

Cover page

**Source Protection Plans
for the
Halton Region Source Protection Area
and the
Hamilton Region Source Protection Area
Version 4.1
March 15, 2022**

Version Tracking:

Version	Approval Date	Effective Date	Description of Amendment
Version 3.2	August 5, 2015	December 31, 2019	Initial version: prepared by Ruth Victor and Associates and Halton-Hamilton Source Protection Region staff. Dated July 24, 2015.
Version 3.3	January 30, 2019	February 5, 2019	Amendment: updated inset on Figure 10 and new Figure 11, updated reference to Greensville well supply studies. Dated October 12, 2017.
Version 4.1			Amendment: comprehensive updates per Section 36 of the <i>Clean Water Act</i> including policy format change for clarity, addition of the “establishment and operation of a liquid hydrocarbon pipeline” as a prescribed threat (and removed as a local threat) per the 2017 Technical Rules, edits to policies as required by the Minister’s amended Section 36 Order (March 2019) and to address policy implementation challenges and concerns. Blue highlights indicate updates from early engagement in 2020-2021. Green highlights indicate updates from pre-consultation in 2021. Yellow highlights indicate updates from the public consultation in 2021-2022. Dated March 15, 2022.

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For more information about the *Clean Water Act, 2006* and how you can play a role in protecting drinking water sources in the Halton-Hamilton Source Protection Region, please visit our website: www.protectingwater.ca



Executive Summary

Ontario is a land rich in water resources, a natural wealth that the province is committed to protecting. From grassroots community projects to provincial government strategies and legislation, people across Ontario are working together to ensure safe and sustainable drinking water for generations to come.

The Source Protection Plan

The first step in ensuring the future of Ontario's drinking water sources came in 2006 with the introduction of the *Clean Water Act*. This key piece of legislation, together with Ontario Regulation 287/07, provides the legal framework for source protection planning and the first step in a **multi-barrier approach** to safeguard the quality and quantity of the province's water supplies. The Act empowers communities to be involved in drinking water source protection through all stages of source protection planning, from the assessment of **watersheds** through to the implementation of source protection policies.

The Source Protection Plan, as mandated by the *Clean Water Act*, is the culmination of extensive science-based assessments, consultation, collaboration, and research. The Plan contains essential policies to ensure that activities that pose significant threats to municipal **drinking water sources** in the Halton Region Source Protection Area and the Hamilton Region Source Protection Area cease to exist or never become significant. This document combines the Plans for the two Source Protection Areas and is referred to as the Plan.

Three documents support this Plan:

1. Assessment Report for the Halton Region Source Protection Area
2. Assessment Report for the Hamilton Region Source Protection Area

These documents identify water quantity stresses and describe the threats to water quality and are included in Appendix A.

3. Explanatory Document

This document explains the rationale for each of the Plan's policies including background discussions, collaboration, and consultancy and can be found at www.protectingwater.ca.

The Source Protection Plan, a living document, will be reviewed and updated as necessary.

Drinking water threats

The *Clean Water Act, 2006* identifies 22 activities that pose threats to the quality and quantity of drinking water sources (see Ontario Regulation 287/07). The application of pesticides, the storage of snow, or the handling and storage of fuel, for example, may impact source water quality. A threat to drinking water quantity, meanwhile, may occur if water is taken from, but not returned to, a drinking water source.

The Assessment Reports for the Halton Region and the Hamilton Region Source Protection Areas, provided as an appendix to this Plan, contain detailed descriptions and thorough evaluations of the Areas' watersheds and the associated activities that pose significant threats to the quality and the quantity of the Areas' sources of drinking water. To find more information about the *Clean Water Act* and drinking water threats, please visit our website at www.protectingwater.ca.

Policy tools

The *Clean Water Act* defines the tools available for policy development and implementation. These include:

- Prescribed instruments, such as permits
- Land use planning
- Education and outreach
- Incentive programs
- Prohibition
- Risk management plans
- Restricted land uses

The policies in this Plan have been developed in accordance with the tools above and clearly identify the parties responsible for their implementation. To assist in reading the Plan, two user-friendly reference tables (Tables 1 and 2) provide easy access to specific policies, identifying individual policies by tool and by drinking water threat.

Policies

This Source Protection Plan includes general policies that set out timelines and designate land uses and activities in relation to drinking water threat policies, threat policies based on prescribed threats, and other policies set out to achieve the Plan's objectives. In addition, monitoring policies, necessary to evaluate the implementation of significant threat policies, are included.

Most importantly, the policies contained in this Source Protection Plan provide the municipalities and residents of Halton Region and Hamilton Region Source Protection Areas with the necessary foundation, information, and agenda to support and carry out the province's ongoing commitment to protecting our precious drinking water sources. The Source Protection Plan policies are grouped as:

- General
- Prescribed drinking water threat policies
- Other policies
 - Transport pathways
 - Climate data

- Disposal of imported fill
- Spill prevention plans
- Lake Ontario Outreach.

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1. Introduction

Clean, safe drinking water is essential to protect the health of Ontario's residents. The May 2000 tragedy caused by the contamination of municipal drinking water in the Town of Walkerton resulted in the Province of Ontario enhancing its efforts to safeguard drinking water supplies.

Justice Dennis O'Connor headed the government inquiry into the Town of Walkerton's contaminated municipal water supply, a tragedy that resulted in the deaths of 7 people and illness in over 2,300. The inquiry highlighted the need to protect the health of Ontario's residents by protecting the province's drinking water using a multi-barrier approach. The purpose of the *Clean Water Act*, introduced in 2006, is to protect drinking water by starting at the source. It is part of a **multi-barrier approach** to reduce both quality and quantity risks to drinking water supplies. The *Clean Water Act* requires communities to develop collaborative, locally-driven, science-based protection plans for their existing and future sources of drinking water.

This document (referred to as the Plan) contains two Source Protection Plans that apply to the Source Protection Areas, Halton Region and Hamilton Region, that comprise the **Halton-Hamilton Source Protection Region** (see **Appendix E** Figure 1). The Halton Region and the Hamilton Region Source Protection Areas are generally equivalent to the **watersheds** managed by the Halton Region Conservation Authority (Conservation Halton), and the Hamilton Conservation Authority, which are called Source Protection Authorities under the Act. However, minor adjustments to watershed boundaries were made to reflect the drainage within the watershed. (Note: within this report, the Source Protection Region or Region refers to the Halton-Hamilton Source Protection Region, and Halton Area or Hamilton Area refers to the two Source Protection Areas unless otherwise identified.)

The Halton Region Source Protection Area comprises lands within the municipalities of Halton Region — City of Burlington and towns of Milton, Oakville, and Halton Hills; the City of Hamilton; the County of Wellington — Township of Puslinch; and Peel Region — City of Mississauga. Approximately 94 percent of the population receive their drinking water from municipal water treatment plants located within the watersheds that are owned and operated by Halton Region and the City of Hamilton. The municipal water takings are from two sources — 88 percent from Lake Ontario and 6 percent from groundwater aquifers. Private systems, including wells and cisterns, provide water to the remaining 6 percent of the population.

The Hamilton Region Source Protection Area stretches from the Township of Puslinch in the northwest to the Town of Grimsby in the east and is primarily within the City of Hamilton. Approximately 97 percent of the population receive their drinking water from municipal water treatment plants located within the watersheds that are owned and operated by the City of Hamilton and from a municipal plant in the Town of Grimsby owned and operated by Niagara Region. The municipal water takings are from two sources — almost 97 percent from Lake Ontario and less than 1 percent from groundwater aquifers. Private systems, including wells and cisterns, provide water to the remaining 3 percent of the population.

A thorough assessment of the characteristics of the Region's watersheds was completed in accordance with the requirements of the *Clean Water Act, 2006* and is documented in the Assessment Reports for the Halton Region and the Hamilton Region Source Protection Areas included in this Plan as Appendix A. The Assessment Reports were the foundation for the development of the policies for this Source Protection Region. They identify stresses on drinking water quantity and describe threats to water quality due to past, ongoing, or potential future activities in the Areas.

The policies within this Plan are the result of extensive consultation, collaboration, and research. They will help ensure activities carried out near municipal wells and surface water intakes do not threaten the quality and quantity of the sources of drinking water. The rationale for each policy has been documented in a corresponding report called the Explanatory Document, which can be found on our website.

A summary of the consultation and collaboration processes implemented to engage the communities through the production of the Assessment Reports and the development of the policies in this Plan can be found in Appendix B.

Together with the Explanatory Document, this Source Protection Plan serves as a blueprint for drinking water source protection in the Halton Region and the Hamilton Region Source Protection Areas.

To find more information about the watersheds within the Halton-Hamilton Source Protection Region, the *Clean Water Act* and source protection planning in your community, please visit our website at www.protectingwater.ca

2. Source Protection Plan Authority and Implementation

2.1 General Authority and Legal Effect

The *Clean Water Act, 2006* and its regulations establish the legal framework for drinking water source protection. The *Clean Water Act, 2006* is administered by the Ministry of the Environment, Conservation and Parks (MECP).

The Act requires that Source Protection Committees, comprising stakeholders that live or conduct business within the Source Protection Region, prepare Source Protection Plans for each Source Protection Area. The Act also establishes the requirement for compliance.

Ontario Regulation 287/07, the General Regulation, requires that the Source Protection Plan explicitly identify the applicable legal provisions of the policies. Appropriate statements are required to have the necessary legal effect under Part III of the *Clean Water Act, 2006* to obligate agencies to comply with the policies of this Plan. To satisfy this requirement, the appropriate statements have been set out within Appendix C, organized into the required lists.

The **Table 4** below provides an overview of the lists and their legal effects of “must conform with”, “must comply with”, “have regard to”, and non-legally binding. Three factors determine the legal effect of a policy: (1) the policy tool, (2) the threat risk level (significant, moderate, or low), and (3) the implementing body. In Appendix C, an additional table is included to identify the type of prescribed instrument that the policy affects, in relation to Lists C and D. Municipalities and other agencies with obligations to ensure that their decisions conform with policies in this Plan or who are required to satisfy obligations in this Plan should refer to the lists in Appendix C.

Table 4: Source Protection Plan Legal Effect Lists under the Clean Water Act

List	Title	Legal Effect
A	Significant threat policies that affect decisions under the Planning Act and Condominium Act, 1998	Legally binding - must conform with
B	Moderate and low threat policies that affect decisions under the <i>Planning Act</i> and <i>Condominium Act</i> , 1998	Legally binding - have regard to
C	Significant threat policies that affect prescribed instrument decisions	Legally binding - must conform with
D	Moderate and low threat policies that affect prescribed instrument decisions	Legally binding - have regard to
E	Significant threat policies that impose obligations on municipalities, source protection authorities and local boards	Legally binding - must comply with
F	Monitoring policies referred to in subsection 22 (2) of the <i>Clean Water Act</i> , 2006	Legally binding - must conform with
G	Policies related to section 57 of the <i>Clean Water Act</i> , 2006	Legally binding - must conform with
H	Policies related to section 58 of the <i>Clean Water Act</i> , 2006	Legally binding - must conform with
I	Policies related to section 59 of the <i>Clean Water Act</i> , 2006	Legally binding - must comply with
J	Strategic action policies	Non legally binding
K	Significant threat policies to be implemented by stakeholders other than municipalities, local boards, or source protection authorities	Non legally binding

The Act also requires that certain provisions regarding timing requirements for implementation of Plan policies, land use designations for the use of restricted land uses, and activity designations for the use of risk management plans be set out in the Plan. General policies have been included in the Plan to satisfy these requirements.

This Source Protection Plan prevails when there is conflict between a significant threat policy and a municipal official plan or zoning by-law, unless the municipality has written policies that are

more restrictive and would protect sources of drinking water better. All planning decisions must conform to the significant threat policies of the Source Protection Plan on the day the Plan takes effect. Section 39 of the *Clean Water Act* must be referenced for detailed provisions regarding the effect of the Plan.

In the case of conflict with the *Provincial Policy Statement*, the *Greenbelt Plan*, the *Niagara Escarpment Plan*, or the *Growth Plan for the Greater Golden Horseshoe*, the provision that provides the greatest protection to the quality and quantity of any water that is or may be used as a source of drinking water is that which prevails.

2.2 Objectives of the Source Protection Plan

The policies in this Plan are focused on the protection of sources of municipal drinking water and general best management practices that will protect source water across the Region. The policies are designed to implement the objectives defined by the General Regulation (section 22(1)):

1. To protect existing and future **drinking water sources** in the Source Protection Area.
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.

An activity that poses a significant risk to drinking water sources may be managed or eliminated to reduce the risk and satisfy these objectives. The Source Protection Committee has included in the Plan policies that it believes will sufficiently manage or eliminate the significant risk.

2.3 Priorities of the Source Protection Plan

The policies contained within this Plan are focused primarily on ensuring that activities that pose a significant risk to municipal **drinking water sources** cease to be significant or never become significant. Identified threats that pose moderate or low risks to the drinking water sources, and not included in this Plan, may be considered and addressed by the Source Protection Committee in the future.

The *Clean Water Act, 2006* provides the authority to the Minister, as defined in the Act, to establish targets for Source Protection Areas that contribute water to the Great Lakes, relating to the use of the lakes as a source of drinking water. The Source Protection Committee then has the authority to include policies in the Plan that address these targets. Great Lakes targets have not been established for this first round of source protection planning and, as a result, no policies are included. Targets may be established in the future and the Plan will be revised as required.

The Act and Regulation identify specific topics that may be addressed in policy in a Source Protection Plan, if the Source Protection Committee is of the opinion that they are a potential

concern in the Halton-Hamilton Source Protection Region. The optional policies that apply in this Region are related to emergency response/spills prevention plans, climate data collection, disposal of imported fill, Lake Ontario outreach, and **transport pathways**.

2.4 Effective Date and Plan Amendments

Section 31 of the *Clean Water Act* provides that the effective date of a Source Protection Plan is either the date upon which a notice of approval of the Plan is published on the Environmental Registry established under the Environmental Bill of Rights, or is the date set out in the Plan. The Minister of the Environment, Conservation and Parks has set the effective date of this Plan as December 31, 2015. **The effective date will change based on amendments/updates as described below.**

This Plan may be amended from time to time in accordance with the circumstances prescribed by the Act and Regulation:

1. The Source Protection Authority, after consulting with the Source Protection Committee, may propose amendments to this Source Protection Plan, per Section 34 of the Act.
2. The Minister of the Environment, Conservation and Parks may order an amendment of the Source Protection Plan, per Section 35 of the Act.
3. As part of the approval of the Source Protection Plan by the Minister of the Environment and Climate Change, an order was issued setting out the date of the periodic review and updating of the Assessment Reports and this Source Protection Plan with a work plan to be submitted by the province by November 30, 2018, per Section 36 of the Act. In March 2019, the Minister amended the Order to provide direction on the updates to be made for the Halton-Hamilton Source Protection Region. A Section 36 process may be possible in the future as well.

2.5 Threats to Drinking Water Sources

The threats to **drinking water sources** include 22 activities prescribed in regulation. The prescribed threats to drinking water sources are set out in Section 1.1 (1) paragraph 2 of Ontario Regulation 287/07. They are:

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.
22. The establishment and operation of a liquid hydrocarbon pipeline.

For a full discussion of the threat activities, please refer to the Assessment Reports in Appendix A or the Explanatory Document at www.protectingwater.ca

Two of the threats were prescribed to safeguard the quantity of water available for municipal well supplies across Ontario. These threats are possible only in areas identified as stressed through the tiered water budget and water quantity stress assessment process (see the Assessment Reports in Appendix A).

The 20 prescribed threat activities that could impact the quality of sources of municipal drinking water are summarized in the Assessment Reports and are described in the Explanatory Document. One of the threats, the management of agricultural source material, can never pose a significant risk in the Halton-Hamilton Source Protection Region.

2.6 Where Policies Apply

The mapping of areas where threat activities could affect source water quality at low, moderate and significant levels are possible is based on the vulnerable area together with the hazardous nature of the threat activity, the associated contaminants, and the vulnerability of the source water to contamination. The vulnerability mapping and the associated scoring is discussed in Section 6 of the Assessment Reports.

The majority of the water quality policies in this Plan address significant threat activities, which only occur in **wellhead protection areas** and **issue contributing areas**, and where **event-based modelling** was completed to assess intake protection zone threats and has identified a significant risk. **Appendix E** Figures 2 through 7 show the areas where threat activities could pose a significant risk to the municipal wells located within the Halton Region Source Protection Area. Figures 9 and 10 show the areas within the Halton Region Source Protection Area where significant threats to the Cedarvale wells are possible. The Cedarvale wells are located in the neighbouring Credit Valley Source Protection Area, however, their protection zones extend into the Halton Area. Figure 11 shows the areas where significant threats to the municipal source water are possible in the Hamilton Area. Policies written to address significant threats indicate that the policy applies within a vulnerable area where a significant threat could occur. These areas correspond to the mapped areas for each threat depicted on the figures.

Appendix E Figures 12 through 15 illustrate the areas where the application of road salt could be a low, moderate or significant threat in the Halton Region and Hamilton Region Source Protection Areas. Relevant policies apply within these areas.

Many threats can occur in the same areas. To provide clear delineation on the wellhead protection area maps to show where significant threats would occur, the threats have been grouped. Policies developed to address a threat would apply in the area shown on the map for the appropriate group. The groupings and their mapped areas are as follows:

- Group 1. Most threats to groundwater could be significant in wellhead protection areas where the vulnerability score is 10. In the Halton-Hamilton Source Protection Region, a score of 10 is only possible in wellhead protection areas A and B.
- Group 2. A few threat activities for waste and sewage could be significant in wellhead protection areas A, B, and C where the vulnerability score for groundwater is 10 or 8.
- Group 3. One threat, the handling and storage of dense non-aqueous phase liquids (DNAPLs), poses a greater risk to groundwater sources due to the physical and toxic characteristics of the chemicals in the group. These chemicals are denser than water and do not dissolve easily in water. Therefore, they are more difficult to detect underground and more difficult to clean up. For these reasons, the handling and storage of dense non-aqueous phase liquids are a significant threat at any vulnerability score within wellhead protection areas A through C.
- Group 4. Where surface water quickly infiltrates into the ground and could impact groundwater quality - a wellhead protection area E - threats to surface water could be significant where the vulnerability score is 9.
- Group 5. A smaller number of significant threats to surface water are possible in a wellhead protection area E where the vulnerability scoring is either 9 or 8.1.

Group 6. Prescribed threat activities that release chloride within the Cedarvale issue contributing area are elevated to be significant threats. Septic systems are not classed as significant threats in an issue contributing area for chloride.

Each threat activity listed in the groups is presented on the maps with the associated contaminant as either chemical or pathogen. The associated risk may vary depending on the contaminant type and the same threat may be listed in two groups.

Appendix E Figure 8 shows the known areas where modelling has determined that under specific circumstances significant threats to the lake-based municipal source water in the Halton and Hamilton Areas exist. Future threats are possible within the mapped event-based areas for wastewater treatment plants that discharge to surface water through a means other than a designed bypass. Additional mapping indicates locations where the release of liquid hydrocarbons during either conveyance in a pipeline, or from handling or storage of fuel in tanks or ships would be a significant threat. Policies within this Plan apply to these areas.

Policies to address significant threat activities that pose a risk to the quantity of source water available for municipal use apply in the wellhead protection areas shown on Figures 16 through 18. The Kelso and Campbellville municipal wells are located within the Halton Region Source Protection Area. Only a portion of the Cedarvale protection area extends into the Halton Region Area from the Credit Valley Area. Policies that address threats to municipal drinking water sources apply only to the area where the threat exists or could exist if the threat activity was to begin in the future.

The Act and Regulation identify specific topics in addition to the prescribed threats that may be addressed in policy in a Source Protection Plan, if the Source Protection Committee is of the opinion that they are a potential concern in the Halton-Hamilton Source Protection Region. Policies that address these concerns are applicable across the Region unless otherwise restricted in the policy.

Tools Used in Policy Development

Tools used in policy development are:

- prescribed instruments
- land use planning
- education and outreach
- incentive programs
- risk management plans
- restricted land uses
- prohibition

The *Clean Water Act, 2006* defines the tools available for use in policies to achieve the objectives of the Plan. Some of the tools rely on voluntary participation, while others regulate the activity.

The Act provides the following tools for use to address drinking water threats:

- **Prescribed instruments** – existing **legislative tools** with the authority to regulate an activity that could be a drinking water threat. Nutrient management plans and environmental compliance approvals¹ are two examples of instruments used by the Province of Ontario to regulate activities. These instruments could potentially be amended to protect **drinking water sources** better.
- **Land use planning** – public policy that seeks to order and regulate land use in an efficient and ethical way.
- **Education and outreach** - informing the public and stakeholders about drinking water threat activities and the importance of protecting drinking water sources. These programs will help raise awareness about why and how drinking water sources should be protected.
- **Incentive programs** – a formal plan used to promote or encourage participation in a program to reduce risks to sources of drinking water. Available expertise and partial or full funding to help landowners complete beneficial projects may increase participation and benefit sources of drinking water.
- **Risk management plans** (Clean Water Act Part IV Section 58) – developed through discussion between the landowner and the municipal risk management official and intended to manage the risk from an **existing** or **future threat**.
- **Restricted land uses** (Clean Water Act Part IV Section 59) – allows the risk management official to screen applications for new development within the vulnerable areas where significant threats are possible for specified prescribed threats.

- **Prohibition** (Clean Water Act Part IV Section 57) – could be used to stop a future threat from occurring, or as a last-resort when it is the opinion of the Source Protection Committee that an existing threat cannot be managed by any other tool.

The municipality that has authority to pass by-laws respecting water production, treatment, and storage under the *Municipal Act, 2001* is responsible for the appointment of a risk management official to implement policies using the tools included in Part IV of the Act.

The General Regulation also specifies tools that can be used for optional policies, which include:

- Education and outreach – on any topic, threat or otherwise
- Incentive programs – on any topic, threat or otherwise
- Specified actions – identify the actions to be taken to implement the Source Protection Plan or to achieve the Plan’s objectives. To be used in policies regarding the collection of climate data and the updating of emergency response/spills prevention plans.

Also included in optional policies are those that ensure that drinking water threats in the vicinity of a transport pathway cease to be or do not become a significant drinking water threat and that transport pathways cease to endanger the raw water supply of a drinking water system. The tools that are identified for use are stewardship programs, best management practices, pilot programs, research, and specified actions.

2.8 Reading the Plan

The policies in this Plan are organized by type, i.e., general policies, prescribed threat policies, and other policies.

To assist the reader of the Plan, a unique identifier has been used for each policy. For example, the Policy T-1-C specifies: policy type (T), its number (1), and its legal effect (C).

The policy type is specified first and is one of the following:

- **G** – a general requirement of the *Clean Water Act, 2006* or its regulations
- **T** – a threat policy based on the 22 prescribed drinking water threats
- **O** – an optional policy included to enhance drinking water source protection in the Source Protection Region

Each policy is numbered sequentially within the policy type.

The effect of the policy is designated as follows:

- **C** – requires compulsory compliance
- **S** – strategic policy, a discretionary obligation recommended to achieve the objectives of the Plan, which is non-legally binding

Threat policies address existing drinking water threats, potential future threats, or both, and the language of the policy indicates its application. The policy text also identifies the party responsible for its implementation.

Definitions are included in the glossary, Appendix D, and should be referenced when implementing the policies.

Activities that are or would be significant drinking water threats must be monitored and the implementation of significant threat policies evaluated. This monitoring and evaluation requires the introduction of additional policies. Monitoring policies follow their associated significant threat policies in Section 3.

Tables 1 and 2 below summarize each policy identifier in relation to the policy tool used to address the threat or identified concern. These tables are easy references to the associated policies.

Table 1 Water quality and quantity threat policy reference table

Threat		Education and Outreach	Incentives	Prescribed Instruments	Land Use Planning	Part IV Tools under the <i>Clean Water Act, 2006</i>			Other Tools
						Prohibited Activities	Restricted Land Uses	Regulated Activities (Risk Management Plans)	
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i>	T-2-C a.		T-1-C a.	T-3-C a.	T-3-C c.	T-3-C c.		
2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage								
	- combined sewer discharge				T-53-C a.				T-51-C
	- stormwater discharges			T-4-C a.	T-9-C a. T-53-C a.				
	- industrial effluent discharges			T-5-C a.	T-53-C a.				
	- sanitary sewers and pipes			T-6-C a.	T-53-C a.				
- septic systems under <i>Ontario Water Resources</i>	T-13-C a.	T-16-S a. T-16-S b.	T-7-C a.	T-10-C a. T-53-C a.				T-15-S a. T-18-C a.	

Table 1 Water quality and quantity threat policy reference table

Threat	Education and Outreach	Incentives	Prescribed Instruments	Land Use Planning	Part IV Tools under the <i>Clean Water Act, 2006</i>			Other Tools
					Prohibited Activities	Restricted Land Uses	Regulated Activities (Risk Management Plans)	
<i>or Environmental Protection Acts</i>								
- septic systems under Ontario Building Code	T-13-C a.	T-16-S a. T-16-S b. T-17-C a.		T-11-C a. T-53-C a.				T-12-S a. T-14-C a. T-15-S a.

Table 1 Water quality and quantity threat policy reference table

Threat		Education and Outreach	Incentives	Prescribed Instruments	Land Use Planning	Part IV Tools under the <i>Clean Water Act, 2006</i>			Other Tools
						Prohibited Activities	Restricted Land Uses	Regulated Activities (Risk Management Plans)	
...2	- sewage treatment plant discharges			T-8-C a. T-52-C a.	T-53-C a.				
	- sewage treatment plant bypasses			T-8-C a.	T-53-C a.				T-19-C a.
	- storage of sewage			T-8-C a.	T-53-C a.				
3 and 4	The application or storage of agricultural source material		T-23-S a. T-23-S b.	T-21-C a.	T-53-C a.		T-20-C a.	T-20-C b.	T-22-S a.
5	The management of agricultural source material	Not a significant threat in the Halton-Hamilton Source Protection Region							
6 and 7	The application or handling and storage of non-agricultural source material	T-54-C a.		T-24-C a.					T-22-S a.

8 and 9	The application or handling and storage of commercial fertilizer	T-27-C a.		T-26-C a.	T-53-C a.		T-25-C a.	T-25-C b.	T-22-S a. T-28-C a.
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Table 1 Water quality and quantity threat policy reference table

Threat		Education and Outreach	Incentives	Prescribed Instruments	Land Use Planning	Part IV Tools under the <i>Clean Water Act, 2006</i>			Other Tools
						Prohibited Activities	Restricted Land Uses	Regulated Activities (Risk Management Plans)	
10 and 11	The application or handling and storage of pesticide	T-31-C a.			T-53-C a.		T-29-C a.	T-29-C b.	T-30-S a.
12 and 13	The application or handling and storage of road salt	T-34-C a.			T-32-C a. T-53-C a.			T-32-C b.	T-33-S a. T-35-C a. T-36-S T-49-S a.
14	The storage of snow				T-37-C a. T-39-C a. T-53-C a.				T-38-S a.
15	The handling and storage of fuel	T-43-C a.			T-41-C a. T-53-C a.		T-40-C a.	T-40-C b.	T-42-S a.
16	The handling and storage of dense non-aqueous phase liquid				T-53-C a.		T-44-C a.	T-44-C b.	

17	The handling and storage of an organic solvent				T-53-C a.		T-45-C a.	T-45-C b.	
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Table 1 Water quality and quantity threat policy reference table

Threat		Education and Outreach	Incentives	Prescribed Instruments	Land Use Planning	Part IV Tools under the <i>Clean Water Act, 2006</i>			Other Tools
						Prohibited Activities	Restricted Land Uses	Regulated Activities (Risk Management Plans)	
18	The management of runoff that contains chemicals used in the de-icing of aircraft								T-46-S a.
19	An activity that takes water without returning it to the same source			T-55-C a.	T-55-C b.				T-56-C a. T-57-C a. T-57-C b.
20	An activity that reduces the recharge of an aquifer				T-58-C a. T-59-C a.				
21	The use of land as livestock grazing or pasturing land, an outdoor confinement		T-23-S a.	T-48-C a.	T-53-C a.		T-47-C a.	T-47-C b.	T-22-S a.

	area or a farm-animal yard								
22	The establishment and operation of a liquid hydrocarbon pipeline								T-62-S a. T-63-S a. T-64-S a. T-65-S T-67-S T-68-S

Table 2 Other policy reference table

Topic	Education and Outreach / Incentive	Specified Actions
Transport Pathways	O-1-S c. O-1-S d.	O-1-S a. O-1-S b. O-1-S e. O-1-S f. O-1-S h.
Collection of Climate Data		O-2-S a. O-2-S b. O-2-S c. O-2-S d.
Disposal of Imported Fill	O-4-S	
Spill Prevention, Contingency, and Emergency Response Plans	O-5-S c.	O-5-S a. O-5-S b. O-6-S
Lake Ontario Outreach		O-7-S O-8-S

Table 3 shows the format of the prescribed and other policies. The “Policy” portion is the legal policy text. All other details are added to provide clarity and to make the plan more easily understood for readers.

Table 3: Format for Prescribed Drinking Water Threat and Other Policies

Policy ID	This is a unique identifier for each policy. It does not form part of the legal policy text.
Threat	A description of the threat activity is provided here, using terminology from the MECP Table of Drinking Water Threats online tool at: www.swpip.ca . It does not form part of the legal policy text.
Policy Tool	An indication of the type of policy tool used is provided here. It does not form part of the legal policy text. See Section 2.7 for a description of the different policy tools.
Policy Implementer	The policy implementing body/bodies are identified here. It does not form part of the legal policy text.
Policy	This is the legal policy text.
Legal Effect	This provides an indication of whether the policy is legally binding or not, and the risk level addressed. It does not form part of the legal policy text. See Appendix C for the full legal effect list as required by the Clean Water Act.
Where Policy Applies	This describes the vulnerable area where the policy applies including the vulnerability score and directs the reader to relevant figure in the Appendix E showing policy applicability areas. It does not form part of the legal policy text.
When Policy Applies	This indicates whether the policy applies to existing activities, future activities, or both. It does not form part of the legal policy text.
Notes	This is additional information provided for some policies to enhance clarity.

