo, Grey Bruce This Week, Meaford Independent and online.

The public meetings for the Amended Source Protection Plan were held as follows: February 3, 2016 at the Grey Sauble Conservation Administration Office and February 9, 2016 at the Plex in Port Elgin. Source Protection staff met directly with the Municipality of Brockton regarding the water quantity work.

On January 13, 2016 as part of the consultation of proposed events-based area (EBA) policies, water quantity policies and other minor amendments to the approved Source Protection Plan, an Official

Two public meetings were held so that landowners and interested members of the public could come and learn about source protection and the Source Protection Plan. Landowners were also given the opportunity to meet with staff to discuss the potential significant drinking water threats that had been identified on their property.

Notice of Public Consultation Letter with Media Release and Consultation Notice attachments was emailed and mailed to 21 lower-tier municipalities and 4 counties in the Source Protection Region, the Chiefs of the two First Nations, and the Chairs of the three neighbouring Source Protection Regions to the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Ontario provincial ministry stakeholders and/or implementing bodies for the Source Protection Plan policies were also each sent this information by email.

The Amended Source Protection Plan notice and other information was sent also to landowners where significant drinking water threats were identified on their property. Approximately 50 packages were sent to landowners.

Step 16: Finalization of the Amended Source Protection Plan

The Amended Source Protection Plan was prepared, incorporating many of the comments received during Step 14. Comments were received from the Ministry of the Environment and Climate Change and the County of Wellington. The Amended Source Protection Plan was approved by the Source Protection Committee at their March 18, 2016 meeting.

Step 17: Source Protection Authority Review and Comment on the Amended Source Protection Plan

The Amended Source Protection Plan documents were forwarded to the three Source Protection Authorities prior to the Source Protection Authority meetings for review and commenting.

Step 18: Proposed Source Protection Plan amendments

The public consultation period for the new and updated wellhead protection area delineations for Ripley and Point Clark was March 1-April 7, 2017. As a result of these consultations, including direct notification to over 200 landowners in the affected area and an Open House session held in Ripley on March 9, 2017. No written comments were received.

Endorsement was received from Saugeen Valley Source Protection Authority on May 16, 2017 and the amended Source Protection Plan was submitted to the Ministry on May 31, 2017 for review.

These amendments were approved by the Minister and posted on the Environmental Registry on December 18, 2018.

Step 19: Section 36 Updates to the Source Protection Plan

Nov. 23, 2018	A report was submitted to the SPC on the S. 36 workplan process.
Mar. 29, 2019	A report was submitted to SPC highlighting the sections that have been
	reviewed for possible inclusion into the S. 36 workplan
April 17, 2019 to	Meetings with municipal staff at Arran-Elderslie, Brockton, Huron-Kinloss,
June 20, 2019	West Grey, South Bruce Peninsula, Kincardine, Grey Highlands, and Owen
	Sound. Additional meetings were held with 16 municipalities in 2018.
July 26, 2019	Review with SPC the areas to include in workplan prior to broader
	consultation with key stakeholders. Receive comments and feedback from
	SPC on S.36 draft workplan
August - September	Stakeholder consultation meetings with municipalities, Risk Management
2019	Officials, and MECP staff
September 2019	Review draft workplan for S. 36 updates with Source Protection Region
	Management Committee
September 2019	SPA meetings to review and finalize proposed workplan
October 2019	SPC Meeting and draft submitted to MECP for final comments

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Nov. 29, 2019	The proposed S. 36 workplan submit electronically to MECP
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Early Engagement with Ministry of the Environment, Conservation and Parks – July 8, 2020 comments received from Source Protection Programs Branch.

Pre-consultation of amendments with Source Protection Authorities – Grey Sauble on November 25, 2020 and Saugeen Valley on January 22, 2021.

Early engagement under Reg. 287/07 with the Ministry of The Environment, Conservation and Parks Conservation and Source Protection Branch Staff - sent files on February 22, 2021. Received comments on March 25, 2021

Pre-consultation with stakeholders and landowners:

June 14, 2021, Emails sent To: Government Implementing Bodies

As per the *Clean Water Act*, 2006 and sections 48 – 51 of O. Reg. 287/07, please find attached a copy of the pre-consultation notice to seek feedback and comments on proposed Source Protection Plan amendments. The deadline for comments is July 30, 2021, for this round of consultation.

Municipal meetings: Municipality of Arran-Elderslie June 16, 2021; Municipalities of Wellington North, Minto and RMO Wellington County June 18, 2021; Town of Hanover (Public Works and Water Operations) June 23, 2021; Municipality of Grey Highlands June 30, 2021; Grey County (Transportation Services) July 5, 2021; Municipality of Brockton July 12, 2021 and Township of Georgian Bluffs July12, 2021.

Letters to landowners in Blair's Grove wellhead protection area – August 18, 2021 (37 letters) Letters to landowners with potential salt threats – September 15, 2021 (35 letters) and September 22, 2021 (Wellington-27 letters)

Letters to landowners (65 letters) in East Linton Events-based Area – September 29, 2021 Public consultation October 13 to November 19, 2021, Public Webinar on November 10, 2021Source Protection Committee review and consideration of comments from all consultation activities – November 26, 2021.

Source Protection Authority Meetings; Grey Sauble, November 22, 2021; Saugeen Valley, December 16, 2021; and Northern Bruce Peninsula, January 24, 2022.

Website: http://home.waterprotection.ca/source-protection-plan/consultation-2021/

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