Note that the general policies (G-1, 2, 3, 4 **and 5**) are provided in a modified, shorter table format reflecting the level of detail relevant to them.

3. Source Protection Plan Policies

3.1 General Policies

Policy ID	G-1
Policy	<p>This source protection plan came into effect on December 31, 2015, the effective date specified in the Notice of Approval posted on the Environmental Registry of Ontario. Amendments to the Source Protection Plan are permitted in accordance with the <i>Clean Water Act, 2006</i>, and the General Regulations. The effective date for new and amended policies is the date of posting of the Notice of Approval of the amendment provisions on the Environmental Registry of Ontario. Except as set out below, the policies contained in this Source Protection Plan shall come into effect on the date set out by the Minister in the Notice of Approval.</p> <ol style="list-style-type: none"> a. For section 58 of the <i>Clean Water Act, 2006</i>, if an activity was engaged in or at a particular location before the relevant policies within this Source Protection Plan takes effect and the Risk Management Official gives notice to a person who is engaged in the activity at that location, policies regarding regulated activities apply to the person who engages in the activity at that location on and after a date specified in the notice that is at least 120 days after the date the notice is given. The policy timeline to establish risk management plans for existing significant threats identified through a Source Protection Plan update is within five years of the effective date of the updated Source Protection Plan. b. For the purpose of section 43(2) of the <i>Clean Water Act, 2006</i>, the deadline for amendments to prescribed instruments is three years from the date that the updated Source Protection Plan comes into full force and effect. c. For the purpose of section 40(2) of the <i>Clean Water Act, 2006</i>, the official plans for the Region of Halton, the City of Hamilton, and the County of Wellington must be amended to conform to the significant threat policies no later than the time of the next five year review required by section 26 of the <i>Planning Act</i>. d. For the purpose of section 40(2) of the <i>Clean Water Act, 2006</i>, the official plans for the Town of Milton, the Town of Halton Hills, the Town of Oakville, and the City of Burlington, must be amended to conform to the significant threat policies no later than the time of the next five year review required by section 26 of the <i>Planning Act</i>.

	<p>e. For the purpose of section 42 of the <i>Clean Water Act, 2006</i>, zoning by-law conformity must be in accordance with the <i>Planning Act</i>.</p>
Legal Effect	<p>a. Must conform with - legally binding. List H (see Appendix C - Compliance Lists);</p> <p>b. Must conform with - legally binding. List I;</p> <p>c. Must conform with - legally binding. List C;</p> <p>d, e, f Must conform with - legally binding. List A.</p>
Notes	<p>This policy enacts timing requirements for implementation of Plan policies. The source protection plan is updated from time to time. Some of the policies must be implemented within a timeframe dependent upon the date that the updated plan takes effect. Policy part a sets the risk management plan policy effective date for existing threats to be later than the Source Protection Plan effective date. This is required by the <i>Clean Water Act, 2006</i>. Policy part a also specifies the policy implementation date separately, as a five year timeline to establish the RMP relevant to the Source Protection Plan effective date.</p>

Policy ID	G-2
Policy	<p>In accordance with Section 59 of the Clean Water Act, 2006, unless identified specifically within a policy, all land uses except solely residential uses, where significant drinking water threat activities have been designated for the purposes of Sections 57 and 58 of the Clean Water Act, 2006 are hereby designated as Restricted Land Uses and a written notice from the Risk Management Official shall be required prior to approval of any Building Permit, Planning Act or Condominium Act application.</p> <p>Despite the above policy, a Risk Management Official may issue written direction specifying the situations under which a planning authority or Chief 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 Chief Building Official, as applicable, is satisfied that:</p> <ul style="list-style-type: none"> • The application complies with the written direction issued by the Risk Management Official; and, • 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. <p>Where the Risk Management Official has provided written direction designating a land use for the purpose of section 59, a written Notice from the Risk Management Official shall be required prior to approval of any Building Permit under the Building Code Act, 1992 as amended, in addition to Planning Act and Condominium Act applications in accordance with Section 59 of the Clean Water Act, 2006.</p>
Legal Effect	Must conform with - legally binding. List I (see Appendix C - Compliance Lists).
Notes	This policy designates land uses in accordance with section 59(1) of the <i>Clean Water Act</i> and works in conjunction with section 58(1).

Policy ID	G-3
Policy	<p>The following activities are designated for the purpose of section 58(1) – Regulated Activities, of the <i>Clean Water Act</i> and require the negotiation of a risk management plan as specified in the policy and where there could be a significant drinking water threat:</p> <ul style="list-style-type: none"> a. The application of agricultural source material on farms not phased-in under the <i>Nutrient Management Act</i>. b. The storage of agricultural source material on farms not phased-in under the <i>Nutrient Management Act</i>. c. The application of commercial fertilizer on farms not phased-in under the <i>Nutrient Management Act</i>. d. The handling and storage of commercial fertilizer. e. The handling and storage of pesticides. f. The handling and storage of road salt. g. The handling and storage of fuel under Ontario Regulation 213/01 and under Ontario Regulation 217/01, except home fuel oil tanks. h. The handling and storage of dense non-aqueous phase liquid. i. The handling and storage of an organic solvent. j. The use of land as a confinement area or a farm-animal yard on farms not phased-in under the <i>Nutrient Management Act</i> and the use of land as livestock grazing or pasturing land.
Legal Effect	Must conform with - legally binding. List H (see Appendix C - Compliance Lists).
Notes	This policy designates activities in accordance with section 58(1) of the <i>Clean Water Act</i> .

Policy ID	G-4
Policy	The establishment, operation and maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act that is exempt from Environmental Compliance Approvals under the <i>Environmental Protection Act</i> is designated for the purpose of Section 57(1) – Prohibited Activities of the <i>Clean Water Act</i> where waste disposal would be a significant drinking water threat.
Legal Effect	Must conform with - legally binding. List G (see Appendix C - Compliance Lists).
Notes	This policy designates activities in accordance with section 57(1) of the <i>Clean Water Act</i> . These activities are exempt from prescribed instruments as indicated, and include the storage of: PCB waste; hazardous waste or liquid industrial waste; and certain wastes exempted from the hazardous waste and liquid industrial waste definitions in Ontario Regulation 347.

Policy ID	G-5
Policy	In accordance with Section 97 of the <i>Clean Water Act, 2006</i> , the Ministry of the Environment, Conservation and Parks and other Ontario provincial ministries shall provide ongoing funding and support for education, outreach and incentive programs to address significant drinking water threats. Where the Halton Region and Hamilton Region Conservation Authorities as source protection authorities are implementing bodies, policy implementation is dependent on funding from the Ministry of the Environment, Conservation and Parks or other provincial ministries or municipalities.
Legal Effect	Non-legally binding. List K (see Appendix C - Compliance Lists).
Notes	This policy is overarching to all policies where Conservation Authorities are implementing bodies. It aims to address long-term, sustained and adequate funding for comprehensive program design, staff resourcing and delivery for education and outreach and incentives/stewardship towards the protection of municipal drinking water sources. Section 97 of the Act refers to the Ontario Drinking Water Stewardship Program which was administered by MECP from 2007 to 2012. This program adequately allowed for comprehensive outreach and incentive programs.

3.2 Prescribed Drinking Water Threat Policies

The following policies addressing legislatively prescribed threats are not listed in any particular order. The reader is directed to Table 1 for a complete listing of policies that apply to each of the prescribed significant threat activities that could be a significant risk to the source water of municipal drinking water systems in the **Halton-Hamilton Source Protection Region**.

Policy ID	T-1-C
Threat	Waste disposal site: multiple types (all sub-threats)
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	Where the future establishment of waste disposal sites, as defined within the meaning of Part V of the <i>Environmental Protection Act</i> , would be a significant drinking water threat, <ul style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks shall prohibit this activity. b. the Ministry of the Environment, Conservation and Parks shall document their actions taken to implement this policy and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. <ul style="list-style-type: none"> • Application of hauled sewage (untreated septage) to land: WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1. • Storage, treatment and discharge of tailings from mines; landfarming of petroleum refining waste; landfilling of hazardous waste: WHPA-A & B – V. score 10; WHPA-E – V. score 9. • Landfilling of municipal waste; landfilling of solid, non-hazardous, industrial or commercial waste: WHPA-A & B – V. score 10; WHPA-B & C – V. score 8; WHPA-E – V. score 9. • Injection of liquid waste into a well: WHPA-A & B – V. score 10; WHPA-B & C – V. score 8. • Polychlorinated biphenyls (PCB) waste storage: WHPA-A & B – V. score 10. • Storage of hazardous waste: WHPA-A & B – V. score 10; WHPA-E – V. score 9.

When Policy Applies	Future
Notes	This policy prohibits future waste disposal sites that pose a significant threat.

Policy ID	T-2-C
Threat	Waste disposal site: storage of hazardous waste
Policy Tool	Education and outreach
Policy Implementer	City of Hamilton, Regional Municipality of Halton
Policy	<p>To raise awareness about appropriate disposal of hazardous materials at waste disposal sites where they would be significant drinking water threats,</p> <ol style="list-style-type: none"> a. the City of Hamilton and the Region of Halton shall continue their established education and outreach programs on hazardous waste disposal and reduction of waste. In addition, within two years of the date the updated Source Protection Plan comes into effect, they shall include messaging for newly identified threats consistent with source water protection and the diligent use and disposal of substances identified in the Ministry of the Environment, Conservation and Park’s most recent Tables of Drinking Water Threats, such as organic solvents, pesticides, and dense non-aqueous phase liquids. b. the City of Hamilton and the Region of Halton shall document the efforts undertaken through education and outreach programs regarding hazardous waste disposal and reduction of waste and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Existing and future

Policy ID	T-3-C
Threat	Waste disposal sites: multiple types (all sub-threats)

Policy Tool	Land use planning, Clean Water Act Part IV – prohibition and risk management plan
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Risk Management Official
Policy	<p>Where the future establishment of waste disposal sites within the meaning of Part V of the <i>Environmental Protection Act</i> would be a significant drinking water threat,</p> <ol style="list-style-type: none"> a. the City of Hamilton shall prohibit through amendments to <i>Planning Act</i> tools the establishment of waste disposal sites with the following specific activities occurring - application of untreated septage to land; storage, treatment and discharge of tailings from mines; landfarming of petroleum refining waste; landfilling of hazardous waste; landfilling of municipal waste; landfilling of solid, non-hazardous, industrial or commercial waste; injection of liquid waste into a well; polychlorinated biphenyls (PCB) waste storage; and storage of hazardous waste. b. the City of Hamilton shall provide copies of their planning documents to the Source Protection Authority when they have been amended to conform with the policy to prohibit the establishment of waste disposal sites. c. the risk management official for the Region of Halton shall screen all building permit and <i>Planning Act</i> applications in accordance with policy G-2 for waste disposal site activities exempt from Environmental Compliance Approvals under Ontario Regulation 347 and prohibit these activities from occurring to ensure they never become significant threats. d. the risk management official for the Region of Halton shall document in his/her annual report, in accordance with Section 65 of Ontario Regulation 287/07, action taken regarding prohibition of waste disposal sites and submit this report to the Source Protection Authority by February 1 of each year.
Legal Effect	<p>Part a – Must conform with - legally binding. List A (Appendix C - Compliance Lists);</p> <p>Part c – Must conform with - legally binding. List I and List G (Parts b and d are monitoring policies)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <ul style="list-style-type: none"> • Application of hauled sewage (untreated septage) to land: WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1.

	<ul style="list-style-type: none"> • Storage, treatment and discharge of tailings from mines; landfarming of petroleum refining waste; landfilling of hazardous waste: WHPA-A & B – V. score 10; WHPA-E – V. score 9. • Landfilling of municipal waste; landfilling of solid, non-hazardous, industrial or commercial waste: WHPA-A & B – V. score 10; WHPA-B & C – V. score 8; WHPA-E – V. score 9. • Injection of liquid waste into a well: WHPA-A & B – V. score 10; WHPA-B & C – V. score 8. • Polychlorinated biphenyls (PCB) waste storage: WHPA-A & B – V. score 10. <p>Storage of hazardous waste: WHPA-A & B – V. score 10; WHPA-E – V. score 9.</p>
When Policy Applies	Future
Notes	This policy uses regulatory tools to prevent the future establishment of waste disposal sites where they could be significant drinking water threats.

Policy ID	T-4-C
Threat	Sewage system or sewage works: stormwater management facility
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>For future systems that would discharge stormwater from stormwater management facilities where this activity would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks shall ensure that the environmental compliance approvals that govern the systems include appropriate terms and conditions to ensure that the systems do not become significant drinking water threats. As part of its program to review environmental compliance approvals that are affected by source protection plans the following conditions shall be considered for inclusion - the requirement for regular maintenance, periodic removal of accumulated sediment, lining of the pond where warranted, the use of an oil/water separator, and other requirements to address site conditions. b. the Ministry of the Environment, Conservation and Parks shall document the number and locations of applications received for environmental compliance approvals for these systems and the actions taken and report this information to the Source Protection Authority by February 1 of each year with copies of any issued approvals.
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1
When Policy Applies	Future
Notes	Stormwater retention ponds are designed to provide treatment of water running off urban lands. Typically this treatment removes sediment; however, additional contaminants that are not removed pose risks to drinking water sources. This policy uses prescribed instruments regulatory tools to manage future risks.

Policy ID	T-5-C
Threat	Sewage system or sewage works: industrial effluent discharges
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>Where the future discharge of industrial effluent to the environment would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks shall ensure that the environmental compliance approvals that govern industrial effluent discharges include appropriate terms and conditions, to ensure that these discharges do not become significant drinking water threats. As part of its program to review environmental compliance approvals that are affected by source protection plans the following conditions shall be considered for inclusion - strict criteria for effluent quality and monitoring. b. the Ministry of the Environment, Conservation and Parks shall document the number and locations of applications received for environmental compliance approvals for industrial effluent discharge and the action taken on the applications and report this information to the Source Protection Authority by February 1 of each year with copies of any issued approvals.
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figure 7. WHPA-E – V. score 9 & 8.1
When Policy Applies	Future
Notes	The discharge of industrial effluent is only a significant threat in a wellhead protection area E. Thus, this policy only applies within Carlisle WHPA-E. This policy uses prescribed instruments regulatory tools to manage future risks.

Policy ID	T-6-C
Threat	Sewage system or sewage works: sanitary sewers and related pipes
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>Where the future installation of sanitary sewers and related pipes would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks shall ensure that the environmental compliance approvals that govern these systems include appropriate terms and conditions to ensure that the sewers and pipes do not become significant drinking water threats. As part of its program to review environmental compliance approvals that are affected by source protection plans the following conditions shall be considered for inclusion - requirement for regular maintenance and inspection. b. the Ministry of the Environment, Conservation and Parks shall document the number and locations of applications received for environmental compliance approvals for sanitary sewers and pipes and the actions taken on the applications and report this information to the Source Protection Authority by February 1 of each year with copies of any issued approvals.
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Future

Policy ID	T-7-C
Threat	Sewage system or sewage works: onsite sewage systems and holding tanks
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>Where existing and potential future septic systems and holding tanks regulated under the <i>Ontario Water Resources Act</i> or the <i>Environmental Protection Act</i> are or would be significant drinking water threats,</p> <ol style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks shall ensure that environmental compliance approvals that govern these systems include appropriate terms and conditions to ensure that these systems and tanks cease to be or do not become significant drinking water threats. As part of its program to review environmental compliance approvals that are affected by source protection plans the following conditions shall be considered for inclusion - mandatory monitoring of groundwater impacts, contingencies in the event that the quality of sources of drinking water is adversely affected, regular and ongoing compliance monitoring, mandatory system and tank inspections at least every five years, upgrading of these septic systems and holding tanks to current standards, if necessary, and annual reporting to the Source Protection Authority of any monitoring and inspection programs required and their results. b. the Ministry of the Environment, Conservation and Parks shall document the number and locations of environmental compliance approvals that were issued or amended for these septic systems and holding tanks and the actions taken, and report this information to the Source Protection Authority by February 1 of each year with copies of any issued approvals.
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10

When Policy Applies	Existing and future
Notes	Sewage works, including septic systems, with a design capacity of greater than 10,000 litres per day are regulated under section 53 of the <i>Ontario Water Resources Act, 1990 and the Environmental Protection Act</i> . This policy uses prescribed instruments regulatory tools.

Policy ID	T-8-C
Threat	Sewage system or sewage works: sewage storage - treatment or holding tanks, sewage treatment plant bypass discharge to surface water, sewage treatment plant effluent discharges (includes lagoons)
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>Where existing or future sewage treatment plants are or would be significant drinking water threats from discharges, bypasses, or the storage of sewage,</p> <ol style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks shall ensure that the approvals that govern sewage treatment plants include appropriate terms and conditions to ensure that they cease to be or do not become significant drinking water threats. As part of its program to review environmental compliance approvals that are affected by source protection plans the following conditions shall be considered for inclusion - strict criteria for effluent quality, appropriate sizing to reduce bypasses, in addition to inspections and proactive maintenance of the works to prevent leaks. b. the Ministry of the Environment, Conservation and Parks shall document the number and locations of environmental compliance approvals that were reviewed or issued for sewage treatment plants and the actions taken and report this information to the Source Protection Authority by February 1 of each year with copies of any issued approvals.
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	<p>See Figures 2 to 11.</p> <ul style="list-style-type: none"> • Sewage storage - treatment or holding tanks: WHPA-A & B – V. score 10; WHPA-B & C – V. score 8; WHPA-E – V. score 9 • sewage treatment plant bypass discharge to surface water: WHPA-E – V. score 9 & 8.1 • sewage treatment plant effluent discharges (includes lagoons): WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1

When Policy Applies	Existing and future

Policy ID	T-9-C
Threat	Sewage system or sewage works - stormwater management facility
Policy Tool	Land use planning
Policy Implementer	Municipal planning authority
Policy	<p>In consideration of <i>Planning Act</i> applications where the future discharge of stormwater effluent from stormwater management facilities would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. where possible, the municipal planning authority shall require the applicant to locate stormwater management facilities outside of the vulnerable area. b. the municipal planning authority shall document the number of applications reviewed for stormwater management facilities, whether the application was approved, and whether the pond was located within or outside of the area where a significant drinking water threat would occur and report this information, including the rationale for decisions made, to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must conform with - legally binding. List A (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1
When Policy Applies	Future
Notes	This policy requests municipalities to prohibit a land use or an associated activity, where possible, to prevent future significant threats due to stormwater management facilities from occurring.

Policy ID	T-10-C
Threat	Sewage system or sewage works - onsite sewage systems
Policy Tool	Land use planning
Policy Implementer	Municipal planning authority
Policy	<p>In consideration of site plan approval for properties located partially within vulnerable areas where the future establishment of septic systems requiring approval under the <i>Environmental Protection Act</i> would be a significant drinking water threat,</p> <ol style="list-style-type: none"> a. where possible, the municipal planning authority shall require the applicants to locate the septic systems outside of the vulnerable areas to ensure they will not be significant drinking water threats. b. the municipal planning authority shall document the number of site plan applications reviewed that were denied, those approved with the septic systems located outside of the vulnerable areas, and those approved with the septic systems located within the vulnerable areas and report this information, including the rationale for the decisions made, to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must conform with - legally binding. List A (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Future

T-11-C

Policy ID	T-11-C
Threat	Sewage system or sewage works - onsite sewage systems
Policy Tool	Land use planning
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Town of Milton
Policy	<p>Where future septic systems requiring approval under the Ontario Building Code would be significant drinking water threats,</p> <ul style="list-style-type: none"> a. the Region of Halton, the Town of Milton and the City of Hamilton shall require through amendments to <i>Planning Act</i> tools that future lot sizes be sufficient to accommodate the systems. b. the municipal planning authority shall provide copies of their planning documents to the Source Protection Authority when they have been amended to conform with the policy to ensure that future lot sizes are sufficient to accommodate the required private servicing.
Legal Effect	Part a - Must conform with - legally binding. List A (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Future

Policy ID	T-12-S
Threat	Sewage system or sewage works - onsite sewage systems
Policy Tool	Other tools: Niagara Escarpment Plan
Policy Implementer	Niagara Escarpment Commission
Policy	<p>For consistency of planning documents across the Halton-Hamilton Source Protection Region where future septic systems requiring approval under the Ontario Building Code would be significant drinking water threats,</p> <ul style="list-style-type: none"> a. the Niagara Escarpment Commission is requested to ensure that future lot sizes in the Niagara Escarpment Plan Area are sufficient to accommodate the required private systems. b. the Niagara Escarpment Commission is requested to provide to the Source Protection Authority a report of the actions taken to ensure that future lot sizes in the Niagara Escarpment Plan Area are sufficient to accommodate the required private septic systems.
Legal Effect	Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Future
Notes	To have consistent policies across the Source Protection Region, the Niagara Escarpment Commission is requested to amend the Niagara Escarpment Plan.

Policy ID	T-13-C
Threat	Sewage system or sewage works: onsite sewage systems and holding tanks
Policy Tool	Education and outreach
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Town of Milton
Policy	<p>To increase awareness about best practices to protect drinking water sources for existing and future users of septic tanks and holding tanks located within vulnerable areas where their use is or would be a significant drinking water threat,</p> <ol style="list-style-type: none"> a. the City of Hamilton and the Region of Halton shall continue their established, related education and outreach programs. In addition, within two years of the date the updated Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Halton Region and Hamilton Region Conservation Authorities, and the Town of Milton are requested to continue and broaden education and outreach programs for newly identified threats as well. The programs should inform landowners about the proper disposal of toxic chemicals, the operation and maintenance of septic systems, water softener discharges, and the benefits of installing effluent filters, performing tank inspections, and having tanks pumped out regularly. b. the City of Hamilton and the Region of Halton shall document the nature of any new or continuing education and outreach programs established regarding septic systems, the number of persons contacted, and the location of the participants and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Existing and future

Policy ID	T-14-C
Threat	Sewage system or sewage works: onsite sewage systems
Policy Tool	Other tools: onsite sewage system maintenance inspection program
Policy Implementer	City of Hamilton, Town of Milton
Policy	<p>In support of the sewage system inspection requirements of the Ontario Building Code specific to vulnerable areas where existing sewage systems are significant drinking water threats,</p> <ul style="list-style-type: none"> a. the Town of Milton and the City of Hamilton shall implement an on-site sewage system maintenance inspection program, as required. b. the Town of Milton and the City of Hamilton shall document the number of sewage system maintenance inspections completed, as well as the actions required, if any, and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Existing
Notes	This policy considers the Ontario Building Code which requires municipalities to establish programs to inspect on-site sewage systems located in vulnerable areas where such sewage systems are significant threats.

Policy ID	T-15-S
Threat	Sewage system or sewage works: onsite sewage systems and holding tanks
Policy Tool	Other tools: decommission septic systems and holding tanks
Policy Implementer	Part a – landowners Part b - City of Hamilton, Regional Municipality of Halton
Policy	<p>Where septic systems and holding tanks are used within municipal service areas and where their use is a significant drinking water threat,</p> <ul style="list-style-type: none"> a. landowners are requested to decommission existing septic systems and holding tanks and connect to municipal sewage works where municipal services are provided, connections are permitted, and where municipal servicing capacity is available. b. the City of Hamilton and the Region of Halton shall document the number and locations of new connections to municipal sewage works for properties formerly using septic systems and holding tanks that were significant drinking water threats and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Existing
Notes	Septic systems and holding tanks that pose significant drinking water threats and exist within municipal service areas should be decommissioned, and this policy requests landowners to do so. Municipal sewage works are considered to be more protective of the sources of drinking water.

Policy ID	T-16-S
Threat	Sewage system or sewage works: onsite sewage systems and holding tanks
Policy Tool	Incentives
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>To assist landowners in reducing the risks to drinking water sources where existing septic systems and holding tanks are significant threats,</p> <ul style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks is requested to provide ongoing funding through the Ontario Drinking Water Stewardship Program or a similar program for septic system upgrades and replacements, holding tank replacements with septic systems, decommissioning of unused systems, and for connection to municipal sewage works. b. if funding is provided by the Ministry of the Environment, Conservation and Parks or municipalities, the Halton Region and Hamilton Region Conservation Authorities shall implement the incentive program to reduce the risk of septic system and holding tank drinking water threats. c. by February 1 of each year, the Halton Region and Hamilton Region Conservation Authorities shall advise the Source Protection Authority of the amount of funding received from provincially funded programs for septic system and holding tank work and connection to municipal sewage works, as well as the number of projects completed in the previous year.
Legal Effect	<p>Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists);</p> <p>Part b - Must comply with - legally binding. List E (Appendix C - Compliance Lists)</p> <p>(Part c is a monitoring policy)</p>
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Existing
Notes	The Ontario Drinking Water Stewardship Program was established by the province of Ontario to assist stakeholders in reducing risks

	to drinking water sources. A continuation of this program will benefit the communities in the Halton-Hamilton Region.
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Policy ID	T-17-C
Threat	Sewage system or sewage works: onsite sewage systems
Policy Tool	Incentives
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Town of Milton
Policy	<p>To assist landowners with improvements required under the on-site sewage systems maintenance inspection program implemented where sewage systems are significant threats and in accordance with the Ontario Building Code,</p> <ul style="list-style-type: none"> a. the City of Hamilton, the Region of Halton, and the Town of Milton shall consider the creation of a financial assistance program. It is recommended that this program be designed in a manner that allows the work to be completed as required, and the landowner to repay the cost over time. b. the City of Hamilton, the Region of Halton, and the Town of Milton shall document their efforts and the results regarding the creation of a municipal financing program to assist landowners and report this information and the number of participants to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Existing and future
Notes	Upgrading failing systems or those not constructed to current standards will improve the effectiveness of sewage treatment. Assistance to get the work completed quickly will benefit the community.

Policy ID	T-18-C
Threat	Sewage system or sewage works: onsite sewage systems
Policy Tool	Other tools: consideration for connections to municipal wastewater services
Policy Implementer	Municipalities responsible for wastewater services (City of Hamilton, Regional Municipality of Halton)
Policy	<p>Where existing and future septic systems requiring approval under the <i>Ontario Water Resources Act</i> or the <i>Environmental Protection Act</i> are or would be significant drinking water threats,</p> <ol style="list-style-type: none"> a. the municipality responsible for wastewater services may consider connections to municipal wastewater services for rural properties where the septic systems have failed and where all other mitigation measures have been explored (including the replacement of the systems and/or installation of advanced private treatment facilities) to the satisfaction of the municipality and found unsuitable, or where the municipality considers connection to municipal wastewater services for future development to be most appropriate, and where the connections are permitted by provincial and municipal planning policy. b. by February 1 of each year, the municipality responsible for wastewater services shall report to the Source Protection Authority the number of any connections made to the municipal wastewater system in the previous year due to the failure of a septic system.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10
When Policy Applies	Existing and future

Policy ID	T-19-C
Threat	Sewage system or sewage works - sewage treatment plant bypass discharge to surface water
Policy Tool	Other tools: address connections of stormwater sources to sanitary sewers
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Town of Oakville, City of Burlington
Policy	<p>Where potential future sewage treatment plant bypasses would be significant drinking water threats,</p> <ul style="list-style-type: none"> a. the municipalities responsible for stormwater systems are requested to implement programs which address connections of stormwater sources to sanitary sewers in order to reduce surges in volumes to sewage treatment plants during wet weather. b. by February 1 of each year, the municipalities responsible for stormwater systems shall report to the Source Protection Authority whether a program to address connections of stormwater sources to sanitary sewers has been implemented, their actions taken, and the results of those actions. c. by February 1 of each year, the municipalities responsible for wastewater services shall report to the Source Protection Authority the number of bypasses of the wastewater treatment plant that occurred in the previous year due to plant capacity limitations.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Parts b and c are monitoring policies)
Where Policy Applies	See Figures 2 to 11. WHPA-E – V. score 9 & 8.1
When Policy Applies	Future

Policy ID	T-20-C
Threat	Application of agricultural source material (ASM) to land; and storage of ASM
Policy Tool	Clean Water Act Part IV – restricted land use and risk management plan
Policy Implementer	Risk Management Official
Policy	<p>Where the existing and potential future application and storage of agricultural source material (ASM) on farms not phased-in under the <i>Nutrient Management Act</i> are or would be significant drinking water threats,</p> <ul style="list-style-type: none"> a. a risk management official shall screen all building permit and <i>Planning Act</i> applications in accordance with policy G-2 for properties zoned for agricultural use within vulnerable areas. b. a risk management official shall establish risk management plans with persons undertaking or proposing to undertake the activities of the application or storage of agricultural source material. The implementation of these risk management plans shall be overseen by a risk management inspector. Their content shall be based upon the regulatory requirements of a nutrient management plan and strategy under the <i>Nutrient Management Act</i> and be scoped to address these specific threats. c. the risk management official shall document action taken regarding risk management plans for the application and storage of agricultural source material in their annual report in accordance with Section 65 of Ontario Regulation 287/07, and the official shall submit this report to the Source Protection Authority by February 1 of each year.
Legal Effect	<p>Part a – Must conform with - legally binding. List I (Appendix C – Compliance Lists)</p> <p>Part b – Must conform with (legally binding). See Appendix C - List H (Part c is a monitoring policy)</p>
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1
When Policy Applies	Existing and future
Notes	Primarily, manure is the agricultural source material associated with drinking water threats.

Policy ID	T-21-C
Threat	Application of agricultural source material (ASM) to land; and storage of ASM
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of Agriculture, Food and Rural Affairs
Policy	<p>Where the existing and potential future application or storage of agricultural source material are or would be significant drinking water threats and are managed by nutrient management plans and strategies,</p> <ul style="list-style-type: none"> a. the Ministry of Agriculture, Food and Rural Affairs shall ensure that the nutrient management plans and strategies are inclusive of measures to protect drinking water sources that, when implemented, will ensure that the application and storage of agricultural source material never become or cease to be significant drinking water threats. Contingency plans required for nutrient management plans and strategies must contain the requirement for notification of the Spills Action Centre if a leak is discovered from an agricultural source material storage facility or if there is a spill. b. the Ministry of Agriculture, Food and Rural Affairs shall document the number and locations of nutrient management plans and strategies that were reviewed or approved and the actions taken to attain compliance with this policy and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1
When Policy Applies	Existing and future
Notes	Nutrient management plans and strategies are existing requirements that the agricultural community uses to guide its operations.

Policy ID	T-22-S
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Threat	Application of agricultural source material (ASM) to land; storage of ASM; application of non-agricultural source material (NASM) or biosolids to land; storage of NASM; application of commercial fertilizer to land; storage of commercial fertilizer; ASM generation (yards or confinement); ASM generation (grazing and pasturing)
Policy Tool	Other tools: compliance inspections of agricultural operations
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>To monitor compliance with nutrient management plans and strategies, non-agricultural source material plans, and Ontario Regulation 267/03 requirements for properties located within vulnerable areas where there are now or potentially would be significant drinking water threats due to the application and storage of agricultural source materials, non-agricultural source materials, commercial fertilizer, and land used for outdoor confinement areas and farm-animal yards,</p> <ol style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks is requested to conduct regular compliance inspections of agricultural operations where significant drinking water threats occur, and shall guide farmers to improve compliance performance, when needed. b. the Ministry of the Environment, Conservation and Parks shall document the number and location of inspections that were compliant and non-compliant with nutrient management plans and strategies, and non-agricultural source material plans and the actions taken, and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	<p>See Figures 2 to 11.</p> <ul style="list-style-type: none"> • Application of ASM to land, storage of ASM, application of NASM, storage of NASM, ASM generation (yards or confinement), ASM generation (grazing and pasturing): WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1. • Application of commercial fertilizer: WHPA-A & B – V. score 10; WHPA-E – V. score 9. • Storage of commercial fertilizer: WHPA-A & B – V. score 10.
When Policy Applies	Existing and future

Policy ID	T-23-S
Threat	Application of agricultural source material (ASM) to land, storage of ASM, ASM generation (yards or confinement), ASM generation (grazing and pasturing)
Policy Tool	Incentives
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>As an incentive to reduce the existing significant risks from the application and storage of agricultural source materials, and from land used for livestock grazing, pasturing land, outdoor confinement areas, and farm-animal yards,</p> <ul style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks is requested to continue to provide ongoing funding for stewardship projects on properties where these activities are a significant threat. b. if funding is provided by the Ministry of the Environment, Conservation and Parks, the Halton Region and Hamilton Region Conservation Authorities shall implement the incentive program. c. by February 1 of each year, the Halton Region and Hamilton Region Conservation Authorities shall advise the Source Protection Authority of the amount of funding received from provincially funded programs for agricultural stewardship projects.
Legal Effect	<p>Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists);</p> <p>Part b - Must comply with - legally binding. List E (Appendix C - Compliance Lists)</p> <p>(Part c is a monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1</p>
When Policy Applies	Existing

Policy ID	T-24-C
Threat	Application of non-agricultural source material (NASM) or biosolids to land, and storage of NASM
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of Agriculture, Food and Rural Affairs
Policy	<p>Where the future application, or handling and storage of categories 2 and 3 non-agricultural source material would be significant drinking water threats,</p> <ul style="list-style-type: none"> a. the Ministry of Agriculture, Food and Rural Affairs shall ensure that non-agricultural source material plans (NASM plans) required under the <i>Nutrient Management Act</i> include measures that, when implemented, will ensure that these activities never become significant drinking water threats. b. the Ministry of Agriculture, Food and Rural Affairs shall document the number and locations where non-agricultural source material plans were approved, and the measures included and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1
When Policy Applies	Future
Notes	Non-agricultural source material is defined in Ontario Regulation 267/03 – General under the <i>Nutrient Management Act, 2002</i> . An example is biosolids.

Policy ID	T-25-C
Threat	Application of commercial fertilizer to land and storage of commercial fertilizer
Policy Tool	Clean Water Act Part IV – restricted land use and risk management plan
Policy Implementer	Risk Management Official
Policy	<p>Where the existing and future application of commercial fertilizer on farms not phased-in under the <i>Nutrient Management Act</i>, and where the handling and storage of commercial fertilizer on properties would be significant drinking water threats,</p> <ol style="list-style-type: none"> a. a risk management official shall screen all building permit and <i>Planning Act</i> applications in accordance with policy G-2 for properties where there would be a significant drinking water threat. b. a risk management official shall establish risk management plans with persons proposing to undertake the activities of the application or storage of commercial fertilizer. The implementation of these risk management plans shall be overseen by a risk management inspector and their content based upon the regulatory requirements of a nutrient management plan under the <i>Nutrient Management Act</i> and best management practices, and scoped to address these specific threats. c. the risk management official shall document action taken regarding risk management plans for the application, handling and storage of commercial fertilizer in their annual report in accordance with Section 65 of Ontario Regulation 287/07, and the official shall submit this report to the Source Protection Authority by February 1 of each year.
Legal Effect	<p>Part a - Must conform with - legally binding. List I (Appendix C - Compliance Lists).</p> <p>Part b - Must conform with - legally binding. List H (Appendix C - Compliance Lists).</p> <p>(Part c is a monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <ul style="list-style-type: none"> • Application of commercial fertilizer: WHPA-A & B – V. score 10; WHPA-E – V. score 9. • Storage of commercial fertilizer: WHPA-A & B – V. score 10.

When Policy Applies	Existing and future
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Policy ID	T-26-C
Threat	Application of commercial fertilizer
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of Agriculture, Food and Rural Affairs
Policy	<p>Where the existing and future application of commercial fertilizer would be a significant drinking water threat,</p> <ol style="list-style-type: none"> a. the Ministry of Agriculture, Food and Rural Affairs shall ensure that nutrient management plans required under the <i>Nutrient Management Act</i> include measures that, when implemented, will ensure that this activity never becomes or ceases to be a significant drinking water threat. b. the Ministry of Agriculture, Food and Rural Affairs shall document the number and locations of properties where nutrient management plans were reviewed, and the measures included that will ensure that this activity never becomes a significant drinking water threat and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Existing and Future

Policy ID	T-27-C
Threat	Application of commercial fertilizer to land and storage of commercial fertilizer
Policy Tool	Education and outreach
Policy Implementer	City of Hamilton, Regional Municipality of Halton
Policy	<p>Where the existing and future application, or handling and storage of commercial fertilizer would be significant drinking water threats,</p> <ol style="list-style-type: none"> a. the City of Hamilton and the Region of Halton shall continue their established, related education and outreach programs. In addition, within two years of the date that the updated Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Halton Region and Hamilton Region Conservation Authorities, are requested to develop and implement education and outreach programs for newly identified threats to promote best management practices regarding these activities for the protection of source water. The target audience will be golf courses, fertilizer application technicians, home and business owners, and retail establishments that apply or store commercial fertilizer. b. the City of Hamilton and the Region of Halton shall document any new and existing education and outreach programs established regarding the application, handling or storage of commercial fertilizer, the nature of the programs, the number of persons contacted, and the location of the participants and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	<p>See Figures 2 to 11.</p> <ul style="list-style-type: none"> • Application of commercial fertilizer: WHPA-A & B – V. score 10; WHPA-E – V. score 9. • Storage of commercial fertilizer: WHPA-A & B – V. score 10.
When Policy Applies	Existing and future
Policy ID	T-28-C

Threat	Application of commercial fertilizer to land and storage of commercial fertilizer
Policy Tool	Best management practice
Policy Implementer	Municipal planning authority
Policy	<p>For golf course properties located where the existing and future application, or storage and handling of commercial fertilizers would be significant drinking water threats,</p> <ol style="list-style-type: none"> a. the municipal planning authority shall encourage all operators to obtain and retain Audubon Co-operative Sanctuary Certification. b. the municipal planning authority shall document the number of golf course operators approached and the number of golf courses with an Audubon Co-operative Sanctuary Certificate and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	<p>See Figures 2 to 11.</p> <ul style="list-style-type: none"> • Application of commercial fertilizer: WHPA-A & B – V. score 10; WHPA-E – V. score 9. • Storage of commercial fertilizer: WHPA-A & B – V. score 10.
When Policy Applies	Existing and future
Notes	The Audubon Co-operative Sanctuary Certification is an award winning education and certification program that provides guidance on environmental protection practices.

Policy ID	T-29-C
Threat	Handling and storage of a pesticide
Policy Tool	Clean Water Act Part IV – restricted land use and risk management plan
Policy Implementer	Risk Management Official
Policy	<p>Where the future handling and storage of pesticide would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. a risk management official shall screen all building permit and <i>Planning Act</i> applications in accordance with policy G-2 for properties where there would be a significant drinking water threat. b. a risk management official shall establish risk management plans with persons proposing to undertake the activities of the handling and storage of pesticide. The implementation of these risk management plans shall be overseen by a risk management inspector. c. the risk management official shall document in their annual report, in accordance with section 65 of Ontario Regulation 287/07, action taken regarding risk management plans for the handling and storage of pesticide and submit this report to the Source Protection Authority by February 1 of each year. d. Repealed.
Legal Effect	<p>Part a – Must conform with - legally binding. List I (Appendix C – Compliance Lists);</p> <p>Part b - Must conform with - legally binding. List H.</p> <p>(Part c is a monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9</p>
When Policy Applies	Future

Policy ID	T-30-S
Threat	Handling and storage of a pesticide

Policy Tool	Best management practice
Policy Implementer	Agrichemical Warehousing Standards Association
Policy	<p>Where the future handling and storage of pesticide would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the Agrichemical Warehousing Standards Association is requested to review their standards to ensure they include appropriate buffer areas and emergency planning and response measures to protect municipal drinking water sources. b. the Halton Region and Hamilton Region Conservation Authorities shall request the Agrichemical Warehousing Standards Association annually to confirm that their standards protect municipal drinking water sources.
Legal Effect	Part a - Strategic - non-legally binding. List K (Appendix C – Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Future

Note that **T-30-S** is amended

Policy ID	T-31-C
Threat	Application, and handling and storage of pesticide
Policy Tool	Education and outreach
Policy Implementer	City of Hamilton, Regional Municipality of Halton
Policy	<p>Where the existing and future application, or handling and storage of pesticide are significant drinking water threats,</p> <ol style="list-style-type: none"> a. the City of Hamilton and the Region of Halton shall continue their established, related education and outreach programs. In addition, within two years of the date that the updated Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Halton Region and Hamilton Region Conservation Authorities, are requested to undertake an education and outreach program for newly identified threats on pesticide use and storage methods and their potential impacts on drinking water sources. It is recommended that the outreach program include wellhead protection area mapping and target pesticide applicators and exterminators, golf course operators, and farmers. b. the City of Hamilton and the Region of Halton shall document the nature of any new and existing education and outreach program established regarding the application, and the handling and storage of pesticide, the number of persons contacted, and the location of the participants and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. <ul style="list-style-type: none"> • handling and storage of pesticide: WHPA-A & B – V. score 10; WHPA-E – V. score 9 • application of pesticide: WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1
When Policy Applies	Existing and future

Policy ID	T-32-C
Threat	Handling and storage of road salt
Policy Tool	Land use planning
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Town of Milton, Town of Halton Hills, Risk Management Official
Policy	<p>Where the future handling and storage of road salt would be a significant drinking water threat</p> <ul style="list-style-type: none"> a. within a wellhead protection area and issue contributing area, the Region of Halton, Town of Milton, Town of Halton Hills, and the City of Hamilton shall prohibit through <i>Planning Act</i> tools salt storage facilities with greater than 5,000 tonnes of capacity. b. within an issue contributing area a risk management official shall establish risk management plans with persons proposing to construct salt storage facilities of 5,000 tonnes or less. The implementation of these risk management plans shall be overseen by a risk management inspector. c. the risk management official shall document in their annual report, in accordance with section 65 of Ontario Regulation 287/07, action taken regarding risk management plans for the handling and storage of road salt and submit this report to the Source Protection Authority by February 1 of each year. d. the municipal planning authority shall provide copies of their planning documents to the Source Protection Authority when they have been amended to conform with the policies to prohibit the salt storage and handling facilities.
Legal Effect	<p>Part a – Must conform with – legally binding. List A (Appendix C - Compliance Lists);</p> <p>Part b - Must conform with - legally binding. List H. (parts c and d are monitoring policies).</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9</p>
When Policy Applies	Future
Notes	Some drinking water sources within the Halton-Hamilton Source Protection Region have high concentrations of sodium and chloride from road salt. This policy helps manage the storage of road salt to protect drinking water sources.

Policy ID	T-33-S
Threat	Handling and storage of road salt
Policy Tool	Other Tools: Niagara Escarpment Plan
Policy Implementer	Niagara Escarpment Commission
Policy	<p>For consistency of planning documents across the Halton-Hamilton Source Protection Region where the future handling and storage of road salt would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the Niagara Escarpment Commission is requested to prohibit salt storage and handling facilities with capacity greater than 5,000 tonnes in the Niagara Escarpment Plan Area where the handling and storage of salt would be a significant drinking water threat. b. the Niagara Escarpment Commission is requested to provide to the Source Protection Authority a report of the actions taken to prohibit salt storage and handling facilities with capacity greater than 5,000 tonnes in the Niagara Escarpment Plan Area where the handling and storage of salt would be a significant drinking water threat.
Legal Effect	Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Future

Policy ID	T-34-C
Threat	Application, and handling and storage of road salt
Policy Tool	Education and outreach
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Town of Milton, Town of Halton Hills, Town of Oakville, City of Burlington
Policy	<p>Where the existing and future application, or handling and storage of road salt would be a significant drinking water threat in a wellhead protection area, intake protection zone or issue contributing area,</p> <ol style="list-style-type: none"> a. the City of Hamilton, Regional Municipality of Halton, Town of Milton, Town of Halton Hills, Town of Oakville, City of Burlington shall continue their established, related education and outreach programs. In addition, within two years of the date that the updated Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the City of Burlington and Towns of Milton, Halton Hills and Oakville in Halton Region, are requested to develop and implement education and outreach programs for the private and public sector, as well as the general public, about the impacts of road salt on drinking water sources and the use of best management practices. It is recommended that the key messages be the efficient use of road salts and the use of alternatives to help address newly identified threats. b. the City of Hamilton and the Region of Halton shall document the nature of any new or existing education and outreach program established regarding the application, and handling and storage of road salt, the number of persons contacted, and the location of the participants and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Existing and future
Notes	Education and outreach programs help inform public and private sectors about the ways in which road salt or alternatives usage can be managed to protect our drinking water sources, bearing in mind that safety is paramount.

Policy ID	T-35-C
Threat	Application, and handling and storage of road salt
Policy Tool	Salt management plans
Policy Implementer	Municipalities
Policy	<p>Where the existing and future application, or handling and storage of road salt would be significant drinking water threats,</p> <ul style="list-style-type: none"> a. within two years of the date that the Source Protection Plan comes into effect, the municipalities shall amend their salt management plans to identify the location of wellhead protection areas, issue contributing areas, and intake protection zones and to enhance best management practices in these areas. b. the municipalities shall advise the Source Protection Authority of the revision to the salt management plans when completed and provide a status update by February 1 of each year until completed.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Existing and future

Policy ID	T-36-S
Threat	Application of road salt
Policy Tool	Best practices
Policy Implementer	Ministry of Transportation
Policy	<p>To seek collaboration on the use of best practices for the application of road salt on Provincial roads where this activity could be a significant, moderate or low drinking water threat,</p> <ul style="list-style-type: none"> a. the Ministry of Transportation and their supporting de-icing contractors are requested to continue the proactive implementation of their salt management plans and to continue the use of best management practices within wellhead protection areas and intake protection zones. b. the Ministry of Transportation is requested to update their salt management plan, as required, to ensure consistency with the most current versions of Environment Canada’s Code of Practice for the Environmental Management of Road Salts and the Transportation Association of Canada’s Syntheses of Best Practices. c. the Ministry of Transportation should continue their ongoing investigation and implementation of innovative practices and new mitigative technologies regarding road salt application and the management of infiltration and runoff. d. the Ministry of Transportation is requested to actively consider the creation of a pilot project utilizing new practices and mitigative technologies for road salt application or the management of runoff that could benefit drinking water sources within the Halton-Hamilton Source Protection Region. e. the Halton Region and Hamilton Region Conservation Authorities shall consult with the Ministry of Transportation to: <ul style="list-style-type: none"> i. determine the status of the Ministry’s salt management plan and, if revised, request a copy; and ii. determine the status of pilot projects underway and proposed future pilot projects designed to protect drinking water sources in the Halton-Hamilton Source Protection

	Region and report on this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Parts a, b, c, d: Significant threats: Strategic - non-legally binding. List K (Appendix C - Compliance Lists); Moderate and low threats: Strategic – non-legally binding. List J. (Part e is a monitoring policy)
Where Policy Applies	Significant threats: See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Existing and future
Notes	The investigation and implementation of innovative practices and new mitigative technologies regarding road salt application and the management of infiltration and runoff are key to protecting drinking water sources.

Policy ID	T-37-C
Threat	Storage of snow
Policy Tool	Land use planning
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Town of Milton, Town of Halton Hills
Policy	<p>Where the future storage of snow would be a significant drinking water threat</p> <ul style="list-style-type: none"> a. in a wellhead protection area and issue contributing area, the Region of Halton, the Towns of Milton and Halton Hills and the City of Hamilton shall prohibit through <i>Planning Act</i> tools snow storage facilities that are at or above grade at greater than one hectare in size or, below grade, at or greater than 0.01 hectare in size. b. the Region of Halton, the Towns of Milton and Halton Hills and the City of Hamilton shall provide copies of their planning documents to the Source Protection Authority when they have been amended to conform with the policy to prohibit snow storage facilities of these sizes.
Legal Effect	Part a - Must conform with - legally binding. List A (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Future
Notes	This policy refers to designated snow storage facilities and not a snow pile at the side of a residential driveway or road.

Policy ID	T-38-S
Threat	Storage of snow
Policy Tool	Niagara Escarpment Plan
Policy Implementer	Niagara Escarpment Commission
Policy	<p>For consistency of planning documents across the Halton-Hamilton Source Protection Region where the future storage of snow would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the Niagara Escarpment Commission is requested to prohibit future snow storage facilities in the Niagara Escarpment Plan Area. b. the Niagara Escarpment Commission is requested to provide to the Source Protection Authority a report on the actions taken to prohibit future snow storage facilities in the Niagara Escarpment Plan Area.
Legal Effect	<p>Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists) (Part b is a monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9</p>
When Policy Applies	Future

Policy ID	T-39-C
Threat	Storage of snow
Policy Tool	Land use planning
Policy Implementer	Municipal planning authority
Policy	<p>Where the future storage of snow would be a significant drinking water threat in an issue contributing area,</p> <ul style="list-style-type: none"> a. the municipal planning authority shall require at site plan approval that best management practices for site design to protect drinking water sources be included to manage snow storage and the associated melt water at snow storage facilities at or above grade between 0.01 and 1 hectare in size. b. the municipal planning authority shall document the number of new site plan applications reviewed, and the conditions imposed for the management of snow storage and melt water runoff and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must conform with - legally binding. List A (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Future
Notes	The design of large parking lots should consider appropriate drainage of salt-laden meltwater to reduce impacts to drinking water sources. This policy uses land use planning tools to achieve the same.

Policy ID	T-40-C
Threat	Handling and storage of fuel
Policy Tool	Risk management plan
Policy Implementer	Risk Management Official
Policy	<p>Where existing and potential future handling and storage of fuel are or would be significant drinking water threats,</p> <ul style="list-style-type: none"> a. the risk management official shall screen all building permit and <i>Planning Act</i> applications in accordance with policy G-2 within these vulnerable areas. b. the risk management official shall establish risk management plans with persons undertaking or proposing to undertake the handling and storage of fuel under Ontario Regulation 213/01 and under Ontario Regulation 217/01, except home fuel oil tanks. The implementation of these risk management plans shall be overseen by a risk management inspector and they shall include the requirements for all storage tanks to comply with the requirements of the <i>Technical Standards and Safety Act</i> and its regulations, for all owners/operators to have an emergency response plan with emergency contact information of the municipality responsible for water services and the Spills Action Centre. c. the risk management official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, action taken regarding risk management plans for the handling and storage of fuel and submit this report to the Source Protection Authority by February 1 of each year.
Legal Effect	<p>Part a - Must conform with - legally binding. List I (Appendix C – Compliance Lists)</p> <p>Part b - Must conform with - legally binding. List H (Appendix C - Compliance Lists)</p> <p>(Part c is a monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9</p>
When Policy Applies	Existing and future

Policy ID	T-41-C
Threat	Handling and storage of fuel
Policy Tool	Land use planning
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Town of Milton
Policy	<p>Where the future handling and storage of fuel would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the Region of Halton, Town of Milton, and the City of Hamilton shall prohibit gas stations through <i>Planning Act</i> tools. b. the municipal planning authority shall provide copies of their planning documents to the Source Protection Authority when they have been amended to conform with the policy to prohibit gas stations.
Legal Effect	Part a - Must conform with - legally binding. List A (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Future

Policy ID	T-42-S
Threat	Handling and storage of fuel
Policy Tool	Niagara Escarpment Plan
Policy Implementer	Niagara Escarpment Commission
Policy	<p>For consistency of planning documents across the Halton-Hamilton Source Protection Region where the future handling and storage of fuel would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the Niagara Escarpment Commission is requested to prohibit gas stations in the Niagara Escarpment Plan Area. b. the Niagara Escarpment Commission is requested to provide to the Source Protection Authority a report of the actions taken to prohibit gas stations in the Niagara Escarpment Plan Area.
Legal Effect	Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Future

Policy ID	T-43-C
Threat	Handling and storage of fuel
Policy Tool	Education and outreach
Policy Implementer	City of Hamilton, Regional Municipality of Halton
Policy	<p>Where the existing and future handling and storage of fuel is or would be a significant drinking water threat,</p> <ol style="list-style-type: none"> a. the City of Hamilton, Regional Municipality of Halton shall continue their established, related education and outreach programs. In addition, within two years of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Halton Region and Hamilton Region Conservation Authorities, shall develop and implement an education and outreach program for homeowners with home fuel oil tanks newly identified as significant threats, regarding spill response and the method and timing for contacting the Spills Action Centre. As part of this program, stickers with emergency phone numbers shall be provided to be placed on or near the fuel tanks and fill pipes to ensure immediacy of response if there is a spill or leak detected. b. the City of Hamilton and the Region of Halton shall document the nature of any new education and outreach program established regarding home fuel oil tanks, the number of persons contacted, and the location of the participants and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Existing and future
Notes	An education and outreach program can help reiterate that the proper installation, inspection, and maintenance of fuel tanks and a rapid clean up of spills could save a fuel tank owner a lot of money and protect the environment.

Policy ID	T-44-C
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Threat	Handling and storage of dense non-aqueous phase liquids
Policy Tool	Risk management plan
Policy Implementer	Risk Management Official
Policy	<p>Where the existing or potential future handling and storage of dense non-aqueous phase liquids is or would be significant drinking water threats,</p> <ul style="list-style-type: none"> a. the risk management official shall screen all building permit and <i>Planning Act</i> applications in accordance with policy G-2 within these vulnerable areas. b. the risk management official shall establish risk management plans with the persons undertaking or proposing to undertake the handling and storage of a dense non-aqueous phase liquid. The implementation of these risk management plans shall be overseen by a risk management inspector. c. the risk management official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, action taken regarding risk management plans for the handling and storage of a dense non-aqueous phase liquid and submit this report to the Source Protection Authority by February 1 of each year.
Legal Effect	<p>Part a - Must conform with - legally binding. List I (Appendix C – Compliance Lists)</p> <p>Part b - Must conform with - legally binding. List H (Appendix C - Compliance Lists)</p> <p>(Part c is a monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A, B, C (all scores)</p>
When Policy Applies	Existing and future

Policy ID	T-45-C
Threat	Handling and storage of an organic solvent
Policy Tool	Risk management plan
Policy Implementer	Risk Management Official
Policy	<p>Where the existing and future handling and storage of an organic solvent would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the risk management official shall screen all building permit and <i>Planning Act</i> applications in accordance with policy G-2 within these vulnerable areas. b. the risk management official shall establish risk management plans with the persons undertaking or proposing to undertake the handling and storage of an organic solvent. The implementation of these risk management plans shall be overseen by a risk management inspector. c. the risk management official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07 action taken regarding risk management plans for the handling and storage of an organic solvent and submit this report to the Source Protection Authority by February 1 of each year.
Legal Effect	<p>Part a - Must conform with - legally binding. List I (Appendix C – Compliance Lists)</p> <p>Part b - Must conform with - legally binding. List H (Appendix C - Compliance Lists)</p> <p>(Part c is a monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10</p>
When Policy Applies	Existing and future

Policy ID	T-46-S
Threat	Management of runoff containing aircraft de-icing chemicals
Policy Tool	Design standards and management practices
Policy Implementer	Relevant airport authorities and operators
Policy	<p>In support of the existing planning process for airport facilities and to protect drinking water sources from runoff containing de-icing chemicals, the following policies apply where the management of runoff that contains chemicals used in the de-icing of aircraft would be a significant threat:</p> <ul style="list-style-type: none"> a. relevant airport authorities and operators, in their consideration of future airport facilities, are requested to include appropriate design standards and management practices to prevent the runoff from airport de-icing facilities from becoming a significant drinking water threat. b. the Halton Region and Hamilton Region Conservation Authorities shall periodically review the federal regulatory regime and policy to ensure appropriate design standards and management practices are included to prevent the runoff of chemicals at de-icing facilities where this activity is a significant threat. If improvements are warranted, Transport Canada is to be contacted.
Legal Effect	Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9
When Policy Applies	Existing

T-47-C Policy ID	T-47-C
Threat	Agricultural source material (ASM) generation - use of land as an outdoor confinement area or a farm-animal yard; and ASM generation - use of land for livestock grazing or pasturing
Policy Tool	Risk management plan, education and outreach
Policy Implementer	Risk Management Official
Policy	<p>To reduce the risks to drinking water sources where there are existing or potential future significant drinking water threats from the use of land as an outdoor confinement area or a farm-animal yard on farms not phased-in under the <i>Nutrient Management Act</i>, or from the use of land for livestock grazing or pasturing on all farms,</p> <ul style="list-style-type: none"> a. the risk management official shall screen all building permit and <i>Planning Act</i> applications in accordance with policy G-2 for properties zoned for agricultural use within these vulnerable areas. b. where a significant threat is identified, the risk management official shall: <ul style="list-style-type: none"> i. establish risk management plans with the persons using or proposing to use farm lands for livestock outdoors within a wellhead protection area-A of any nutrient units and in a wellhead protection area-B and E where there are 5 nutrients units or greater per farm property. The implementation of these risk management plans shall be overseen by a risk management inspector and their content shall be based upon the regulatory requirements of a nutrient management strategy under the <i>Nutrient Management Act</i> and incorporate the best management practices for livestock grazing and pasturing land as set out in <i>Streamside Grazing</i> (2007 and as amended) including extensive grazing within a wellhead protection area-A, and scoped to address these specific threats. ii. undertake an education and outreach program on nutrient management methods and their potential impacts on drinking water sources, in a wellhead protection area-B and E where there are less than 5 nutrients units per farm property. c. the risk management official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, action taken regarding risk management plans and

	<p>education and outreach for the use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard and submit this report to the Source Protection Authority by February 1 of each year.</p>
Legal Effect	<p>Part a - Must conform with - legally binding. List I (Appendix C – Compliance Lists) Part b (i) - Must conform with - legally binding. List H Part b (ii) - Must comply with - legally binding. List E. (Part c is a monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1</p>
When Policy Applies	<p>Existing and future</p>
Notes	<p>This policy requires risk management plans to be established making use of related standards from the <i>Nutrient Management Act</i> for the specific threat and nutrient units, as well as best management practices from recognized documents.</p>

Policy ID	T-48-C
Threat	Agricultural source material (ASM) generation - use of land as an outdoor confinement area or a farm-animal yard
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of Agriculture, Food and Rural Affairs
Policy	<p>Where the existing and potential future use of land as an outdoor confinement area or farm-animal yard is or would be a significant drinking water threat and is managed by nutrient management strategies prepared under the <i>Nutrient Management Act</i>,</p> <p>a. the Ministry of Agriculture, Food and Rural Affairs shall ensure that all existing and future nutrient management strategies incorporate measures to protect drinking water sources that, when implemented, will ensure that the activities never become or cease to be significant drinking water threats.</p> <p>b. the Ministry of Agriculture, Food and Rural Affairs shall document the number and locations of nutrient management strategies that were reviewed, amended, or approved, and the actions taken to attain compliance with this policy and report this information to the Source Protection Authority by February 1 of each year.</p>
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists). (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1
When Policy Applies	Existing and future

Policy ID	T-49-S
Threat	Application of road salt
Policy Tool	Salt management plans
Policy Implementer	De-icing contractors
Policy	<p>To raise awareness of mapped drinking water sources and seek collaboration on the use of best practices for the application of road salt where this activity would be a future significant, moderate or low threat on private properties,</p> <ol style="list-style-type: none"> a. de-icing contractors are requested to develop and/or amend their salt management plans for private properties to identify the location of wellhead protection areas and intake protection zones, and to use best management practices to protect drinking water sources within these areas. b. the Halton Region and Hamilton Region Conservation Authorities shall request the Smart About Salt organization and Ministry of Transportation Ontario to consult with private de-icing contractors to determine if their salt management plans identify the location of vulnerable areas for drinking water source protection and report on this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists)(Part b is a monitoring policy)
Where Policy Applies	<ul style="list-style-type: none"> • Significant threat areas: See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9; • Moderate threat areas: WHPA-A & B – V. score 10; WHPA-B & C – V. score 8, WHPA-E – V. score 9 & 8.1; • Low threat areas: WHPA-A & B – V. score 10; WHPA-B & C – V. score 8 & 6, WHPA-D – V. score 6, WHPA-E – V. score 8.1, HVA – V. score 6.
When Policy Applies	Future

T-50-S Repealed

Policy ID	T-51-C
Threat	Discharge of combined sewer effluent
Policy Tool	Land use planning
Policy Implementer	City of Hamilton
Policy	<p>Where the future discharge of combined sewer effluent from a stormwater outlet to surface water would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the City of Hamilton shall comply with the requirements of the province. b. the City of Hamilton shall report on actions taken to implement the policy to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-E – V. score 9 & 8.1.
When Policy Applies	Future

Policy ID	T-52-C
Threat	Discharges from sewage treatment plants (modelled sewage treatment plant failure)
Policy Tool	Prescribed instrument
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>Where discharges from sewage treatment plants are existing significant drinking water threats to Lake Ontario municipal intakes,</p> <p>a. the Ministry of the Environment, Conservation and Parks shall ensure that the environmental compliance approvals that govern the sewage works include appropriate terms and conditions to ensure that the systems do not become significant drinking water threats. As part of its program to review environmental compliance approvals that are affected by source protection plans and in consultation with the municipalities responsible for water services, the following conditions shall be considered for inclusion - adjustment of the reporting thresholds for pathogens and chemicals of concern in effluent.</p> <p>b. by February 1 of each year, the Ministry of the Environment, Conservation and Parks shall make all monitoring and reporting requirements available at Access Environment for access to current monitoring and effluent limits.</p>
Legal Effect	Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figure 8. Event-based IPZ-3 (no scores)
When Policy Applies	Existing
Notes	Through modelling of a sewage treatment plant failure (resulting in discharge of contaminants into Lake Ontario), some significant threats to municipal lake-based water intakes were identified. This policy uses a regulatory approach to address the threats.

	<p>Access Environment is a publicly available map-based tool by the government of Ontario, where a search can be made for registrations on the Environmental Activity and Sector Registry, Renewable Energy Approvals and Environmental Compliance Approvals issued by the Ministry of the Environment and Climate Change from December 1999 onward.</p> <p>https://www.ontario.ca/page/list-environmental-approvals-and-registrations</p>
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Policy ID	T-53-C
Threat	Multiple
Policy Tool	Land use planning
Policy Implementer	Municipal planning authorities
Policy	<p>To facilitate the effective implementation of policies for significant drinking water threats and assist in municipal decision-making,</p> <ul style="list-style-type: none"> a. the municipal planning authorities are requested to require proponents to disclose whether any of the following activities are expected to occur on the property where they would be significant drinking water threats, proposed storage location, where applicable, as well as the substances utilized or stored and their volume: <ul style="list-style-type: none"> i. the establishment, operation or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage ii. the application or storage of agricultural source material iii. the application, or handling and storage of commercial fertilizer iv. the application, or handling and storage of pesticide v. the application, or handling and storage of road salt vi. the storage of snow vii. the handling and storage of fuel viii. the handling and storage of a dense non-aqueous phase liquid ix. the handling and storage of an organic solvent x. the use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard xi. the establishment and operation of a liquid hydrocarbon pipeline. b. the City of Hamilton, the Region of Halton, and the County of Wellington are requested to require a full disclosure report as part of a complete application under the <i>Planning Act</i>. c. Repealed. d. the municipal planning authority shall report to the Source Protection Authority by February 1 of each year on actions taken to amend municipal documents/processes to require

	disclosure of threat activities and the number of disclosure reports that were received in the previous year.
Legal Effect	Parts a and b Must conform with - legally binding. List A (Appendix C - Compliance Lists) (Part d is a monitoring policy)
Where Policy Applies	See Figures 2 to 11.
When Policy Applies	Future

Policy ID	T-54-C
Threat	Application, or handling and storage of category 1 non-agricultural source material
Policy Tool	Education and outreach
Policy Implementer	City of Hamilton, Regional Municipality of Halton
Policy	<p>Where the future application, or handling and storage of category 1 non-agricultural source material would be a significant drinking water threat,</p> <ol style="list-style-type: none"> a. the City of Hamilton, Regional Municipality of Halton shall continue their established, related education and outreach programs. In addition, within two years of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Halton Region and Hamilton Region Conservation Authorities, are requested to develop and implement education and outreach programs to promote best management practices regarding newly identified significant threat activities for the protection of source water. b. the City of Hamilton and the Region of Halton shall document any new and existing education and outreach programs established regarding the application, handling or storage of category 1 non-agricultural source material, the nature of the programs, the number of persons contacted, and the location of the participants and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9 & 8.1
When Policy Applies	Future

Policy ID	T-55-C
Threat	Increased or new water taking without returning to the same water body
Policy Tool	Prescribed instrument, land use planning
Policy Implementer	Ministry of the Environment, Conservation and Parks, Municipal planning authority
Policy	<p>Within a wellhead protection area Q1, where an increased or new water taking would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks shall ensure that groundwater Permit to Take Water approvals include appropriate terms and conditions to demonstrate that the taking will not adversely impact the aquifer’s ability to meet municipal and other water supply requirements. The following conditions should be considered for inclusion – a phased approach to assess impacts before fully approved and the requirement for appropriate monitoring. b. the municipal planning authority shall only provide final approval for new development that requires a Permit to Take Water once the Ministry of the Environment, Conservation and Parks has determined that the proposed taking does not become a significant water quantity threat. c. the Ministry of the Environment, Conservation and Parks shall document the number and locations of permit applications that were reviewed or issued for water takings and their actions taken and report this information to the Source Protection Authority by February 1 of each year with copies of any issued permits. d. the municipal planning authority shall report actions taken to implement part (b) of this policy to the Source Protection Authority by February 1 of each year.
Legal Effect	<p>Part a - Must conform with - legally binding. List C (Appendix C - Compliance Lists);</p> <p>Part b - Must conform with - legally binding. List A. (Parts c and d are monitoring policies)</p>
Where Policy Applies	See Figures 16, 17, 18. WHPA-Q1
When Policy Applies	Future

Policy ID	T-56-C
Threat	Increased or new water taking without returning to the same water body
Policy Tool	Watermain leak detection program
Policy Implementer	City of Hamilton, Regional Municipality of Halton
Policy	<p>To ensure consumptive demand does not become a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the City of Hamilton and the Region of Halton shall work to reduce consumption by strengthening watermain leak detection programs in areas serviced by a well located within a wellhead protection area Q1 within two years of the date that the Source Protection Plan takes effect, and shall initiate a watermain leak reduction strategy as deemed required by the municipality, within the following year. b. the City of Hamilton and Region of Halton shall report actions taken to implement this policy to the Source Protection Authority by February 1 of each year until the program is implemented and every five years thereafter.
Legal Effect	Part a - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 16, 17, 18. WHPA-Q1
When Policy Applies	Existing and future

Policy ID	T-57-C
Threat	Increased or new water taking without returning to the same water body
Policy Tool	Water conservation plans and outdoor water use programs
Policy Implementer	City of Hamilton, Regional Municipality of Halton
Policy	<p>To encourage community involvement in safeguarding drinking water sources where consumptive demand could result in a significant drinking water threat in a wellhead protection area Q1,</p> <ul style="list-style-type: none"> a. within two years of the date that the Source Protection Plan takes effect, the City of Hamilton and the Region of Halton shall develop or enhance Water Conservation Plans to support sustainable drinking water sources. b. within two years of the date that the Source Protection Plan takes effect, the City of Hamilton and the Region of Halton shall review and where necessary enhance and enforce outdoor water use programs. c. the City of Hamilton and the Region of Halton shall provide the Source Protection Authority with copies of their Water Conservation Plans as they are amended and shall report on actions taken to implement the Plans by February 1 of each year.
Legal Effect	Parts a and b - Must comply with - legally binding. List E (Appendix C - Compliance Lists) (Part c is a monitoring policy)
Where Policy Applies	See Figures 16, 17, 18. WHPA-Q1
When Policy Applies	Existing and future

Policy ID	T-58-C
Threat	Reduction in recharge of an aquifer
Policy Tool	Land use planning
Policy Implementer	Municipal planning authority
Policy	<p>Within a wellhead protection area Q2 where a future reduction in recharge would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the municipal planning authority shall only approve settlement area and urban area expansions as part of a municipal comprehensive review where it has been demonstrated that a reduction in recharge will not create a significant drinking water threat. b. the municipal planning authority shall report on actions taken to implement this policy to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must conform with - legally binding. List A (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 16, 17, 18. WHPA-Q2
When Policy Applies	Future

Policy ID	T-59-C
Threat	Reduction in recharge of an aquifer
Policy Tool	Land use planning
Policy Implementer	Municipal planning authority
Policy	<p>Within a wellhead protection area Q2 where a future reduction in recharge would be a significant drinking water threat,</p> <ul style="list-style-type: none"> a. the municipal planning authority shall require that planning applications demonstrate that all attempts have been made to achieve a pre-development recharge condition using best management practices and including low impact development measures. b. the municipal planning authority shall report on actions taken to implement this policy to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Must conform with - legally binding. List A (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figures 16, 17, 18. WHPA-Q2
When Policy Applies	Future

Policy ID	T-60-S
Threat	Application, and handling and storage of road salt (moderate and low threats)
Policy Tool	Education and outreach; same as Policy T-34-C
Policy Implementer	City of Hamilton, Regional Municipality of Halton, Town of Milton, Town of Halton Hills, Town of Oakville, City of Burlington
Policy	<p>Where the existing and future application, or handling and storage of road salt would be a moderate or low drinking water threat in a wellhead protection area, intake protection zone or issue contributing area,</p> <ol style="list-style-type: none"> a. the City of Hamilton, Regional Municipality of Halton shall continue their established, related education and outreach programs. In addition, within two years of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the City of Burlington and Towns of Milton, Halton Hills and Oakville in Halton Region, are requested to develop and implement education and outreach programs for the private and public sector, as well as the general public, about the impacts of road salt on drinking water sources and the use of best management practices. It is recommended that the key messages be the efficient use of road salts and the use of alternatives. b. the City of Hamilton and the Region of Halton shall document the nature of any new or existing education and outreach program established regarding the application, and handling and storage of road salt, the number of persons contacted, and the location of the participants and report this information to the Source Protection Authority by February 1 of each year.
Legal Effect	Part a - Strategic - non-legally binding. List J (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	<p>See Figures 12, 13, 14, 15.</p> <ul style="list-style-type: none"> • Moderate threats: WHPA-A -V. score 10; WHPA-B – V. score 10, 8; WHPA-C – V. score 8; WHPA-E - V. score 9, 8.1; IPZ-1 – V. score 7. • Low threats: WHPA-A -V. score 10; WHPA-B – V. score 10, 8, 6; WHPA-C – V. score 8, 6; WHPA-D – V. score 6; WHPA-E - V. score 8.1; IPZ-1 – V. score 7, 6; IPZ-2- V. score 6.3, 5.4, HVA – V. score 6.

When Policy Applies	Existing and future
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Policy ID	T-61-S
Threat	Application, and handling and storage of road salt (moderate and low threats)
Policy Tool	Salt management plans; same as Policy T-35-C
Policy Implementer	Municipalities
Policy	<p>Where the existing and future application, or handling and storage of road salt would be moderate or low drinking water threats,</p> <ul style="list-style-type: none"> a. within two years of the date that the Source Protection Plan comes into effect, the municipalities shall amend their salt management plans to identify the location of wellhead protection areas, issue contributing areas, and intake protection zones and to enhance best management practices in these areas. b. the municipalities shall advise the Source Protection Authority of the revision to the salt management plans when completed and provide a status update by February 1 of each year until completed.
Legal Effect	Part a - Strategic - non-legally binding. List J (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	<p>See Figures 12, 13, 14, 15.</p> <ul style="list-style-type: none"> • Moderate threats: WHPA-A -V. score 10; WHPA-B – V. score 10, 8; WHPA-C – V. score 8; WHPA-E - V. score 9, 8.1; IPZ-1 – V. score 7. • Low threats: WHPA-A -V. score 10; WHPA-B – V. score 10, 8, 6; WHPA-C – V. score 8, 6; WHPA-D – V. score 6; WHPA-E - V. score 8.1; IPZ-1 – V. score 7, 6; IPZ-2- V. score 6.3, 5.4, HVA – V. score 6.
When Policy Applies	Existing and future

Policy ID	T-62-S
Threat	Establishment and operation of a liquid hydrocarbon pipeline
Policy Tool	Specify Action
Policy Implementer	Canada Energy Regulator, Technical Standards and Safety Authority
Policy	Where the establishment and operation of a liquid hydrocarbon pipeline is an existing significant drinking water threat, the Canada Energy Regulator and Technical Standards and Safety Authority are recommended to ensure that their regulatory requirements manage liquid hydrocarbon pipelines through appropriate design standards (including the location of safety valves), monitoring, maintenance (including integrity management programs) and other relevant practices, such that drinking water sources are protected.
Legal Effect	Strategic - non-legally binding. List K (Appendix C - Compliance Lists). Note: the monitoring policy is T-68-C, directed to Halton Region and Hamilton Region Conservation Authorities.
Where Policy Applies	See Figure 8. Event-based IPZ-3 (no scores)
When Policy Applies	Existing
Notes	This policy leverages regulatory bodies to help manage <u>existing</u> significant threats of liquid hydrocarbon pipelines. The existing significant drinking water threats resulting from spills from a liquid hydrocarbon pipeline are located about two kilometres from the Lake Ontario shore.

Policy ID	T-63-S
Threat	Establishment and operation of a liquid hydrocarbon pipeline
Policy Tool	Specify Action
Policy Implementer	Canada Energy Regulator, Ontario Energy Board
Policy	Where the establishment and operation of a liquid hydrocarbon pipeline could become a significant drinking water threat, the Canada Energy Regulator and Ontario Energy Board in their consideration of a liquid hydrocarbon pipeline application are recommended to ensure that the applicant has complied with and included appropriate design standards (including the location of safety valves), monitoring, maintenance (including integrity management programs) and other relevant practices, that when implemented will prevent a pipeline from becoming a significant drinking water threat.
Legal Effect	Strategic - non-legally binding. List K (Appendix C - Compliance Lists) Note: the monitoring policy is T-68-C, directed to Halton Region and Hamilton Region Conservation Authorities.
Where Policy Applies	See Figures 2 to 11. Event-based IPZ-3 (no scores), WHPA-A & B - V. score 10, WHPA-E – V. score 9
When Policy Applies	Future
Notes	This policy manages <u>future</u> significant threats of liquid hydrocarbon pipelines using a preventative approach.

Policy ID	T-64-S
Threat	Establishment and operation of a liquid hydrocarbon pipeline
Policy Tool	Specify action
Policy Implementer	Liquid hydrocarbon pipeline owners
Policy	Where the establishment and operation of a liquid hydrocarbon pipeline is or could be a significant, moderate or low threat to drinking water sources, liquid hydrocarbon pipeline owners are requested to use threats risk assessment information from assessment reports approved under the Ontario Clean Water Act, 2006 and relevant watershed information while developing and updating emergency planning zones (EPZs) and designated geographical areas (DGAs).
Legal Effect	Significant threats: Strategic - non-legally binding. List K (Appendix C - Compliance Lists); Moderate and low threats: Strategic - non-legally binding. List J. Note: the monitoring policy is T-68-C, directed to Halton Region and Hamilton Region Conservation Authorities.
Where Policy Applies	See Figures 2 to 11. Significant threats: Event-based IPZ-3; WHPA-A & B - V. score 10, WHPA-E – V. score 9 Moderate threats: WHPA-A & B – V. score 10; WHPA-B & C – V. score 8; WHPA-E – V. score 9 & 8.1; IPZ-1 – V. score 7; IPZ-2, score 6.4; WHPA-B, C, D – V. score 6; IPZ-1 – V. score 6; IPZ-2 V. score 6.3 & 5.4; HVAs – V. score 6.
When Policy Applies	Existing and future
Notes	This policy leverages existing watershed and source water protection science to help manage <u>existing and future</u> significant, moderate or low liquid hydrocarbon pipeline threats.

Policy ID	T-65-S
Threat	Establishment and operation of a liquid hydrocarbon pipeline and the handling and storage of fuel
Policy Tool	Specify action – update emergency plans
Policy Implementer	Liquid hydrocarbon pipeline owners and owners of facilities where the handling and storage of fuel occurs
Policy	Where the establishment and operation of a liquid hydrocarbon pipeline is or could be a significant threat to drinking water sources, and where the handling and storage of fuel is an existing significant drinking water threats to Lake Ontario municipal intakes, facility owners are requested to update emergency preparedness/contingency plans to include the location of municipal intakes, actions to be taken to protect drinking water sources should an incident occur, and the requirement for inclusion of the protection of drinking water sources in emergency preparedness exercises.
Legal Effect	Strategic - non-legally binding. List K (Appendix C - Compliance Lists). Note: the monitoring policy is T-68-C, directed to Halton Region and Hamilton Region Conservation Authorities.
Where Policy Applies	See Figures 2 to 11. Pipelines and fuel threats: Event-based IPZ-3 (no scores); Pipelines: WHPA-A, B - V. score 10, WHPA-E – V. score 9
When Policy Applies	Existing and future
Notes	This policy manages <u>existing and future</u> significant threats of liquid hydrocarbon pipeline through emergency response plan updates.

Policy ID	T-66-C
Threat	Discharges from sewage treatment plants
Policy Tool	Emergency plans
Policy Implementer	Municipalities that own sewage treatment plants
Policy	<p>Where discharges from municipal sewage treatment plants are identified as existing significant drinking water threats to Lake Ontario municipal intakes,</p> <p>municipalities that own the sewage treatment plants are requested to update emergency preparedness/ contingency plans to include the location of municipal intakes, actions to be taken to protect drinking water sources should an incident occur, and the requirement for inclusion of the protection of drinking water sources in emergency preparedness exercises.</p>
Legal Effect	<p>Legally binding - must comply with. List E (Appendix C - Compliance Lists)</p> <p>Note: the monitoring policy is T-68-C, directed to Halton Region and Hamilton Region Conservation Authorities.</p>
Where Policy Applies	<p>See Figure 8.</p> <p>Event-based IPZ-3 (no scores)</p>
When Policy Applies	Existing

Policy ID	T-67-S
Threat	Establishment and operation of a liquid hydrocarbon pipeline, discharges from sewage treatment plants and the handling and storage of fuel
Policy Tool	Specify action
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	<p>Where the establishment and operation of a liquid hydrocarbon pipeline is an existing significant threat to drinking water sources, and where the discharges from sewage treatment plants and the handling and storage of fuel, are an existing significant threat to Lake Ontario drinking water sources,</p> <ol style="list-style-type: none"> a. the Ministry of the Environment, Conservation and Parks shall provide mapping of intake protection zones three and the locations of known significant threats to the Spills Action Centre, and if necessary modify procedures to ensure that the operators of all water treatment plants that could be affected by a spill are notified. b. by February 1 of each year, the Ministry of the Environment, Conservation and Parks shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, including the number, type, and location of spills reported within intake protection zones three, adjusted thresholds, and actions taken or recommended to improve the efficiency and effectiveness of the spill reporting system.
Legal Effect	Part a - Strategic - non-legally binding. List K (Appendix C - Compliance Lists) (Part b is a monitoring policy)
Where Policy Applies	See Figure 8. Event based IPZ-3 (no scores).
When Policy Applies	Existing
Notes	This policy manages <u>existing</u> significant liquid hydrocarbon pipeline, discharges from sewage treatment plants and the handling and storage of fuel threats through measures at the MECP Spills Action Centre.

Policy ID	T-68-C
Threat	Establishment and operation of a liquid hydrocarbon pipeline, discharges from sewage treatment plants, the handling and storage of fuel
Policy Tool	Education and outreach
Policy Implementer	Halton Region and Hamilton Region Conservation Authorities
Policy	<p>Where the establishment and operation of a liquid hydrocarbon pipeline is or could be a significant threat to Lake Ontario and groundwater municipal drinking water sources and where the discharges from sewage treatment plants and the handling and storage of fuel are existing significant drinking water threats to Lake Ontario municipal intakes, the Halton Region and Hamilton Region Conservation Authorities shall on an annual basis:</p> <ol style="list-style-type: none"> a. provide educational awareness sessions on drinking water source protection to interested liquid hydrocarbon pipeline companies; b. provide relevant website addresses for approved assessment reports and the source protection plan and watershed information if available, to liquid hydrocarbon pipeline companies; c. request the Canada Energy Regulator and Technical Standards and Safety Authority to confirm that their requirements for liquid hydrocarbon pipelines manage existing significant drinking water threats; d. request the Canada Energy Regulator and Ontario Energy Board to confirm that their requirements for pipeline design standards, monitoring, maintenance and other relevant practices in vulnerable areas prevents a pipeline from becoming a significant drinking water threat; e. request information updates including new or changes to liquid hydrocarbon pipelines; f. request an invitation from liquid hydrocarbon pipeline owners, sewage treatment plant owners, and fuel storage facility owners to observe emergency preparedness exercises relevant to the Halton-Hamilton Source Protection Region; and request a copy of their emergency preparedness plans when amended to protect municipal drinking water sources.
Legal Effect	<p>See Figures 2 to 11.</p> <p>Monitoring policy.</p> <p>Must conform with - legally binding. List F (Appendix C - Compliance Lists).</p>
Where Policy Applies	Pipelines, fuel, sewage threats: Event based IPZ-3 (no scores);

	Pipelines: WHPA-A, B - V. score 10; and WHPA-E - V. score 9.
When Policy Applies	Existing and future
Notes	This policy manages <u>existing and future</u> significant threats of liquid hydrocarbon pipelines through education and outreach.

3.2.2 Local Threat Policies – Repealed.

L-1-S - Repealed

L-2-S - Repealed

3.3 Other Policies

These optional policies will ensure that the findings of source protection planning will benefit other agencies and governing bodies.

3.3.1 Transport Pathways

Policy ID	O-1-S
Threat	Multiple
Policy Tool	Best management practices
Policy Implementer	Municipalities, Ministry of the Environment, Conservation and Parks, Halton Region and Hamilton Region Conservation Authorities
Policy	<p>To achieve the intent of the <i>Clean Water Act, 2006</i>, that drinking water threats identified in the vicinity of a transport pathway cease to be or do not become a significant threat, and that a pathway ceases to endanger the source water of a municipal water supply, the following policies apply:</p> <ol style="list-style-type: none"> a. Municipalities are requested to use best management practices to protect the quantity and quality of groundwater sources during maintenance and the installation of new municipal infrastructure in proximity to municipal wells. b. Municipalities are requested to incorporate conditions of approval for development applications to ensure private wells that are no longer in use are decommissioned in accordance with Ontario Regulation 903. c. The Ministry of the Environment, Conservation and Parks and the municipalities responsible for water services are requested to provide ongoing funding for incentive programs focused on the decommissioning of wells, and for education and outreach programs regarding the decommissioning of wells in accordance with Ontario Regulation 903. d. If funding is provided by the Ministry of the Environment, Conservation and Parks through the Ontario Drinking Water Stewardship Program, the Halton Region and Hamilton Region

	<p>Conservation Authorities shall implement the incentive program to decommission unused wells in accordance with Ontario Regulation 903.</p> <ul style="list-style-type: none"> e. The municipalities are requested to develop a program to facilitate, where possible and appropriate, the connection to municipal water services of current private well users within the urban area. The users should be required to decommission the unused wells in accordance with Ontario Regulation 903. f. The municipalities are requested to prohibit the construction of new wells and septic systems within the urban area where municipal water and wastewater services are available. g. Repealed h. The Source Protection Authority and Source Protection Committee, upon receipt of a notice from a municipality regarding an application for development of a transport pathway within a wellhead protection area, shall refer the notice to the Halton Region and Hamilton Region Conservation Authorities for follow up and reporting back.
Legal Effect	Strategic - non-legally binding. List J (Appendix C - Compliance Lists).
Where Policy Applies	WHPA and IPZ (all zones and scores)
When Policy Applies	Existing and future

3.3.2 Climate Data

Policy ID	O-2-S
Threat	Not applicable
Policy Tool	Climate conditions monitoring and data collection
Policy Implementer	Municipalities (excluding County of Wellington), Halton Region and Hamilton Region Conservation Authorities, the Ministry of the Environment, Conservation and Parks, Ministry of Northern Development, Mines, Natural Resources and Forestry, Environment and Climate Change Canada
Policy	<p>To ensure that data on the climate conditions in the Source Protection Area are gathered on an ongoing basis, the following policies apply:</p> <ol style="list-style-type: none"> a. The municipalities (excluding County of Wellington), the Halton Region and Hamilton Conservation Authorities, the Ministry of the Environment, Conservation and Parks, Ministry of Northern Development, Mines, Natural Resources and Forestry, and Environment and Climate Change Canada are encouraged in their efforts to collect and/or interpret the hydrogeological, hydrological, and climate data for the Source Protection Areas and are requested to share the data as appropriate in a timely manner. b. The Ministry of the Environment, Conservation and Parks is requested, in collaboration with Environment and Climate Change Canada, to install best practical instrumentation to provide monitoring of current speed and direction and water chemistry of Lake Ontario in the nearshore source water. c. Environment and Climate Change Canada is requested to review its monitoring network to ensure appropriate locations are utilized for climate stations, and that data for all necessary parameters, including solar radiation, used to monitor climate change are being collected. d. The Ministry of the Environment, Conservation and Parks, in collaboration with the Halton Region and Hamilton Region Conservation Authorities, is requested to review its monitoring networks for groundwater and surface water to ensure appropriate locations and adequate construction of monitoring wells and stations are utilized,

	and that data for all necessary parameters that could be used to monitor climate change are being collected.
Legal Effect	Strategic - non-legally binding. List J (Appendix C - Compliance Lists).
Where Policy Applies	Halton-Hamilton Source Protection Region
When Policy Applies	Existing and future
Notes	This policy requests that the collection of data necessary for assessing long term trends in the local climate be continued and the data be shared.

3.3.3

O-3-S Repealed

3.3.4 Disposal or Use of Excess Fill/Soil including but not limited to Contaminated Soil

Policy ID	O-4-S
Threat	Other – disposal or use of excess fill/soil including but not limited to contaminated soil
Policy Tool	Education and outreach
Policy Implementer	Municipalities and Halton Region and Hamilton Region Conservation Authorities
Policy	The municipalities and the Halton Region and Hamilton Region Conservation Authorities are requested to develop and implement an education and outreach program for rural landowners, contractors, and developers based on Ministry of the Environment, Conservation and Parks guidance to best protect drinking water sources during the disposal or use of excess fill/soil including but not limited to contaminated soil.
Legal Effect	Strategic - non-legally binding. List J (Appendix C - Compliance Lists).
Where Policy Applies	Halton-Hamilton Source Protection Region
When Policy Applies	Existing and future
Notes	Excess soil or fill brought onto a property may contain contaminants such as metals and oil that could be carried by rain water and contaminate drinking water sources. This policy aims to raise awareness.

	<p>Excess soil is waste unless it meets the requirements under s.3(2) of O. Reg. 406/19 under the Environmental Protection Act. If it meets these requirements, the excess soil can be reused at sites with similar soil quality as long as the requirements and rules are followed. Based on the level of contamination, the excess soil may also be reused, if the excess soil meets the applicable excess soil quality standard at the reuse site.</p> <p>To support protection of drinking water sources, the document, “Rules for Soil Management and Excess Soil Quality Standards” (https://files.ontario.ca/mecp-soil-rules-en-2020-12-21.pdf), adopted by reference in O. Reg. 406/19, sets out rules related to set back distances for waterbodies in Section C, and Section D outlines reuse rules for specific circumstances such as salt impacted soils and has set back distances for potable water wells and waterbodies.</p> <p>The Source Protection Committee decided to use the wording: “excess fill/excess soil including but not limited to contaminated soil” in the Source Protection Plan. This helps capture the consideration of contaminated soil being used or disposed of within the watersheds of the Source Protection Region.</p>
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3.3.5 Spill Prevention Plans, Spill Contingency Plans, and Emergency Response Plans along Highways, Railway Lines, or Shipping Lanes

Policy ID	O-5-S
Threat	Other - transportation corridors
Policy Tool	Emergency plans
Policy Implementer	Municipalities, Ministry of the Environment, Conservation and Parks, <u>The Ministry of Transportation Ontario, Transport Canada</u>
Policy	<p>To ensure spill prevention plans, contingency plans, and emergency response plans are updated for the purpose of protecting drinking water sources with respect to spills that occur within a wellhead protection area or intake protection zone along highways, railway lines, or shipping lanes, the following policies apply:</p> <ol style="list-style-type: none"> a. The municipalities are requested to incorporate the location of wellhead protection areas and intake protection zones into their emergency response plans and train staff, in order to protect drinking water sources when a spill occurs along highways, rail lines, or in shipping lanes. b. The Ministry of the Environment, Conservation and Parks is requested to provide mapping of vulnerable areas and train staff to assist the Spills Action Centre in responding to reported spills along transportation corridors. c. The Ministry of Transportation Ontario, Transport Canada and the Spills Action Centre are requested to work together to implement an education and outreach program to encourage all transportation businesses that ship goods through wellhead protection areas and intake protection zones to prepare spill prevention plans and spill contingency plans, to review these plans annually, and to update them, and train staff, as required.
Legal Effect	Strategic - non-legally binding. List J (Appendix C - Compliance Lists).
Where Policy Applies	WHPAs, IPZs (all zones and scores)
When Policy Applies	Existing and future
Notes	Existing legislation often requires facility owners to develop and implement a response plan should a spill into the environment occur. This policy recommends that protection of drinking water sources be

	considered in prevention, contingency, and emergency response plans.
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Policy ID	O-6-S
Threat	Other - shipping
Policy Tool	Spill control plans
Policy Implementer	Hamilton-Oshawa Port Authority, Transport Canada, Ministry of the Environment, Conservation and Parks
Policy	<p>a) The Hamilton-Oshawa Port Authority is requested to include information on the Halton-Hamilton sourcewater protection program and intake protection zone maps in their internal emergency response plans and notify the local municipality of known spill events.</p> <p>b) Transport Canada is requested to advise vessel operators using Hamilton Harbour and western Lake Ontario shipping lanes, and the Ministry of the Environment, Conservation and Parks is requested to advise the companies in the vicinity of the port to update their spill control plans to include:</p> <ol style="list-style-type: none"> i. the location of the municipal drinking water intakes, ii. best practices for spill containment and cleanup to protect drinking water supplies, and iii. the City of Hamilton, Halton Region and Spills Action Centre emergency contact information.
Legal Effect	Strategic - non-legally binding. List J (Appendix C - Compliance Lists).
Where Policy Applies	Hamilton Harbour, western Lake Ontario shipping lanes, port lands
When Policy Applies	Existing and future

3.3.6 Lake Ontario Outreach

Policy ID	O-7-S
Threat	Not applicable
Policy Tool	Education and outreach

Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	The Ministry of the Environment, Conservation and Parks is requested to reach out to the Ontario Region of Environment and Climate Change Canada to share information about water resources obtained through the source protection planning process. This sharing of information could result in an update to the document "Environmental Sensitivity Atlas for Lake Ontario's Canadian Shoreline" to include maps of the current drinking water infrastructure, as well as the current knowledge and understanding of the conditions of the Canadian shoreline of Lake Ontario.
Legal Effect	Strategic - non-legally binding. List J (Appendix C - Compliance Lists).
Where Policy Applies	Halton-Hamilton Source Protection Region
When Policy Applies	Existing and future

Policy ID	O-8-S
Threat	Not applicable
Policy Tool	Education and outreach
Policy Implementer	Ministry of the Environment, Conservation and Parks
Policy	To raise the profile of the importance of Lake Ontario as a source of drinking water for residents of Ontario and to encourage collaboration on protecting our shared drinking water sources, the Ministry of the Environment, Conservation and Parks is requested to reach out to Environment and Climate Change Canada, New York State, and United States government agencies to discuss the findings and policies arising from source protection planning.
Legal Effect	Strategic - non-legally binding. List J (Appendix C - Compliance Lists).
Where Policy Applies	Halton-Hamilton Source Protection Region
When Policy Applies	Existing and future

4. References

All Provincial statutes and regulations are available on the provincial website “e-Laws”, available at:

<https://www.ontario.ca/laws> Government of Canada, 2019. *Canadian Energy Regulator Act, S.C., 2019*. Amended 2020. Available at: <https://laws-lois.justice.gc.ca/eng/acts/C-15.1/>

Province of Ontario, 2001. Ontario Regulation 210/01 - Oil and Gas Pipeline Systems, under the *Technical Standards and Safety Act, 2000*.

Province of Ontario, 2001. Ontario Regulation 213/01 – Fuel Oil under the *Technical Standards and Safety Act, 2000*.

Province of Ontario, 2001. Ontario Regulation 217/01 – Liquid Fuels under *Technical Standards and Safety Act, 2000*.

Province of Ontario, 2002-last amended 2021. *Nutrient Management Act, 2002*.

Province of Ontario, 2005-last amended 2017. Niagara Escarpment Plan under the *Niagara Escarpment Planning and Development Act, R.S.O. 1990*.

Province of Ontario, 2005-last amended 2017. Greenbelt Plan under *Greenbelt Act, 2005*.

Province of Ontario, 2006-last amended 2021. *Clean Water Act, 2006*.

Province of Ontario, 2006-last amended 2020. The Growth Plan for the Greater Golden Horseshoe under the *Places to Grow Act, 2005*.

Province of Ontario, 2012-last amended 2020. Ontario Regulation 332/12 - Ontario Building Code under the *Building Code Act, 1992*.

Province of Ontario, 2007. Best Management Practices: Streamside Grazing. Cooperative effort of Agriculture and Agri-Food Canada; Ontario Ministry of Agriculture, Food and Rural Affairs; and the Ontario Federation of Agriculture.

Province of Ontario, 2007-last amended 2018. Ontario Regulation 287/07 – General, under the *Clean Water Act, 2006*.

Province of Ontario, 2020. Provincial Policy Statement under the *Planning Act, R.S.O. 1990*

Appendix A: Assessment Reports and Explanatory Document

Assessment Reports for Halton Region Source Protection Area and Hamilton Region Source Protection Area and the Explanatory Document in support of the Source Protection Plan

**(electronic versions are also available
at www.protectingwater.ca)**

Appendix B: Collaboration and Consultation

Appendix B.1 Collaboration

Source protection planning under the *Clean Water Act, 2006* is a community-wide initiative that requires municipal representatives, residents, and business owners to work together with provincial agencies and conservation authorities. In this area, Halton Region Conservation Authority (Conservation Halton) and Hamilton Conservation Authority work together as the **Halton-Hamilton Source Protection Region**.

During the development of the Assessment Reports and the Source Protection Plans for the two Source Protection Areas, the authorities provided administrative, scientific, and technical support to the Source Protection Committee.

The Halton-Hamilton Source Protection Committee was assembled to implement the requirements of the *Clean Water Act, 2006*. The Committee is required to work cooperatively with municipalities, conservation authorities, and provincial agencies and to represent the broad interests of those that live and work within the Region. The Committee is charged with preparing three documents — a Terms of Reference, an Assessment Report, and a Source Protection Plan — for each Source Protection Area.

The Halton-Hamilton Source Protection Committee comprised 16 members during the planning stages of the program between 2007 and 2015 and during implementation comprises 10 members. The Minister of the Environment and Climate Change appointed the chair of the Source Protection Committee, Robert Edmondson. The other 9 members of the Committee were appointed by the Source Protection Authorities. As required by law, the Committee is composed as follows:

- one-third municipal representatives
- one-third agricultural, industrial, or commercial representatives
- one-third general public representation, including health and environmental interests.

The current and past Halton-Hamilton Source Protection Committee members are listed below with their period of involvement:

Chair

Robert Edmondson, 2014 to present

Municipal Sector

Councillor Judi Partridge, City of Hamilton – 2011 to present

Daniel Banks, Regional Municipality of Halton, 2018 to present

David Rodgers, Aberfoyle Aquascience – 2016 to present

Agricultural Sector

Gavin Smuk, Ontario Federation of Agriculture – Hamilton-Wentworth – 2007 to present

Scott Stewart, Ontario Federation of Agriculture – Hamilton-Wentworth – 2021 to present

Industrial/Commercial Sectors

Sarah Lock, Trans-Northern Pipelines Inc. – 2020 to present

General Public and Environmental Interest

Dana Couture – 2018 to present

Carla Coveart - 2019 to present

Chris Murray – 2021 to present

Source protection committee liaisons are:

Barbara Veale, Conservation Halton

Scott Peck, Hamilton Conservation Authority

Richard MacDonald, Hamilton Public Health Unit

Elizabeth Forrest, Ministry of the Environment, Conservation and Parks.

The following persons have also been members of the Committee in the past and contributed to the process:

Past Chair

Doug Cuthbert – 2007 to 2013

Past Municipal Sector Representatives

Chris Shrive, City of Hamilton – 2008 to 2014

Dave Kerr, City of Hamilton – 2007 to 2008

Mary Lou Tanner, Halton Region – 2007 to 2008

Councillor Margaret McCarthy, City of Hamilton – 2007 to 2010

Jacqueline Weston, Halton Region – 2008 to 2010

Bert Posedowski, City of Hamilton – 2014 to 2016

Barry Lee, Halton Region – 2007 to 2015

David Simpson, Halton Region – 2010 to 2016

Councillor Susan Fielding, Township of Puslinch – 2007 to 2015

Adam Gilmore, Regional Municipality of Halton – 2016 to 2018

Past Industrial/Commercial Sectors Representatives

Teri Yamada, Golf Industry Representative – 2007 to 2012

Peter Ashenhurst, Home Builders Representative - 2007 to 2013

Melanie Horton, Aggregate Sector Representative – 2007 to 2016

Michael Barton, Home Builders Representative – 2014 to 2016

Michael Kandravý, Suncor Energy Products Partnership – 2016 to 2019

Past Agricultural Sector Representatives

Nick DiGirolamo, Ontario Federation of Agriculture – Halton – 2007 to 2017

Bert Andrews, Ontario Federation of Agriculture – Halton – 2017 to 2020

Past Environmental Interest Representatives

Paul Attack – 2009 to 2014

Betty Hansen – 2007 to 2009

Mark Sproule-Jones – 2008 to 2009

Daisy Radigan – 2014 to 2016

Dr. Turlough Finan – 2009 to 2019

Past General Public Interest Representatives

Adam Kuehnbaum – 2007 to 2011

Andrea Doherty – 2011 to 2016

Dave Braden – 2007 to 2018

Glenn Powell – 2007 to 2020.

Advisors to the program during development of the Source Protection Plan included:

- Tea Peshava, Ministry of the Environment, Conservation and Parks Liaison

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- Mary Wooding, Ministry of the Environment, Conservation and Parks Liaison
 - John Westlake, Ministry of the Environment Liaison
 - Wesley Wright, Ministry of the Environment Liaison
 - Nicole Mathews, Halton Region Health Protection Services, Medical Officer of Health Liaison
 - Dave King, Hamilton Public Health Services, Medical Officer of Health Liaison
 - Tony Colaco, Halton Region Health Protection Services, Medical Officer of Health Liaison
 - Kathy Menyes, Conservation Halton Liaison
 - Scott Peck, Hamilton Conservation Authority Liaison

Technical experts assisted in the peer review of the underlying studies in the first round of Assessment Reports and in policy development for the Plan. Conservation Authority staff implement the local source water protection program led by a program manager for the source protection region, fulfilling their source protection authority duties under the Clean Water Act, 2006. These include undertaking technical studies and updating and developing new policies during the second round of source protection planning; and liaising with municipalities and other stakeholders to support policy implementation. In preparation for comprehensive updates per Section 36 of the Clean Water Act, updates are proposed by source protection authority to the source protection plan including the assessment reports. A municipal working group meets regularly to discuss policy implementation and some of the proposed updates. These multi-stakeholder collaborations support the successful implementation of the program.

We thank all those involved for their contribution.

Appendix B.2 Consultation – first round of source protection planning (2005-2017)

The source protection planning process is open and transparent and offers many opportunities for government, private sector, and community participants to provide input. The Committee took the source protection message to the public as well as inviting people to get involved in protecting their **drinking water sources** and to share their local knowledge and drinking water concerns. In an effort to raise awareness of the *Clean Water Act* and source protection planning, staff participated in many community and local association events.

The *Clean Water Act* and the General Regulation set out the requirements for consultation on the three required documents – Terms of Reference, Assessment Report, and Source Protection Plan. Each consultation process required notification to stakeholders, the public, and the municipalities, and consultation for a minimum length of time.

Terms of Reference

Draft proposed Terms of Reference were prepared for the Halton Region and the Hamilton Region Source Protection Areas in accordance with the requirements of the General Regulation. Prior to submission of the documents to the Ministry of the Environment, the Source Protection Committee released the documents for public review on May 27, 2008 and requested that comments be received by July 3, 2008. In addition, public meetings were held for both the Halton Region and the Hamilton Region Terms of Reference on June 17 and 19, 2008. The documents were finalized and submitted to the Source Protection Authorities for endorsement and submitted to the Minister of the Environment on August 7, 2008. The Terms of Reference for each Area were approved on May 25, 2009.

Assessment Reports

On September 9, 2010, the Source Protection Committee released the Draft Proposed Assessment Reports for the Halton Region and the Hamilton Region Source Protection Areas for public review and comment. Newsletters, newspaper announcements, and emails notified the public and municipalities that the reports were available for viewing and downloading online. Owners of land within mapped vulnerable areas were notified of the findings of the vulnerable area delineation and the threats assessment in two letters. These landowners were also contacted by the Hamilton-Halton Watershed Stewardship Program about available funding that could be used to reduce the risks to **drinking water sources**.

The Source Protection Committee held four public meetings on the assessment findings for the Halton Region and the Hamilton Region Source Protection Areas on October 1 and October 4, 2010. Comments received before October 26, 2010 were considered and the reports finalized.

The Source Protection Committee released the Proposed Assessment Reports to the Source Protection Authorities and a public consultation was held between November 5 and December 5, 2010. Again, notification was sent to all stakeholders and municipalities. Comments received were submitted with the reports to the Ministry of the Environment on December 16, 2010. Notification of the approval of the two reports was received from the Director, Source Protection Programs Branch of the Ministry of the Environment on June 30, 2011. Notification of the approval of the reports was posted on the Environmental Registry on January 11, 2012.

In autumn 2011, some initial modelling to identify significant threats to the source water for the Lake Ontario based municipal intakes was finalized by the **Lake Ontario Collaborative**. The Source Protection Committee initialized an amendment to the two approved Assessment Reports to include the findings of this work. The revisions comprised the inclusion of a report on the modelling as an appendix to the report and a rewording of report text to reflect this inclusion and the identification of significant threats and updated intake protection zones.

The Proposed Updated Assessment Reports were released for public consultation between October 12 and November 11, 2011 with notification of the release sent directly to stakeholders affected by the amendments. Comments received were submitted with the reports to the Ministry of the Environment on December 5, 2011. Following discussions with the Ministry, Director's approval was received for the Assessment Report for the Halton Region Source Protection Area on February 1, 2012, and on February 9, 2012 for the Hamilton Region report.

Technical work continued throughout 2014 and again study findings were brought into the Assessment Reports. The two Assessment Reports were updated to include water quantity risk assessments with new wellhead protection areas and a revised threats assessment, and new work on the event-based modelling for the Lake Ontario intake threats assessment. A 60-day public consultation period with one public meeting was held in December 2014 and January 2015. Because new geographic areas are delineated as wellhead protection areas, direct contact with landowners affected was made. All comments received during the consultation period and subsequent comments received from the Ministry of the Environment and Climate Change were considered by the Source Protection Committee before finalizing the reports.

The City of Hamilton initiated a Class Environmental Assessment process to establish a backup well for their Greensville municipal well supply with completion scheduled for early 2018. Assessments of vulnerability and sustainability for the new well's source water were completed in concert with updates to the mapping of the existing well's protection areas due to cumulative impacts. The findings of the studies, new mapping and subsequent policy discussion were brought into the Assessment Report for the Hamilton Region Source Protection Area and this Plan under section 34 of the Clean Water Act. Personalized letters

were sent to each landowner within the newly mapped vulnerable areas, the technical reports were released on the source protection website (www.protectingwater.ca) and public meetings held July 11, 2017 and November 16, 2017 provided an opportunity for the public to review and discuss the results of the studies and the proposed amendments to the documents. Also at this time, the Assessment Reports were corrected for small typographical errors and missing words under section 51 of the Act. The Assessment Reports dated October 2017 were used to support the Plan at that time.

Source Protection Plan

Consultation on policies included in the Source Protection Plan began in 2010 with the formation of the Planners' Working Group, which comprises planning representatives from each of the municipalities and conservation authorities within the **Halton-Hamilton Source Protection Region** and liaisons from the Source Protection Committee. This group discussed the threats to **drinking water sources** and policy needs associated with these threats and provided advice to the Source Protection Committee. The Group benefited from the expertise of other municipal staff and invited guests.

A notice that the Halton-Hamilton Source Protection Committee was beginning to prepare source protection plans under the *Clean Water Act* was sent mid-June 2011 to all landowners within the vulnerable areas where significant threats are possible, municipal clerks, Conservation Halton and Hamilton Conservation Authority. The letters included an overview of source protection planning, listed the identified significant threat activities occurring on each property, if any, and invited the landowners to contact source protection staff to discuss the program, the municipal well supplies, and the significant threat activities identified.

The Source Protection Committee reviewed the policy directives and draft policies, modified them when necessary, and on August 23, 2011, endorsed the policies for pre-consultation with municipalities, agencies, and stakeholders designated in the policies to be responsible for their implementation.

The policies were released to the municipalities through the Planners' Working Group on August 31, 2011 and meetings were held with each municipality in early September 2011 to assist those completing the reviews. Formal packages were submitted to implementing bodies in mid-October and pre-consultation comments were received by December 31, 2011. Draft policies were modified in response to comments received and follow-up discussions.

The Source Protection Committee endorsed the final draft proposed policies for public consultation on January 24, 2012. Halton Region's review of the draft policies was delayed until April 27, 2012; however, the Source Protection Committee carried on with the scheduled release of the Plan for public consultation.

The Draft Proposed Plan and Explanatory Document were endorsed for release to the public on February 21, 2012. Public consultation was held between February 27 and April 26, 2012. Notification letters and e-mails were sent to landowners, municipal clerks, Conservation Halton, Hamilton Conservation Authority, the planners' working group, other interested parties, neighbouring source protection areas, implementing bodies, and operators of facilities with significant threat activities. A media release and newspaper advertisements were also distributed to local newspapers in March and April. Four public meetings were held between 6:30 and 8:30 p.m. on the evenings of April 16 through 19 in Milton, Greensville, Hamilton, and Carlisle. All comments received were considered by the Committee and changes made, as appropriate.

On May 15, 2012 the Halton-Hamilton Source Protection Committee endorsed the Proposed Plan and the Explanatory Document for release to the Source Protection Authorities. The Halton Region Authority released the documents for public consultation at their meeting on May 24 and the Hamilton Region Authority released the documents at their meeting on June 7. Public consultation was held between June 8 and July 19, 2012.

Comments received on the Proposed Plan were submitted with the Plan to the Minister of the Environment in August 2012 for consideration during the formal review and approval process. Recommendations were received from the Ministry of the Environment on the Proposed Plan in June and November 2013 and January 2014. The Source Protection Committee considered all recommendations and revised the Plan accordingly. The Committee also included a map of the Cedarvale wellhead protection area and issue contributing area and revised policies to address the potential significant threat activities. The pre-consultation process was followed when policies were new to implementing bodies and notification letters were sent on January 13, 2014 to the landowners now included in the Cedarvale protection areas.

The Committee released the Plan for public consultation between March 4 and April 4, 2014 and held one public meeting in the Georgetown area on March 24, 2014. All comments received during consultation were considered by the Committee.

With the completion of a water quantity study for Kelso and Campbellville well fields in 2014, the Source Protection Committee developed policies to address the two prescribed threat activities for water quantity. Again the Plan was released for public consultation. This time, the Plan was released with the updated Assessment Reports and the findings of the water quantity study. The public consultation period was for 60 days through December 2014 and January 2015 with the outreach mainly in the Milton area where landowners are primarily affected by the amendments to the documents. One public meeting was held on January 22, 2015 in Campbellville. All comments received were considered by the Committee prior to finalizing the Source Protection Plan for submission to the Halton Region and the Hamilton Region Source Protection Authorities. The Authorities endorsed the submission of the

updated Plan to the Ministry of the Environment and Climate Change at their meetings held March 26 and April 2, 2015.

Following resubmission of the Plan to the Ministry of the Environment and Climate Change, the Source Protection Committee met on June 18, 2015 to discuss changes to a policy as requested by Halton Region and changes to the Assessment Reports as requested by the Ministry. A follow-up e-mail survey responded to a change the CTC Source Protection Committee made to the Cedarvale issue contributing area that affected the Halton-Hamilton policies. The Plan and Assessment Reports were approved for finalization and resubmission to the Ministry for review and approval on July 24, 2015.

Upon completion of the technical assessments of the City of Hamilton's Greensville municipal well for vulnerability and sustainability, the study findings and new wellhead protection area mapping were added to the Assessment Report for the Hamilton Region Source Protection Area and the vulnerability mapping to this Source Protection Plan. Proposed edits were discussed by the Source Protection Committee and released for public consultation October 16 through December 1, 2017. Letters were sent to all affected landowners and implementing bodies. Policies are unchanged.

Appendix B.3 Consultation – second round of source protection planning (2018-2022)

The Clean Water Act, 2006 enables source protection plans and assessment reports to be revised using one of four methods listed below. Per the Ministry of the Environment, Conservation and Parks (MECP), the method used depends on factors such as the level of complexity of the revisions and how time sensitive they are.

1. a locally initiated amendment under section 34;
2. a Minister ordered amendment under section 35;
3. an update resulting from the review under section 36; or
4. an amendment under section 51 of O. Reg. 287/07 for minor/administrative revisions.

Conservation Halton and the Hamilton Region Conservation Authority are the local Source Protection Authorities (SPAs) under the Clean Water Act and are grouped into one source water protection region known as the Halton-Hamilton Source Protection Region (HHSPPR).

Upon approval of the first source protection plan for the Halton-Hamilton Source Protection Region (HHSPPR) on December 31, 2015, the Minister of the MECP issued an order requiring the subsequent submission of a workplan by November 30, 2018 to review source protection plans per Section 36 of the Clean Water Act. These workplans were required across Ontario, leading to the second round of source protection planning across the province.

The HHSPR workplan includes tasks to review both science and policies, to support the continued protection of drinking water sources. It is available at: <https://bit.ly/3k6pyu0>. The HHSPR workplan was reviewed by MECP, resulting in the Minister issuing an amended order in March 2019 pursuant to Section 36 of the Clean Water Act. This amended order specifies the mandatory items from the workplan.

Comprehensive Updates to the Source Protection Plan

Through 2019-2022, HHSPR staff **carried out** updates to the assessment reports, source protection plan, and explanatory document per Section 36. Through an established municipal working group, municipal staff are engaged. The updates are brought to the Halton-Hamilton Source Protection Committee (HHSPC) for review and endorsement.

The Figure 1 shows the steps required by MECP, leading to the submission of the amended documents to MECP.

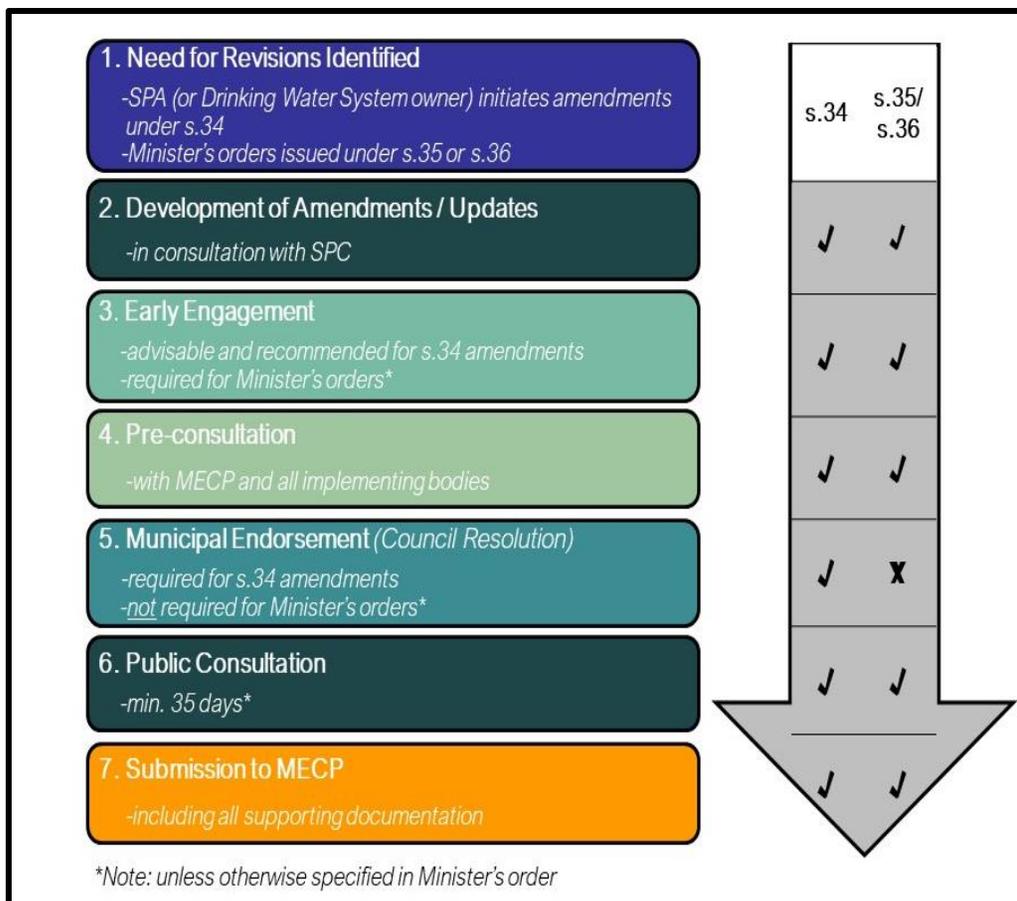


Figure 1: Assessment Report and Source Protection Plan Revision Process (MECP, October 2019).

The required steps are from: “Source Protection Planning Bulletin – Overview of Requirements for Plan and Assessment Report Amendments and Updates under sections 34, 35 and 36 of the Clean Water Act”, by MECP, October 2019.

The timelines of these steps for the HHSPR section 36 updates are shown in the table below.

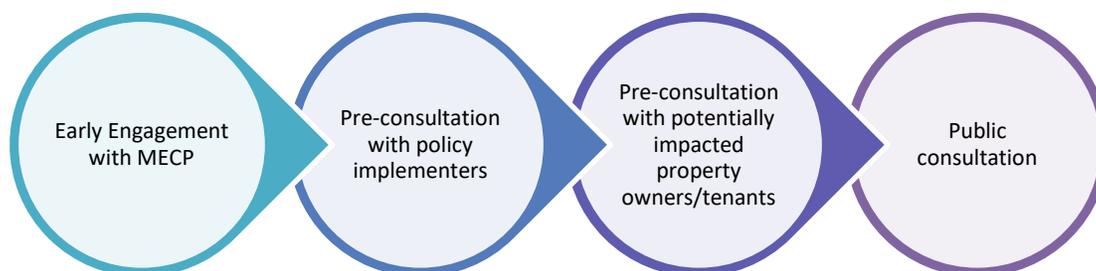
Table B3.1: Comprehensive Updates to the HHSPR Source Protection Plan

No.	Step	Timeline
1	Need for revisions/updates identified (Minister’s Order issued under S. 35 or S. 36; SPA initiated S. 34; other)	2018 to 2020 (Completed)
2	Development of amendments/update (in consultation with the HHSPC)	April 2019 to May 2021 (Completed)
3	Early engagement (with MECP)	June 21 to July 20, 2021 (Completed)
4	Pre-consultation: a) with MECP and all policy implementers; and b) with persons/businesses believed to be engaged in significant threats.	a) September 4 to October 4, 2021 b) November 5 2021 to December 3, 2022 (Completed)
5	Municipal endorsement (Not applicable for Section 36 updates)	Not applicable for Section 36 updates

No.	Step	Timeline
6	Public consultation (minimum 35 days)	December 15, 2021 to February 4, 2022
7	Submission to MECP Must be within 6 months of completion of consultation.	By May 30, 2022

Early Engagement and Consultation Stages

The engagement and consultation stages are shown in the figure below and described in detail.



Early engagement

Early engagement with MECP ensures that the MECP is engaged before technical and policy work is finalized, in order to provide essential early feedback. Early engagement helps to ensure that technical reports and information that supports the assessment report changes are evaluated by MECP to meet the requirements of the technical framework (prescribed under the Clean Water Act, including the Director’s Technical Rules and Tables of Drinking Water Threats) in effect at the time of the updates. Comments from the MECP are to be addressed by providing responses, before moving to the next stage. HHSPR staff conducted early engagement on the City of Hamilton’s Freelon drinking water system separately because in 2018, it was anticipated that this work would form part of a Section 34 type of amendment. However, due to timing factors, this work will most likely form part of the Section 36 updates. Early engagement in 2020-2021 with MECP and with the Wellington Source Water Protection group resulted in revised technical work by EarthFx in summer 2021, the consultant retained by City of Hamilton. Early engagement with MECP on all other Section 36 updates was undertaken in June-July 2021, resulting in revisions to the proposed updates. The early engagement materials were also shared with the Source Protection Committee and municipal working group, and their comments were addressed as well. The comments received from MECP during early engagement and how they were addressed are provided below. This process led to the preparation of materials for the pre-consultation step described below.

Table B3.2: Early Engagement Comments and Reponses

No.	Comment (July 2021, unless otherwise noted)	Response from HHSPR (August 2021, unless otherwise noted)
A.	Freelton revised WHPA comments received from MECP and Wellington Source Water (April 2020 to June 2021)	Addressed to the satisfaction of MECP and Wellington Source Water confirmed through an email and letter, respectively (May-June 2021).
B.	General comments from MECP received July 20, 2021 Although the Minister’s s.36 Order requires assessment of the vulnerability of the Woodward Intake, the proposed updated assessment report for the Hamilton Source Protection Area did not include the technical work associated with this requirement. We look forward to working with you to discuss potential options the source protection authority can pursue to ensure this mandatory update is completed.	HHSPR discussed viable options with MECP in late July 2021 to ensure that this mandatory update is completed. HHSPR has subsequently re-assessed the Woodward vulnerability of the current delineated zones, and updated the Technical Study and Assessment Report accordingly. The separate IPZ-2 re-delineation work is dependant upon creek flow modelling from a separate technical study led by the Hamilton Conservation Authority (HCA). An estimate at this time, subject to change, is late fall 2022. HHSPR will be able to confirm the timing after the CA modelling study is completed to the satisfaction of the HCA).
C.	Technical comments from MECP received July 20, 2021 See comments 1-6 below.	
1	Technical Study for the Lake Ontario Intake Protection Zones in the Halton Region SPA (April, 2021), Section 2.2.1: Please include a clear definition for the term “remaining Time of Travel,” including whether it refers to the time period following the time that captures the maximum length of the surface watercourse.	“Remaining Time of Travel” is now clearly defined in the Technical Study - Section 2.1.2 (page 3).
2	Technical Study for the Lake Ontario Intake Protection Zones in the Halton Region SPA (April, 2021), Section 3.1.2: Please clarify why four (4) categories of water depth were used to determine	HHSPR re-examined the approach taken for intake distance and depth criteria, and have revised it to follow the Michigan State Department of Environmental Quality, 2004 method used by Stantec in

No.	Comment (July 2021, unless otherwise noted)	Response from HHSPR (August 2021, unless otherwise noted)
	<p>the depth criteria, and only three (3) categories were used for the distance from the shoreline and the water quality concerns for scoring the Source Vulnerability Factor. Were these four (4) categories meant to be three (3) to be consistent with other criteria?</p>	<p>their 2008 report that informed the first approved assessment reports for HHSPR. HHSPR also reviewed and revised the approach taken for criteria for water quality concerns, considering the method established by Stantec for other Lake Ontario Collaborative SPAs and also considering the identification of a “water quality issue” as defined under the Clean Water Act, 2006. Please see the updated Technical Study for the Lake Ontario Intake Protection Zones in the Halton Region SPA and Hamilton Region SPA (August 2021).</p>
<p>3</p>	<p>Technical Study for the Lake Ontario Intake Protection Zones in the Halton Region SPA (April, 2021), Table 3.2: Please clarify why 10 metres is used as a limit for the water depth criterion (i.e., varies from < 3 m to > 10 m). In addition, a rationale behind the use of 500 metres as a limit of distance criteria instead of 300 metres originally adapted in the assessment report was used. Is 500 metres more appropriate to reflect the Source Vulnerability Factor?</p>	<p>HHSPR re-examined the approach taken for intake distance and depth criteria, and have revised it to follow the Michigan State Department of Environmental Quality, 2004 method used by Stantec in their 2008 report that informed the first approved assessment reports for HHSPR. Please see the updated Technical Study for the Lake Ontario Intake Protection Zones in the Halton Region SPA and Hamilton Region SPA (August 2021).</p>
<p>4</p>	<p>Technical Study for the Lake Ontario Intake Protection Zones in the Halton Region SPA (April, 2021), Section 3.2.1: Please include a description of the approach used for rounding the sub-scores up/down and explain how this may impact the final Area Vulnerability Factor (Vfa)/ Source Vulnerability Factor (Vfs) scores.</p>	<p>HHSPR revised the rounding of scores by using Microsoft excel to follow the traditional method. For example, a score of 8.25 rounds down to 8, while a score of 8.75 rounds up to 9.</p>
<p>5</p>	<p>Technical Study for the Lake Ontario Intake Protection Zones in the Halton Region SPA (April, 2021), Section 3.2.2: Please include a description of and</p>	<p>HHSPR reviewed and revised all formulae for determining the source and area vulnerability factors, considering the methods established by Stantec for other</p>

No.	Comment (July 2021, unless otherwise noted)	Response from HHSPR (August 2021, unless otherwise noted)
	<p>rationale for the approach used to average the sub-scores for the different land characteristics and transport pathways. Were the sub-scores averaged in one step (i.e., all parameters averaged in one formula), or in two steps (i.e., land characteristics as the first step, and then the average of the first step is averaged with the transport pathways sub-scores)?</p> <p>Note: Addressing these items may result in a change to the final scores of the IPZs. Given this, the proposed updates to the assessment report should reflect any changes to the study as a result of addressing these comments. The assessment reports shall include a minimum level of technical information as required by Technical Rule (9). If the assessment report does not include all technical information in the study, the assessment report should contain a link to the study to enable readers access to the approaches used for delineating and scoring the IPZs.</p>	<p>Lake Ontario Collaborative SPAs. Please see the updated Technical Study for the Lake Ontario Intake Protection Zones in the Halton Region SPA and Hamilton Region SPA (August 2021) for the formulae.</p> <p>The Assessment Reports are updated accordingly. As was done in the first round of source protection planning, the detailed background technical studies are to be made available on the website www.protectingwater.ca. This website link is now included in the updated Assessment Reports in the vulnerability assessment section as well, to enable readers access to the approaches used for delineating and scoring the IPZs.</p>
6	<p>Halton Region Assessment Report, Section 7.2.1: Please clarify in the document if the 35,000 tonnes/year of biosolids generated in Halton is sent to Hamilton for processing into a Class A fertilizer, and if the Woodward Wastewater Treatment Plant only processes the wastewater biosolids generated by the City of Hamilton. In addition, please clarify if the 60,000 tonnes treatment capacity accounts for processing biosolids from both jurisdictions.</p>	<p>City of Hamilton has confirmed that they do not receive biosolids from the Regional Municipality of Halton. The City of Hamilton new Biosolids Management Facility produces Class A product and is only treating material from the City of Hamilton, receiving dewatered biosolids from both the Woodward and Dundas wastewater treatment plants. This is clarified in the Assessment Report for Halton SPA, page 266 and in the Hamilton SPA on page 210.</p>

No.	Comment (July 2021, unless otherwise noted)	Response from HHSPR (August 2021, unless otherwise noted)
D.	<p>Source Protection Plan (SPP) comments from MECP received July 20, 2021</p> <p>See comments 1-2 below.</p>	
1.	<p>Section 3.1 (Policy G-1 a.): It appears Policy G-1 addresses timelines for the implementing bodies “to conform” with the policy obligation (i.e., time the committee has decided to give an implementer to either update or put new instruments/management plans in place for existing activities), but is not about the effective date of the policy itself (i.e., policy effective date). Given this, we recommend revising the text to remove references to policy effective dates (e.g., remove first paragraph). In addition, (i) given s.58(3) is a provision in the Act that addresses policy effective date (i.e., allows committees to identify a later effective date than the Plan effective date for risk management plan policies), please remove reference to s.58(3) under “a”; (ii) clause “b” could also be removed because policies that apply to future activities always have the same effective date as the source protection plan.</p>	<p>G-1 indicates that all policies come into effect per Section 2.4 of the SPP, which in turn specifies that: “Section 31 of the Clean Water Act provides that the effective date of a Source Protection Plan is either the date upon which a notice of approval of the Plan is published on the Environmental Registry established under the Environmental Bill of Rights, or is the date set out in the Plan”.</p> <p>Revisions were made to Section 2.4 to indicate that updates to the SPP occur from time to time and that the effective date would change accordingly. Policy G-1 is edited to indicate both: the effective date of all policies unless otherwise specified, and the exceptions. The edits follow the Feb. 2021 approved Grand River SPP’s policy WC-CW-1.1.1 and WC-CW-1.1.2. Reference to s. 58(3) is removed in part (a). Part (b) is removed.</p>
2.	<p>Section 3.1 (Policy G-2): We understand that this policy has been revised to enable the Risk Management Official (RMO) to provide written direction specifying the situations when municipal planning staff are permitted to determine that a site-specific land use is/is not designated for the purposes of s.59. However, clarification is needed regarding the purpose of the following text “Where the Risk Management Official has provided</p>	<p>This addresses a requirement related to supporting improved implementation, per the Minister’s Section 36 amended Order for the HHSPR. This policy update would allow risk management officials to provide written direction to municipal staff regarding types of building or planning applications that can be screened out of the Section 59 notice process. During early engagement, County of Wellington also provided comments to check that the wording of policy G-2</p>

No.	Comment (July 2021, unless otherwise noted)	Response from HHSPR (August 2021, unless otherwise noted)
	<p>written direction designating a land use for the purpose of section 59...”. Given the s.59 policy itself (not the RMO) is what designates a land use for the purpose of s.59, it is unclear why this text has been included.</p>	<p>matches a policy with the same intent from the Wellington County Chapter of the Grand River Plan dated February 3, 2021.</p> <p>Edits were made to the first paragraph of policy G-2 to follow the Feb. 2021 approved Grand River SPP’s policy WC-CW-1.1.3 which has the same intent of supporting improved implementation; and staff retained the wording “unless identified specifically within a policy” from the first approved SPP for HHSPR.</p>
<p>3.</p>	<p>Editorial:</p> <ul style="list-style-type: none"> a) Section 2.1, Table 4: Decisions made by risk management officials/ inspectors “must conform” with policies created under Part IV of the CWA (i.e., s.57, s.58 and s.59); therefore, please revise Table 4 to indicate a legal effect of “must conform” instead of “must comply” for Legal Effect Lists G, H and I. This revision should be made throughout the Plan, where appropriate. b) Section 2.8, Table 3: We note that the new policy format identifies the specific vulnerable areas and scores for where each policy applies. While this can indeed be helpful to the reader, including this information may require extensive edits to the Plan should the Director’s Technical Rules (including Threats Tables) be amended in the future. To avoid this, many committees have opted to state that the policy applies “where 	<ul style="list-style-type: none"> a) The legal effect of “must comply” is changed to: “must conform” for Legal Effect Lists G, H and I (Clean Water Act Part IV S. 57, 58 and 59 policies) throughout the SPP. The explanatory document was checked as well. b) The new policy format does result in the need for extensive edits whenever the Technical Rules (including the Threats Tables) change. However the utility and need of these details was a priority for policy implementers and therefore has been incorporated. Should this pose a significant challenge in the future, HHSPR will revisit it with policy implementers and the SPC. c) A supporting policy detail for Policy T-68-C is edited to indicate that it is a monitoring policy and its legal effect is List F. It is correctly listed in Appendix C – Compliance Lists. d) Duly noted.

No.	Comment (July 2021, unless otherwise noted)	Response from HHSPR (August 2021, unless otherwise noted)
	<p>significant, etc.” with clear direction in the Plan on how to use the online tools (i.e., SPIA and Threats Tool) to determine where a given policy applies.</p> <p>c) Policy T-68-C identifies List E as the appropriate legal effect list for this policy; however, if it is a monitoring policy, it should be on List F.</p> <p>d) Where policy codes have been added/revised (e.g., Policy T-68-C), please ensure that the revision is carried throughout the entire Plan (incl. legal effect lists), explanatory document and assessment reports.</p>	

Pre-consultation

Pre-consultation refers to the regulatory requirements within O. Reg. 287/07 (s.35 to s.39) and the amended Minister's orders under section 36, to consult with impacted implementing bodies and persons/businesses believed to be engaged in significant drinking water threat activities that are affected by the updates. This must be done prior to conducting broader public consultation.

More specifically, it refers to the requirement to send notices to these persons or bodies, including government ministries that have obligations under the Clean Water Act. The implementing bodies and persons/businesses believed to be engaged (in significant drinking water threat activities) are to be made aware of the source protection plan and assessment report revisions and given an opportunity to provide feedback as early in the process as possible. The SPA determines if pre-consultation with implementing bodies and persons/businesses engaged is done concurrently or at different times, taking into consideration the nature of the policy updates and various factors influencing each update.

HHSPR staff supported the Source Protection Committee by undertaking pre-consultation with (a) policy implementing bodies and then (b) with persons/businesses believed to be engaged in significant threat activities. HHSPR hosted optional virtual pre-consultation information sessions and meetings as follows:

- September 13, 2021: with OMAFRA
- September 21 and 29, 2021: for municipalities
- October 8, 2021: with AWSA
- November 22, 2021: for impacted property owners/tenants of the Freelton, Carlisle, Greenville WHPAs.

Pre-consultation comments were received as shown in the tables below.

Pre-consultation Comments and Responses, December 7, 2021

Table B1: Comments on the Halton Assessment Report

No.	Comm- enter	Comment on the Halton Assessment Report	HHSR Response (edits in green highlight , page numbers are approximate)
1.	MECP	We have reviewed the amended versions of the plan and assessment reports, and note that comments we provided during early engagement have been addressed.	Acknowledged. No action required.
2.	MECP	Figures 6-1 to 6-5: To clarify that IPZ-1s are still scored under Section 36 updates, please include the IPZ-1 vulnerability scores, as was done in Figure 6.1 of the updated Hamilton Assessment Report 2021, and in the Halton Assessment Report (2017).	Addressed. Figures 6-1 to 6-5 in Appendix H.
3.	MECP	Table 6.6: Correct the value range (# of storm outfalls) to read "(0-3)" instead of "(0-34)".	Addressed. Section 6.1.4. Table 6.6. Page 197
4.	City of Hamilton	<p>Thank you for the opportunity to review the Assessment Reports and the Source Protection Plan as part of the pre-consultation process. The fact that the early engagement comments and the reports with track changes were provided as part of the pre-consultation package, proved to be very useful.</p> <p>I also want to acknowledge that the changes in the reports are the result of the on-going collaboration with the municipal members and builds on feedback from Source Protection Committee as well as technical studies developed in the last few years. Therefore, the major up-dates within the Assessment Report (AR) and Source Protection Plan (SPP) are consistent with the information exchange ahead.</p> <p>The overall comment for both ARs relates to the fact that – in our opinion – the ARs should reflect best information available to date,</p>	<p>Acknowledged. Further discussions took place with City of Hamilton staff in November 2021 to discuss which comments can be addressed in a future Section 34 update. While these are not part of the current Section 36 update and need detailed planning and comprehensive data analysis and discussions to address, they can</p>

No.	Comm- enter	Comment on the Halton Assessment Report	HHSPR Response (edits in green highlight , page numbers are approximate)
		including the climate change work. On this note, I have several places through out the report that I suggest being up-dated if not in this round, then through an up-date in the next year or so.	be considered for a future update. These comments are indicated as such in the response column.
5.	City of Hamilton	<p>Page 248 – section 7.1.2 Freelton Water Supply Well FDF03 is a new well that was permitted to take water in 2010. Accordingly, little water quality data are available and trends cannot be assessed at this time.</p> <p>Water quality analysis results for various periods between 1999 and 2010 were reviewed to assess the potential for issues with the source water for the Freelton well, FDF01. The annual reports contain data readily available for these two wells. Up-to-date information should be provided especially that the bulk of the current AR revisions stem from the Freelton new WHPAs.</p> <p>Carlisle Water Supply - same comment as above</p>	Addressed. Section 7.1.2. Data from 2017-2021 annual reports for the drinking water systems were reviewed and summaries added to pages 248-250.
6.	City of Hamilton	Table 7.2. - Please provide the addresses that correspond to the Drinking Water Threats in table 7.2.	Addressed. Sent data as confidential files.
7.	City of Hamilton	<p>Executive Summary Page ii - the <i>Follow up</i> paragraph - consider to revisit the wording so it can reflect the current AR up-date work.</p> <p>(note: this comment was received on the Hamilton assessment report. It is applied to the Halton assessment report for consistency).</p>	Addressed. The Executive Summary “Follow up” section is revised to indicate that the document is updated from time to time, including per Section 36 of the Clean Water Act.

No.	Comm- enter	Comment on the Halton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
8.	City of Hamilton	Table 2.3 Populations and population densities by watershed/subwatershed - up-date population and / wards based on 2016 Census. (note: this comment was received on the Hamilton assessment report. It is applied to the Halton assessment report for consistency).	Addressed. Section 2.2.2. Table 2.3. Populations updated based on 2016 Census. Pages 42-44.

Table B2: Pre-Consultation Comments on the Hamilton Assessment Report

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSR Response (edits in green highlight, page numbers are approximate)
1.	City of Hamilton	<p>Executive Summary</p> <p>Page i - The Woodward system and neighbouring Grimsby system take water from Lake Ontario and distribute it to approximately 96.7 percent of the population within the Hamilton Region Source Protection Area.</p> <p>The Greenville well system, situated within Middle Spencer Creek, a subwatershed of the Spencer Creek watershed, serves 0.03 percent. Not sure if the percentage was revised within table 2.1 especially that the data is reported per SPA.</p> <p>Please know that:</p> <ul style="list-style-type: none"> • Woodward Drinking Water Subsystem is a large municipal residential system that supplies a significant portion of Hamilton’s population with drinking water including Stoney Creek, Dundas, Ancaster, Waterdown, and Glanbrook. The population served is estimated at 536,917. • Greenville municipal system provides water to 36 homes. <p><i>Source: Annual Drinking Water report (2020).</i></p> <p>Page ii - the <i>Follow up</i> paragraph - consider to revisit the wording so it can reflect the current AR up-date work.</p>	<p>Addressed.</p> <p>Section 2. Table 2.1 was updated for 2016 census data. An explanatory note is added near the table to indicate the actual population (Woodward system) and numbers of homes (Greenville system) served, not cut to the source protection area boundary. Page 11.</p> <p>Addressed. The Executive Summary “Follow up” section is revised to indicate that the document is updated from time to time, including per</p>

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
			Section 36 of the Clean Water Act.
2.	City of Hamilton	Page 36 - Section 2.2.2 - <i>The settlement of Greensville, located on the escarpment above Dundas, is growing based on its serviced by private well water supplies. One municipal well supplies water to about 127 108 people in this community, while the others rely on private wells.</i> <i>(Source: Annual Drinking Water report (2020))</i>	Addressed. Section 2.2.2. Text is updated as suggested. Page 36
3.	City of Hamilton	Page 36 - Section 2.2.2 - Consider including wording related to the fact that the City is looking into 2051 targets. Potential wording: <i>The City is planning for a significant amount of growth over the next 30 years to the year 2051. The Province of Ontario provides the growth forecasts that the City must plan for:</i> <ul style="list-style-type: none"> • <i>An increase of 236,000 people (total population of 820,000 by 2051)</i> • <i>An increase of 110,000 housing units</i> • <i>An increase of 122,000 jobs</i> <i>Through the update to the City's growth strategy, known as GRIDS 2 and the Municipal Comprehensive Review (MCR), the City must determine if all this forecasted growth can be planned within the existing urban boundary through intensification and redevelopment, or if an expansion to the urban boundary is required to plan for a portion of this growth in new greenfield communities.</i> For more information: https://www.hamilton.ca/city-planning/official-plan-zoning-by-law/grids-2-and-municipal-comprehensive-review	Addressed. Section 2.2.2. Text is updated as suggested. Page 37

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
4.	City of Hamilton	Page 39 - Table 2.3 Populations and population densities by watershed/subwatershed - up-date population and / wards based on 2016 Census.	Addressed. Section 2.2.2. Populations updated based on 2016 Census. Pages 39-41.
5.	City of Hamilton	Page 64, Section 3.7.2 Randle reef - the text should reflect the fact that stage one is now complete and Stage 2 activities are expected to be complete for August 2021. (Source: Council Communication re Randle Reef Sediment Remediation Project update, June 15, 2021; http://randlereef.ca/)	Addressed. Section 3.7.2. Text is updated on page 64.
6.	City of Hamilton	Page 76 - Watershed water quality - The updated water quality charts are welcome as the trends seem to show more variability in the last 10 years.	Acknowledged. No action required.
7.	City of Hamilton	Page 85, Section 4 - Monitoring Programs Are Station 258 and 3051 still active? A map and graphs with the trends at different stations similar to the watershed surface water data would help visualize the information and present the information in a consistent manner. <i>Based on 1997 data, the Ministry of the Environment reported that Lake Ontario water quality near Hamilton is typically poorer than the general lake quality. - The data is 25 years old. We know that in general water quality is poorer in the nearshore area of major cities, but it should cite more recent data or a range of years. i.e. based on data collected in the last 30years, ...</i> Plus, this statement seems to conflict with another one – within the above paragraph - <i>Although the Lake Ontario nearshore zone (from which the municipality takes its water) is impacted, it has relatively good quality water.</i>	Acknowledged. Discussed with City of Hamilton staff in November 2021. Work and resources are being identified for consideration in a future Section 34 update, requiring analyses of updated information and data.

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
8.	City of Hamilton	<p>Pg 87 - Algae - The report includes the following sentence: <i>There are no microcystin data available for review for the Woodward source water. Data available for review for the Burlington source water indicated microcystin has not been detected.</i></p> <p>Hamilton Water has protocols in place for monitoring and sampling of microcystin since 2011 (it has been always below MAC). Please let me know if data is needed as this statement is not accurate. Is the statement related to Burlington intake reflecting the current situation?</p>	<p>Addressed. Section 4.2.2. Text is updated on page 85. Sentence on Burlington is removed.</p> <p>Discussed further with City of Hamilton staff in November 2021. Water treatment plant licences include conditions to monitor and address algae issues, which can be discussed with water treatment plant operators and considered in a future Section 34 update.</p>
9.	City of Hamilton	<p>Page 87 - Pathogens - <i>In 2009, the City of Hamilton's health department collected samples.</i> The report should reflect 2020 or a range of year (i.e. 2010 - 2020) as this is an on-going program.</p>	<p>Acknowledged. Discussed with City of Hamilton staff in November 2021. Work and resources are being identified for</p>

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
			consideration in a future Section 34 update, requiring analyses of updated information and data.
10.	City of Hamilton	Page 88 - <i>In 2007 and 2008, Environment Canada collected water samples</i> - the study continued for Woodward intake until 2012. The data is available if needed.	Acknowledged. Discussed with City of Hamilton staff in November 2021. Work and resources are being identified for consideration in a future Section 34 update, requiring analyses of updated information and data.
11.	City of Hamilton	Page 89 - there are new studies since 2005 regarding pharmaceuticals. i.e. https://www.watercanada.net/study-examines-impact-of-pharmaceuticals-on-the-great-lakes/	Acknowledged. Discussed with City of Hamilton staff in November 2021. Work and resources are being identified for consideration in a future Section 34 update,

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
			requiring analyses of updated information and data.
12.	City of Hamilton	Page 93: section 4.3.2 Groundwater Quality: "The quality of groundwater is monitored primarily using the nine wells of the Provincial Groundwater Monitoring Network (PGMN), the municipal wells, and the municipal and private studies, as required." Hamilton Water also maintains a network of monitoring wells that are being sampled every other year through a collaborative program with Hamilton CA. Please consider mentioning these monitoring wells.	Addressed. Section 4.3.2. Text updated. Page 92
13.	City of Hamilton	Page 99, Section 4.5 Last paragraph re to Ancaster wells. The well does not meet the new drinking water regulation (2018) for arsenic so the access is now restricted. I think that it should not be considered as a source of drinking water. https://conservationhamilton.ca/ancaster-well-faq/	Addressed. Section 4.5. Sentence removed. Page 98
14.	City of Hamilton	Page 94 - Chart 4.5 - information is aggregated, not clear which ones are the shallow wells.	Addressed. Section 4.3.2. Text updated to identify the shallow well. Page 93
15.	City of Hamilton	Page 100 - Table 4.3 - please see comments re to table 2.1.	Addressed. Section 4.5.1. Text updated to identify the population served by Woodward Drinking Water Subsystem and

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
			the homes served by the Greensville municipal system. A note is added at the bottom of Table 4.3: capacity and users are based on the drinking water system, not source protection area boundaries. Page 99.
16.	City of Hamilton	Section 4.5.1. <i>"The City of Hamilton is studying the possible relocation of an intake to reduce negative impacts from poorer water quality due to downwelling events and turbidity."</i> The City studied this option over 10 years ago. The study concluded that there are no benefits in extending the intake. I suggest that the sentence can be removed.	Addressed. Section 4.5.1. Text is deleted on page 101.
17.	City of Hamilton	Table 4.6 Municipal wastewater treatment plant information should be up-dated based on the most recent annual report (2020). Please let me know if you do not have access to it.	Addressed. Section 4.6. Table 4.6. Daily average flow is updated to 2020 data. Page 107.
18.	City of Hamilton	Section 5. Groundwater budget – this section was written based on a specific assessment done by EarthFx that was not revisited in this round of up-dates, so I did not review this section. Nevertheless, it seems that the section includes a lot of details about the technical aspects of	Acknowledged. Discussed with City of Hamilton staff in November 2021. Needs to

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
		that study. Should we rather focus on the findings of the assessment and the details / study be part of the appendixes?	be discussed with MECP. Work and resources may then be identified for consideration in a future Section 34 update.
19.	City of Hamilton	<p>Page 162 - sect 6 - Table 6.2. - we looked at the last 10 years of data and there are no exceedances of ODWQS for treated drinking water.</p> <p>The typical concerns that the treatment plant operators mentioned regarding the raw water quality are still consistent with the last AR and the general opinion is that the pathogens and algae bloom are top concerns:</p> <ol style="list-style-type: none"> 1.The presence of pathogens in the source water 2. Taste and other issues associated with geosmin producing microbes 3. Industrial wastewater discharges 4. Urban runoff and storm sewer discharge 5. Contaminated sediment disrupted by dredging activities and bank and shoreline modifications or spills 6. Climate change and increasing lake temperature 	Acknowledged. Discussed with City of Hamilton staff in November 2021. Work and resources are being identified for consideration in a future Section 34 update, requiring consideration of monitoring gaps, analyses of updated information and data, and detailed discussions with water treatment plant operators.
20.	City of Hamilton	Tables 6.4 - 6.7 - capture well the criteria used to determine the vulnerability score for IPZ2	Acknowledged. No action required.

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
21.	City of Hamilton	Page 189 - Well transport pathways - will this assessment method be applied by a case-by-case by SPA for future notifications of potential transportation pathways moving forward?	Any new proposed wells would not meet the criteria for well transport pathways (i.e. the cluster of older wells), as the new wells would be constructed per O. Reg. 903 requirements under the Ontario Water Resources Act. All other transport pathways will be screened by the municipalities using the GIS screening tool provided by HHSPR, and the regulation followed.
22.	City of Hamilton	Page 197 - Greensville - consider adding charts related to water quality. The residents had been interested in this information / requested it at the open houses in the past.	Acknowledged. Discussed with City of Hamilton staff in November 2021. Work and resources are being identified for

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
			consideration in a future Section 34 update, requiring analyses of updated information and data.
23.	City of Hamilton	Page 201- Greensville - Significant threats to groundwater: " The verification process will continue, and the significant threat counts may be revised in an updated report". Furthermore in table 7.1 (page 221) there is a note saying that " The threat count is the result of an air photo interpretation and has not been verified". I believe that this is wording from the original report. Should this report contain revised threat count based on the current (field verified, annual reporting) information?	Addressed. Section 7.4.1. Table 7.1. Page 220. Also Section 7.2.1. Page 200. Text is edited to indicate that yearly updates from field verification are provided in annual progress reports. The assessment report reports potential significant threat counts.
24.	City of Hamilton	Table 7.1. - 1 chemical threat DWT -was this related to the school large septic system? The septic system is now outside of the WHPA. Please clarify.	Addressed. Section 7.4.1. Table 7.1. Text is edited to indicate that yearly updates from field verification are provided in annual progress

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
			reports. Page 220. Property level detail provided confidentially to City of Hamilton staff.
25.	City of Hamilton	Page 207 - Section 7, Sewage systems - "The City of Hamilton reported that in 2009 there were 23 bypasses at the Woodward Wastewater Treatment Plant and 56 discharges from four combined sewer overflows." Information to be up-dated to 2020 or range of years.	Addressed. Section 7.2.3. Daily average flow is updated to 2020 data. Page 207.
26.	City of Hamilton	Page 221 - The liquid hydrocarbons pipes that cross an open body of water can represent SDWT without a modelling exercise. Will other crossings be considered in the shore area at a later point? There are the hydrocarbon pipelines along the shore and within the Harbour. "The release of oil liquid hydrocarbons into one creek at one location was modelled, however, by extending the results upstream the number of pipeline crossings of the creek increases to 111 locations where the threat activity occurs."	Acknowledged. No further action needed. Based on the modelling studies, pipeline significant drinking water threats (SDWT) occur in the IPZ-3, which does not extend into the lake. Pipelines threats were also examined for the changed technical rules. No pipelines currently cross our WHPAs, so no new SDWTs are found in

No.	Comm- enter	Comment on the Hamilton Assessment Report	HHSPR Response (edits in green highlight, page numbers are approximate)
			WHPAs. IPZ-1s and 2s do not have vulnerability scores high enough for SDWT.
27.	City of Hamilton	Page 222- Table 7.3. - it shows questions marks. Probably the table from word did not convert well into pdf.	Addressed. Section 7.5. Table 7.3 updated to use "x" marks. Page 222
28.	City of Hamilton	Climate change scenarios, interpretation and municipal well implications should be included.	Acknowledged. Discussed with City of Hamilton staff in November 2021. Work and resources are being identified for consideration in a future Section 34 update, requiring analyses of updated information and data.

Table 3: Pre-Consultation Comments on the Source Protection Plan

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
1.	MECP	<p>Section 3.2 – Policies addressing the application of agricultural source material (ASM) and the application of commercial fertilizer</p> <p>Policies T-21-C and T-26-C: These two prescribed instrument policies rely on nutrient management plans (NMPs) to address the application of ASM and commercial fertilizer where these prescribed threat activities are significant threats to sources of drinking water. In their pre-consultation comments, both the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and MECP (Southwest Region, DWECD) have expressed concerns with policies T-21-C and T-26-C. More specifically, OMAFRA has reasserted that that it “does not have an active role” with NMPs, and therefore, does not and cannot ensure NMPs include measures to protect sources of drinking water. In addition, OMAFRA does not conduct inspections, document the number and locations of NMPs nor ensure compliance.</p> <p>MECP (Southwest Region, DWECD) has also expressed concern regarding the expectations set out in these prescribed instrument (PI) policies regarding their compliance role for addressing NMPs. Specifically, while Agricultural Environmental Officers (Ag EOs) are able to conduct inspections, they do not and cannot check NMPs for compliance with source protection plan policies. In addition, Ag EOs have no enforcement powers under the Nutrient Management Act, 2002 (NMA) nor the CWA. This means that should they come across a compliance issue, they cannot change the PI - but could simply encourage the creator of the instrument to amend it.</p>	<p>Acknowledged. As discussed at the October 2021 Halton-Hamilton Source Protection Committee (HHSPC) meeting, the pre-consultation comments from OMAFRA and MECP on NMP policies will be addressed in a subsequent section 34. This approach and timing would allow for MECP to sort out the details and logistics for consistency across the province with other SPCs.</p> <p>Confirmation was received from MECP on Nov. 23, 2021 by email, HHSPR and the</p>

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
		<p>Given this, to address the aforementioned implementation challenges, we recommend the following policy amendments:</p> <ul style="list-style-type: none"> • Policies T-21-C and T-26-C (part a) could be revised to name the person or body responsible for issuing, amending or otherwise creating the nutrient management plan, as responsible for ensuring it conforms with the significant threat policy. This would be the person with an Agricultural Operation Strategy/Plan Development Certificate from OMAFRA, that is certified to prepare nutrient management plans. Note: Policies that identify this ‘certified person’ as the implementer, would be legally binding. • Policy T-21-C addresses both the application and storage of ASM; however, given that these activities require different prescribed instruments (nutrient management plans for application and nutrient management strategies for storage), they also have different implementing bodies (certified person vs. OMAFRA). We recommend splitting these policies into two separate policies to assist with accuracy and implementation. • Policies T-21-C and T-26-C (part b) could be revised to identify the person responsible for creating the nutrient management plan as the person responsible for monitoring and reporting on compliance. MECP (Ag EOs) could continue to be included, but only to report on the outcome of inspections conducted under the NMA. That can include assessing compliance with an assortment of requirements set out under the NMA and it’s regulations plus it may include assessing whether a farm is operating in compliance 	<p>SPC can move forward with the Section 36 update without including those changes to NMP policies, with the caveat that the update to those policies will have to happen as a future Section 34 amendment.</p> <p>Until then, the NMP and NMS policies will remain as approved originally in 2015. (i.e. proposed edits made under the Section 36 process are removed).</p>

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
		with a current instrument, such as a NMP. Ag EO inspections do not include a compliance assessment under the CWA or with source protection plan policies.	
2.	MECP	Policies T-20-C and T-25-C: These two policies rely on risk management plans (RMPs) to address existing and future application of ASM and commercial fertilizer where these prescribed threat activities are significant threats to sources of drinking water. However, given that they only apply to farms that are not phased-in under the NMA, the risk management official (RMO) has no authority to establish an RMP to address these threats where a PI already exists. Given that there is no enforcement authority for these threats, the committee may wish to discuss the merits of amending this policy so that RMOs have the authority to establish an RMP, and would have the authority to enforce it.	Acknowledged. No further action. This was discussed with the municipal working group. Addressing the comment could result in duplication of policy tools for farms (phased in under the NMA), through RMPs and prescribed instruments (PIs). It was recommended to not change the policy at this time (i.e. not apply RMPs to farms phased in under the NMP).
3.	MECP	In addition, we note that policy T-26-C only addresses the future application of commercial fertilizer. Given the equivalent RMP policy only addresses non phased-in farms, this means that there is no policy requiring existing PIs to be amended for this activity to ensure it ceases to be, or never becomes a significant drinking water threat.	Addressed. Policy T-26-C is updated.

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
4.	MECP	<p>Environmental Assessment and Permissions Division (EAPD):</p> <p>Policy T-52-C (part b): MECP is generally supportive of this prescribed instrument policy that addresses discharges from sewage treatment plants. However, the current policy now states that: “by February 1 of each year, the Ministry of the Environment, Conservation and Parks shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year to adjust thresholds.” With ‘to adjust thresholds’ being a new requirement.</p> <ul style="list-style-type: none"> • If the ministry adjusts a limit or reporting requirement it would be included in the environmental compliance approval (ECA) and would then be posted on Access Environment. This information is publicly available, as the ECA posted to Access Environment would include all monitoring and reporting requirements, and would be the best resource for determining what the required effluent limits are. • Given this, and that EAPD is unable to manually review individual files every year to summarize all amendments which involved adjusted effluent limits or monitoring requirements, we request that the monitoring policy language be revised to identify that MECP makes all monitoring and reporting requirements publicly available, and direct the SPA to Access Environment to determine if any changes were made to effluent limits and monitoring requirements. 	<p>Addressed.</p> <p>Policy T-52-C (part b) is revised to direct MECP to make all monitoring and reporting requirements publicly available at Access Environment to determine if any changes were made to effluent limits and monitoring requirements. However, the Source Protection Authority is not identified as the body making that determination, as it is unknown if provincial funding will be provided to carry out the task of manually reviewing and comparing individual reports (current</p>

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
			and previous) to determine if any changes were made to the effluent limits thresholds (and to what degree) and changes to the monitoring requirements.
5.	MECP	<p>Drinking Water and Environmental Compliance Division (DWECD):</p> <p>Policy T-26-C (part a): The policy in part a addresses the creation of NMPs to ensure they include measures that prevent the application of commercial fertilizer from being/becoming a significant drinking water threat. Given that OMAFRA does not review or approve NMPs (nor does MECP), the implementation body for part a should not be OMAFRA or MECP. The body responsible for the creation of NMPs is the farmer and/or the certified consultant; they should be identified as the implementation body for the purpose of part a.</p> <ul style="list-style-type: none"> • It is our understanding that part b of the policy is meant to be a monitoring policy linked to part a. That is, the purpose of part b is to have a party report back to confirm that the NMP was in fact created in accordance with the requirement of part a. If our understanding of the purpose of part b is correct, then the only party who can reasonably provide that monitoring report is the farmer and/or consultant who prepared the NMP. • MECP Ag EOs are not able to report on when an NMP complies with the part a policy because they were not involved in the 	<p>Acknowledged. As discussed at the October 2021 Halton-Hamilton Source Protection Committee (HHSPC) meeting, the pre-consultation comments from OMAFRA and MECP on NMP policies will be addressed in a subsequent section 34. This approach and timing would allow for MECP to sort out the details and logistics for consistency across the</p>

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
		<p>creation of the NMP and MECP Ag EOs do not carry out assessments to determine whether an NMP is in compliance with a CWA policy. MECP is not in a position to provide a monitoring report on this particular subject matter.</p> <ul style="list-style-type: none"> • If a committee wishes MECP to report on the outcome of inspections we conduct under the NMA that are relevant for the purposes of a source protection plan policy, it must be understood that when we report on inspection findings in the agriculture program, we are reporting on the result of compliance assessments we have undertaken under the NMA. That can include assessing compliance with an assortment of requirements set out under the NMA and it's regulations, plus it may include assessing whether a farm is operating in compliance with a current instrument, such as an NMP. Our inspections do not include a compliance assessment under the CWA or with source protection plan policies. • In summary, it is our assertion that the policy currently set out in part b is entirely unrelated to the policy set out in part a, and therefore, is not an appropriate monitoring policy in this case. We encourage the committee to update part b so that their monitoring policy is directed at the proper implementation body who is responsible for creating NMPs. These are the only parties able to provide a proper report back with regard to part a of the policy. 	<p>province with other SPCs.</p> <p>Confirmation was received from MECP on Nov. 23, 2021 by email, HHSPR and the SPC can move forward with the Section 36 update without including those changes to NMP policies, with the caveat that the update to those policies will have to happen as a future Section 34 amendment.</p>
6.	MECP	We also recommend including a note in the plan to clarify how plan amendments relate to existing or new policies with explicit implementation timelines (e.g., within 3 years of the effective date). Being	Through this comment and discussion with MECP, it was

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
		<p>silent on this is interpreted to mean that these implementation timelines will apply to the amendment (i.e., within 3 years of the effective date of the amendment). While not essential, being explicit in the plan about the authority’s expectations for implementation timelines could help avoid confusion or misunderstanding for implementing bodies.</p>	<p>identified that policies using RMPs to address existing threats cannot come into effect on the same day as the effective date of the Source Protection Plan. Policy G-1 is edited accordingly. Policy G-1 also specifies a 5 year timeline to establish an RMP - and this is a policy implementation date, not the policy effective date. Note that future threat policies come into effect on the same day as the plan.</p>
7.	OMAFRA	<p>Policy T-26-C: I believe that (b) is consistent with the feedback we have provided over the years that OMAFRA so that makes sense me to. Regarding (a) – I want to note that OMAFRA does not have an active role in Nutrient Management Plans. There are requirements set out in the Reg as to when a farm requires an NMP and what has to be included in an NMP but OMAFRA does not ensure compliance with</p>	<p>Acknowledged. As discussed at the October 2021 Halton-Hamilton Source Protection Committee</p>

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
		<p>those sections, that would be MECP. I interpret the phrasing of “OMAFRA shall ensure NMPs include measures...” to mean that OMAFRA must include measures above and beyond the regulatory requirements of an NMP, which we cannot do. I just want to note that if that is the intent of the policy wording, we will not be able to conform to the policy. The current wording of (a) makes it sound like (to me) OMAFRA is being directed to actively review and impose possible conditions when we cannot do that.</p> <p>My points above would also apply to policies for ASM application.</p>	<p>(HHSPC) meeting, the pre-consultation comments from OMAFRA and MECP on NMP policies will be addressed in a subsequent section 34. This approach and timing would allow for MECP to sort out the details and logistics for consistency across the province with other SPCs.</p> <p>Confirmation was received from MECP on Nov. 23, 2021 by email, HHSPR and the SPC can move forward with the Section 36 update without including those changes to NMP policies, with the caveat that the update to those</p>

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
			policies will have to happen as a future Section 34 amendment.
8.	City of Hamilton	<p>Thank you for the opportunity to review the Assessment Reports and the Source Protection Plan as part of the pre-consultation process. The fact that the early engagement comments and the reports with track changes were provided as part of the pre-consultation package, proved to be very useful. I also want to acknowledge that the changes in the reports are the result of the on-going collaboration with the municipal members and builds on feedback from Source Protection Committee as well as technical studies developed in the last few years. Therefore, the major up-dates within the Assessment Report (AR) and Source Protection Plan (SPP) are consistent with the information exchange ahead.</p>	Acknowledged. No action required.
9.	City of Hamilton	<p>The E&O policies (T-2-C, T-13-C, T-27-C and T-31-C) refer to a two years implementation period of the date the Source Protection Plan comes into effect. I see the applicability in the case of new SDWTs but it would apply to the up-dated SPP rather than the original effective date (2015).</p> <p>I think that this comments ties back to G-1 policy that needs to clearly outline that the up-dated SPP timelines only applies to the new SDWT unless it is a new policy all together.</p> <p>Nevertheless, I think it will be very difficult for someone to figure out if a certain property falls under the initial or up-dated SPP.</p>	Addressed. Policies T-2-C, T-13-C, T-27-C, T-31-C, T-43-C, T-54-C. MECP has provided clarification that the SPP or within the policy it should be clarified if the policy implementation date is relevant to the updated SPP's effective date. The E&O policies address

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
			existing and future threats, therefore the policy text can recommend (i) the continuation of existing programs and (ii) E&O for newly identified significant drinking water threat (SDWT). Alternately, the two year timelines can be removed since E&O programs are established.
10.	City of Hamilton	Definitions - Revise the definition of existing threat based on the latest discussions with the implementers and the SPC.	Addressed. Appendix D. Page 152. In the second round of planning in 2021, it was discussed with the municipal working group about the definition of “existing threat”, such that the ten-year window is

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
			<p>proposed to be removed. Further, a proponent would need to demonstrate intent of resuming an activity. It would be subject to policies to manage risks. This will help prevent unintended prohibitions, given the high growth and development area that HHSPR is characterized by. Examples of “demonstrated intent” are included in the Explanatory Document. Section 2.4. Page 16.</p>
11.	MTO	<p>In the documentation provided, Policy # O-5-S is being updated to say that MTO is requested to implement an education and outreach program to encourage all transportation businesses that ship goods through wellhead protection areas and intake protection zones to prepare spill prevention plans and spill contingency plans, to review these plans</p>	<p>Addressed. While MTO does not enforce spill prevention requirements, it appears that</p>

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
		<p>annually, and to update them, and train staff as required.</p> <p>It is not MTO's position or responsibility to conduct mandatory training as it relates to commercial motor vehicles or spill prevention. MTO has conducted higher level presentations to safety councils such as the Fleet Safety Council and Infrastructure Health and Safety Association as it relates to topics such as commercial vehicle general requirements, daily vehicle inspections and cargo securement. MTO is responsible for moving people and goods safely, efficiently, and sustainably across Ontario but does not enforce spill prevention requirements under the Environmental Protection Act. This responsibility would fall under the Ministry of the Environment, Conservation and Parks.</p> <p>Alternatively, Transport Canada offers information related to dangerous goods through its Transportation of Dangerous Goods Safety Awareness Program to target audiences of municipalities (elected officials and technical services staff), first responders and industry, including manufacturers, shippers and carriers. They can be contacted at TC.TDGSafetyAwareness-SensibilisationalsecuriteduTMD.TC@tc.gc.ca.</p> <p>MTO does not have a sign policy currently in place for the Halton-Hamilton Source Protection Region and there are no signs installed on provincial highways in the source protection area. The installation of drinking water protection zone signs may be considered on provincial highways only where specific criteria (vulnerability scores) have been reached, as outlined in the signage policies MTO has with other Source Protection Areas. Please indicate whether the proposed updates will result in</p>	<p>they carry out high level presentations to safety councils. The Policy O-5-S is updated accordingly, to recommend that MTO, Transport Canada and the MECP Spills Action Centre work together to develop and implement an E&O program.</p> <p>There are two road signs installed in HHSPR, on the 401 close to the Walkers Line and Kelso WHPA. Further opportunities to install signs on highways will be explored with MTO.</p>

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
		the request for signs on provincial highways (i.e. the vulnerable areas cross the provincial highway).	
12.		<p>AWSA has reviewed the proposed updates to the Halton-Hamilton Source Protection Region’s Source Protection Plan and provides the following information relevant to the January 2019 Warehousing Audit Protocols and User Guide. The guide and bulletins are attached with the relevant sections highlighted.</p> <p>Buffer Areas Protocol A1 specifies that all new storage buildings be at least 50 metres from zoned residential property lot lines, hospitals, schools, shopping centres, restaurants, processing facilities for feed or food (not storage) and other buildings with high occupancy. Protocol A2 applies to existing structures and requires pre-approval from AWSA for all renovations or new construction, which will infringe on the 50 metre buffer to the aforementioned features.</p> <p>While not specific to all municipal drinking water sources, protocol E1 specifies that buildings constructed on flood plain land have written authorization from local authorities including local Conservation Authorities as appropriate. This should serve to protect intake-based water sources.</p> <p>We recognize that drinking water sources are absent from the aforementioned list of features and we will consider this in future revisions of the standard. Given the containment and mitigation measures in place (as described below), and the need for Conservation Authority engagement during the building and permitting process, we believe that the risk associated with new builds and</p>	<p>Acknowledged. HHSPR and the SPC will continue to collaboratively engage AWSA in order to incorporate the protection of drinking water sources into the AWSA standards to satisfy Policy T-30-S.</p>

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
		<p>renovations/expansions has been addressed until such time as the standard is updated.</p> <p>Containment</p> <p>Protocols B17 and B18 address curbing in certified warehouse areas to ensure a minimum retention curbing of 10 cm for all areas certified after December 31, 1996. Facilities certified before the aforementioned date may use a sloped floor system provided that drains do not lead to any site or municipal sanitary (septic) or storm sewage system.</p> <p>Protocol E3 requires a plan be in the place to contain volumes of contaminated water such as might be created during the extinguishing of a fire. This is included in the Emergency Response (ER) plan. Bulletin 6 also describes fire control tactics that should be implemented to reduce the volumes of water created as a result of fire extinguishing events thereby reducing potential environmental impact. A controlled burn is the recommended approach for agrichemical fire incidents.</p> <p>Protocol E12 requires that the facility has in place a plan for the disposal of contaminated products and hazardous waste, as might be created during the extinguishing of a fire. Protocol F4 requires that employees are trained on Protocol E12.</p> <p>Protocols H3, H5 and H6 address containment during the transfer and storage of bulk products to ensure spills are contained in manner appropriate to the volume of the storage. Protocol H13 prohibits the use of underground storage tanks or piping thereby mitigating risks to groundwater contamination.</p> <p>Emergency Response</p> <p>In addition to the many embedded fire control measures within the standard, there are protocols</p>	

No.	Comm- enter	Comment on the Source Protection Plan	Response (edits in green highlight, page numbers are approximate)
		<p>specific to emergency response (Section G), let-it-burn policies (Bulletin 6) and to the control of water created during fire response activities (Protocol E3).</p> <p>Section G contains several protocols related to the development and implementation of the ER plan. Specific to this consultation is the requirement for G1(e) a written containment plan for volumes of contaminated fire fighting /spilled liquids (E3) and G2 that a representative from the local fire department has visited the site and reviewed the ER plan and Bulletin 6. If the fire department fails to attend, the facility must document their efforts to extend an invitation. Protocol G8 also requires that the local fire department has a copy of the total potential (maximum) inventories which includes flammable and combustible liquids and all other agrichemicals. Protocol D8 requires employees be trained on the ER plan and Protocol F2 tests employee knowledge of the ER plan.</p> <p>Communications AWSA remains in constant communication with certified sites and auditors and provides updates and clarity on emerging issues. Any changes required to the standard or issues requiring clarity can be specified in a Bulletin which remains in effect until such time as the standard is updated to a new version. Furthermore, any evolving issues in the Halton-Hamilton Source Protection Region can be easily communicated to sites in that region through the AWSA mailing list.</p>	

Table B4: Other Changes

	Edit made	Document
1.	Edits to the term “importation of fill”, per discussions at the October 5, 2021 Source Protection Committee meeting. Replaced with: “excess fill/excess soil including but not limited to contaminated soil”	Source Protection Plan Policy O-4-S, Explanatory Document page 7-8, Section 4.3 page 252-256
2.	Cover page graphics updated to include the drinking water protection zone road sign and updated logo for Drinking Water Source Protection. Older provincial logo removed. Temporary note on public consultation added to enhance clarity	Assessment Reports, Source Protection Plan, Explanatory Document
3.	Statement of acknowledgement of provincial funding on second page (after cover page)	Assessment Reports, Source Protection Plan, Explanatory Document
4.	Note about potential COVID-19 restrictions to view printed copies on third page (after cover page)	Assessment Reports, Source Protection Plan, Explanatory Document
5.	Conservation Halton and the Hamilton Conservation Authority logos added on third page (after the cover page)	Explanatory Document
6.	Appendix A: Collaboration and Consultation updated for Source Protection Committee memberships, descriptions about continual updates to Assessment Reports and Source Protection Plan under the Clean Water Act, 2006, and the Section 36 comprehensive updates consultation process.	Assessment Reports, Source Protection Plan
7.	Appendix H: Maps and Figures for ease of updates and to efficiently comply with AODA requirements	Assessment Reports

Municipal council resolutions

Prior to conducting public consultation for locally initiated amendments under section 34, the Clean Water Act requires the SPA to obtain a municipal council resolution from municipalities affected by the amendments. There is no legislative requirement to obtain a municipal council resolution as part of amendments or updates under sections 35 or 36 of the Clean Water Act, unless explicitly stated in the Minister's order. However, municipalities have the discretion to pass resolutions expressing comments on the proposed updates. Where a municipality has provided council resolutions, the SPA must submit those to the ministry with the proposed revisions.

The Minister's amended Section 36 order for the HHSPR does not require municipal council resolutions for Section 36 updates.

Public consultation

The public consultation requirements for revisions are similar to those during initial source protection plan development; however, per the MECP, for locally initiated amendments and s.36 orders issued to date, only one public consultation opportunity is required and there is no requirement for a public meeting. The SPA may have a public meeting depending on local circumstances and the scope and scale of the changes. The public consultation period must be for a minimum of 35 days (or as otherwise noted in a Minister's order).

Notification of public consultation must be provided by the SPA to all implementing bodies; persons believed to be engaged in significant drinking water threat activities; affected municipalities; and other miscellaneous bodies identified in O. Reg. 287/07 under ss.50(2) (e.g. Niagara Escarpment Commission, planning boards, contacts for Great Lakes water quality agreements, etc).

Following public consultation, any comments received during public consultation are to be submitted to the MECP as part of the submission package. MECP has provided SPAs with other submission details and supporting information requirements.

Source of most of the information: "Source Protection Planning Bulletin – Overview of Requirements for Plan and Assessment Report Amendments and Updates under sections 34, 35 and 36 of the Clean Water Act", by Ministry of the Environment, Conservation and Parks, October 2019. Note that bulletins and other resources developed by the Ministry of the Environment, Conservation and Parks may potentially be updated by them.

HHSPR carried out public consultation from December 15, 2021 to February 4, 2022. A notice and source protection plan, explanatory document, assessment report and background technical studies were publicly posted at www.protectingwater.ca. Printed copies were made available the municipal offices of the City of Hamilton and Regional Municipality of Halton.

Notices and letters were sent to implementing bodies; persons believed to be engaged in significant drinking water threat activities; affected municipalities; and other miscellaneous bodies identified in O. Reg. 287/07. Information sessions were held online for the public on:

- January 13, 2022
- January 20, 2022.

Frequently asked questions, presentation materials and a recording of a session was made available at www.protectingwater.ca

PUBLIC NOTICE

DECEMBER 15, 2021



Halton-Hamilton
Source Protection
Region

We are listening, tell us what you think!

UPDATES TO THE HALTON-HAMILTON SOURCE PROTECTION PLAN

Ontario's Clean Water Act (2006) serves as a watershed-based community initiative to protect existing and future sources of municipal drinking water. This initiative includes the Halton-Hamilton Assessment Reports and Source Protection Plan. These documents are currently being updated, and the changes could apply to properties in drinking water protection zones. If you live in Halton or Hamilton, **we want to hear your feedback about the proposed updates.**

The documents can be found at protectingwater.ca and comments must be submitted in writing by email or received through regular mail by **February 4, 2022** to:

Chitra Gowda, Senior Manager, Watershed Planning and Source Protection
2596 Britannia Road West, Burlington, ON L7P 0G3
sourceprotection@hrca.on.ca | 905.336.1158 ext. 2237

Printed copies can be found at the municipal offices listed below excluding statutory holidays, until **February 4, 2022**. Please note that COVID-19 restrictions can impact the ability to view printed copies. Please check municipality websites or call their office before your visit.

- Hamilton City Hall, Clerk's counter, 71 Main Street West, Hamilton, ON L8P 4Y5 from Monday to Friday from 8:30am–4:30pm. hamilton.ca
- Regional Municipality of Halton, Clerk's counter, 1151 Bronte Road, Oakville, ON, L6M 3L1, by appointment only by emailing sourcewater@halton.ca halton.ca/For-Residents/New-Coronavirus/Access-to-Regional-Services-during-COVID-19



You are also invited to attend a virtual public information session to learn more about the proposed updates. Please use the weblink below to register at least one day in advance:

January 13, 2022 (7pm–8pm)
<https://bit.ly/Session1Jan13>

January 20, 2022 (11am–12pm)
<https://bit.ly/Session2Jan20>

If you are unable to attend, the sessions will be recorded and posted, with frequently asked questions, at protectingwater.ca

Figure: Public Notice of Consultation for proposed updates per Section 36 of the Clean Water Act, 2006

Table B-5: Public Consultation Comments on the Assessment Reports

No.	Commenter	Comments	HHSPR Response (edits made in the report are in yellow highlight and page numbers are approximate)
Hamilton Region Assessment Report			
1	Hamilton Conservation Authority Staff	From Figure 1 in Appendix E it is not clear whether WC-13 is part of the Hamilton-Halton Source Water Protection Area. If the Source Water Protection Area matches our watershed boundary, this watercourse should be included in Table 2.3 and in discussion in Section 3.6 of the Hamilton-Halton Source Protection Plan update.	<p>Addressed. Editorial updates are made to: Table 2.3 (page 36), Section 3.6 (page 50) and Appendix H Figure 2.8 to mention watercourse WC-13.</p> <p>Note that the watercourse WC-13 (a roadside ditch) was previously named WC-12 and a portion of it is within the SPA boundary.</p> <p>As already noted in chapter 2, the Hamilton Source Protection Area is slightly smaller than the watershed managed by Hamilton Conservation Authority due to a realignment of the boundaries between Conservation Authorities. This realignment was necessary to reflect better the drainage patterns and the extension of the in-water area to the international boundary in Lake Ontario. This realignment has been in place since the first round of source protection planning which began in 2005.</p>
2	Glenn Meldrum, Greenville	I live at 3 Birch Crescent in Greenville. I have a question in regard to "Prescribed Drinking Water Threat Activities," items 19 and 20. North of the Greenville Wellhead Protection Area but south of Hwy.# 5, lies the Lafarge Quarry pond. The pond level is	<p>Addressed through the response below. No change needed to the Assessment Report.</p> <p>Response: The Lafarge quarry pond located in the processing area is fed by both surface</p>

No.	Commenter	Comments	HHSPR Response (edits made in the report are in yellow highlight and page numbers are approximate)
		<p>lowered by diesel pump 24 hours per day and 365 days per year. The water from the pond is pumped into a channel which flows over Tew Falls. Is this pond fed by surface water or an aquifer? What is the quality of water in this pond and should it be covered by the Greensville Wellhead Protection Area? Thank you.</p>	<p>water and groundwater. Mainly by groundwater and surface water collected in the sump pumps of the South and North quarry which is directed to the quarry pond to be discharged off-site (into a channel flowing into Logie’s Creek and over Tews Falls).</p> <p>The "Prescribed Drinking Water Threat Activities," items 19 and 20 deal with water quantity threats. Based on the results of Tier 3 Water Budget undertaken for the source protection region, the risk level to the Greensville well supply was low and therefore no water quantity threats were identified. In terms of water quality, the Lafarge processing area pond is outside of water quality wellhead protection area (as there is a groundwater divide between where the Greensville municipal wells are located and the quarry pond). It means that it is not possible for water from the quarry pond to reach the municipal wells. HHSPR does not have information about the pond water quality.</p>
Halton Region Assessment Report			
3.	Jennifer Minogue, Nassagaweya	I have looked through the report and while comprehensive, I find it is not detailed about individual well	Addressed through the response below. No change

No.	Commenter	Comments	HHSPR Response (edits made in the report are in yellow highlight and page numbers are approximate)
		<p>protection. My comments at this time are:</p> <ol style="list-style-type: none"> 1. more information about geothermal system impacts as these may be installed more often in the future as there will be a transition to renewable energy heating systems (electricity). There are 2 systems installed by my immediate neighbors, one being a well and one a horizontal loop system so they are getting more popular. 2. I live in Nassagaweya where everyone is on well and septic. We are all sitting on bedrock in my area and there is concern about contamination from septic systems. Houses are being built that are massive (15,000 - 20 000 sq ft) and the lot can be small in proportion to the house and number of occupants in a 7 bedroom house. The rock is permeable and there have been well contamination issues in the recent past from even a small manure pile. 3. Wells are drilled but there is no follow-up to see if they are maintained in any way. I know of one example where the well owner chopped off the wellhead because it interfered with landscaping. Another one was paved over. I don't know how long it takes for water to move to an adjacent well if the water has been contaminated by improper actions by a neighbor. 	<p>needed to the Assessment Report.</p> <p>The scope of the Halton-Hamilton Region source water protection program is municipal residential drinking water systems as specified in the <i>Clean Water Act, 2006</i>. Geothermal systems are considered in the municipal wellhead protection areas through the contaminant transport pathways analysis.</p> <p>Septic systems are considered in the municipal wellhead protection areas through the risk assessment.</p> <p>Other types of drinking water systems have not been included in the source protection plan at this time, and they can be included through a separate process described in the legislation (for example, through municipal council resolution). The MECP plans on releasing a best practices guidance for drinking water systems that are not included in source protection plans across Ontario. This guidance may support the review of geothermal, septic system and other activities as it relates to source water protection by those system owners.</p>

No.	Commenter	Comments	HHSPR Response (edits made in the report are in yellow highlight and page numbers are approximate)
		<p>4. My last comment is that I hope you don't rely on the well record data base because it is extremely inaccurate. Locations seem to be almost random, if the well is on there at all. It seems like it wouldn't be too hard to tag them with a serial number when they are drilled. That is a go-forward initiative.</p>	<p>The Ontario Regulation 903 – Wells (under the Ontario Water Resources Act) lays out well construction methods and specifications. It also requires the well owner to maintain the well at all times after construction. MECP district offices can be contacted for pollution complaints etc.</p> <p>The provincial Water Well Information System (WWIS) database includes “location confidence indices”, which provide estimated margins of error for each well location. To assess wells as potential contaminant transport pathways in municipal wellhead protection areas delineated under the <i>Clean Water Act, 2006</i>, HHSPR only selected wells with a reported margin of error of less than 30 metres.</p> <p>The WWIS database supplemented by other data sources was used to develop groundwater flow models, groundwater level maps, assess preferential transport pathways, etc.</p>

Table B-6: Public Consultation Comments on the Source Protection Plan and Explanatory Document

No.	Commenter	Comments	HHSPP Response (edits made in the Plan and Document are in yellow highlight and page numbers are approximate)
1	Erin Harkins, Program Analyst, Ministry of the Environment, Conservation and Parks (MECP)	<p><u>Comment on monitoring policy T-52-C (part b) directed at MECP (EAPD)</u> MECP appreciates the revisions to the policy based on our pre-consultation comments provided on October 5, 2021. While all monitoring and reporting requirements are made publicly available on Access Environment, the site only hosts the most current permissions and does not include a record of previously issued versions or revoked ECAs. Given this, we suggest the following revision to the monitoring policy for clarity: <i>By February 1st each year, the Ministry of Environment, Conservation and Parks shall make all monitoring and reporting requirements available at Access Environment to determine if any changes were made to effluent limits and monitoring requirements for access to current monitoring and effluent limits.</i></p> <p>If there are sites of interest, it is recommended that members of the public or the SPA download the current version of an approval. A periodic check of these locations would indicate if a new permission or approval had been issued or if an amendment occurred for comparison between documents.</p> <p><u>Summary of consultation activities (plan) versus summary of comments (explanatory document)</u></p>	<p>Addressed. <u>Comment on monitoring policy T-52-C (part b)</u> Policy T-52-C part b (Source Protection Plan page 100-101) are updated per the edit provided by MECP. As well, the notes section accompanying the policy (page 101) explain what Access Environment is. Lastly, the Explanatory Document is updated (page 69) to explain the change.</p> <p>The task of periodically checking for changes involves downloading all current and requesting MECP for previous versions of an environmental compliance approval (ECA) and conducting a comparison. If funding is provided by MECP to undertake this work, it may be considered by HHSPP.</p>

No.	Commenter	Comments	HHSPR Response (edits made in the Plan and Document are in yellow highlight and page numbers are approximate)
		<p>We note that a full summary of the <i>comments</i> received during pre-consultation has been included in <i>Appendix B: Collaboration and Consultation</i> in the updated source protection plan. While a summary of all <i>consultation activities</i> undertaken during the preparation of the plan must be included in the <i>plan</i> (as per section 28 of O.Reg. 287/07) (e.g., a description of who was consulted, how they were consulted, and when - including dates, locations), as per section 40(1) subparagraph 3 of O.Reg. 287/07, the updated <i>explanatory document</i> must contain a summary of the <i>comments</i> received during <i>pre-consultation</i>, including how the comments affected the development of the policies set out in the plan. As per the above, we suggest moving the summary of comments included in Appendix B of the plan to an appropriate section in the explanatory document.</p>	<p><u>Summary of consultation activities (plan) versus summary of comments (explanatory document)</u></p> <p>The summary of the comments and responses is added to the Explanatory Document Section 2 (pages 11-65) and the Source Protection Plan (pages 183-200).</p>
2	Sara Yonson Environmental Manager Hamilton- Oshawa Port Authority (HOPA)	<p>Please note that the Hamilton-Oshawa Port Authority is a landlord port. While we maintain certain infrastructure, operations are conducted by port tenants. These tenants make up some but definitely not all of the industrial tenants operating out of Hamilton's north end. It feels that the proposed policy is singling out port tenants while not addressing their neighbours. For a reference of port landholdings, please refer to the following map: https://www.hopaports.ca/locations/port-of-hamilton/port-of-hamilton-directory/</p>	<p>Addressed. Transport Canada enforces pollution prevention and response in the marine environment under the Canada Shipping Act, 2001 and other national laws and international conventions and standards. This includes marine safety, pollution prevention, enforcement,</p>

No.	Commenter	Comments	HHSPR Response (edits made in the Plan and Document are in yellow highlight and page numbers are approximate)
		<p>Port tenants in Hamilton obtain environmental permits with the MECP, if the concern is with companies adjacent to Hamilton Harbour it would be more effective for the MECP to lead the land portion of O-6-S to get a wider roll out. MECP could also interface with tenants that are on the Lake Ontario side of the Burlington lift bridge and in closer proximity to the drinking water intake.</p> <p>Any event that is likely to affect the water quality at the drinking water intake in Lake Ontario is also very likely to intersect with mandatory reporting clauses in legislation (Fisheries Act, Canada Shipping Act, E2 Regulations, Ontario EPA, etc). Given there are legal requirements to report a spill large enough to affect drinking water intakes, a non-binding policy on a subset of industry does not seem to add value.</p> <p>The port also does not have any jurisdiction over vessels on the Lake Ontario side of the canal. The vessels that do come into the port often only visit us once or twice a season and travel through many sensitive areas, it would not be viable to include the location of all municipal drinking water intakes along their route.</p> <p>What would be viable for HOPA to implement and would promote the goals of the program is for HOPA to continue including and referencing the local sourcewater protection programs and</p>	<p>and oil spill preparedness and response programs.</p> <p>Policy O-6-S (Source Protection Plan page 127) is updated as follows: HOPA is requested to include information on the local sourcewater protection programs and relevant vulnerable area maps in their internal emergency response plans and notify the local municipality of known spill events.</p> <p>Transport Canada is requested to advise vessel operators using Hamilton Harbour and western Lake Ontario shipping lanes, and MECP is requested to advise the companies in the vicinity of the port to update their spill control plans to include:</p> <ul style="list-style-type: none"> i. the location of the municipal drinking water intakes, ii. best practices for spill containment and cleanup to protect drinking water supplies, and iii. the City of Hamilton, and Halton Region and Ontario Spills

No.	Commenter	Comments	HHSPR Response (edits made in the Plan and Document are in yellow highlight and page numbers are approximate)
		<p>maps in our internal emergency response plans. Our Harbour Master’s Office is staffed 24/7 and is generally notified of all major events. If a major spill to water is reported, HOPA staff would be aware of the source water concerns and could ask the appropriate questions to ensure the local municipality was notified.</p> <p>Also a note – when rolling this out HOPA attempted to call the Halton line and was unsuccessful in reaching an appropriate individual. Hopefully this has been rectified.</p> <p>Please feel free to get in touch with any questions or clarifications.</p>	<p>Action Centre emergency contact information.</p> <p>The phrase “enhanced best practices” is changed to “best practices” for clarity. The correct phone number was obtained from Halton Region and provided to HOPA.</p> <p>The Explanatory Document is updated accordingly (pages 314-315).</p>
3	Joe Muller, Senior Strategic Advisor, Niagara Escarpment Commission	<p>On review, the proposed amendments to the Halton-Hamilton Source Protection Plan conform to the prior pre-circulation I examined and responded to last fall, essentially comprising a reformatting of existing policy in the plan. As such, since there is no effective change in policy outside of how it is presented in the Plan, we continue to have no formal comment on this component of the Plan.</p> <p>In references, I note that the NEP was updated in 2017, so that should be the formal date of the NEP that is being cited (undergoing a formal and major update</p>	<p>Addressed.</p> <p>The Source Protection Plan (SPP) and Explanatory Document (ED) are updated to indicate the most recent formal year (2017) of the Niagara Escarpment Plan (SPP page 131 and ED page 100). Where appropriate it is explained that the Niagara Escarpment Plan undergoes a formal and major update every 10</p>

No.	Commenter	Comments	HHSPR Response (edits made in the Plan and Document are in yellow highlight and page numbers are approximate)
		every 10 years). There are housekeeping updates that address amendments and corrections to the Plan on an ongoing basis (Office Consolidations), but these do not reflect significant NEP updates.	years, and minor amendments and corrections on an ongoing basis (called Office Consolidations).
4	Kyle Davis, Risk Management Official, Wellington Source Water Protection	As noted in our SPP comments prior to approval, this policy (O-2-S) should be directed at Conservation Authorities or Provincial Ministries. The County does collect data on a site by site basis.	Addressed. County of Wellington is now excluded from the Policy O-2-S by noting the same in the Source Protection Plan (page 123). In the Explanatory Document, an update is made accordingly (page 304-305).
5	Conservation Halton Staff	In the Source Protection Plan on page 272, correct the typo implantation to implementation and update the port authority name throughout the document.	Addressed. Spelling corrected in the Source Protection Plan (page 314). Port authority name changed from Hamilton Port Authority to Hamilton-Oshawa Port Authority throughout the Plan and Explanatory Document.
6	Conservation Halton Staff	Policy T-18-C: "Municipalities responsible for wastewater services" should be replaced with municipality names.	Addressed. Additional information accompanying the Policy is updated. RMOH, City of Hamilton.
7	Conservation Halton Staff	Policy T-19-C: "the municipalities responsible for stormwater systems" are single and lower tiers in HHSPR. Remove	Addressed. Additional information accompanying the Policy

No.	Commenter	Comments	HHSPR Response (edits made in the Plan and Document are in yellow highlight and page numbers are approximate)
		Halton Region municipality from preamble (policy implementer) and add single and lower tier names.	is updated. The policy is directed to municipalities responsible for wastewater and stormwater systems - where potential future sewage treatment plant bypasses would be significant threats. Therefore Halton Region municipality is not deleted. Burlington and Oakville are added.
8	Conservation Halton Staff	Review all policies with CH and HCA as implementing bodies/collaborators or as monitoring policy implementers and check feasibility of implementation, in relation to factors such as funding and eligible activities considerations.	Addressed. As discussed and endorsed at the SPC meeting on March 15, 2022, an overarching new Policy G-5 is added to address the comment. The new policy utilizes Section 97 of the <i>Clean Water Act, 2006</i> (Ontario Drinking Water Stewardship Program). The new Policy G-5 is noted on page 38 and provided on page 44 of the SPP. It is relevant to SPP Policies T-13-C, T-23-C, T-27-C, T-31-C, T-36-C, T-43-C, T-46-C, T-54-C, O-1-S, O-2-S, O-4-S. The new Policy G-5 is included in List K in Appendix C (Compliance Lists) on page 210.

No.	Commenter	Comments	HHSPR Response (edits made in the Plan and Document are in yellow highlight and page numbers are approximate)
			<p>For policy T-49-C part b, a practical implementation challenge is addressed by utilising existing organizations who liaise with road salt contractors.</p> <p>Reference to the Halton and Hamilton Stewardship Programs is removed throughout.</p> <p>An update is made accordingly to the Explanatory document accordingly (page 72 and 77-78).</p>
9	Elizabeth Forrest, Liaison Officer, Ministry of the Environment, Conservation and Parks	A few years ago, changes were made to the regulatory requirement for the septic systems approved under Ontario’s Building Code. As you are aware, the Building Code Act, 1992 and the Building Code regulate the design, construction and renovation of small on-site sewage systems up to a daily design sewage flow of 10,000 litres per day. As of January 1, 2017, the reference to the Ministry of Municipal Affairs and Housing Supplementary Standard SB-5 was removed from the Building Code. This means that a treatment unit will only be deemed to comply with the effluent quality criteria set out in Building Code if it has been certified to the CAN/BNQ 3680-600 certification standard. Additionally, the reference to ‘tertiary’ treatment has	<p>Addressed.</p> <p>The comment is a response to HHSPR’s request in Dec. 2021 for an update on the outcome of a consultation in 2015-2016 to make changes to the Ontario Building Code relevant to septic systems. Based on MECP’s response, an update is made to the Explanatory Document (page 89).</p>

No.	Commenter	Comments	HHSPR Response (edits made in the Plan and Document are in yellow highlight and page numbers are approximate)
		<p>now been renamed in the latest Building Code, as 'Level IV' quality effluent.</p> <p>For more information you can check out section 8.6.2.2. Other Treatment Units in Regulation 332/12.</p>	

Table B-7: Other Comments

No.	Commenter	Comments	HHSPR Response
1	ACTION Milton community group, by email to a Source Protection Committee member	<p>We are once again concerned regarding the future of the Old Milton ground water source that has come traditionally from the Kelso well. Daniel Banks, the Acting Manager of Water & Wastewater Planning for Halton Region provided a copy of the Staff Report PW-07-21 dated February 17, 2021 from Andrew Farr, Commissioner, Public Works. In this report 3 options were presented to provide future capacity related to the groundwater system.</p> <p>The First Option is that the Region modify the Town of Milton's existing groundwater supply, treatment, and distribution system through increased capacity. This could involve keeping the Kelso well-based system, and adding additional groundwater sources and wells located by the Region. The Second Option was to modify the Town of Milton's existing groundwater supply, treatment, and distribution system, through modifying or reducing the groundwater service area, and increasing the lake-based service area. This option could include blending of lake and groundwater and/or taking certain areas off the groundwater source, and replacing it with lake-based water.</p> <p>The Third Option was to convert the Town of Milton's existing groundwater serviced area to lake-based servicing, and decommission the groundwater supply system.</p>	<p>Acknowledged. The proposed Reid Road, Campbellville quarry is not located within a wellhead protection area delineated under the <i>Clean Water Act, 2006</i>. HHSPR will continue to monitor the proposal.</p> <p>Municipal drinking water treatment and supply to the Town of Milton area is the purview of the Regional Municipality of Halton (RMOH). HHSPR contacted RMOH staff who indicated that they are starting the next Regional Infrastructure Master Plan later in 2022. RMOH will keep HHSPR informed accordingly, to also ensure municipal drinking water source protection under the <i>Clean Water Act, 2006</i>.</p>

No.	Commenter	Comments	HHSPR Response
		<p>We would like the Region to follow the First Option, and modify the Town of Milton's existing groundwater supply, treatment and distribution system through increased capacity.</p> <p>In terms of history, in 1999 we had formed a group SOS (Save Our Source) when the Region of Halton was planning to take Milton off the groundwater based water system, and replace it, or blend it with Lake Ontario water. The Region decided to keep us on the groundwater system after an investigation revealed that blending the two water systems which were at different temperatures and different degrees of hardness would result in fluctuations in quality that could affect some industries.</p> <p>In 2011 the Region of Halton was again considering the groundwater based system, and they wanted to take the Timberlea region of Old Milton off the groundwater system, and then Dorset Park if they felt it to be necessary in terms of population growth in the area. We approached the Region with the request that areas of industry within Old Milton be taken off the groundwater source instead, and they decided in favour of that option.</p> <p>Now the Region of Halton is considering removing the groundwater source for Old Milton going forward. Our group has begun a process where we would like to proceed with a letter writing campaign, a petition, and a delegation</p>	

No.	Commenter	Comments	HHSPR Response
		<p>to Regional Council in order to advocate for keeping, and expanding our groundwater service. We anticipate public hearings will take place sometime in February, 2022.</p> <p>We are hopeful that members of ACTION Milton and other community residents might support us in our endeavour, and send the message to others concerned with keeping our ground water source. We are wondering if any ACTION Milton members or other residents would like to help us in joining our campaign by letter writing, or gathering signatures on a petition, or phoning potential supporters. There is a caution that we feel is necessary to provide in that if the Campbellville Quarry is approved, it could adversely affect Milton's ground water.</p> <p>We would also like to find people who are willing to sign our petition. An on-line petition is available through change.org.https://chng.it/QyYKKSjSrZ</p> <p>Thank you for your interest and support.</p>	

Appendix C: Policy Compliance Lists

***Clean Water Act, 2006* Part III Policy Lists**

**To fulfill the requirements of
Ontario Regulation 287/07 subsections 34 (1) to (3)**

Table C-1 Compliance lists

LIST	TITLE	POLICIES
A	Significant threat policies that affect decisions under the <i>Planning Act</i> and <i>Condominium Act, 1998</i> (not all policies refer to the <i>Condominium Act</i>)	Clause 39 (1)(a), subsections 39 (2), (4) and (6), and sections 40 and 42 of the <i>Clean Water Act, 2006</i> apply to the following policies: G-1 d. T-37-C a. G-1 e. T-39-C a. G-1 f. T-41-C a. T-3-C a. T-53-C a., b. T-9-C a. T-55-C b. T-10-C a. T-58-C a. T-11-C a. T-59-C a. T-32-C a.
B	Moderate and low threat policies that affect decisions under the <i>Planning Act</i> and <i>Condominium Act, 1998</i>	Subsection 39 (1) (b) of the <i>Clean Water Act, 2006</i> applies to the following policies: No applicable policies.
C	Significant threat policies that affect prescribed instrument decisions	Subsection 39 (6), clause 39 (7) (a), section 43 and subsection 44 (1) of the <i>Clean Water Act, 2006</i> apply to the following policies: G-1 c. T-8-C a. T-1-C a. T-21-C a. T-4-C a. T-24-C a. T-5-C a. T-26-C a. T-6-C a. T-48-C a. T-7-C a. T-52-C a. T-55-C a.
D	Moderate and low threat policies that affect prescribed instrument decisions	Clause 39 (7) (b) of the <i>Clean Water Act, 2006</i> applies to the following policies: No applicable policies.
E	Significant threat policies that impose obligations on municipalities, source protection authorities and local boards	Section 38 and subsection 39 (6) of the <i>Clean Water Act, 2006</i> applies to the following policies: T-2-C a. T-31-C a. T-13-C a. T-34-C a. T-14-C a. T-35-C a. T-16-S b. T-43-C a. T-17-C a. T-51-C a. T-18-C a. T-19-C a. T-54-C a. T-23-S b. T-56-C a. T-27-C a. T-57-C a., b. T-28-C a. T-66-C T-67 a., b., c., d., e., f

Table C-1 Compliance lists continued

LIST	TITLE	POLICIES																																																												
F	Monitoring policies referred to in subsection 22 (2) of the <i>Clean Water Act, 2006</i>	<p>Section 45 of the <i>Clean Water Act, 2006</i> applies to the following policies:</p> <table border="0"> <tr> <td>T-1-C b.</td> <td>T-32-C c., d.</td> </tr> <tr> <td>T-2-C b.</td> <td>T-33-S b.</td> </tr> <tr> <td>T-3-C b.,d.</td> <td>T-34-C b.</td> </tr> <tr> <td>T-4-C b.</td> <td>T-35-C b.</td> </tr> <tr> <td>T-5-C b.</td> <td>T-36-S e.</td> </tr> <tr> <td>T-6-C b.</td> <td>T-37-C b.</td> </tr> <tr> <td>T-7-C b.</td> <td>T-38-S b.</td> </tr> <tr> <td>T-8-C b.</td> <td>T-39-C b.</td> </tr> <tr> <td>T-9-C b.</td> <td>T-40-C c.</td> </tr> <tr> <td>T-10-C b.</td> <td>T-41-C b.</td> </tr> <tr> <td>T-11-C b.</td> <td>T-42-S b.</td> </tr> <tr> <td>T-12-S b.</td> <td>T-43-C b.</td> </tr> <tr> <td>T-13-C b.</td> <td>T-44-C c.</td> </tr> <tr> <td>T-14-C b.</td> <td>T-45-C c.</td> </tr> <tr> <td>T-15-S b.</td> <td>T-46-S b.</td> </tr> <tr> <td>T-16-S c.</td> <td>T-47-C c.</td> </tr> <tr> <td>T-17-C b.</td> <td>T-48-C b.</td> </tr> <tr> <td>T-18-C b.</td> <td>T-49-S b.</td> </tr> <tr> <td>T-19-C b., c.</td> <td>T-51-C b.</td> </tr> <tr> <td>T-20-C c.</td> <td>T-52-C b.</td> </tr> <tr> <td>T-21-C b.</td> <td>T-53-C d.</td> </tr> <tr> <td>T-22-S b.</td> <td>T-54-C b.</td> </tr> <tr> <td>T-23-S c.</td> <td>T-55-C c., d.</td> </tr> <tr> <td>T-24-C b.</td> <td>T-56-C b.</td> </tr> <tr> <td>T-25-C c.</td> <td>T-57-C c.</td> </tr> <tr> <td>T-26-C b.</td> <td>T-58-C b.</td> </tr> <tr> <td>T-27-C b.</td> <td>T-59-C b.</td> </tr> <tr> <td>T-28-C b.</td> <td>T-68 a., b., c., d., e., f.</td> </tr> <tr> <td>T-29-C c.</td> <td></td> </tr> <tr> <td>T-31-C b.</td> <td></td> </tr> </table>	T-1-C b.	T-32-C c., d.	T-2-C b.	T-33-S b.	T-3-C b.,d.	T-34-C b.	T-4-C b.	T-35-C b.	T-5-C b.	T-36-S e.	T-6-C b.	T-37-C b.	T-7-C b.	T-38-S b.	T-8-C b.	T-39-C b.	T-9-C b.	T-40-C c.	T-10-C b.	T-41-C b.	T-11-C b.	T-42-S b.	T-12-S b.	T-43-C b.	T-13-C b.	T-44-C c.	T-14-C b.	T-45-C c.	T-15-S b.	T-46-S b.	T-16-S c.	T-47-C c.	T-17-C b.	T-48-C b.	T-18-C b.	T-49-S b.	T-19-C b., c.	T-51-C b.	T-20-C c.	T-52-C b.	T-21-C b.	T-53-C d.	T-22-S b.	T-54-C b.	T-23-S c.	T-55-C c., d.	T-24-C b.	T-56-C b.	T-25-C c.	T-57-C c.	T-26-C b.	T-58-C b.	T-27-C b.	T-59-C b.	T-28-C b.	T-68 a., b., c., d., e., f.	T-29-C c.		T-31-C b.	
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T-29-C c.																																																														
T-31-C b.																																																														
G	Policies related to section 57 of the <i>Clean Water Act, 2006</i>	<p>The following policies relate to section 57 (prohibition) of the <i>Clean Water Act</i>:</p> <p>G-4 T-3-C c.</p>																																																												

Table C-2 Prescribed instruments which apply to Source Protection Plan policies in Lists C and D of Table C-1
(ss 34(4) of Ontario Regulation 287/07)

Policy ID	Legal Effect	Aggregate Resource Act – licenses, wayside permits, aggregate permits, and site plans	Environmental Protection Act – waste sites and systems; sewage works	Environmental Protection Act – renewable energy approvals	Nutrient Management Act – nutrient management strategies	Nutrient Management Act – nutrient management plans	Nutrient Management Act – NASM plans	Ontario Water Resources Act – permits to take water	Ontario Water Resources Act – sewage works	Pesticides Act – permits	Safe Drinking Water Act – permits, licences
T-1-C a.	Conform with		X								
T-4-C a.	Conform with		X								
T-5-C a.	Conform with		X								
T-6-C a.	Conform with		X								
T-7-C a.	Conform with		X						X		
T-8-C a.	Conform with		X						X		
T-21-C a.	Conform with				X	X					

T-24-C a.	Conform with						X				
T-26-C a.	Conform with					X					
T-48-C a.	Conform with				X						
T-52-C a.	Conform with		X						X		
T-55-C a.	Conform with							X			
G-1 c.	Conform with	X	X	X	X	X	X	X	X	X	X

Appendix D: Glossary of Terms

Glossary of Terms

Cesspool:	an underground container for the temporary storage of sewage.
Combined sewer:	sewers that carry both stormwater and sanitary wastes in one pipe.
Condensate:	gas oil, naphtha and other relatively light hydrocarbons which remain liquid at normal temperature and pressure.
Consumptive Demand:	the amount of water that is taken from a water source and not returned locally to the same source of water within a reasonable amount of time.
Crude Oil:	a naturally occurring, unrefined petroleum product composed of hydrocarbon deposits. Crude oil can be refined to produce usable products such as gasoline, diesel, and various forms of petrochemicals.
Drinking Water Sources:	drinking water comes from surface water, groundwater, or from collected precipitation. Surface water includes rivers, lakes, and reservoirs. Groundwater is pumped from wells that tap into water-bearing sediment and rock units below ground.
Earth Pit Privy:	a latrine consisting of an excavation in the ground topped by an outhouse.
Existing Threat:	an activity that commenced, or has been engaged with a demonstrated intent to continue, in a location in a vulnerable area prior to the Source Protection Plan taking effect where there would be a drinking water threat. It includes any expansion of the activity or conversion to a similar use only on the same parcel of land.
Extensive Grazing:	grazing of farm animals in pastures that typically provide all the nutritional needs of the animals with stocking densities of less than one nutrient unit per acre (Streamside Grazing, 2007). The majority of Ontario's unimproved pastures are managed as extensive grazing areas.
Farm Animal:	as defined in the <i>Nutrient Management Act, 2002</i> : <ul style="list-style-type: none">• livestock, including poultry and ratites• fur-bearing animals• bees• cultured fish• deer and elk

-
- game animals and birds
 - any additional animals, birds, or fish prescribed by the regulations

Farm-animal Yard: fenced, outdoor livestock areas associated with a barn or other outbuilding that is lined with concrete or paved with impervious material, other than land meeting the definition of an outdoor confinement area. Food and water are not provided in farm-animal yards. They are generally used as outdoor exercise areas or holding areas when barns are being cleaned.

Future Threat: any activity in a vulnerable area where there could be a drinking water threat that is not defined as an existing threat within this Source Protection Plan.

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- Greywater:** sewage from a home that is derived from fixtures other than toilets.
- Halton-Hamilton Source Protection Region:** Ontario Regulation 284/07 defines a Source Protection Region as a consolidation of two or more Source Protection Areas. Halton-Hamilton Source Protection Region joins Halton Region Source Protection Area and Hamilton Region Source Protection Area, which are the equivalent jurisdictions of Halton Region Conservation Authority (Conservation Halton) and Hamilton Conservation Authority. The Region and Areas are shown on Figure 1.
- Holding Tank:** a tank designed for temporary storage of sanitary sewage discharged into it.
- Industrial Effluent Discharge:** a sewage works that discharges to surface water and has as its primary function the collection, transmission, or treatment of industrial sewage. National Pollutant Release Inventory reporting must be required of the facility.
- Intake Protection Zone:** areas of land and water that contribute source water to a drinking water system intake within a specified distance, period of flow time, and/or watershed area and within which it is desirable to regulate or monitor drinking water threats.
- Issue:** a chemical or pathogen that exists in source water at a concentration, or has an increasing concentration that, if it continues, may deteriorate the quality of the water for use as drinking water.
- Issue Contributing Area:** an area of water flowing toward an intake or well within a vulnerable area where threats related to an identified issue must be addressed to have the water source remain viable for drinking water.
- Leaching Bed:** an absorption system constructed as trenches or as a filter bed to which effluent from a treatment unit is applied. Leaching beds may be constructed wholly in ground or partly or wholly raised above ground, as required by local conditions. It comprises soil, pipes and backfill.
- Legislative Tools:** includes tools specified in existing legislation that could be used to protect drinking water sources. This includes prescribed instruments as defined below.
- Multi-barrier Approach:** an integrated system of water management aimed at reducing the contamination of drinking water from source to tap. The approach includes the protection of water supplies, appropriate treatment and testing, reliable distribution systems, and professional training for water managers.

Municipal Planning Authority: as established under section 14.1 of the *Planning Act*. The applicable level of government for implementation of a policy has been established through legislation and delegation of planning approval authorities.

Nutrient Unit: a way of quantifying the amount of nutrients that farm animals generate and to characterize the size of farms. A nutrient unit is the amount of nutrients that give the fertilizer replacement value the lower of 43 kilograms of nitrogen or 55 kilograms of phosphate.

Outdoor Confinement Area: as defined in Ontario Regulation 267/03, made pursuant to the *Nutrient Management Act, 2002*, an enclosure with the following characteristics:

1. It has no roof, except as described in characteristic #3.
2. It is composed of fence, pens, corrals, or similar structures.
3. It may contain a shelter to protect the animals from the wind or another shelter with a roof of an area of less than 20 square metres.
4. It has permanent or portable feeding or watering equipment.
5. The animals are fed or watered at the enclosure.
6. The animals may or may not have access to other buildings or structures for shelter, feeding, or watering.
7. Grazing and foraging provide less than 50 percent of dry matter intake.

Prescribed Instruments: some legislation requires the issuance of an instrument, i.e., a permit or license, for an activity to be carried out. For example, environmental compliance approvals are issued to owners of wastewater treatment plants, and nutrient management plans are required by farm operators under specified circumstances. Specific instruments have been prescribed under the *Clean Water Act, 2006* and can be modified through policy to protect drinking water sources better.

Prescribed Threats: twenty-one activities are prescribed in Ontario Regulation 287/07 section 1.1(1) as drinking water threats. Nineteen of these activities can affect water quality and two can affect water quantity. The water quality threats are listed in Table 1 and are discussed in the Assessment Reports and the Explanatory Document.

Privy Vault: a latrine in which the receptacle for human waste consists of a constructed vault from which the waste is periodically removed.

Risk Management Official: person appointed under Part IV of the *Clean Water Act, 2006* by the council of a single-tier municipality, and the council of the upper or

low-tier municipality that has authority to pass by-laws respecting water production, treatment, and storage under the *Municipal Act, 2001*.

Salt Storage Facility: a designated area for the storage of road salt or salt/sand mixtures transported to the site in bulk.

Sanitary Sewage: liquid or water borne waste from industrial, commercial, or domestic origins. Domestic sewage could include human body waste, toilet or other bathroom waste, and shower, tub, culinary, sink and laundry waste.

Septic System: small septic systems are regulated under the Ontario Building Code where the system or all systems on one parcel of land have a design capacity of 10,000 litres per day or less, and where they are located on the same parcel of land as the building they serve. Large septic systems include all others. Both large and small systems are listed in the Ministry of the Environment, Conservation and Parks's Tables of Drinking Water Threats as including:

- (a) an earth pit privy
- (b) a privy vault
- (c) a greywater system
- (d) a cesspool
- (e) a leaching bed system and its associated treatment unit

Septic Tank: a watertight vault in which sanitary sewage is collected for the purpose of removing scum, grease and solids from the liquid without the addition of air and in which solids settling and anaerobic digestion of the sanitary sewage takes place.

Sewage System: defined in the Ontario Building Code where the system or all systems on one parcel of land have a design capacity of 10,000 litres per day or less, and where they are located on the same parcel of land as the building they serve, as:

- (a) a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet and all forms of privy including a portable privy, an earth pit privy, a pail privy, a privy vault and a composting toilet system
- (b) a greywater system
- (c) a cesspool
- (d) a leaching bed system

- (e) a system that requires or uses a *holding tank* for the retention of hauled sewage at the site where it is produced before its collection by a hauled sewage system

Sewage Works: the equipment, piping, tanks, etc., used for the collection, transmission, treatment, and disposal of sewage and described in the environmental compliance approval issued under the *Ontario Water Resources Act* or environmental compliance approval issued under the *Environmental Protection Act* for the facility.

Snow Storage Facility: a designated purposely designed storage area used for the stockpiling of snow transported to the site for storage and melting.

Stormwater: stormwater management ponds are typically designed to remove suspended sediment from runoff in urban areas. However, urban stormwater runoff may also contain nutrients, bacteria, heavy metals, oil and grease, pesticides, sodium, and chloride. Some of these contaminants may also be removed through treatment methods, but many are not. Thus, all stormwater discharging from a retention pond is considered untreated.

Tables of Drinking Water Threats: tables prepared by the Ministry of the Environment, Conservation and Parks that list the prescribed threats to drinking water sources and circumstances correlated with their level of risk to drinking water sources when occurring within vulnerable areas.

Tier 3 Water Budget and Water Quantity Risk Assessment: the assessment of stresses on the sustainability of the municipal well water sources is completed as a tiered process. A Tier 3 assessment is required when a subwatershed, in which a municipal well water supply is located, has been found to have demands placed on the water that are higher than the threshold water available. The Tier 3 study is focused on the sustainability of the local area of the water supply instead of the subwatershed.

Transport Pathway: any structure or land alteration or condition resulting from a naturally occurring process or human activity that would increase the probability of a contaminant reaching a drinking water source, such as utility corridors, poorly constructed wells or earth energy systems, and abandoned pits and quarries.

Watershed(s): an area of land that drains water into a waterbody such as a lake or river. Watershed may refer to the drainage of surface water or groundwater and the two drainage areas may not be coincident in a given area.

Wellhead Protection Area: an area that is related to a well and within which it is desirable to regulate or monitor drinking water threats (*see Assessment Reports*).

Works: see “sewage works” above.

Appendix E: Maps